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3 Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019

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FIGURE

1a Monitoring Highway 8 East South Houston Path, 64MSMS00709

1b TAGA File Event Summary; File: 64MSMS00709 Acquired on 21 March 2019 at 08:54:24; Title: Monitoring Highway 8 East South Houston

1c Monitoring Highway 8 East South Houston in ppbv for Benzene, Toluene, and Xylenes

2a Monitoring Highway 146 South Deer Park, 64MSMS00710

2b TAGA File Event Summary; File: 64MSMS00710 Acquired on 21 March 2019 at 09:42:41; Title: Monitoring Highway 146 South Deer Park / LaPorte

2c Monitoring Highway 146 South Deer Park in ppbv for Benzene, Toluene, and Xylenes

3a Stationary Monitoring San Jacinto Elementary Location, 64MSMS00711

3b TAGA File Event Summary; File: 64MSMS00711 Acquired on 21 March 2019 at 11:15:25; Title: Stationary Monitoring San Jacinto Elementary

3c Stationary Monitoring San Jacinto Elementary in ppbv for Benzene, Toluene, and Xylenes

4a Monitoring Deer Park 13th Street Path, 64MSMS00712

4b TAGA File Event Summary; File: 64MSMS00712 Acquired on 21 March 2019 at 11:56:46; Title: Monitoring Deer Park – 13th Street

4c Monitoring Deer Park 13th Street in ppbv for Benzene, Toluene, and Xylenes

5a Monitoring Highway 8 East to Highway 225 Path, 64MSMS00714

5b TAGA File Event Summary; File: 64MSMS00714 Acquired on 21 March 2019 at 14:35:42; Title: Monitoring Highway 8 East to Highway 255

5c Monitoring Highway 8 East to Highway 225 in ppbv for Benzene, Toluene, and Xylenes

6a Monitoring 13th Street Neighborhood Path, 64MSMS00715

6b TAGA File Event Summary; File: 64MSMS00715 Acquired on 21 March 2019 at 15:30:27; Title: Monitoring 13th Street Neighborhood

6c Neighborhood Monitoring 13th Street in ppbv for Benzene, Toluene, and Xylenes

7a Monitoring Highway 225 West Path, 64MSMS00716

7b TAGA File Event Summary; File: 64MSMS00716 Acquired on 21 March 2019 at 16:21:15; Title: Monitoring Highway 225 West

7c Monitoring Highway 225 West in ppbv for Benzene, Toluene, and Xylenes

8a Monitoring Highway 8 West Path, 64MSMS00717

8b TAGA File Event Summary; File: 64MSMS00717 Acquired on 21 March 2019 at 18:09:42; Title: Monitoring Highway 8 West

8c Monitoring Highway 8 West in ppbv for Benzene, Toluene, and Xylenes

9a Monitoring Highway 8 East to Highway 225 Path, 64MSMS00720

9b TAGA File Event Summary; File: 64MSMS00720 Acquired on 22 March 2019 at 08:45:14; Title: Monitoring Highway 8 to Highway 225

9c Monitoring Highway 8 East to Highway 225 in ppbv for Benzene, Toluene, and Xylenes

10a Monitoring Deer Park North Path, 64MSMS00721

10b TAGA File Event Summary; File: 64MSMS00721 Acquired on 22 March 2019 at 11:22:30; Title: Monitoring Deer Park

10c Monitoring Deer Park North in ppbv for Benzene, Toluene, and Xylenes

11a Monitoring Pasadena Freeway Frontage Road Path, 64MSMS00722

11b TAGA File Event Summary; File: 64MSMS00722 Acquired on 22 March 2019 at 12:22:59; Title: Monitoring Pasadena Freeway Frontage Road

11c Monitoring Pasadena Freeway Frontage Road in ppbv for Benzene, Toluene, and Xylenes

12a Monitoring Independence Parkway to Battleground Park Path, 64MSMS00723

12b TAGA File Event Summary; File: 64MSMS00723 Acquired on 22 March 2019 at 12:58:32; Title: Monitoring Independence Parkway to Battleground Park

12c Monitoring Independence Parkway to Battleground Park in ppbv for Benzene, Toluene, and Xylenes

13a Monitoring Deer Park to Channelview Path, 64MSMS00724

13b TAGA File Event Summary; File: 64MSMS00724 Acquired on 22 March 2019 at 14:17:55; Title: Monitoring from Deer Park to Channelview

13c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

14a Monitoring Channelview Three Path, 64MSMS00727

14b TAGA File Event Summary; File: 64MSMS00727 Acquired on 22 March 2019 at 15:39:44; Title: Monitoring Channelview Three

14c Monitoring Channelview Three in ppbv for Benzene, Toluene, and Xylenes

15a Monitoring Galena Park Path, 64MSMS00728

15b TAGA File Event Summary; File: 64MSMS00728 Acquired on 22 March 2019 at 17:19:39; Title: Monitoring Galena Park

15c Monitoring Galen Park in ppbv for Benzene, Toluene, and Xylenes

16a Monitoring Highway 225 Eastbound Path, 64MSMS00731

16b TAGA File Event Summary; File: 64MSMS00731 Acquired on 23 March 2019 at 09:02:05; Title: Monitoring Highway 225 Eastbound

16c Monitoring Highway 225 Eastbound in ppbv for Benzene, Toluene, and Xylenes

17a Monitoring Deer Park to Channelview Path, 64MSMS00732

17b TAGA File Event Summary; File: 64MSMS00732 Acquired on 23 March 2019 at 10:24:34; Title: Monitoring Deer Park to Channelview

17c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

18a Monitoring Channelview Path, 64MSMS00733

18b TAGA File Event Summary; File: 64MSMS00733 Acquired on 23 March 2019 at 11:34:21; Title: Monitoring Channelview

18c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

19a Monitoring Pleasantville to Tri-Park Path, 64MSMS00734

19b TAGA File Event Summary; File: 64MSMS00734 Acquired on 23 March 2019 at 12:54:16; Title: Monitoring Pleasantville - Tri Park

19c Monitoring Pleasantville - Tri Park in ppbv for Benzene, Toluene, and Xylenes

20a Monitoring Northwest of Site Path, 64MSMS00735

20b TAGA File Event Summary; File: 64MSMS00735 Acquired on 23 March 2019 at 14:46:26; Title: Monitoring Northwest of the Site

20c Monitoring Northwest of the Site in ppbv for Benzene, Toluene, and Xylenes

21a Monitoring Highway 10 East Path, 64MSMS00738

21b TAGA File Event Summary; File: 64MSMS00738 Acquired on 24 March 2019 at 08:43:50; Title: Monitoring Highway 10 East

21c Monitoring Highway 10 East in ppbv in ppbv for Benzene, Toluene, and Xylenes

22a Monitoring Channelview to Galena Park Path, 64MSMS00739

22b TAGA File Event Summary; File: 64MSMS00739 Acquired on 24 March 2019 at 10:41:59; Title: Monitoring Channelview to Galena Park

22c Monitoring Channelview to Galena Park in ppbv for Benzene, Toluene, and Xylenes

23a Monitoring Channelview to Galena Park Two Path, 64MSMS00740

23b TAGA File Event Summary; File: 64MSMS00740 Acquired on 24 March 2019 at 11:44:14; Title: Monitoring Channelview to Galena Park Two

23c Monitoring Channelview to Galena Park Two in ppbv for Benzene, Toluene, and Xylenes

24a Monitoring Galena Park to Channelview Path, 64MSMS00742

24b TAGA File Event Summary; File: 64MSMS00742 Acquired on 24 March 2019 at 14:12:34; Title: Monitoring Glena Park to Channelview

24c Monitoring Galena Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

25a Monitoring Lynchburg to Channelview Path, 64MSMS00743

25b TAGA File Event Summary; File: 64MSMS00743 Acquired on 24 March 2019 at 15:14:1; Title: Monitoring Lynchburg to Channelview

25c Monitoring Lynchburg to Channelview in ppbv for Benzene, Toluene, and Xylenes

26a Monitoring Highway 8 to Highway 225 West Path, 64MSMS00746

26b TAGA File Event Summary; File: 64MSMS00746 Acquired on 25 March 2019 at 08:53:29; Title: Monitoring Highway 8 to Highway 225 West

26c Monitoring Highway 8 North to Highway 225 in ppbv for Benzene, Toluene, and Xylenes

27a Monitoring EPA Command Center to Lynchburg Ferry Path, 64MSMS00747

27b TAGA File Event Summary; File: 64MSMS00747 Acquired on 25 March 2019 at 09:32:18; Title: Monitoring EPA Command Post to Lynchburg Ferry

27c Monitoring Command Post to Lynchburg Ferry in ppbv for Benzene, Toluene, and Xylenes

28a Monitoring Baytown to Lynchburg Ferry Path, 64MSMS00748

28b TAGA File Event Summary; File: 64MSMS00748 Acquired on 25 March 2019 at 10:42:45; Title: Monitoring Baytown to Lynchburg Ferry

28c Monitoring from Baytown to Lynchburg Ferry in ppbv for Benzene, Toluene, and Xylenes

29a Monitoring Highway 10 to Lynchburg Ferry Path, 64MSMS00751

29b TAGA File Event Summary; File: 64MSMS00751 Acquired on 25 March 2019 at 13:53:16; Title: Monitoring Highway 10 to Lynchburg Ferry

29c Monitoring Highway 10 to Lynchburg Ferry in ppbv for Benzene, Toluene, and Xylenes

30a Monitoring Lynchburg Ferry to Baytown Path, 64MSMS00752

30b TAGA File Event Summary; File: 64MSMS00752 Acquired on 25 March 2019 at 14:52:06; Title: Monitoring Lynchburg Ferry to Baytown

30c Monitoring Lynchburg Ferry to Baytown in ppbv for Benzene, Toluene, and Xylenes

31a Monitoring ITC Site and Vista Drive Path, 64MSMS00753

31b TAGA File Event Summary; File: 64MSMS00753 Acquired on 25 March 2019 at 15:48:25; Title: Monitoring ITC Site and Vista Road

31c Monitoring ITC Site and Vista Drive in ppbv for Benzene, Toluene, and Xylenes

32a Monitoring Highway 8 to Command Post Path, 64MSMS00757

32b TAGA File Event Summary; File: 64MSMS00757 Acquired on 26 March 2019 at 09:06:31; Title: Monitoring Highway 8 to Command Post

32c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

33a Monitoring EPA Command Post to Deer Park Path, 64MSMS00758

33b TAGA File Event Summary; File: 64MSMS00758 Acquired on 26 March 2019 at 09:37:49; Title: Monitoring EPA Command Post to Deer Park

33c Monitoring from Command Post to Deer Park in ppbv for Benzene, Toluene, and Xylenes

34a Monitoring Deer Park to Pasadena Path, 64MSMS00759

34b TAGA File Event Summary; File: 64MSMS00759 Acquired on 26 March 2019 at 10:26:57; Title: Monitoring Deer Park to Pasadena

34c Monitoring Deer Park to Pasadena in ppbv for Benzene, Toluene, and Xylenes

35a Monitoring Deer Park Path, 64MSMS00762

35b TAGA File Event Summary; File: 64MSMS00762 Acquired on 26 March 2019 at 13:07:03; Title: Monitoring Deer Park

35c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

36a Monitoring Deer Park Two Path, 64MSMS00763

36b TAGA File Event Summary; File: 64MSMS00763 Acquired on 26 March 2019 at 14:04:39; Title: Monitoring Deer Park Two

36c Monitoring Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

37a Monitoring Pasadena to Deer Park Two, 64MSMS00764

37b TAGA File Event Summary; File: 64MSMS00764 Acquired on 26 March 2019 at 15:11:12; Title: Monitoring Pasadena to Deer Park Two

37c Monitoring Pasadena to Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

38a Monitoring Independence Parkway Path, 64MSMS00765

38b TAGA File Event Summary; File: 64MSMS00765 Acquired on 26 March 2019 at 15:58:10; Title: Monitoring Independence Parkway

38c Monitoring Independence Parkway in ppbv for Benzene, Toluene, and Xylenes

39a Monitoring Highway 8 to Command Post Path, 64MSMS00768

39b TAGA File Event Summary; File: 64MSMS00768 Acquired on 27 March 2019 at 08:06:29; Title: Monitoring Highway 8 to Command Post

39c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

40a Monitoring Pasadena to Deer Park Path, 64MSMS00769

40b TAGA File Event Summary; File: 64MSMS00769 Acquired on 27 March 2019 at 08:44:09; Title: Monitoring Pasadena to Deer Park

40c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

41a Monitoring Deer Park to Galena Park Path, 64MSMS00770

41b TAGA File Event Summary; File: 64MSMS00770 Acquired on 27 March 2019 at 09:49:40; Title: Monitoring Deer Park to Galena Park

41c Monitoring Deer Park to Galena Park in ppbv for Benzene, Toluene, and Xylenes

42a Monitoring Galena Park Path, 64MSMS00771

42b TAGA File Event Summary; File: 64MSMS00771 Acquired on 27 March 2019 at 11:07:44; Title: Monitoring Galena Park

42c Monitoring Galena Park in ppbv for Benzene, Toluene, and Xylenes

43a Monitoring Galena Park to Channelview Path, 64MSMS00775

43b TAGA File Event Summary; File: 64MSMS00775 Acquired on 27 March 2019 at 14:14:04; Title: Monitoring Galena Park to Channelview

43c Monitoring Galena Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

44a Monitoring Channelview Path, 64MSMS00776

44b TAGA File Event Summary; File: 64MSMS00776 Acquired on 27 March 2019 at 15:20:51; Title: Monitoring Channelview

44c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

45a Monitoring Channelview to Command Post Path, 64MSMS00777

45b TAGA File Event Summary; File: 64MSMS00777 Acquired on 27 March 2019 at 16:43:43; Title: Monitoring Channelview to Command Post

45c Monitoring Channelview to Command Post in ppbv for Benzene, Toluene, and Xylenes

46a Monitoring Highway 8 to Command Post Path, 64MSMS00780

46b TAGA File Event Summary; File: 64MSMS00780 Acquired on 28 March 2019 at 08:43:49; Title: Monitoring Highway 8 to Command Post

46c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

47a Monitoring Command Post to Galena Park Path, 64MSMS00782

47b TAGA File Event Summary; File: 64MSMS00782 Acquired on 28 March 2019 at 09:26:38; Title: Monitoring Command Post to Galena Park

47c Monitoring Command Post to Galena Park in ppbv for Benzene, Toluene, and Xylenes

48a Monitoring Galena Park Path, 64MSMS00783

48b TAGA File Event Summary; File: 64MSMS00783 Acquired on 28 March 2019 at 10:46:39; Title: Monitoring Galena Park

48c Monitoring Galena Park in ppbv for Benzene, Toluene, and Xylenes

49a Monitoring Channelview Path, 64MSMS00784

49b TAGA File Event Summary; File: 64MSMS00784 Acquired on 28 March 2019 at 11:49:10; Title: Monitoring Channelview

49c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

50a Monitoring Channelview Two Path, 64MSMS00786

50b TAGA File Event Summary; File: 64MSMS00786 Acquired on 28 March 2019 at 13:45:30; Title: Monitoring Channelview Two

50c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

51a Monitoring Baytown Path, 64MSMS00787

51b TAGA File Event Summary; File: 64MSMS00787 Acquired on 28 March 2019 at 14:50:29; Title: Monitoring Baytown

51c Monitoring Baytown in ppbv for Benzene, Toluene, and Xylenes

52a Monitoring Deer Park Path, 64MSMS00788

52b TAGA File Event Summary; File: 64MSMS00788 Acquired on 28 March 2019 at 16:04:01; Title: Monitoring Deer Park

52c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

53a Monitoring Highway 8 to Command Post Path, 64MSMS00793

53b TAGA File Event Summary; File: 64MSMS00793 Acquired on 29 March 2019 at 08:36:02; Title: Monitoring Highway 8 to Command Post

53c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

54a Monitoring Command Post to Galena Park Path, 64MSMS00794

54b TAGA File Event Summary; File: 64MSMS00794 Acquired on 29 March 2019 at 09:08:12; Title: Monitoring Command Post to Galena Park

54c Monitoring Command Post to Galena Park in ppbv for Benzene, Toluene, and Xylenes

55a Monitoring Galena Park Path, 64MSMS00795

55b TAGA File Event Summary; File: 64MSMS00795 Acquired on 29 March 2019 at 09:57:40; Title: Monitoring Galena Park

55c Monitoring Galena Park in ppbv for Benzene, Toluene, and Xylenes

56a Monitoring Channelview Path, 64MSMS00796

56b TAGA File Event Summary; File: 64MSMS00796 Acquired on 29 March 2019 at 11:11:15; Title: Monitoring Channelview

56c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

57a Monitoring Channelview Two Path, 64MSMS00797

57b TAGA File Event Summary; File: 64MSMS00797 Acquired on 29 March 2019 at 12:05:22; Title: Monitoring Channelview Two

57c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

58a Monitoring Channelview Three Path, 64MSMS00800

58b TAGA File Event Summary; File: 64MSMS00800 Acquired on 29 March 2019 at 14:46:20; Title: Monitoring Channelview Three

58c Monitoring Channelview Three in ppbv for Benzene, Toluene, and Xylenes

59a Monitoring Channelview to Pasadena Path, 64MSMS00801

59b TAGA File Event Summary; File: 64MSMS00801 Acquired on 29 March 2019 at 15:56:02; Title: Monitoring Channelview to Pasadena

59c Monitoring Channelview to Pasadena in ppbv for Benzene, Toluene, and Xylenes

60a Monitoring Highway 8 to Command Post Path, 64MSMS00804

60b TAGA File Event Summary; File: 64MSMS00804 Acquired on 30 March 2019 at 08:19:02; Title: Monitoring Highway 8 to Command Post

60c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

61a Monitoring Channelview Path, 64MSMS00805

61b TAGA File Event Summary; File: 64MSMS00805 Acquired on 30 March 2019 at 08:45:46; Title: Monitoring Channelview

61c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

62a Monitoring Channelview Two Path, 64MSMS00807

62b TAGA File Event Summary; File: 64MSMS00807 Acquired on 30 March 2019 at 09:54:35; Title: Monitoring Channelview Two

62c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

63a Monitoring Channelview Three Path, 64MSMS00808

63b TAGA File Event Summary; File: 64MSMS00808 Acquired on 30 March 2019 at 11:08:58; Title: Monitoring Channelview Three

63c Monitoring Channelview Three in ppbv for Benzene, Toluene, and Xylenes

64a Monitoring Highland Channelview Path, 64MSMS00811

64b TAGA File Event Summary; File: 64MSMS00811 Acquired on 30 March 2019 at 14:01:36; Title: Monitoring Highland Channelview

64c Monitoring Highland Channelview in ppbv for Benzene, Toluene, and Xylenes

65a Monitoring Deer Park Path, 64MSMS00812

65b TAGA File Event Summary; File: 64MSMS00812 Acquired on 30 March 2019 at 15:24:03; Title: Monitoring Deer Park

65c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

66a Monitoring Highway 8 to Command Post Path, 64MSMS00815

66b TAGA File Event Summary; File: 64MSMS00815 Acquired on 31 March 2019 at 08:07:31; Title: Monitoring Highway 8 to Command Post

66c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

67a Monitoring Pasadena to Deer Park Path, 64MSMS00816

67b TAGA File Event Summary; File: 64MSMS00816 Acquired on 31 March 2019 at 08:42:50; Title: Monitoring Pasadena to Deer Park

67c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

68a Monitoring Deer Park Path, 64MSMS00817

68b TAGA File Event Summary; File: 64MSMS00817 Acquired on 31 March 2019 at 09:47:02; Title: Monitoring Deer Park

68c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

69a Monitoring Deer Park Two Path, 64MSMS00818

69b TAGA File Event Summary; File: 64MSMS00818 Acquired on 31 March 2019 at 11:01:18; Title: Monitoring Deer Park Two

69c Monitoring Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

70a Monitoring Deer Park Three Path, 64MSMS00822

70b TAGA File Event Summary; File: 64MSMS00822 Acquired on 31 March 2019 at 12:46:23; Title: Monitoring Deer Park Three

70c Monitoring Deer Park Three in ppbv for Benzene, Toluene, and Xylenes

71a Monitoring Deer Park Four Path, 64MSMS00823

71b TAGA File Event Summary; File: 64MSMS00823 Acquired on 31 March 2019 at 13:47:03; Title: Monitoring Deer Park Four

71c Monitoring Deer Park Four in ppbv for Benzene, Toluene, and Xylenes

72a Monitoring Deer Park Five Path, 64MSMS00824

72b TAGA File Event Summary; File: 64MSMS00824 Acquired on 31 March 2019 at 14:33:51; Title: Monitoring Deer Park Five

72c Monitoring Deer Park Five in ppbv for Benzene, Toluene, and Xylenes

73a Monitoring Deer Park Six Path, 64MSMS00825

73b TAGA File Event Summary; File: 64MSMS00825 Acquired on 31 March 2019 at 15:33:55; Title: Monitoring Deer Park Six

73c Monitoring Deer Park Six in ppbv for Benzene, Toluene, and Xylenes

74a Monitoring Highway 8 to Command Post Path, 64MSMS00828

74b TAGA File Event Summary; File: 64MSMS00828 Acquired on 01 April 2019 at 08:53:30; Title: Monitoring Highway 8 to Command Post

74c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

75a Monitoring Pasadena to Deer Park Path, 64MSMS00829

75b TAGA File Event Summary; File: 64MSMS00829 Acquired on 01 April 2019 at 09:38:35; Title: Monitoring Pasadena to Deer Park

75c Mobile Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

76a Monitoring Deer Park to Pasadena Path, 64MSMS00830

76b TAGA File Event Summary; File: 64MSMS00830 Acquired on 01 April 2019 at 10:35:24; Title: Monitoring Deer Park to Pasadena

76c Mobile Monitoring Deer Park to Pasadena in ppbv for Benzene, Toluene, and Xylenes

77a Monitoring Deer Park Path, 64MSMS00831

77b TAGA File Event Summary; File: 64MSMS00831 Acquired on 01 April 2019 at 11:42:28; Title: Monitoring Deer Park

77c Mobile Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

78a Monitoring Deer Park Two Path, 64MSMS00833

78b TAGA File Event Summary; File: 64MSMS00833 Acquired on 01 April 2019 at 14:20:03; Title: Monitoring Deer Park Two

78c Mobile Monitoring Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

79a Monitoring Deer Park Three Path, 64MSMS00834

79b TAGA File Event Summary; File: 64MSMS00834 Acquired on 01 April 2019 at 15:27:18; Title: Monitoring Deer Park Three

79c Mobile Monitoring Deer Park Three in ppbv for Benzene, Toluene, and Xylenes

80a Monitoring Baytown to Pasadena Path, 64MSMS00835

80b TAGA File Event Summary; File: 64MSMS00835 Acquired on 01 April 2019 at 16:39:22; Title: Monitoring Baytown to Pasadena

80c Mobile Monitoring Baytown to Pasadena in ppbv for Benzene, Toluene, and Xylenes

81a Monitoring Deer Park to Channelview Path, 64MSMS00841

81b TAGA File Event Summary; File: 64MSMS00841 Acquired on 02 April 2019 at 09:34:57; Title: Monitoring Deer Park to Channelview

81c Mobile Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

82a Monitoring Channelview Path, 64MSMS00842

82b TAGA File Event Summary; File: 64MSMS00842 Acquired on 02 April 2019 at 10:44:39; Title: Monitoring Channelview

82c Mobile Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

83a Monitoring Jacinto City to Deer Park Path, 64MSMS00843

83b TAGA File Event Summary; File: 64MSMS00843 Acquired on 02 April 2019 at 12:09:57; Title: Monitoring Jacinto City to Deer Park

83c Mobile Monitoring Jacinto City to Deer Park in ppbv for Benzene, Toluene, and Xylenes

84a Monitoring Deer Park to Channelview Path, 64MSMS00853

84b TAGA File Event Summary; File: 64MSMS00853 Acquired on 03 April 2019 at 15:13:12; Title: Monitoring Deer Park to Channelview

84c Mobile Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

85a Monitoring Channelview to Pasadena Path, 64MSMS00854

85b TAGA File Event Summary; File: 64MSMS00854 Acquired on 03 April 2019 at 16:35:49; Title: Monitoring Channelview to Pasadena

85c Mobile Monitoring Channelview to Pasadena in ppbv for Benzene, Toluene, and Xylenes

86a Monitoring Highway 8 to Command Post Path, 64MSMS00857

86b TAGA File Event Summary; File: 64MSMS00857 Acquired on 04 April 2019 at 08:32:18; Title: Monitoring Highway 8 to Command Post

86c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

87a Monitoring Deer Park to Channelview Path, 64MSMS00858

87b TAGA File Event Summary; File: 64MSMS00858 Acquired on 04 April 2019 at 09:35:58; Title: Monitoring Deer Park to Channelview

87c Mobile Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

88a Monitoring Channelview Path, 64MSMS00859

88b TAGA File Event Summary; File: 64MSMS00859 Acquired on 04 April 2019 at 10:41:18; Title: Monitoring Channelview

88c Mobile Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

89a Monitoring Channelview to Galena Park Path, 64MSMS00860

89b TAGA File Event Summary; File: 64MSMS00860 Acquired on 04 April 2019 at 11:50:27; Title: Monitoring Channelview to Galena Park

89c Mobile Monitoring Channelview to Galena Park in ppbv for Benzene, Toluene, and Xylenes

90a Monitoring Channelview to Galena Park Two Path, 64MSMS00861

90b TAGA File Event Summary; File: 64MSMS00861 Acquired on 04 April 2019 at 12:58:34; Title: Monitoring Channelview to Galena Park Two

90c Mobile Monitoring Channelview to Galena Park Two in ppbv for Benzene, Toluene, and Xylenes

91a Monitoring Channelview to Galena Park Three Path, 64MSMS00863

91b TAGA File Event Summary; File: 64MSMS00863 Acquired on 04 April 2019 at 14:49:35; Title: Monitoring Channelview to Galena Park Three

91c Mobile Monitoring Channelview to Galena Park Three in ppbv for Benzene, Toluene, and Xylenes

92a Monitoring Channelview to Deer Park Path, 64MSMS00864

92b TAGA File Event Summary; File: 64MSMS00864 Acquired on 04 April 2019 at 16:33:18; Title: Monitoring Channelview to Deer Park

92c Mobile Monitoring Channelview to Deer Park in ppbv for Benzene, Toluene, and Xylenes

93a Monitoring Highway 8 to Command Post Path, 64MSMS00868

93b TAGA File Event Summary; File: 64MSMS00868 Acquired on 05 April 2019 at 08:41:26; Title: Monitoring Highway 8 to Command Post

93c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

94a Monitoring Deer Park to Channelview Path, 64MSMS00869

94b TAGA File Event Summary; File: 64MSMS00869 Acquired on 05 April 2019 at 09:23:38; Title: Monitoring Deer Park to Channelview

94c Mobile Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

95a Monitoring Channelview Path, 64MSMS00870

95b TAGA File Event Summary; File: 64MSMS00870 Acquired on 05 April 2019 at 10:37:02; Title: Monitoring Channelview

95c Mobile Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

96a Monitoring Channelview Two Path, 64MSMS00871

96b TAGA File Event Summary; File: 64MSMS00871 Acquired on 05 April 2019 at 11:49:40; Title: Monitoring Channelview Two

96c Mobile Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

97a Monitoring Galena Park, 64MSMS00874

97b TAGA File Event Summary; File: 64MSMS00874 Acquired on 05 April 2019 at 14:59:06; Title: Monitoring Galena Park

97c Mobile Monitoring Galena Park in ppbv for Benzene, Toluene, and Xylenes

98a Monitoring Channelview to Pasadena Path, 64MSMS00875

98b TAGA File Event Summary; File: 64MSMS00875 Acquired on 05 April 2019 at 16:16:03; Title: Monitoring Channelview to Pasadena

98c Mobile Monitoring Channelview to Pasadena in ppbv for Benzene, Toluene, and Xylenes

99a Monitoring Highway 9 to Command Post Path, 64MSMS00878

99b TAGA File Event Summary; File: 64MSMS00878 Acquired on 06 April 2019 at 08:29:57; Title: Monitoring Highway 8 to Command Post

99c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

100a Monitoring Deer Park to Channelview Path, 64MSMS00879

100b TAGA File Event Summary; File: 64MSMS00879 Acquired on 06 April 2019 at 09:01:37; Title: Monitoring Deer Park to Channelview

100c Mobile Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

101a Monitoring Baytown to Channelview Path, 64MSMS00880

101b TAGA File Event Summary; File: 64MSMS00880 Acquired on 06 April 2019 at 10:07:20; Title: Monitoring Baytown to Channelview

101c Mobile Monitoring Baytown to Channelview in ppbv for Benzene, Toluene, and Xylenes

102a Monitoring Channelview Path, 64MSMS00881

102b TAGA File Event Summary; File: 64MSMS00881 Acquired on 06 April 2019 at 11:20:52; Title: Monitoring Channelview

102c Mobile Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

103a Monitoring Channelview to Galena Park Path, 64MSMS00883

103b TAGA File Event Summary; File: 64MSMS00883 Acquired on 06 April 2019 at 13:57:55; Title: Monitoring Channelview to Galena Park

103c Mobile Monitoring Channelview to Galena Park in ppbv for Benzene, Toluene, and Xylenes

104a Monitoring Channelview to Pasadena Path, 64MSMS00884

104b TAGA File Event Summary; File: 64MSMS00884 Acquired on 06 April 2019 at 15:59:04; Title: Monitoring Channelview to Pasadena

104c Mobile Monitoring Channelview to Pasadena in ppbv for Benzene, Toluene, and Xylenes

105a Monitoring Highway 8 to Command Post Path, 64MSMS00887

105b TAGA File Event Summary; File: 64MSMS00887 Acquired on 07 April 2019 at 09:15:02; Title: Monitoring Highway 8 to Command Post

105c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

106a Monitoring Deer Park to Channelview Path, 64MSMS00888

106b TAGA File Event Summary; File: 64MSMS00888 Acquired on 07 April 2019 at 10:06:04; Title: Monitoring Deer Park to Channelview

106c Mobile Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

107a Monitoring Channelview Path, 64MSMS00889

107b TAGA File Event Summary; File: 64MSMS00889 Acquired on 07 April 2019 at 10:06:04; Title: Monitoring Deer Park to Channelview

107c Mobile Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

108a Monitoring Channelview Two Path, 64MSMS00890

108b TAGA File Event Summary; File: 64MSMS00890 Acquired on 07 April 2019 at 12:03:19; Title: Monitoring Channelview Two

108c Mobile Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

109a Monitoring Highway 8 to Command Post Path, 64MSMS00897

109b TAGA File Event Summary; File: 64MSMS00897 Acquired on 08 April 2019 at 08:22:41; Title: Monitoring Highway 8 to Command Post

109c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

110a Monitoring Deer Park to Channelview Path, 64MSMS00898

110b TAGA File Event Summary; File: 64MSMS00898 Acquired on 08 April 2019 at 09:06:49; Title: Monitoring Deer Park to Channelview

110c Mobile Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

111a Monitoring Baytown to Channelview Path, 64MSMS00899

111b TAGA File Event Summary; File: 64MSMS00899 Acquired on 08 April 2019 at 09:59:07; Title: Monitoring Baytown to Channelview

111c Mobile Monitoring Baytown to Channelview in ppbv for Benzene, Toluene, and Xylenes

112a Monitoring Channelview Path, 64MSMS00900

112b TAGA File Event Summary; File: 64MSMS00900 Acquired on 08 April 2019 at 11:03:06; Title: Monitoring Channelview

112c Mobile Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

113a Monitoring Channelview to Galena Park Path, 64MSMS00902

113b TAGA File Event Summary; File: 64MSMS00902 Acquired on 08 April 2019 at 13:07:52; Title: Monitoring Channelview to Galena Park

113c Mobile Monitoring Channelview to Galena Park in ppbv for Benzene, Toluene, and Xylenes

114a Monitoring Channelview to Pasadena Path, 64MSMS00903

114b TAGA File Event Summary; File: 64MSMS00903 Acquired on 08 April 2019 at 15:01:48; Title: Monitoring Channelview to Pasadena

114c Mobile Monitoring Channelview to Pasadena in ppbv for Benzene, Toluene, and Xylenes

115a Monitoring Highway 8 to Command Post Path, 64MSMS00906

115b TAGA File Event Summary; File: 64MSMS00906 Acquired on 09 April 2019 at 08:22:45; Title: Monitoring from Highway 8 to Command Post

115c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

116a Monitoring Deer Park to Channelview Path, 64MSMS00907

116b TAGA File Event Summary; File: 64MSMS00907 Acquired on 09 April 2019 at 09:07:10; Title: Monitoring Deer Park to Channelview

116c Mobile Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

117a Monitoring ITC Site to Baytown Path, 64MSMS00908

117b TAGA File Event Summary; File: 64MSMS00908 Acquired on 09 April 2019 at 10:11:51; Title: Monitoring ITC Site to Baytown

117c Mobile Monitoring ITC Site to Baytown in ppbv for Benzene, Toluene, and Xylenes

118a Monitoring Channelview Path, 64MSMS00909

118b TAGA File Event Summary; File: 64MSMS00909 Acquired on 09 April 2019 at 11:26:56; Title: Monitoring Channelview

118c Mobile Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

119a Monitoring Channelview to Galena Park Path, 64MSMS00911

119b TAGA File Event Summary; File: 64MSMS00911 Acquired on 09 April 2019 at 13:37:02; Title: Monitoring Channelview to Galena Park

119c Mobile Monitoring Channelview to Galena Park in ppbv for Benzene, Toluene, and Xylenes

120a Monitoring Channelview Two Path, 64MSMS00912

120b TAGA File Event Summary; File: 64MSMS00912 Acquired on 09 April 2019 at 15:28:24; Title: Monitoring Channelview Two

120c Mobile Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

121a Monitoring Lynchburg to Pasadena Path, 64MSMS00913

121b TAGA File Event Summary; File: 64MSMS00913 Acquired on 09 April 2019 at 16:19:46; Title: Monitoring Lynchburg to Pasadena

121c Mobile Monitoring Lynchburg to Pasadena in ppbv for Benzene, Toluene, and Xylenes

122a Monitoring Highway 8 to Command Post Path, 64MSMS00916

122b TAGA File Event Summary; File: 64MSMS00916 Acquired on 10 April 2019 at 07:56:22; Title: Monitoring Highway 8 to Command Post

122c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

123a Monitoring Pasadena to Deer Park Path, 64MSMS00917

123b TAGA File Event Summary; File: 64MSMS00917 Acquired on 10 April 2019 at 08:34:25; Title: Monitoring Pasadena to Deer Park

123c Mobile Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

124a Monitoring Deer Park to Baytown Path, 64MSMS00918

124b TAGA File Event Summary; File: 64MSMS00918 Acquired on 10 April 2019 at 09:33:19; Title: Monitoring Deer Park to Baytown

124c Mobile Monitoring Deer Park to Baytown in ppbv for Benzene, Toluene, and Xylenes

125a Monitoring Lynchburg to Channelview Path, 64MSMS00919

125b TAGA File Event Summary; File: 64MSMS00919 Acquired on 10 April 2019 at 10:48:47; Title: Monitoring Lynchburg to Channelview

125c Mobile Monitoring Lynchburg to Channelview in ppbv for Benzene, Toluene, and Xylenes

126a Monitoring Channelview Path, 64MSMS00920

126b TAGA File Event Summary; File: 64MSMS00920 Acquired on 10 April 2019 at 11:38:21; Title: Monitoring Channelview

126c Mobile Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

127a Monitoring Galena Park Path, 64MSMS00922

127b TAGA File Event Summary; File: 64MSMS00922 Acquired on 10 April 2019 at 13:55:21; Title: Monitoring Galena Park

127c Mobile Monitoring Galena Park in ppbv for Benzene, Toluene, and Xylenes

128a Monitoring Galena Park to Channelview Path, 64MSMS00923

128b TAGA File Event Summary; File: 64MSMS00923 Acquired on 10 April 2019 at 15:10:00; Title: Monitoring Galena Park to Channelview

128c Mobile Monitoring Galena Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

129a Monitoring Channelview to Deer Park Path, 64MSMS00924

129b TAGA File Event Summary; File: 64MSMS00924 Acquired on 10 April 2019 at 16:13:28; Title: Monitoring Channelview to Deer Park

129c Mobile Monitoring Channelview to Deer Park in ppbv for Benzene, Toluene, and Xylenes

130a Monitoring Highway 8 to Command Post Path, 64MSMS00928

130b TAGA File Event Summary; File: 64MSMS00928 Acquired on 11 April 2019 at 08:37:33; Title: Monitoring Highway 8 to Command Post

130c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

131a Stationary Monitoring at EPA Command Post Location, 64MSMS00929

131b TAGA File Event Summary; File: 64MSMS00929 Acquired on 11 April 2019 at 09:23:24; Title: Stationary Monitoring at EPA Command Post

131c Stationary Monitoring at EPA Command Post in ppbv for Benzene, Toluene, and Xylenes

132a Monitoring Pasadena to Deer Park Path, 64MSMS00930

132b TAGA File Event Summary; File: 64MSMS00930 Acquired on 11 April 2019 at 10:06:59; Title: Monitoring Pasadena to Deer Park

132c Mobile Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

133a Monitoring Deer Park to Baytown Path, 64MSMS00931

133b TAGA File Event Summary; File: 64MSMS00931 Acquired on 11 April 2019 at 11:05:07; Title: Monitoring Deer Park to Baytown

133c Mobile Monitoring Deer Park to Baytown in ppbv for Benzene, Toluene, and Xylenes

134a Monitoring Lynchburg to Galena Park Path, 64MSMS00932

134b TAGA File Event Summary; File: 64MSMS00932 Acquired on 11 April 2019 at 12:01:26; Title: Monitoring Lynchburg to Galena Park

134c Mobile Monitoring Lynchburg to Galena Park in ppbv for Benzene, Toluene, and Xylenes

135a Monitoring Galena Park to Channelview Path, 64MSMS00934

135b TAGA File Event Summary; File: 64MSMS00934 Acquired on 11 April 2019 at 14:05:06; Title: Monitoring Galena Park to Channelview

135c Mobile Monitoring Galena Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

136a Monitoring Channelview to Deer Park Path, 64MSMS00935

136b TAGA File Event Summary; File: 64MSMS00935 Acquired on 11 April 2019 at 15:22:24; Title: Monitoring Channelview to Deer Park

136c Mobile Monitoring Channelview to Deer Park in ppbv for Benzene, Toluene, and Xylenes

137a Monitoring Highway 8 to Command Post Path, 64MSMS00938

137b TAGA File Event Summary; File: 64MSMS00938 Acquired on 12 April 2019 at 10:46:01; Title: Monitoring Highway 8 to Command Post

137c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

138a Monitoring Pasadena to Deer Park Path, 64MSMS00939

138b TAGA File Event Summary; File: 64MSMS00939 Acquired on 12 April 2019 at 11:17:06; Title: Monitoring Pasadena to Deer Park

138c Mobile Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

139a Monitoring Deer Park to Galena Park Path, 64MSMS00940

139b TAGA File Event Summary; File: 64MSMS00940 Acquired on 12 April 2019 at 12:31:27; Title: Monitoring Deer Park to Galena Park

139c Mobile Monitoring Deer Park to Galena Park in ppbv for Benzene, Toluene, and Xylenes

140a Monitoring Galena Park to Manchester Path, 64MSMS00942

140b TAGA File Event Summary; File: 64MSMS00942 Acquired on 12 April 2019 at 14:04:32; Title: Monitoring Galena Park to Manchester

140c Mobile Monitoring Galena Park to Manchester in ppbv for Benzene, Toluene, and Xylenes

141a Monitoring Manchester to Deer Park Path, 64MSMS00943

141b TAGA File Event Summary; File: 64MSMS00943 Acquired on 12 April 2019 at 14:56:35; Title: Monitoring Manchester to Deer Park

141c Mobile Monitoring Manchester to Deer Park in ppbv for Benzene, Toluene, and Xylenes

142a Monitoring Highway 8 to Command Post Path, 64MSMS00946

142b TAGA File Event Summary; File: 64MSMS00946 Acquired on 13 April 2019 at 08:23:52; Title: Monitoring Highway 8 to Command Post

142c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

143a Monitoring Pasadena to Deer Park Path, 64MSMS00947

143b TAGA File Event Summary; File: 64MSMS00947 Acquired on 13 April 2019 at 09:03:01; Title: Monitoring Pasadena to Deer Park

143c Mobile Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

144a Monitoring Deer Park to Channelview Path, 64MSMS00948

144b TAGA File Event Summary; File: 64MSMS00948 Acquired on 13 April 2019 at 10:02:38; Title: Monitoring Deer Park to Channelview

144c Mobile Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

145a Monitoring Lynchburg to Channelview Path, 64MSMS00949

145b TAGA File Event Summary; File: 64MSMS00949 Acquired on 13 April 2019 at 10:59:11; Title: Monitoring Lynchburg Ferry to Channelview

145c Mobile Monitoring Lynchburg to Channelview in ppbv for Benzene, Toluene, and Xylenes

146a Monitoring Channelview to Galena Park Path, 64MSMS00950

146b TAGA File Event Summary; File: 64MSMS00950 Acquired on 13 April 2019 at 11:47:54; Title: Monitoring Channelview to Galena Park

146c Mobile Monitoring Channelview to Galena Park in ppbv for Benzene, Toluene, and Xylenes

147a Monitoring Galena Park to Baytown Path, 64MSMS00952

147b TAGA File Event Summary; File: 64MSMS00952 Acquired on 13 April 2019 at 13:55:34; Title: Monitoring Galena Park to Baytown

147c Mobile Monitoring Galena Park to Baytown in ppbv for Benzene, Toluene, and Xylenes

148a Monitoring Channelview to Baytown Path, 64MSMS00953

148b TAGA File Event Summary; File: 64MSMS00953 Acquired on 13 April 2019 at 15:06:45; Title: Monitoring Channelview to Baytown

148c Mobile Monitoring Channelview to Baytown in ppbv for Benzene, Toluene, and Xylenes

149a Monitoring Highway 8 to Command Post Path, 64MSMS00956

149b TAGA File Event Summary; File: 64MSMS00956 Acquired on 14 April 2019 at 08:05:52; Title: Monitoring Highway 8 to Command Post

149c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

150a Monitoring Pasadena to Deer Park Path, 64MSMS00957

150b TAGA File Event Summary; File: 64MSMS00957 Acquired on 14 April 2019 at 12:34:47; Title: Monitoring Pasadena to Deer Park

150c Mobile Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

151a Monitoring Deer Park Path, 64MSMS00958

151b TAGA File Event Summary; File: 64MSMS00958 Acquired on 14 April 2019 at 13:29:48; Title: Monitoring Deer Park

151c Mobile Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

152a Monitoring Deer Park to Baytown Path, 64MSMS00959

152b TAGA File Event Summary; File: 64MSMS00959 Acquired on 14 April 2019 at 14:35:10; Title: Monitoring Deer Park to Baytown

152c Mobile Monitoring Deer Park to Baytown in ppbv for Benzene, Toluene, and Xylenes

153a Monitoring Highway 8 to Command Post Path, 64MSMS00962

153b TAGA File Event Summary; File: 64MSMS00962 Acquired on 15 April 2019 at 07:57:57; Title: Monitoring Highway 8 to Command Post

153c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

154a Monitoring Pasadena to Deer Park Path, 64MSMS00963

154b TAGA File Event Summary; File: 64MSMS00963 Acquired on 15 April 2019 at 08:52:36; Title: Monitoring Pasadena to Deer Park

154c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

155a Monitoring Highway 8 to Command Post Path, 64MSMS00966

155b TAGA File Event Summary; File: 64MSMS00966 Acquired on 17 April 2019 at 08:09:1; Title: Monitoring Highway 8 to Command Post

155c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

156a Monitoring Pasadena to Deer Park Path, 64MSMS00967

156b TAGA File Event Summary; File: 64MSMS00967 Acquired on 17 April 2019 at 08:51:2; Title: Monitoring Pasadena to Deer Park

156c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

157a Monitoring Deer Park to Channelview Path, 64MSMS00968

157b TAGA File Event Summary; File: 64MSMS00968 Acquired on 17 April 2019 at 09:40:13; Title: Monitoring Deer Park to Channelview

157c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

158a Monitoring Lynchburg to Channelview Path, 64MSMS00969

158b TAGA File Event Summary; File: 64MSMS00969 Acquired on 17 April 2019 at 10:29:50; Title: Monitoring Lynchburg to Channelview

158c Monitoring Lynchburg to Channelview in ppbv for Benzene, Toluene, and Xylenes

159a Monitoring Channelview Path, 64MSMS00970

159b TAGA File Event Summary; File: 64MSMS00970 Acquired on 17 April 2019 at 11:36:38; Title: Monitoring Channelview

159c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

160a Monitoring Galena Park Path, 64MSMS00972

160b TAGA File Event Summary; File: 64MSMS00972 Acquired on 17 April 2019 at 13:22:08; Title: Monitoring Galena Park

160c Monitoring Galena Park in ppbv for Benzene, Toluene, and Xylenes

161a Monitoring Manchester to Galena Park Path, 64MSMS00973

161b TAGA File Event Summary; File: 64MSMS00973 Acquired on 17 April 2019 at 14:11:58; Title: Monitoring Manchester to Galena Park

161c Monitoring Manchester to Galena Park in ppbv for Benzene, Toluene, and Xylenes

162a Monitoring Channelview to Deer Park Path, 64MSMS00974

162b TAGA File Event Summary; File: 64MSMS00974 Acquired on 17 April 2019 at 15:58:18; Title: Monitoring Channelview to Deer Park

162c Monitoring Channelview to Deer Park in ppbv for Benzene, Toluene, and Xylenes

163a Monitoring Highway 8 to Command Post Path, 64MSMS00977

163b TAGA File Event Summary; File: 64MSMS00977 Acquired on 18 April 2019 at 08:40:52; Title: Monitoring Highway 8 to Command Post

163c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

164a Monitoring Deer Park Path, 64MSMS00979

164b TAGA File Event Summary; File: 64MSMS00979 Acquired on 18 April 2019 at 10:10:18; Title: Monitoring Deer Park

164c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

165a Monitoring Deer Park to Pasadena Path, 64MSMS00980

165b TAGA File Event Summary; File: 64MSMS00980 Acquired on 18 April 2019 at 11:40:13; Title: Monitoring Deer Park to Pasadena

165c Monitoring Deer Park to Pasadena in ppbv for Benzene, Toluene, and Xylenes

166a Monitoring Pasadena to Baytown Path, 64MSMS00982

166b TAGA File Event Summary; File: 64MSMS00982 Acquired on 18 April 2019 at 13:52:52; Title: Monitoring Pasadena to Baytown

166c Monitoring Pasadena to Baytown in ppbv for Benzene, Toluene, and Xylenes

167a Monitoring Deer Park to Baytown Path, 64MSMS00983

167b TAGA File Event Summary; File: 64MSMS00983 Acquired on 18 April 2019 at 14:59:06; Title: Monitoring Deer Park to Baytown

167c Monitoring Deer Park to Baytown in ppbv for Benzene, Toluene, and Xylenes

168a Monitoring Lynchburg to Deer Park Path, 64MSMS00984

168b TAGA File Event Summary; File: 64MSMS00984 Acquired on 18 April 2019 at 15:50:31; Title: Monitoring Lynchburg to Deer Park

168c Monitoring Lynchburg to Deer Park in ppbv for Benzene, Toluene, and Xylenes

169a Monitoring Highway 8 to Command Post Path, 64MSMS00987

169b TAGA File Event Summary; File: 64MSMS00987 Acquired on 19 April 2019 at 07:57:47; Title: Monitoring Highway 8 to Command Post

169c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

170a Monitoring Pasadena to Deer Park Path, 64MSMS00988

170b TAGA File Event Summary; File: 64MSMS00988 Acquired on 19 April 2019 at 08:42:14; Title: Monitoring Pasadena to Deer Park

170c Monitoring Pasadena to Deer Park in ppbv in ppbv for Benzene, Toluene, and Xylenes

171a Monitoring Deer Park to La Porte Path, 64MSMS00989

171b TAGA File Event Summary; File: 64MSMS00989 Acquired on 19 April 2019 at 09:29:22; Title: Monitoring Deer Park to La Porte

171c Monitoring Deer Park to La Porte in ppbv for Benzene, Toluene, and Xylenes

172a Monitoring Deer Park to La Porte Two Path, 64MSMS00990

172b TAGA File Event Summary; File: 64MSMS00990 Acquired on 19 April 2019 at 11:29:00; Title: Monitoring Deer Park to La Porte Two

172c Monitoring Deer Park to La Porte Two in ppbv for Benzene, Toluene, and Xylenes

173a Monitoring Deer Park Path, 64MSMS00992

173b TAGA File Event Summary; File: 64MSMS00992 Acquired on 19 April 2019 at 13:18:23; Title: Monitoring Deer Park

173c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

174a Monitoring Deer Park to La Porte Three Path, 64MSMS00993

174b TAGA File Event Summary; File: 64MSMS00993 Acquired on 19 April 2019 at 14:07:31; Title: Monitoring Deer Park to La Porte Three

174c Monitoring Deer Park to La Porte Three in ppbv for Benzene, Toluene, and Xylenes

175a Monitoring La Porte Path, 64MSMS00994

175b TAGA File Event Summary; File: 64MSMS00994 Acquired on 19 April 2019 at 15:07:12; Title: Monitoring La Porte

175c Monitoring La Porte in ppbv for Benzene, Toluene, and Xylenes

176a Monitoring La Porte to Deer Park Path, 64MSMS00995

176b TAGA File Event Summary; File: 64MSMS00995 Acquired on 19 April 2019 at 16:02:31; Title: Monitoring La Porte to Deer Park

176c Monitoring La Porte to Deer Park in ppbv for Benzene, Toluene, and Xylenes

177a Monitoring Pasadena to Deer Park Path, 64MSMS01000

177b TAGA File Event Summary; File: 64MSMS01000 Acquired on 20 April 2019 at 09:39:01; Title: Monitoring Pasadena to Deer Park

177c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

178a Monitoring Deer Park Path, 64MSMS01001

178b TAGA File Event Summary; File: 64MSMS01001 Acquired on 20 April 2019 at 10:28:33; Title: Monitoring Deer Park

178c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

179a Monitoring Deer Park Two Path, 64MSMS01002

179b TAGA File Event Summary; File: 64MSMS01002 Acquired on 20 April 2019 at 11:01:15; Title: Monitoring Deer Park Two

179c Monitoring Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

180a Monitoring La Porte to Independence Parkway Path, 64MSMS01003

180b TAGA File Event Summary; File: 64MSMS01003 Acquired on 20 April 2019 at 12:08:00; Title: Monitoring La Porte to Independence

180c Monitoring La Porte to Independence in ppbv for Benzene, Toluene, and Xylenes

181a Monitoring Deer Park to Baytown Path, 64MSMS01005

181b TAGA File Event Summary; File: 64MSMS01005 Acquired on 20 April 2019 at 14:26:16; Title: Monitoring Deer Park to Baytown

181c Monitoring Deer Park to Baytown in ppbv for Benzene, Toluene, and Xylenes

182a Monitoring Deer Park to Baytown Path, 64MSMS01006

182b TAGA File Event Summary; File: 64MSMS01006 Acquired on 20 April 2019 at 15:07:12; Title: Monitoring Deer Park to Baytown Two

182c Monitoring Deer Park to Baytown Two in ppbv for Benzene, Toluene, and Xylenes

183a Monitoring Baytown to Deer Park Path, 64MSMS01007

183b TAGA File Event Summary; File: 64MSMS01007 Acquired on 20 April 2019 at 16:03:22; Title: Monitoring Baytown to Deer Park

183c Monitoring Baytown to Deer Park in ppbv for Benzene, Toluene, and Xylenes

184a Monitoring Highway 8 to Command Post Path, 64MSMS01010

184b TAGA File Event Summary; File: 64MSMS01010 Acquired on 21 April 2019 at 08:30:22; Title: Monitoring Highway 8 to Command Post

184c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

185a Monitoring Pasadena to Deer Park Path, 64MSMS01011

185b TAGA File Event Summary; File: 64MSMS01011 Acquired on 21 April 2019 at 09:04:00; Title: Monitoring Pasadena to Deer Park

185c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

186a Monitoring Channelview Path, 64MSMS01012

186b TAGA File Event Summary; File: 64MSMS01012 Acquired on 21 April 2019 at 09:57:21; Title: Monitoring Channelview

186c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

187a Monitoring Channelview Two Path, 64MSMS01013

187b TAGA File Event Summary; File: 64MSMS01013 Acquired on 21 April 2019 at 11:12:48; Title: Monitoring Channelview Two

187c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

188a Monitoring Channelview to Deer Park Path, 64MSMS01014

188b TAGA File Event Summary; File: 64MSMS01014 Acquired on 21 April 2019 at 12:21:26; Title: Monitoring Channelview to Deer Park

188c Monitoring Channelview to Deer Park in ppbv for Benzene, Toluene, and Xylenes

189a Monitoring Deer Park to Baytown Path, 64MSMS01016

189b TAGA File Event Summary; File: 64MSMS01016 Acquired on 21 April 2019 at 14:43:23; Title: Monitoring Deer Park to Baytown

189c Monitoring Deer Park to Baytown in ppbv for Benzene, Toluene, and Xylenes

190a Monitoring Baytown to Deer Park Path, 64MSMS01017

190b TAGA File Event Summary; File: 64MSMS01017 Acquired on 21 April 2019 at 15:49:10; Title: Monitoring Baytown to Deer Park

190c Monitoring Baytown to Deer Park in ppbv for Benzene, Toluene, and Xylenes

191a Monitoring Highway 8 to Command Post Path, 64MSMS01020

191b TAGA File Event Summary; File: 64MSMS01020 Acquired on 22 April 2019 at 08:45:46; Title: Monitoring Highway 8 to Command Post

191c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

192a Monitoring Pasadena to Deer Park Path, 64MSMS01021

192b TAGA File Event Summary; File: 64MSMS01021 Acquired on 22 April 2019 at 09:17:26; Title: Monitoring Pasadena to Deer Park

192c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

193a Monitoring Deer Park to Channelview Path, 64MSMS01022

193b TAGA File Event Summary; File: 64MSMS01022 Acquired on 22 April 2019 at 10:00:06; Title: Monitoring Deer Park to Channelview

193c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

194a Monitoring Channelview to Galena Park Path, 64MSMS01023

194b TAGA File Event Summary; File: 64MSMS01023 Acquired on 22 April 2019 at 11:24:44; Title: Monitoring Channelview to Galena Park

194c Monitoring Channelview to Galena Park in ppbv for Benzene, Toluene, and Xylenes

195a Monitoring Galena Park Path, 64MSMS01025

195b TAGA File Event Summary; File: 64MSMS01025 Acquired on 22 April 2019 at 13:21:35; Title: Monitoring Galena Park

195c Monitoring Galena Park in ppbv for Benzene, Toluene, and Xylenes

196a Monitoring Galena Park to Channelview Path, 64MSMS01026

196b TAGA File Event Summary; File: 64MSMS01026 Acquired on 22 April 2019 at 14:20:57; Title: Monitoring Galena Park to Channelview

196c Monitoring Galena Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

197a Monitoring Channelview to Deer Park Path, 64MSMS01027

197b TAGA File Event Summary; File: 64MSMS01027 Acquired on 22 April 2019 at 15:27:20; Title: Monitoring Channelview to Deer Park

197c Monitoring Channelview to Deer Park in ppbv for Benzene, Toluene, and Xylenes

198a Monitoring Highway 8 to Command Post Path, 64MSMS01030

198b TAGA File Event Summary; File: 64MSMS01030 Acquired on 23 April 2019 at 08:16:48; Title: Monitoring Highway 8 to Command Post

198c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

199a Monitoring Pasadena to Deer Park Two Path, 64MSMS01031

199b TAGA File Event Summary; File: 64MSMS01031 Acquired on 23 April 2019 at 08:57:15; Title: Monitoring Pasadena to Deer Park

199c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

200a Monitoring Deer Park to Channelview Path, 64MSMS01033

200b TAGA File Event Summary; File: 64MSMS01033 Acquired on 23 April 2019 at 09:47:20; Title: Monitoring Deer Park to Channelview Two

200c Monitoring Deer Park to Channelview Two in ppbv for Benzene, Toluene, and Xylenes

201a Monitoring Channelview Path, 64MSMS01034

201b TAGA File Event Summary; File: 64MSMS01034 Acquired on 23 April 2019 at 11:13:49; Title: Monitoring Channelview

201c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

202a Monitoring Galena Park to Manchester Path, 64MSMS01036

202b TAGA File Event Summary; File: 64MSMS01036 Acquired on 23 April 2019 at 13:18:26; Title: Monitoring Galena Park to Manchester

202c Monitoring Galena Park to Manchester in ppbv for Benzene, Toluene, and Xylenes

203a Monitoring Manchester to Deer Park Path, 64MSMS01037

203b TAGA File Event Summary; File: 64MSMS01037 Acquired on 23 April 2019 at 14:09:56; Title: Monitoring Manchester to Deer Park

203c Monitoring Manchester to Deer Park in ppbv for Benzene, Toluene, and Xylenes

204a Monitoring Deer Park to Channelview Path, 64MSMS01038

204b TAGA File Event Summary; File: 64MSMS01038 Acquired on 23 April 2019 at 15:22:16; Title: Monitoring Deer Park to Channelview Three

204c Monitoring Deer Park to Channelview Three in ppbv for Benzene, Toluene, and Xylenes

205a Monitoring Highway 8 to Command Post Path, 64MSMS01041

205b TAGA File Event Summary; File: 64MSMS01041 Acquired on 24 April 2019 at 08:46:55; Title: Monitoring Highway 8 to Command Post

205c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

206a Monitoring Pasadena to Deer Park Path, 64MSMS01042

206b TAGA File Event Summary; File: 64MSMS01042 Acquired on 24 April 2019 at 09:17:34; Title: Monitoring Pasadena to Deer Park

206c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

207a Monitoring Deer Park to Channelview Path, 64MSMS01043

207b TAGA File Event Summary; File: 64MSMS01043 Acquired on 24 April 2019 at 10:12:32; Title: Monitoring Deer Park to Channelview

207c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

208a Monitoring Channelview Path, 64MSMS01044

208b TAGA File Event Summary; File: 64MSMS01044 Acquired on 24 April 2019 at 11:23:53; Title: Monitoring Channelview

208c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

209a Monitoring Channelview to Deer Park Path, 64MSMS01046

209b TAGA File Event Summary; File: 64MSMS01046 Acquired on 24 April 2019 at 13:31:08; Title: Monitoring Channelview to Deer Park

209c Monitoring Channelview to Deer Park in ppbv for Benzene, Toluene, and Xylenes

210a Monitoring Deer Park to Channelview Path, 64MSMS01047

210b TAGA File Event Summary; File: 64MSMS01047 Acquired on 24 April 2019 at 14:24:52; Title: Monitoring Deer Park to Channelview

210c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

211a Monitoring Channelview to Deer Park Two Path, 64MSMS01048

211b TAGA File Event Summary; File: 64MSMS01048 Acquired on 24 April 2019 at 15:23:08; Title: Monitoring Channelview to Deer Park Two

211c Monitoring Channelview to Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

212a Monitoring Highway 8 to Command Post Path, 64MSMS01051

212b TAGA File Event Summary; File: 64MSMS01051 Acquired on 25 April 2019 at 08:45:56; Title: Monitoring Highway 8 to Command Post

212c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

213a Monitoring Pasadena to Deer Path, 64MSMS01052

213b TAGA File Event Summary; File: 64MSMS01052 Acquired on 25 April 2019 at 09:13:32; Title: Monitoring Pasadena to Deer Park

213c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

214a Monitoring Deer Park to La Porte Path, 64MSMS01053

214b TAGA File Event Summary; File: 64MSMS01053 Acquired on 25 April 2019 at 09:52:25; Title: Monitoring Deer Park to La Porte

214c Monitoring Deer Park to La Porte in ppbv for Benzene, Toluene, and Xylenes

215a Monitoring Deer Park to La Porte Two Path, 64MSMS01054

215b TAGA File Event Summary; File: 64MSMS01054 Acquired on 25 April 2019 at 11:09:02; Title: Monitoring Deer Park to La Porte Two

215c Monitoring Deer Park to La Porte Two in ppbv for Benzene, Toluene, and Xylenes

216a Monitoring Deer Park Path, 64MSMS01056

216b TAGA File Event Summary; File: 64MSMS01056 Acquired on 25 April 2019 at 13:56:22; Title: Monitoring Deer Park

216c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

217a Monitoring Deer Park to La Porte Three Path, 64MSMS01057

217b TAGA File Event Summary; File: 64MSMS01057 Acquired on 25 April 2019 at 15:10:22; Title: Monitoring Deer Park to La Porte Three

217c Monitoring Deer Park to La Porte Three in ppbv for Benzene, Toluene, and Xylenes

218a Monitoring Highway 8 to Command Post Path, 64MSMS01060

218b TAGA File Event Summary; File: 64MSMS01060 Acquired on 26 April 2019 at 08:22:27; Title: Monitoring Highway 8 to Command Post

218c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

219a Monitoring Pasadena to Deer Park Path, 64MSMS01061

219b TAGA File Event Summary; File: 64MSMS01061 Acquired on 26 April 2019 at 08:50:30; Title: Monitoring Pasadena to Deer Park

219c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

220a Monitoring Deer Park Path, 64MSMS01062

220b TAGA File Event Summary; File: 64MSMS01062 Acquired on 26 April 2019 at 09:53:19; Title: Monitoring Deer Park

220c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

221a Monitoring Deer Park Two Path, 64MSMS01063

221b TAGA File Event Summary; File: 64MSMS01063 Acquired on 26 April 2019 at 10:56:48; Title: Monitoring Deer Park Two

221c Monitoring Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

222a Monitoring Deer Park Three Path, 64MSMS01064

222b TAGA File Event Summary; File: 64MSMS01064 Acquired on 26 April 2019 at 12:01:31; Title: Monitoring Deer Park Three

222c Monitoring Deer Park Three in ppbv for Benzene, Toluene, and Xylenes

223a Monitoring Deer Park Four Path, 64MSMS01066

223b TAGA File Event Summary; File: 64MSMS01066 Acquired on 26 April 2019 at 14:02:40; Title: Monitoring Deer Park Four

223c Monitoring Deer Park Four in ppbv for Benzene, Toluene, and Xylenes

224a Monitoring Deer Park Five Path, 64MSMS01067

224b TAGA File Event Summary; File: 64MSMS01067 Acquired on 26 April 2019 at 15:18:03; Title: Monitoring Deer Park Five

224c Monitoring Deer Park Five in ppbv for Benzene, Toluene, and Xylenes

225a Monitoring Highway 8 to Command Post Path, 64MSMS01070

225b TAGA File Event Summary; File: 64MSMS01070 Acquired on 27 April 2019 at 08:07:19; Title: Monitoring Highway 8 to Command Post

225c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

226a Monitoring Pasadena to Deer Park Path, 64MSMS01071

226b TAGA File Event Summary; File: 64MSMS01071 Acquired on 27 April 2019 at 08:39:19; Title: Monitoring Pasadena to Deer Park

226c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

227a Monitoring Deer Park to Channelview Path, 64MSMS01072

227b TAGA File Event Summary; File: 64MSMS01072 Acquired on 27 April 2019 at 09:29:31; Title: Monitoring Deer Park to Channelview

227c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

228a Monitoring Channelview to Baytown Path, 64MSMS01073

228b TAGA File Event Summary; File: 64MSMS01073 Acquired on 27 April 2019 at 10:44:56; Title: Monitoring Channelview to Baytown

228c Monitoring Channelview to Baytown in ppbv for Benzene, Toluene, and Xylenes

229a Monitoring Baytown to Channelview Path, 64MSMS01075

229b TAGA File Event Summary; File: 64MSMS01075 Acquired on 27 April 2019 at 13:10:07; Title: Monitoring Baytown to Channelview

229c Monitoring Baytown to Channelview in ppbv for Benzene, Toluene, and Xylenes

230a Monitoring Channelview Path, 64MSMS01076

230b TAGA File Event Summary; File: 64MSMS01076 Acquired on 27 April 2019 at 14:05:35; Title: Monitoring Channelview

230c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

231a Monitoring Galena Park Path, 64MSMS01077

231b TAGA File Event Summary; File: 64MSMS01077 Acquired on 27 April 2019 at 15:22:03; Title: Monitoring Galena Park

231c Monitoring Galena Park in ppbv for Benzene, Toluene, and Xylenes

232a Monitoring Highway 8 to Command Post Path, 64MSMS01080

232b TAGA File Event Summary; File: 64MSMS01080 Acquired on 28 April 2019 at 08:09:20; Title: Monitoring Highway 8 to Command Post

232c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

233a Monitoring Deer Park to Channelview Path, 64MSMS01081

233b TAGA File Event Summary; File: 64MSMS01081 Acquired on 28 April 2019 at 09:20:17; Title: Monitoring Deer Park to Channelview

233c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

234a Monitoring Channelview Path, 64MSMS01082

234b TAGA File Event Summary; File: 64MSMS01082 Acquired on 28 April 2019 at 10:39:32; Title: Monitoring Channelview

234c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

235a Monitoring Channelview Two Path, 64MSMS01085

235b TAGA File Event Summary; File: 64MSMS01085 Acquired on 28 April 2019 at 13:32:00; Title: Monitoring Channelview Two

235c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

236a Monitoring Channelview to Lynchburg Path, 64MSMS01086

236b TAGA File Event Summary; File: 64MSMS01086 Acquired on 28 April 2019 at 14:26:26; Title: Monitoring Channelview to Lynchburg

236c Monitoring Channelview to Lynchburg in ppbv for Benzene, Toluene, and Xylenes

237a Monitoring Channelview Three Path, 64MSMS01087

237b TAGA File Event Summary; File: 64MSMS01087 Acquired on 28 April 2019 at 15:32:38; Title: Monitoring Channelview Three

237c Monitoring Channelview Three in ppbv for Benzene, Toluene, and Xylenes

238a Monitoring Highway 8 to Command Post Path, 64MSMS01090

238b TAGA File Event Summary; File: 64MSMS01090 Acquired on 29 April 2019 at 08:40:24; Title: Monitoring Highway 8 to Command Post

238c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

239a Monitoring Deer Park to Channelview Path, 64MSMS01091

239b TAGA File Event Summary; File: 64MSMS01091 Acquired on 29 April 2019 at 09:48:23; Title: Monitoring Deer Park to Channelview

239c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

240a Monitoring Channelview Path, 64MSMS01092

240b TAGA File Event Summary; File: 64MSMS01092 Acquired on 29 April 2019 at 11:03:17; Title: Monitoring Channelview

240c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

241a Monitoring Channelview Two Path, 64MSMS01095

241b TAGA File Event Summary; File: 64MSMS01095 Acquired on 29 April 2019 at 13:16:46; Title: Monitoring Channelview Two

241c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

242a Monitoring Channelview Three Path, 64MSMS01096

242b TAGA File Event Summary; File: 64MSMS01096 Acquired on 29 April 2019 at 14:23:52; Title: Monitoring Channelview Three

242c Monitoring Channelview Three in ppbv for Benzene, Toluene, and Xylenes

243a Monitoring Channelview Four Path, 64MSMS01097

243b TAGA File Event Summary; File: 64MSMS01097 Acquired on 29 April 2019 at 15:16:57; Title: Monitoring Channelview Four

243c Monitoring Channelview Four in ppbv for Benzene, Toluene, and Xylenes

244a Monitoring Highway 8 to Command Post Path, 64MSMS01100

244b TAGA File Event Summary; File: 64MSMS01100 Acquired on 30 April 2019 at 08:47:09; Title: Monitoring Highway 8 to Deer Park

244c Monitoring Highway 8 to Deer Park in ppbv for Benzene, Toluene, and Xylenes

245a Monitoring Deer Park to Channelview Path, 64MSMS01101

245b TAGA File Event Summary; File: 64MSMS01101 Acquired on 30 April 2019 at 10:06:50; Title: Monitoring Deer Park to Channelview

245c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

246a Monitoring Channelview Path, 64MSMS01102

246b TAGA File Event Summary; File: 64MSMS01102 Acquired on 30 April 2019 at 10:49:28; Title: Monitoring Channelview

246c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

247a Monitoring Channelview Two Path, 64MSMS01103

247b TAGA File Event Summary; File: 64MSMS01103 Acquired on 30 April 2019 at 11:36:36; Title: Monitoring Channelview Two

247c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

248a Monitoring Channelview Three Path, 64MSMS01105

248b TAGA File Event Summary; File: 64MSMS01105 Acquired on 30 April 2019 at 14:21:11; Title: Monitoring Channelview Three

248c Monitoring Channelview Three in ppbv for Benzene, Toluene, and Xylenes

249a Monitoring Channelview to Lynchburg Path, 64MSMS01106

249b TAGA File Event Summary; File: 64MSMS01106 Acquired on 30 April 2019 at 15:16:10; Title: Monitoring Channelview to Lynchburg

249c Monitoring Channelview to Lynchburg in ppbv for Benzene, Toluene, and Xylenes

250a Monitoring Highway 8 to Command Post, 64MSMS01109

250b TAGA File Event Summary; File: 64MSMS01109 Acquired on 01 May 2019 at 08:25:00; Title: Monitoring Highway 8 to Deer Park

250c Monitoring Highway 8 to Deer Park in ppbv for Benzene, Toluene, and Xylenes

251a Monitoring Highway 8 to Deer Park Two Path, 64MSMS01110

251b TAGA File Event Summary; File: 64MSMS01110 Acquired on 01 May 2019 at 08:58:08; Title: Monitoring Highway 8 to Deer Park Two

251c Monitoring Highway 8 to Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

252a Monitoring Deer Park to Channelview Path, 64MSMS01111

252b TAGA File Event Summary; File: 64MSMS01111 Acquired on 01 May 2019 at 10:36:27; Title: Monitoring Deer Park to Channelview

252c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

253a Monitoring Channelview Path, 64MSMS01112

253b TAGA File Event Summary; File: 64MSMS01112 Acquired on 01 May 2019 at 11:46:54; Title: Monitoring Channelview

253c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

254a Monitoring Channelview Two Path, 64MSMS01114

254b TAGA File Event Summary; File: 64MSMS01114 Acquired on 01 May 2019 at 14:03:26; Title: Monitoring Channelview Two

254c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

255a Monitoring Channelview Three Path, 64MSMS01115

255b TAGA File Event Summary; File: 64MSMS01115 Acquired on 01 May 2019 at 14:55:40; Title: Monitoring Channelview Three

255c Monitoring Channelview Three in ppbv for Benzene, Toluene, and Xylenes

256a Monitoring Highway 8 to Command Post Path, 64MSMS01118

256b TAGA File Event Summary; File: 64MSMS01118 Acquired on 02 May 2019 at 08:22:02; Title: Monitoring Highway 8 to Command Post

256c Monitoring Highway to Command Post in ppbv for Benzene, Toluene, and Xylenes

257a Monitoring Pasadena to Galena Park Path, 64MSMS01119

257b TAGA File Event Summary; File: 64MSMS01119 Acquired on 02 May 2019 at 09:39:11; Title: Monitoring Pasadena to Galena Park

257c Monitoring Pasadena to Galena Park in ppbv for Benzene, Toluene, and Xylenes

258a Monitoring Jacinto City to Channelview Path, 64MSMS01120

258b TAGA File Event Summary; File: 64MSMS01120 Acquired on 02 May 2019 at 11:01:51; Title: Monitoring Jacinto City to Channelview

258c Monitoring Jacinto City to Channelview in ppbv for Benzene, Toluene, and Xylenes

259a Monitoring Channelview Path, 64MSMS01123

259b TAGA File Event Summary; File: 64MSMS01123 Acquired on 02 May 2019 at 13:43:38; Title: Monitoring Channelview

259c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

260a Monitoring Channelview Two Path, 64MSMS01124

260b TAGA File Event Summary; File: 64MSMS01124 Acquired on 02 May 2019 at 14:50:25; Title: Monitoring Channelview Two

260c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

261a Monitoring Channelview to Command Post Path, 64MSMS01125

261b TAGA File Event Summary; File: 64MSMS01125 Acquired on 02 May 2019 at 16:05:05; Title: Monitoring Channelview to Command Post

261c Monitoring Channelview to Command Post in ppb for Benzene, Toluene, and Xylenes

262a Monitoring Pasadena to Deer Park Path, 64MSMS01129

262b TAGA File Event Summary; File: 64MSMS01129 Acquired on 07 May 2019 at 12:41:27; Title: Monitoring Pasadena to Deer Park

262c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

263a Monitoring Deer Park to Channelview Path, 64MSMS01130

263b TAGA File Event Summary; File: 64MSMS01130 Acquired on 07 May 2019 at 13:35:50; Title: Monitoring Deer Park to Channelview

263c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

264a Monitoring Channelview Path, 64MSMS01131

264b TAGA File Event Summary; File: 64MSMS01131 Acquired on 07 May 2019 at 15:31:29; Title: Monitoring Channelview

264c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

265a Monitoring Channelview to Pasadena Path, 64MSMS01132

265b TAGA File Event Summary; File: 64MSMS01132 Acquired on 07 May 2019 at 16:55:04; Title: Monitoring Channelview to Pasadena

265c Monitoring Channelview to Pasadena in ppbv for Benzene, Toluene, and Xylenes

266a Monitoring Highway 8 to Command Post Path, 64MSMS01134

266b TAGA File Event Summary; File: 64MSMS01134 Acquired on 08 May 2019 at 11:55:50; Title: Monitoring Highway 8 to Command Post

266c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

267a Monitoring Pasadena to Deer Park Path, 64MSMS01135

267b TAGA File Event Summary; File: 64MSMS01135 Acquired on 08 May 2019 at 12:24:49; Title: Monitoring Pasadena to Deer Park

267c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

268a Monitoring Channelview Path, 64MSMS01136

268b TAGA File Event Summary; File: 64MSMS01136 Acquired on 08 May 2019 at 13:46:10; Title: Monitoring Channelview

268c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

269a Monitoring Channelview Two Path, 64MSMS01137

269b TAGA File Event Summary; File: 64MSMS01137 Acquired on 08 May 2019 at 15:04:05; Title: Monitoring Channelview Two

269c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

270a Monitoring Highway 8 to Command Post Path, 64MSMS01140

270b TAGA File Event Summary; File: 64MSMS01140 Acquired on 09 May 2019 at 08:04:45; Title: Monitoring Highway 8 to Command Post

270c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

271a Monitoring Pasadena to Deer Park Path, 64MSMS01141

271b TAGA File Event Summary; File: 64MSMS01141 Acquired on 09 May 2019 at 08:54:28; Title: Monitoring Pasadena to Deer Park

271c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

272a Monitoring Deer Park to Channelview Path, 64MSMS01142

272b TAGA File Event Summary; File: 64MSMS01142 Acquired on 09 May 2019 at 09:53:38; Title: Monitoring Deer Park to Channelview

272c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

273a Monitoring Channelview Path, 64MSMS01143

273b TAGA File Event Summary; File: 64MSMS01143 Acquired on 09 May 2019 at 11:09:06; Title: Monitoring Channelview

273c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

274a Monitoring Channelview Two Path, 64MSMS01144

274b TAGA File Event Summary; File: 64MSMS01144 Acquired on 09 May 2019 at 12:46:44; Title: Monitoring Channelview Two

274c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

275a Monitoring Highway 8 to ITC Site Path, 64MSMS01148

275b TAGA File Event Summary; File: 64MSMS01148 Acquired on 10 May 2019 at 09:30:17; Title: Monitoring Highway 8 to ITC Site

275c Monitoring Highway 8 to ITC Site in ppbv for Benzene, Toluene, and Xylenes

276a Monitoring Independence Parkway Path, 64MSMS01149

276b TAGA File Event Summary; File: 64MSMS01149 Acquired on 10 May 2019 at 10:12:15; Title: Monitoring Independence Parkway

276c Monitoring Independence Parkway in ppbv for Benzene, Toluene, and Xylenes

277a Monitoring Deer Park Path, 64MSMS01150

277b TAGA File Event Summary; File: 64MSMS01150 Acquired on 10 May 2019 at 12:00:07; Title: Monitoring Deer Park

277c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

278a Monitoring Deer Park Two Path, 64MSMS01151

278b TAGA File Event Summary; File: 64MSMS01151 Acquired on 10 May 2019 at 12:55:42; Title: Monitoring Deer Park Two

278c Monitoring Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

279a Monitoring Deer Park Three Path, 64MSMS01152

279b TAGA File Event Summary; File: 64MSMS01152 Acquired on 10 May 2019 at 13:43:54; Title: Monitoring Deer Park Three

279c Monitoring Deer Park Three in ppbv for Benzene, Toluene, and Xylenes

280a Monitoring Texas City to Deer Park Path, 64MSMS01179

280b TAGA File Event Summary; File: 64MSMS01179 Acquired on 13 May 2019 at 12:16:29; Title: Monitoring Texas City to Deer Park

280c Monitoring Texas City to Deer Park in ppbv for Benzene, Toluene, and Xylenes

281a Monitoring Deer Park Path, 64MSMS01181

281b TAGA File Event Summary; File: 64MSMS01181 Acquired on 13 May 2019 at 13:53:39; Title: Monitoring Deer Park

281c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

282a Monitoring Deer Park Two Path, 64MSMS01182

282b TAGA File Event Summary; File: 64MSMS01182 Acquired on 13 May 2019 at 15:28:00; Title: Monitoring Deer Park Two

282c Monitoring Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

283a Monitoring Highway 8 to ITC Site Path, 64MSMS01185

283b TAGA File Event Summary; File: 64MSMS01185 Acquired on 14 May 2019 at 08:51:17; Title: Monitoring Highway 8 to ITC Site

283c Monitoring Highway 8 to ITC Site in ppbv for Benzene, Toluene, and Xylenes

284a Monitoring Deer Park Path, 64MSMS01190

284b TAGA File Event Summary; File: 64MSMS01190 Acquired on 14 May 2019 at 14:09:58; Title: Monitoring Deer Park

284c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

285a Monitoring Deer Park Two Path, 64MSMS01191

285b TAGA File Event Summary; File: 64MSMS01191 Acquired on 14 May 2019 at 15:28:14; Title: Monitoring Deer Park Two

285c Monitoring Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

286a Monitoring Highway 8 to ITC Site Path, 64MSMS01194

286b TAGA File Event Summary; File: 64MSMS01194 Acquired on 16 May 2019 at 08:03:48; Title: Monitoring Highway 8 to ITC Site

286c Monitoring Highway 8 to ITC Site in ppbv for Benzene, Toluene, and Xylenes

287a Monitoring ITC Site Two Path, 64MSMS01196

287b TAGA File Event Summary; File: 64MSMS01196 Acquired on 16 May 2019 at 09:25:10; Title: Monitoring ITC Site Two

287c Monitoring ITC Site Two in ppbv for Benzene, Toluene, and Xylenes

288a Monitoring ITC Site Three Path, 64MSMS01197

288b TAGA File Event Summary; File: 64MSMS01197 Acquired on 16 May 2019 at 10:57:26; Title: Monitoring ITC Site Three

288c Monitoring ITC Site Three in ppbv for Benzene, Toluene, and Xylenes

289a Monitoring ITC Site Four Path, 64MSMS01199

289b TAGA File Event Summary; File: 64MSMS01199 Acquired on 16 May 2019 at 13:41:31; Title: Monitoring ITC Site Four

289c Monitoring ITC Site Four in ppbv for Benzene, Toluene, and Xylenes

290a Monitoring ITC Site Five Path, 64MSMS01200

290b TAGA File Event Summary; File: 64MSMS01200 Acquired on 16 May 2019 at 14:38:59; Title: Monitoring ITC Site Five

290c Monitoring ITC Site Five in ppbv for Benzene, Toluene, and Xylenes

291a Monitoring ITC Site Six Path, 64MSMS01201

291b TAGA File Event Summary; File: 64MSMS01201 Acquired on 16 May 2019 at 15:47:35; Title: Monitoring ITC Site Six

291c Monitoring ITC Site Six in ppbv for Benzene, Toluene, and Xylenes

292a Monitoring Highway 8 to ITC Site Path, 64MSMS01204

292b TAGA File Event Summary; File: 64MSMS01204 Acquired on 17 May 2019 at 07:52:33; Title: Monitoring Highway 8 to ITC Site

292c Monitoring Highway 8 to ITC Site in ppbv for Benzene, Toluene, and Xylenes

293a Monitoring ITC Site Path, 64MSMS01205

293b TAGA File Event Summary; File: 64MSMS01205 Acquired on 17 May 2019 at 08:39:39; Title: Monitoring ITC Site

293c Monitoring ITC Site in ppbv for Benzene, Toluene, and Xylenes

294a Monitoring ITC Site Two Path, 64MSMS01206

294b TAGA File Event Summary; File: 64MSMS01206 Acquired on 17 May 2019 at 09:38:19; Title: Monitoring ITC Site Two

294c Monitoring ITC Site Two in ppbv for Benzene, Toluene, and Xylenes

295a Monitoring ITC Site Three Path, 64MSMS01207

295b TAGA File Event Summary; File: 64MSMS01207 Acquired on 17 May 2019 at 10:57:14; Title: Monitoring ITC Site Three

295c Monitoring ITC Site Three in ppbv for Benzene, Toluene, and Xylenes

296a Monitoring ITC Site Four Path, 64MSMS01209

296b TAGA File Event Summary; File: 64MSMS01209 Acquired on 17 May 2019 at 13:28:18; Title: Monitoring ITC Site Four

296c Monitoring ITC Site Four in ppbv for Benzene, Toluene, and Xylenes

297a Monitoring ITC Site Five Path, 64MSMS01210

297b TAGA File Event Summary; File: 64MSMS01210 Acquired on 17 May 2019 at 14:26:44; Title: Monitoring ITC Site Five

297c Monitoring ITC Site Five in ppbv for Benzene, Toluene, and Xylenes

298a Monitoring Highway 8 to ITC Site Path, 64MSMS01213

298b TAGA File Event Summary; File: 64MSMS01213 Acquired on 18 May 2019 at 08:14:54; Title: Monitoring Highway 8 to ITC Site

298c Monitoring Highway 8 to ITC Site in ppbv for Benzene, Toluene, and Xylenes

299a Monitoring ITC Site Path, 64MSMS01214

299b TAGA File Event Summary; File: 64MSMS01214 Acquired on 18 May 2019 at 08:47:05; Title: Monitoring ITC Site

299c Monitoring ITC Site in ppbv for Benzene, Toluene, and Xylenes

300a Monitoring ITC Site Two Path, 64MSMS01215

300b TAGA File Event Summary; File: 64MSMS01215 Acquired on 18 May 2019 at 09:57:50; Title: Monitoring ITC Site Two

300c Monitoring ITC Site Two in ppbv for Benzene, Toluene, and Xylenes

301a Monitoring ITC Site Three Path, 64MSMS01216

301b TAGA File Event Summary; File: 64MSMS01216 Acquired on 18 May 2019 at 11:17:52; Title: Monitoring ITC Site Three

301c Monitoring ITC Site Three in ppbv for Benzene, Toluene, and Xylenes

302a Monitoring ITC Site Four Path, 64MSMS01218

302b TAGA File Event Summary; File: 64MSMS01218 Acquired on 18 May 2019 at 14:31:05; Title: Monitoring ITC Site Four

302c Monitoring ITC Site Four in ppbv for Benzene, Toluene, and Xylenes

303a Monitoring ITC Site Five Path, 64MSMS01219

303b TAGA File Event Summary; File: 64MSMS01219 Acquired on 18 May 2019 at 15:42:44; Title: Monitoring ITC Site Five

303c Monitoring ITC Site Five in ppbv for Benzene, Toluene, and Xylenes

304a Monitoring Highway 8 to ITC Site Path, 64MSMS01222

304b TAGA File Event Summary; File: 64MSMS01222 Acquired on 19 May 2019 at 08:08:45; Title: Monitoring Highway 8 to ITC Site

304c Monitoring Highway 8 to ITC Site in ppbv for Benzene, Toluene, and Xylenes

305a Monitoring ITC Site Path, 64MSMS01223

305b TAGA File Event Summary; File: 64MSMS01223 Acquired on 19 May 2019 at 08:38:07; Title: Monitoring ITC Site

305c Monitoring ITC Site in ppbv for Benzene, Toluene, and Xylenes

306a Monitoring ITC Site Two Path, 64MSMS01224

306b TAGA File Event Summary; File: 64MSMS01224 Acquired on 19 May 2019 at 10:15:13; Title: Monitoring ITC Site Two

306c Monitoring ITC Site Two in ppbv for Benzene, Toluene, and Xylenes

307a Monitoring ITC Site Three Path, 64MSMS01225

307b TAGA File Event Summary; File: 64MSMS01225 Acquired on 19 May 2019 at 11:20:15; Title: Monitoring ITC Site Three

307c Monitoring ITC Site Three in ppbv for Benzene, Toluene, and Xylenes

308a Monitoring ITC Site Four Path, 64MSMS01227

308b TAGA File Event Summary; File: 64MSMS01227 Acquired on 19 May 2019 at 13:32:18; Title: Monitoring ITC Site Four

308c Monitoring ITC Site Four in ppbv for Benzene, Toluene, and Xylenes

309a Monitoring ITC Site Five Path, 64MSMS01228

309b TAGA File Event Summary; File: 64MSMS01228 Acquired on 19 May 2019 at 14:47:12; Title: Monitoring ITC Site Five

309c Monitoring ITC Site Five in ppbv for Benzene, Toluene, and Xylenes

310a Monitoring ITC Site Six Path, 64MSMS01229

310b TAGA File Event Summary; File: 64MSMS01229 Acquired on 19 May 2019 at 16:06:26; Title: Monitoring ITC Site Six

310c Monitoring ITC Site Six in ppbv for Benzene, Toluene, and Xylenes

311a Monitoring Highway 8 to ITC Site Path, 64MSMS01232

311b TAGA File Event Summary; File: 64MSMS01232 Acquired on 20 May 2019 at 08:50:58; Title: Monitoring Highway 8 to ITC Site

311c Monitoring Highway 8 to ITC Site in ppbv for Benzene, Toluene, and Xylenes

312a Monitoring ITC Site Path, 64MSMS01233

312b TAGA File Event Summary; File: 64MSMS01233 Acquired on 20 May 2019 at 09:41:44; Title: Monitoring ITC Site

312c Monitoring ITC Site in ppbv for Benzene, Toluene, and Xylenes

313a Monitoring ITC Site Two Path, 64MSMS01234

313b TAGA File Event Summary; File: 64MSMS01234 Acquired on 20 May 2019 at 11:02:45; Title: Monitoring ITC Site Two

313c Monitoring ITC Site Two in ppbv for Benzene, Toluene, and Xylenes

314a Monitoring ITC Site Three Path, 64MSMS01236

314b TAGA File Event Summary; File: 64MSMS01236 Acquired on 20 May 2019 at 14:08:23; Title: Monitoring ITC Site Three

314c Monitoring ITC Site Three in ppbv for Benzene, Toluene, and Xylenes

315a Monitoring ITC Site Four Path, 64MSMS01237

315b TAGA File Event Summary; File: 64MSMS01237 Acquired on 20 May 2019 at 15:14:17; Title: Monitoring ITC Site Four

315c Monitoring ITC Site Four in ppbv for Benzene, Toluene, and Xylenes

316a Monitoring ITC Site Five Path, 64MSMS01238

316b TAGA File Event Summary; File: 64MSMS01238 Acquired on 20 May 2019 at 16:25:30; Title: Monitoring ITC Site Five

316c Monitoring ITC Site Five in ppbv for Benzene, Toluene, and Xylenes

1.0 INTRODUCTION

The United States Environmental Protection Agency (USEPA)/Environmental Response Team (ERT) issued Work Assignment (WA) Number SERAS-372, Intercontinental Terminals Company (Site) in Deer Park, Texas (TX), to Leidos, Inc. under the Scientific, Engineering, Response and Analytical Services (SERAS) contract. As an element of this WA, SERAS personnel were to conduct target compound ambient air monitoring using the ECA Trace Atmospheric Gas Analyzer (TAGA) IIe, to provide assistance to the USEPA/ERT and EPA Region 6 during the emergency response operations following a fire at the Intercontinental Terminals Company in Deer Park, TX.

The TAGA air monitoring events conducted from 21 March 2019 to 20 May 2019 were screening in nature. Air monitoring for benzene, toluene, and total xylenes was performed in accordance with the SERAS Standard Operating Procedure (SOP) # 1711, *Trace Atmospheric Gas Analyzer (TAGA) IIe Operations*. Real-time monitoring for the target compounds was performed using a selected ion technique.

2.0 METHODOLOGY

2.1 Mass Spectrometer/Mass Spectrometer General Theory

The ECA TAGA IIe is based upon the Perkin-Elmer API 365 mass spectrometer/mass spectrometer (MS/MS) and is a direct air-monitoring instrument capable of detecting, in real time, trace levels of many organic compounds in ambient air. The technique of triple quadrupole MS/MS is used to differentiate and quantitate compounds.

The initial step in the MS/MS process involves simultaneous chemical ionization of the compounds present in a sample of ambient air. The ionization produces both positive and negative ions by donating or removing one or more electrons. The chemical ionization is a "soft" ionization technique, which allows ions to be formed with little or no structural fragmentation. These ions are called parent ions. The parent ions with different mass-to-charge (m/z) ratios are separated by the first quadrupole (the first MS of the MS/MS system). The quadrupole scans selected m/z ratios allowing only the parent ions with these ratios to pass through the quadrupole. Parent ions with m/z ratios different from those selected are discriminated electronically and fail to pass through the quadrupole.

The parent ions selected in the first quadrupole are accelerated through a collision cell containing uncharged nitrogen molecules in the second quadrupole. A portion of the parent ions entering the second quadrupole fragments as they collide with the nitrogen molecules. These fragment ions are called daughter ions. This process, in the second quadrupole, is called collision induced dissociation. The daughter ions are separated according to their m/z ratios by the third quadrupole (the second MS of the MS/MS system). The quadrupole scans selected m/z ratios, allowing only the daughter ions with these ratios to pass through the quadrupole. Daughter ions with m/z ratios different from those selected are discriminated electronically and fail to pass through the quadrupole. Daughter ions with the selected m/z ratios are then counted by an electron multiplier. The resulting signals are measured in ion counts per second (icps) for each parent/daughter ion pair selected. The intensity of the icps for each parent/daughter ion pair is directly proportional to the ambient air concentration of the organic compound that produced the ion pair. All of the ions discussed in this report have a single charge. The m/z ratios of all of the ions discussed are equal to the ion masses in atomic mass units (amu). Therefore, the terms parent and daughter masses are synonymous with parent and daughter ion m/z ratios.

2.2 TAGA Procedure

The TAGA was used to analyze outdoor ambient air during mobile and stationary monitoring events. For mobile and stationary monitoring, one end of a 4-foot corrugated Teflon® sampling hose was attached to the TAGA source inlet, while the other was attached to a glass transfer tube passing through the wall of the vehicle during the monitoring event. Air was continuously drawn

through the hose at a set flow rate and transported to the TAGA source during the monitoring event.

2.2.1 TAGA Mass Calibration

At the beginning of the monitoring period, a gas mixture containing benzene, toluene, xylenes, tetrachloroethene, trichloroethene, 1,1-dichloroethene, and vinyl chloride was introduced by a mass flow controller (MFC) into the sample air flow (SAF). The tuning parameters for the first quadrupole at 30, 78, 106, 130, and 166 amu, and the third quadrupole at 30, 78, 105, 129, and 166 amu were optimized for sensitivity and mass assignment. The peak widths were limited between 0.55 amu and 0.85 amu. The mass assignments were set to the correct values within 0.15 amu.

2.2.2 TAGA Response Factor Measurements

The TAGA was calibrated for the target compounds at the beginning, beginning and end, or beginning, middle, and end of the day depending on environmental constraints. The calibration system consisted of a regulated gas cylinder containing a gas standard mixture of the target compounds connected to an in-line MFC. The MFC was calibrated with a National Institute of Standards and Technology (NIST) traceable flow rate meter. The gas standard certification is presented in Appendix A. The gas standard containing a known mixture of target compounds, certified by the supplier, was regulated at preset flow rates, and diluted with ambient air. The dilution of the gas standard resulted in known analyte concentrations. The calibration consisted of a zero point and five known concentrations obtained by setting the MFC to 0, 10, 20, 40, 80, and 90 milliliters per minute (mL/min) with the SAF at 1,500 milliliters per second (mL/sec).

The approximate concentration range of standards introduced into the TAGA was between 1 and 30 parts per billion by volume (ppbv). Utilizing the analytes' concentrations, gas flow rates, and air sampling flow rates, the response factors (RFs), in units of ion counts per second per part per billion by volume (icps/ppbv), were calculated for each ion pair by using a least-square-fit algorithm to calculate the slope of its curve. The coefficient of correlation was checked for each ion pair's RF to ensure that it was greater than 0.90. The intermediate response factors (IRF) were calculated between pairs of calibrations. The RF or IRF of each analyte was used to quantify the target compounds in ambient air. Calibration data are included in Appendix B.

2.2.3 TAGA Air Monitoring

TAGA monitoring was performed by continuously drawing air through the Teflon® hose at a flow-rate of approximately 1,500 mL/sec. The air was then passed through a glass splitter where the pressure gradient between the mass spectrometer core and the atmosphere causes a sample flow of approximately 10 mL/min into the ionization source through a heated transfer line. The flow into the TAGA source was controlled so that the ionization source pressure was maintained at an optimum value of approximately 1.8 torr. The remaining airflow was drawn through the air pump and vented from the TAGA bus.

Monitoring was performed in the parent/daughter ion-monitoring mode. As monitoring proceeded, the operator pressed letter keys (flags), alphabetically on a computer keyboard, to denote events or locations during the monitoring event. This information was also recorded on an event log sheet. The intensity of each parent/daughter ion pair monitored by the TAGA was recorded in a permanent file on the computer's hard drive. One set of recorded measurements of all the ion pairs is called a sequence.

Mobile monitoring was conducted continuously along a recorded path. Stationary monitoring was conducted continuously at a fixed location. At the conclusion of mobile

or stationary monitoring event, a one-minute ambient data segment was collected. Upon completion of the one-minute post-monitoring ambient data segment, the instrumentation was challenged with the calibration standard, which was introduced at 30 mL/min (approximately 6.7 ppbv, and total xylenes at approximately 10 ppbv), to verify that the system was functioning properly.

2.3 Global Positioning System (GPS) and Tracking

The mobile laboratory is equipped with a Trimble Pro 6T GPS receiver that streams geographical coordinates to a personal computer. The coordinates represent position of the TAGA mobile laboratory in real-time. The instrument data are synchronized with the GPS coordinates, so the monitoring data can be directly associated with the position of the mobile laboratory as indicated by the GPS system at any time during the mobile monitoring period. The synchronized information is recorded into the data repository (database) and uploaded to the USEPA/ERT VIPER data management system in real-time to be archived on a USEPA/ERT server.

2.4 Meteorological Monitoring

United States Department of Commerce, National Oceanic and Atmospheric Administration, National Climatic Data Center provided the meteorological data for one weather station in the vicinity of mobile monitoring events. Data were collected from the William P Hobby Airport located in Houston, TX from 07 May 2019 through 16 May 2019.

The Texas Commission on Environmental Quality (TCEQ) provided the meteorological data for two weather stations in the vicinity of the mobile monitoring and stationary monitoring events. Data were collected from the Houston Deer Park #2 weather station located in Deer Park, TX from 19 March 2019 through 20 May 2019 and from the La Porte Municipal Airport weather station located in La Porte, TX from 19 March 2019 through 20 May 2019.

Meteorological data, such as wind speed, wind direction, and rainfall, are summarized in Table 1 for the beginning of the period during which monitoring occurred. The compiled meteorological data are presented in Appendix C. The reported data for rainfall are an average of the data recorded during the hour preceding the time recorded in the table. The reported meteorological data for wind speed and direction represent a five-minute average collected prior to the time recorded in the table. Because of the distance of the meteorological monitoring location from the study location and the short averaging period, care should be exercised in relating meteorological conditions existing at the Site.

3.0 TAGA AIR MONITORING RESULTS

The TAGA was used to conduct Mobile Monitoring and Stationary Monitoring at and around the Site.

3.1 Mobile Monitoring Paths and Stationary Locations

Figures 1a, 2a, 4a through 130a, and 132a through 316a present the monitoring paths taken by the TAGA mobile laboratory as it traveled in the vicinity of the Site. Figures 3a and 131a present the locations where stationary monitoring was conducted in the vicinity of the Site. The maps, representing the monitoring path and stationary locations are marked by letters. These letters are the “flags” that the TAGA operator placed into the file. These "flags" mark events and are carried through the rest of the data presentation.

3.2 TAGA File Event Summaries

Figures 1b through 316b present the TAGA file event summaries. These are observations made during the file acquisition by the TAGA operator, along with the time from the TAGA file and the letter “flags” used to mark the data, which are recorded by the TAGA computer.

3.3 Graphical Presentations

Figures 1c through 316c are the graphical representations of the TAGA files. A graph of each target compound concentration is presented in ppbv plotted on the vertical axis, and time into the acquisition, in minutes, on the horizontal axis. The target compound concentration was calculated by averaging the concentrations obtained from the ion pairs that were monitored for each target compound. There are two horizontal lines on each graph. The lower line is set at the detection limit (DL) for the compound. The higher line is set at the concentration equal to the quantitation limit (QL) for the target compound. When high concentrations are represented, the lower DL line may not be readily discerned. Transient momentary spikes above the QL line are occasionally observed. These spikes, electronic in nature, do not affect average concentrations. They may be distinguished from elevated concentrations because the spikes are only present for one sequence and are often only present for one ion pair of the monitored compound.

4.0 DISCUSSION OF RESULTS

TAGA mobile monitoring and stationary monitoring was conducted between 21 March 2019 and 20 May 2019. The TAGA monitoring is screening in nature. During each mobile or stationary monitoring period, the TAGA mobile laboratory monitored continuously while moving along the monitoring paths on remaining stationary in a fixed location. Only mobile or stationary monitoring events that contained instantaneous maximum concentrations of a target compound above the short-term Air Monitoring Comparison Values (AMCVs), as determined by the TCEQ, are discussed below. The AMCVs for benzene, toluene, and total xylenes are 180 ppbv, 4,000 ppbv, and 1,700 ppbv respectively.

All results are presented in ppbv and micrograms per cubic meter (µg/m^3) and include the time and location where the maximums were observed. A summary of instantaneous maximum concentrations in ppbv, and correlated meteorological data, for all monitoring runs is presented in Table 1.

4.1 Monitoring Highway 8 East South Houston, 64MSMS00709

Monitoring Highway 8 East South Houston was performed on 21 March 2019 at 8:54:24 and is represented in Figure 1. The average wind speed and direction for the five-minute period ending at 9:00 were 3.3 miles per hour (mph) from 55 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 200 ppbv (640 µg/m^3), was detected at 13.790 minutes into the monitoring run while traveling North on Highway 8 between Greenshadow Drive and the Pasadena Freeway East ramp between flags F and G. The highest instantaneous maximum concentration of toluene, at 20 ppbv (76 µg/m^3), was detected at 15.095 minutes into the monitoring run while merging onto Highway 225 East between flags G and H. The highest instantaneous maximum concentration of xylenes, at 8.2 ppbv (36 µg/m^3), was detected at 16.431 minutes into the monitoring run while merging onto Highway 225 East between flags G and H. The concentration for benzene exceeded the linear calibration range and is considered estimated.

4.2 Monitoring Highway 225 West, 64MSMS00716

Monitoring Highway 225 West was performed on 21 March 2019 at 16:21:15 and is represented in Figure 7. The average wind speed and direction for the five-minute period ending at 17:00 were 3.6 mph from 331 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentrations of benzene, at 3,300 ppbv (11,000 µg/m^3), and toluene, at 720 ppbv (2,700 µg/m^3), were detected at 13.727 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags D and E. The highest instantaneous maximum concentration of xylenes, at 800 ppbv (3,500 µg/m^3), was detected at

13.769 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags D and E. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.3 Monitoring Independence Parkway to Battleground Park, 64MSMS00723

Monitoring Independence Parkway to Battleground Park was performed on 22 March 2019 at 12:58:32 and is represented in Figure 12. The average wind speed and direction for the five-minute period ending at 13:00 were 6.1 mph from 140 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 1,700 ppbv (5,400 µg/m^3), was detected at 9.194 minutes into the monitoring run while traveling northeast on Vista Road near the Site between flags E and F. The highest instantaneous maximum concentration of toluene, at 550 ppbv (2,100 µg/m^3), was detected at 9.215 minutes into the monitoring run while traveling northeast on Vista Road near the Site between flags E and F. The highest instantaneous maximum concentration of xylenes, at 600 ppbv (2,600 µg/m^3), was detected at 9.204 minutes into the monitoring run while traveling northeast on Vista Road near the Site between flags E and F. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.4 Monitoring Channelview Three, 64MSMS00727

Monitoring Channelview Three was performed on 22 March 2019 at 15:39:44 and is represented in Figure 14. The average wind speed and direction for the five-minute period ending at 16:00 were 10.3 mph from 128 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 1,100 ppbv (3,500 µg/m^3), was detected at 48.007 minutes into the monitoring run while stationary on Peninsula Street/San Jacinto Boulevard between flags M and N. The highest instantaneous maximum concentrations of toluene, at 400 ppbv (1,500 µg/m^3), and xylenes, at 430 ppbv (1,900 µg/m^3), were detected at 48.354 minutes into the monitoring run while stationary on Peninsula Street/San Jacinto Boulevard between flags M and N. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.5 Monitoring Highway 225 Eastbound, 64MSMS00731

Monitoring Highway 225 Eastbound was performed on 23 March 2019 at 9:02:05 and is represented in Figure 16. The average wind speed and direction for the five-minute period ending at 10:00 were 12.1 mph from 127 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 210 ppbv (660 µg/m^3), was detected at 31.651 minutes into the monitoring run while traveling east on Highway 10 between Dell Dale Street and Sheldon Road between flags R and S. The highest instantaneous maximum concentration of toluene, at 66 ppbv (250 µg/m^3), was detected at 31.672 minutes into the monitoring run while traveling east on Highway 10 between Dell Dale Street and Sheldon Road between flags R and S. The highest instantaneous maximum concentration of xylenes, at 62 ppbv (270 µg/m^3), was detected at 24.614 minutes into the monitoring run while traveling east on Market Street between Federal Road and Miles Street between flags N and O. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.6 Monitoring Northwest of Site, 64MSMS00735

Monitoring Northwest of Site was performed on 23 May 2019 at 14:46:26 and is represented in

Figure 20. The average wind speed and direction for the five-minute period ending at 15:00 were 12.7 mph from 124 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 820 ppbv (2,600 µg/m^3), was detected at 54.960 minutes into the monitoring run while traveling west on Jacintoport Boulevard between flags K and L. The highest instantaneous maximum concentration of toluene, at 160 ppbv (620 µg/m^3), was detected at 55.002 minutes into the monitoring run while traveling west on Jacintoport Boulevard between flags K and L. The highest instantaneous maximum concentration of xylenes, at 130 ppbv (550 µg/m^3), was detected at 54.981 minutes into the monitoring run while traveling while traveling west on Jacintoport Boulevard between flags K and L. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.7 Monitoring Highway 10 East, 64MSMS00738

Monitoring Highway 10 East was performed on 24 March 2019 at 8:43:50 and is represented in Figure 21. The average wind speed and direction for the five-minute period ending at 9:00 were 9.6 mph from 172 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 210 ppbv (670 µg/m^3), was detected at 65.257 minutes into the monitoring run while traveling west on Jacintoport Boulevard between flags Q and R. The highest instantaneous maximum concentration of toluene, at 140 ppbv (530 µg/m^3), was detected at 65.447 minutes into the monitoring run while traveling west on Jacintoport Boulevard between flags Q and R. The highest instantaneous maximum concentration of xylenes, at 320 ppbv (1,400 µg/m^3), was detected at 65.478 minutes into the monitoring run while traveling west on Jacintoport Boulevard between flags Q and R. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.8 Monitoring Lynchburg to Channelview, 64MSMS00743

Monitoring Lynchburg to Channelview was performed on 24 May 2019 at 15:14:11 and is represented in Figure 25. The average wind speed and direction for the five-minute period ending at 16:00 were 10.1 mph from 161 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 410 ppbv (1,300 µg/m^3), was detected at 80.446 minutes into the monitoring run while traveling east on Jacintoport Boulevard between flags X and Y. The highest instantaneous maximum concentration of toluene, at 150 ppbv (580 µg/m^3), was detected at 82.812 minutes into the monitoring run while traveling east on Jacintoport Boulevard between flags X and Y. The highest instantaneous maximum concentration of xylenes, at 200 ppbv (870 µg/m^3), was detected at 80.456 minutes into the monitoring run while traveling east on Jacintoport Boulevard between flags X and Y. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.9 Monitoring ITC Site and Vista Drive, 64MSMS00753

Monitoring ITC Site and Vista Drive was performed on 25 March 2019 at 15:48:25 and is represented in Figure 31. The average wind speed and direction for the five-minute period ending at 16:00 were 4.5 mph from 262 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentrations of benzene, at 3,600 ppbv (12,000 µg/m^3), toluene, at 1,100 ppbv (4,200 µg/m^3), and xylenes, at 600 ppbv (2,600 µg/m^3), were detected at 10.014 minutes into the monitoring run while traveling northeast on Vista Road near the Site between flags C and D. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.10 Monitoring Independence Parkway, 64MSMS00765

Monitoring Independence Parkway was performed on 26 March 2019 at 15:58:10 and is represented in Figure 38. The average wind speed and direction for the five-minute period ending at 16:00 were 4.6 mph from 33 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentrations of benzene, at 250 ppbv (790 µg/m^3), and toluene, at 99 ppbv (370 µg/m^3), were detected at 30.399 minutes into the monitoring run while stationary at the intersection of Independence Parkway and Vista Road near the Site between flags H and I. The highest instantaneous maximum concentration of xylenes, 210 ppb (900 µg/m^3), was detected at 30.388. minutes into the monitoring run while stationary at the intersection of Independence Parkway and Vista Road near the Site between flags H and I. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.11 Monitoring Channelview, 64MSMS00776

Monitoring Channelview was performed on 27 March 2019 at 15:20:51 and is represented in Figure 44. The average wind speed and direction for the five-minute period ending at 16:00 were 9.1 mph from 138 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentrations of benzene, at 370 ppbv (1,200 µg/m^3), and toluene, at 67 ppbv (250 µg/m^3), were detected at 32.923 minutes into the monitoring run while traveling east on Peninsula Street/San Jacinto Boulevard flags M and N. The highest instantaneous maximum concentration of xylenes, 28 ppb (120 µg/m^3), was detected at 32.892 minutes into the monitoring run while traveling east on Peninsula Street/San Jacinto Boulevard flags M and N.. The concentrations for benzene and toluene exceeded the linear calibration range and are considered estimated.

4.12 Monitoring Channelview, 64MSMS00796

Monitoring Channelview was performed on 29 March 2019 at 11:11:15 and is represented in Figure 56. The average wind speed and direction for the five-minute period ending at 11:00 were 12.6 mph from 154 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 480 ppbv (1,500 µg/m^3), was detected at 21.963 minutes into the monitoring run while traveling north on Sheldon Road between flags I and J. The highest instantaneous maximum concentration of toluene, at 53 ppbv (200 µg/m^3), was detected at 22.100 minutes into the monitoring run while traveling north on Sheldon Road between flags I and J. The highest instantaneous maximum concentration of xylenes, at 28 ppbv (120 µg/m^3), was detected at 22.794 minutes into the monitoring run while traveling east on Market Street between flags J and K. The concentrations for benzene and toluene exceeded the linear calibration range and are considered estimated.

4.13 Monitoring Channelview Two, 64MSMS00797

Monitoring Channelview Two was performed on 29 March 2019 at 12:05:22 and is represented in Figure 57. The average wind speed and direction for the five-minute period ending at 13:00 were 13.2 mph from 154 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 820 ppbv (2,600 µg/m^3), was detected at 16.125 minutes into the monitoring run while traveling south on Sheldon Road between flags E and F. The highest instantaneous maximum concentrations of toluene, at 97 ppbv (370 µg/m^3), and xylenes, at 36 ppbv (160 µg/m^3), were detected at 16.115 minutes into the monitoring run while traveling south on Sheldon Road between flags E and F. The concentrations

for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.14 Monitoring Channelview Three, 64MSMS00800

Monitoring Channelview Three was performed on 29 March 2019 at 14:46:20 and is represented in Figure 58. The average wind speed and direction for the five-minute period ending at 15:00 were 12.5 mph from 155 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 1,600 ppbv (5,100 µg/m^3), was detected at 11.413 minutes into the monitoring run while traveling east on Jacintoport Boulevard between flags C and D. The highest instantaneous maximum concentration of toluene, at 230 ppbv (860 µg/m^3), was detected at 11.434 minutes into the monitoring run while traveling east on Jacintoport Boulevard between flags C and D. The highest instantaneous maximum concentration of xylenes, at 70 ppbv (300 µg/m^3), was detected at 11.676 minutes into the monitoring run while traveling east on Jacintoport Boulevard between flags C and D. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.15 Monitoring Channelview Two, 64MSMS00807

Monitoring Channelview Two was performed on 30 March 2019 at 9:54:35 and is represented in Figure 62. The average wind speed and direction for the five-minute period ending at 10:00 were 5.0 mph from 222 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 690 ppbv (2,200 µg/m^3), was detected at 8.552 minutes into the monitoring run while exiting from Highway 10 West onto the East Freeway Frontage Road at Magnolia Street between flags E and F. The highest instantaneous maximum concentration of toluene, at 83 ppbv (310 µg/m^3), was detected at 8.563 minutes into the monitoring run while exiting from Highway 10 West onto the East Freeway Frontage Road at Magnolia Street between flags F and G. The highest instantaneous maximum concentration of xylenes, at 29 ppbv (130 µg/m^3), was detected at 36.615 minutes into the monitoring run while traveling west on Market Street near the intersection with Monmouth Street between flags U and V. The concentrations for benzene and toluene exceeded the linear calibration range and are considered estimated.

4.16 Monitoring Highland Channelview, 64MSMS00811

Monitoring Highland Channelview was performed on 30 March 2019 at 14:01:36 and is represented in Figure 64. The average wind speed and direction for the five-minute period ending at 15:00 were 5.5 mph from 337 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentrations of benzene, at 200 ppbv (640 µg/m^3), and toluene, at 25 ppbv (94 µg/m^3), were detected at 70.253 minutes into the monitoring run while traveling west on Pasadena Freeway Frontage Road between flags X and Y. The instantaneous concentration of xylenes, at 13 ppbv (55 µg/m^3), was detected at 8.142 minutes into the monitoring run while traveling west on East Freeway Frontage Road near the intersection of Eastpoint Boulevard between flags D and E. The concentrations for benzene and toluene exceeded the linear calibration range and are considered estimated.

4.17 Monitoring Deer Park, 64MSMS00812

Monitoring Deer Park was performed on 30 March 2019 at 15:24:03 and is represented in Figure 65. The average wind speed and direction for the five-minute period ending at 16:00 were 9.2 mph from 334 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 390 ppbv (1,200 µg/m^3), was detected at 23.636 minutes into the monitoring run while traveling east on Pasadena Freeway Frontage Road between Miller Cutoff Road and Sens Road between flags J and K. The highest instantaneous maximum concentration of toluene, at 50 ppbv (190 µg/m^3), was detected at 23.678 minutes into the monitoring run while traveling east on Pasadena Freeway Frontage Road between Miller Cutoff Road and Sens Road between flags J and K. The highest instantaneous maximum concentration of xylenes, at 16 ppbv (69 µg/m^3), was detected at 23.625 minutes into the monitoring run while traveling east on Pasadena Freeway Frontage Road between Miller Cutoff Road and Sens Road between flags J and K. The concentrations for benzene and toluene exceeded the linear calibration range and are considered estimated.

4.18 Monitoring Pasadena to Deer Park, 64MSMS00816

Monitoring Pasadena to Deer Park was performed on 31 March 2019 at 8:42:50 and is represented in Figure 67. The average wind speed and direction for the five-minute period ending at 9:00 were 6.3 mph from 25 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 1,000 ppbv (3,300 µg/m^3), was detected at 22.342 minutes into the monitoring run while traveling east on Thirteenth Street near the intersection of East Boulevard between flags I and J. The highest instantaneous maximum concentration of toluene, at 220 ppbv (830 µg/m^3), was detected at 22.321 minutes into the monitoring run while traveling east on Thirteenth Street near the intersection of East Boulevard between flags I and J. The highest instantaneous maximum concentration of xylenes, at 120 ppbv (510 µg/m^3), was detected at 22.363 minutes into the monitoring run while traveling east on Thirteenth Street near the intersection of East Boulevard between flags I and J. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.19 Monitoring Deer Park, 64MSMS00817

Monitoring Deer Park was performed on 31 March 2019 at 9:47:02 and is represented in Figure 68. The average wind speed and direction for the five-minute period ending at 10:00 were 6.7 mph from 14 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 840 ppbv (2,700 µg/m^3), was detected at 48.438 minutes into the monitoring run while traveling east on Thirteenth Street near San Jacinto Elementary School between flags P and Q. The highest instantaneous maximum concentration of toluene, at 150 ppbv (580 µg/m^3), was detected at 3.629 minutes into the monitoring run while traveling east on Pasadena Freeway Frontage Road near the intersection of East Boulevard between flags A and B. The highest instantaneous maximum concentration of xylenes, at 83 ppbv (360 µg/m^3), was detected at 3.566 minutes into the monitoring run while traveling east on Pasadena Freeway Frontage Road the intersection of East Boulevard between flags A and B. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.20 Monitoring Deer Park Two, 64MSMS00818

Monitoring Deer Park Two was performed on 31 March 2019 at 11:01:18 and is represented in Figure 69. The average wind speed and direction for the five-minute period ending at 11:00 were 6.0 mph from 14 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentrations of benzene, at 790 ppbv (2,500 µg/m^3), and xylenes, at 60 ppbv (260 µg/m^3), were detected at 29.242 minutes into the monitoring run while traveling west on East X Street near the intersection of East Boulevard between flags L and M. The highest instantaneous maximum concentration of toluene, at 140 ppbv (540 µg/m^3), was detected at 29.231 minutes into the monitoring run while traveling west on East X Street near the

intersection of East Boulevard between flags L and M. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.21 Monitoring Deer Park Three, 64MSMS00822

Monitoring Deer Park Three was performed on 31 March 2019 at 12:46:23 and is represented in Figure 70. The average wind speed and direction for the five-minute period ending at 13:00 were 6.8 mph from 13 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentrations of benzene, at 790 ppbv (2,500 µg/m^3), and toluene, at 120 ppbv (470 µg/m^3), were detected at 12.349 minutes into the monitoring run while traveling east on Pasadena Freeway Frontage Road near the intersection of East Boulevard between flags H and I. The highest instantaneous maximum concentration of xylenes, at 60 ppbv (260 µg/m^3), was detected at 12.212 minutes into the monitoring run while traveling east on Pasadena Freeway Frontage Road near the intersection of East Boulevard between flags H and I. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.22 Monitoring Deer Park Four, 64MSMS00823

Monitoring Deer Park Four was performed on 31 March 2019 at 13:47:03 and is represented in Figure 71. The average wind speed and direction for the five-minute period ending at 14:00 were 5.5 mph from 359 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentrations of benzene, at 390 ppbv (1,200 µg/m^3), and toluene, at 61 ppbv (230 µg/m^3), were detected at 19.186 minutes into the monitoring run while traveling west on Thirteenth Street near the intersection of East Boulevard between flags G and H. The highest instantaneous maximum concentration of xylenes, at 22 ppbv (96 µg/m^3), was detected at 19.512 minutes into the monitoring run while traveling west on Thirteenth Street near the intersection of East Boulevard between flags G and H. The concentrations for benzene and toluene exceeded the linear calibration range and are considered estimated.

4.23 Monitoring Deer Park Five, 64MSMS00824

Monitoring Deer Park Five was performed on 31 March 2019 at 14:33:51 and is represented in Figure 72. The average wind speed and direction for the five-minute period ending at 15:00 were 5.9 mph from 18 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 450 ppbv (1,400 µg/m^3), was detected at 16.914 minutes into the monitoring run while traveling west on East X Street between East Boulevard and Luella Ave between flags I and J. The highest instantaneous maximum concentration of toluene, at 68 ppbv (260 µg/m^3), was detected at 16.925 minutes into the monitoring run while traveling west on East X Street between East Boulevard and Luella Avenue between flags I and J. The highest instantaneous maximum concentration of xylenes, at 27 ppbv (120 µg/m^3), was detected at 23.152 minutes into the monitoring run while traveling east on San Augustine Street between Luella Avenue and East Boulevard between flags K and L. The concentrations for benzene and toluene exceeded the linear calibration range and are considered estimated.

4.24 Monitoring Deer Park Six, 64MSMS00825

Monitoring Deer Park Six was performed on 31 March 2019 at 15:33:55 and is represented in Figure 73. The average wind speed and direction for the five-minute period ending at 16:00 were 5.9 mph from 25 degrees. There was 0.01 inches of precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 400 ppbv (1,300 µg/m^3), was detected at 11.634 minutes into the monitoring run while traveling west on East X Street between East Boulevard and Luella Avenue between flags F and G. The highest instantaneous maximum concentration of toluene, at 53 ppbv (200 µg/m^3), was detected at 11.624 minutes into the monitoring run while traveling west on X Street between Luella Avenue and Center Street between flags G and H. The highest instantaneous maximum concentration of xylenes, at 21 ppbv (91 µg/m^3), was detected at 11.613 minutes into the monitoring run while traveling west on East X Street between East Boulevard and Luella Avenue between flags F and G. The concentration for benzene and toluene exceeded the linear calibration range and is considered estimated.

4.25 Monitoring Deer Park Three, 64MSMS00834

Monitoring Deer Park Three was performed on 01 April 2019 at 15:27:18 and is represented in Figure 79. The average wind speed and direction for the five-minute period ending at 16:00 were 2.9 mph from 33 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 5,000 ppbv (16,000 µg/m^3), was detected at 25.329 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags J and K. The highest instantaneous maximum concentrations of toluene, at 2,500 ppbv (9,400 µg/m^3), and xylenes, at 2,600 ppbv (11,000 µg/m^3), were detected at 25.203 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags J and K. The concentrations for benzene, toluene and xylenes exceeded the linear calibration range and are considered estimated.

4.26 Monitoring Deer Park to Channelview, 64MSMS00858

Monitoring Deer Park to Channelview was performed on 04 April 2019 at 9:35:58 and is represented in Figure 87. The average wind speed and direction for the five-minute period ending at 10:00 were 9.6 mph from 200 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentrations of benzene, at 2,400 ppbv (7,600 µg/m^3), and toluene, at 470 ppbv (1,800 µg/m^3), were detected at 45.872 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags K and L. The highest instantaneous maximum concentration of xylenes, at 2,400 ppbv (10,000 µg/m^3), was detected at 34.785 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags J and K. The concentrations for benzene, toluene and xylenes exceeded the linear calibration range and are considered estimated.

4.27 Monitoring Deer Park to Channelview, 64MSMS00898

Monitoring Deer Park to Channelview was performed on 08 April 2019 at 9:06:49 and is represented in Figure 110. The average wind speed and direction for the five-minute period ending at 9:00 were 8.8 mph from 329 degrees. There was 0.35 inches of precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 560 ppbv (1,800 µg/m^3), was detected at 25.234 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags J and K. The highest instantaneous maximum concentration of toluene, at 300 ppbv (1,100 µg/m^3), was detected at 38.140 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags M and N. The highest instantaneous maximum concentration of xylenes, at 880 ppbv (3,800 µg/m^3), was detected at 38.466 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags M and N. The concentrations for benzene, toluene and xylenes exceeded the linear calibration range and are considered estimated.

4.28 Monitoring Channelview to Pasadena, 64MSMS00903

Monitoring Channelview to Pasadena was performed on 08 April 2019 at 15:01:48 and is represented in Figure 114. The average wind speed and direction for the five-minute period ending at 16:00 were 7.5 mph from 327 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 750 ppbv (2,400 µg/m^3), was detected at 57.095 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags T and U. The highest instantaneous maximum concentration of toluene, at 530 ppbv (2,000 µg/m^3), was detected at 57.116 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags T and U. The highest instantaneous maximum concentration of xylenes, at 1,100 ppbv (4,900 µg/m^3), was detected at 45.020 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags Q and R. The concentrations for benzene, toluene and xylenes exceeded the linear calibration range and are considered estimated.

4.29 Monitoring Deer Park to Channelview, 64MSMS00907

Monitoring Deer Park to Channelview was performed on 09 April 2019 at 9:07:10 and is represented in Figure 116. The average wind speed and direction for the five-minute period ending at 10:00 were 6.5 mph from 256 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 650 ppbv (2,100 µg/m^3), was detected at 38.425 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags N and O. The highest instantaneous maximum concentration of toluene, at 660 ppbv (2,500 µg/m^3), was detected at 51.562 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags Q and R. The highest instantaneous maximum concentration of xylenes, at 850 ppbv (3,700 µg/m^3), was detected at 38.414 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags N and O. The concentrations for benzene, toluene and xylenes exceeded the linear calibration range and are considered estimated.

4.30 Monitoring Lynchburg to Pasadena, 64MSMS00913

Monitoring Lynchburg to Pasadena was performed on 09 April 2019 at 16:19:46 and is represented in Figure 121. The average wind speed and direction for the five-minute period ending at 17:00 were 3.2 mph from 333 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentrations of benzene, at 2,300 ppbv (7,300 µg/m^3), and toluene 1,200 ppbv (4,500 µg/m^3), were detected at 51.583 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags M and N. The highest instantaneous maximum concentration of xylenes, at 820 ppbv (3,500 µg/m^3), was detected at 40.886 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags J and K. The concentrations for benzene, toluene and xylenes exceeded the linear calibration range and are considered estimated.

4.31 Monitoring Pasadena to Deer Park, 64MSMS00917

Monitoring Pasadena to Deer Park was performed on 10 April 2019 at 8:34:25 and is represented in Figure 123. The average wind speed and direction for the five-minute period ending at 9:00 were 9.3 mph from 191 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 430 ppbv (1,400 µg/m^3), was

detected at 41.296 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags N and O. The highest instantaneous maximum concentration of toluene, at 720 ppbv (2,700 µg/m^3), was detected at 41.117 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags N and O. The highest instantaneous maximum concentration of xylenes, at 770 ppbv (3,300 µg/m^3), was detected at 41.212 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags N and O. The concentrations for benzene, toluene and xylenes exceeded the linear calibration range and are considered estimated.

4.32 Monitoring Pasadena to Deer Park, 64MSMS00930

Monitoring Pasadena to Deer Park was performed on 11 April 2019 at 10:06:59 and is represented in Figure 132. The average wind speed and direction for the five-minute period ending at 10:00 were 9.9 mph from 190 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 180 ppbv (580 µg/m^3), was detected at 43.242 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags L and M. The highest instantaneous maximum concentration of toluene, at 53 ppbv (200 µg/m^3), was detected at 43.252 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags L and M. The highest instantaneous maximum concentration of xylenes, at 8.1 ppbv (35 µg/m^3), was detected at 43.231 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags L and M. The concentrations for benzene and toluene exceeded the linear calibration range and are considered estimated.

4.33 Monitoring Channelview to Deer Park, 64MSMS00935

Monitoring Channelview to Deer Park was performed on 11 April 2019 at 15:22:24 and is represented in Figure 136. The average wind speed and direction for the five-minute period ending at 16:00 were 6.6 mph from 167 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 180 ppbv (560 µg/m^3), was detected at 48.575 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags R and S. The highest instantaneous maximum concentration of toluene, at 61 ppbv (230 µg/m^3), was detected at 48.133 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags Q and R. The highest instantaneous maximum concentration of xylenes, at 130 ppbv (570 µg/m^3), was detected at 47.702 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags Q and R. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.34 Monitoring Channelview to Baytown, 64MSMS00953

Monitoring Channelview to Baytown was performed on 13 April 2019 at 15:06:45 and is represented in Figure 148. The average wind speed and direction for the five-minute period ending at 16:00 were 5.5 mph from 311 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentrations of benzene, at 940 ppbv (3,000 µg/m^3), and xylenes, at 1,200 ppbv (5,300 µg/m^3), were detected at 83.517 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags D1 and E1. The highest instantaneous maximum concentration of toluene, at 480 ppbv (1,800 µg/m^3), was detected at 83.506 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags D1 and E1. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.35 Monitoring Pasadena to Deer Park, 64MSMS00957

Monitoring Pasadena to Deer Park was performed on 14 April 2019 at 12:34:47 and is represented in Figure 150. The average wind speed and direction for the five-minute period ending at 13:00 were 8.3 mph from 319 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentrations of benzene, at 890 ppbv (2,900 µg/m^3), and toluene, at 850 ppbv (3,200 µg/m^3), were detected at 27.149 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags K and L. The highest instantaneous maximum concentration of xylenes, at 2,600 ppbv (11,000 µg/m^3), was detected at 27.044 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags J and K. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.36 Monitoring Deer Park to Baytown, 64MSMS00959

Monitoring Deer Park to Baytown was performed on 14 April 2019 at 14:35:10 and is represented in Figure 152. The average wind speed and direction for the five-minute period ending at 15:00 were 7.0 mph from 321 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 630 ppbv (2,000 µg/m^3), was detected at 105.932 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags I1 and J1. The highest instantaneous maximum concentration of toluene, at 490 ppbv (1,800 µg/m^3), was detected at 106.048 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags I1 and J1. The highest instantaneous maximum concentration of xylenes, at 3,300 ppbv (14,000 µg/m^3), was detected at 106.153 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags I1 and J1. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.37 Monitoring Pasadena to Baytown, 64MSMS00982

Monitoring Pasadena to Baytown was performed on 18 April 2019 at 13:52:52 and is represented in Figure 166. The average wind speed and direction for the five-minute period ending at 14:00 were 8.9 mph from 302 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 810 ppbv (2,600 µg/m^3), was detected at 42.001 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags J and K. The highest instantaneous maximum concentration of toluene, at 240 ppbv (890 µg/m^3), was detected at 24.057 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags G and H. The highest instantaneous maximum concentration of xylenes, at 780 ppbv (3,400 µg/m^3), was detected at 24.120 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags G and H. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.38 Monitoring Lynchburg to Deer Park, 64MSMS00984

Monitoring Lynchburg to Deer Park was performed on 18 April 2019 at 15:50:31 and is represented in Figure 168. The average wind speed and direction for the five-minute period ending at 16:00 were 8.3 mph from 318 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 870 ppbv (2,800 µg/m^3), was detected at 30.367 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags H and I. The highest instantaneous maximum concentration

of toluene, at 200 ppbv (750 µg/m^3), was detected at 42.516 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags J and K. The highest instantaneous maximum concentration of xylenes, at 560 ppbv (2,400 µg/m^3), was detected at 30.136 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags H and I. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.39 Monitoring Pasadena to Deer Park, 64MSMS00988

Monitoring Pasadena to Deer Park was performed on 19 April 2019 at 8:42:14 and is represented in Figure 170. The average wind speed and direction for the five-minute period ending at 9:00 were 6.7 mph from 334 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 360 ppbv (1,100 µg/m^3), was detected at 18.008 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags E and F. The highest instantaneous maximum concentration of toluene, at 360 ppbv (1,400 µg/m^3), was detected at 18.050 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags E and F. The highest instantaneous maximum concentration of xylenes, at 490 ppbv (2,100 µg/m^3), was detected at 17.630 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags E and F. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.40 Monitoring Deer Park to La Porte, 64MSMS00989

Monitoring Deer Park to La Porte was performed on 19 April 2019 at 9:29:22 and is represented in Figure 171. The average wind speed and direction for the five-minute period ending at 10:00 were 8.2 mph from 319 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 1,000 ppbv (3,200 µg/m^3), was detected at 79.635 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags T and U. The highest instantaneous maximum concentration of toluene, at 170 ppbv (620 µg/m^3), was detected at 79.562 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags T and U. The highest instantaneous maximum concentration of xylenes, at 490 ppbv (2,100 µg/m^3), was detected at 80.203 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags T and U. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.41 Monitoring Deer Park, 64MSMS00992

Monitoring Deer Park was performed on 19 April 2019 at 13:18:23 and is represented in Figure 173. The average wind speed and direction for the five-minute period ending at 14:00 were 10.8 mph from 322 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 770 ppbv (2,500 µg/m^3), was detected at 21.627 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags G and H. The highest instantaneous maximum concentration of toluene, at 180 ppbv (670 µg/m^3), was detected at 21.890 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags H and I. The highest instantaneous maximum concentration of xylenes, at 620 ppbv (2,700 µg/m^3), was detected at 37.478 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags J and K. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.42 Monitoring La Porte to Deer Park, 64MSMS00995

Monitoring La Porte to Deer Park was performed on 19 April 2019 at 16:02:31 and is represented in Figure 176. The average wind speed and direction for the five-minute period ending at 16:00 were 8.6 mph from 310 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 810 ppbv (2,600 µg/m^3), was detected at 38.803 minutes into the monitoring run while traveling south on Independence Parkway near the Site between flags K and L. The highest instantaneous maximum concentration of toluene, at 260 ppbv (990 µg/m^3), was detected at 25.255 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags J and K. The highest instantaneous maximum concentration of xylenes, at 920 ppbv (4,000 µg/m^3), was detected at 25.171 minutes into the monitoring run while traveling north on Independence Parkway near the Site between flags I and J. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.43 Monitoring Deer Park to Channelview, 64MSMS01043

Monitoring Deer Park to Channelview was performed on 24 April 2019 at 10:12:32 and is represented in Figure 207. The average wind speed and direction for the five-minute period ending at 11:00 were 11.9 mph from 122 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 910 ppbv (2,900 µg/m^3), was detected at 55.159 minutes into the monitoring run while traveling north on Lakeside Drive between flags R and S. The highest instantaneous maximum concentration of toluene, at 310 ppbv (1,200 µg/m^3), was detected at 55.191 minutes into the monitoring run while traveling north on Lakeside Drive between flags R and S. The highest instantaneous maximum concentration of xylenes, at 3,700 ppbv (16,000 µg/m^3), was detected at 55.201 minutes into the monitoring run while traveling north on Lakeside Drive between flags R and S. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.44 Monitoring Pasadena to Deer Park, 64MSMS01071

Monitoring Pasadena to Deer Park was performed on 27 April 2019 at 8:39:19 and is represented in Figure 226. The average wind speed and direction for the five-minute period ending at 9:00 were 8.7 mph from 183 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 520 ppbv (1,700 µg/m^3), was detected at 29.031 minutes into the monitoring run while traveling west on Tidal Road near the Site between flags J and K. The highest instantaneous maximum concentration of toluene, at 280 ppbv (1,000 µg/m^3), was detected at 38.372 minutes into the monitoring run while traveling east on Tidal Road near the Site between flags K and L. The highest instantaneous maximum concentration of xylenes, at 8,100 ppbv (35,000 µg/m^3), was detected at 28.569 minutes into the monitoring run while traveling west on Tidal Road near the Site between flags J and K. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.45 Monitoring Pasadena to Deer Park, 64MSMS01072

Monitoring Pasadena to Deer Park was performed on 27 April 2019 at 9:29:31 and is represented in Figure 227. The average wind speed and direction for the five-minute period ending at 10:00 were 9.4 mph from 166 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 190 ppbv (610 µg/m^3), was detected at 64.794 minutes into the monitoring run while traveling north on Lakeside Drive

between flags T and U. The highest instantaneous maximum concentration of toluene, at 45 ppbv (170 µg/m^3), was detected at 64.752 minutes into the monitoring run while traveling north on Lakeside Drive between flags T and U. The highest instantaneous maximum concentration of xylenes, at 54 ppbv (230 µg/m^3), was detected at 64.773 minutes into the monitoring run while traveling north on Lakeside Drive between flags T and U. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.46 Monitoring Pasadena to Deer Park, 64MSMS01080

Monitoring Pasadena to Deer Park was performed on 28 April 2019 at 8:09:20 and is represented in Figure 232. The average wind speed and direction for the five-minute period ending at 8:00 were 8.2 mph from 143 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 81 ppbv (260 µg/m^3), was detected at 47.796 minutes into the monitoring run while traveling west on Tidal Road near the Site between flags V and W. The highest instantaneous maximum concentration of toluene, at 550 ppbv (2,100 µg/m^3), was detected at 59.051 minutes into the monitoring run while traveling east on Tidal Road near the Site between flags W and X. The highest instantaneous maximum concentration of xylenes, at 3,600 ppbv (16,000 µg/m^3), was detected at 58.588 minutes into the monitoring run while traveling east on Tidal Road near the Site between flags W and X. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.47 Monitoring Pasadena to Deer Park, 64MSMS01087

Monitoring Pasadena to Deer Park was performed on 28 April 2019 at 15:32:38 and is represented in Figure 237. The average wind speed and direction for the five-minute period ending at 16:00 were 11.0 mph from 128 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentrations of benzene, at 490 ppbv (1,600 µg/m^3), and toluene, at 46 ppbv (175 µg/m^3), were detected at 48.964 minutes into the monitoring run while traveling north on Lakeside Drive between flags M and N. The highest instantaneous maximum concentration of xylenes, at 28 ppbv (120 µg/m^3), was detected at 48.953 minutes into the monitoring run while traveling north on Lakeside Drive between flags M and N. The concentrations for benzene and toluene exceeded the linear calibration range and are considered estimated.

4.48 Monitoring Highway 8 to Command Post, 64MSMS01090

Monitoring Highway 8 to Command Post was performed on 29 April 2019 at 8:40:24 and is represented in Figure 238. The average wind speed and direction for the five-minute period ending at 9:00 were 12.3 mph from 159 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 460 ppbv (1,500 µg/m^3), was detected at 54.423 minutes into the monitoring run while traveling east on Tidal Road near the Site between flags R and S. The highest instantaneous maximum concentration of toluene, at 99 ppbv (370 µg/m^3), was detected at 54.434 minutes into the monitoring run while traveling east on Tidal Road near the Site between flags R and S. The highest instantaneous maximum concentration of xylenes, at 9,900 ppbv (43,000 µg/m^3), was detected at 55.117 minutes into the monitoring run while traveling east on Tidal Road near the Site between flags R and S. The concentrations for benzene, toluene and xylenes exceeded the linear calibration range and are considered estimated.

4.49 Monitoring Highway 8 to Deer Park, 64MSMS01100

Monitoring Highway 8 to Deer Park was performed on 30 April 2019 at 8:47:09 and is

represented in Figure 244. The average wind speed and direction for the five-minute period ending at 9:00 were 13.9 mph from 148 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 74 ppbv (240 µg/m^3), was detected at 56.253 minutes into the monitoring run while traveling west on Tidal Road near the Site between flags R and S. The highest instantaneous maximum concentration of toluene, at 57 ppbv (210 µg/m^3), was detected at 69.117 minutes into the monitoring run while traveling east on Tidal Road near the Site between flags U and V. The highest instantaneous maximum concentration of xylenes, at 4,400 ppbv (19,000 µg/m^3), was detected at 56.085 minutes into the monitoring run while traveling west on Tidal Road near the Site between flags R and S. The concentrations for benzene, toluene and xylenes exceeded the linear calibration range and are considered estimated.

4.50 Monitoring Channelview, 64MSMS01102

Monitoring Channelview was performed on 30 April 2019 at 10:49:28 and is represented in Figure 246. The average wind speed and direction for the five-minute period ending at 11:00 were 15.4 mph from 144 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 480 ppbv (1,500 µg/m^3), was detected at 8.804 minutes into the monitoring run while traveling south on Lakeside Drive between flags C and D. The highest instantaneous maximum concentration of toluene, at 39 ppbv (150 µg/m^3), was detected at 8.794 minutes into the monitoring run while traveling south on Lakeside Drive between flags C and D. The highest instantaneous maximum concentration of xylenes, at 130 ppbv (550 µg/m^3), was detected at 37.267 minutes into the monitoring run while traveling northeast on Market Street between flags M and N. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.51 Monitoring Channelview Two, 64MSMS01103

Monitoring Channelview Two was performed on 30 April 2019 at 11:36:36 and is represented in Figure 247. The average wind speed and direction for the five-minute period ending at 12:00 were 15.5 mph from 146 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 210 ppbv (680 µg/m^3), was detected at 7.469 minutes into the monitoring run while traveling south on Lakeside Drive between flags F and G. The highest instantaneous maximum concentration of toluene, at 56 ppbv (210 µg/m^3), was detected at 7.458 minutes into the monitoring run while traveling south on Lakeside Drive between flags F and G. The highest instantaneous maximum concentration of xylenes, at 15 ppbv (66 µg/m^3), was detected at 7.658 minutes into the monitoring run while traveling south on Lakeside Drive between flags G and H. The concentrations for benzene and toluene exceeded the linear calibration range and are considered estimated.

4.52 Monitoring Highway 8 to Deer Park Two, 64MSMS01110

Monitoring Highway 8 to Deer Park Two was performed on 01 May 2019 at 8:58:08 and is represented in Figure 251. The average wind speed and direction for the five-minute period ending at 09:00 were 13.2 mph from 150 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 60 ppbv (190 µg/m^3), was detected at 46.955 minutes into the monitoring run while traveling west on Tidal Road near the Site between flags P and Q. The highest instantaneous maximum concentration of toluene, at 31 ppbv (120 µg/m^3), was detected at 67.676 minutes into the monitoring run while traveling east on Tidal Road near the Site between flags S and T. The highest instantaneous maximum

concentration of xylenes, at 4,500 ppbv (20,000 µg/m^3), was detected at 66.856 minutes into the monitoring run while traveling east on Tidal Road near the Site between flags S and T. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.53 Monitoring Jacinto City to Channelview, 64MSMS01120

Monitoring Jacinto City to Channelview was performed on 02 May 2019 at 11:01:51 and is represented in Figure 258. The average wind speed and direction for the five-minute period ending at 12:00 were 15.1 mph from 116 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 480 ppbv (1,500 µg/m^3), was detected at 53.393 minutes into the monitoring run while traveling east on Dezavala Road/Lakeside Drive between flags R and S. The highest instantaneous maximum concentrations of toluene, at 110 ppbv (420 µg/m^3), and xylenes, at 48 ppbv (210 µg/m^3), were detected at 53.214 minutes into the monitoring run while traveling east on Dezavala Road/Lakeside Drive between flags R and S. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.54 Monitoring Channelview, 64MSMS01123

Monitoring Channelview was performed on 02 May 2019 at 13:43:38 and is represented in Figure 259. The average wind speed and direction for the five-minute period ending at 14:00 were 12.6 mph from 117 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 200 ppbv (630 µg/m^3), was detected at 40.455 minutes into the monitoring run while traveling south on Lakeside Drive between flags I and J. The highest instantaneous maximum concentration of toluene, at 26 ppbv (99 µg/m^3), was detected at 11.897 minutes into the monitoring run while traveling north on Sheldon Road between flags E and F. The highest instantaneous maximum concentration of xylenes, at 420 ppbv (1,800 µg/m^3), was detected at 28.180 minutes into the monitoring run while traveling west on Market Street near Southwest Shipyard between flags H and I. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.55 Monitoring Channelview, 64MSMS01143

Monitoring Channelview was performed on 09 May 2019 at 11:09:06 and is represented in Figure 273. The average wind speed and direction for the five-minute period ending at 11:00 were 4.0 mph from 195 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 230 ppbv (730 µg/m^3), was detected at 9.446 minutes into the monitoring run while traveling north on Lakeside Drive between flags D and E. The highest instantaneous maximum concentration of toluene, at 49 ppbv (180 µg/m^3), was detected at 9.509 minutes into the monitoring run while traveling north on Lakeside Drive between flags D and E. The highest instantaneous maximum concentration of xylenes, at 120 ppbv (540 µg/m^3), was detected at 5.050 minutes into the monitoring run while traveling west on Market Street between flags B and C. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

4.56 Monitoring ITC Site Three, 64MSMS01197

Monitoring ITC Site Three was performed on 16 May 2019 at 10:57:26 and is represented in Figure 288. The average wind speed and direction for the five-minute period ending at 11:00 were 9.3 mph from 101 degrees. There was no precipitation measured during the preceding hour.

The highest instantaneous maximum concentration of benzene, at 320 ppbv (1,000 µg/m^3), was detected at 54.970 minutes into the monitoring run while monitoring through the ITC facility between flags L and M. The highest instantaneous maximum concentration of toluene, at 150 ppbv (550 µg/m^3), was detected at 54.949 minutes into the monitoring run while monitoring through the ITC facility between flags L and M. The highest instantaneous maximum concentration of xylenes, at 930 ppbv (4,000 µg/m^3), was detected at 54.886 minutes into the monitoring run while monitoring through the ITC facility between flags L and M. The concentrations for benzene, toluene, and xylenes exceeded the linear calibration range and are considered estimated.

5.0 QUALITY ASSURANCE/QUALITY CONTROL

The compound parent/daughter ion pairs used are listed below.

Compound	Parent Ion Mass	Daughter Ion Mass
Benzene	78	39
Benzene	78	52
Toluene	92	65
Toluene	92	91
Xylene	106	65
Xylene	106	91

Table 2 documents the RFs and IRFs generated during the calibration procedure for the individual ion pairs. The RFs or IRFs were used to quantitate the ion pair concentrations. An end-of-day calibration was not performed on 15 April 2019 due to a vehicle maintenance issue, and on 07 May 2019 due to a local weather emergency. As such, no IRFs or Error Bars were calculated for data files 64MSMS00962, 64MSMS00963, 64MSMS01129, 64MSMS01130, 64MSMS01131, and 64MSMS01132. No results above the AHCV were observed for these data files.

The summaries of detection and quantitation limit data for the monitoring periods (Sections 5.3 and 5.4 and Table 3) document the concentration in ppbv required for a compound's ion pair to be considered detectable and quantifiable during the specified monitoring period. The detection limit (DL) is defined as three times the standard deviation (SD) of the concentration for a compound's ion pair measured in an ambient air sample. The QL is defined as 10 times the SD of the concentration for the same conditions. The detection and quantitation limits for a compound result from averaging the appropriate detection and quantitation limits of the compound’s ion pairs.

5.1 Intermediate Response Factor for Ion Pairs

Response factors were generated from two calibration events, as described in the procedure (Section 2.2.2.). Table 2 contains the RFs in units of icps/ppbv. The initial and final RFs were used to calculate the IRFs, which were used to calculate the reported concentration results.

The following equation was used to calculate the IRFs found in Tables 2 and 3:

$$\mathrm{IRF} = \frac{2(\mathrm{RF}_1 \times \mathrm{RF}_2)}{(\mathrm{RF}_1 + \mathrm{RF}_2)}$$

where:

IRF = Intermediate response factor (icps/concentration)
RF_1 = The RF for an ion pair measured during the first calibration event (icps/concentration)

RF_2 = The RF for the same ion pair measured during the second calibration event (icps/concentration)

For example, the entry for the 78/39 ion pair of benzene from Table 2 for files 64MSMS00708 and 64MSMS00713, 21 March 2019 is:

RF_1 = 6.2740 icps/ppbv
RF_2 = 6.1628 icps/ppbv

therefore,

$$\text{IRF} = \frac{2\ (6.2740 \text{ x } 6.1628)}{(6.2740 + 6.1628)} = \frac{77.3308}{12.4368} = 6.2179$$

The result, 6.2179 icps/ppbv, is the IRF reported in Table 2 and used in Table 3.

5.2 Error Bars

The potential maximum concentration percent deviations for each target compound are presented in Table 2 and are called "error bars" for simplicity. They represent the potential bias in the concentration due to changes in the sensitivity of the TAGA instrument. Errors bars were calculated using the following equation:

$$\text{error bar} = \frac{|RF_1 - RF_2|}{(RF_1 + RF_2)} \times 100$$

where:

error bar = Maximum concentration percent deviation
RF_1 = The RF for an ion pair measured during the first calibration event (icps/concentration)
RF_2 = The RF for the same ion pair measured during the second calibration event (icps/concentration)

For example, the entry for the 78/39 ion pair of benzene from Table 2 for files 64MSMS00708 and 64MSMS00713, 21 March 2019 is:

RF_1 = 6.2740 icps/ppbv
RF_2 = 6.1628 icps/ppbv

Therefore:

$$\text{error bar} = \frac{|6.2740\text{-}6.1628|}{(6.2740\text{+}6.1628)} \text{x } 100 = \frac{0.1112}{12.4368} \text{ x } 100 = 0.894$$

The % error bar calculated for the 78/39 ion pair of benzene is 0.894% for files 64MSMS00708 and 64MSMS00713, 21 March 2019.

The above calculation was repeated for each ion pair. The error bars for each compound's ions were averaged to give a single value for the compound. This averaged error bar can be applied to the samples analyzed between the two calibrations of the monitoring period.

5.3 Ion Pair Detection and Quantitation Limits

The DLs and QLs were calculated using the SD of the compound's ion pair intensity measured in an ambient air sample and its RF or IRF. The SD reflects the variability of the instrument's response to the ambient air sample.

The following equation was used to calculate the DLs found in Table 3:

$$DL = \frac{3 \times SD}{RF \text{ or } IRF}$$

where:

DL = Detection limit for an ion pair (concentration)
SD = Standard deviation of the ion intensity measured in an ambient air sample (icps)
RF or IRF = Response or intermediate response factor for an ion pair (icps/concentration)

For example, the entry for the 78/39 ion pair of benzene from Table 3 for files 64MSMS00708 and 64MSMS00713, 21 March 2019 is:

SD = 7.1451 icps
IRF = 6.2179 icps/ppbv

$$DL = \frac{3 \text{ x } 7.1451}{6.2179} = 3.45 \text{ ppbv}$$

The following equation was used to calculate the QLs found in Table 3:

$$QL = \frac{10 \times SD}{RF \text{ or } IRF}$$

where:

QL = Quantitation limit concentration for an ion pair (concentration)
SD = Standard deviation of the ion intensity measured in an ambient air sample (icps)
RF or IRF = Response or intermediate response factor for an ion pair (icps/concentration)

For example, the entry for the 78/39 ion pair of benzene from Table 3 for files 64MSMS00708 and 64MSMS00713, 21 March 2019 is:

SD = 7.1451 icps
IRF = 6.2179 icps/ppbv

$$QL = \frac{10 \text{ x } 7.1451}{6.2179} = 11.5 \text{ ppbv}$$

5.4 Compound Detection and Quantitation Limits

Averaging the respective DLs and QLs of the target compound's ion pairs generated the DLs and QLs found in Table 3.

The following equation was used to calculate the compound's DL:

$$DL_c = \frac{DL_1 + DL_2 + \ldots + DL_n}{n}$$

where:

DL_c = Detection limit for a compound (concentration)
DL_1 = Detection limit for the first ion pair (concentration)
DL_2 = Detection limit for the second ion pair (concentration)
DL_n = Detection limit for the nth ion pair (concentration)
n = Number of ion pairs to be averaged

For example, using the entries for the 78/39 and 78/52 ion pairs of benzene from Table 3 for files 64MSMS00708 and 64MSMS00713, 21 March 2019 is:

$$DL_c = \frac{3.45 + 1.12}{2} = \frac{4.57}{2} = 2.285 \text{ ppbv}$$

This result, 2.285 ppbv, rounded to 2.3 ppbv is the DL for benzene found in Table 3.

The following equation was used to calculate the compound's QL:

$$QL_c = \frac{QL_1 + QL_2 + \ldots QL_n}{n}$$

where:

QL_c = Quantitation limit for a compound (concentration)
QL_1 = Quantitation limit for the first ion pair (concentration)
QL_2 = Quantitation limit for the second ion pair (concentration)
QL_n = Quantitation limit for the nth ion pair (concentration)
n = Number of ion pairs to be averaged

For example, using the entries for the 78/39 and 78/52 ion pairs of benzene from Table 3 for files 64MSMS00708 and 64MSMS00713, 21 March 2019 is:

$$QL_c = \frac{11.5 + 3.73}{2} = \frac{15.23}{2} = 7.615 \text{ ppbv}$$

This result, 7.615 ppbv, rounded to 7.6 ppbv is the QL for benzene found in Table 3.

TABLES

TABLE 1
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS00709	03/21/19	8:54:24	Monitoring Highway 8 East South Houston	200 J	20	8.2	3.3	55	0
64MSMS00710	03/21/19	9:42:41	Monitoring Highway 146 South Deer Park	< 180	< 4,000	< 1,700	4.4	55	0
64MSMS00711	03/21/19	11:15:25	Stationary Monitoring San Jacinto Elementary	< 180	< 4,000	< 1,700	4.1	65	0
64MSMS00712	03/21/19	11:56:46	Monitoring Deer Park 13th Street	< 180	< 4,000	< 1,700	4.2	269	0
64MSMS00714	03/21/19	14:35:42	Monitoring Highway 8 East to Highway 225	< 180	< 4,000	< 1,700	5.0	314	0
64MSMS00715	03/21/19	15:30:27	Monitoring 13th Street Neighborhood	< 180	< 4,000	< 1,700	4.4	328	0
64MSMS00716	03/21/19	16:21:15	Monitoring Highway 225 West	3,300 J	720 J	800 J	3.6	331	0
64MSMS00717	03/21/19	18:09:42	Monitoring Highway 8 West	< 180	< 4,000	< 1,700	6.0	172	0
64MSMS00720	03/22/19	8:45:14	Monitoring Highway 8 East to Highway 225	< 180	< 4,000	< 1,700	3.4	299	0
64MSMS00721	03/22/19	11:22:30	Monitoring Deer Park North	< 180	< 4,000	< 1,700	4.0	142	0
64MSMS00722	03/22/19	12:22:59	Monitoring Pasadena Freeway Frontage Road	< 180	< 4,000	< 1,700	5.7	140	0
64MSMS00723	03/22/19	12:58:32	Monitoring Independence Parkway to Battleground Park	1,700 J	550 J	600 J	6.1	140	0
64MSMS00724	03/22/19	14:17:55	Monitoring Deer Park to Channelview	< 180	< 4,000	< 1,700	4.5	133	0
64MSMS00727	03/22/19	15:39:44	Monitoring Channelview Three	1,100 J	400 J	430 J	10.3	128	0
64MSMS00728	03/22/19	17:19:39	Monitoring Galena Park	< 180	< 4,000	< 1,700	9.0	152	0
64MSMS00731	03/23/19	9:02:05	Monitoring Highway 225 Eastbound	210 J	66 J	62 J	11.0	127	0

Wind direction is the direction from which the wind is blowing

ppbv = Parts per billion by volume
mph = Miles per hour
J = Estimated value
- = Not reported

[1] TCDEQ Deer Park #2 Weather Station
[2] TCDEQ La Porte Municipal Airport Weather Station

TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS00732	03/23/19	10:24:34	Monitoring Deer Park to Channelview	< 180	< 4,000	< 1,700	12.1	127	0
64MSMS00733	03/23/19	11:34:21	Monitoring Channelview	< 180	< 4,000	< 1,700	13.4	123	0
64MSMS00734	03/23/19	12:54:16	Monitoring Pleasantville to Tri-Park	< 180	< 4,000	< 1,700	13.0	124	0
64MSMS00735	03/23/19	14:46:26	Monitoring Northwest of Site	820 J	160 J	130 J	12.7	124	0
64MSMS00738	03/24/19	8:43:50	Monitoring Highway 10 East	210 J	140 J	320 J	9.6	172	0
64MSMS00739	03/24/19	10:41:59	Monitoring Channelview to Galena Park	< 180	< 4,000	< 1,700	8.6	172	0
64MSMS00740	03/24/19	11:44:14	Monitoring Channelview to Galena Park Two	< 180	< 4,000	< 1,700	9.4	154	0
64MSMS00742	03/24/19	14:12:34	Monitoring Galena Park to Channelview	< 180	< 4,000	< 1,700	8.9	61	0
64MSMS00743	03/24/19	15:14:11	Monitoring Lynchburg to Channelview	410 J	150 J	200 J	10.1	161	0
64MSMS00746	03/25/19	8:53:29	Monitoring Highway 8 to Highway 225 W	< 180	< 4,000	< 1,700	3.0	261	0
64MSMS00747	03/25/19	9:32:18	Monitoring from EPA Command Center to Lynchburg Ferry	< 180	< 4,000	< 1,700	6.5	261	0
64MSMS00748	03/25/19	10:42:45	Monitoring Baytown to Lynchburg Ferry	< 180	< 4,000	< 1,700	6.1	270	0
64MSMS00751	03/25/19	13:53:16	Monitoring Highway 10 to Lynchburg Ferry	< 180	< 4,000	< 1,700	5.2	255	0
64MSMS00752	03/25/19	14:52:06	Monitoring Lynchburg Ferry to Baytown	< 180	< 4,000	< 1,700	3.6	274	0
64MSMS00753	03/25/19	15:48:25	Monitoring ITC Site and Vista Drive	3,600 J	1,100 J	600 J	4.5	262	0
64MSMS00757	03/26/19	9:06:31	Monitoring Highway 8 North to Command Post	< 180	< 4,000	< 1,700	5.9	73	0

Wind direction is the direction from which the wind is blowing

ppbv = Parts per billion by volume
mph = Miles per hour
J = Estimated value
- = Not reported

[1] TCDEQ Deer Park #2 Weather Station
[2] TCDEQ La Porte Municipal Airport Weather Station

TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS00758	03/26/19	9:37:49	Monitoring EPA Command Post to Deer Park	< 180	< 4,000	< 1,700	5.1	64	0
64MSMS00759	03/26/19	10:26:57	Monitoring Deer Park to Pasadena	< 180	< 4,000	< 1,700	5.6	21	0
64MSMS00762	03/26/19	13:07:03	Monitoring Deer Park	< 180	< 4,000	< 1,700	5.7	55	0
64MSMS00763	03/26/19	14:04:39	Monitoring Deer Park Two	< 180	< 4,000	< 1,700	5.1	51	0
64MSMS00764	03/26/19	15:11:12	Monitoring Pasadena and Deer Park Two	< 180	< 4,000	< 1,700	4.7	33	0
64MSMS00765	03/26/19	15:58:10	Monitoring Independence Parkway	250 J	99 J	210 J	4.6	33	0
64MSMS00768	03/27/19	8:06:29	Monitoring Highway 8 N to Command Post	< 180	< 4,000	< 1,700	10.1	94	0
64MSMS00769	03/27/19	8:44:09	Monitoring Pasadena to Deer Park	< 180	< 4,000	< 1,700	10.9	100	0
64MSMS00770	03/27/19	9:49:40	Monitoring Deer Park to Galena Park	< 180	< 4,000	< 1,700	10.3	102	0
64MSMS00771	03/27/19	11:07:44	Monitoring Galena Park	< 180	< 4,000	< 1,700	7.4	111	0
64MSMS00775	03/27/19	14:14:04	Monitoring Galena Park to Channelview	< 180	< 4,000	< 1,700	8.1	120	0
64MSMS00776	03/27/19	15:20:51	Monitoring Channelview	370 J	67 J	28	9.1	138	0
64MSMS00777	03/27/19	16:43:43	Monitoring Channelview to Command Post	< 180	< 4,000	< 1,700	8.8	137	0
64MSMS00780	03/28/19	8:43:49	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	9.7	152	0
64MSMS00782	03/28/19	9:26:38	Monitoring Command Post to Galena Park	< 180	< 4,000	< 1,700	9.6	157	0
64MSMS00783	03/28/19	10:46:39	Monitoring Galena Park	< 180	< 4,000	< 1,700	9.7	147	0

Wind direction is the direction from which the wind is blowing

ppbv = Parts per billion by volume
mph = Miles per hour
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[1] TCDEQ Deer Park #2 Weather Station
[2] TCDEQ La Porte Municipal Airport Weather Station

TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS00784	03/28/19	11:49:10	Monitoring Channelview	< 180	< 4,000	< 1,700	10.7	141	0
64MSMS00786	03/28/19	13:45:30	Monitoring Channelview Two	< 180	< 4,000	< 1,700	12.3	144	0
64MSMS00787	03/28/19	14:50:29	Monitoring Baytown	< 180	< 4,000	< 1,700	12.3	152	0
64MSMS00788	03/28/19	16:04:01	Monitoring Deer Park	< 180	< 4,000	< 1,700	12.1	152	0
64MSMS00793	03/29/19	8:36:02	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	7.8	128	0
64MSMS00794	03/29/19	9:08:12	Monitoring Command Post to Galena Park	< 180	< 4,000	< 1,700	7.8	128	0
64MSMS00795	03/29/19	9:57:40	Monitoring Galena Park	< 180	< 4,000	< 1,700	8.6	129	0
64MSMS00796	03/29/19	11:11:15	Monitoring Channelview	480 J	53 J	28	12.6	154	0
64MSMS00797	03/29/19	12:05:22	Monitoring Channelview Two	820 J	98 J	36 J	13.2	154	0
64MSMS00800	03/29/19	14:46:20	Monitoring Channelview Three	1,600 J	230 J	70 J	12.5	155	0
64MSMS00801	03/29/19	15:56:02	Monitoring Channelview to Pasadena	< 180	< 4,000	< 1,700	12.8	147	0
64MSMS00804	03/30/19	8:19:02	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	7.7	185	0
64MSMS00805	03/30/19	8:45:46	Monitoring Channelview	< 180	< 4,000	< 1,700	6.9	192	0
64MSMS00807	03/30/19	9:54:35	Monitoring Channelview Two	690 J	83 J	29	5.0	222	0
64MSMS00808	03/30/19	11:08:58	Monitoring Channelview Three	< 180	< 4,000	< 1,700	3.4	247	0
64MSMS00811	03/30/19	14:01:36	Monitoring Highland Channelview	200 J	25 J	13	5.5	337	0

Wind direction is the direction from which the wind is blowing

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TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS00812	03/30/19	15:24:03	Monitoring Deer Park	390 J	50 J	16	9.2	334	0.01
64MSMS00815	03/31/19	8:07:31	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	7.8	10	0
64MSMS00816	03/31/19	8:42:50	Monitoring Pasadena to Deer Park	1,000 J	220 J	120 J	6.3	25	0
64MSMS00817	03/31/19	9:47:02	Monitoring Deer Park	840 J	150 J	83 J	6.7	14	0
64MSMS00818	03/31/19	11:01:18	Monitoring Deer Park Two	790 J	140 J	60 J	6.0	14	0
64MSMS00822	03/31/19	12:46:23	Monitoring Deer Park Three	790 J	120 J	60 J	6.8	13	0
64MSMS00823	03/31/19	13:47:03	Monitoring Deer Park Four	390 J	61 J	22	5.5	359	0
64MSMS00824	03/31/19	14:33:51	Monitoring Deer Park Five	450 J	68 J	27	5.9	18	0
64MSMS00825	03/31/19	15:33:55	Monitoring Deer Park Six	400 J	53 J	21	5.9	25	0.01
64MSMS00828	04/01/19	8:53:30	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	4.6	28	0
64MSMS00829	04/01/19	9:38:35	Monitoring Pasadena to Deer Park	< 180	< 4,000	< 1,700	4.7	38	0
64MSMS00830	04/01/19	10:35:24	Monitoring Deer Park to Pasadena	< 180	< 4,000	< 1,700	4.0	3	0
64MSMS00831	04/01/19	11:42:28	Monitoring Deer Park	< 180	< 4,000	< 1,700	3.4	330	0
64MSMS00833	04/01/19	14:20:03	Monitoring Deer Park Two	< 180	< 4,000	< 1,700	2.7	352	0
64MSMS00834	04/01/19	15:27:18	Monitoring Deer Park Three	5,000 J	2,500 J	2,600 J	2.9	33	0
64MSMS00835	04/01/19	16:39:22	Monitoring Baytown to Pasadena	< 180	< 4,000	< 1,700	3.5	24	0

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TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS00841	04/02/19	9:34:57	Monitoring Deer Park to Channelview	< 180	< 4,000	< 1,700	2.9	51	0
64MSMS00842	04/02/19	10:44:39	Monitoring Channelview	< 180	< 4,000	< 1,700	3.9	58	0
64MSMS00843	04/02/19	12:09:57	Monitoring Jacinto City to Deer Park	< 180	< 4,000	< 1,700	4.8	83	0
64MSMS00853	04/03/19	15:13:12	Monitoring Deer Park to Channelview	< 180	< 4,000	< 1,700	13.3	108	0
64MSMS00854	04/03/19	16:35:49	Monitoring Channelview to Pasadena	< 180	< 4,000	< 1,700	13.74	104	0
64MSMS00857	04/04/19	8:32:18	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	5.0	220	0.02
64MSMS00858	04/04/19	9:35:58	Monitoring Deer Park to Channelview	2,400 J	470 J	2,400 J	9.6	200	0
64MSMS00859	04/04/19	10:41:18	Monitoring Channelview	< 180	< 4,000	< 1,700	10.3	229	0
64MSMS00860	04/04/19	11:50:27	Monitoring Channelview to Galena Park	< 180	< 4,000	< 1,700	9.0	236	0
64MSMS00861	04/04/19	12:58:34	Monitoring Channelview to Galena Park Two	< 180	< 4,000	< 1,700	11.1	222	0
64MSMS00863	04/04/19	14:49:35	Monitoring Channelview to Galena Park Three	< 180	< 4,000	< 1,700	10.5	234	0
64MSMS00864	04/04/19	16:33:18	Monitoring Channelview to Deer Park	< 180	< 4,000	< 1,700	7.7	221	0
64MSMS00868	04/05/19	8:41:26	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	4.1	90	0
64MSMS00869	04/05/19	9:23:38	Monitoring Deer Park to Channelview	< 180	< 4,000	< 1,700	3.0	116	0
64MSMS00870	04/05/19	10:37:02	Monitoring Channelview	< 180	< 4,000	< 1,700	5.6	134	0
64MSMS00871	04/05/19	11:49:40	Monitoring Channelview Two	< 180	< 4,000	< 1,700	6.5	124	0

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TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS00874	04/05/19	14:59:06	Monitoring Galena Park	< 180	< 4,000	< 1,700	9.1	121	0
64MSMS00875	04/05/19	16:16:03	Monitoring Channelview to Pasadena	< 180	< 4,000	< 1,700	9.4	132	0
64MSMS00878	04/06/19	8:29:57	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	8.3	93	0
64MSMS00879	04/06/19	9:01:37	Monitoring Deer Park to Channelview	< 180	< 4,000	< 1,700	8.3	93	0
64MSMS00880	04/06/19	10:07:20	Monitoring Baytown to Channelview	< 180	< 4,000	< 1,700	8.4	105	0
64MSMS00881	04/06/19	11:20:52	Monitoring Channelview	< 180	< 4,000	< 1,700	11.1	151	0
64MSMS00883	04/06/19	13:57:55	Monitoring Channelview to Galena Park	< 180	< 4,000	< 1,700	11.8	151	0
64MSMS00884	04/06/19	15:59:04	Monitoring Channelview to Pasadena	< 180	< 4,000	< 1,700	9.5	113	0
64MSMS00887	04/07/19	9:15:02	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	9.2	106	0
64MSMS00888	04/07/19	10:06:04	Monitoring Deer Park to Channelview	< 180	< 4,000	< 1,700	9.9	103	0
64MSMS00889	04/07/19	10:57:05	Monitoring Channelview	< 180	< 4,000	< 1,700	12.0	152	0.30
64MSMS00890	04/07/19	12:03:19	Monitoring Channelview Two	< 180	< 4,000	< 1,700	7.5	233	0.51
64MSMS00897	04/08/19	8:22:41	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	8.8	329	0.35
64MSMS00898	04/08/19	9:06:49	Monitoring Deer Park to Channelview	560 J	300 J	880 J	8.8	329	0.35
64MSMS00899	04/08/19	9:59:07	Monitoring Baytown to Channelview	< 180	< 4,000	< 1,700	8.4	325	0
64MSMS00900	04/08/19	11:03:06	Monitoring Channelview	< 180	< 4,000	< 1,700	9.0	321	0

Wind direction is the direction from which the wind is blowing

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TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
654MSMS0902	04/08/19	13:07:52	Monitoring Channelview to Galena Park	< 180	< 4,000	< 1,700	9.7	321	0
64MSMS00903	04/08/19	15:01:48	Monitoring Channelview to Pasadena	750 J	530 J	1,100 J	7.5	327	0
64MSMS00906	04/09/19	8:22:45	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	5.8	263	0
64MSMS00907	04/09/19	9:07:10	Monitoring Deer Park to Channelview	650 J	660 J	850 J	6.5	256	0
64MSMS00908	04/09/19	10:11:51	Monitoring ITC Site to Baytown	< 180	< 4,000	< 1,700	5.5	268	0
64MSMS00909	04/09/19	11:26:56	Monitoring Channelview	< 180	< 4,000	< 1,700	6.0	276	0
64MSMS00911	04/09/19	13:37:02	Monitoring Channelview to Galena Park	< 180	< 4,000	< 1,700	4.1	319	0
64MSMS00912	04/09/19	15:28:24	Monitoring Channelview Two	< 180	< 4,000	< 1,700	3.6	328	0
64MSMS00913	04/09/19	16:19:46	Monitoring Lynchburg to Pasadena	2,300 J	1,200 J	820 J	3.2	333	0
64MSMS0916	04/10/19	7:56:22	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	9.2	193	0
64MSMS00917	04/10/19	8:34:25	Monitoring Pasadena to Deer Park	430 J	720 J	770 J	9.3	191	0
64MSMS00918	04/10/19	9:33:19	Monitoring Deer Park to Baytown	< 180	< 4,000	< 1,700	11.9	192	0
64MSMS00919	04/10/19	10:48:47	Monitoring Lynchburg to Channelview	< 180	< 4,000	< 1,700	11.9	193	0
64MSMS00920	04/10/19	11:38:21	Monitoring Channelview	< 180	< 4,000	< 1,700	12.4	191	0
64MSMS00922	04/10/19	13:55:21	Monitoring Galena Park	< 180	< 4,000	< 1,700	13.3	179	0
64MSMS00923	04/10/19	15:10:00	Monitoring Galena Park to Channelview	< 180	< 4,000	< 1,700	12.5	123	0

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TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS00924	04/10/19	16:13:28	Monitoring Channelview to Deer Park	< 180	< 4,000	< 1,700	12.7	173	0
64MSMS00928	04/11/19	8:37:33	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	11.1	182	0
64MSMS00929	04/11/19	9:23:24	Stationary Monitoring EPA Command Post	< 180	< 4,000	< 1,700	9.9	190	0
64MSMS00930	04/11/19	10:06:59	Monitoring Pasadena to Deer Park	180 J	53 J	8.1	9.9	190	0
64MSMS00931	04/11/19	11:05:07	Monitoring Deer Park to Baytown	< 180	< 4,000	< 1,700	9.6	186	0
64MSMS00932	04/11/19	12:01:26	Monitoring Lynchburg to Galena Park	< 180	< 4,000	< 1,700	9.3	184	0
64MSMS00934	04/11/19	14:05:06	Monitoring Galena Park to Channelview	< 180	< 4,000	< 1,700	4.6	199	0.03
64MSMS00935	04/11/19	15:22:24	Monitoring Channelview to Deer Park	180 J	61 J	130 J	6.6	167	0
64MSMS00938	04/12/19	10:46:01	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	9.8	91	0
64MSMS00939	04/12/19	11:17:06	Monitoring Pasadena to Deer Park	< 180	< 4,000	< 1,700	11.1	94	0
64MSMS00940	04/12/19	12:31:27	Monitoring Deer Park to Galena Park	< 180	< 4,000	< 1,700	11.6	92	0
64MSMS00942	04/12/19	14:04:32	Monitoring Galena Park to Manchester	< 180	< 4,000	< 1,700	13.6	103	0
64MSMS00943	04/12/19	14:56:35	Monitoring Manchester to Deer Park	< 180	< 4,000	< 1,700	13.2	95	0
64MSMS00946	04/13/19	8:23:52	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	9.6	148	0
64MSMS00947	04/13/19	9:03:01	Monitoring Pasadena to Deer Park	< 180	< 4,000	< 1,700	9.6	148	0
64MSMS00948	04/13/19	10:02:38	Monitoring Deer Park to Channelview	< 180	< 4,000	< 1,700	11.6	171	0

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TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS00949	04/13/19	10:59:11	Monitoring Lynchburg to Channelview	< 180	< 4,000	< 1,700	12.9	182	0
64MSMS00950	04/13/19	11:47:54	Monitoring Channelview to Galena Park	< 180	< 4,000	< 1,700	15.0	194	0
64MSMS00952	04/13/19	13:55:34	Monitoring Galena Park to Baytown	< 180	< 4,000	< 1,700	12.2	218	0
64MSMS00953	04/13/19	15:06:45	Monitoring Channelview to Baytown	940 J	480 J	1,200 J	5.5	311	0
64MSMS00956	04/14/19	8:05:52	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	8.2	315	0
64MSMS00957	04/14/19	12:34:47	Monitoring Pasadena to Deer Park	890 J	860 J	2,600 J	8.3	319	0
64MSMS00958	04/14/19	13:29:48	Monitoring Deer Park	< 180	< 4,000	< 1,700	7.2	322	0
64MSMS00959	04/14/19	14:35:10	Monitoring Deer Park to Baytown	630 J	490 J	3,300 J	7.0	321	0
64MSMS00962	04/15/19	7:57:57	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	6.7	179	0
64MSMS00963	04/15/19	8:52:36	Monitoring Pasadena to Deer Park	< 180	< 4,000	< 1,700	8.2	162	0
64MSMS00966	04/17/19	8:09:14	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	11.6	150	0
64MSMS00967	04/17/19	8:51:22	Monitoring Pasadena to Deer Park	< 180	< 4,000	< 1,700	11.6	150	0
64MSMS00968	04/17/19	9:40:13	Monitoring Deer Park to Channelview	< 180	< 4,000	< 1,700	12.2	151	0
64MSMS00969	04/17/19	10:29:50	Monitoring Lynchburg Channelview	< 180	< 4,000	< 1,700	11.0	145	0
64MSMS00970	04/17/19	11:36:38	Monitoring Channelview	< 180	< 4,000	< 1,700	11.4	125	0
64MSMS00972	04/17/19	13:22:08	Monitoring Galena Park	< 180	< 4,000	< 1,700	12.6	133	0

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TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS00973	04/17/19	14:11:58	Monitoring Manchester to Galena Park	< 180	< 4,000	< 1,700	12.6	133	0
64MSMS00974	04/17/19	15:58:18	Monitoring Channelview to Deer Park	< 180	< 4,000	< 1,700	12.8	131	0
64MSMS00977	04/18/19	8:40:52	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	5.5	51	0.03
64MSMS00979	04/18/19	10:10:18	Monitoring Deer Park	< 180	< 4,000	< 1,700	3.9	15	0
64MSMS00980	04/18/19	11:40:13	Monitoring Deer Park to Pasadena	< 180	< 4,000	< 1,700	5.9	295	0
64MSMS00982	04/18/19	13:52:52	Monitoring Pasadena to Baytown	820 J	240 J	780 J	8.9	302	0
64MSMS00983	04/18/19	14:59:06	Monitoring Deer Park to Baytown	< 180	< 4,000	< 1,700	8.7	306	0
64MSMS00984	04/18/19	15:50:31	Monitoring Lynchburg to Deer Park	870 J	200 J	560 J	8.3	318	0
64MSMS00987	04/19/19	7:57:47	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	8.0	328	0
64MSMS00988	04/19/19	8:42:14	Monitoring Pasadena to Deer Park	360 J	360 J	490 J	6.7	334	0
64MSMS00989	04/19/19	9:29:22	Monitoring Deer Park to La Porte	1,000 J	170 J	490 J	8.2	319	0
64MSMS00990	04/19/19	11:29:00	Monitoring Deer Park to La Porte Two	< 180	< 4,000	< 1,700	10.0	316	0
64MSMS00992	04/19/19	13:18:23	Monitoring Deer Park	770 J	180 J	620 J	10.8	322	0
64MSMS00993	04/19/19	14:07:31	Monitoring Deer Park to La Porte Three	< 180	< 4,000	< 1,700	10.8	322	0
64MSMS00994	04/19/19	15:07:12	Monitoring La Porte	< 180	< 4,000	< 1,700	10.5	317	0
64MSMS00995	04/19/19	16:02:31	Monitoring La Porte to Deer Park	810 J	260 J	920 J	8.6	310	0

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TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS01000	04/20/19	9:39:01	Monitoring Pasadena to Deer Park	< 180	< 4,000	< 1,700	2.9	256	0
64MSMS01001	04/20/19	10:28:33	Monitoring Deer Park	< 180	< 4,000	< 1,700	3.9	233	0
64MSMS01002	04/20/19	11:01:15	Monitoring Deer Park Two	< 180	< 4,000	< 1,700	3.9	233	0
64MSMS01003	04/20/19	12:08:00	Monitoring La Porte to Independence	< 180	< 4,000	< 1,700	4.7	215	0
64MSMS01005	04/20/19	14:26:16	Monitoring Deer Park to Baytown	< 180	< 4,000	< 1,700	3.3	237	0
64MSMS01006	04/20/19	15:07:12	Monitoring Deer Par to Baytown Two	< 180	< 4,000	< 1,700	3.3	237	0
64MSMS01007	04/20/19	16:03:22	Monitoring Baytown to Deer Park	< 180	< 4,000	< 1,700	5.8	239	0
64MSMS01010	04/21/19	8:30:22	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	11.3	148	0
64MSMS01011	04/21/19	9:04:00	Monitoring Pasadena to Deer Park	< 180	< 4,000	< 1,700	11.3	148	0
64MSMS01012	04/21/19	9:57:21	Monitoring Channelview	< 180	< 4,000	< 1,700	11.9	134	0
64MSMS01013	04/21/19	11:12:48	Monitoring Channelview Two	< 180	< 4,000	< 1,700	12.2	143	0
64MSMS01014	04/21/19	12:21:26	Monitoring Channelview to Deer Park	< 180	< 4,000	< 1,700	12.7	138	0
64MSMS01016	04/21/19	14:43:23	Monitoring Deer Park to Baytown	< 180	< 4,000	< 1,700	12.3	139	0
64MSMS01017	04/21/19	15:49:10	Monitoring Baytown to Deer Park	< 180	< 4,000	< 1,700	11.6	141	0
64MSMS01020	04/22/19	8:45:46	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	11.1	155	0
64MSMS01021	04/22/19	9:17:26	Monitoring Pasadena to Deer Park	< 180	< 4,000	< 1,700	11.3	135	0
64MSMS01022	04/22/19	10:00:06	Monitoring Deer Park to Channelview	< 180	< 4,000	< 1,700	11.3	135	0

Wind direction is the direction from which the wind is blowing

ppbv = Parts per billion by volume
mph = Miles per hour
\- = Not reported

[1] TCDEQ Deer Park #2 Weather Station
[2] TCDEQ La Porte Municipal Airport Weather Station

TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS01023	04/22/19	11:24:44	Monitoring Channelview to Galena Park	< 180	< 4,000	< 1,700	13.3	119	0
64MSMS01025	04/22/19	13:21:35	Monitoring Galena Park	< 180	< 4,000	< 1,700	12.9	124	0
64MSMS01026	04/22/19	14:20:57	Monitoring Galena Park to Channelview	< 180	< 4,000	< 1,700	12.0	121	0
64MSMS01027	04/22/19	15:27:20	Monitoring Channelview to Deer Park	< 180	< 4,000	< 1,700	11.4	122	0
64MSMS01030	04/23/19	8:16:48	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	9.0	122	0
64MSMS01031	04/23/19	8:57:15	Monitoring Pasadena to Deer Park	< 180	< 4,000	< 1,700	7.6	147	0
64MSMS01033	04/23/19	9:47:20	Monitoring Deer Park to Channelview Two	< 180	< 4,000	< 1,700	8.8	128	0
64MSMS01034	04/23/19	11:13:49	Monitoring Channelview	< 180	< 4,000	< 1,700	11.8	121	0
64MSMS01036	04/23/19	13:18:26	Monitoring Galena Park to Manchester	< 180	< 4,000	< 1,700	10.8	141	0
64MSMS01037	04/23/19	14:09:56	Monitoring Manchester to Deer Park	< 180	< 4,000	< 1,700	10.8	141	0
64MSMS01038	04/23/19	15:22:16	Monitoring Deer Park to Channelview	< 180	< 4,000	< 1,700	8.8	127	0
64MSMS01041	04/24/19	8:46:55	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	9.1	102	0
64MSMS01042	04/24/19	9:17:34	Monitoring Pasadena to Deer Park	< 180	< 4,000	< 1,700	10.0	103	0
64MSMS01043	04/24/19	10:12:32	Monitoring Deer Park to Channelview	910 J	310 J	3,700 J	11.9	122	0
64MSMS01044	04/24/19	11:23:53	Monitoring Channelview	< 180	< 4,000	< 1,700	13.1	126	0
64MSMS01046	04/24/19	13:31:08	Monitoring Channelview to Deer Park	< 180	< 4,000	< 1,700	14.4	127	0

Wind direction is the direction from which the wind is blowing

ppbv = Parts per billion by volume
mph = Miles per hour
J = Estimated value
- = Not reported

[1] TCDEQ Deer Park #2 Weather Station
[2] TCDEQ La Porte Municipal Airport Weather Station

TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS01047	04/24/19	14:24:52	Monitoring Deer Park to Channelview Two	< 180	< 4,000	< 1,700	13.1	125	0
64MSMS01048	04/24/19	15:23:08	Monitoring Channelview to Deer Park Two	< 180	< 4,000	< 1,700	12.9	127	0
64MSMS01051	04/25/19	8:45:56	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	5.8	311	0
64MSMS01052	04/25/19	9:13:32	Monitoring Pasadena to Deer Park	< 180	< 4,000	< 1,700	5.3	320	0
64MSMS01053	04/25/19	9:52:25	Monitoring Deer Park to La Porte	< 180	< 4,000	< 1,700	5.3	320	0
64MSMS01054	04/25/19	11:09:02	Monitoring Deer Park to La Porte Two	< 180	< 4,000	< 1,700	6.4	311	0
64MSMS01056	04/25/19	13:56:22	Monitoring Deer Park	< 180	< 4,000	< 1,700	6.5	327	0
64MSMS01057	04/25/19	15:10:22	Monitoring Deer Park to La Porte Three	< 180	< 4,000	< 1,700	6.4	318	0
64MSMS01060	04/26/19	8:22:27	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	4.8	19	0
64MSMS01061	04/26/19	8:50:30	Monitoring Pasadena to Deer Park	< 180	< 4,000	< 1,700	4.8	19	0
64MSMS01062	04/26/19	9:53:19	Monitoring Deer Park	< 180	< 4,000	< 1,700	3.8	33	0
64MSMS01063	04/26/19	10:56:48	Monitoring Deer Park Two	< 180	< 4,000	< 1,700	4.5	42	0
64MSMS01064	04/26/19	12:01:31	Monitoring Deer Park Three	< 180	< 4,000	< 1,700	4.2	12	0
64MSMS01066	04/26/19	14:02:40	Monitoring Deer Park Four	< 180	< 4,000	< 1,700	4.5	12	0
64MSMS01067	04/26/19	15:18:03	Monitoring Deer Park Five	< 180	< 4,000	< 1,700	4.2	59	0
64MSMS01070	04/27/19	8:07:19	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	8.5	177	0

Wind direction is the direction from which the wind is blowing

ppbv = Parts per billion by volume
mph = Miles per hour
\- = Not reported

[1] TCDEQ Deer Park #2 Weather Station
[2] TCDEQ La Porte Municipal Airport Weather Station

TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS01071	04/27/19	8:39:19	Monitoring Pasadena to Deer Park	520 J	280 J	8,100 J	8.7	183	0
64MSMS01072	04/27/19	9:29:31	Monitoring Deer Park to Channelview	190 J	45 J	54 J	9.4	166	0
64MSMS01073	04/27/19	10:44:56	Monitoring Channelview to Baytown	< 180	< 4,000	< 1,700	9.9	170	0
64MSMS01075	04/27/19	13:10:07	Monitoring Baytown to Channelview	< 180	< 4,000	< 1,700	9.7	177	0
64MSMS01076	04/27/19	14:05:35	Monitoring Channelview	< 180	< 4,000	< 1,700	9.8	176	0
64MSMS01077	04/27/19	15:22:03	Monitoring Galena Park	< 180	< 4,000	< 1,700	10.6	173	0
64MSMS01080	04/28/19	8:09:20	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	8.2	143	0
64MSMS01081	04/28/19	9:20:17	Monitoring Deer Park to Channelview	< 180	< 4,000	< 1,700	8.7	146	0
64MSMS01082	04/28/19	10:39:32	Monitoring Channelview	< 180	< 4,000	< 1,700	9.6	131	0
64MSMS01085	04/28/19	13:32:00	Monitoring Channelview Two	< 180	< 4,000	< 1,700	11.5	139	0
64MSMS01086	04/28/19	14:26:26	Monitoring Channelview to Lynchburg	< 180	< 4,000	< 1,700	10.5	140	0
64MSMS01087	04/28/19	15:32:38	Monitoring Channelview Three	490 J	46 J	28	11.0	128	0
64MSMS01090	04/29/19	8:40:24	Monitoring Highway 8 to Command Post	460 J	99 J	9,900 J	12.3	159	0
64MSMS01091	04/29/19	9:48:23	Monitoring Deer Park to Channelview	< 180	< 4,000	< 1,700	13.3	156	0
64MSMS01092	04/29/19	11:03:17	Monitoring Channelview	< 180	< 4,000	< 1,700	13.5	148	0
64MSMS01095	04/29/19	13:16:46	Monitoring Channelview Two	< 180	< 4,000	< 1,700	12.2	140	0

Wind direction is the direction from which the wind is blowing

ppbv = Parts per billion by volume
mph = Miles per hour
J = Estimated value
- = Not reported

[1] TCDEQ Deer Park #2 Weather Station
[2] TCDEQ La Porte Municipal Airport Weather Station

TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS01096	04/29/19	14:23:52	Monitoring Channelview Three	< 180	< 4,000	< 1,700	10.9	144	0
64MSMS01097	04/29/19	15:16:57	Monitoring Channelview Four	< 180	< 4,000	< 1,700	11.0	133	0
64MSMS01100	04/30/19	8:47:09	Monitoring Highway 8 to Deer Park	< 180	< 4,000	< 1,700	13.9	148	0
64MSMS01101	04/30/19	10:06:50	Monitoring Deer Park to Channelview	< 180	< 4,000	< 1,700	15.2	144	0
64MSMS01102	04/30/19	10:49:28	Monitoring Channelview	480 J	39 J	130 J	15.4	144	0
64MSMS01103	04/30/19	11:36:36	Monitoring Channelview Two	210 J	56 J	15	15.5	146	0
64MSMS01105	04/30/19	14:21:11	Monitoring Channelview Three	< 180	< 4,000	< 1,700	14.1	153	0
64MSMS01106	04/30/19	15:16:10	Monitoring Channelview to Lynchburg	< 180	< 4,000	< 1,700	12.5	152	0
64MSMS01109	05/01/19	8:25:00	Monitoring Highway 8 to Deer Park	< 180	< 4,000	< 1,700	13.2	150	0
64MSMS01110	05/01/19	8:58:08	Monitoring Highway 8 to Deer Park Two	< 180	< 4,000	< 1,700	13.2	150	0
64MSMS01111	05/01/19	10:36:27	Monitoring Deer Park to Channelview	< 180	< 4,000	< 1,700	13.2	143	0
64MSMS01112	05/01/19	11:46:54	Monitoring Channelview	< 180	< 4,000	< 1,700	12.3	139	0
64MSMS01114	05/01/19	14:03:26	Monitoring Channelview Two	< 180	< 4,000	< 1,700	11.8	135	0
64MSMS01115	05/01/19	14:55:40	Monitoring Channelview Three	< 180	< 4,000	< 1,700	10.2	132	0
64MSMS01118	05/02/19	8:22:02	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	10.7	91	0
64MSMS01119	05/02/19	9:39:11	Monitoring Pasadena to Galena Park	< 180	< 4,000	< 1,700	14.5	106	0

Wind direction is the direction from which the wind is blowing

ppbv = Parts per billion by volume
mph = Miles per hour
J = Estimated value
- = Not reported

[1] TCDEQ Deer Park #2 Weather Station
[2] TCDEQ La Porte Municipal Airport Weather Station

TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS01120	05/02/19	11:01:51	Monitoring Jacinto City to Channelview	480 J	110 J	48 J	15.1	116	0
64MSMS01123	05/02/19	13:43:38	Monitoring Channelview	200 J	26 J	420 J	12.6	117	0
64MSMS01124	05/02/19	14:50:25	Monitoring Channelview Two	< 180	< 4,000	< 1,700	13.1	123	0
64MSMS01125	05/02/19	16:05:05	Monitoring Channelview to Command Post	< 180	< 4,000	< 1,700	11.2	125	0
64MSMS01129	05/07/19	12:41:27	Monitoring Pasadena to Deer Park	< 180	< 4,000	< 1,700	10.8	127	0
64MSMS01130	05/07/19	13:35:50	Monitoring Deer Park to Channelview	< 180	< 4,000	< 1,700	14.6	133	0
64MSMS01131	05/07/19	15:31:29	Monitoring Channelview	< 180	< 4,000	< 1,700	6.1	83	0
64MSMS01132	05/07/19	16:55:04	Monitoring Channelview to Pasadena	< 180	< 4,000	< 1,700	12.9	88	0
64MSMS01134	05/08/19	11:55:50	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	10.2	154	0
64MSMS01135	05/08/19	12:24:49	Monitoring Pasadena to Deer Park	< 180	< 4,000	< 1,700	9.1	159	0
64MSMS01136	05/08/19	13:46:10	Monitoring Channelview	< 180	< 4,000	< 1,700	8.4	154	0
64MSMS01137	05/08/19	15:04:05	Monitoring Channelview Two	< 180	< 4,000	< 1,700	8.1	142	0
64MSMS01140	05/09/19	8:04:45	Monitoring Highway 8 to Command Post	< 180	< 4,000	< 1,700	6.0	150	0
64MSMS01141	05/09/19	8:54:28	Monitoring Pasadena to Deer Park	< 180	< 4,000	< 1,700	4.5	183	0
64MSMS01142	05/09/19	9:53:38	Monitoring Deer Park to Channelview	< 180	< 4,000	< 1,700	4.3	153	0
64MSMS01143	05/09/19	11:09:06	Monitoring Channelview	230 J	49 J	120 J	4.0	195	0

Wind direction is the direction from which the wind is blowing

ppbv = Parts per billion by volume
mph = Miles per hour
J = Estimated value
- = Not reported

[1] TCDEQ Deer Park #2 Weather Station
[2] TCDEQ La Porte Municipal Airport Weather Station

TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS01144	05/09/19	12:46:44	Monitoring Channelview Two	< 180	< 4,000	< 1,700	5.1	149	0
64MSMS01148	05/10/19	9:30:17	Monitoring Highway 8 to ITC Site	< 180	< 4,000	< 1,700	3.3	1	0
64MSMS01149	05/10/19	10:12:15	Monitoring Independence Parkway	< 180	< 4,000	< 1,700	3.3	1	0
64MSMS01150	05/10/19	12:00:07	Monitoring Deer Park	< 180	< 4,000	< 1,700	3.2	27	0
64MSMS01151	05/10/19	12:55:42	Monitoring Deer Park Two	< 180	< 4,000	< 1,700	4.1	69	0
64MSMS01152	05/10/19	13:43:54	Monitoring Deer Park Three	< 180	< 4,000	< 1,700	6.8	89	0
64MSMS01179	05/13/19	12:16:29	Monitoring Texas City to Deer Park	< 180	< 4,000	< 1,700	7.9	82	0
64MSMS01181	05/13/19	13:53:39	Monitoring Deer Park	< 180	< 4,000	< 1,700	8.9	108	0
64MSMS01182	05/13/19	15:28:00	Monitoring Deer Park Two	< 180	< 4,000	< 1,700	8.0	123	0
64MSMS01185	05/14/19	8:51:17	Monitoring Highway 8 to ITC Site	< 180	< 4,000	< 1,700	9.6	100	0
64MSMS01190	05/14/19	14:09:58	Monitoring Deer Park	< 180	< 4,000	< 1,700	9.7	122	0
64MSMS01191	05/14/19	15:28:14	Monitoring Deer Park Two	< 180	< 4,000	< 1,700	11.3	131	0
64MSMS01194	05/16/19	8:03:48	Monitoring Highway 8 to ITC Site	< 180	< 4,000	< 1,700	5.0	125	0
64MSMS01196	05/16/19	9:25:10	Monitoring ITC Site Two	< 180	< 4,000	< 1,700	8.5	98	0
64MSMS01197	05/16/19	10:57:26	Monitoring ITC Site Three	320 J	150 J	930J	9.7	100	0
64MSMS01199	05/16/19	13:41:31	Monitoring ITC Site Four	< 180	< 4,000	< 1,700	12.2	103	0

Wind direction is the direction from which the wind is blowing

ppbv = Parts per billion by volume
mph = Miles per hour
J = Estimated value
- = Not reported

[1] TCDEQ Deer Park #2 Weather Station
[2] NOAA William P Hobby Airport Weather Station

TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS01200	05/16/19	14:38:59	Monitoring ITC Site Five	< 180	< 4,000	< 1,700	12.2	104	0
64MSMS01201	05/16/19	15:47:35	Monitoring ITC Site Six	< 180	< 4,000	< 1,700	11.8	116	0
64MSMS01204	05/17/19	7:52:33	Monitoring Highway 8 to ITC Site	< 180	< 4,000	< 1,700	9.2	141	0
64MSMS01205	05/17/19	8:39:39	Monitoring ITC Site	< 180	< 4,000	< 1,700	10.6	141	0
64MSMS01206	05/17/19	9:38:19	Monitoring ITC Site Two	< 180	< 4,000	< 1,700	11.2	128	0
64MSMS01207	05/17/19	10:57:14	Monitoring ITC Site Three	< 180	< 4,000	< 1,700	12.3	123	0
64MSMS01209	05/17/19	13:28:18	Monitoring ITC Site Four	< 180	< 4,000	< 1,700	13.5	126	0
64MSMS01210	05/17/19	14:26:44	Monitoring ITC Site Five	< 180	< 4,000	< 1,700	14.1	126	0
64MSMS01213	05/18/19	8:14:54	Monitoring Highway 8 to ITC Site	< 180	< 4,000	< 1,700	10.7	152	0
64MSMS01214	05/18/19	8:47:05	Monitoring ITC Site	< 180	< 4,000	< 1,700	11.0	156	0
64MSMS01215	05/18/19	9:57:50	Monitoring ITC Site Two	< 180	< 4,000	< 1,700	13.1	154	0
64MSMS01216	05/18/19	11:17:52	Monitoring ITC Site Three	< 180	< 4,000	< 1,700	13.4	164	0
64MSMS01218	05/18/19	14:31:05	Monitoring ITC Site Four	< 180	< 4,000	< 1,700	12.3	160	0
64MSMS01219	05/18/19	15:42:44	Monitoring ITC Site Five	< 180	< 4,000	< 1,700	8.5	156	0
64MSMS01222	05/19/19	8:08:45	Monitoring Highway 8 to ITC Site	< 180	< 4,000	< 1,700	9.3	191	0
64MSMS01223	05/19/19	8:38:07	Monitoring ITC Site	< 180	< 4,000	< 1,700	7.8	189	0
64MSMS01224	05/19/19	10:15:13	Monitoring ITC Site Two	< 180	< 4,000	< 1,700	7.4	177	0

Wind direction is the direction from which the wind is blowing

ppbv = Parts per billion by volume
mph = Miles per hour
\- = Not reported

[1] TCDEQ Deer Park #2 Weather Station
[2] TCDEQ La Porte Municipal Airport Weather Station

TABLE 1 (continued)
Summary of Maximum Results and Meteorological Conditions during Monitoring, 21 March to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

File	Date	Start Time	Title	Benzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	Wind Speed[1] (mph)	Wind Direction[1] (degrees)	Rainfall[2] (inches)
64MSMS01225	05/19/19	11:20:15	Monitoring ITC Site Three	< 180	< 4,000	< 1,700	8.7	158	0
64MSMS01227	05/19/19	13:32:18	Monitoring ITC Site Four	< 180	< 4,000	< 1,700	9.8	153	0
64MSMS01228	05/19/19	14:47:12	Monitoring ITC Site Five	< 180	< 4,000	< 1,700	10.6	143	0
64MSMS01229	05/19/19	16:06:26	Monitoring ITC Site Six	< 180	< 4,000	< 1,700	10.1	133	0
64MSMS01232	05/20/19	8:50:58	Monitoring Highway 8 to ITC Site	< 180	< 4,000	< 1,700	14.1	143	0
64MSMS01233	05/20/19	9:41:44	Monitoring ITC Site	< 180	< 4,000	< 1,700	14.1	150	0
64MSMS01234	05/20/19	11:02:45	Monitoring ITC Site Two	< 180	< 4,000	< 1,700	13.0	149	0
64MSMS01236	05/20/19	14:08:23	Monitoring ITC Site Three	< 180	< 4,000	< 1,700	14.8	143	0
64MSMS01237	05/20/19	15:14:17	Monitoring ITC Site Four	< 180	< 4,000	< 1,700	14.8	150	0
64MSMS01238	05/20/19	16:25:30	Monitoring ITC Site Five	< 180	< 4,000	< 1,700	12.4	144	0

Wind direction is the direction from which the wind is blowing
ppbv = Parts per billion by volume
mph = Miles per hour
- = Not reported

[1] TCDEQ Deer Park #2 Weather Station
[2] TCDEQ La Porte Municipal Airport Weather Station

TABLE 2
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00708 and 64MSMS00713 on 21 March 2019
Used for Survey Files: 64MSMS00709, 64MSMS00710, 64MSMS00711, and 64MSMS00712

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	6.2740	6.1628	6.2179	0.894
Benzene	78/52	58.951	56.009	57.442	2.56
				Average:	1.7
Toluene	92/65	60.021	47.757	53.191	11.4
Toluene	92/91	368.17	257.03	302.72	17.8
				Average:	15
Xylene	106/65	33.942	15.466	21.249	37.4
Xylene	106/91	398.31	206.81	272.26	31.6
				Average:	35

Calibration Files: 64MSMS00713_MD and 64MSMS00718 on 21 March 2019
Used for Survey Files: 64MSMS00714, 64MSMS00715, 64MSMS00716, and 64MSMS00717

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	6.1628	5.5879	5.8613	4.89
Benzene	78/52	56.009	47.751	51.551	7.96
				Average:	6.4
Toluene	92/65	47.757	41.199	44.236	7.37
Toluene	92/91	257.03	212.82	232.84	9.41
				Average:	8.4
Xylene	106/65	15.466	11.395	13.122	15.2
Xylene	106/91	206.81	146.45	171.47	17.1
				Average:	16

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
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Calibration Files: 64MSMS00719 and 64MSMS00729 on 22 March 2019
Used for Survey Files: 64MSMS00720, 64MSMS00721, 64MSMS00722, 64MSMS00723, 64MSMS00724, 64MSMS00727, and 64MSMS00728

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	6.0577	5.3407	5.6766	6.29
Benzene	78/52	52.857	45.884	49.124	7.06
				Average:	6.7
Toluene	92/65	54.352	42.095	47.445	12.7
Toluene	92/91	286.29	207.69	240.74	15.9
				Average:	14
Xylene	106/65	15.987	8.1456	10.792	32.5
Xylene	106/91	242.13	158.54	191.61	20.9
				Average:	27

Calibration Files: 64MSMS00730 and 64MSMS00736 on 23 March 2019
Used for Survey Files: 64MSMS00731, 64MSMS00732, 64MSMS00733, 64MSMS00734, and 64MSMS00735

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	13.049	14.341	13.664	4.72
Benzene	78/52	78.861	89.716	83.939	6.44
				Average:	5.6
Toluene	92/65	65.794	72.068	68.788	4.55
Toluene	92/91	302.75	331.31	316.39	4.50
				Average:	4.5
Xylene	106/65	27.571	36.776	31.515	14.3
Xylene	106/91	226.89	312.53	262.91	15.9
				Average:	15

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00737 and 64MSMS00741 on 24 March 2019
Used for Survey Files: 64MSMS00738, 64MSMS00739, and 64MSMS00740

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	15.688	10.236	12.389	21.0
Benzene	78/52	104.32	68.854	82.954	20.5
				Average:	21
Toluene	92/65	86.928	41.118	55.829	35.8
Toluene	92/91	374.44	174.69	238.23	36.4
				Average:	36
Xylene	106/65	35.770	10.775	16.561	53.7
Xylene	106/91	293.61	108.92	158.89	45.9
				Average:	50

Calibration Files: 64MSMS00741_MD and 64MSMS00744 on 24 March 2019
Used for Survey Files: 64MSMS00742 and 64MSMS00743

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	10.236	11.503	10.833	5.83
Benzene	78/52	68.854	75.029	71.809	4.29
				Average:	5.1
Toluene	92/65	41.118	60.991	49.121	19.5
Toluene	92/91	174.69	248.79	205.26	17.5
				Average:	18
Xylene	106/65	10.775	21.660	14.391	33.6
Xylene	106/91	108.92	209.09	143.22	31.5
				Average:	33

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
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Calibration Files: 64MSMS00745 and 64MSMS00749 on 25 March 2019
Used for Survey Files: 64MSMS00746, 64MSMS00747, and 64MSMS00748

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	12.221	11.658	11.933	2.36
Benzene	78/52	82.700	79.640	81.141	1.88
				Average:	2.1
Toluene	92/65	64.063	61.925	62.976	1.70
Toluene	92/91	267.75	258.07	262.82	1.84
				Average:	1.8
Xylene	106/65	23.837	21.878	22.815	4.29
Xylene	106/91	210.07	216.31	213.14	1.46
				Average:	2.9

Calibration Files: 64MSMS00749_MD and 64MSMS00755 on 25 March 2019
Used for Survey Files: 64MSMS00751, 64MSMS00752, and 64MSMS00753

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	11.658	10.848	11.239	3.60
Benzene	78/52	79.640	77.081	78.340	1.63
				Average:	2.6
Toluene	92/65	61.925	56.813	59.258	4.31
Toluene	92/91	258.07	234.51	245.72	4.78
				Average:	4.5
Xylene	106/65	21.878	20.189	21.000	4.01
Xylene	106/91	216.31	212.53	214.40	0.882
				Average:	2.4

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
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Calibration Files: 64MSMS00756 and 64MSMS00761 on 26 March 2019
Used for Survey Files: 64MSMS00757, 64MSMS00758, and 64MSMS00759

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	14.792	13.074	13.880	6.17
Benzene	78/52	105.21	93.709	99.125	5.78
				Average:	6.0
Toluene	92/65	70.770	59.378	64.575	8.75
Toluene	92/91	276.93	220.08	245.25	11.4
				Average:	10
Xylene	106/65	18.025	12.939	15.064	16.4
Xylene	106/91	293.27	220.19	251.53	14.2
				Average:	15

Calibration Files: 64MSMS00761_MD and 64MSMS00766 on 26 March 2019
Used for Survey Files: 64MSMS00762, 64MSMS00763, 64MSMS00764, and 64MSMS00765

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	13.074	14.897	13.926	6.52
Benzene	78/52	93.709	103.20	98.224	4.82
				Average:	5.7
Toluene	92/65	59.378	67.086	62.997	6.10
Toluene	92/91	220.08	245.68	232.17	5.50
				Average:	5.8
Xylene	106/65	12.939	15.535	14.119	9.12
Xylene	106/91	220.19	265.01	240.53	9.24
				Average:	9.2

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
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Calibration Files: 64MSMS00767 and 64MSMS00774 on 27 March 2019
Used for Survey Files: 64MSMS00768, 64MSMS00769, 64MSMS00770, and 64MSMS00771

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	16.863	21.301	18.824	11.6
Benzene	78/52	121.99	147.50	133.54	9.47
				Average:	11
Toluene	92/65	81.816	83.924	82.856	1.27
Toluene	92/91	318.86	303.21	310.84	2.51
				Average:	1.9
Xylene	106/65	18.378	19.898	19.108	3.97
Xylene	106/91	332.22	381.50	355.16	6.91
				Average:	5.4

Calibration Files: 64MSMS00774_MD and 64MSMS00778 on 27 March 2019
Used for Survey Files: 64MSMS00775, 64MSMS00776, and 64MSMS00777

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	21.301	16.566	18.637	12.5
Benzene	78/52	147.50	113.42	128.24	13.1
				Average:	13
Toluene	92/65	83.924	76.414	79.993	4.68
Toluene	92/91	303.21	263.23	281.81	7.06
				Average:	5.9
Xylene	106/65	19.898	15.683	17.541	11.8
Xylene	106/91	381.50	300.62	336.27	11.9
				Average:	12

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00779 and 64MSMS00785 on 28 March 2019
Used for Survey Files: 64MSMS00780, 64MSMS00782, 64MSMS00783, and 64MSMS00784

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	15.701	15.392	15.544	0.994
Benzene	78/52	104.82	100.25	102.48	2.23
				Average:	1.6
Toluene	92/65	87.793	84.715	86.227	1.78
Toluene	92/91	314.80	287.17	300.35	4.59
				Average:	3.2
Xylene	106/65	22.371	17.166	19.426	13.2
Xylene	106/91	413.26	297.73	346.11	16.2
				Average:	15

Calibration Files: 64MSMS00785_MD and 64MSMS00791 on 28 March 2019
Used for Survey Files: 64MSMS00786, 64MSMS00787, and 64MSMS00788

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	15.392	15.830	15.608	1.41
Benzene	78/52	100.25	102.44	101.33	1.08
				Average:	1.2
Toluene	92/65	84.715	89.295	86.945	2.63
Toluene	92/91	287.17	305.81	296.20	3.14
				Average:	2.9
Xylene	106/65	17.166	16.813	16.988	1.04
Xylene	106/91	297.73	320.41	308.65	3.67
				Average:	2.4

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00792 and 64MSMS00799 on 29 March 2019
Used for Survey Files: 64MSMS00793, 64MSMS00794, 64MSMS00795, 64MSMS00796, and 64MSMS00797

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	13.253	13.148	13.200	0.398
Benzene	78/52	87.837	84.344	86.055	2.03
				Average:	1.2
Toluene	92/65	77.464	77.872	77.668	0.263
Toluene	92/91	272.58	264.94	268.71	1.42
				Average:	0.84
Xylene	106/65	14.007	13.547	13.773	1.67
Xylene	106/91	259.95	239.66	249.40	4.06
				Average:	2.9

Calibration Files: 64MSMS00799_MD and 64MSMS00802 on 29 March 2019
Used for Survey Files: 64MSMS00800 and 64MSMS00801

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	13.148	15.206	14.102	7.26
Benzene	78/52	84.344	103.55	92.965	10.2
				Average:	8.7
Toluene	92/65	77.872	114.57	92.722	19.1
Toluene	92/91	264.94	418.46	324.45	22.5
				Average:	21
Xylene	106/65	13.547	26.733	17.982	32.7
Xylene	106/91	239.66	595.26	341.74	42.6
				Average:	38

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
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Calibration Files: 64MSMS00803 and 64MSMS00810 on 30 March 2019
Used for Survey Files: 64MSMS00804, 64MSMS00805, 64MSMS00807, and 64MSMS00808

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	16.282	14.650	15.423	5.28
Benzene	78/52	110.13	97.313	103.32	6.18
				Average:	5.7
Toluene	92/65	110.08	98.017	103.70	5.80
Toluene	92/91	376.32	333.90	353.85	5.97
				Average:	5.9
Xylene	106/65	17.482	12.685	14.702	15.9
Xylene	106/91	356.73	246.36	291.44	18.3
				Average:	17

Calibration Files: 64MSMS00810_MD and 64MSMS00813 on 30 March 2019
Used for Survey Files: 64MSMS00811 and 64MSMS00812

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	14.650	25.733	18.670	27.4
Benzene	78/52	97.313	150.41	118.17	21.4
				Average:	24
Toluene	92/65	98.017	123.73	109.38	11.6
Toluene	92/91	333.90	339.54	336.70	0.837
				Average:	6.2
Xylene	106/65	12.685	11.288	11.946	5.83
Xylene	106/91	246.36	212.00	227.89	7.50
				Average:	6.7

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
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Calibration Files: 64MSMS00814 and 64MSMS00821 on 31 March 2019
Used for Survey Files: 64MSMS00815, 64MSMS00816, 64MSMS00817, and 64MSMS00818

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	27.940	29.541	28.718	2.79
Benzene	78/52	165.80	178.35	171.85	3.65
				Average:	3.2
Toluene	92/65	121.82	154.61	136.27	11.9
Toluene	92/91	314.19	427.08	362.04	15.2
				Average:	14
Xylene	106/65	10.052	13.005	11.339	12.8
Xylene	106/91	213.01	378.48	272.60	28.0
				Average:	20

Calibration Files: 64MSMS00821_MD and 64MSMS00826 on 31 March 2019
Used for Survey Files: 64MSMS00822, 64MSMS00823, 64MSMS00824, and 64MSMS00825

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	29.541	31.883	30.667	3.81
Benzene	78/52	178.35	201.87	189.38	6.19
				Average:	5.0
Toluene	92/65	154.61	184.90	168.41	8.92
Toluene	92/91	427.08	530.73	473.30	10.8
				Average:	9.9
Xylene	106/65	13.005	16.238	14.443	11.1
Xylene	106/91	378.48	572.16	455.59	20.4
				Average:	16

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00827 and 64MSMS00832 on 01 April 2019
Used for Survey Files: 64MSMS00828, 64MSMS00829, 64MSMS00830, and 64MSMS00831

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	31.302	37.020	33.922	8.37
Benzene	78/52	185.46	194.77	190.00	2.45
				Average:	5.4
Toluene	92/65	174.40	152.59	162.77	6.67
Toluene	92/91	448.07	378.74	410.50	8.38
				Average:	7.5
Xylene	106/65	14.426	11.691	12.915	10.5
Xylene	106/91	401.72	237.52	298.53	25.7
				Average:	18

Calibration Files: 64MSMS00832_MD and 64MSMS00836 on 01 April 2019
Used for Survey Files: 64MSMS00833, 64MSMS00834, and 64MSMS00835

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	37.020	36.859	36.939	0.218
Benzene	78/52	194.77	201.14	197.91	1.61
				Average:	0.91
Toluene	92/65	152.59	165.42	158.75	4.04
Toluene	92/91	378.74	427.77	401.76	6.08
				Average:	5.1
Xylene	106/65	11.691	11.711	11.701	0.0876
Xylene	106/91	237.52	291.54	261.77	10.2
				Average:	5.1

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
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Calibration Files: 64MSMS00840 and 64MSMS00844 on 02 April 2019
Used for Survey Files: 64MSMS00841, 64MSMS00842, and 64MSMS00843

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	21.554	27.804	24.283	12.7
Benzene	78/52	142.81	174.57	157.10	10.0
				Average:	11
Toluene	92/65	86.359	106.79	95.496	10.6
Toluene	92/91	423.37	537.35	473.60	11.9
				Average:	11
Xylene	106/65	26.409	38.074	31.186	18.1
Xylene	106/91	251.93	393.22	307.10	21.9
				Average:	20

Calibration Files: 64MSMS00852 and 64MSMS00855 on 03 April 2019
Used for Survey Files: 64MSMS00853 and 64MSMS00854

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	17.536	14.742	16.018	8.66
Benzene	78/52	114.06	99.896	106.51	6.62
				Average:	7.6
Toluene	92/65	86.755	77.440	81.833	5.67
Toluene	92/91	355.91	319.67	336.82	5.36
				Average:	5.5
Xylene	106/65	30.336	28.569	29.426	3.00
Xylene	106/91	286.41	288.10	287.25	0.295
				Average:	1.6

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00856 and 64MSMS00862 on 04 April 2019
Used for Survey Files: 64MSMS00857, 64MSMS00858, 64MSMS00859, 64MSMS00860, and 64MSMS00861

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	12.140	10.570	11.301	6.91
Benzene	78/52	85.809	73.199	79.004	7.93
				Average:	7.4
Toluene	92/65	76.840	59.273	66.923	12.9
Toluene	92/91	307.17	237.25	267.72	12.8
				Average:	13
Xylene	106/65	29.567	20.070	23.910	19.1
Xylene	106/91	268.48	196.73	227.07	15.4
				Average:	17

Calibration Files: 64MSMS00862_MD and 64MSMS00865 on 04 April 2019
Used for Survey Files: 64MSMS00863 and 64MSMS00864

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	10.570	11.775	11.140	5.39
Benzene	78/52	73.199	80.172	76.527	4.55
				Average:	5.0
Toluene	92/65	59.273	67.451	63.098	6.45
Toluene	92/91	237.25	276.45	255.35	7.63
				Average:	7.0
Xylene	106/65	20.070	25.977	22.645	12.8
Xylene	106/91	196.73	250.08	220.22	11.9
				Average:	12

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00867 and 64MSMS00873 on 05 April 2019
Used for Survey Files: 64MSMS00868, 64MSMS00869, 64MSMS00870, and 64MSMS00871

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	13.203	11.973	12.558	4.89
Benzene	78/52	84.449	79.646	81.977	2.93
				Average:	3.9
Toluene	92/65	81.637	61.591	70.211	14.0
Toluene	92/91	384.16	293.09	332.51	13.4
				Average:	14
Xylene	106/65	31.958	22.839	26.640	16.6
Xylene	106/91	262.17	203.46	229.11	12.6
				Average:	15

Calibration Files: 64MSMS00873_MD and 64MSMS00876 on 05 April 2019
Used for Survey Files: 64MSMS00874 and 64MSMS00875

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	11.973	12.783	12.365	3.27
Benzene	78/52	79.646	85.729	82.576	3.68
				Average:	3.5
Toluene	92/65	61.591	71.246	66.067	7.27
Toluene	92/91	293.09	345.71	317.23	8.24
				Average:	7.8
Xylene	106/65	22.839	29.107	25.595	12.1
Xylene	106/91	203.46	262.77	229.34	12.7
				Average:	12

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00877 and 64MSMS00882 on 06 April 2019
Used for Survey Files: 64MSMS00878, 64MSMS00879, 64MSMS00880, and 64MSMS00881

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	11.918	12.153	12.034	0.976
Benzene	78/52	83.899	83.411	83.654	0.292
				Average:	0.63
Toluene	92/65	58.030	55.218	56.589	2.48
Toluene	92/91	258.97	237.59	247.82	4.30
				Average:	3.4
Xylene	106/65	23.521	20.432	21.868	7.03
Xylene	106/91	198.52	179.85	188.72	4.94
				Average:	6.0

Calibration Files: 64MSMS00882_MD and 64MSMS00885 on 06 April 2019
Used for Survey Files: 64MSMS00883 and 64MSMS00884

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	12.062	9.4816	2.36	7.86
Benzene	78/52	83.896	22.693	0.811	2.70
			Average:	1.6	5.3
Toluene	92/65	59.177	17.258	0.875	2.92
Toluene	92/91	253.24	29.054	0.344	1.15
			Average:	0.61	2.0
Xylene	106/65	23.432	9.9978	1.28	4.27
Xylene	106/91	204.37	29.605	0.435	1.45
			Average:	0.86	2.9

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00886 and 64MSMS00891 on 07 April 2019
Used for Survey Files: 64MSMS00887, 64MSMS00888, 64MSMS00889, and 64MSMS00890

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	15.657	14.396	15.000	4.20
Benzene	78/52	106.31	102.97	104.61	1.60
				Average:	2.9
Toluene	92/65	100.48	76.865	87.099	13.3
Toluene	92/91	426.03	337.20	376.45	11.6
				Average:	12
Xylene	106/65	48.052	28.430	35.724	25.7
Xylene	106/91	396.89	286.69	332.91	16.1
				Average:	21

Calibration Files: 64MSMS00896 and 64MSMS00901 on 08 April 2019
Used for Survey Files: 64MSMS00897, 64MSMS00898, 64MSMS00899, and 64MSMS00900

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	15.299	15.361	15.330	0.202
Benzene	78/52	109.32	105.72	107.49	1.68
				Average:	0.94
Toluene	92/65	72.216	66.616	69.303	4.03
Toluene	92/91	298.06	279.25	288.35	3.26
				Average:	3.6
Xylene	106/65	27.316	25.246	26.240	3.94
Xylene	106/91	274.05	264.88	269.39	1.70
				Average:	2.8

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00901_MD and 64MSMS00904 on 08 April 2019
Used for Survey Files: 64MSMS00902 and 64MSMS00903

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	15.361	15.002	15.179	1.18
Benzene	78/52	105.72	106.28	106.00	0.262
				Average:	0.72
Toluene	92/65	66.616	70.041	68.285	2.51
Toluene	92/91	279.25	286.60	282.87	1.30
				Average:	1.9
Xylene	106/65	25.246	27.698	26.415	4.63
Xylene	106/91	264.88	278.32	271.44	2.47
				Average:	3.6

Calibration Files: 64MSMS00905 and 64MSMS00910 on 09 April 2019
Used for Survey Files: 64MSMS00906, 64MSMS00907, 64MSMS00908, and 64MSMS00909

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	11.460	14.835	12.931	12.8
Benzene	78/52	84.746	106.23	94.280	11.3
				Average:	12
Toluene	92/65	54.321	71.462	61.724	13.6
Toluene	92/91	233.65	296.78	261.46	11.9
				Average:	13
Xylene	106/65	17.421	24.630	20.407	17.1
Xylene	106/91	193.51	293.84	233.35	20.6
				Average:	19

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00910_MD and 64MSMS00914 on 09 April 2019
Used for Survey Files: 64MSMS00911, 64MSMS00912, and 64MSMS00913

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	14.835	16.158	15.468	4.27
Benzene	78/52	106.23	116.60	111.18	4.65
				Average:	4.5
Toluene	92/65	71.462	83.083	76.836	7.52
Toluene	92/91	296.78	341.59	317.61	7.02
				Average:	7.3
Xylene	106/65	24.630	32.792	28.131	14.2
Xylene	106/91	293.84	369.93	327.52	11.5
				Average:	13

Calibration Files: 64MSMS00915 and 64MSMS00921 on 10 April 2019
Used for Survey Files: 64MSMS00916, 64MSMS00917, 64MSMS00918, 64MSMS00919, and 64MSMS00920

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	12.054	12.622	12.331	2.30
Benzene	78/52	88.992	92.275	90.604	1.81
				Average:	2.1
Toluene	92/65	60.688	62.438	61.550	1.42
Toluene	92/91	256.01	267.01	261.39	2.10
				Average:	1.8
Xylene	106/65	19.766	23.956	21.660	9.58
Xylene	106/91	222.28	270.90	244.20	9.86
				Average:	9.7

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00921_MD and 64MSMS00925 on 10 April 2019
Used for Survey Files: 64MSMS00922, 64MSMS00923, and 64MSMS00924

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	12.622	11.553	12.064	4.42
Benzene	78/52	92.275	83.924	87.901	4.74
				Average:	4.6
Toluene	92/65	62.438	52.968	57.314	8.21
Toluene	92/91	267.01	218.57	240.37	9.98
				Average:	9.1
Xylene	106/65	23.956	16.226	19.347	19.2
Xylene	106/91	270.90	186.93	221.21	18.3
				Average:	19

Calibration Files: 64MSMS00927 and 64MSMS00933 on 11 April 2019
Used for Survey Files: 64MSMS00928, 64MSMS00929, 64MSMS00930, 64MSMS00931, and 64MSMS00932

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	9.9890	12.072	10.932	9.44
Benzene	78/52	75.097	85.988	80.174	6.76
				Average:	8.1
Toluene	92/65	51.509	65.120	57.520	11.7
Toluene	92/91	213.86	268.94	238.26	11.4
				Average:	12
Xylene	106/65	15.519	23.730	18.766	20.9
Xylene	106/91	169.25	257.74	204.33	20.7
				Average:	21

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00933_MD and 64MSMS00936 on 11 April 2019
Used for Survey Files: 64MSMS00934 and 64MSMS00935

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	12.072	11.942	12.007	0.541
Benzene	78/52	85.988	88.739	87.342	1.57
				Average:	1.1
Toluene	92/65	65.120	66.746	65.923	1.23
Toluene	92/91	268.94	277.96	273.37	1.65
				Average:	1.4
Xylene	106/65	23.730	23.800	23.765	0.147
Xylene	106/91	257.74	267.79	262.67	1.91
				Average:	1.0

Calibration Files: 64MSMS00937 and 64MSMS00941 on 12 April 2019
Used for Survey Files: 64MSMS00938, 64MSMS00939, and 64MSMS00940

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	13.611	12.153	12.841	5.66
Benzene	78/52	105.29	89.969	97.027	7.84
				Average:	6.8
Toluene	92/65	42.898	51.460	46.791	9.07
Toluene	92/91	172.43	210.26	189.47	9.89
				Average:	9.5
Xylene	106/65	11.181	17.281	13.578	21.4
Xylene	106/91	131.06	203.61	159.47	21.7
				Average:	22

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00941_MD and 64MSMS00944 on 12 April 2019
Used for Survey Files: 64MSMS00942 and 64MSMS00943

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	12.153	13.617	12.843	5.68
Benzene	78/52	89.969	92.806	91.366	1.55
				Average:	3.6
Toluene	92/65	51.460	65.615	57.681	12.1
Toluene	92/91	210.26	261.27	233.00	10.8
				Average:	11
Xylene	106/65	17.281	27.608	21.257	23.0
Xylene	106/91	203.61	286.23	237.95	16.9
				Average:	20

Calibration Files: 64MSMS00945 and 64MSMS00951 on 13 April 2019
Used for Survey Files: 64MSMS00946, 64MSMS00947, 64MSMS00948, 64MSMS00949, and 64MSMS00950

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	9.8592	10.199	10.026	1.70
Benzene	78/52	73.922	71.190	72.531	1.88
				Average:	1.8
Toluene	92/65	45.223	47.089	46.137	2.02
Toluene	92/91	182.85	183.26	183.05	0.111
				Average:	1.1
Xylene	106/65	13.884	17.039	15.301	10.2
Xylene	106/91	159.39	175.60	167.10	4.84
				Average:	7.5

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00951_MD and 64MSMS00954 on 13 April 2019
Used for Survey Files: 64MSMS00952 and 64MSMS00953

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	10.199	12.870	11.380	11.6
Benzene	78/52	71.190	95.693	81.643	14.7
				Average:	13
Toluene	92/65	47.089	50.093	48.545	3.09
Toluene	92/91	183.26	192.84	187.93	2.55
				Average:	2.8
Xylene	106/65	17.039	14.381	15.598	8.46
Xylene	106/91	175.60	174.41	175.00	0.339
				Average:	4.4

Calibration Files: 64MSMS00955 and 64MSMS00960 on 14 April 2019
Used for Survey Files: 64MSMS00956, 64MSMS00957, 64MSMS00958, and 64MSMS00959

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	17.425	22.562	19.664	12.8
Benzene	78/52	124.63	159.65	139.98	12.3
				Average:	13
Toluene	92/65	53.042	78.602	63.340	19.4
Toluene	92/91	211.13	320.37	254.52	20.6
				Average:	20
Xylene	106/65	14.418	26.166	18.592	28.9
Xylene	106/91	199.91	424.51	271.81	36.0
				Average:	32

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00965 and 64MSMS00971 on 17 April 2019
Used for Survey Files: 64MSMS00966, 64MSMS00967, 64MSMS00968, 64MSMS00969, and 64MSMS00970

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	10.409	8.5920	9.4137	9.56
Benzene	78/52	66.845	54.896	60.284	9.81
				Average:	9.7
Toluene	92/65	46.100	29.466	35.953	22.0
Toluene	92/91	184.42	122.01	146.86	20.4
				Average:	21
Xylene	106/65	16.008	7.9977	10.666	33.4
Xylene	106/91	188.73	90.251	122.11	35.3
				Average:	34

Calibration Files: 64MSMS00971_MD and 64MSMS00975 on 17 April 2019
Used for Survey Files: 64MSMS00972, 64MSMS00973, and 64MSMS00974

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	8.5920	8.6168	8.6044	0.144
Benzene	78/52	54.896	55.539	55.216	0.582
				Average:	0.36
Toluene	92/65	29.466	32.112	30.732	4.30
Toluene	92/91	122.01	129.29	125.54	2.90
				Average:	3.6
Xylene	106/65	7.9977	8.4701	8.2271	2.87
Xylene	106/91	90.251	101.37	95.488	5.80
				Average:	4.3

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00976 and 64MSMS00981 on 18 April 2019
Used for Survey Files: 64MSMS00977, 64MSMS00978, 64MSMS00979, and 64MSMS00980

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	8.6168	16.461	11.312	31.3
Benzene	78/52	52.925	102.64	69.838	32.0
				Average:	32
Toluene	92/65	53.580	77.433	63.335	18.2
Toluene	92/91	244.37	344.78	286.02	17.0
				Average:	18
Xylene	106/65	23.184	29.863	26.103	12.6
Xylene	106/91	202.32	253.09	224.87	11.1
				Average:	12

Calibration Files: 64MSMS00981_MD and 64MSMS00985 on 18 April 2019
Used for Survey Files: 64MSMS00982, 64MSMS00983, and 64MSMS00984

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	16.461	16.918	16.686	1.37
Benzene	78/52	102.64	108.13	105.31	2.60
				Average:	2.0
Toluene	92/65	77.433	66.628	71.626	7.50
Toluene	92/91	344.78	313.49	328.39	4.75
				Average:	6.1
Xylene	106/65	29.863	25.106	27.279	8.65
Xylene	106/91	253.09	231.80	241.98	4.39
				Average:	6.5

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00986 and 64MSMS00991 on 19 April 2019
Used for Survey Files: 64MSMS00987, 64MSMS00988, 64MSMS00989, and 64MSMS00990

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	21.968	25.220	23.482	6.89
Benzene	78/52	145.11	170.38	156.73	8.01
				Average:	7.4
Toluene	92/65	116.46	118.38	117.41	0.819
Toluene	92/91	554.72	570.32	562.41	1.39
				Average:	1.1
Xylene	106/65	49.256	49.551	49.403	0.299
Xylene	106/91	470.91	526.41	497.12	5.56
				Average:	2.9

Calibration Files: 64MSMS00991_MD and 64MSMS00996 on 19 April 2019
Used for Survey Files: 64MSMS00992, 64MSMS00993, 64MSMS00994, and 64MSMS00995

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	25.220	22.438	23.748	5.84
Benzene	78/52	170.38	151.89	160.60	5.74
				Average:	5.8
Toluene	92/65	118.38	101.99	109.57	7.44
Toluene	92/91	570.32	468.00	514.12	9.85
				Average:	8.6
Xylene	106/65	49.551	39.796	44.141	10.9
Xylene	106/91	526.41	468.75	495.91	5.79
				Average:	8.4

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00999 and 64MSMS01004 on 20 April 2019
Used for Survey Files: 64MSMS01000, 64MSMS01001, 64MSMS01002, and 64MSMS01003

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	22.364	20.751	21.527	3.74
Benzene	78/52	155.73	146.38	150.91	3.10
				Average:	3.4
Toluene	92/65	104.58	82.879	92.474	11.6
Toluene	92/91	474.23	357.34	407.57	14.1
				Average:	13
Xylene	106/65	40.120	22.675	28.974	27.8
Xylene	106/91	481.19	384.51	427.46	11.2
				Average:	19

Calibration Files: 64MSMS01004_MD and 64MSMS01008 on 20 April 2019
Used for Survey Files: 64MSMS01005, 64MSMS01006, and 64MSMS01007

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	20.751	20.454	20.601	0.720
Benzene	78/52	146.38	142.16	144.24	1.46
				Average:	1.1
Toluene	92/65	82.879	84.690	83.775	1.08
Toluene	92/91	357.34	360.42	358.87	0.429
				Average:	0.75
Xylene	106/65	22.675	23.122	22.896	0.978
Xylene	106/91	384.51	411.14	397.38	3.35
				Average:	2.2

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01009 and 64MSMS01015 on 21 April 2019
Used for Survey Files: 64MSMS01010, 64MSMS01011, 64MSMS01012, 64MSMS01013, and 64MSMS01014

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	13.302	13.012	13.155	1.10
Benzene	78/52	93.962	91.793	92.865	1.17
				Average:	1.1
Toluene	92/65	77.464	74.689	76.051	1.82
Toluene	92/91	343.67	307.57	324.62	5.54
				Average:	3.7
Xylene	106/65	20.321	15.971	17.885	12.0
Xylene	106/91	339.76	282.88	308.72	9.14
				Average:	11

Calibration Files: 64MSMS01015_MD and 64MSMS01018 on 21 April 2019
Used for Survey Files: 64MSMS01016 and 64MSMS01017

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	13.012	13.142	13.076	0.496
Benzene	78/52	91.793	94.228	92.994	1.31
				Average:	0.90
Toluene	92/65	74.689	87.701	80.673	8.01
Toluene	92/91	307.57	369.91	335.87	9.20
				Average:	8.6
Xylene	106/65	15.971	23.697	19.082	19.5
Xylene	106/91	282.88	416.94	337.07	19.2
				Average:	19

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01019 and 64MSMS01024 on 22 April 2019
Used for Survey Files: 64MSMS01020, 64MSMS01021, 64MSMS01022, and 64MSMS01023

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	13.908	13.778	13.843	0.469
Benzene	78/52	99.062	97.857	98.455	0.612
				Average:	0.54
Toluene	92/65	75.128	71.493	73.265	2.48
Toluene	92/91	318.89	295.91	306.97	3.74
				Average:	3.1
Xylene	106/65	17.639	14.357	15.829	10.3
Xylene	106/91	312.30	249.88	277.62	11.1
				Average:	11

Calibration Files: 64MSMS01029 and 64MSMS01035 on 23 April 2019
Used for Survey Files: 64MSMS01030, 64MSMS01031, 64MSMS01033, and 64MSMS01034

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	14.446	13.512	13.963	3.34
Benzene	78/52	100.25	95.365	97.749	2.50
				Average:	2.9
Toluene	92/65	92.862	78.262	84.939	8.53
Toluene	92/91	339.14	292.47	314.08	7.39
				Average:	8.0
Xylene	106/65	27.789	15.474	19.878	28.5
Xylene	106/91	417.71	245.94	309.60	25.9
				Average:	27

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01035_MD and 64MSMS01039 on 23 April 2019
Used for Survey Files: 64MSMS01036, 64MSMS01037, and 64MSMS01038

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	13.512	13.957	13.731	1.62
Benzene	78/52	95.365	103.67	99.346	4.17
				Average:	2.9
Toluene	92/65	78.262	78.707	78.484	0.283
Toluene	92/91	292.47	285.12	288.75	1.27
				Average:	0.78
Xylene	106/65	15.474	13.264	14.284	7.69
Xylene	106/91	245.94	206.73	224.64	8.66
				Average:	8.2

Calibration Files: 64MSMS01040 and 64MSMS01045 on 24 April 2019
Used for Survey Files: 64MSMS01041, 64MSMS01042, 64MSMS01043, and 64MSMS01044

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	13.327	13.580	13.452	0.942
Benzene	78/52	90.439	91.626	91.028	0.652
				Average:	0.80
Toluene	92/65	68.168	75.950	71.849	5.40
Toluene	92/91	242.09	272.26	256.29	5.87
				Average:	5.6
Xylene	106/65	10.331	12.927	11.484	11.2
Xylene	106/91	153.84	196.57	172.60	12.2
				Average:	12

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
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Calibration Files: 64MSMS01045_MD and 64MSMS01049 on 24 April 2019
Used for Survey Files: 64MSMS01046, 64MSMS01047, and 64MSMS01048

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	13.580	13.747	13.663	0.611
Benzene	78/52	91.626	91.434	91.530	0.105
				Average:	0.36
Toluene	92/65	75.950	76.129	76.039	0.118
Toluene	92/91	272.26	276.01	274.12	0.684
				Average:	0.40
Xylene	106/65	12.927	12.964	12.945	0.143
Xylene	106/91	196.57	202.95	199.71	1.60
				Average:	0.87

Calibration Files: 64MSMS01050 and 64MSMS01055 on 25 April 2019
Used for Survey Files: 64MSMS01051, 64MSMS01052, 64MSMS01053, and 64MSMS01054

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	15.299	18.624	16.799	9.80
Benzene	78/52	109.16	120.49	114.54	4.94
				Average:	7.4
Toluene	92/65	84.097	87.268	85.653	1.85
Toluene	92/91	298.32	282.63	290.26	2.70
				Average:	2.3
Xylene	106/65	12.064	12.676	12.363	2.47
Xylene	106/91	215.10	182.07	197.21	8.31
				Average:	5.4

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
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Calibration Files: 64MSMS01055_MD and 64MSMS01058 on 25 April 2019
Used for Survey Files: 64MSMS01056 and 64MSMS01057

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	18.624	18.785	18.704	0.430
Benzene	78/52	120.49	122.35	121.42	0.766
				Average:	0.60
Toluene	92/65	87.268	88.659	87.958	0.791
Toluene	92/91	282.63	297.57	289.91	2.58
				Average:	1.7
Xylene	106/65	12.676	13.038	12.855	1.41
Xylene	106/91	182.07	203.86	192.35	5.65
				Average:	3.5

Calibration Files: 64MSMS01059 and 64MSMS01065 on 26 April 2019
Used for Survey Files: 64MSMS01060, 64MSMS01061, 64MSMS01062, 64MSMS01063, and 64MSMS01064

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	18.124	20.819	19.378	6.92
Benzene	78/52	125.55	132.84	129.09	2.82
				Average:	4.9
Toluene	92/65	113.20	133.42	122.48	8.20
Toluene	92/91	391.93	460.62	423.51	8.06
				Average:	8.1
Xylene	106/65	15.252	21.397	17.809	16.8
Xylene	106/91	308.02	421.94	356.09	15.6
				Average:	16

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
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Calibration Files: 64MSMS01065_MD and 64MSMS01068 on 26 April 2019
Used for Survey Files: 64MSMS01066 and 64MSMS01067

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	20.819	20.473	20.644	0.838
Benzene	78/52	132.84	135.15	133.98	0.863
				Average:	0.85
Toluene	92/65	133.42	116.51	124.39	6.76
Toluene	92/91	460.62	378.29	415.42	9.81
				Average:	8.3
Xylene	106/65	21.397	16.575	18.680	12.7
Xylene	106/91	421.94	259.48	321.34	23.8
				Average:	18

Calibration Files: 64MSMS01069 and 64MSMS01074 on 27 April 2019
Used for Survey Files: 64MSMS01070, 64MSMS01071, 64MSMS01072, and 64MSMS01073

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	18.464	20.831	19.576	6.02
Benzene	78/52	121.42	125.75	123.55	1.75
				Average:	3.9
Toluene	92/65	119.84	99.192	108.54	9.43
Toluene	92/91	407.26	308.94	351.35	13.7
				Average:	12
Xylene	106/65	17.080	13.141	14.854	13.0
Xylene	106/91	328.68	168.51	222.80	32.2
				Average:	23

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
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Calibration Files: 64MSMS01074_MD and 64MSMS01078 on 27 April 2019
Used for Survey Files: 64MSMS01075, 64MSMS01076, and 64MSMS01077

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	20.831	22.482	21.625	3.81
Benzene	78/52	125.75	141.38	133.11	5.85
				Average:	4.8
Toluene	92/65	99.192	128.44	111.93	12.8
Toluene	92/91	308.94	422.58	356.93	15.5
				Average:	14
Xylene	106/65	13.141	16.579	14.661	11.6
Xylene	106/91	168.51	272.31	208.19	23.5
				Average:	18

Calibration Files: 64MSMS01079 and 64MSMS01084 on 28 April 2019
Used for Survey Files: 64MSMS01080, 64MSMS01081, and 64MSMS01082

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	19.620	21.678	20.597	4.98
Benzene	78/52	131.81	130.60	131.20	0.462
				Average:	2.7
Toluene	92/65	136.15	127.17	131.51	3.41
Toluene	92/91	478.37	427.51	451.51	5.61
				Average:	4.5
Xylene	106/65	18.900	17.507	18.177	3.82
Xylene	106/91	406.65	272.35	326.22	19.8
				Average:	12

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01084_MD and 64MSMS01088 on 28 April 2019
Used for Survey Files: 64MSMS01085, 64MSMS01086, and 64MSMS01087

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	21.678	23.168	22.398	3.32
Benzene	78/52	130.60	143.73	136.85	4.79
				Average:	4.1
Toluene	92/65	127.17	133.57	130.29	2.45
Toluene	92/91	427.51	440.66	433.98	1.52
				Average:	2.0
Xylene	106/65	17.507	16.673	17.080	2.44
Xylene	106/91	272.35	263.11	267.65	1.72
				Average:	2.1

Calibration Files: 64MSMS01089 and 64MSMS01094 on 29 April 2019
Used for Survey Files: 64MSMS01090, 64MSMS01091, and 64MSMS01092

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	18.748	19.731	19.227	2.55
Benzene	78/52	122.85	123.34	123.09	0.201
				Average:	1.4
Toluene	92/65	129.42	128.23	128.83	0.463
Toluene	92/91	465.57	476.34	470.90	1.14
				Average:	0.80
Xylene	106/65	17.228	15.556	16.349	5.10
Xylene	106/91	350.66	296.50	321.31	8.37
				Average:	6.7

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01094_MD and 64MSMS01098 on 29 April 2019
Used for Survey Files: 64MSMS01095, 64MSMS01096, and 64MSMS01097

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	19.731	20.293	20.008	1.41
Benzene	78/52	123.34	124.94	124.13	0.642
				Average:	1.0
Toluene	92/65	128.23	121.04	124.53	2.88
Toluene	92/91	476.34	429.96	451.97	5.12
				Average:	4.0
Xylene	106/65	15.556	13.436	14.419	7.31
Xylene	106/91	296.50	211.11	246.62	16.8
				Average:	12

Calibration Files: 64MSMS01099 and 64MSMS01104 on 30 April 2019
Used for Survey Files: 64MSMS01100, 64MSMS01101, 64MSMS01102, and 64MSMS01103

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	18.074	18.291	18.182	0.595
Benzene	78/52	110.92	116.98	113.87	2.66
				Average:	1.6
Toluene	92/65	114.00	128.81	120.95	6.10
Toluene	92/91	419.88	484.41	449.84	7.13
				Average:	6.6
Xylene	106/65	12.746	15.544	14.007	9.89
Xylene	106/91	244.01	322.17	277.69	13.8
				Average:	12

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01104_MD and 64MSMS01107 on 30 April 2019
Used for Survey Files: 64MSMS01105 and 64MSMS01106

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	18.291	18.204	18.247	0.237
Benzene	78/52	116.98	112.06	114.47	2.15
				Average:	1.2
Toluene	92/65	128.81	119.07	123.75	3.93
Toluene	92/91	484.41	441.77	462.10	4.60
				Average:	4.3
Xylene	106/65	15.544	13.769	14.603	6.05
Xylene	106/91	322.17	264.78	290.67	9.78
				Average:	7.9

Calibration Files: 64MSMS01108 and 64MSMS01113 on 01 May 2019
Used for Survey Files: 64MSMS01109, 64MSMS01110, 64MSMS01111, and 64MSMS01112

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	21.777	22.957	22.352	2.64
Benzene	78/52	144.15	143.70	143.93	0.155
				Average:	1.4
Toluene	92/65	138.44	147.62	142.89	3.21
Toluene	92/91	533.27	550.44	541.72	1.58
				Average:	2.4
Xylene	106/65	15.515	17.848	16.600	6.99
Xylene	106/91	324.30	320.99	322.63	0.512
				Average:	3.8

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01113_MD and 64MSMS01116 on 01 May 2019
Used for Survey Files: 64MSMS01114 and 64MSMS01115

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	22.957	22.160	22.552	1.77
Benzene	78/52	143.70	139.33	141.48	1.55
				Average:	1.7
Toluene	92/65	147.62	141.86	144.68	1.99
Toluene	92/91	550.44	534.67	542.44	1.45
				Average:	1.7
Xylene	106/65	17.848	16.201	16.985	4.84
Xylene	106/91	320.99	298.09	309.12	3.70
				Average:	4.3

Calibration Files: 64MSMS01117 and 64MSMS01122 on 02 May 2019
Used for Survey Files: 64MSMS01118, 64MSMS01119, and 64MSMS01120

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	23.736	24.985	24.345	2.56
Benzene	78/52	155.51	144.96	150.05	3.51
				Average:	3.0
Toluene	92/65	158.56	127.78	141.52	10.8
Toluene	92/91	616.49	467.39	531.68	13.8
				Average:	12
Xylene	106/65	19.405	14.981	16.908	12.9
Xylene	106/91	453.41	215.94	292.55	35.5
				Average:	24

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01122_MD and 64MSMS01126 on 02 May 2019
Used for Survey Files: 64MSMS01123, 64MSMS01124, and 64MSMS01125

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	24.985	25.504	25.242	1.03
Benzene	78/52	144.96	163.08	153.49	5.88
				Average:	3.5
Toluene	92/65	127.78	163.24	143.35	12.2
Toluene	92/91	467.39	635.33	538.57	15.2
				Average:	14
Xylene	106/65	14.981	20.304	17.241	15.1
Xylene	106/91	215.94	416.83	284.50	31.7
				Average:	23

Calibration Files: 64MSMS01133 and 64MSMS01138 on 08 May 2019
Used for Survey Files: 64MSMS01134, 64MSMS01135, 64MSMS01136, and 64MSMS01137

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	21.771	17.549	19.433	10.7
Benzene	78/52	139.43	104.23	119.29	14.4
				Average:	13
Toluene	92/65	156.42	95.143	118.32	24.4
Toluene	92/91	767.22	444.70	563.04	26.6
				Average:	25
Xylene	106/65	40.991	11.222	17.621	57.0
Xylene	106/91	833.58	221.75	350.31	58.0
				Average:	57

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01139 and 64MSMS01145 on 09 May 2019
Used for Survey Files: 64MSMS01140, 64MSMS01141, 64MSMS01142, 64MSMS01143, and 64MSMS01144

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	19.762	22.475	21.031	6.42
Benzene	78/52	126.73	128.74	127.73	0.786
				Average:	3.6
Toluene	92/65	102.15	93.270	97.507	4.54
Toluene	92/91	494.80	425.01	457.26	7.59
				Average:	6.1
Xylene	106/65	12.783	10.286	11.399	10.8
Xylene	106/91	307.71	191.44	236.03	23.3
				Average:	17

Calibration Files: 64MSMS01147 and 64MSMS01153 on 10 May 2019
Used for Survey Files: 64MSMS01148, 64MSMS01149, 64MSMS01150, 64MSMS01151, and 64MSMS01152

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	7.1765	10.242	8.4396	17.6
Benzene	78/52	44.122	69.565	53.997	22.4
				Average:	20
Toluene	92/65	51.867	61.486	56.268	8.49
Toluene	92/91	239.79	285.48	260.65	8.70
				Average:	8.6
Xylene	106/65	23.336	23.624	23.479	0.612
Xylene	106/91	211.06	214.24	212.64	0.748
				Average:	0.68

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
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Calibration Files: 64MSMS01174 and 64MSMS01180 on 13 May 2019
Used for Survey Files: 64MSMS01179

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	10.725	11.522	11.109	3.58
Benzene	78/52	75.301	71.023	73.100	2.92
				Average:	3.3
Toluene	92/65	69.336	50.038	58.127	16.2
Toluene	92/91	298.06	177.81	222.74	25.3
				Average:	21
Xylene	106/65	19.339	6.7818	10.042	48.1
Xylene	106/91	352.60	88.640	141.67	59.8
				Average:	54

Calibration Files: 64MSMS01180_MD and 64MSMS01183 on 13 May 2019
Used for Survey Files: 64MSMS01181 and 64MSMS01182

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	11.522	10.582	11.032	4.25
Benzene	78/52	71.023	67.939	69.447	2.22
				Average:	3.2
Toluene	92/65	50.038	54.389	52.123	4.17
Toluene	92/91	177.81	203.87	189.95	6.83
				Average:	5.5
Xylene	106/65	6.7818	7.6691	7.1982	6.14
Xylene	106/91	88.640	126.82	104.35	17.7
				Average:	12

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01184 and 64MSMS01189 on 14 May 2019
Used for Survey Files: 64MSMS01185

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	9.8963	11.392	10.592	7.03
Benzene	78/52	72.321	69.225	70.739	2.19
				Average:	4.6
Toluene	92/65	77.174	50.081	60.743	21.3
Toluene	92/91	315.50	169.02	220.11	30.2
				Average:	26
Xylene	106/65	18.115	6.4532	9.5163	47.5
Xylene	106/91	399.24	80.914	134.56	66.3
				Average:	57

Calibration Files: 64MSMS01189_MD and 64MSMS01192 on 14 May 2019
Used for Survey Files: 64MSMS01190 and 64MSMS01191

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	11.392	10.570	10.966	3.74
Benzene	78/52	69.225	66.029	67.589	2.36
				Average:	3.1
Toluene	92/65	50.081	50.712	50.394	0.626
Toluene	92/91	169.02	176.12	172.49	2.06
				Average:	1.3
Xylene	106/65	6.4532	5.9726	6.2036	3.87
Xylene	106/91	80.914	79.760	80.332	0.718
				Average:	2.3

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01193 and 64MSMS01198 on 16 May 2019
Used for Survey Files: 64MSMS01194, 64MSMS01196, and 64MSMS01197

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	11.485	14.526	12.828	11.7
Benzene	78/52	83.157	90.903	86.858	4.45
				Average:	8.1
Toluene	92/65	89.468	81.334	85.207	4.76
Toluene	92/91	346.13	278.38	308.58	10.8
				Average:	7.8
Xylene	106/65	14.040	9.7969	11.541	17.8
Xylene	106/91	348.78	150.73	210.50	39.6
				Average:	29

Calibration Files: 64MSMS01198_MD and 64MSMS01202 on 16 May 2019
Used for Survey Files: 64MSMS01199, 64MSMS01200 and 64MSMS01201

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	14.526	17.629	15.928	9.65
Benzene	78/52	90.903	105.37	97.602	7.37
				Average:	8.5
Toluene	92/65	81.334	93.802	87.124	7.12
Toluene	92/91	278.38	328.38	301.32	8.24
				Average:	7.7
Xylene	106/65	9.7969	10.791	10.270	4.83
Xylene	106/91	150.73	185.59	166.36	10.4
				Average:	7.6

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01203 and 64MSMS01208 on 17 May 2019
Used for Survey Files: 64MSMS01204, 64MSMS01205, 64MSMS01206, 64MSMS01207

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	10.045	11.392	10.676	6.29
Benzene	78/52	67.197	66.567	66.880	0.471
				Average:	3.4
Toluene	92/65	78.596	71.629	74.951	4.64
Toluene	92/91	293.43	246.67	268.02	8.66
				Average:	6.6
Xylene	106/65	8.4126	7.4678	7.9121	5.95
Xylene	106/91	178.57	104.00	131.45	26.4
				Average:	16

Calibration Files: 64MSMS01208_MD and 64MSMS01211 on 17 May 2019
Used for Survey Files: 64MSMS01209 and 64MSMS01210

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	11.392	12.616	11.973	5.10
Benzene	78/52	66.567	66.363	66.464	0.153
				Average:	2.6
Toluene	92/65	71.629	53.079	60.974	14.9
Toluene	92/91	246.67	176.38	205.68	16.6
				Average:	16
Xylene	106/65	7.4678	5.5495	6.3673	14.7
Xylene	106/91	104.00	67.868	82.137	21.0
				Average:	18

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01212 and 64MSMS01217 on 18 May 2019
Used for Survey Files: 64MSMS01213, 64MSMS01214, 64MSMS01215, and 64MSMS01216

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	11.658	12.863	12.231	4.92
Benzene	78/52	74.701	73.131	73.908	1.06
				Average:	3.0
Toluene	92/65	71.450	70.659	71.052	0.557
Toluene	92/91	252.46	246.05	249.21	1.28
				Average:	0.92
Xylene	106/65	6.4162	7.1105	6.7455	5.13
Xylene	106/91	106.13	106.98	106.55	0.397
				Average:	2.8

Calibration Files: 64MSMS01217_MD and 64MSMS01220 on 18 May 2019
Used for Survey Files: 64MSMS01218 and 64MSMS01219

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	12.863	12.202	12.524	2.64
Benzene	78/52	73.131	77.267	75.142	2.75
				Average:	2.7
Toluene	92/65	70.659	87.565	78.208	10.7
Toluene	92/91	246.05	328.42	281.33	14.3
				Average:	13
Xylene	106/65	7.1105	9.3204	8.0668	13.4
Xylene	106/91	106.98	210.15	141.78	32.5
				Average:	23

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01221 and 64MSMS01226 on 19 May 2019
Used for Survey Files: 64MSMS01222, 64MSMS01223, 64MSMS01224 and 64MSMS01225

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	8.0975	8.5426	8.3141	2.67
Benzene	78/52	52.115	57.103	54.495	4.57
				Average:	3.6
Toluene	92/65	59.903	58.432	59.158	1.24
Toluene	92/91	268.60	255.07	261.66	2.58
				Average:	1.9
Xylene	106/65	23.324	23.430	23.377	0.228
Xylene	106/91	197.18	204.16	200.61	1.74
				Average:	0.98

Calibration Files: 64MSMS01226_MD and 64MSMS01230 on 19 May 2019
Used for Survey Files: 64MSMS01227, 64MSMS0128, and 64MSMS0129

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	8.5426	8.4313	8.4866	0.656
Benzene	78/52	57.103	55.181	56.125	1.71
				Average:	1.2
Toluene	92/65	58.432	59.186	58.807	0.641
Toluene	92/91	255.07	259.52	257.28	0.865
				Average:	0.75
Xylene	106/65	23.430	23.558	23.494	0.271
Xylene	106/91	204.16	217.86	210.79	3.25
				Average:	1.8

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 2 (continued)
Response Factors and Error Bars Summary for 21 March 2019 to 20 May 2019
Intercontinental Terminals Company Emergency Response
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01231 and 64MSMS01235 on 20 May 2019
Used for Survey Files: 64MSMS01232, 64MSMS01233, and 64MSMS01234

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	8.5488	9.5872	9.0383	5.73
Benzene	78/52	58.494	66.863	62.399	6.68
				Average:	6.2
Toluene	92/65	53.710	62.722	57.867	7.74
Toluene	92/91	213.82	239.27	225.83	5.62
				Average:	6.7
Xylene	106/65	23.336	24.482	23.895	2.40
Xylene	106/91	195.75	227.60	210.48	7.52
				Average:	5.0

Calibration Files: 64MSMS01235_MD and 64MSMS01239 on 20 May 2019
Used for Survey Files: 64MSMS01236, 64MSMS01237 and 64MSMS01238

Compound	PM/DM	Initial Response Factor (icps/ppbv)	Final Response Factor (icps/ppbv)	Intermediate Response Factor (icps/ppbv)	Error Bar (%)
Benzene	78/39	9.5872	8.8331	9.1947	4.09
Benzene	78/52	66.863	59.304	62.857	5.99
				Average:	5.0
Toluene	92/65	62.722	55.273	58.763	6.31
Toluene	92/91	239.27	207.48	222.25	7.12
				Average:	6.7
Xylene	106/65	24.482	19.705	21.835	10.8
Xylene	106/91	227.60	195.44	210.30	7.60
				Average:	9.2

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume
% = Percent

TABLE 3
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00708 and 64MSMS00713 on 21 March 2019
Used for Survey Files: 64MSMS00709, 64MSMS00710, 64MSMS00711, and 64MSMS00712

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	6.2179	7.1451	3.45	11.5
Benzene	78/52	57.442	21.447	1.12	3.73
			Average:	2.3	7.6
Toluene	92/65	53.191	33.707	1.90	6.34
Toluene	92/91	302.72	88.281	0.875	2.92
			Average:	1.4	4.6
Xylene	106/65	21.249	20.017	2.83	9.42
Xylene	106/91	272.26	80.739	0.890	2.97
			Average:	1.9	6.2

Calibration Files: 64MSMS00713_MD and 64MSMS00718 on 21 March 2019
Used for Survey Files: 4MSMS00714, 64MSMS00715, 64MSMS00716, and 64MSMS00717

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	5.8613	8.4286	4.31	14.4
Benzene	78/52	51.551	15.727	0.915	3.05
			Average:	2.6	8.7
Toluene	92/65	44.236	12.951	0.878	2.93
Toluene	92/91	232.84	26.976	0.348	1.16
			Average:	0.61	2.0
Xylene	106/65	13.122	7.9444	1.82	6.05
Xylene	106/91	171.47	24.494	0.429	1.43
			Average:	1.1	3.7

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00719 and 64MSMS00729 on 22 March 2019
Used for Survey Files: 64MSMS00720, 64MSMS00721, 64MSMS00722, 64MSMS00723, 64MSMS00724, 64MSMS00727, and 64MSMS00728

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	5.6766	5.9677	3.15	10.5
Benzene	78/52	49.124	18.637	1.14	3.79
			Average:	2.1	7.2
Toluene	92/65	47.445	17.346	1.10	3.66
Toluene	92/91	240.74	44.232	0.551	1.84
			Average:	0.82	2.7
Xylene	106/65	10.792	10.596	2.95	9.82
Xylene	106/91	191.61	32.489	0.509	1.70
			Average:	1.7	5.8

Calibration Files: 64MSMS00730 and 64MSMS00736 on 23 March 2019
Used for Survey Files: 64MSMS00731, 64MSMS00732, 64MSMS00733, 64MSMS00734, and 64MSMS00735

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	13.664	6.1763	1.36	4.52
Benzene	78/52	83.939	14.083	0.503	1.68
			Average:	0.93	3.1
Toluene	92/65	68.788	13.911	0.607	2.02
Toluene	92/91	316.39	32.161	0.305	1.02
			Average:	0.46	1.5
Xylene	106/65	31.515	11.469	1.09	3.64
Xylene	106/91	262.91	26.450	0.302	1.01
			Average:	0.70	2.3

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00737 and 64MSMS00741 on 24 March 2019
Used for Survey Files: 64MSMS00738, 64MSMS00739, and 64MSMS00740

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	12.389	7.8129	1.89	6.31
Benzene	78/52	82.954	18.969	0.686	2.29
			Average:	1.3	4.3
Toluene	92/65	55.829	28.576	1.54	5.12
Toluene	92/91	238.23	66.356	0.836	2.79
			Average:	1.2	4.0
Xylene	106/65	16.561	15.266	2.77	9.22
Xylene	106/91	158.89	45.561	0.860	2.87
			Average:	1.8	6.0

Calibration Files: 64MSMS00741_MD and 64MSMS00744 on 24 March 2019
Used for Survey Files: 64MSMS00742 and 64MSMS00743

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	10.833	5.5872	1.55	5.16
Benzene	78/52	71.809	9.5490	0.399	1.33
			Average:	0.97	3.2
Toluene	92/65	49.121	9.1713	0.560	1.87
Toluene	92/91	205.26	18.802	0.275	0.916
			Average:	0.42	1.4
Xylene	106/65	14.391	7.6770	1.60	5.33
Xylene	106/91	143.22	27.008	0.566	1.89
			Average:	1.1	3.6

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00745 and 64MSMS00749 on 25 March 2019
Used for Survey Files: 64MSMS00746, 64MSMS00747, and 64MSMS00748

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	11.933	4.5859	1.15	3.84
Benzene	78/52	81.141	12.623	0.467	1.56
			Average:	0.81	2.7
Toluene	92/65	62.976	9.7332	0.464	1.55
Toluene	92/91	262.82	24.818	0.283	0.944
			Average:	0.37	1.2
Xylene	106/65	22.815	6.8631	0.902	3.01
Xylene	106/91	213.14	30.272	0.426	1.42
			Average:	0.66	2.2

Calibration Files: 64MSMS00749_MD and 64MSMS00755 on 25 March 2019
Used for Survey Files: 64MSMS00751, 64MSMS00752, and 64MSMS00753

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	11.239	5.6281	1.50	5.01
Benzene	78/52	78.340	10.753	0.412	1.37
			Average:	0.96	3.2
Toluene	92/65	59.258	10.493	0.531	1.77
Toluene	92/91	245.72	23.034	0.281	0.937
			Average:	0.41	1.4
Xylene	106/65	21.000	6.3202	0.903	3.01
Xylene	106/91	214.40	18.678	0.261	0.871
			Average:	0.58	1.9

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00756 and 64MSMS00761 on 26 March 2019
Used for Survey Files: 64MSMS00757, 64MSMS00758, and 64MSMS00759

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	13.880	9.6972	2.10	6.99
Benzene	78/52	99.125	18.334	0.555	1.85
			Average:	1.3	4.4
Toluene	92/65	64.575	23.198	1.08	3.59
Toluene	92/91	245.25	47.958	0.587	1.96
			Average:	0.83	2.8
Xylene	106/65	15.064	8.6900	1.73	5.77
Xylene	106/91	251.53	19.987	0.238	0.795
			Average:	0.98	3.3

Calibration Files: 64MSMS00761_MD and 64MSMS00766 on 26 March 2019
Used for Survey Files: 64MSMS00762, 64MSMS00763, 64MSMS00764, and 64MSMS00765

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	13.926	12.310	2.65	8.84
Benzene	78/52	98.224	40.223	1.23	4.10
			Average:	1.9	6.5
Toluene	92/65	62.997	20.663	0.984	3.28
Toluene	92/91	232.17	35.629	0.460	1.53
			Average:	0.72	2.4
Xylene	106/65	14.119	9.9384	2.11	7.04
Xylene	106/91	240.53	24.573	0.306	1.02
			Average:	1.2	4.0

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00767 and 64MSMS00774 on 27 March 2019
Used for Survey Files: 64MSMS00768, 64MSMS00769, 64MSMS00770, and 64MSMS00771

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	18.824	8.3817	1.34	4.45
Benzene	78/52	133.54	19.752	0.444	1.48
			Average:	0.89	3.0
Toluene	92/65	82.856	22.355	0.809	2.70
Toluene	92/91	310.84	39.603	0.382	1.27
			Average:	0.60	2.0
Xylene	106/65	19.108	10.906	1.71	5.71
Xylene	106/91	355.16	25.950	0.219	0.731
			Average:	0.97	3.2

Calibration Files: 64MSMS00774_MD and 64MSMS00778 on 27 March 2019
Used for Survey Files: 64MSMS00775, 64MSMS00776, and 64MSMS00777

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	18.637	13.084	2.11	7.02
Benzene	78/52	128.24	31.951	0.747	2.49
			Average:	1.4	4.8
Toluene	92/65	79.993	16.287	0.611	2.04
Toluene	92/91	281.81	25.461	0.271	0.903
			Average:	0.44	1.5
Xylene	106/65	17.541	7.9361	1.36	4.52
Xylene	106/91	336.27	18.520	0.165	0.551
			Average:	0.76	2.5

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00779 and 64MSMS00785 on 28 March 2019
Used for Survey Files: 64MSMS00780, 64MSMS00782, 64MSMS00783, and 64MSMS00784

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	15.544	8.4992	1.64	5.47
Benzene	78/52	102.48	24.256	0.710	2.37
			Average:	1.2	3.9
Toluene	92/65	86.227	66.617	2.32	7.73
Toluene	92/91	300.35	107.97	1.08	3.59
			Average:	1.7	5.7
Xylene	106/65	19.426	14.985	2.31	7.71
Xylene	106/91	346.11	43.872	0.380	1.27
			Average:	1.3	4.5

Calibration Files: 64MSMS00785_MD and 64MSMS00791 on 28 March 2019
Used for Survey Files: 64MSMS00786, 64MSMS00787, and 64MSMS00788

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	15.608	6.8944	1.33	4.42
Benzene	78/52	101.33	13.057	0.387	1.29
			Average:	0.86	2.9
Toluene	92/65	86.945	8.4286	0.291	0.969
Toluene	92/91	296.20	12.276	0.124	0.414
			Average:	0.21	0.69
Xylene	106/65	16.988	4.1675	0.736	2.45
Xylene	106/91	308.65	9.0412	0.0879	0.293
			Average:	0.41	1.4

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00792 and 64MSMS00799 on 29 March 2019
Used for Survey Files: 64MSMS00793, 64MSMS00794, 64MSMS00795, 64MSMS00796, and 64MSMS00797

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	13.200	6.7245	1.53	5.09
Benzene	78/52	86.055	15.388	0.536	1.79
			Average:	1.0	3.4
Toluene	92/65	77.668	29.518	1.14	3.80
Toluene	92/91	268.71	59.116	0.660	2.20
			Average:	0.90	3.0
Xylene	106/65	13.773	9.0557	1.97	6.57
Xylene	106/91	249.40	19.478	0.234	0.781
			Average:	1.1	3.7

Calibration Files: 64MSMS00799_MD and 64MSMS00802 on 29 March 2019
Used for Survey Files: 64MSMS00800 and 64MSMS00801

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	14.102	7.2427	1.54	5.14
Benzene	78/52	92.965	17.689	0.571	1.90
			Average:	1.1	3.5
Toluene	92/65	92.722	10.298	0.333	1.11
Toluene	92/91	324.45	15.822	0.146	0.488
			Average:	0.24	0.80
Xylene	106/65	17.982	6.4405	1.07	3.58
Xylene	106/91	341.74	21.885	0.192	0.640
			Average:	0.63	2.1

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00803 and 64MSMS00810 on 30 March 2019
Used for Survey Files: 64MSMS00804, 64MSMS00805, 64MSMS00807, and 64MSMS00808

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	15.423	7.1259	1.39	4.62
Benzene	78/52	103.32	11.618	0.337	1.12
			Average:	0.86	2.9
Toluene	92/65	103.70	17.647	0.511	1.70
Toluene	92/91	353.85	31.489	0.267	0.890
			Average:	0.39	1.3
Xylene	106/65	14.702	6.0035	1.23	4.08
Xylene	106/91	291.44	18.790	0.193	0.645
			Average:	0.71	2.4

Calibration Files: 64MSMS00810_MD and 64MSMS00813 on 30 March 2019
Used for Survey Files: 64MSMS00811 and 64MSMS00812

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	18.670	17.410	2.80	9.33
Benzene	78/52	118.17	41.010	1.04	3.47
			Average:	1.9	6.4
Toluene	92/65	109.38	23.387	0.641	2.14
Toluene	92/91	336.70	38.159	0.340	1.13
			Average:	0.49	1.6
Xylene	106/65	11.946	5.5636	1.40	4.66
Xylene	106/91	227.89	18.623	0.245	0.817
			Average:	0.82	2.7

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00814 and 64MSMS00821 on 31 March 2019
Used for Survey Files: 64MSMS00815, 64MSMS00816, 64MSMS00817, and 64MSMS00818

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	28.718	9.4312	0.985	3.28
Benzene	78/52	171.85	16.282	0.284	0.947
			Average:	0.63	2.1
Toluene	92/65	136.27	13.725	0.302	1.01
Toluene	92/91	362.04	25.311	0.210	0.699
			Average:	0.26	0.85
Xylene	106/65	11.339	4.0986	1.08	3.61
Xylene	106/91	272.60	14.066	0.155	0.516
			Average:	0.62	2.1

Calibration Files: 64MSMS00821_MD and 64MSMS00826 on 31 March 2019
Used for Survey Files: 64MSMS00822, 64MSMS00823, 64MSMS00824, and 64MSMS00825

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	30.667	8.5430	0.836	2.79
Benzene	78/52	189.38	20.025	0.317	1.06
			Average:	0.58	1.9
Toluene	92/65	168.41	10.513	0.187	0.624
Toluene	92/91	473.30	21.244	0.135	0.449
			Average:	0.16	0.54
Xylene	106/65	14.443	4.5002	0.935	3.12
Xylene	106/91	455.59	12.916	0.0851	0.284
			Average:	0.51	1.7

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00827 and 64MSMS00832 on 01 April 2019
Used for Survey Files: 64MSMS00828, 64MSMS00829, 64MSMS00830, and 64MSMS00831

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	33.922	16.253	1.44	4.79
Benzene	78/52	190.00	25.332	0.400	1.33
			Average:	0.92	3.1
Toluene	92/65	162.77	27.364	0.504	1.68
Toluene	92/91	410.50	50.123	0.366	1.22
			Average:	0.44	1.5
Xylene	106/65	12.915	10.857	2.52	8.41
Xylene	106/91	298.53	30.788	0.309	1.03
			Average:	1.4	4.7

Calibration Files: 64MSMS00832_MD and 64MSMS00836 on 01 April 2019
Used for Survey Files: 64MSMS00833, 64MSMS00834, and 64MSMS00835

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	36.939	13.840	1.12	3.75
Benzene	78/52	197.91	33.208	0.503	1.68
			Average:	0.81	2.7
Toluene	92/65	158.75	13.967	0.264	0.880
Toluene	92/91	401.76	21.232	0.159	0.528
			Average:	0.21	0.70
Xylene	106/65	11.701	6.2091	1.59	5.31
Xylene	106/91	261.77	16.791	0.192	0.641
			Average:	0.89	3.0

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00840 and 64MSMS00844 on 02 April 2019
Used for Survey Files: 64MSMS00841, 64MSMS00842, and 64MSMS00843

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	24.283	11.330	1.40	4.67
Benzene	78/52	157.10	25.950	0.496	1.65
			Average:	0.95	3.2
Toluene	92/65	95.496	17.903	0.562	1.87
Toluene	92/91	473.60	38.470	0.244	0.812
			Average:	0.40	1.3
Xylene	106/65	31.186	8.8630	0.853	2.84
Xylene	106/91	307.10	29.403	0.287	0.957
			Average:	0.57	1.9

Calibration Files: 64MSMS00852 and 64MSMS00855 on 03 April 2019
Used for Survey Files: 64MSMS00853 and 64MSMS00854

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	16.018	6.6984	1.25	4.18
Benzene	78/52	106.51	12.793	0.360	1.20
			Average:	0.81	2.7
Toluene	92/65	81.833	10.882	0.399	1.33
Toluene	92/91	336.82	24.530	0.218	0.728
			Average:	0.31	1.0
Xylene	106/65	29.426	6.5394	0.667	2.22
Xylene	106/91	287.25	21.748	0.227	0.757
			Average:	0.45	1.5

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00856 and 64MSMS00862 on 04 April 2019
Used for Survey Files: 64MSMS00857, 64MSMS00858, 64MSMS00859, 64MSMS00860, and 64MSMS00861

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	11.301	6.6086	1.75	5.85
Benzene	78/52	79.004	15.486	0.588	1.96
			Average:	1.2	3.9
Toluene	92/65	66.923	21.397	0.959	3.20
Toluene	92/91	267.72	32.771	0.367	1.22
			Average:	0.66	2.2
Xylene	106/65	23.910	9.8759	1.24	4.13
Xylene	106/91	227.07	25.771	0.340	1.13
			Average:	0.79	2.6

Calibration Files: 64MSMS00862_MD and 64MSMS00865 on 04 April 2019
Used for Survey Files: 64MSMS00863 and 64MSMS00864

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	11.140	5.5636	1.50	4.99
Benzene	78/52	76.527	12.200	0.478	1.59
			Average:	0.99	3.3
Toluene	92/65	63.098	15.715	0.747	2.49
Toluene	92/91	255.35	37.756	0.444	1.48
			Average:	0.60	2.0
Xylene	106/65	22.645	9.0224	1.20	3.98
Xylene	106/91	220.22	23.827	0.325	1.08
			Average:	0.76	2.5

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00867 and 64MSMS00873 on 05 April 2019
Used for Survey Files: 64MSMS00868, 64MSMS00869, 64MSMS00870, and 64MSMS00871

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	12.558	9.8742	2.36	7.86
Benzene	78/52	81.977	25.861	0.946	3.15
			Average:	1.7	5.5
Toluene	92/65	70.211	22.321	0.954	3.18
Toluene	92/91	332.51	48.603	0.439	1.46
			Average:	0.70	2.3
Xylene	106/65	26.640	12.680	1.43	4.76
Xylene	106/91	229.11	40.732	0.533	1.78
			Average:	0.98	3.3

Calibration Files: 64MSMS00873_MD and 64MSMS00876 on 05 April 2019
Used for Survey Files: 64MSMS00874 and 64MSMS00875

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	12.365	8.0234	1.95	6.49
Benzene	78/52	82.576	23.552	0.856	2.85
			Average:	1.4	4.7
Toluene	92/65	66.067	19.930	0.905	3.02
Toluene	92/91	317.23	53.349	0.505	1.68
			Average:	0.70	2.3
Xylene	106/65	25.595	13.275	1.56	5.19
Xylene	106/91	229.34	41.688	0.545	1.82
			Average:	1.1	3.5

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00877 and 64MSMS00882 on 06 April 2019
Used for Survey Files: 64MSMS00878, 64MSMS00879, 64MSMS00880, and 64MSMS00881

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	12.034	7.0454	1.76	5.85
Benzene	78/52	83.654	13.198	0.473	1.58
			Average:	1.1	3.7
Toluene	92/65	56.589	14.001	0.742	2.47
Toluene	92/91	247.82	29.938	0.362	1.21
			Average:	0.55	1.8
Xylene	106/65	21.868	9.5278	1.31	4.36
Xylene	106/91	188.72	26.832	0.427	1.42
			Average:	0.87	2.9

Calibration Files: 64MSMS00882_MD and 64MSMS00885 on 06 April 2019
Used for Survey Files: 64MSMS00883 and 64MSMS00884

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	12.062	9.4816	2.36	7.86
Benzene	78/52	83.896	22.693	0.811	2.70
			Average:	1.6	5.3
Toluene	92/65	59.177	17.258	0.875	2.92
Toluene	92/91	253.24	29.054	0.344	1.15
			Average:	0.61	2.0
Xylene	106/65	23.432	9.9978	1.28	4.27
Xylene	106/91	204.37	29.605	0.435	1.45
			Average:	0.86	2.9

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00886 and 64MSMS00891 on 07 April 2019
Used for Survey Files: 64MSMS00887, 64MSMS00888, 64MSMS00889, and 64MSMS00890

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	15.000	4.7284	0.946	3.15
Benzene	78/52	104.61	10.530	0.302	1.01
			Average:	0.62	2.1
Toluene	92/65	87.099	11.931	0.411	1.37
Toluene	92/91	376.45	21.865	0.174	0.581
			Average:	0.29	0.98
Xylene	106/65	35.724	8.4598	0.710	2.37
Xylene	106/91	332.91	22.349	0.201	0.671
			Average:	0.46	1.5

Calibration Files: 64MSMS00896 and 64MSMS00901 on 08 April 2019
Used for Survey Files: 64MSMS00897, 64MSMS00898, 64MSMS00899, and 64MSMS00900

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	15.330	8.6748	1.70	5.66
Benzene	78/52	107.49	22.525	0.629	2.10
			Average:	1.2	3.9
Toluene	92/65	69.303	14.197	0.615	2.05
Toluene	92/91	288.35	32.196	0.335	1.12
			Average:	0.47	1.6
Xylene	106/65	26.240	7.3866	0.844	2.81
Xylene	106/91	269.39	24.213	0.270	0.899
			Average:	0.56	1.9

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00901_MD and 64MSMS00904 on 08 April 2019
Used for Survey Files: 64MSMS00902 and 64MSMS00903

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	15.179	6.5083	1.29	4.29
Benzene	78/52	106.00	11.994	0.339	1.13
			Average:	0.81	2.7
Toluene	92/65	68.285	11.190	0.492	1.64
Toluene	92/91	282.87	24.666	0.262	0.872
			Average:	0.38	1.3
Xylene	106/65	26.415	6.8023	0.773	2.58
Xylene	106/91	271.44	18.876	0.209	0.695
			Average:	0.49	1.6

Calibration Files: 64MSMS00905 and 64MSMS00910 on 09 April 2019
Used for Survey Files: 64MSMS00906, 64MSMS00907, 64MSMS00908, and 64MSMS00909

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	12.931	13.272	3.08	10.3
Benzene	78/52	94.280	28.982	0.922	3.07
			Average:	2.0	6.7
Toluene	92/65	61.724	24.053	1.17	3.90
Toluene	92/91	261.46	61.557	0.706	2.35
			Average:	0.94	3.1
Xylene	106/65	20.407	12.063	1.77	5.91
Xylene	106/91	233.35	36.817	0.473	1.58
			Average:	1.1	3.7

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00910_MD and 64MSMS00914 on 09 April 2019
Used for Survey Files: 64MSMS00911, 64MSMS00912, and 64MSMS00913

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	15.468	7.6713	1.49	4.96
Benzene	78/52	111.18	17.091	0.461	1.54
			Average:	0.97	3.2
Toluene	92/65	76.836	18.063	0.705	2.35
Toluene	92/91	317.61	36.070	0.341	1.14
			Average:	0.52	1.7
Xylene	106/65	28.131	8.1111	0.865	2.88
Xylene	106/91	327.52	26.788	0.245	0.818
			Average:	0.56	1.9

Calibration Files: 64MSMS00915 and 64MSMS00921 on 10 April 2019
Used for Survey Files: 64MSMS00916, 64MSMS00917, 64MSMS00918, 64MSMS00919, and 64MSMS00920

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	12.331	8.2018	2.00	6.65
Benzene	78/52	90.604	15.500	0.513	1.71
			Average:	1.3	4.2
Toluene	92/65	61.550	15.479	0.754	2.51
Toluene	92/91	261.39	33.506	0.385	1.28
			Average:	0.57	1.9
Xylene	106/65	21.660	10.946	1.52	5.05
Xylene	106/91	244.20	24.514	0.301	1.00
			Average:	0.91	3.0

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00921_MD and 64MSMS00925 on 10 April 2019
Used for Survey Files: 64MSMS00922, 64MSMS00923, and 64MSMS00924

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	12.064	6.7400	1.68	5.59
Benzene	78/52	87.901	20.677	0.706	2.35
			Average:	1.2	4.0
Toluene	92/65	57.314	32.574	1.71	5.68
Toluene	92/91	240.37	79.237	0.989	3.30
			Average:	1.3	4.5
Xylene	106/65	19.347	16.709	2.59	8.64
Xylene	106/91	221.21	80.426	1.09	3.64
			Average:	1.8	6.1

Calibration Files: 64MSMS00927 and 64MSMS00933 on 11 April 2019
Used for Survey Files: 64MSMS00928, 64MSMS00929, 64MSMS00930, 64MSMS00931, and 64MSMS00932

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	10.932	6.9198	1.90	6.33
Benzene	78/52	80.174	12.312	0.461	1.54
			Average:	1.2	3.9
Toluene	92/65	57.520	11.780	0.614	2.05
Toluene	92/91	238.26	29.482	0.371	1.24
			Average:	0.49	1.6
Xylene	106/65	18.766	7.5212	1.20	4.01
Xylene	106/91	204.33	18.746	0.275	0.917
			Average:	0.74	2.5

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00933_MD and 64MSMS00936 on 11 April 2019
Used for Survey Files: 64MSMS00934 and 64MSMS00935

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	12.007	4.9991	1.25	4.16
Benzene	78/52	87.342	12.635	0.434	1.45
			Average:	0.84	2.8
Toluene	92/65	65.923	12.549	0.571	1.90
Toluene	92/91	273.37	24.217	0.266	0.886
			Average:	0.42	1.4
Xylene	106/65	23.765	8.9475	1.13	3.76
Xylene	106/91	262.67	26.685	0.305	1.02
			Average:	0.72	2.4

Calibration Files: 64MSMS00937 and 64MSMS00941 on 12 April 2019
Used for Survey Files: 64MSMS00938, 64MSMS00939, and 64MSMS00940

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	12.841	8.4915	1.98	6.61
Benzene	78/52	97.027	17.106	0.529	1.76
			Average:	1.3	4.2
Toluene	92/65	46.791	12.564	0.806	2.69
Toluene	92/91	189.47	27.801	0.440	1.47
			Average:	0.62	2.1
Xylene	106/65	13.578	5.6777	1.25	4.18
Xylene	106/91	159.47	18.677	0.351	1.17
			Average:	0.80	2.7

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00941_MD and 64MSMS00944 on 12 April 2019
Used for Survey Files: 64MSMS00942 and 64MSMS00943

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	12.843	10.902	2.55	8.49
Benzene	78/52	91.366	31.620	1.04	3.46
			Average:	1.8	6.0
Toluene	92/65	57.681	15.827	0.823	2.74
Toluene	92/91	233.00	32.875	0.423	1.41
			Average:	0.62	2.1
Xylene	106/65	21.257	9.4382	1.33	4.44
Xylene	106/91	237.95	31.656	0.399	1.33
			Average:	0.87	2.9

Calibration Files: 64MSMS00945 and 64MSMS00951 on 13 April 2019
Used for Survey Files: 64MSMS00946, 64MSMS00947, 64MSMS00948, 64MSMS00949, and 64MSMS00950

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	10.026	3.5153	1.05	3.51
Benzene	78/52	72.531	9.4306	0.390	1.30
			Average:	0.72	2.4
Toluene	92/65	46.137	6.1264	0.398	1.33
Toluene	92/91	183.05	13.078	0.214	0.714
			Average:	0.31	1.0
Xylene	106/65	15.301	4.2715	0.838	2.79
Xylene	106/91	167.10	10.137	0.182	0.607
			Average:	0.51	1.7

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00951_MD and 64MSMS00954 on 13 April 2019
Used for Survey Files: 64MSMS00952 and 64MSMS00953

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	11.380	5.9521	1.57	5.23
Benzene	78/52	81.643	14.120	0.519	1.73
			Average:	1.0	3.5
Toluene	92/65	48.545	13.903	0.859	2.86
Toluene	92/91	187.93	29.200	0.466	1.55
			Average:	0.66	2.2
Xylene	106/65	15.598	9.8625	1.90	6.32
Xylene	106/91	175.00	23.477	0.402	1.34
			Average:	1.1	3.8

Calibration Files: 64MSMS00955 and 64MSMS00960 on 14 April 2019
Used for Survey Files: 64MSMS00956, 64MSMS00957, 64MSMS00958, and 64MSMS00959

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	19.664	6.2091	0.947	3.16
Benzene	78/52	139.98	13.961	0.299	0.997
			Average:	0.62	2.1
Toluene	92/65	63.340	7.5386	0.357	1.19
Toluene	92/91	254.52	12.835	0.151	0.504
			Average:	0.25	0.85
Xylene	106/65	18.592	3.9278	0.634	2.11
Xylene	106/91	271.81	9.4382	0.104	0.347
			Average:	0.37	1.2

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration File: 64MSMS00961 at 06:49:21 on 15 April 2019
Used for Survey Files: 64MSMS00962 and 64MSMS00963

Compound	PM/DM	Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	15.997	11.986	2.25	7.49
Benzene	78/52	118.14	26.872	0.682	2.27
			Average:	1.5	4.9
Toluene	92/65	51.837	20.720	1.20	4.00
Toluene	92/91	209.02	45.687	0.656	2.19
			Average:	0.93	3.1
Xylene	106/65	13.350	9.2527	2.08	6.93
Xylene	106/91	186.52	26.337	0.424	1.41
			Average:	1.3	4.2

Calibration Files: 64MSMS00965 and 64MSMS00971 on 17 April 2019
Used for Survey Files: 64MSMS00966, 64MSMS00967, 64MSMS00968, 64MSMS00969, and 64MSMS00970

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	9.4137	4.7284	1.51	5.02
Benzene	78/52	60.284	12.475	0.621	2.07
			Average:	1.1	3.5
Toluene	92/65	35.953	8.2869	0.691	2.30
Toluene	92/91	146.86	19.376	0.396	1.32
			Average:	0.54	1.8
Xylene	106/65	10.666	6.9079	1.94	6.48
Xylene	106/91	122.11	14.313	0.352	1.17
			Average:	1.1	3.8

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00971_MD and 64MSMS00975 on 17 April 2019
Used for Survey Files: 64MSMS00972, 64MSMS00973, and 64MSMS00974

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	8.6044	6.8625	2.39	7.98
Benzene	78/52	55.216	18.832	1.02	3.41
			Average:	1.7	5.7
Toluene	92/65	30.732	9.0394	0.882	2.94
Toluene	92/91	125.54	15.610	0.373	1.24
			Average:	0.63	2.1
Xylene	106/65	8.2271	6.1763	2.25	7.51
Xylene	106/91	95.488	16.746	0.526	1.75
			Average:	1.4	4.6

Calibration Files: 64MSMS00976 and 64MSMS00981 on 18 April 2019
Used for Survey Files: 64MSMS00977, 64MSMS00978, 64MSMS00979, and 64MSMS00980

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	11.312	6.8241	1.81	6.03
Benzene	78/52	69.838	9.6768	0.416	1.39
			Average:	1.1	3.7
Toluene	92/65	63.335	13.917	0.659	2.20
Toluene	92/91	286.02	27.125	0.285	0.948
			Average:	0.47	1.6
Xylene	106/65	26.103	7.8129	0.898	2.99
Xylene	106/91	224.87	23.305	0.311	1.04
			Average:	0.60	2.0

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00981_MD and 64MSMS00985 on 18 April 2019
Used for Survey Files: 64MSMS00982, 64MSMS00983, and 64MSMS00984

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	16.686	11.042	1.99	6.62
Benzene	78/52	105.31	28.808	0.821	2.74
			Average:	1.4	4.7
Toluene	92/65	71.626	23.863	1.00	3.33
Toluene	92/91	328.39	56.717	0.518	1.73
			Average:	0.76	2.5
Xylene	106/65	27.279	13.519	1.49	4.96
Xylene	106/91	241.98	45.009	0.558	1.86
			Average:	1.0	3.4

Calibration Files: 64MSMS00986 and 64MSMS00991 on 19 April 2019
Used for Survey Files: 64MSMS00987, 64MSMS00988, 64MSMS00989, and 64MSMS00990

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	23.482	5.5211	0.705	2.35
Benzene	78/52	156.73	15.415	0.295	0.984
			Average:	0.50	1.7
Toluene	92/65	117.41	17.289	0.442	1.47
Toluene	92/91	562.41	34.661	0.185	0.616
			Average:	0.31	1.0
Xylene	106/65	49.403	12.132	0.737	2.46
Xylene	106/91	497.12	30.427	0.184	0.612
			Average:	0.46	1.5

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS00991_MD and 64MSMS00996 on 19 April 2019
Used for Survey Files: 64MSMS00992, 64MSMS00993, 64MSMS00994, and 64MSMS00995

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	23.748	7.2909	0.921	3.07
Benzene	78/52	160.60	13.377	0.250	0.833
			Average:	0.59	2.0
Toluene	92/65	109.57	16.382	0.449	1.50
Toluene	92/91	514.12	31.904	0.186	0.621
			Average:	0.32	1.1
Xylene	106/65	44.141	6.4753	0.440	1.47
Xylene	106/91	495.91	20.118	0.122	0.406
			Average:	0.28	0.94

Calibration Files: 64MSMS00999 and 64MSMS01004 on 20 April 2019
Used for Survey Files: 64MSMS01000, 64MSMS01001, 64MSMS01002, and 64MSMS01003

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	21.527	7.3918	1.03	3.43
Benzene	78/52	150.91	25.253	0.502	1.67
			Average:	0.77	2.6
Toluene	92/65	92.474	33.140	1.08	3.58
Toluene	92/91	407.57	70.514	0.519	1.73
			Average:	0.80	2.7
Xylene	106/65	28.974	18.001	1.86	6.21
Xylene	106/91	427.46	61.518	0.432	1.44
			Average:	1.1	3.8

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01004_MD and 64MSMS01008 on 20 April 2019
Used for Survey Files: 64MSMS01005, 64MSMS01006, and 64MSMS01007

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	20.601	9.9384	1.45	4.82
Benzene	78/52	144.24	25.100	0.522	1.74
			Average:	0.98	3.3
Toluene	92/65	83.775	18.917	0.677	2.26
Toluene	92/91	358.87	46.726	0.391	1.30
			Average:	0.53	1.8
Xylene	106/65	22.896	8.8159	1.16	3.85
Xylene	106/91	397.38	30.684	0.232	0.772
			Average:	0.69	2.3

Calibration Files: 64MSMS01009 and 64MSMS01015 on 21 April 2019
Used for Survey Files: 64MSMS01010, 64MSMS01011, 64MSMS01012, 64MSMS01013, and 64MSMS01014

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	13.155	6.0986	1.39	4.64
Benzene	78/52	92.865	14.630	0.473	1.58
			Average:	0.93	3.1
Toluene	92/65	76.051	18.721	0.738	2.46
Toluene	92/91	324.62	32.442	0.300	0.999
			Average:	0.52	1.7
Xylene	106/65	17.885	8.5833	1.44	4.80
Xylene	106/91	308.72	29.534	0.287	0.957
			Average:	0.86	2.9

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01015_MD and 64MSMS01018 on 21 April 2019
Used for Survey Files: 64MSMS01016 and 64MSMS01017

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	13.076	10.904	2.50	8.34
Benzene	78/52	92.994	41.496	1.34	4.46
			Average:	1.9	6.4
Toluene	92/65	80.673	32.260	1.20	4.00
Toluene	92/91	335.87	79.450	0.710	2.37
			Average:	0.95	3.2
Xylene	106/65	19.082	9.7243	1.53	5.10
Xylene	106/91	337.07	30.790	0.274	0.913
			Average:	0.90	3.0

Calibration Files: 64MSMS01019 and 64MSMS01024 on 22 April 2019
Used for Survey Files: 64MSMS01020, 64MSMS01021, 64MSMS01022, and 64MSMS01023

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	13.843	6.4346	1.39	4.65
Benzene	78/52	98.455	18.777	0.572	1.91
			Average:	0.98	3.3
Toluene	92/65	73.265	17.095	0.700	2.33
Toluene	92/91	306.97	47.334	0.463	1.54
			Average:	0.58	1.9
Xylene	106/65	15.829	8.7000	1.65	5.50
Xylene	106/91	277.62	25.598	0.277	0.922
			Average:	0.96	3.2

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01029 and 64MSMS01035 on 23 April 2019
Used for Survey Files: 64MSMS01030, 64MSMS01031, 64MSMS01033, and 64MSMS01034

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	13.963	5.8480	1.26	4.19
Benzene	78/52	97.749	8.1408	0.250	0.833
			Average:	0.75	2.5
Toluene	92/65	84.939	14.178	0.501	1.67
Toluene	92/91	314.08	25.861	0.247	0.823
			Average:	0.37	1.2
Xylene	106/65	19.878	6.7245	1.01	3.38
Xylene	106/91	309.60	16.410	0.159	0.530
			Average:	0.59	2.0

Calibration Files: 64MSMS01035_MD and 64MSMS01039 on 23 April 2019
Used for Survey Files: 64MSMS01036, 64MSMS01037, and 64MSMS01038

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	13.731	6.5486	1.43	4.77
Benzene	78/52	99.346	14.472	0.437	1.46
			Average:	0.93	3.1
Toluene	92/65	78.484	13.118	0.501	1.67
Toluene	92/91	288.75	27.463	0.285	0.951
			Average:	0.39	1.3
Xylene	106/65	14.284	7.2721	1.53	5.09
Xylene	106/91	224.64	24.452	0.327	1.09
			Average:	0.93	3.1

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01040 and 64MSMS01045 on 24 April 2019
Used for Survey Files: 64MSMS01041, 64MSMS01042, 64MSMS01043, and 64MSMS01044

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	13.452	9.2314	2.06	6.86
Benzene	78/52	91.028	25.670	0.846	2.82
			Average:	1.5	4.8
Toluene	92/65	71.849	17.621	0.736	2.45
Toluene	92/91	256.29	41.713	0.488	1.63
			Average:	0.61	2.0
Xylene	106/65	11.484	9.2314	2.41	8.04
Xylene	106/91	172.60	26.056	0.453	1.51
			Average:	1.4	4.8

Calibration Files: 64MSMS01045_MD and 64MSMS01049 on 24 April 2019
Used for Survey Files: 64MSMS01046, 64MSMS01047, and 64MSMS01048

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	13.663	7.5908	1.67	5.56
Benzene	78/52	91.530	16.493	0.541	1.80
			Average:	1.1	3.7
Toluene	92/65	76.039	14.061	0.555	1.85
Toluene	92/91	274.12	25.293	0.277	0.923
			Average:	0.42	1.4
Xylene	106/65	12.945	8.6546	2.01	6.69
Xylene	106/91	199.71	23.885	0.359	1.20
			Average:	1.2	3.9

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01050 and 64MSMS01055 on 25 April 2019
Used for Survey Files: 64MSMS01051, 64MSMS01052, 64MSMS01053, and 64MSMS01054

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	16.799	7.3382	1.31	4.37
Benzene	78/52	114.54	15.401	0.403	1.34
			Average:	0.86	2.9
Toluene	92/65	85.653	18.453	0.646	2.15
Toluene	92/91	290.26	38.670	0.400	1.33
			Average:	0.52	1.7
Xylene	106/65	12.363	6.1264	1.49	4.96
Xylene	106/91	197.21	21.026	0.320	1.07
			Average:	0.90	3.0

Calibration Files: 64MSMS01055_MD and 64MSMS01058 on 25 April 2019
Used for Survey Files: 64MSMS01056 and 64MSMS01057

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	18.704	5.2805	0.847	2.82
Benzene	78/52	121.42	13.195	0.326	1.09
			Average:	0.59	2.0
Toluene	92/65	87.958	17.907	0.611	2.04
Toluene	92/91	289.91	38.580	0.399	1.33
			Average:	0.50	1.7
Xylene	106/65	12.855	5.0913	1.19	3.96
Xylene	106/91	192.35	12.763	0.199	0.663
			Average:	0.69	2.3

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01059 and 64MSMS01065 on 26 April 2019
Used for Survey Files: 64MSMS01060, 64MSMS01061, 64MSMS01062, 64MSMS01063, and 64MSMS01064

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	19.378	10.429	1.61	5.38
Benzene	78/52	129.09	26.410	0.614	2.05
			Average:	1.1	3.7
Toluene	92/65	122.48	45.239	1.11	3.69
Toluene	92/91	423.51	82.592	0.585	1.95
			Average:	0.85	2.8
Xylene	106/65	17.809	14.117	2.38	7.93
Xylene	106/91	356.09	46.373	0.391	1.30
			Average:	1.4	4.6

Calibration Files: 64MSMS01065_MD and 64MSMS01068 on 26 April 2019
Used for Survey Files: 64MSMS01066 and 64MSMS01067

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	20.644	9.2355	1.34	4.47
Benzene	78/52	133.98	27.708	0.620	2.07
			Average:	0.98	3.3
Toluene	92/65	124.39	17.715	0.427	1.42
Toluene	92/91	415.42	37.433	0.270	0.901
			Average:	0.35	1.2
Xylene	106/65	18.680	7.4889	1.20	4.01
Xylene	106/91	321.34	22.086	0.206	0.687
			Average:	0.70	2.3

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01069 and 64MSMS01074 on 27 April 2019
Used for Survey Files: 64MSMS01070, 64MSMS01071, 64MSMS01072, and 64MSMS01073

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	19.576	9.9069	1.52	5.06
Benzene	78/52	123.55	19.500	0.474	1.58
			Average:	1.0	3.3
Toluene	92/65	108.54	21.361	0.590	1.97
Toluene	92/91	351.35	47.002	0.401	1.34
			Average:	0.50	1.7
Xylene	106/65	14.854	8.5814	1.73	5.78
Xylene	106/91	222.80	23.508	0.317	1.06
			Average:	1.0	3.4

Calibration Files: 64MSMS01074_MD and 64MSMS01078 on 27 April 2019
Used for Survey Files: 64MSMS01075, 64MSMS01076, and 64MSMS01077

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	21.625	18.422	2.56	8.52
Benzene	78/52	133.11	41.064	0.925	3.08
			Average:	1.7	5.8
Toluene	92/65	111.93	22.801	0.611	2.04
Toluene	92/91	356.93	55.970	0.470	1.57
			Average:	0.54	1.8
Xylene	106/65	14.661	10.309	2.11	7.03
Xylene	106/91	208.19	36.649	0.528	1.76
			Average:	1.3	4.4

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01079 and 64MSMS01084 on 28 April 2019
Used for Survey Files: 64MSMS01080, 64MSMS01081, and 64MSMS01082

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	20.597	9.1167	1.33	4.43
Benzene	78/52	131.20	18.216	0.417	1.39
			Average:	0.87	2.9
Toluene	92/65	131.51	23.664	0.540	1.80
Toluene	92/91	451.51	48.658	0.323	1.08
			Average:	0.43	1.4
Xylene	106/65	18.177	7.3717	1.22	4.06
Xylene	106/91	326.22	28.004	0.258	0.858
			Average:	0.74	2.5

Calibration Files: 64MSMS01084_MD and 64MSMS01088 on 28 April 2019
Used for Survey Files: 64MSMS01085, 64MSMS01086, and 64MSMS01087

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	22.398	5.4249	0.727	2.42
Benzene	78/52	136.85	11.876	0.260	0.868
			Average:	0.49	1.6
Toluene	92/65	130.29	12.984	0.299	0.997
Toluene	92/91	433.98	20.841	0.144	0.480
			Average:	0.22	0.74
Xylene	106/65	17.080	7.1811	1.26	4.20
Xylene	106/91	267.65	17.650	0.198	0.659
			Average:	0.73	2.4

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01089 and 64MSMS01094 on 29 April 2019
Used for Survey Files: 64MSMS01090, 64MSMS01091, and 64MSMS01092

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	19.227	5.8255	0.909	3.03
Benzene	78/52	123.09	14.773	0.360	1.20
			Average:	0.63	2.1
Toluene	92/65	128.83	17.381	0.405	1.35
Toluene	92/91	470.90	38.471	0.245	0.817
			Average:	0.32	1.1
Xylene	106/65	16.349	5.8480	1.07	3.58
Xylene	106/91	321.31	18.506	0.173	0.576
			Average:	0.62	2.1

Calibration Files: 64MSMS01094_MD and 64MSMS01098 on 29 April 2019
Used for Survey Files: 64MSMS01095, 64MSMS01096, and 64MSMS01097

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	20.008	7.5131	1.13	3.76
Benzene	78/52	124.13	12.555	0.303	1.01
			Average:	0.71	2.4
Toluene	92/65	124.53	15.877	0.382	1.27
Toluene	92/91	451.97	38.003	0.252	0.841
			Average:	0.32	1.1
Xylene	106/65	14.419	6.6680	1.39	4.62
Xylene	106/91	246.62	18.600	0.226	0.754
			Average:	0.81	2.7

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01099 and 64MSMS01104 on 30 April 2019
Used for Survey Files: 64MSMS01100, 64MSMS01101, 64MSMS01102, and 64MSMS01103

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	18.182	6.7270	1.11	3.70
Benzene	78/52	113.87	10.759	0.283	0.945
			Average:	0.70	2.3
Toluene	92/65	120.95	13.816	0.343	1.14
Toluene	92/91	449.84	26.773	0.179	0.595
			Average:	0.26	0.87
Xylene	106/65	14.007	4.5002	0.964	3.21
Xylene	106/91	277.69	11.919	0.129	0.429
			Average:	0.55	1.8

Calibration Files: 64MSMS01104_MD and 64MSMS01107 on 30 April 2019
Used for Survey Files: 64MSMS01105 and 64MSMS01106

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	18.247	6.1763	1.02	3.38
Benzene	78/52	114.47	12.296	0.322	1.07
			Average:	0.67	2.2
Toluene	92/65	123.75	9.9978	0.242	0.808
Toluene	92/91	462.10	20.352	0.132	0.440
			Average:	0.19	0.62
Xylene	106/65	14.603	7.3717	1.51	5.05
Xylene	106/91	290.67	21.708	0.224	0.747
			Average:	0.87	2.9

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01108 and 64MSMS01113 on 01 May 2019
Used for Survey Files: 64MSMS01109, 64MSMS01110, 64MSMS01111, and 64MSMS01112

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	22.352	9.1167	1.22	4.08
Benzene	78/52	143.93	14.192	0.296	0.986
			Average:	0.76	2.5
Toluene	92/65	142.89	18.179	0.382	1.27
Toluene	92/91	541.72	27.641	0.153	0.510
			Average:	0.27	0.89
Xylene	106/65	16.600	4.9725	0.899	3.00
Xylene	106/91	322.63	16.556	0.154	0.513
			Average:	0.53	1.8

Calibration Files: 64MSMS01113_MD and 64MSMS01116 on 01 May 2019
Used for Survey Files: 64MSMS01114 and 64MSMS01115

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	22.552	17.380	2.31	7.71
Benzene	78/52	141.48	39.273	0.833	2.78
			Average:	1.6	5.2
Toluene	92/65	144.68	20.768	0.431	1.44
Toluene	92/91	542.44	50.249	0.278	0.926
			Average:	0.35	1.2
Xylene	106/65	16.985	7.3620	1.30	4.33
Xylene	106/91	309.12	24.607	0.239	0.796
			Average:	0.77	2.6

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01117 and 64MSMS01122 on 02 May 2019
Used for Survey Files: 64MSMS01118, 64MSMS01119, and 64MSMS01120

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	24.345	7.1627	0.883	2.94
Benzene	78/52	150.05	13.017	0.260	0.867
			Average:	0.57	1.9
Toluene	92/65	141.52	15.479	0.328	1.09
Toluene	92/91	531.68	41.023	0.231	0.772
			Average:	0.28	0.93
Xylene	106/65	16.908	7.1811	1.27	4.25
Xylene	106/91	292.55	17.430	0.179	0.596
			Average:	0.73	2.4

Calibration Files: 64MSMS01122_MD and 64MSMS01126 on 02 May 2019
Used for Survey Files: 64MSMS01123, 64MSMS01124, and 64MSMS01125

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	25.242	6.5486	0.778	2.59
Benzene	78/52	153.49	13.238	0.259	0.863
			Average:	0.52	1.7
Toluene	92/65	143.35	15.135	0.317	1.06
Toluene	92/91	538.57	29.558	0.165	0.549
			Average:	0.24	0.80
Xylene	106/65	17.241	5.0252	0.874	2.91
Xylene	106/91	284.50	13.888	0.146	0.488
			Average:	0.51	1.7

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration File: 64MSMS01128 at 12:16:26 on 07 May 2019
Used for Survey Files: 64MSMS01129, 64MSMS01130, 64MSMS01131, and 64MSMS01132

Compound	PM/DM	Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	17.147	9.0412	1.58	5.27
Benzene	78/52	94.531	13.292	0.422	1.41
			Average:	1.0	3.3
Toluene	92/65	102.97	26.790	0.781	2.60
Toluene	92/91	481.31	56.992	0.355	1.18
			Average:	0.57	1.9
Xylene	106/65	21.294	10.654	1.50	5.00
Xylene	106/91	419.93	39.682	0.283	0.945
			Average:	0.89	3.0

Calibration Files: 64MSMS01133 and 64MSMS01138 on 08 May 2019
Used for Survey Files: 64MSMS01134, 64MSMS01135, 64MSMS01136, and 64MSMS01137

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	19.433	6.0662	0.936	3.12
Benzene	78/52	119.29	12.606	0.317	1.06
			Average:	0.63	2.1
Toluene	92/65	118.32	21.836	0.554	1.85
Toluene	92/91	563.04	53.351	0.284	0.948
			Average:	0.42	1.4
Xylene	106/65	17.621	7.2480	1.23	4.11
Xylene	106/91	350.31	35.713	0.306	1.02
			Average:	0.77	2.6

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01139 and 64MSMS01145 on 09 May 2019
Used for Survey Files: 64MSMS01140, 64MSMS01141, 64MSMS01142, 64MSMS01143, and 64MSMS01144

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	21.031	8.0350	1.15	3.82
Benzene	78/52	127.73	14.252	0.335	1.12
			Average:	0.74	2.5
Toluene	92/65	97.507	15.174	0.467	1.56
Toluene	92/91	457.26	32.466	0.213	0.710
			Average:	0.34	1.1
Xylene	106/65	11.399	10.319	2.72	9.05
Xylene	106/91	236.03	18.953	0.241	0.803
			Average:	1.5	4.9

Calibration Files: 64MSMS01147 and 64MSMS01153 on 10 May 2019
Used for Survey Files: 64MSMS01148, 64MSMS01149, 64MSMS01150, 64MSMS01151, and 64MSMS01152

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	8.4396	4.7561	1.69	5.64
Benzene	78/52	53.997	10.408	0.578	1.93
			Average:	1.1	3.8
Toluene	92/65	56.268	24.856	1.33	4.42
Toluene	92/91	260.65	59.467	0.684	2.28
			Average:	1.0	3.3
Xylene	106/65	23.479	14.391	1.84	6.13
Xylene	106/91	212.64	31.060	0.438	1.46
			Average:	1.1	3.8

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01174 and 64MSMS01180 on 13 May 2019
Used for Survey Files: 64MSMS01179

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	11.109	6.9554	1.88	6.26
Benzene	78/52	73.100	19.826	0.814	2.71
			Average:	1.3	4.5
Toluene	92/65	58.127	26.842	1.39	4.62
Toluene	92/91	222.74	53.044	0.714	2.38
			Average:	1.0	3.5
Xylene	106/65	10.042	9.7130	2.90	9.67
Xylene	106/91	141.67	38.587	0.817	2.72
			Average:	1.9	6.2

Calibration Files: 64MSMS01180_MD and 64MSMS01183 on 13 May 2019
Used for Survey Files: 64MSMS01181 and 64MSMS01182

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	11.032	5.1799	1.41	4.70
Benzene	78/52	69.447	11.466	0.495	1.65
			Average:	0.95	3.2
Toluene	92/65	52.123	6.7927	0.391	1.30
Toluene	92/91	189.95	15.093	0.238	0.795
			Average:	0.31	1.0
Xylene	106/65	7.1982	5.1799	2.16	7.20
Xylene	106/91	104.35	9.0461	0.260	0.867
			Average:	1.2	4.0

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01184 and 64MSMS01189 on 14 May 2019
Used for Survey Files: 64MSMS01185

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	10.592	9.8920	2.80	9.34
Benzene	78/52	70.739	25.345	1.07	3.58
			Average:	1.9	6.5
Toluene	92/65	60.743	27.144	1.34	4.47
Toluene	92/91	220.11	55.162	0.752	2.51
			Average:	1.0	3.5
Xylene	106/65	9.5163	13.268	4.18	13.9
Xylene	106/91	134.56	39.477	0.880	2.93
			Average:	2.5	8.4

Calibration Files: 64MSMS01189_MD and 64MSMS01192 on 14 May 2019
Used for Survey Files: 64MSMS01190 and 64MSMS01191

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	10.966	5.0262	1.38	4.58
Benzene	78/52	67.589	8.3666	0.371	1.24
			Average:	0.87	2.9
Toluene	92/65	50.394	6.0035	0.357	1.19
Toluene	92/91	172.49	14.482	0.252	0.840
			Average:	0.30	1.0
Xylene	106/65	6.2036	4.2599	2.06	6.87
Xylene	106/91	80.332	10.538	0.394	1.31
			Average:	1.2	4.1

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01193 and 64MSMS01198 on 16 May 2019
Used for Survey Files: 64MSMS01194, 64MSMS01196, and 64MSMS01197

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	12.828	8.2052	1.92	6.40
Benzene	78/52	86.858	19.894	0.687	2.29
			Average:	1.3	4.3
Toluene	92/65	85.207	25.867	0.911	3.04
Toluene	92/91	308.58	61.661	0.599	2.00
			Average:	0.76	2.5
Xylene	106/65	11.541	7.6770	2.00	6.65
Xylene	106/91	210.50	32.677	0.466	1.55
			Average:	1.2	4.1

Calibration Files: 64MSMS01198_MD and 64MSMS01202 on 16 May 2019
Used for Survey Files: 64MSMS01199, 64MSMS01200 and 64MSMS01201

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	15.928	4.2715	0.805	2.68
Benzene	78/52	97.602	9.1041	0.280	0.933
			Average:	0.54	1.8
Toluene	92/65	87.124	10.353	0.357	1.19
Toluene	92/91	301.32	13.258	0.132	0.440
			Average:	0.24	0.81
Xylene	106/65	10.270	3.6500	1.07	3.55
Xylene	106/91	166.36	6.9962	0.126	0.421
			Average:	0.60	2.0

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01203 and 64MSMS01208 on 17 May 2019
Used for Survey Files: 64MSMS01204, 64MSMS01205, 64MSMS01206, 64MSMS01207

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	10.676	7.3955	2.08	6.93
Benzene	78/52	66.880	15.232	0.683	2.28
			Average:	1.4	4.6
Toluene	92/65	74.951	25.484	1.02	3.40
Toluene	92/91	268.02	44.135	0.494	1.65
			Average:	0.76	2.5
Xylene	106/65	7.9121	8.9345	3.39	11.3
Xylene	106/91	131.45	23.214	0.530	1.77
			Average:	2.0	6.5

Calibration Files: 64MSMS01208_MD and 64MSMS01211 on 17 May 2019
Used for Survey Files: 64MSMS01209 and 64MSMS01210

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	11.973	4.6970	1.18	3.92
Benzene	78/52	66.464	11.394	0.514	1.71
			Average:	0.85	2.8
Toluene	92/65	60.974	12.576	0.619	2.06
Toluene	92/91	205.68	27.530	0.402	1.34
			Average:	0.51	1.7
Xylene	106/65	6.3673	4.1026	1.93	6.44
Xylene	106/91	82.137	9.2053	0.336	1.12
			Average:	1.1	3.8

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01212 and 64MSMS01217 on 18 May 2019
Used for Survey Files: 64MSMS01213, 64MSMS01214, 64MSMS01215, and 64MSMS01216

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	12.231	3.9236	0.962	3.21
Benzene	78/52	73.908	7.1012	0.288	0.961
			Average:	0.63	2.1
Toluene	92/65	71.052	9.4306	0.398	1.33
Toluene	92/91	249.21	17.221	0.207	0.691
			Average:	0.30	1.0
Xylene	106/65	6.7455	4.4278	1.97	6.56
Xylene	106/91	106.55	7.0306	0.198	0.660
			Average:	1.1	3.6

Calibration Files: 64MSMS01217_MD and 64MSMS01220 on 18 May 2019
Used for Survey Files: 64MSMS01218 and 64MSMS01219

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	12.524	4.8565	1.16	3.88
Benzene	78/52	75.142	11.821	0.472	1.57
			Average:	0.82	2.7
Toluene	92/65	78.208	8.8252	0.339	1.13
Toluene	92/91	281.33	15.682	0.167	0.557
			Average:	0.25	0.84
Xylene	106/65	8.0668	4.8111	1.79	5.96
Xylene	106/91	141.78	11.080	0.234	0.781
			Average:	1.0	3.4

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01221 and 64MSMS01226 on 19 May 2019
Used for Survey Files: 64MSMS01222, 64MSMS01223, 64MSMS01224 and 64MSMS01225

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	8.3141	6.1763	2.23	7.43
Benzene	78/52	54.495	10.611	0.584	1.95
			Average:	1.4	4.7
Toluene	92/65	59.158	13.239	0.671	2.24
Toluene	92/91	261.66	27.906	0.320	1.07
			Average:	0.50	1.7
Xylene	106/65	23.377	9.7147	1.25	4.16
Xylene	106/91	200.61	26.901	0.402	1.34
			Average:	0.82	2.7

Calibration Files: 64MSMS01226_MD and 64MSMS01230 on 19 May 2019
Used for Survey Files: 64MSMS01227, 64MSMS0128, and 64MSMS0129

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	8.4866	4.1872	1.48	4.93
Benzene	78/52	56.125	10.525	0.563	1.88
			Average:	1.0	3.4
Toluene	92/65	58.807	8.4390	0.431	1.44
Toluene	92/91	257.28	19.426	0.227	0.755
			Average:	0.33	1.1
Xylene	106/65	23.494	5.2722	0.673	2.24
Xylene	106/91	210.79	12.998	0.185	0.617
			Average:	0.43	1.4

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

TABLE 3 (continued)
Summary of Detection and Quantitation Limit Data in ppbv for 21 March to 20 May 2019
Intercontinental Terminals Company
Deer Park, Texas
August 2019

Calibration Files: 64MSMS01231 and 64MSMS01235 on 20 May 2019
Used for Survey Files: 64MSMS01232, 64MSMS01233, and 64MSMS01234

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	9.0383	5.4762	1.82	6.06
Benzene	78/52	62.399	10.826	0.520	1.73
			Average:	1.2	3.9
Toluene	92/65	57.867	11.018	0.571	1.90
Toluene	92/91	225.83	22.046	0.293	0.976
			Average:	0.43	1.4
Xylene	106/65	23.895	7.7961	0.979	3.26
Xylene	106/91	210.48	22.976	0.327	1.09
			Average:	0.65	2.2

Calibration Files: 64MSMS01235_MD and 64MSMS01239 on 20 May 2019
Used for Survey Files: 64MSMS01236, 64MSMS01237 and 64MSMS01238

Compound	PM/DM	Intermediate Response Factor (icps/ppbv)	Standard Deviation (icps)	Detection Limit (ppbv)	Quantitation Limit (ppbv)
Benzene	78/39	9.1947	4.0175	1.31	4.37
Benzene	78/52	62.857	6.3445	0.303	1.01
			Average:	0.81	2.7
Toluene	92/65	58.763	7.1012	0.363	1.21
Toluene	92/91	222.25	14.938	0.202	0.672
			Average:	0.28	0.94
Xylene	106/65	21.835	5.1544	0.708	2.36
Xylene	106/91	210.30	8.9730	0.128	0.427
			Average:	0.42	1.4

PM/DM = Parent Mass/Daughter Mass
icps = ion counts per second
ppbv = parts per billion by volume

FIGURES

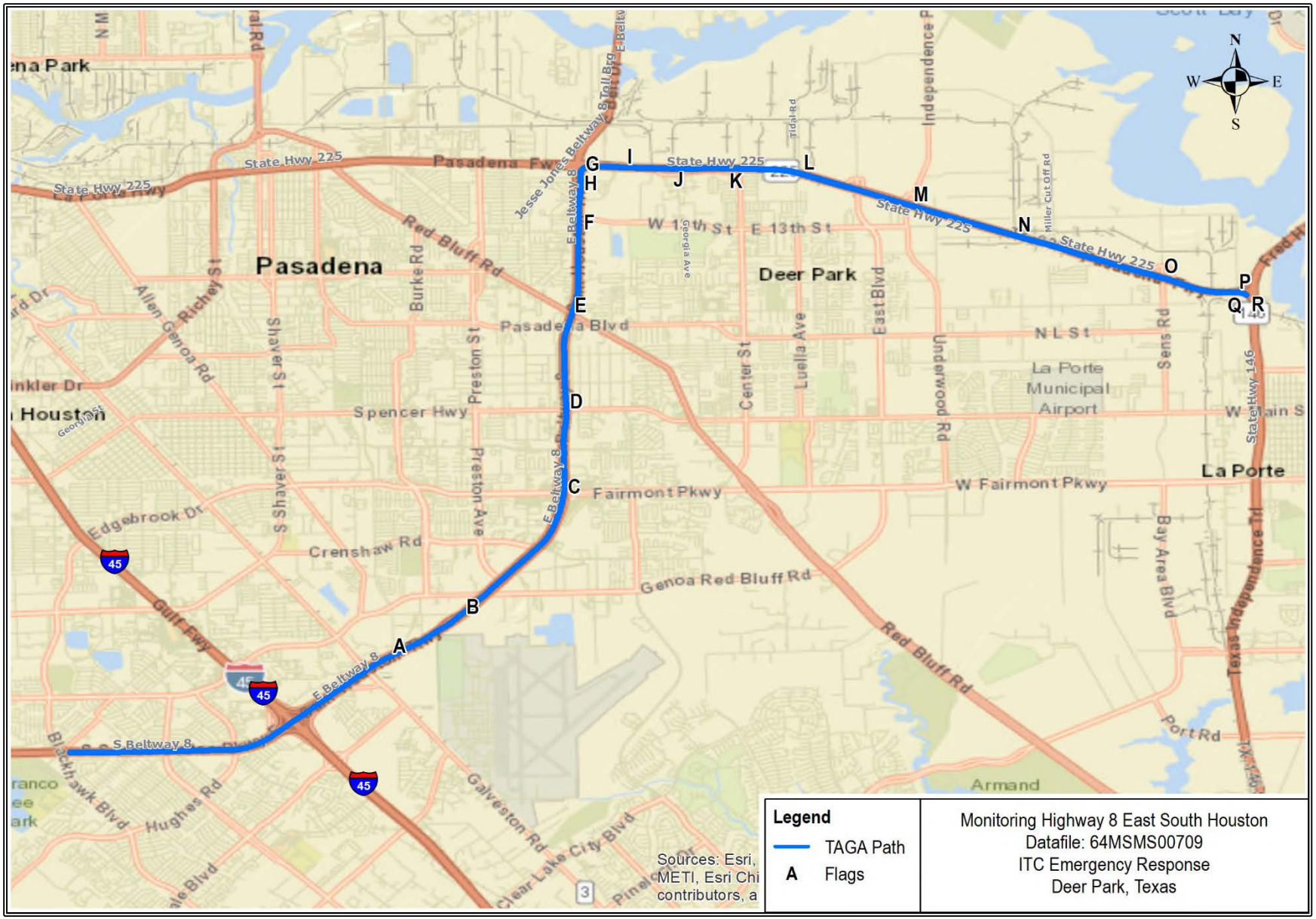


Figure 1a Monitoring Highway 8 East South Houston Path, 64MSMS00709

Figure 1b

TAGA File Event Summary
File: 64MSMS00709 Acquired on 21 March 2019 at 08:54:24
Title: Monitoring Highway 8 East South Houston

Flag	Time	Sequence	Description
A	5.1	487	Start mobile monitoring Highway 8 East
B	7.3	692	Cross Genoa Red Bluff Road
C	9.0	858	Cross Fairmont Parkway
D	10.2	967	Cross Spencer Highway
E	11.6	1102	Cross Red Bluff Road
F	12.9	1230	Cross Greenshadow Drive
G	14.1	1344	Stationary on Pasadena Freeway on-ramp
H	18.7	1775	Highway 225 East on-ramp
I	21.6	2053	Cross Boggy Bayou
J	23.1	2197	Cross Georgia Avenue
K	25.4	2412	Cross Center Street
L	27.6	2628	Cross Tidal Road
M	31.1	2956	Cross Independence Parkway
N	35.3	3353	Cross Miller Cut-off Road
O	38.6	3672	Cross Sens Road
P	41.1	3910	Stationary on Highway 146 ramp – End mobile monitoring
Q	41.3	3923	Start Ambient
R	42.3	4018	End Ambient
S	42.5	4044	Start 30 mL/min Spike
T	43.7	4155	End 30 mL/min Spike

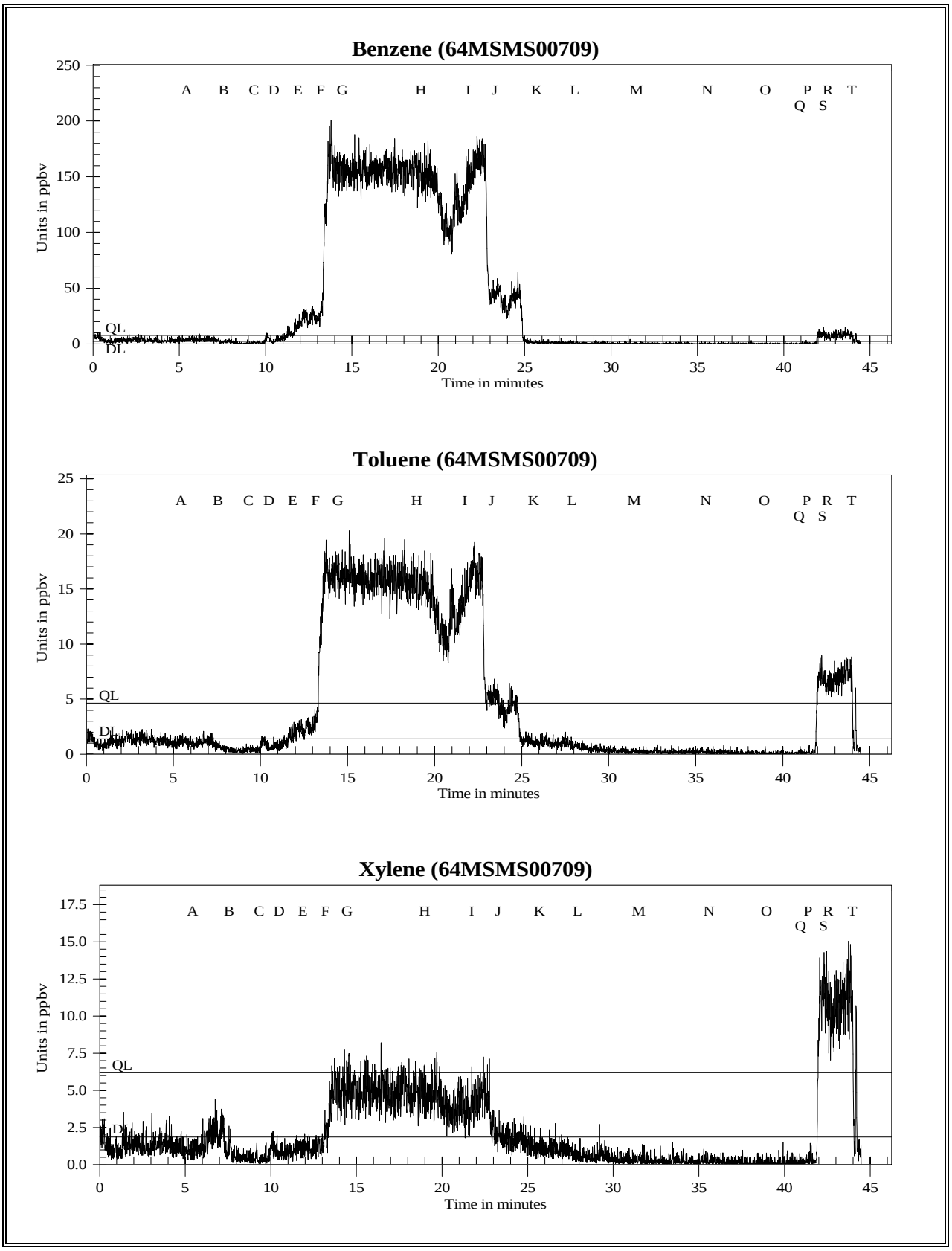


Figure 1c Monitoring Highway 8 East South Houston in ppbv for Benzene, Toluene, and Xylenes

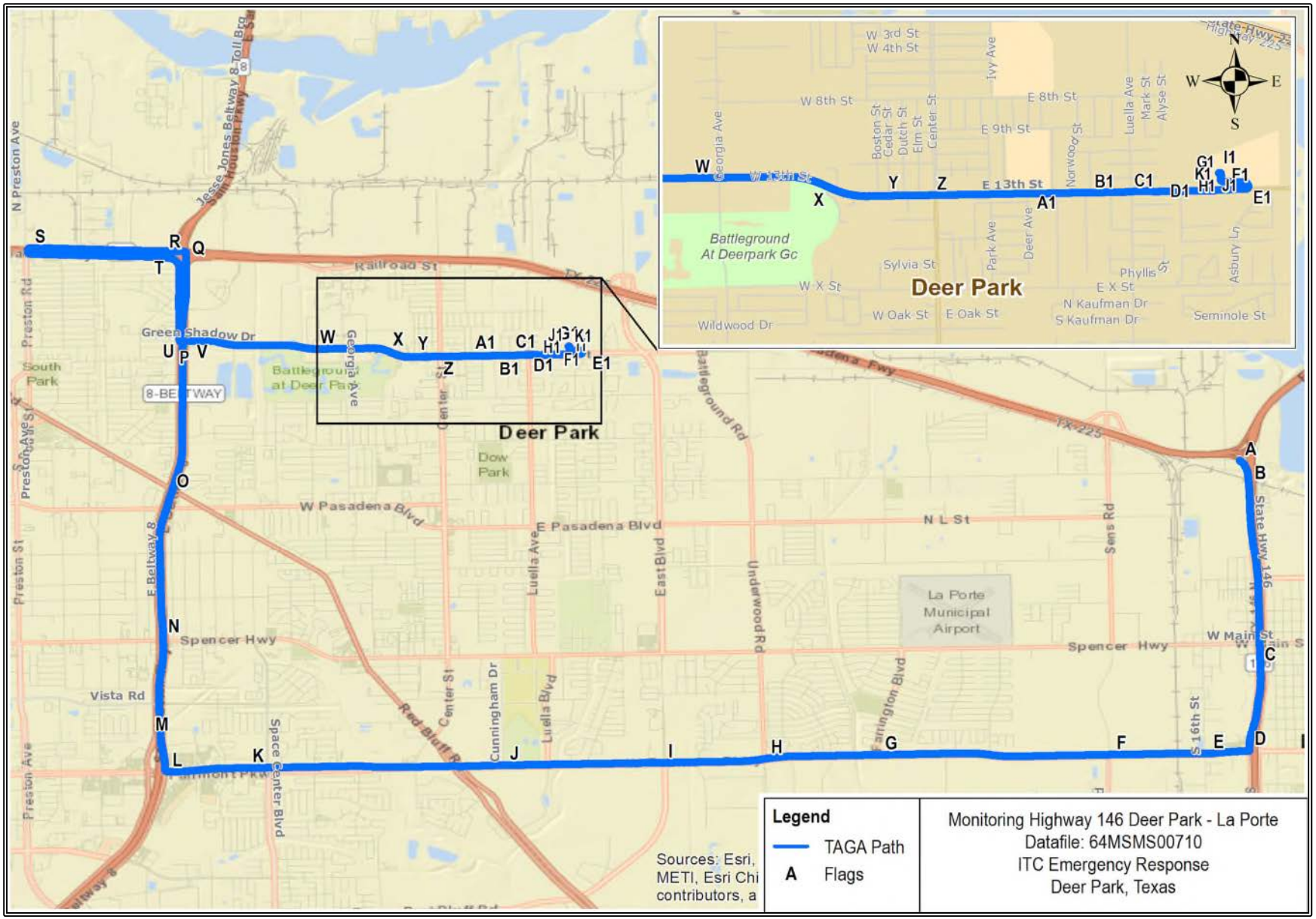


Figure 2a Monitoring Highway 146 South Deer Park, 64MSMS00710

Figure 2b

TAGA File Event Summary
File: 64MSMS00710 Acquired on 21 March 2019 at 09:42:41
Title: Monitoring Highway 146 South Deer Park / La Porte

Flag	Time	Sequence	Description
A	0.5	53	Starting mobile monitoring on Highway 146 South on-ramp
B	1.1	105	Merge onto Highway 146 South
C	2.9	278	Cross West Main Street
D	4.4	416	Right turn onto Fairmont Parkway
E	5.5	527	Traffic light at South 16th Street
F	8.3	791	Cross Bay Area Boulevard
G	12.8	1219	Cross Farrington Street
H	15.3	1457	Cross Underwood Road
I	17.3	1647	Cross Genoa Red Bluff Road
J	19.5	1853	Cross Cunningham Drive
K	24.0	2287	Cross Space Center Boulevard
L	26.3	2503	Right turn onto Highway 8 East ramp
M	28.0	2667	Cross Vista Road
N	28.6	2723	Cross Spencer Highway
O	30.0	2854	Cross Red Bluff Road
P	31.4	2986	Cross Green Shadows Drive
Q	33.4	3173	Stationary at Highway 225
R	34.6	3289	Left turn onto Highway 225 West
S	37.3	3548	U-turn on Highway 225 at Preston Road
T	41.0	3900	Right turn onto Highway 8 West on-ramp
U	43.0	4087	Stationary at Greenshadow Drive
V	48.1	4578	Left turn Greenshadow Drive
W	55.6	5283	Cross Georgia Avenue on West 13th Street
X	58.1	5520	Exiting plume near Battleground Golf Club
Y	59.6	5668	Cross Cedar Street
Z	61.7	5863	Cross Center Street
A1	64.2	6106	Cross Deer Avenue
B1	65.7	6244	Cross Kenny Street
C1	66.7	6339	Cross Luella Avenue
D1	68.4	6500	Passing San Jacinto Elementary School
E1	69.7	6632	Left turn into San Jacinto Elementary School
F1	71.6	6811	Stationary monitoring at San Jacinto Elementary School
G1	86.4	8218	Ending stationary monitoring at San Jacinto Elementary School
H1	86.5	8225	Start ambient

Figure 2b (continued)

TAGA File Event Summary
File: 64MSMS00710 Acquired on 21 March 2019 at 09:42:41
Title: Mobile Monitoring Highway 146 South Deer Park / LaPorte

Flag	Time	Sequence	Description
I1	87.5	8320	End ambient
J1	88.0	8370	Start 30 mL/min spike
K1	89.2	8481	End 30 mL/min spike

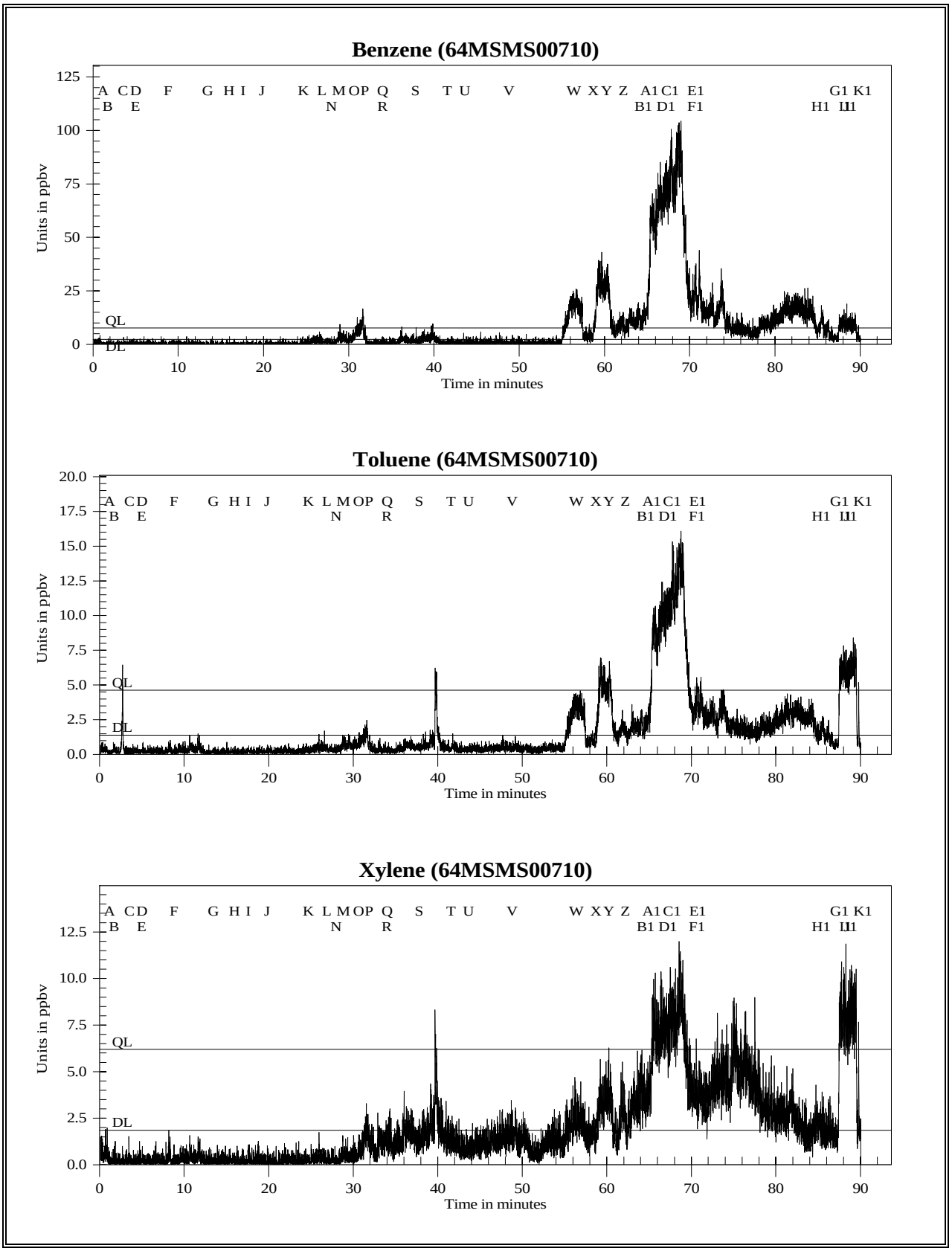


Figure 2c Monitoring Highway 146 South Deer Park in ppbv for Benzene, Toluene, and Xylenes

Figure 3a Stationary Monitoring San Jacinto Elementary Location, 64MSMS00711

Figure 3b

TAGA File Event Summary
File: 64MSMS00711 Acquired on 21 March 2019 at 11:15:25
Title: Stationary Monitoring San Jacinto Elementary

Flag	Time	Sequence	Description
A	1.0	96	Starting stationary monitoring at San Jacinto Elementary
B	33.0	3139	Start ambient
C	34.0	3234	End ambient
D	35.0	3328	Start of 30 mL/min spike
E	37.0	3519	End of 30 mL/min spike

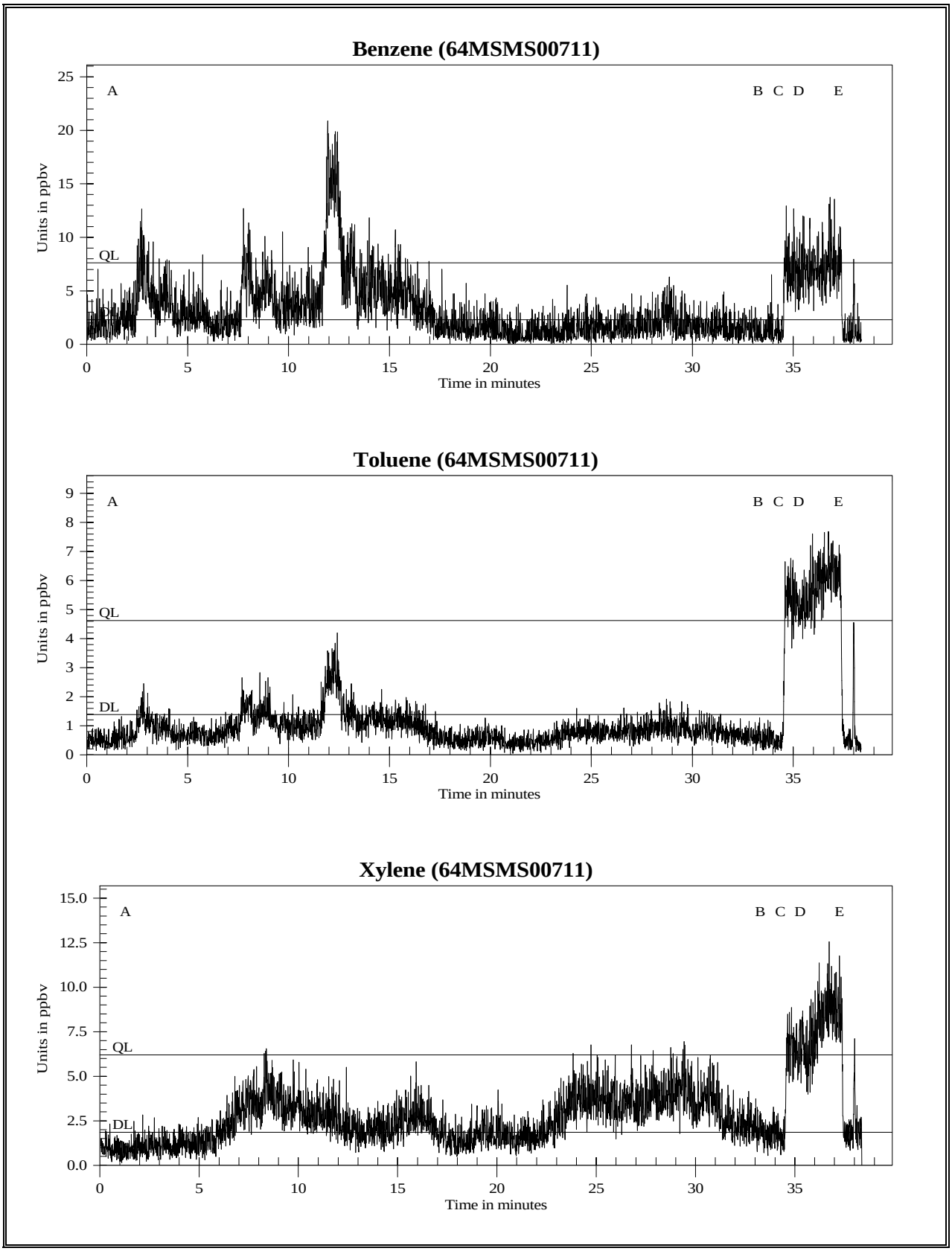


Figure 3c Stationary Monitoring San Jacinto Elementary in ppbv for Benzene, Toluene, and Xylenes

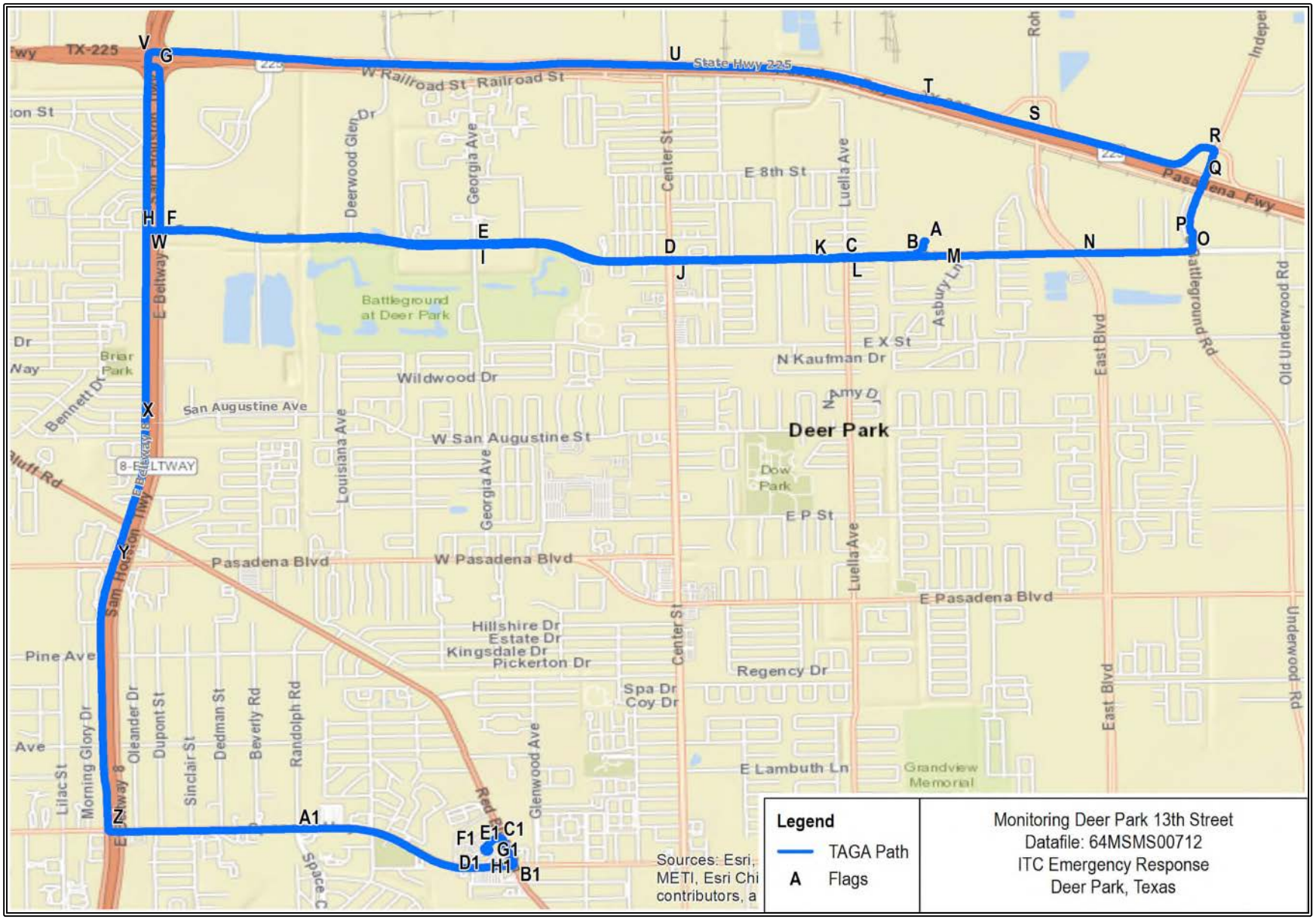


Figure 4a Monitoring Deer Park 13th Street Path, 64MSMS00712

Figure 4b

TAGA File Event Summary
File: 64MSMS00712 Acquired on 21 March 2019 at 11:56:46
Title: Monitoring Deer Park – 13th Street

Flag	Time	Sequence	Description
A	0.6	62	Start mobile monitoring at San Jacinto Elementary School
B	1.9	177	Right turn onto 13th Street
C	3.6	346	Cross Luella Avenue
D	7.6	723	Cross Center Street
E	11.2	1070	Cross Georgia Avenue
F	15.9	1511	Right turn onto Highway 8 Service Road
G	18.2	1733	U-turn on Highway 8 Service Road
H	20.9	1992	Left turn onto Greenshadow Drive
I	25.4	2412	Cross Georgia Avenue
J	28.8	2742	Cross Center Street
K	30.7	2921	Cross Kenny Street
L	31.5	3000	Cross Luella Avenue
M	32.5	3086	Passing San Jacinto Elementary School
N	35.3	3357	Cross East Boulevard
O	37.9	3605	Turning left onto Battleground Road
P	39.9	3792	Left turn onto Battleground Road
Q	40.8	3878	Cross Highway 225
R	42.6	4047	Left turn onto Pasadena Freeway Frontage Road
S	47.6	4529	Cross East Boulevard
T	49.1	4667	Merge onto Highway 225 West
U	50.9	4840	Cross Center Street
V	56.0	5328	Left turn onto Highway 8 Service Road
W	58.4	5556	Cross Greenshadow Drive
X	60.7	5773	Cross San Augustine Avenue
Y	63.2	6006	Cross Pasadena Boulevard
Z	66.6	6336	Left turn onto Spencer Highway
A1	68.5	6510	Cross Space Center Boulevard
B1	71.5	6803	Left turn onto Red Bluff Road
C1	72.1	6852	Left turn into Crossroads Shopping Center
D1	73.3	6968	Ending mobile monitoring at shopping center
E1	73.5	6989	Start ambient
F1	74.5	7084	End ambient
G1	74.7	7104	Start of 30 mL/min spike
H1	76.4	7266	End of 30 mL/min spike

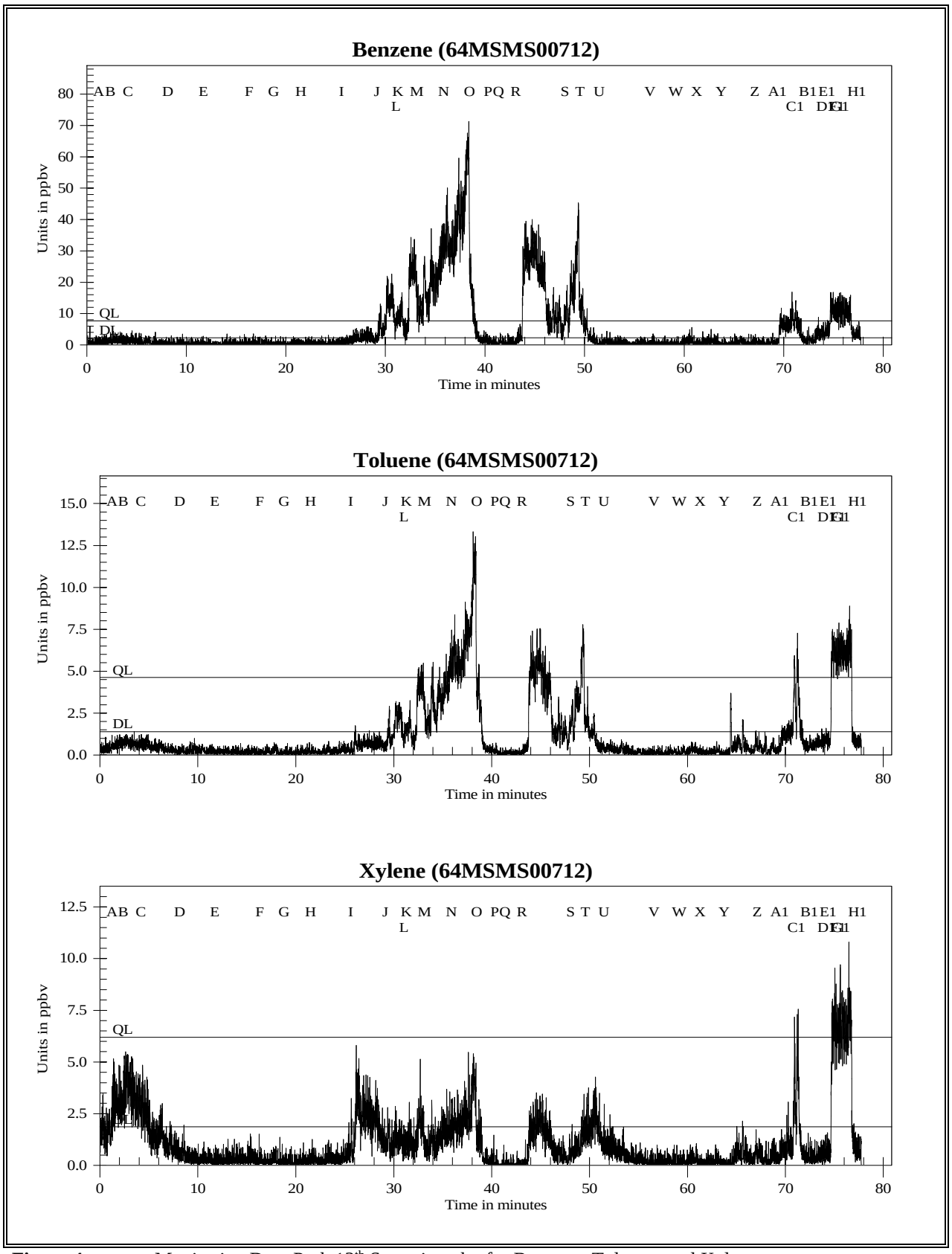


Figure 4c Monitoring Deer Park 13th Street in ppbv for Benzene, Toluene, and Xylenes

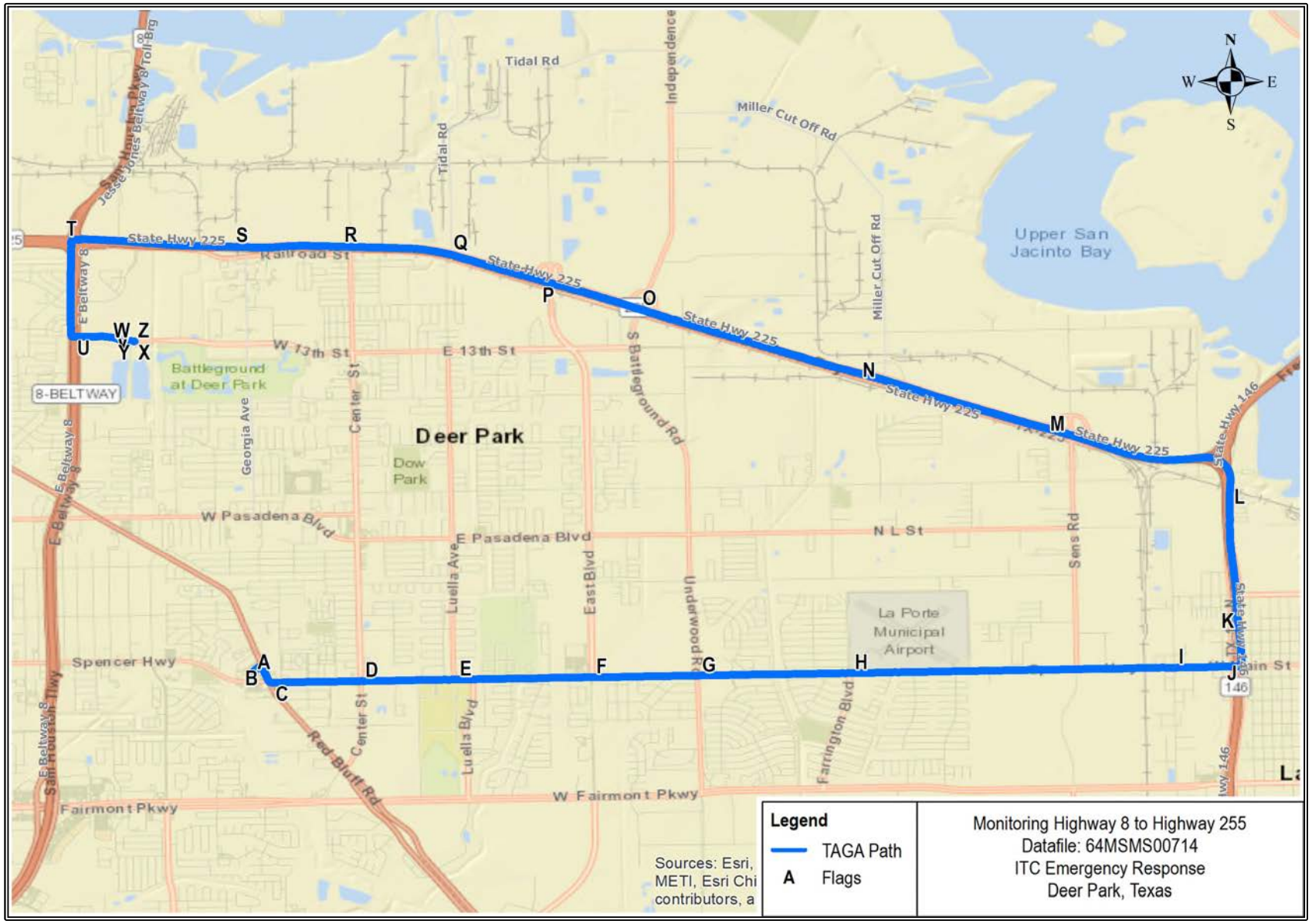


Figure 5a Monitoring Highway 8 East to Highway 225 Path, 64MSMS00714

Figure 5b

TAGA File Event Summary
File: 64MSMS00714 Acquired on 21 March 2019 at 14:35:42
Title: Monitoring Highway 8 East to Highway 255

Flag	Time	Sequence	Description
A	1.6	157	Starting mobile monitoring at Crossroad Center
B	3.2	305	Turning right onto Red Bluff Road
C	5.2	495	Turning left onto Spencer Highway
D	6.5	615	Crossing the intersection of Center Street on Spencer Highway
E	7.8	742	Crossing the intersection of Luella Boulevard on Spencer Highway
F	10.0	947	Crossing the intersection of Canada on Spencer Boulevard
G	12.3	1172	Crossing the intersection of Underwood Road on Spencer Boulevard
H	16.0	1525	Crossing the intersection of Farrington Street on Spencer Boulevard
I	20.0	1904	Crossing the intersection of South 16th Street on Spencer Boulevard
J	21.9	2084	Turning left onto North 9th Street
K	22.7	2160	Merging onto Highway 146 North
L	23.9	2273	Merging onto Highway 255 East Frontage Road
M	25.5	2422	Passing under Sens Road overpass
N	28.2	2683	Passing under Miller Cut Off Road overpass
O	32.1	3049	Passing under Battleground Road overpass
P	33.8	3213	Passing under East Boulevard overpass
Q	36.1	3434	Passing over Tidal Road on Highway 22 East
R	39.0	3710	Passing over Center Street on Highway 22 East
S	41.4	3935	Passing Georgia Avenue
T	44.7	4252	Turning left onto Highway 8 West Frontage Road
U	46.3	4404	Turning left onto Greenshadow Drive
V	47.7	4539	Ending mobile monitoring at Jana Lane
W	48.2	4583	Start of the post-run ambient
X	49.2	4680	End of the post-run ambient
Y	50.6	4814	Start of 30 mL/min spike
Z	51.7	4913	End of 30 mL/min spike

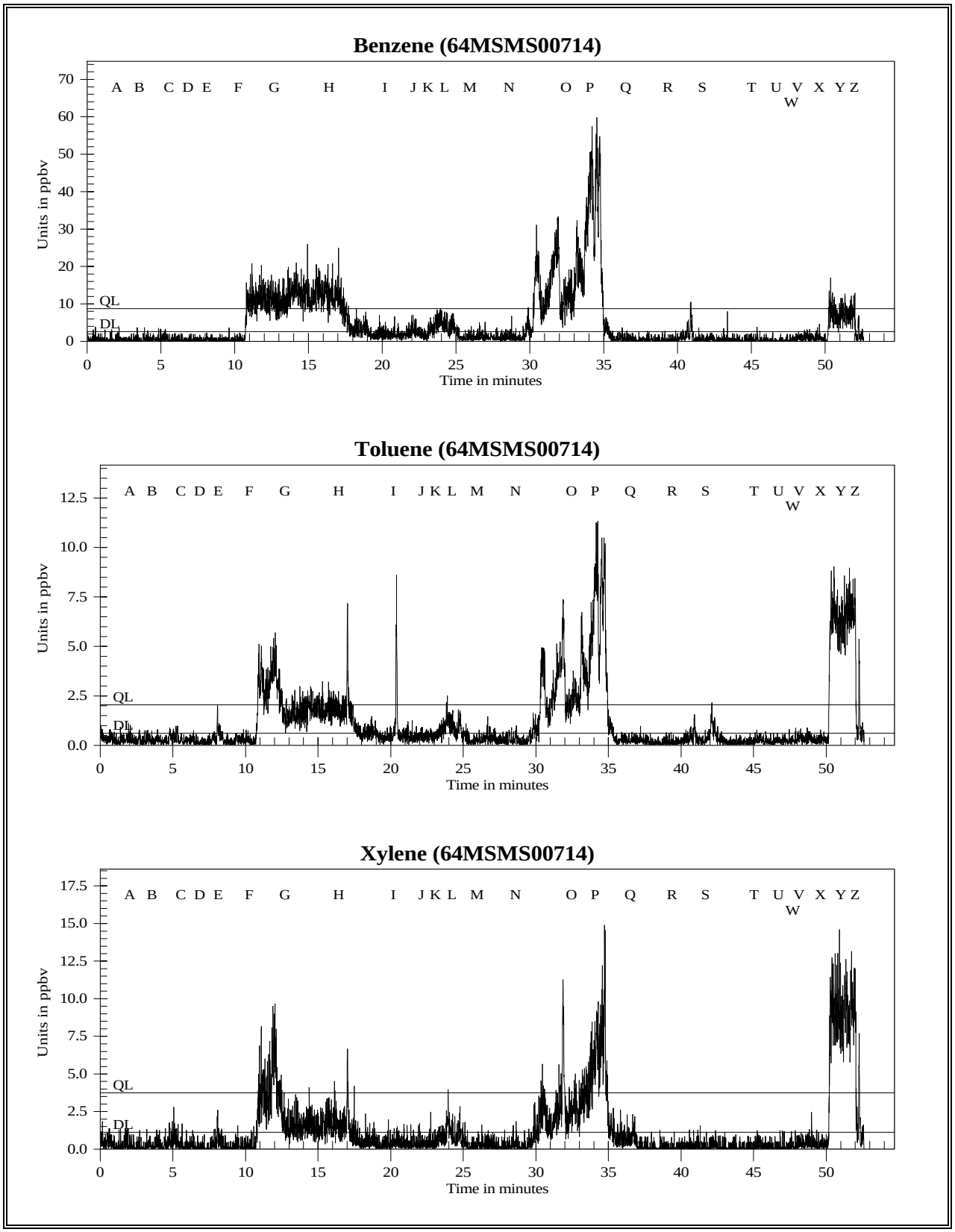


Figure 5c Monitoring Highway 8 East to Highway 225 in ppbv for Benzene, Toluene, and Xylenes

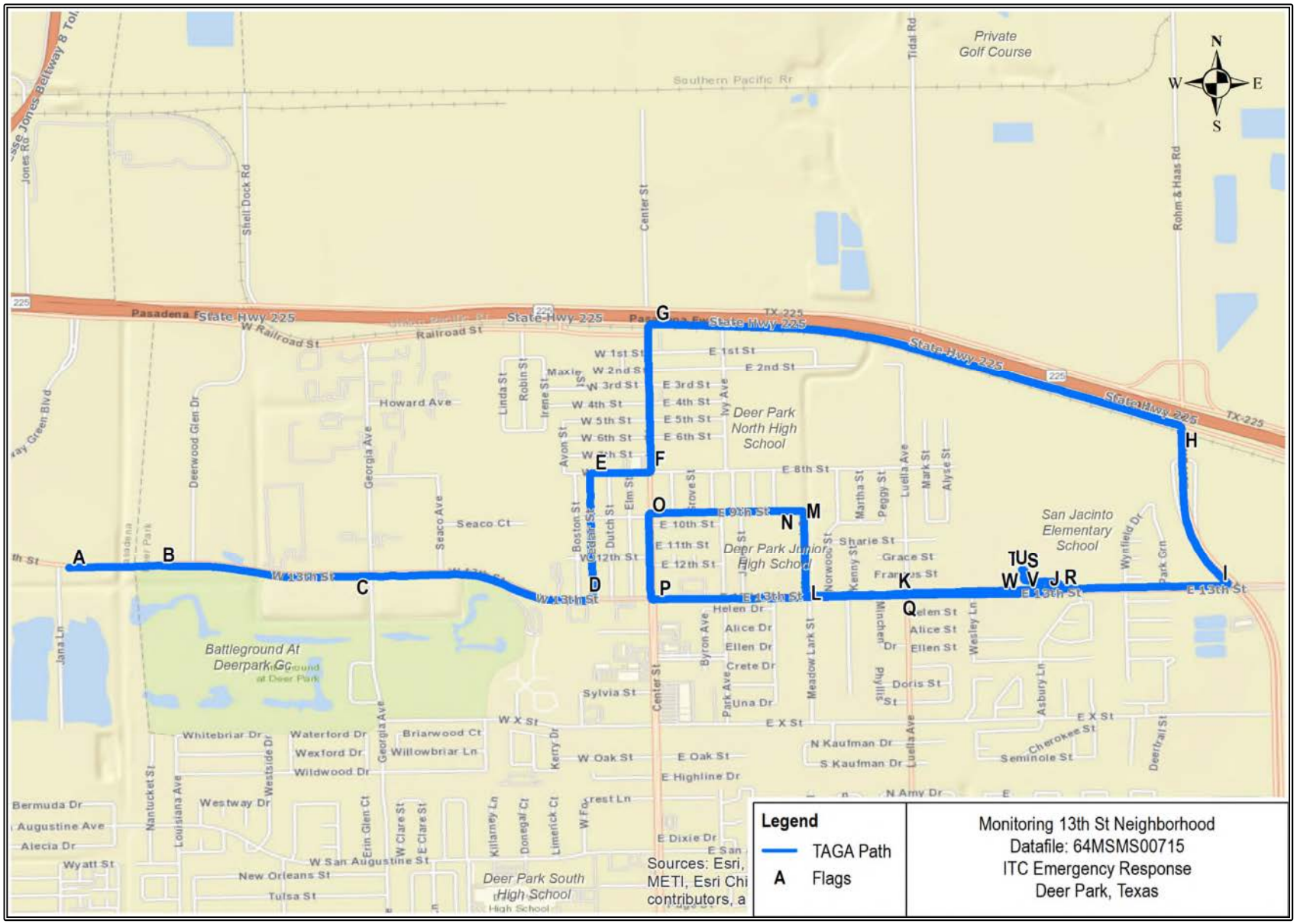


Figure 6a Monitoring 13th Street Neighborhood Path, 64MSMS00715

Figure 6b

TAGA File Event Summary
File: 64MSMS00715 Acquired on 21 March 2019 at 15:30:27
Title: Monitoring 13th Street Neighborhood

Flag	Time	Sequence	Description
A	0.7	64	Starting mobile monitoring at Jana Lane
B	2.7	259	Continuing east on Greenshadow Drive
C	5.7	544	Cross Georgia Avenue
D	8.3	790	Left turn onto Cedar Street
E	12.3	1167	Right turn onto West 8th Street
F	13.2	1260	Left turn onto Center Street
G	16.2	1539	Right turn onto Pasadena Freeway Frontage Road
H	21.8	2072	Right turn onto East Boulevard
I	23.8	2262	Right turn onto East 13th Street
J	26.1	2485	Passing San Jacinto Elementary School
K	28.1	2674	Cross Luella Ave
L	29.7	2829	Right turn onto Meadowlark Lane
M	31.8	3024	Left turn; continuing on Meadowlark Lane
N	32.4	3083	Passing Deer Park Junior High School
O	35.2	3347	Left turn onto Center Street
P	36.5	3468	Left turn onto East 13th Street
Q	39.7	3772	Luella Ave
R	41.4	3937	Left turn into San Jacinto Elementary School
S	42.1	4000	Ending mobile monitoring at San Jacinto Elementary School
T	42.3	4024	Start Ambient
U	43.3	4120	End Ambient
V	44.7	4255	Start 30 mL/min spike
W	45.8	4353	End 30 mL/min spike

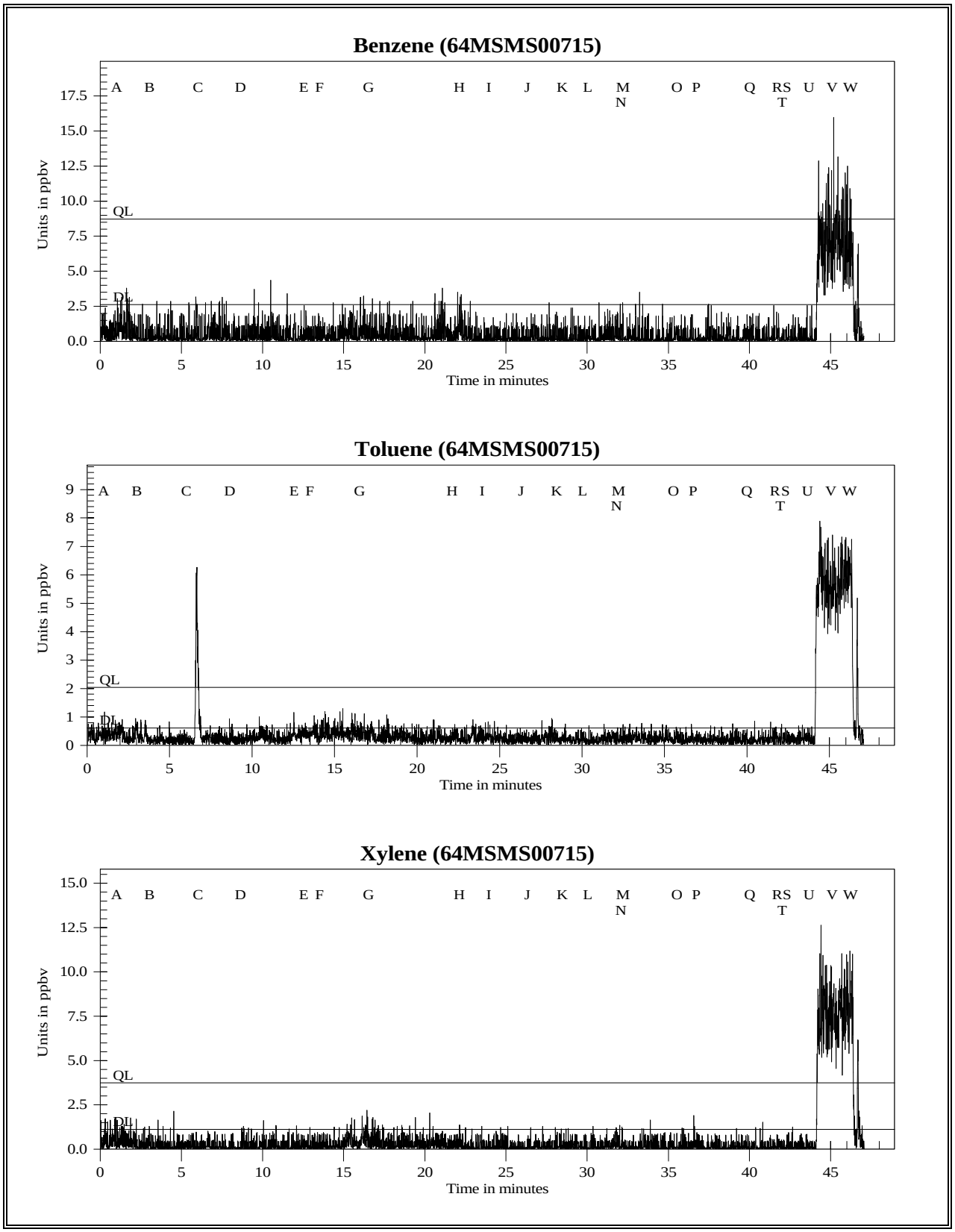


Figure 6c Neighborhood Monitoring 13th Street in ppbv for Benzene, Toluene, and Xylenes

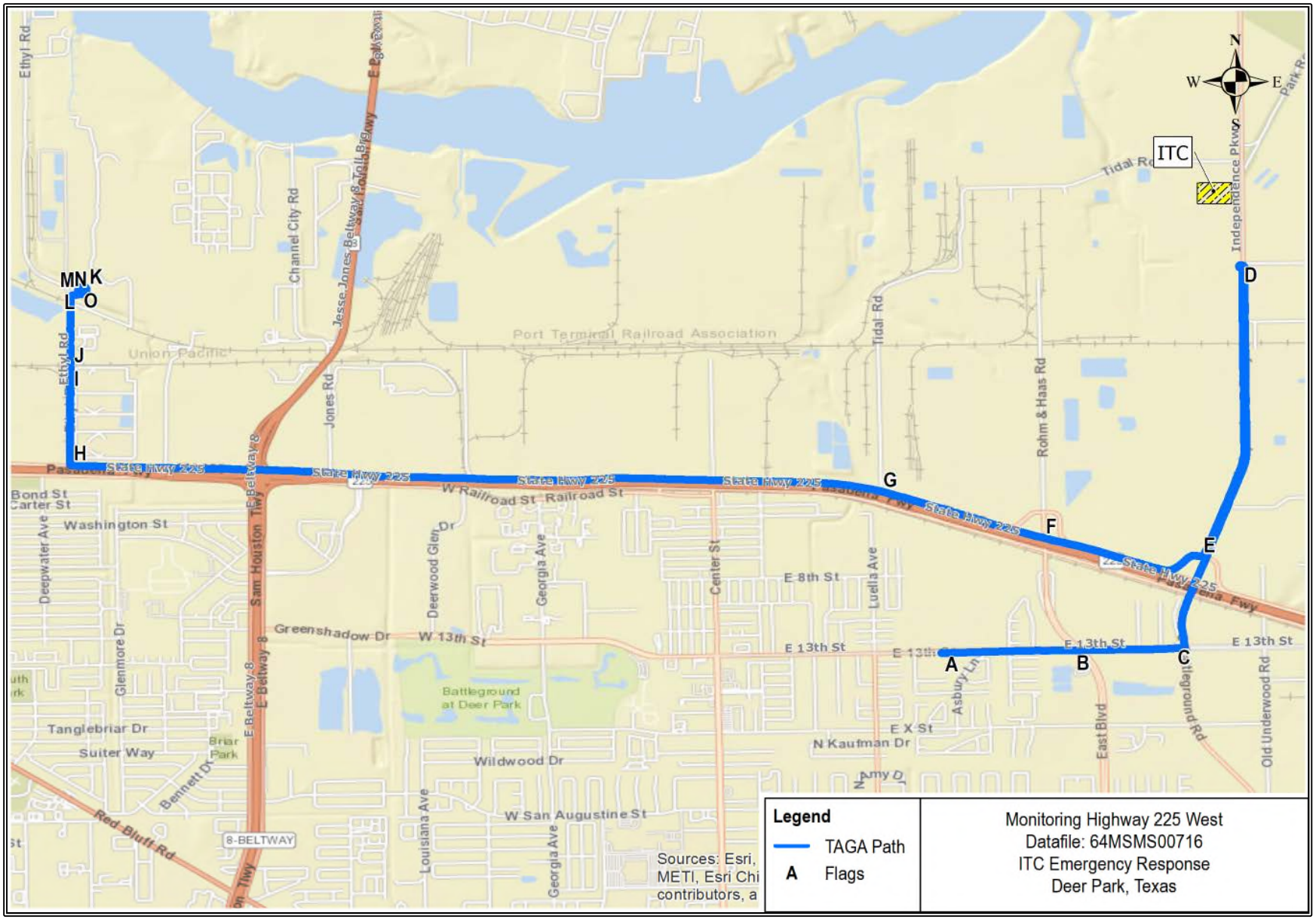


Figure 7a Monitoring Highway 225 West Path, 64MSMS00716

Figure 7b

TAGA File Event Summary
File: 64MSMS00716 Acquired on 21 March 2019 at 16:21:15
Title: Monitoring Highway 225 West

Flag	Time	Sequence	Description
A	0.9	89	Starting mobile monitoring at East 13th Street
B	2.5	234	Cross East Boulevard
C	3.9	373	Left turn onto Battleground Road
D	13.6	1298	U-turn at the ITC site
E	21.1	2007	Right turn onto Pasadena Freeway Frontage Road
F	23.0	2184	Cross East Boulevard
G	25.3	2404	Cross Tidal Road
H	36.1	3434	Right turn onto Ethyl Road
I	39.1	3716	Stationary at railroad crossing
J	39.5	3754	Resuming mobile monitoring
K	41.6	3957	Ending mobile monitoring at EPA Command Post
L	44.1	4193	Start Ambient
M	45.1	4293	End Ambient
N	46.8	4450	Start 30 mL/min spike
O	48.2	4585	End 30 mL/min spike

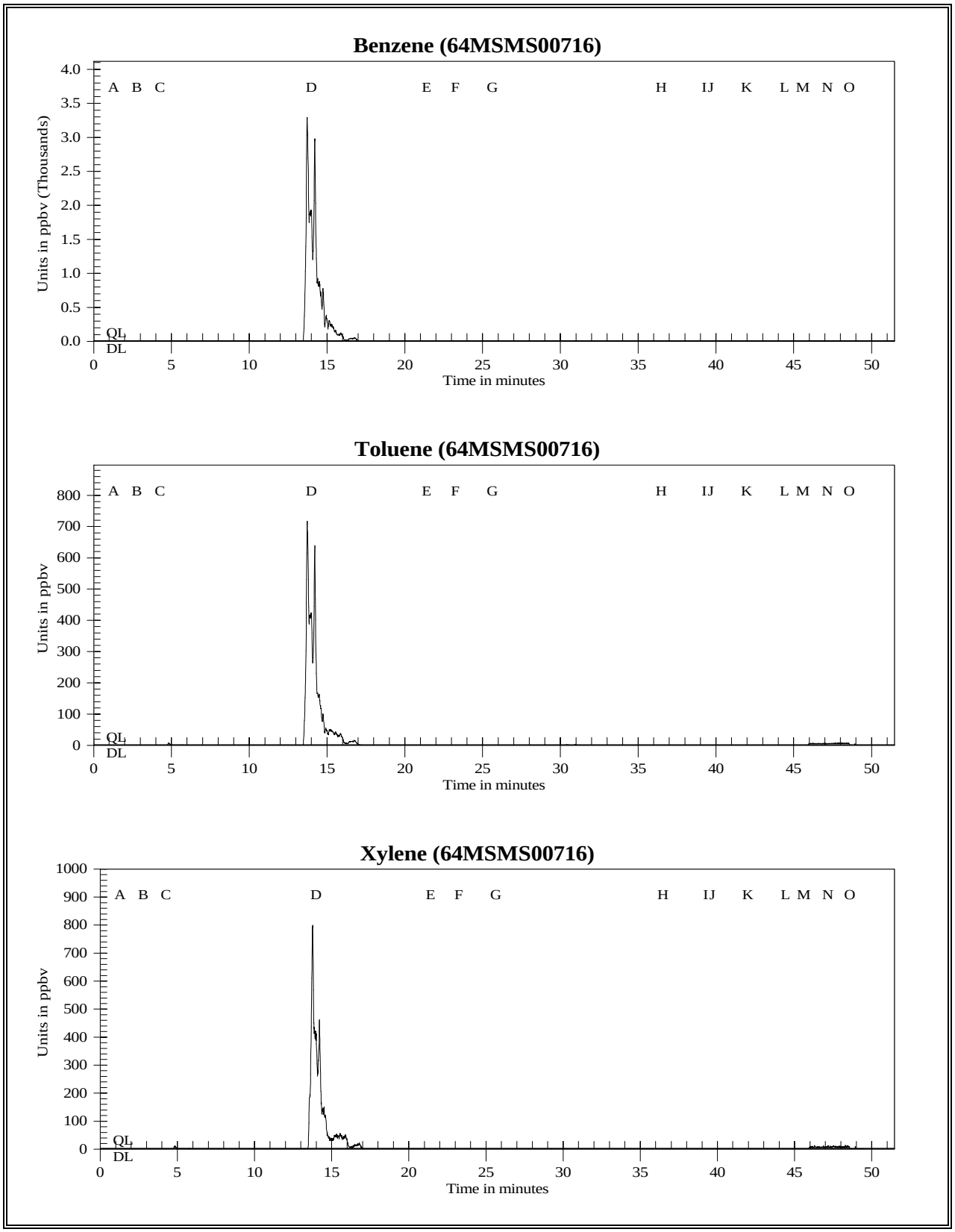


Figure 7c Monitoring Highway 225 West in ppbv for Benzene, Toluene, and Xylenes

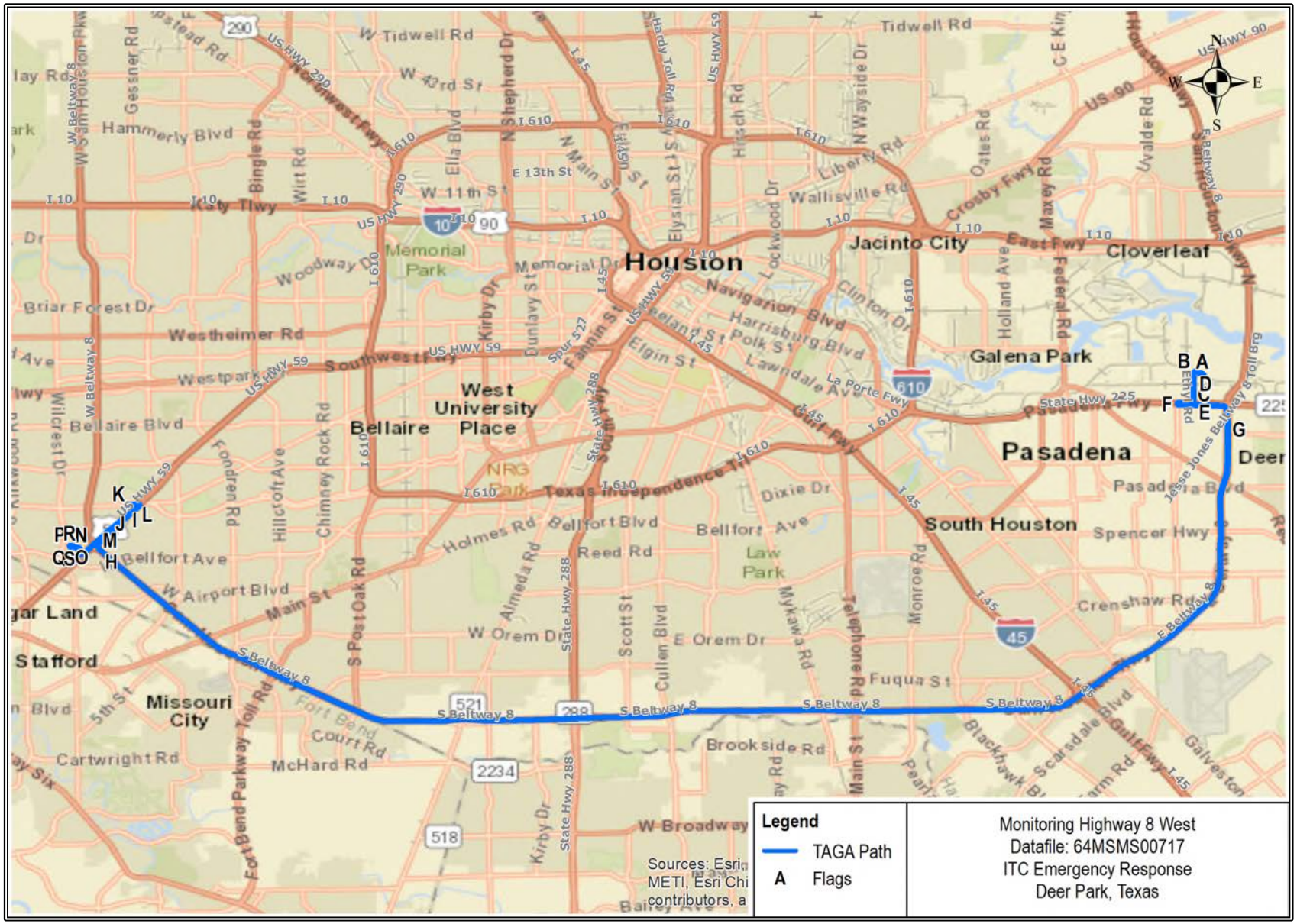


Figure 8a Monitoring Highway 8 West Path, 64MSMS00717

Figure 8b

TAGA File Event Summary
File: 64MSMS00717 Acquired on 21 March 2019 at 18:09:42
Title: Monitoring Highway 8 West

Flag	Time	Sequence	Description
A	4.7	451	Starting mobile monitoring at EPA Command Post
B	5.9	558	Left turn onto Ethyl Road
C	8.1	772	Stationary at railroad crossing
D	9.4	899	Resuming mobile monitoring
E	11.0	1046	Right turn onto Pasadena Freeway Frontage Road
F	12.1	1149	U-turn onto Pasadena Freeway Frontage Road at Preston Road
G	14.4	1371	Continuing mobile monitoring on Highway 8 South
H	45.9	4360	Exit onto Highway 69 North
I	48.6	4621	U-turn onto Highway 69 South
J	49.6	4716	Right turn onto Plainfield Street
K	50.6	4816	Right turn onto Bissonnet Street
L	51.3	4876	Right turn onto Highway 69 South
M	53.5	5089	Exit onto Highway 69 South Frontage Road
N	55.9	5317	Arriving at the Region 6 Laboratory
O	56.5	5371	Ending mobile monitoring
P	60.7	5775	Start ambient
Q	63.5	6041	End ambient
R	64.7	6156	Start 30 mL/min spike
S	67.0	6369	End 30 mL/min spike

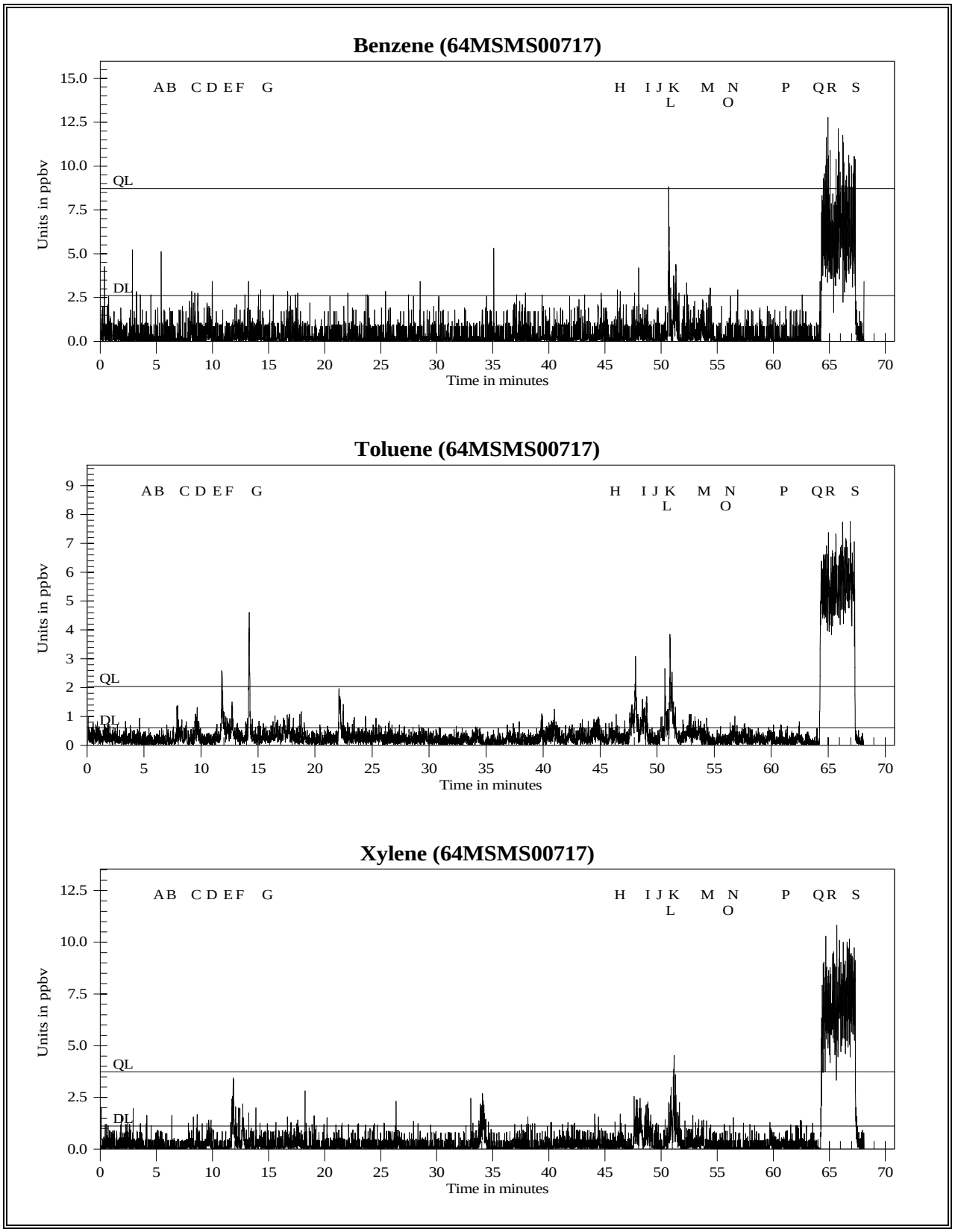


Figure 8c Monitoring Highway 8 West in ppbv for Benzene, Toluene, and Xylenes

Figure 9a Monitoring Highway 8 East to Highway 225 Path, 64MSMS00720

Figure 9b

TAGA File Event Summary
File: 64MSMS00720 Acquired on 22 March 2019 at 08:45:14
Title: Monitoring Highway 8 to Highway 225

Flag	Time	Sequence	Description
A	1.6	157	Starting mobile monitoring Highway 8 North at Highway 45
B	2.9	278	Cross State Highway 3
C	7.0	668	Cross Fairmont Parkway
D	8.1	771	Cross Spencer Highway
E	10.7	1015	Cross Greenshadow Drive
F	11.8	1118	Right turn onto Highway 225 East
G	13.9	1325	Exit toward Railroad Street
H	14.5	1382	Cross Georgia Avenue
I	16.3	1547	Right turn onto Center Street
J	16.5	1572	Left turn onto East 1st Street
K	17.5	1666	Left turn onto Ivy Avenue
L	17.9	1701	Right turn onto Pasadena Freeway Frontage Road
M	22.4	2133	Cross East Boulevard
N	25.2	2395	Left turn onto Independence Parkway
O	25.8	2457	Stationary downwind from the ITC Site on Independence Parkway
P	27.4	2610	Resuming mobile monitoring
Q	31.3	2980	U-turn at GEO Specialty Chemicals
R	34.5	3281	Right turn onto Pasadena Freeway Frontage Road
S	36.5	3469	Cross East Boulevard
T	39.7	3775	Cross Tidal Road
U	41.6	3960	Cross Center Street
V	47.3	4493	Cross Highway 8
W	48.4	4602	Right turn onto Ethyl Road
X	53.6	5096	Ending mobile monitoring at EPA Command Post
Y	58.4	5554	Start ambient
Z	59.9	5694	End ambient
A1	61.4	5840	Start 30 mL/min spike
B1	62.4	5935	End 30 mL/min spike

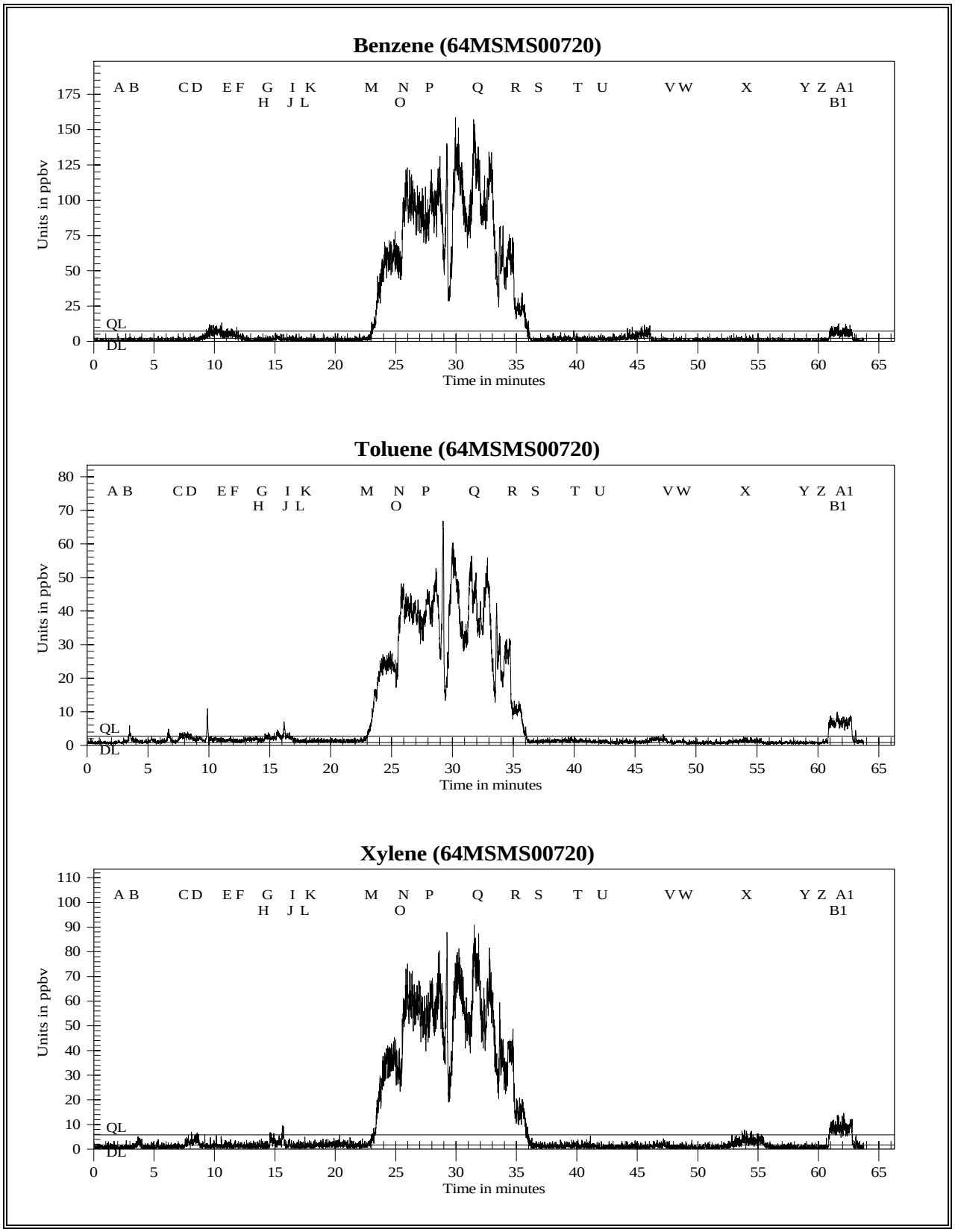


Figure 9c Monitoring Highway 8 East to Highway 225 in ppbv for Benzene, Toluene, and Xylenes

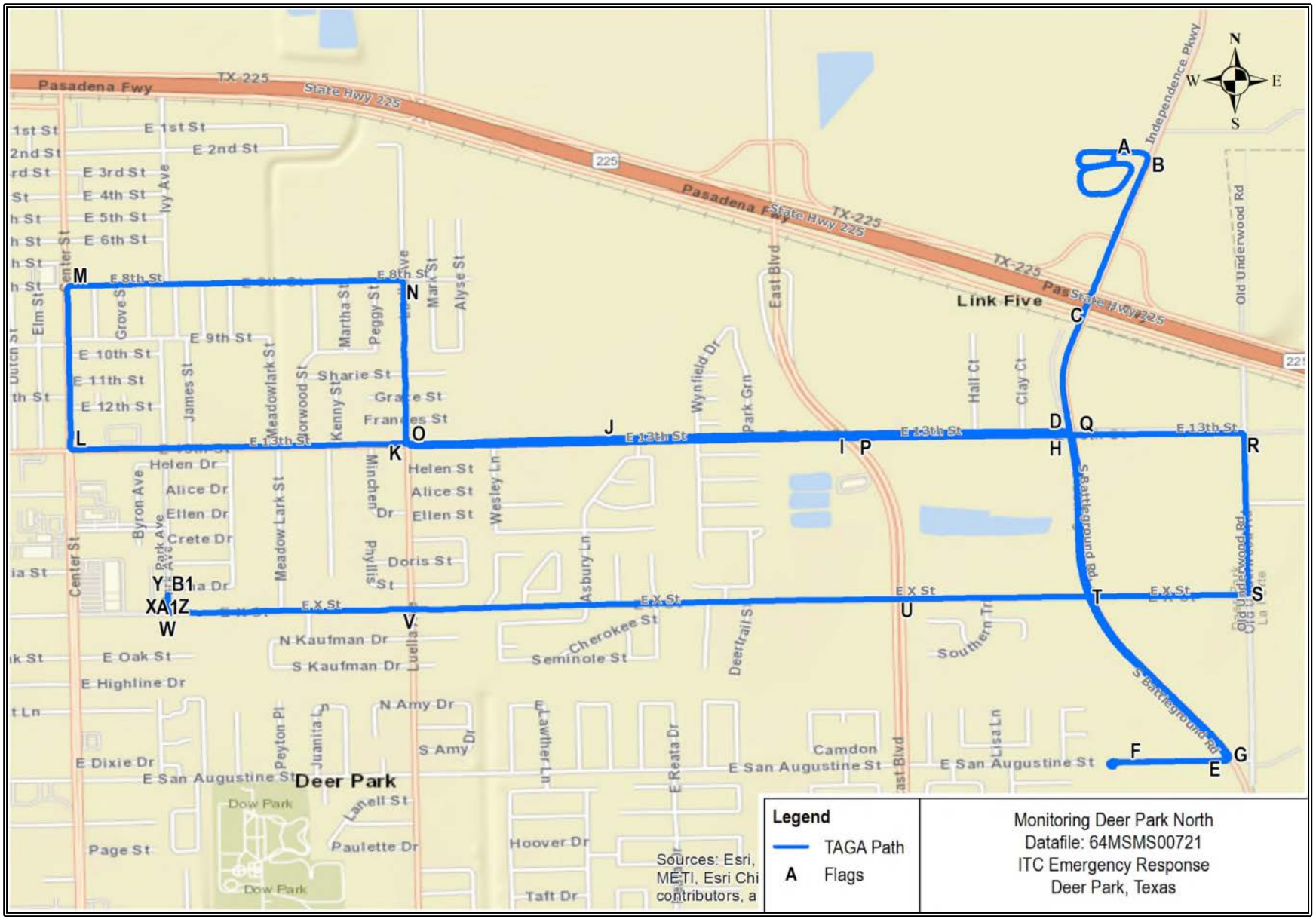


Figure 10a Monitoring Deer Park North Path, 64MSMS00721

Figure 10b

TAGA File Event Summary
File: 64MSMS00721 Acquired on 22 March 2019 at 11:22:30
Title: Monitoring Deer Park North

Flag	Time	Sequence	Description
A	2.7	253	Starting mobile monitoring at Love's Travel Stop
B	6.4	614	Right turn onto Independence Parkway
C	8.1	769	Cross Highway 225; continuing onto Battleground Road
D	9.0	861	Cross 13th Street
E	11.4	1080	Right turn onto San Augustine Street
F	12.9	1232	U-turn on San Augustine Street
G	14.3	1359	Left turn onto Battleground Road
H	17.5	1669	Left turn onto 13th Street
I	19.6	1861	Cross East Boulevard
J	21.3	2023	Passing San Jacinto Elementary School
K	23.0	2184	Cross Luella Avenue
L	26.3	2498	Right turn onto Center Street
M	27.7	2637	Right turn onto East 8th Street
N	31.0	2951	Right turn onto Luella Avenue
O	33.2	3159	Left turn onto East 13th Street
P	37.0	3520	Cross East Boulevard
Q	39.1	3721	Cross Battleground Road
R	40.7	3873	Right turn onto Old Underwood Road
S	42.3	4022	Right turn onto East Avenue X
T	43.7	4157	Cross Battleground Road
U	46.0	4371	Cross East Boulevard
V	50.1	4764	Cross Luella Avenue
W	52.2	4968	Right turn onto Park Avenue
X	52.6	5006	Ending mobile monitoring
Y	52.9	5033	Start ambient
Z	54.0	5139	End ambient
A1	55.9	5312	Start 30 mL/min spike
B1	56.9	5409	End 30 mL/min spike

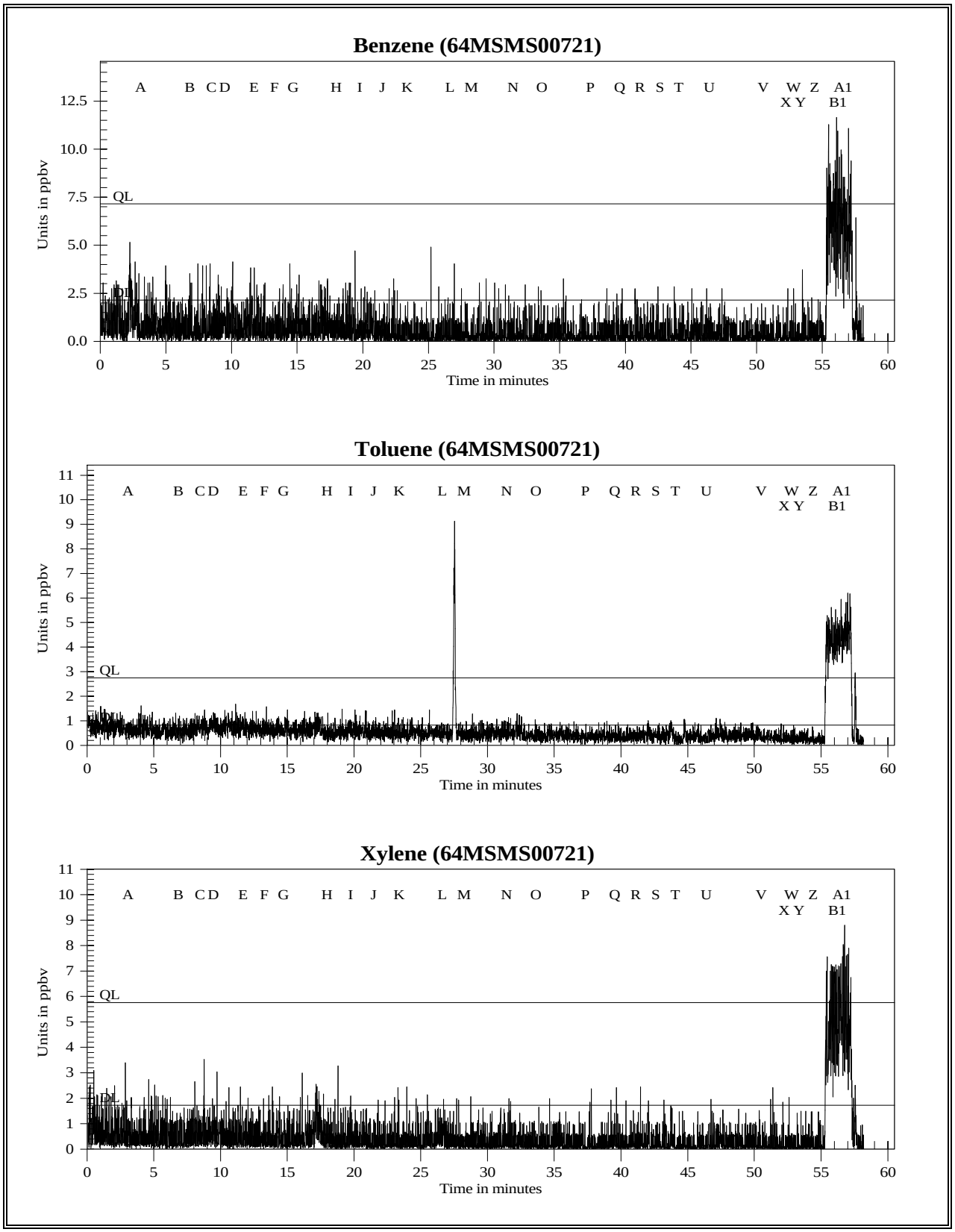


Figure 10c Monitoring Deer Park North in ppbv for Benzene, Toluene, and Xylenes

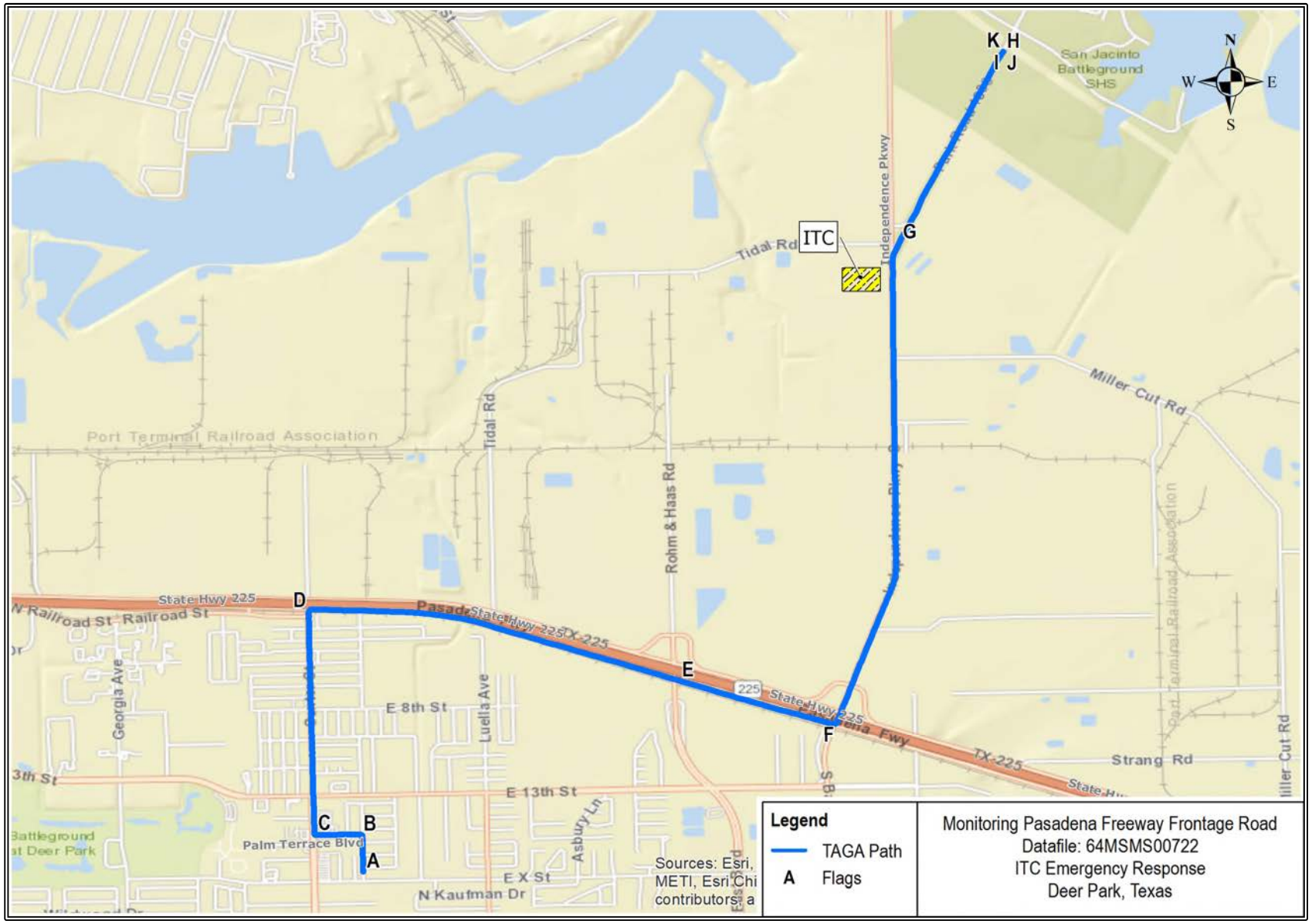


Figure 11a Monitoring Pasadena Freeway Frontage Road Path, 64MSMS00722

Figure 11b

TAGA File Event Summary
File: 64MSMS00722 Acquired on 22 March 2019 at 12:22:59
Title: Monitoring Pasadena Freeway Frontage Road

Flag	Time	Sequence	Description
A	0.5	50	Starting mobile monitoring on Park Avenue
B	1.7	161	Left turn onto Palm Terrace Boulevard
C	2.7	256	Right turn onto Center Street
D	7.9	753	Right turn onto Pasadena Freeway Frontage Road
E	13.7	1300	Cross East Boulevard
F	16.3	1550	Left turn onto Independence Parkway
G	25.5	2427	Ending mobile monitoring
H	25.9	2465	Start ambient
I	27.3	2595	End ambient
J	28.6	2716	Start 30 mL/min spike
K	29.9	2843	End 30 mL/min spike

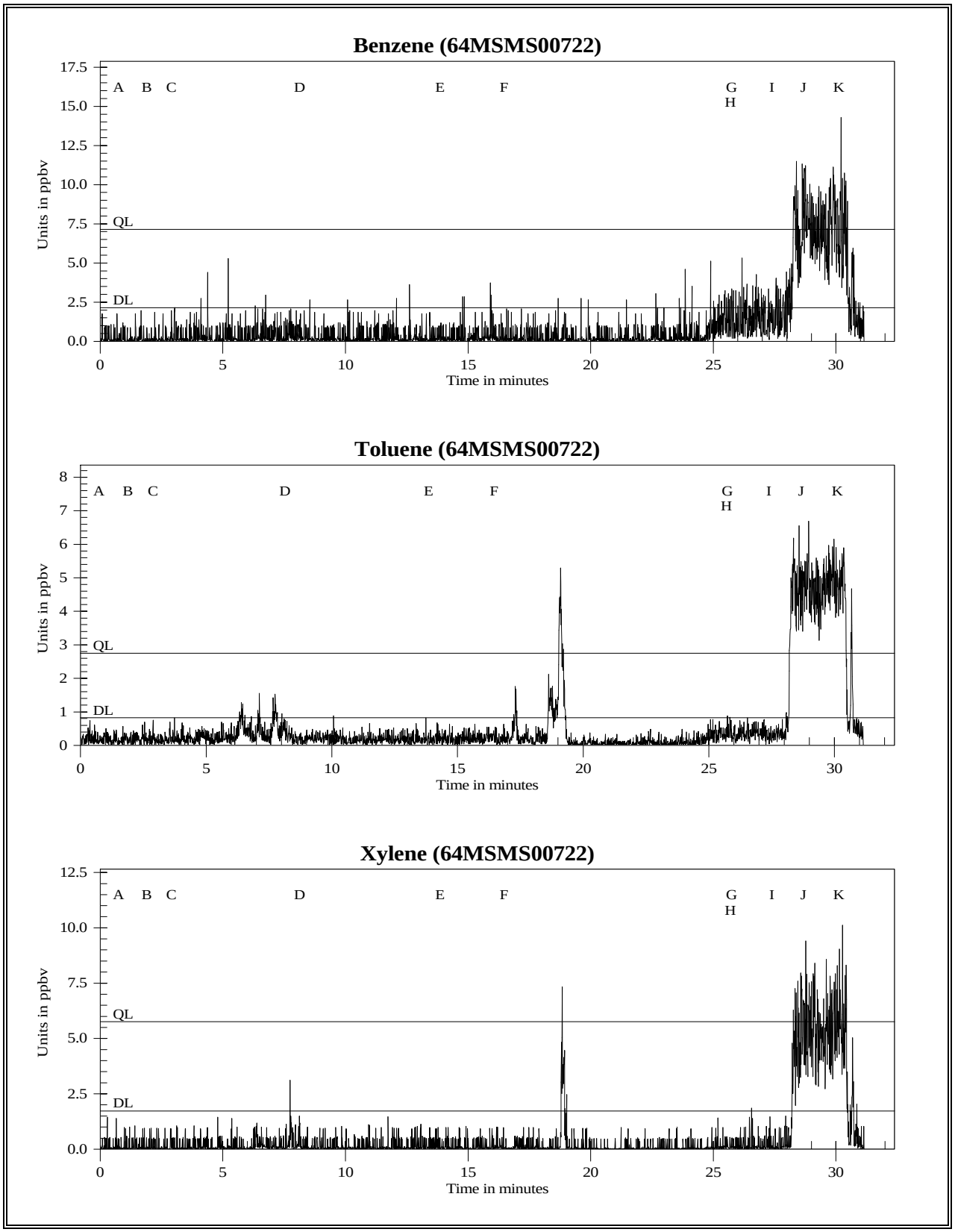


Figure 11c Monitoring Pasadena Freeway Frontage Road in ppbv for Benzene, Toluene, and Xylenes

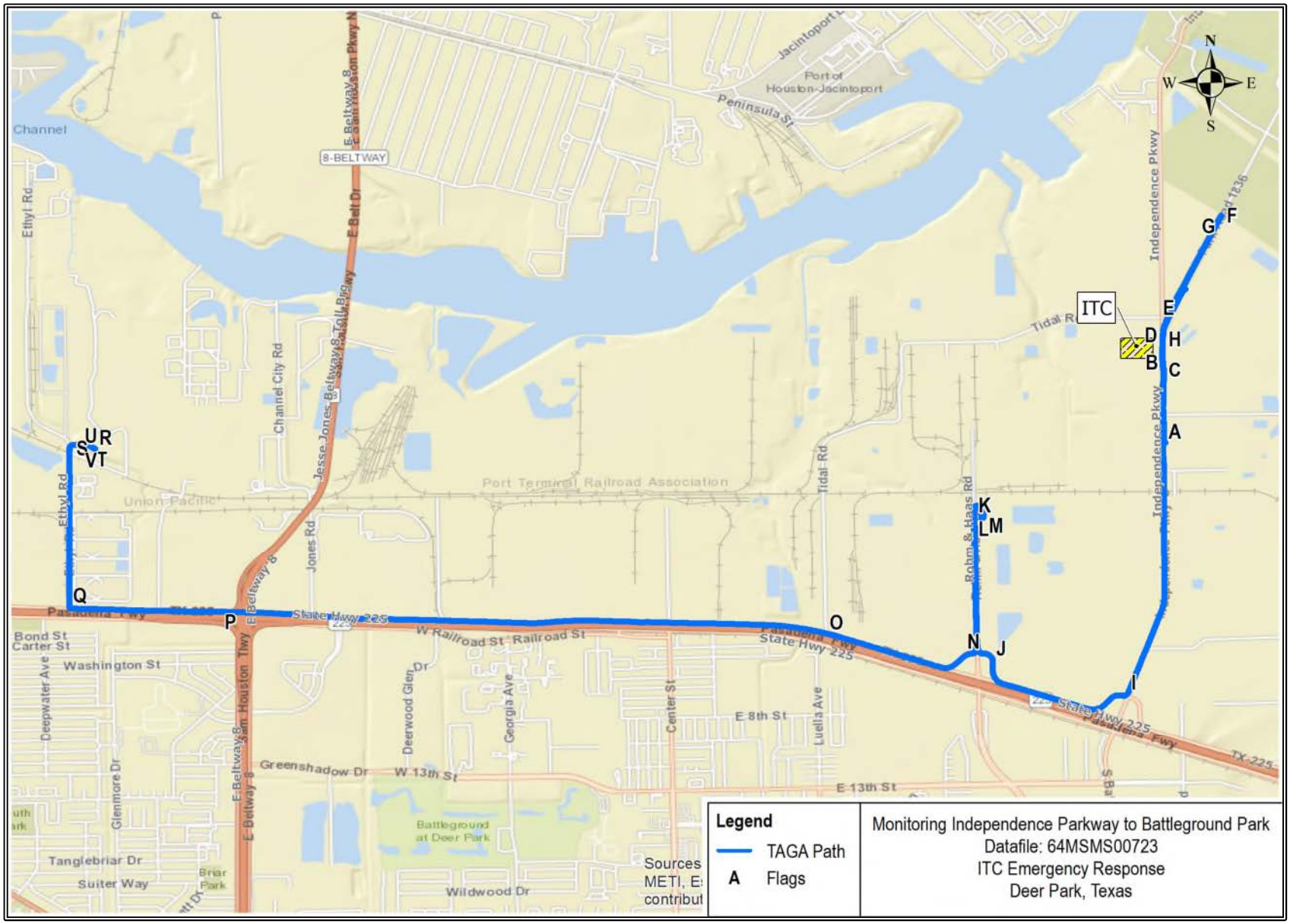


Figure 12a Monitoring Independence Parkway to Battleground Park Path, 64MSMS00723

Figure 12b

TAGA File Event Summary
File: 64MSMS00723 Acquired on 22 March 2019 at 12:58:32
Title: Monitoring Independence Parkway to Battleground Park

Flag	Time	Sequence	Description
A	0.8	77	Starting mobile monitoring on Independence Parkway
B	5.2	492	Stationary monitoring on Independence Parkway
C	5.8	557	Resuming mobile monitoring
D	7.6	728	Passing the ITC Site
E	8.6	821	Right turn onto Vista Road
F	12.8	1214	Stationary monitoring at Battleground Park
G	15.0	1428	Reversing on Vista Road
H	26.9	2561	Passing the ITC Site on Independence Parkway
I	36.2	3447	Right turn onto Pasadena Freeway Frontage Road
J	38.9	3702	Right turn onto Rohm and Haas Road
K	44.0	4187	U-turn on Rohm and Haas Road
L	44.5	4230	Stationary monitoring on Rohm and Haas Road
M	49.7	4729	Resuming mobile monitoring
N	53.0	5039	Right turn onto Pasadena Freeway Frontage Road
O	55.8	5302	Cross Tidal Road
P	61.4	5836	Cross Highway 8
Q	62.9	5981	Right turn onto Ethyl Road
R	68.0	6469	Ending mobile monitoring at EPA Command Post
S	68.4	6503	Start ambient
T	69.4	6600	End ambient
U	70.7	6721	Start 30 mL/min spike
V	71.7	6817	End 30 mL/min spike

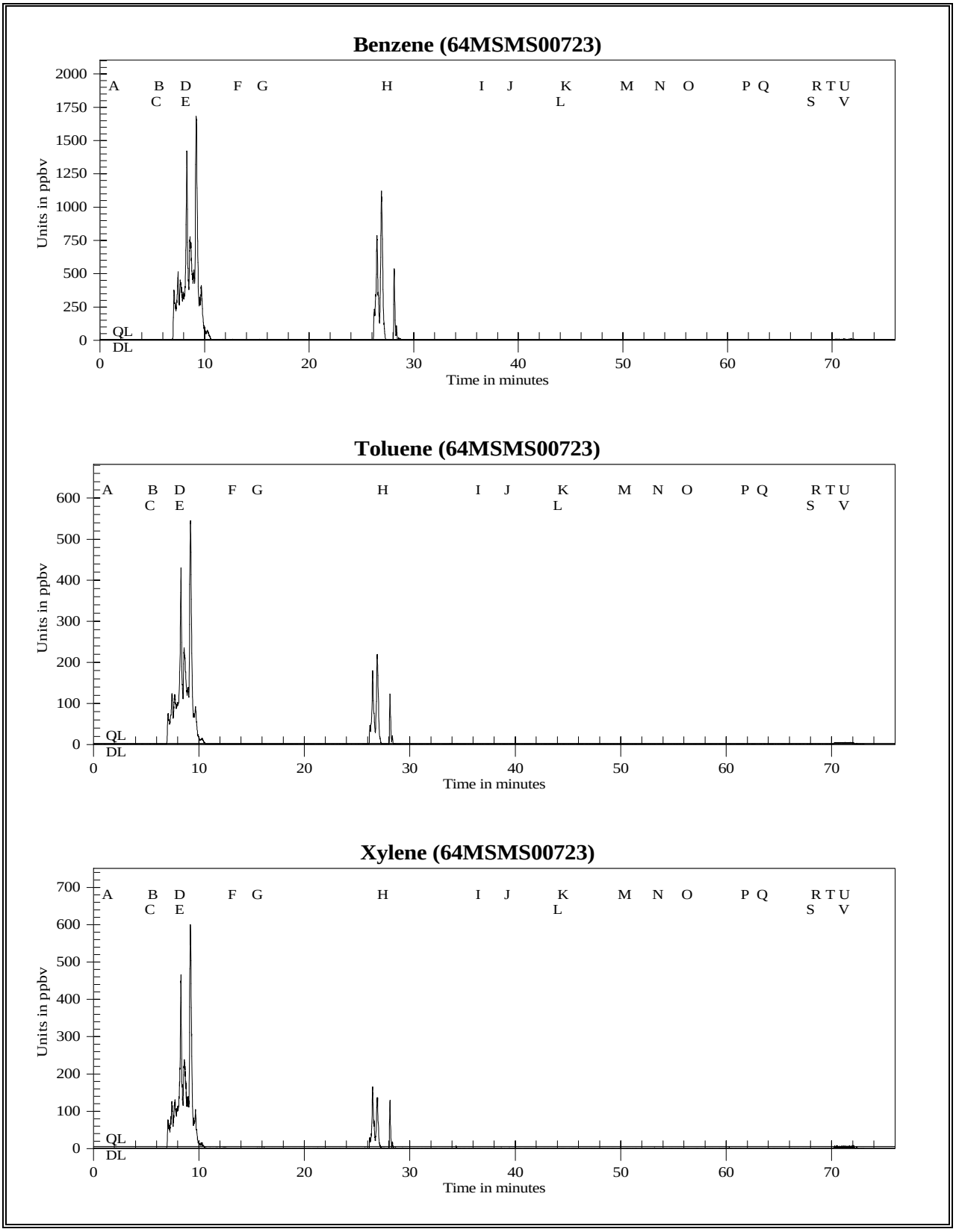


Figure 12c Monitoring Independence Parkway to Battleground Park in ppbv for Benzene, Toluene, and Xylenes

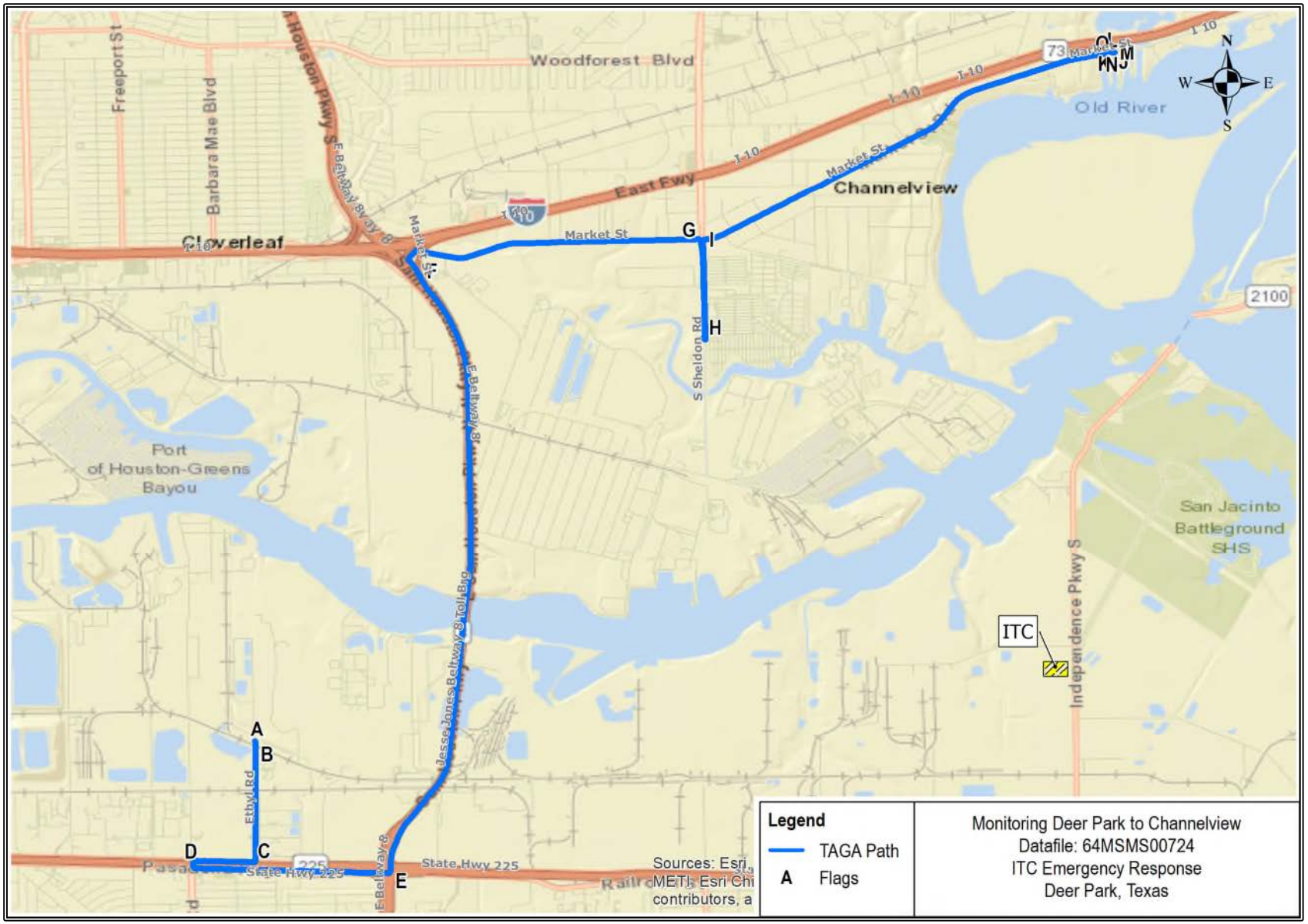


Figure 13a Monitoring Deer Park to Channelview Path, 64MSMS00724

Figure 13b

TAGA File Event Summary
File: 64MSMS00724 Acquired on 22 March 2019 at 14:17:55
Title: Monitoring from Deer Park to Channelview

Flag	Time	Sequence	Description
A	1.1	102	Starting mobile monitoring at EPA Command Post
B	1.7	159	Continuing monitoring on Ethyl Road
C	3.3	316	Right turn onto Pasadena Freeway Frontage Road
D	4.2	397	U-turn on Pasadena Freeway Frontage Road at Preston Road
E	6.9	657	Left turn onto Highway 8 North
F	13.0	1233	Exit toward Market Street
G	17.6	1672	Right turn onto Sheldon Road
H	19.6	1869	U-turn on Sheldon Road
I	22.8	2167	Right turn onto Market Street
J	32.8	3119	Stationary monitoring on Market Street
K	33.3	3165	Ending mobile monitoring
L	33.7	3203	Start ambient
M	34.8	3306	End ambient
N	36.8	3504	Start 30 mL/min spike
O	38.0	3609	End 30 mL/min spike

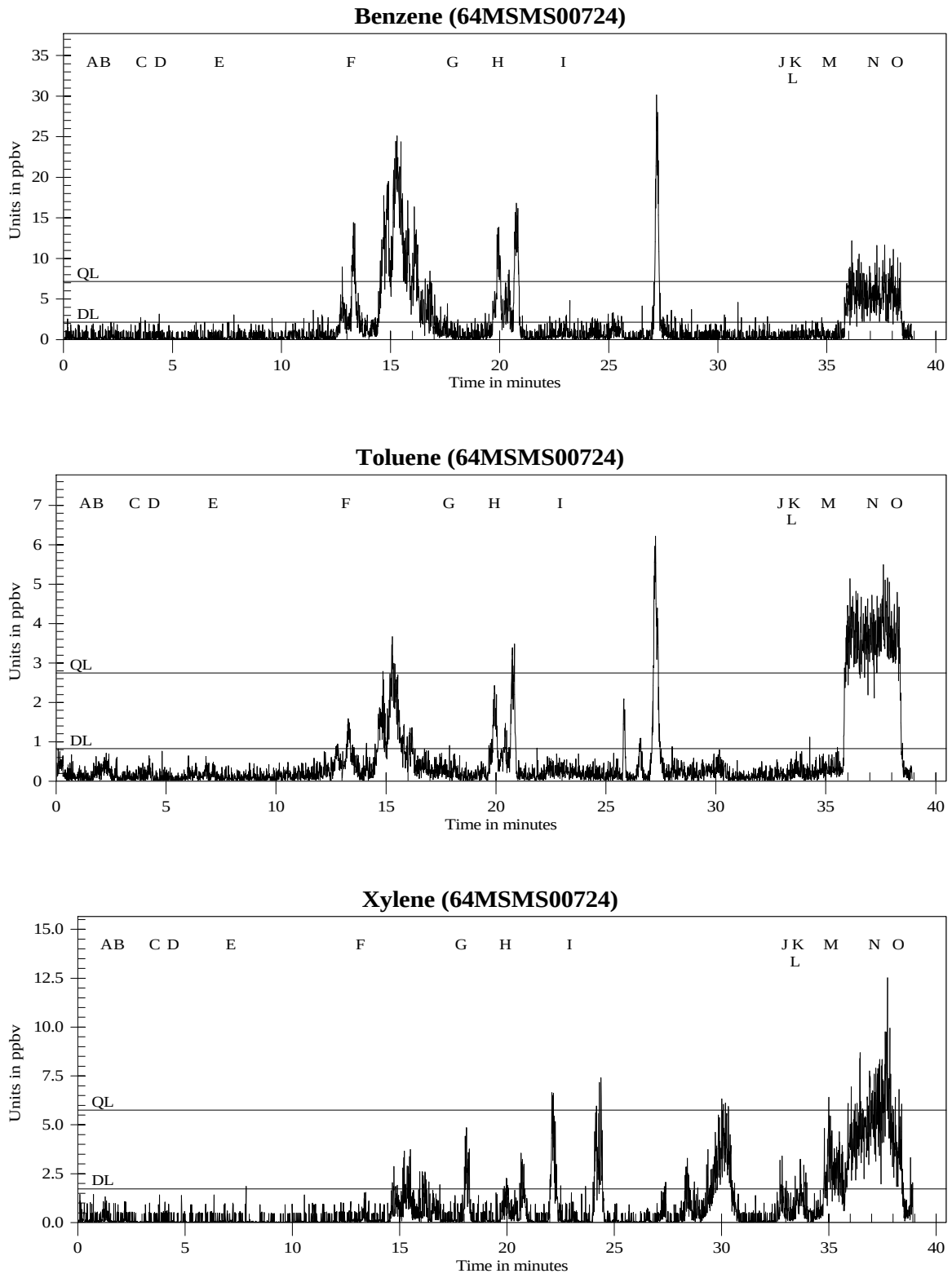


Figure 13c Monitoring from Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

Figure 14a Monitoring Channelview Three Path, 64MSMS00727

Figure 14b

TAGA File Event Summary
File: 64MSMS00727 Acquired on 22 March 2019 at 15:39:44
Title: Monitoring Channelview Three

Flag	Time	Sequence	Description
A	1.0	100	Starting mobile monitoring on Market Street
B	7.3	695	Visible plume across the channel
C	9.3	885	U-turn on Market Street
D	10.2	967	Stationary monitoring at the end of Market Street
E	13.0	1237	Resuming mobile monitoring
F	21.0	1999	Right turn onto Magnolia Street
G	21.6	2059	Left turn onto East Freeway Service Road
H	24.6	2341	Left turn onto Bayou Drive
I	25.9	2465	Right turn onto Market Street
J	32.7	3109	Left turn onto Sheldon Road
K	38.2	3636	Left turn onto Jacintoport Boulevard
L	44.0	4182	Continuing onto Peninsula Street
M	44.8	4261	Stationary monitoring on Peninsula Street
N	48.5	4608	U-turn on Peninsula Street
O	49.1	4673	Resume mobile monitoring on Peninsula Street
P	51.3	4875	Continuing onto San Jacinto Boulevard
Q	56.1	5336	Right turn onto Jacintoport Boulevard
R	58.6	5573	Driving through plume
S	60.7	5776	Exiting plume
T	64.7	6152	U-turn on Jacintoport Boulevard
U	68.7	6529	Entering plume
V	69.1	6569	Exiting plume
W	69.9	6648	Right turn onto Sheldon Road
X	78.1	7424	Left turn onto East Freeway Service Road
Y	86.8	8250	Left turn onto Holland Avenue
Z	92.3	8774	Ending mobile monitoring near Galena Park
A1	92.6	8807	Start ambient
B1	93.6	8903	End ambient
C1	94.8	9009	Start 30 mL/min spike
D1	95.9	9116	End 30 mL/min spike

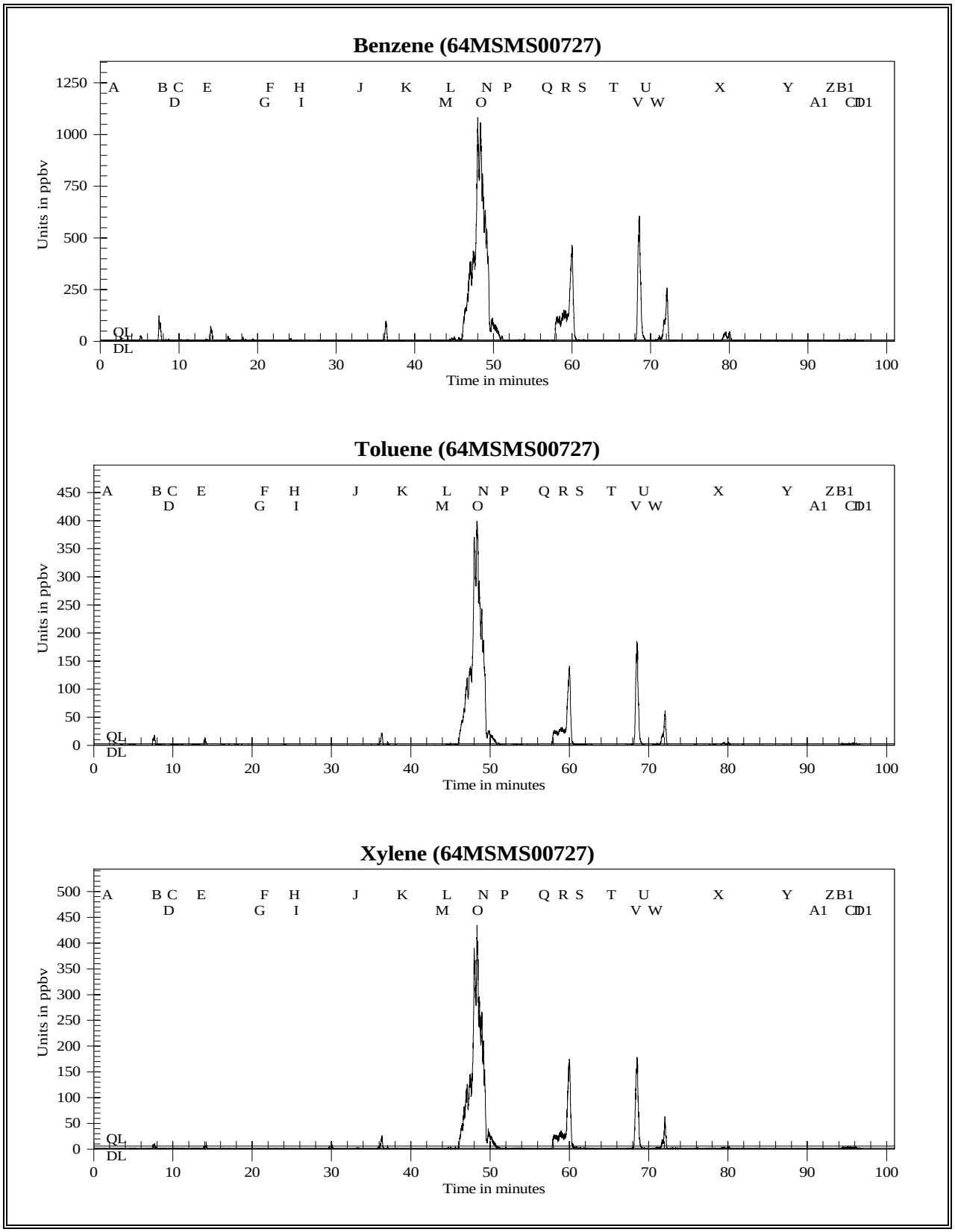


Figure 14c Monitoring Channelview Three in ppbv for Benzene, Toluene, and Xylenes

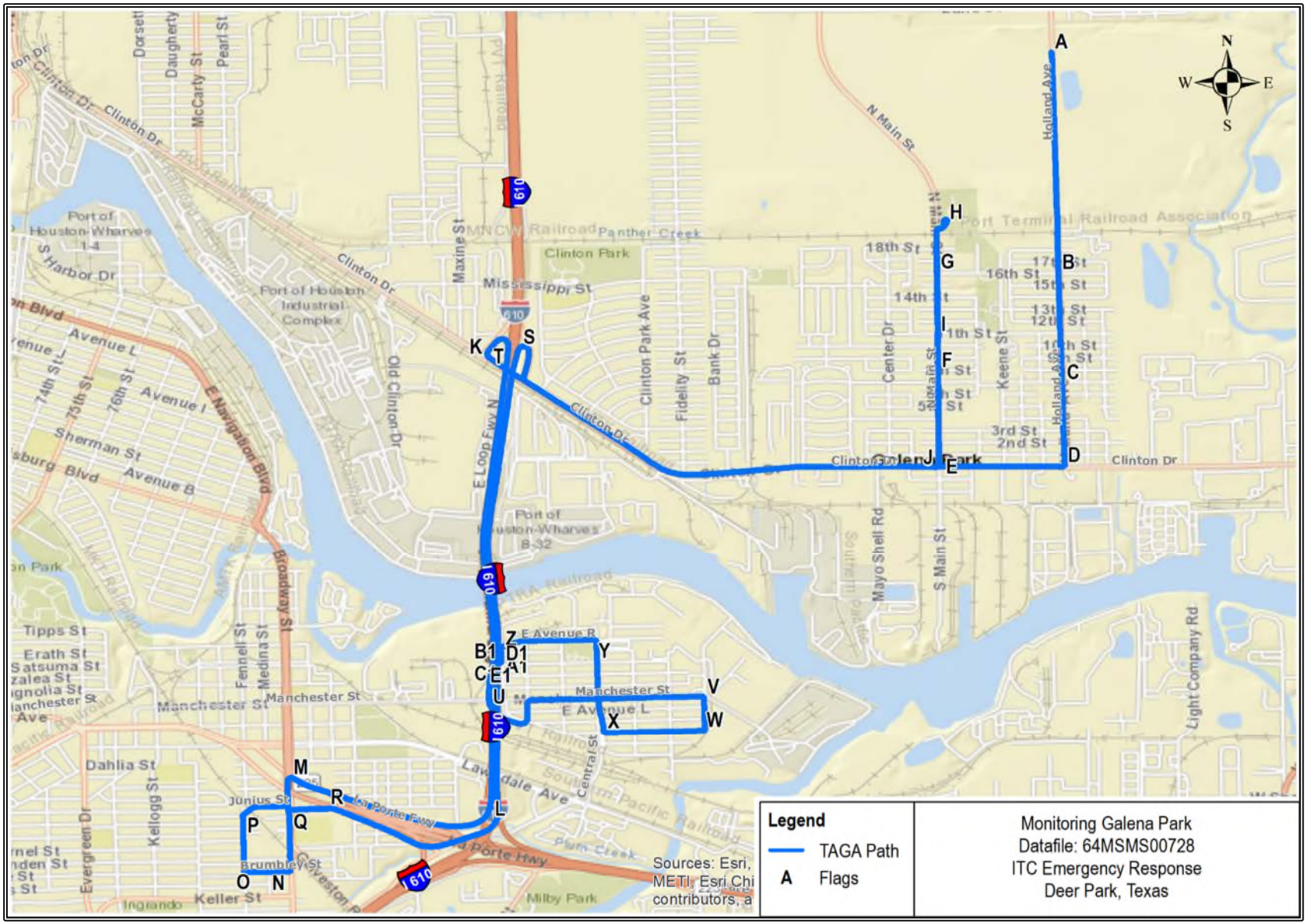


Figure 15a Monitoring Galena Park Path, 64MSMS00728

Figure 15b

TAGA File Event Summary
File: 64MSMS00728 Acquired on 22 March 2019 at 17:19:39
Title: Monitoring Galena Park

Flag	Time	Sequence	Description
A	1.0	100	Starting mobile monitoring on Holland Avenue
B	4.2	403	Cross 16th Street
C	5.8	555	Cross 8th Street
D	7.6	722	Right turn onto Clinton Drive
E	9.0	859	Right turn onto Main Street
F	11.0	1042	Cross 8th Street
G	12.5	1187	Cross 16th Street
H	13.7	1305	U-turn at Galena Park Sports Complex
I	16.7	1588	Cross 11th Street
J	19.2	1831	Right turn onto Clinton Drive
K	24.2	2300	Right turn onto Highway 610 South on-ramp
L	27.8	2642	Exit onto La Porte Freeway Frontage Road
M	30.5	2905	Left turn onto Broadway Street
N	30.7	2922	Right turn onto Brumblay Street
O	30.7	2924	Right turn onto Fennell Street
P	32.6	3100	Right turn onto Junius Street
Q	34.4	3274	Left turn onto Broadway Street
R	35.9	3412	Right turn onto La Porte Freeway / Highway 610 North
S	37.5	3563	Exit right onto Clinton Drive westbound
T	38.8	3691	Right turn onto Highway 610 South on-ramp
U	44.4	4222	Exit onto Manchester Street
V	45.4	4319	Right turn onto 97th Street
W	48.3	4596	Right turn onto Avenue J
X	50.8	4826	Right turn onto Central Street
Y	51.5	4898	Left turn onto Avenue R
Z	54.5	5187	Left turn onto Concrete Street
A1	56.7	5396	Ending mobile monitoring
B1	62.5	5939	Start ambient
C1	63.6	6050	End ambient
D1	64.1	6092	Start 30 mL/min spike
E1	65.1	6188	End 30 mL/min spike

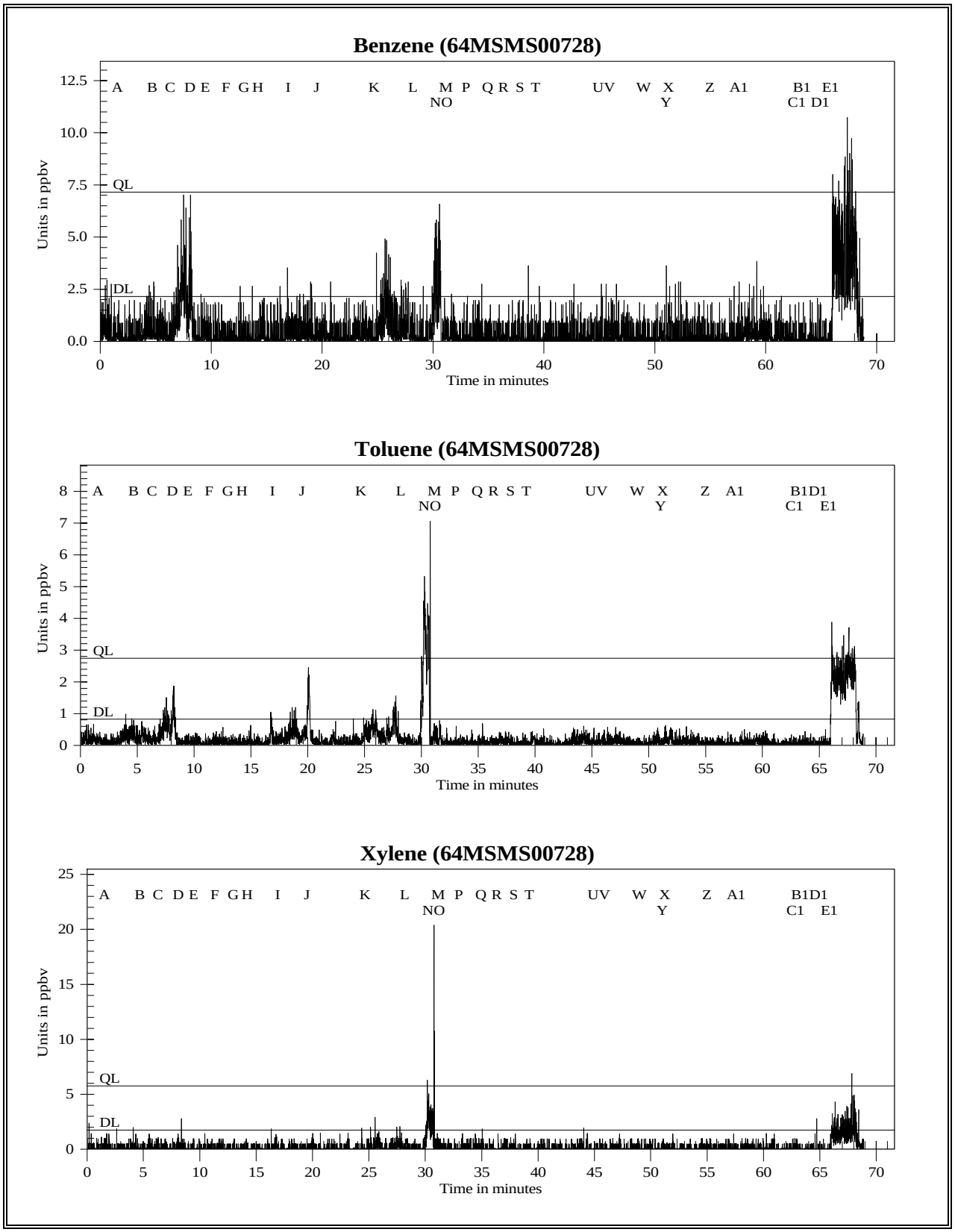


Figure 15c Monitoring Galen Park in ppbv for Benzene, Toluene, and Xylenes

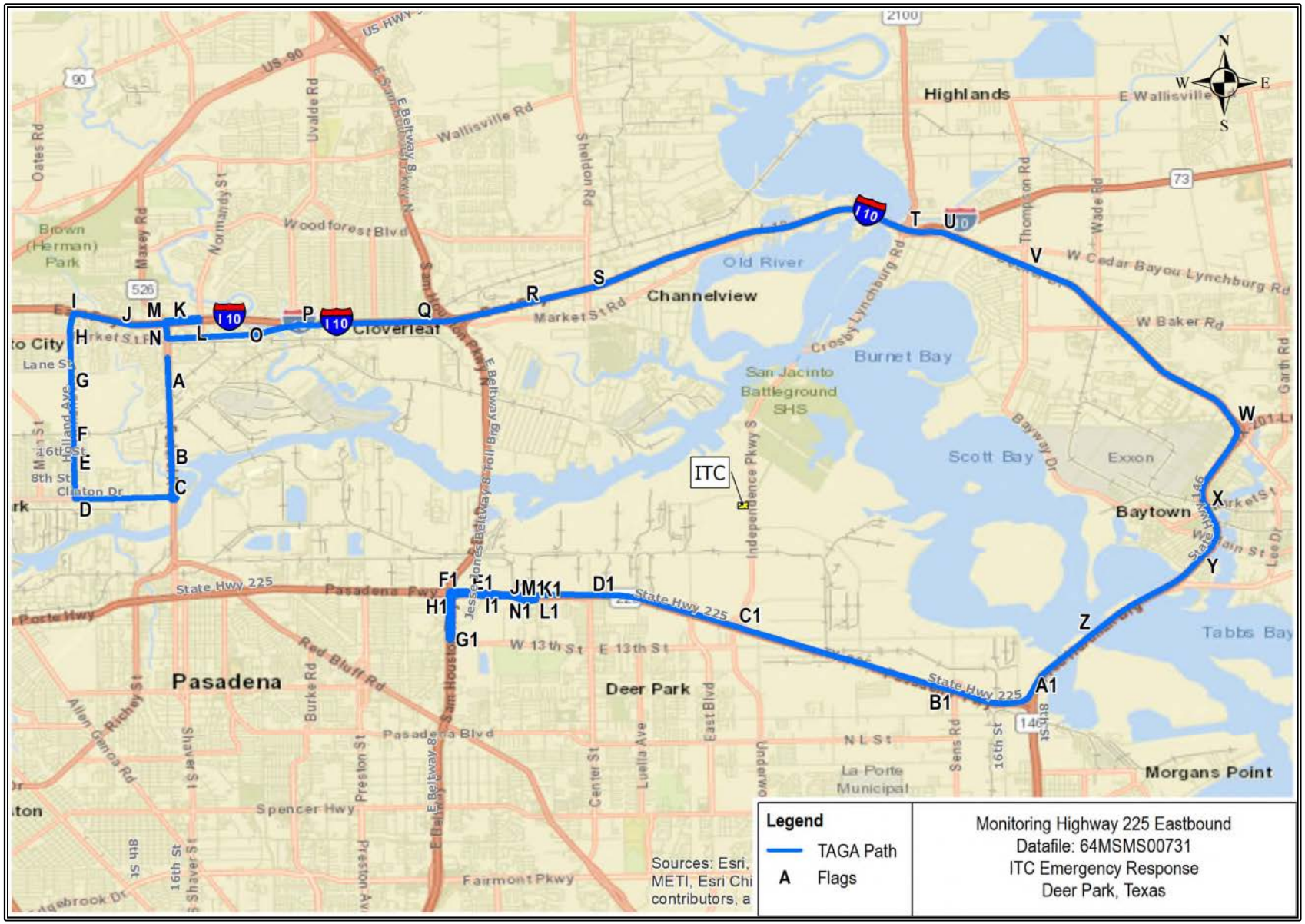


Figure 16a Monitoring Highway 225 Eastbound Path, 64MSMS00731

Figure 16b

TAGA File Event Summary
File: 64MSMS00731 Acquired on 23 March 2019 at 09:02:05
Title: Monitoring Highway 225 Eastbound

Flag	Time	Sequence	Description
A	1.1	107	Starting mobile monitoring on Federal Road South
B	3.4	327	Cross Hunting Bayou
C	4.3	413	Right turn onto Clinton Drive
D	7.5	711	Right turn onto Holland Avenue
E	8.5	809	Cross 8th Street
F	10.0	947	Cross 16th Street
G	12.0	1140	Cross Lane Street
H	13.9	1319	Cross Market Street
I	15.3	1454	Right turn onto East Freeway Service Road East
J	16.6	1582	Merging onto Highway 10 East
K	17.4	1652	Exit onto East Freeway Service Road
L	18.1	1717	U-turn on East Freeway Service Road West
M	19.5	1855	Left turn onto Federal Road
N	21.5	2046	Left turn onto Market Street
O	24.9	2366	Cross Miller Street on Market Street
P	26.6	2528	Continuing monitoring onto East Freeway Service Road East
Q	29.4	2799	Merge onto Highway 10 East
R	30.9	2941	Cross Dell Dale Street (entering plume)
S	31.9	3033	Cross Sheldon Road (exiting plume)
T	36.7	3489	Cross Crosby Lynchburg Road
U	37.2	3540	Exit onto Highway 330 East
V	38.8	3684	Cross Bayway Drive
W	42.9	4078	Exit onto Highway 146 East South
X	44.6	4238	Cross Market Street
Y	45.7	4348	Cross Missouri Street
Z	47.3	4495	Continuing monitoring onto Fred Hartman Bridge
A1	48.6	4617	Exit onto Highway 225 West
B1	49.8	4731	Cross Sens Road
C1	52.8	5023	Cross Battleground Road / Independence Parkway
D1	54.8	5213	Cross Center Street
E1	56.2	5347	Exit onto Pasadena Freeway Frontage Road
F1	57.6	5473	Left turn onto Highway 8 South
G1	60.3	5736	U-turn onto Highway 8 North
H1	70.5	6707	Right turn onto Pasadena Freeway Frontage Road

Figure 16b (continued)

TAGA File Event Summary
File: 64MSMS00731 Acquired on 23 March 2019 at 09:02:05
Title: Monitoring Highway 225, March 23, 2019

Flag	Time	Sequence	Description
I1	72.1	6854	Right turn into Deerwood Glen Business Park
J1	73.1	6953	Ending mobile monitoring
K1	73.9	7022	Start ambient
L1	74.9	7116	End ambient
M1	76.4	7268	Start 30 mL/min spike
N1	77.5	7366	End 30 mL/min spike

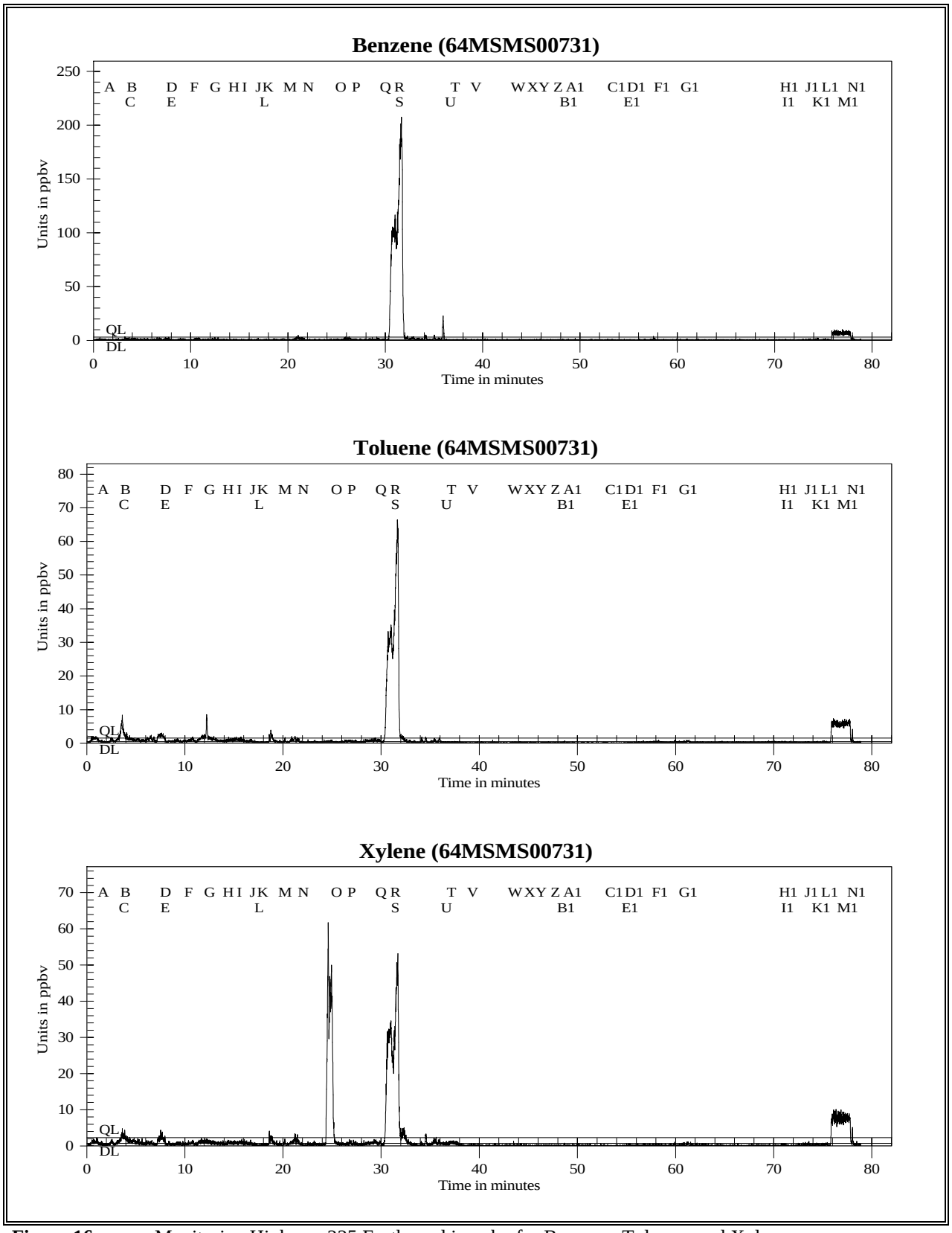


Figure 16c Monitoring Highway 225 Eastbound in ppbv for Benzene, Toluene, and Xylenes

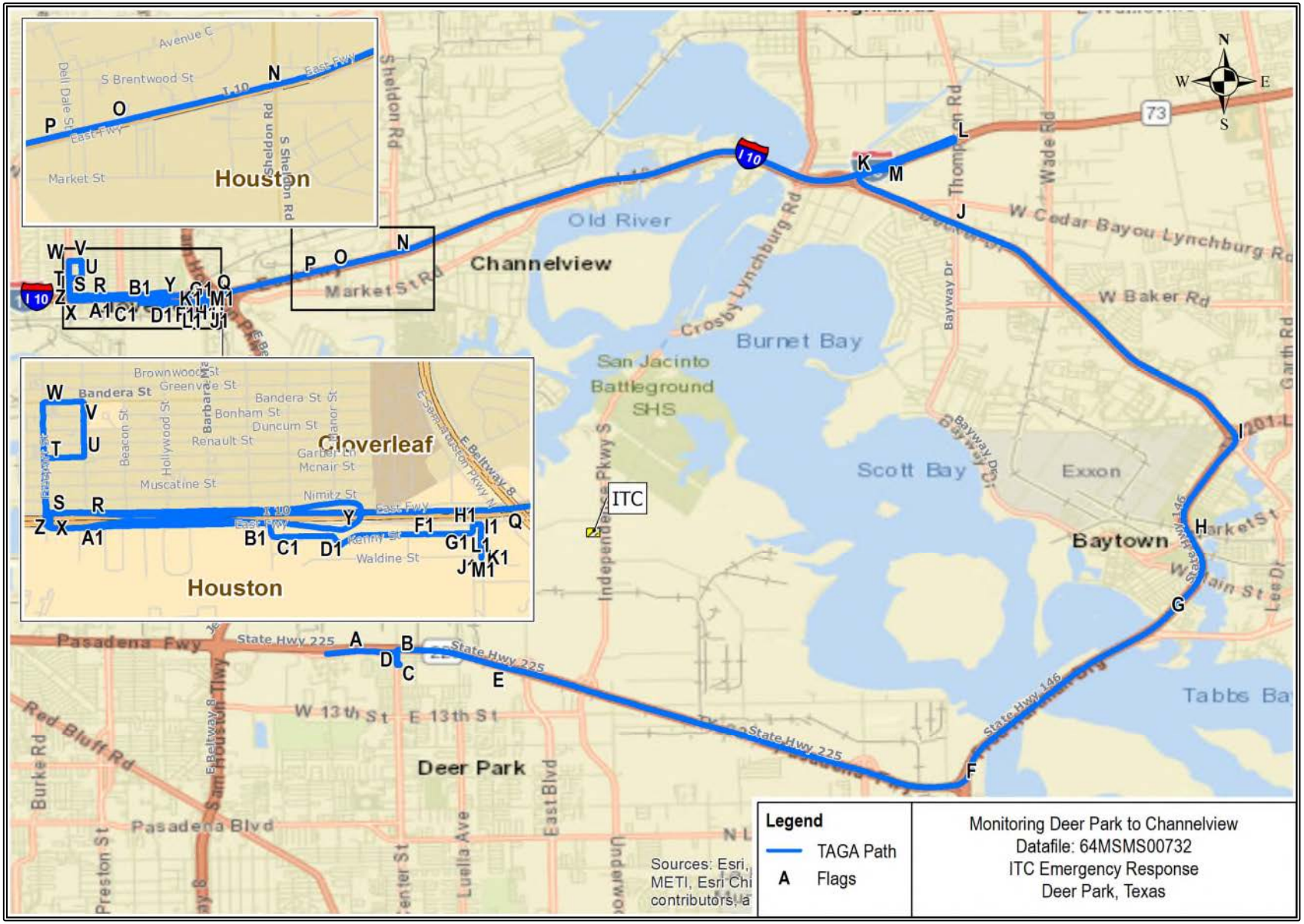


Figure 17a Monitoring Deer Park to Channelview Path, 64MSMS00732

Figure 17b

TAGA File Event Summary
File: 64MSMS00732 Acquired on 23 March 2019 at 10:24:34
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	0.9	89	Starting mobile monitoring on Railroad Street East
B	1.9	180	Right turn onto Center Street
C	2.4	232	U-turn on Center Street
D	3.7	354	Right turn onto Pasadena Freeway Frontage Road
E	5.7	541	Merge onto Highway 225 East
F	10.4	988	Merge onto Highway 146 North
G	13.6	1290	Cross Missouri Street
H	14.7	1395	Cross Market Street
I	16.1	1528	Exit onto Highway 330 West
J	20.4	1940	Cross Bayway Drive
K	22.1	2099	Exit onto East Freeway Service Road East
L	24.2	2297	U-turn onto East Freeway Service Road West at Thompson Road
M	25.5	2427	Merge onto Highway 10 West
N	35.2	3346	Cross Sheldon Road
O	35.8	3403	Entering plume (Channelview)
P	36.1	3431	Cross Dell Dale Street
Q	37.0	3520	Cross Highway 8
R	38.3	3643	Exit onto East Freeway Service Road
S	39.0	3707	Right turn onto Freeport Street
T	39.8	3783	Right turn onto Garber Lane
U	40.8	3881	Left turn onto Frankie Street
V	42.0	3997	Left turn onto Bandera Street
W	42.8	4070	Left turn onto Freeport Street
X	44.9	4269	Left turn onto East Freeway Service Road
Y	46.9	4464	U-turn onto East Freeway Service Road
Z	49.7	4726	U-turn onto East Freeway Service Road
A1	51.4	4886	Merge onto Highway 10 East
B1	52.2	4963	Right turn onto Redmond Street
C1	52.8	5017	Left turn onto Kenny Street
D1	53.6	5098	Right turn onto Patch
F1	54.9	5223	Cross Marwood
G1	56.1	5331	Left turn onto Penn City Road
H1	56.6	5382	Right turn onto Jacintoport Boulevard
I1	57.1	5429	Ending mobile monitoring

Figure 17b (continued)

TAGA File Event Summary
File: 64MSMS00732 Acquired on 23 March 2019 at 10:24:34
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
J1	57.4	5458	Start ambient
K1	58.4	5553	End ambient
L1	60.0	5708	Start 30 mL/min spike
M1	61.0	5803	End 30 mL/min spike

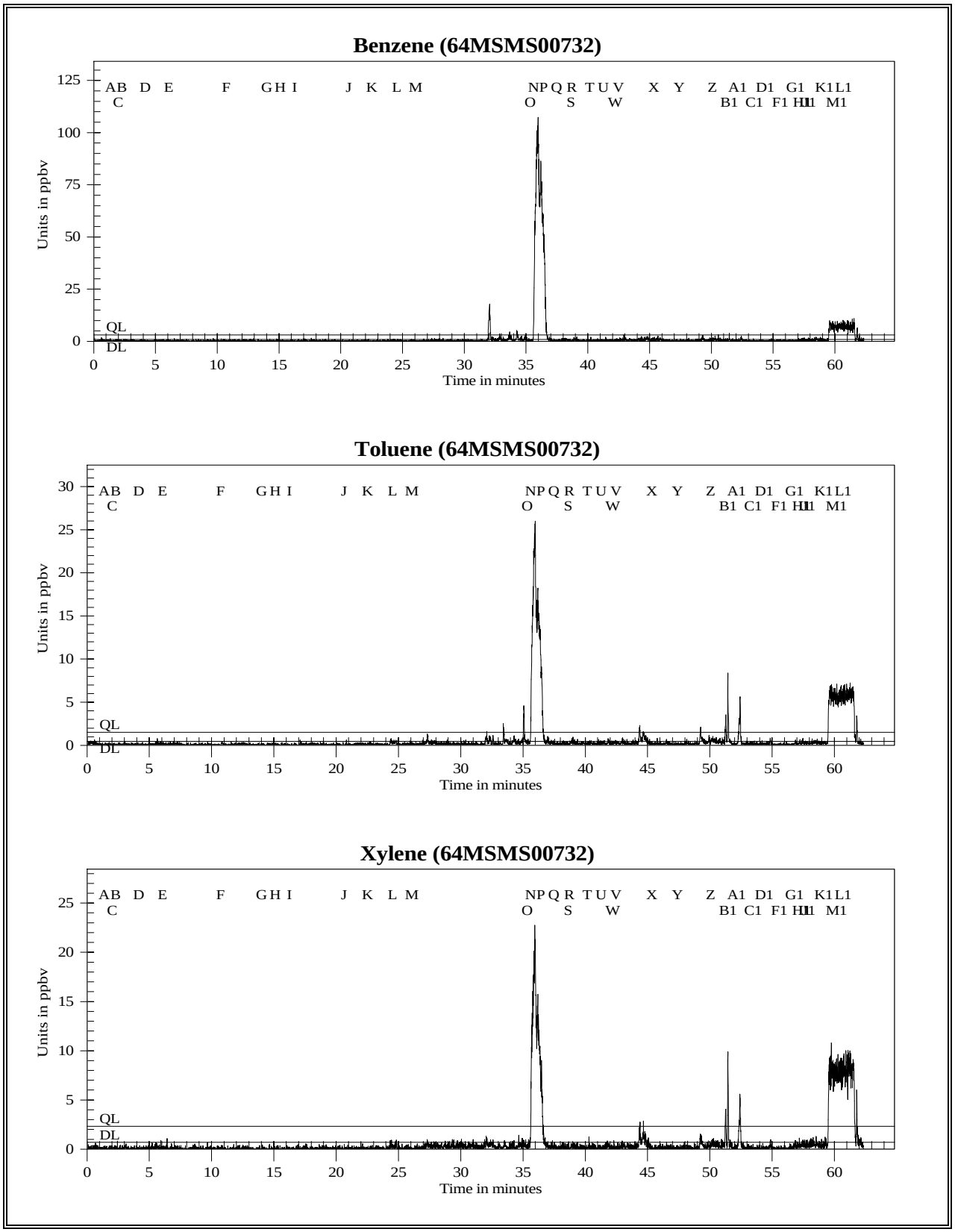


Figure 17c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

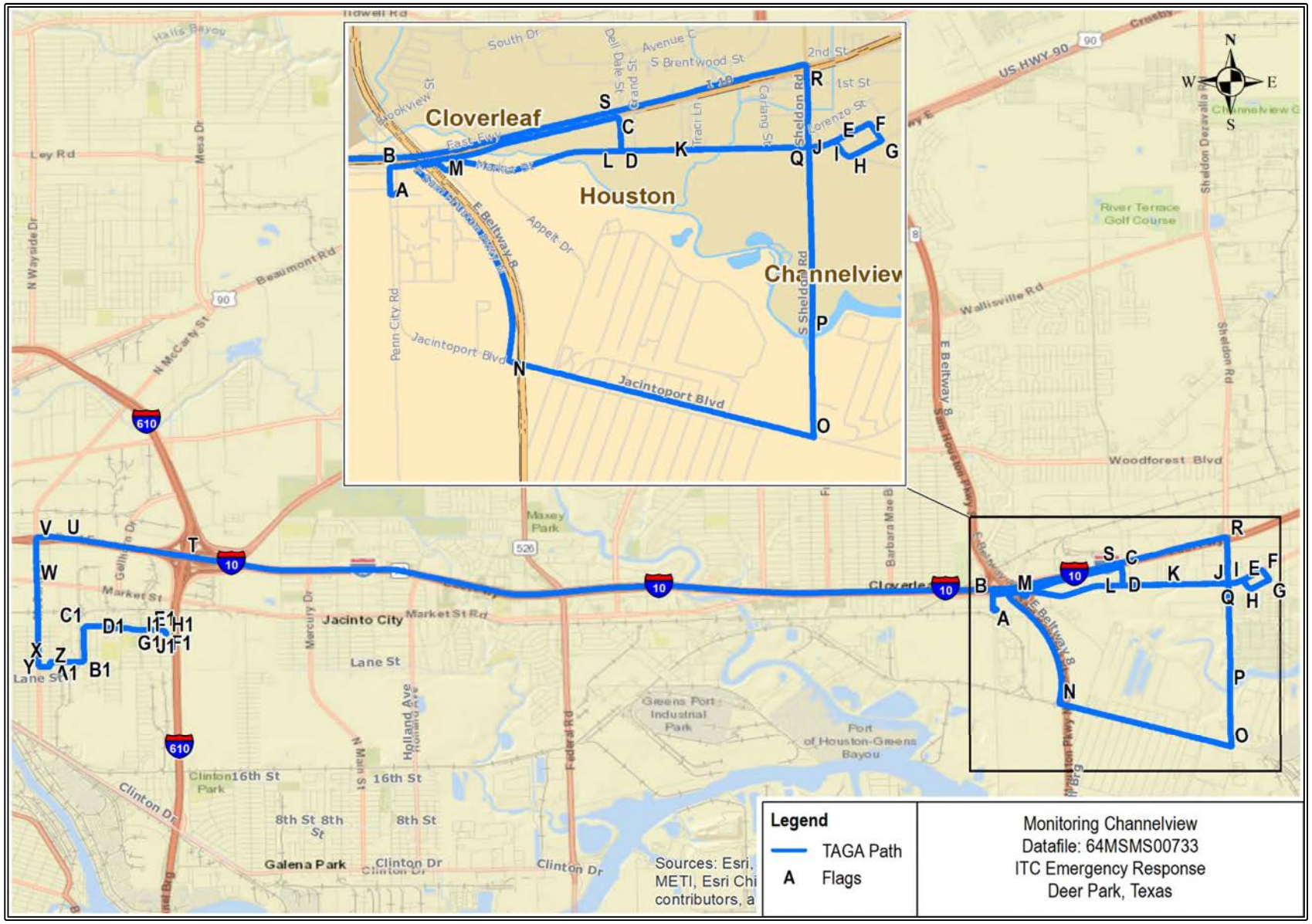


Figure 18a Monitoring Channelview Path, 64MSMS00733

Figure 18b

TAGA File Event Summary
File: 64MSMS00733 Acquired on 23 March 2019 at 11:34:21
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	1.4	134	Starting mobile monitoring on Penn City Road
B	2.1	205	Right turn onto East Freeway Service Road
C	5.1	482	Right turn onto Dell Dale Street
D	6.2	592	Left turn onto Market Street
E	8.9	848	Cross Dezavala Road
F	9.6	916	Right turn onto Red Oak
G	10.2	974	Right turn onto Channelview Drive
H	11.0	1050	Right turn onto Dezevala Road
I	11.5	1092	Left turn onto Market Street
J	12.4	1181	Cross Sheldon Road
K	13.9	1325	Cross Traci Lane
L	14.9	1417	Cross Dell Dale Street
M	16.9	1610	Left turn onto Highway 8 Frontage Road
N	19.4	1848	Left turn onto Jacintoport Boulevard
O	22.7	2160	Left turn onto Sheldon Road
P	24.0	2279	Cross Carpenters Bayou
Q	27.3	2598	Cross Market Street
R	29.3	2789	Left turn onto East Freeway Service Road
S	30.7	2919	Cross Dell Dale Street
T	38.6	3669	Cross Highway 610
U	39.8	3783	Exit onto East Freeway Service Road
V	40.5	3854	Left turn onto McCarty Street
W	42.4	4036	Cross Market Street
X	44.4	4225	Cross Munn Street
Y	44.8	4257	Left turn onto Chadwick Street
Z	45.4	4317	Left turn onto Pearl Street
A1	45.9	4369	Right turn onto Munn Street
B1	48.6	4621	Left turn onto Demaree Lane
C1	51.2	4870	Right turn onto Tilgham Street
D1	52.0	4941	Cross Pleasantville Drive
E1	55.5	5282	Right turn onto Laurentide Street
F1	56.1	5336	Ending mobile monitoring
G1	56.3	5352	Start ambient
H1	57.3	5448	End ambient

Figure 18b (continued)

TAGA File Event Summary
File: 64MSMS00733 Acquired on 23 March 2019 at 11:34:21
Title: Monitoring Channelview

Flag	Time	Sequence	Description
I1	58.5	5567	Start 30 mL/min spike
J1	59.5	5662	End 30 mL/min spike

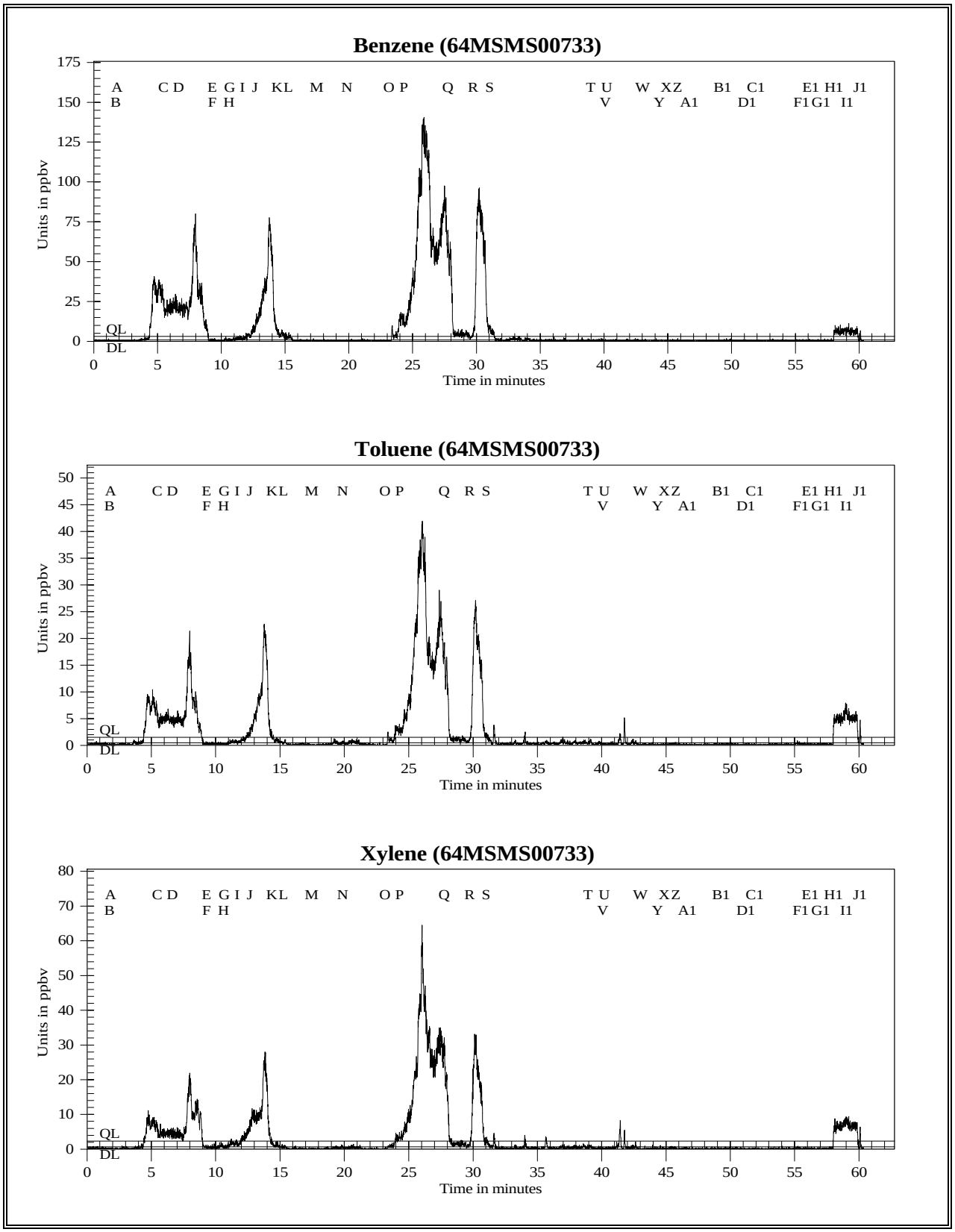


Figure 18c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

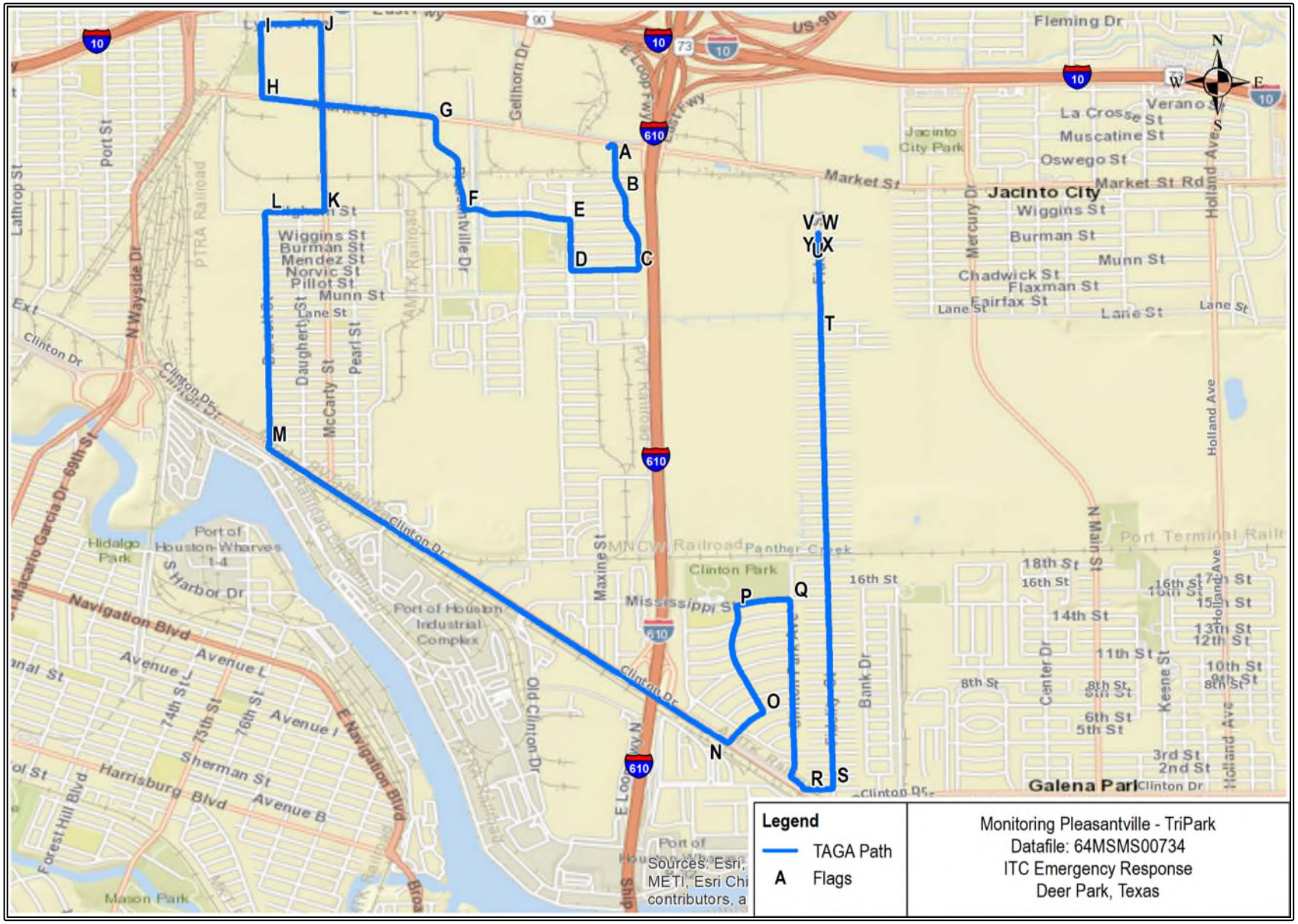


Figure 19a Monitoring Pleasantville to Tri-Park Path, 64MSMS00734

Figure 19b

TAGA File Event Summary
File: 64MSMS00734 Acquired on 23 March 2019 at 12:54:16
Title: Monitoring Pleasantville - Tri Park

Flag	Time	Sequence	Description
A	1.1	104	Starting mobile monitoring on Laurentide Street
B	2.0	191	Cross Fannette Street
C	3.7	357	Right turn onto Josie Street
D	6.3	604	Right turn onto Ledwicke Street
E	8.6	818	Left turn onto Tilgham Street
F	11.0	1048	Right turn onto Pleasantville Drive
G	13.7	1303	Left turn onto Market Street
H	15.3	1460	Right turn onto Dorsett Street
I	16.4	1558	Right turn onto Lyons Avenue
J	18.0	1710	Right turn onto McCarty Street
K	20.4	1940	Right turn onto Tilgham Street
L	21.3	2030	Left turn onto Dorsett Street
M	26.9	2556	Left turn onto Clinton Drive
N	32.5	3095	Left turn onto Pennsylvania Street
O	34.0	3238	Left turn onto Midway Boulevard
P	36.7	3491	Right turn onto Mississippi Street
Q	37.6	3574	Right turn onto Clinton Park Street
R	41.9	3989	Left turn onto Mascot Street
S	42.6	4049	Left turn onto Fidelity Street
T	49.6	4713	Cross Fillmore Street
U	51.0	4848	Ending mobile monitoring on Fidelity Street
V	51.2	4873	Start ambient
W	52.3	4970	End ambient
X	53.6	5093	Start 30 mL/min spike
Y	54.6	5188	End 30 mL/min spike

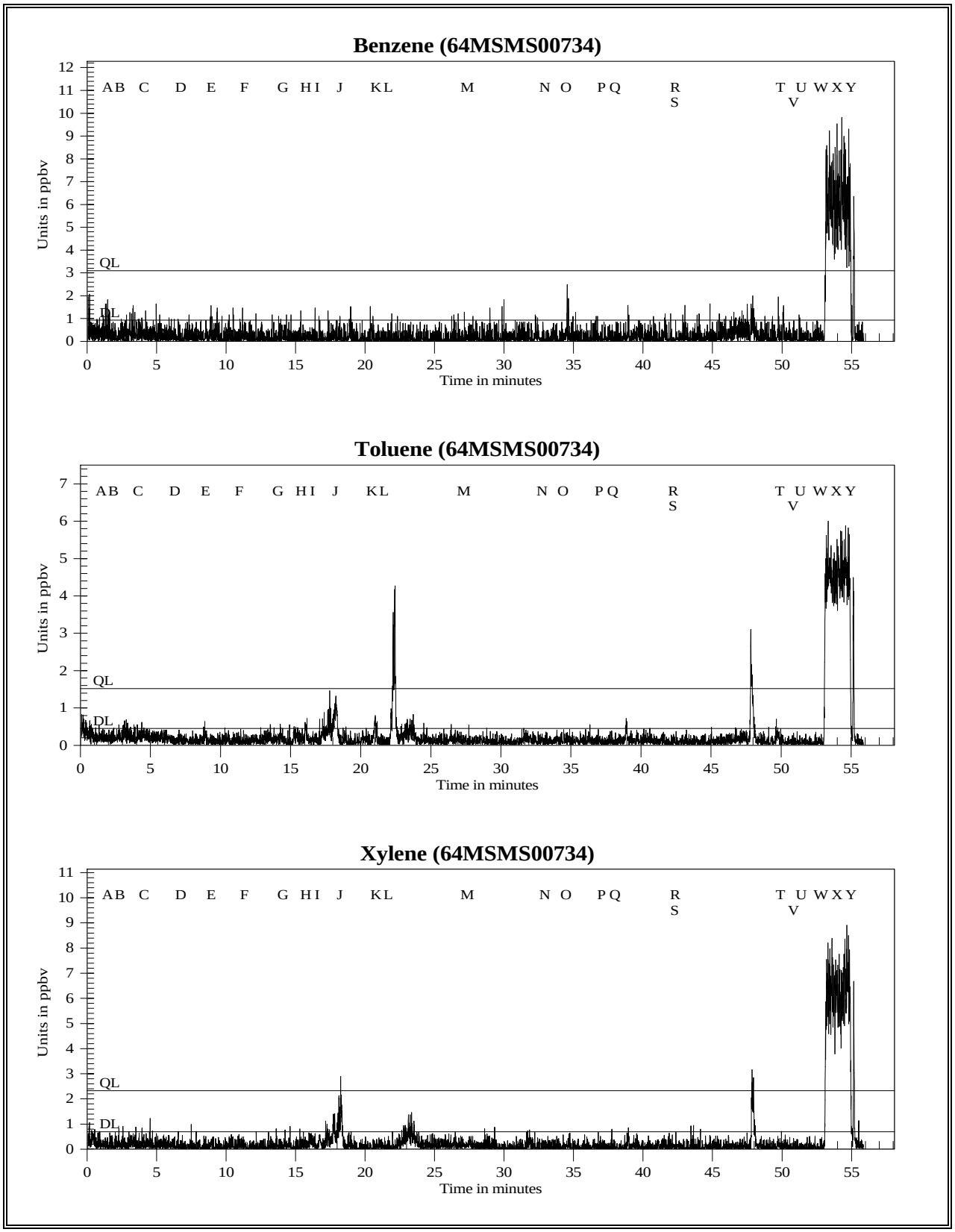


Figure 19c Monitoring Pleasantville - Tri Park in ppbv for Benzene, Toluene, and Xylenes

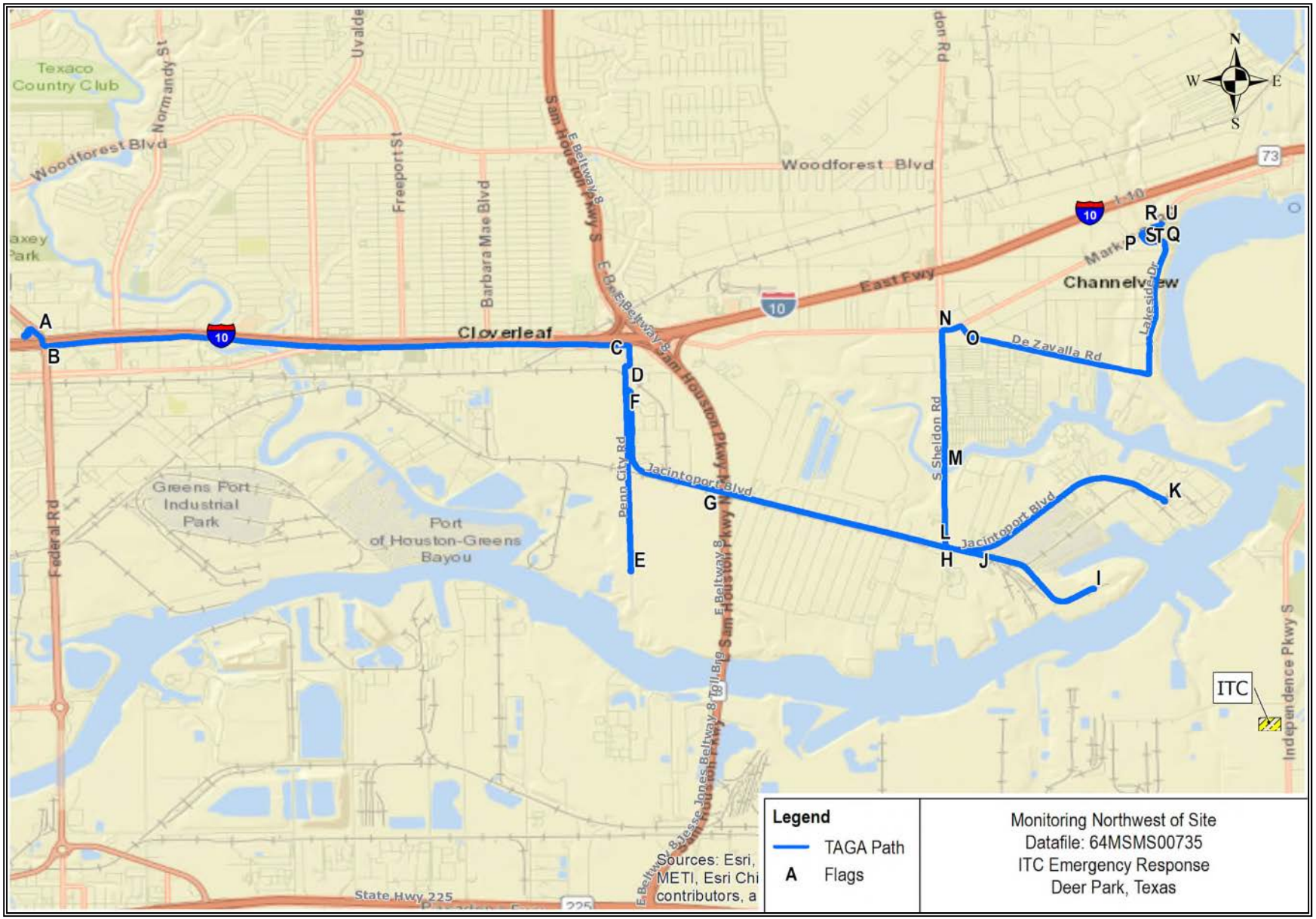


Figure 20a Monitoring Northwest of Site Path, 64MSMS00735

Figure 20b

TAGA File Event Summary
File: 64MSMS00735 Acquired on 23 March 2019 at 14:46:26
Title: Monitoring Northwest of the Site

Flag	Time	Sequence	Description
A	2.3	216	Starting mobile monitoring on Federal Road
B	3.2	303	Left turn onto East Freeway Service Road
C	11.6	1107	Right turn onto Jacintoport Boulevard
D	12.3	1172	Merge onto Penn City Road
E	16.1	1531	U-turn on Penn City Road
F	20.9	1991	Right turn onto Jacintoport Boulevard
G	26.4	2510	Cross Highway 8
H	31.9	3032	Merge onto San Jacinto Boulevard
I	36.5	3469	U-turn at the end of San Jacinto Boulevard/Peninsula Street
J	42.9	4084	Right turn onto Jacintoport Boulevard
K	50.3	4780	U-turn at Houston Fuel Oil Terminal
L	58.0	5512	Right turn onto Sheldon Road
M	60.0	5708	Cross Carpenters Bayou
N	62.3	5922	Right turn onto Market Street
O	62.8	5973	Right turn onto Dezavala Road
P	70.4	6694	Right turn onto Market Street
Q	71.3	6778	Ending mobile monitoring at River Terrace Park
R	71.7	6816	Start ambient
S	72.7	6909	End ambient
T	74.0	7033	Start 30 mL/min spike
U	75.0	7128	End 30 mL/min spike

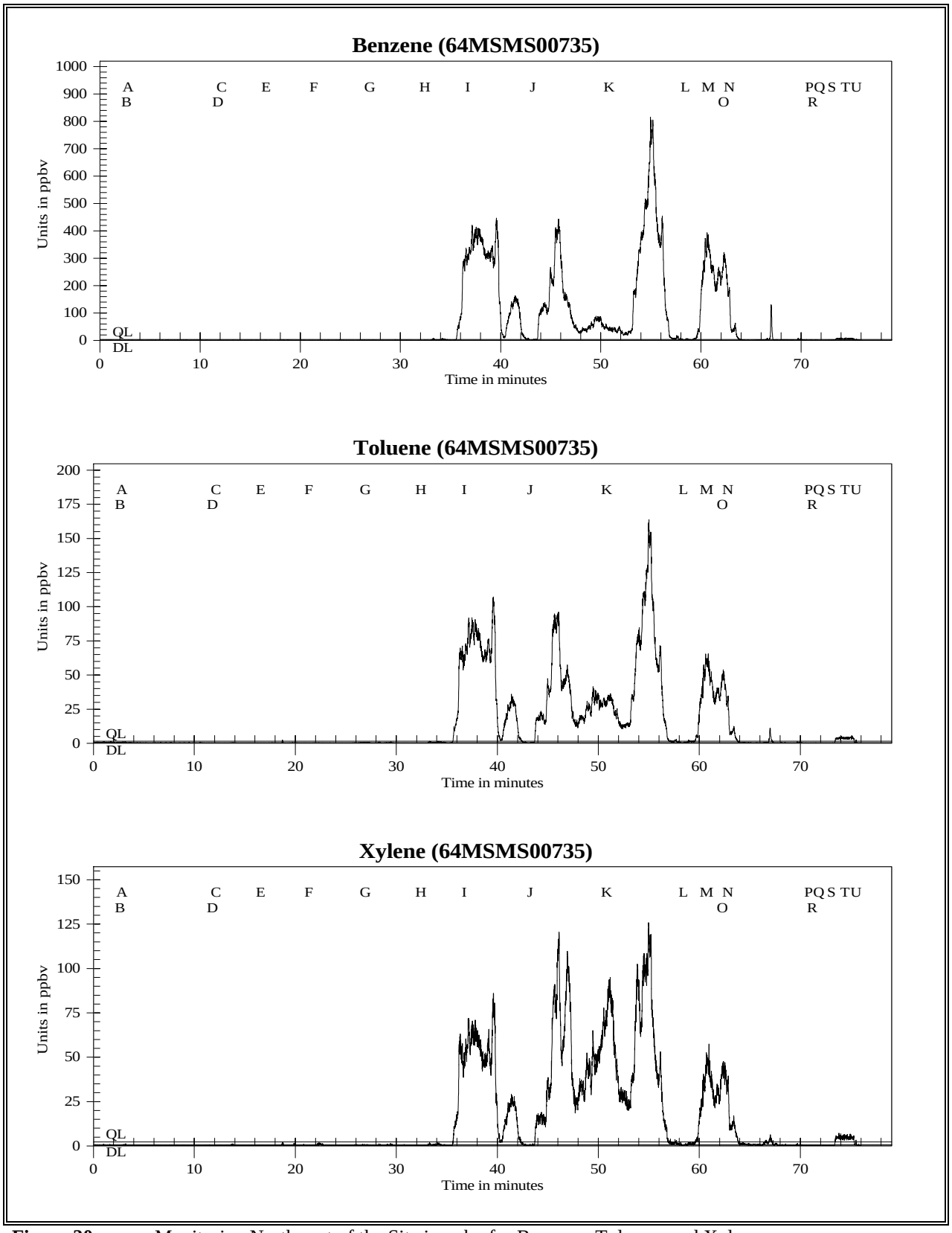


Figure 20c Monitoring Northwest of the Site in ppbv for Benzene, Toluene, and Xylenes

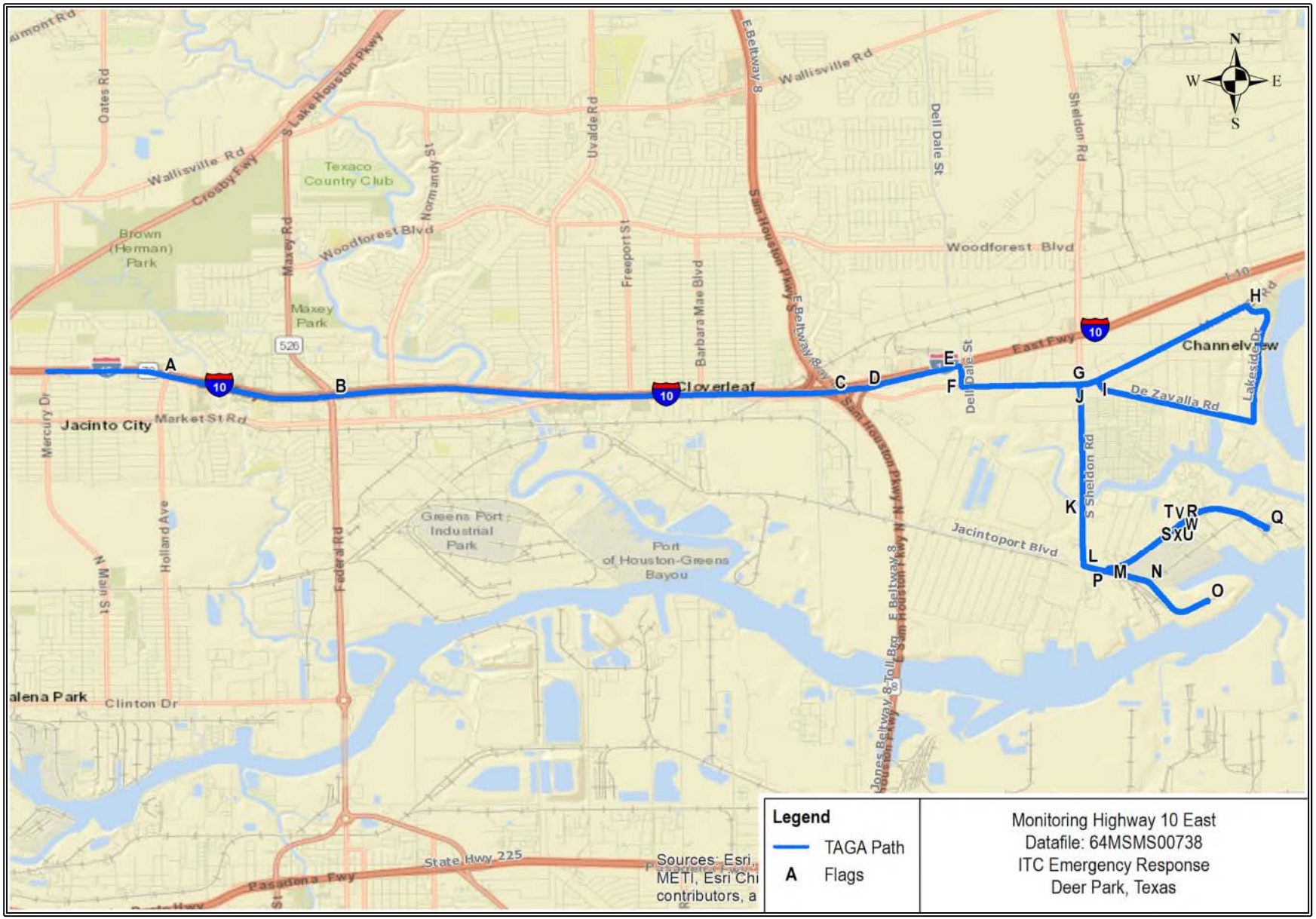


Figure 21a Monitoring Highway 10 East Path, 64MSMS00738

Figure 21b

TAGA File Event Summary
File: 64MSMS00738 Acquired on 24 March 2019 at 08:43:50
Title: Monitoring Highway 10 East

Flag	Time	Sequence	Description
A	0.8	78	Start mobile monitoring at Highway 10 E and Holland Avenue
B	2.0	194	Cross Federal Road
C	5.6	536	Cross Highway 8
D	5.9	560	Exit onto East Freeway Service Road
E	7.1	677	Right turn onto Dell Dale Street
F	8.0	766	Left turn onto Market Street
G	12.3	1168	Cross Sheldon Road
H	16.9	1612	Right turn onto Lakeside Drive
I	26.4	2510	Left turn onto Market Street
J	27.8	2645	Left turn onto Sheldon Road
K	33.4	3178	Cross Carpenter’s Bayou
L	36.9	3510	Left turn onto Jacintoport Boulevard
M	37.8	3599	Merge onto San Jacinto Boulevard
N	39.4	3745	Continuing onto San Jacinto Boulevard
O	43.2	4105	U-turn on San Jacinto Boulevard
P	50.9	4837	Right turn onto Jacintoport Boulevard
Q	61.2	5816	U-turn on Jacintoport Boulevard
R	67.2	6388	Stationary on Jacintoport Boulevard
S	103.0	9793	Resume mobile monitoring
T	108.9	10351	End mobile monitoring
U	109.2	10382	Start ambient
V	110.3	10484	End ambient
W	111.8	10631	Start 30 mL/min spike
X	112.8	10729	End 30 mL/min spike

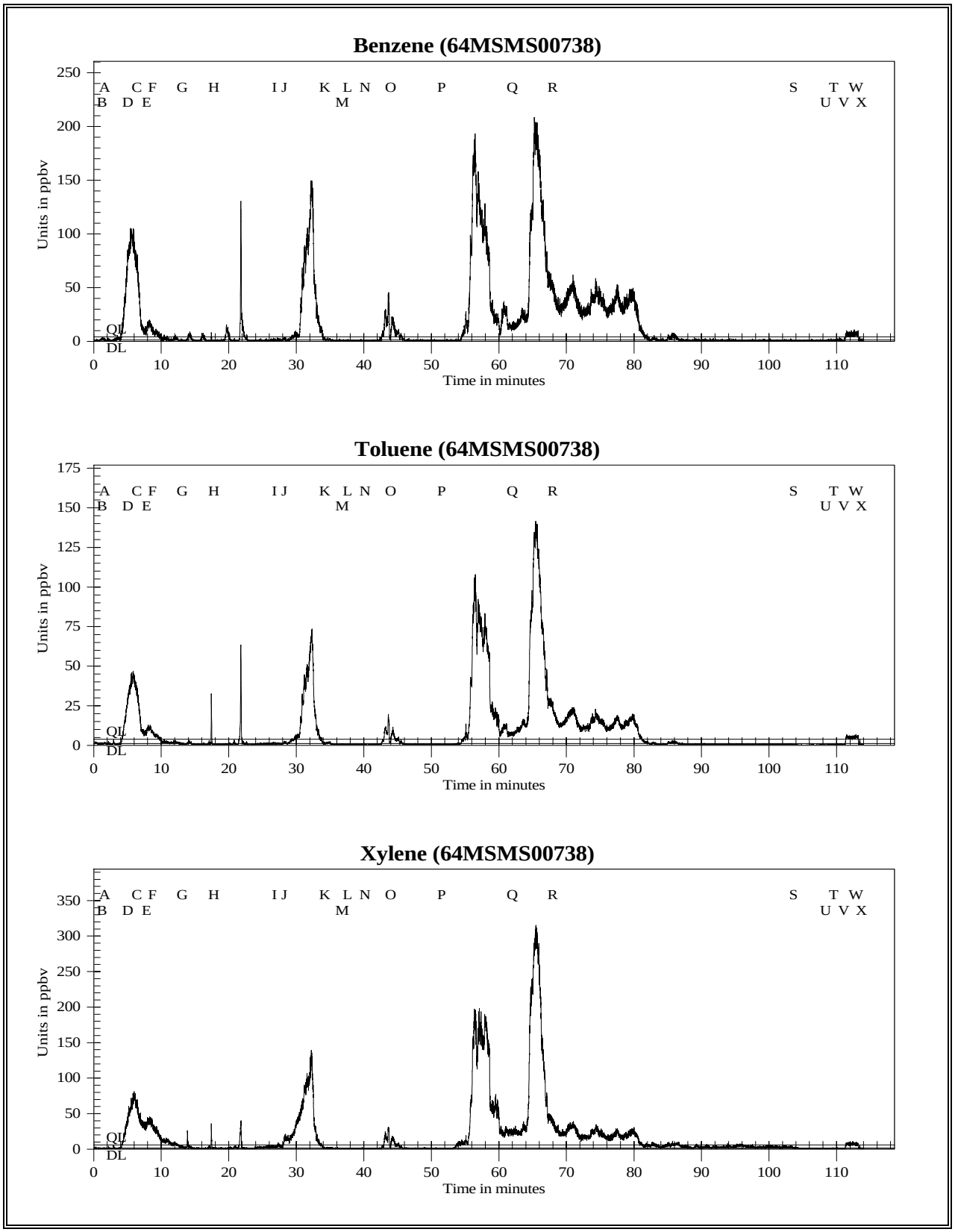


Figure 21c Monitoring Highway 10 East in ppbv for Benzene, Toluene, and Xylenes

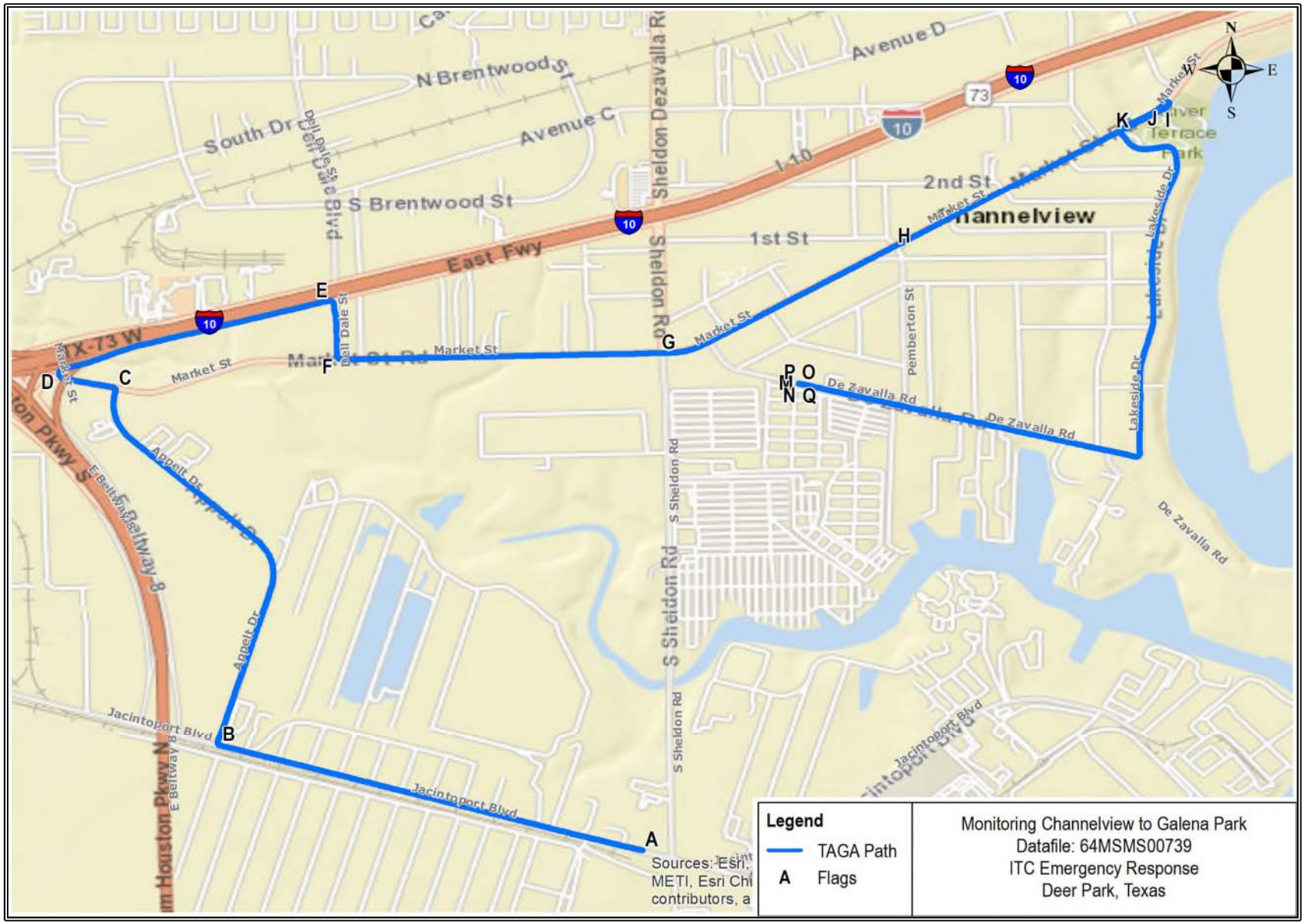


Figure 22a Monitoring Channelview to Galena Park Path, 64MSMS00739

Figure 22b

TAGA File Event Summary
File: 64MSMS00739 Acquired on 24 March 2019 at 10:41:59
Title: Monitoring Channelview to Galena Park

Flag	Time	Sequence	Description
A	1.0	94	Start mobile monitoring at Jacintoport Boulevard and Sheldon Road
B	6.8	649	Right turn onto Appelt Drive
C	14.8	1408	Left turn onto Market Street
D	15.9	1509	Right turn onto East Freeway Service Road
E	19.1	1820	Right turn onto Dell Dale Street
F	20.2	1920	Left turn onto Market Street
G	25.0	2381	Cross Sheldon Road
H	28.7	2729	Cross Pemberton Street
I	33.0	3138	Stationary at River Terrace Park
J	42.0	3995	Resume mobile monitoring – U-turn on Market Street
K	42.5	4040	Left turn onto Lakeside Drive
L	49.4	4697	Right turn onto Dezavala Road
M	54.5	5184	End mobile monitoring on Dezevala Road
N	55.0	5230	Start ambient
O	56.1	5333	End ambient
P	57.7	5488	Start 30 mL/min spike
Q	58.7	5583	End 30 mL/min spike

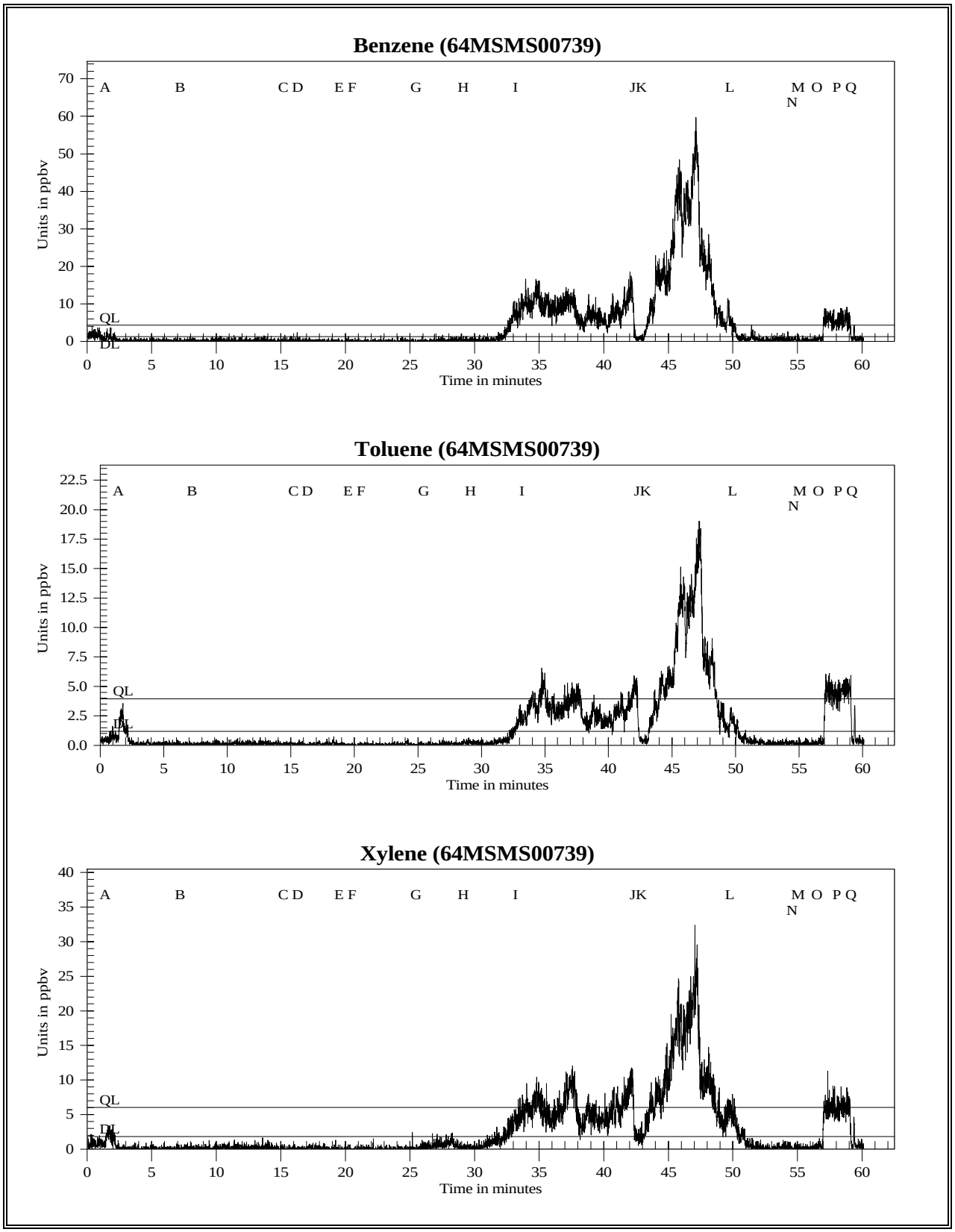


Figure 22c Monitoring Channelview to Galena Park in ppbv for Benzene, Toluene, and Xylenes

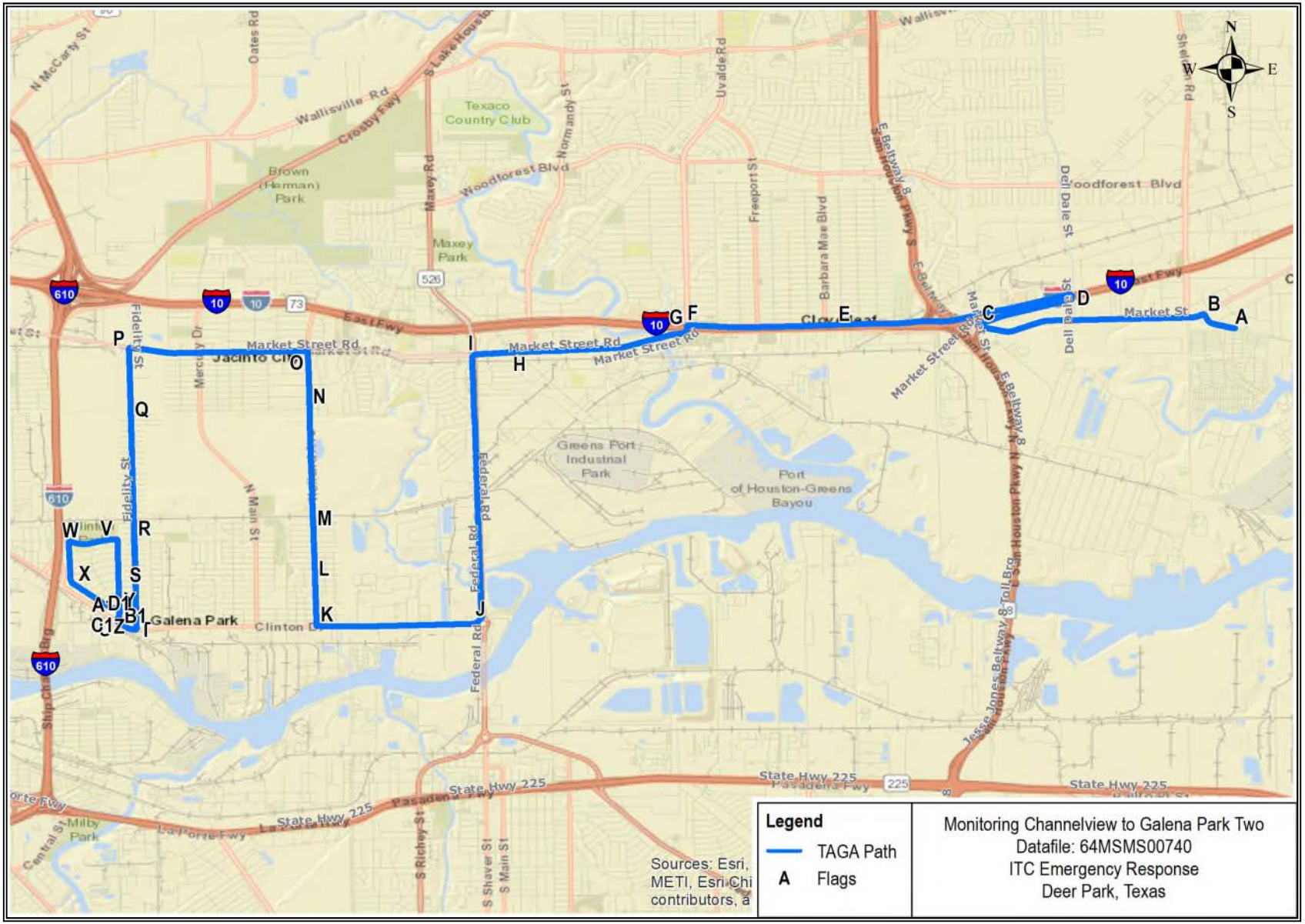


Figure 23a Monitoring Channelview to Galena Park Two Path, 64MSMS00740

Figure 23b

TAGA File Event Summary
File: 64MSMS00740 Acquired on 24 March 2019 at 11:44:14
Title: Monitoring Channelview to Galena Park Two

Flag	Time	Sequence	Description
A	1.3	123	Start mobile monitoring on Dezevala Road
B	2.2	207	Left turn onto Market Street
C	5.8	552	Right turn onto East Freeway Service Road
D	7.2	688	U-turn at Dell Dale Street
E	10.2	974	Merge onto Highway 10 East
F	11.6	1100	Exit onto East Freeway Service Road
G	11.9	1130	Left turn onto Market Street
H	15.0	1431	Cross Sheffield Boulevard
I	17.3	1650	Left turn onto Federal Road
J	23.4	2227	Right turn onto Clinton Drive
K	26.8	2550	Right turn onto Holland Avenue
L	28.3	2694	Cross 8th Street
M	30.1	2866	Cross 17th Street
N	33.2	3162	Cross Munn Street
O	34.7	3300	Left turn onto Market Street
P	39.0	3712	Left turn onto Fidelity Street
Q	41.5	3943	Cross Fillmore Street
R	45.4	4314	Cross Mississippi Street
S	47.0	4467	Cross Pennsylvania Street
T	48.8	4642	Right turn onto Clinton Drive
U	50.1	4761	Right turn onto Clinton Park Street
V	54.3	5163	Left turn onto Mississippi Street
W	55.7	5296	Left turn onto Defender Street
X	57.9	5510	Continue onto Rhode Island Street
Y	60.7	5775	Right turn onto Clinton Park Street
Z	61.7	5871	End mobile monitoring
A1	62.2	5917	Start ambient
B1	63.4	6031	End ambient
C1	65.0	6183	Start 30 mL/min spike
D1	66.0	6279	End 30 mL/min spike

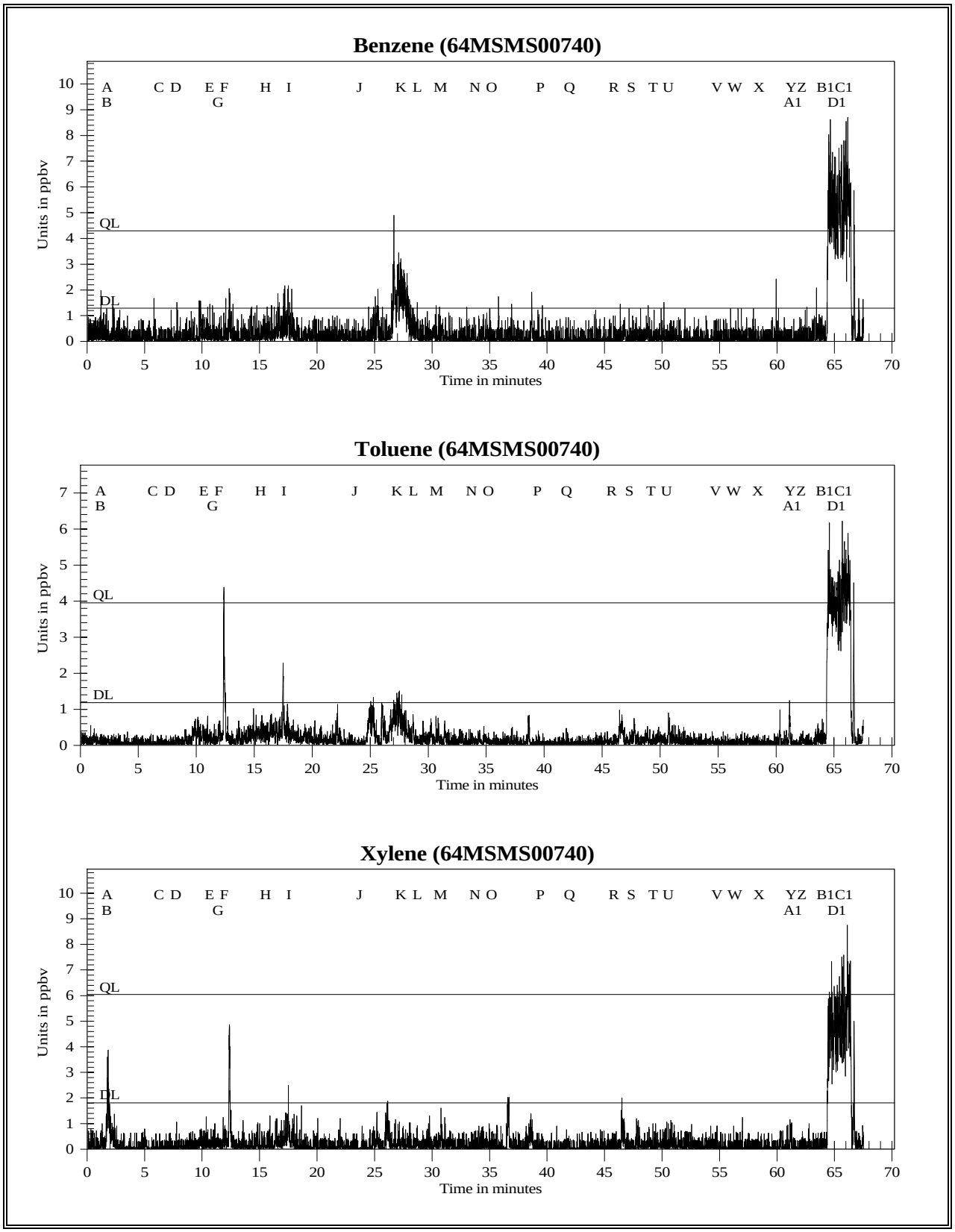


Figure 23c Monitoring Channelview to Galena Park Two in ppbv for Benzene, Toluene, and Xylenes

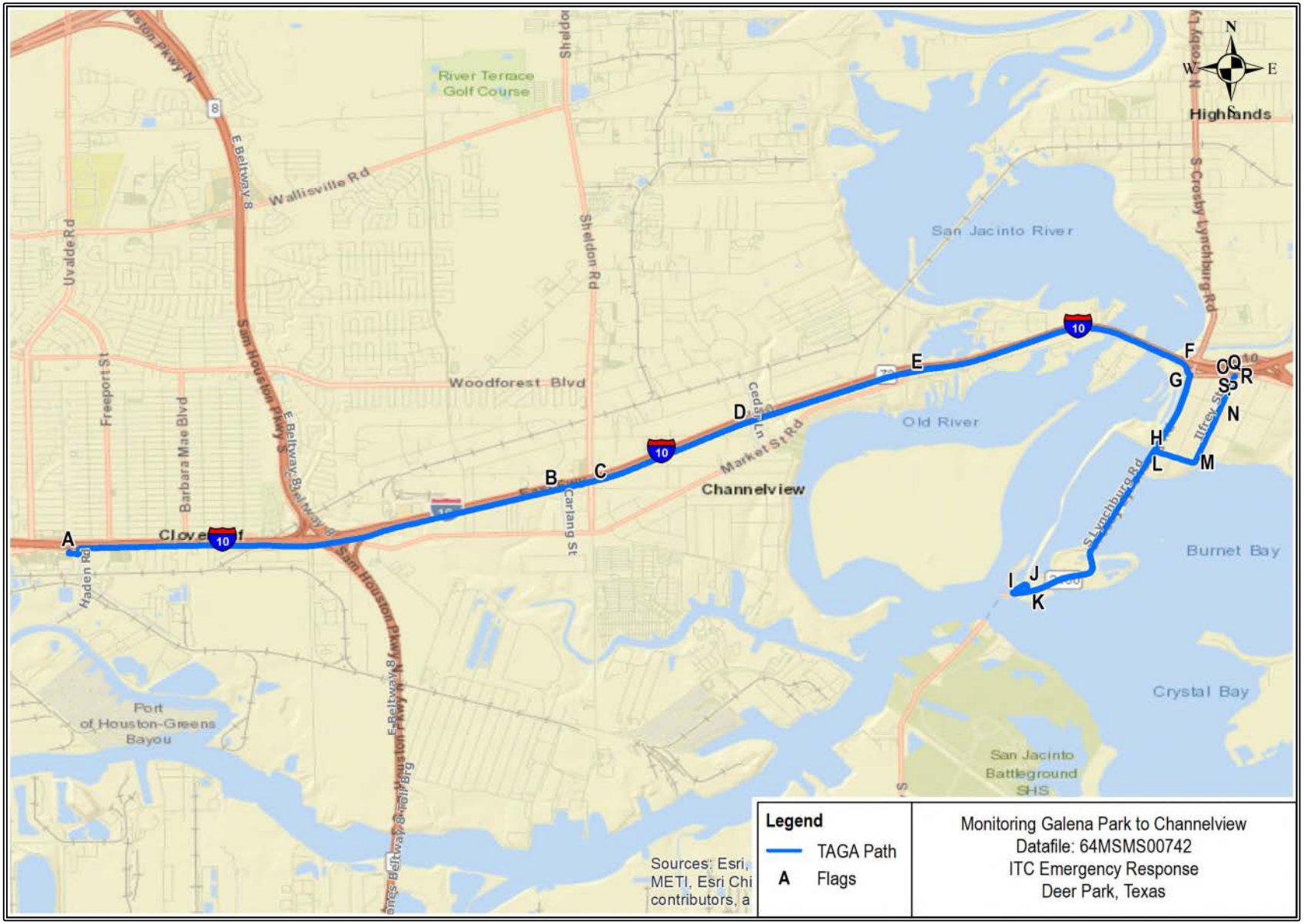


Figure 24a Monitoring Galena Park to Channelview Path, 64MSMS00742

Figure 24b

TAGA File Event Summary
File: 64MSMS00742 Acquired on 24 March 2019 at 14:12:34
Title: Monitoring Glena Park to Channelview

Flag	Time	Sequence	Description
A	5.4	516	Start mobile monitoring at East Freeway Service Road and Haden Road
B	11.9	1134	Cross Carling Street
C	13.9	1322	Cross Sheldon Road
D	17.1	1623	Cross Cedar Lane
E	21.7	2062	Merge onto Highway 10 East
F	24.2	2297	Exit Highway 10
G	24.8	2360	Right turn onto Independence Parkway North
H	27.6	2623	Cross Lakeview Drive
I	34.7	3304	Right turn Lynchburg Road
J	36.6	3482	Right turn onto Crokett Street
K	37.2	3536	Left turn onto Independence Parkway North
L	43.5	4139	Right turn onto Lakeview Drive
M	46.2	4390	Right turn onto Ilfrey Street
N	50.9	4840	Cross Center Street
O	53.6	5093	End mobile monitoring at Decker Drive
P	53.9	5125	Start ambient
Q	54.9	5222	End ambient
R	56.3	5358	Start 30 mL/min spike
S	57.4	5455	End 30 mL/min spike

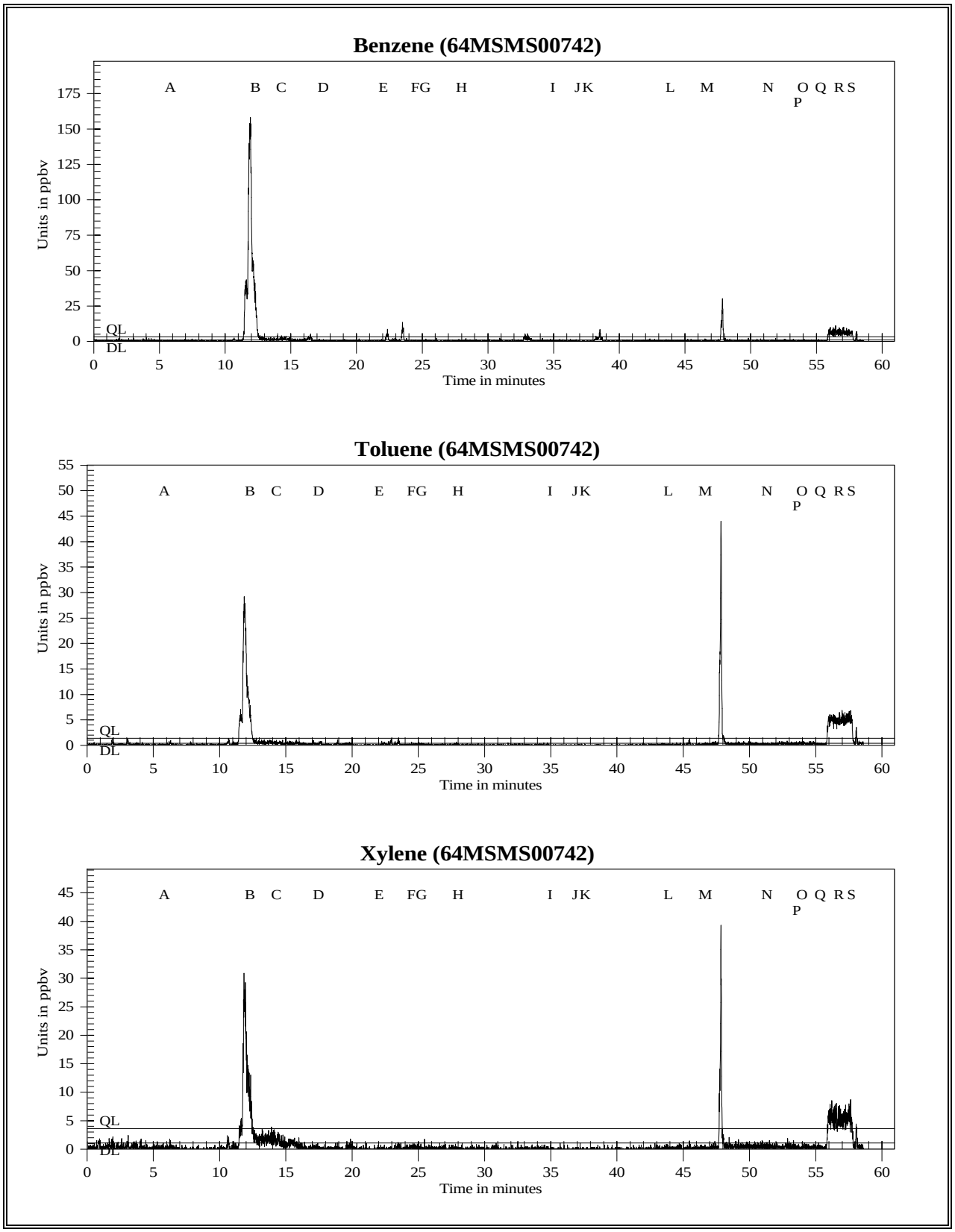


Figure 24c Monitoring from Galena Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

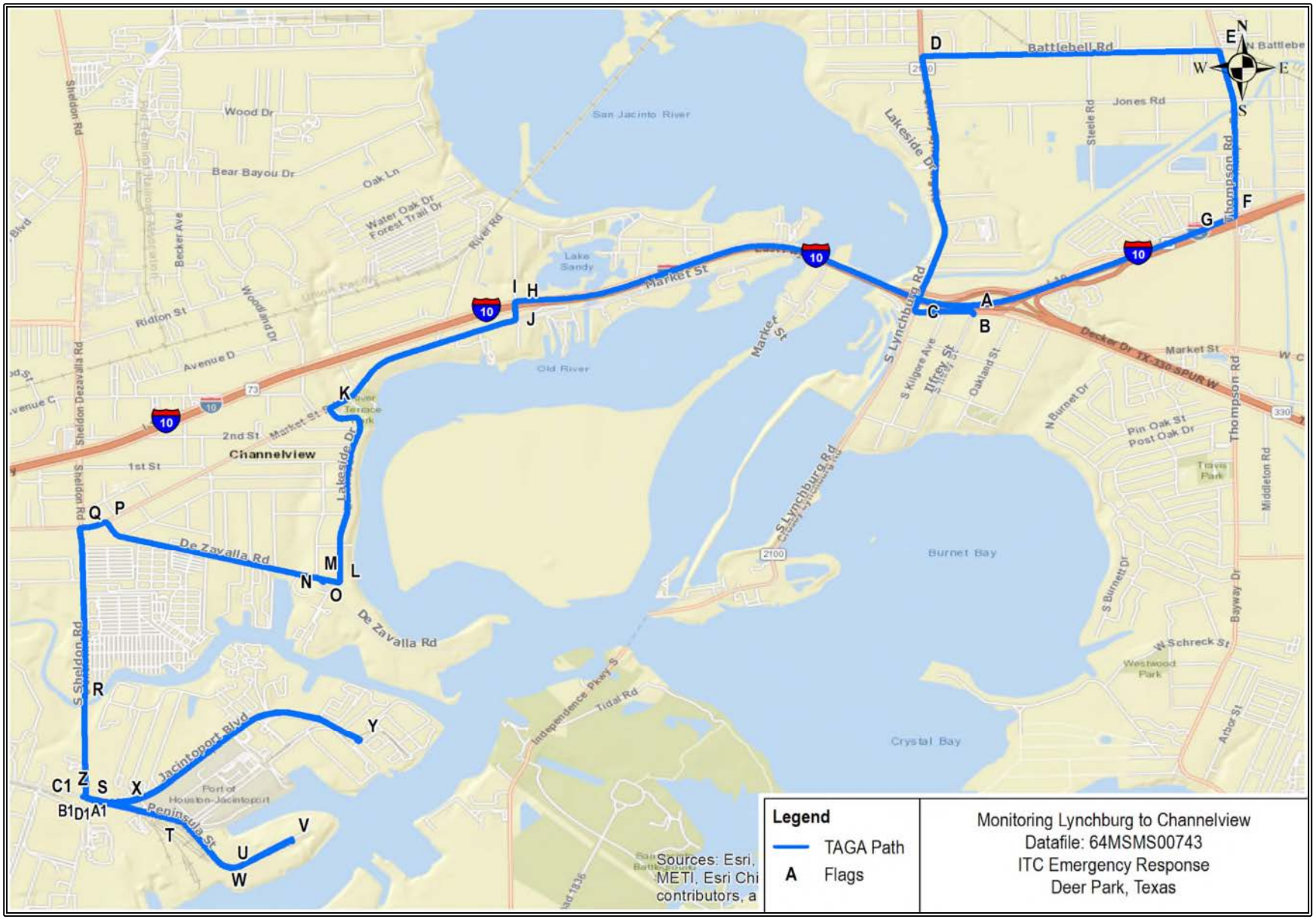


Figure 25a Monitoring Lynchburg to Channelview Path, 64MSMS00743

Figure 25b

TAGA File Event Summary
File: 64MSMS00743 Acquired on 24 March 2019 at 15:14:11
Title: Monitoring Lynchburg to Channelview

Flag	Time	Sequence	Description
A	1.2	115	Start mobile monitoring at Ilfrey Street and Decker Drive
B	3.4	322	Left turn onto Decker Drive
C	4.3	409	Right turn onto Independence Parkway North
D	8.3	794	Right turn onto Battlebell Road
E	13.2	1260	Right turn onto Thompson Road
F	16.6	1577	Right turn onto East Freeway Service Road
G	17.1	1626	Merge onto Highway 10 West
H	24.0	2279	Exit Highway 10 West
I	24.1	2293	Left turn onto Magnolia Street
J	24.6	2343	Right turn onto Market Street
K	28.8	2737	Left turn onto Lakeside Drive
L	34.2	3252	Right turn onto Dezavala Road
M	35.4	3366	U-turn at Elsbeth Road
N	36.2	3447	Stationary at Dezavala Road and Lakeside Drive
O	50.1	4761	Resume mobile monitoring on Dezavala Road
P	54.2	5157	Left turn onto Market Street
Q	56.0	5321	Left turn onto Sheldon Road
R	60.6	5759	Cross Carpenter’s Bayou
S	63.3	6016	Left turn onto Jacintoport Boulevard
T	65.9	6264	Merge onto San Jacinto Boulevard
U	67.8	6450	Continue onto Peninsula Street
V	69.3	6586	U-turn at Coast Cargo terminal
W	71.1	6757	Continue onto San Jacinto Boulevard
X	74.8	7112	Right turn onto Jacintoport Boulevard
Y	83.7	7958	U-turn on Jacintoport Boulevard
Z	92.4	8782	End mobile monitoring at Jacintoport Boulevard and Sheldon Road
A1	93.3	8869	Start ambient
B1	94.3	8964	End ambient
C1	96.0	9124	Start 30 mL/min spike
D1	96.9	9218	End 30 mL/min spike

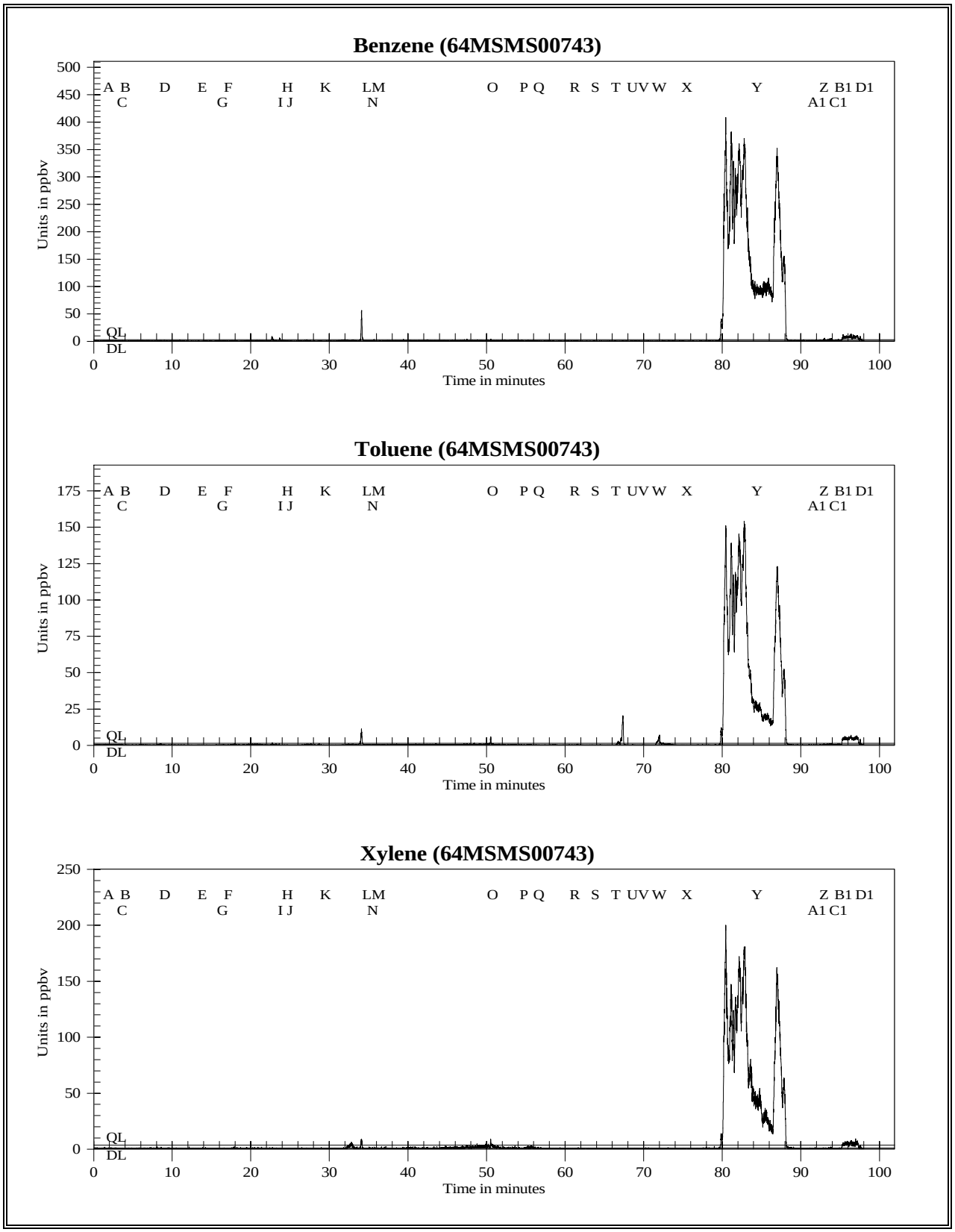


Figure 25c Monitoring from Lynchburg to Channelview in ppbv for Benzene, Toluene, and Xylenes

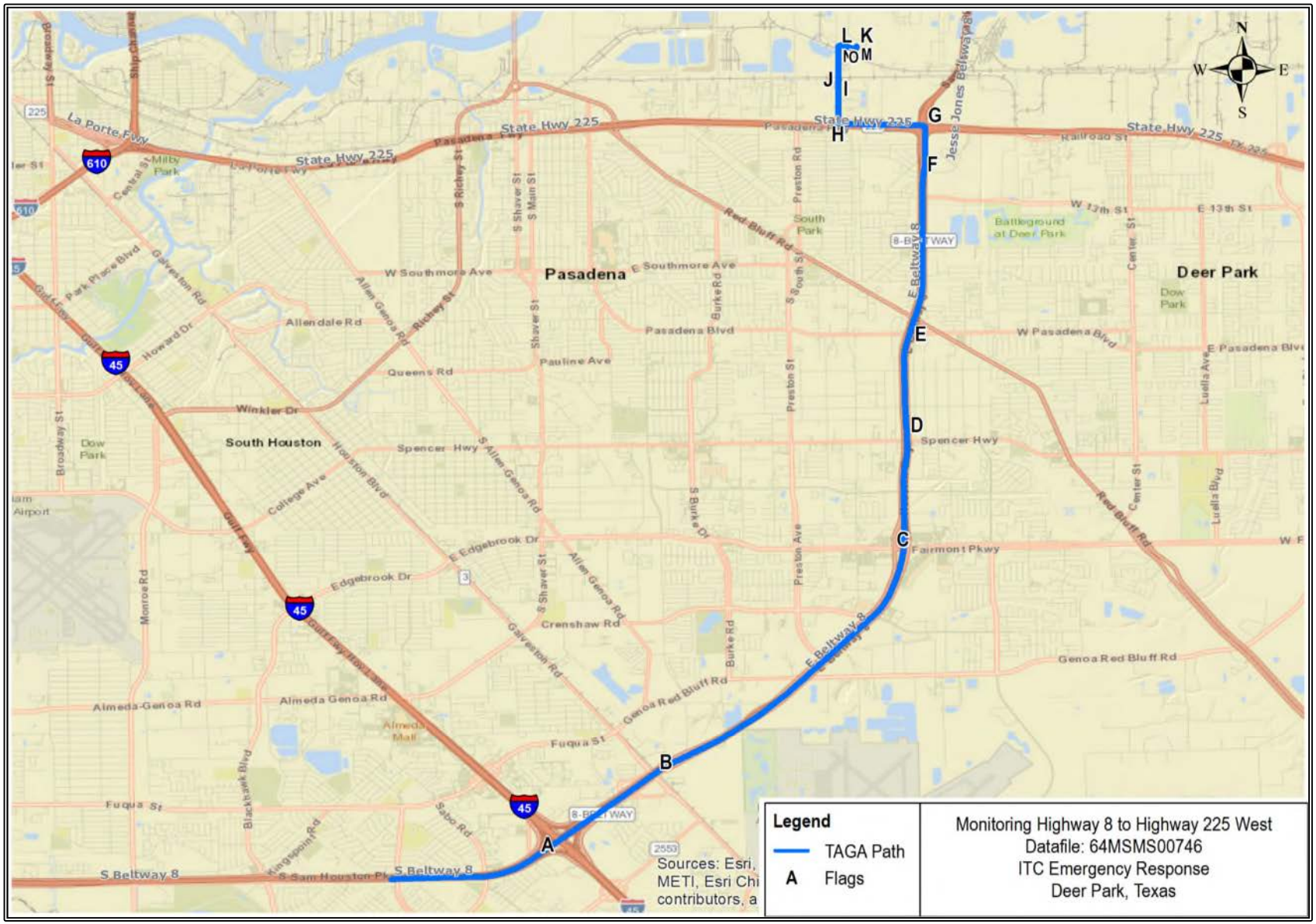


Figure 26a Monitoring Highway 8 to Highway 225 West Path, 64MSMS00746

Figure 26b

TAGA File Event Summary
File: 64MSMS00746 Acquired on 25 March 2019 at 08:53:29
Title: Monitoring Highway 8 to Highway 225 West

Flag	Time	Sequence	Description
A	1.3	66	Start mobile monitoring at Highway 45
B	2.5	125	Cross Galveston Road
C	6.7	328	Cross Fairmont Parkway
D	7.8	380	Cross Spencer Highway
E	8.8	432	Cross Pasadena Boulevard
F	10.5	512	Exit onto Highway 8 Frontage Road
G	12.5	612	Left turn onto Pasadena Freeway Frontage Road
H	14.3	696	Right turn onto Ethyl Road
I	15.7	766	Stationary at railroad crossing on Ethyl Road
J	20.1	982	Resume mobile monitoring on Ethyl Road
K	23.4	1140	End mobile monitoring at EPA Command Post
L	23.9	1164	Start ambient
M	25.4	1241	End ambient
N	27.1	1322	Start 30 mL/min spike
O	28.1	1371	End 30 mL/min spike

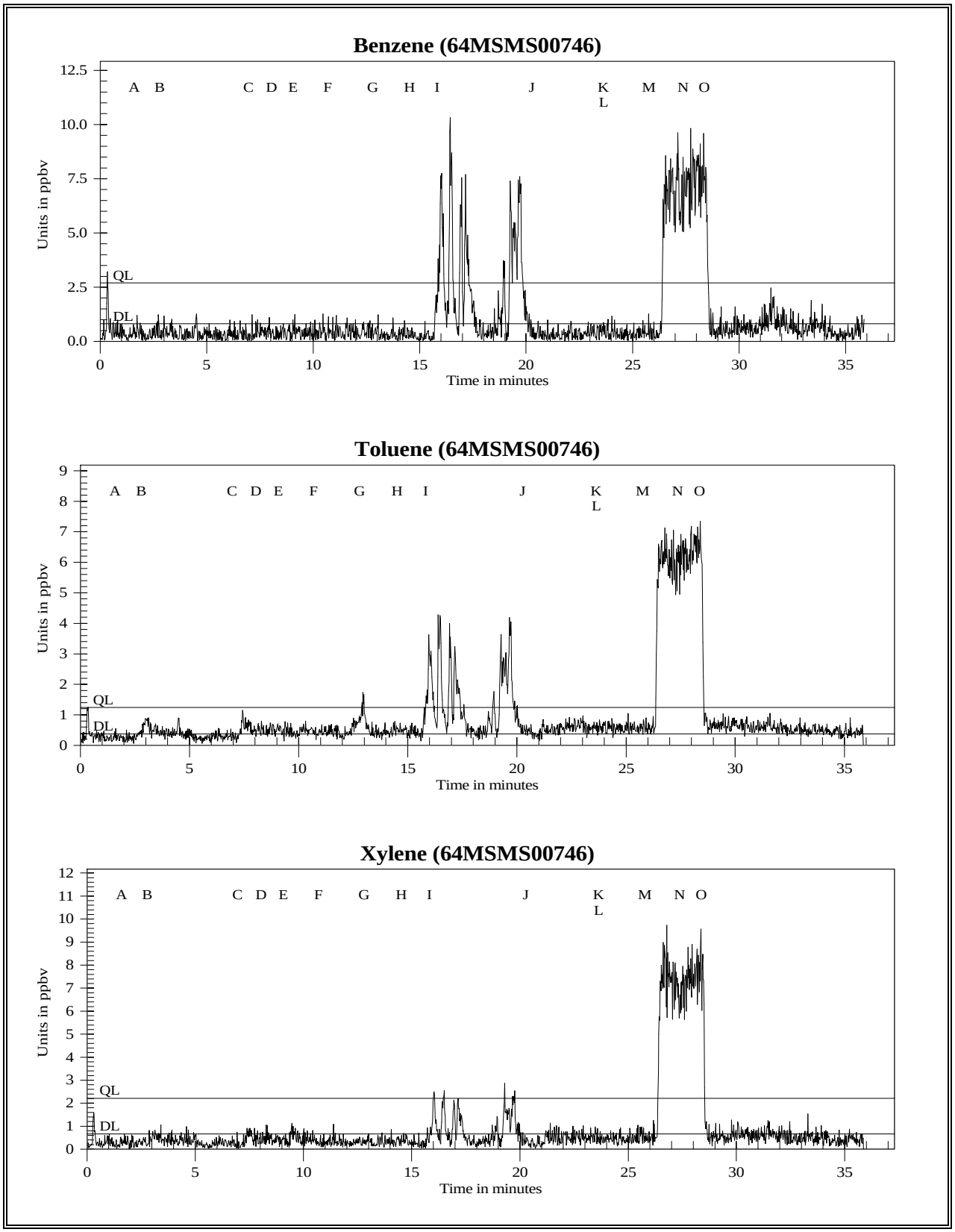


Figure 26c Monitoring Highway 8 North to Highway 225 in ppbv for Benzene, Toluene, and Xylenes

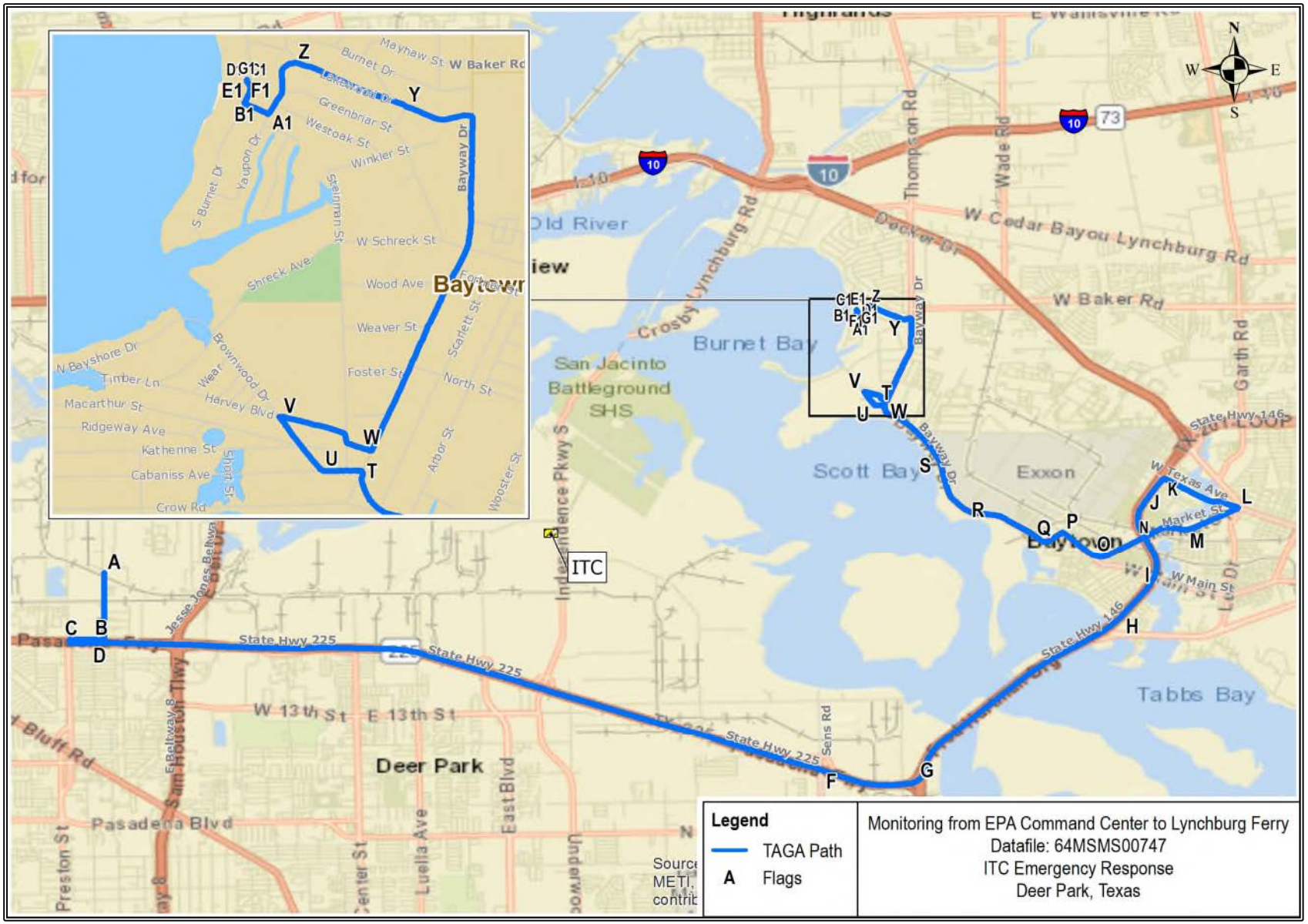


Figure 27a Monitoring from EPA Command Center to Lynchburg Ferry Path, 64MSMS00747

Figure 27b

TAGA File Event Summary
File: 64MSMS00747 Acquired on 25 March 2019 at 09:32:18
Title: Monitoring EPA Command Post to Lynchburg Ferry

Flag	Time	Sequence	Description
A	0.7	35	Start mobile monitoring at EPA Command Post
B	3.6	177	Right turn onto Pasadena Freeway Frontage Road
C	4.5	219	U-turn at Preston Road
D	5.1	251	Merge onto Highway 225 East
E	9.2	450	Cross East Boulevard
F	12.8	625	Cross Sens Road
G	13.9	677	Merge onto Highway 146 North
H	16.8	822	Cross Missouri Street
I	17.5	853	Cross Main Street
J	18.6	906	Exit onto Highway 146 Frontage Road
K	19.3	941	Right turn onto West Texas Avenue
L	21.4	1046	Right turn onto Market Street
M	22.8	1114	Passing Robert E. Lee High School
N	23.9	1165	Cross Highway 146
O	25.1	1223	Continue onto Market Street
P	26.2	1277	Left turn to continue onto Market Street
Q	26.9	1314	Continue onto Bayway Drive
R	28.8	1405	Cross West Street
S	30.5	1486	Passing Exxon Chemical Technologies
T	33.2	1617	Left turn onto Cabaniss Avenue
U	34.1	1664	Right turn onto Brownwood Drive
V	35.5	1733	Right turn onto Harvey Boulevard
W	37.4	1826	Left turn onto Bayway Drive
Y	40.5	1976	Cross Mayhaw Drive
Z	42.4	2067	Left turn onto Yaupon Drive
A1	43.1	2102	Right turn onto Natchez Street
B1	43.7	2132	Right turn onto South Burnett Drive
C1	44.2	2154	End mobile monitoring on South Burnett Drive
D1	44.6	2173	Start ambient
E1	45.6	2222	End ambient
F1	47.3	2306	Start 30 mL/min spike
G1	48.3	2354	End 30 mL/min spike

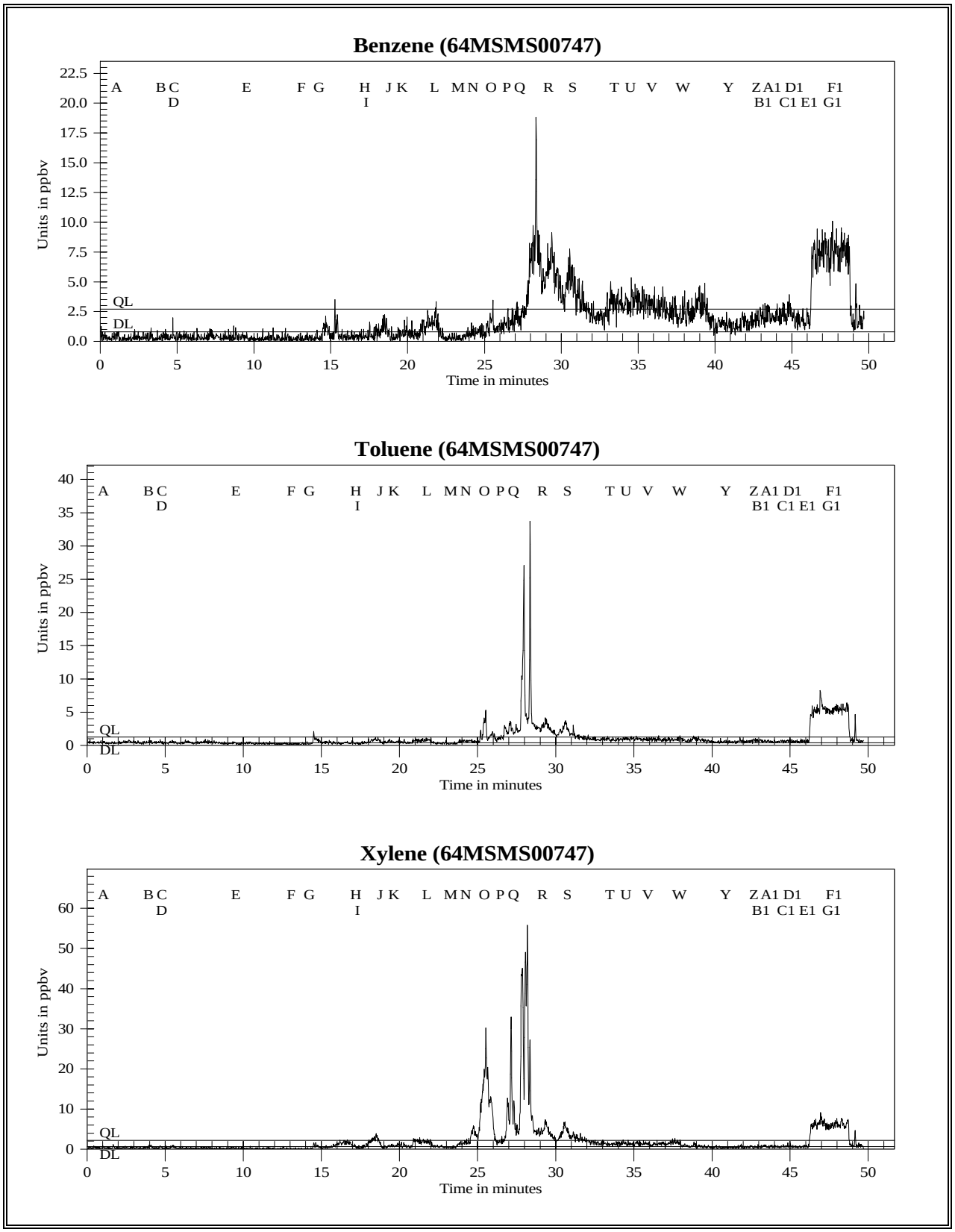


Figure 27c Monitoring from Command Post to Lynchburg Ferry in ppbv for Benzene, Toluene, and Xylenes

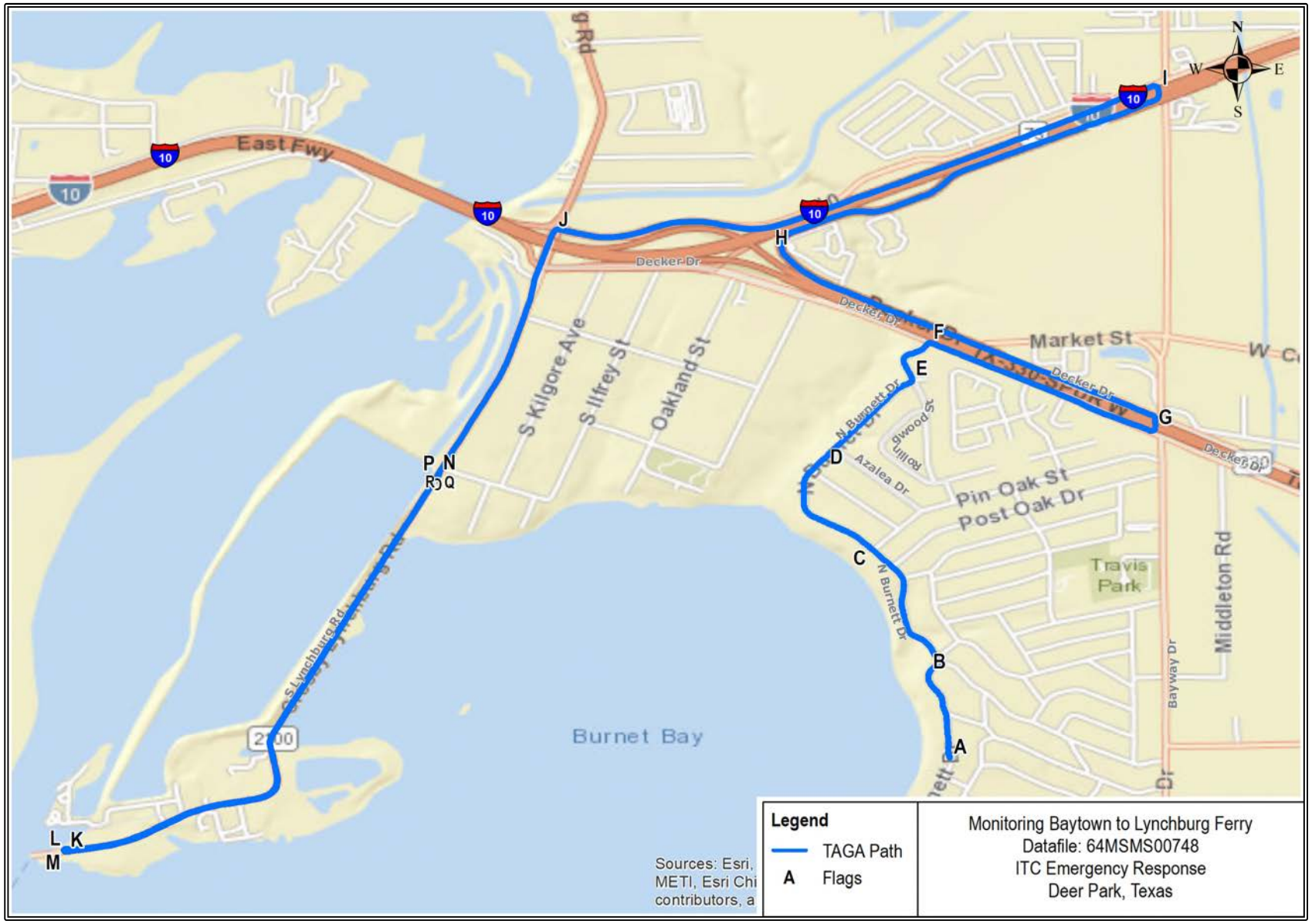


Figure 28a Monitoring Baytown to Lynchburg Ferry Path, 64MSMS00748

Figure 28b

TAGA File Event Summary
File: 64MSMS00748 Acquired on 25 March 2019 at 10:42:45
Title: Monitoring Baytown to Lynchburg Ferry

Flag	Time	Sequence	Description
A	1.5	72	Start mobile monitoring on South Burnett Drive
B	4.2	204	Left turn onto North Burnett Drive
C	6.5	319	Cross Pin Oak Drive
D	9.5	463	Cross Azalea Drive
E	11.1	542	Left turn onto Rollingwood Road
F	12.2	597	Right turn onto Decker Drive
G	13.4	655	U-turn at Thompson Road and Bayway Drive
H	15.8	771	Right turn onto Highway 10 Frontage Road eastbound
I	17.8	870	U-turn at Thompson Road
J	21.4	1044	Left turn onto Independence Parkway North
K	27.7	1353	Stationary at Lynchburg Ferry
L	48.9	2384	Resume mobile monitoring at Lynchburg Ferry
M	49.5	2414	U-turn on Independence Parkway North
N	53.8	2622	End mobile monitoring on Independence Parkway North near Lakeview Drive
O	55.5	2708	Start ambient
P	56.5	2756	End ambient
Q	58.6	2858	Start 30 mL/min spike
R	59.6	2907	End 30 mL/min spike

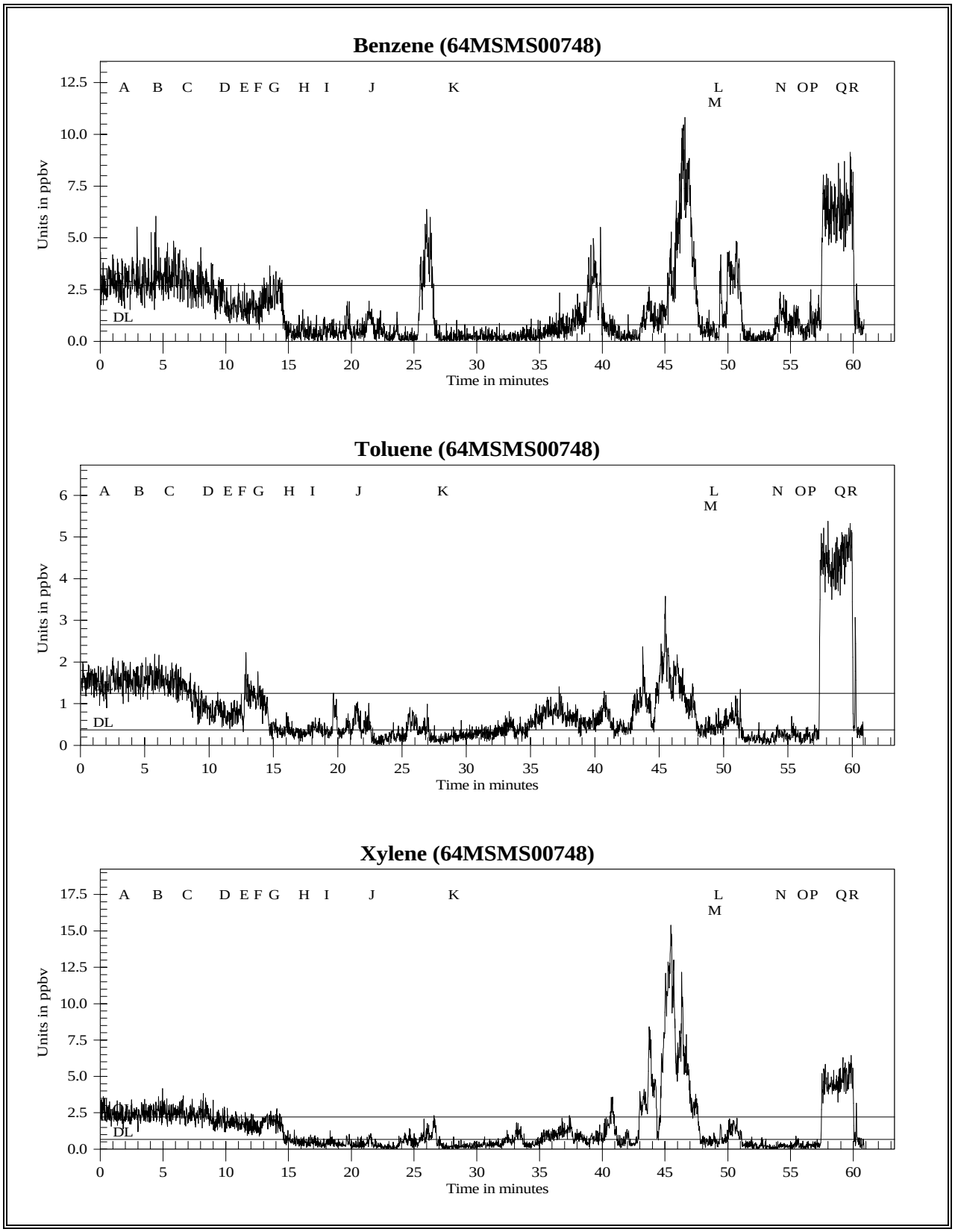


Figure 28c Monitoring from Baytown to Lynchburg Ferry in ppbv for Benzene, Toluene, and Xylenes

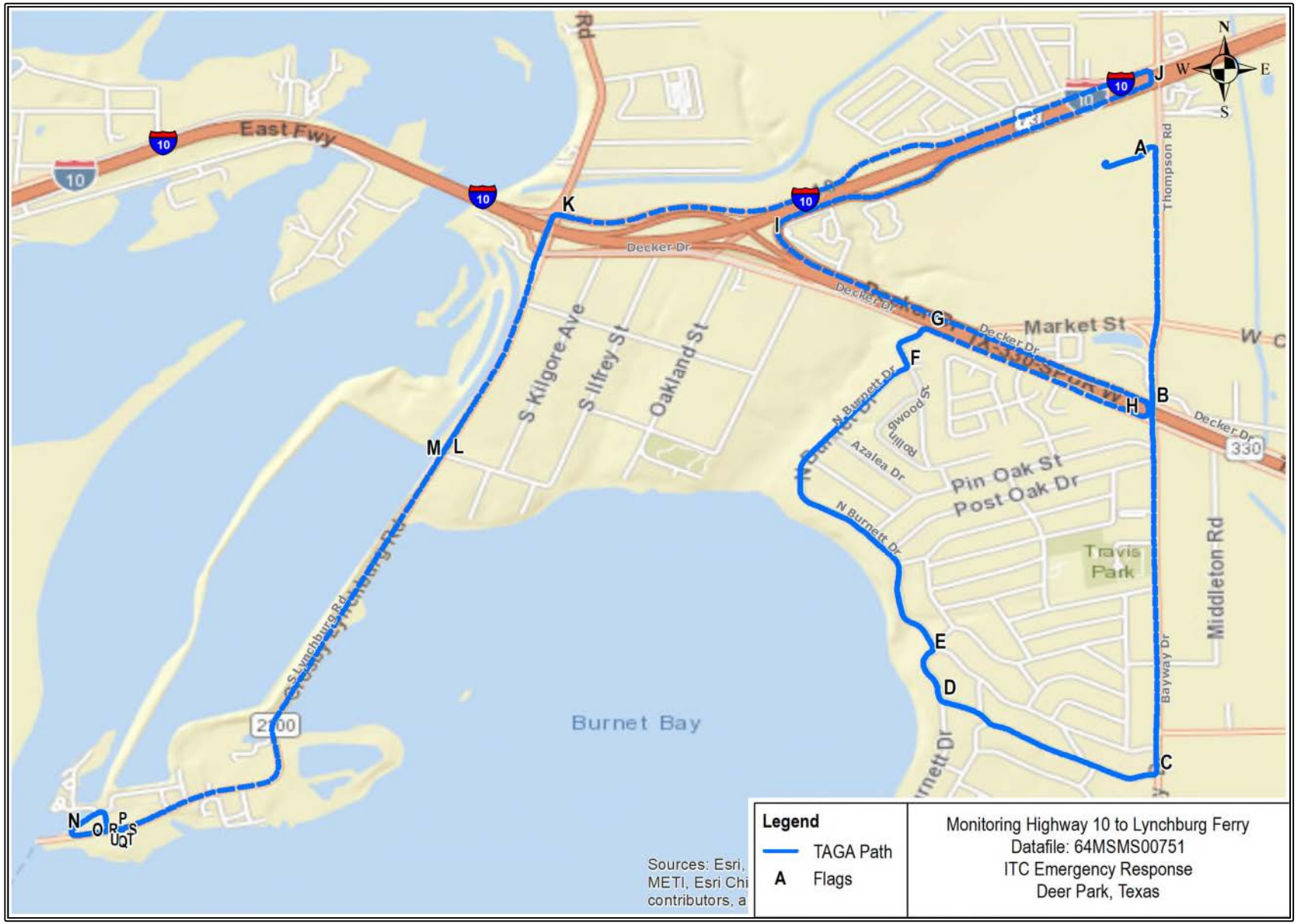


Figure 29a Monitoring Highway 10 to Lynchburg Ferry Path, 64MSMS00751

Figure 29b

TAGA File Event Summary
File: 64MSMS00751 Acquired on 25 March 2019 at 13:53:16
Title: Monitoring Highway 10 to Lynchburg Ferry

Flag	Time	Sequence	Description
A	2.6	128	Start mobile monitoring on Thompson Road southbound
B	6.2	302	Cross Highway 330; continuing onto Bayway Drive
C	9.4	458	Right turn onto Lakewood Drive
D	13.3	648	Right turn onto South Burnett Drive
E	14.4	704	Left turn onto North Burnett Drive
F	21.0	1022	Left turn onto Rollingwood Road
G	22.1	1079	Right turn onto Decker Drive
H	23.4	1140	U-turn at Thompson Road and Bayway Drive
I	25.8	1260	Right turn onto Highway 10 Service Road
J	28.5	1388	U-turn at Thompson Road
K	32.1	1566	Left turn onto Independence Parkway North
L	34.9	1704	Stationary at Lakeview Drive
M	35.8	1745	Resume mobile monitoring on Independence Parkway North
N	40.5	1973	Right turn onto Lynchburg Road
O	41.2	2007	Left turn onto Independence Parkway North
P	42.0	2050	Stationary on Independence Parkway North
Q	43.3	2111	End Mobile monitoring on Independence Parkway North
R	43.6	2128	Start ambient
S	44.8	2183	End ambient
T	46.7	2277	Start 30 mL/min spike
U	47.8	2330	End 30 mL/min spike

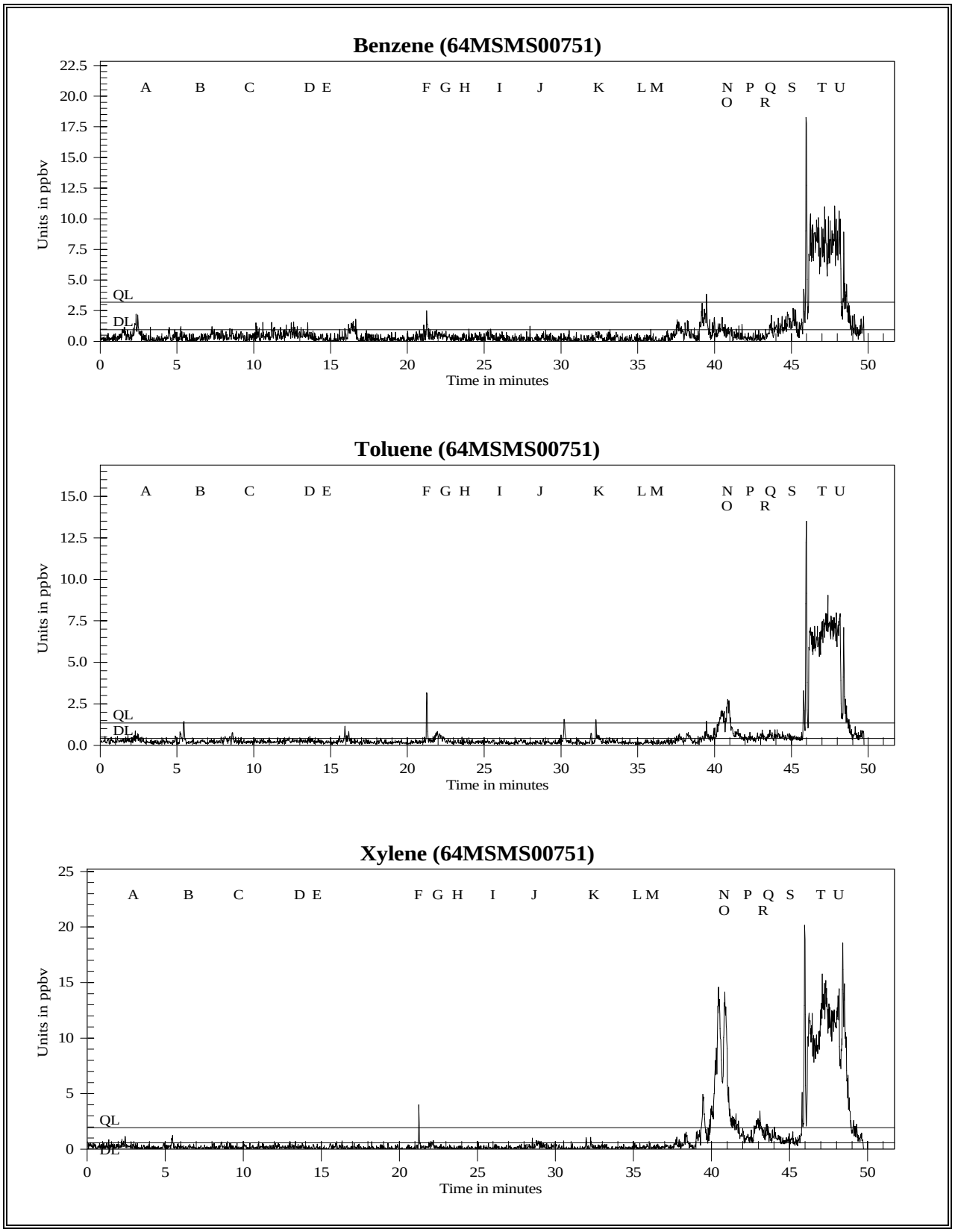


Figure 29c Monitoring Highway 10 to Lynchburg Ferry in ppbv for Benzene, Toluene, and Xylenes

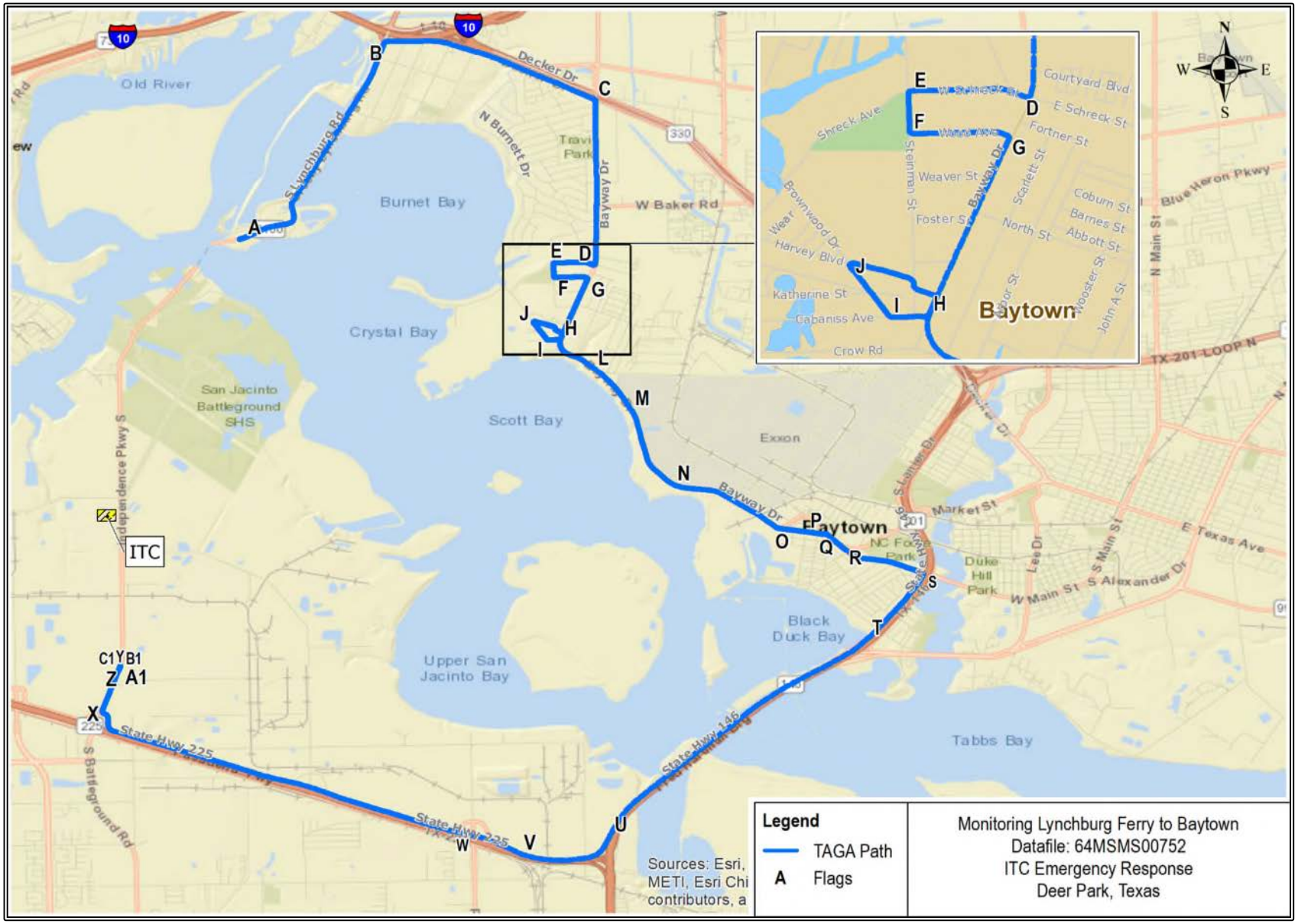


Figure 30a Monitoring Lynchburg Ferry to Baytown Path, 64MSMS00752

Figure 30b

TAGA File Event Summary
File: 64MSMS00752 Acquired on 25 March 2019 at 14:52:06
Title: Monitoring Lynchburg Ferry to Baytown

Flag	Time	Sequence	Description
A	1.9	94	Start mobile monitoring on Independence Parkway North
B	6.6	322	Right turn onto Decker Drive
C	9.5	464	Right turn onto Bayway Drive
D	13.1	641	Right turn onto West Shreck Street
E	14.7	717	Left turn onto Steinman Street
F	15.9	775	Left turn onto Woods Street
G	18.1	881	Right turn on to Bayway Drive
H	19.7	962	Right turn onto Cabaniss Avenue
I	20.5	999	Right turn onto Brownwood Drive
J	21.9	1070	Right turn onto Harvey Boulevard
L	26.0	1266	Cross Wooster Street
M	26.9	1314	Passing Exxon Mobil Chemical
N	28.6	1397	Cross West Street
O	30.6	1492	Continue onto Wisconsin Street
P	31.7	1548	Cross Huggins Street
Q	32.3	1575	Right turn onto Market Street
R	33.3	1624	Continue onto Main Street
S	35.1	1713	Right turn onto Highway 146 Frontage Road
T	37.0	1803	Merge onto Highway 146 South
U	39.8	1942	Exit onto Highway 225 West
V	40.8	1989	Exit onto Pasadena Freeway Frontage Road
W	41.3	2014	Cross Sens Road
X	45.9	2239	Right turn onto Independence Parkway
Y	47.3	2305	End Mobile Monitoring on Independence Parkway
Z	47.7	2324	Start ambient
A1	48.7	2373	End ambient
B1	50.1	2444	Start 30 mL/min spike
C1	51.2	2494	End 30 mL/min spike

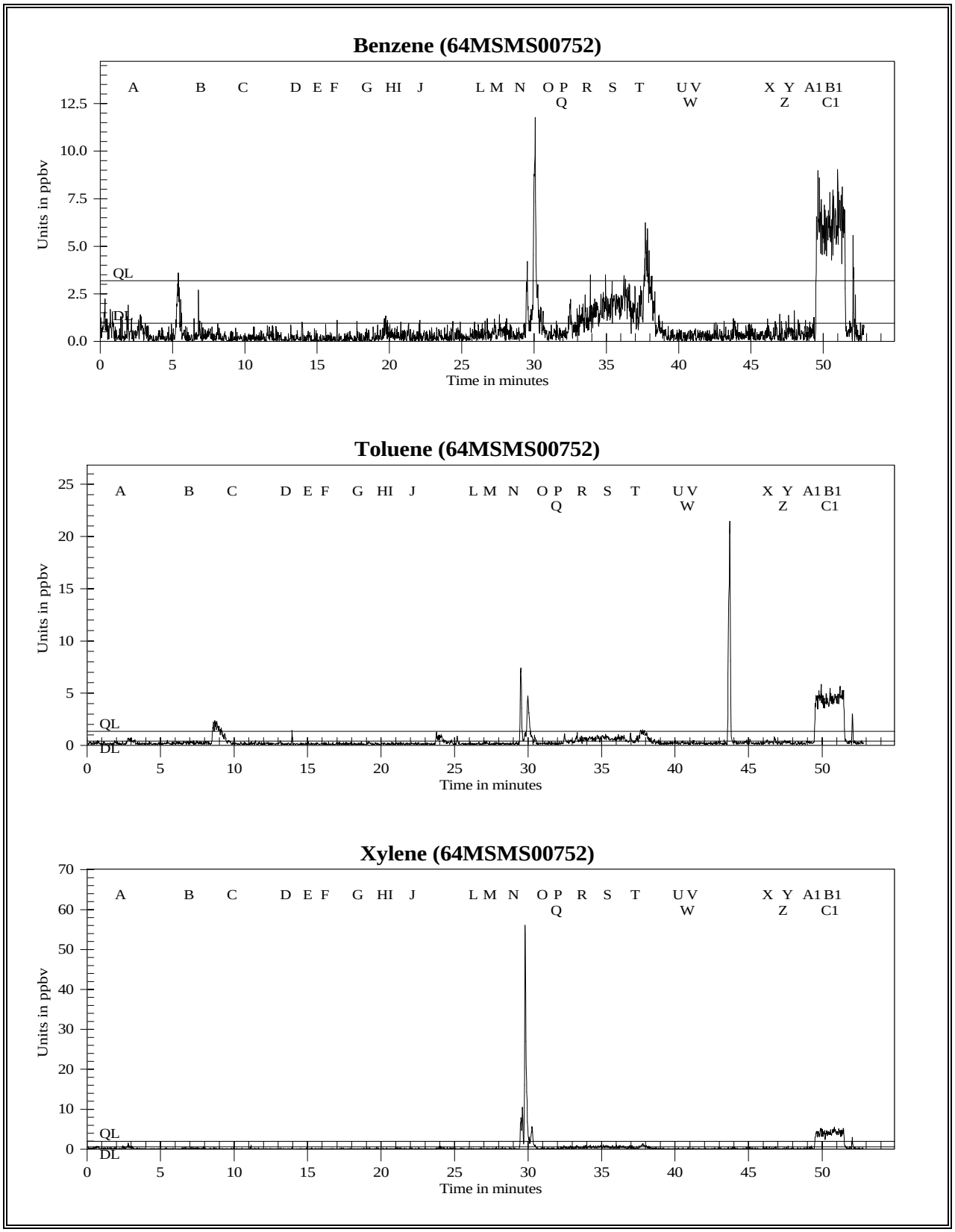


Figure 30c Monitoring from Lynchburg Ferry to Baytown in ppbv for Benzene, Toluene, and Xylenes

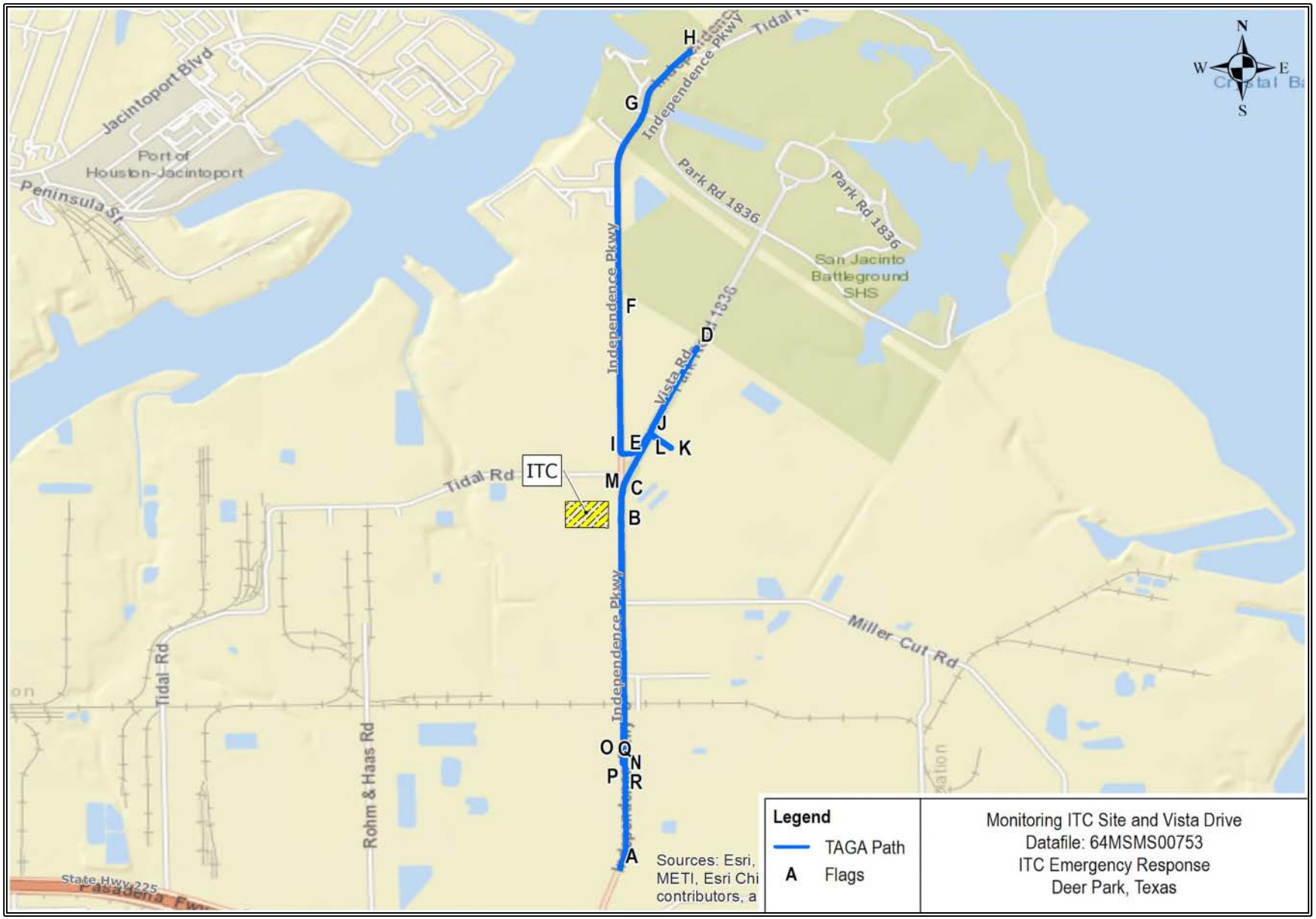


Figure 31a Monitoring ITC Site and Vista Drive Path, 64MSMS00753

Figure 31b

TAGA File Event Summary
File: 64MSMS00753 Acquired on 25 March 2019 at 15:48:25
Title: Monitoring ITC Site and Vista Road

Flag	Time	Sequence	Description
A	1.0	50	Start mobile monitoring on Independence Parkway
B	9.2	451	Passing the ITC Site
C	10.0	486	Right turn onto Vista Road
D	11.9	582	Reversing on Vista Road
E	18.4	900	Right turn onto Independence Parkway
F	21.0	1023	Cross U-Wood
G	24.0	1171	Cross Park Road 1836
H	25.5	1244	U-turn on Independence Parkway
I	34.8	1695	Left turn onto Vista Road
J	35.8	1747	Right turn at Oxychem
K	37.0	1802	U-turn at Oxychem
L	39.2	1910	Left turn onto Vista Road
M	41.1	2002	Passing ITC Site
N	47.4	2310	End mobile monitoring on Independence Parkway
O	47.7	2326	Start ambient
P	48.8	2380	End ambient
Q	50.1	2444	Start 30 mL/min spike
R	51.2	2494	End 30 mL/min spike

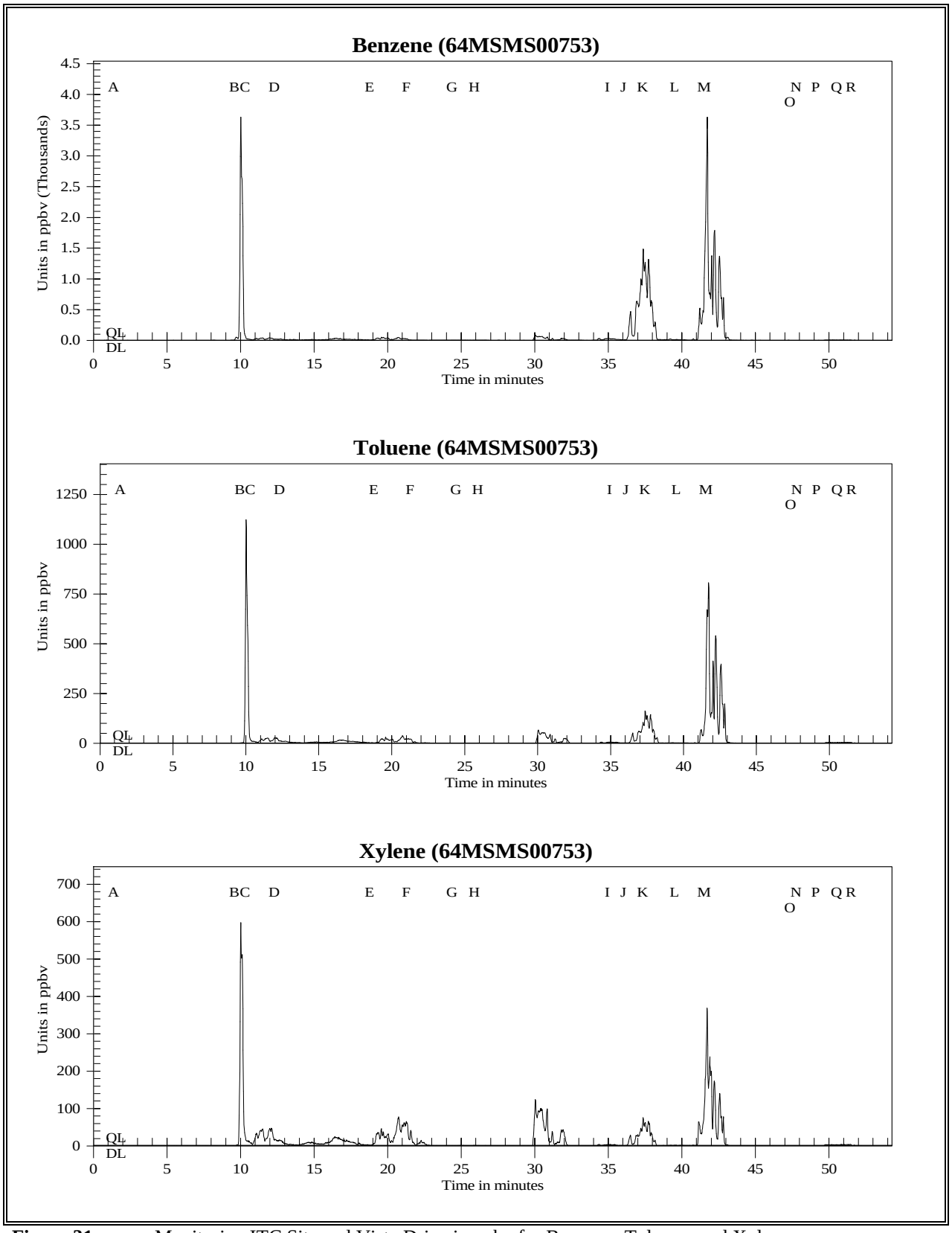


Figure 31c Monitoring ITC Site and Vista Drive in ppbv for Benzene, Toluene, and Xylenes

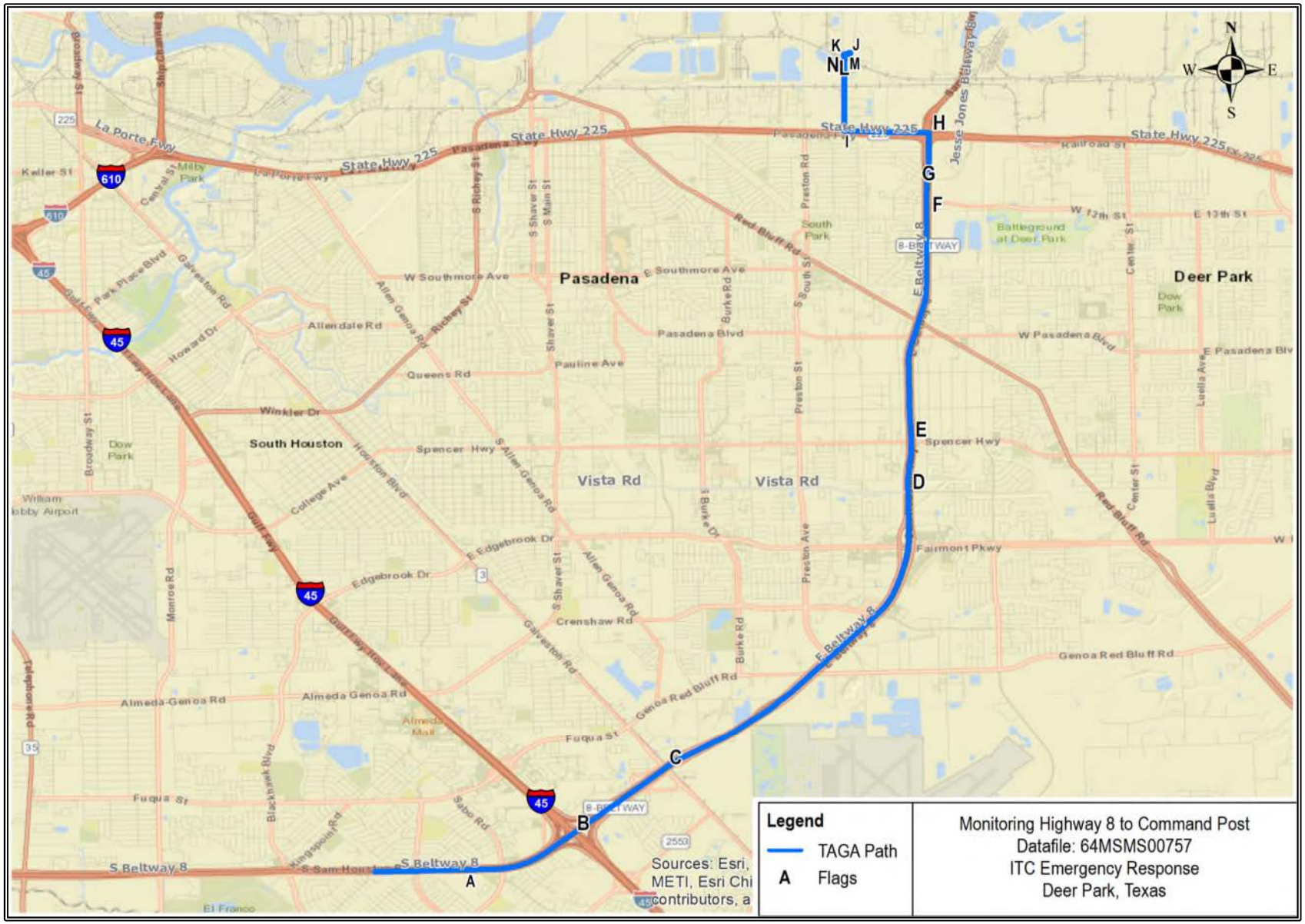


Figure 32a Monitoring Highway 8 to Command Post Path, 64MSMS00757

Figure 32b

TAGA File Event Summary
File: 64MSMS00757 Acquired on 26 March 2019 at 09:06:31
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	0.9	91	Start mobile monitoring on Highway 8 North
B	2.0	192	Cross Highway 45
C	3.1	298	Cross Galveston Road
D	7.9	749	Cross Vista Road
E	8.4	799	Cross Spencer Highway
F	11.0	1050	Cross Greenshadow Drive
G	11.3	1073	Exit onto Highway 8 Service Road
H	15.0	1425	Left turn onto Pasadena Freeway Frontage Road
I	16.5	1568	Right turn onto Ethyl Road
J	19.9	1889	End mobile monitoring at EPA Command Post
K	21.9	2086	Start ambient
L	22.9	2181	End ambient
M	25.7	2447	Start 30 mL/min spike
N	26.8	2547	End 30 mL/min spike

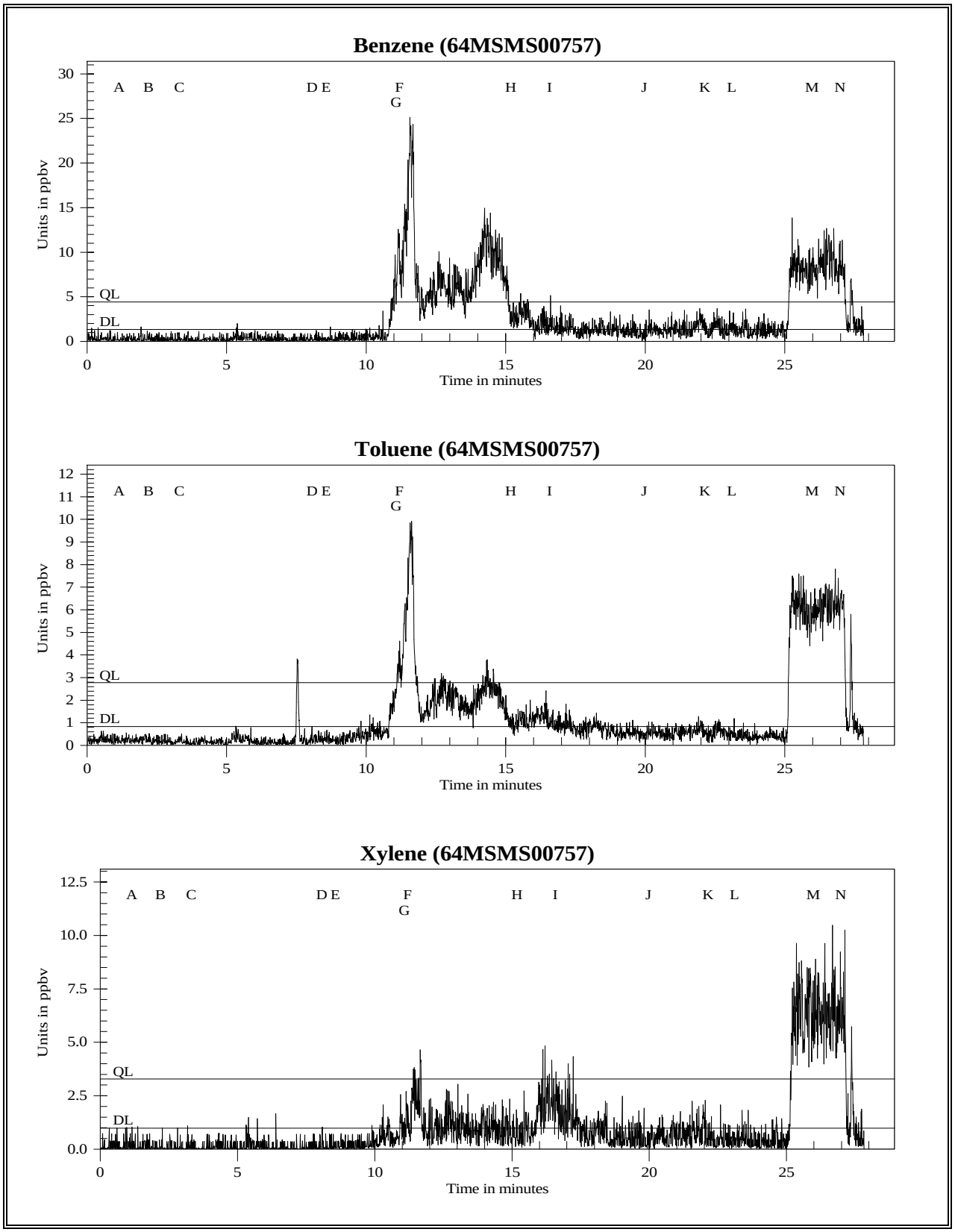


Figure 32c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

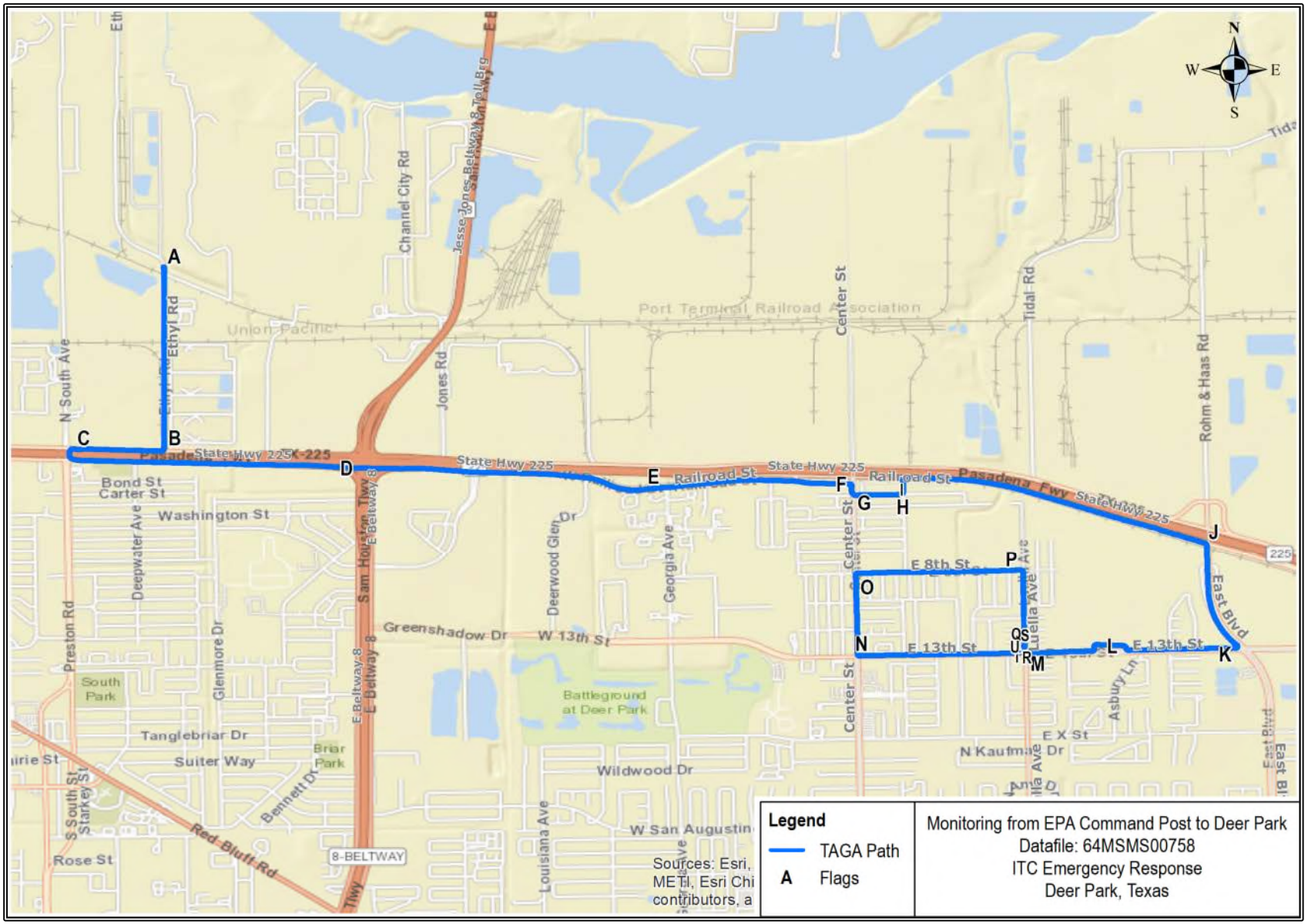


Figure 33a Monitoring EPA Command Post to Deer Park Path, 64MSMS00758

Figure 33b

TAGA File Event Summary
File: 64MSMS00758 Acquired on 26 March 2019 at 09:37:49
Title: Monitoring EPA Command Post to Deer Park

Flag	Time	Sequence	Description
A	1.4	138	Start mobile monitoring at EPA Command Post
B	4.7	449	Right turn onto Pasadena Freeway Frontage Road
C	5.5	527	U-turn at Preston Road
D	10.7	1018	Cross Highway 8; continuing onto Railroad Street
E	14.6	1390	Cross Georgia Avenue
F	17.1	1622	Right turn onto Center Street
G	17.3	1650	Left turn onto East 1st Street
H	18.8	1791	Left turn onto Ivy Avenue
I	19.3	1834	Right turn onto Pasadena Freeway Frontage Road
J	23.2	2210	Right turn onto East Boulevard
K	24.8	2363	Right turn onto East 13th Street
L	27.0	2572	Passing San Jacinto Elementary School
M	29.7	2829	Cross Luella Avenue
N	33.8	3216	Right turn onto Center Street
O	35.4	3365	Right turn onto East 8th Street
P	39.0	3713	Right turn onto Luella Avenue
Q	41.1	3910	End mobile monitoring at Luella Avenue and Frances Street
R	41.7	3964	Start ambient
S	42.7	4065	End ambient
T	44.2	4204	Start 30 mL/min spike
U	45.4	4318	End 30 mL/min spike

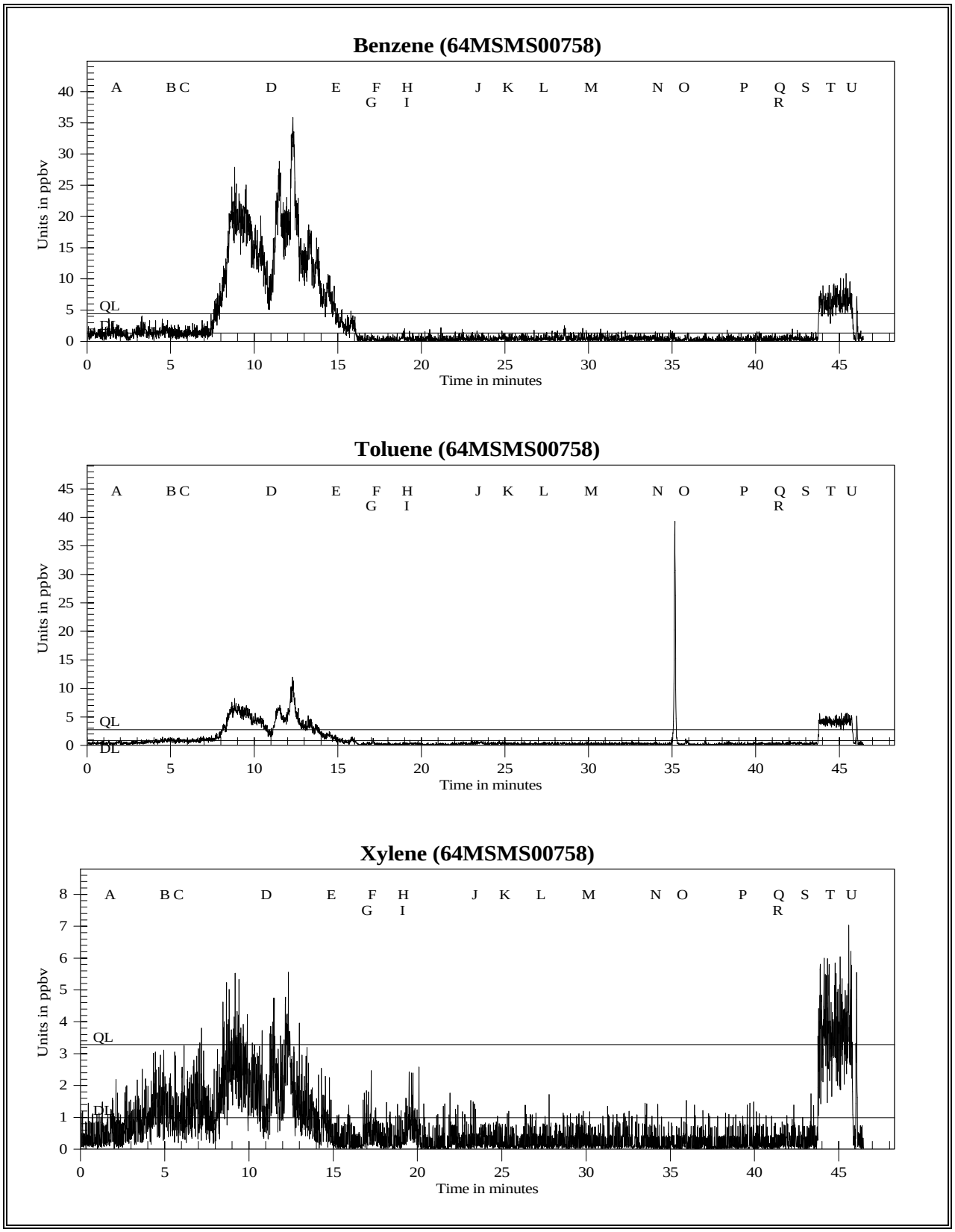


Figure 33c Monitoring from Command Post to Deer Park in ppbv for Benzene, Toluene, and Xylenes

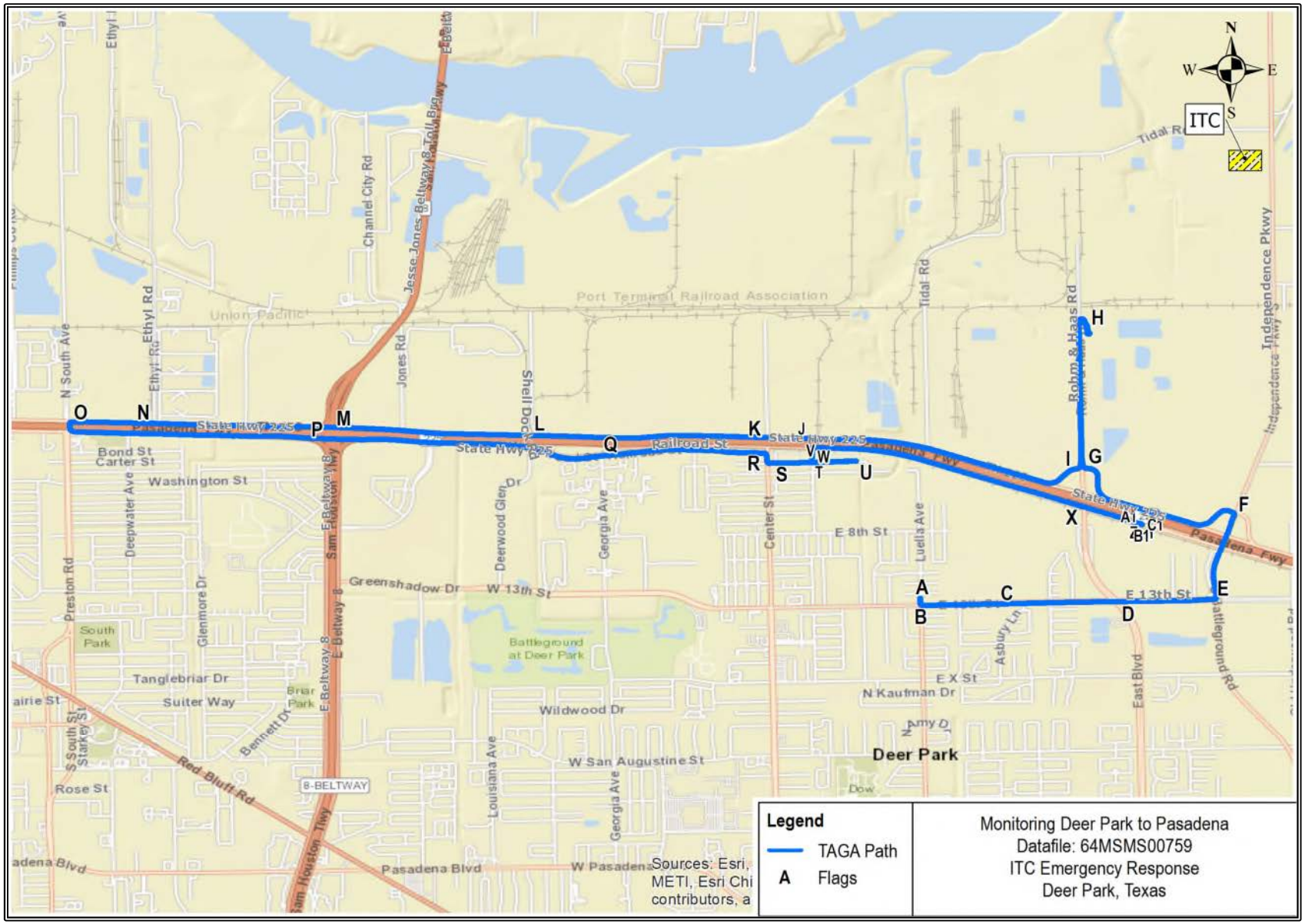


Figure 34a Monitoring Deer Park to Pasadena Path, 64MSMS00759

Figure 34b

TAGA File Event Summary
File: 64MSMS00759 Acquired on 26 March 2019 at 10:26:57
Title: Monitoring Deer Park to Pasadena

Flag	Time	Sequence	Description
A	1.8	170	Start mobile monitoring at Luella Avenue and Frances Street
B	2.2	211	Left turn onto East 13th Street
C	4.1	392	Passing San Jacinto Elementary School
D	6.7	639	Cross East Boulevard
E	8.2	780	Left turn onto Battleground Road
F	9.6	918	Left turn onto Pasadena Freeway Frontage Road
G	12.4	1176	Right turn onto Rohm and Haas Road
H	16.1	1527	U-turn on Rohm and Haas Road
I	25.6	2431	Right turn onto Pasadena Freeway Frontage Road
J	31.3	2973	Cross Ivy Avenue
K	32.1	3052	Cross Center Street
L	36.2	3442	Cross Shell Dock Road
M	40.7	3875	Cross Highway 8
N	42.8	4071	Cross Ethyl Road
O	43.8	4162	U-turn at Preston Road
P	48.4	4604	Cross Highway 8; continuing onto Railroad Street
Q	52.9	5032	Cross Georgia Avenue
R	56.4	5360	Right turn onto Center Street
S	56.7	5391	Left turn onto East 1st Street
T	58.5	5558	Cross Ivy Avenue; continuing onto Kentucky Street
U	59.9	5695	Reversing on Kentucky Street
V	66.7	6339	Right turn onto Ivy Avenue
W	67.4	6405	Right turn onto Pasadena Freeway Frontage Road
X	71.1	6763	Cross East Boulevard
Y	72.0	6844	End Mobile Monitoring on Pasadena Freeway Frontage Road
Z	72.3	6874	Start ambient
A1	73.4	6976	End ambient
B1	74.6	7090	Start 30 mL/min spike
C1	75.6	7187	End 30 mL/min spike

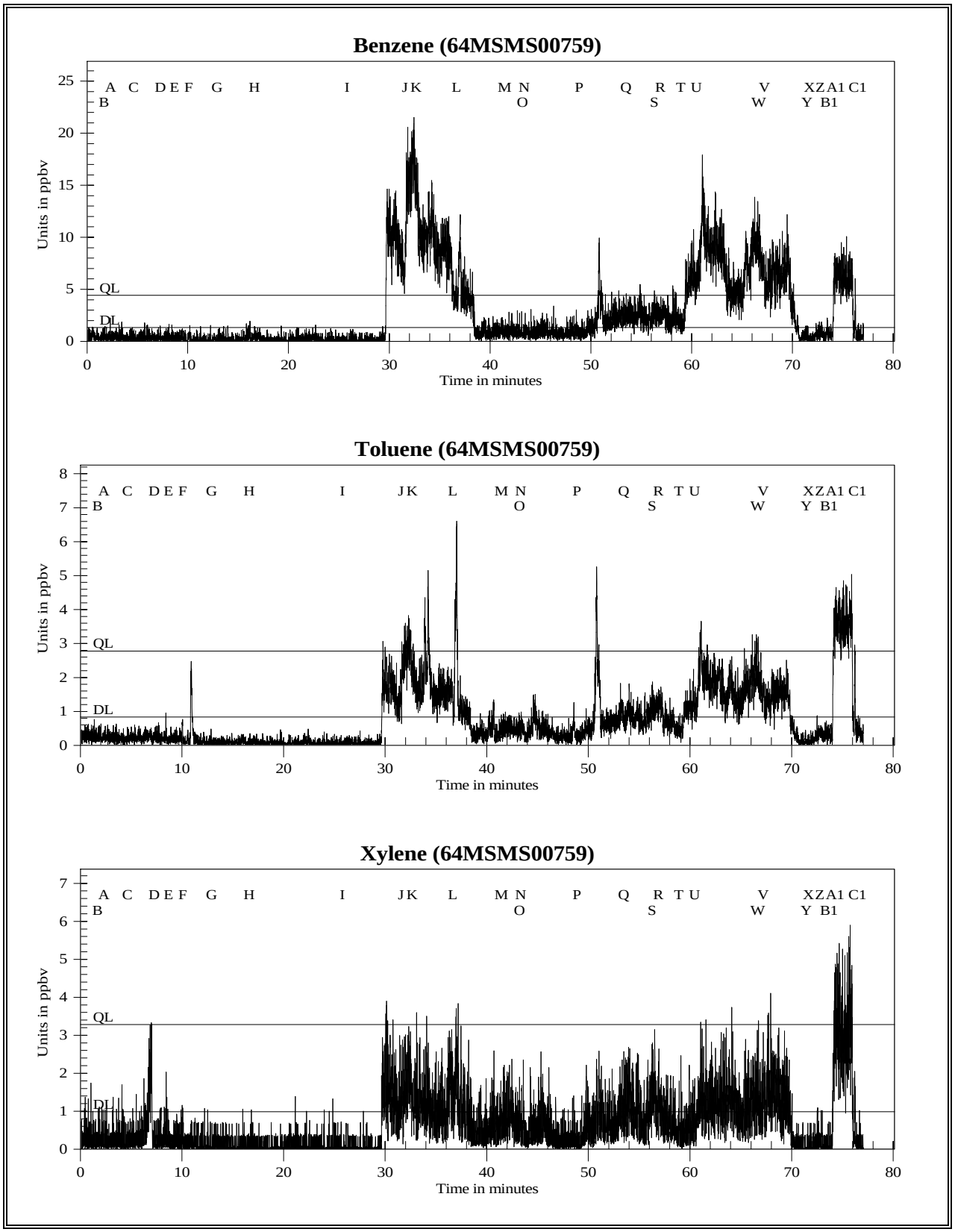


Figure 34c Monitoring Deer Park to Pasadena in ppbv for Benzene, Toluene, and Xylenes

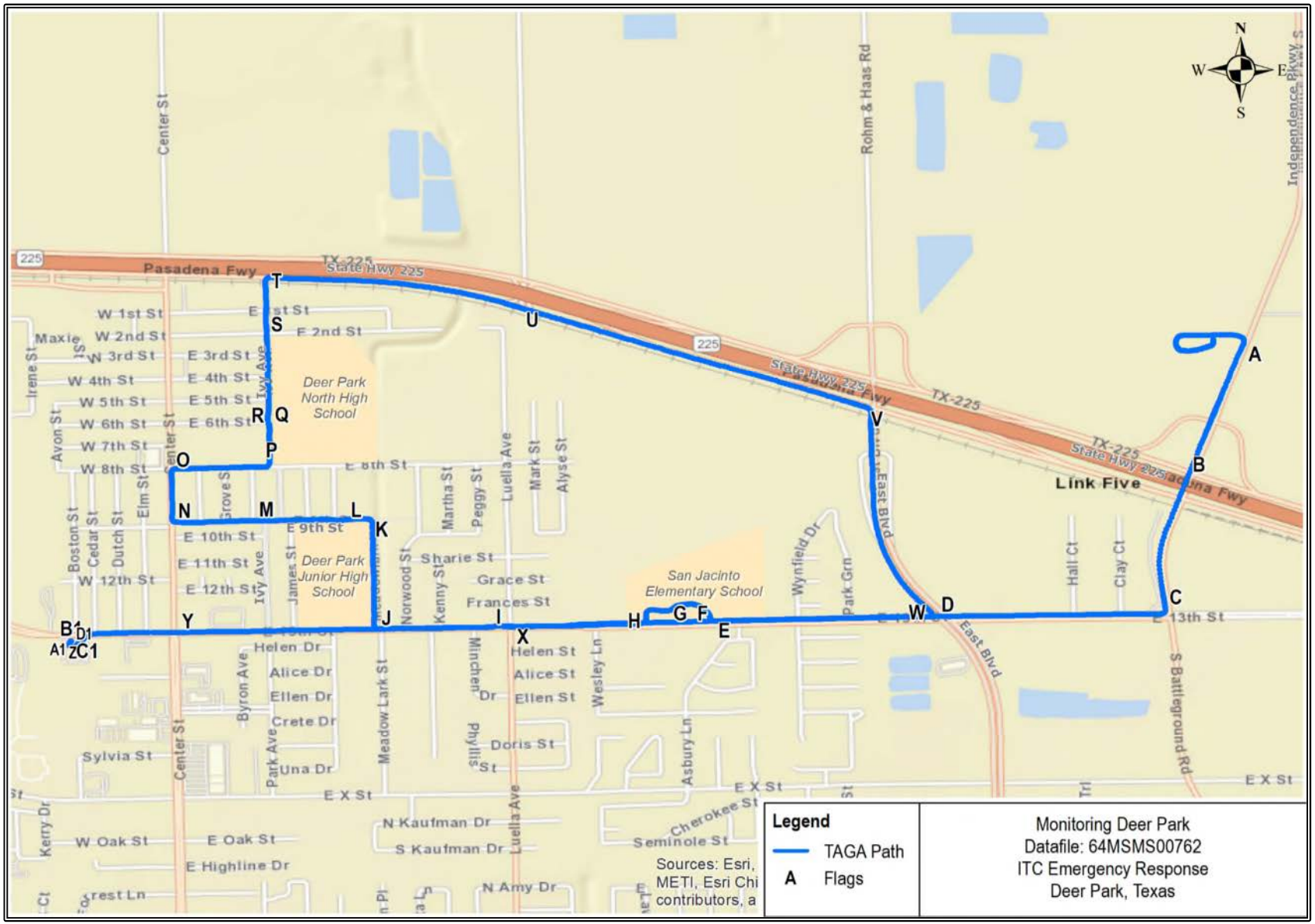


Figure 35a Monitoring Deer Park Path, 64MSMS00762

Figure 35b

TAGA File Event Summary
File: 64MSMS00762 Acquired on 26 March 2019 at 13:07:03
Title: Monitoring Deer Park

Flag	Time	Sequence	Description
A	4.6	435	Start mobile monitoring on Independence Parkway
B	5.9	565	Cross Highway 225; continuing onto Battleground Road
C	6.6	631	Right turn onto East 13th Street
D	8.8	834	Cross East Boulevard
E	10.4	988	Passing San Jacinto Elementary School
F	11.3	1072	Stationary at San Jacinto Elementary School
G	13.6	1295	Resume mobile monitoring
H	14.8	1408	Continue past San Jacinto Elementary School
I	16.1	1531	Cross Luella Avenue
J	17.2	1639	Right turn onto Meadowlark Lane
K	18.7	1778	Stationary at Deer Park Junior High School
L	20.4	1945	Resume mobile monitoring on Meadowlark Lane
M	22.5	2137	Cross Ivy Avenue
N	24.0	2281	Right turn onto Center Street
O	24.6	2341	Right turn onto East 8th Street
Q	26.9	2563	Stationary at Deer Park High School on Ivy Avenue
R	28.4	2701	Resume mobile monitoring on Ivy Avenue
S	30.1	2862	Cross East 2nd Street
T	30.9	2938	Right turn onto Pasadena Freeway Frontage Road
U	33.6	3197	Cross Tidal Road
V	35.6	3388	Right turn onto East Boulevard
W	37.2	3542	Right turn onto East 13th Street
X	41.0	3903	Cross Luella Avenue
Y	44.6	4242	Cross Center Street
Z	46.0	4371	End mobile monitoring at East 13th Street and Boston Street
A1	46.9	4463	Start ambient
B1	47.9	4558	End ambient
C1	50.0	4757	Start 30 mL/min spike
D1	51.1	4859	End 30 mL/min spike

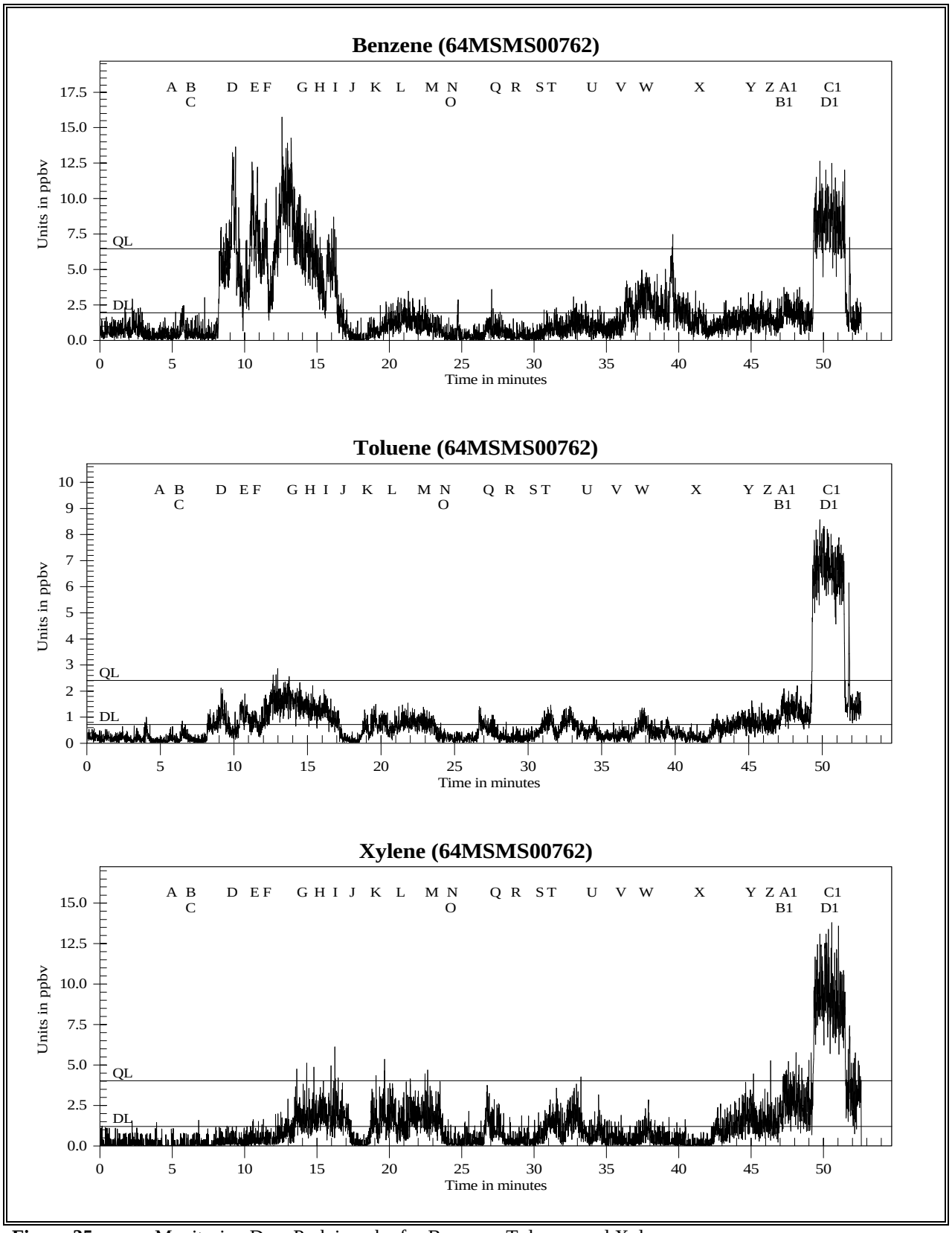


Figure 35c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

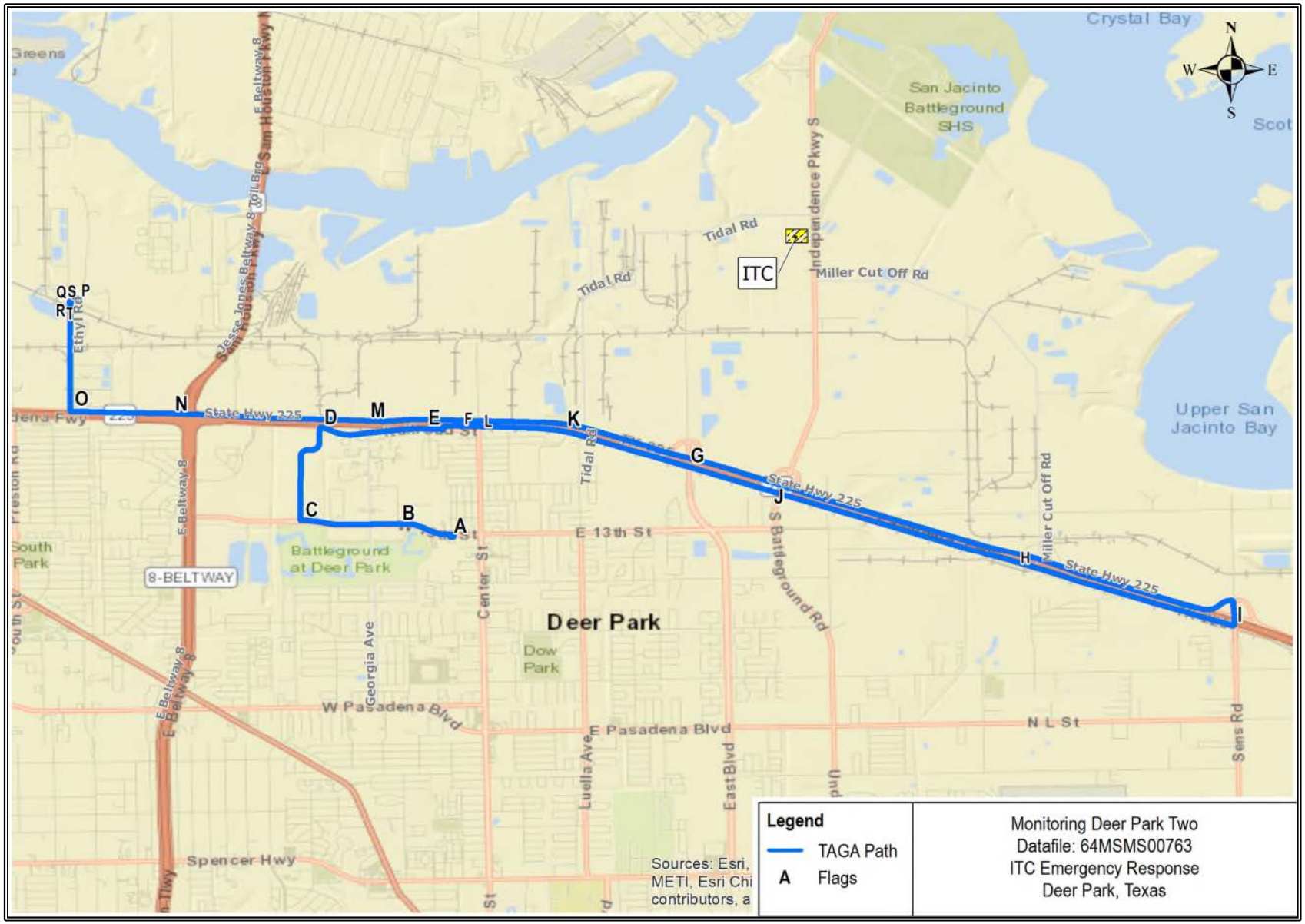


Figure 36a Monitoring Deer Park Two Path, 64MSMS00763

Figure 36b

TAGA File Event Summary
File: 64MSMS00763 Acquired on 26 March 2019 at 14:04:39
Title: Monitoring Deer Park Two

Flag	Time	Sequence	Description
A	1.0	96	Start mobile monitoring on West 13th Street
B	5.0	479	Cross Seaco Avenue
C	8.0	758	Right turn onto Deerwood Glen
D	11.8	1118	Right turn onto Railroad Street
E	14.4	1371	Merge onto Pasadena Freeway Frontage Road
F	16.4	1557	Cross Center Street
G	21.4	2035	Cross East Boulevard
H	27.1	2574	Cross Miller Cut-off Road
I	30.8	2926	U-turn at Sens Road
J	37.6	3574	Cross Battleground Road/Independence Parkway
K	41.2	3921	Cross Tidal Road
L	43.3	4114	Cross Center Street
M	45.1	4291	Cross Georgia Avenue
N	48.2	4580	Cross Highway 8
O	50.3	4784	Right turn onto Ethyl Road
P	56.1	5337	End mobile monitoring at EPA Command Post
Q	57.4	5459	Start ambient
R	58.4	5556	End ambient
S	59.8	5684	Start 30 mL/min spike
T	61.2	5822	End 30 mL/min spike

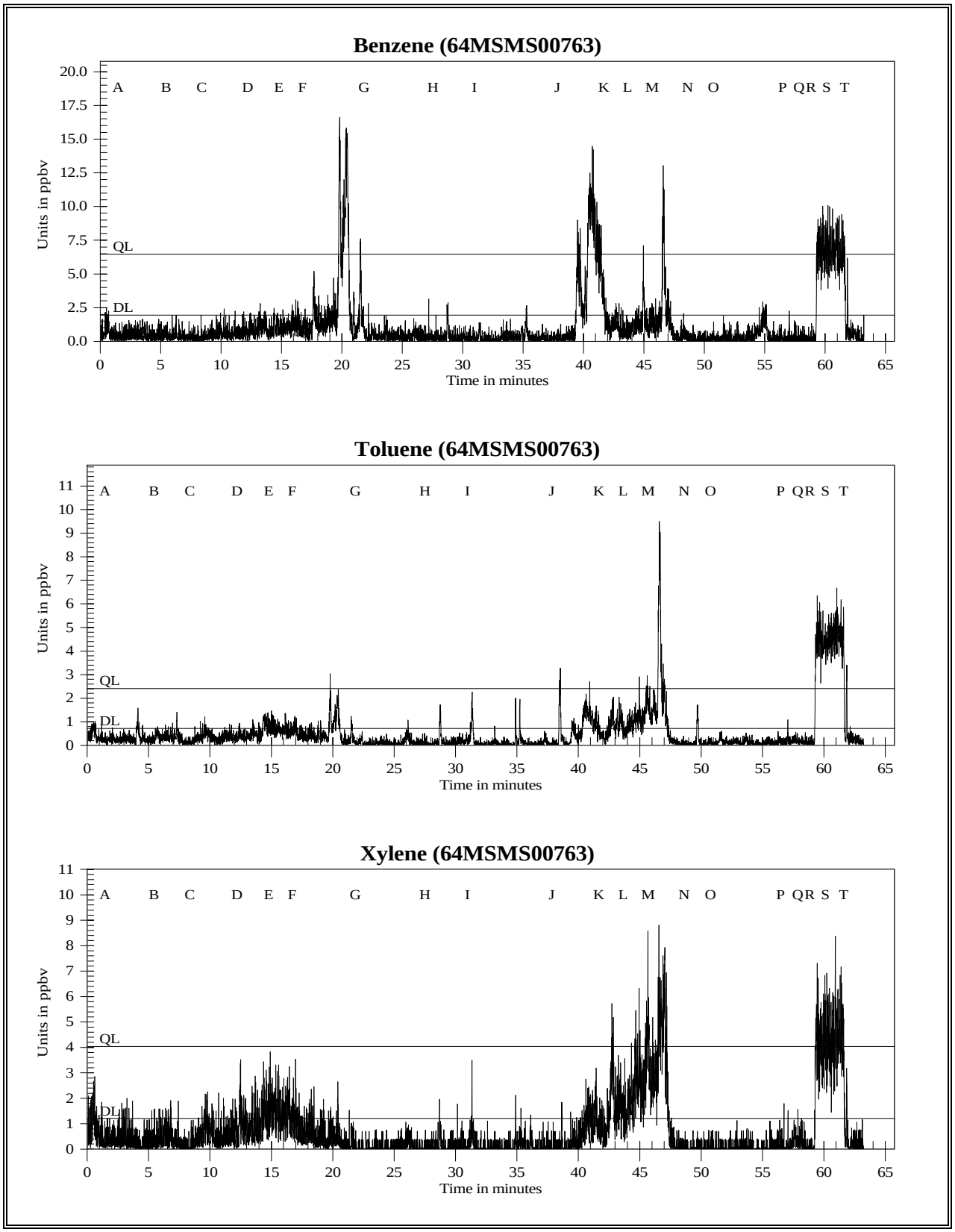


Figure 36c Monitoring Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

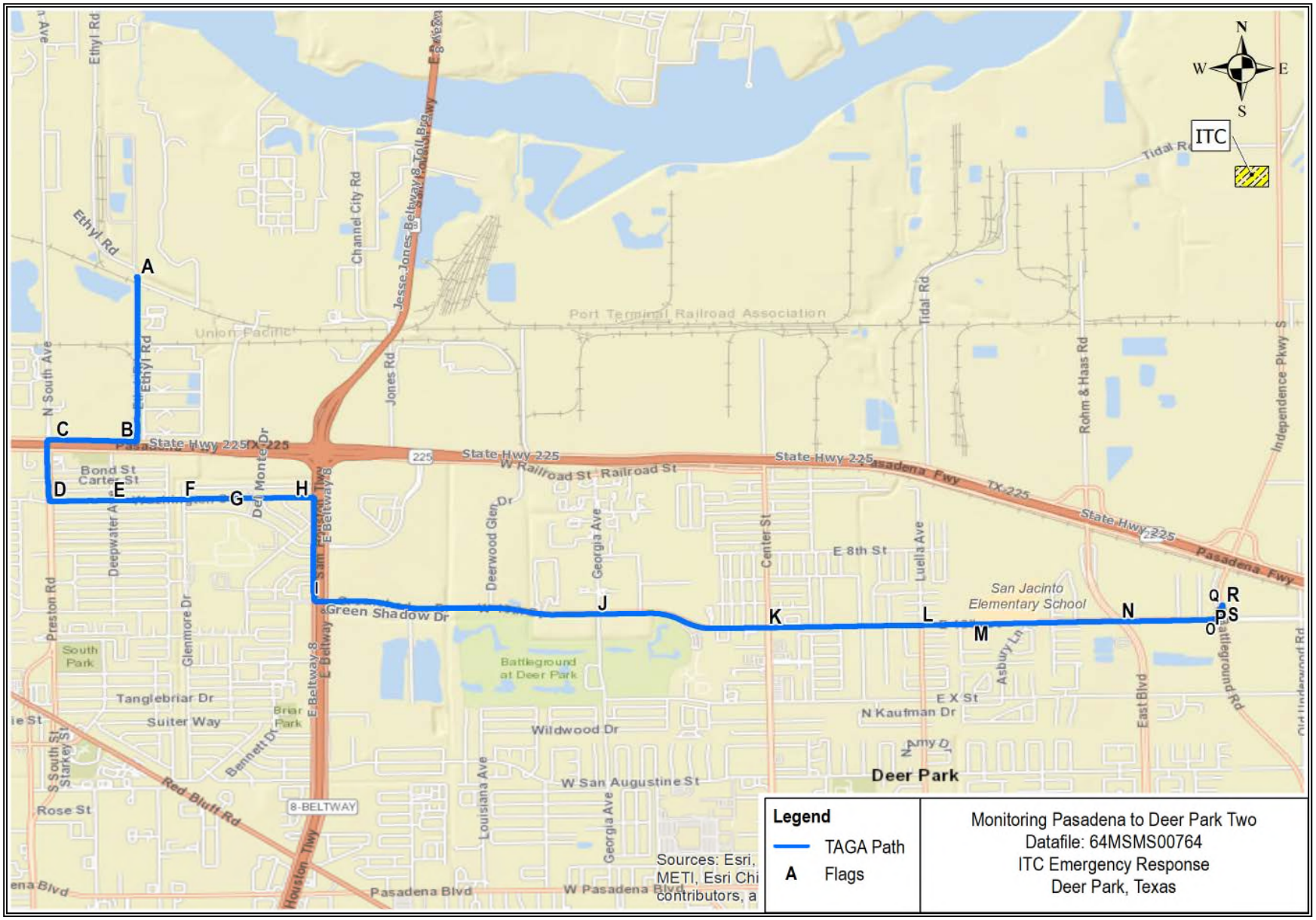


Figure 37a Monitoring Pasadena to Deer Park Two, 64MSMS00764

Figure 37b

TAGA File Event Summary
File: 64MSMS00764 Acquired on 26 March 2019 at 15:11:12
Title: Monitoring Pasadena to Deer Park Two

Flag	Time	Sequence	Description
A	3.5	337	Start mobile monitoring at EPA Command Post
B	9.7	923	Right turn onto Pasadena Freeway Frontage Road
C	11.1	1054	Left turn onto Preston Road
D	13.7	1302	Left turn onto Washington Street
E	15.3	1460	Cross Deepwater Avenue
F	17.7	1682	Cross Glenmore Drive
G	19.2	1826	Cross Del Monte Drive
H	21.2	2013	Right turn onto Highway 8 Service Road southbound
I	23.8	2263	Left turn onto Greenshadow Drive
J	27.8	2640	Cross Georgia Avenue; continuing onto West 13th Street
K	30.2	2873	Cross Center Street; continuing onto East 13th Street
L	32.6	3100	Cross Luella Avenue
M	34.0	3233	Passing San Jacinto Elementary School
N	36.0	3423	Cross East Boulevard
O	37.6	3579	Left turn onto Battleground Road; end mobile monitoring
P	38.2	3636	Start ambient
Q	40.6	3864	End ambient
R	42.0	3995	Start 30 mL/min spike
S	43.0	4092	End 30 mL/min spike

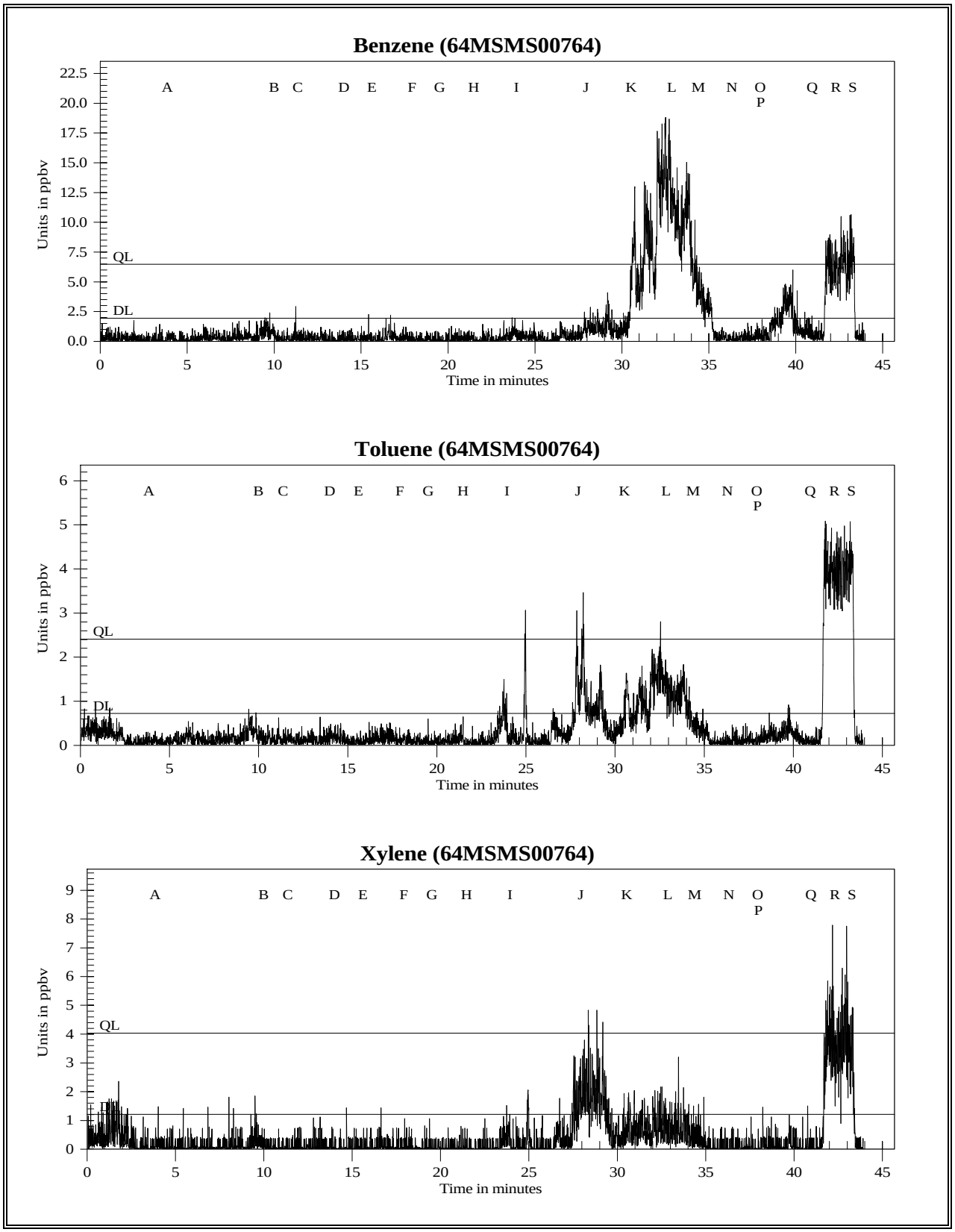


Figure 37c Monitoring Pasadena to Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

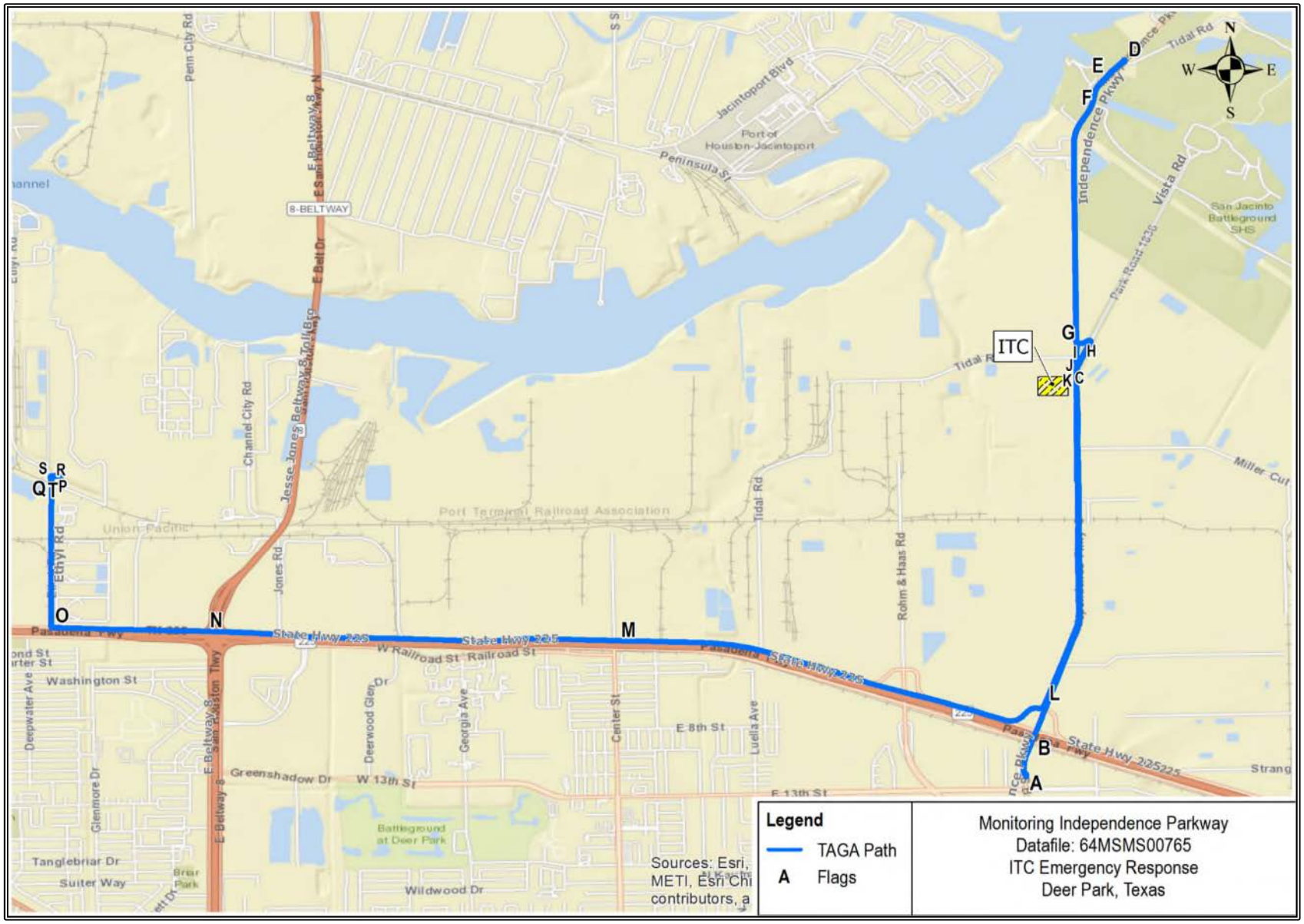


Figure 38a Monitoring Independence Parkway Path, 64MSMS00765

Figure 38b

TAGA File Event Summary
File: 64MSMS00765 Acquired on 26 March 2019 at 15:58:10
Title: Monitoring Independence Parkway

Flag	Time	Sequence	Description
A	1.8	170	Start mobile monitoring on Battleground Road
B	3.1	297	Cross Highway 225; continuing onto Independence Parkway
C	12.8	1216	Passing ITC Site
D	18.7	1778	U-turn on Independence Parkway
E	22.3	2124	Stationary on Independence Parkway
F	25.0	2381	Resume mobile monitoring
G	28.3	2694	Left turn onto Vista Road
H	29.8	2834	Stationary at Vista Road and Independence Parkway
I	31.6	3002	Resume mobile monitoring
J	31.9	3037	Left turn onto Independence Parkway
K	32.2	3062	Passing ITC Site
L	41.3	3932	Right turn onto Pasadena Freeway Frontage Road
M	47.0	4467	Cross Center Street
N	66.5	6321	Cross Highway 8
O	67.8	6443	Right turn onto Ethyl Road
P	70.0	6659	End mobile monitoring at EPA Command Post
Q	72.0	6844	Start ambient
R	73.0	6941	End ambient
S	74.4	7077	Start 30 mL/min spike
T	75.5	7175	End 30 mL/min spike

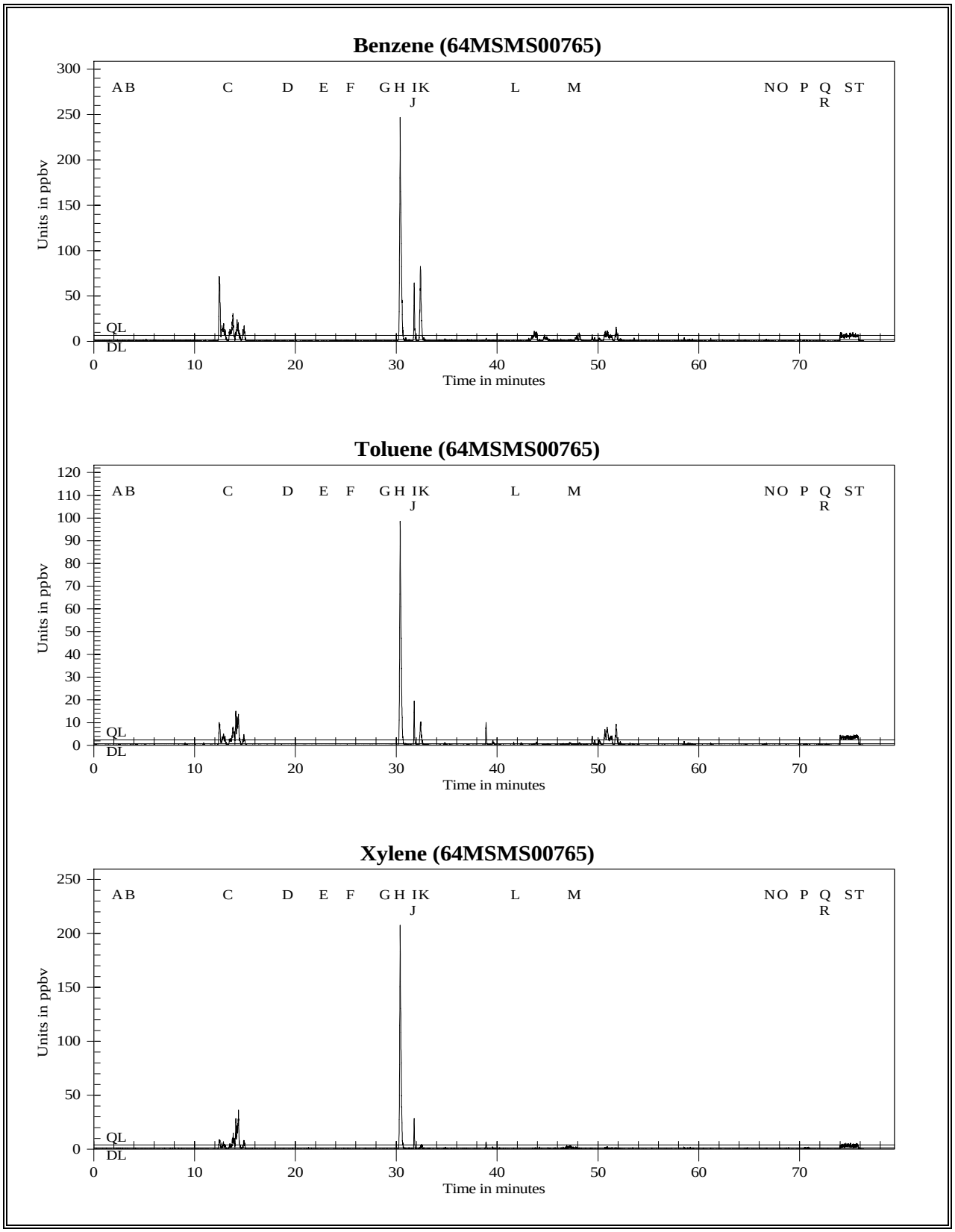


Figure 38c Monitoring Independence Parkway in ppbv for Benzene, Toluene, and Xylenes

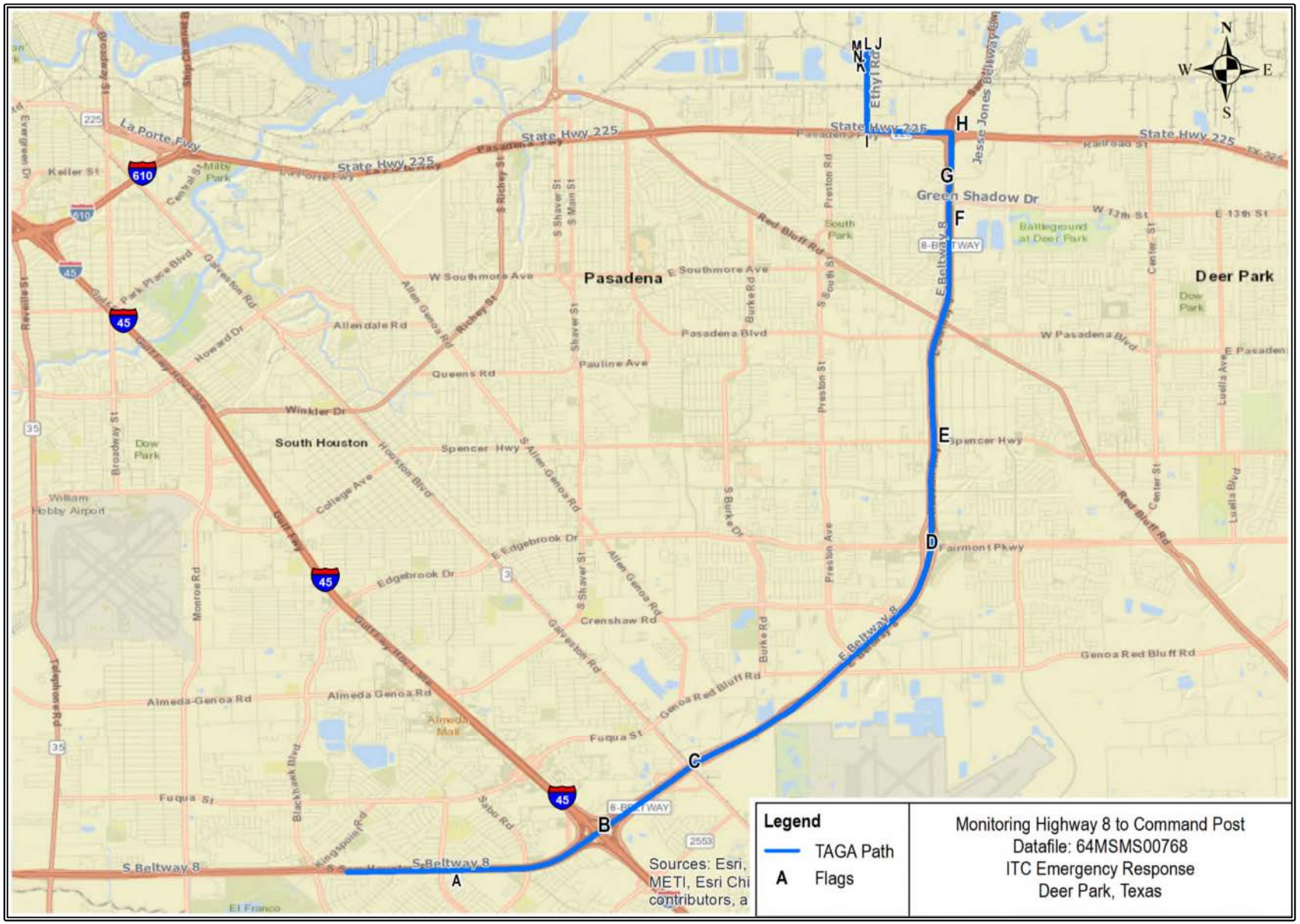


Figure 39a Monitoring Highway 8 to Command Post Path, 64MSMS00768

Figure 39b

TAGA File Event Summary
File: 64MSMS00768 Acquired on 27 March 2019 at 08:06:29
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	1.3	121	Start mobile monitoring on Highway 8 North
B	2.7	261	Cross Highway 45
C	3.9	371	Cross Galveston Road
D	8.6	820	Cross Fairmont Parkway
E	9.8	937	Cross Spencer Highway
F	12.5	1192	Cross Greenshadow Drive
G	12.8	1219	Exit onto Highway 8 Service Road
H	14.3	1362	Left turn onto Pasadena Freeway Frontage Road
I	15.7	1498	Right turn onto Ethyl Road
J	18.6	1771	End mobile monitoring at EPA Command Post
K	20.4	1940	Start ambient
L	21.4	2035	End ambient
M	23.1	2194	Start 30 mL/min spike
N	24.1	2289	End 30 mL/min spike

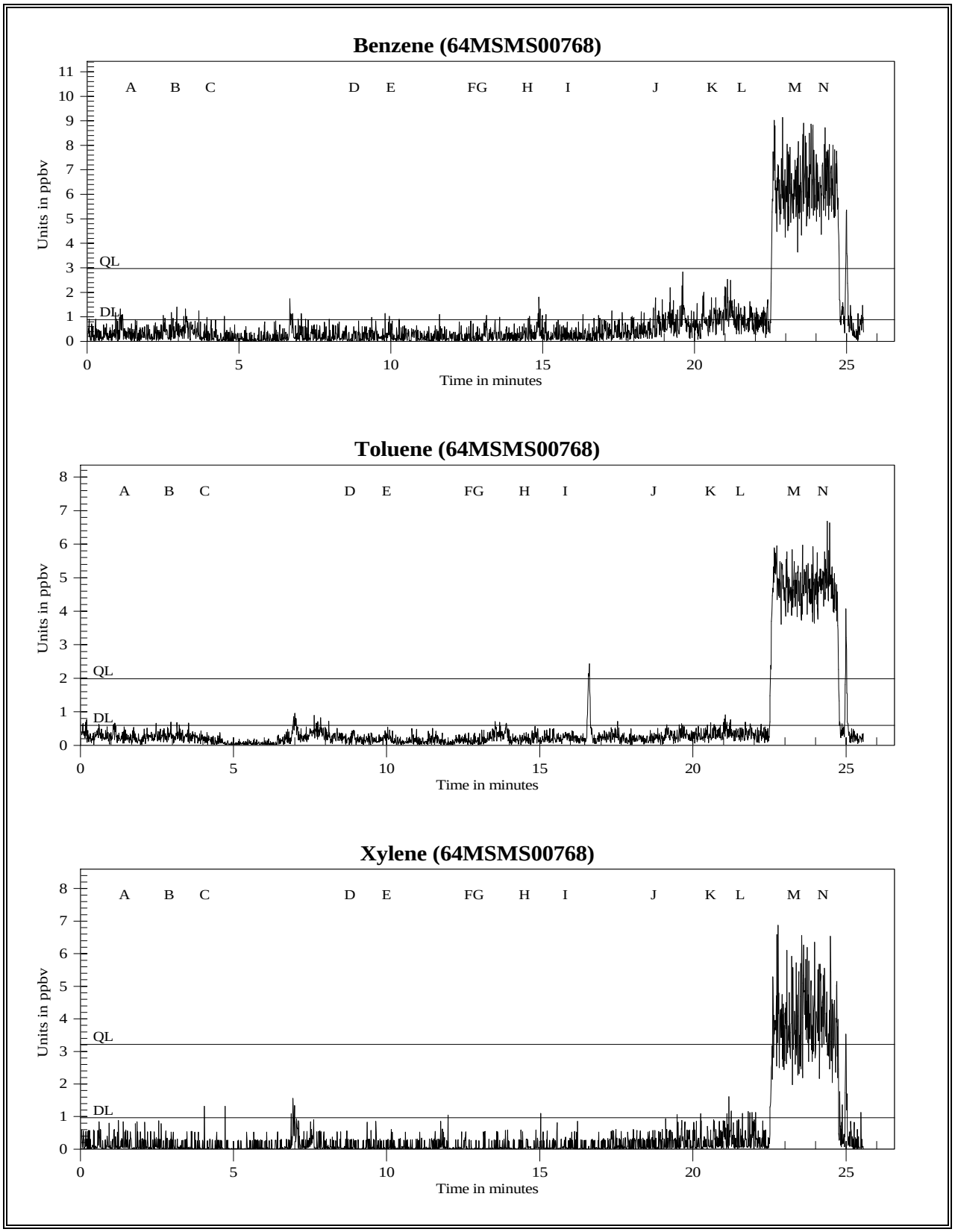


Figure 39c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

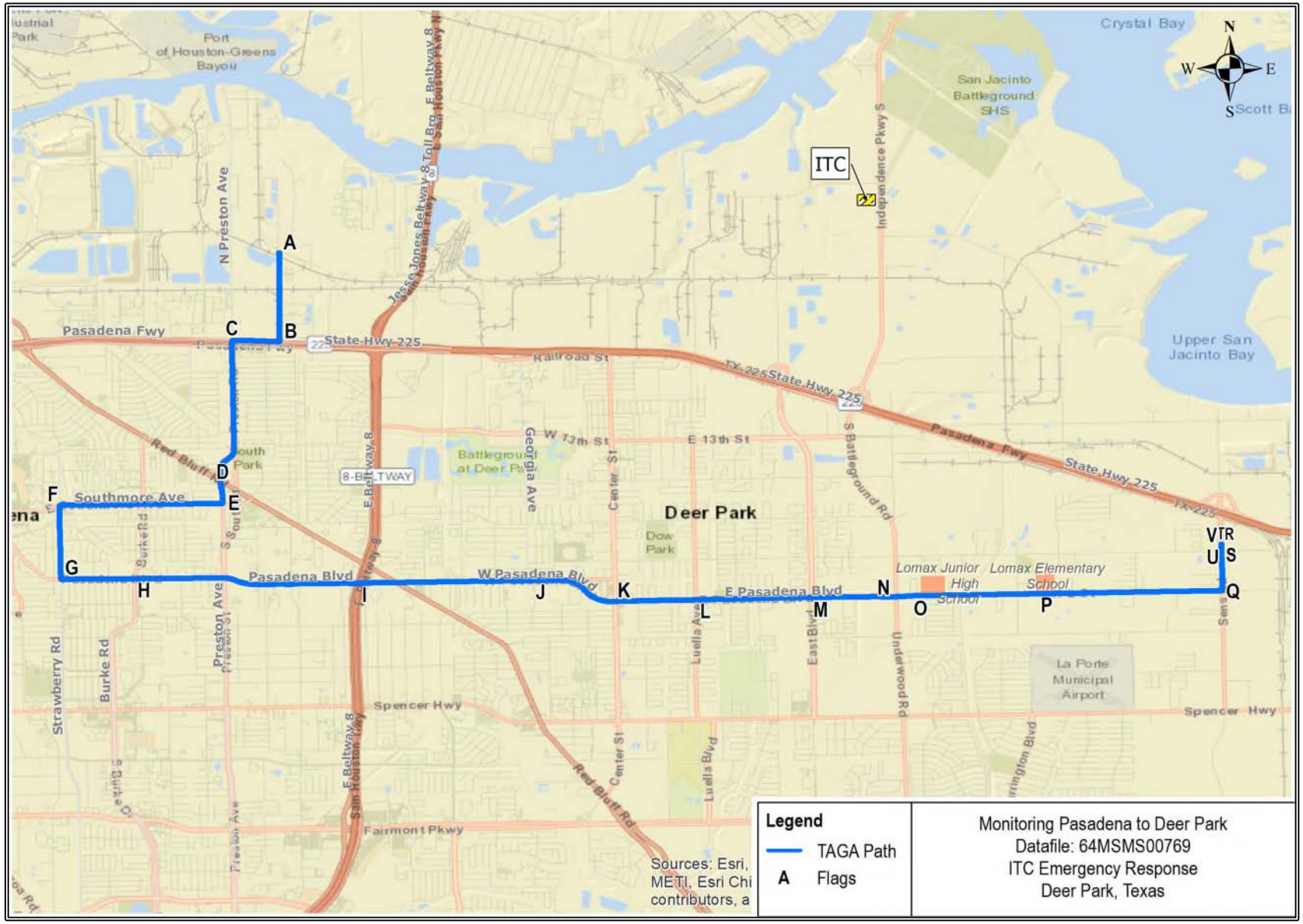


Figure 40a Monitoring Pasadena to Deer Park Path, 64MSMS00769

Figure 40b

TAGA File Event Summary
File: 64MSMS00769 Acquired on 27 March 2019 at 08:44:09
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	2.1	202	Start mobile monitoring at EPA Command Post
B	5.5	528	Right turn onto Pasadena Freeway Frontage Road
C	6.6	628	Left turn onto Preston Road
D	10.4	993	Cross Red Bluff Road
E	11.8	1127	Right turn onto Southmore Avenue
F	14.8	1406	Left turn onto Strawberry Road
G	16.7	1588	Left turn onto Pasadena Boulevard
H	18.7	1774	Cross Burke Road
I	24.1	2293	Cross Highway 8
J	27.7	2631	Cross Georgia Avenue; passing Bonnette Junior High School
K	29.9	2840	Cross Center Street
L	31.4	2989	Cross Luella Avenue
M	33.4	3178	Cross East Boulevard
N	35.9	3411	Cross Battleground Road/Underwood Road
O	36.4	3463	Passing Lomax Junior High School
P	38.4	3651	Passing Lomax Elementary School
Q	43.5	4135	Left turn onto Sens Road
R	44.8	4258	End mobile monitoring at North P Street
S	45.3	4303	Start ambient
T	46.3	4398	End ambient
U	47.5	4513	Start 30 mL/min spike
V	48.5	4608	End 30 mL/min spike

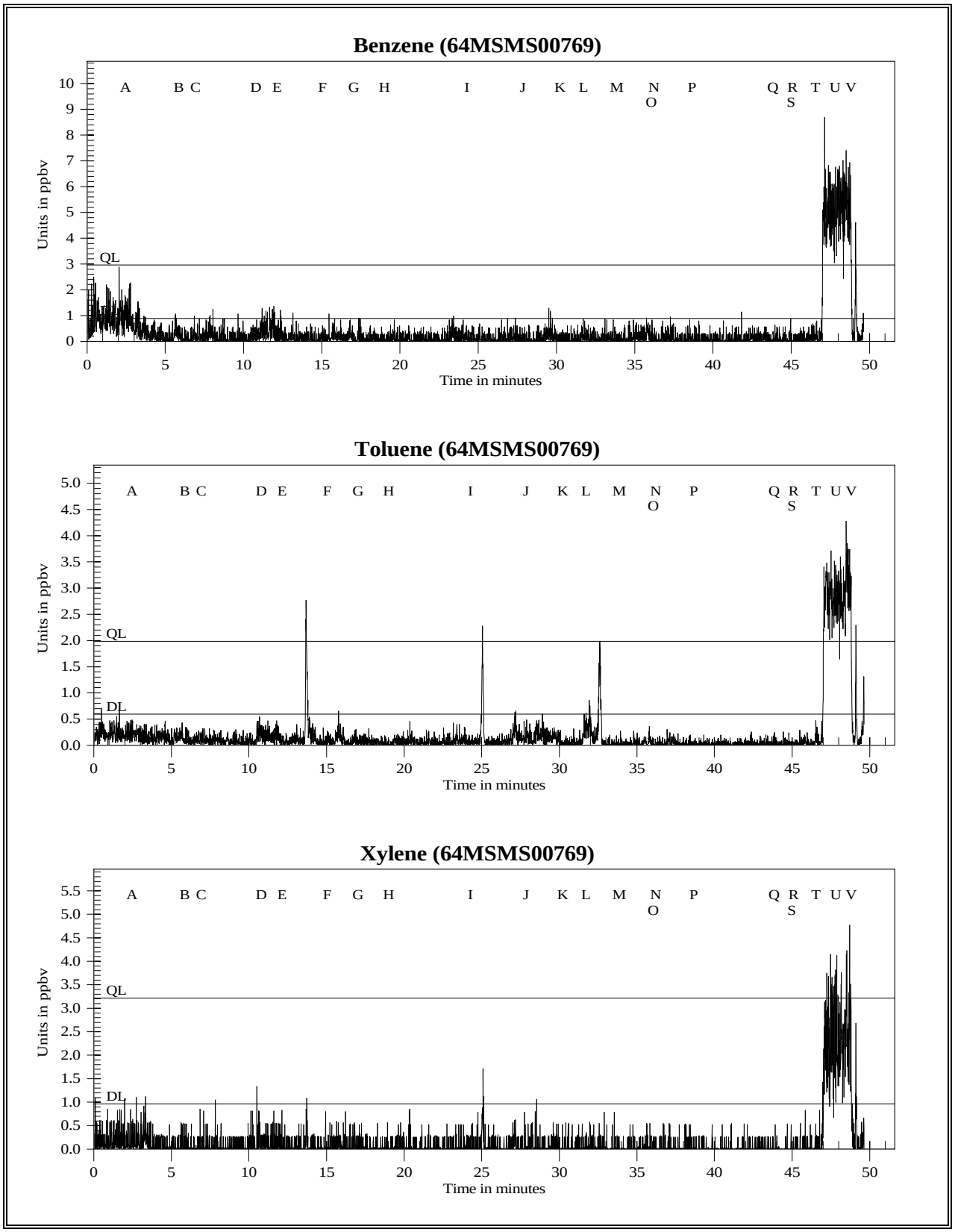


Figure 40c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

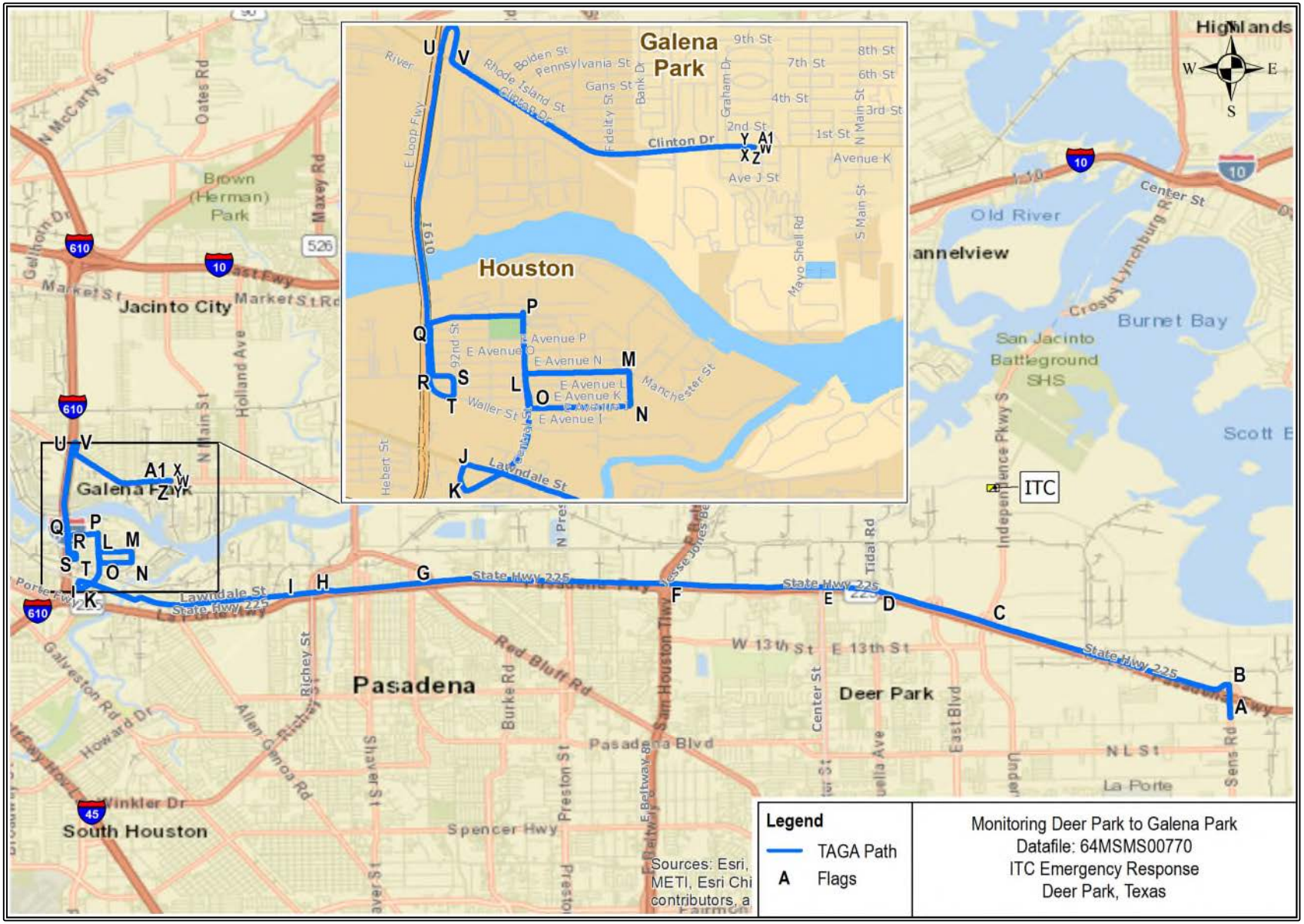


Figure 41a Monitoring Deer Park to Galena Park Path, 64MSMS00770

Figure 41b

TAGA File Event Summary
File: 64MSMS00770 Acquired on 27 March 2019 at 09:49:40
Title: Monitoring Deer Park to Galena Park

Flag	Time	Sequence	Description
A	1.0	93	Start mobile monitoring on Sens Road
B	3.3	313	Left turn onto Pasadena Freeway Frontage Road
C	7.6	722	Cross Battleground Road/Independence Parkway
D	9.7	923	Cross Tidal Road
E	11.8	1126	Cross Center Street
F	16.2	1542	Cross Highway 8
G	21.8	2072	Cross Pasadena Boulevard
H	24.6	2335	Cross Richey Street
I	25.5	2425	Merge onto Lawndale Street
J	32.7	3114	Left turn onto Highway 610 South ramp connector
K	33.2	3154	Left turn onto Central Street
L	34.6	3295	Right turn onto Manchester Street
M	35.9	3411	Right turn onto 97th Street
N	36.7	3493	Right turn onto Avenue J
O	40.8	3884	Right turn onto Central Street
P	45.8	4352	Left turn onto Avenue R
Q	48.6	4623	Left turn onto Concrete Street
R	49.6	4719	Left turn onto Manchester Street
S	50.2	4773	Right turn onto 92nd Street
T	50.5	4803	Right turn onto Highway 610 North ramp
U	52.9	5032	Exit Highway 610 North
V	54.4	5177	Left turn onto Clinton Drive
W	58.5	5559	End mobile monitoring at Clinton Drive and Magnolia Drive
X	59.0	5613	Start ambient
Y	60.0	5708	End ambient
Z	63.0	5993	Start 30 mL/min spike
A1	64.8	6161	End 30 mL/min spike

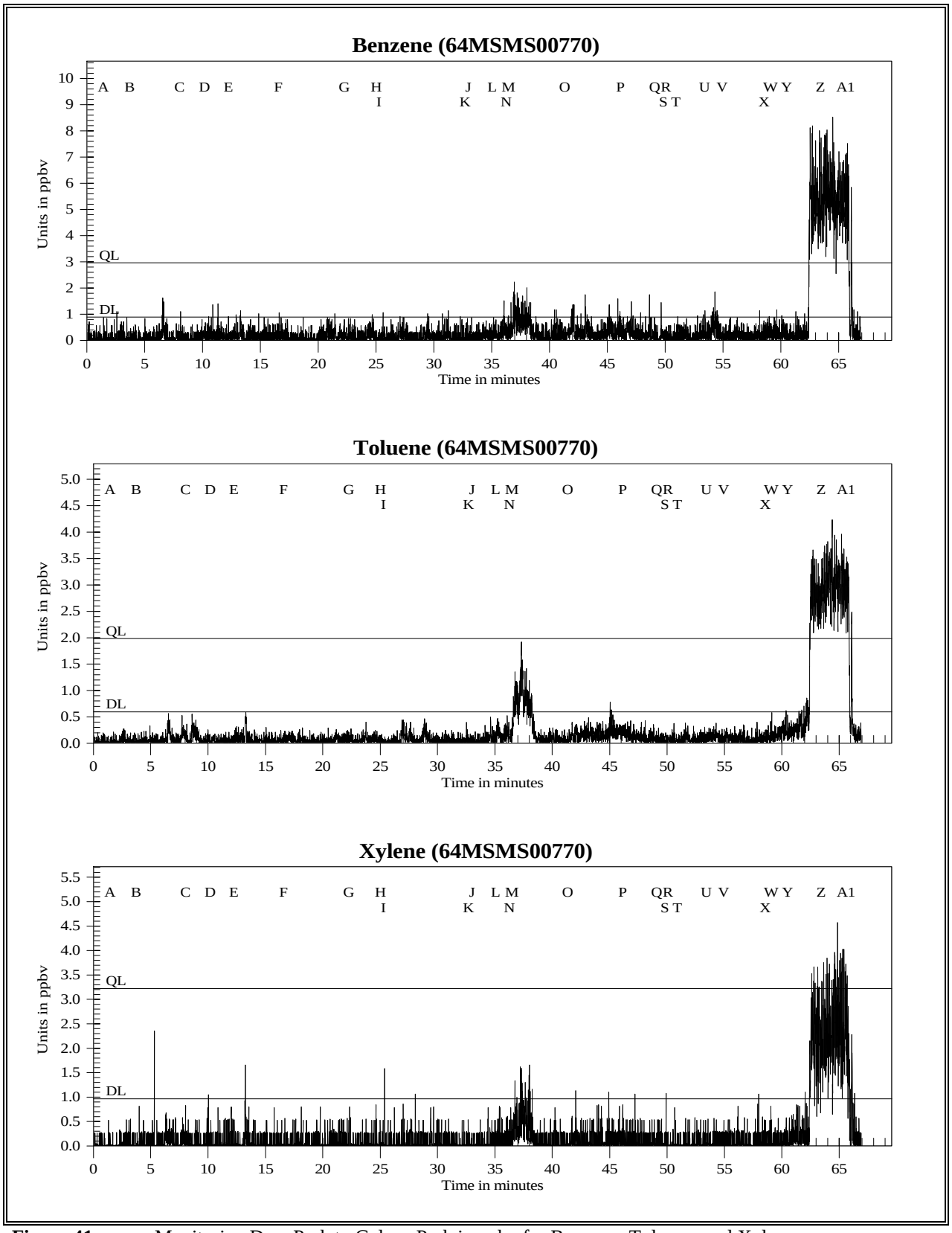


Figure 41c Monitoring Deer Park to Galena Park in ppbv for Benzene, Toluene, and Xylenes

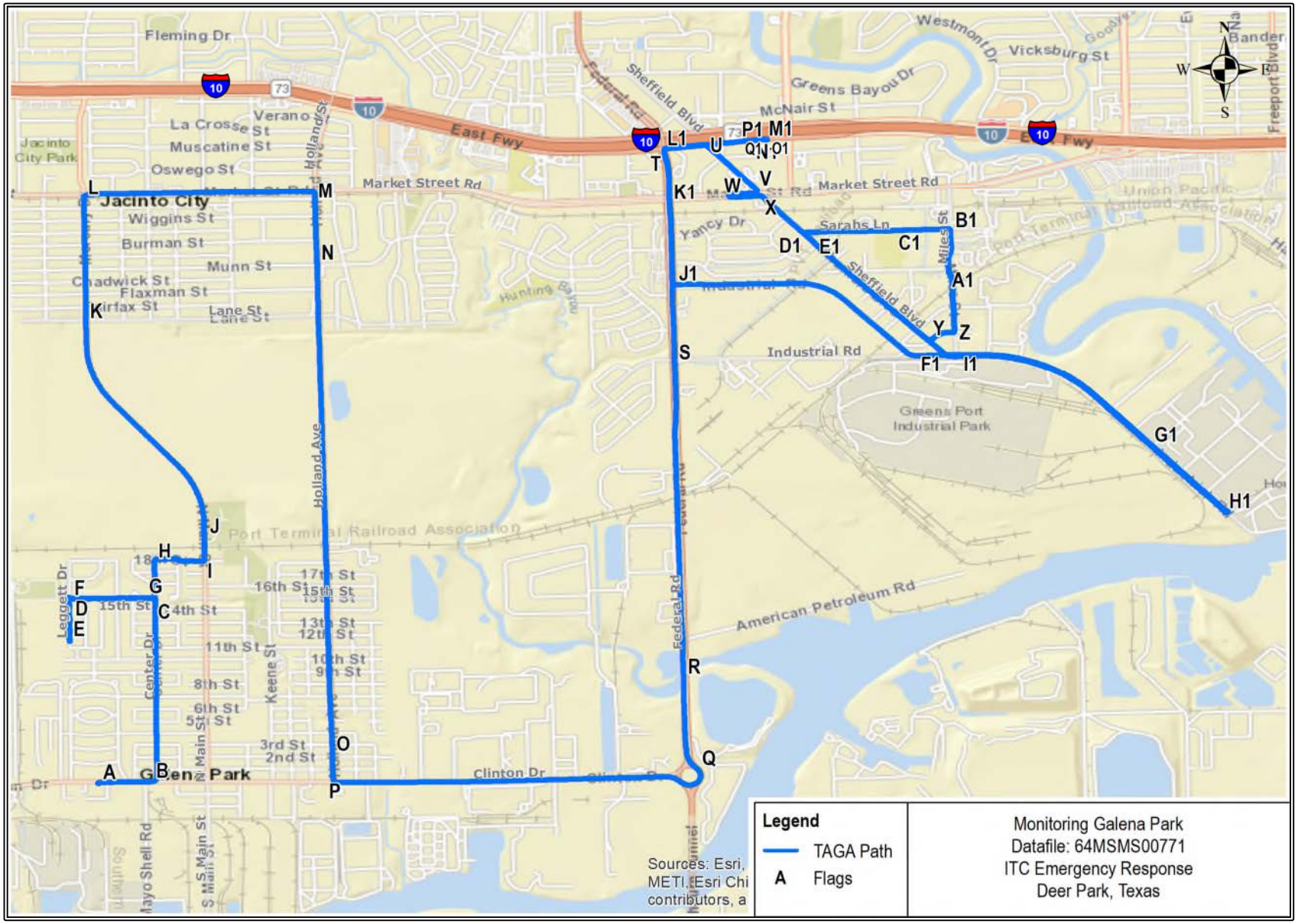


Figure 42a Monitoring Galena Park Path, 64MSMS00771

Figure 42b

TAGA File Event Summary
File: 64MSMS00771 Acquired on 27 March 2019 at 11:07:44
Title: Monitoring Galena Park

Flag	Time	Sequence	Description
A	0.9	87	Start mobile monitoring at Clinton Drive and Magnolia Drive
B	4.0	383	Left turn onto Center Drive
C	8.0	758	Left turn onto 15th Street
D	10.3	977	Left turn onto Leggett Drive
E	17.2	1639	Reversing on Leggett Drive
F	21.0	1999	Turn onto 15th Street
G	23.2	2203	Left turn onto Center Drive
H	24.2	2303	Right turn onto 18th Street
I	26.1	2485	Left turn onto North Main Street
J	27.0	2565	Passing Galena Park Sports Complex
K	28.8	2742	Cross Lane Street
L	31.6	3005	Right turn onto Market Street
M	34.2	3249	Right turn onto Holland Avenue
N	35.9	3415	Cross Munn Street
O	42.1	4008	Cross 2nd Street
P	42.8	4067	Left turn onto Clinton Drive
Q	46.3	4406	Left turn onto Federal Road
R	47.3	4499	Cross Hunting Bayou
S	51.6	4911	Cross Industrial Road
T	56.2	5345	Right turn onto East Freeway Service Road
U	56.8	5401	Right turn onto Sheffield Boulevard
V	58.0	5512	Right turn onto Market Street
W	58.7	5580	U-turn on Market Street
X	59.3	5643	Right turn onto Sheffield Boulevard
Y	62.9	5979	Left turn onto Ellen Lane
Z	63.7	6057	Left turn onto Miles Street
A1	67.6	6426	Cross Myrtle Lane
B1	69.5	6613	Left turn onto Sarahs Lane
C1	70.6	6716	Passing Woodland Acres Elementary School
D1	73.4	6981	Left turn onto Sheffield Boulevard
E1	74.2	7055	Cross Century Drive
F1	76.6	7280	Left turn onto Industrial Road
G1	78.5	7465	Cross 100th Street
H1	79.7	7576	U-turn at the end of Industrial Road

Figure 42b (continued)

TAGA File Event Summary
File: 64MSMS00771 Acquired on 27 March 2019 at 11:07:44
Title: Monitoring Galena Park

Flag	Time	Sequence	Description
I1	85.7	8148	Cross Miles Street
J1	88.8	8441	Right turn onto Federal Road
K1	90.4	8597	Cross Market Street
L1	91.5	8704	Right turn onto East Freeway Service Road
M1	92.6	8807	End mobile monitoring on East Freeway Service Road
N1	93.0	8845	Start ambient
O1	94.4	8975	End ambient
P1	95.6	9091	Start 30 mL/min spike
Q1	97.3	9251	End 30 mL/min spike

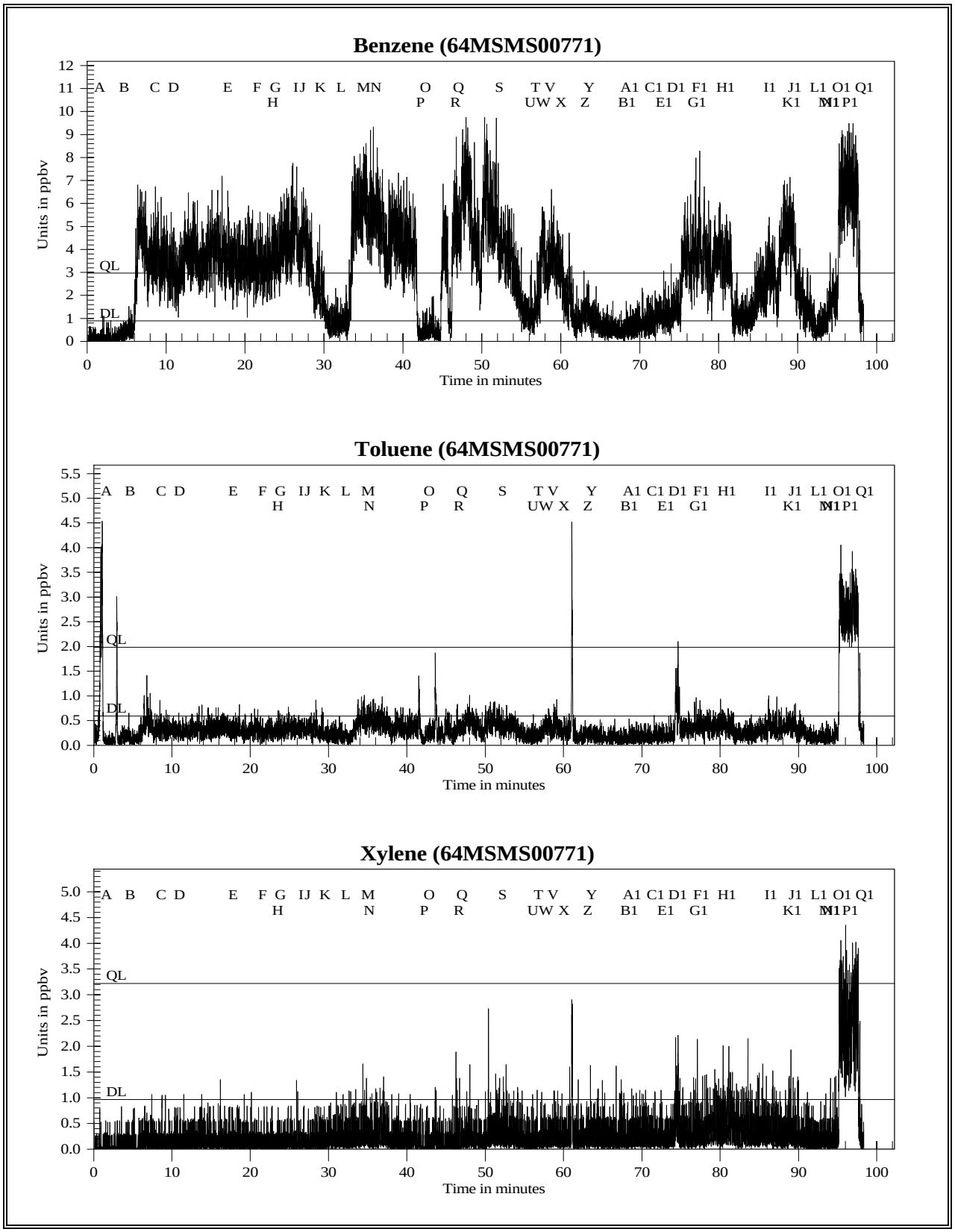


Figure 42c Monitoring Galena Park in ppbv for Benzene, Toluene, and Xylenes

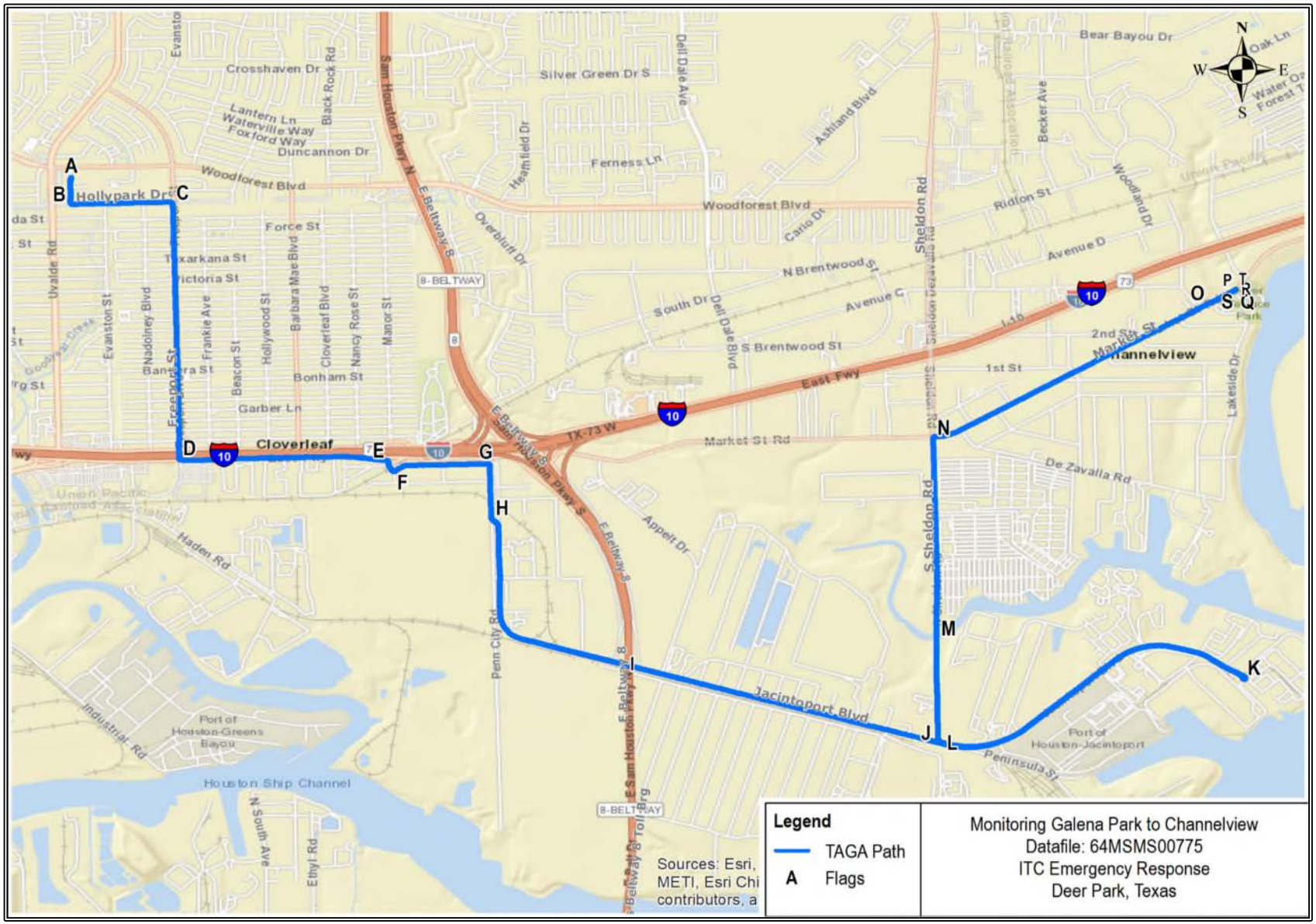


Figure 43a Monitoring Galena Park to Channelview Path, 64MSMS00775

Figure 43b

TAGA File Event Summary
File: 64MSMS00775 Acquired on 27 March 2019 at 14:14:04
Title: Monitoring Galena Park to Channelview

Flag	Time	Sequence	Description
A	1.5	140	Start mobile monitoring at White Cedar Street and Woodforest Boulevard
B	4.1	387	Left turn onto Holly Park Drive
C	5.9	563	Right turn onto Freeport Street
D	11.5	1096	Left turn onto East Freeway Service Road
E	13.9	1319	Right turn onto Patch Road
F	14.3	1359	Left turn onto Kenny Street
G	16.1	1535	Right turn onto Penn City Road
H	17.2	1633	Merge left onto Jacintoport Boulevard
I	24.7	2347	Cross Highway 8
J	28.4	2704	Cross Sheldon Road
K	36.5	3469	U-turn on Jacintoport Boulevard
L	43.2	4112	Right turn onto Sheldon Road
M	45.3	4311	Cross Carpenter’s Bayou
N	49.6	4716	Right turn onto Market Street
O	55.1	5241	Cross Lakeside Drive
P	56.1	5333	End mobile monitoring at River Terrace Park
Q	57.0	5423	Start ambient
R	58.3	5540	End ambient
S	59.8	5684	Start 30 mL/min spike
T	60.8	5784	End 30 mL/min spike

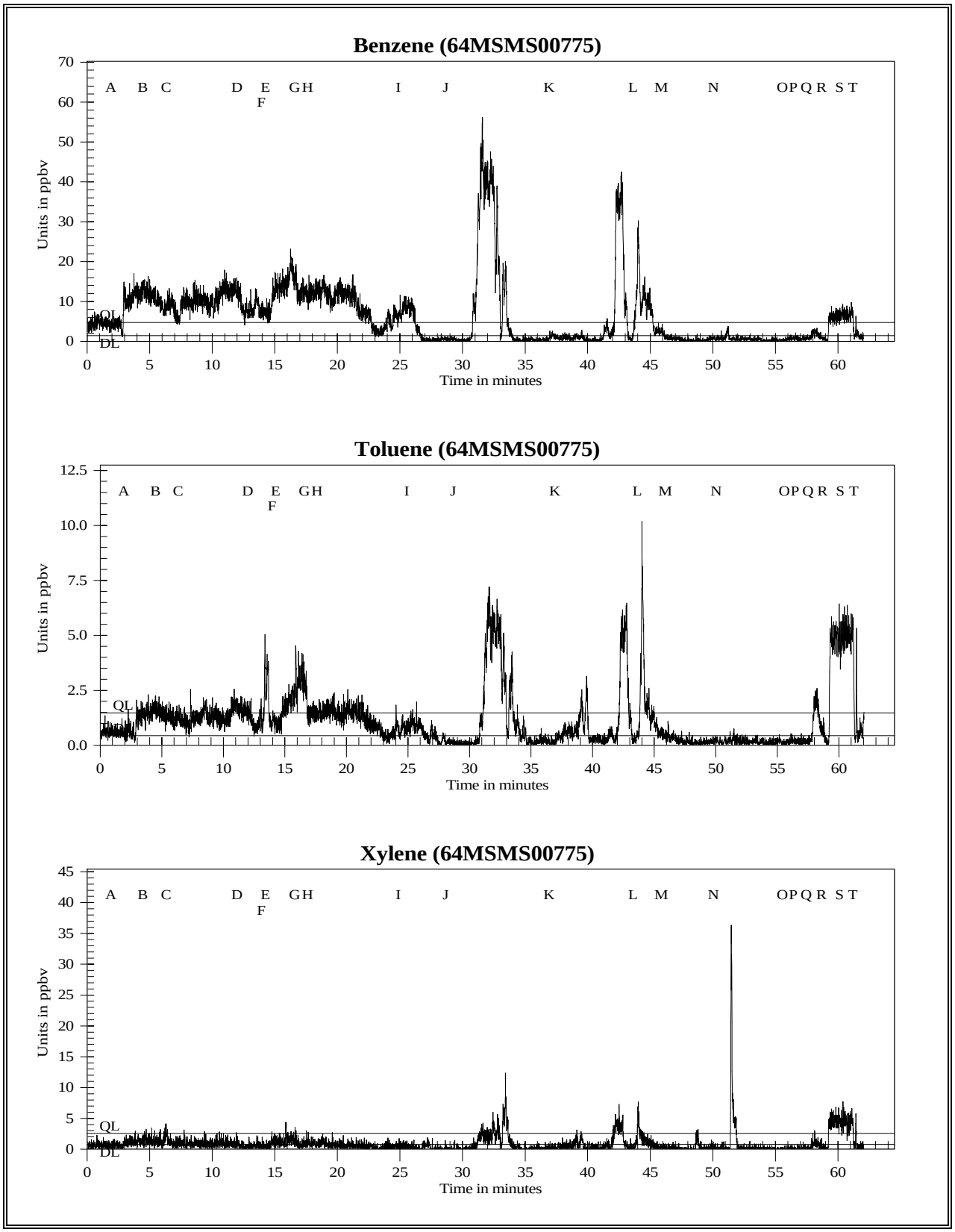


Figure 43c Monitoring Galena Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

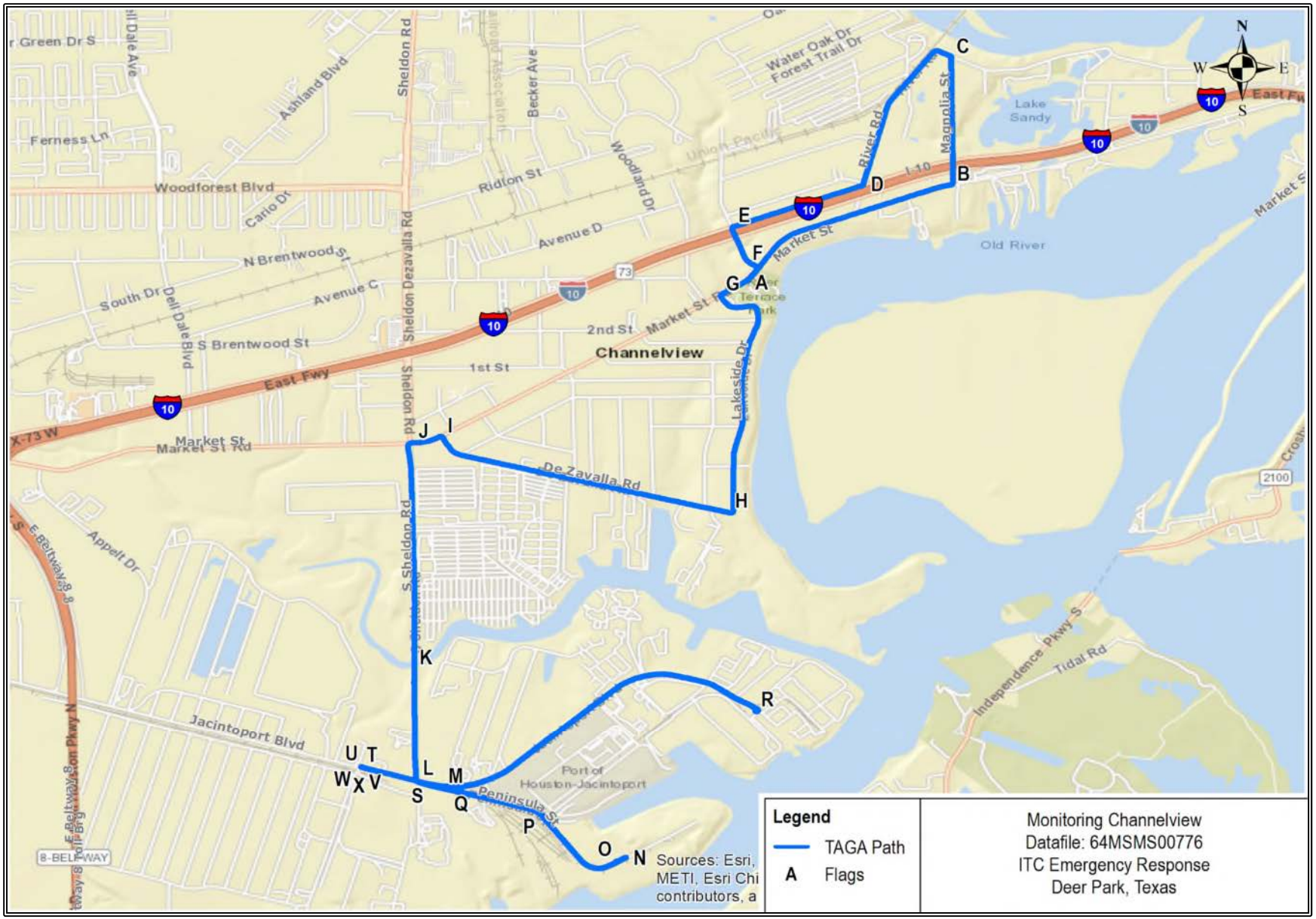


Figure 44a Monitoring Channelview Path, 64MSMS00776

Figure 44b

TAGA File Event Summary
File: 64MSMS00776 Acquired on 27 March 2019 at 15:20:51
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	1.5	143	Start mobile monitoring on Market Street at River Terrace Park
B	4.8	455	Left turn onto Magnolia Street
C	8.9	850	Left turn onto River Road
D	12.4	1178	Right turn onto East Freeway Service Road
E	14.0	1332	Left turn onto Bayou Drive
F	15.1	1441	Right turn onto Market Street
G	15.9	1517	Left turn onto Lakeside Drive
H	20.0	1904	Right turn to continue onto Dezavala Road
I	23.8	2263	Left turn onto Market Street
J	25.2	2400	Left turn onto Sheldon Road
K	28.3	2693	Cross Carpenter’s Bayou
L	30.5	2904	Left turn onto Jacintoport Boulevard
M	31.1	2961	Merge onto San Jacinto Boulevard
N	35.5	3374	Reversing on San Jacinto Boulevard/Peninsula Street
O	37.6	3571	U-turn on San Jacinto Boulevard
P	40.0	3800	Continuing on San Jacinto Boulevard
Q	41.5	3948	Right turn onto Jacintoport Boulevard
R	46.5	4421	U-turn on Jacintoport Boulevard
S	53.1	5046	Cross Sheldon Road
T	54.0	5139	End mobile monitoring on Sheldon Road
U	54.4	5172	Start ambient
V	55.4	5268	End ambient
W	57.8	5500	Start 30 mL/min spike
X	59.1	5615	End 30 mL/min spke

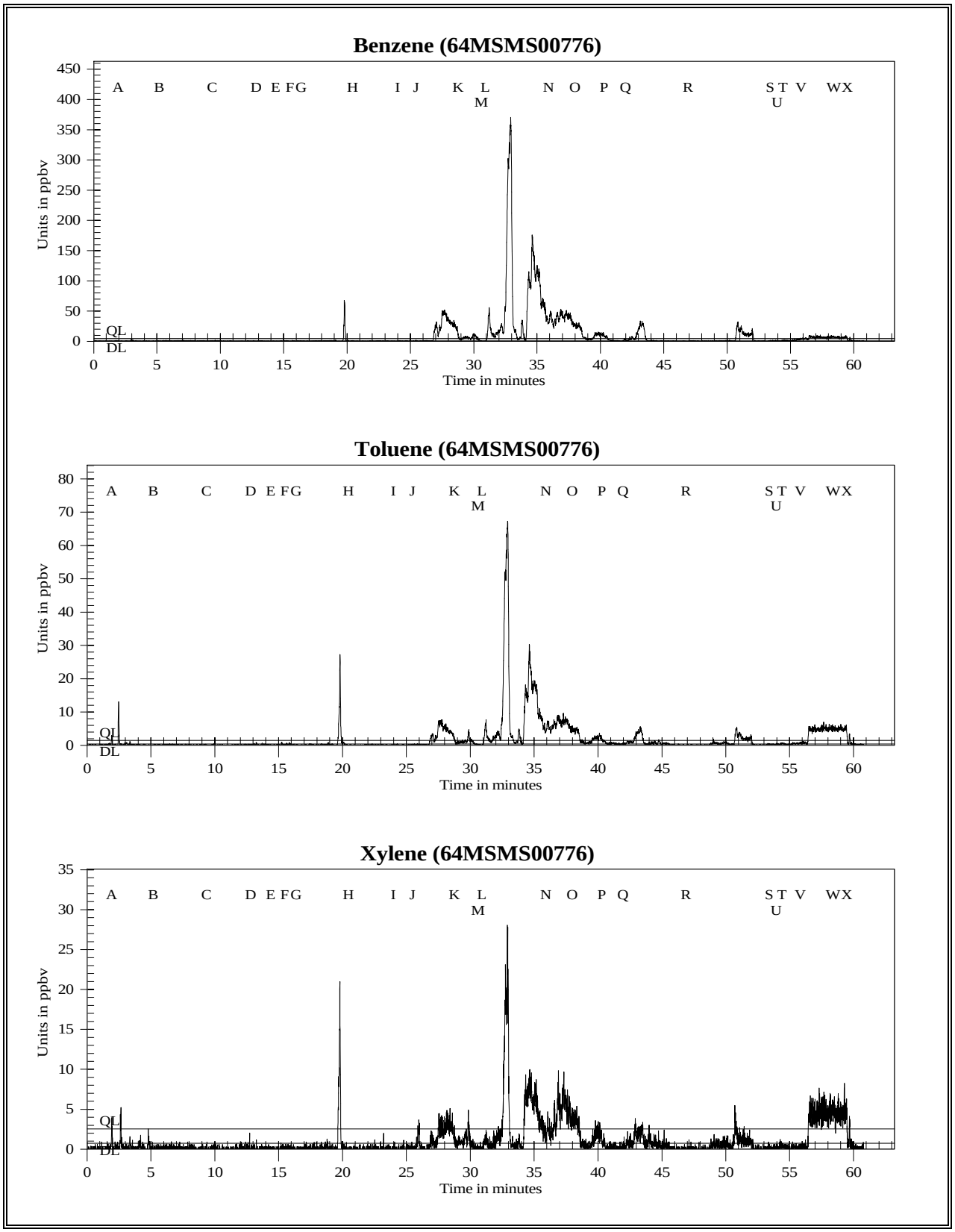


Figure 44c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

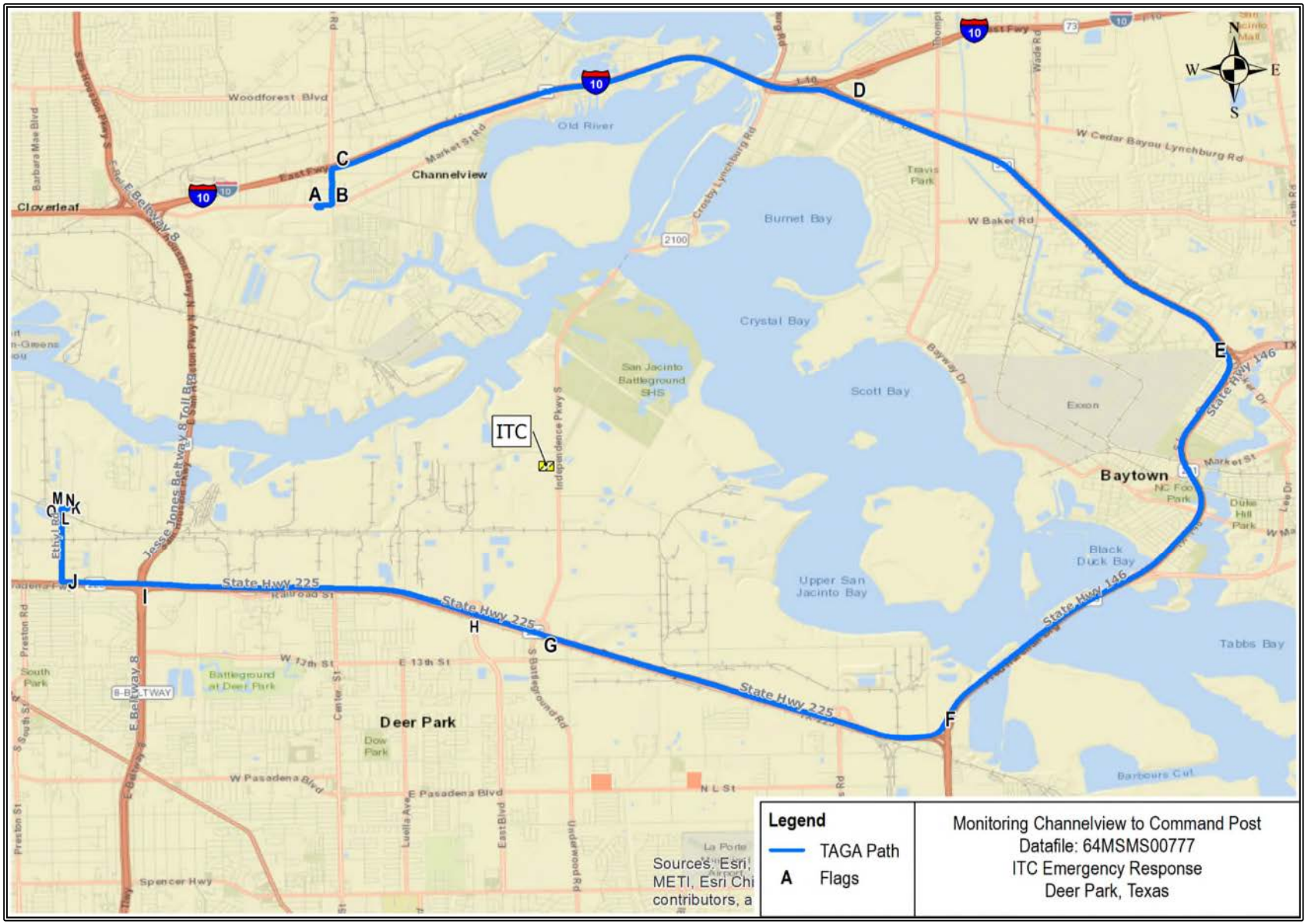


Figure 45a Monitoring Channelview to Command Post Path, 64MSMS00777

Figure 45b

TAGA File Event Summary
File: 64MSMS00777 Acquired on 27 March 2019 at 16:43:43
Title: Monitoring Channelview to Command Post

Flag	Time	Sequence	Description
A	3.6	340	Start mobile monitoring on Market Street at the Flying J Truck Stop
B	4.1	394	Left turn onto Sheldon Road
C	7.8	741	Right turn onto East Freeway Service Road
D	13.4	1276	Merge onto Highway 330 South
E	18.2	1729	Merge only Highway 146 South
F	23.4	2230	Merge onto Highway 225 West
G	27.3	2599	Cross Battleground Road/Independence Parkway
H	28.0	2667	Exit onto Pasadena Freeway Frontage Road
I	48.3	4591	Cross Highway 8
J	49.6	4716	Right turn onto Ethyl Road
K	52.2	4968	End mobile monitoring at EPA Command Post
L	52.8	5019	Start ambient
M	53.8	5114	End ambient
N	55.0	5234	Start 30 mL/min spike
O	56.0	5329	End 30 mL/min spike

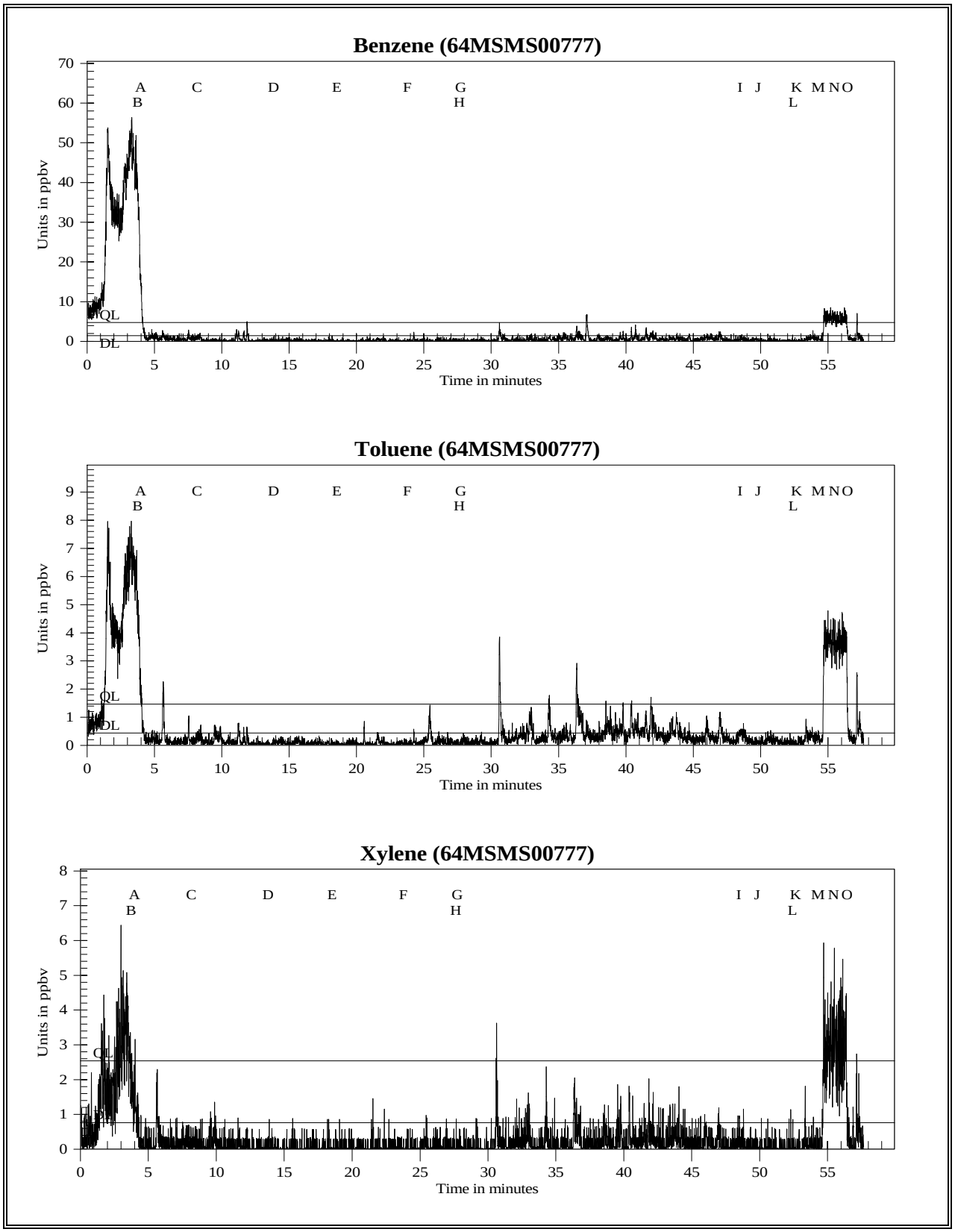


Figure 45c Monitoring Channelview to Command Post in ppbv for Benzene, Toluene, and Xylenes

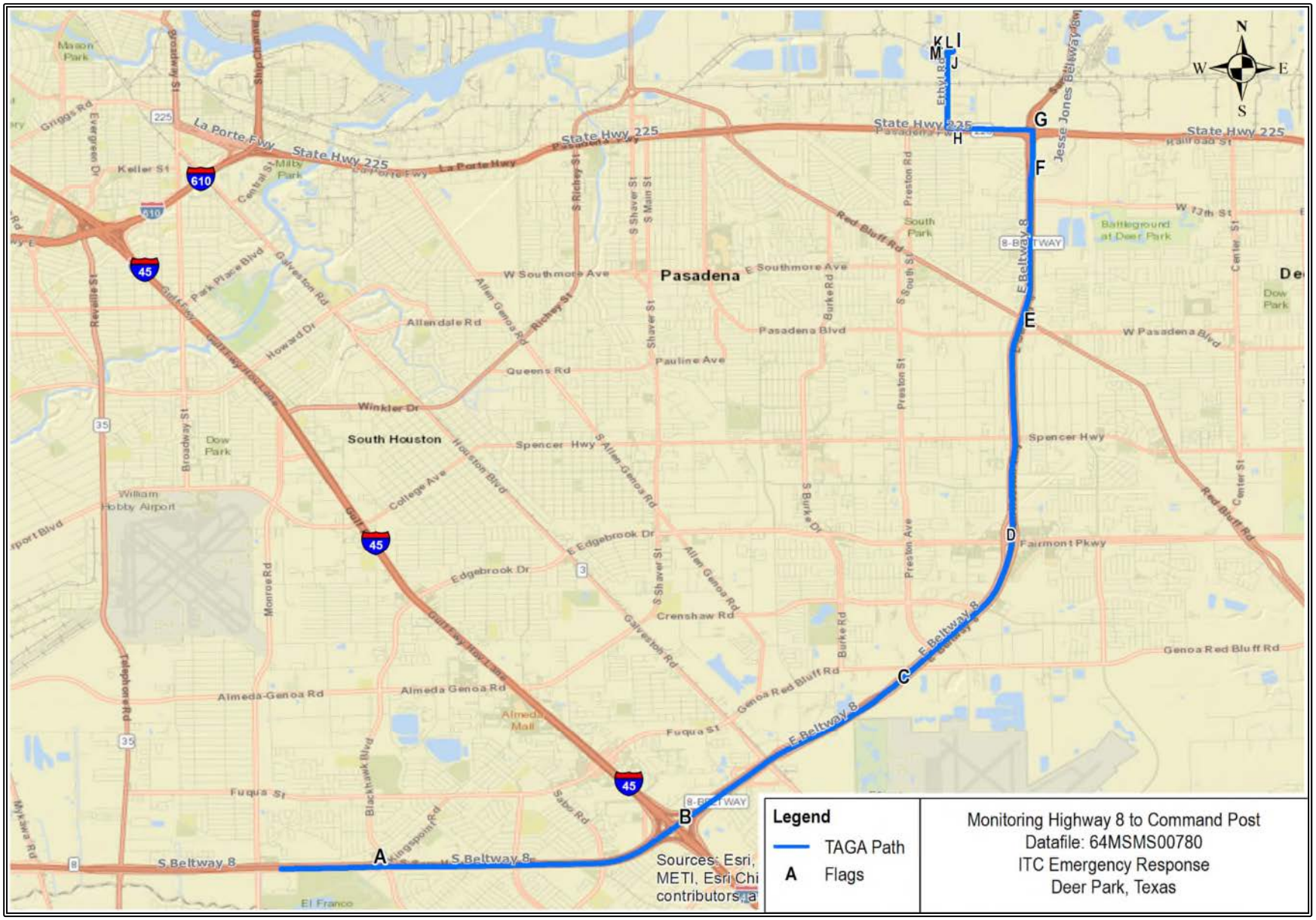


Figure 46a Monitoring Highway 8 to Command Post Path, 64MSMS00780

Figure 46b

TAGA File Event Summary
File: 64MSMS00780 Acquired on 28 March 2019 at 08:43:49
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	1.1	102	Start mobile monitoring on Highway 8 North
B	4.0	378	Cross Highway 45
C	8.0	760	Cross Genoa Red Bluff Road
D	9.7	920	Cross Fairmont Parkway
E	12.0	1143	Cross Pasadena Boulevard
F	13.7	1308	Exit onto Highway 8 service Road
G	15.6	1484	Left turn onto Pasadena Freeway Frontage Road
H	16.8	1601	Right turn onto Ethyl Road
I	19.7	1872	End mobile monitoring at EPA Command Post
J	21.3	2027	Start ambient
K	22.4	2133	End ambient
L	24.3	2314	Start 30 mL/min spike
M	25.7	2447	End 30 mL/min spike

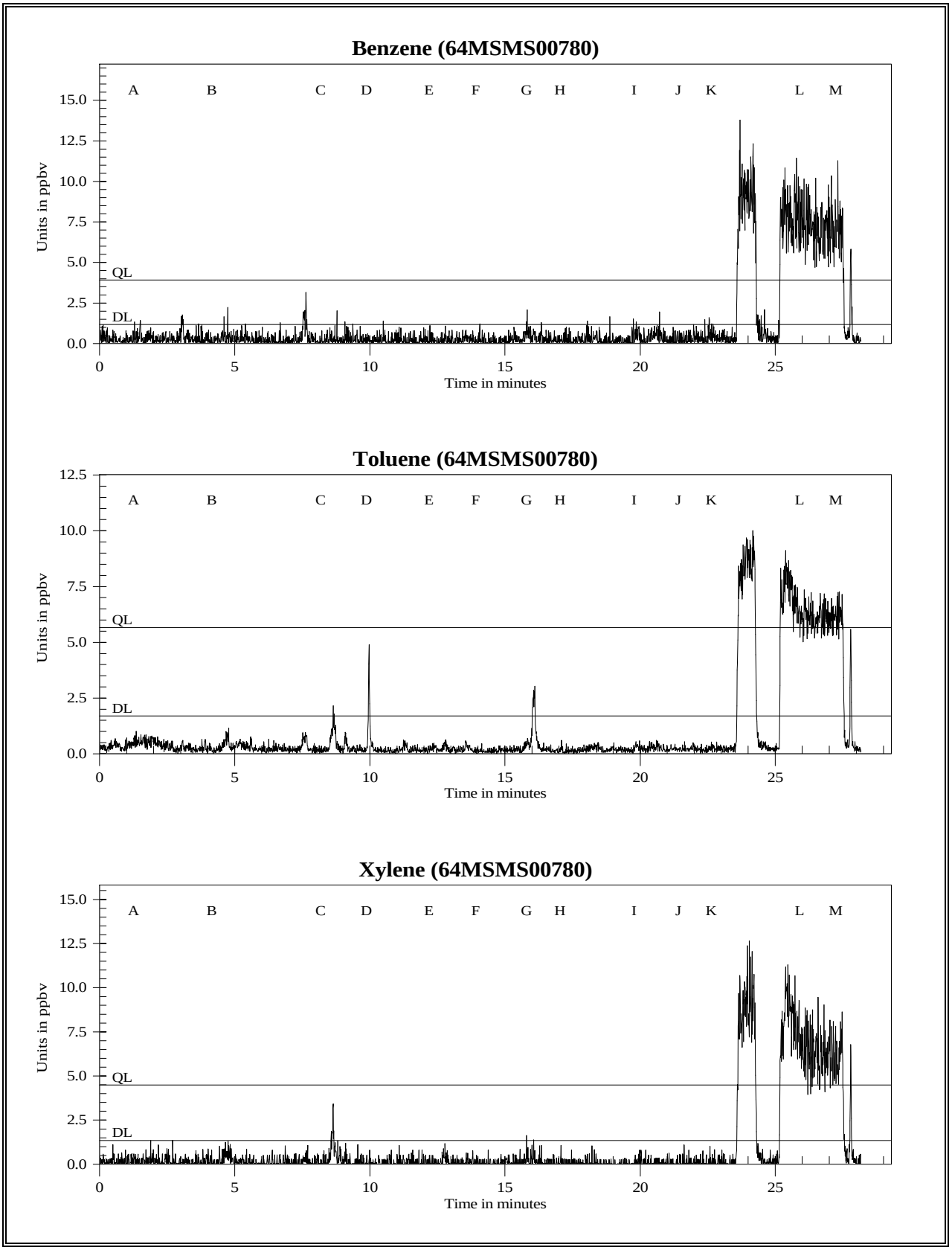


Figure 46c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

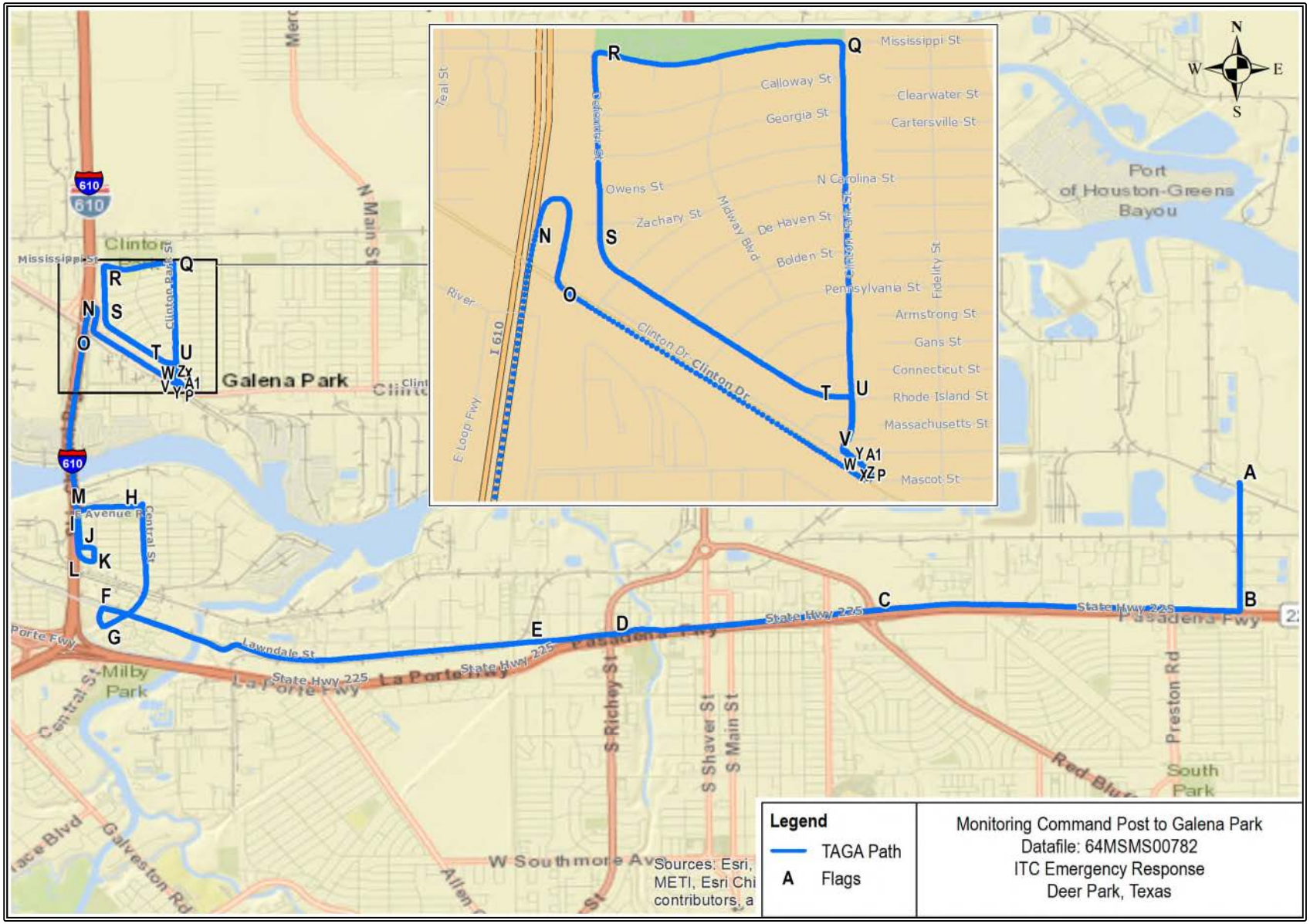


Figure 47a Monitoring Command Post to Galena Park Path, 64MSMS00782

Figure 47b

TAGA File Event Summary
File: 64MSMS00782 Acquired on 28 March 2019 at 09:26:38
Title: Monitoring Command Post to Galena Park

Flag	Time	Sequence	Description
A	1.3	121	Start mobile monitoring at EPA Command Post
B	4.4	421	Right turn onto Pasadena Freeway Frontage Road
C	9.3	885	Cross Red Bluff Road
D	13.9	1321	Cross Richey Street
E	14.9	1417	Merge onto Lawndale Street
F	21.8	2072	Left turn onto Highway 610 Access Road
G	22.4	2127	Left turn onto Central Street
H	26.7	2539	Left turn onto Avenue R
I	29.4	2797	Left turn onto Concrete Street
J	30.6	2913	Left turn onto Manchester Street
K	31.1	2957	Right turn onto 92nd Street
L	31.4	2987	Right turn onto Highway 610 on-ramp
M	32.2	3064	Merge onto Highway 610 North
N	33.8	3219	Exit Highway 610 North
O	35.8	3406	Left turn onto Clinton Drive
P	37.4	3552	Left turn onto Clinton Park Street
Q	42.1	4002	Left turn onto Mississippi Street
R	43.7	4160	Left turn onto Defender Street
S	45.9	4366	Left turn onto Rhode Island Street
T	49.0	4656	Continue onto Rhode Island Street
U	49.3	4688	Right turn onto Clinton Park Street
V	49.9	4748	Left turn onto Clinton Drive
W	50.4	4789	End mobile monitoring on Clinton Drive
X	50.9	4840	Start ambient
Y	52.4	4984	End ambient
Z	55.9	5314	Start 30 mL/min spike
A1	56.9	5413	End 30 mL/min spike

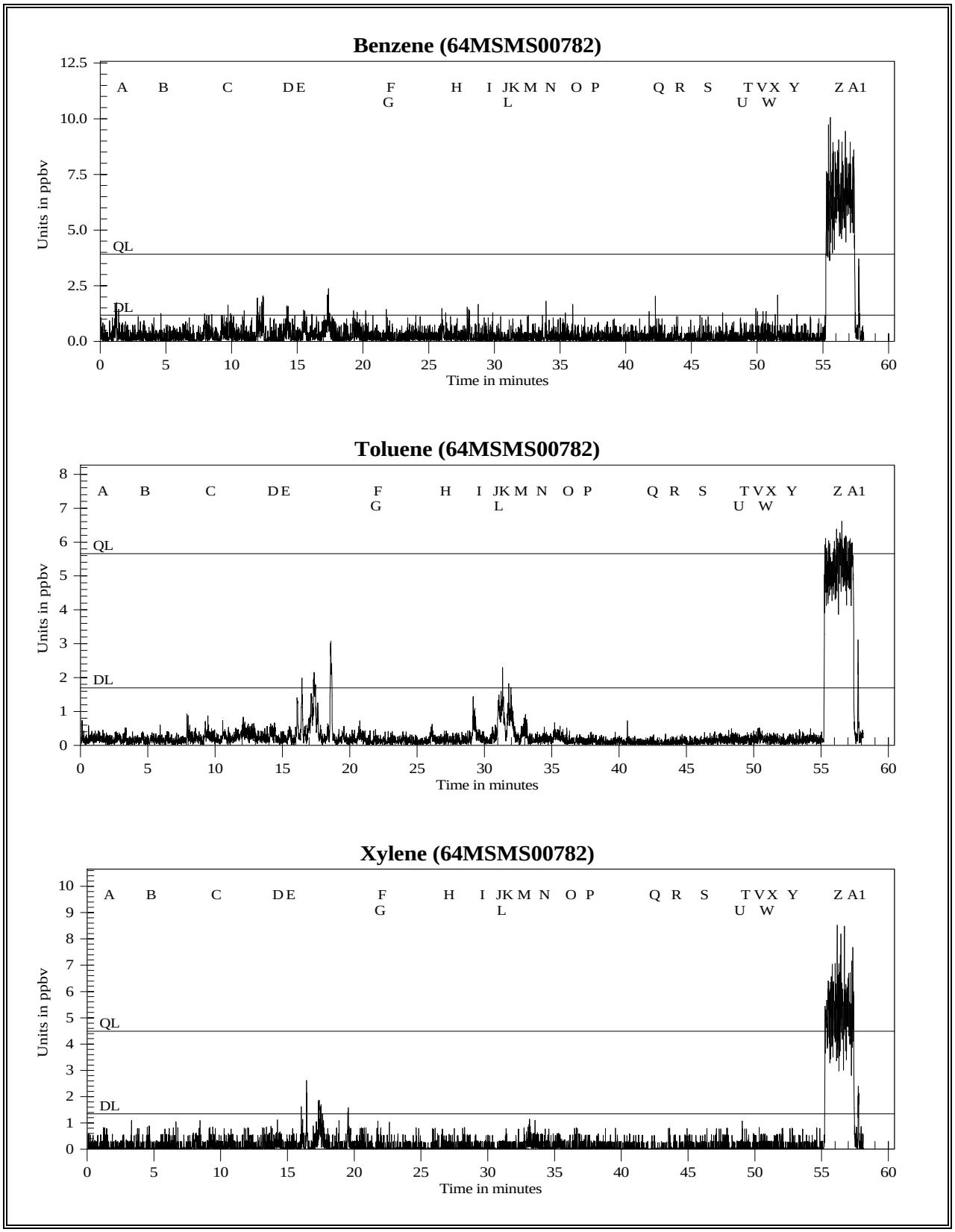


Figure 47c Monitoring Command Post to Galena Park in ppbv for Benzene, Toluene, and Xylenes

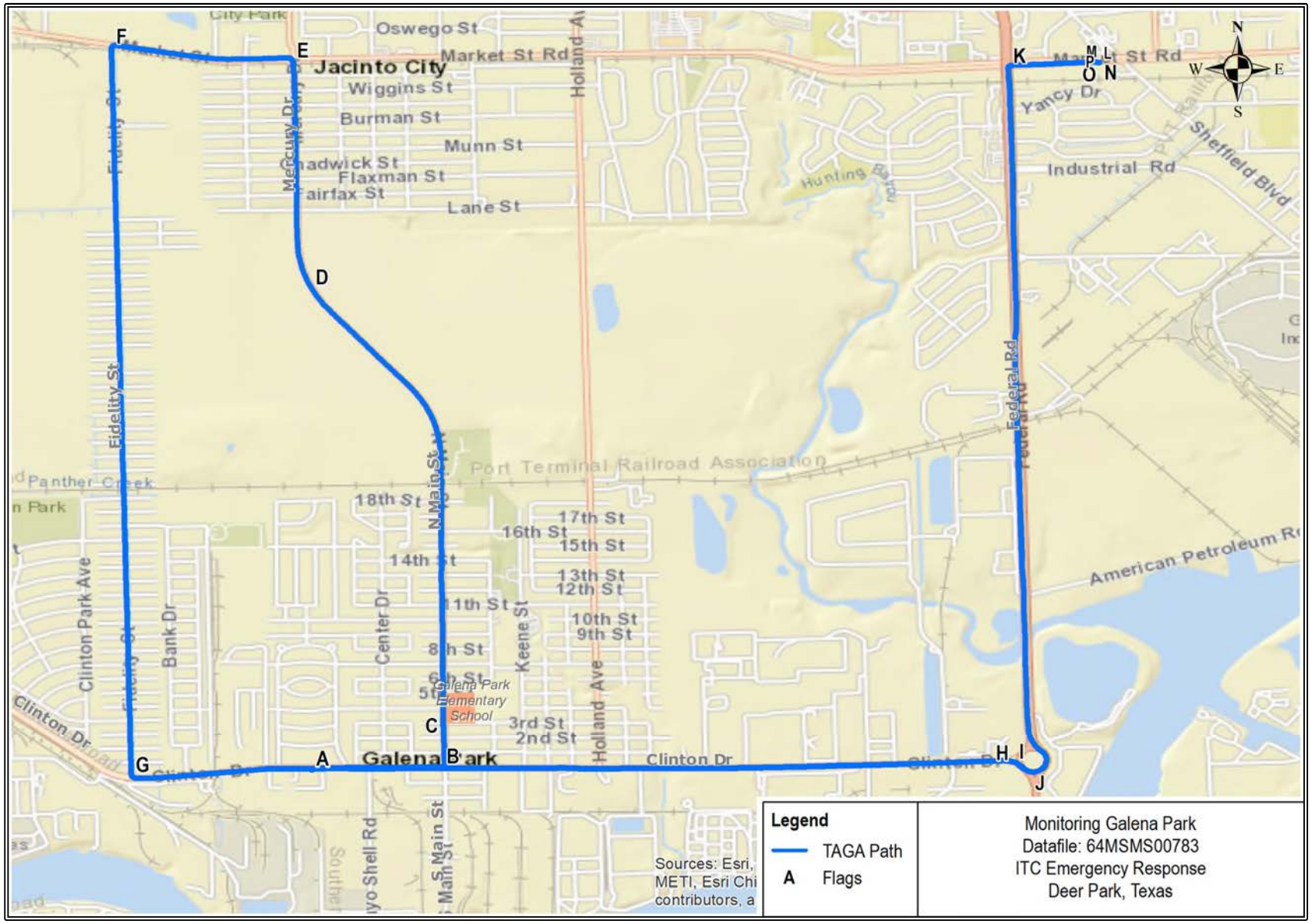


Figure 48a Monitoring Galena Park Path, 64MSMS00783

Figure 48b

TAGA File Event Summary
File: 64MSMS00783 Acquired on 28 March 2019 at 10:46:39
Title: Monitoring Galena Park

Flag	Time	Sequence	Description
A	0.7	69	Start mobile monitoring on Clinton Drive
B	3.2	302	Left turn onto N Main Street
C	4.0	378	Passing Galena Park Elementary School
D	9.0	853	Right turn onto Mercury Drive
E	12.5	1186	Left turn onto Market Street
F	13.9	1321	Left turn onto Fidelity drive
G	23.2	2211	Left turn onto Clinton Drive
H	31.5	2994	Stationary at the intersection of Clinton Drive and Federal Road
I	34.9	3320	Resume mobile monitoring
J	35.2	3352	Left turn onto Federal Road
K	48.3	4589	Right turn onto Market Street
L	49.9	4746	End mobile monitoring on Market Street
M	50.7	4821	Start ambient
N	51.7	4919	End ambient
O	53.4	5082	Start 30 mL/min spike
P	54.5	5182	End 30 mL/min spike

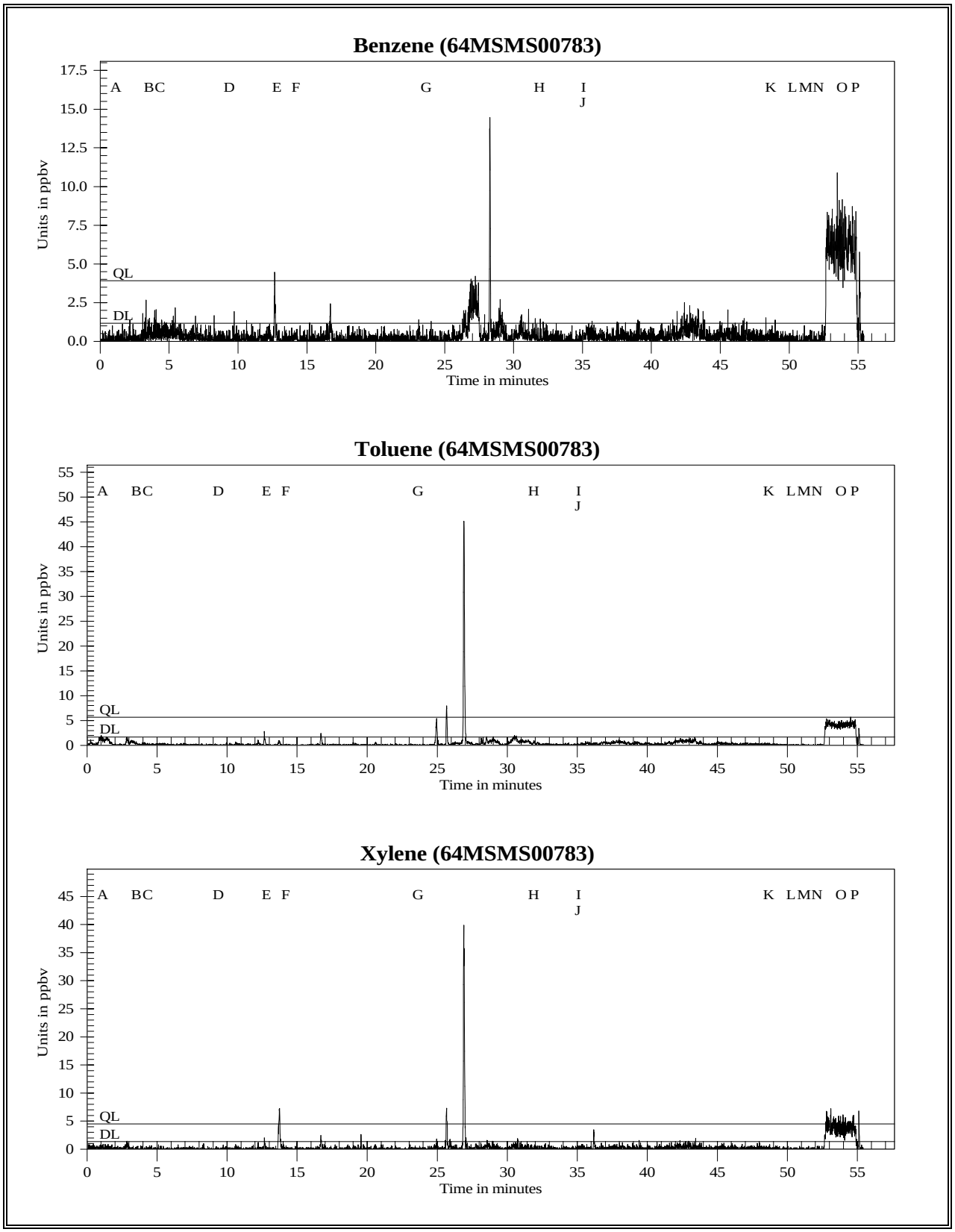


Figure 48c Monitoring Galena Park in ppbv for Benzene, Toluene, and Xylenes

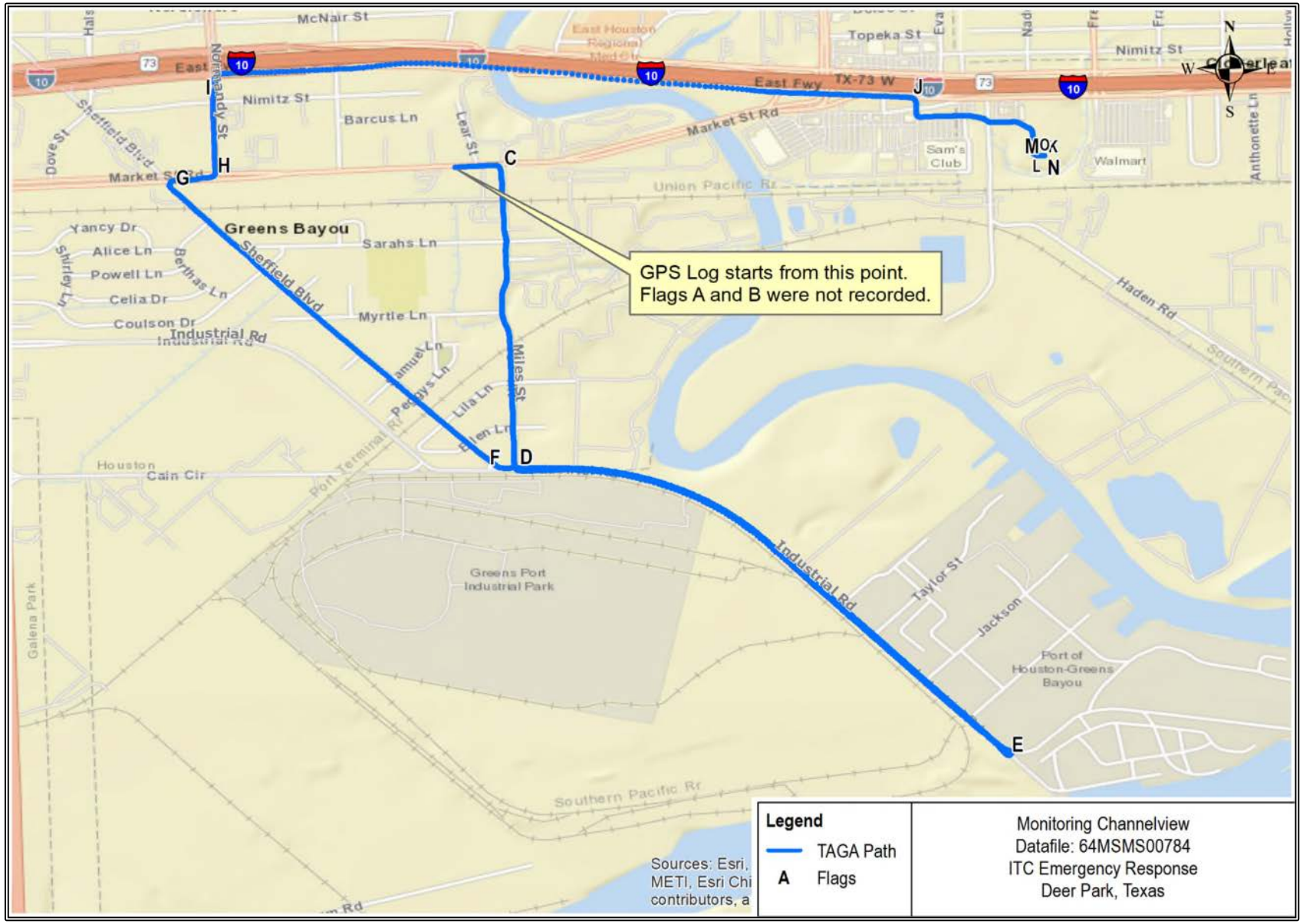


Figure 49a Monitoring Channelview Path, 64MSMS00784

Figure 49b

TAGA File Event Summary
File: 64MSMS00784 Acquired on 28 March 2019 at 11:49:10
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	0.9	89	Start mobile monitoring on Market Street
B	1.9	181	Continue onto Market Street
C	4.4	419	Right turn onto Miles Street
D	14.0	1335	Left turn onto Industrial Road
E	17.1	1630	U-turn at the end of Industrial Road
F	22.3	2122	Right turn onto Sheffield Boulevard
G	27.6	2625	Right turn onto Market Street
H	28.2	2682	Left turn onto Normandy Street
I	29.8	2832	Right turn onto East Freeway Frontage Road
J	33.7	3206	Right turn into shopping center
K	36.5	3475	End mobile monitoring in shopping center
L	37.2	3533	Start ambient
M	38.2	3636	End ambient
N	39.8	3789	Start 30 mL/min spike
O	40.9	3892	End 30 mL/min spike

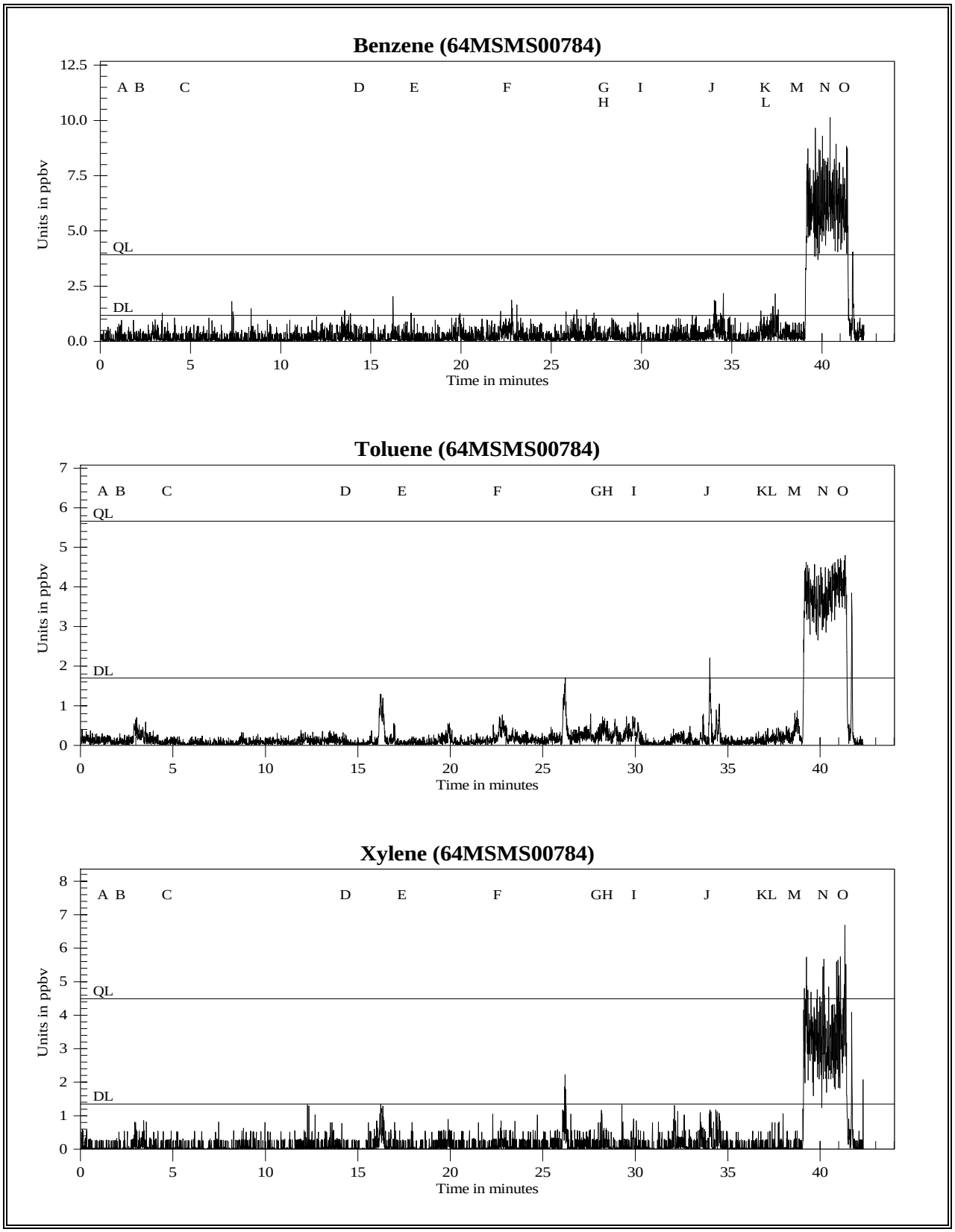


Figure 49c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

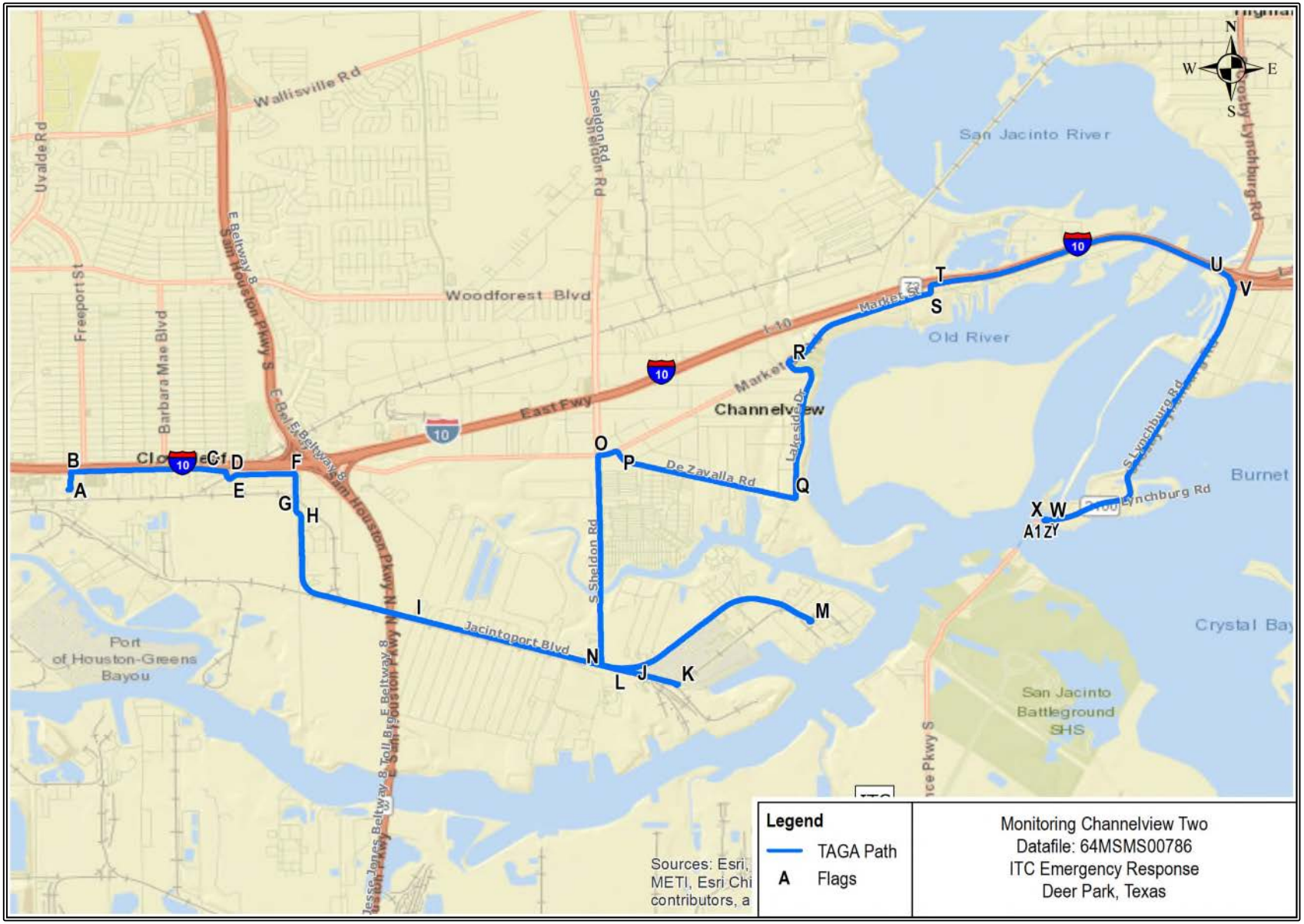


Figure 50a Monitoring Channelview Two Path, 64MSMS00786

Figure 50b

TAGA File Event Summary
File: 64MSMS00786 Acquired on 28 March 2019 at 13:45:30
Title: Monitoring Channelview Two

Flag	Time	Sequence	Description
A	1.3	129	Start mobile monitoring in shopping center
B	3.5	337	Right turn onto East Freeway Service Road
C	5.8	551	Merge right onto East Freeway ramp
D	6.2	587	Right turn onto Patch Road
E	6.6	633	Left turn onto Kenny Street
F	9.0	853	Right turn onto Penn City Road
G	10.1	959	Merge left onto Jacintoport Boulevard
H	10.6	1004	Right turn onto Jacintoport Boulevard
I	19.0	1807	Cross Appelt Drive
J	22.0	2094	Right turn onto San Jacinto Boulevard
K	23.3	2214	U-turn on San Jacinto Boulevard
L	24.4	2324	Right turn onto Jacintoport Boulevard
M	28.3	2688	U-turn on Jacintoport Boulevard
N	32.3	3067	Right turn onto Sheldon Road
O	36.9	3506	Right turn onto Market Street
P	37.4	3553	Right turn onto Dezavala Road
Q	39.7	3777	Left turn onto Lakeside Drive
R	43.0	4087	Right turn onto Market Street
S	45.5	4322	Left turn onto Cedar Lane
T	45.9	4363	Right turn onto East Freeway Service Road; merge onto Highway 10 East
U	48.3	4597	Exit Highway 10 East
V	48.9	4648	Right turn onto Independence Parkway North
W	54.8	5207	End mobile monitoring at Lynchburg Ferry
X	55.4	5264	Start ambient
Y	56.4	5364	End ambient
Z	57.9	5504	Start 30 mL/min spike
A1	59.1	5615	End 30 mL/min spike

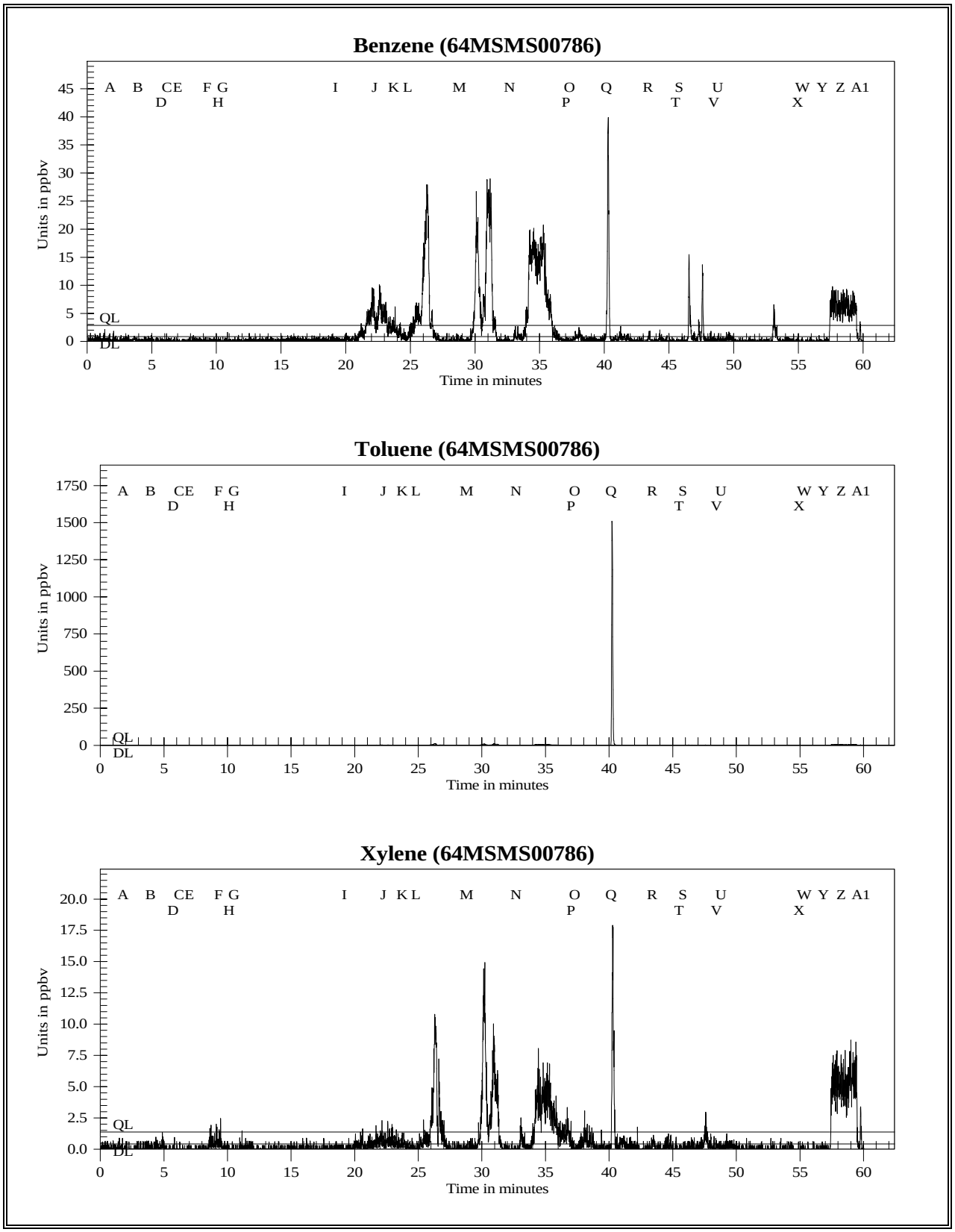


Figure 50c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

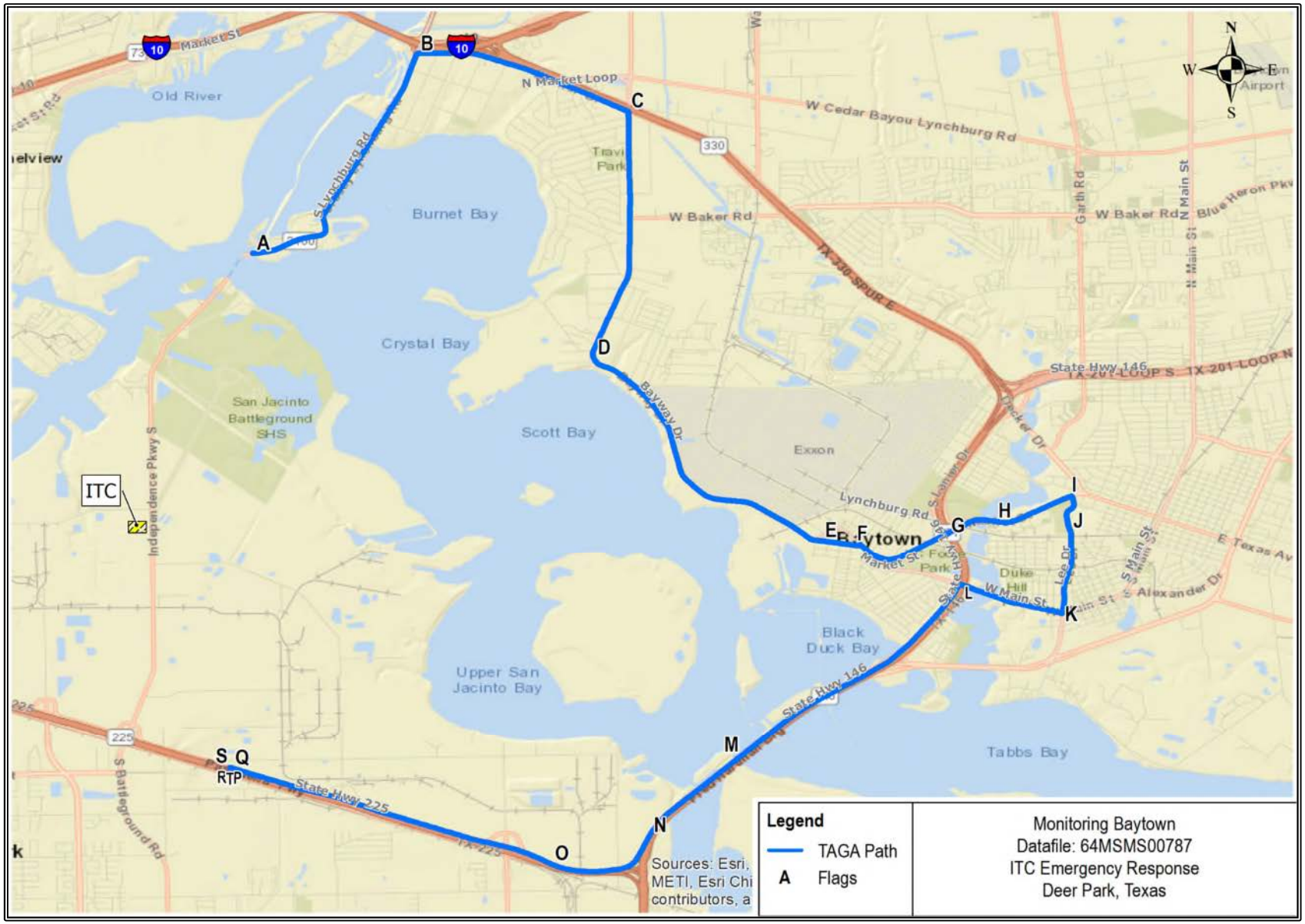


Figure 51a Monitoring Baytown Path, 64MSMS00787

Figure 51b

TAGA File Event Summary
File: 64MSMS00787 Acquired on 28 March 2019 at 14:50:29
Title: Monitoring Baytown

Flag	Time	Sequence	Description
A	1.1	105	Start mobile monitoring at Lynchburg Ferry
B	7.9	749	Right turn onto Decker Drive
C	11.0	1050	Right turn onto Bayway Drive
D	15.0	1431	Continuing onto Bayway Drive
E	19.7	1875	Merge onto Wisconsin Street
F	21.1	2010	Right turn onto Market Street
G	23.3	2219	Cross Highway 146
H	24.5	2328	Passing Robert E Lee High School
I	26.0	2474	Right turn onto Lee Drive
J	26.8	2545	Passing Lee College
K	29.4	2799	Right turn onto W Main Street
L	32.2	3062	Left turn onto Highway 146 South
M	35.0	3328	Passing over Fred Hartman Bridge
N	36.1	3434	Merge onto Highway 225 West
O	37.2	3537	Exit onto Pasadena Freeway Frontage Road
P	40.5	3851	End mobile monitoring on Pasadena Freeway Frontage Road
Q	41.2	3919	Start ambient
R	42.3	4021	End ambient
S	44.1	4195	Start 30 mL/min spike
T	45.1	4293	End 30 mL/min spike

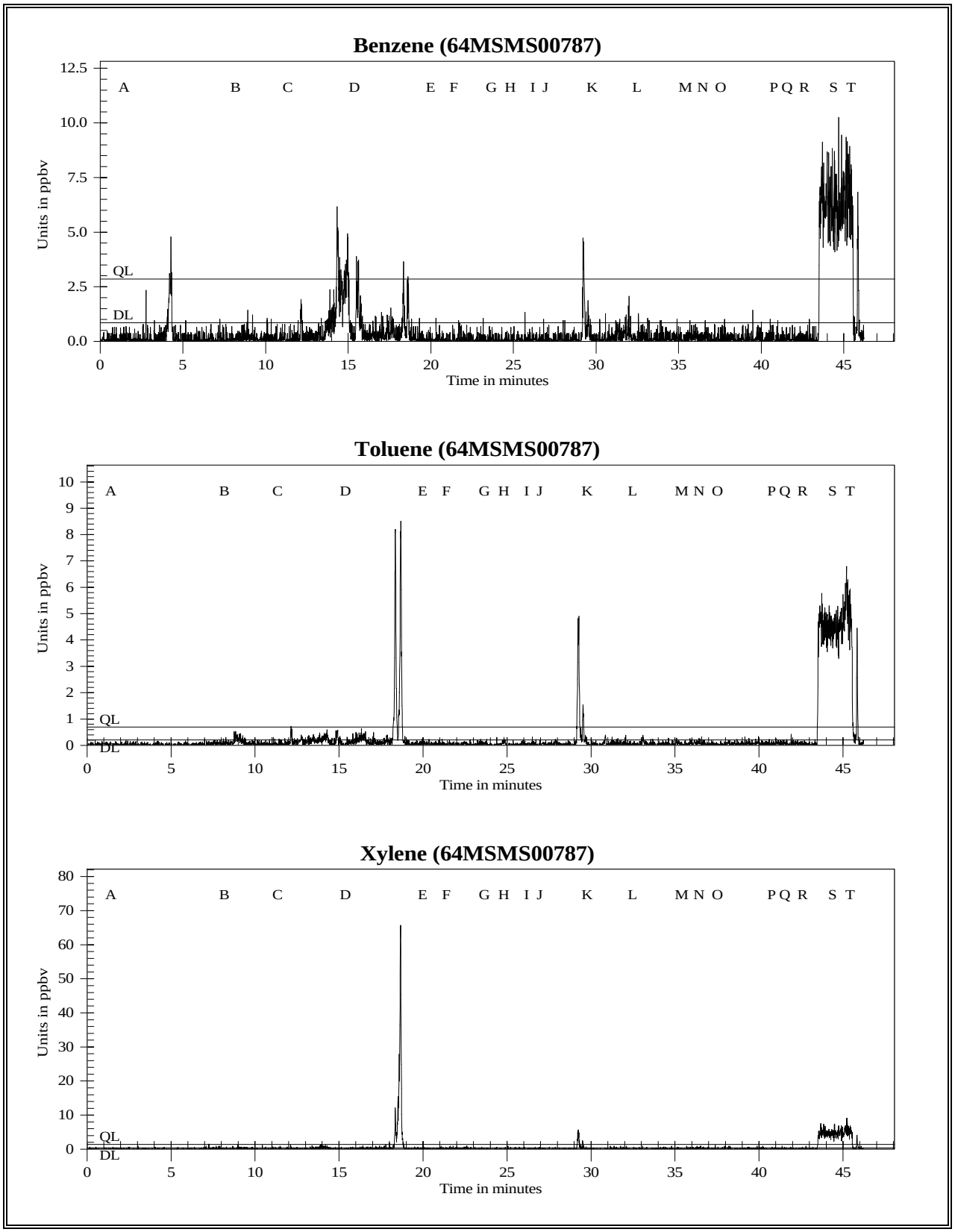


Figure 51c Monitoring Baytown in ppbv for Benzene, Toluene, and Xylenes

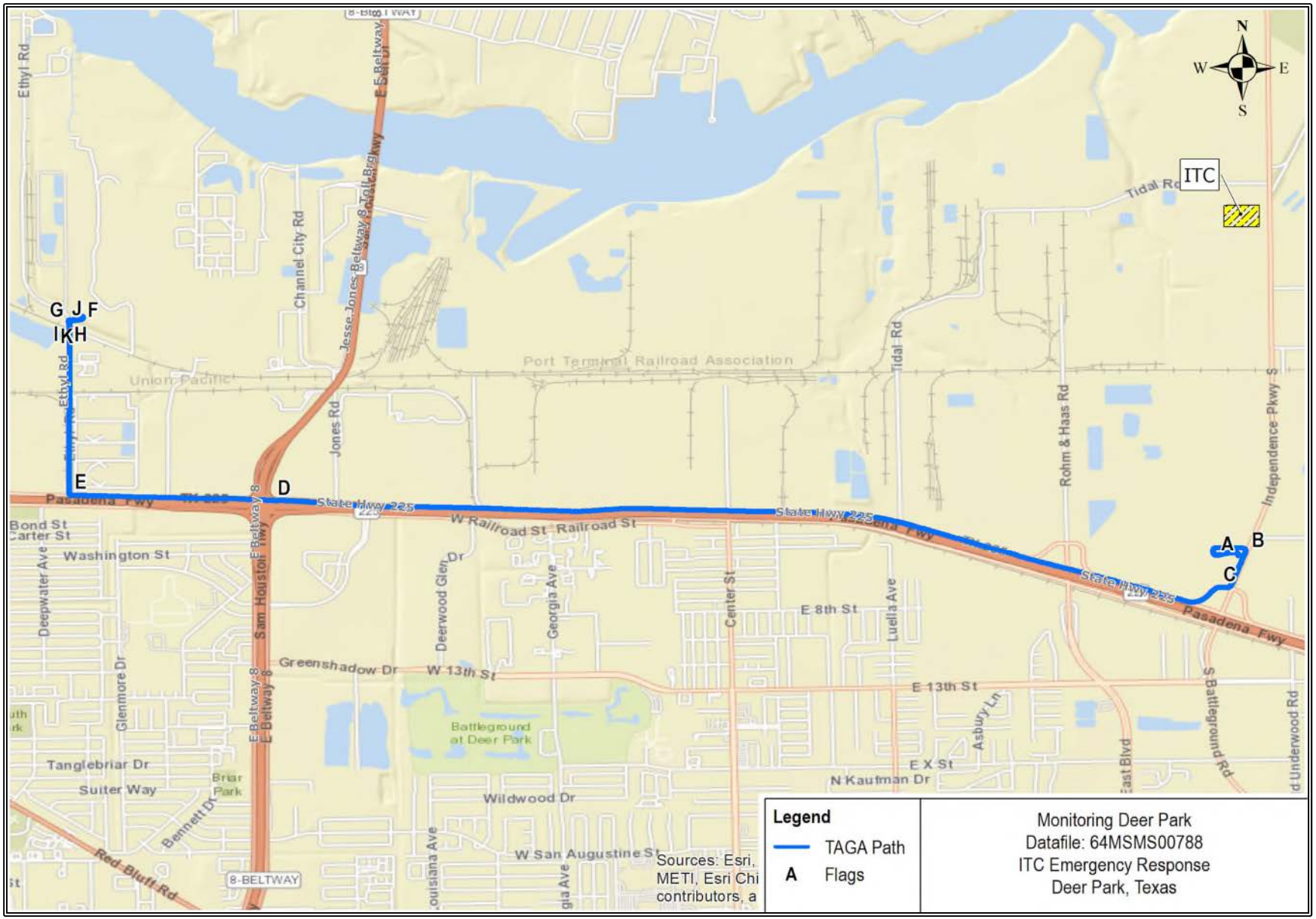


Figure 52a Monitoring Deer Park Path, 64MSMS00788

Figure 52b

TAGA File Event Summary
File: 64MSMS00788 Acquired on 28 March 2019 at 16:04:01
Title: Monitoring Deer Park

Flag	Time	Sequence	Description
A	0.9	83	Start mobile monitoring at Love's Travel Stop on Independence Parkway
B	4.3	405	Merge right onto Independence Parkway
C	5.4	517	Right turn onto Pasadena Freeway Frontage Road
D	18.8	1791	Cross Highway 8
E	20.3	1932	Right turn onto Ethyl Road
F	23.0	2191	U-turn at EPA Command Post
G	24.3	2311	End mobile monitoring at EPA Command Post
H	24.9	2366	Start ambient
I	25.9	2466	End ambient
J	27.7	2633	Start 30 mL/min spike
K	31.8	3026	End 30 mL/min spike

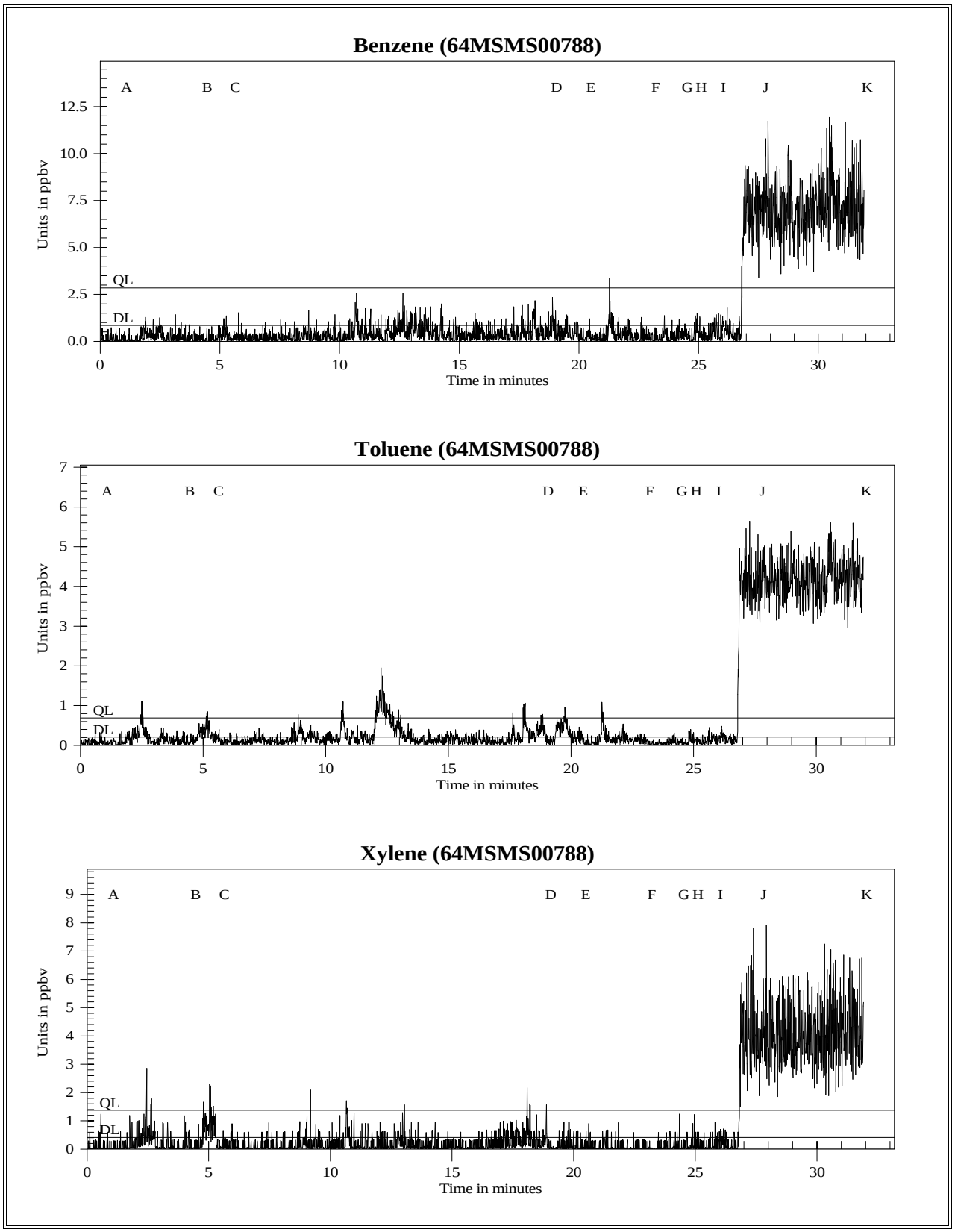


Figure 52c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

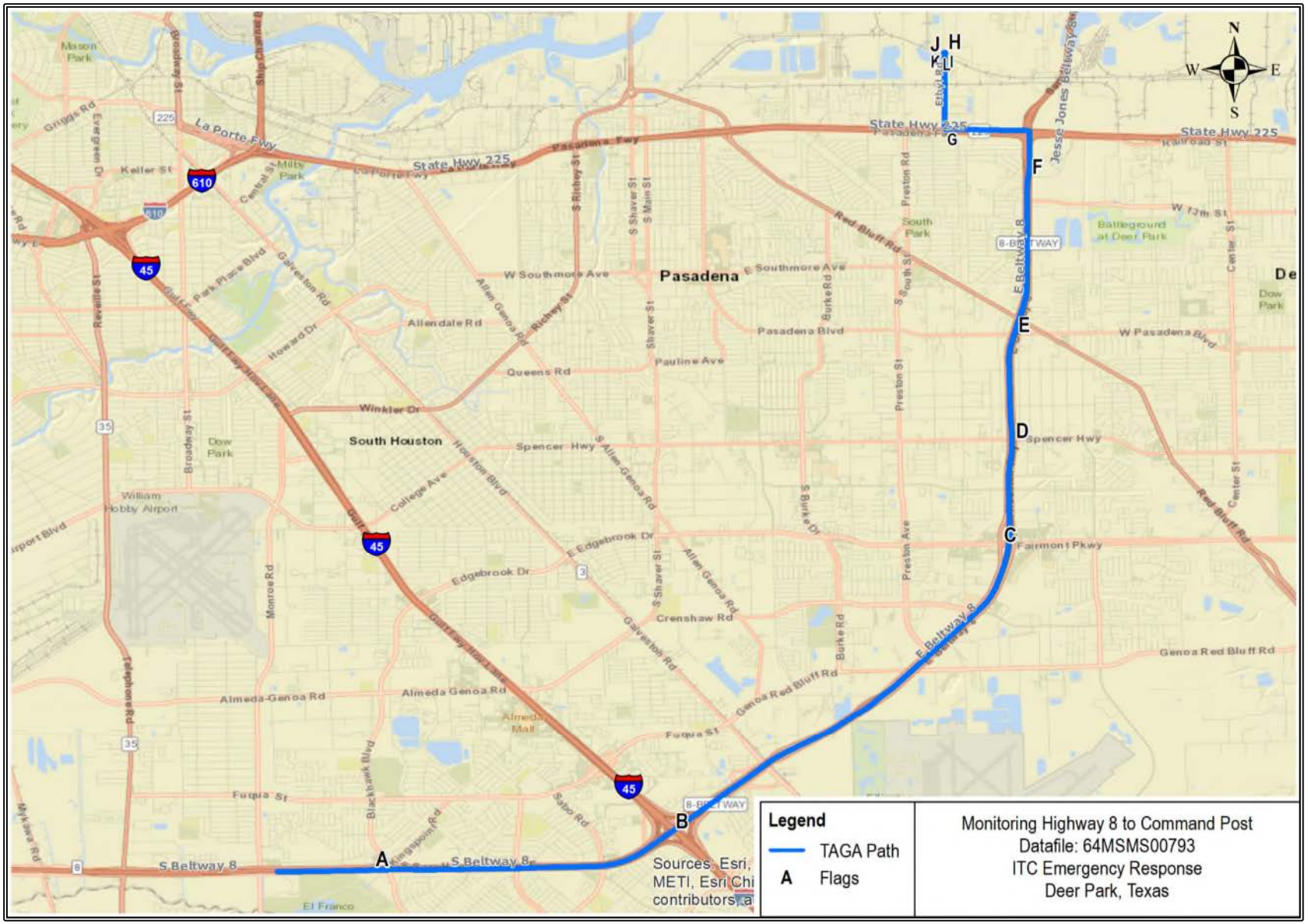


Figure 53a Monitoring Highway 8 to Command Post Path, 64MSMS00793

Figure 53b

TAGA File Event Summary
File: 64MSMS00793 Acquired on 29 March 2019 at 08:36:02
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	1.1	110	Start mobile monitoring on Highway 8 North
B	4.2	402	Cross Highway 45
C	9.8	934	Cross Fairmont Parkway
D	11.0	1042	Cross Spencer Highway
E	12.6	1195	Cross Pasadena Boulevard
F	15.7	1496	Exit onto Highway 8 Service Road
G	18.1	1726	Right turn onto Ethyl Road
H	23.0	2189	End mobile monitoring at EPA Command Post
I	23.4	2225	Start ambient
J	24.7	2349	End ambient
K	26.8	2553	Start 30 mL/min spike
L	27.9	2653	End 30 mL/min spike

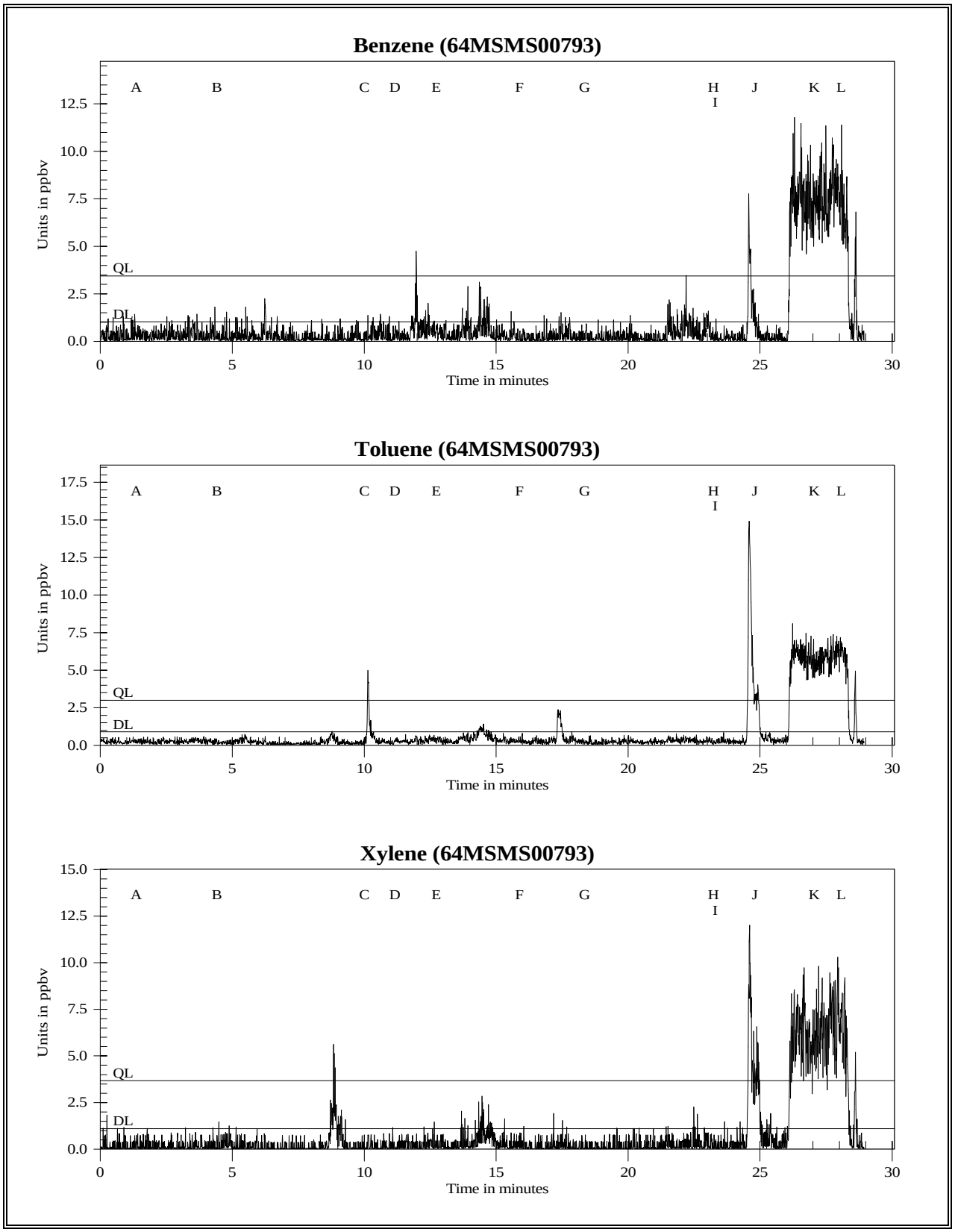


Figure 53c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

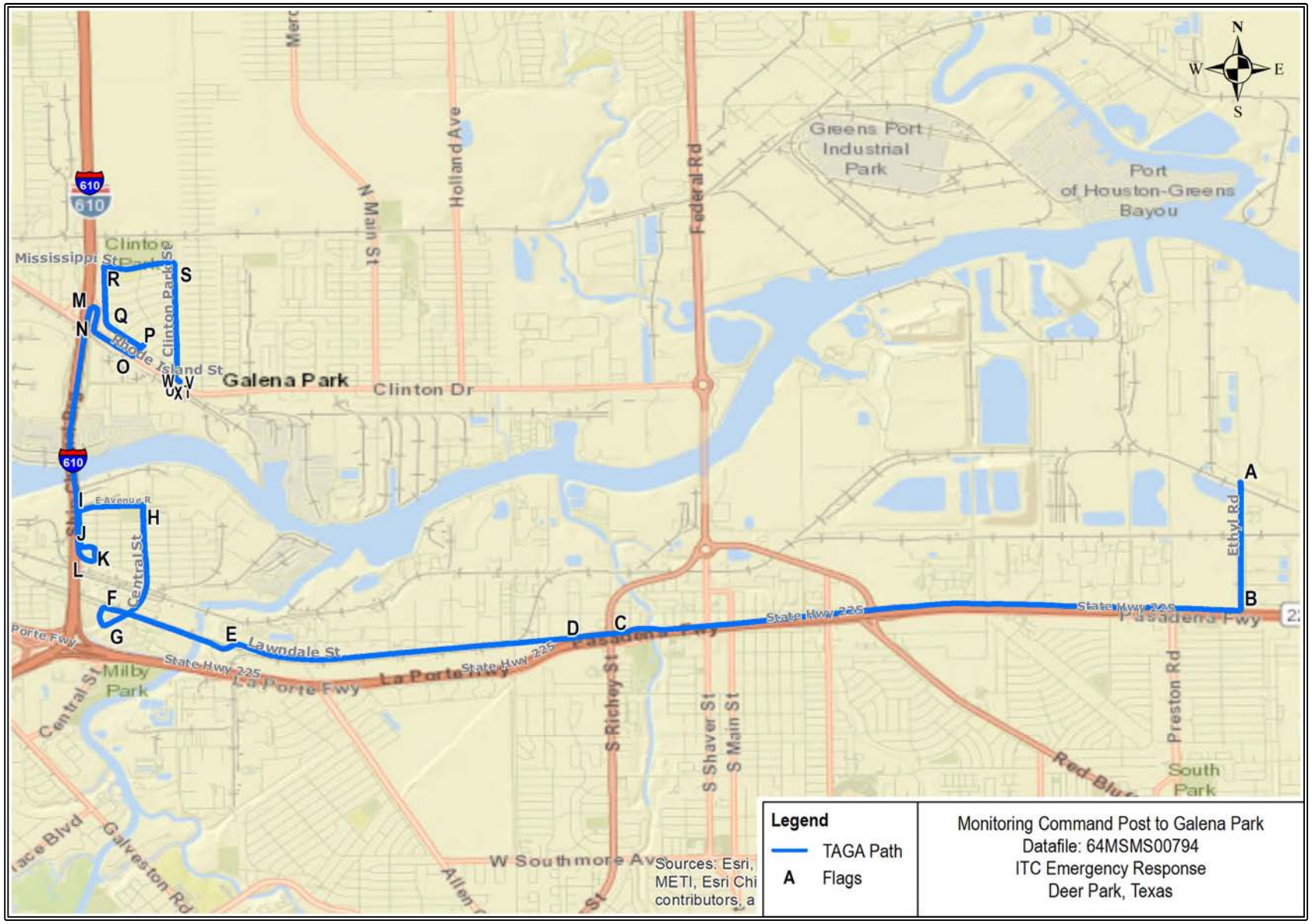


Figure 54a Monitoring Command Post to Galena Park Path, 64MSMS00794

Figure 54b

TAGA File Event Summary
File: 64MSMS00794 Acquired on 29 March 2019 at 09:08:12
Title: Monitoring Command Post to Galena Park

Flag	Time	Sequence	Description
A	0.8	77	Start mobile monitoring at EPA Command Post
B	3.7	352	Right turn onto Pasadena Freeway Frontage Road
C	11.7	1110	Cross Richey Street
D	12.2	1164	Merge onto Lawndale Street
E	15.8	1501	Continuing on Lawndale Street
F	19.0	1810	Left turn onto J Connector
G	19.6	1869	Left turn onto Central Street
H	23.2	2210	Left turn onto Avenue R
I	25.5	2423	Left turn onto Concrete Street
J	26.6	2530	Left turn onto Manchester Street
K	27.1	2577	Right turn onto 92nd Street
L	27.5	2614	Merge onto Highway 610 North ramp
M	29.7	2823	Exit Highway 610 North
N	30.3	2886	Left turn onto Clinton Drive
O	31.4	2989	Left turn onto Pennsylvania Street
P	33.4	3179	Left turn onto Rhode Island Street
Q	34.5	3285	Right turn onto Defender Street
R	36.4	3463	Right turn onto Mississippi Street
S	37.6	3574	Right turn onto Clinton Park Street
T	41.0	3899	End mobile monitoring at Clinton Park Street and Clinton Drive
U	41.5	3951	Start ambient
V	42.5	4046	End ambient
W	44.3	4217	Start 30 mL/min spike
X	45.4	4317	End 30 mL/min spike

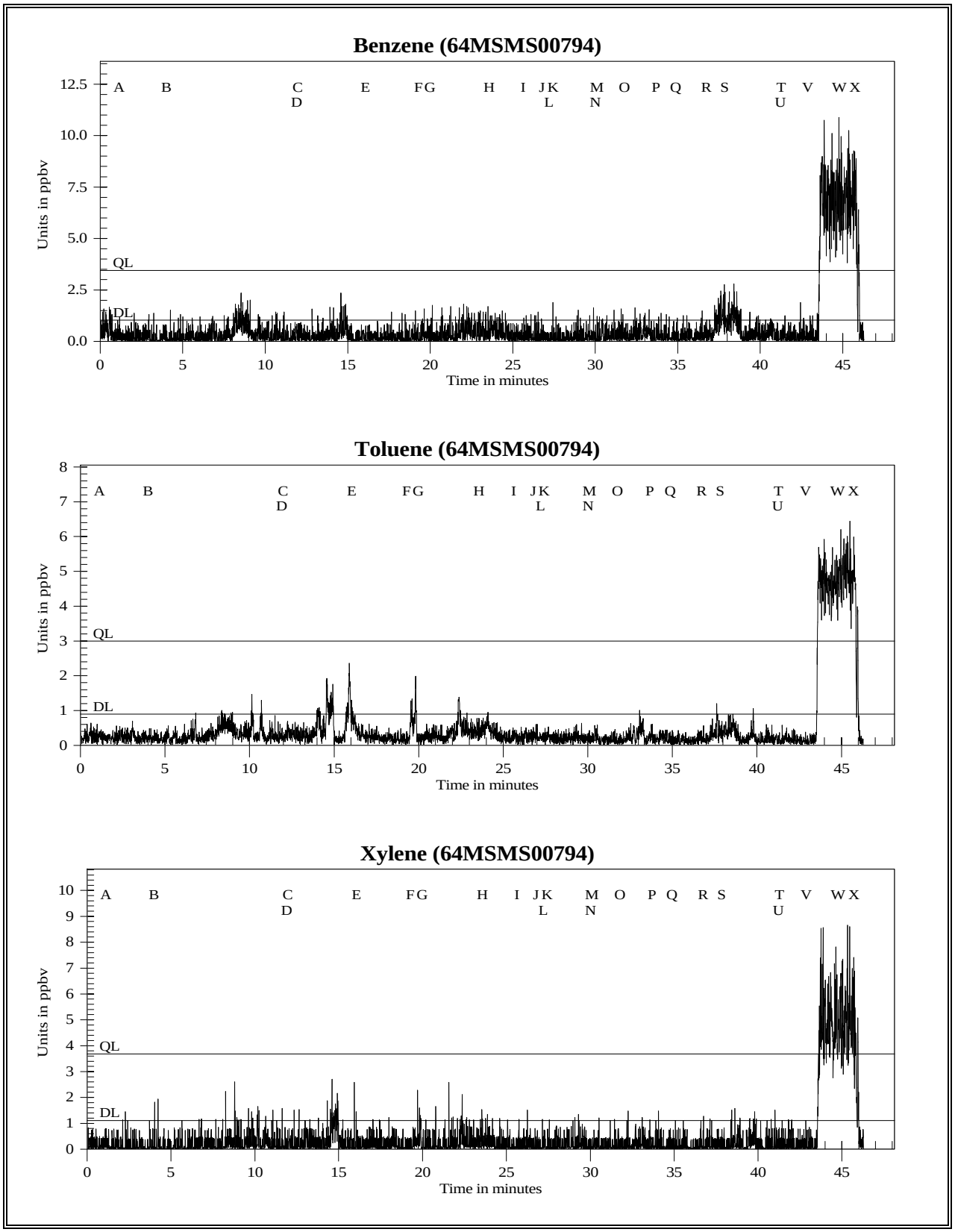


Figure 54c Monitoring Command Post to Galena Park in ppbv for Benzene, Toluene, and Xylenes

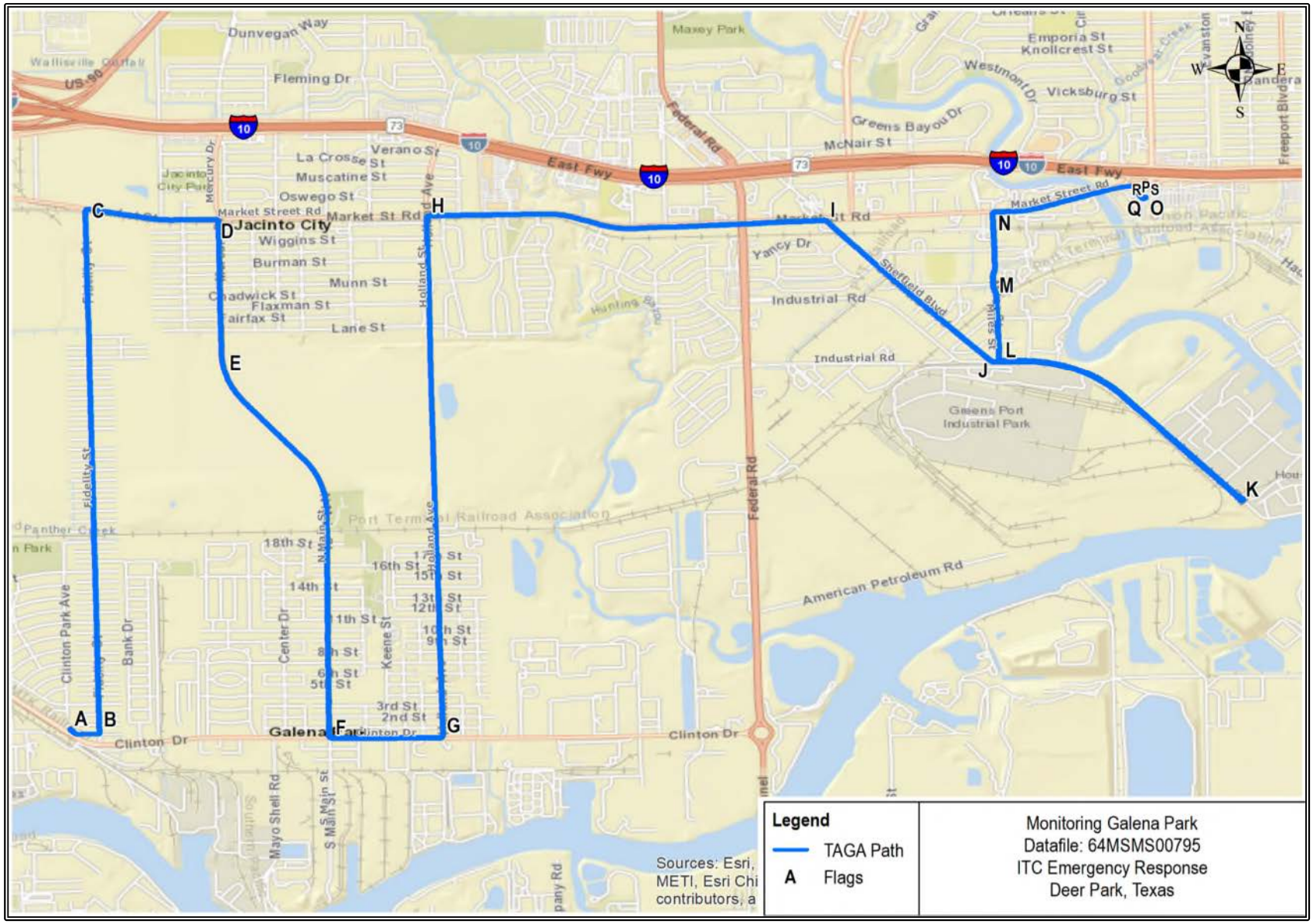


Figure 55a Monitoring Galena Park Path, 64MSMS00795

Figure 55b

TAGA File Event Summary
File: 64MSMS00795 Acquired on 29 March 2019 at 09:57:40
Title: Monitoring Galena Park

Flag	Time	Sequence	Description
A	0.8	78	Start mobile monitoring on Clinton Drive
B	2.2	208	Left turn onto Fidelity Street
C	10.2	975	Right turn onto Market Street
D	11.5	1096	Right turn onto Mercury Drive
E	14.1	1343	Merge onto Main Street
F	20.6	1964	Left turn onto Clinton Drive
G	21.7	2065	Left turn onto Holland Avenue
H	28.4	2701	Right turn onto Market Street
I	34.0	3230	Right turn onto Sheffield Boulevard
J	37.8	3597	Left turn onto Industrial Road
K	41.0	3900	U-turn at the end of Industrial Road
L	44.5	4230	Right turn onto Miles Street
M	49.3	4688	Cross Myrtle Lane
N	52.8	5020	Right turn onto Market Street
O	55.1	5244	End mobile monitoring at shopping center on East Freeway Service Road
P	55.5	5277	Start ambient
Q	56.5	5377	End ambient
R	58.1	5520	Start 30 mL/min spike
S	59.1	5615	End 30 mL/min spike

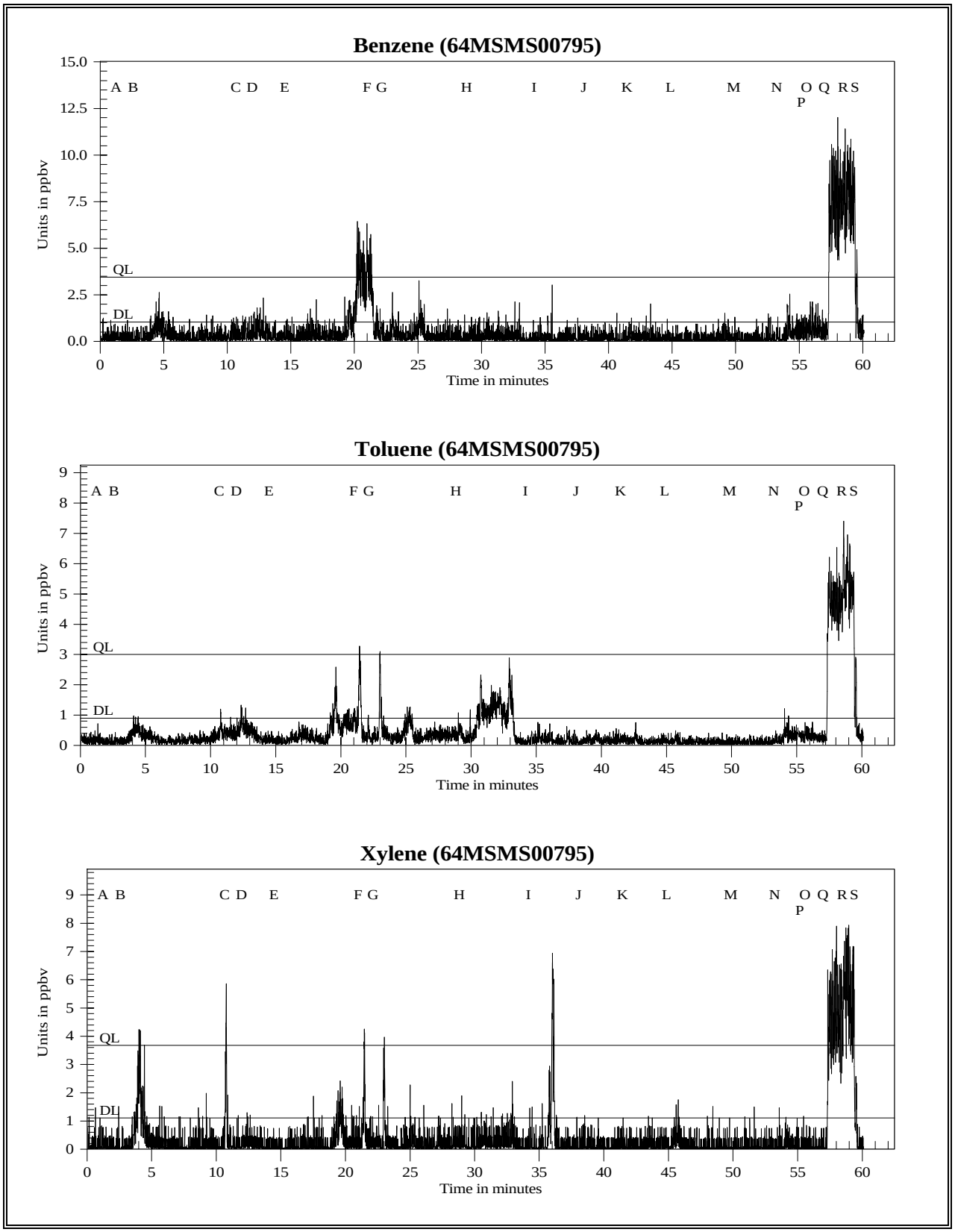


Figure 55c Monitoring Galena Park in ppbv for Benzene, Toluene, and Xylenes

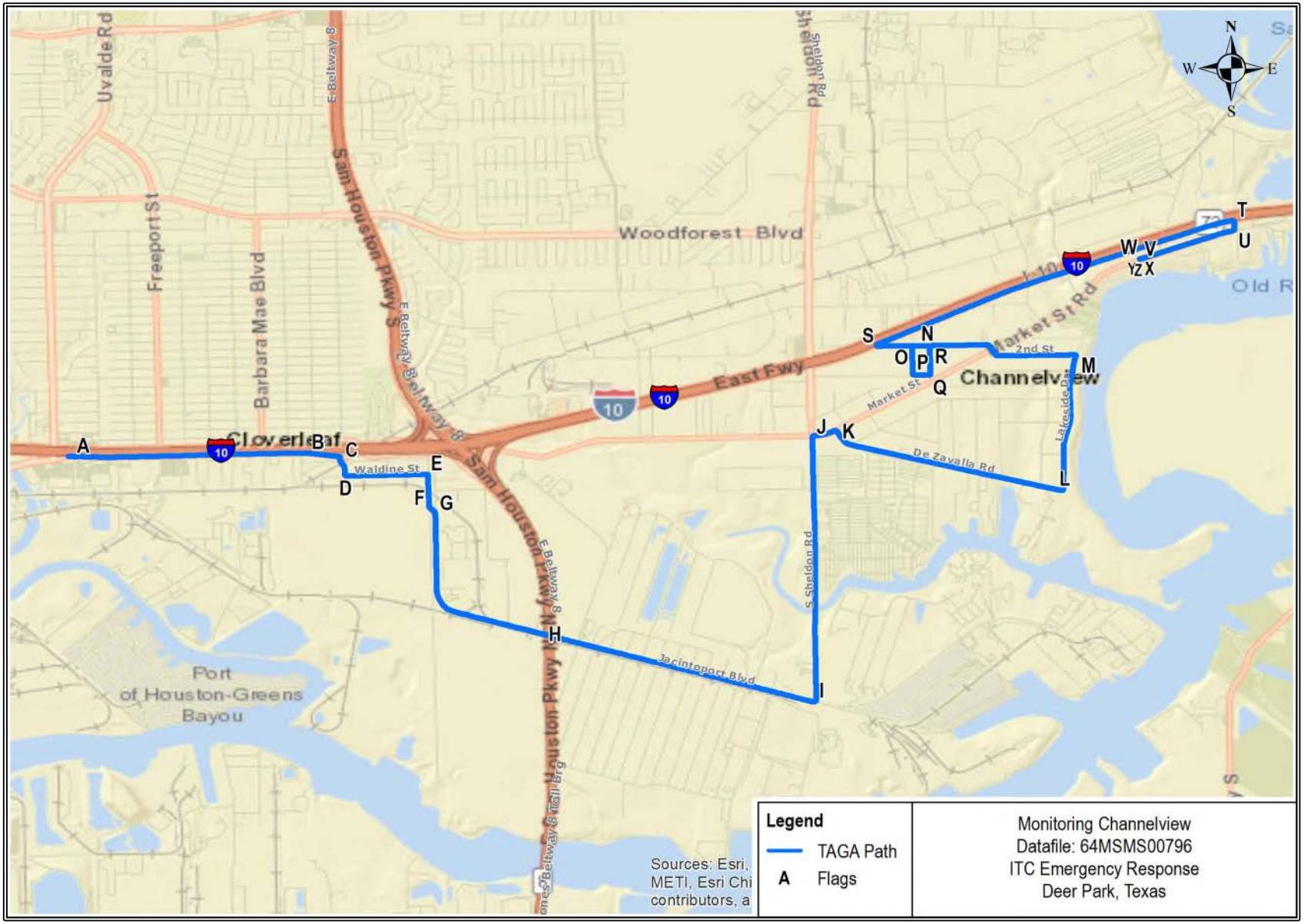


Figure 56a Monitoring Channelview Path, 64MSMS00796

Figure 56b

TAGA File Event Summary
File: 64MSMS00796 Acquired on 29 March 2019 at 11:11:15
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	1.7	159	Start mobile monitoring on East Freeway Service Road
B	5.2	495	Merge onto East Freeway ramp
C	5.5	520	Right turn onto Patch Road
D	6.1	582	Left turn onto Waldine Street
E	8.7	831	Right turn onto Penn City Road
F	9.5	902	Left turn onto Jacintoport Boulevard Connector
G	9.9	940	Right turn onto Jacintoport Boulevard
H	15.5	1476	Cross Highway 8
I	18.9	1802	Left turn onto Sheldon Road
J	22.6	2146	Right turn onto Market Street
K	23.1	2200	Right turn onto Dezavala Road
L	27.1	2582	Left turn onto Lakeside Drive
M	29.8	2834	Left turn onto 2nd Street
N	34.3	3262	Passing Dezavala Elementary School
O	34.9	3320	Left turn onto Crockett Street
P	35.8	3409	Left turn onto 1st Street
Q	36.5	3469	Left turn onto Euclid Street
R	38.0	3618	Left turn onto 2nd Street
S	39.6	3765	Right turn onto East Freeway Frontage Road
T	44.2	4203	Right turn onto Magnolia Street
U	44.5	4235	Right turn onto Market Street
V	46.4	4410	End mobile monitoring on Market Street
W	46.9	4456	Start ambient
X	47.9	4553	End ambient
Y	49.4	4694	Start 30 mL/min spike
Z	50.4	4794	End 30 mL/min spike

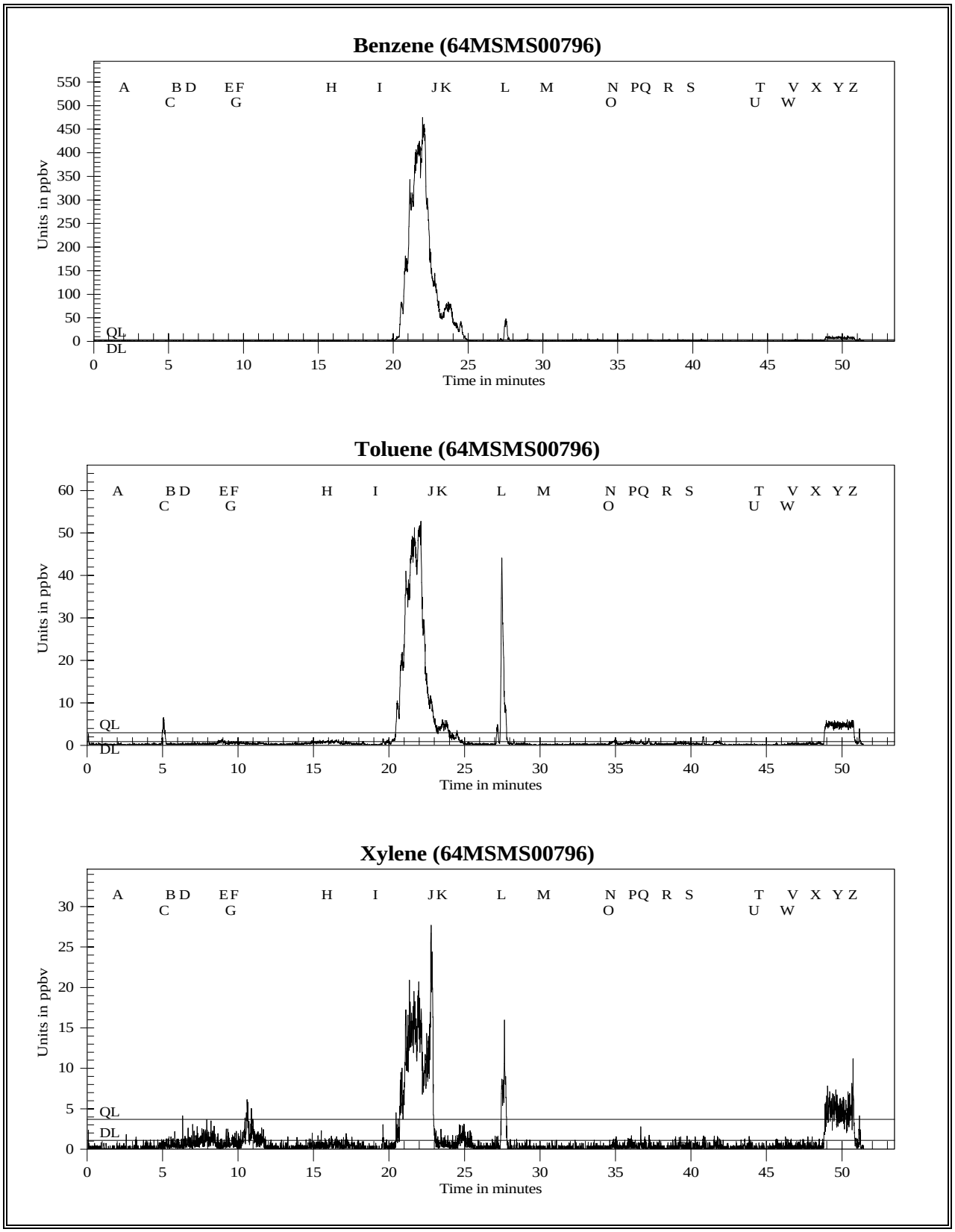


Figure 56c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

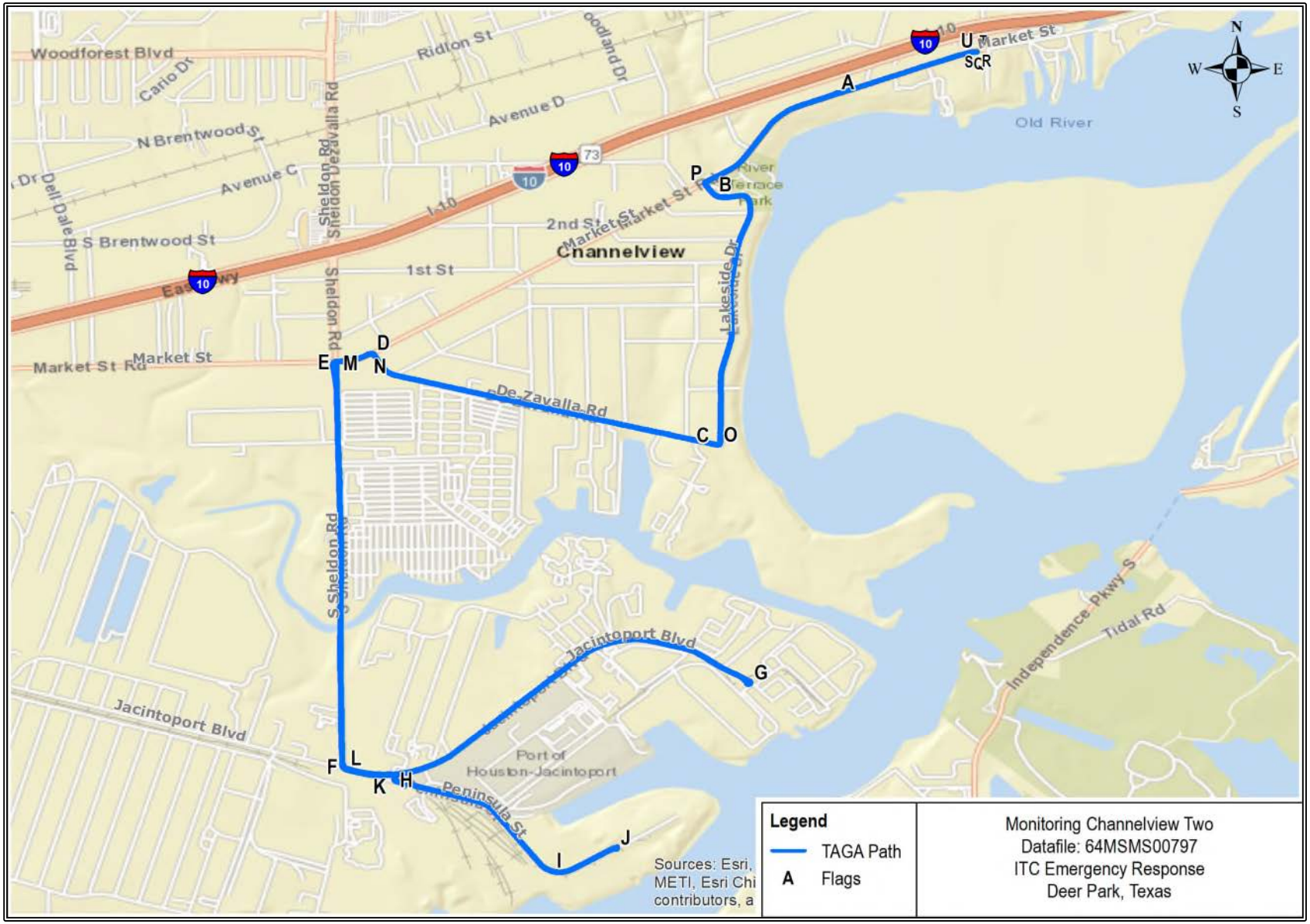


Figure 57a Monitoring Channelview Two Path, 64MSMS00797

Figure 57b

TAGA File Event Summary
File: 64MSMS00797 Acquired on 29 March 2019 at 12:05:22
Title: Monitoring Channelview Two

Flag	Time	Sequence	Description
A	0.6	58	Start mobile monitoring on Market Street
B	4.1	387	Left turn onto Lakeside Drive
C	8.9	850	Right turn onto Dezavala Road
D	12.8	1214	Left turn onto Market Street
E	14.4	1374	Left turn onto Sheldon Road
F	19.4	1842	Left turn onto Jacintoport Boulevard
G	26.4	2514	U-turn on Jacintoport Boulevard
H	33.3	3163	Left turn onto Peninsula Street
I	36.0	3423	Continuing on Peninsula Street
J	42.2	4011	U-turn on Peninsula Street
K	45.3	4309	Merge onto Jacintoport Boulevard
L	45.9	4366	Right turn onto Sheldon Road
M	51.7	4913	Right turn onto Market Street
N	52.2	4959	Right turn onto Dezavala Road
O	56.2	5348	Left turn onto Lakeside Drive
P	60.2	5722	Right turn onto Market Street
Q	63.3	6023	End mobile monitoring on Market Street
R	64.0	6090	Start ambient
S	65.1	6190	End ambient
T	66.7	6340	Start 30 mL/min spike
U	67.7	6439	End 30 mL/min spike

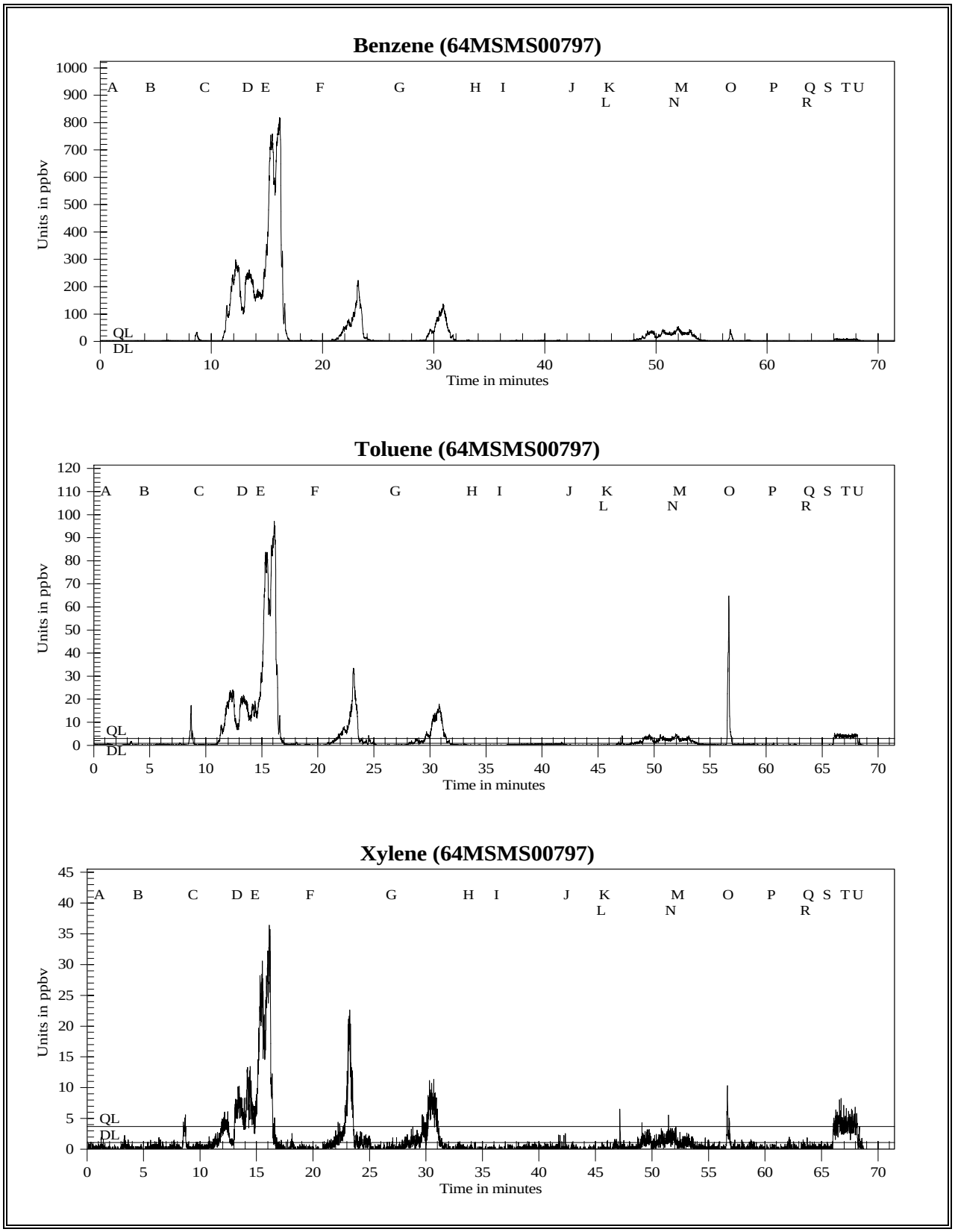


Figure 57c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

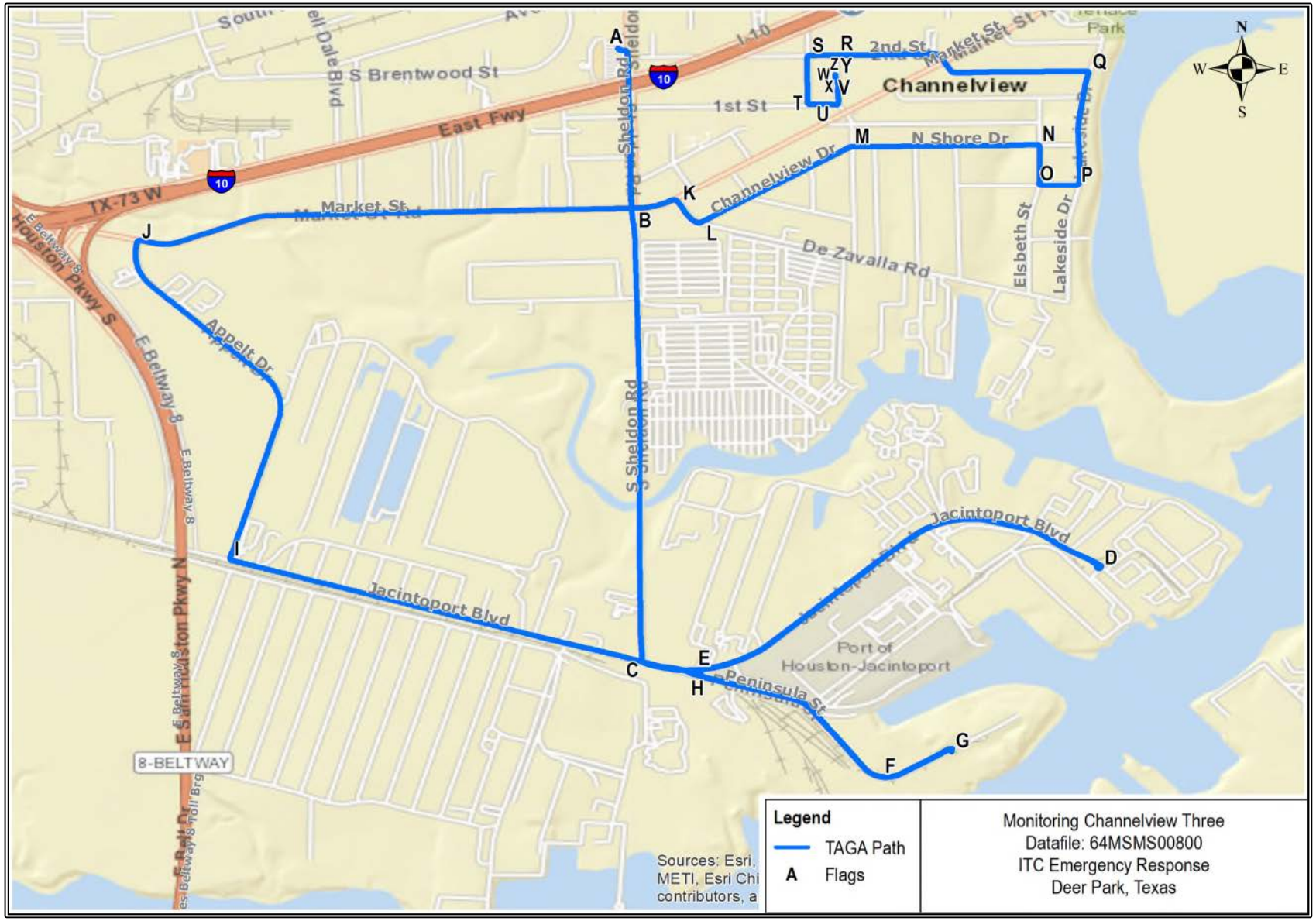


Figure 58a Monitoring Channelview Three Path, 64MSMS00800

Figure 58b

TAGA File Event Summary
File: 64MSMS00800 Acquired on 29 March 2019 at 14:46:20
Title: Monitoring Channelview Three

Flag	Time	Sequence	Description
A	0.6	61	Start mobile monitoring on Market Street
B	5.2	498	Left turn onto Sheldon Road
C	8.7	828	Left turn onto Jacintoport Boulevard
D	14.9	1414	U-turn on Jacintoport Boulevard
E	21.3	2024	Left turn onto Peninsula Street
F	24.7	2352	Continuing onto Peninsula Street
G	26.7	2537	U-turn on Peninsula Street
H	34.3	3258	Merge onto Jacintoport Boulevard
I	38.6	3666	Right turn onto Appelt Drive
J	41.6	3954	Right turn onto Market Street
K	46.9	4461	Right turn onto Dezavala Road
L	47.2	4491	Left turn onto Channelview Drive
M	50.0	4751	Right turn onto N Shore Drive
N	52.1	4951	Right turn onto Elsbeth Drive
O	53.0	5039	Left turn onto Woodrow Street
P	53.5	5084	Left turn onto Lakeside Drive
Q	54.8	5215	Left turn onto 2nd Street
R	58.7	5583	Passing Dezavala Elementary School
S	59.1	5624	Left turn onto Crockett Street
T	60.1	5711	Left turn onto 1st Street
U	60.6	5760	Left turn onto Euclid Street
V	61.5	5849	End mobile monitoring on Euclid Street
W	62.3	5922	Start ambient
X	63.4	6025	End ambient
Y	65.0	6182	Start 30 mL/min spike
Z	66.0	6279	End 30 mL/min spike

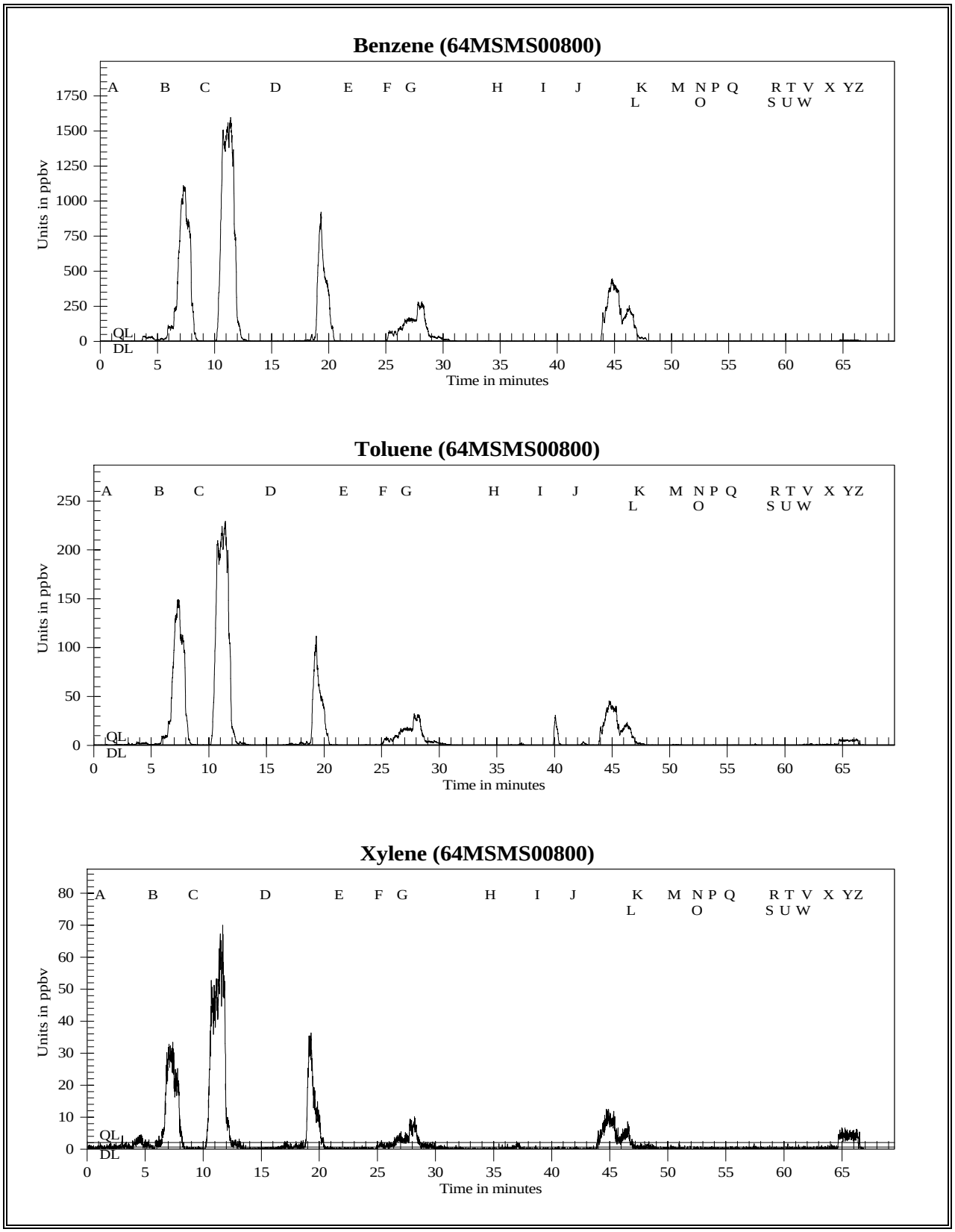


Figure 58c Monitoring Channelview Three in ppbv for Benzene, Toluene, and Xylenes

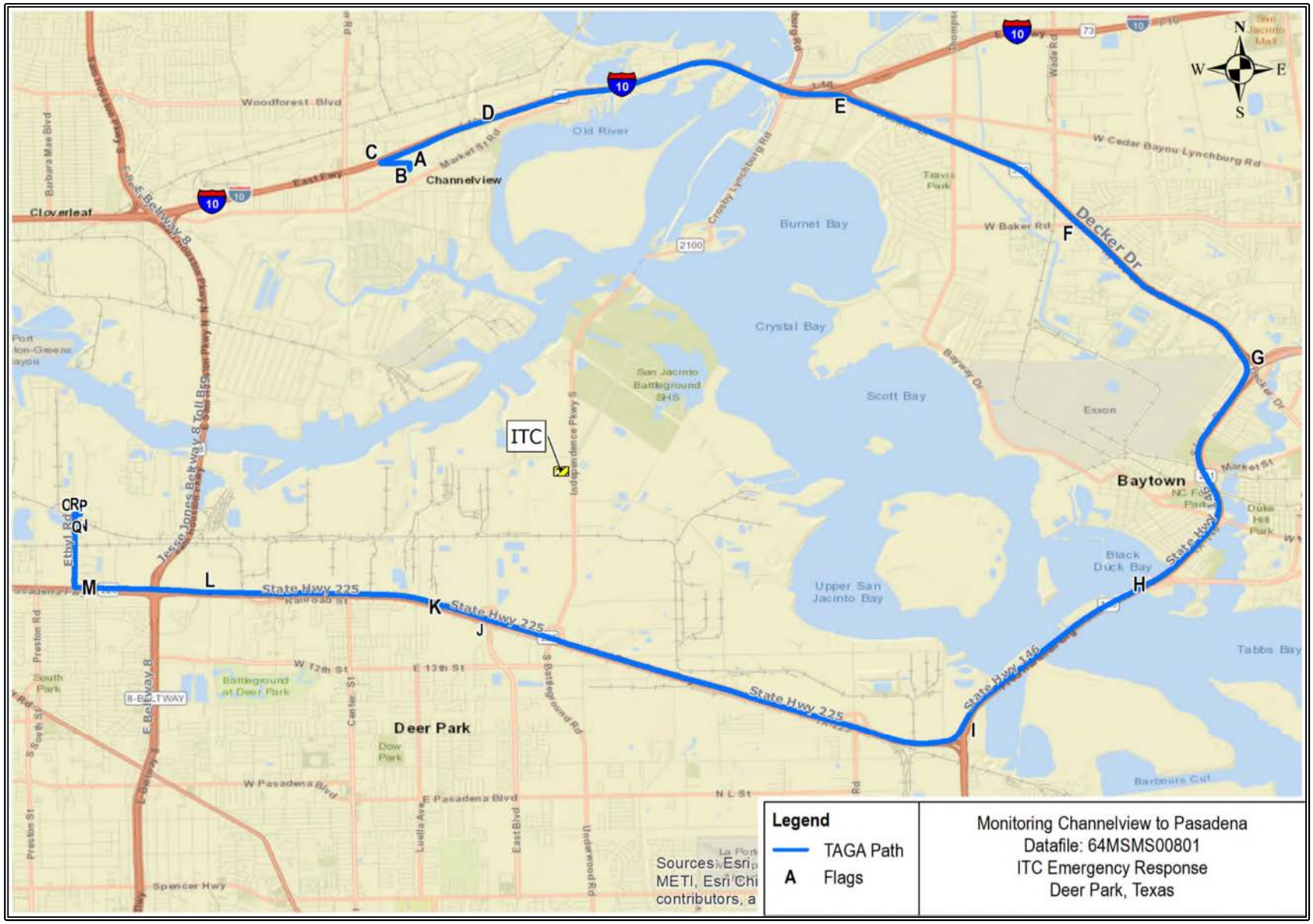


Figure 59a Monitoring Channelview to Pasadena Path, 64MSMS00801

Figure 59b

TAGA File Event Summary
File: 64MSMS00801 Acquired on 29 March 2019 at 15:56:02
Title: Monitoring Channelview to Pasadena

Flag	Time	Sequence	Description
A	0.8	75	Start mobile monitoring on Euclid Street
B	1.7	161	Left turn onto 2nd Street
C	2.5	242	Right turn onto East Freeway Service Road
D	4.2	402	Merge onto Highway 10 East
E	8.0	758	Merge onto Highway 330 South
F	11.1	1053	Cross W Baker Road
G	13.6	1290	Merge onto Highway 146 South
H	16.8	1598	Crossing Fred Hartman Bridge
I	18.9	1802	Merge onto Highway 225 West
J	23.8	2268	Cross East Boulevard
K	24.4	2320	Exit onto Pasadena Freeway Frontage Road
L	30.4	2888	Merge onto Pasadena Freeway Frontage Road
M	34.4	3268	Right turn onto Ethyl Road
N	38.4	3653	End mobile monitoring at EPA Command Post
O	38.9	3697	Start ambient
P	40.1	3811	End ambient
Q	42.2	4014	Start 30 mL/min spike
R	43.4	4124	End 30 mL/min spike

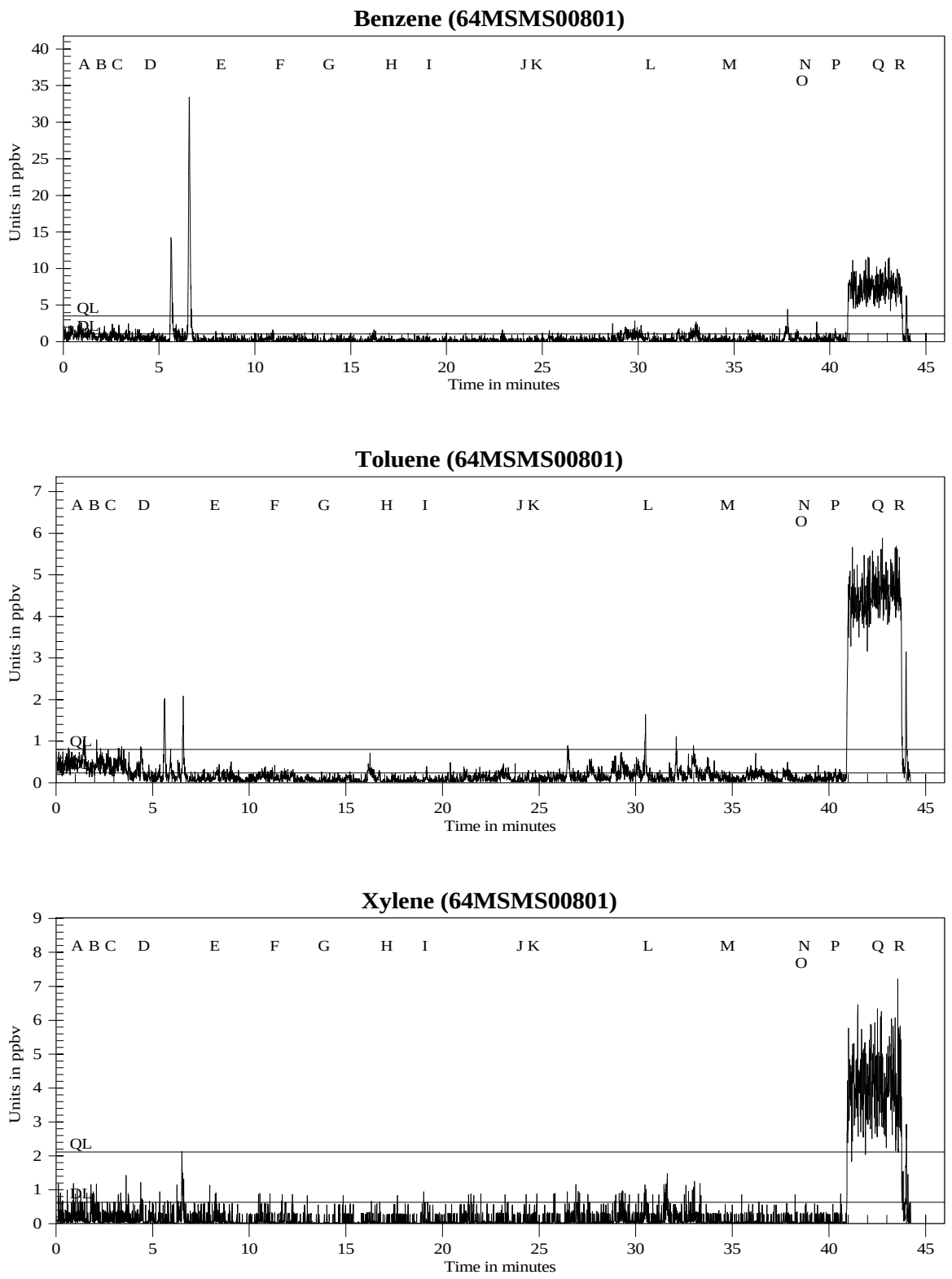


Figure 59c Monitoring Channelview to Pasadena in ppbv for Benzene, Toluene, and Xylenes

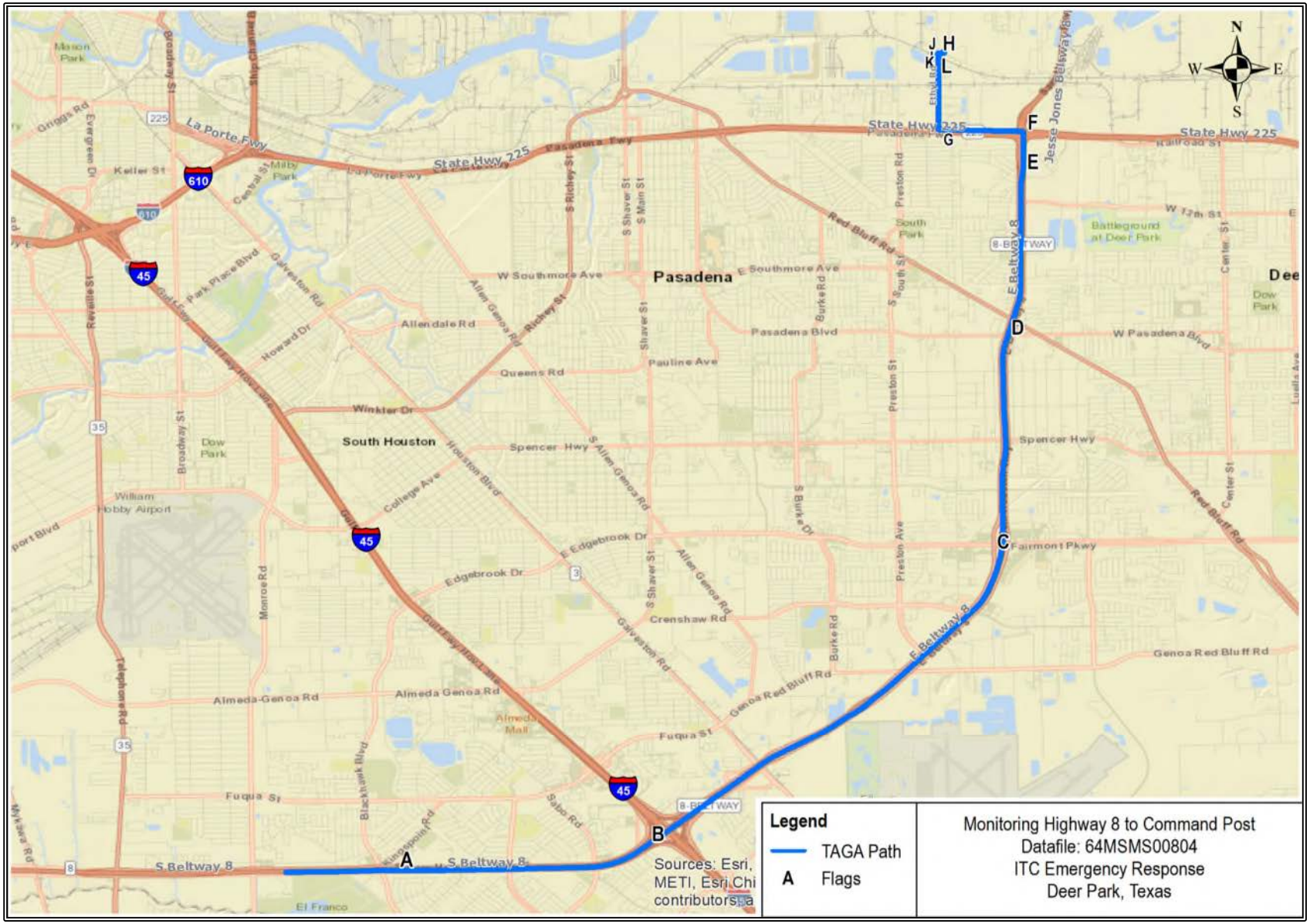


Figure 60a Monitoring Highway 8 to Command Post Path, 64MSMS00804

Figure 60b

TAGA File Event Summary
File: 64MSMS00804 Acquired on 30 March 2019 at 08:19:02
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	1.1	102	Start mobile monitoring on Highway 8 North
B	3.1	295	Cross Highway 45
C	8.4	801	Cross Fairmont Parkway
D	10.4	989	Cross Pasadena Boulevard
E	12.0	1143	Exit onto Highway 8 Service Road
F	13.0	1237	Left turn onto Pasadena Freeway Frontage Road
G	14.2	1354	Right turn onto Ethyl Road
H	17.7	1685	End mobile monitoring at EPA Command Post
I	18.6	1767	Start ambient
J	20.4	1937	End ambient
K	22.1	2105	Start 30 mL/min spike
L	23.2	2203	End 30 mL/min spike

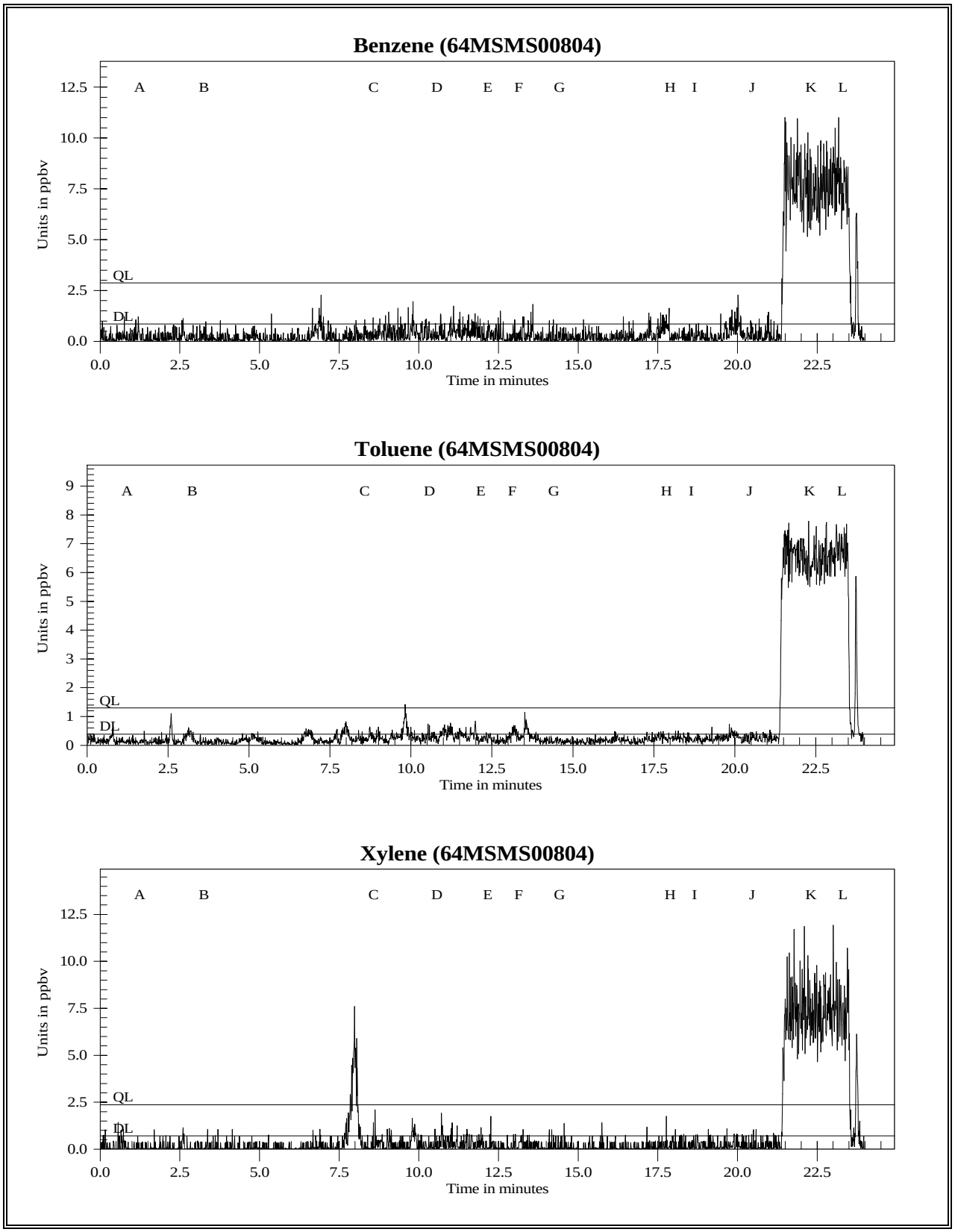


Figure 60c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

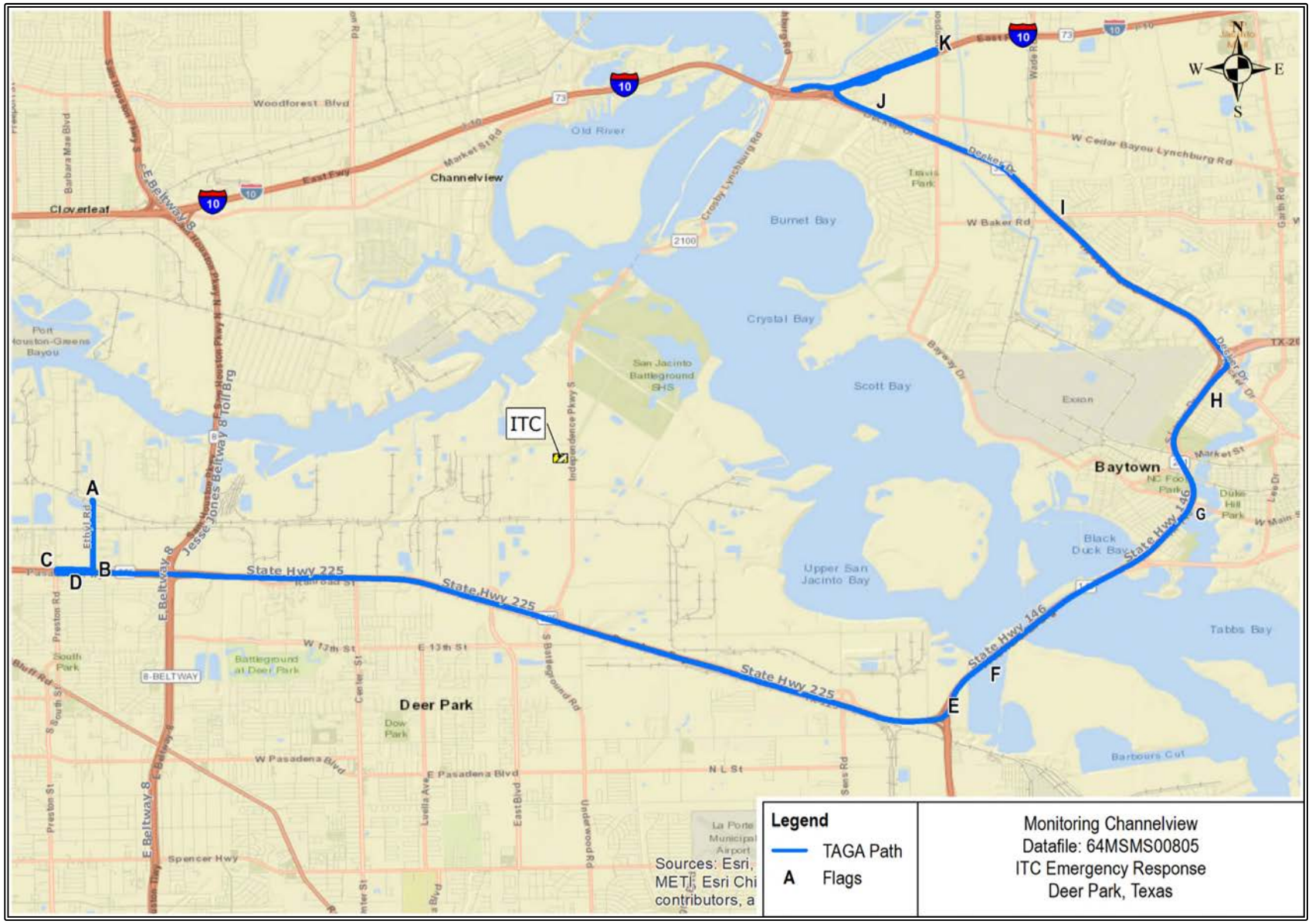


Figure 61a Monitoring Channelview Path, 64MSMS00805

Figure 61b

TAGA File Event Summary
File: 64MSMS00805 Acquired on 30 March 2019 at 08:45:46
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	1.0	93	Start mobile monitoring at EPA Command Post
B	4.0	383	Right turn onto Pasadena Freeway Frontage Road
C	4.9	470	U-turn on Pasadena Freeway Frontage Road at Preston Road
D	5.7	541	Merge onto Highway 225 East
E	14.1	1338	Merge onto Highway 146 North
F	15.0	1425	Cross Fred Hartman Bridge
G	17.6	1676	Cross W Main Street
H	19.3	1834	Merge onto Highway 330 North
I	22.1	2102	Cross W Baker Road
J	24.4	2319	Exit onto East Freeway Service Road
K	26.9	2558	U-turn on East Freeway Service Road
Notes:		Run aborted. Vehicle generator stopped during monitoring run.	

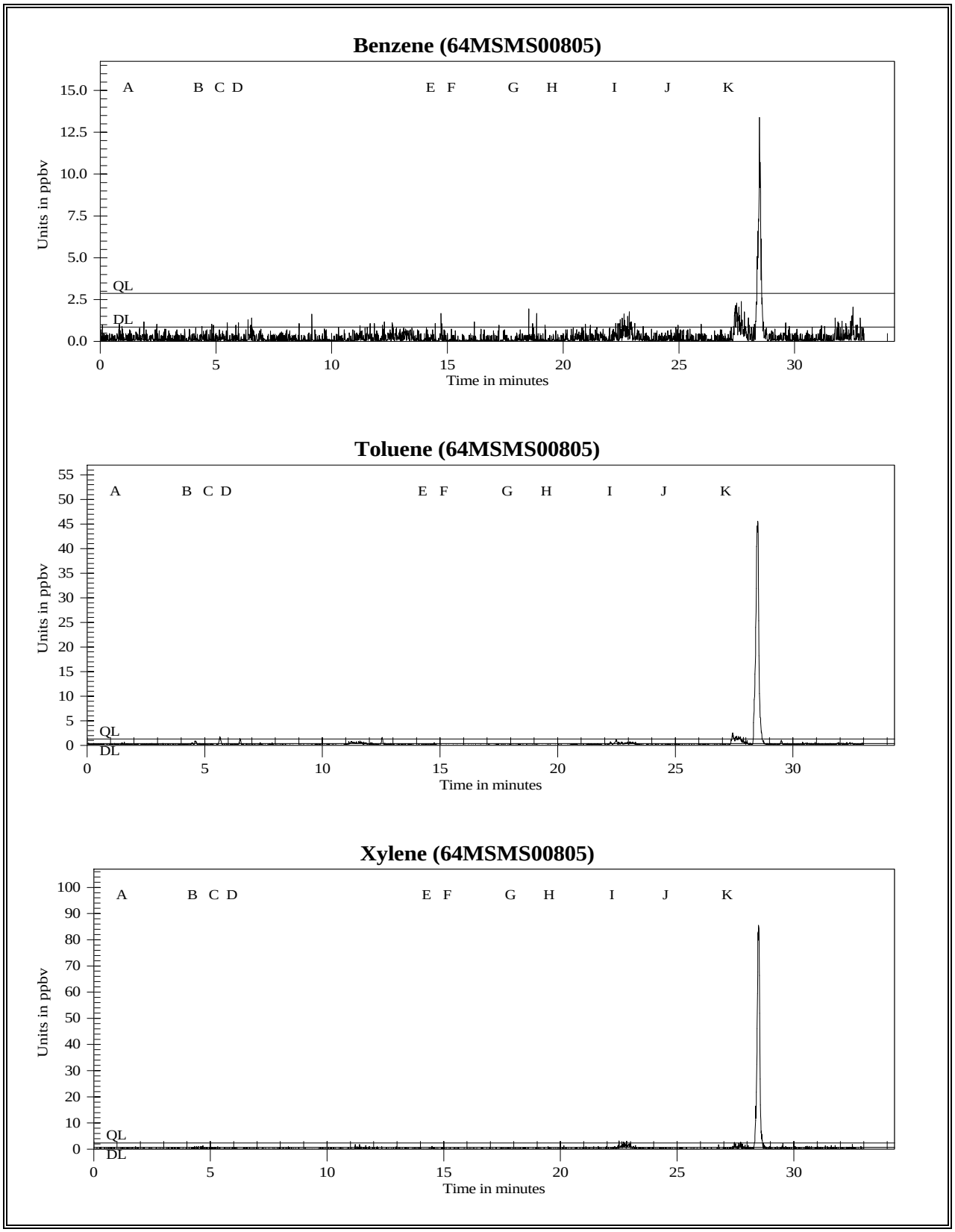


Figure 61c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

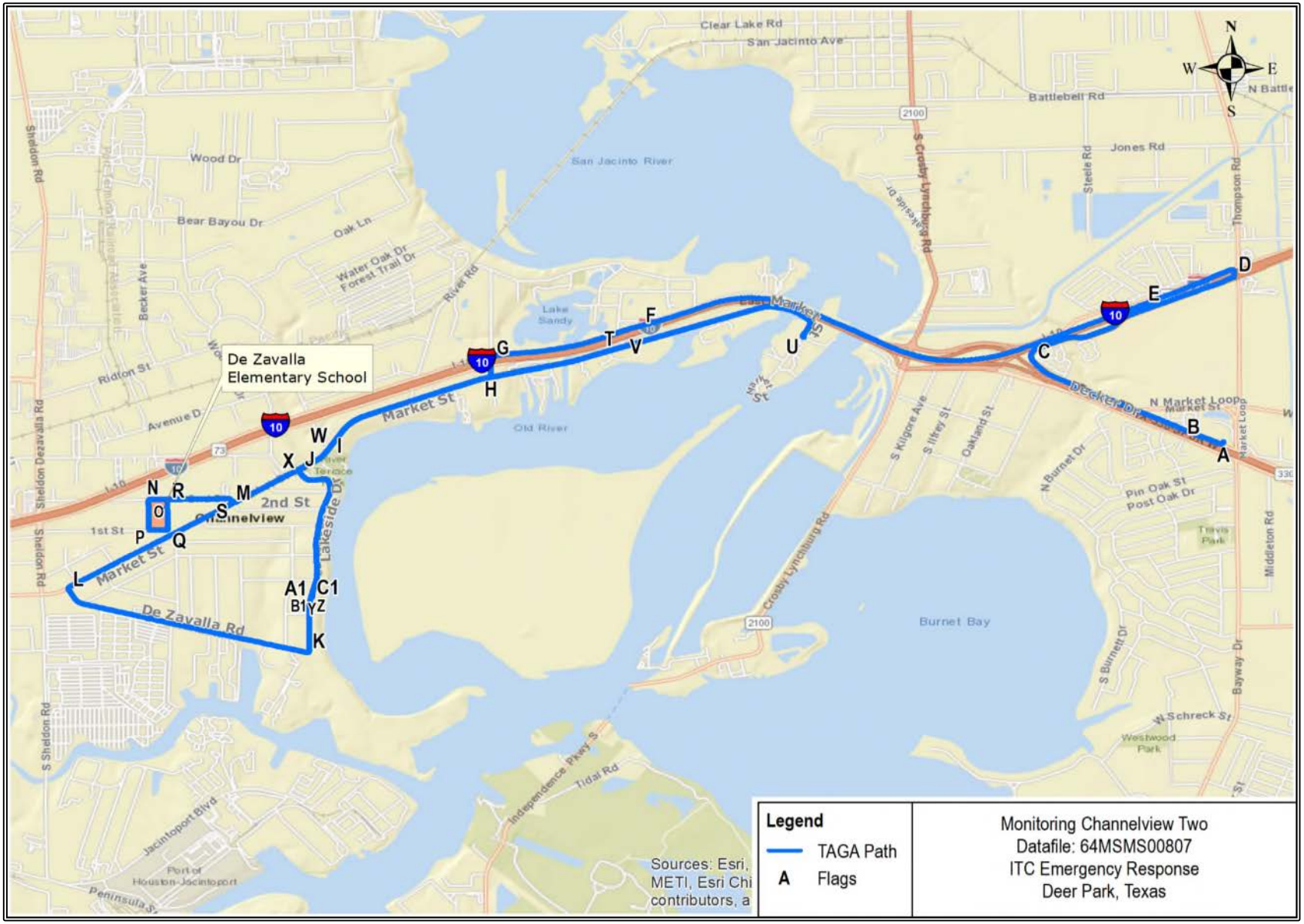


Figure 62a Monitoring Channelview Two Path, 64MSMS00807

Figure 62b

TAGA File Event Summary
File: 64MSMS00807 Acquired on 30 March 2019 at 09:54:35
Title: Monitoring Channelview Two

Flag	Time	Sequence	Description
A	0.7	72	Start mobile monitoring at Thompson Road and Decker Drive
B	1.3	127	Right turn onto Decker Drive
C	2.6	246	Right turn onto East Freeway Service Road
D	4.5	433	U-turn on East Freeway Service Road at Thompson Road
E	5.6	536	Merge onto Highway 10 West
F	8.6	815	Exit onto East Freeway Service Road
G	10.1	961	Left turn onto Magnolia Street
H	10.6	1008	Right turn onto Market Street
I	12.3	1173	Cross Bayou Drive
J	12.9	1224	Left turn onto Lakeside Drive
K	15.9	1517	Right turn onto Dezavala Road
L	18.8	1788	Right turn onto Market Street
M	21.0	1996	Left turn onto 2nd Street
N	22.5	2138	Passing Dezavala Elementary School
O	22.7	2162	Left turn onto Crockett Street
P	23.3	2219	Left turn onto 1st Street
Q	23.8	2265	Left turn onto Euclid Street
R	24.7	2346	Right turn onto 2nd Street
S	26.0	2477	Left turn onto Market Street
T	31.2	2968	Cross Monmouth Street
U	34.5	3279	U-turn on Market Street
V	38.9	3701	Cross Monmouth Street
W	43.5	4135	Cross Bayou Drive
X	44.1	4196	Left turn onto Lakeside Drive
Y	47.0	4472	End mobile monitoring on Lakeside Drive
Z	47.5	4516	Start ambient
A1	48.5	4613	End ambient
B1	50.0	4757	Start 30 mL/min spike
C1	51.1	4860	End 30 mL/min spike

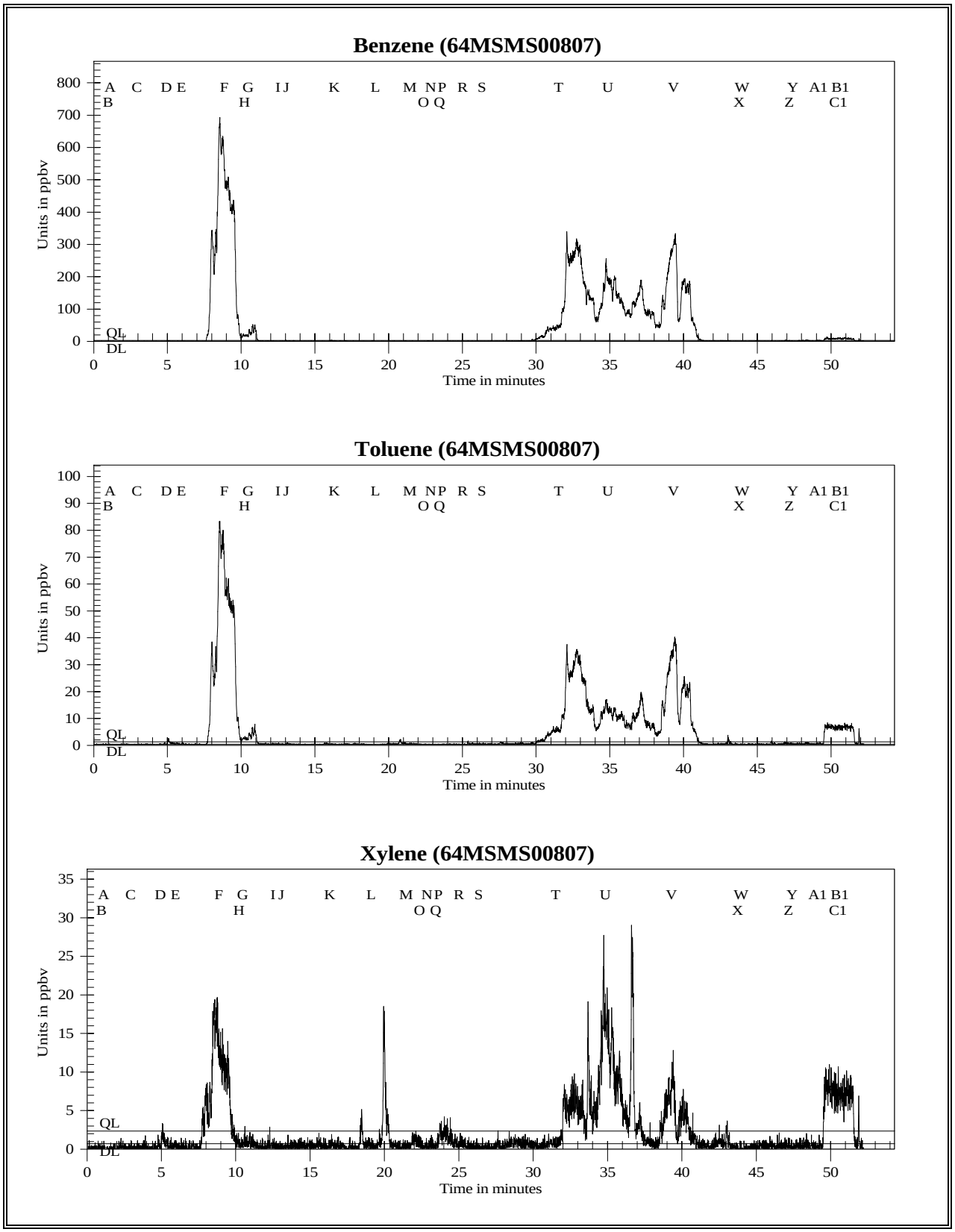


Figure 62c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

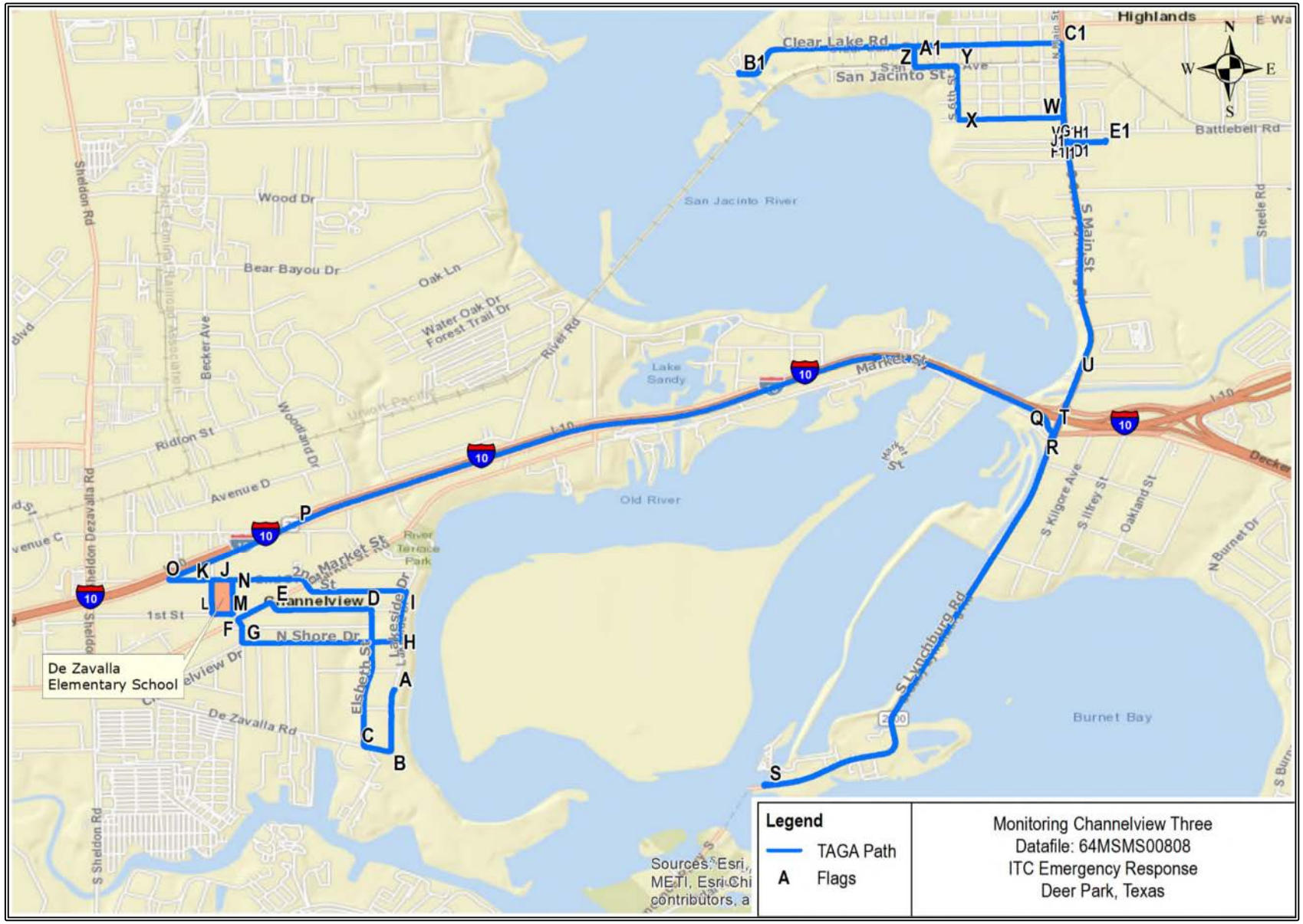


Figure 63a Monitoring Channelview Three Path, 64MSMS00808

Figure 63b

TAGA File Event Summary
File: 64MSMS00808 Acquired on 30 March 2019 at 11:08:58
Title: Monitoring Channelview Three

Flag	Time	Sequence	Description
A	1.8	172	Start mobile monitoring on Lakeside Drive
B	3.2	303	Right turn onto Dezavala Road
C	3.6	341	Right turn onto Elsbeth Street
D	6.5	617	Left turn onto Pecan Street
E	8.5	812	Left turn onto Market Street
F	9.2	874	Left turn onto Pemberton Street
G	9.9	942	Left turn onto N Shore Drive
H	12.4	1176	Left turn onto Lakeside Drive
I	13.3	1268	Left turn onto 2nd Street
J	16.5	1574	Passing Dezavala Elementary School
K	16.9	1604	Left turn onto Crockett Street
L	17.7	1682	Left turn onto 1st Street
M	18.1	1721	Left turn onto Euclid Street
N	18.9	1799	Left turn onto 2nd Street
O	19.8	1888	Right turn onto East Freeway Service Road
P	21.2	2021	Merge onto Highway 10 East
Q	25.3	2403	Exit onto East Freeway Service Road
R	25.5	2423	Right turn onto Independence Parkway North
S	30.3	2885	U-turn on Independence Parkway North at Lynchburg Ferry
T	36.5	3471	Right turn onto Decker Drive
U	37.4	3553	Merge onto S Main Street
V	39.7	3778	Cross Battlebell Road
W	40.1	3810	Left turn onto Avenue E
X	41.7	3970	Right turn onto S 6th Street
Y	43.1	4103	Left turn onto San Jacinto Street
Z	44.0	4187	Right turn onto N 8th Street
A1	45.3	4312	Left turn onto Clear Lake Road
B1	49.5	4703	U-turn on Clear Lake Road
C1	56.0	5326	Right turn onto S Main Street
D1	57.8	5493	Left turn onto Listi Lane
E1	59.5	5656	U-turn on Listi Lane
F1	60.6	5759	End mobile monitoring at Listi Lane and S Main Street
G1	61.0	5803	Start ambient
H1	62.0	5900	End ambient

Figure 63b (continued)

TAGA File Event Summary
File: 64MSMS00808 Acquired on 30 March 2019 at 11:08:58
Title: Monitoring Channelview Three

Flag	Time	Sequence	Description
I1	63.6	6046	Start 30 mL/min spike
J1	64.6	6145	End 30 mL/min spike

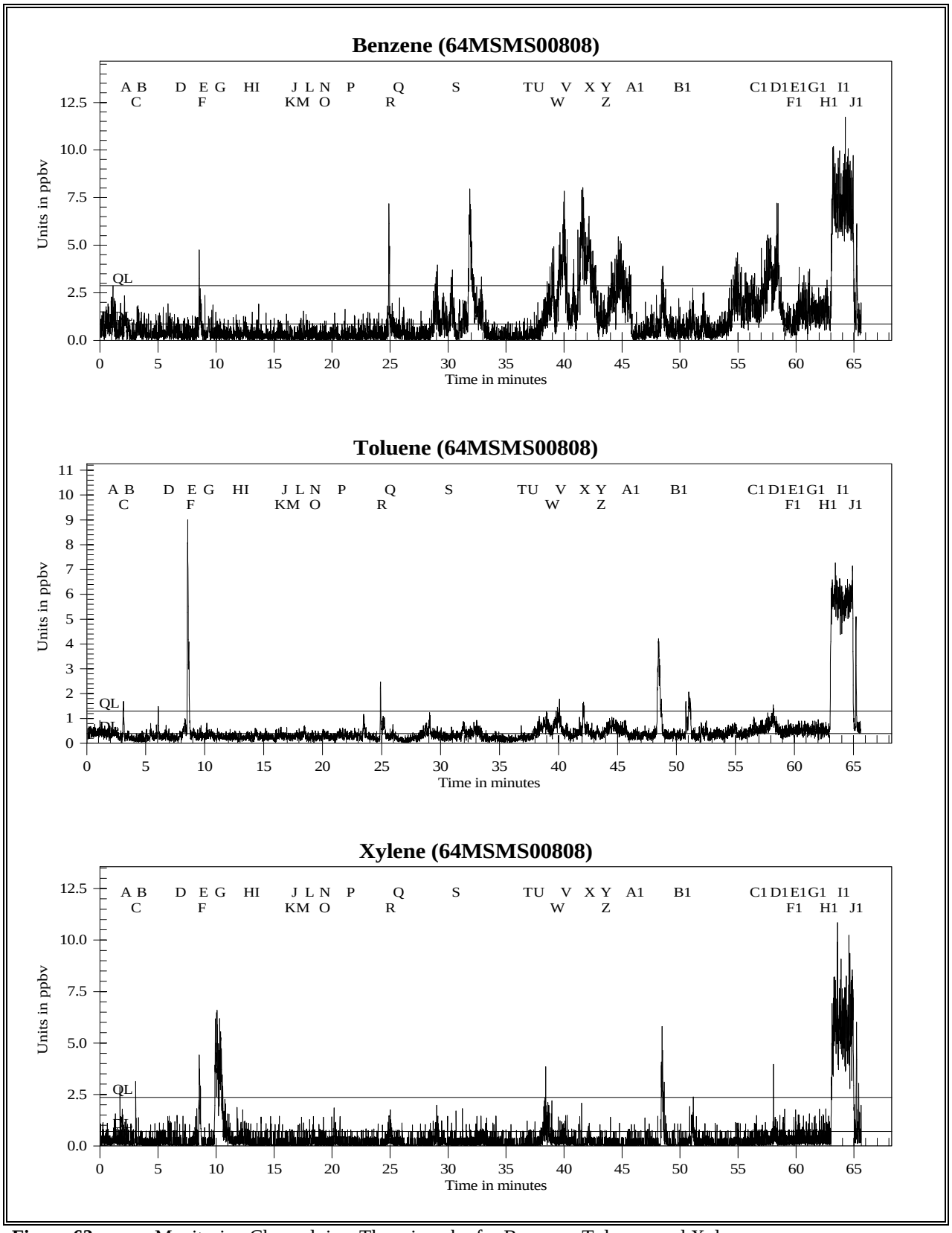


Figure 63c Monitoring Channelview Three in ppbv for Benzene, Toluene, and Xylenes

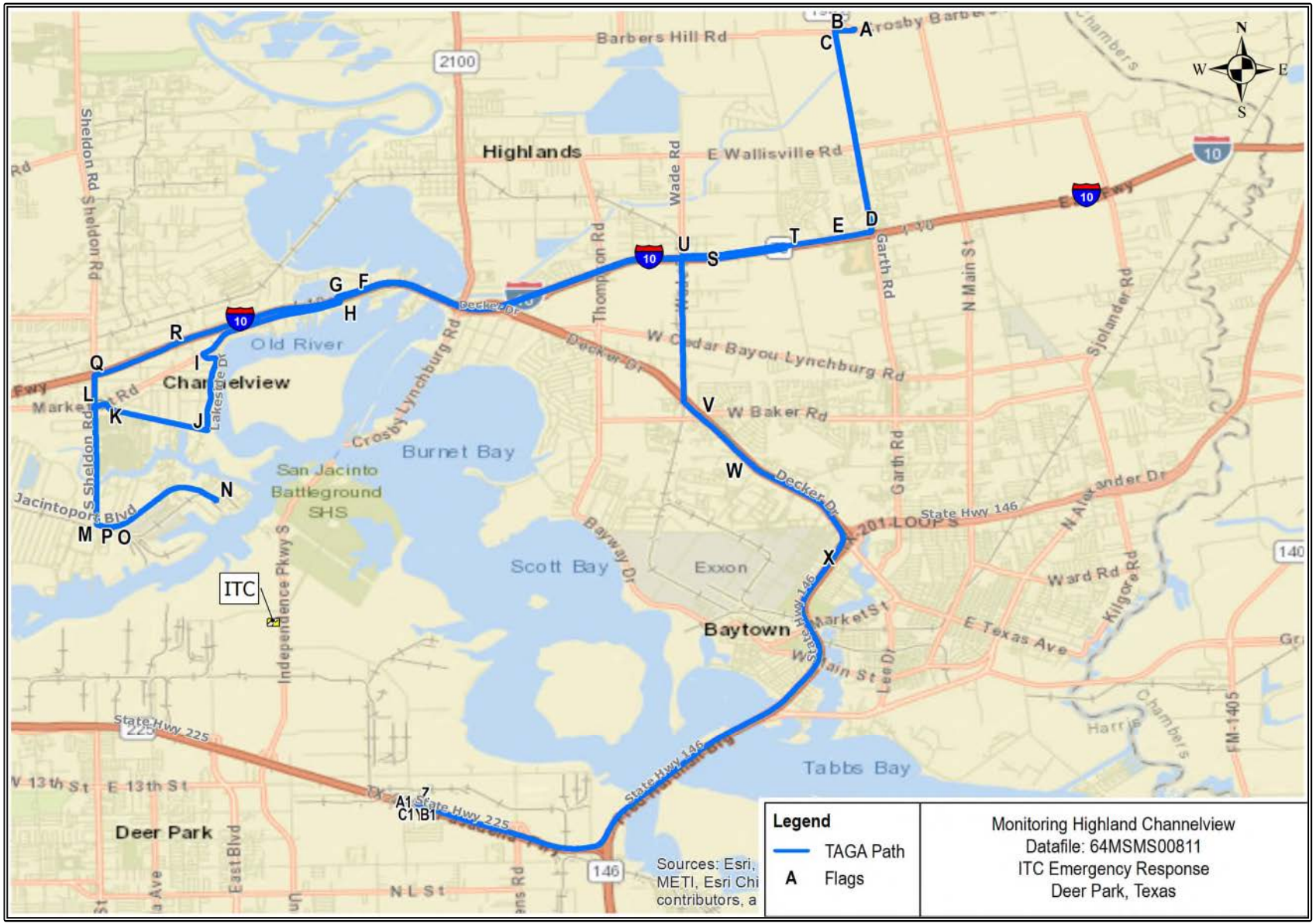


Figure 64a Monitoring Highland Channelview Path, 64MSMS00811

Figure 64b

TAGA File Event Summary
File: 64MSMS00811 Acquired on 30 March 2019 at 14:01:36
Title: Monitoring Highland Channelview

Flag	Time	Sequence	Description
A	0.6	59	Start mobile monitoring on Crosby Barbers Hill Road
B	2.1	196	Merge onto Barbers Hill Road
C	2.8	270	Left turn onto Garth Road
D	8.0	758	Right turn onto East Freeway Service Road
E	8.5	812	Merge onto Highway 10 West
F	14.5	1382	Exit onto East Freeway Service Road
G	15.0	1425	Left turn onto Monmouth Street
H	15.5	1476	Right turn onto Market Street
I	19.3	1832	Left turn onto Lakeside Drive
J	22.1	2106	Right turn onto Dezavala Road
K	25.0	2379	Left turn onto Market Street
L	27.0	2568	Left turn onto Sheldon Road
M	30.4	2894	Left turn onto Jacintoport Boulevard
N	34.4	3274	U-turn on Jacintoport Boulevard
O	37.6	3580	Continuing onto Jacintoport Boulevard
P	38.6	3674	Right turn onto Sheldon Road
Q	43.5	4139	Right turn onto East Freeway Service Road
R	45.0	4282	Merge onto Highway 10 East
S	51.2	4865	Exit onto East Freeway Service Road
T	52.9	5028	U-turn on East Freeway Service Road at John Martin Road
U	55.1	5242	Left turn onto Wade Road
V	59.8	5683	Left turn onto Decker Drive
W	61.8	5873	Merge onto Highway 330 South
X	63.5	6042	Merge onto Highway 146 South
Y	71.2	6773	End mobile monitoring on Pasadena Freeway Frontage Road
Z	72.2	6865	Start ambient
A1	73.3	6974	End ambient
B1	75.2	7148	Start 30 mL/min spike
C1	76.4	7266	End 30 mL/min spike

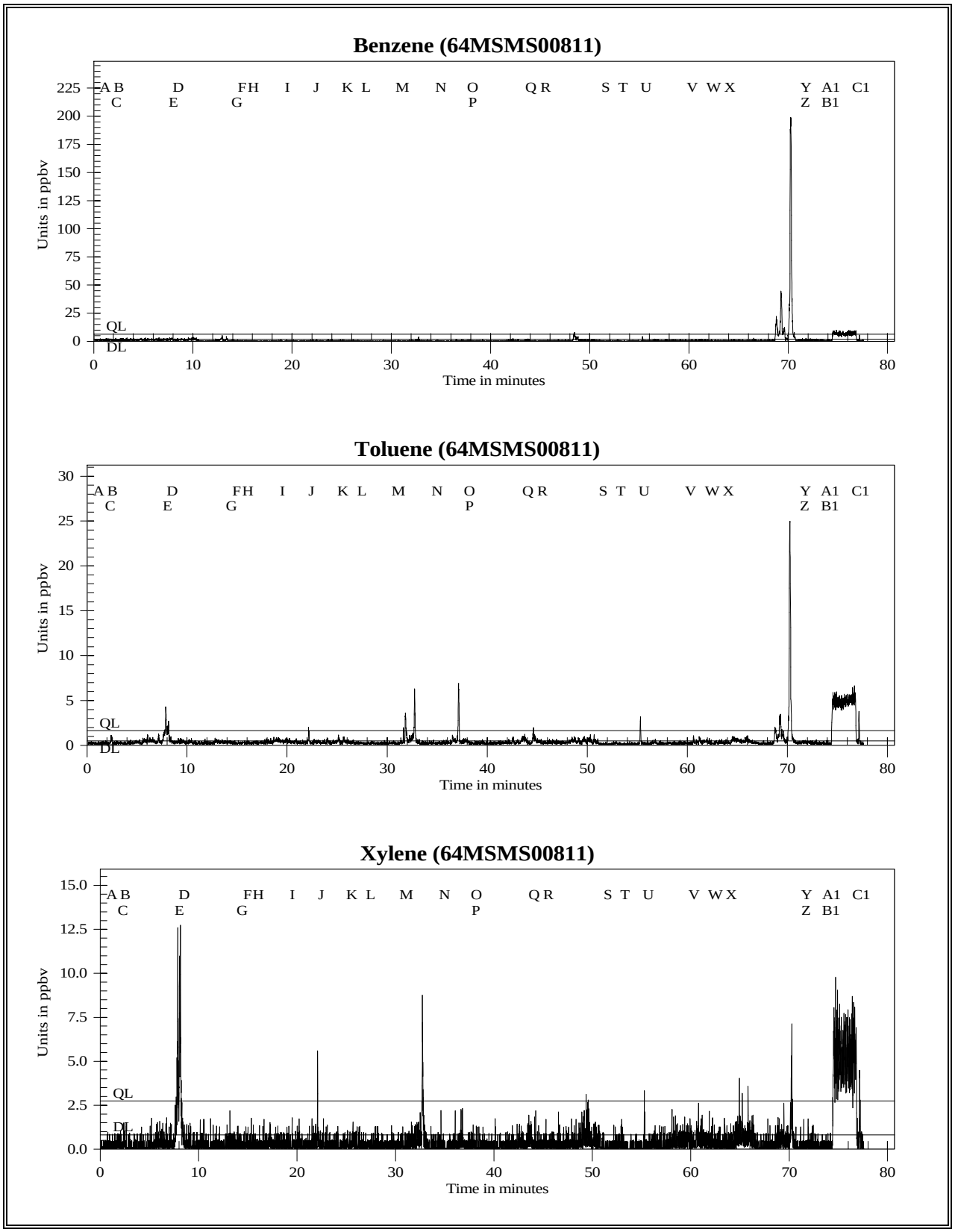


Figure 64c Monitoring Highland Channelview in ppbv for Benzene, Toluene, and Xylenes

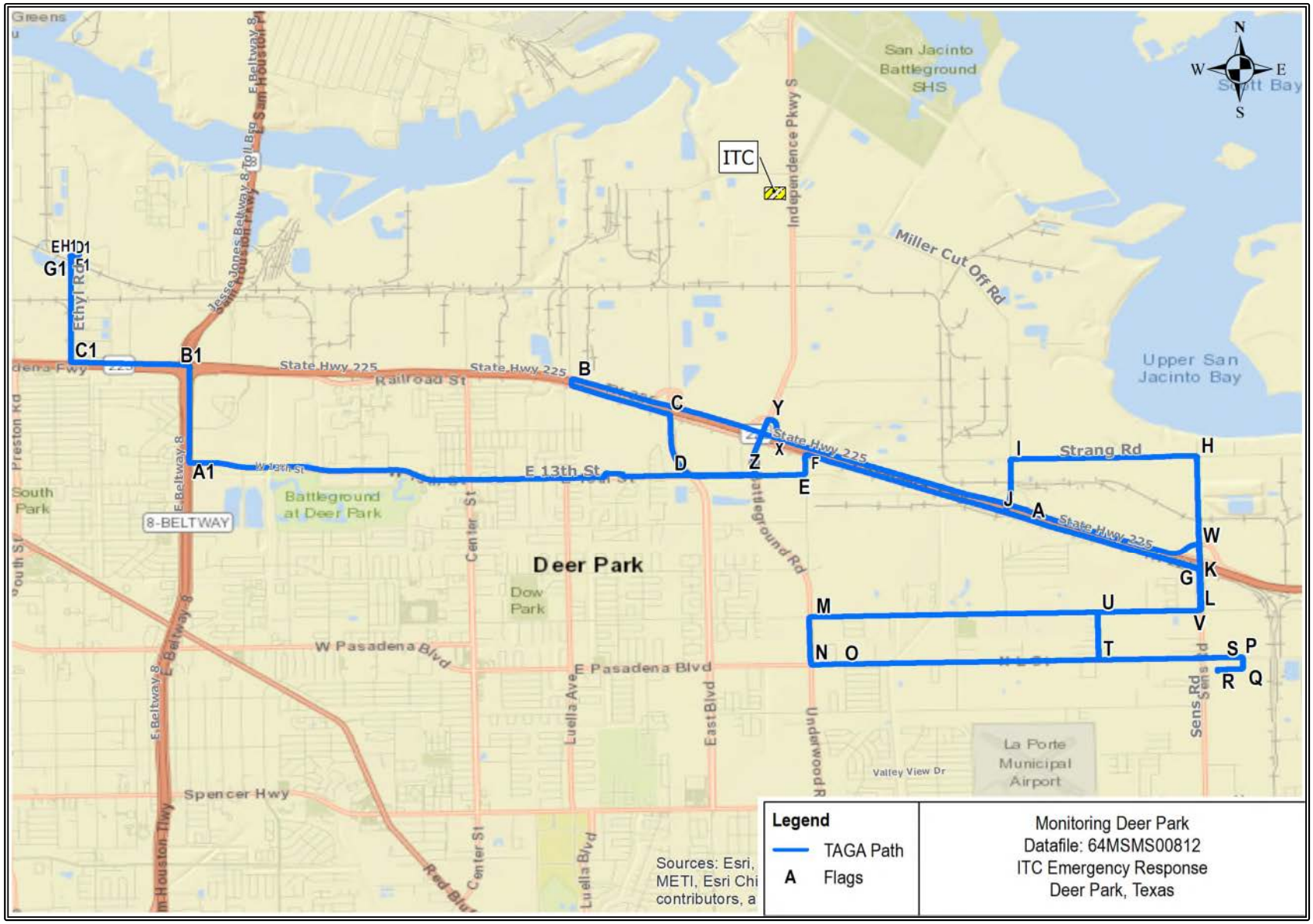


Figure 65a Monitoring Deer Park Path, 64MSMS00812

Figure 65b

TAGA File Event Summary
File: 64MSMS00812 Acquired on 30 March 2019 at 15:24:03
Title: Monitoring Deer Park

Flag	Time	Sequence	Description
A	0.7	66	Start mobile monitoring on Pasadena Freeway Frontage Road
B	5.0	478	U-turn on Pasadena Freeway Frontage Road
C	6.4	611	Right turn onto East Boulevard
D	8.6	817	Left turn onto E 13th Street
E	10.6	1004	Left turn onto Old Underwood Road
F	11.3	1072	Right turn onto Pasadena Freeway Frontage Road
G	15.4	1466	Left turn onto Sens Road
H	17.9	1701	Left turn onto Strang Road
I	20.8	1978	Left turn onto Miller Cut-off Road
J	22.3	2118	Left turn onto Pasadena Freeway Frontage Road
K	24.3	2308	Right turn onto Sens Road
L	25.0	2376	Right turn onto North P Street
M	31.6	3005	Left turn onto Underwood Road
N	33.8	3219	Left turn onto N Avenue L
O	34.4	3269	Passing Lomax Junior High School
P	41.1	3913	Right turn onto unmarked service road
Q	41.6	3960	Right turn onto unmarked service road
R	42.5	4043	U-turn on unmarked service road
S	44.7	4250	Left turn onto N Avenue L
T	48.2	4588	Right turn onto Valley View Drive
U	50.3	4787	Right turn onto North P Street
V	52.5	4992	Left turn onto Sens Road
W	53.7	5104	Left turn onto Pasadena Freeway Frontage Road
X	57.9	5504	Right turn at Independence Parkway ramp
Y	60.1	5714	Left turn onto Battleground Road
Z	61.1	5813	Right turn onto E 13th Street
A1	74.3	7066	Right turn onto Highway 8 Service Road
B1	75.9	7221	Left turn onto Pasadena Freeway Frontage Road
C1	77.5	7367	Right turn onto Ethyl Road
D1	81.3	7733	End mobile monitoring at EPA Command Post
E1	81.9	7784	Start ambient
F1	82.9	7879	End ambient
G1	88.2	8384	Start 30 mL/min spike
H1	89.3	8486	End 30 mL/min spike

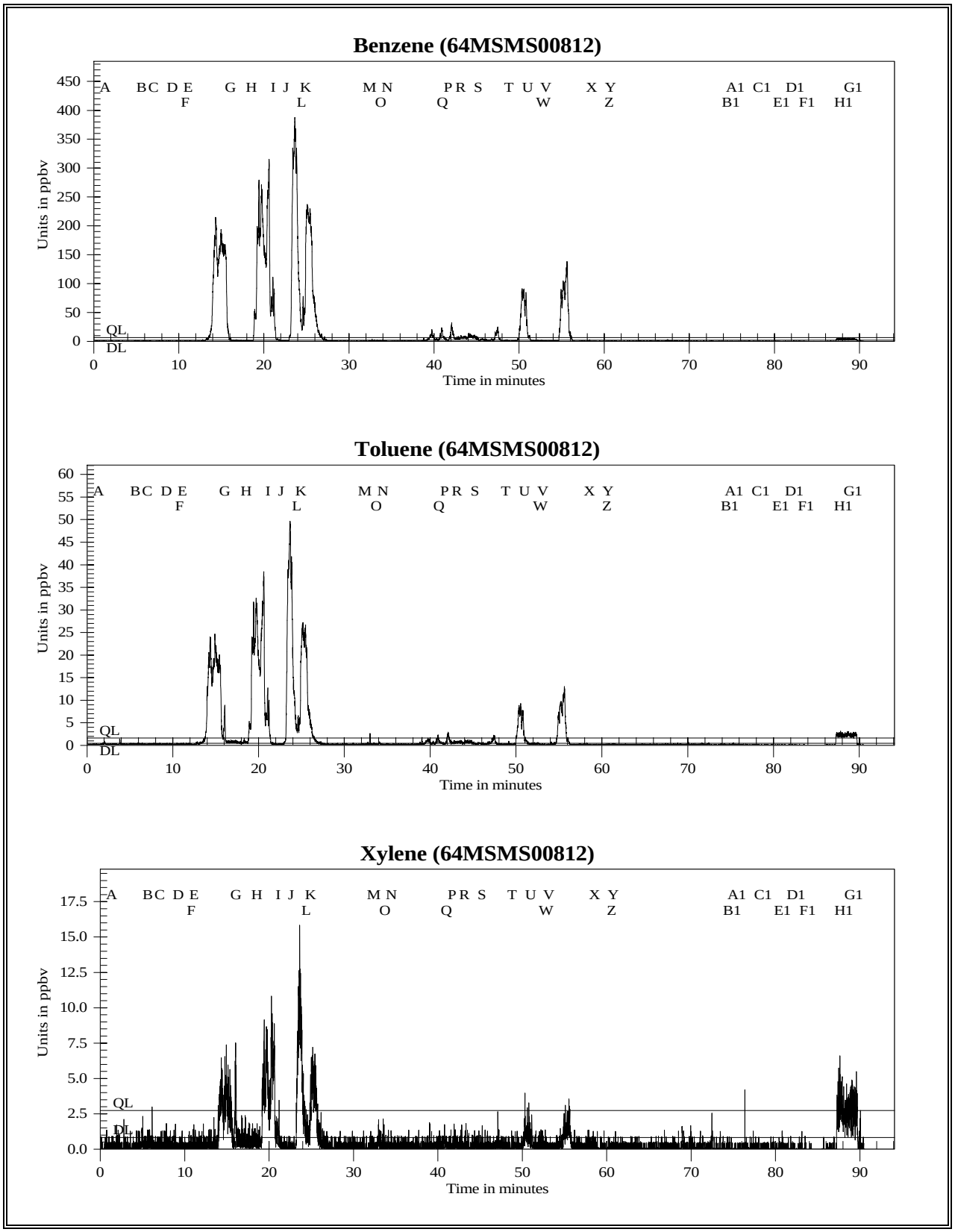


Figure 65c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

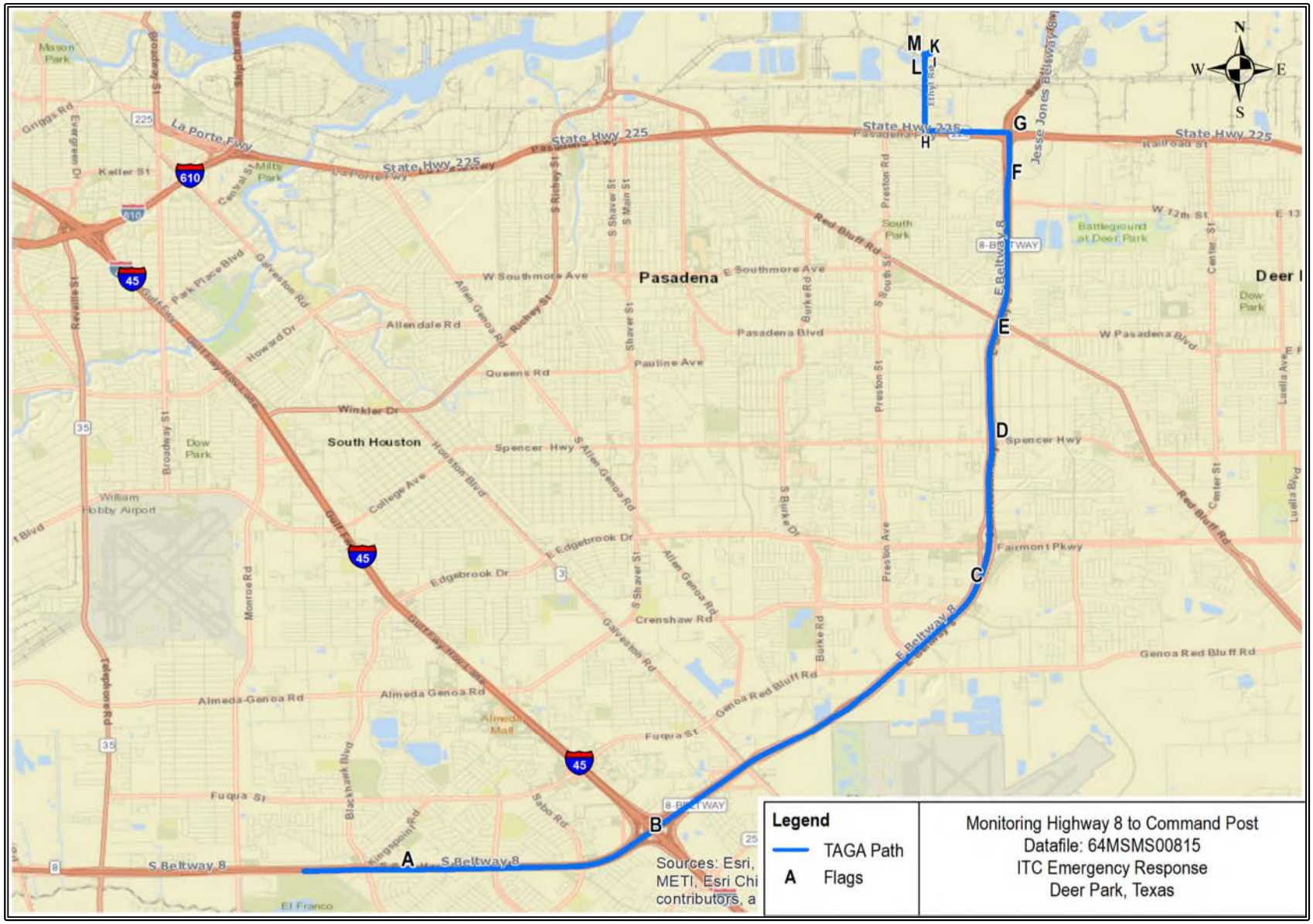


Figure 66a Monitoring Highway 8 to Command Post Path, 64MSMS00815

Figure 66b

TAGA File Event Summary
File: 64MSMS00815 Acquired on 31 March 2019 at 08:07:31
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	1.2	118	Start mobile monitoring on Highway 8 North
B	3.3	319	Cross Highway 45
C	8.5	812	Cross Fairmont Parkway
D	9.6	915	Cross Spencer Highway
E	10.7	1015	Cross Pasadena Boulevard
F	12.3	1175	Exit onto Highway 8 Service Road
G	13.4	1273	Left turn onto Pasadena Freeway Frontage Road
H	14.8	1405	Right turn onto Ethyl Road
I	18.5	1758	End mobile monitoring at EPA Command Post
J	19.0	1810	Start ambient
K	20.0	1905	End ambient
L	21.7	2068	Start 30 mL/min spike
M	22.8	2165	End 30 mL/min spike

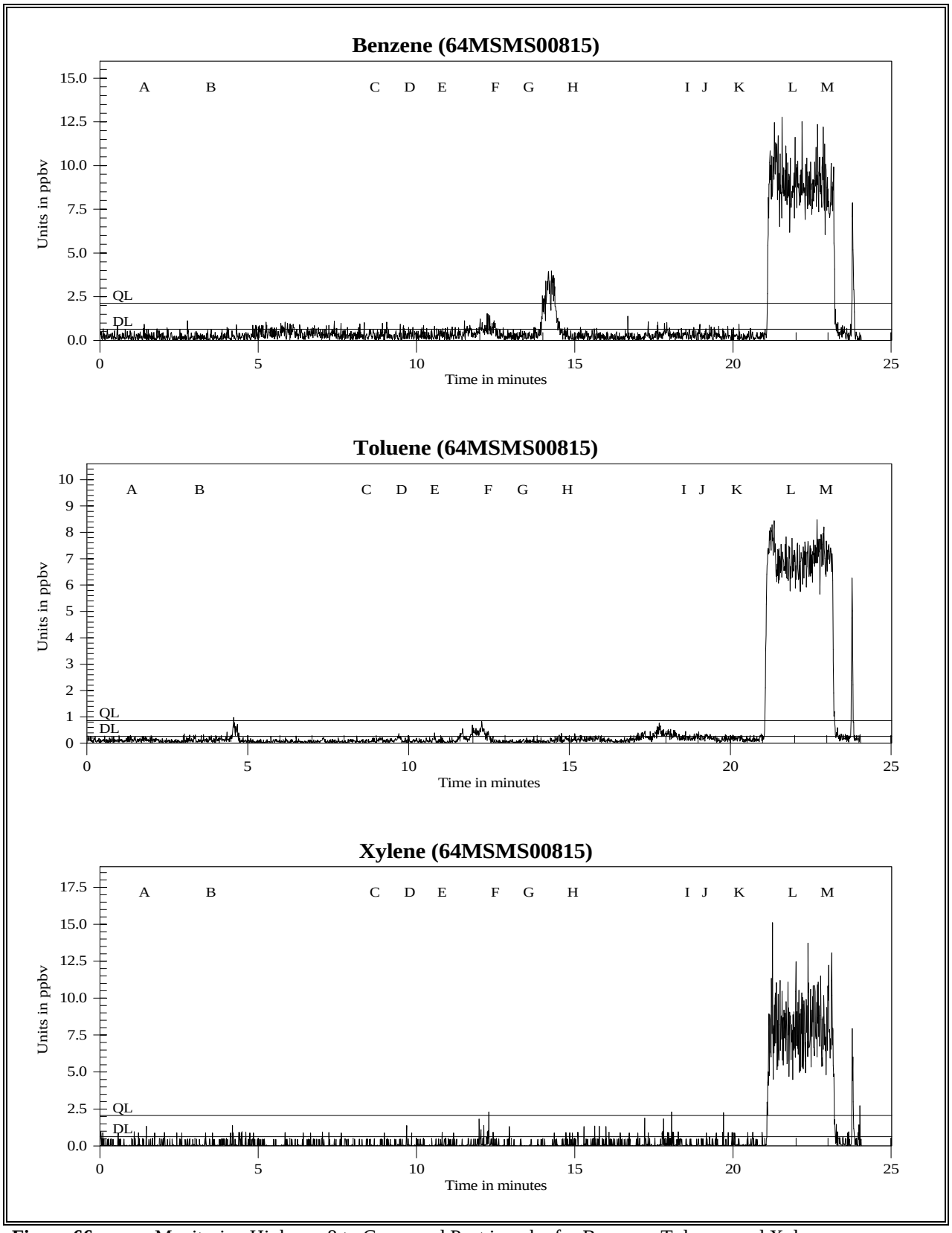


Figure 66c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

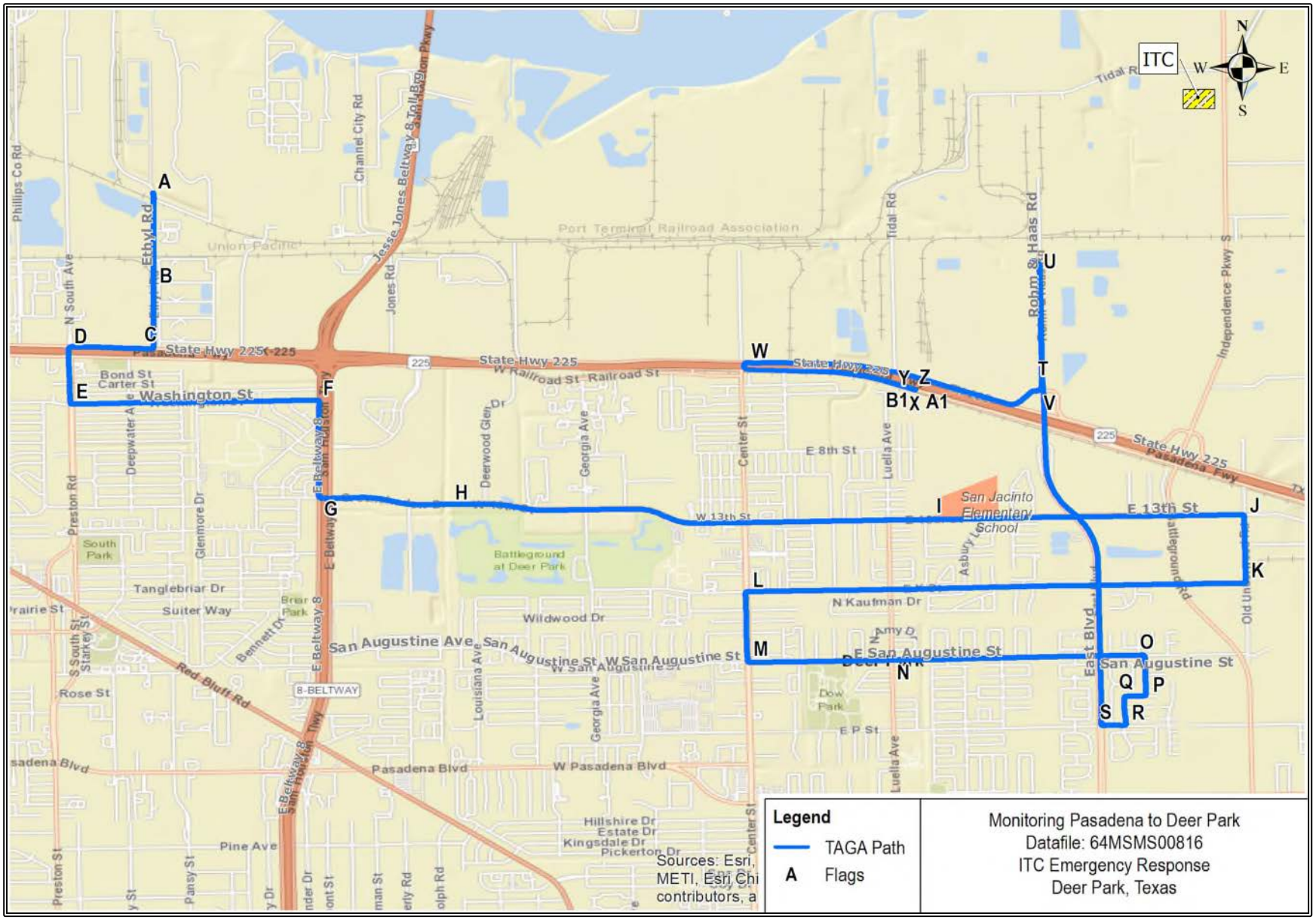


Figure 67a Monitoring Pasadena to Deer Park Path, 64MSMS00816

Figure 67b

TAGA File Event Summary
File: 64MSMS00816 Acquired on 31 March 2019 at 08:42:50
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	0.7	67	Start mobile monitoring at EPA Command Post
B	3.2	303	Continuing onto Ethyl Road
C	4.0	381	Right turn onto Pasadena Freeway Frontage Road
D	4.9	471	Left turn onto Preston Road
E	5.8	549	Left turn onto Washington Street
F	10.3	980	Right turn onto Highway 8 Service Road
G	12.1	1151	Left turn onto Greenshadow Drive
H	14.2	1349	Continuing onto W 13th Street
I	19.7	1870	Passing San Jacinto Elementary School
J	24.0	2281	Right turn onto Old Underwood Road
K	25.0	2374	Right turn onto East Avenue X
L	32.3	3068	Left turn onto Center Street
M	34.3	3265	Left turn onto San Augustine Avenue
N	36.1	3433	Cross Luella Avenue
O	39.6	3769	Right turn onto Shiprock Drive
P	40.7	3872	Right turn onto Gallup Drive
Q	41.3	3924	Left turn onto White Sands Drive
R	42.0	3990	Right turn onto East P Street
S	42.7	4062	Right turn onto East Boulevard
T	46.7	4437	Continuing onto Rohm and Haas Road
U	49.1	4670	U-turn on Rohm and Haas Road
V	51.3	4879	Right turn onto Pasadena Freeway Frontage Road
W	53.7	5109	U-turn on Pasadena Freeway Frontage Road at Center Street
X	55.6	5291	End mobile monitoring on Pasadena Freeway Frontage Road near Tidal Road
Y	56.0	5328	Start ambient
Z	57.1	5426	End ambient
A1	58.8	5594	Start 30 mL/min spike
B1	59.9	5692	End 30 mL/min spike

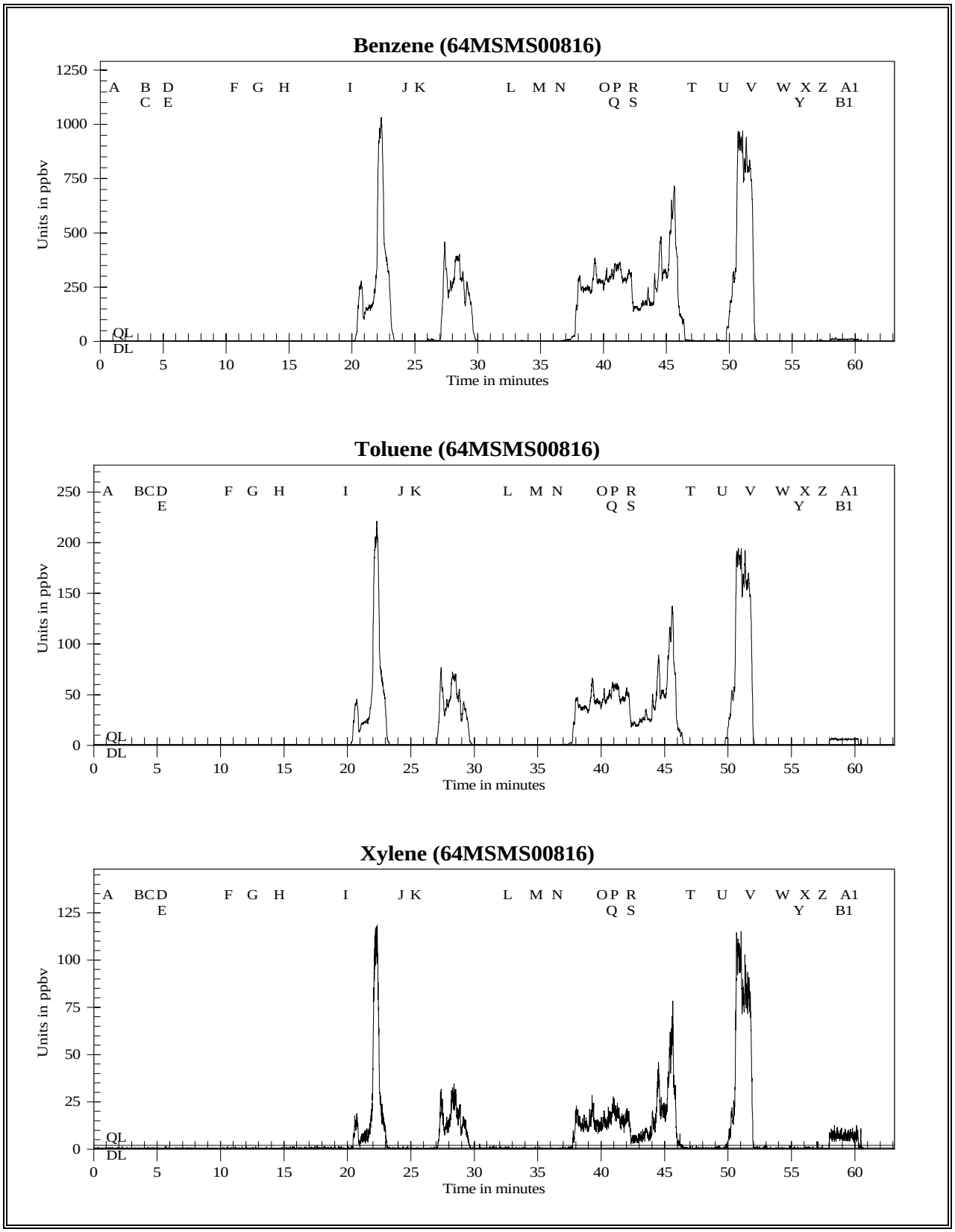


Figure 67c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

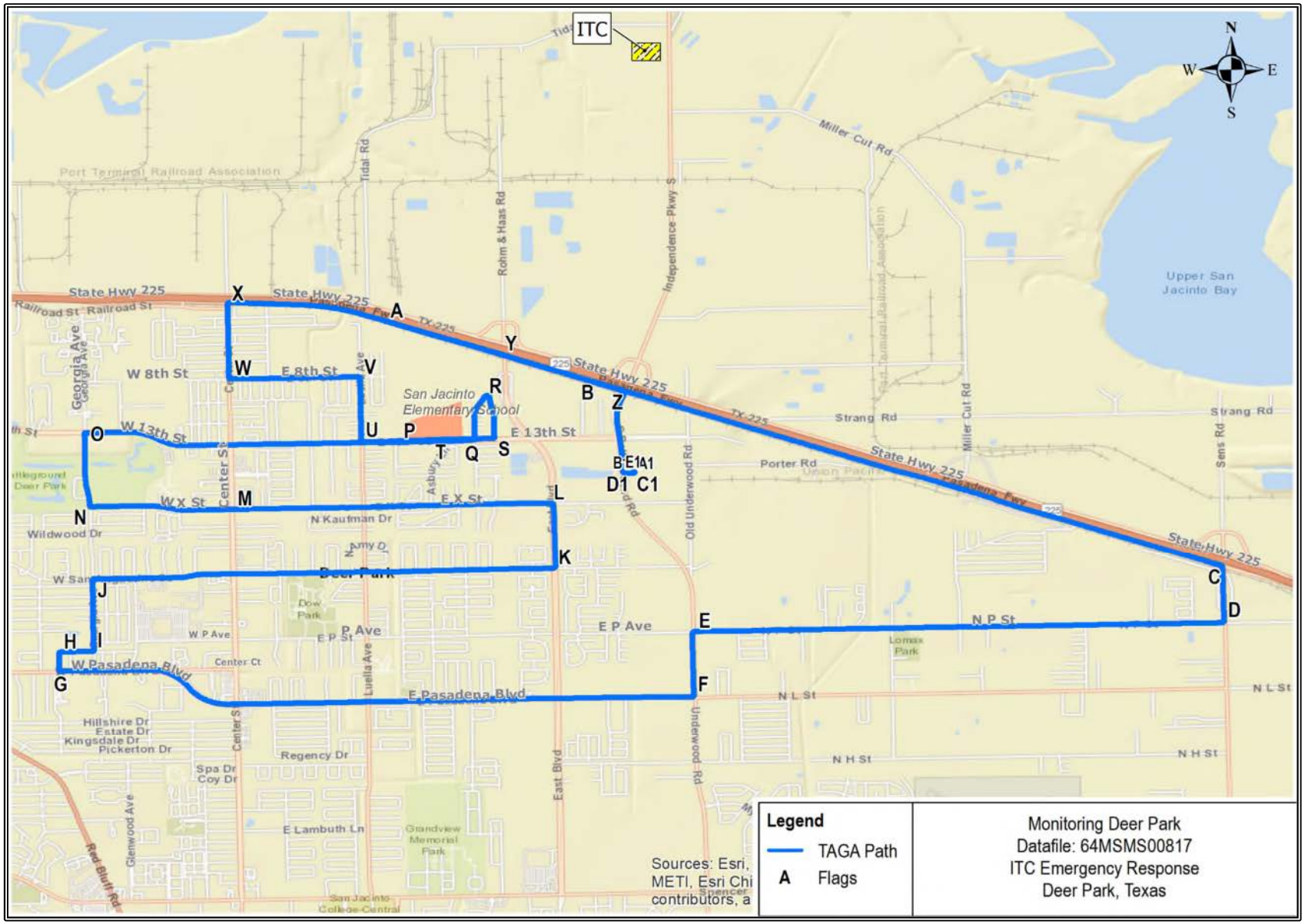


Figure 68a Monitoring Deer Park Path, 64MSMS00817

Figure 68b

TAGA File Event Summary
File: 64MSMS00817 Acquired on 31 March 2019 at 09:47:02
Title: Monitoring Deer Park

Flag	Time	Sequence	Description
A	1.1	105	Start mobile monitoring on Pasadena Freeway Frontage Road
B	3.7	354	Continuing onto Pasadena Freeway Frontage Road
C	8.6	817	Right turn onto Sens Road
D	9.3	883	Right turn onto North P Street
E	14.9	1420	Left turn onto Underwood Road
F	15.8	1506	Right turn onto East Pasadena Boulevard
G	23.7	2257	Right turn onto Brookhollow Drive
H	24.3	2308	Continuing onto Brookhollow Drive
I	25.4	2414	Left turn onto Georgia Avenue
J	26.5	2522	Right turn onto San Augustine Avenue
K	33.1	3152	Left turn onto East Boulevard
L	34.4	3269	Left turn onto East X Street
M	39.2	3732	Cross Center Street
N	40.8	3878	Right turn onto Georgia Avenue
O	41.8	3978	Right turn onto W 13th Street
P	48.0	4566	Passing San Jacinto Elementary School
Q	49.8	4735	Left turn onto Wynfield Drive
R	51.5	4898	Right turn onto Park Green
S	53.0	5041	Right turn onto 13th Street
T	53.9	5123	Passing San Jacinto Elementary School
U	55.0	5231	Right turn onto Luella Avenue
V	56.4	5363	Left turn onto E 8th Street
W	58.7	5580	Right turn onto Center Street
X	60.0	5702	Right turn onto Pasadena Freeway Frontage Road
Y	62.5	5946	Cross East Boulevard
Z	64.3	6111	Right turn onto Battleground Road
A1	66.1	6285	End mobile monitoring on Battleground Road
B1	67.2	6385	Start ambient
C1	68.2	6488	End ambient
D1	69.5	6613	Start 30 mL/min spike
E1	70.6	6711	End 30 mL/min spike

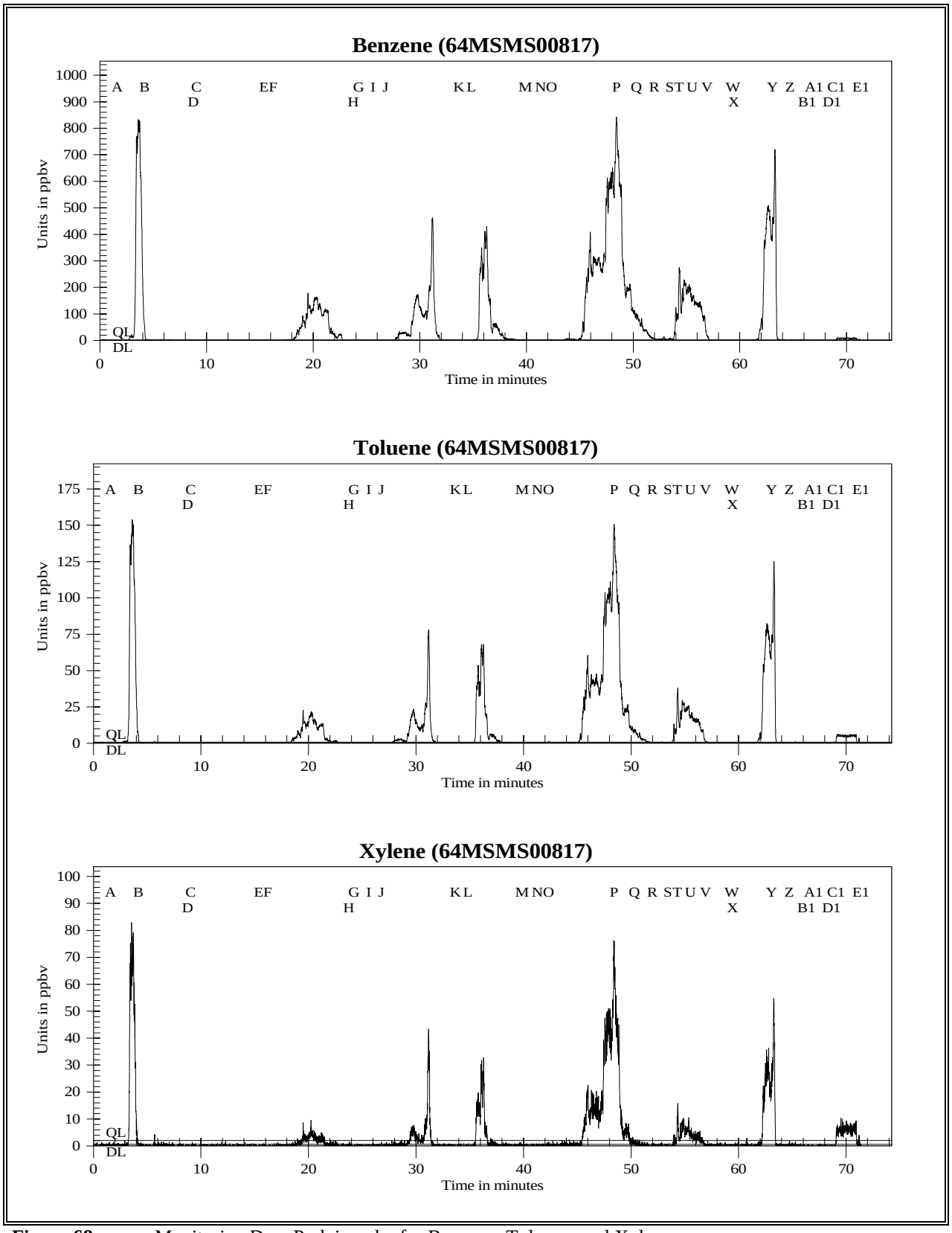


Figure 68c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

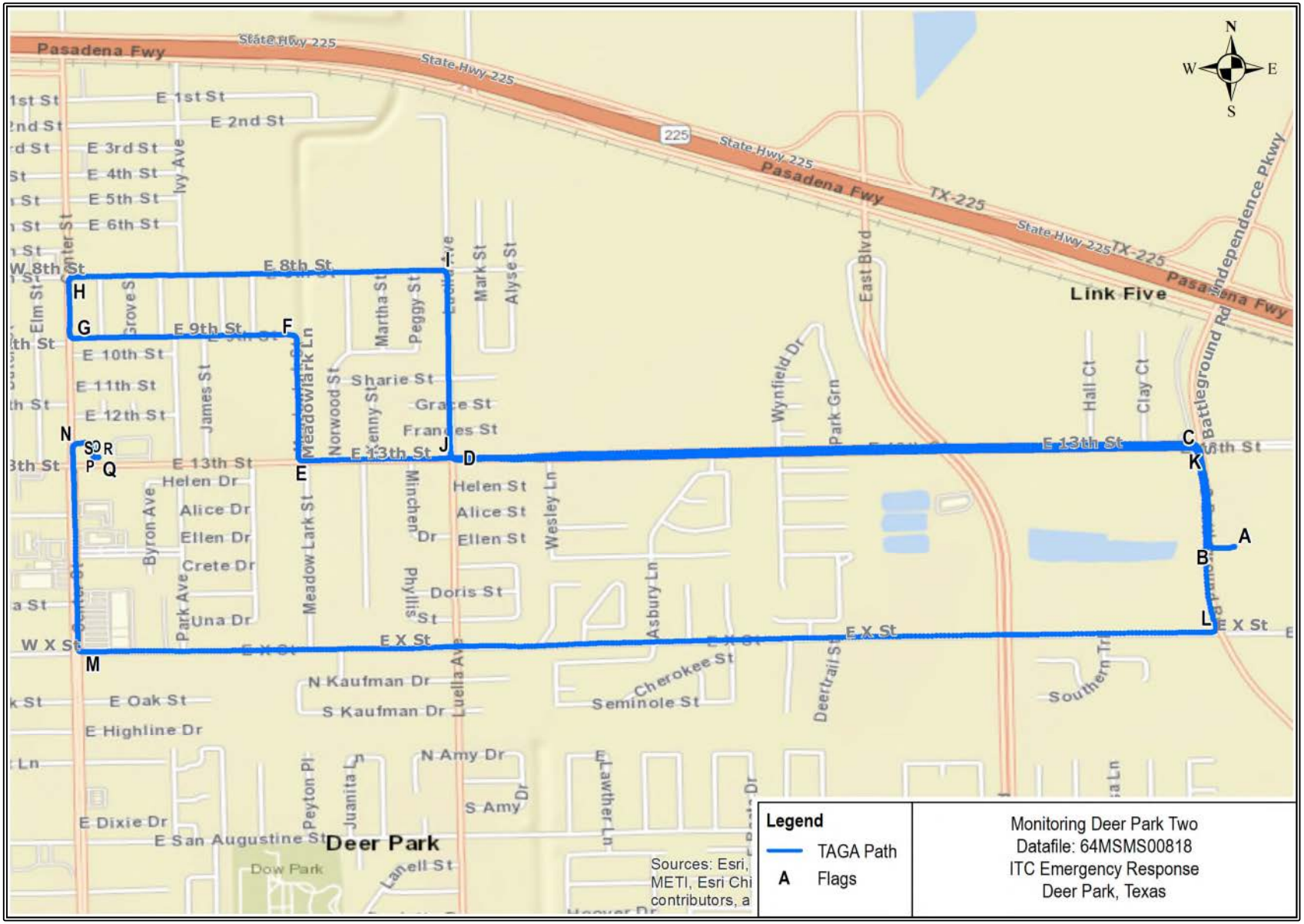


Figure 69a Monitoring Deer Park Two Path, 64MSMS00818

Figure 69b

TAGA File Event Summary
File: 64MSMS00818 Acquired on 31 March 2019 at 11:01:18
Title: Monitoring Deer Park Two

Flag	Time	Sequence	Description
A	0.6	59	Start mobile monitoring near Battleground Road
B	7.9	753	Right turn onto Battleground Road
C	8.7	828	Left turn onto E 13th Street
D	12.5	1194	Cross Luella Avenue
E	13.5	1287	Right turn onto Meadowlark Lane
F	14.5	1382	Left turn onto E 9th Street
G	16.7	1584	Right turn onto Center Street
H	17.1	1630	Right turn onto E 8th Street
I	19.6	1867	Right turn onto Luella Avenue
J	21.3	2030	Left turn onto E 13th Street
K	26.6	2533	Right turn onto Battleground Road
L	27.6	2626	Right turn onto East X Street
M	34.3	3262	Right turn onto Center Street
N	36.0	3426	Right turn into parking lot
O	36.8	3498	End mobile monitoring on Center Street
P	37.4	3556	Start ambient
Q	38.4	3651	End ambient
R	40.0	3808	Start 30 mL/min spike
S	41.2	3916	End 30 mL/min spike

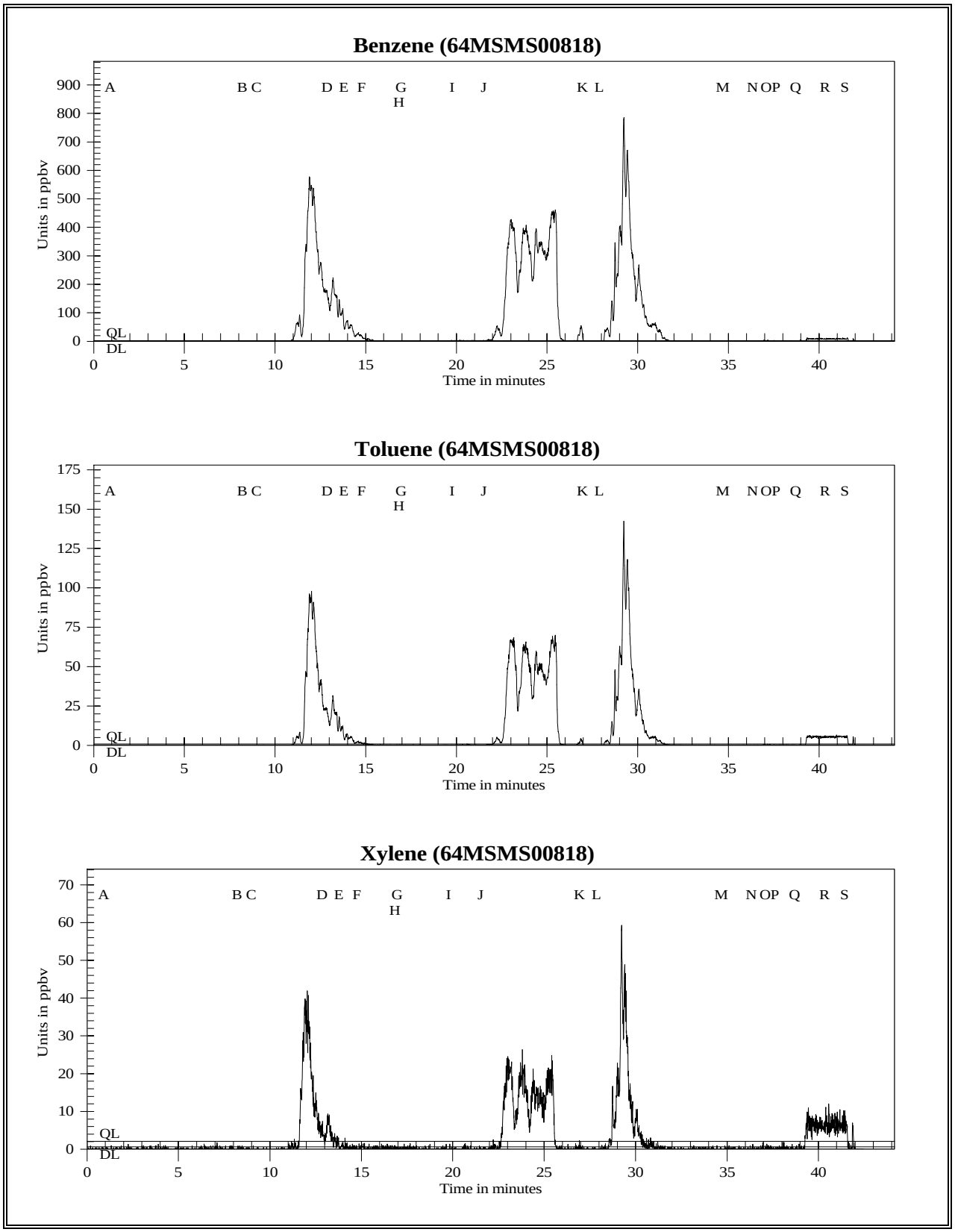


Figure 69c Monitoring Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

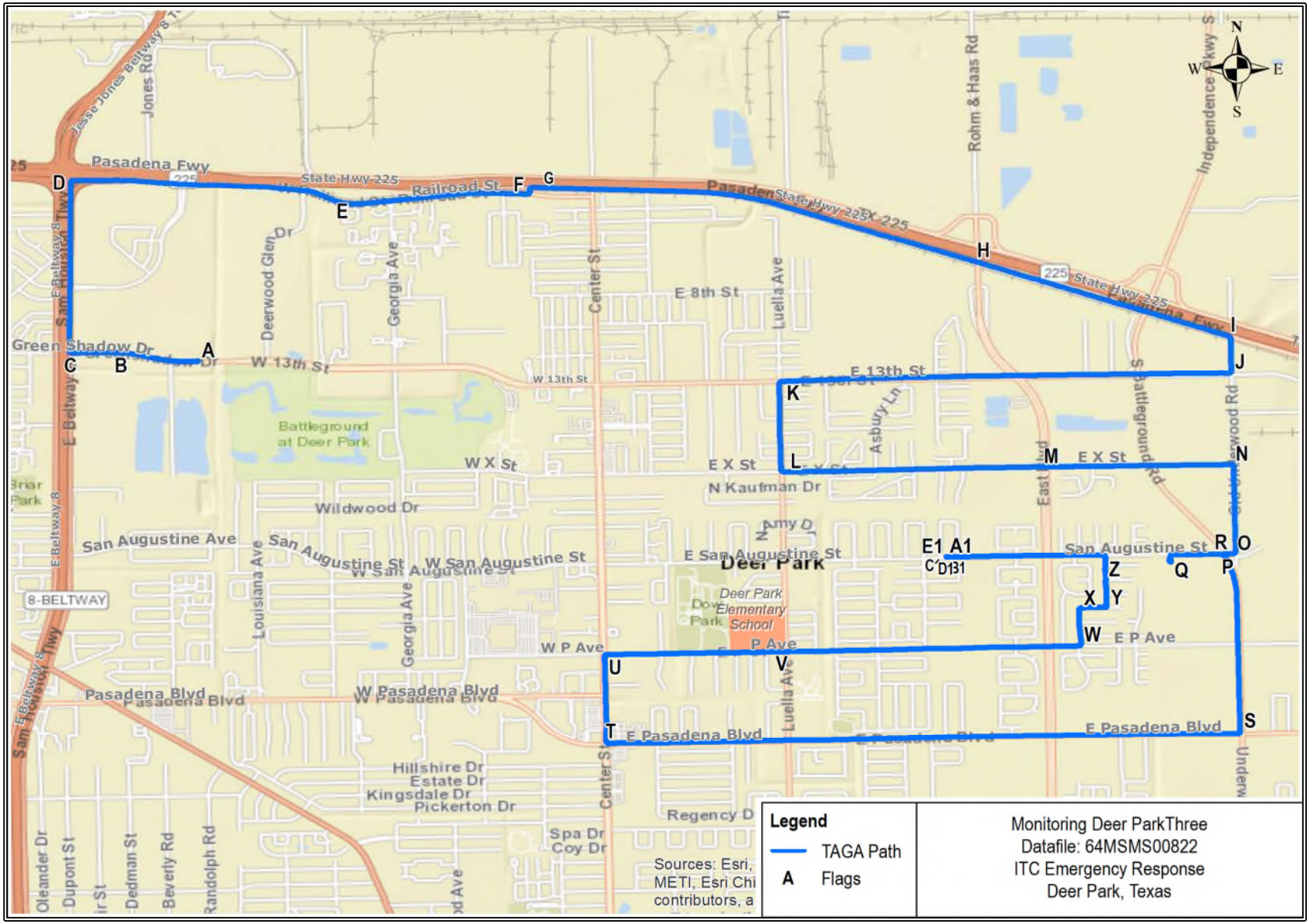


Figure 70a Monitoring Deer Park Three Path, 64MSMS00822

Figure 70b

TAGA File Event Summary
File: 64MSMS00822 Acquired on 31 March 2019 at 12:46:23
Title: Monitoring Deer Park Three

Flag	Time	Sequence	Description
A	0.5	50	Start mobile monitoring on W 13th Street
B	2.1	199	Continuing onto Greenshadow Drive
C	2.7	256	Right turn onto Highway 8 Service Road
D	4.0	383	Right turn onto Pasadena Freeway Frontage Road
E	5.9	558	Merge onto Railroad Street
F	8.0	764	Left onto unmarked connector street
G	8.6	820	Right turn onto Pasadena Freeway Frontage Road
H	11.6	1107	Cross East Boulevard
I	13.9	1325	Right turn onto Battleground Road
J	14.8	1408	Right turn onto E 13th Street
K	20.1	1912	Left turn onto Luella Avenue
L	21.6	2053	Left turn onto East X Street
M	24.2	2305	Cross East Boulevard
N	27.0	2566	Right turn onto Battleground Road
O	28.1	2675	Left onto E San Augustine Street
P	28.7	2729	Continuing on E San Augustine Street
Q	29.6	2812	U-turn on E San Augustine Street
R	31.5	3000	Right turn onto Underwood Road
S	33.6	3192	Right turn onto E Pasadena Boulevard
T	40.0	3804	Right turn onto Center Street
U	41.6	3954	Right turn onto East P Street
V	43.6	4146	Passing Deer Park Elementary School
W	48.6	4621	Left turn onto White Sands Drive
X	49.3	4688	Right turn onto Gallup Drive
Y	50.0	4753	Left turn onto Shiprock Drive
Z	51.7	4917	Left turn onto E San Augustine Street
A1	54.0	5136	End mobile monitoring on E San Augustine Street
B1	54.5	5184	Start ambient
C1	55.5	5280	End ambient
D1	56.7	5388	Start 30 mL/min spike
E1	57.7	5485	End 30 mL/min spike

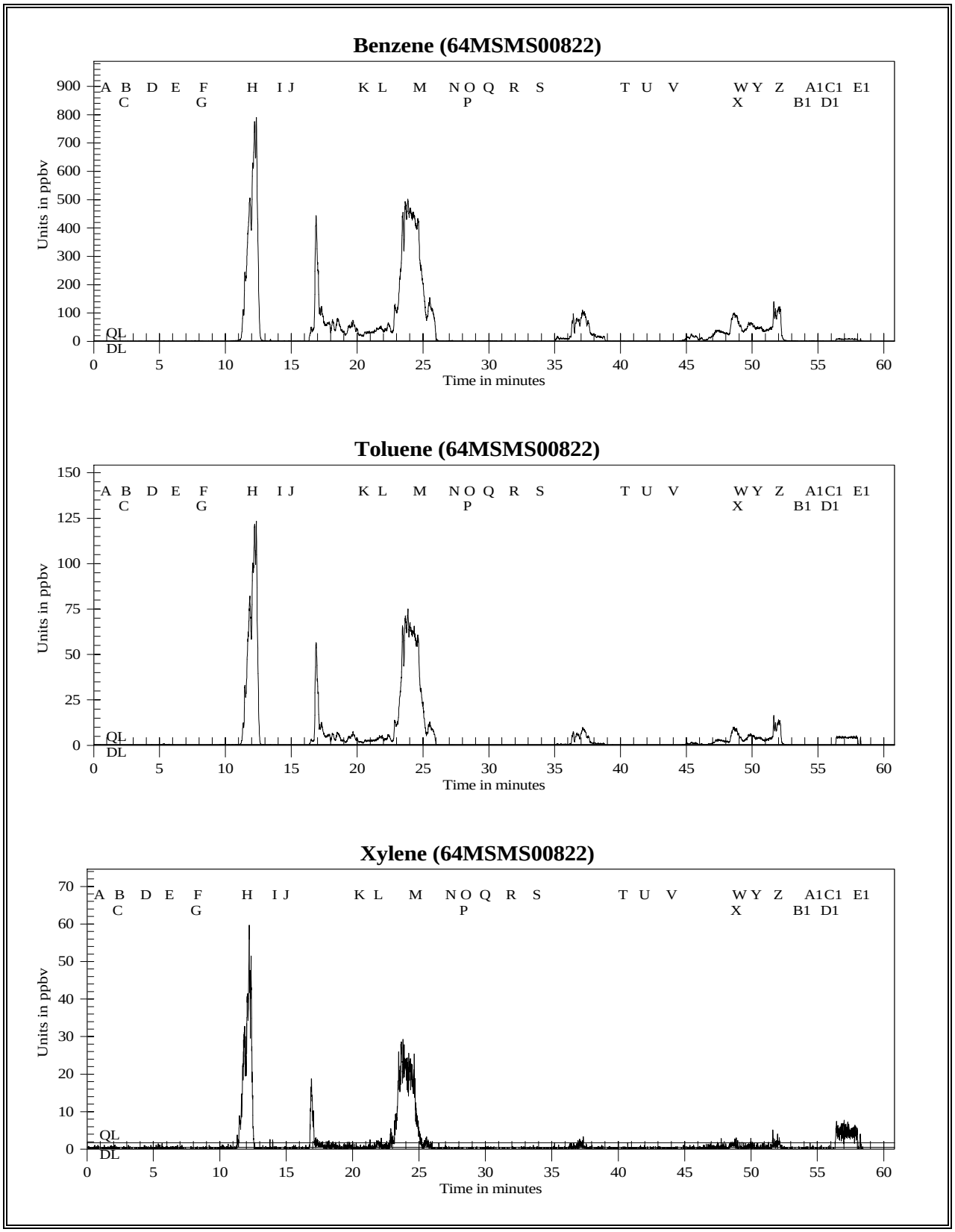


Figure 70c Monitoring Deer Park Three in ppbv for Benzene, Toluene, and Xylenes

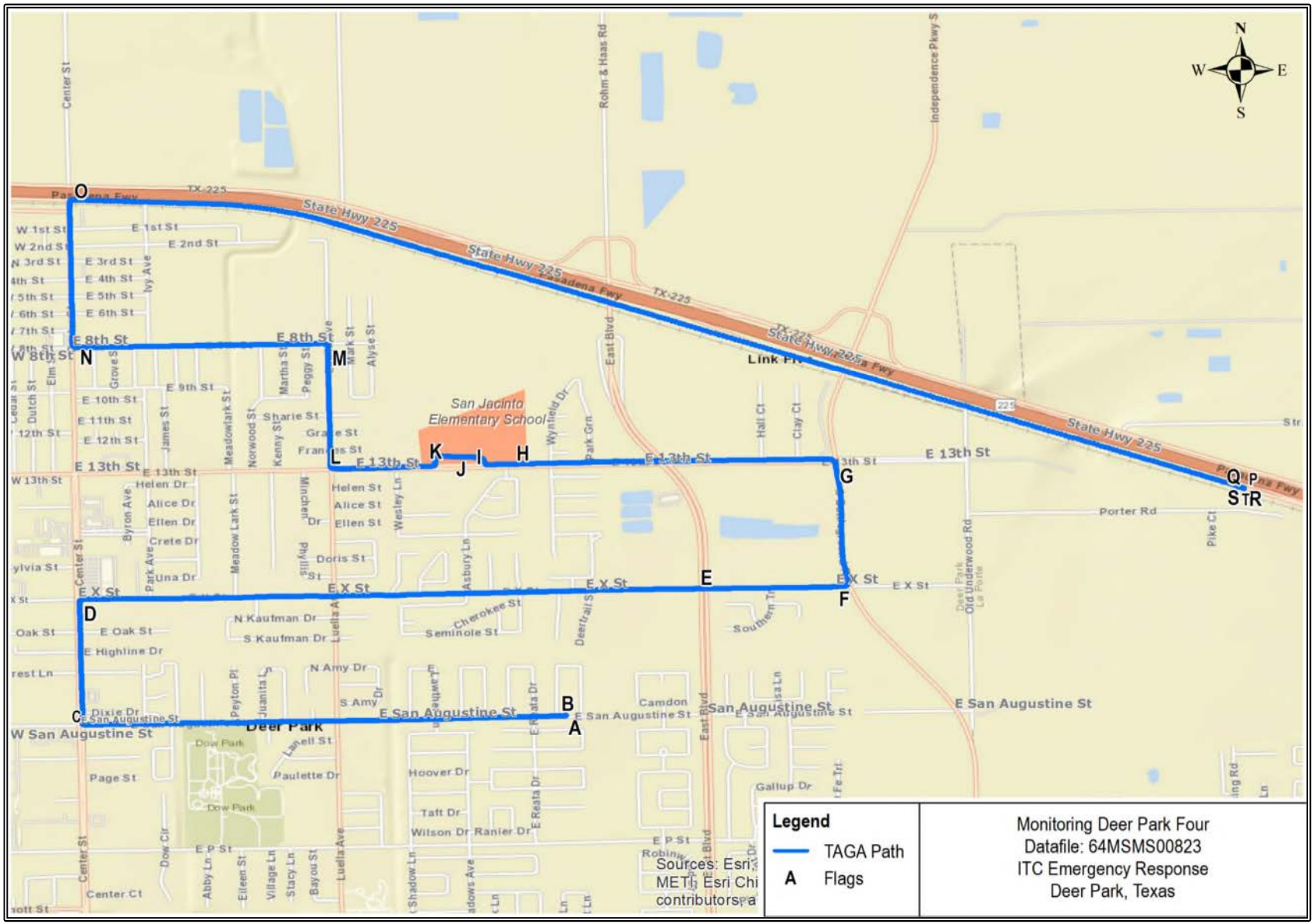


Figure 71a Monitoring Deer Park Four Path, 64MSMS00823

Figure 71b

TAGA File Event Summary
File: 64MSMS00823 Acquired on 31 March 2019 at 13:47:03
Title: Monitoring Deer Park Four

Flag	Time	Sequence	Description
A	1.3	121	Start mobile monitoring on San Augustine Street
B	1.7	159	Continuing onto San Augustine Street
C	6.7	636	Right turn onto Center Street
D	7.9	756	Right turn onto East X Street
E	14.3	1365	Cross East Boulevard
F	16.2	1544	Left turn onto Battleground Road
G	17.3	1650	Left turn onto E 13th Street
H	20.0	1904	Passing San Jacinto Elementary School
I	22.8	2168	Stationary at San Jacinto Elementary School
J	25.1	2389	Resume mobile monitoring at San Jacinto Elementary School
K	25.7	2446	Right turn onto E 13th Street
L	26.7	2541	Right turn onto Luella Avenue
M	28.1	2674	Left turn onto E 8th Street
N	30.7	2919	Right turn onto Center Street
O	32.1	3054	Right turn onto Pasadena Freeway Frontage Road
P	39.3	3737	End mobile monitoring on Pasadena Freeway Frontage Road
Q	39.8	3783	Start ambient
R	40.9	3886	End ambient
S	42.8	4070	Start 30 mL/min spike
T	43.8	4166	End 30 mL/min spike

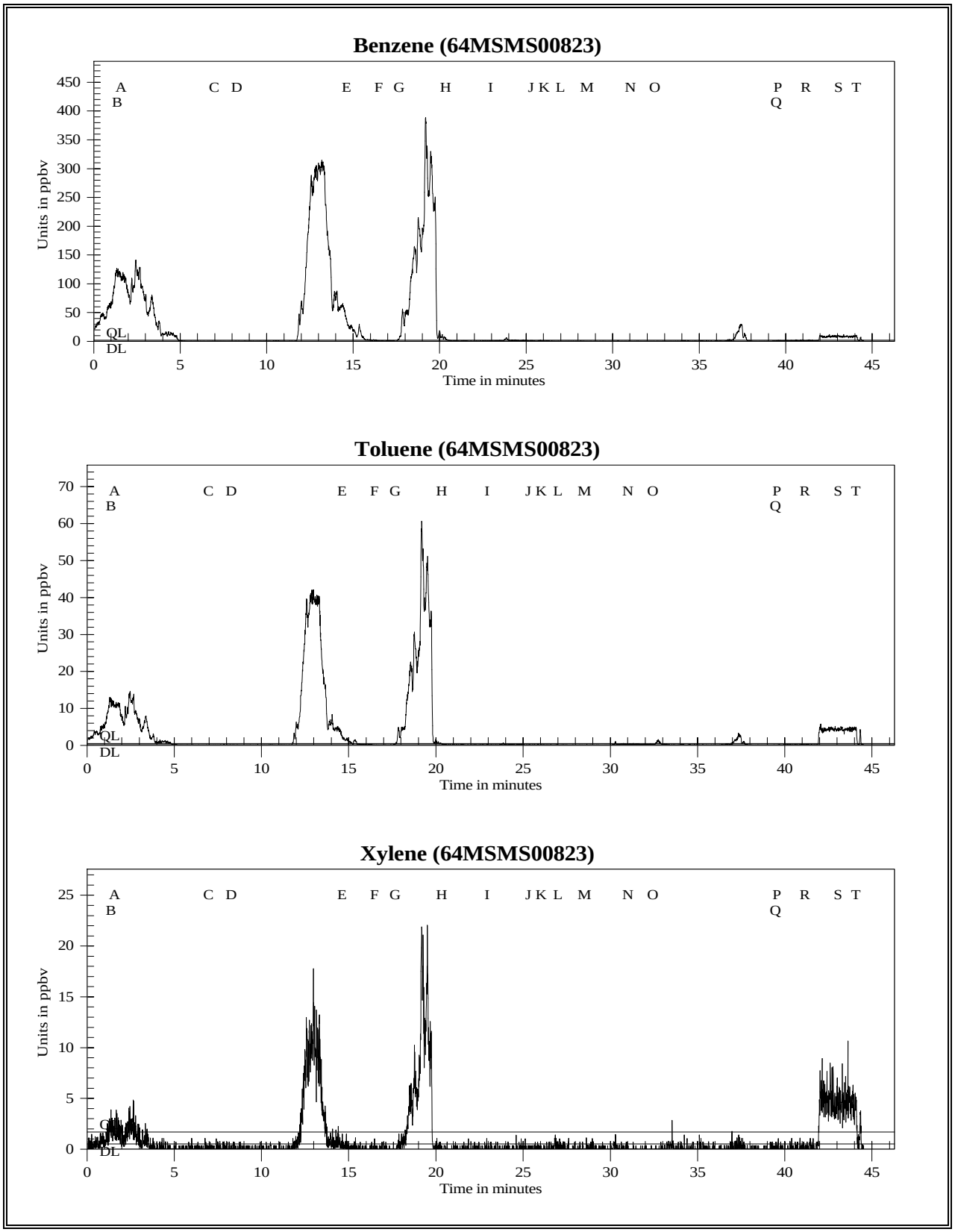


Figure 71c Monitoring Deer Park Four in ppbv for Benzene, Toluene, and Xylenes

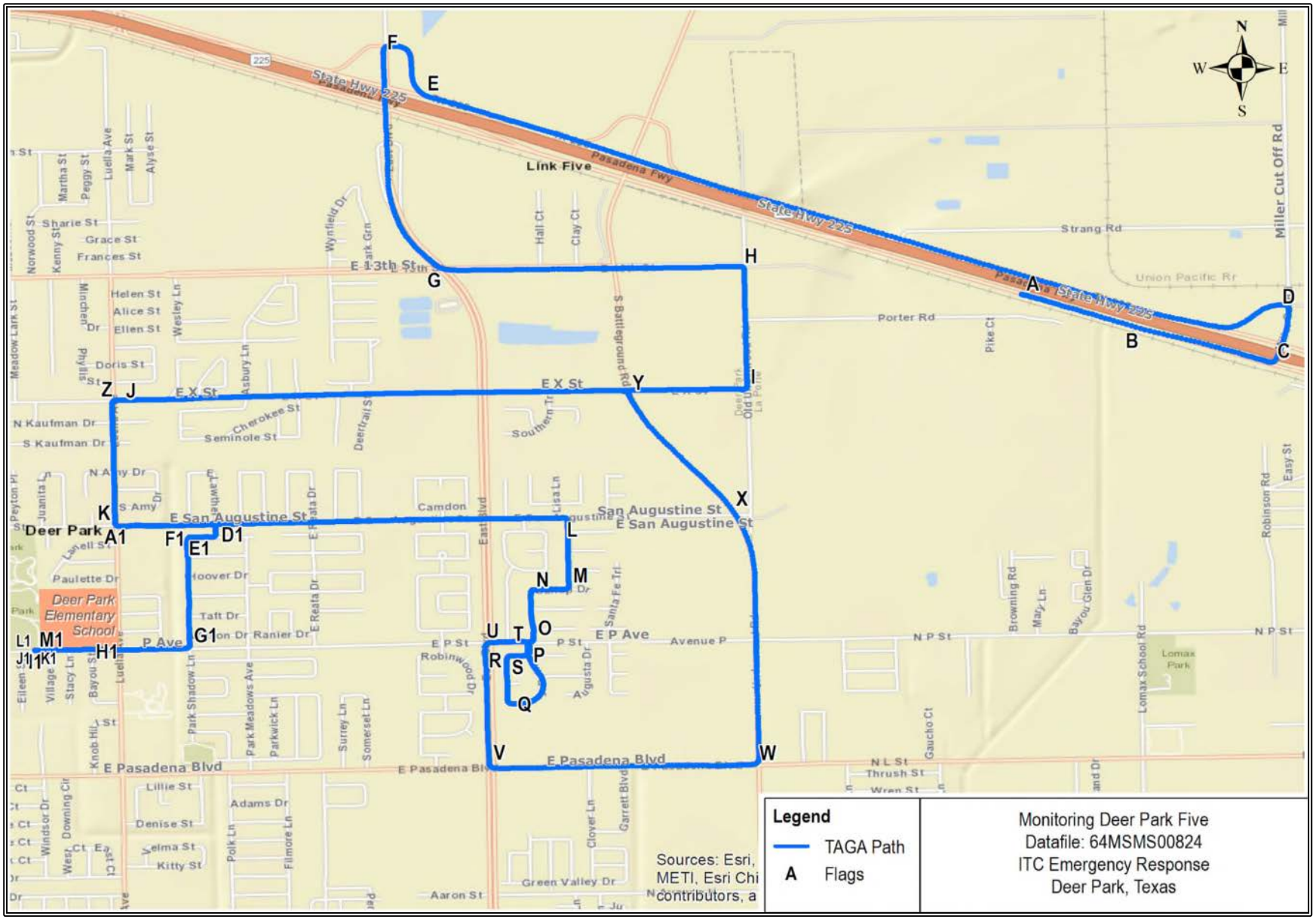


Figure 72a Monitoring Deer Park Five Path, 64MSMS00824

Figure 72b

TAGA File Event Summary
File: 64MSMS00824 Acquired on 31 March 2019 at 14:33:51
Title: Monitoring Deer Park Five

Flag	Time	Sequence	Description
A	0.6	59	Start mobile monitoring Pasadena Freeway Frontage Road
B	1.4	134	Continuing onto Pasadena Freeway Frontage Road
C	2.1	202	Left turn onto Miller Cut-off Road
D	2.6	245	Left turn onto Pasadena Freeway Frontage Road
E	6.5	622	Right merge onto Rohm and Haas Road
F	7.8	742	Left turn onto East Boulevard
G	10.0	951	Left turn onto E 13th Street
H	12.2	1165	Right turn onto Old Underwood Road
I	13.4	1279	Right turn onto East X Street
J	19.0	1809	Left turn onto Luella Avenue
K	20.4	1942	Left turn onto San Augustine Street
L	25.3	2403	Right turn onto Shiprock Drive
M	26.4	2514	Right turn onto Gallup Drive
N	27.0	2569	Left turn onto White Sands Drive
O	28.4	2697	Right turn onto East P Street
P	28.7	2734	Left turn onto Piney Point Drive
Q	30.2	2870	Right turn onto Pine Brook Drive
R	31.1	2962	Right turn to continue onto Pine Brook Drive
S	31.7	3010	Left turn onto Piney Point Drive
T	32.2	3062	Left turn onto East P Street
U	32.9	3127	Left turn onto East Boulevard
V	35.3	3358	Left turn onto Pasadena Boulevard
W	37.0	3517	Left turn onto Underwood Road
X	38.9	3697	Continuing onto Battleground Road
Y	39.9	3794	Left turn onto East X Street
Z	44.5	4234	Left turn onto Luella Avenue
A1	46.0	4375	Left turn onto San Augustine Street
D1	49.1	4665	Right turn onto E Lawther Lane
E1	49.4	4696	Right turn onto Ed Watson Lane
F1	49.7	4726	Left turn onto Park Shadow Lane
G1	51.2	4873	Right turn onto East P Street
H1	52.4	4979	Passing Deer Park Elementary School
I1	52.8	5023	End mobile monitoring on East P Street
J1	53.1	5046	Start ambient

Figure 72b (continued)

TAGA File Event Summary
File: 64MSMS00824 Acquired on 31 March 2019 at 14:33:51
Title: Monitoring Deer Park Five

Flag	Time	Sequence	Description
K1	54.5	5179	End ambient
L1	56.0	5323	Start 30 mL/min spike
M1	57.0	5423	End 30 mL/min spike

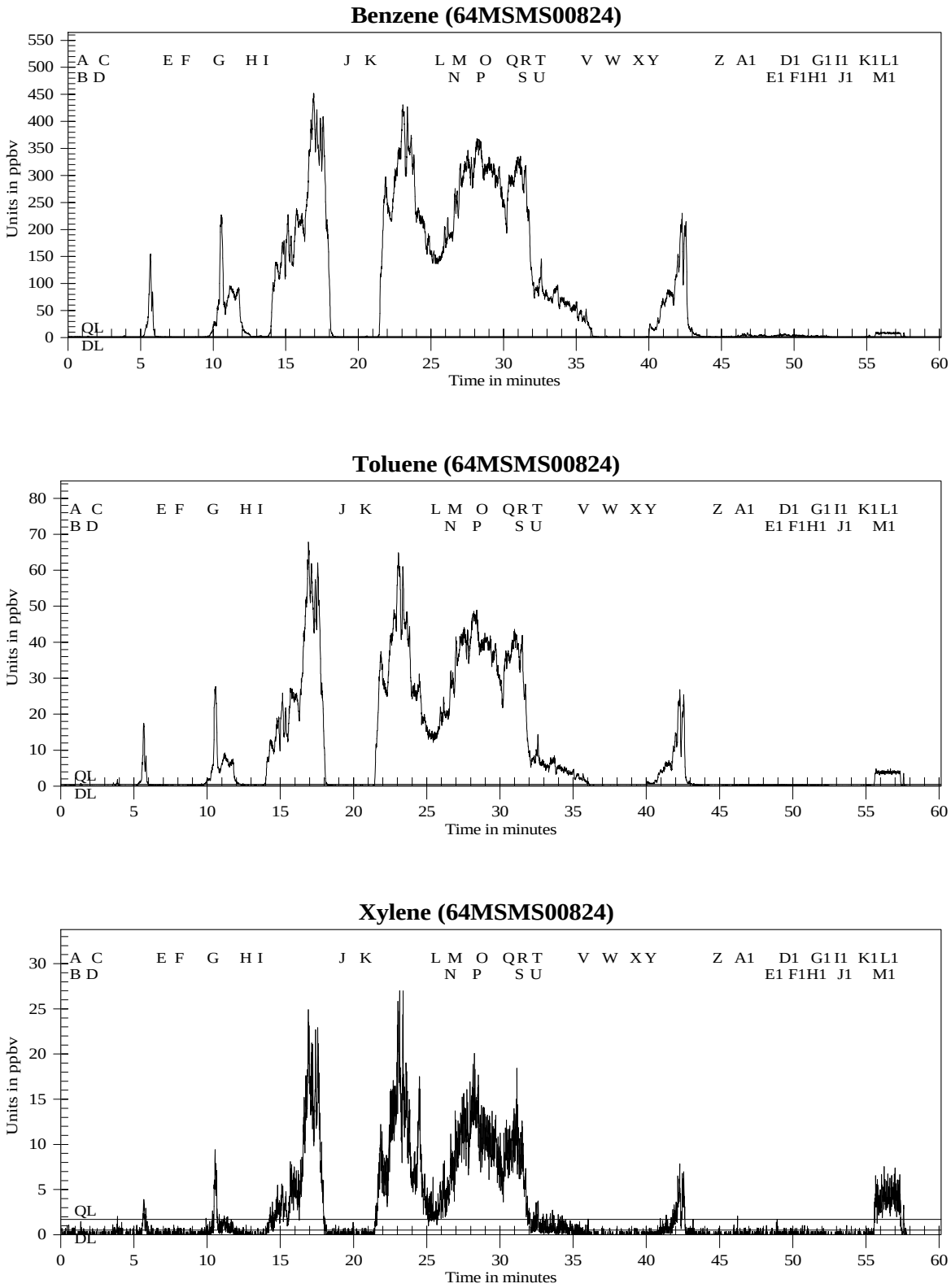


Figure 72c Monitoring Deer Park Five in ppbv for Benzene, Toluene, and Xylenes

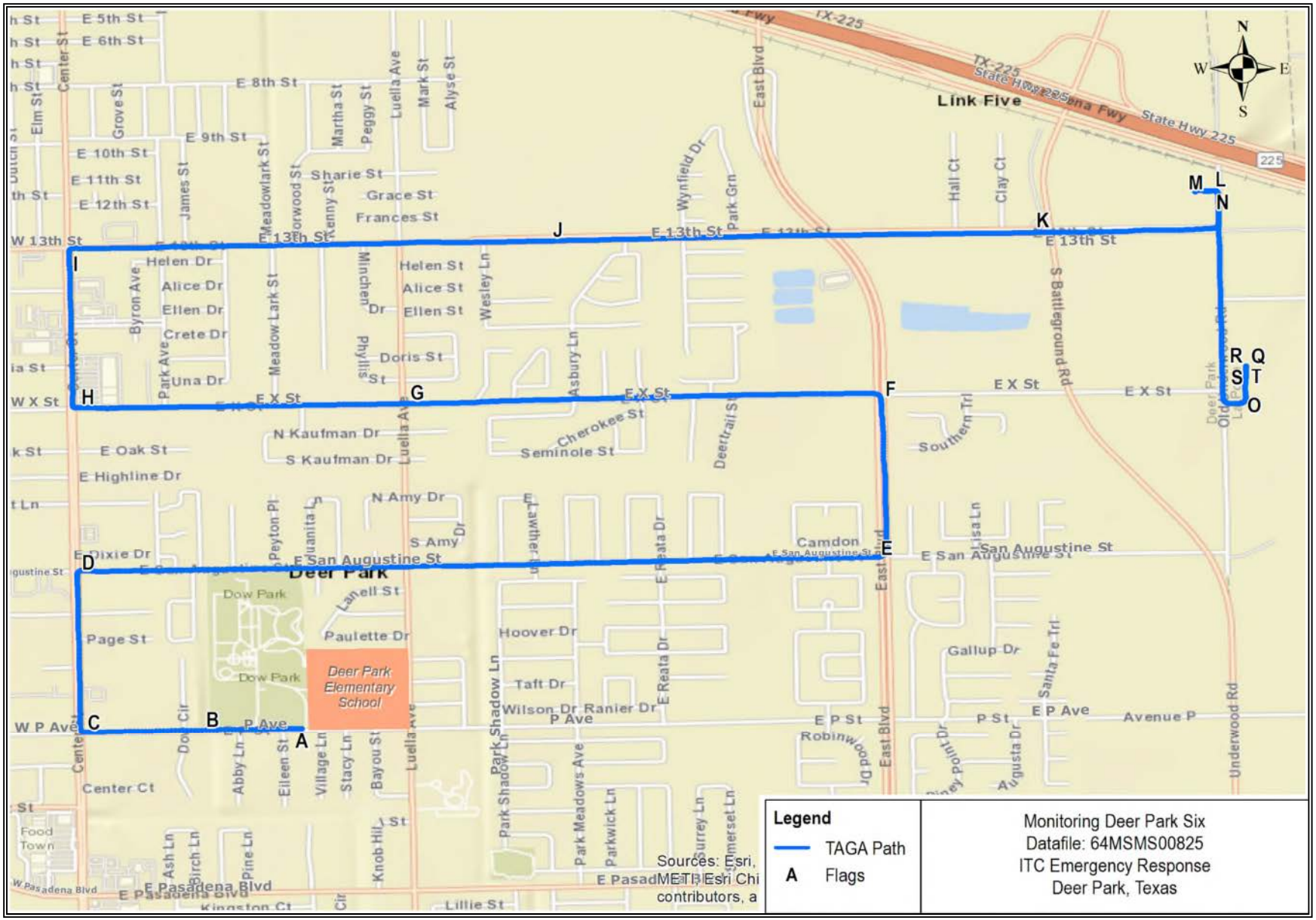


Figure 73a Monitoring Deer Park Six Path, 64MSMS00825

Figure 73b

TAGA File Event Summary
File: 64MSMS00825 Acquired on 31 March 2019 at 15:33:55
Title: Monitoring Deer Park Six

Flag	Time	Sequence	Description
A	0.6	55	Start mobile monitoring on East P Street
B	1.3	126	Continuing onto East P Street
C	2.1	199	Right turn onto Center Street
D	3.3	319	Right turn onto San Augustine Street
E	8.8	834	Left turn onto East Boulevard
F	10.4	985	Left turn onto East X Street
G	14.0	1330	Cross Luella Avenue
H	17.1	1630	Right turn onto Center Street
I	18.2	1731	Right turn onto E 13th Street
J	21.7	2061	Passing San Jacinto Elementary School
K	25.2	2401	Cross Battleground Road
L	27.1	2579	Left turn onto Old Underwood Road
M	28.2	2686	Stationary on Old Underwood Road
N	29.7	2824	U-turn on Old Underwood Road
O	31.8	3021	End mobile monitoring on Old Underwood Road
Q	34.0	3233	Start ambient
R	35.0	3331	End ambient
S	36.6	3480	Start 30 mL/min spike
T	37.7	3586	End 30 mL/min spike

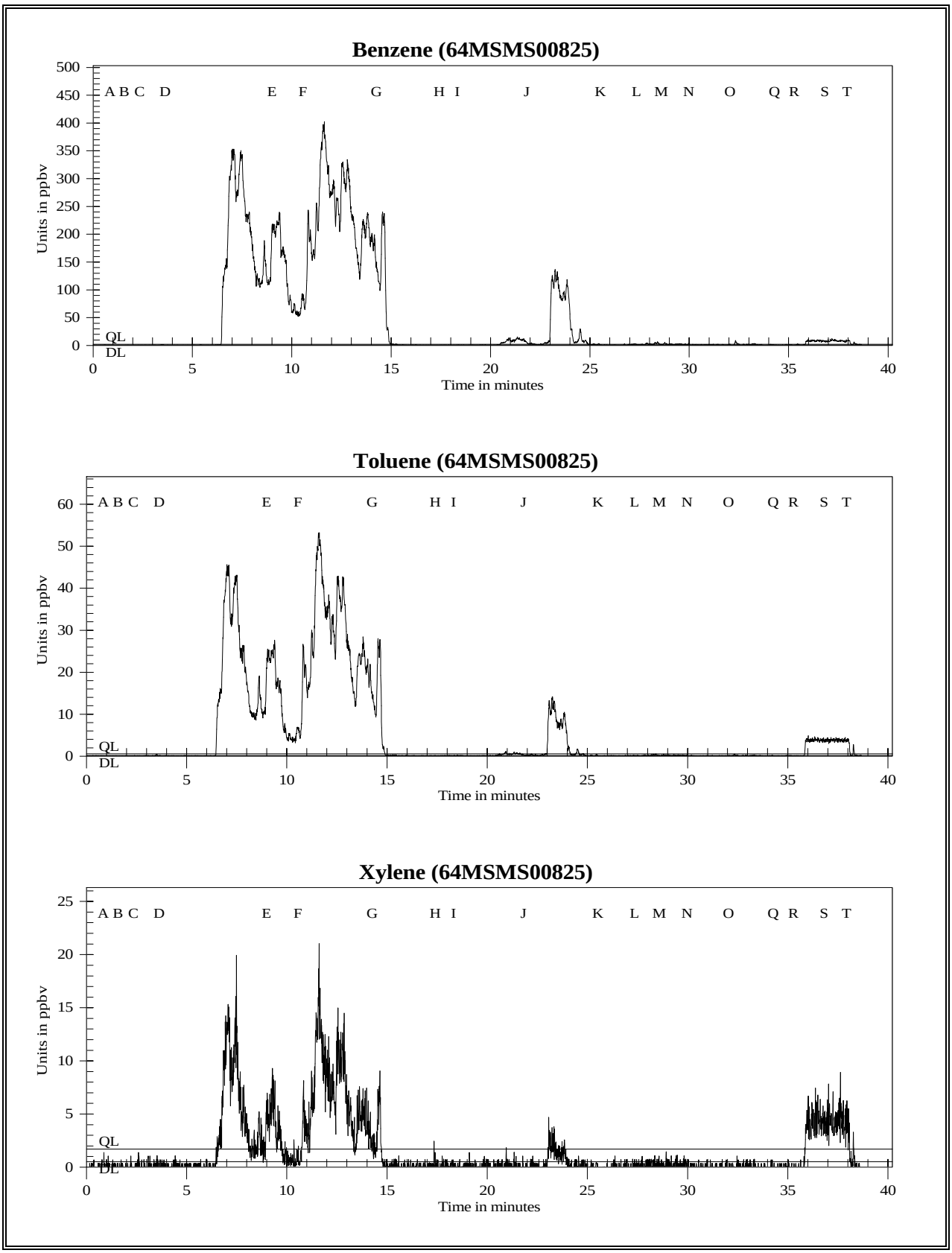


Figure 73c Monitoring Deer Park Six in ppbv for Benzene, Toluene, and Xylenes

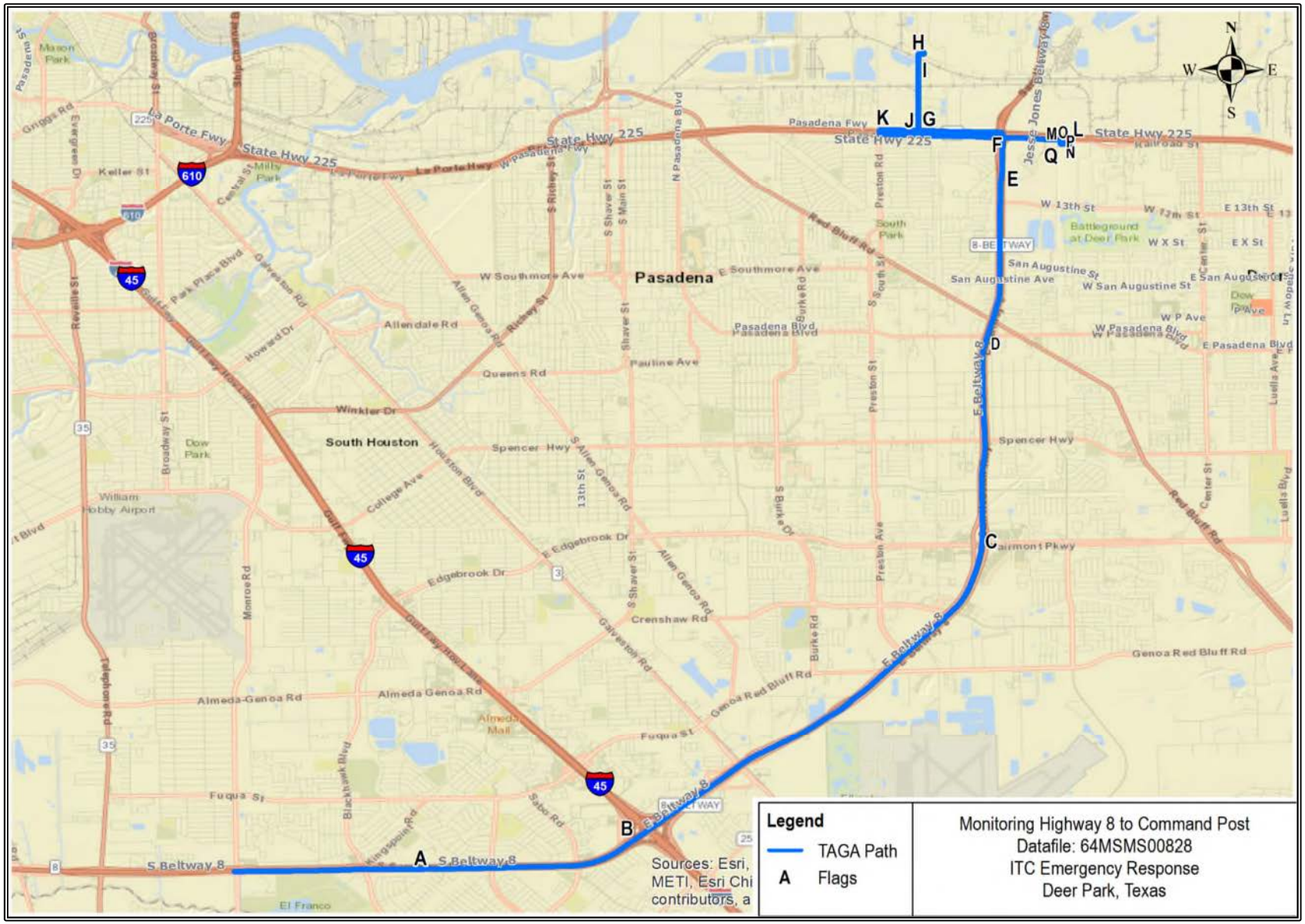


Figure 74a Monitoring Highway 8 to Command Post Path, 64MSMS00828

Figure 74b

TAGA File Event Summary
File: 64MSMS00828 Acquired on 01 April 2019 at 08:53:30
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	2.1	196	Start mobile monitoring on Highway 8 North
B	4.1	392	Cross Highway 45
C	9.6	917	Cross Fairmont Parkway
D	11.8	1118	Cross Pasadena Boulevard
E	13.6	1298	Exit onto Highway 8 Service Road
F	14.7	1398	Left turn onto Pasadena Freeway Frontage Road
G	16.4	1558	Right turn onto Ethyl Road
H	21.0	1996	Stationary at EPA Command Post
I	26.4	2507	Resume mobile monitoring at EPA Command Post
J	29.3	2791	Right turn onto Pasadena Freeway Frontage Road
K	30.4	2888	U-turn on Pasadena Freeway Frontage Road at Preston Road
L	34.8	3309	Right turn into parking lot on Pasadena Freeway Frontage Road
M	36.1	3434	End mobile monitoring on Pasadena Freeway Frontage Road
N	36.4	3466	Start ambient
O	37.5	3563	End ambient
P	39.1	3715	Start 30 mL/min spike
Q	40.1	3815	End 30 mL/min spike

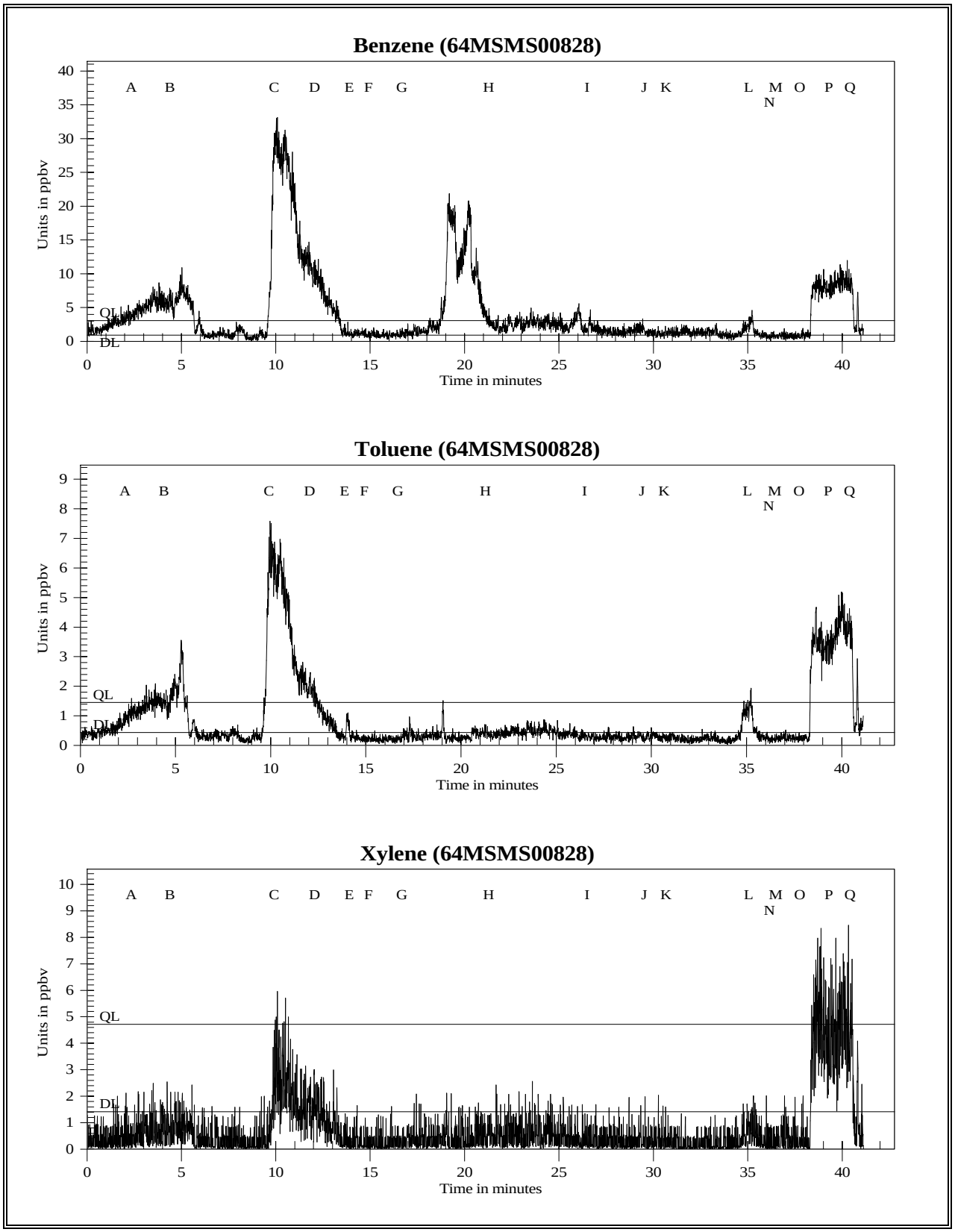


Figure 74c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

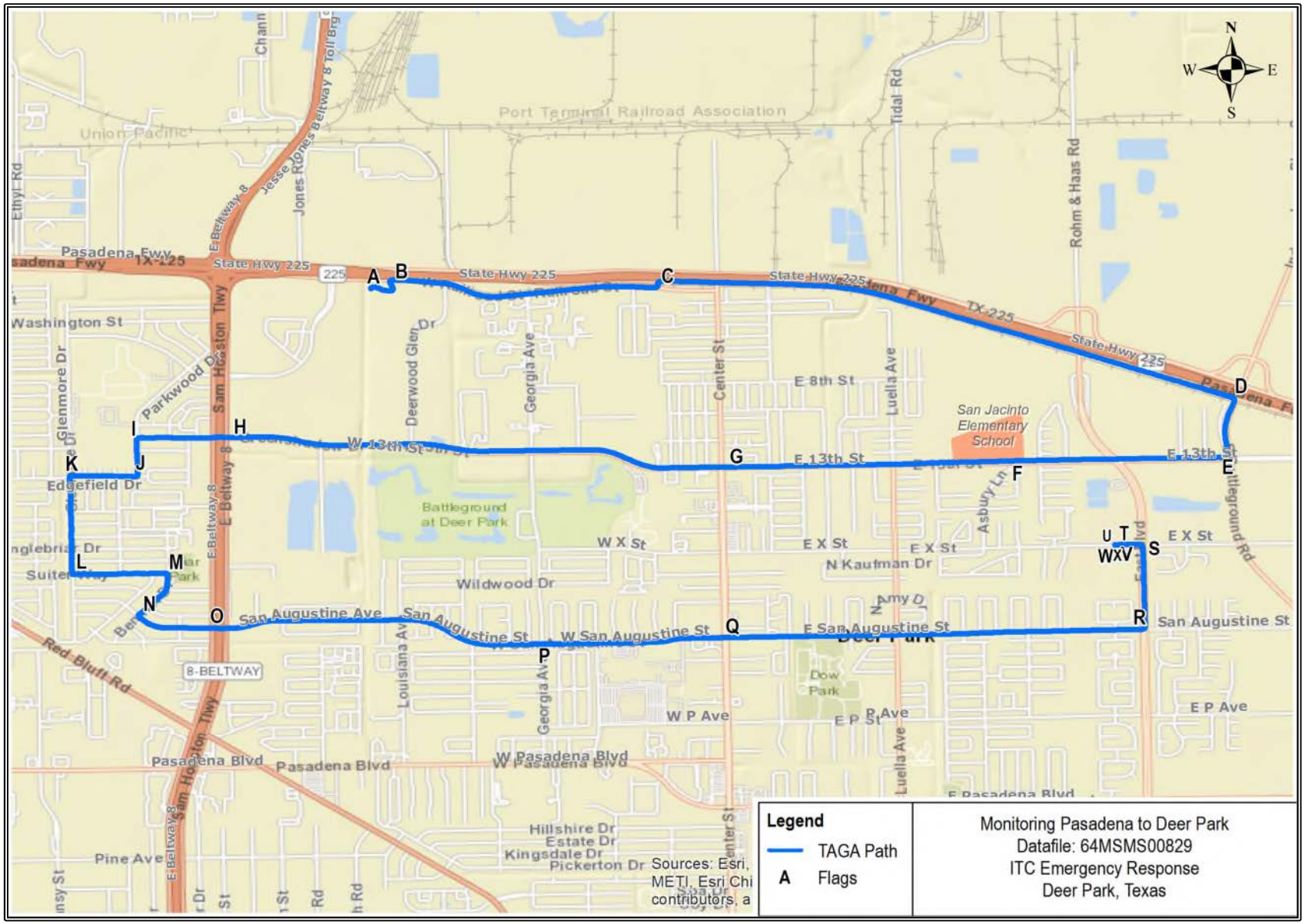


Figure 75a Monitoring Pasadena to Deer Park Path, 64MSMS00829

Figure 75b

TAGA File Event Summary
File: 64MSMS00829 Acquired on 01 April 2019 at 09:38:35
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	0.7	66	Start mobile monitoring on Pasadena Freeway Frontage Road
B	2.7	254	Right turn onto Railroad Street
C	5.5	528	Merge onto Pasadena Freeway Frontage Road
D	12.4	1176	Right turn onto Battleground Road
E	13.8	1309	Right turn onto E 13th Street
F	16.7	1584	Passing San Jacinto Elementary School
G	19.4	1850	Cross Center Street
H	23.9	2276	Continuing onto Greenshadow Drive
I	26.2	2492	Left turn onto Parkwood Drive
J	27.1	2574	Right turn onto Edgefield Drive
K	28.3	2693	Left turn onto Glenmore Drive
L	30.5	2897	Left turn onto Suiter Way
M	32.5	3086	Right turn onto Bennett Drive
N	33.8	3213	Right turn onto Ramsey Drive
O	36.2	3445	Continue onto San Augustine Avenue
P	39.4	3746	Cross Georgia Avenue
Q	42.0	3992	Cross Center Street
R	47.3	4493	Left turn onto East Boulevard
S	48.4	4605	Left turn onto East X Street
T	48.9	4648	End mobile monitoring on East X Street
U	49.2	4681	Start ambient
V	50.2	4776	End ambient
W	51.6	4902	Start 30 mL/min spike
X	52.6	4998	End 30 mL/min spike

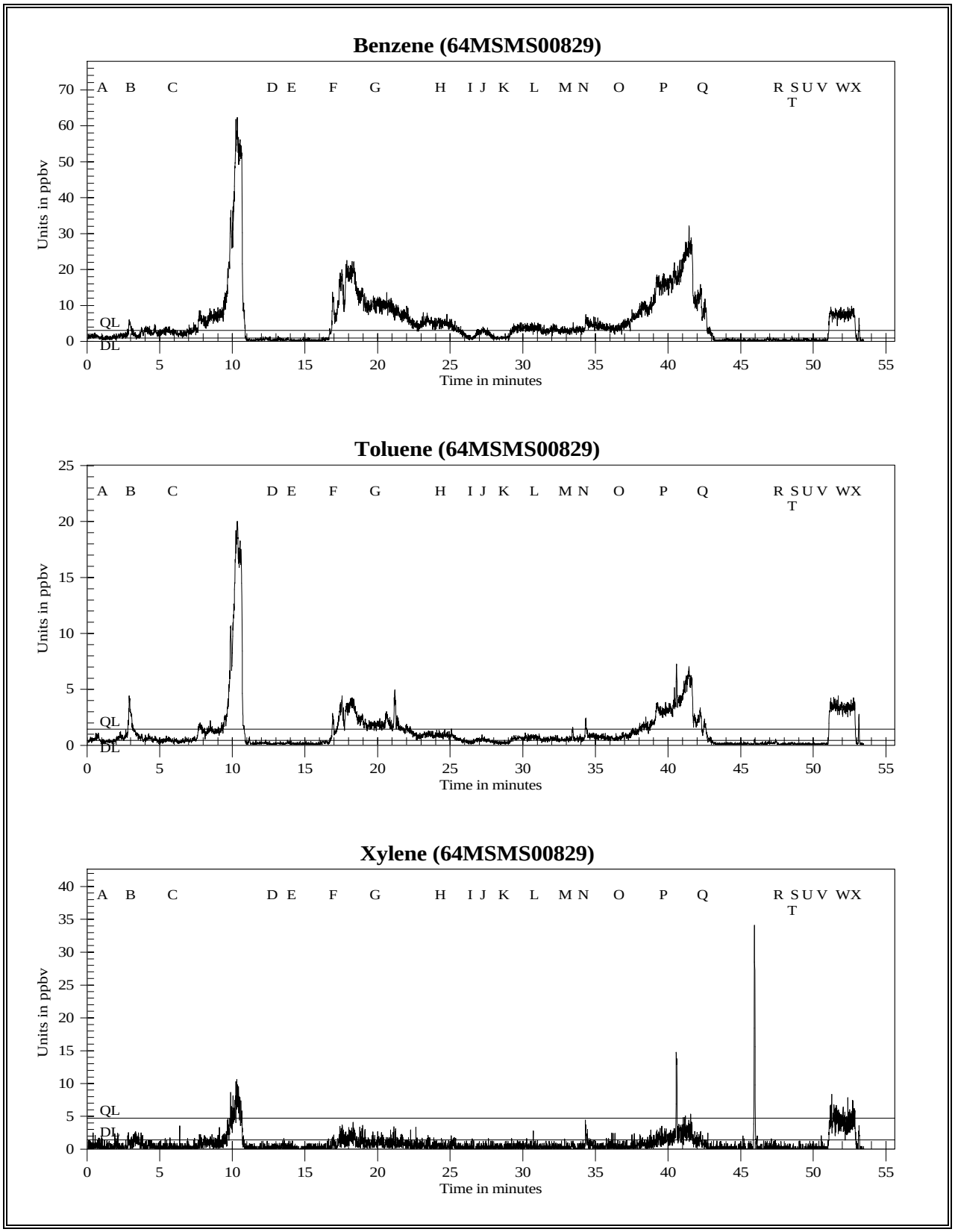


Figure 75c Mobile Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

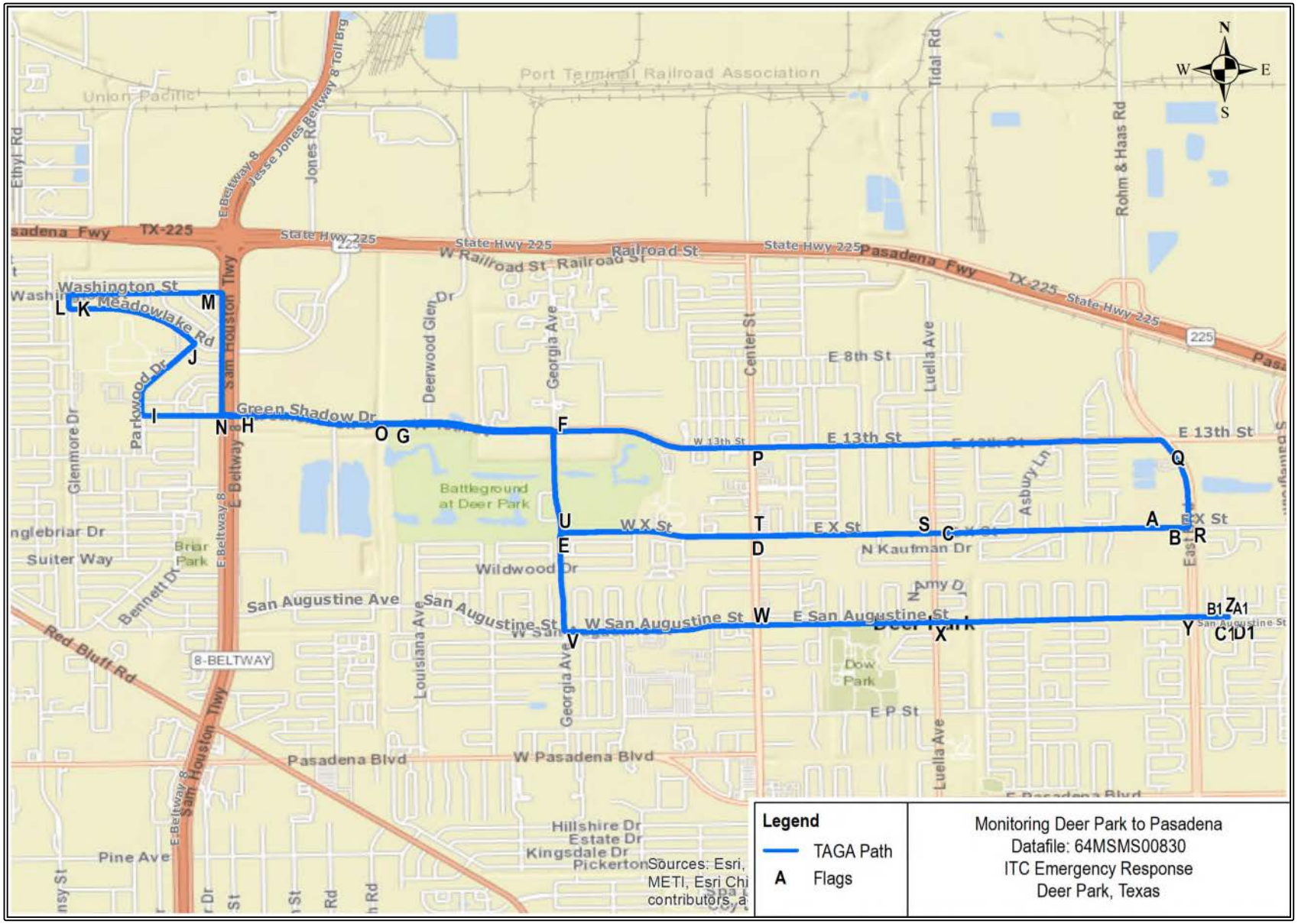


Figure 76a Monitoring Deer Park to Pasadena Path, 64MSMS00830

Figure 76b

TAGA File Event Summary
File: 64MSMS00830 Acquired on 01 April 2019 at 10:35:24
Title: Monitoring Deer Park to Pasadena

Flag	Time	Sequence	Description
A	0.6	59	Start mobile monitoring on East X Street
B	0.9	91	Continuing onto East X Street
C	3.8	364	Cross Luella Avenue
D	7.1	676	Cross Center Street
E	9.3	882	Right turn onto Georgia Avenue
F	11.2	1067	Left turn onto W 13th Street
G	12.9	1229	Continuing onto Greenshadow Drive
H	14.5	1382	Cross Highway 8
I	16.5	1565	Right turn onto Parkwood Drive
J	18.1	1721	Left turn onto Meadowlark Lane
K	20.4	1940	Right turn onto Glenmore Drive
L	20.9	1988	Right turn onto Washington Drive
M	23.8	2263	Right turn onto Highway 8 Service Road
N	26.0	2469	Left turn onto Greenshadow Drive
O	28.0	2664	Continuing onto W 13th Street
P	32.5	3086	Cross Center street
Q	37.5	3566	Right turn onto East Boulevard
R	38.5	3658	Right turn onto East X Street
S	41.7	3970	Cross Luella Avenue
T	44.7	4249	Cross Center Street
U	47.1	4475	Left turn onto Georgia Avenue
V	48.6	4626	Left turn onto San Augustine Avenue
W	51.5	4894	Cross Center Street
X	53.7	5108	Cross Luella Avenue
Y	57.1	5431	Cross East Boulevard
Z	57.6	5478	End mobile monitoring on San Augustine Avenue
A1	58.1	5529	Start ambient
B1	59.2	5629	End ambient
C1	61.0	5797	Start 30 mL/min spike
D1	62.0	5898	End 30 mL/min spike

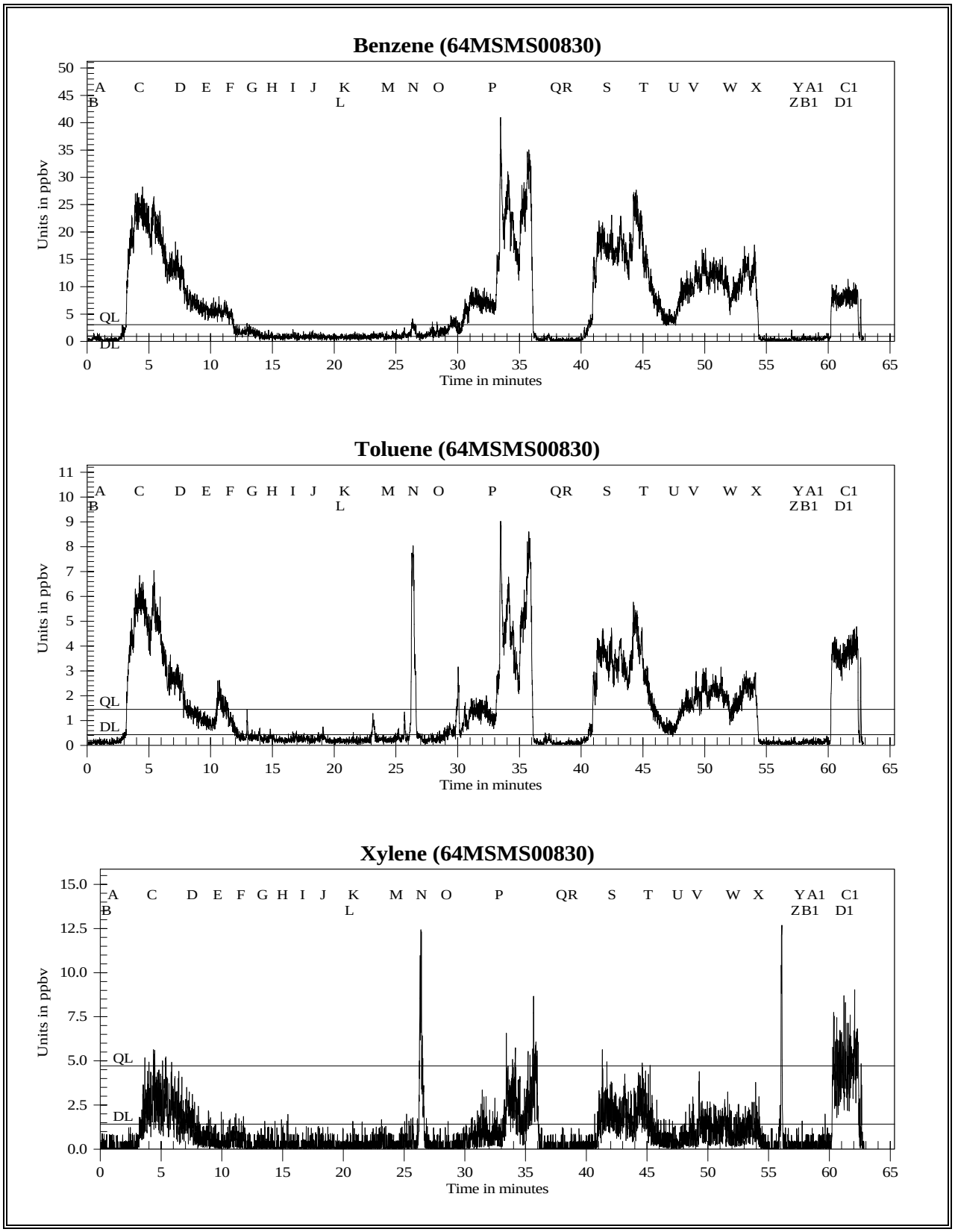


Figure 76c Mobile Monitoring Deer Park to Pasadena in ppbv for Benzene, Toluene, and Xylenes

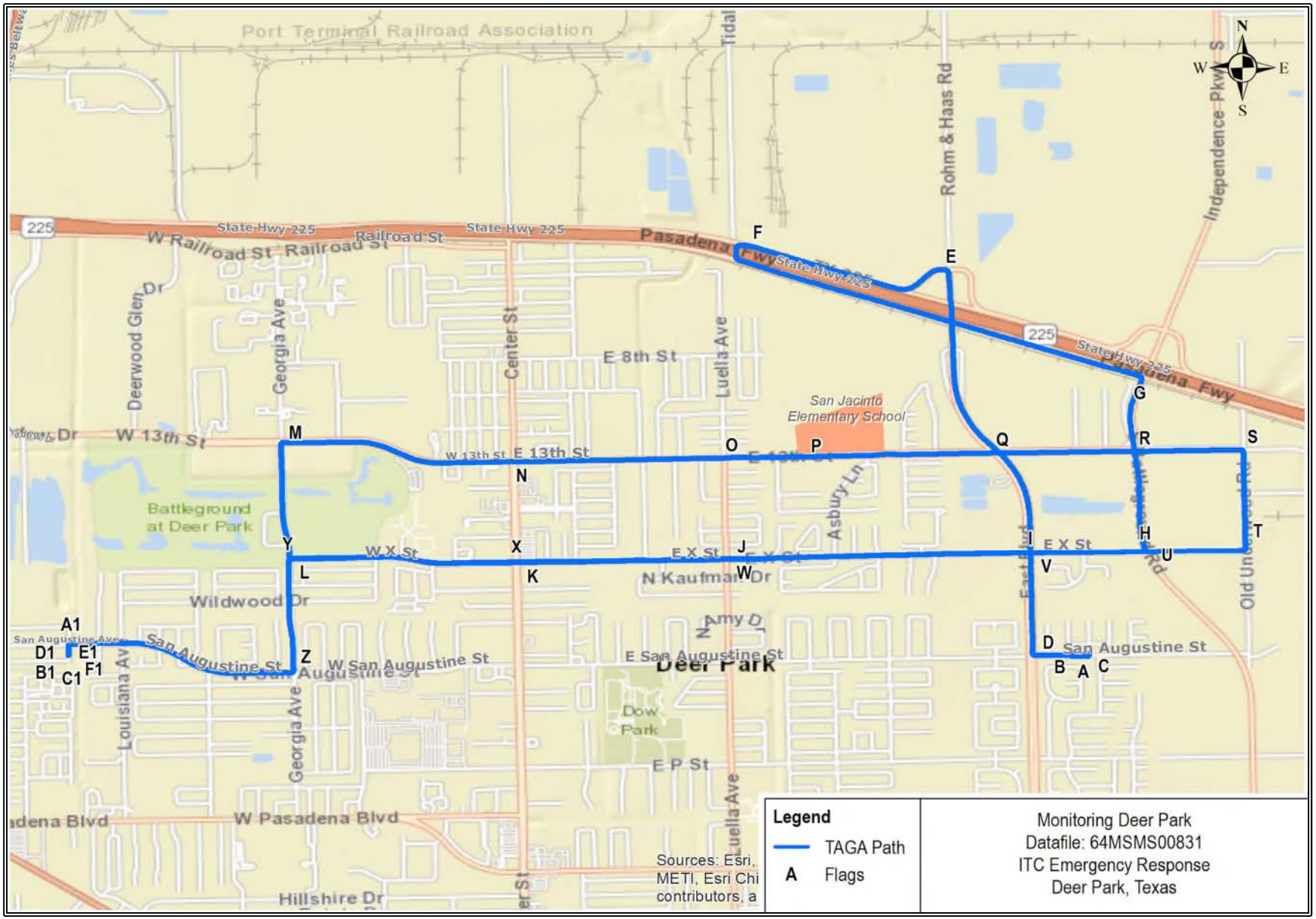


Figure 77a Monitoring Deer Park Path, 64MSMS00831

Figure 77b

TAGA File Event Summary
File: 64MSMS00831 Acquired on 01 April 2019 at 11:42:28
Title: Monitoring Deer Park

Flag	Time	Sequence	Description
A	0.8	81	Start mobile monitoring on San Augustine Avenue
B	1.2	113	Continuing on San Augustine Avenue
C	2.0	192	U-turn on San Augustine Avenue
D	2.9	272	Right turn onto East Boulevard
E	7.4	707	Left merge onto Pasadena Freeway Frontage Road
F	9.0	858	U-turn on Pasadena Freeway Frontage Road
G	13.0	1233	Right turn onto Battleground Road
H	14.7	1395	Right turn on East X Street
I	16.6	1582	Cross East Boulevard
J	19.9	1894	Cross Luella Avenue
K	23.9	2271	Cross Center Street
L	26.3	2499	Right turn onto Georgia Avenue
M	28.0	2664	Right turn onto W 13th Street
N	31.6	3005	Cross Center Street
O	33.9	3224	Cross Luella Avenue
P	34.9	3323	Passing San Jacinto Elementary School
Q	37.4	3553	Cross East Boulevard
R	39.2	3731	Cross Battleground Road
S	40.7	3872	Right turn onto Old Underwood Road
T	42.1	4002	Right turn onto X Street
U	43.9	4173	Cross Battleground Road
V	45.9	4361	Cross East Boulevard
W	49.7	4723	Cross Luella Avenue
X	53.8	5117	Cross Center Street
Y	57.7	5482	Left turn onto Georgia Avenue
Z	59.9	5700	Right turn onto San Augustine Avenue
A1	62.8	5971	Left turn onto Jane Lane
B1	63.1	6004	End mobile monitoring on Jane Lane
C1	63.8	6065	Start ambient
D1	64.8	6160	End ambient
E1	66.3	6302	Start 30 mL/min spike
F1	67.3	6397	End 30 mL/min spike

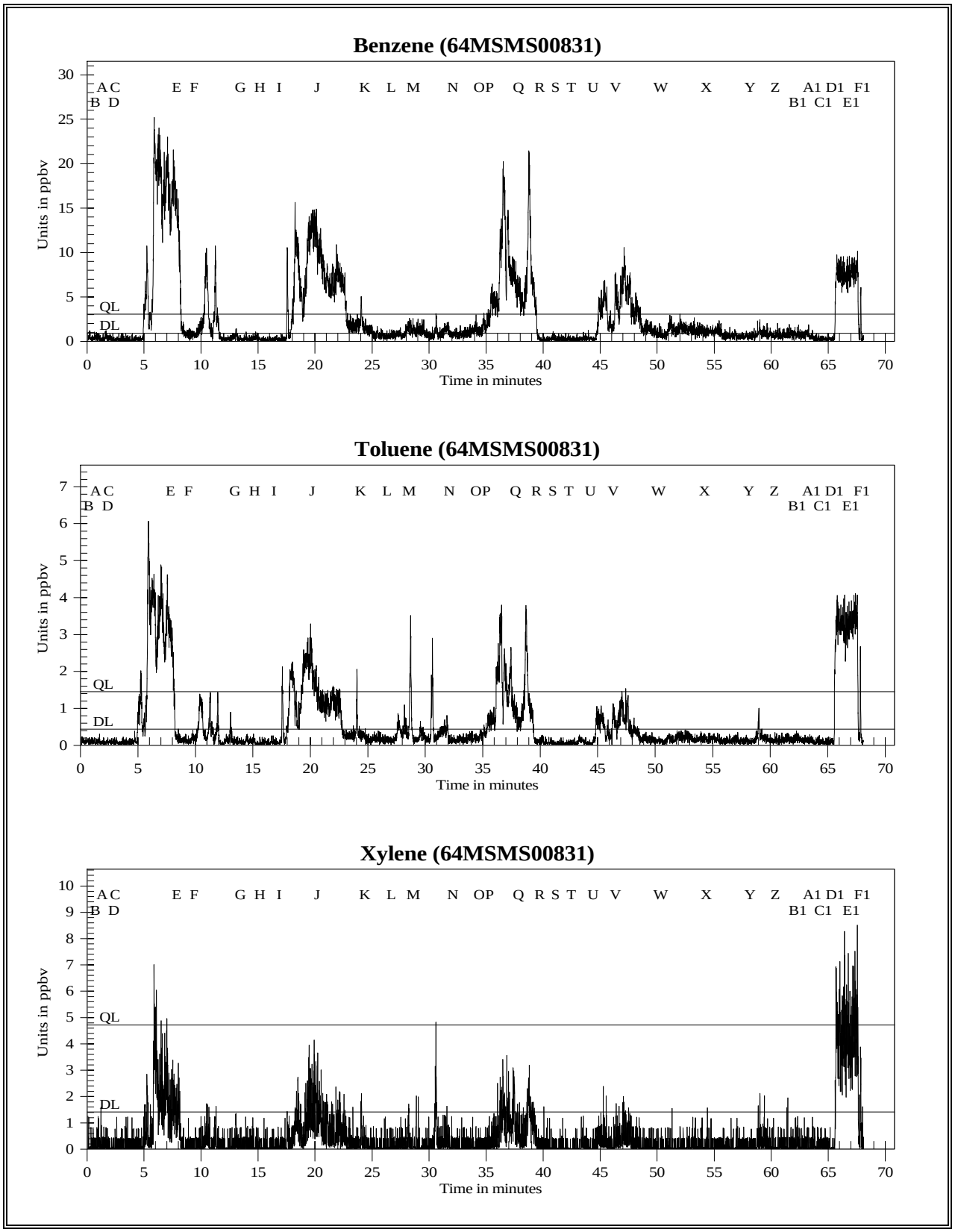


Figure 77c Mobile Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

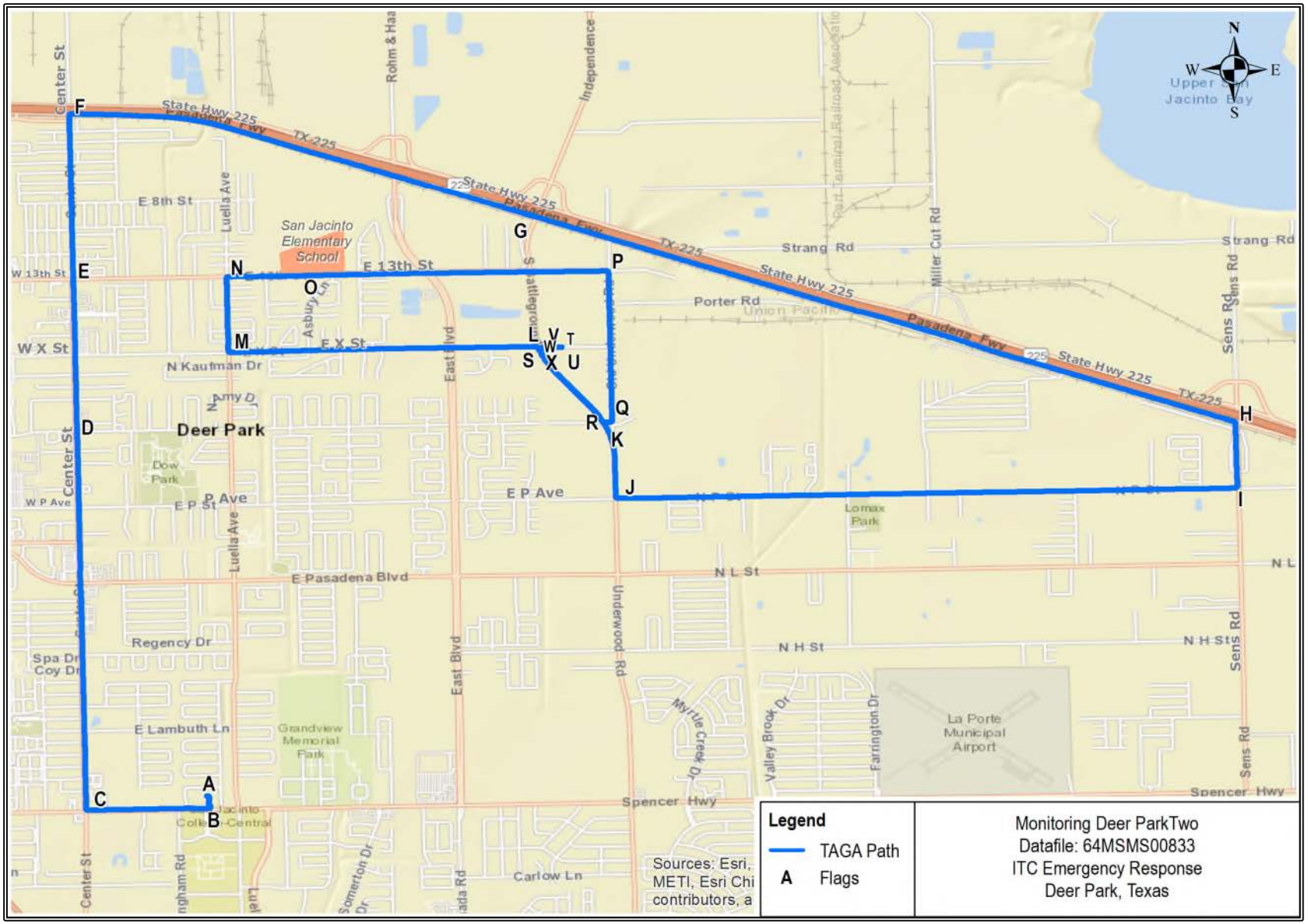


Figure 78a Monitoring Deer Park Two Path, 64MSMS00833

Figure 78b

TAGA File Event Summary
File: 64MSMS00833 Acquired on 01 April 2019 at 14:20:03
Title: Monitoring Deer Park Two

Flag	Time	Sequence	Description
A	0.6	61	Start mobile monitoring near Academy Lane and Spencer Highway
B	5.5	522	Right turn onto Spencer Highway
C	8.4	804	Right turn onto Center Street
D	13.6	1294	Cross San Augustine Avenue
E	16.0	1523	Cross 13th Street
F	18.8	1785	Right turn onto Pasadena Freeway Frontage Road
G	24.1	2290	Cross Battleground Road
H	30.9	2940	Right turn onto Sens Road
I	31.9	3030	Right turn onto North P Street
J	38.5	3661	Right turn onto Underwood Road
K	40.3	3832	Continuing onto Battleground Road
L	41.5	3948	Left turn onto East X Street
M	45.7	4342	Right turn onto Luella Avenue
N	47.3	4499	Right turn onto E 13th Street
O	48.5	4608	Passing San Jacinto Elementary School
P	53.3	5068	Right turn onto Old Underwood Road
Q	55.4	5268	Right turn onto San Augustine Avenue
R	55.7	5295	Right turn onto Battleground Road
S	57.1	5426	Right turn onto East Avenue X
T	57.5	5469	End mobile monitoring on East Avenue X near Battleground Road
U	58.6	5572	Start ambient
V	60.3	5738	End ambient
W	62.3	5925	Start 30 mL/min spike
X	63.4	6025	End 30 mL/min spike

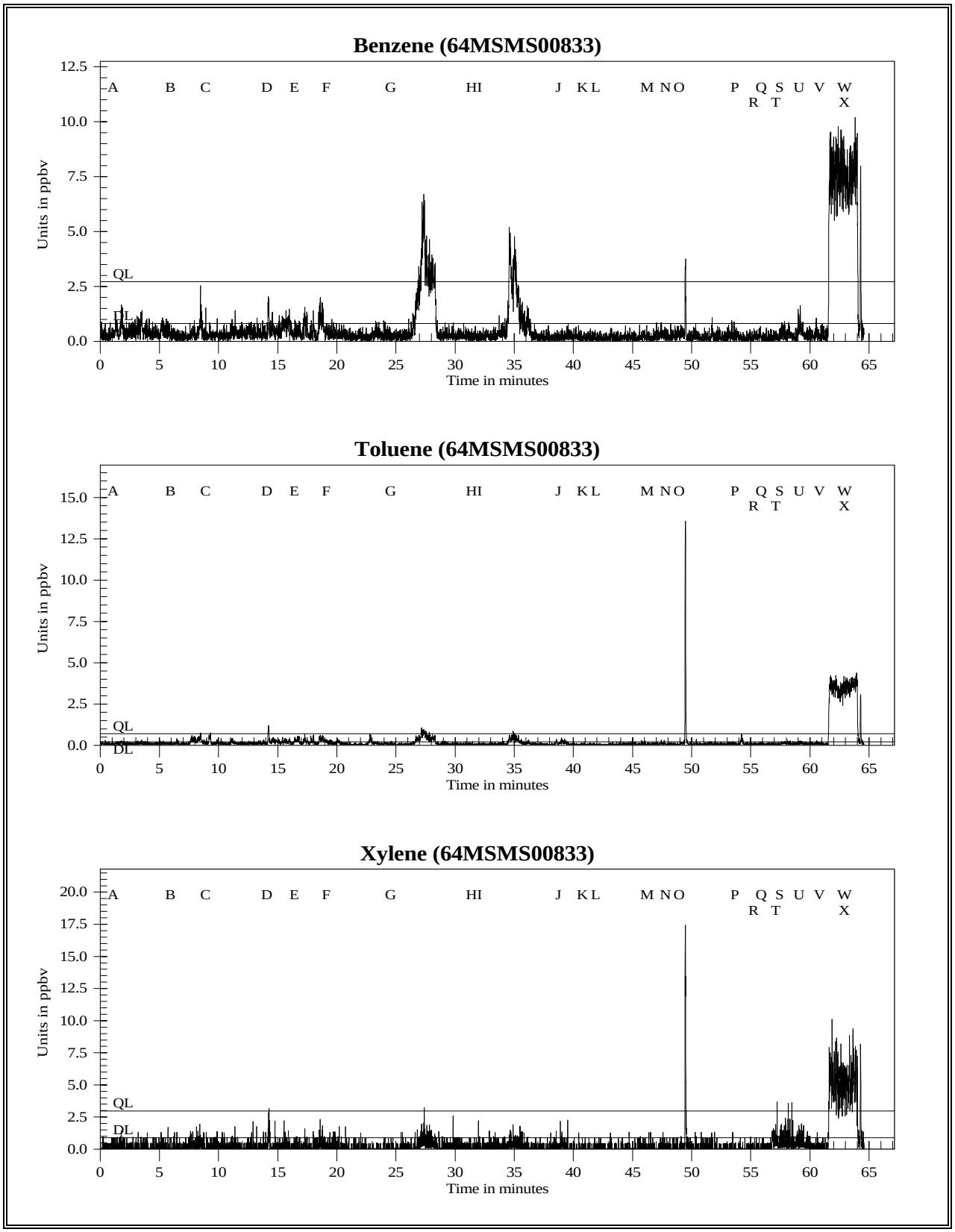
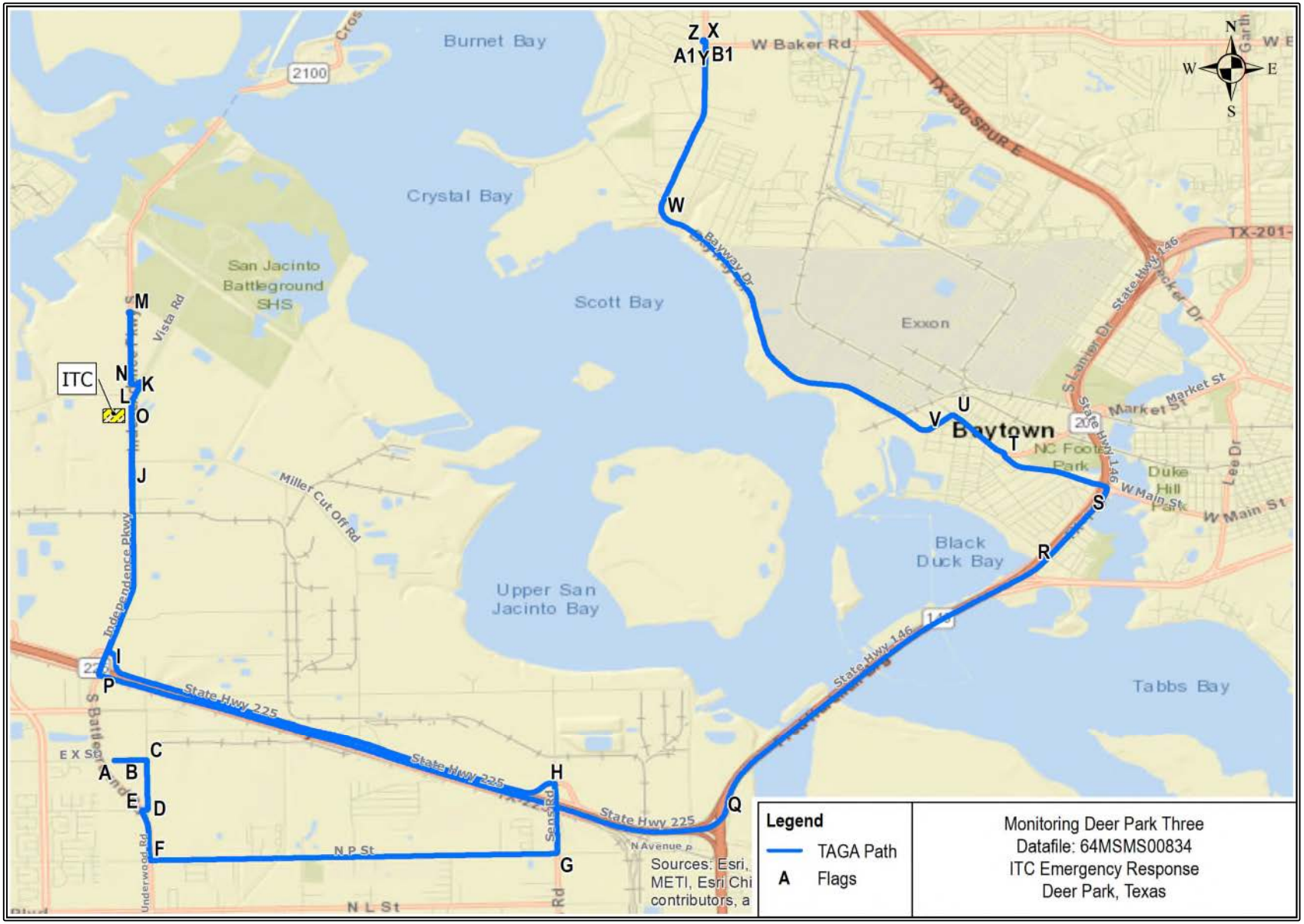


Figure 78c Mobile Monitoring Deer Park Two in ppbv for Benzene, Toluene, and Xylenes



Legend
TAGA Path
A Flags

Monitoring Deer Park Three
Datafile: 64MSMS00834
ITC Emergency Response
Deer Park, Texas

Sources: Esri, METI, Esri Chi contributors, a

Figure 79a Monitoring Deer Park Three Path, 64MSMS00834

Figure 79b

TAGA File Event Summary
File: 64MSMS00834 Acquired on 01 April 2019 at 15:27:18
Title: Monitoring Deer Park Three

Flag	Time	Sequence	Description
A	0.8	77	Start mobile monitoring on East Avenue X
B	1.5	146	Continuing on East Avenue X
C	2.2	207	Right turn onto Old Underwood Road
D	3.5	338	Right turn onto San Augustine Street
E	4.3	413	Left turn onto Old Underwood Road
F	5.5	528	Left turn onto North P Street
G	11.3	1073	Left turn onto Sens Road
H	14.1	1338	Left merge onto Pasadena Freeway Frontage Road
I	19.5	1859	Right turn onto Independence Parkway
J	23.7	2255	Cross Miller Cut-off Road
K	25.5	2427	Right turn onto Vista Road
L	26.4	2507	Right turn onto Independence Parkway
M	27.8	2645	U-turn on Independence Parkway
N	29.3	2786	Left turn onto Vista Road
O	30.4	2894	Left turn onto Independence Parkway
P	35.8	3406	Left turn onto Pasadena Freeway Frontage Road
Q	40.4	3846	Merge onto Highway 146 North
R	43.7	4152	Exit onto Robert C Lanier Drive
S	46.7	4440	Left turn onto W Main Street
T	49.2	4680	Left turn onto Market Street
U	50.5	4802	Left turn to continue onto Market Street
V	51.4	4883	Right turn onto Bayway Drive
W	56.4	5364	Right turn to continue onto Bayway Drive
X	59.7	5672	End mobile monitoring on Bayway Drive
Y	60.1	5713	Start ambient
Z	61.1	5811	End ambient
A1	62.7	5962	Start 30 mL/min spike
B1	63.8	6066	End 30 mL/min spike

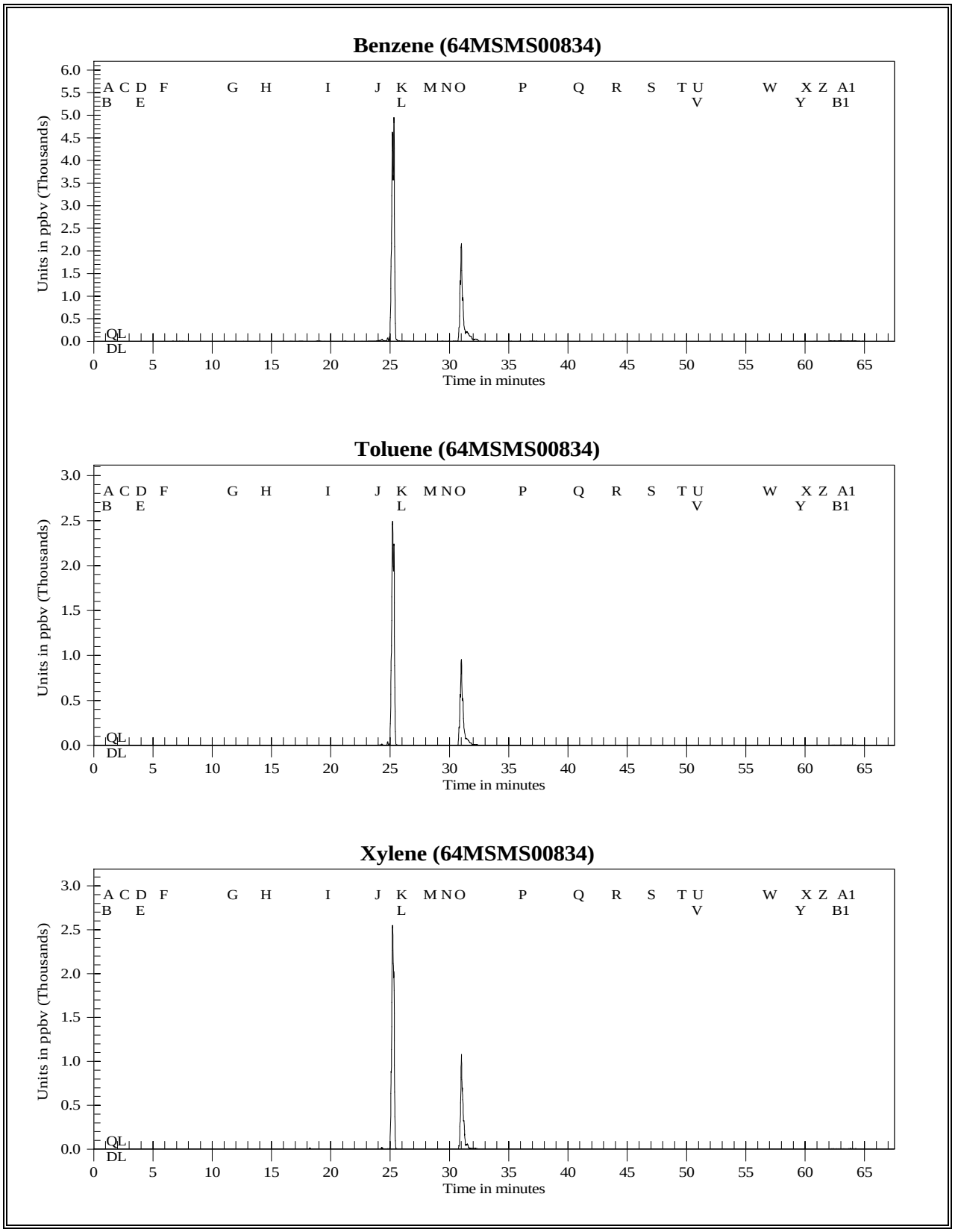


Figure 79c Mobile Monitoring Deer Park Three in ppbv for Benzene, Toluene, and Xylenes

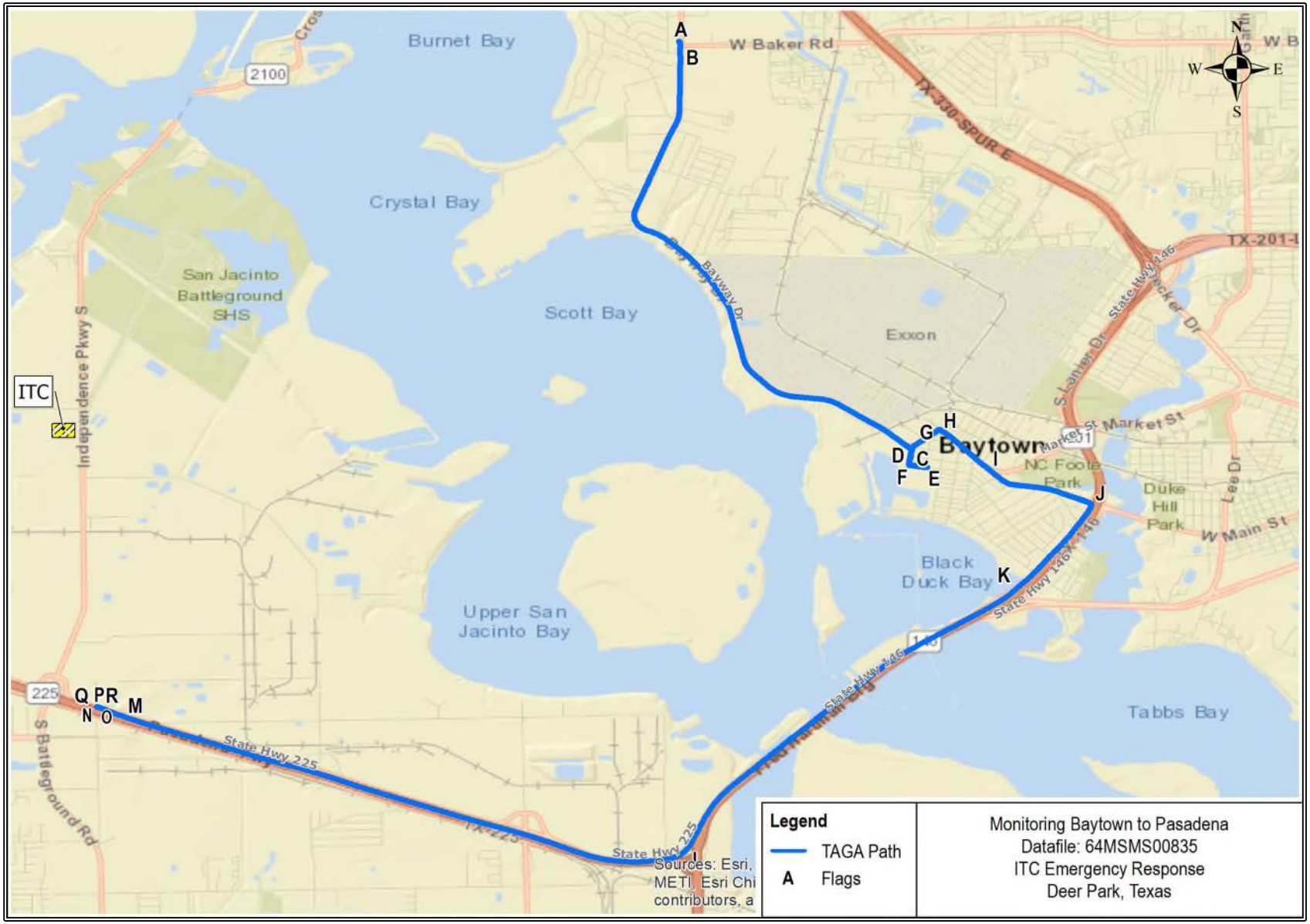


Figure 80a Monitoring Baytown to Pasadena Path, 64MSMS00835

Figure 80b

TAGA File Event Summary
File: 64MSMS00835 Acquired on 01 April 2019 at 16:39:22
Title: Monitoring Baytown to Pasadena

Flag	Time	Sequence	Description
A	0.6	59	Start mobile monitoring on Bayway Drive
B	1.8	175	Continuing onto Bayway Drive
C	8.2	779	Right turn onto Nevada Street
D	9.0	855	Left turn onto Michigan Street
E	12.8	1221	U-turn on Michigan Street
F	14.4	1371	Right turn onto Nevada Street
G	15.4	1468	Right turn onto Market Street
H	16.0	1525	Continuing onto Market Street
I	17.3	1641	Right turn onto W Main Street
J	19.0	1804	Right turn onto Robert C Lanier Drive
K	20.0	1907	Merge onto Highway 146 South
L	22.8	2168	Merge tonto Highway 225 West
M	26.5	2523	Exit onto Pasadena Freeway Frontage Road
N	27.0	2564	End mobile monitoring on Pasadena Freeway Frontage Road
O	27.4	2602	Start ambient
P	28.4	2701	End ambient
Q	29.7	2824	Start 30 mL/min spike
R	30.7	2924	End 30 mL/min spike

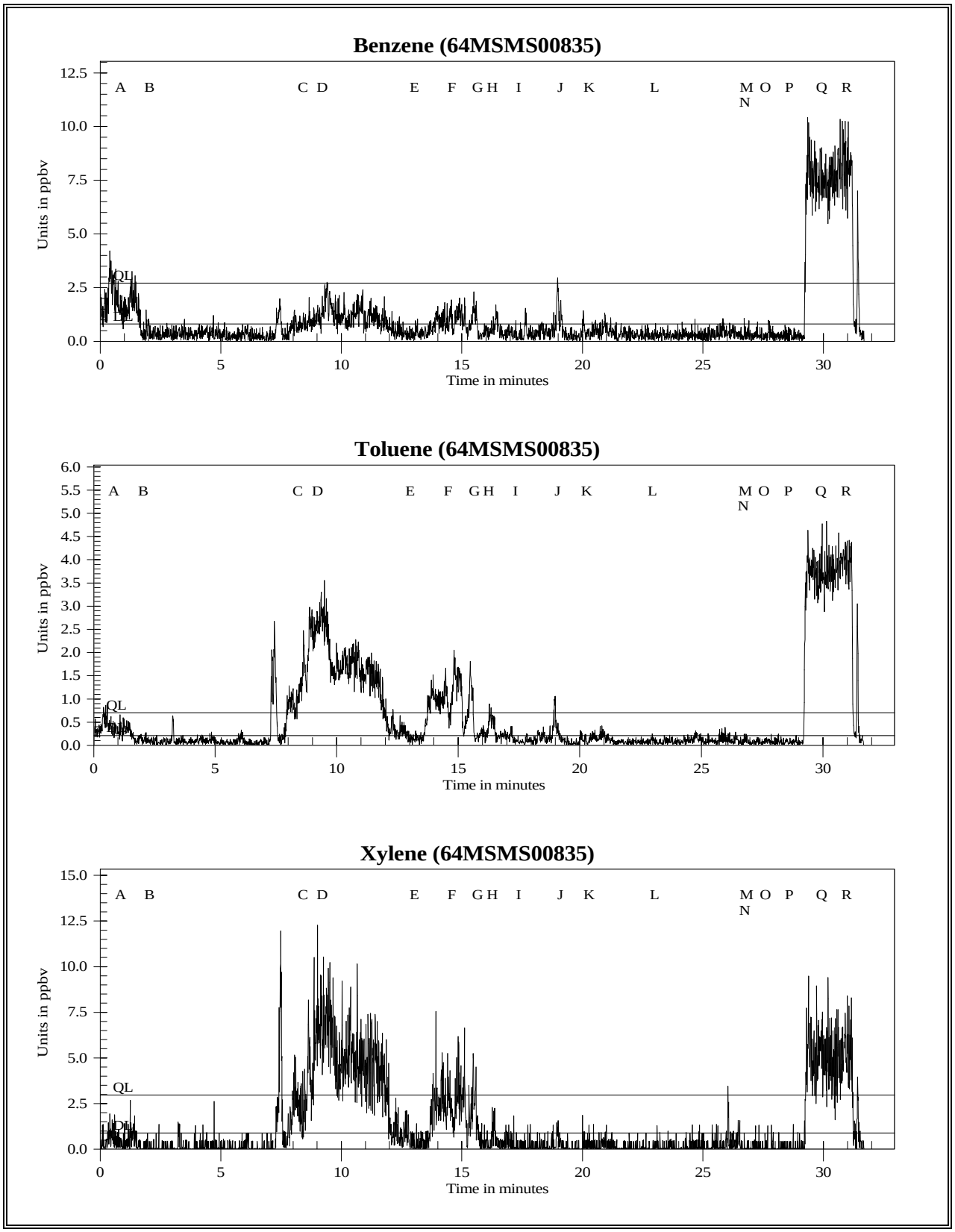


Figure 80c Mobile Monitoring Baytown to Pasadena in ppbv for Benzene, Toluene, and Xylenes

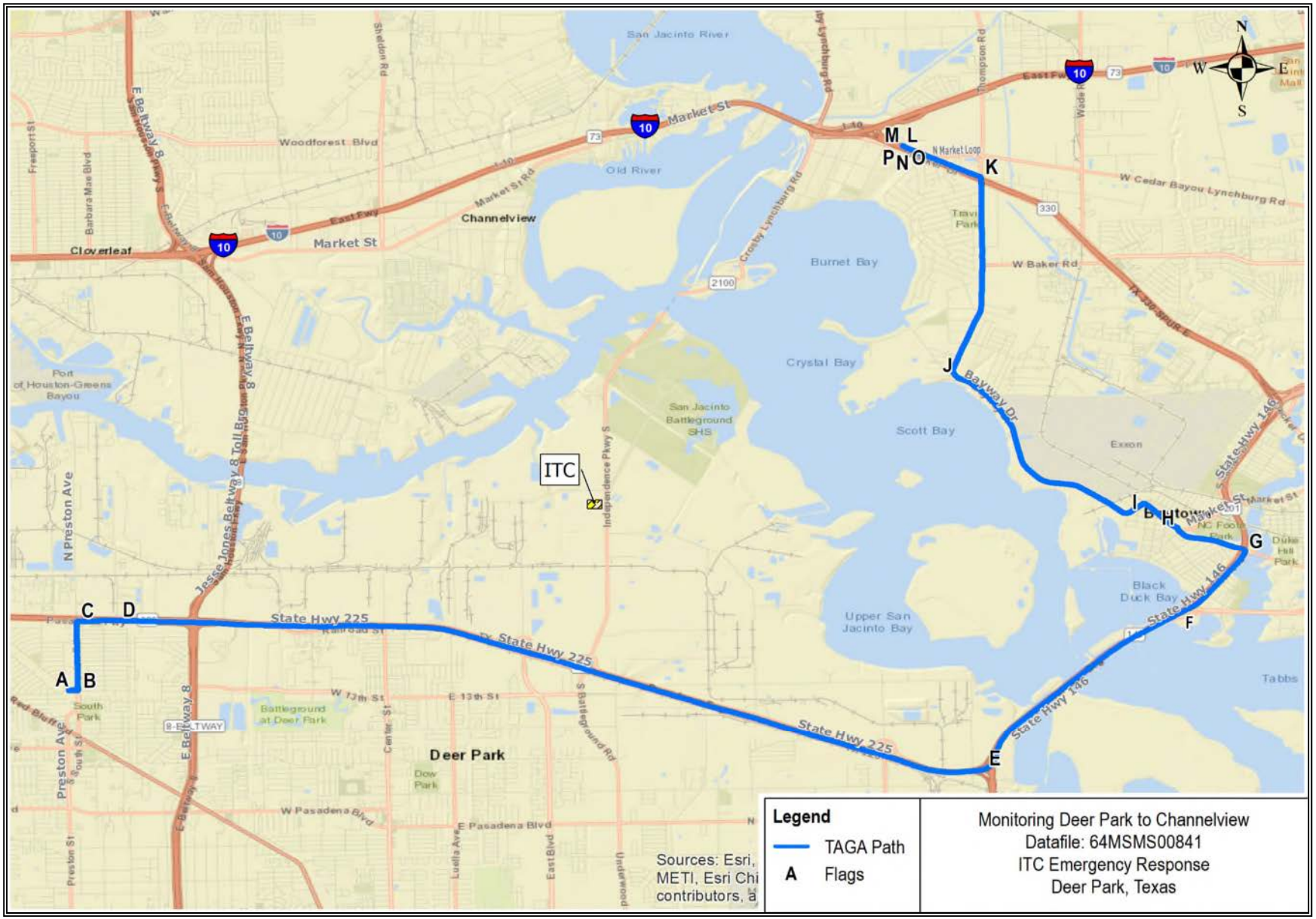


Figure 81a Monitoring Deer Park to Channelview Path, 64MSMS00841

Figure 81b

TAGA File Event Summary
File: 64MSMS00841 Acquired on 02 April 2019 at 09:34:57
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	21.5	2048	Start mobile monitoring near Fleming Drive and Preston Road
B	26.7	2541	Left turn onto Preston Road
C	29.2	2774	Right turn onto Pasadena Freeway Frontage Road
D	29.8	2838	Merge onto Highway 225 East
E	38.1	3626	Merge onto Highway 146 North
F	40.8	3876	Exit onto Robert C Lanier Drive
G	43.8	4162	Left turn onto W Main Street
H	45.8	4358	Left turn onto Market Street
I	47.9	4551	Right turn onto Bayway Drive
J	53.6	5098	Right turn to continue onto Bayway Drive
K	59.9	5692	Left turn onto Decker Street
L	61.3	5828	End mobile monitoring on Decker Street
M	61.8	5876	Start ambient
N	63.1	5998	End ambient
O	64.6	6142	Start 30 mL/min spike
P	65.6	6237	End 30 mL/min spike

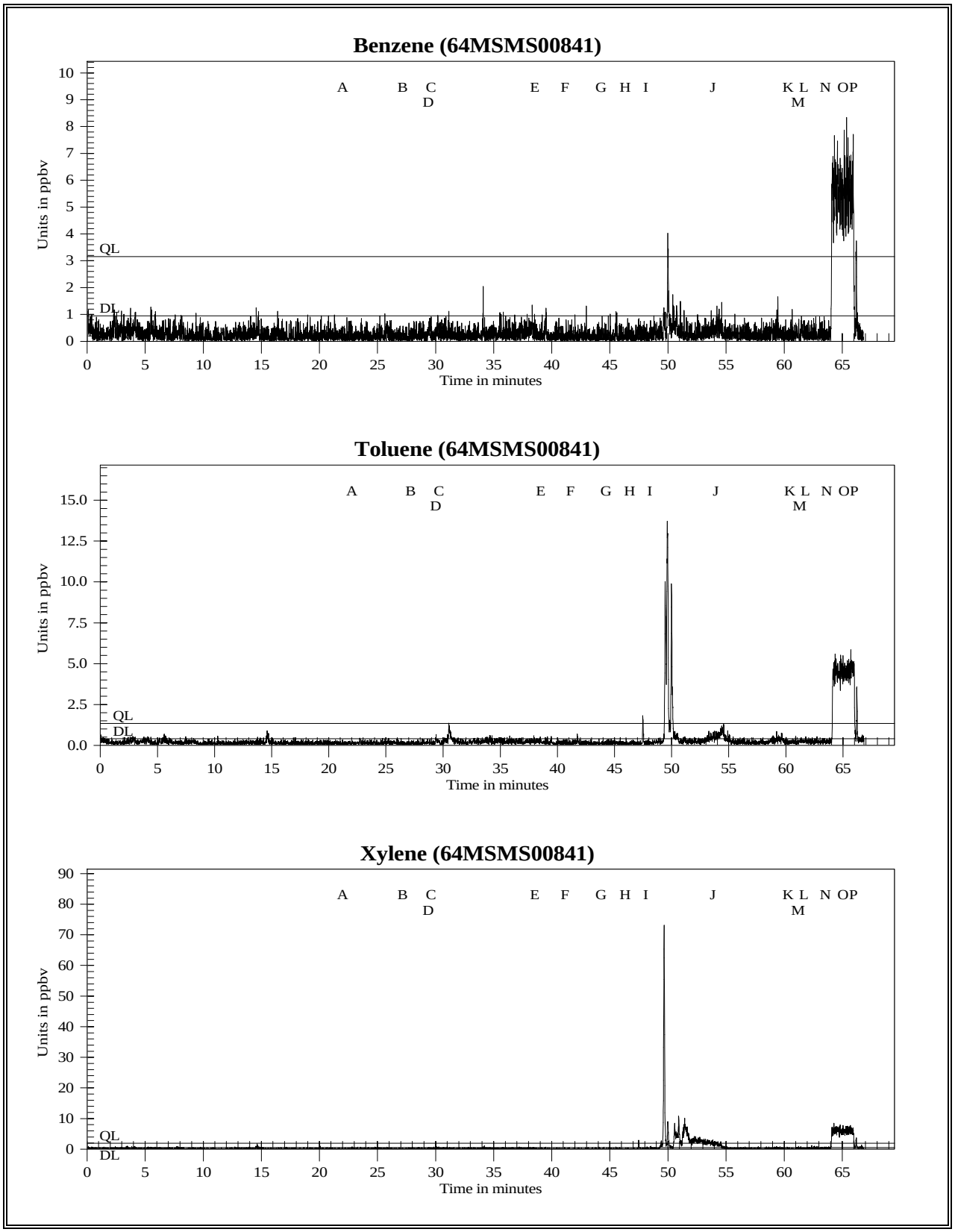


Figure 81c Mobile Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

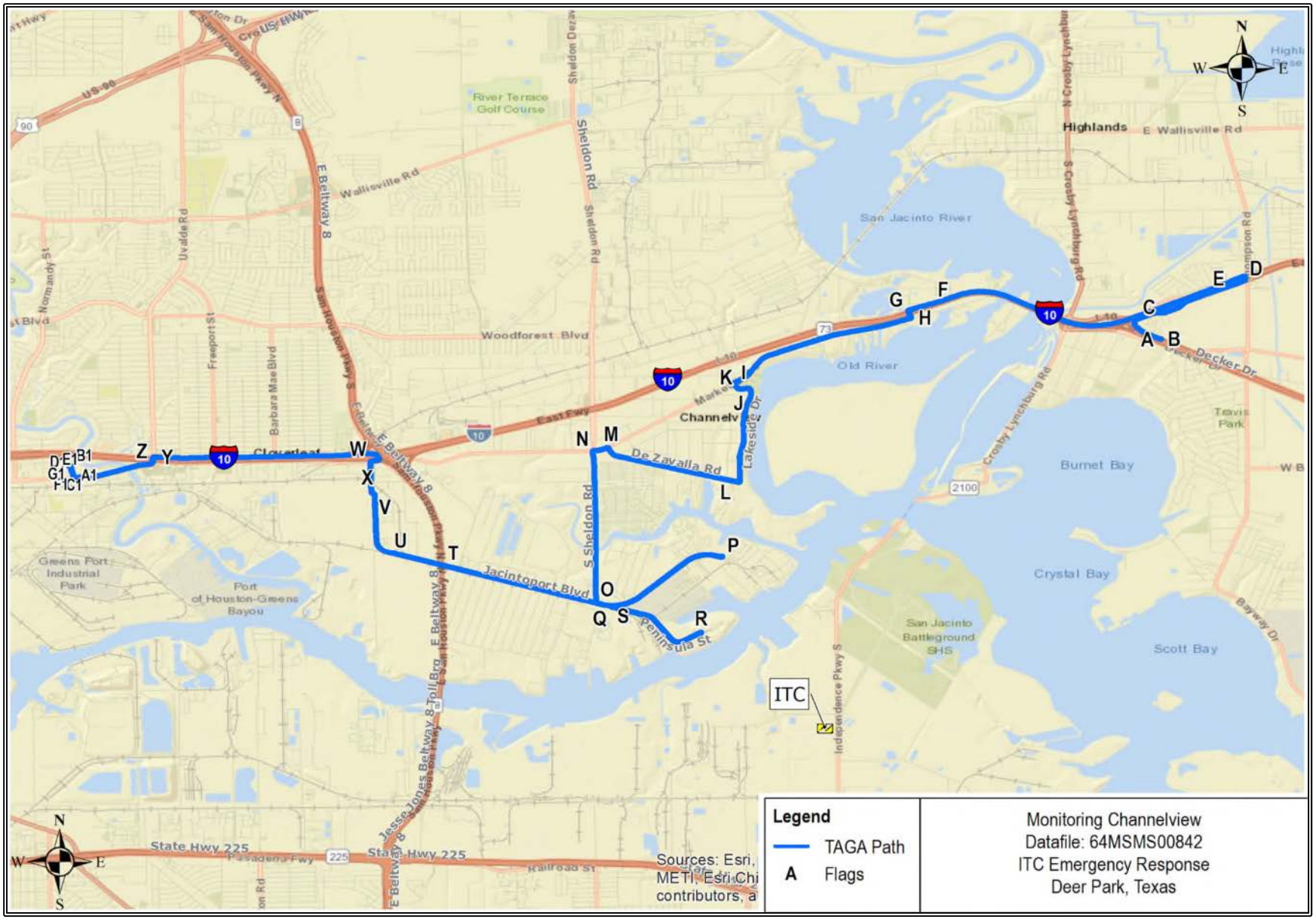


Figure 82a Monitoring Channelview Path, 64MSMS00842

Figure 82b

TAGA File Event Summary
File: 64MSMS00842 Acquired on 02 April 2019 at 10:44:39
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	1.0	96	Start mobile monitoring on Decker Drive
B	1.7	159	Continuing onto Decker Drive
C	2.5	234	Right turn onto East Freeway Service Road
D	4.3	414	U-turn on East Freeway Service Road at Thompson Road
E	5.6	535	Merge onto Highway 10 West
F	8.9	848	Exit onto East Freeway Service Road
G	9.6	912	Left turn onto Monmouth Street
H	10.0	951	Right turn onto Market Street
I	14.7	1401	Left turn onto Lakeside Drive
J	16.1	1527	Stationary on Lakeside Drive
K	17.9	1707	Resume mobile monitoring on Lakeside Drive
L	22.0	2095	Right turn onto Dezavala Road
M	25.2	2398	Left turn onto Market street
N	27.4	2609	Left turn onto Sheldon Road
O	31.5	3000	Left turn onto Jacintoport Boulevard
P	35.5	3373	U-turn on Jacintoport Boulevard
Q	39.0	3707	Left turn onto San Jacinto Boulevard
R	43.6	4144	U-turn on San Jacinto Boulevard/Peninsula Street
S	48.1	4578	Left turn onto Jacintoport Boulevard
T	52.0	4944	Cross Highway 8
U	54.1	5142	Continuing onto Jacintoport Boulevard
V	57.8	5493	Merge onto Penn City Road
W	59.3	5642	Right turn onto East Freeway Service Road
X	59.6	5668	U-turn on East Freeway Service Road
Y	70.2	6675	Left turn onto Uvalde Road
Z	70.6	6714	Right turn onto Market Street
A1	73.4	6976	Right turn onto Lear Street
B1	75.7	7194	U-turn on Lear Street
C1	77.2	7343	End mobile monitoring on Lear Street
D1	77.7	7388	Start ambient
E1	78.9	7502	End ambient
F1	80.3	7632	Start 30 mL/min spike
G1	81.5	7751	End 30 mL/min spike

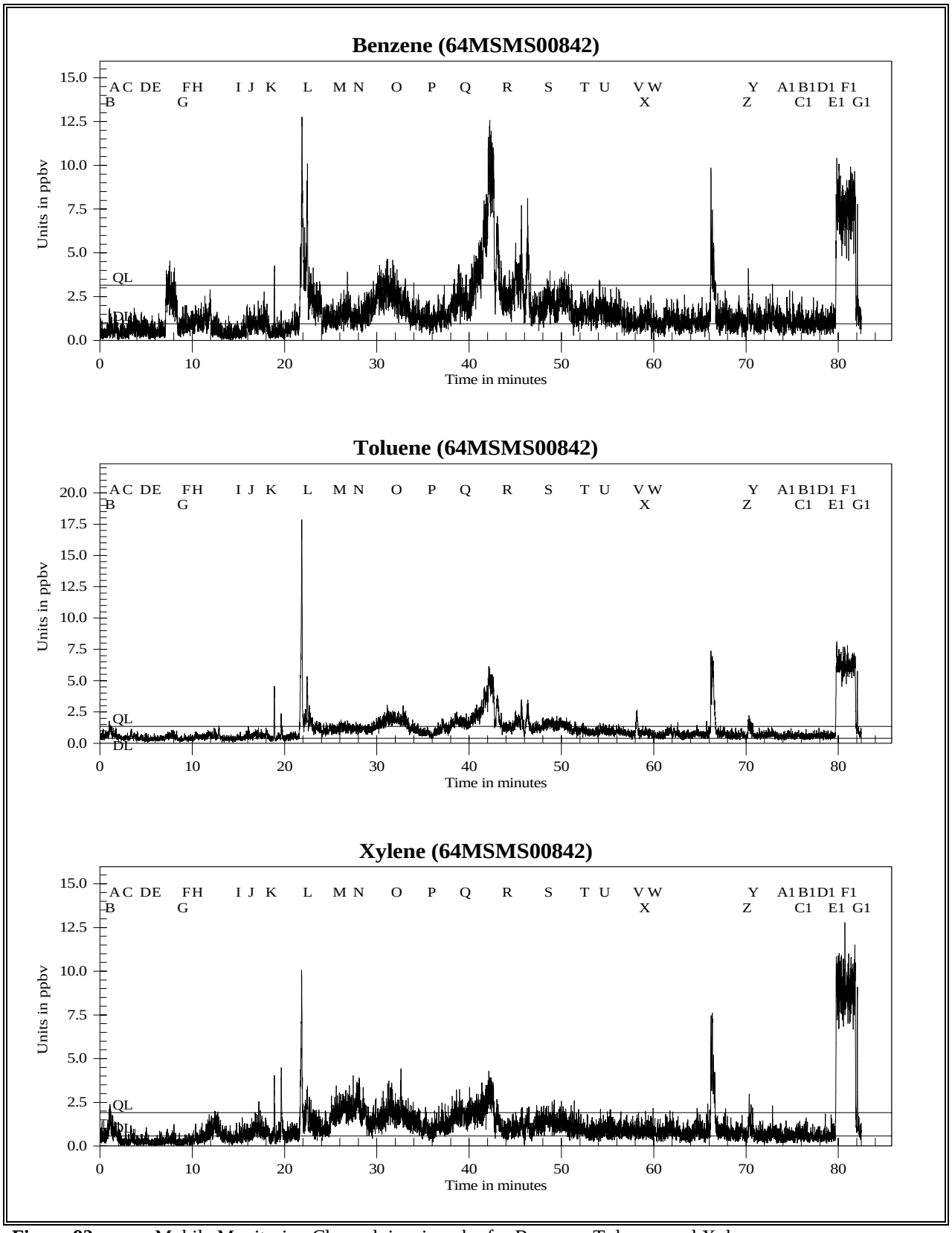


Figure 82c Mobile Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

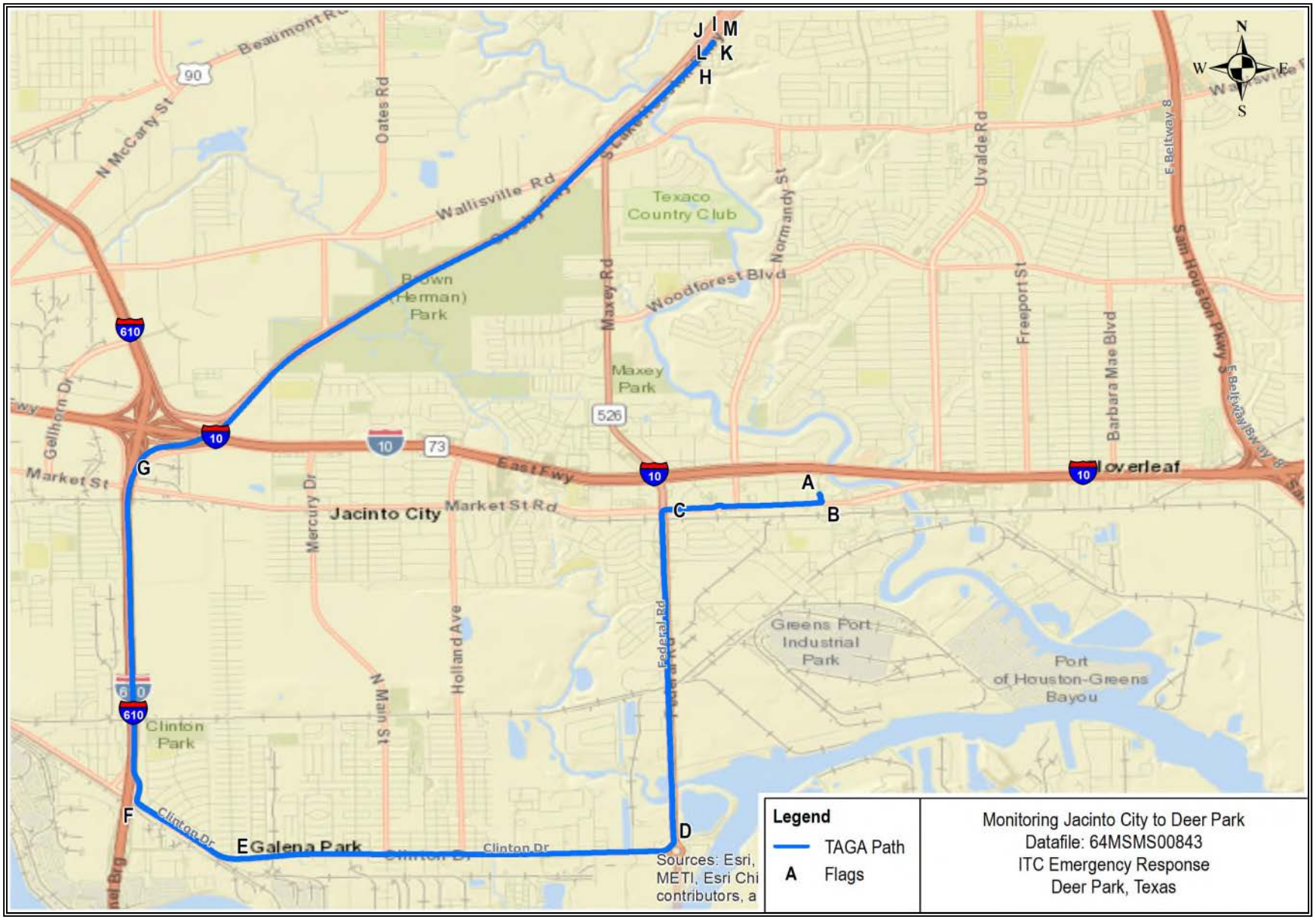


Figure 83a Monitoring Jacinto City to Deer Park Path, 64MSMS00843

Figure 83b

TAGA File Event Summary
File: 64MSMS00843 Acquired on 02 April 2019 at 12:09:57
Title: Monitoring Jacinto City to Deer Park

Flag	Time	Sequence	Description
A	0.7	64	Start mobile monitoring on Lear Street
B	1.8	172	Right turn onto Market Street
C	6.8	647	Left turn onto Federal Road
D	11.6	1108	Right turn onto Clinton Drive
E	24.0	2284	Cross Fidelity Street
F	29.0	2759	Merge onto Highway 610 North
G	32.0	3043	Merge onto Highway 90 East
H	37.0	3520	Exit onto Highway 90 Frontage Road
I	38.2	3629	End mobile monitoring on Highway 90 Frontage Road
J	38.7	3677	Start ambient
K	39.7	3775	End ambient
L	41.0	3903	Start 30 mL/min spike
M	42.2	4016	End 30 mL/min spike

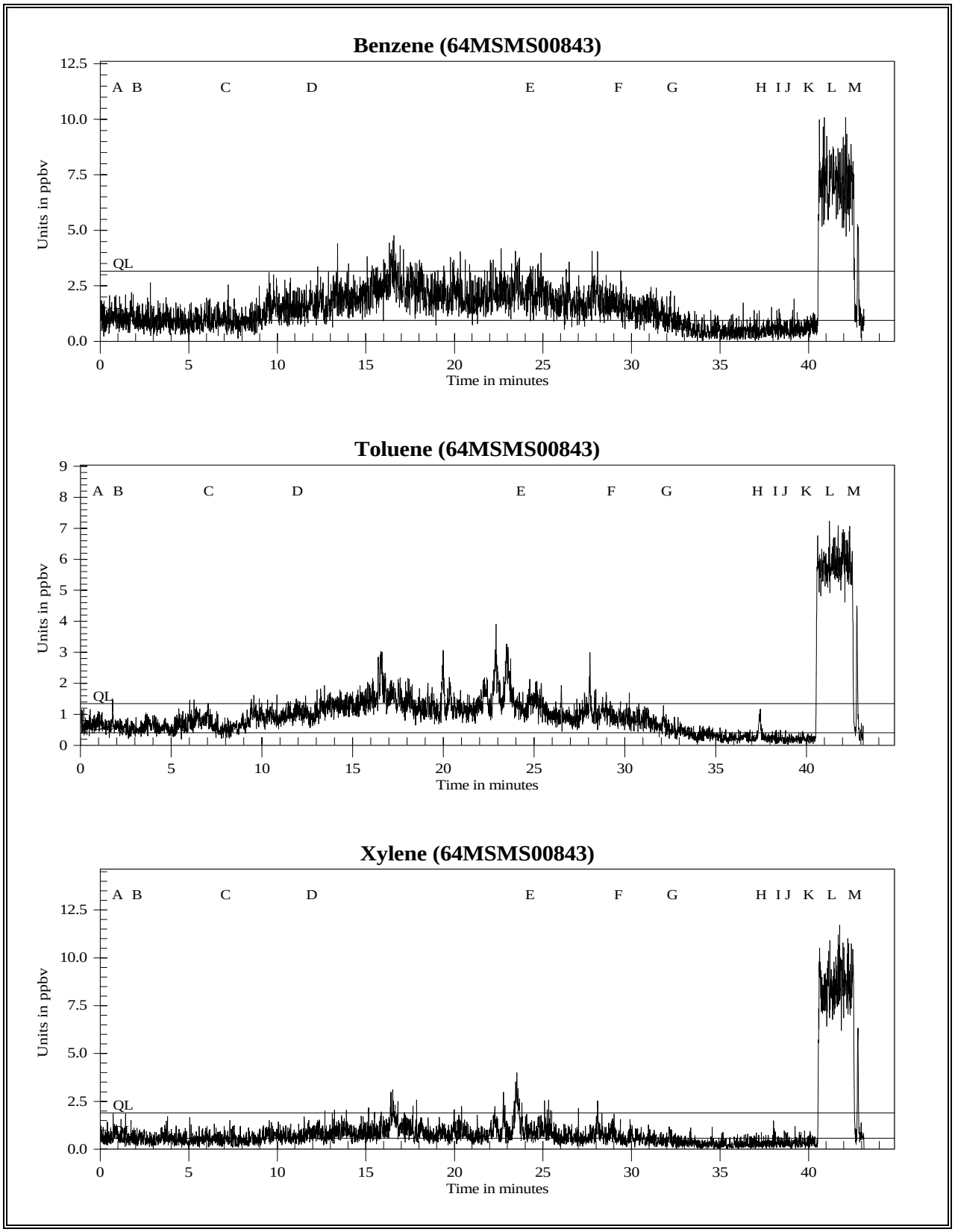


Figure 83c Mobile Monitoring Jacinto City to Deer Park in ppbv for Benzene, Toluene, and Xylenes

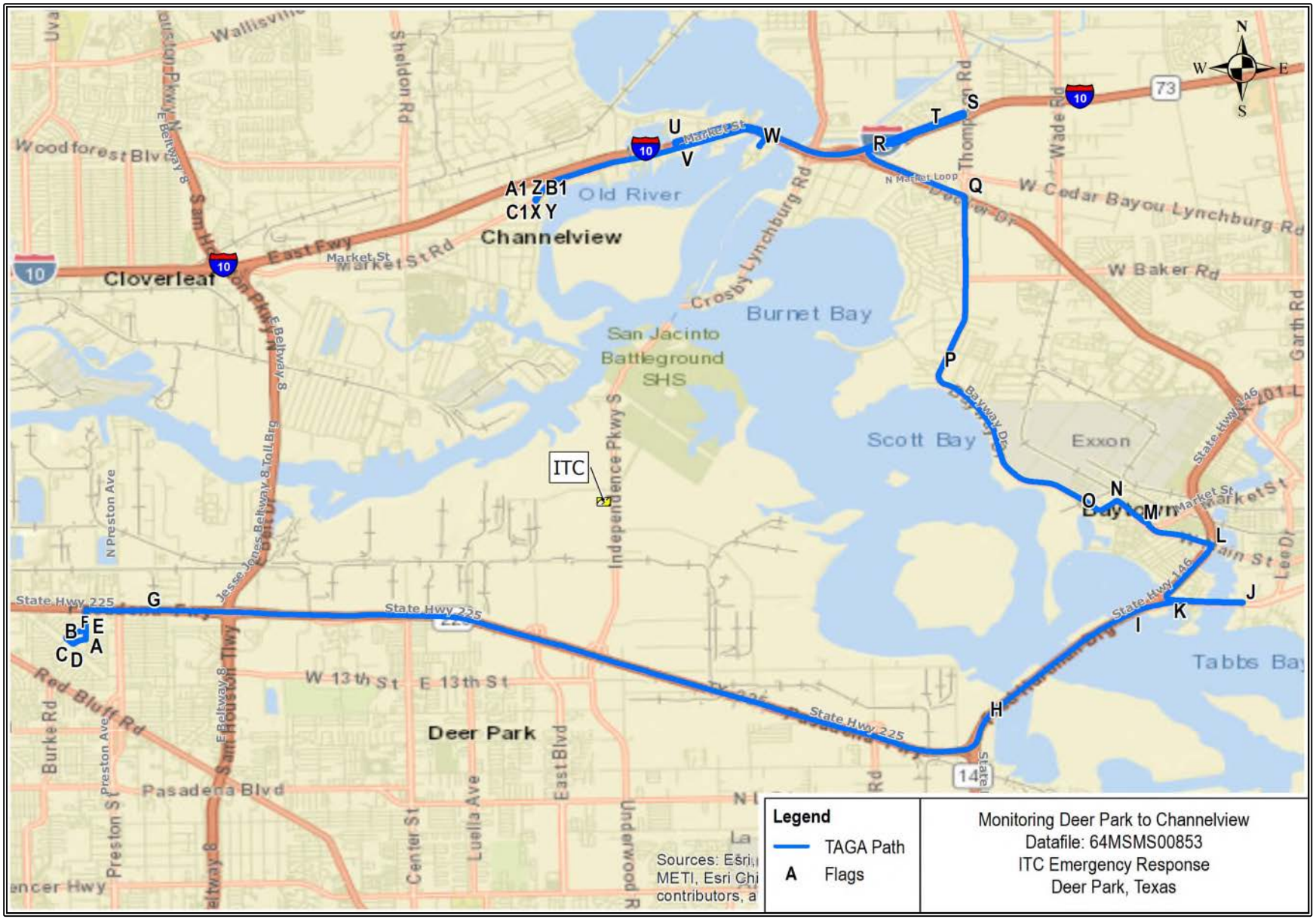


Figure 84a Monitoring Deer Park to Channelview Path, 64MSMS00853

Figure 84b

TAGA File Event Summary
File: 64MSMS00853 Acquired on 03 April 2019 at 15:13:12
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	0.9	89	Start mobile monitoring Near Preston Road and Thomas Avenue
B	2.9	281	Continuing onto Thomas Avenue
C	4.5	425	Left turn onto Delta Street
D	4.6	438	Left turn onto Norman Street
E	5.4	512	Left turn onto Burke Road
F	7.1	674	Right turn onto Pasadena Freeway Frontage Road
G	9.0	852	Merge onto Highway 225 East
H	17.9	1704	Merge onto Highway 146 North
I	20.1	1910	Merge onto Highway 146B East
J	21.7	2062	U-turn on Highway 146B
K	23.0	2189	Exit onto Robert C Lanier Drive
L	24.7	2352	Left turn onto Main Street
M	26.9	2555	Left turn onto Market Street
N	28.0	2663	Continuing onto Market Street
O	28.6	2716	Right turn onto Bayway Drive
P	33.3	3162	Continuing onto Bayway Drive
Q	37.3	3544	Left turn onto Decker Street
R	38.8	3694	Merge onto East Freeway Service Road
S	48.4	4605	U-turn on East Freeway Service Road at Thompson Road
T	50.0	4751	Merge onto Highway 10 West
U	57.2	5436	Exit onto Monmouth Street
V	57.8	5493	Left turn onto Market Street
W	61.3	5832	U-turn on Market Street
X	68.8	6542	Left turn onto Launch Road
Y	71.0	6751	End mobile monitoring at River Terrace Park
Z	71.6	6808	Start ambient
A1	72.7	6912	End ambient
B1	74.5	7079	Start 30 mL/min spike
C1	75.8	7207	End 30 mL/min spike

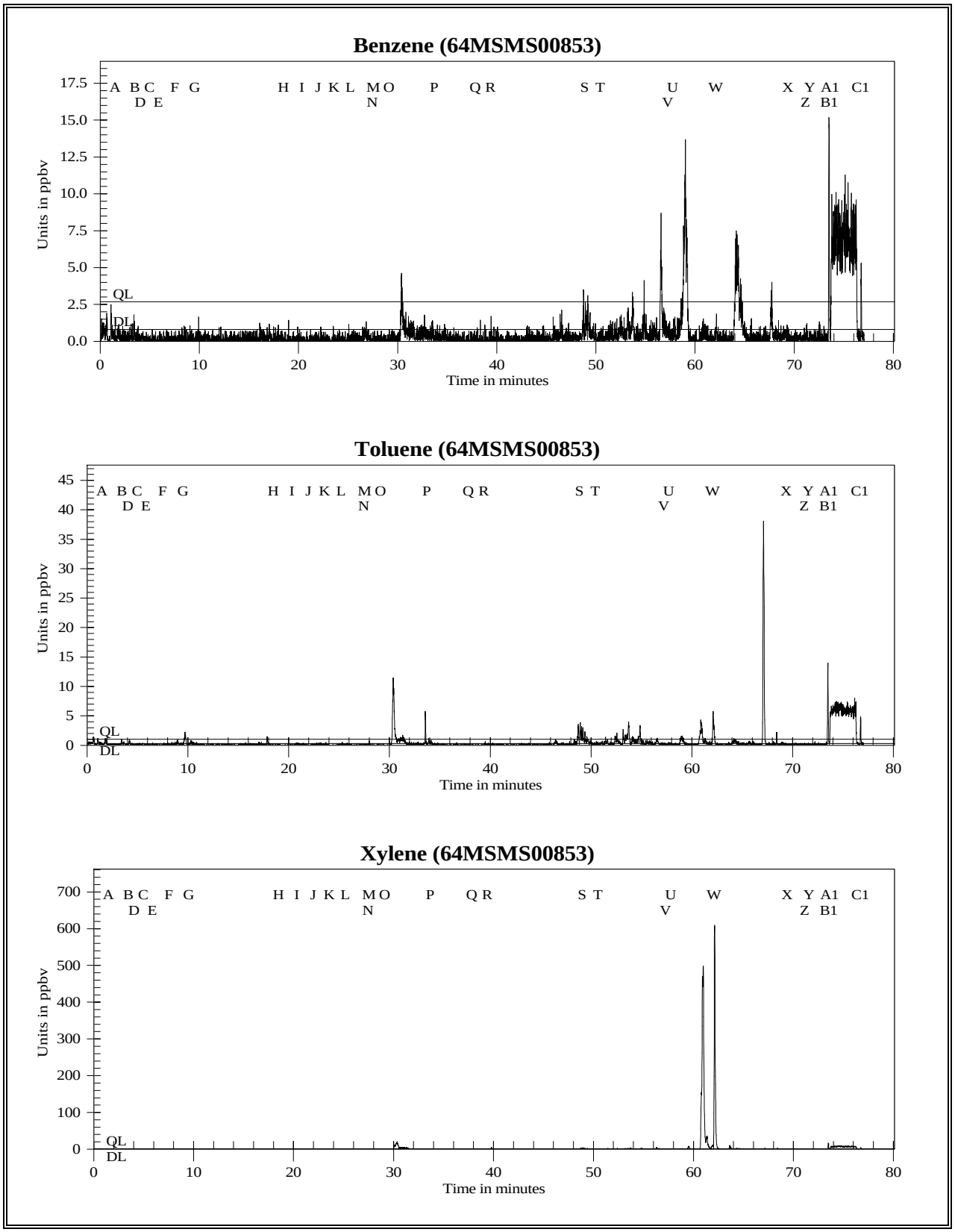


Figure 84c Mobile Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

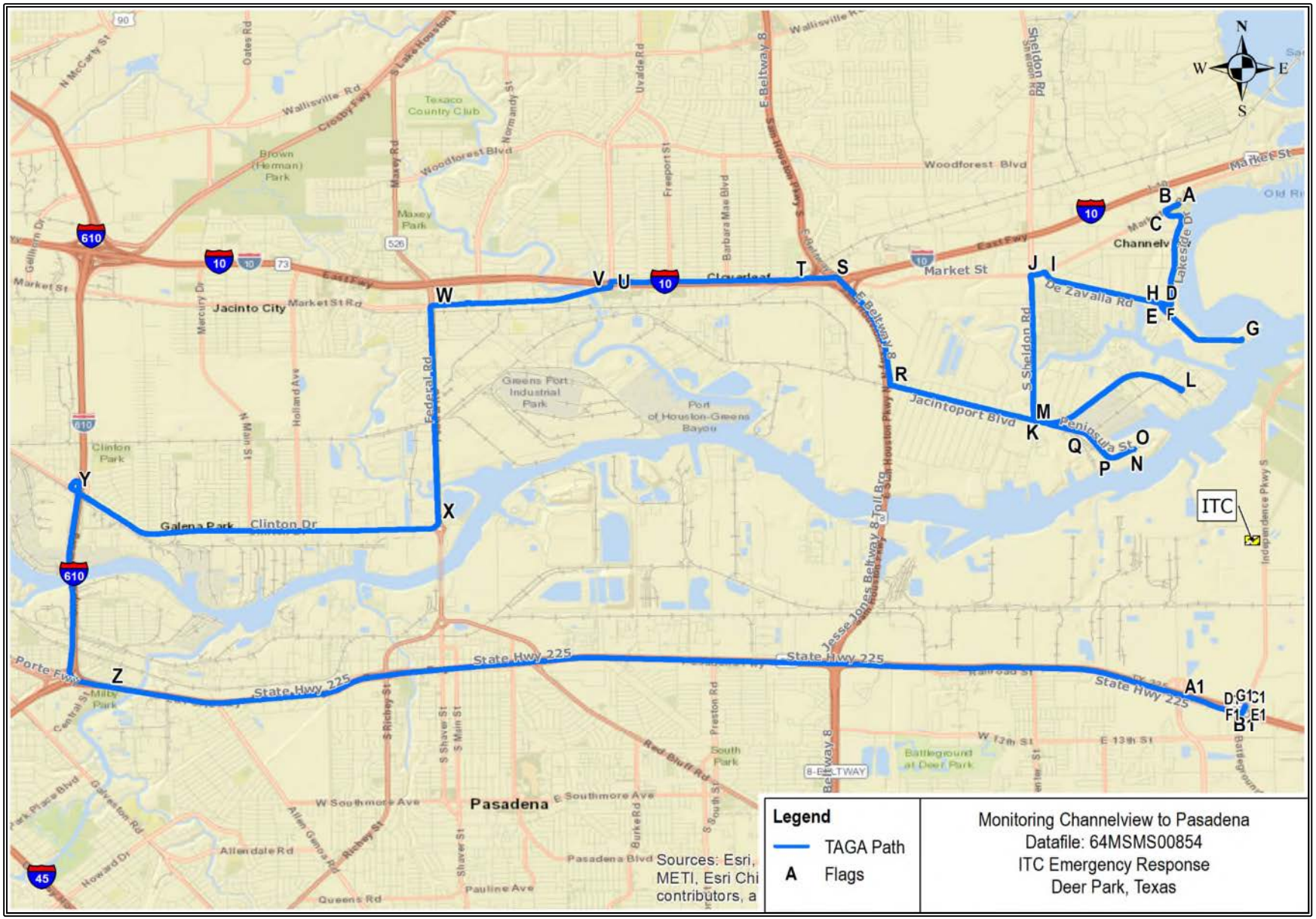


Figure 85a Monitoring Channelview to Pasadena Path, 64MSMS00854

Figure 85b

TAGA File Event Summary
File: 64MSMS00854 Acquired on 03 April 2019 at 16:35:49
Title: Monitoring Channelview to Pasadena

Flag	Time	Sequence	Description
A	0.8	75	Start mobile monitoring at River Terrace Park
B	3.1	300	Left turn onto Market Street
C	3.5	338	Left turn onto Lakeside Drive
D	7.0	668	Left turn onto Dezavala Road
E	9.2	879	Stationary at Dezavala and Lakeside Drive
F	14.1	1340	Resume mobile monitoring on Dezavala Road
G	18.8	1785	U-turn on Dezavala Road
H	24.7	2349	Continuing onto Dezavala Road
I	27.3	2598	Left turn onto Market Street
J	29.2	2775	Left turn onto Sheldon Road
K	32.3	3073	Left turn onto Jacintoport Boulevard
L	36.9	3512	U-turn on Jacintoport Boulevard
M	41.6	3959	Left turn onto San Jacinto Boulevard
N	44.6	4244	Continuing onto Peninsula Street
O	45.3	4309	U-turn on Peninsula Street
P	46.2	4396	Continuing onto San Jacinto Street
Q	47.8	4550	Left turn onto Jacintoport Boulevard
R	51.9	4933	Right turn onto Highway 8 Service Road
S	54.2	5149	Left turn onto East Freeway Service Road
T	54.7	5199	Continuing onto East Freeway Service Road
U	58.6	5569	Left turn onto Uvalde Road
V	58.9	5602	Right turn onto Market Street
W	64.2	6103	Left turn onto Federal Road
X	69.5	6605	Right turn onto Clinton Drive
Y	78.4	7453	Merge onto Highway 610 South
Z	83.6	7949	Merge onto Highway 225 East
A1	94.2	8956	Exit onto Pasadena Freeway Frontage Road
B1	96.8	9207	Left turn onto Independence Parkway
C1	97.4	9264	End mobile monitoring on Independence Parkway
D1	97.6	9284	Start ambient
E1	98.7	9383	End ambient
F1	100.3	9541	Start 30 mL/min spike
G1	101.4	9638	End 30 mL/min spike

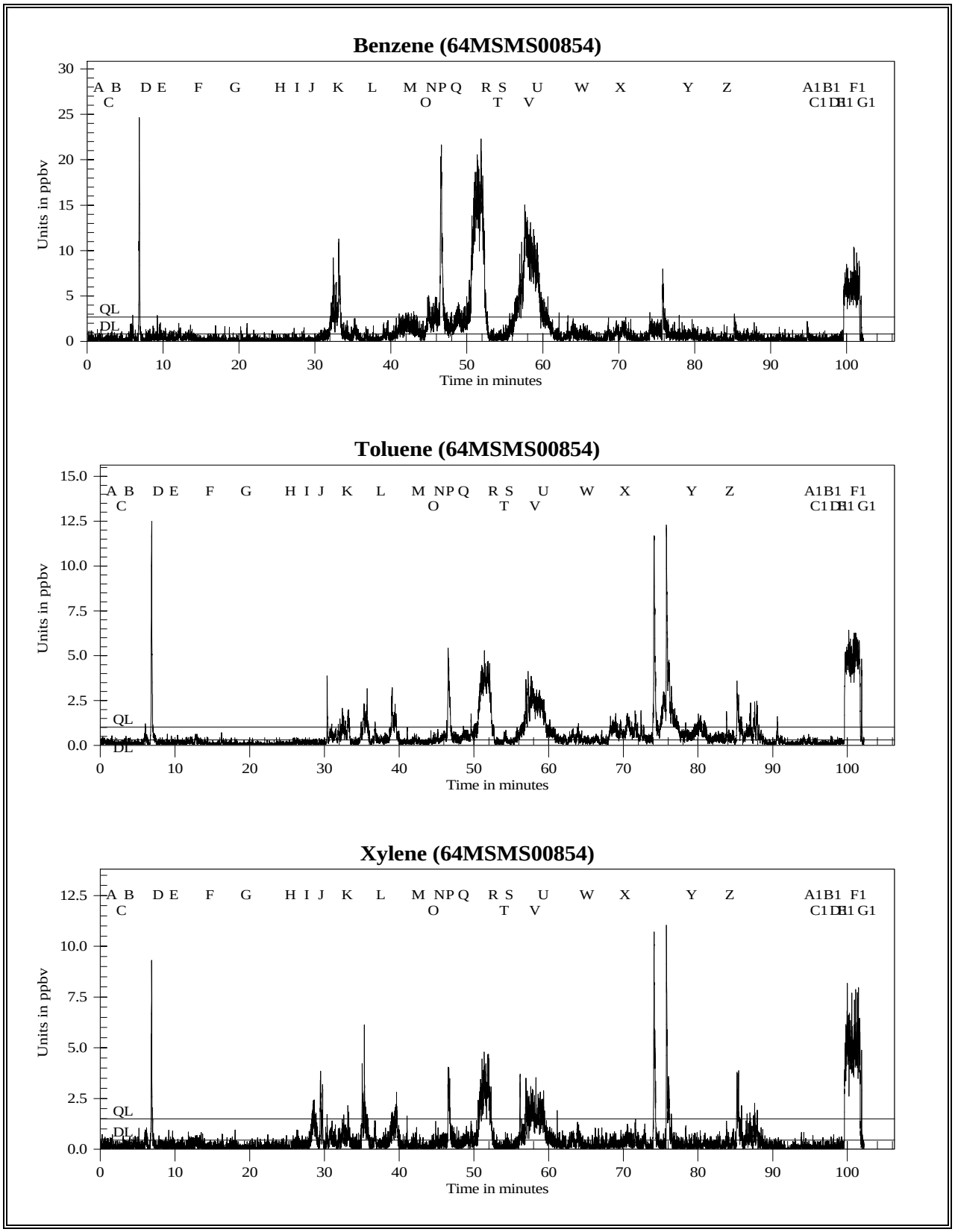


Figure 85c Mobile Monitoring Channelview to Pasadena in ppbv for Benzene, Toluene, and Xylenes

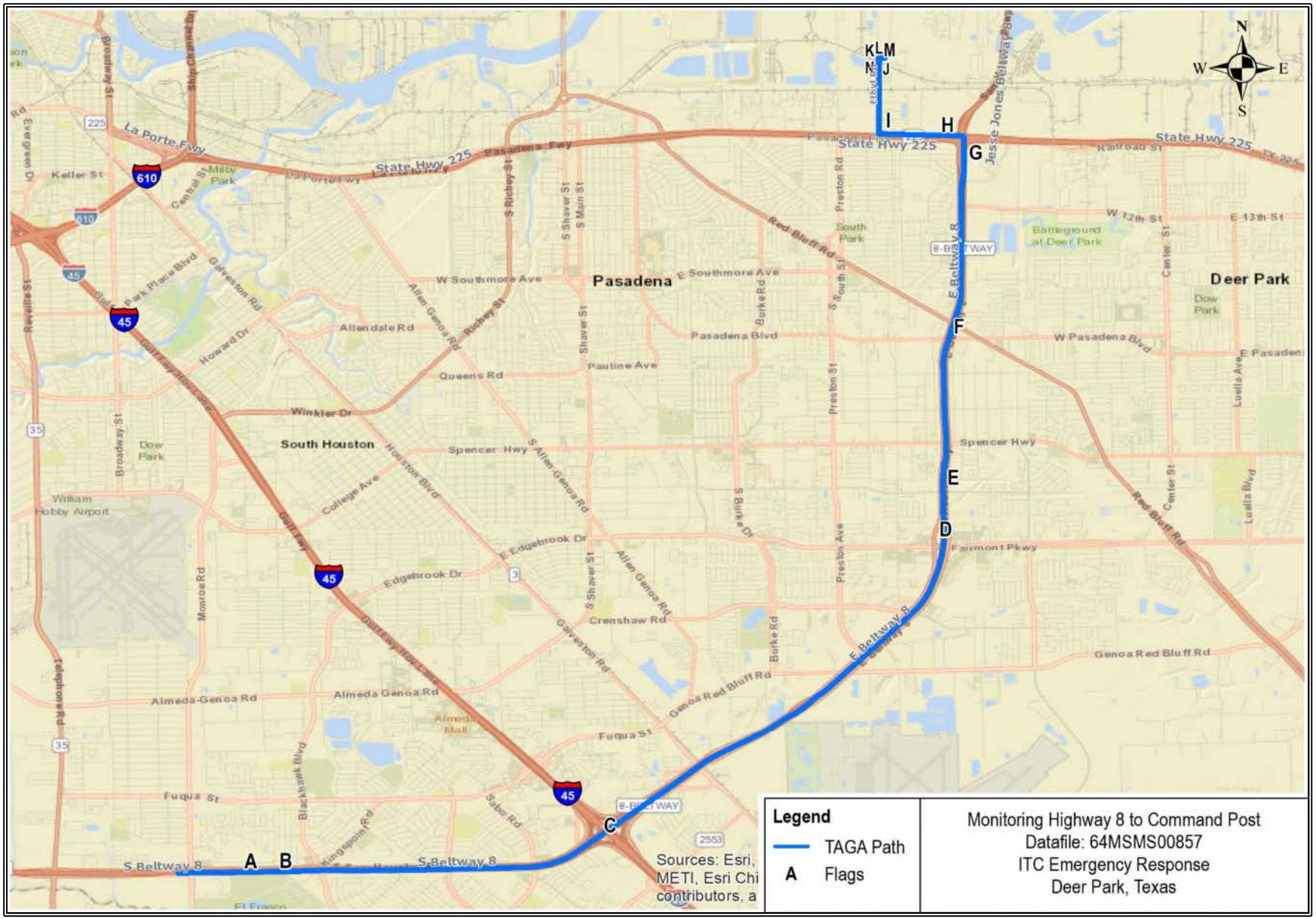


Figure 86a Monitoring Highway 8 to Command Post Path, 64MSMS00857

Figure 86b

TAGA File Event Summary
File: 64MSMS00857 Acquired on 04 April 2019 at 08:32:18
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	0.8	75	Start mobile monitoring on Highway 8 North
B	1.1	105	Continuing onto Highway 8
C	4.1	386	Cross Highway 45
D	9.7	921	Cross Fairmont Parkway
E	10.2	970	Cross Vista Road
F	11.8	1126	Cross Pasadena Boulevard
G	17.4	1658	Exit onto Highway 8 Service Road
H	20.2	1921	Left turn onto Pasadena Freeway Frontage Road
I	21.4	2034	Right turn onto Ethyl Road
J	25.1	2390	End mobile monitoring at EPA Command Post
K	27.1	2580	Start ambient
L	28.4	2704	End ambient
M	30.6	2913	Start 30 mL/min spike
N	31.8	3022	End 30 mL/min spike

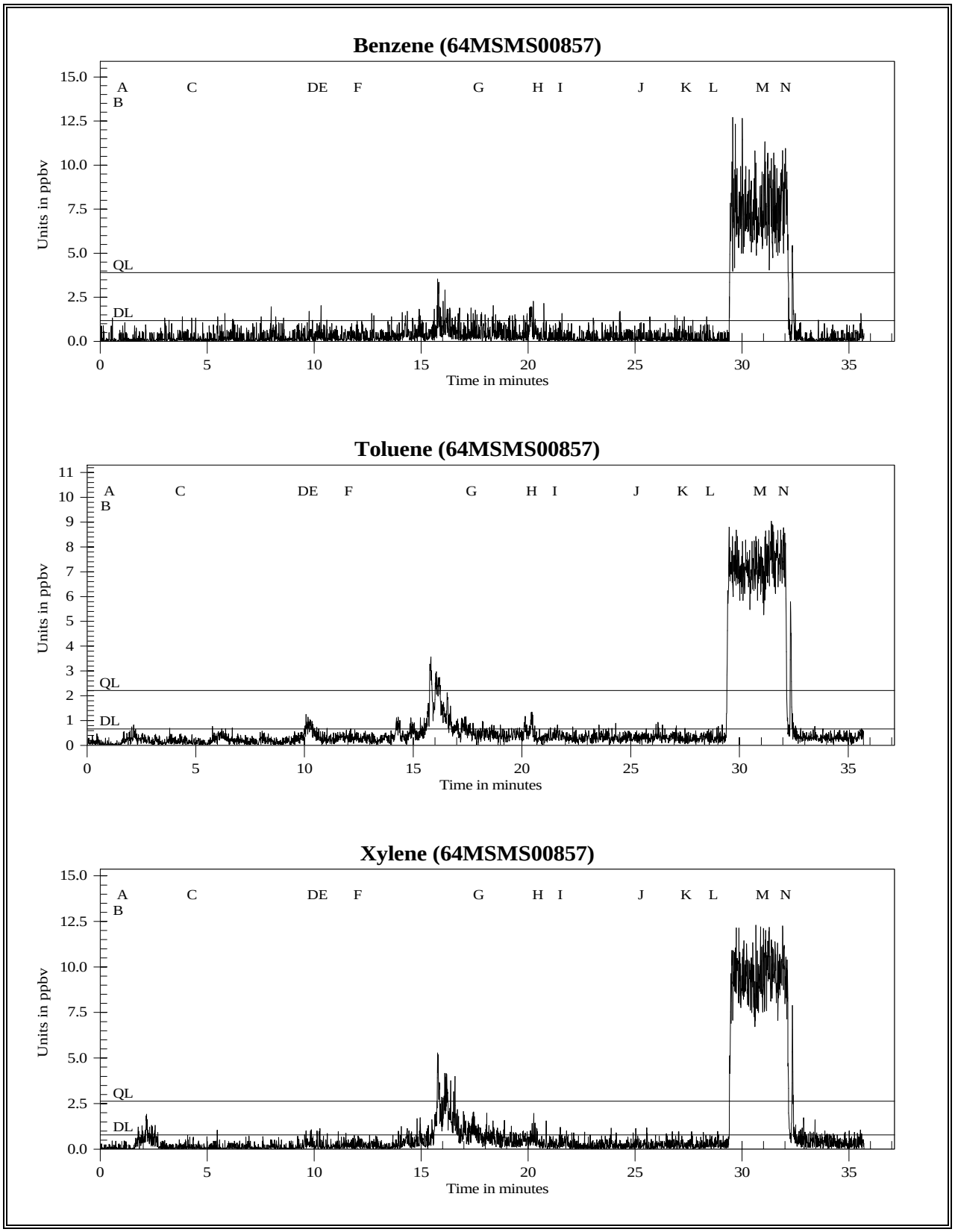


Figure 86c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

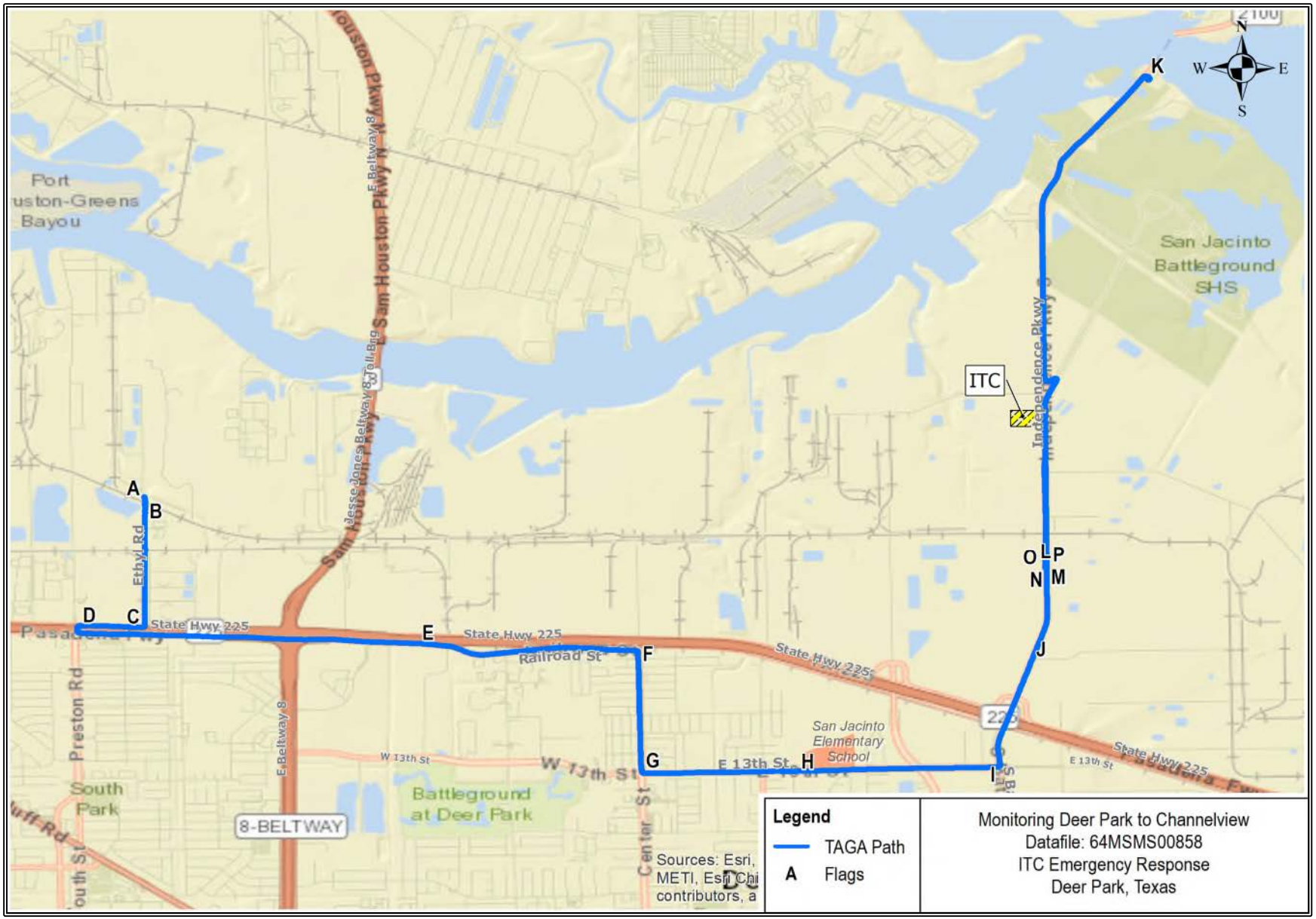


Figure 87a Monitoring Deer Park to Channelview Path, 64MSMS00858

Figure 87b

TAGA File Event Summary
File: 64MSMS00858 Acquired on 04 April 2019 at 09:35:58
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	1.0	100	Start mobile monitoring at EPA Command Post
B	1.6	150	Continuing onto Ethyl Road
C	4.6	436	Right turn onto Pasadena Freeway Frontage Road
D	5.4	516	U-turn on Pasadena Freeway Frontage Road at Preston Road
E	9.4	894	Continuing onto Railroad Street
F	15.5	1471	Right turn onto Center Street
G	17.5	1663	Left turn onto 13th Street
H	19.7	1874	Passing San Jacinto Elementary School
I	23.2	2206	Left turn onto Battleground Road
J	26.3	2504	Continuing onto Independence Parkway
K	39.5	3759	U-turn on Independence Parkway
L	54.3	5161	End mobile monitoring on Independence Parkway
M	54.5	5182	Start ambient
N	55.5	5280	End ambient
O	57.2	5440	Start 30 mL/min spike
P	58.2	5534	End 30 mL/min spike

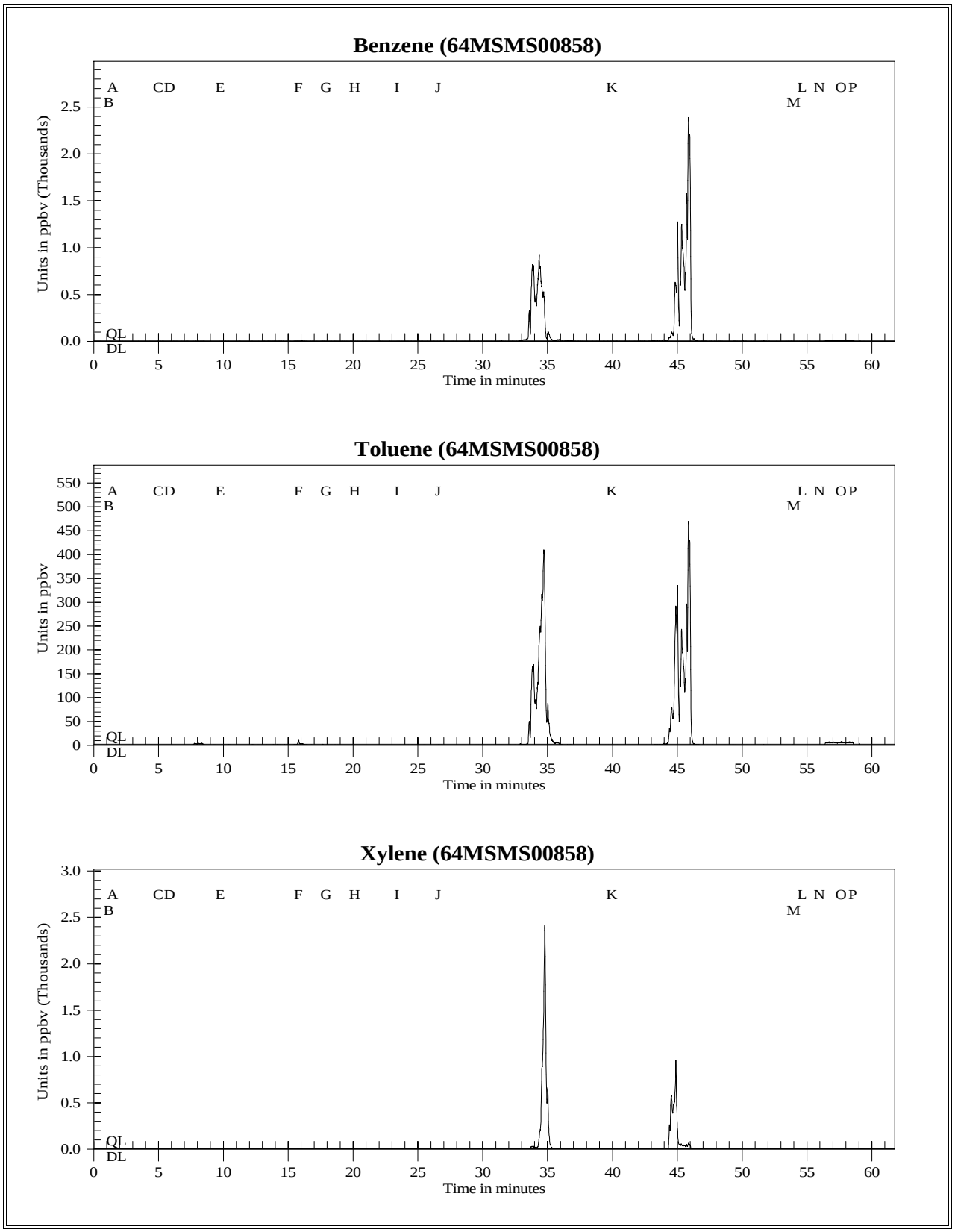


Figure 87c Mobile Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

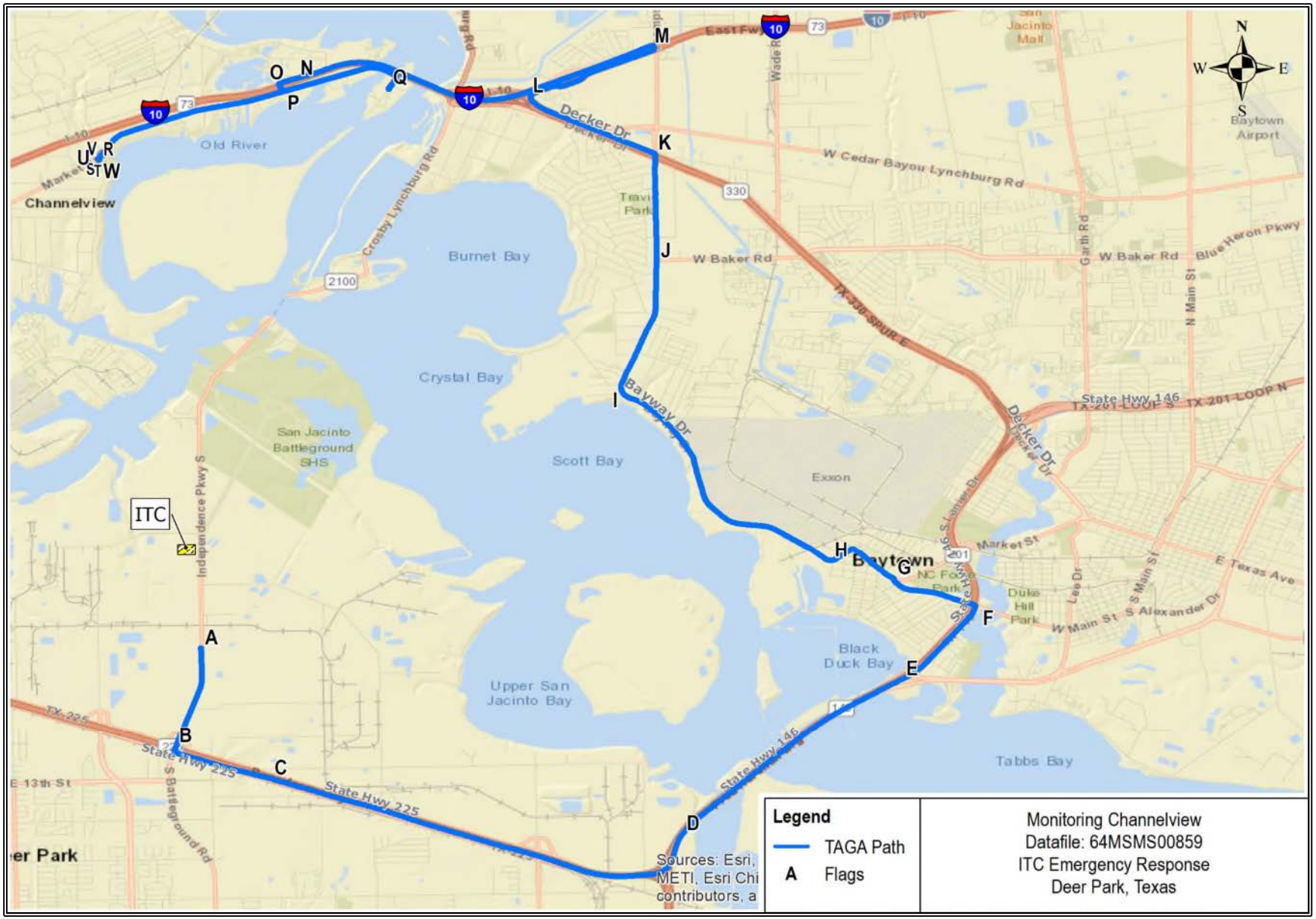


Figure 88a Monitoring Channelview Path, 64MSMS00859

Figure 88b

TAGA File Event Summary
File: 64MSMS00859 Acquired on 04 April 2019 at 10:41:18
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	1.0	93	Start mobile monitoring on Independence Parkway
B	7.1	672	Left turn onto Pasadena Freeway Frontage Road
C	8.4	796	Merge onto Highway 225 East
D	12.2	1164	Merge onto Highway 146 North
E	14.4	1374	Exit onto Robert C Lanier Drive
F	18.3	1740	Left turn onto Main Street
G	20.2	1924	Left turn onto Market Street
H	22.1	2103	Right turn onto Bayway Drive
I	28.1	2674	Right turn to continue on Bayway Drive
J	31.3	2972	Cross W Baker Road
K	34.2	3252	Left turn onto Decker Drive
L	35.9	3418	Right turn onto East Freeway Service Road
M	39.0	3704	U-turn on East Freeway Service Road
N	46.4	4410	Exit onto East Freeway Service Road
O	46.9	4458	Left turn onto Monmouth Street
P	47.6	4529	Left turn onto Market Street
Q	50.9	4840	U-turn on Market Street
R	58.7	5586	Left turn onto Launch Road
S	61.2	5821	End mobile monitoring at River Terrace Park
T	61.4	5838	Start ambient
U	62.4	5936	End ambient
V	64.2	6101	Start 30 mL/min spike
W	65.2	6203	End 30 mL/min spike

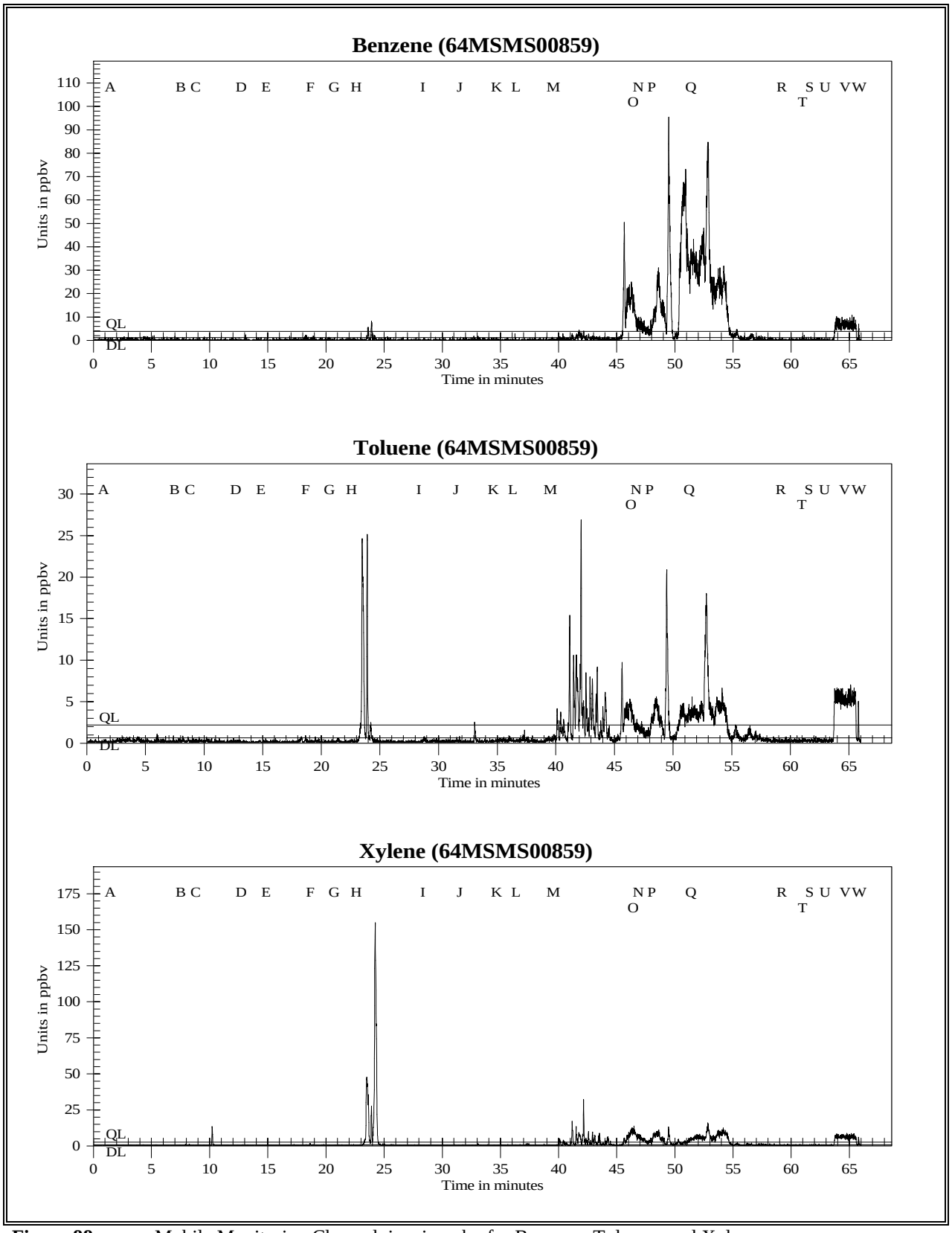


Figure 88c Mobile Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

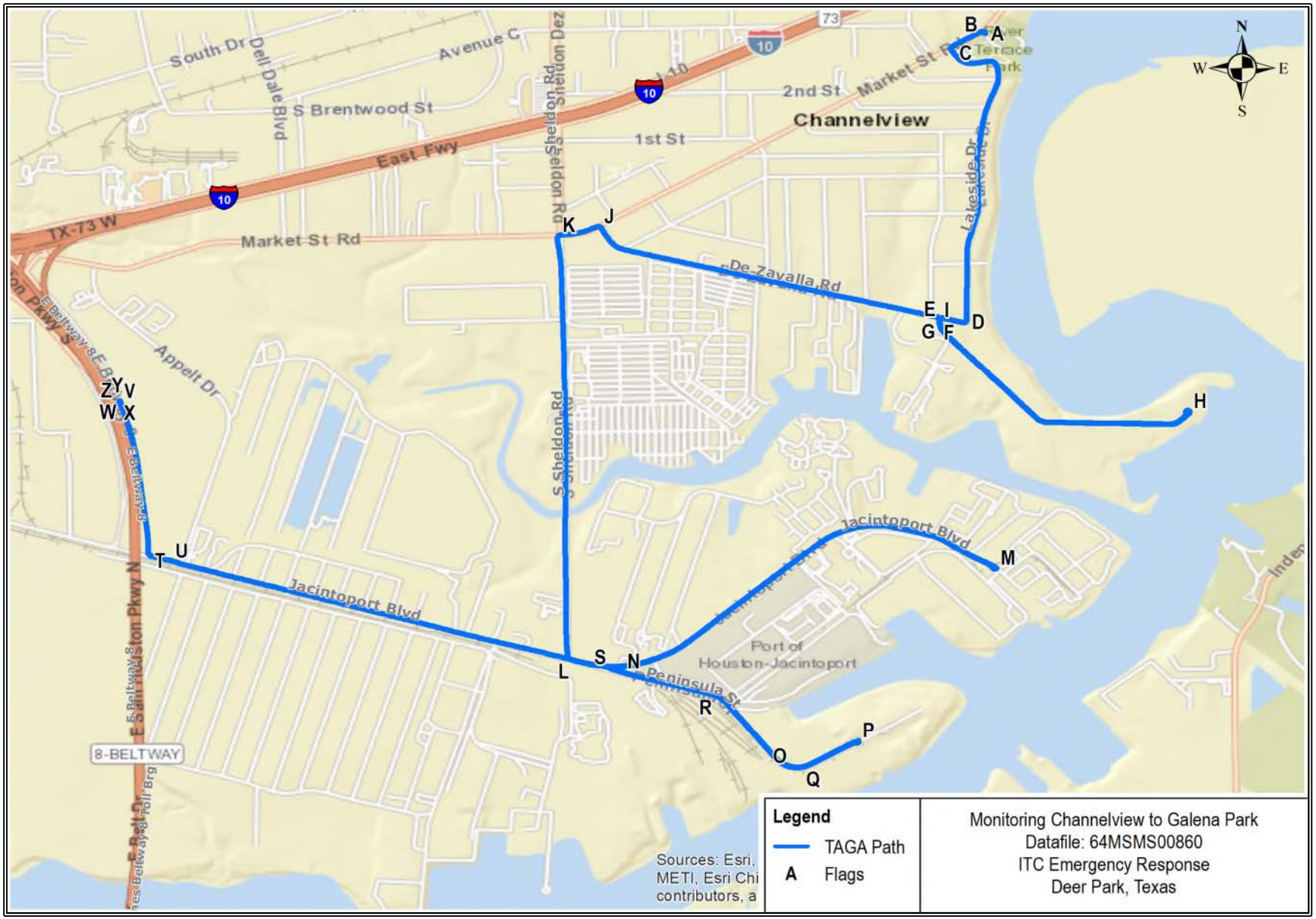


Figure 89a Monitoring Channelview to Galena Park Path, 64MSMS00860

Figure 89b

TAGA File Event Summary
File: 64MSMS00860 Acquired on 04 April 2019 at 11:50:27
Title: Monitoring Channelview to Galena Park

Flag	Time	Sequence	Description
A	0.8	74	Start mobile monitoring at River Terrace Park
B	2.1	197	Left turn onto Market Street
C	2.5	237	Left turn onto Lakeside Drive
D	5.5	528	Right turn to continue on Lakeside Drive
E	6.0	576	Left turn on Dezavala Road
F	6.7	639	Stationary at intersection of Lakeside Drive and Dezavala Road
G	13.0	1240	Resume mobile monitoring on Dezavala Road
H	19.0	1807	U-turn at the end of Dezavala Road
I	24.9	2365	Left turn to continue on Dezavala Road
J	27.4	2606	Left turn onto Market Street
K	28.9	2751	Left turn onto Sheldon Road
L	32.2	3062	Left turn onto Jacintoport Boulevard
M	36.7	3490	U-turn on Jacintoport Boulevard
N	41.5	3946	Left turn onto San Jacinto Boulevard
O	44.0	4185	Continuing onto Peninsula Street
P	45.7	4350	U-turn on Peninsula Street
Q	47.9	4555	Continuing onto San Jacinto Boulevard
R	50.2	4770	Continuing onto San Jacinto Boulevard
S	51.5	4898	Left turn onto Jacintoport Boulevard
T	55.5	5280	Stationary on Jacintoport Boulevard
U	57.5	5472	Resume mobile monitoring on Jacintoport Boulevard
V	59.7	5675	End mobile monitoring on Jacintoport Boulevard
W	59.9	5695	Start ambient
X	60.9	5795	End ambient
Y	62.5	5944	Start 30 mL/min spike
Z	63.6	6046	End 30 mL/min spike

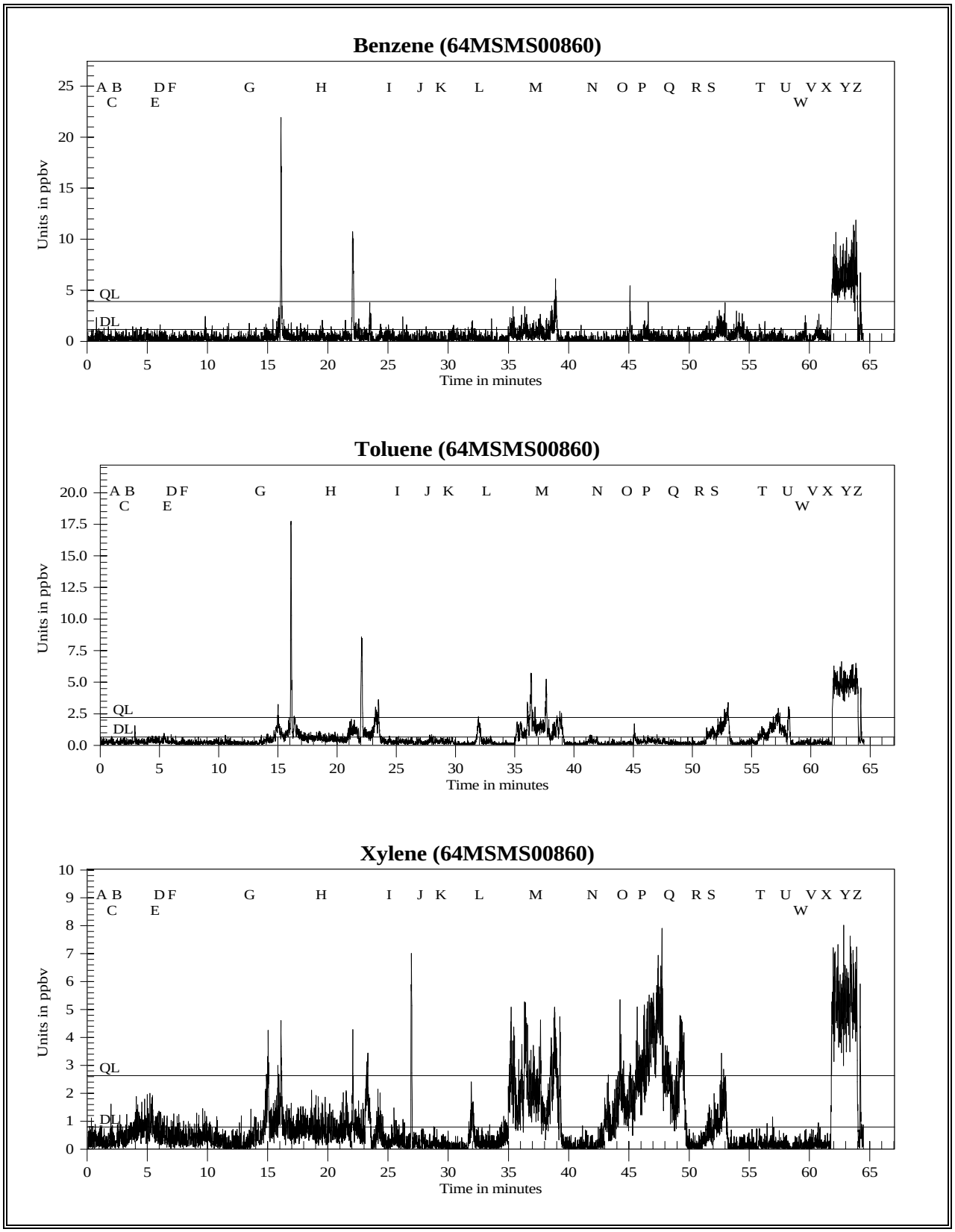


Figure 89c Mobile Monitoring Channelview to Galena Park in ppbv for Benzene, Toluene, and Xylenes

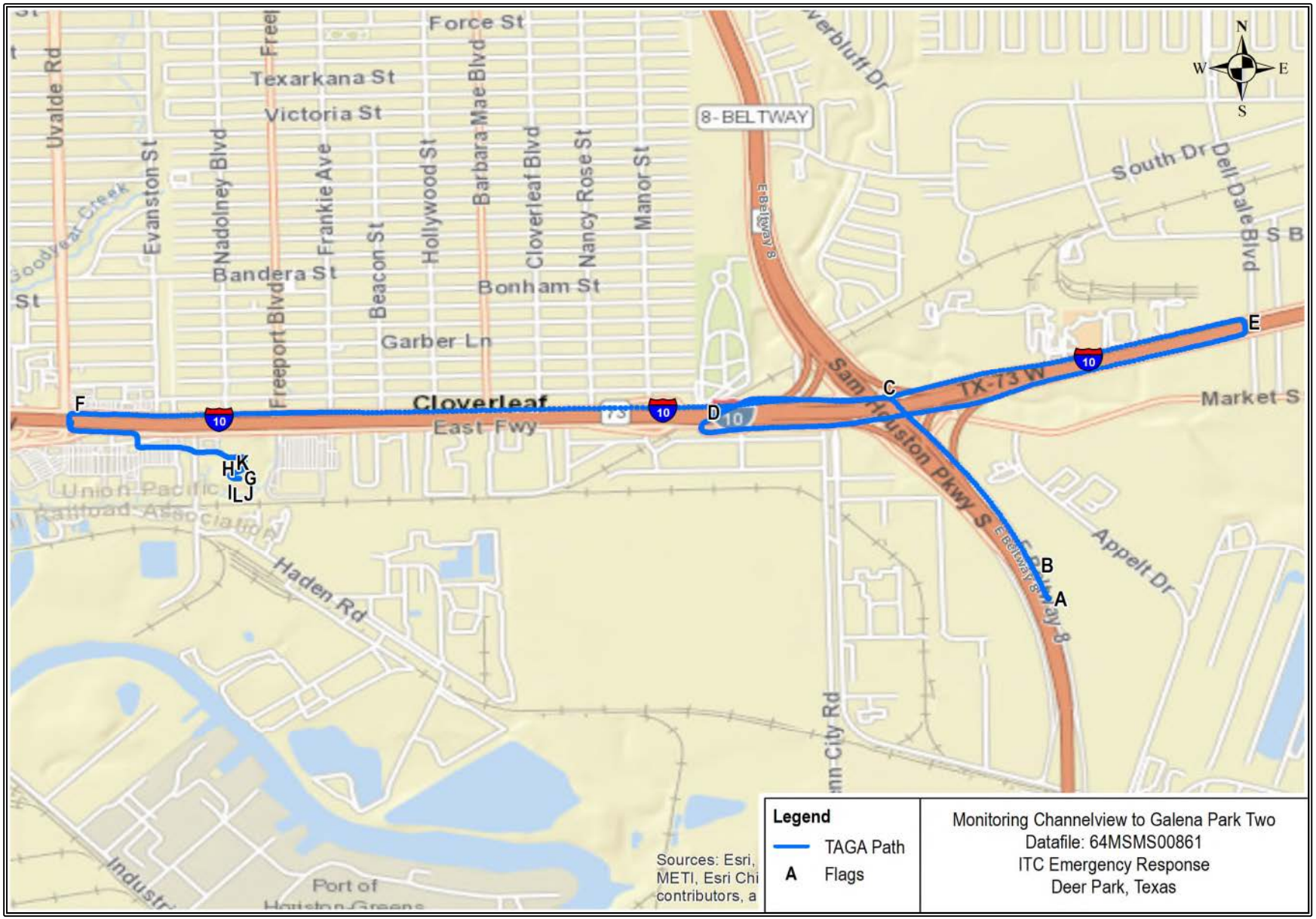


Figure 90a Monitoring Channelview to Galena Park Two Path, 64MSMS00861

Figure 90b

TAGA File Event Summary
File: 64MSMS00861 Acquired on 04 April 2019 at 12:58:34
Title: Monitoring Channelview to Galena Park Two

Flag	Time	Sequence	Description
A	0.8	81	Start mobile monitoring on Jacintoport Boulevard
B	1.7	164	Continuing onto Highway 8 Service Road
C	3.1	297	Left turn onto Market Street
D	4.2	397	Left turn onto East Freeway Service Road
E	7.2	690	U-turn on East Freeway Service Road
F	13.8	1311	U-turn on East Freeway Service Road
G	17.8	1690	Stationary at shopping center
H	68.8	6545	End mobile monitoring at shopping center
I	69.4	6599	Start ambient
J	70.5	6702	End ambient
K	72.4	6885	Start 30 mL/min spike
L	73.4	6980	End 30 mL/min spike

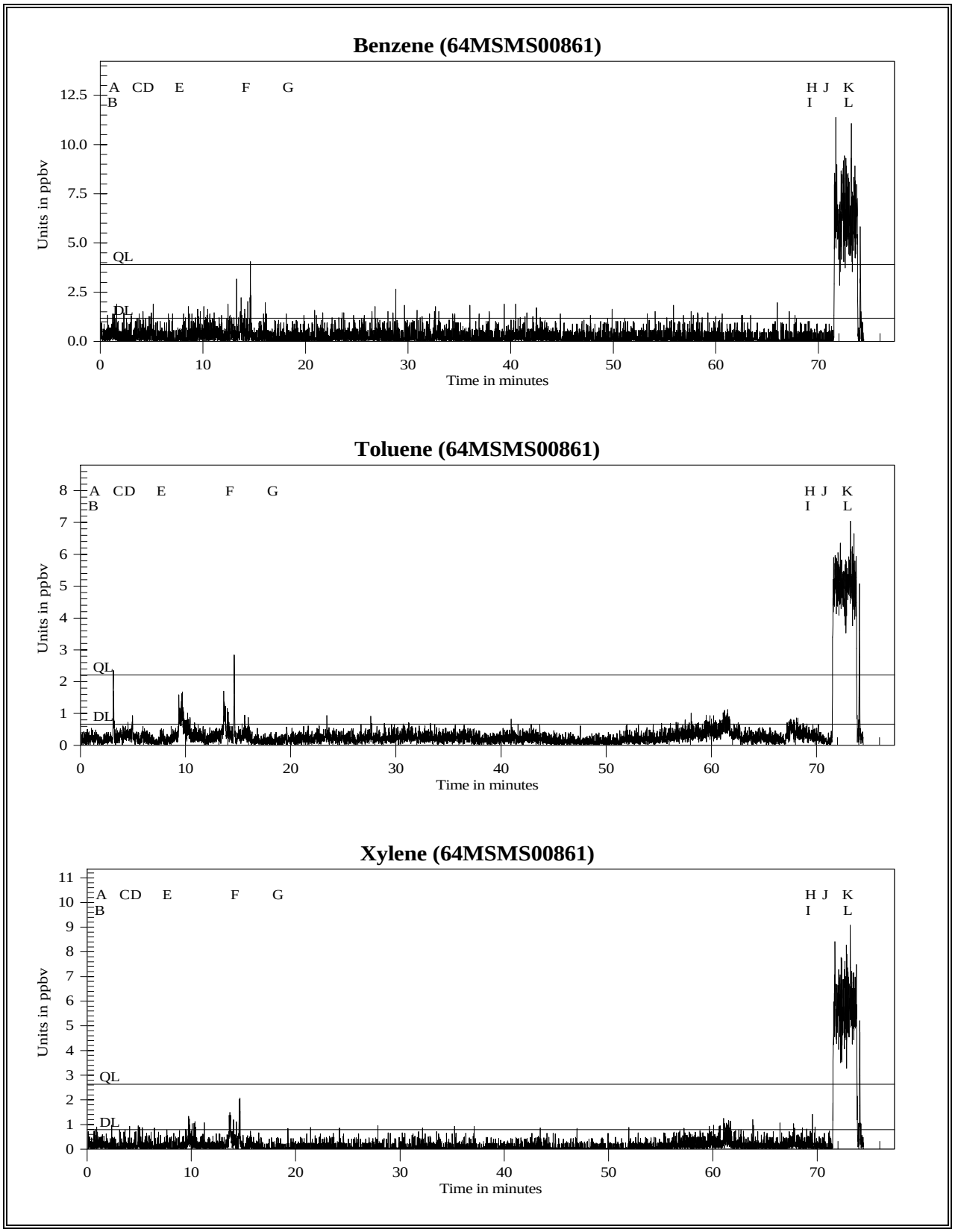


Figure 90c Mobile Monitoring Channelview to Galena Park Two in ppbv for Benzene, Toluene, and Xylenes

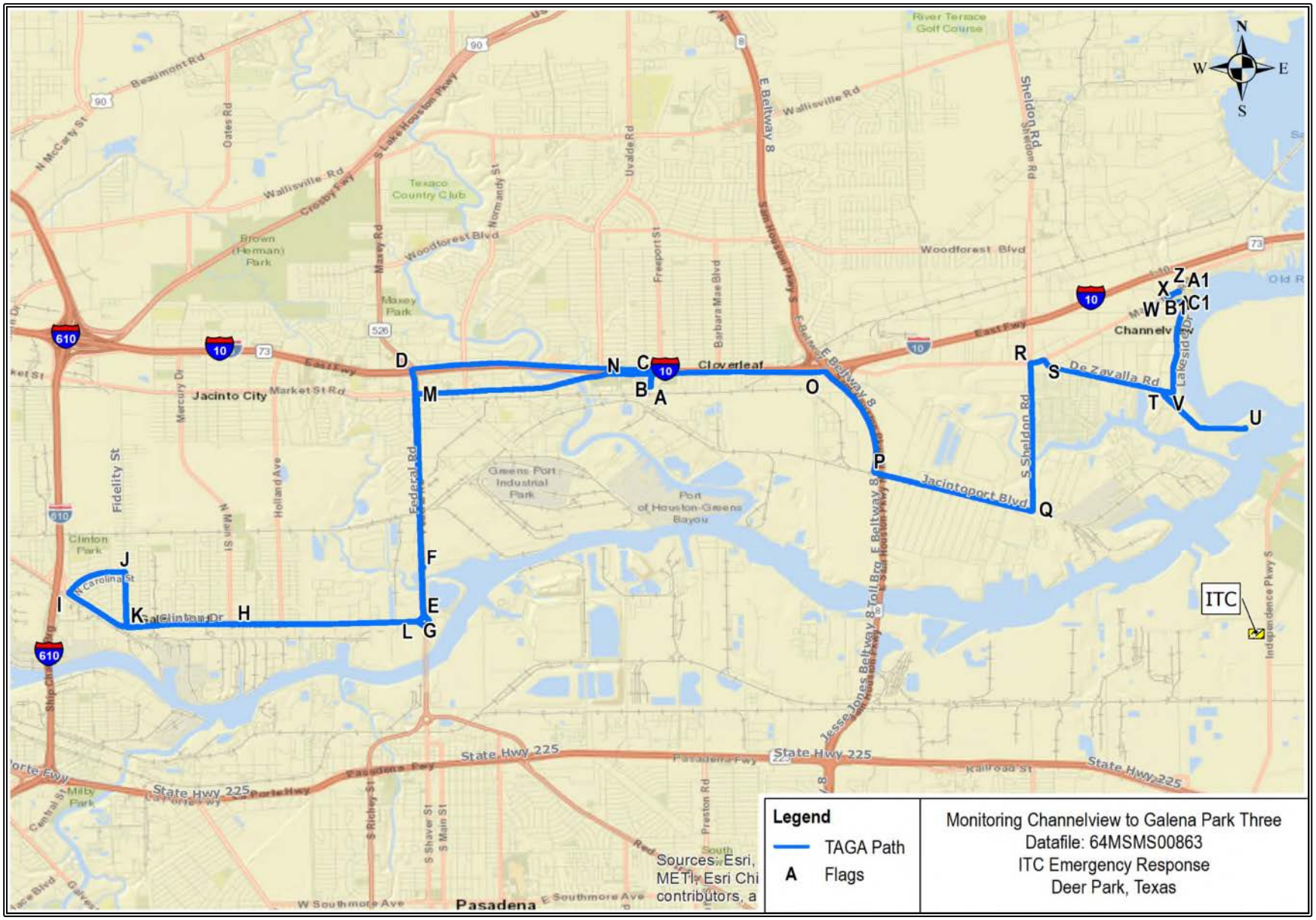


Figure 91a Monitoring Channelview to Galena Park Three Path, 64MSMS00863

Figure 91b

TAGA File Event Summary
File: 64MSMS00863 Acquired on 04 April 2019 at 14:49:35
Title: Monitoring Channelview to Galena Park Three

Flag	Time	Sequence	Description
A	0.7	70	Start mobile monitoring in shopping center on East Freeway Service Road
B	2.1	197	Right turn onto East Freeway Service Road
C	4.2	402	U-turn on East Freeway Service Road
D	11.1	1058	Left turn onto Federal Road
E	16.8	1596	U-turn on roundabout at Clinton Drive
F	19.0	1810	U-turn on Federal Road
G	20.8	1978	Right turn onto Clinton Drive
H	24.6	2343	Cross Main Street
I	29.4	2793	Right turn onto North Carolina Street
J	32.1	3049	Right turn onto Fidelity Street
K	34.6	3295	Left turn onto Clinton Drive
L	40.7	3870	Left turn onto Federal Road
M	47.8	4548	Right turn onto Market Street
N	54.2	5158	Merge onto East Freeway Service Road
O	58.9	5597	Right turn onto Highway 8 Service Road
P	61.5	5851	Left turn onto Jacintoport Boulevard
Q	64.9	6172	Left turn onto Sheldon Road
R	69.3	6589	Right turn onto Market Street
S	69.8	6641	Right turn onto Dezavala Road
T	72.7	6909	Right turn to continue onto Dezavala Road
U	76.5	7278	U-turn on Dezavala Road
V	82.4	7830	Right turn onto Lakeside Drive
W	85.6	8137	Right turn onto Market Street
X	86.1	8183	Right turn onto Launch Road
Y	86.7	8243	End mobile monitoring at River Terrace Park
Z	87.3	8304	Start ambient
A1	88.4	8407	End ambient
B1	90.0	8562	Start 30 mL/min spike
C1	91.1	8665	End 30 mL/min spike

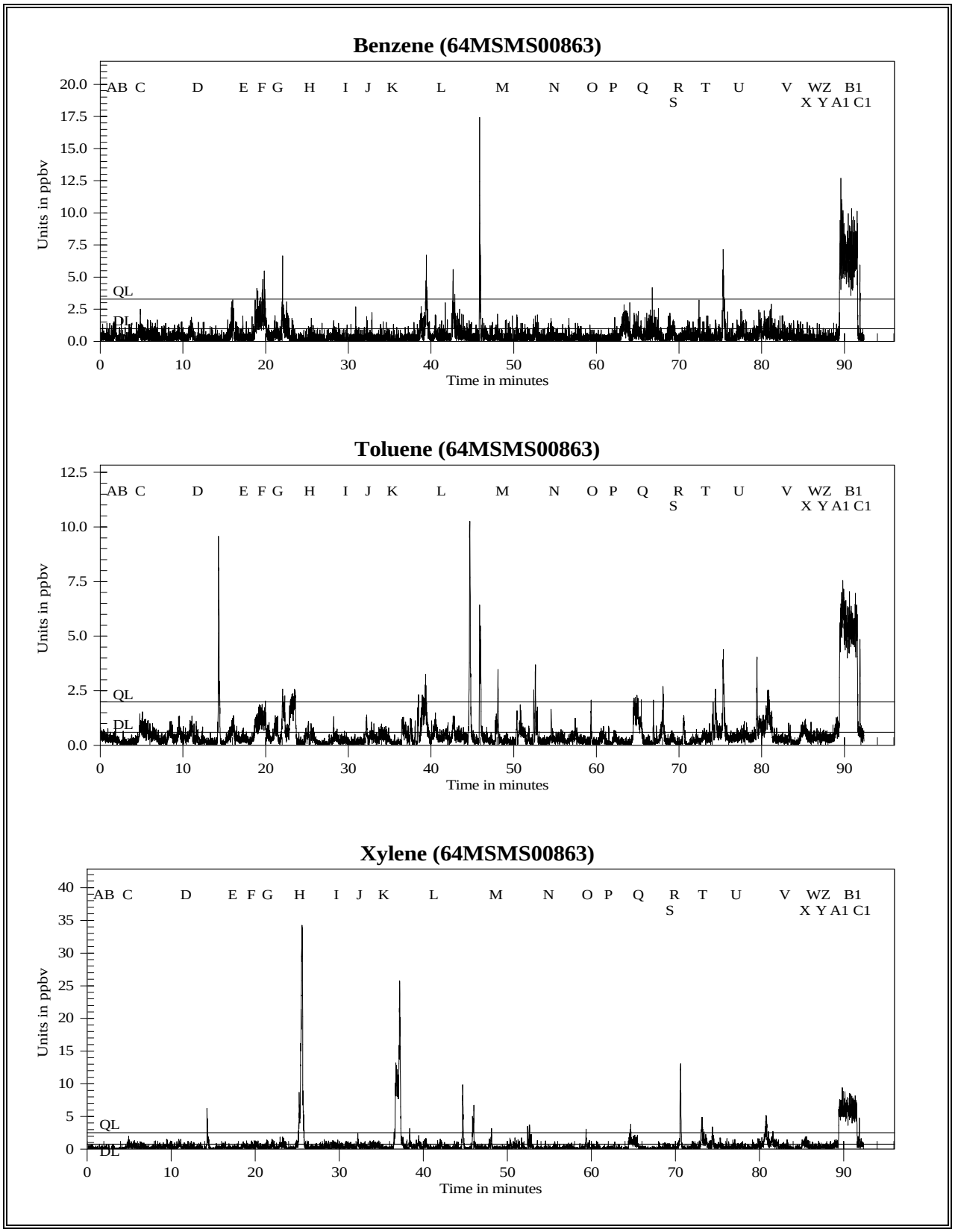


Figure 91c Mobile Monitoring Channelview to Galena Park Three in ppbv for Benzene, Toluene, and Xylenes

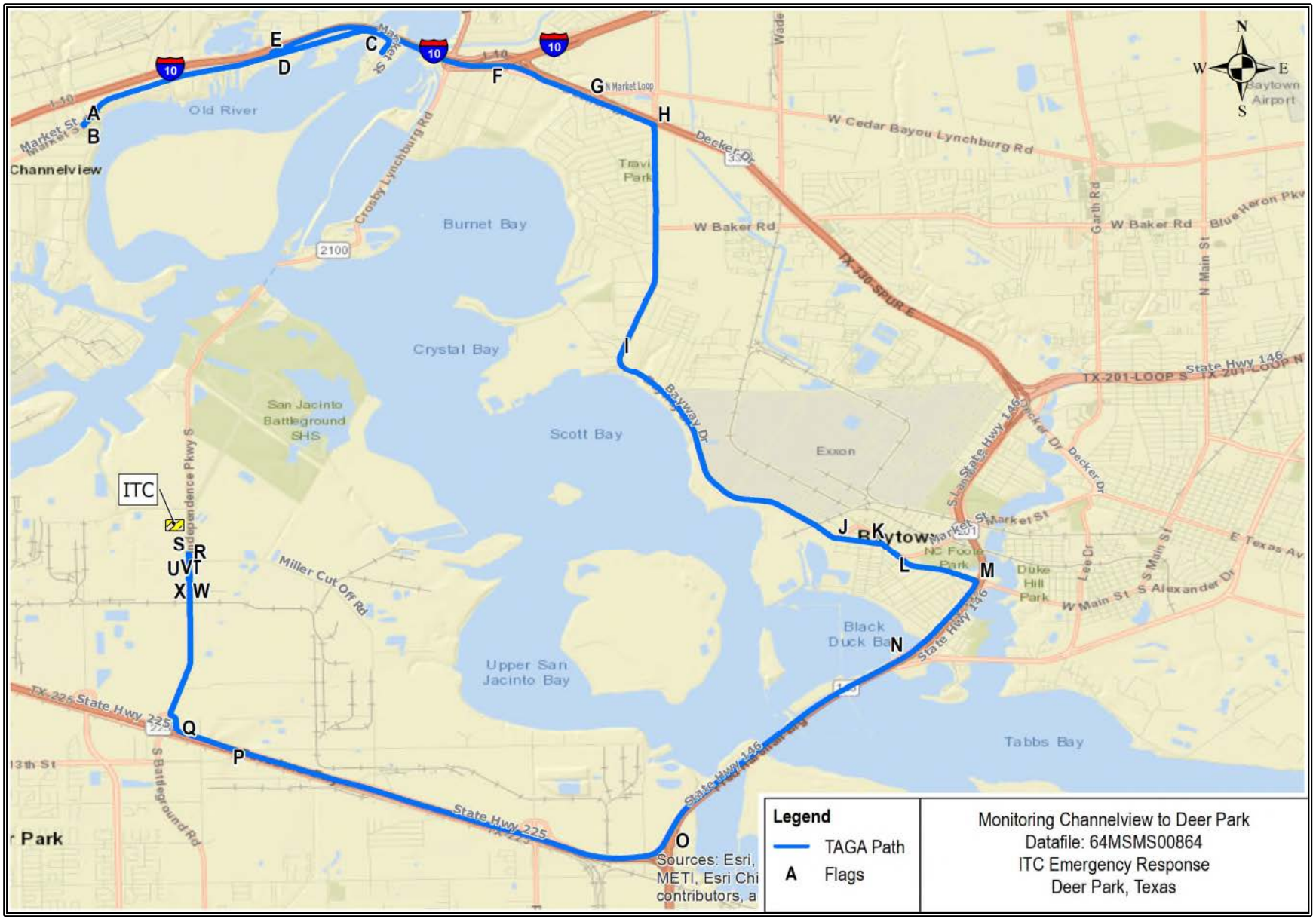


Figure 92a Monitoring Channelview to Deer Park Path, 64MSMS00864

Figure 92b

TAGA File Event Summary
File: 64MSMS00864 Acquired on 04 April 2019 at 16:33:18
Title: Monitoring Channelview to Deer Park

Flag	Time	Sequence	Description
A	0.7	67	Start mobile monitoring at River Terrace Park
B	8.3	791	Right turn onto Market Street
C	14.2	1352	U-turn on Market Street
D	17.4	1653	Right turn onto Monmouth Street
E	17.6	1675	Merge onto Highway 10 East
F	20.3	1931	Merge onto Highway 330 South
G	21.2	2018	Merge onto Decker Drive
H	22.3	2121	Right turn onto Bayway Drive
I	26.0	2472	Left turn to continue onto Bayway Drive
J	30.1	2865	Left turn onto Wisconsin Street
K	32.1	3048	Right turn onto Market Street
L	32.7	3111	Right turn onto Main Street
M	34.4	3269	Right turn onto Robert C Lanier Drive
N	36.1	3434	Merge onto Highway 146 South
O	38.7	3677	Merge onto Highway 225 West
P	42.5	4046	Exit onto Pasadena Freeway Frontage Road
Q	43.4	4131	Right turn onto Independence Parkway
R	48.6	4621	Cross Miller Cut-off Road
S	50.1	4762	U-turn on Independence Parkway
T	51.4	4883	End mobile monitoring on Independence Parkway
U	51.6	4903	Start ambient
V	52.6	4998	End ambient
W	54.1	5141	Start 30 mL/min spike
X	55.1	5239	End 30 mL/min spike

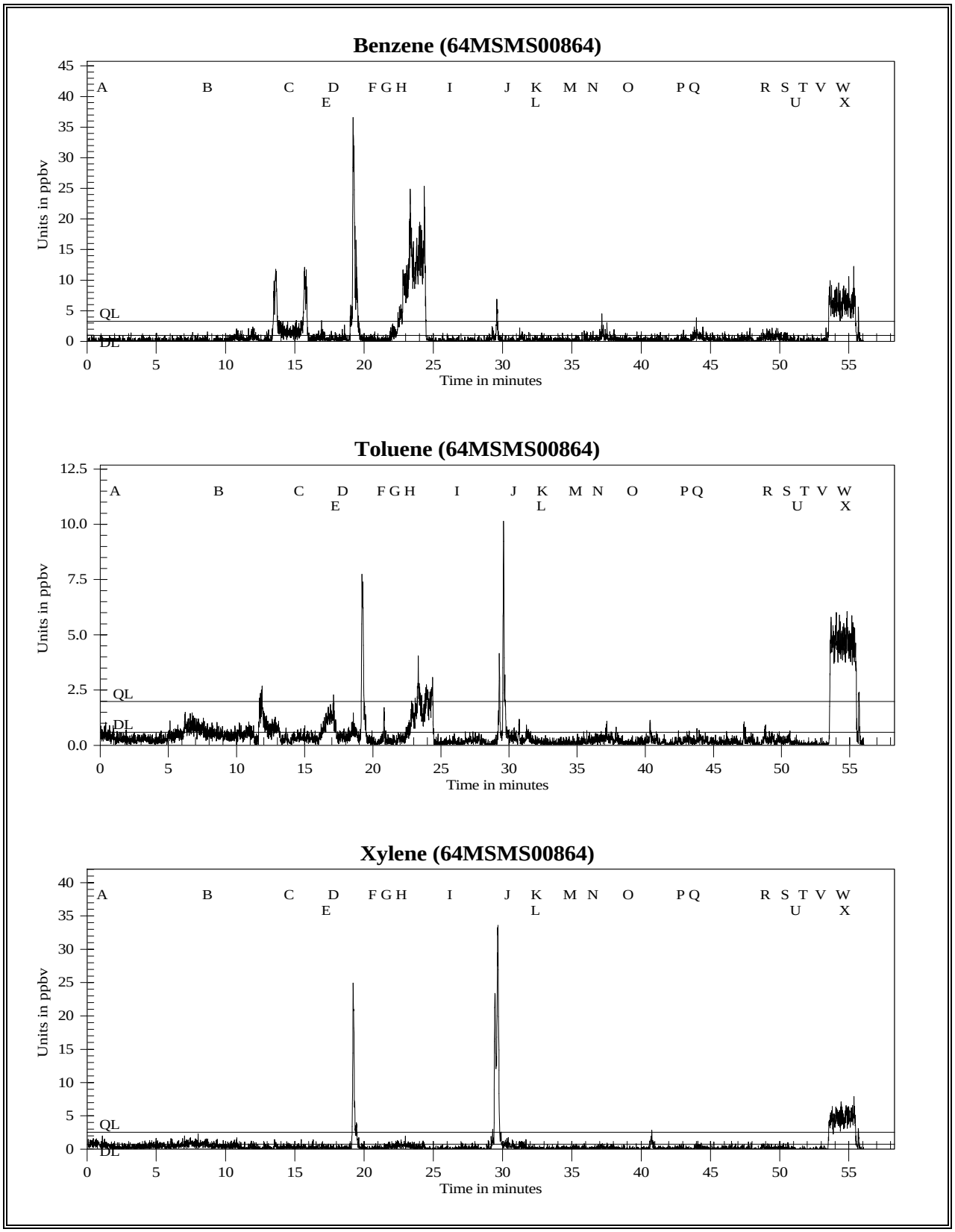


Figure 92c Mobile Monitoring Channelview to Deer Park in ppbv for Benzene, Toluene, and Xylenes

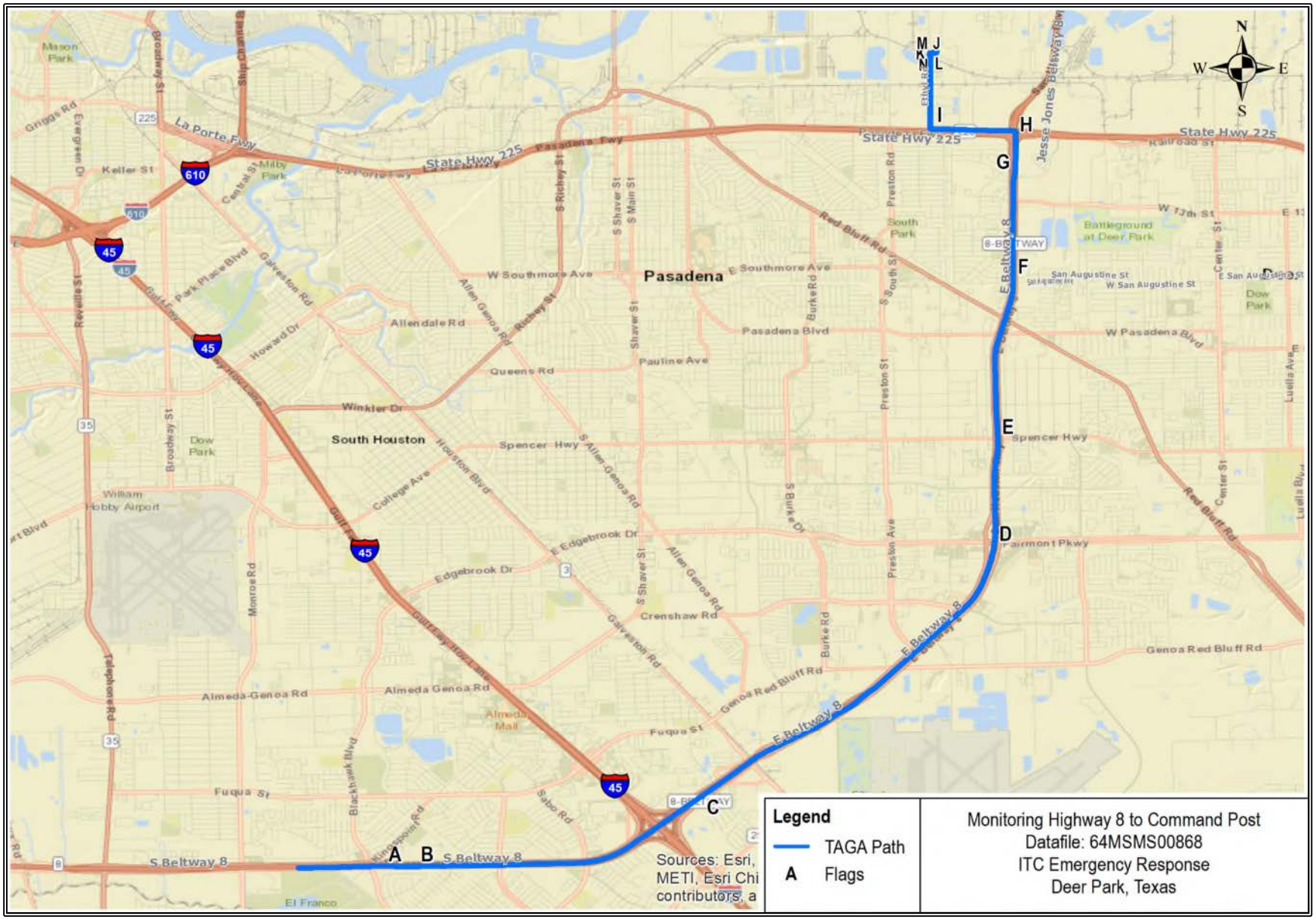


Figure 93a Monitoring Highway 8 to Command Post Path, 64MSMS00868

Figure 93b

TAGA File Event Summary
File: 64MSMS00868 Acquired on 05 April 2019 at 08:41:26
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	1.0	97	Start mobile monitoring on Highway 8 North
B	1.3	123	Continuing onto Highway 8 North
C	3.9	367	Cross Highway 45
D	8.8	836	Cross Fairmont Parkway
E	9.9	945	Cross Spencer Highway
F	11.6	1107	Cross San Augustine Avenue
G	12.8	1222	Exit onto Highway 8 Service Road
H	14.0	1330	Left turn onto Pasadena Freeway Frontage Road
I	15.4	1465	Right turn onto Ethyl Road
J	19.2	1828	End mobile monitoring at EPA Command Post
K	20.8	1980	Start ambient
L	21.8	2075	End ambient
M	23.6	2241	Start 30 mL/min spike
N	24.6	2338	End 30 mL/min spike

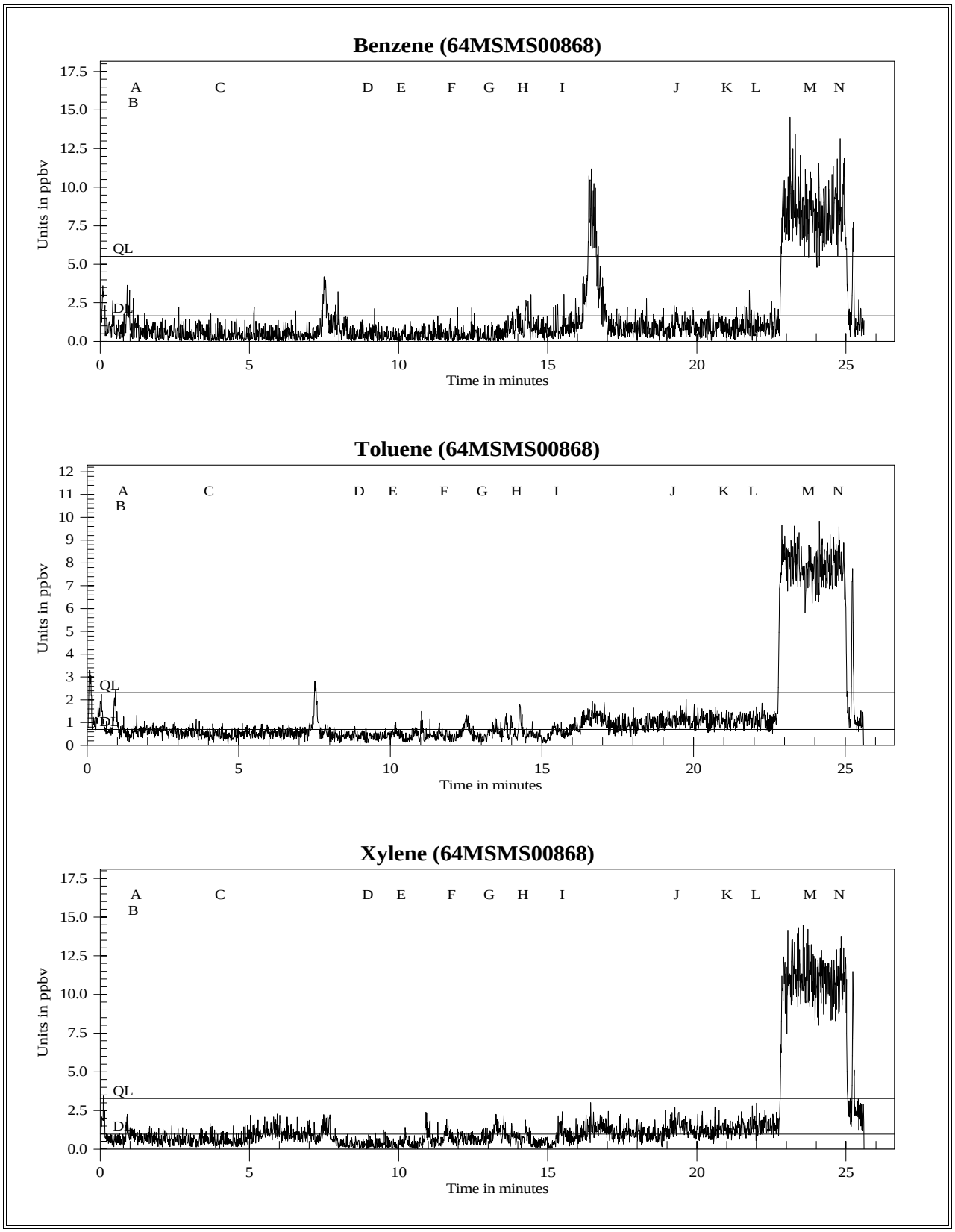


Figure 93c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

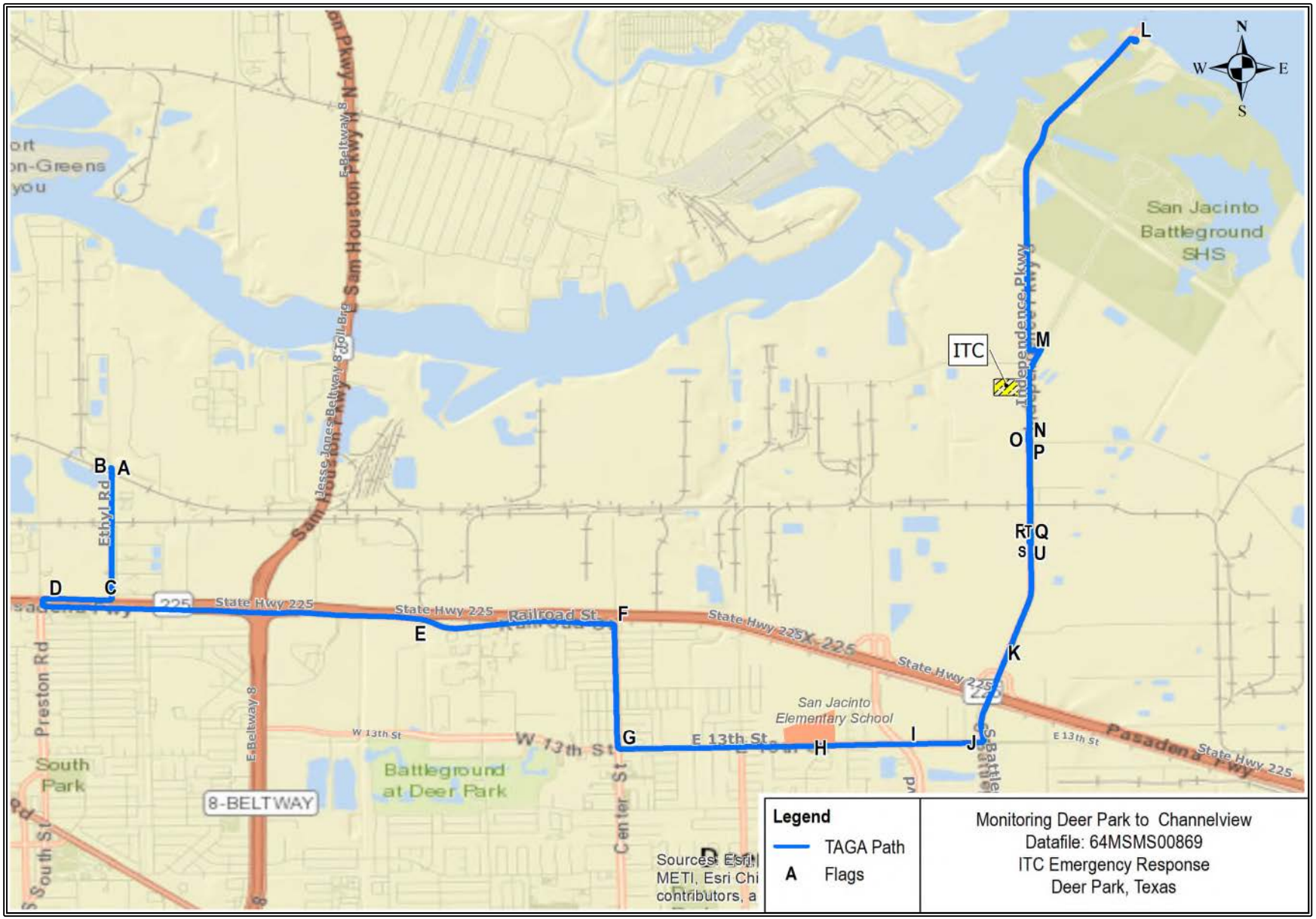


Figure 94a Monitoring Deer Park to Channelview Path, 64MSMS00869

Figure 94b

TAGA File Event Summary
File: 64MSMS00869 Acquired on 05 April 2019 at 09:23:38
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	1.5	142	Start mobile monitoring at EPA Command Post
B	16.3	1547	Continuing onto Ethyl Road
C	18.7	1780	Right turn onto Pasadena Freeway Frontage Road
D	19.4	1842	U-turn on Pasadena Freeway Frontage Road at Preston Road
E	23.9	2276	Continuing onto Railroad Street
F	26.4	2515	Right turn onto Center Street
G	29.8	2835	Left turn onto 13th Street
H	32.2	3060	Passing San Jacinto Elementary School
I	33.3	3165	Cross East Boulevard
J	34.5	3285	Left turn onto Battleground Road
K	36.5	3471	Continuing onto Independence Parkway
L	47.9	4559	U-turn onto Independence Parkway
M	53.4	5082	Continuing onto Independence Parkway
N	56.2	5348	Cross Miller Cut-off Road
O	56.5	5374	Stationary on Independence Parkway
P	58.5	5567	Resume mobile monitoring on Independence Parkway
Q	60.8	5784	End mobile monitoring on Independence Parkway
R	62.1	5908	Start ambient
S	63.2	6012	End ambient
T	64.7	6155	Start 30 mL/min spike
U	65.8	6255	End 30 mL/min spike

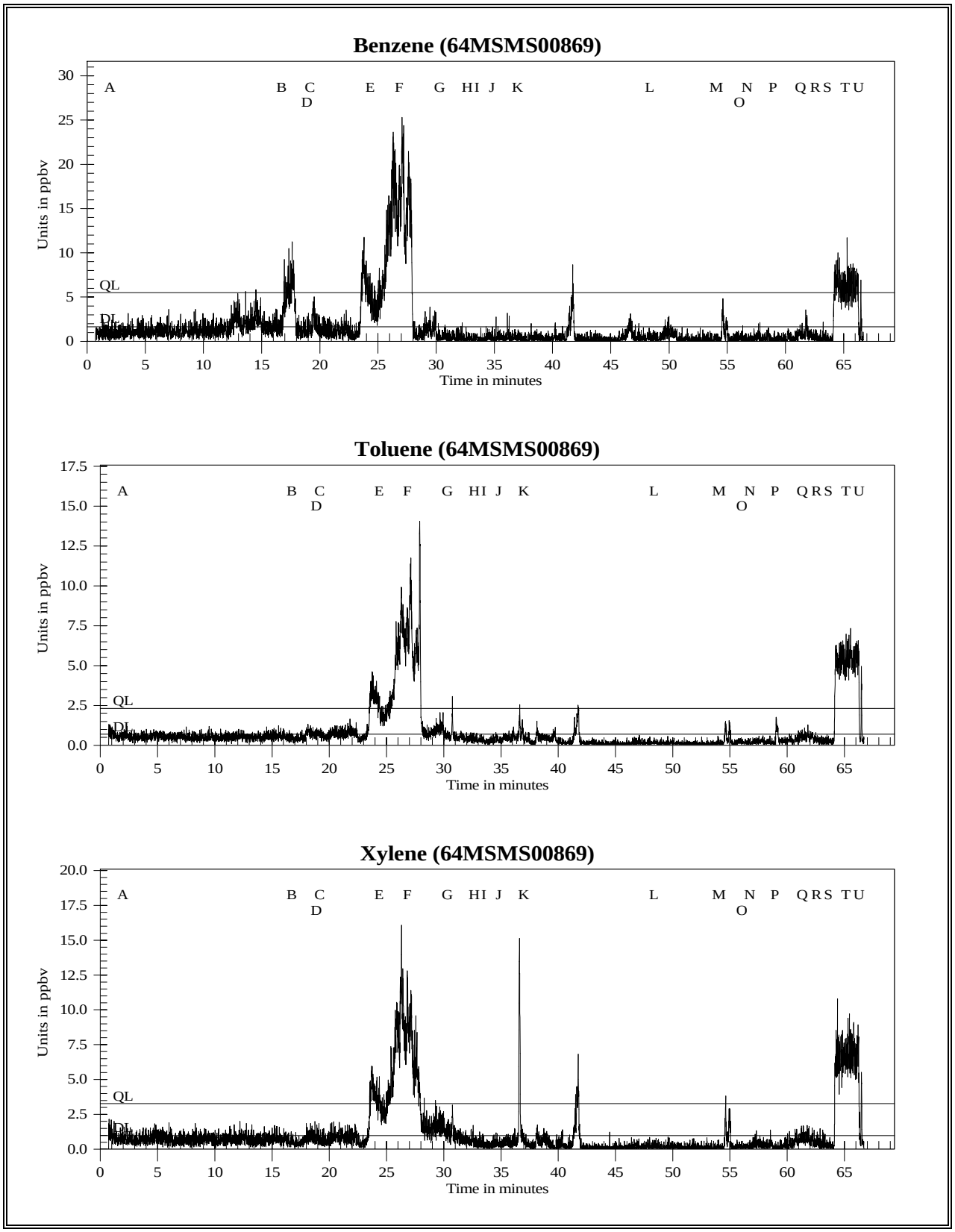


Figure 94c Mobile Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

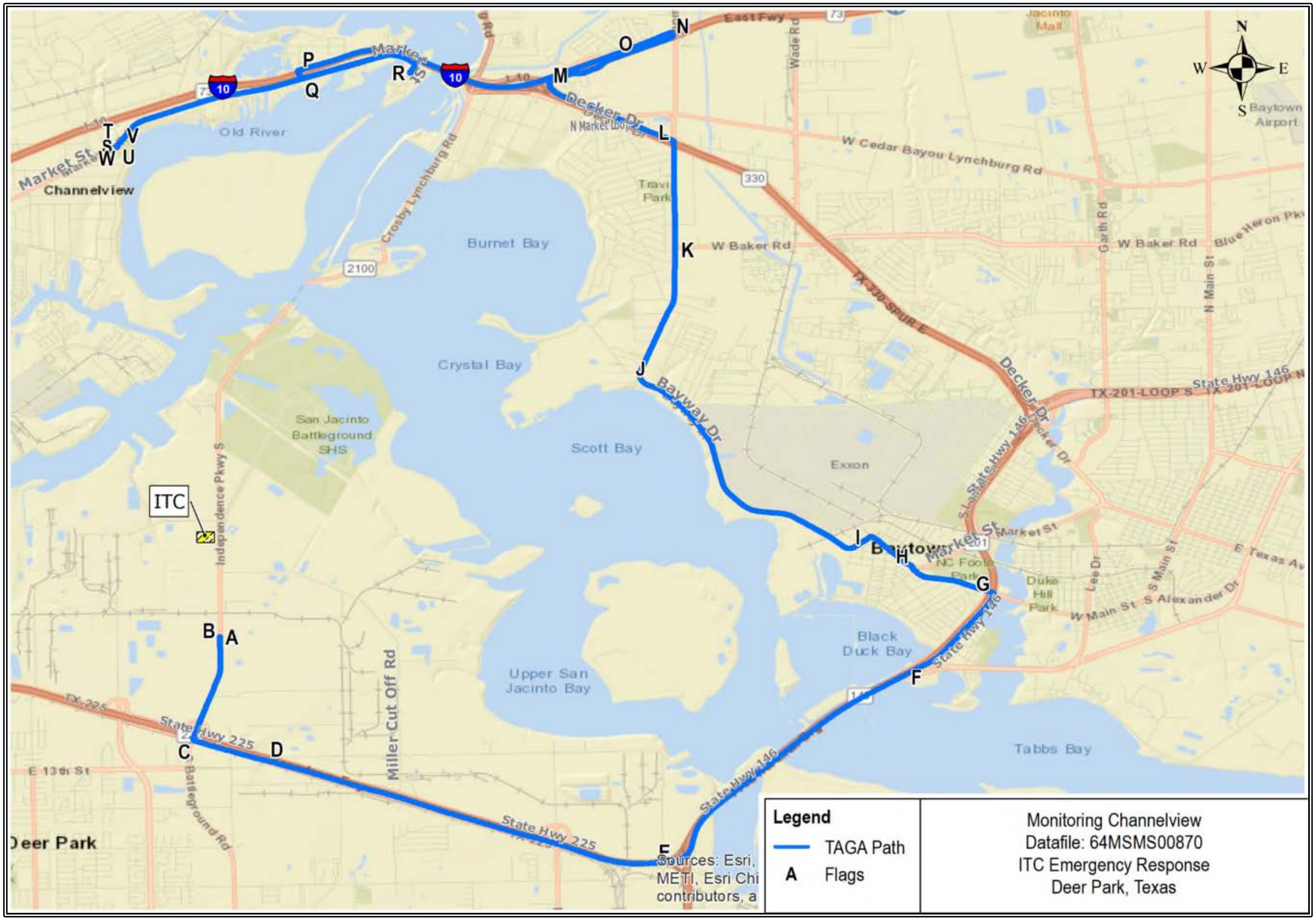


Figure 95a Monitoring Channelview Path, 64MSMS00870

Figure 95b

TAGA File Event Summary
File: 64MSMS00870 Acquired on 05 April 2019 at 10:37:02
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	0.6	58	Start mobile monitoring on Independence Parkway
B	1.1	102	Continuing onto Independence Parkway
C	4.5	425	Left turn onto Pasadena Freeway Frontage Road
D	5.4	512	Merge onto Highway 225 East
E	8.7	826	Merge onto Highway 146 North
F	11.7	1110	Exit onto Robert C Lanier Drive
G	13.2	1256	Left turn onto Main Street
H	15.4	1462	Left turn onto Market Street
I	17.9	1699	Right turn onto Bayway Drive
J	23.0	2189	Right turn to continue onto Bayway Drive
K	25.5	2427	Cross W Baker Road
L	27.6	2629	Left turn onto Decker Street
M	29.3	2791	Right turn onto East Freeway Service Road
N	31.8	3025	U-turn on East Freeway Service Road
O	33.3	3166	Merge onto Highway 10 West
P	40.0	3802	Left turn onto Monmouth Road
Q	40.5	3851	Left turn onto Market Street
R	44.7	4248	U-turn on Market Street
S	54.0	5135	End mobile monitoring on Market Street
T	54.9	5225	Start ambient
U	56.1	5332	End ambient
V	57.6	5476	Start 30 mL/min spike
W	58.6	5570	End 30 mL/min spike
Notes:		Nitrogen regulator pressure loss at approximately 40 minutes into the run. Regulator pressure reset to approximately 37 psi and mobile monitoring was resumed.	

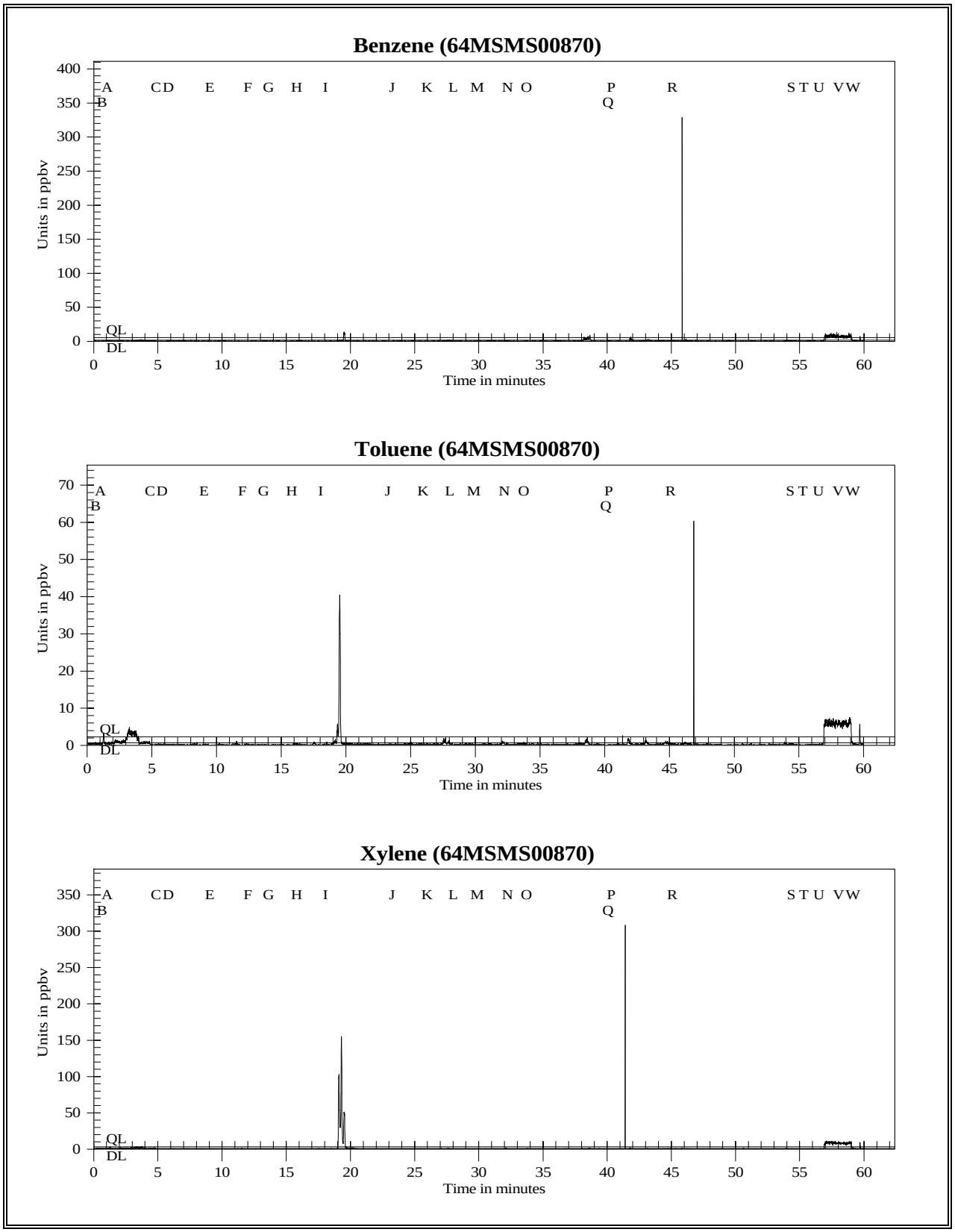


Figure 95c Mobile Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

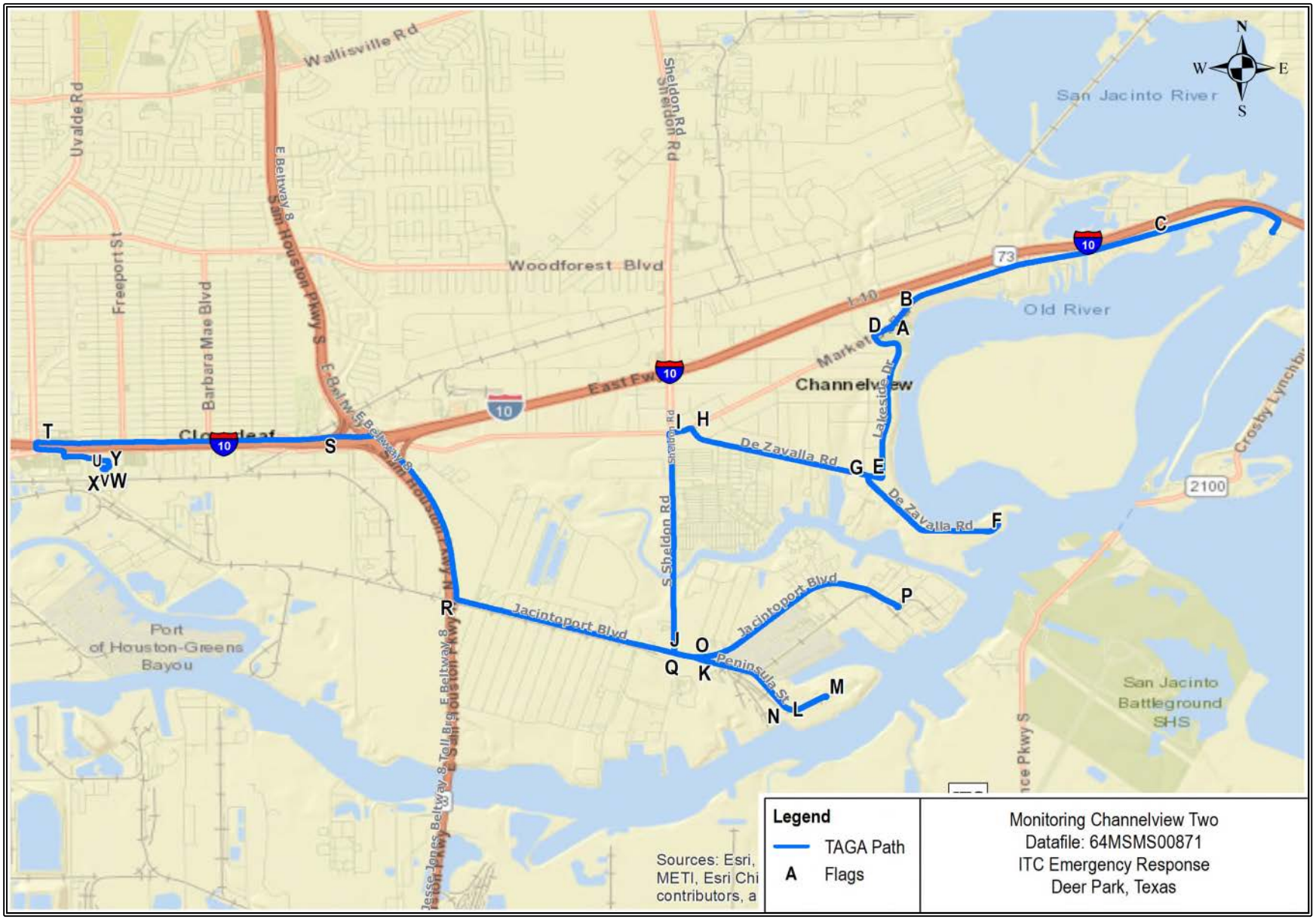


Figure 96a Monitoring Channelview Two Path, 64MSMS00871

Figure 96b

TAGA File Event Summary
File: 64MSMS00871 Acquired on 05 April 2019 at 11:49:40
Title: Monitoring Channelview Two

Flag	Time	Sequence	Description
A	1.0	100	Start mobile monitoring on Market Street
B	1.9	183	Continuing onto Market Street
C	14.3	1363	U-turn on Market Street
D	19.8	1880	Left turn onto Lakeside Drive
E	23.3	2219	Left turn onto Dezavala Road
F	27.9	2650	U-turn on Dezavala Road
G	35.1	3334	Left turn to continue on Dezavala Road
H	37.8	3593	Left turn onto Market Street
I	39.5	3754	Left turn onto Sheldon Road
J	43.2	4111	Left turn onto Jacintoport Boulevard
K	44.1	4193	Right turn onto San Jacinto Boulevard
L	46.2	4396	Continuing onto Peninsula Street
M	47.4	4504	U-turn on Peninsula Street
N	49.8	4740	Continuing onto San Jacinto Boulevard
O	52.6	5000	Right turn onto Jacintoport Boulevard
P	56.4	5360	U-turn onto Jacintoport Boulevard
Q	61.1	5808	Cross Sheldon Road
R	64.2	6103	Right turn onto Highway 8 Service Road
S	67.2	6386	Left turn onto East Freeway Service Road
T	71.1	6762	U-turn on East Freeway Service Road
U	74.4	7074	End mobile monitoring at shopping center on East Freeway Service Road
V	75.2	7148	Start ambient
W	76.2	7245	End ambient
X	77.6	7375	Start 30 mL/min spike
Y	78.6	7470	End 30 mL/min spike

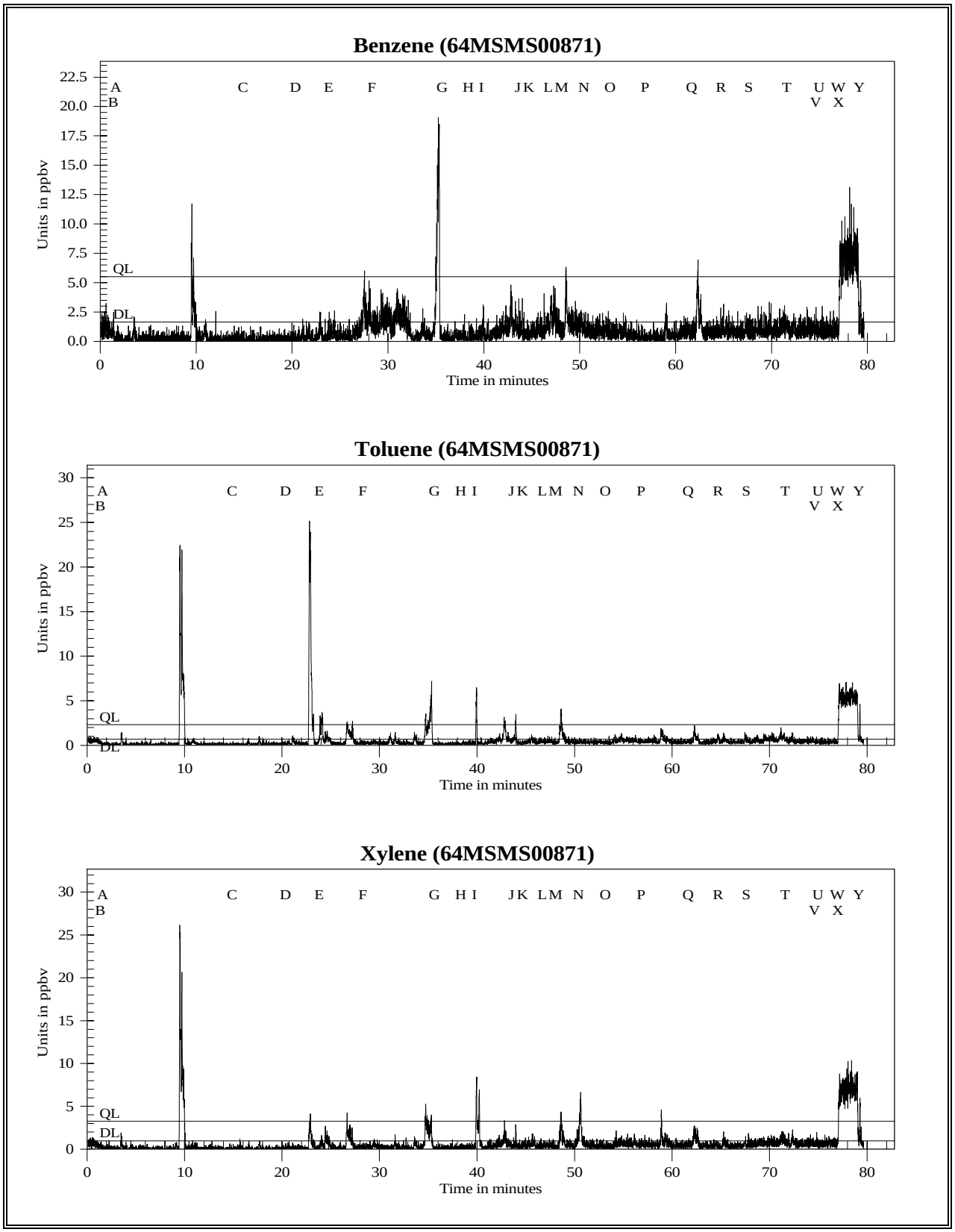


Figure 96c Mobile Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

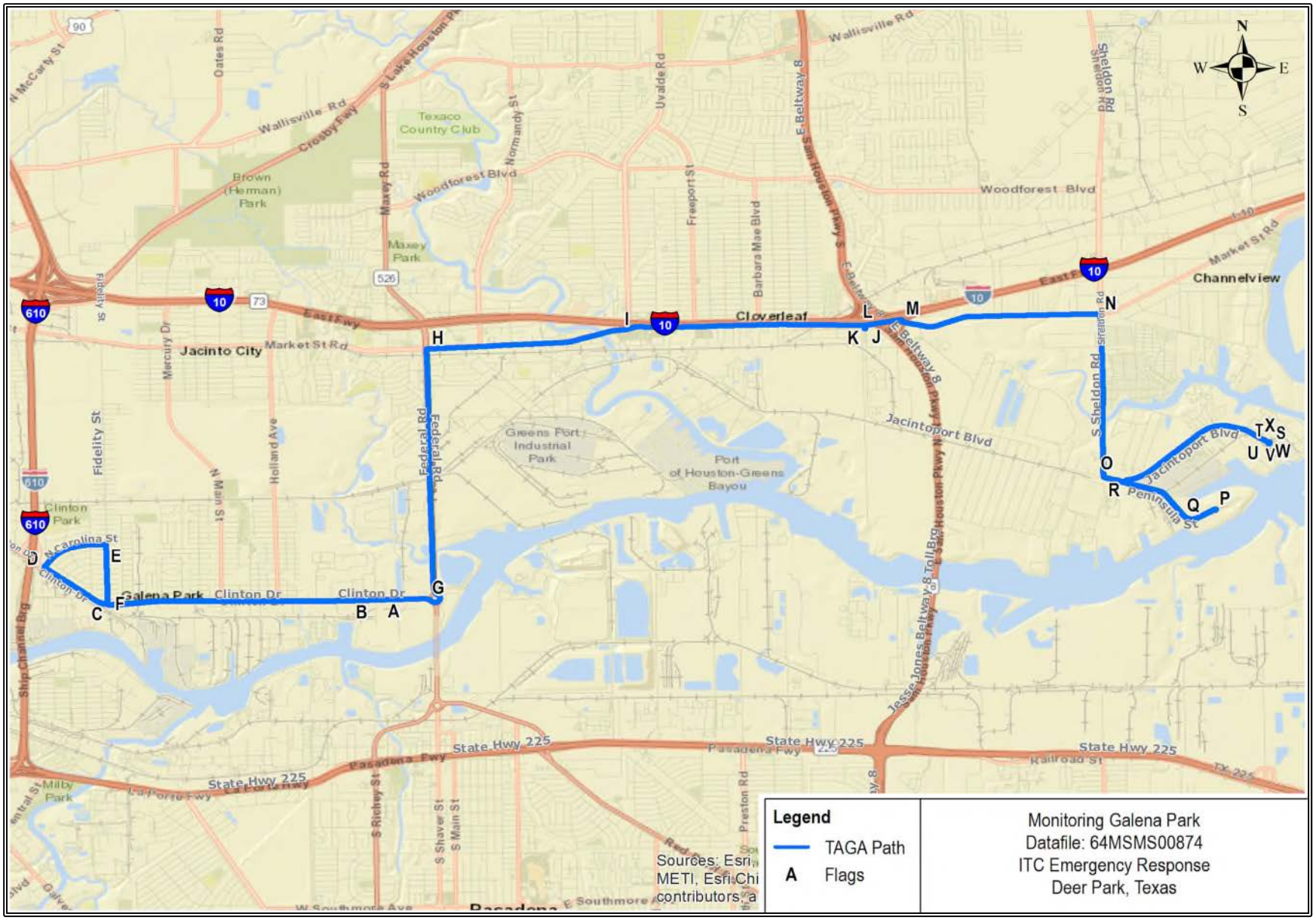


Figure 97a Monitoring Galena Park Path, 64MSMS00874

Figure 97b

TAGA File Event Summary
File: 64MSMS00874 Acquired on 05 April 2019 at 14:59:06
Title: Monitoring Galena Park

Flag	Time	Sequence	Description
A	0.8	75	Start mobile monitoring on Clinton Drive
B	2.1	196	Continuing onto Clinton Drive
C	7.4	704	Cross Fidelity Street
D	9.8	936	Right turn onto North Carolina Street
E	12.7	1211	Right turn onto Fidelity Street
F	15.9	1515	Left turn onto Clinton Drive
G	23.6	2241	Left turn onto Federal Road
H	30.4	2891	Right turn onto Market Street
I	35.6	3384	Merge onto East Freeway Service Road
J	40.3	3829	Right turn onto Jacintoport Boulevard
K	41.7	3970	U-turn onto Jacintoport Boulevard
L	43.5	4141	Right turn onto East Freeway Service Road
M	44.2	4204	Right turn onto Market Street
N	48.0	4567	Right turn on Sheldon Road
O	51.7	4913	Left turn onto Jacintoport Boulevard
P	59.3	5642	U-turn on Peninsula Street
Q	60.8	5784	Continuing onto San Jacinto Boulevard
R	63.5	6039	Right turn onto Jacintoport Boulevard
S	67.7	6437	U-turn onto Jacintoport Boulevard
T	68.1	6472	End mobile monitoring on Jacintoport Boulevard
U	68.6	6524	Start ambient
V	69.7	6627	End ambient
W	71.4	6792	Start 30 mL/min spike
X	72.5	6890	End 30 mL/min spike

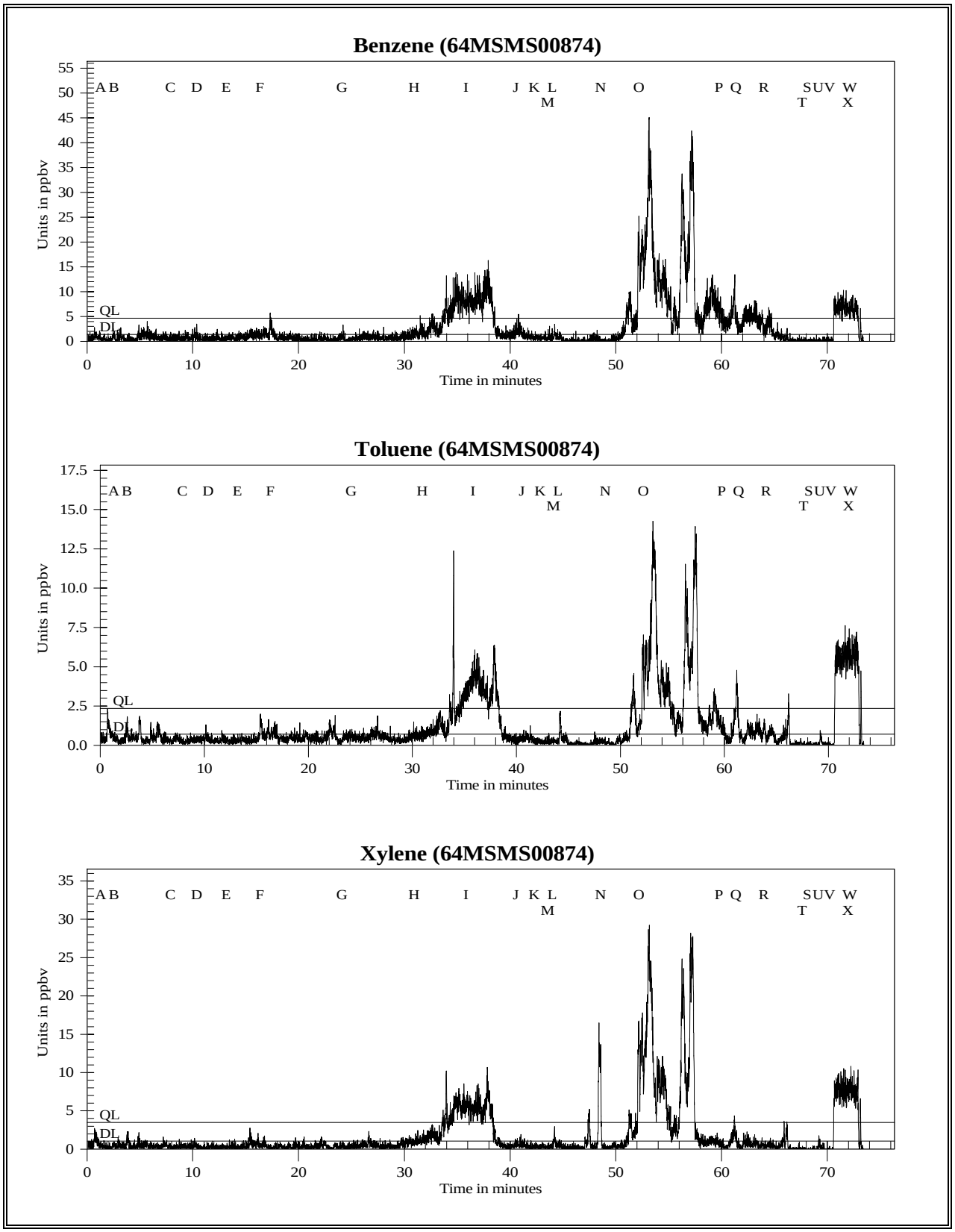


Figure 97c Mobile Monitoring Galena Park in ppbv for Benzene, Toluene, and Xylenes

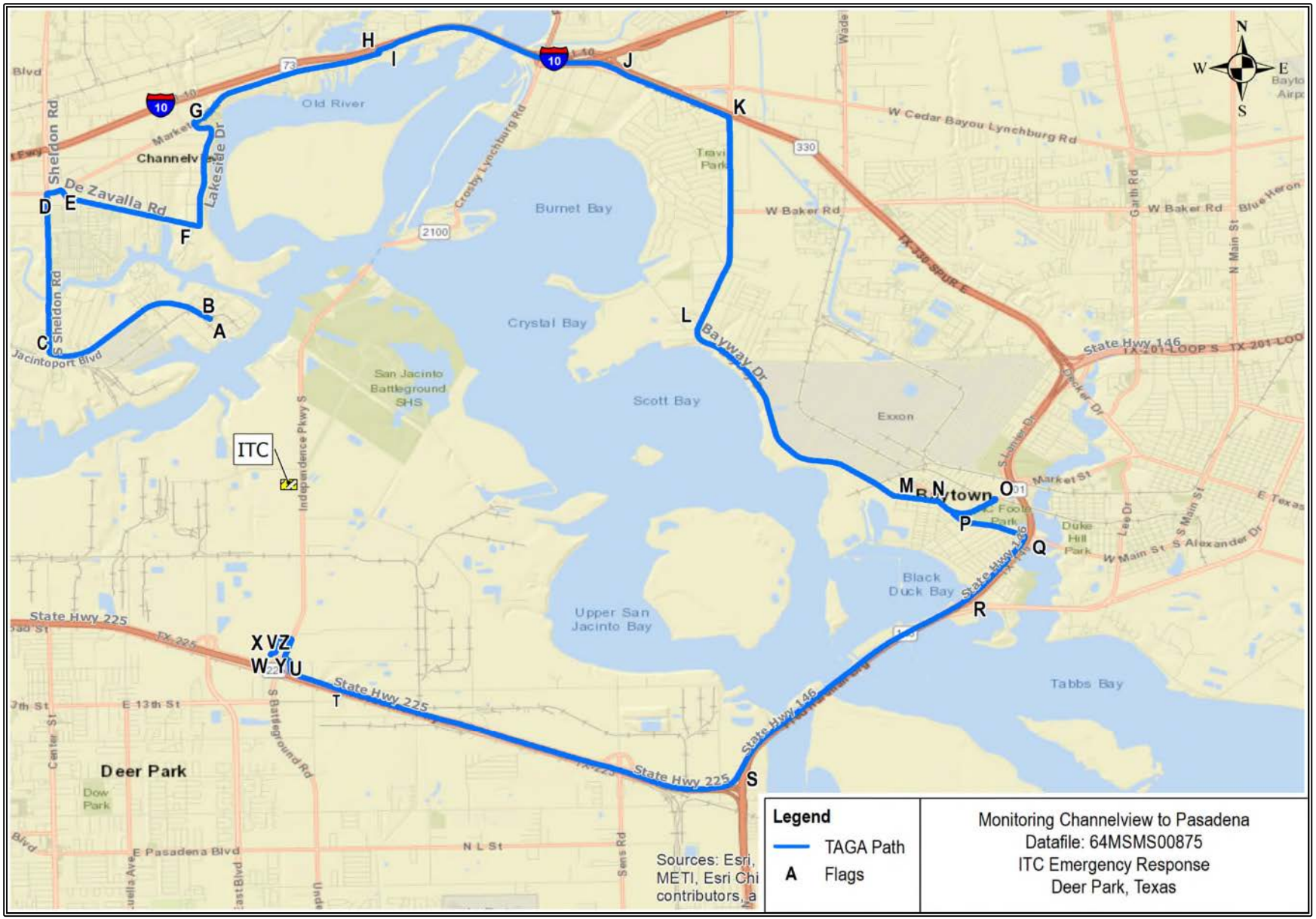


Figure 98a Monitoring Channelview to Pasadena Path, 64MSMS00875

Figure 98b

TAGA File Event Summary
File: 64MSMS00875 Acquired on 05 April 2019 at 16:16:03
Title: Monitoring Channelview to Pasadena

Flag	Time	Sequence	Description
A	0.6	58	Start mobile monitoring on Jacintoport Boulevard
B	0.9	85	Continuing onto Jacintoport Boulevard
C	4.4	421	Right turn onto Sheldon Road
D	7.6	725	Right turn onto Market Street
E	8.1	768	Right turn onto Dezavala Road
F	10.6	1007	Left turn onto Lakeside Drive
G	13.5	1281	Right turn onto Market Street
H	17.3	1649	Left turn onto Monmouth Street
I	17.7	1682	Right turn onto Highway 10 East
J	20.5	1954	Merge onto Highway 330 South
K	22.3	2122	Exit onto Bayway Drive
L	26.2	2492	Left turn to continue onto Bayway Drive
M	30.7	2918	Left turn onto Wisconsin Street
N	32.0	3045	Right turn onto Market Street
O	33.6	3198	U-turn on Market Street
P	35.0	3330	Left turn onto Main Street
Q	36.7	3493	Right turn onto Robert C Lanier Drive
R	38.3	3639	Merge onto Highway 146 South
S	41.1	3911	Merge onto Highway 225 West
T	44.9	4266	Exit onto Pasadena Freeway Frontage Road
U	45.9	4363	Right turn onto Independence Parkway
V	49.6	4719	End mobile monitoring on Independence Parkway
W	50.0	4759	Start ambient
X	51.1	4859	End ambient
Y	52.7	5009	Start 30 mL/min spike
Z	53.7	5106	End 30 mL/min spike

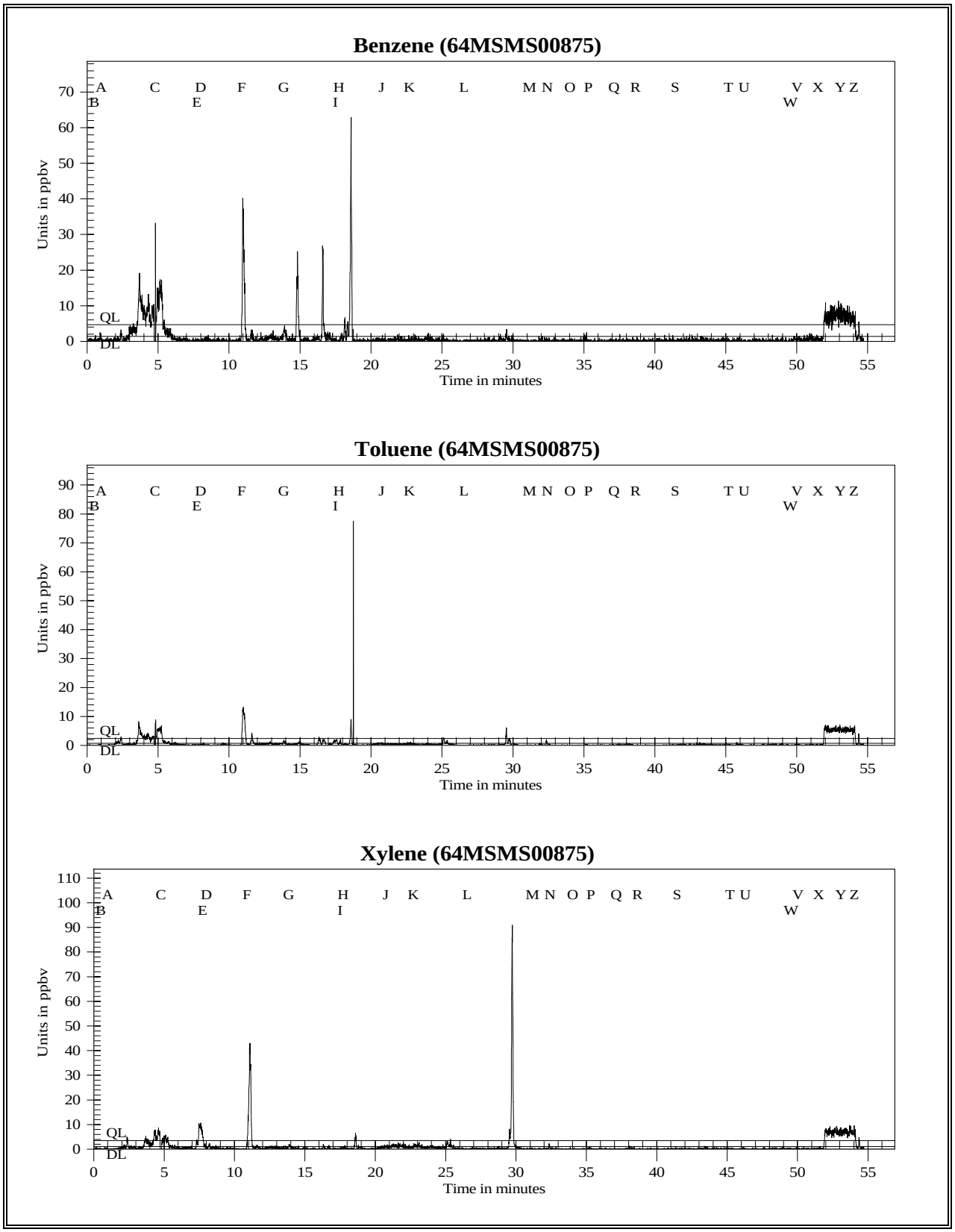


Figure 98c Mobile Monitoring Channelview to Pasadena in ppbv for Benzene, Toluene, and Xylenes

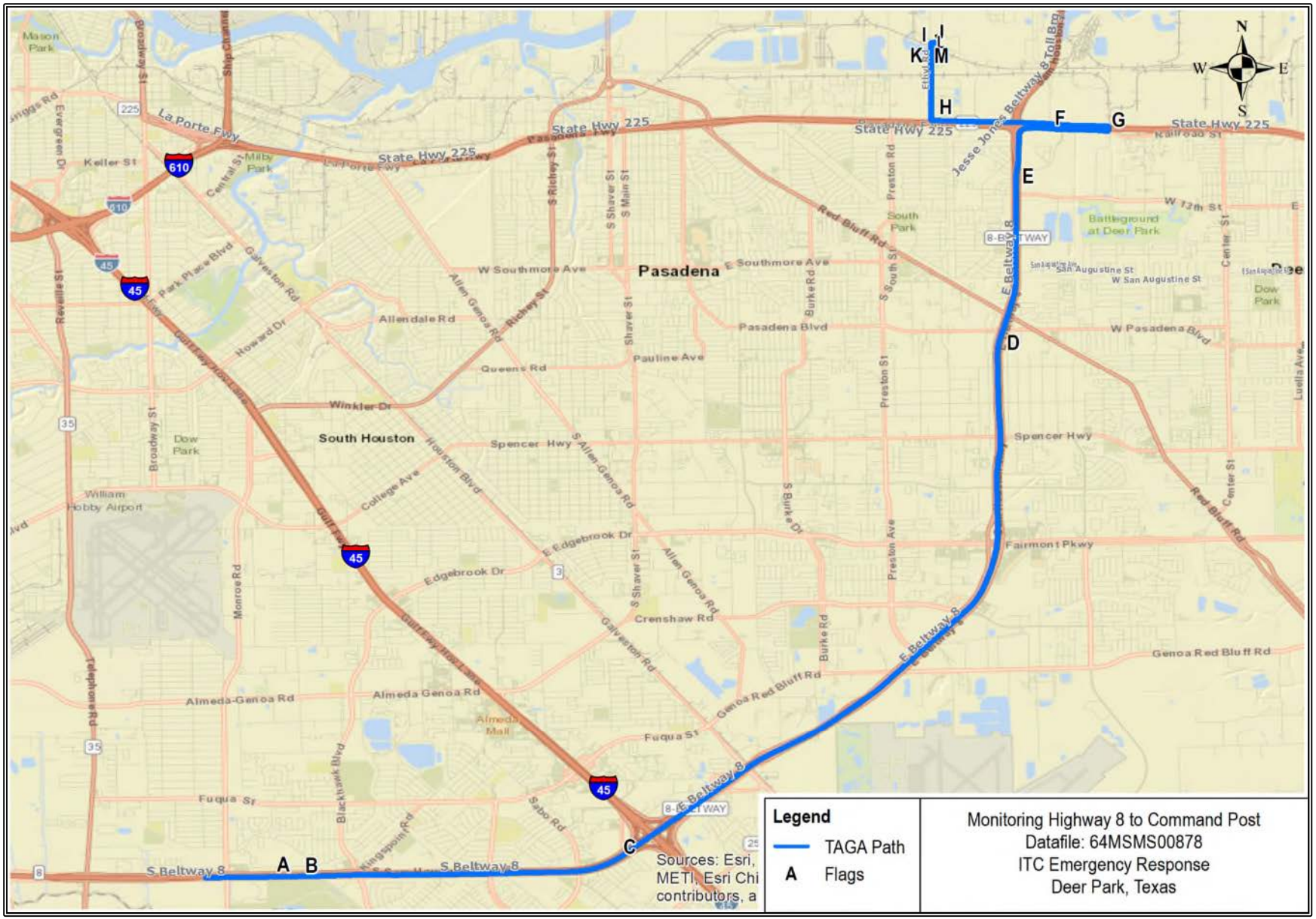


Figure 99a Monitoring Highway 9 to Command Post Path, 64MSMS00878

Figure 99b

TAGA File Event Summary
File: 64MSMS00878 Acquired on 06 April 2019 at 08:29:57
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	0.9	83	Start mobile monitoring on Highway 8 North
B	1.0	97	Continuing onto Highway 8 North
C	3.7	352	Cross Highway 45
D	10.3	981	Cross Pasadena Boulevard
E	12.1	1153	Exit onto Highway 8 Service Road
F	13.4	1276	Right turn onto Pasadena Freeway Frontage Road
G	14.1	1346	U-turn on Pasadena Freeway Frontage Road
H	17.7	1680	Right turn onto Ethyl Road
I	21.4	2035	End mobile monitoring at EPA Command Post
J	21.6	2059	Start ambient
K	22.7	2159	End ambient
L	24.1	2295	Start 30 mL/min spike
M	25.2	2398	End 30 mL/min spike

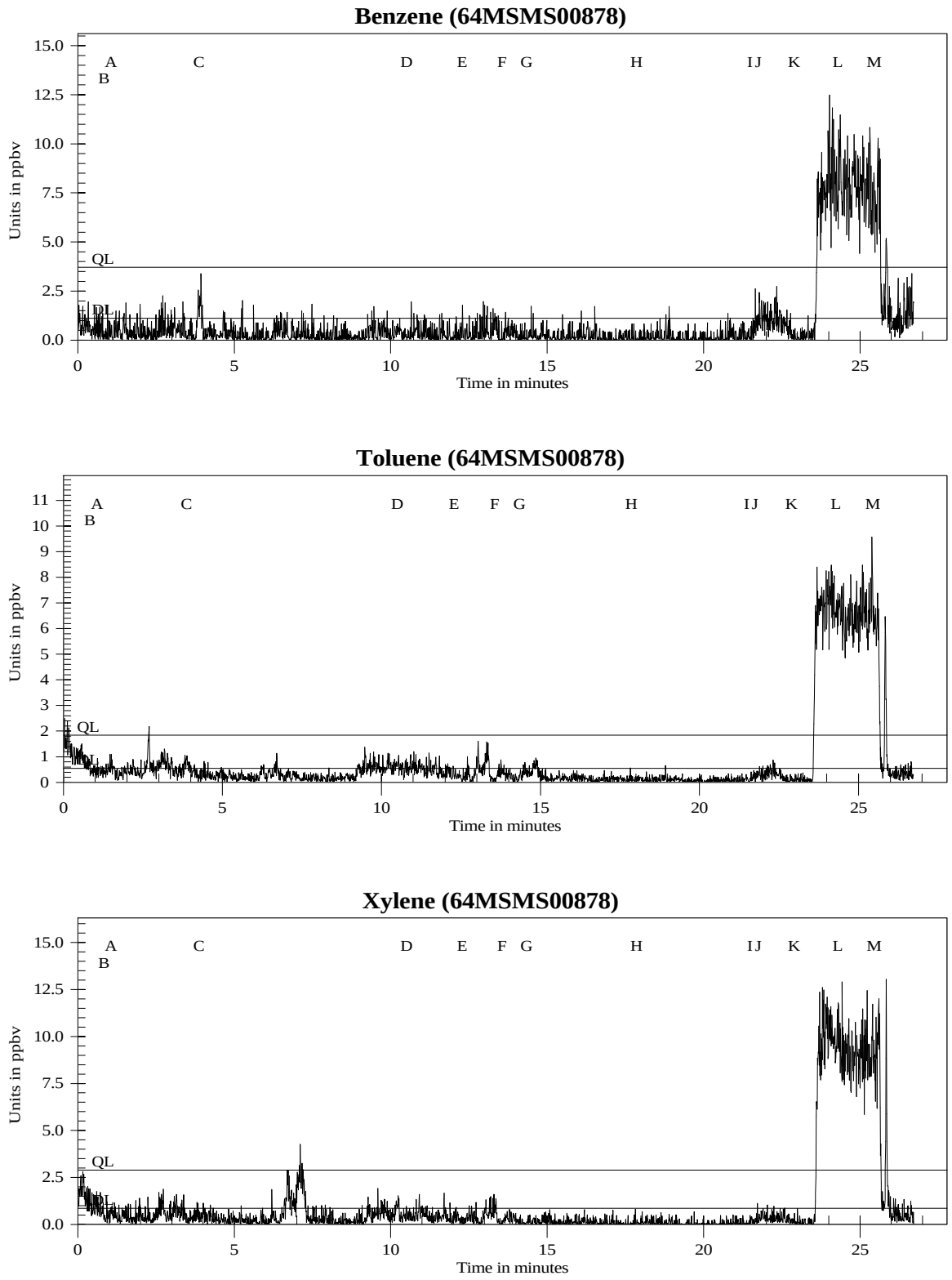


Figure 99c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

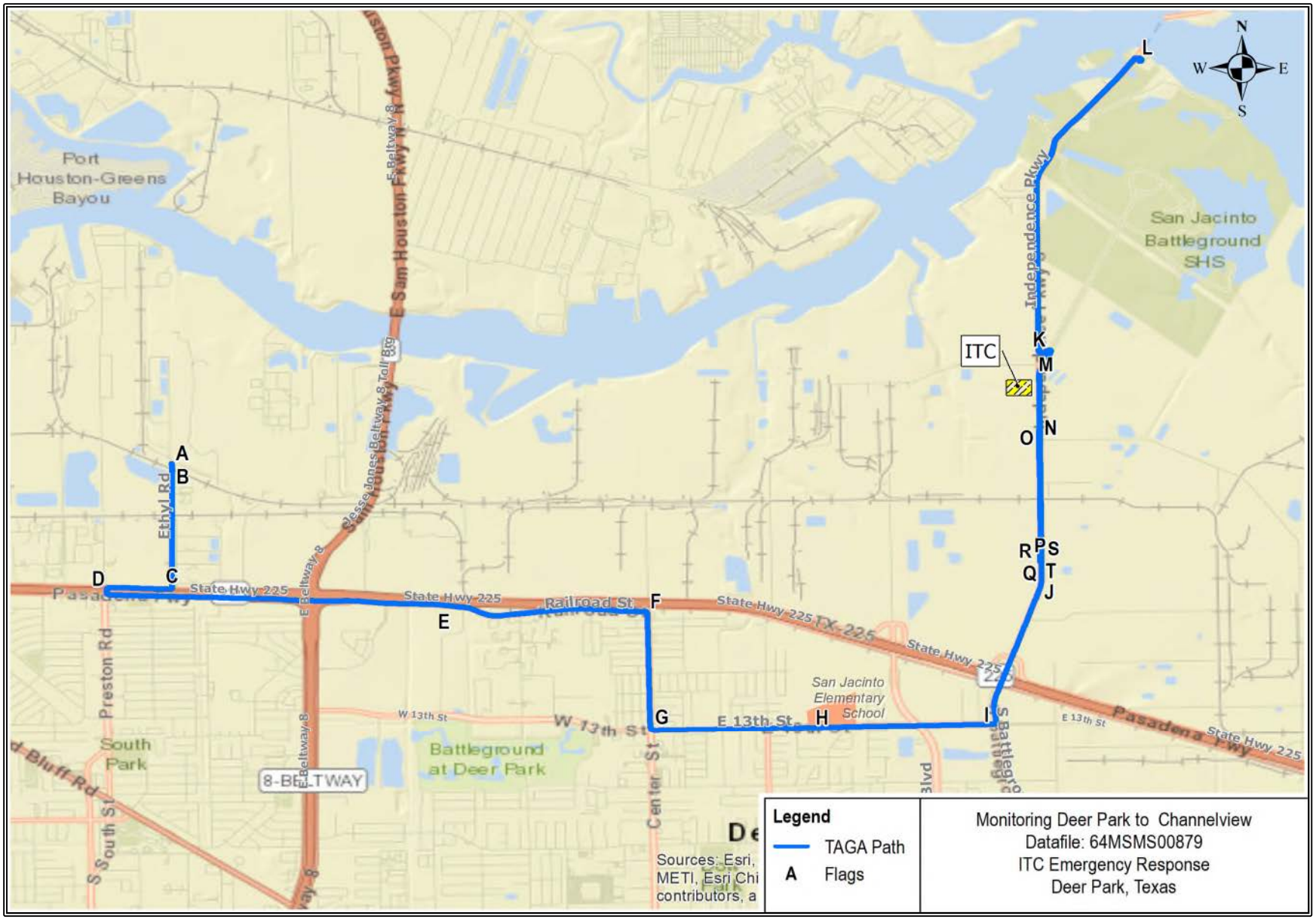


Figure 100a Monitoring Deer Park to Channelview Path, 64MSMS00879

Figure 100b

TAGA File Event Summary
File: 64MSMS00879 Acquired on 06 April 2019 at 09:01:37
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	0.6	55	Start mobile monitoring at EPA Command Post
B	11.8	1121	Continuing onto Ethyl Road
C	14.6	1390	Right turn onto Pasadena Freeway Frontage Road
D	15.3	1455	U-turn on Pasadena Freeway Frontage Road at Preston Road
E	18.3	1745	Continuing onto Railroad Street
F	21.4	2037	Right turn onto Center Street
G	23.2	2206	Left turn onto 13th Street
H	25.9	2461	Passing San Jacinto Elementary School
I	29.3	2783	Left turn onto Battleground Road
J	32.0	3040	Continuing onto Independence Parkway
K	37.2	3534	Continuing onto Independence Parkway
L	41.8	3973	U-turn on Independence Parkway
M	48.2	4583	Continuing onto Independence Parkway
N	51.3	4876	Stationary on Independence Parkway
O	54.7	5203	Resume mobile monitoring on Independence Parkway
P	57.2	5443	End mobile monitoring on Independence Parkway
Q	57.6	5475	Start ambient
R	58.6	5572	End ambient
S	60.2	5726	Start 30 mL/min spike
T	61.2	5819	End 30 mL/min spike

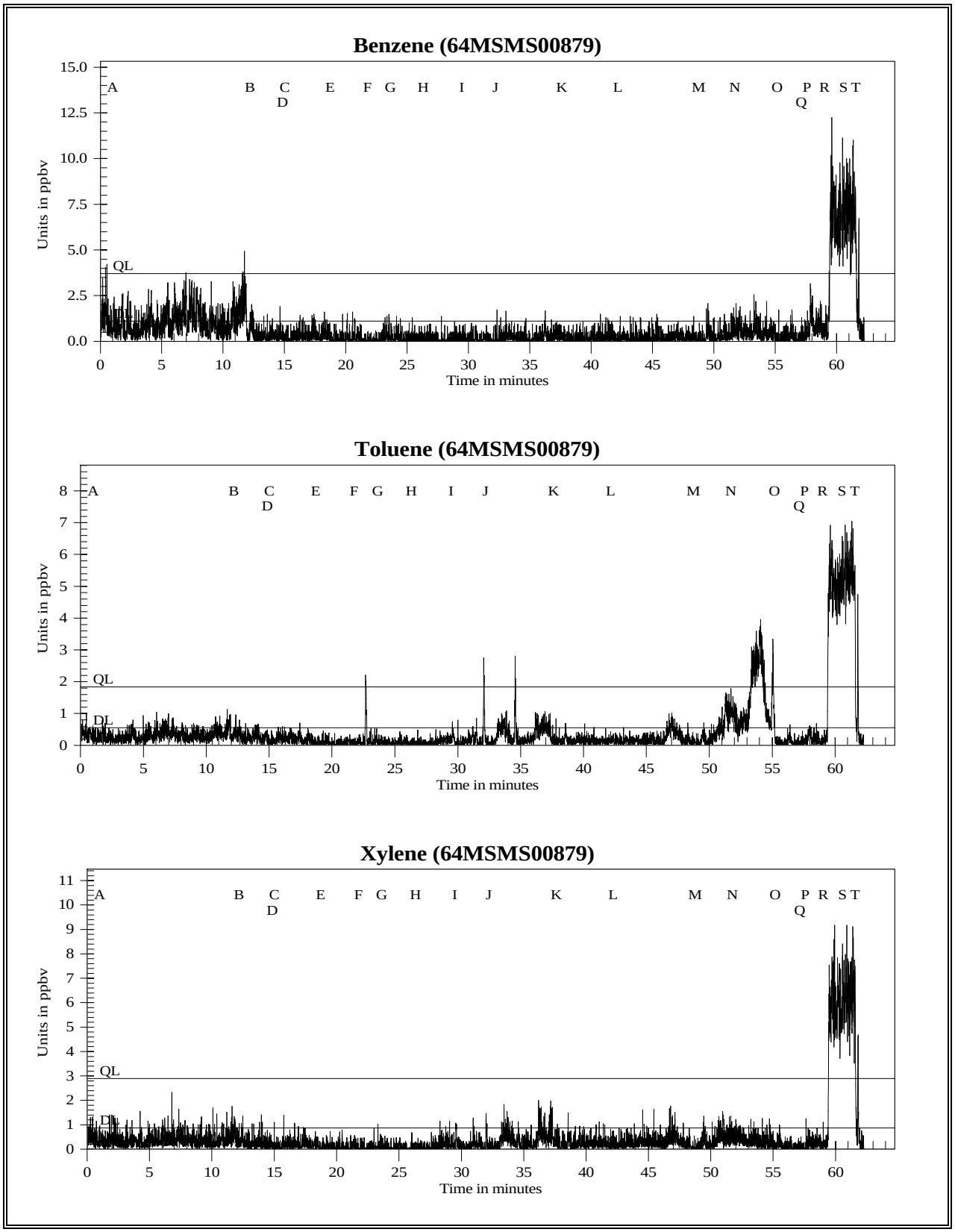


Figure 100c Mobile Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

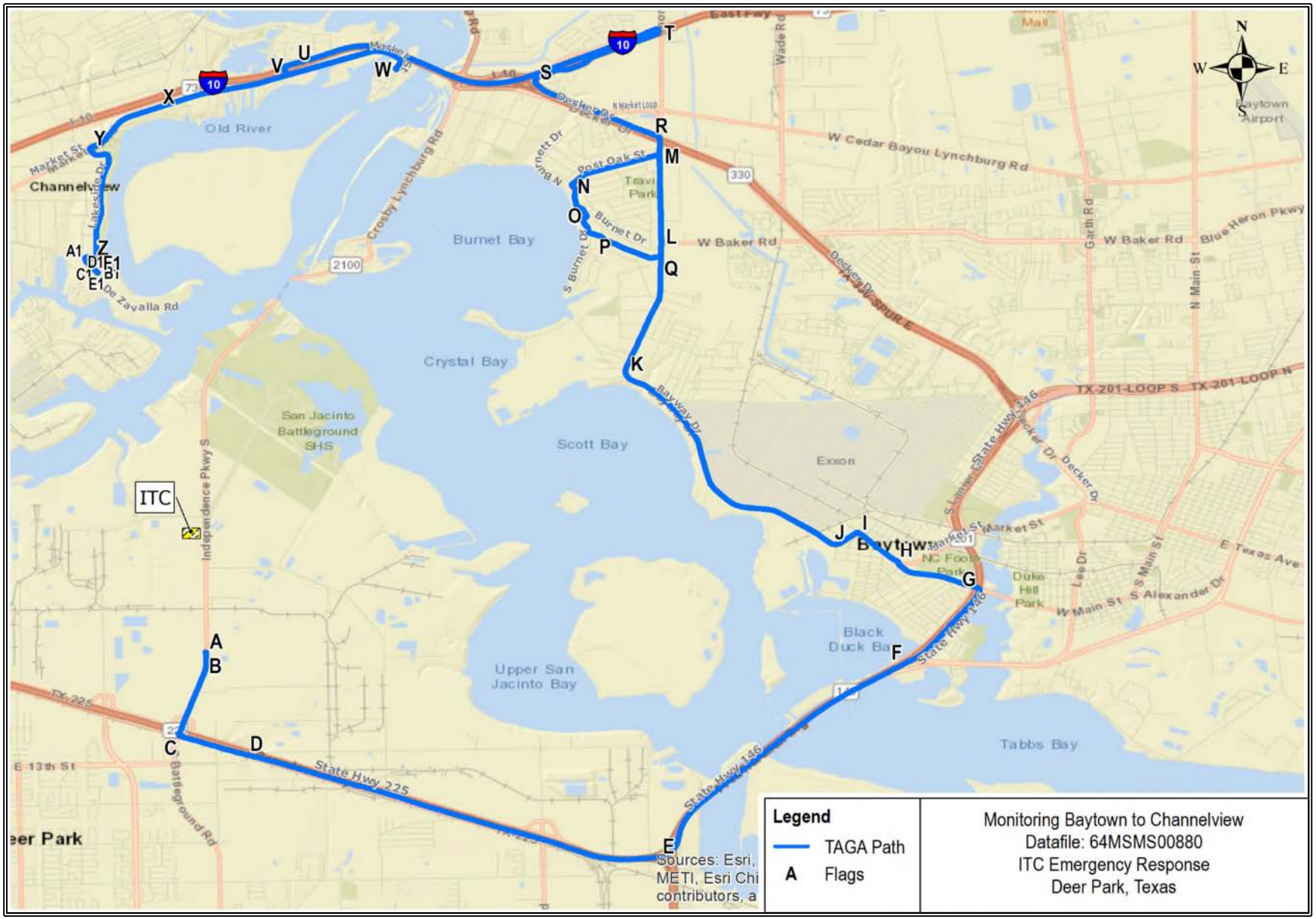


Figure 101a Monitoring Baytown to Channelview Path, 64MSMS00880

Figure 101b

TAGA File Event Summary
File: 64MSMS00880 Acquired on 06 April 2019 at 10:07:20
Title: Monitoring Baytown to Channelview

Flag	Time	Sequence	Description
A	0.6	61	Start mobile monitoring on Independence Parkway
B	1.5	148	Continuing onto Independence Parkway
C	4.5	424	Left turn onto Pasadena Freeway Frontage Road
D	5.3	506	Merge onto Highway 225 East
E	8.6	815	Merge onto Highway 146 North
F	11.5	1091	Exit onto Robert C Lanier Drive
G	14.0	1335	Left turn onto Main Street
H	16.0	1525	Left turn onto Market Street
I	17.3	1642	Left turn to continue onto Market Street
J	17.9	1706	Right turn onto Bayway Drive
K	23.0	2189	Right turn to continue on Bayway Drive
L	25.4	2411	Cross W Baker Road
M	27.2	2590	Left turn onto Post Oak Street
N	30.8	2929	Left turn onto N Burnett Drive
O	32.4	3084	Right turn onto S Burnett Drive
P	33.7	3206	Left turn onto Lakewood Dive
Q	35.9	3411	Left turn onto Bayway Drive
R	38.4	3656	Left turn onto Decker Drive
S	40.1	3811	Right turn onto East Freeway Service Road
T	42.3	4019	U-turn on East Freeway Service Road
U	46.1	4385	Left turn onto Monmouth Street
V	46.9	4461	Left turn onto Market Street
W	49.9	4745	U-turn on Market Street
X	58.9	5602	Cross River Road
Y	60.8	5783	Left turn onto Lakeside Drive
Z	63.9	6074	Continuing onto Lakeside Drive
A1	64.5	6131	Left turn onto Dezavala Drive
B1	65.6	6237	End mobile monitoring on Dezavala Drive
C1	66.0	6279	Start ambient
D1	67.0	6374	End ambient
E1	68.7	6529	Start 30 mL/min spike
F1	69.7	6630	End 30 mL/min spike

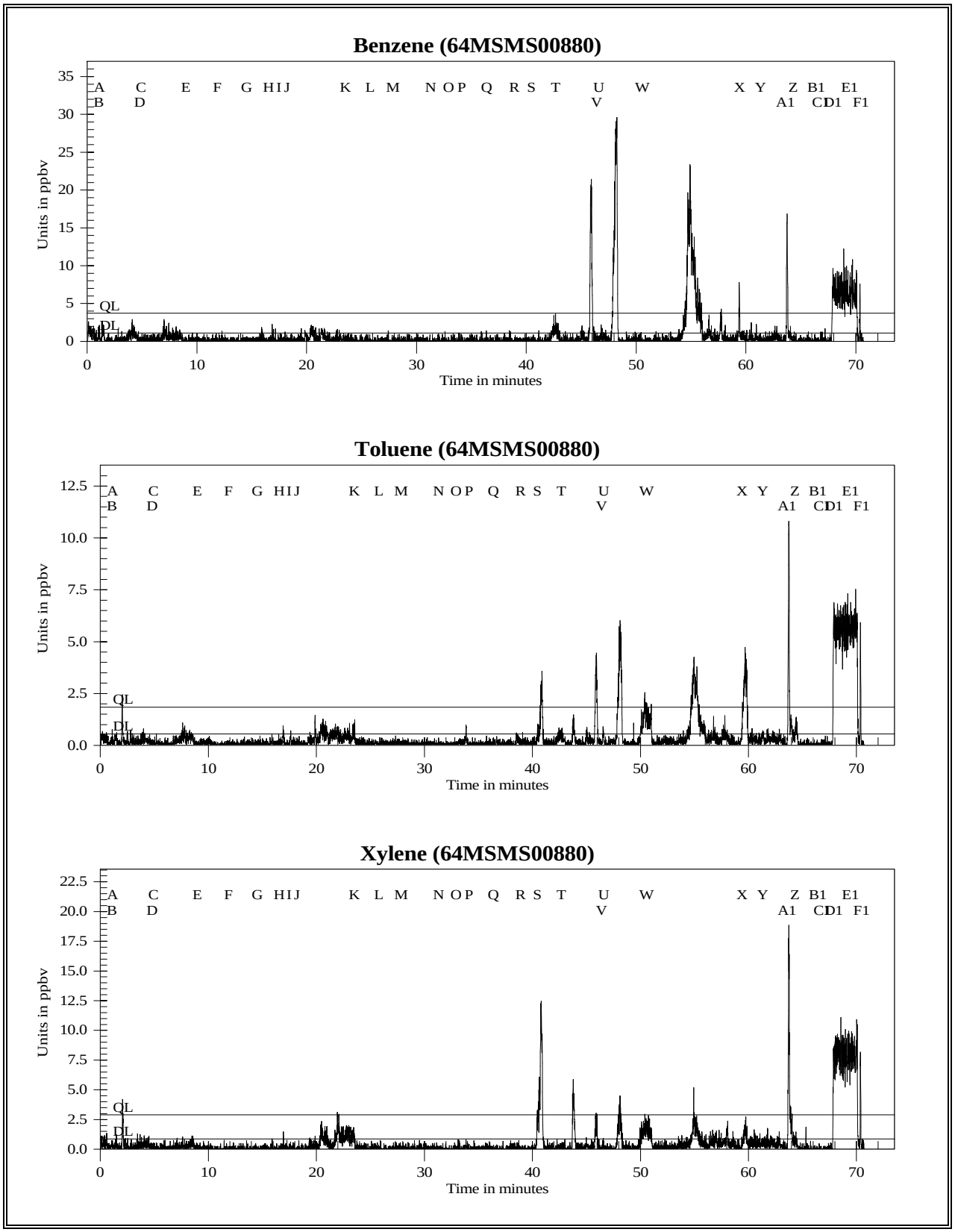


Figure 101c Mobile Monitoring Baytown to Channelview in ppbv for Benzene, Toluene, and Xylenes

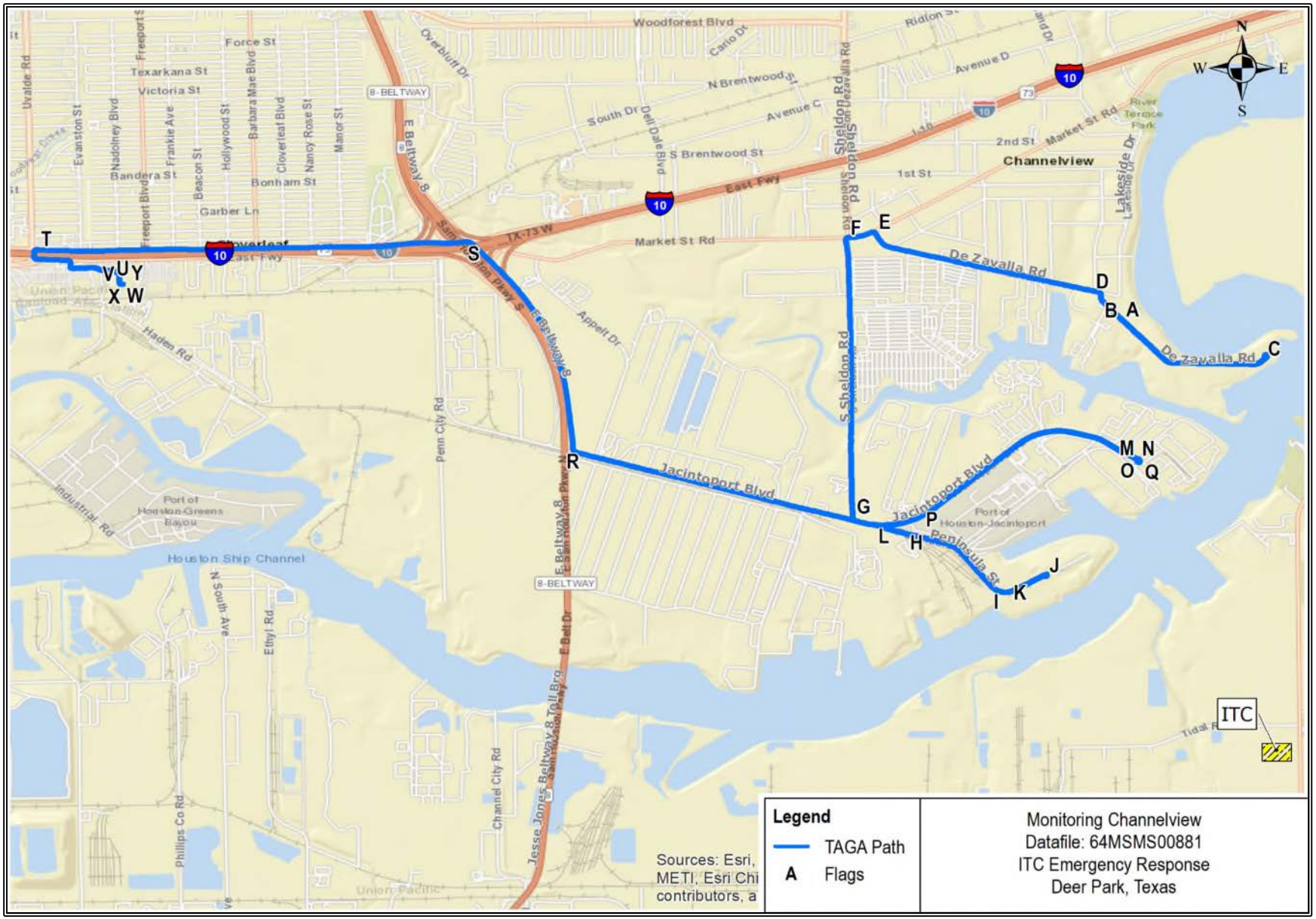


Figure 102a Monitoring Channelview Path, 64MSMS00881

Figure 102b

TAGA File Event Summary
File: 64MSMS00881 Acquired on 06 April 2019 at 11:20:52
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	0.7	66	Start mobile monitoring on Dezavala Drive
B	1.1	110	Continuing onto Dezavala Drive
C	5.4	517	U-turn on Dezavala Drive
D	11.7	1110	Left turn to continue onto Dezavala Drive
E	14.0	1336	Left turn onto Market Street
F	14.8	1405	Left turn onto Sheldon Road
G	18.4	1747	Left turn onto Jacintoport Boulevard
H	19.3	1831	Right turn onto San Jacinto Boulevard
I	21.9	2080	Continuing onto Peninsula Street
J	22.8	2168	U-turn on Peninsula Street
K	24.8	2354	Continuing onto San Jacinto Boulevard
L	28.2	2682	Right turn onto Jacintoport Boulevard
M	33.2	3155	U-turn on Jacintoport Boulevard
N	35.2	3352	Stationary on Jacintoport Boulevard
O	36.3	3453	Resume mobile monitoring on Jacintoport Boulevard
P	43.1	4098	U-turn on Jacintoport Boulevard
Q	47.8	4542	U-turn on Jacintoport Boulevard
R	55.5	5275	Right turn onto Highway 8 Service Road
S	57.8	5497	Left turn onto East Freeway Service Road
T	61.7	5865	U-turn on East Freeway Service Road
U	65.5	6226	End mobile monitoring at shopping center on East Freeway Service Road
V	65.8	6261	Start ambient
W	66.9	6359	End ambient
X	68.4	6500	Start 30 mL/min spike
Y	70.4	6694	End 30 mL/min spike
Notes:		Curtain gas flow error message at approximately 30.8 minutes into the monitoring run.	

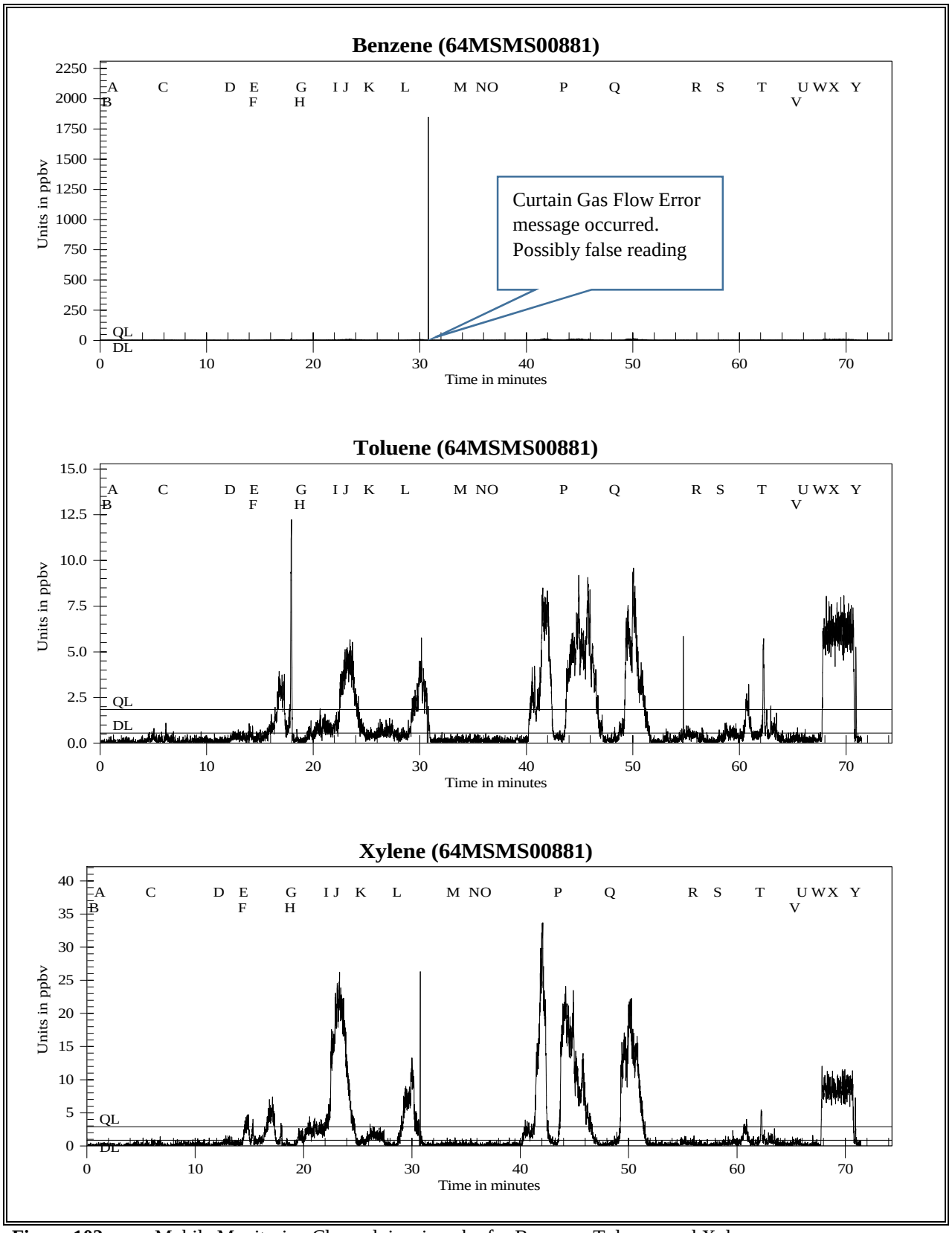


Figure 102c Mobile Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

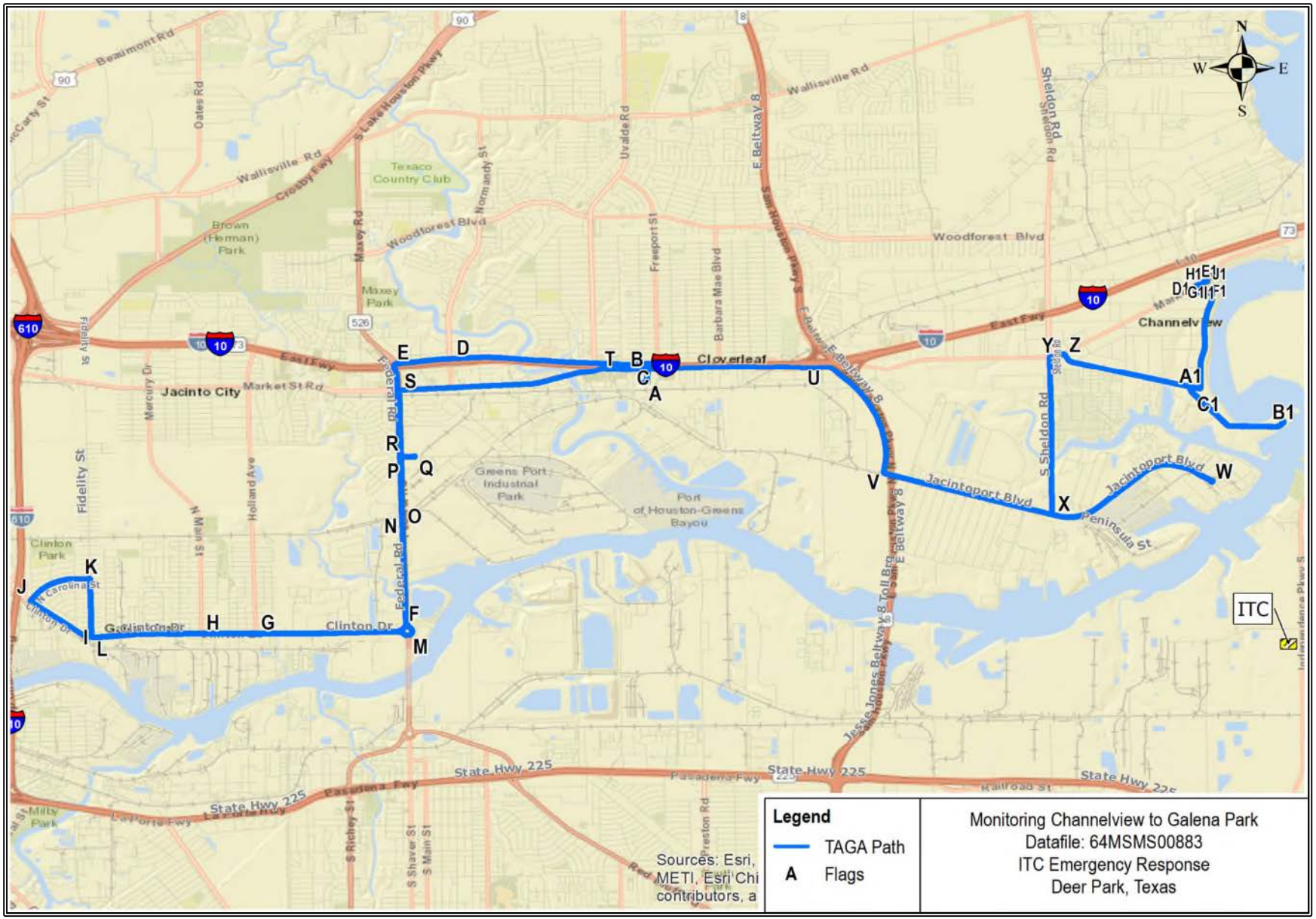


Figure 103a Monitoring Channelview to Galena Park Path, 64MSMS00883

Figure 103b

TAGA File Event Summary
File: 64MSMS00883 Acquired on 06 April 2019 at 13:57:55
Title: Monitoring Channelview to Galena Park

Flag	Time	Sequence	Description
A	0.7	70	Start mobile monitoring at shopping center on East Freeway Service Road
B	5.1	482	Continuing onto East Freeway Service Road
C	5.4	512	U-turn on East Freeway Service Road
D	10.2	969	Cross Normandy Street
E	12.1	1148	Left turn onto Federal Road
F	18.0	1712	Right turn onto Clinton Drive
G	20.4	1942	Cross Holland Avenue
H	21.9	2087	Cross Main Street
I	24.5	2333	Cross Fidelity Street
J	25.9	2463	Right turn onto North Carolina Street
K	29.1	2764	Right turn onto Fidelity Street
L	31.6	3003	Left turn onto Clinton Drive
M	37.9	3602	Left turn onto Federal Road
N	40.7	3870	Stationary at railroad crossing on Federal Road
O	53.9	5128	Resume mobile monitoring on Federal Road
P	55.3	5263	Right turn onto Industrial Road
Q	56.9	5413	U-turn on Industrial Road
R	57.8	5500	Right turn onto Federal Road
S	60.1	5718	Right turn onto Market Street
T	64.9	6172	Merge onto East Freeway Service Road
U	68.9	6553	Right turn onto Highway 8 Service Road
V	71.2	6767	Left turn onto Jacintoport Boulevard
W	79.9	7598	U-turn on Jacintoport Boulevard
X	87.0	8269	Right turn onto Sheldon Road
Y	90.5	8603	Right turn onto Market Street
Z	91.0	8649	Right turn onto Dezavala Road
A1	93.3	8871	Right turn to continue on Dezavala Road
B1	98.0	9318	U-turn on Dezavala Road
C1	104.8	9961	Right turn onto Lakeside Drive
D1	108.7	10338	Right turn onto Market Street
E1	109.4	10405	Right turn onto Launch Road
F1	110.0	10457	End mobile monitoring at River Terrace Park
G1	110.5	10504	Start ambient
H1	111.5	10603	End ambient

Figure 103b (continued)

TAGA File Event Summary
File: 64MSMS00883 Acquired on 06 April 2019 at 13:57:55
Title: Monitoring Channelview to Galena Park

Flag	Time	Sequence	Description
I1	113.2	10764	Start 30 mL/min spike
J1	114.2	10859	End 30 mL/min spike

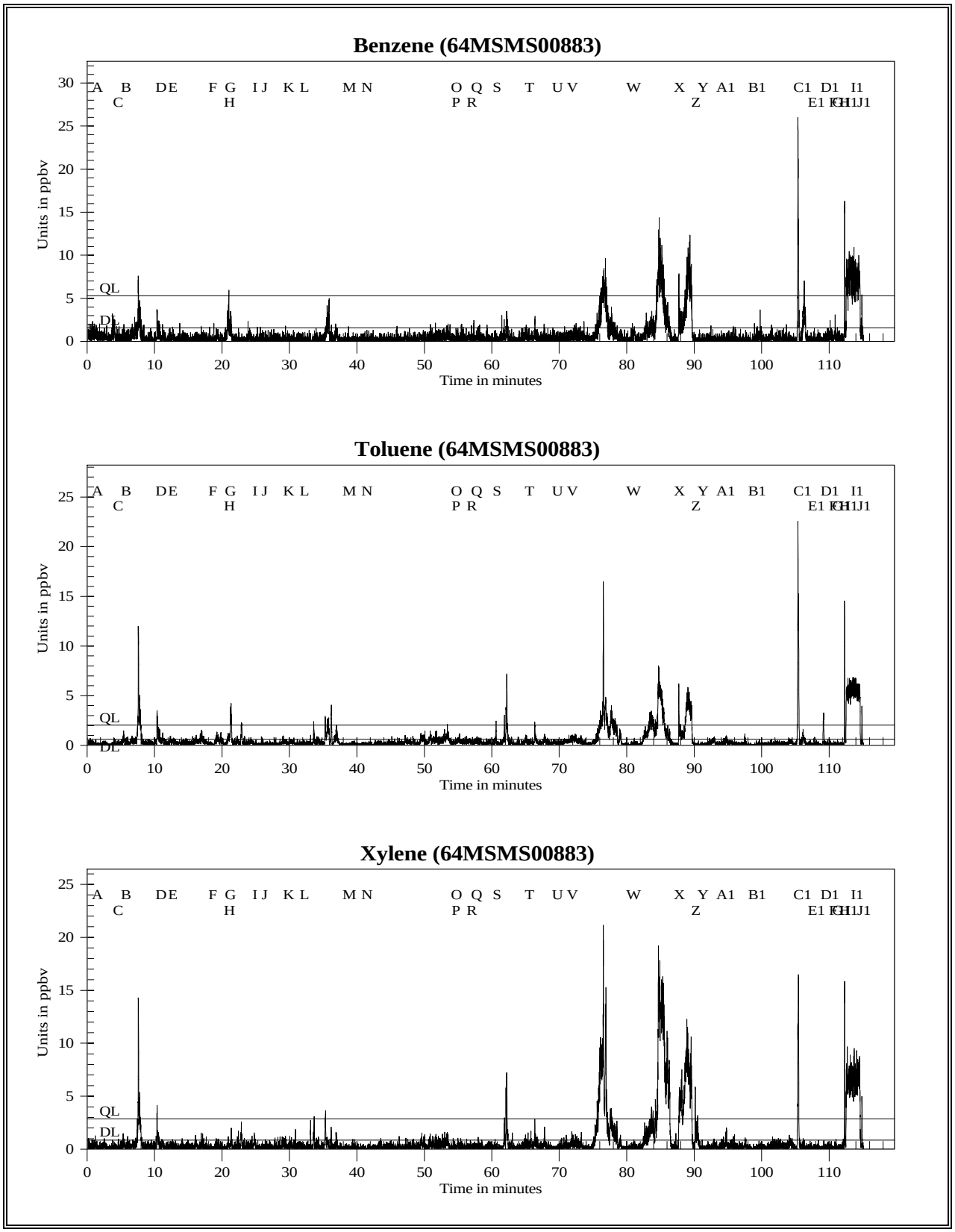


Figure 103c Mobile Monitoring Channelview to Galena Park in ppbv for Benzene, Toluene, and Xylenes

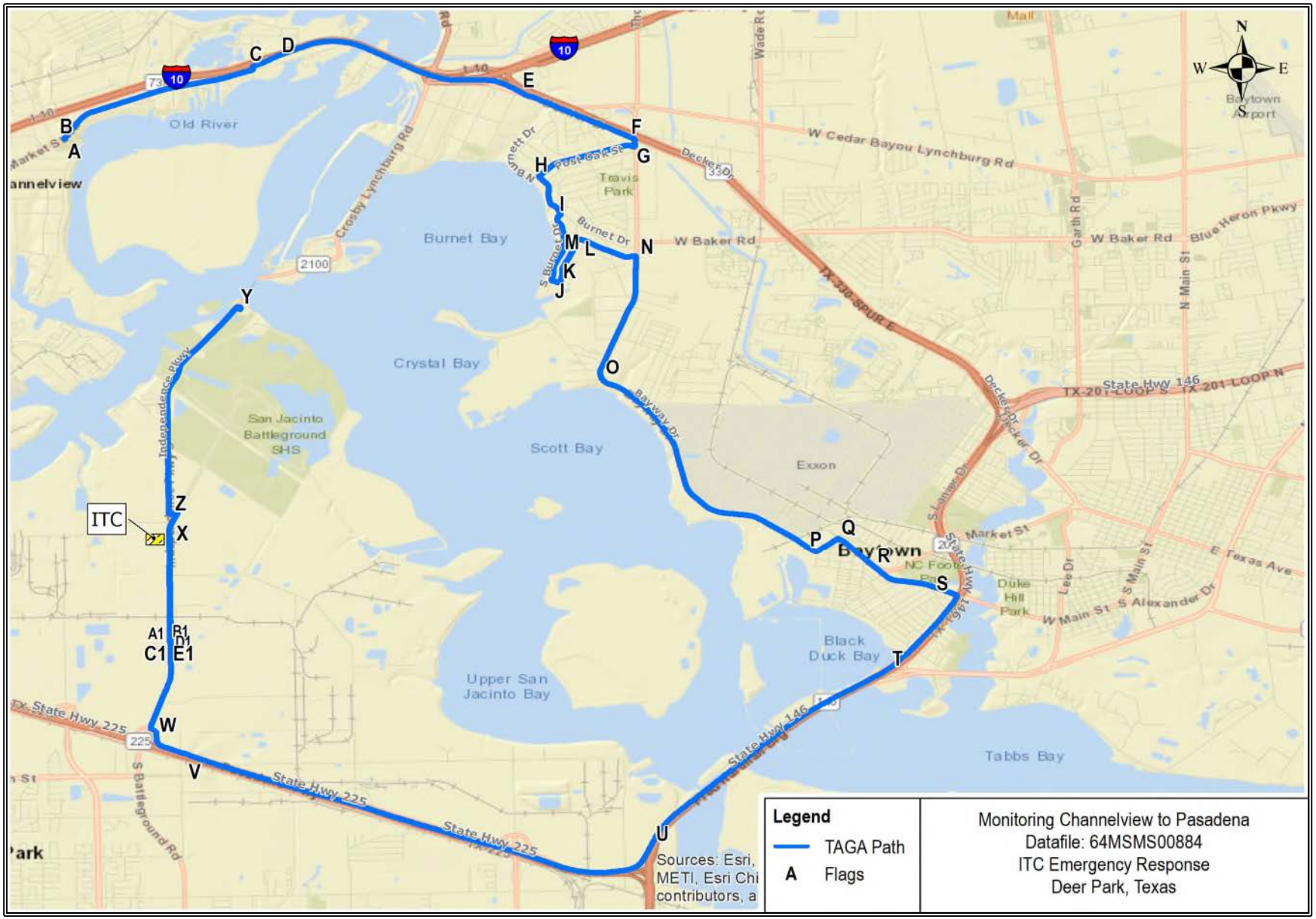


Figure 104a Monitoring Channelview to Pasadena Path, 64MSMS00884

Figure 104b

TAGA File Event Summary
File: 64MSMS00884 Acquired on 06 April 2019 at 15:59:04
Title: Monitoring Channelview to Pasadena

Flag	Time	Sequence	Description
A	0.7	64	Start mobile monitoring at River Terrace Park
B	1.5	143	Continuing onto Market Street
C	5.9	565	Right turn onto East Freeway Service Road
D	6.3	603	Merge onto Highway 10 East
E	8.8	839	Exit onto Decker Drive
F	10.8	1026	Right turn onto Bayway Drive
G	11.2	1065	Right turn onto Pin Oak Drive
H	14.6	1390	Left turn onto N Burnett Drive
I	16.4	1558	Right turn onto S Burnett Drive
J	19.0	1804	Left turn onto Winkler Drive
K	19.5	1851	Left turn onto Yaupon Drive
L	21.2	2018	Continuing onto Yaupon Drive
M	22.0	2091	Right turn onto Lakewood Drive
N	23.8	2265	Right turn onto Bayway Drive
O	26.0	2469	Left turn to continue on Bayway Drive
P	30.4	2889	Left turn onto Market Street
Q	31.1	2953	Right turn to continue on Market Street
R	32.6	3103	Right turn onto Main Street
S	34.2	3257	Right turn onto Robert C Lanier Freeway
T	35.9	3415	Merge onto Highway 146 South
U	38.4	3656	Merge onto Highway 225 West
V	42.5	4038	Exit onto Pasadena Freeway Frontage Road
W	43.2	4111	Right turn onto Independence Parkway
X	48.3	4591	Continuing onto Independence Parkway
Y	53.1	5046	U-turn on Independence Parkway
Z	58.1	5523	Continuing onto Independence Parkway
A1	62.5	5941	End mobile monitoring on Independence Parkway
B1	62.8	5971	Start ambient
C1	63.8	6068	End ambient
D1	65.2	6198	Start 30 mL/min spike
E1	66.2	6293	End 30 mL/min spike

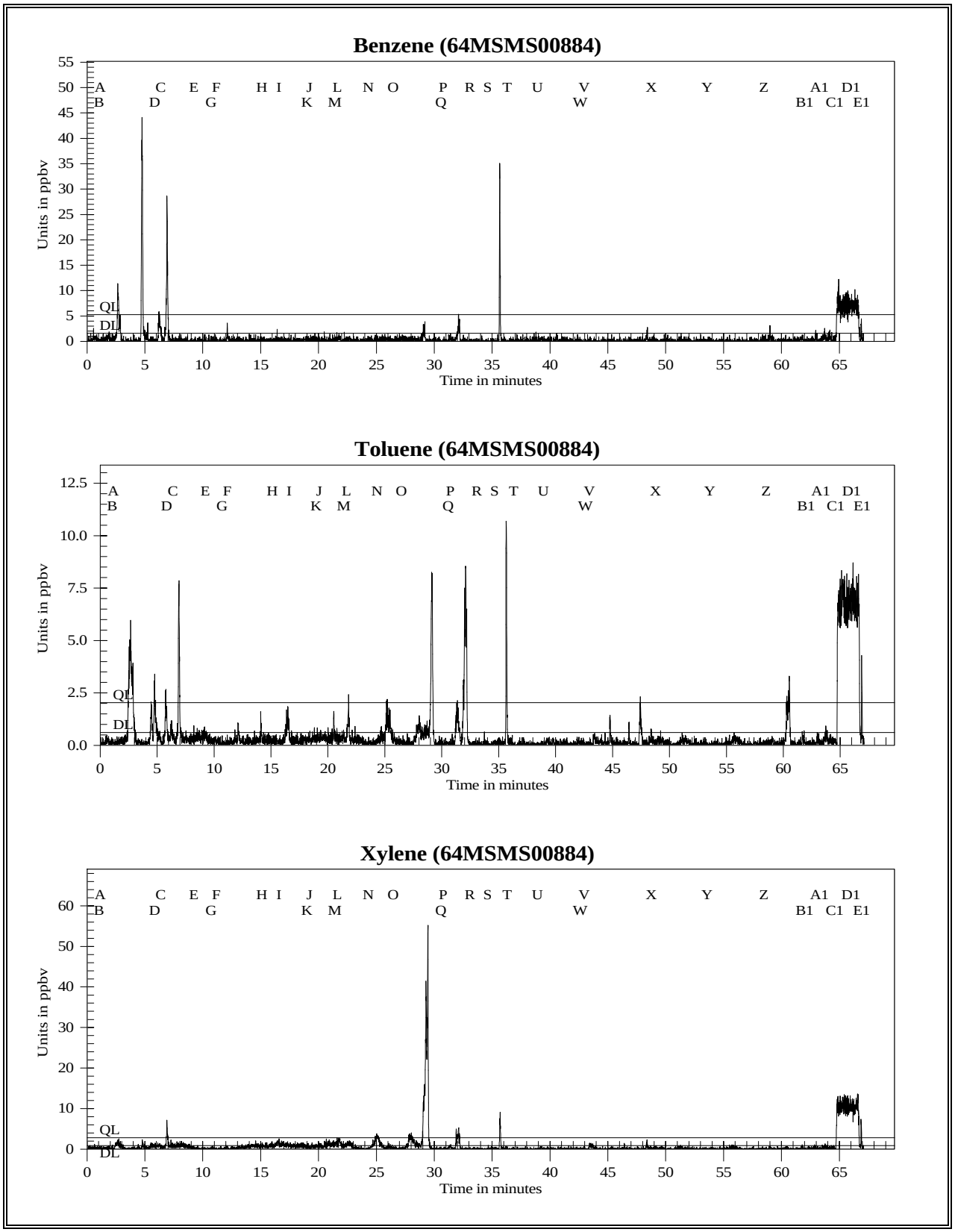


Figure 104c Mobile Monitoring Channelview to Pasadena in ppbv for Benzene, Toluene, and Xylenes

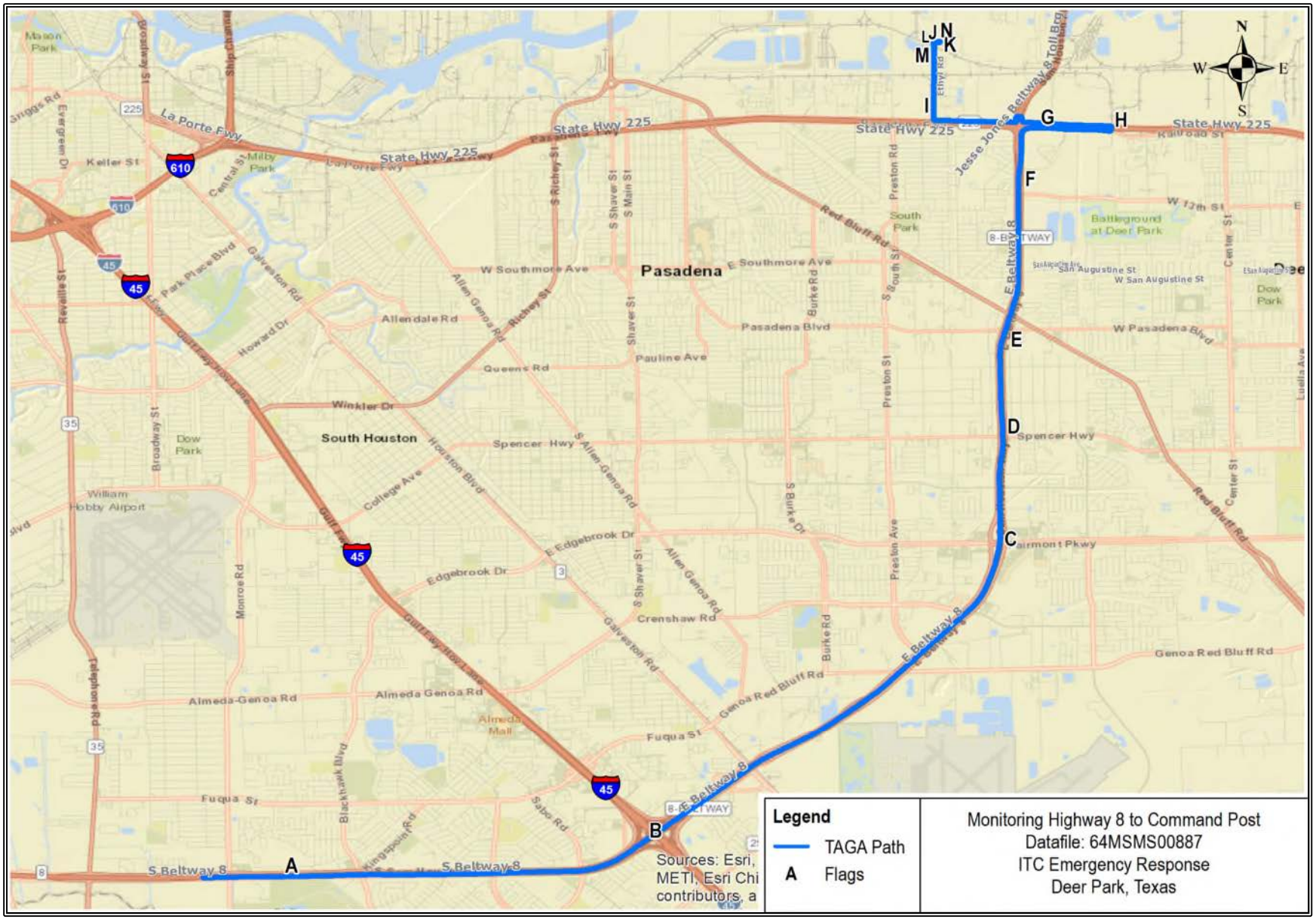


Figure 105a Monitoring Highway 8 to Command Post Path, 64MSMS00887

Figure 105b

TAGA File Event Summary
File: 64MSMS00887 Acquired on 07 April 2019 at 09:15:02
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	0.8	74	Start mobile monitoring on Highway 8 North
B	3.3	319	Cross Highway 45
C	6.9	653	Cross Fairmont Parkway
D	7.8	739	Cross Spencer Highway
E	8.7	829	Cross Pasadena Boulevard
F	10.2	969	Exit onto Highway 8 Service Road
G	11.1	1056	Right turn onto Pasadena Freeway Frontage Road
H	12.0	1138	U-turn on Pasadena Freeway Frontage Road
I	15.5	1473	Right turn onto Ethyl Road
J	18.6	1771	End mobile monitoring at EPA Command Post
K	19.3	1835	Start ambient
L	20.3	1932	End ambient
M	22.1	2106	Start 30 mL/min spike
N	23.2	2205	End 30 mL/min spike

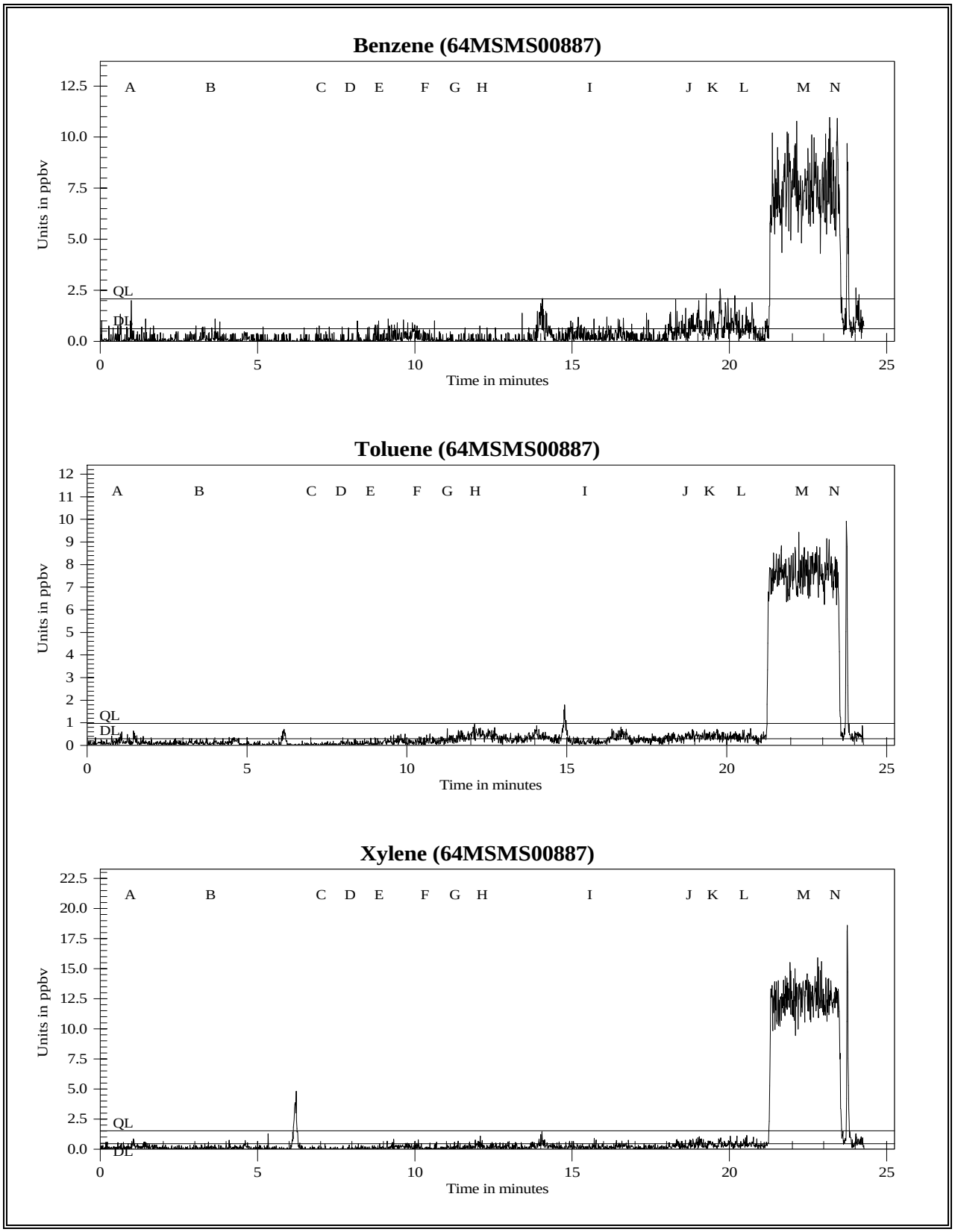


Figure 105c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

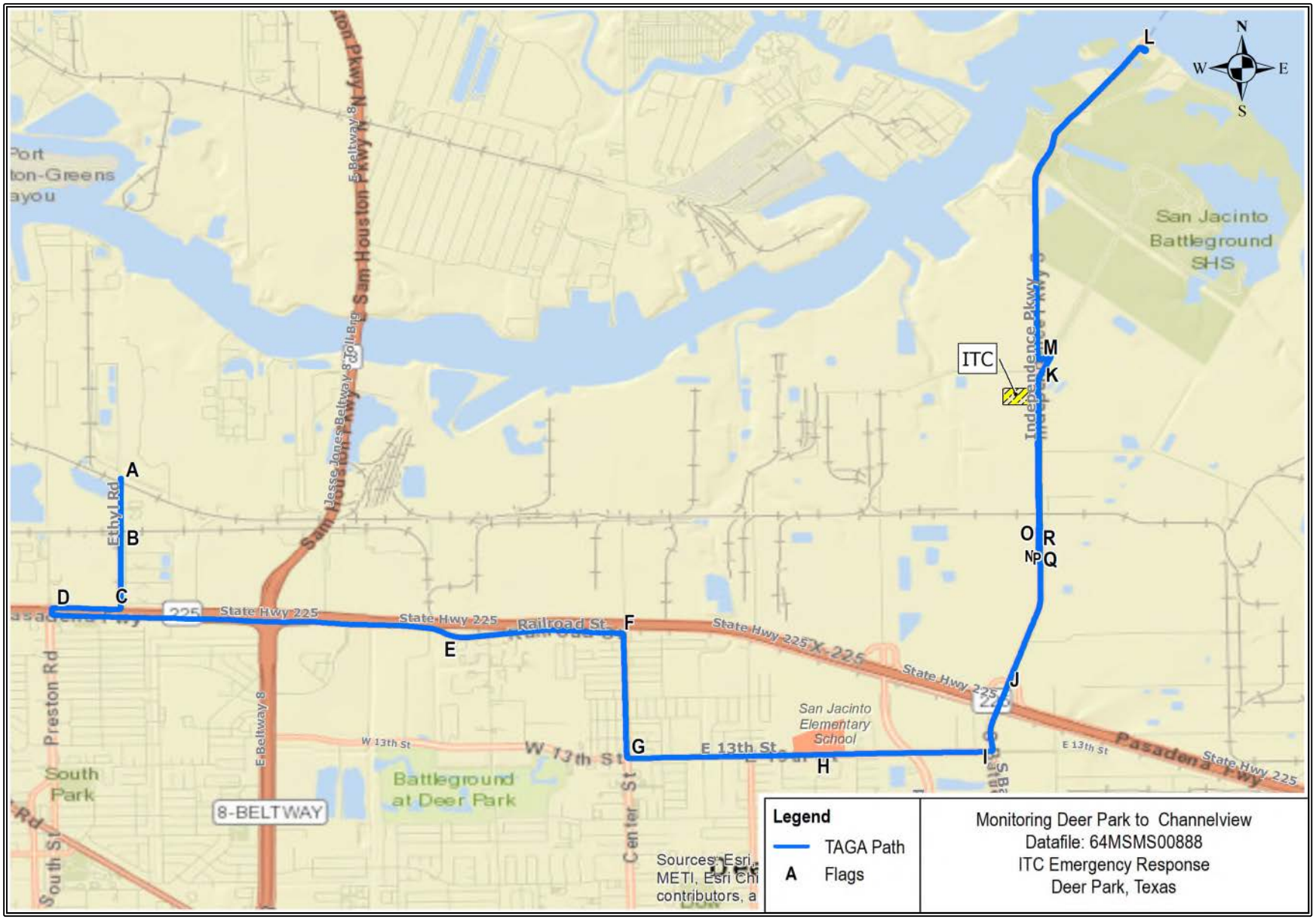


Figure 106a Monitoring Deer Park to Channelview Path, 64MSMS00888

Figure 106b

TAGA File Event Summary
File: 64MSMS00888 Acquired on 07 April 2019 at 10:06:04
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	0.8	74	Start mobile monitoring at EPA Command Post
B	2.3	218	Continuing onto Ethyl Road
C	3.6	346	Right turn onto Pasadena Freeway Frontage Road
D	4.4	417	U-turn on Pasadena Freeway Frontage Road at Preston Road
E	9.6	918	Continuing onto Railroad Street
F	10.7	1015	Right turn onto Center Street
G	12.2	1161	Left turn onto 13th Street
H	14.6	1386	Passing San Jacinto Elementary School
I	17.0	1618	Left turn onto Battleground Road
J	18.9	1801	Continuing onto Independence Parkway
K	25.1	2384	Continuing onto Independence Parkway
L	31.4	2983	U-turn on Independence Parkway
M	37.8	3591	Continuing onto Independence Parkway
N	42.8	4068	End mobile monitoring on Independence Parkway
O	43.2	4105	Start ambient
P	44.2	4200	End ambient
Q	46.5	4420	Start 30 mL/min spike
R	47.5	4517	End 30 mL/min spike
Notes:		Low curtain gas error message at approximately 4 minutes into the monitoring run.	

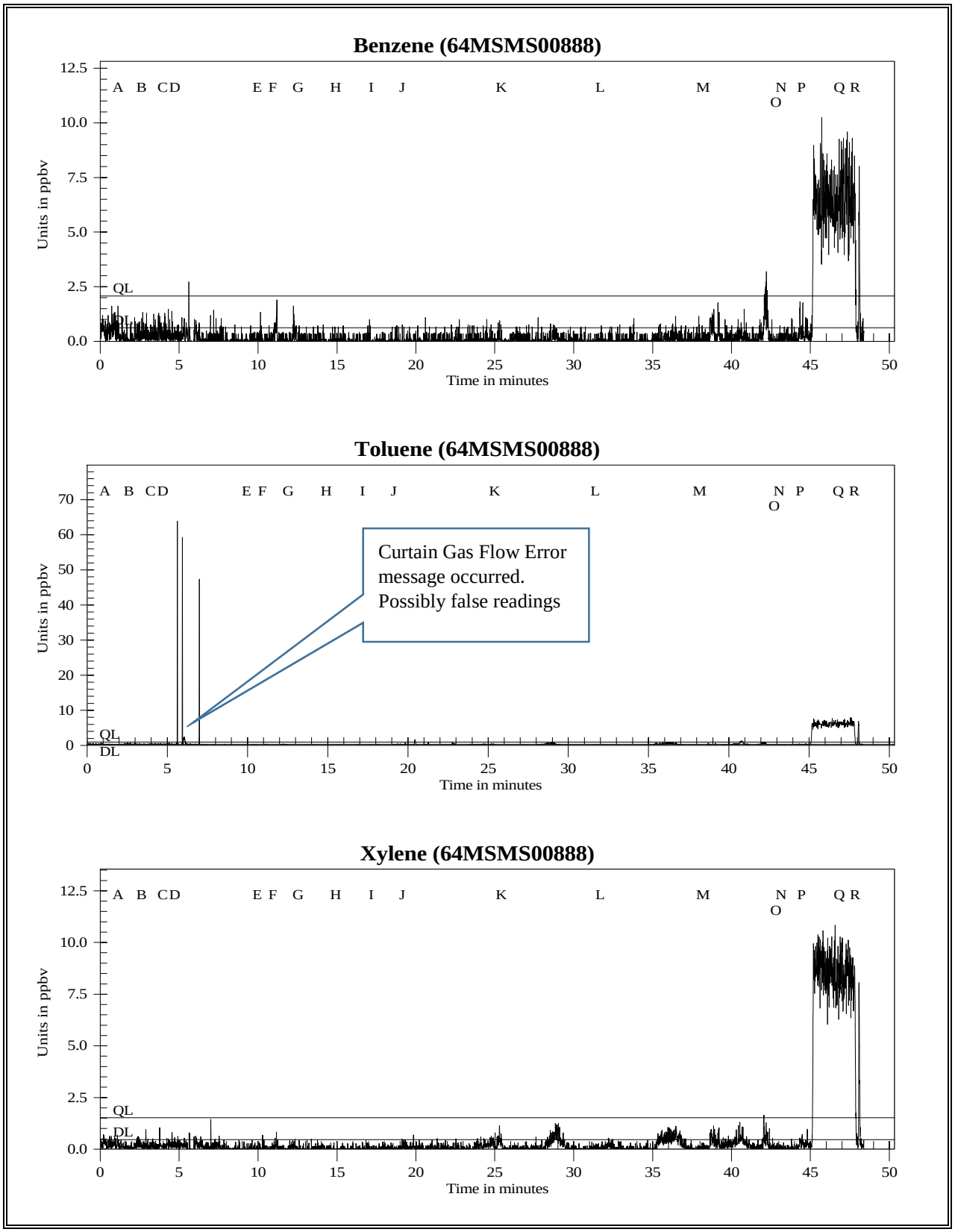


Figure 106c Mobile Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

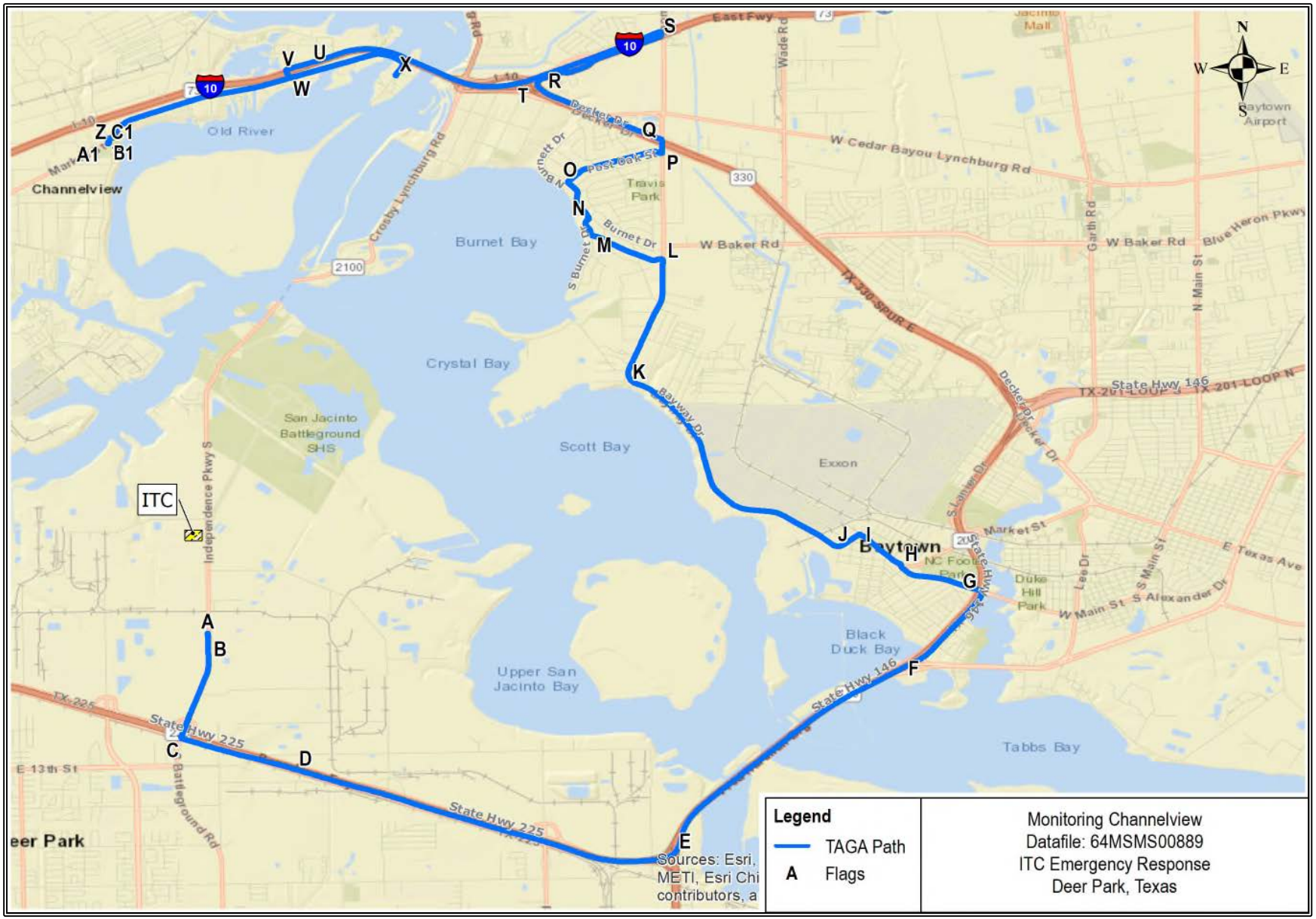


Figure 107a Monitoring Channelview Path, 64MSMS00889

Figure 107b

TAGA File Event Summary
File: 64MSMS00889 Acquired on 07 April 2019 at 10:57:05
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	0.6	56	Start mobile monitoring on Independence Parkway
B	3.6	340	Continuing onto Independence Parkway
C	5.7	544	Left turn onto Pasadena Freeway Frontage Road
D	7.1	672	Merge onto Highway 225 East
E	10.3	980	Merge onto Highway 146 North
F	13.0	1235	Exit onto Robert C Lanier Drive
G	15.3	1458	Left turn onto Main Street
H	17.7	1688	Left turn onto Market Street
I	19.6	1861	Left turn to continue on Market Street
J	20.2	1923	Right turn onto Bayway Drive
K	25.8	2453	Right turn to continue on Bayway Drive
L	28.3	2696	Left turn onto Lakewood Drive
M	31.1	2954	Right turn onto S Burnett Street
N	31.9	3030	Left turn onto N Burnett Street
O	33.7	3201	Right turn onto Pin Oak Drive
P	37.5	3566	Left turn onto Bayway Drive
Q	38.0	3610	Left turn onto Decker Drive
R	39.4	3745	Right turn onto East Freeway Service Road
S	41.4	3941	U-turn on East Freeway Service Road at Thompson Road
T	43.2	4105	Merge onto Highway 10 West
U	45.0	4277	Exit onto East Freeway Service Road
V	45.5	4326	Left turn onto Monmouth Street
W	45.9	4369	Left turn onto Market Street
X	49.3	4692	U-turn on Market Street
Y	57.6	5477	End mobile monitoring on Market Street
Z	58.1	5527	Start ambient
A1	59.3	5638	End ambient
B1	60.8	5781	Start 30 mL/min spike
C1	62.0	5894	End 30 mL/min spike

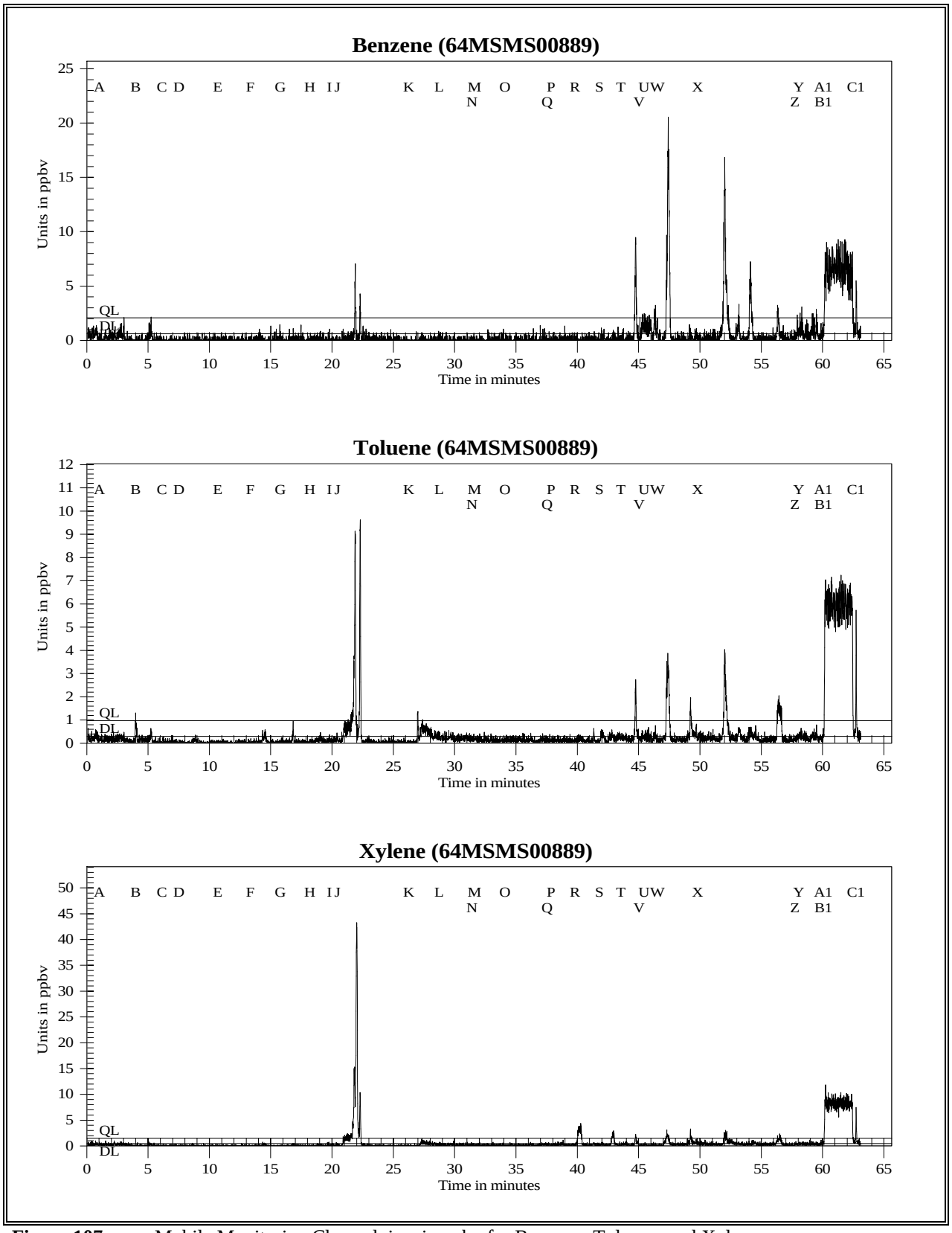


Figure 107c Mobile Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

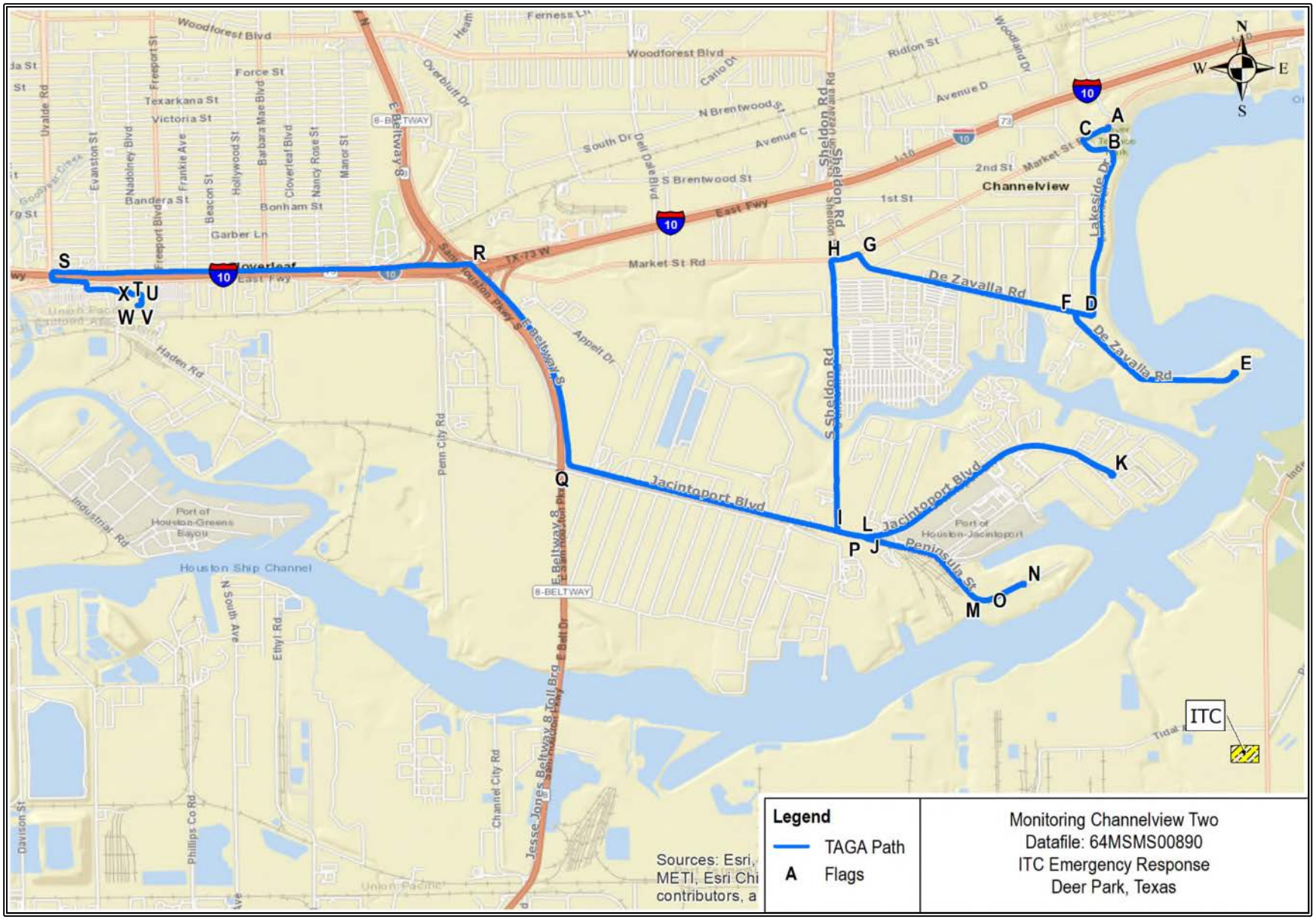


Figure 108a Monitoring Channelview Two Path, 64MSMS00890

Figure 108b

TAGA File Event Summary
File: 64MSMS00890 Acquired on 07 April 2019 at 12:03:19
Title: Monitoring Channelview Two

Flag	Time	Sequence	Description
A	1.1	102	Start mobile monitoring on Market Street
B	3.4	327	Continuing onto Market Street
C	3.8	362	Left turn onto Lakeside Drive
D	7.6	725	Left turn onto Dezavala Road
E	13.0	1233	U-turn on Dezavala Road
F	19.0	1804	Left turn to continue on Dezavala Road
G	21.5	2049	Left turn onto Market Street
H	22.4	2133	Left turn onto Sheldon Road
I	25.7	2441	Left turn onto Jacintoport Boulevard
J	26.2	2493	Continuing onto Jacintoport Boulevard
K	30.7	2919	U-turn on Jacintoport Boulevard
L	34.9	3319	Left turn onto San Jacinto Boulevard
M	37.4	3560	Continuing onto Peninsula Street
N	38.3	3645	U-turn on Peninsula Street
O	40.2	3821	Continuing onto San Jacinto Boulevard
P	43.0	4092	Left turn onto Jacintoport Boulevard
Q	46.8	4453	Right turn onto Highway 8 Service Road
R	49.4	4702	Left turn onto East Freeway Service Road
S	53.1	5049	U-turn on East Freeway Service Road
T	56.8	5399	End mobile monitoring at shopping center on East Freeway Service Road
U	57.4	5458	Start ambient
V	58.4	5556	End ambient
W	59.9	5694	Start 30 mL/min spike
X	60.9	5790	End 30 mL/min spike

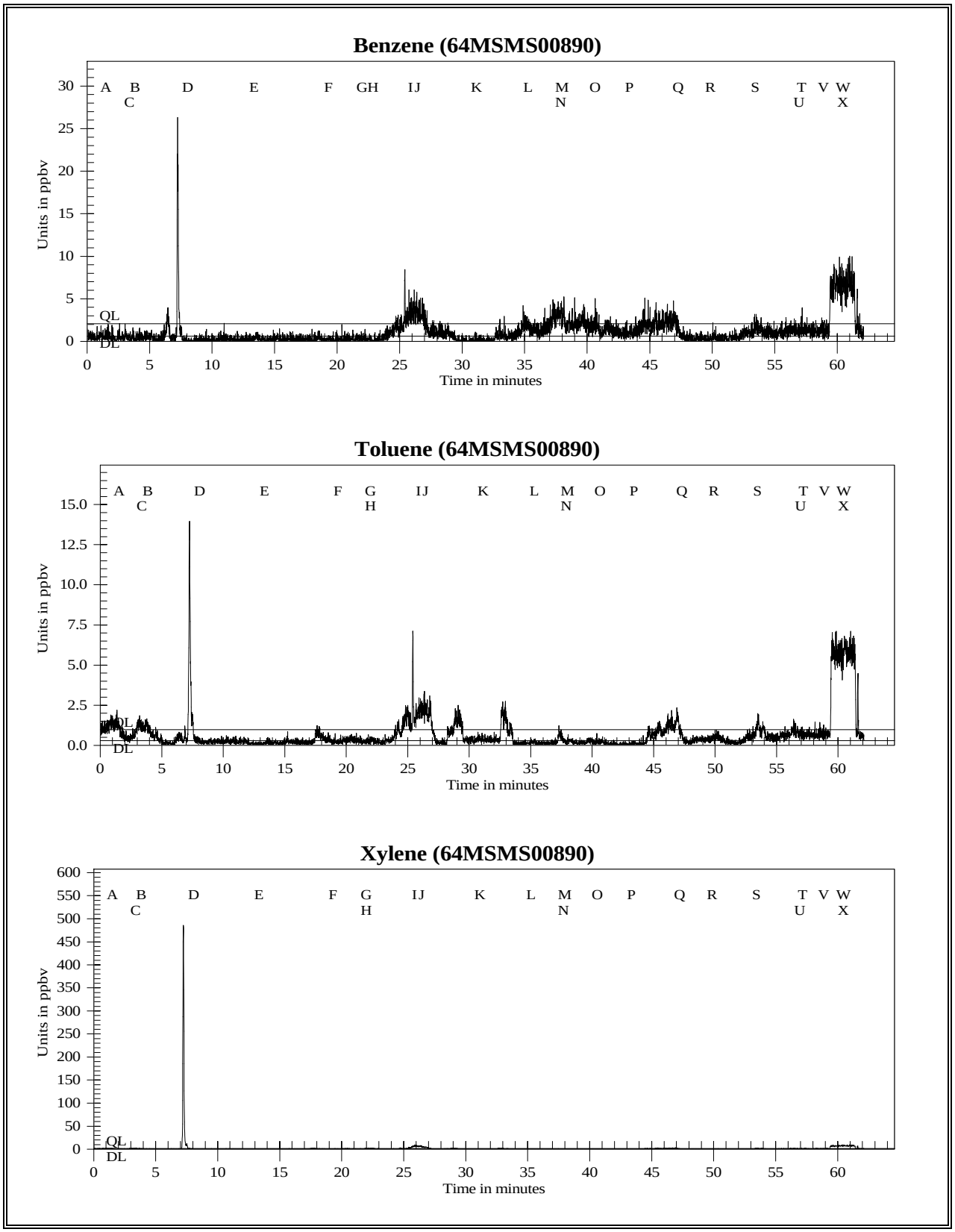


Figure 108c Mobile Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

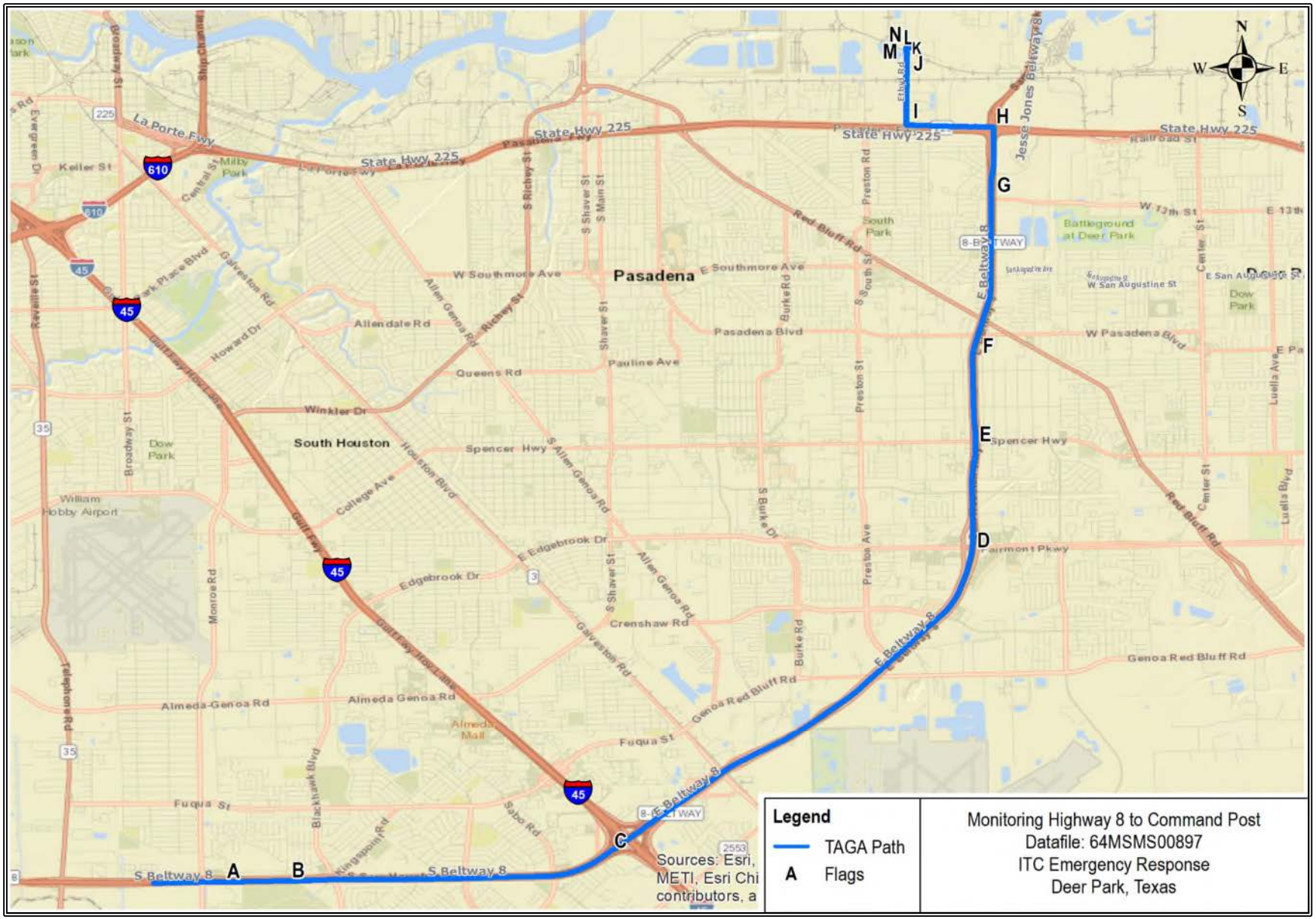


Figure 109a Monitoring Highway 8 to Command Post Path, 64MSMS00897

Figure 109b

TAGA File Event Summary
File: 64MSMS00897 Acquired on 08 April 2019 at 08:22:41
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	0.9	86	Start mobile monitoring on Highway 8 North
B	1.4	138	Continuing onto Highway 8 North
C	4.1	390	Cross Highway 45
D	8.3	787	Cross Fairmont Parkway
E	9.3	886	Cross Spencer Highway
F	10.4	989	Cross Pasadena Boulevard
G	12.3	1167	Exit onto Highway 8 Service Road
H	13.7	1308	Left turn onto Pasadena Freeway Frontage Road
I	14.8	1412	Right turn onto Ethyl Road
J	17.9	1706	End mobile monitoring at EPA Command Post
K	18.5	1763	Start ambient
L	19.6	1867	End ambient
M	21.5	2049	Start 30 mL/min spike
N	22.6	2151	End 30 mL/min spike

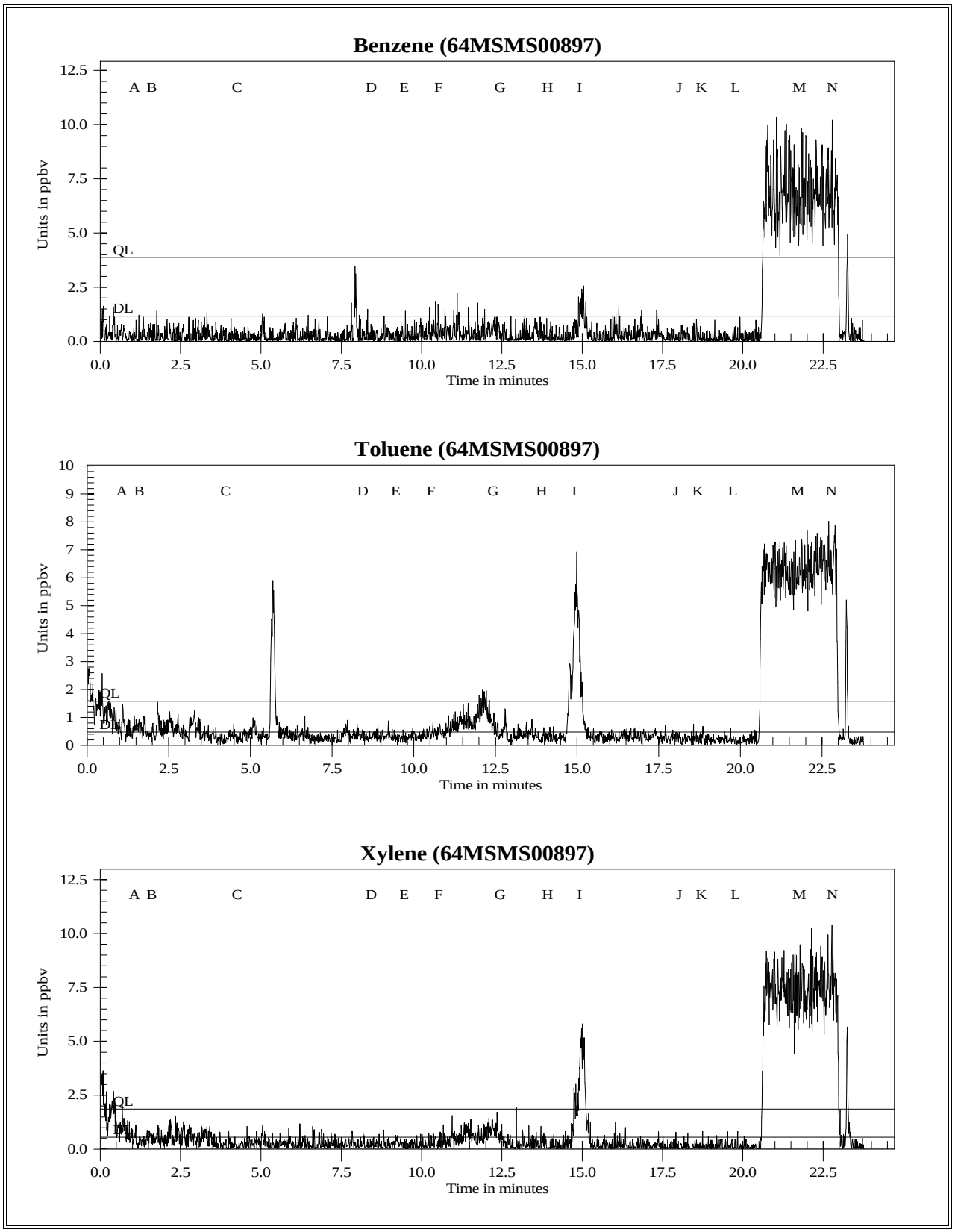


Figure 109c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

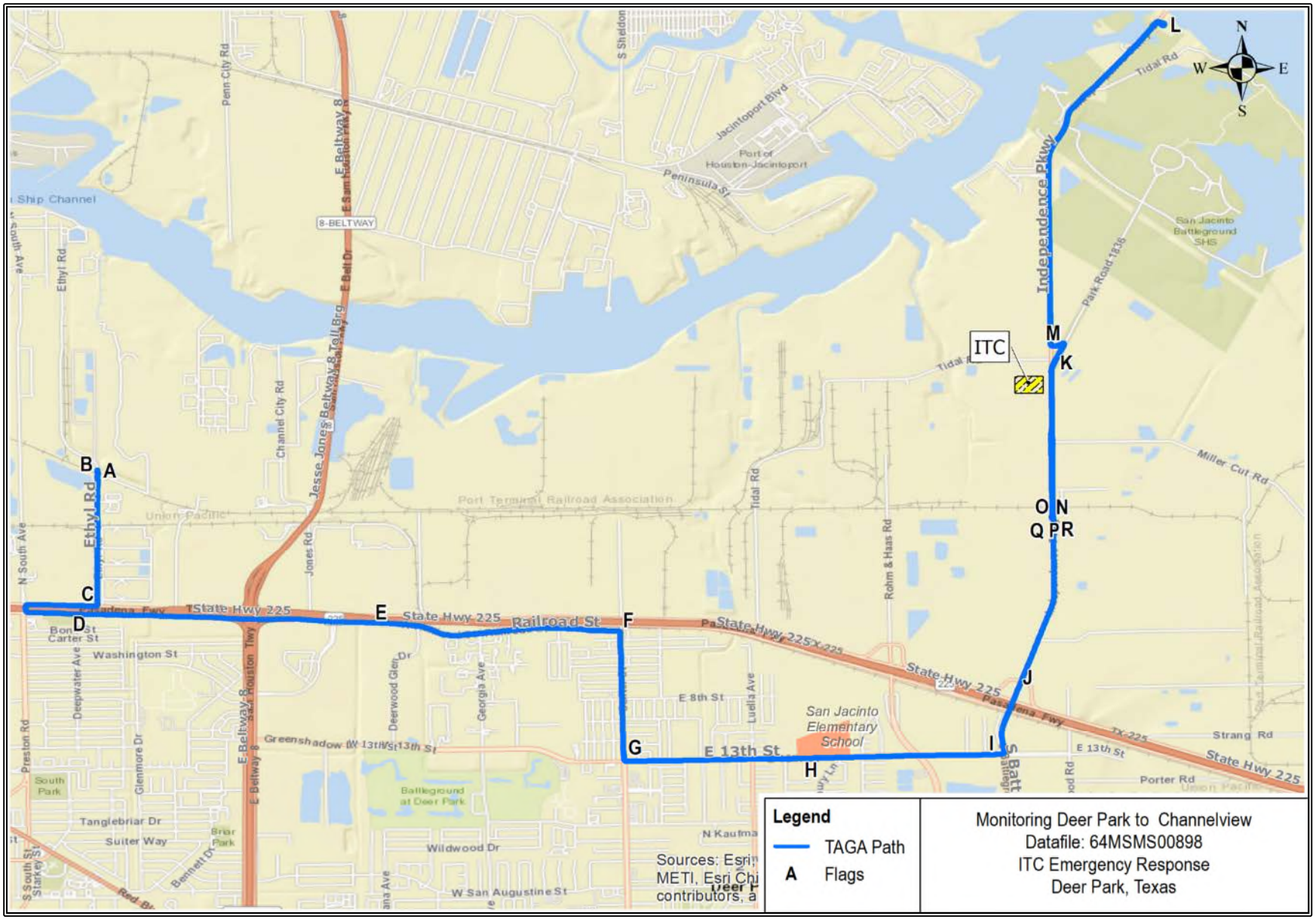


Figure 110a Monitoring Deer Park to Channelview Path, 64MSMS00898

Figure 110b

TAGA File Event Summary
File: 64MSMS00898 Acquired on 08 April 2019 at 09:06:49
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	0.8	77	Start mobile monitoring at EPA Command Post
B	3.8	365	Continuing onto Ethyl Road
C	5.9	563	Right turn onto Pasadena Freeway Frontage Road
D	7.4	704	U-turn onto Pasadena Freeway Frontage Road at Preston Road
E	9.6	915	Continuing onto Railroad Street
F	12.5	1186	Right turn onto Center Street
G	14.2	1351	Left turn onto 13th Street
H	16.2	1539	Passing San Jacinto Elementary School
I	18.1	1721	Left turn onto Battleground Road
J	20.0	1905	Continuing onto Independence Parkway
K	26.0	2471	Continuing onto Independence Parkway
L	31.8	3027	U-turn on Independence Parkway
M	37.1	3525	Continuing onto Independence Parkway
N	40.9	3889	End mobile monitoring on Independence Parkway
O	41.3	3924	Start ambient
P	42.3	4021	End ambient
Q	43.8	4162	Start 30 mL/min spike
R	45.0	4279	End 30 mL/min spike

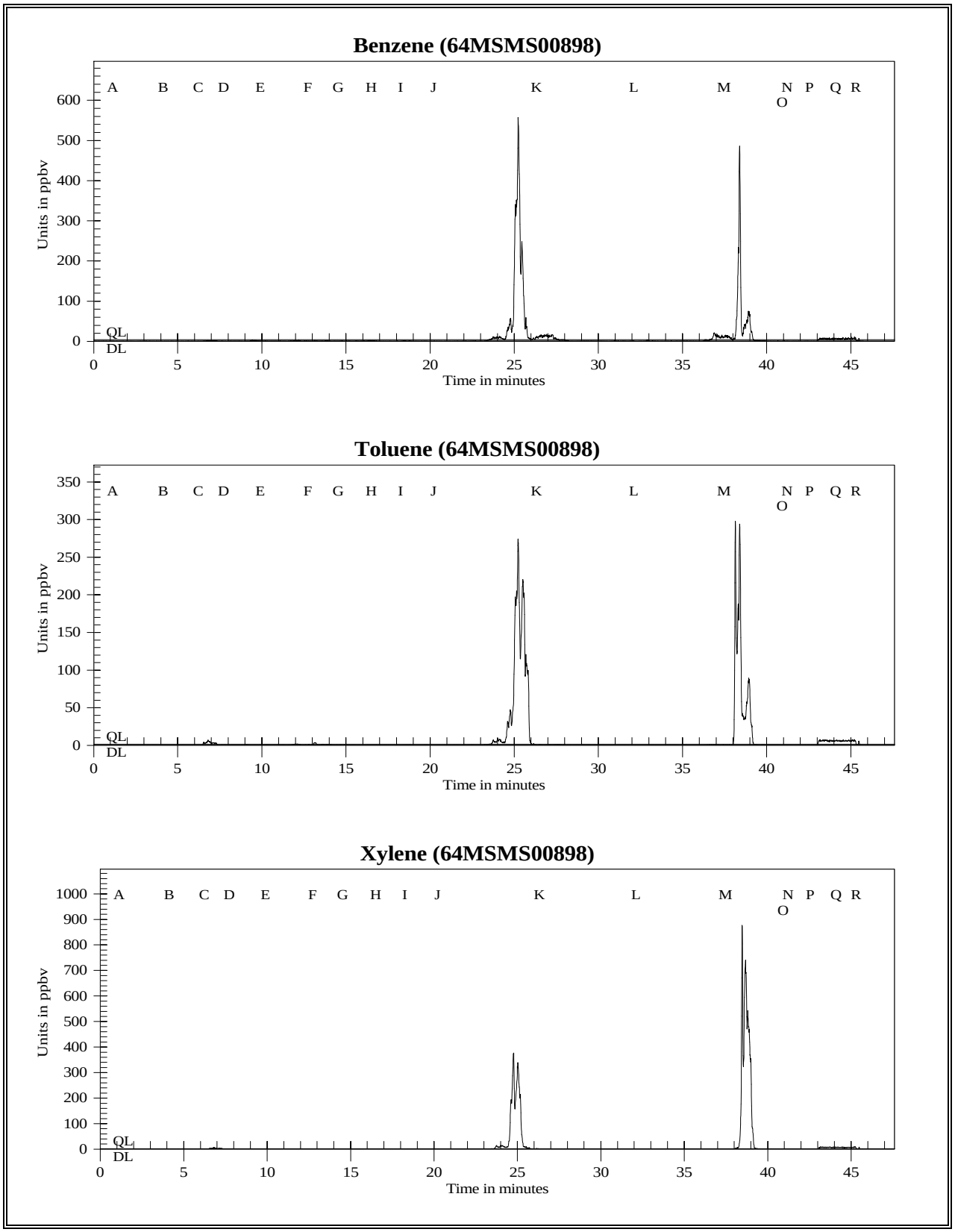


Figure 110c Mobile Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

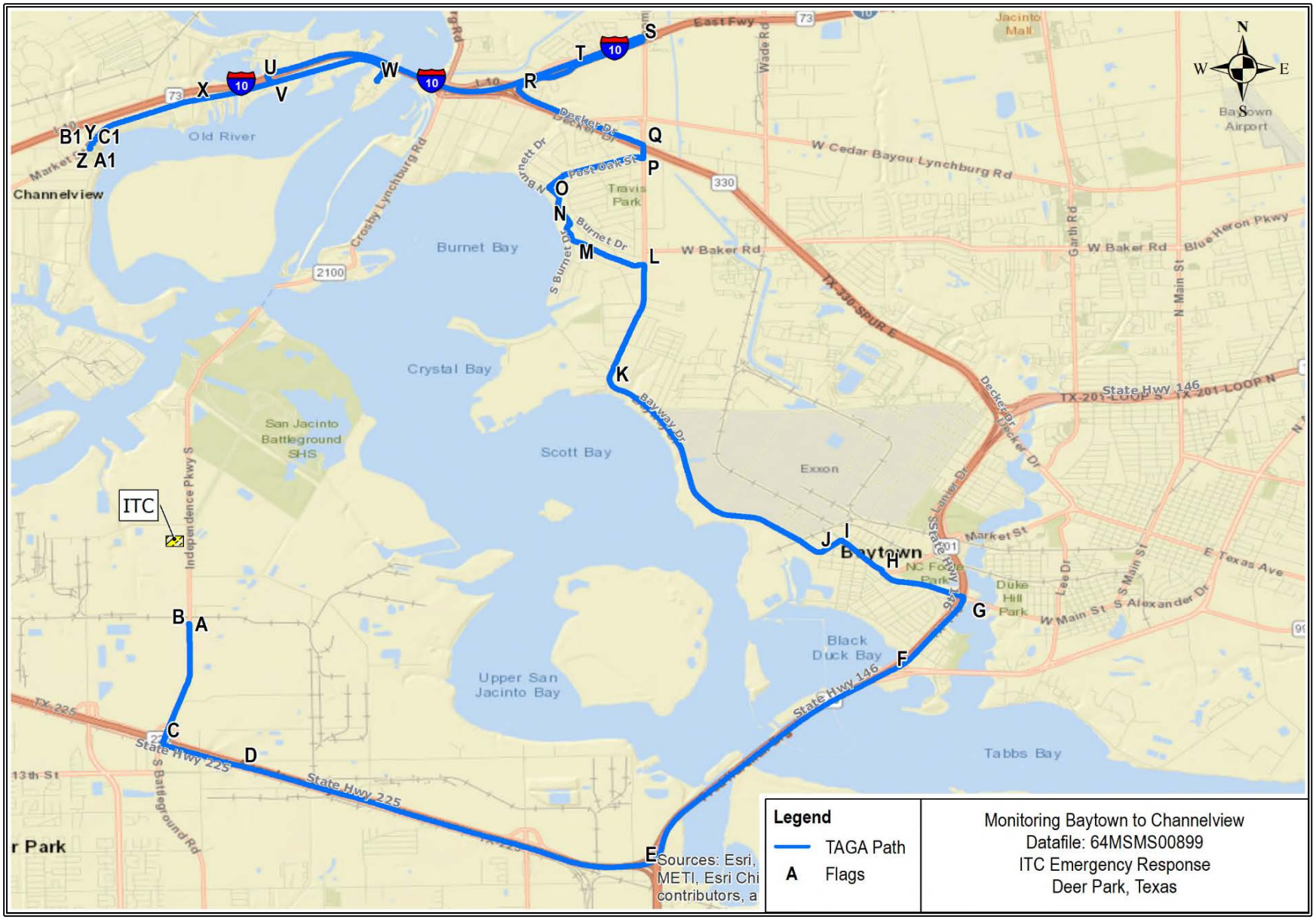


Figure 111a Monitoring Baytown to Channelview Path, 64MSMS00899

Figure 111b

TAGA File Event Summary
File: 64MSMS00899 Acquired on 08 April 2019 at 09:59:07
Title: Monitoring Baytown to Channelview

Flag	Time	Sequence	Description
A	0.6	62	Start mobile monitoring on Independence Parkway
B	3.5	329	Continuing onto Independence Parkway
C	5.5	525	Left turn onto Pasadena Freeway Frontage Road
D	6.4	608	Merge onto Highway 225 East
E	9.7	920	Merge onto Highway 146 North
F	12.5	1186	Exit onto Robert C Lanier Drive
G	15.4	1465	Left turn onto Main Street
H	17.8	1691	Left turn onto Market Street
I	19.0	1804	Left turn to continue on Market Street
J	19.5	1855	Right turn onto Bayway Drive
K	24.3	2308	Right turn to continue on Bayway Drive
L	26.3	2499	Left turn onto Lakewood Drive
M	28.7	2728	Right turn onto S Burnett Drive
N	29.4	2799	Left turn onto N Burnett Drive
O	30.9	2938	Right turn onto Pin Oak Drive
P	34.4	3276	Left turn onto Bayway Drive
Q	35.3	3354	Left turn onto Decker Drive
R	36.8	3504	Right turn onto East Freeway Service Road
S	38.6	3670	U-turn on East Freeway Service Road at Thompson Road
T	40.3	3834	Merge onto Highway 10 West
U	45.1	4287	Left turn onto Monmouth Street
V	45.4	4318	Left turn onto Market Street
W	48.4	4601	U-turn onto Market Street
X	53.6	5092	Cross Magnolia Street
Y	56.1	5333	End mobile monitoring on Market Street
Z	56.5	5369	Start ambient
A1	57.5	5464	End ambient
B1	59.1	5616	Start 30 mL/min spike
C1	60.1	5711	End 30 mL/min spike

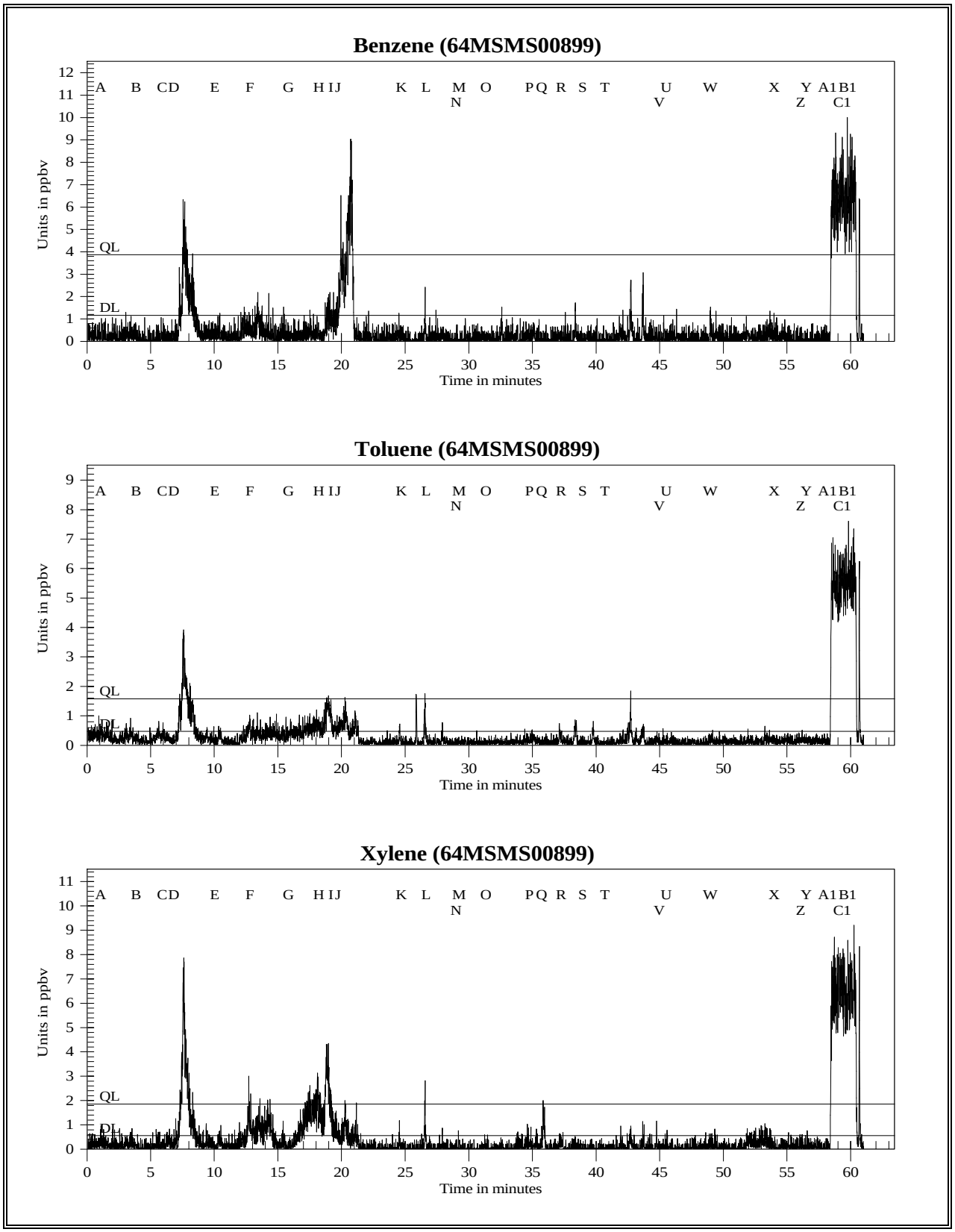


Figure 111c Mobile Monitoring Baytown to Channelview in ppbv for Benzene, Toluene, and Xylenes

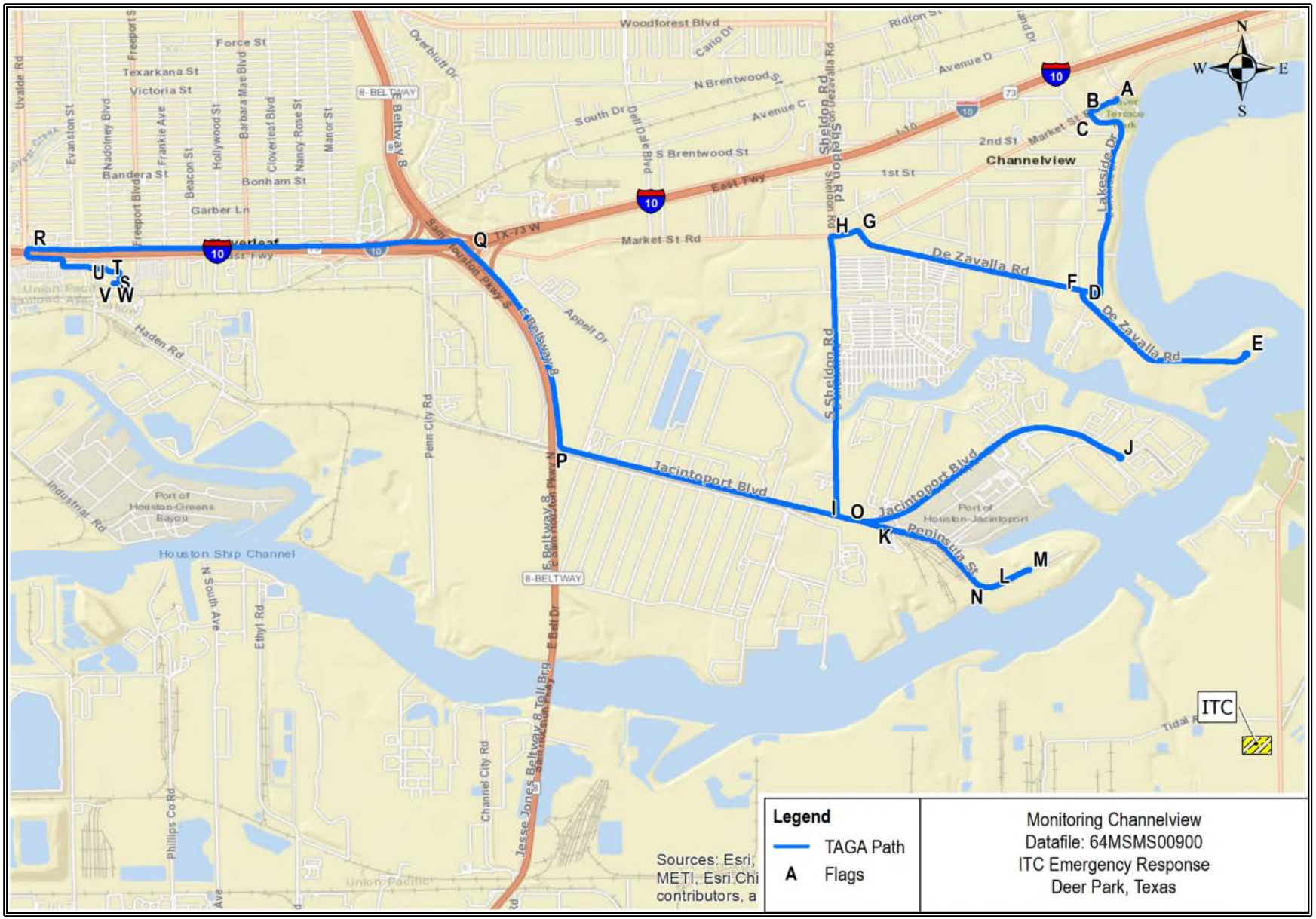


Figure 112a Monitoring Channelview Path, 64MSMS00900

Figure 112b

TAGA File Event Summary
File: 64MSMS00900 Acquired on 08 April 2019 at 11:03:06
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	0.6	61	Start mobile monitoring on Market Street
B	3.7	351	Continuing onto Market Street
C	3.8	365	Left turn onto Lakeside Drive
D	7.6	728	Left turn onto Dezavala Road
E	12.7	1205	U-turn on Dezavala Road
F	18.2	1729	Left turn to continue on Dezavala Road
G	20.7	1970	Left turn onto Market Street
H	22.3	2125	Left turn onto Sheldon Road
I	26.8	2547	Left turn onto Jacintoport Boulevard
J	30.8	2926	U-turn onto Jacintoport Boulevard
K	35.1	3339	Left turn onto San Jacinto Boulevard
L	37.7	3586	Continuing onto Peninsula Street
M	39.2	3731	U-turn on Peninsula Street
N	40.7	3870	Continuing onto Peninsula Street
O	43.1	4095	Left turn onto Jacintoport Boulevard
P	46.2	4396	Right turn onto Highway 8 Service Road
Q	48.4	4607	Left turn onto East Freeway Service Road
R	51.9	4935	U-turn on East Freeway Service Road
S	54.9	5217	End mobile monitoring at shopping center on East Freeway Service Road
T	55.4	5271	Start ambient
U	56.4	5367	End ambient
V	58.0	5515	Start 30 mL/min spike
W	59.5	5653	End 30 mL/min spike

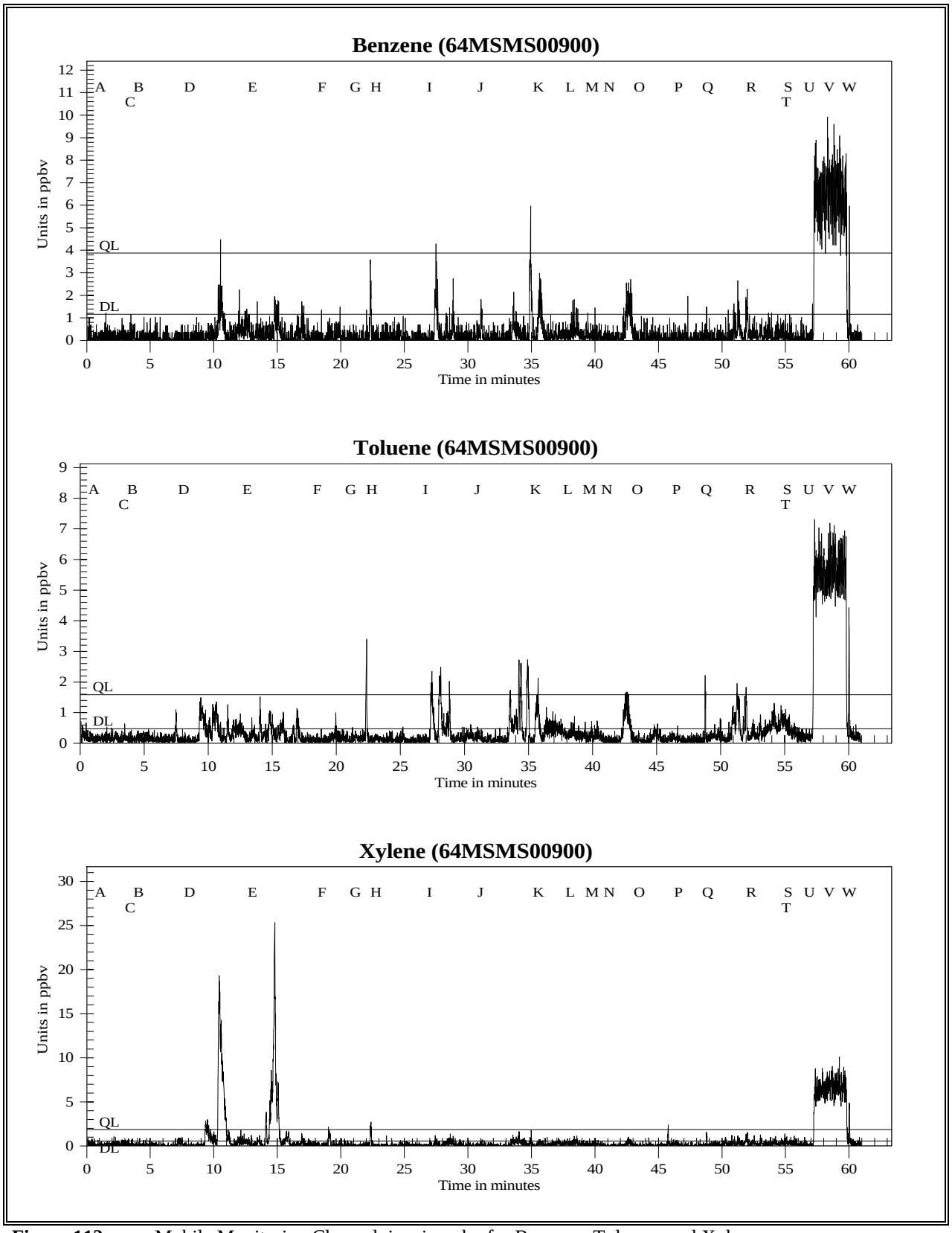


Figure 112c Mobile Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

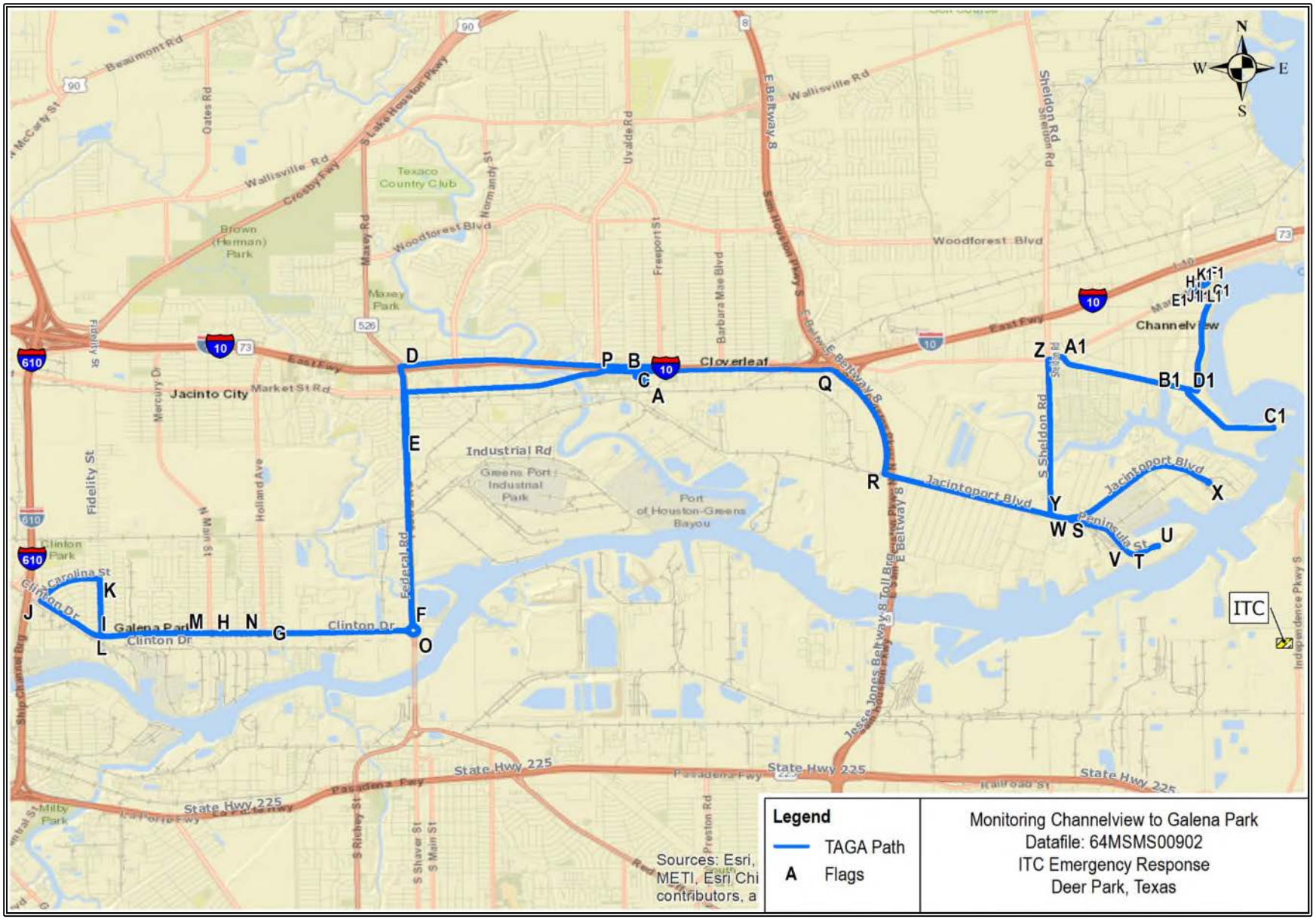


Figure 113a Monitoring Channelview to Galena Park Path, 64MSMS00902

Figure 113b

TAGA File Event Summary
File: 64MSMS00902 Acquired on 08 April 2019 at 13:07:52
Title: Monitoring Channelview to Galena Park

Flag	Time	Sequence	Description
A	1.8	172	Start mobile monitoring at shopping center on East Freeway Service Road
B	6.2	590	Merge onto East Freeway Service Road
C	6.8	646	U-turn onto East Freeway Service Road
D	15.3	1452	Left turn onto Federal Road
E	18.0	1712	Cross Industrial Road
F	21.3	2026	Right turn onto Clinton Drive
G	23.5	2233	Cross Holland Avenue
H	24.4	2325	Cross Main Street
I	27.0	2572	Cross Fidelity Street
J	28.8	2740	Right turn onto North Carolina Street
K	32.5	3086	Right turn onto Fidelity Street
L	34.6	3287	Left turn onto Clinton Drive
M	37.2	3533	Cross Main Street
N	38.2	3634	Cross Holland Avenue
O	41.3	3924	Left turn onto Federal Road
P	52.0	4948	Merge onto East Freeway Service Road
Q	56.3	5355	Right turn onto Highway 8 Service Road
R	58.2	5531	Left turn onto Jacintoport Boulevard
S	61.4	5835	Continue onto San Jacinto Boulevard
T	63.5	6038	Continue onto Peninsula Street
U	65.2	6204	U-turn on Peninsula Street
V	68.0	6470	Continuing onto San Jacinto Boulevard
W	70.3	6686	Right turn onto Jacintoport Boulevard
X	73.7	7012	U-turn on Jacintoport Boulevard
Y	78.0	7418	Right turn onto Sheldon Road
Z	81.6	7760	Right turn onto Market Street
A1	82.0	7798	Right turn onto Dezavala Road
B1	84.8	8063	Right turn to continue ont Dezavala Road
C1	89.1	8473	U-turn on Dezavala Road
D1	94.5	8988	Right turn onto Lakeside Drive
E1	98.1	9329	Right turn onto Market Street
F1	99.1	9421	Right turn onto Launch Drive
G1	100.2	9525	End mobile monitoring at River Terrace Park
H1	100.5	9551	Moving to ambient location

Figure 113b (continued)

TAGA File Event Summary
File: 64MSMS00902 Acquired on 08 April 2019 at 13:07:52
Title: Monitoring Channelview to Galena Park

Flag	Time	Sequence	Description
I1	102.2	9719	Start ambient
J1	103.3	9820	End ambient
K1	104.7	9953	Start 30 mL/min spike
L1	105.7	10050	End 30 mL/min spike

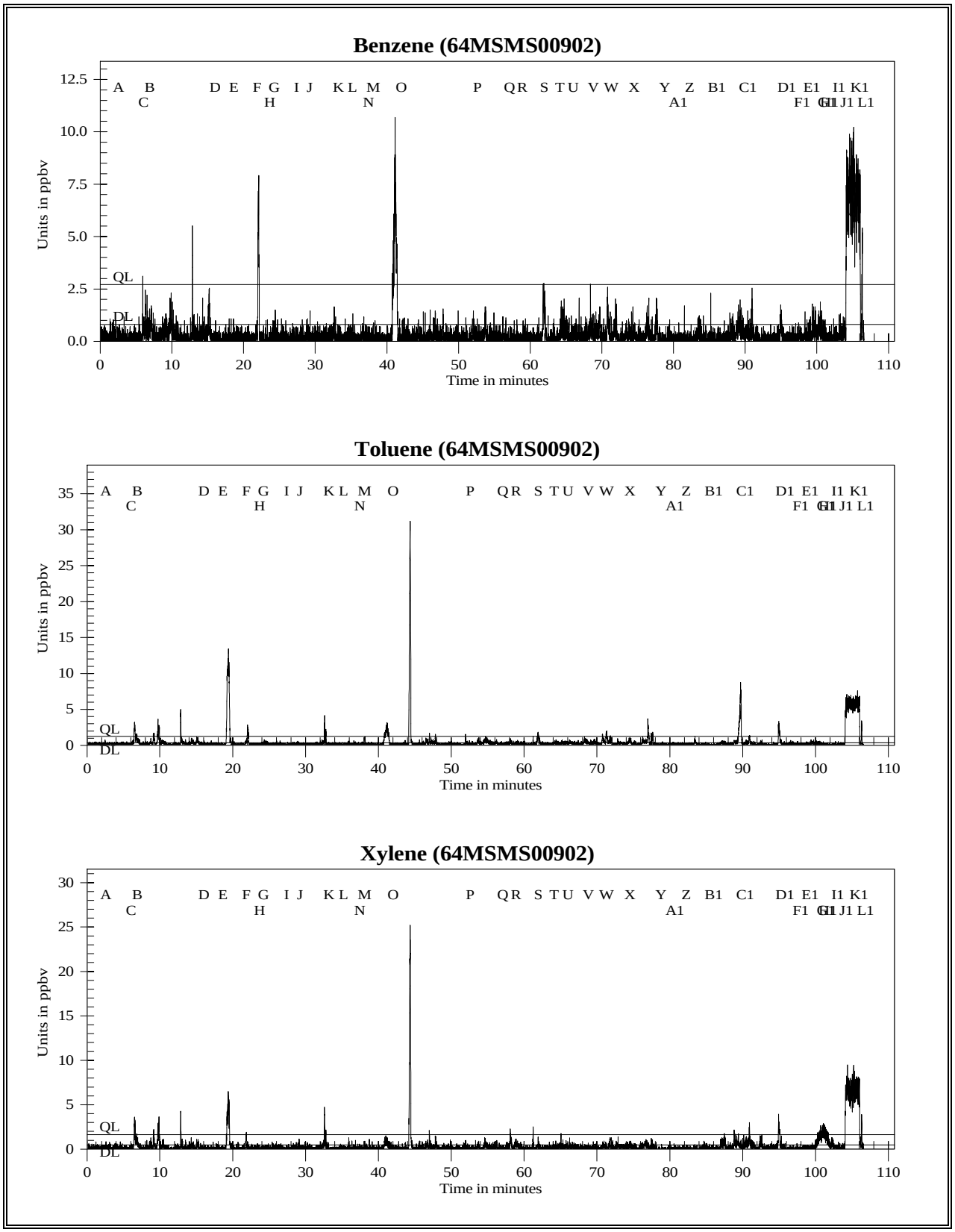


Figure 113c Mobile Monitoring Channelview to Galena Park in ppbv for Benzene, Toluene, and Xylenes

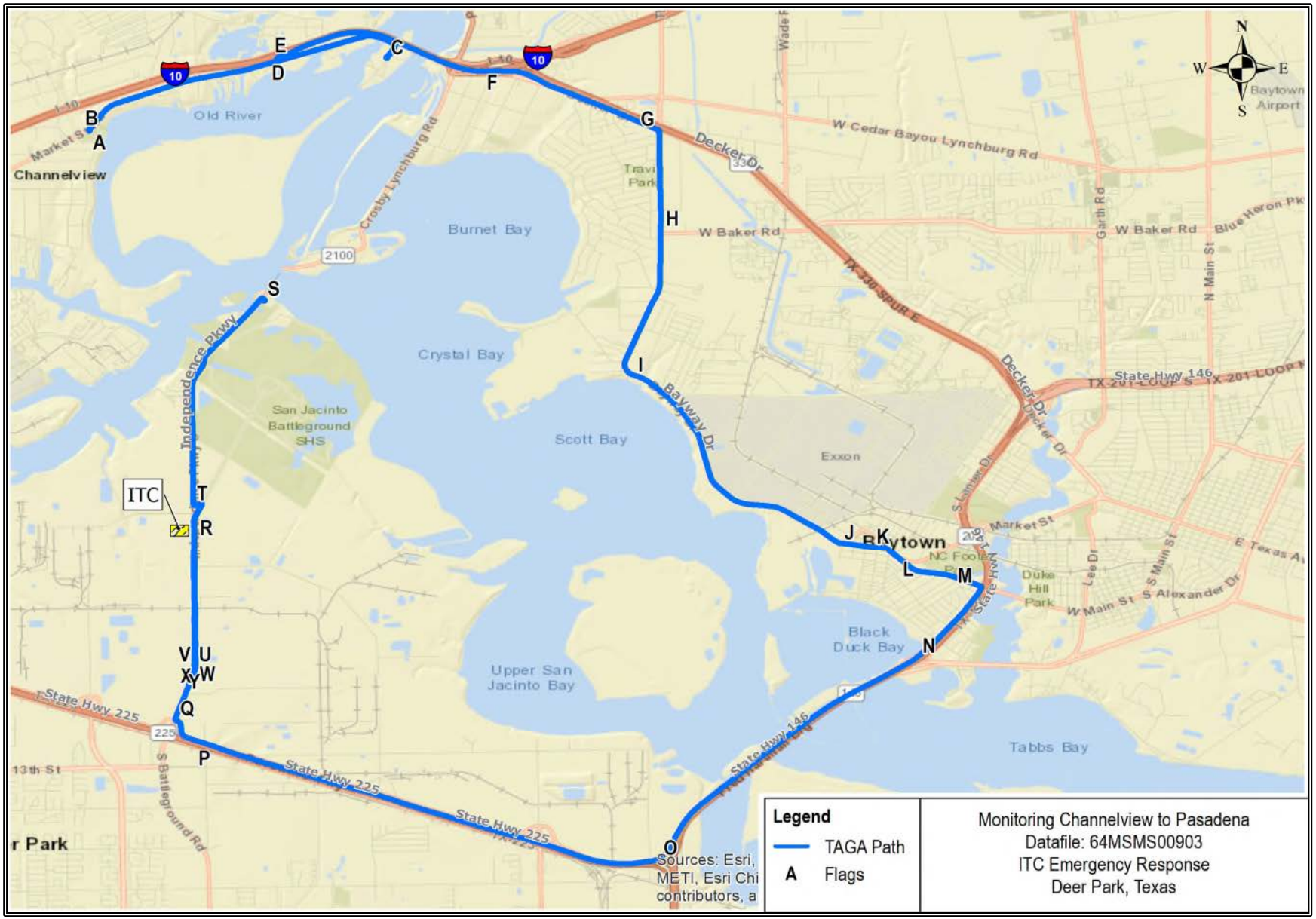


Figure 114a Monitoring Channelview to Pasadena Path, 64MSMS00903

Figure 114b

TAGA File Event Summary
File: 64MSMS00903 Acquired on 08 April 2019 at 15:01:48
Title: Monitoring Channelview to Pasadena

Flag	Time	Sequence	Description
A	0.6	59	Start mobile monitoring at River Terrace Park
B	2.3	223	Continue onto Market Street
C	8.6	815	U-turn on Market Street
D	12.1	1148	Right turn onto Monmouth Street
E	12.2	1165	Merge onto Highway 10 East
F	14.2	1347	Exit onto Decker Drive
G	16.4	1560	Right turn onto Bayway Drive
H	18.7	1774	Cross W Baker Road
I	21.5	2046	Left turn to continue on Bayway Drive
J	25.8	2449	Left turn onto Wisconsin Street
K	27.1	2577	Right turn onto Market Street
L	28.3	2688	Right turn onto Main Street
M	30.1	2858	Right turn onto Robert C Lanier Drive
N	31.7	3010	Merge onto Highway 146 South
O	35.0	3325	Merge onto Highway 225 West
P	38.9	3699	Exit onto Pasadena Freeway Frontage Road
Q	39.7	3777	Right turn onto Independence Parkway
R	45.6	4339	Continue onto Independence Parkway
S	50.6	4808	U-turn on Independence Parkway
T	55.5	5279	Continue onto Independence Parkway
U	60.7	5767	End mobile monitoring on Independence Parkway
V	60.9	5790	Start ambient
W	61.9	5886	End ambient
X	63.4	6027	Start 30 mL/min spike
Y	64.4	6123	End 30 mL/min spike

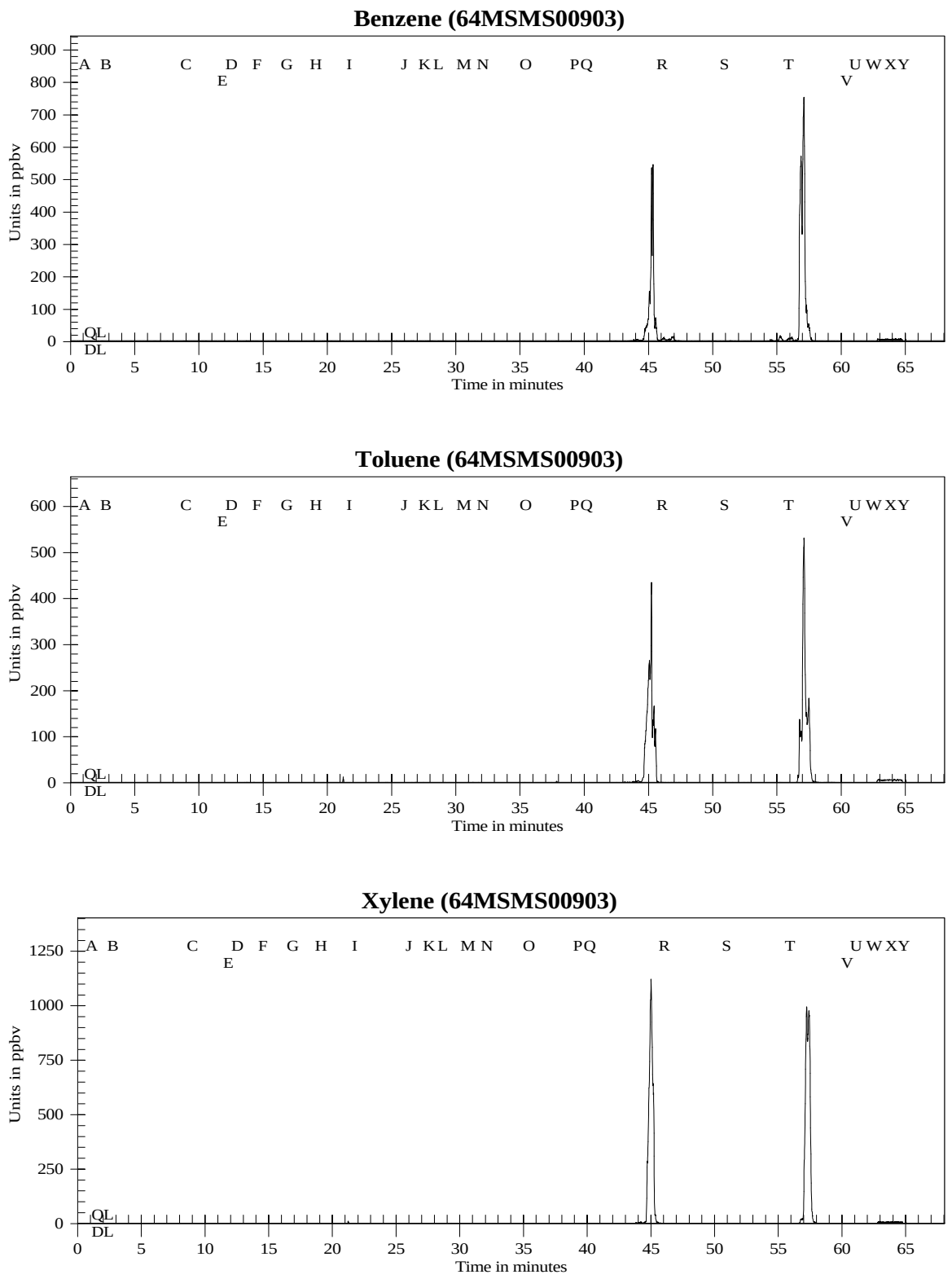


Figure 114c Mobile Monitoring Channelview to Pasadena in ppbv for Benzene, Toluene, and Xylenes

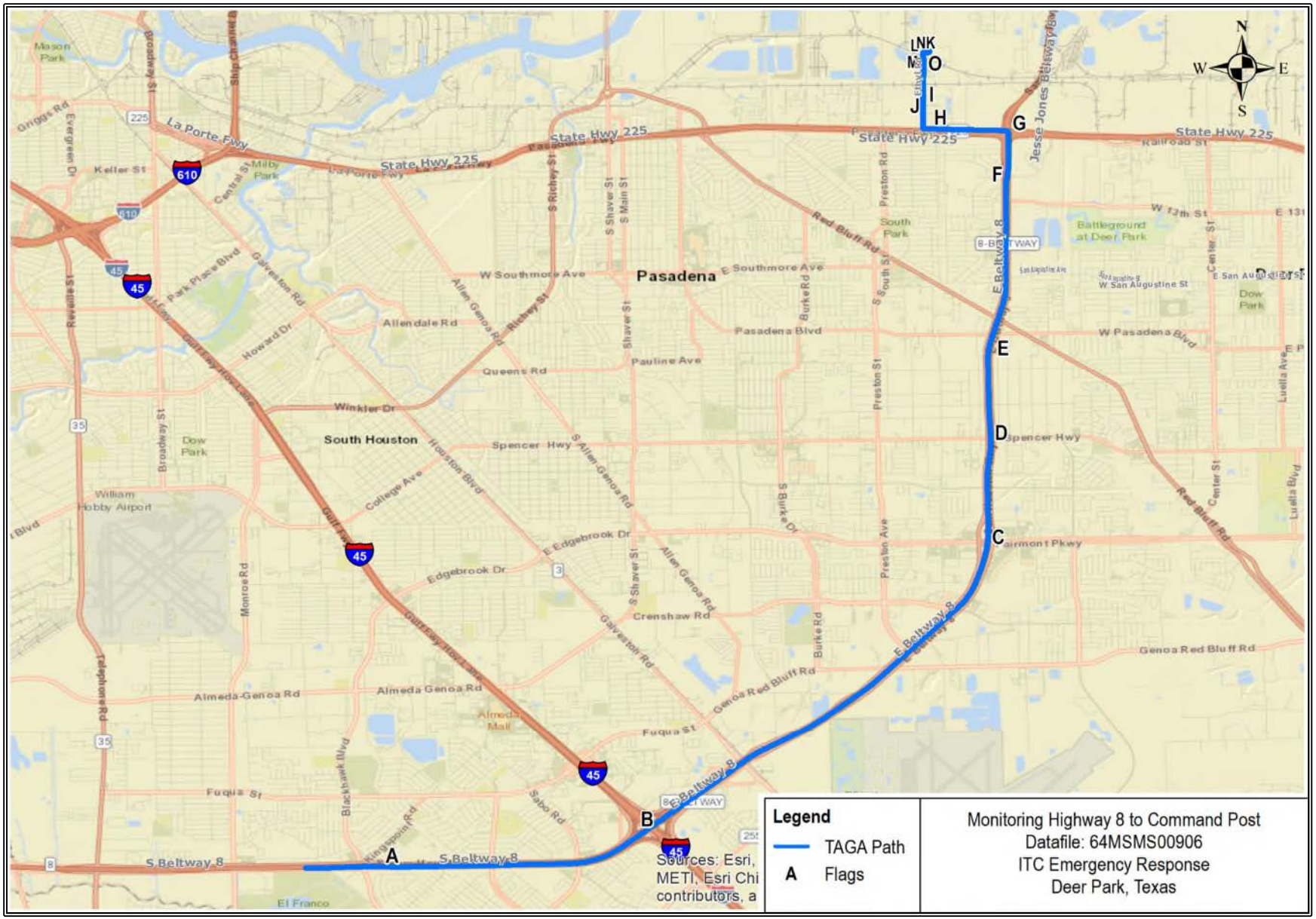


Figure 115a Monitoring Highway 8 to Command Post Path, 64MSMS00906

Figure 115b

TAGA File Event Summary
File: 64MSMS00906 Acquired on 09 April 2019 at 08:22:45
Title: Monitoring from Highway 8 to Command Post

Flag	Time	Sequence	Description
A	1.2	113	Start mobile monitoring on Highway 8 North
B	3.9	373	Cross Highway 45
C	8.4	804	Cross Fairmont Parkway
D	9.6	910	Cross Spencer Highway
E	10.7	1016	Cross Pasadena Boulevard
F	12.3	1172	Exit onto Highway 8 Service Road
G	14.8	1405	Left turn onto Pasadena Freeway Frontage Road
H	16.2	1541	Right turn onto Ethyl Road
I	17.7	1687	Stationary at railroad crossing on Ethyl Road
J	18.2	1731	Resume mobile monitoring on Ethyl Road
K	21.7	2064	End mobile monitoring at EPA Command Post
L	22.8	2171	Start ambient
M	24.1	2289	End ambient
N	25.7	2442	Start 30 mL/min spike
O	26.7	2539	End 30 mL/min spike

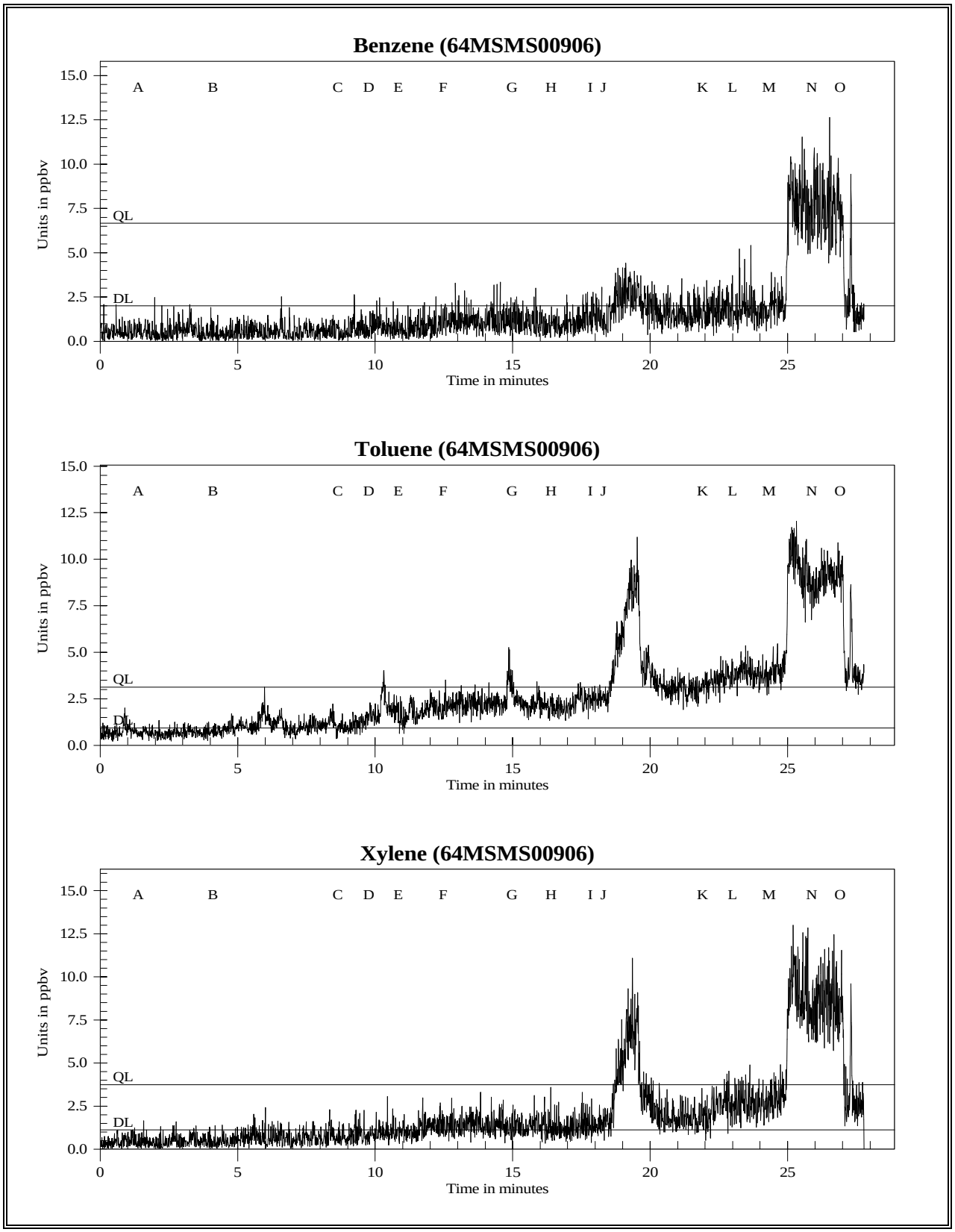


Figure 115c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

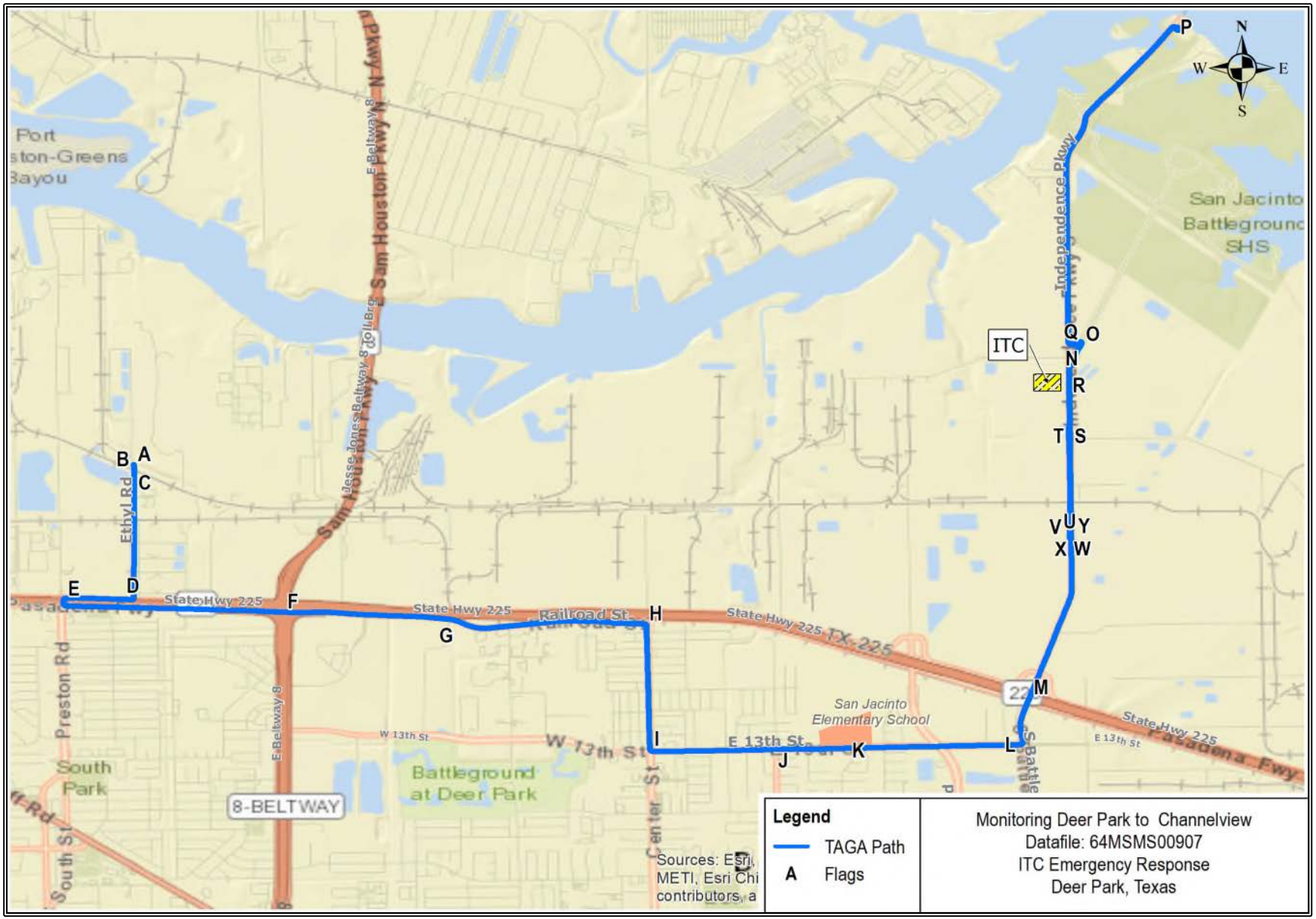


Figure 116a Monitoring Deer Park to Channelview Path, 64MSMS00907

Figure 116b

TAGA File Event Summary
File: 64MSMS00907 Acquired on 09 April 2019 at 09:07:10
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	1.1	108	Start mobile monitoring at EPA Command Post
B	10.0	956	Stationary at railroad crossing on Ethyl Road
C	13.0	1241	Resume mobile monitoring on Ethyl Road
D	15.3	1460	Right turn on Pasadena Freeway Frontage Road
E	16.2	1539	U-turn on Pasadena Freeway Frontage Road at Preston Road
F	19.5	1856	Cross Highway 8
G	21.1	2007	Continuing onto Railroad Street
H	23.5	2232	Right turn onto Center Street
I	26.3	2501	Left turn onto E 13th Street
J	27.9	2653	Cross Luella Avenue
K	28.9	2745	Passing San Jacinto Elementary School
L	31.4	2989	Left turn onto Battleground Road
M	32.4	3081	Continuing onto Independence Parkway
N	38.2	3634	Passing ITC Site
O	38.8	3694	Cross Vista Road
P	44.3	4212	U-turn at Juan Seguin Park on Independence Parkway
Q	50.4	4795	Cross Vista Road
R	51.6	4906	Passing ITC Site
S	53.2	5063	Stationary on Independence Parkway
T	54.4	5172	Resume mobile monitoring on Independence Parkway
U	56.8	5405	End mobile monitoring on Independence Parkway
V	57.4	5461	Start ambient
W	58.5	5558	End ambient
X	59.7	5681	Start 30 mL/min spike
Y	60.8	5781	End 30 mL/min spike

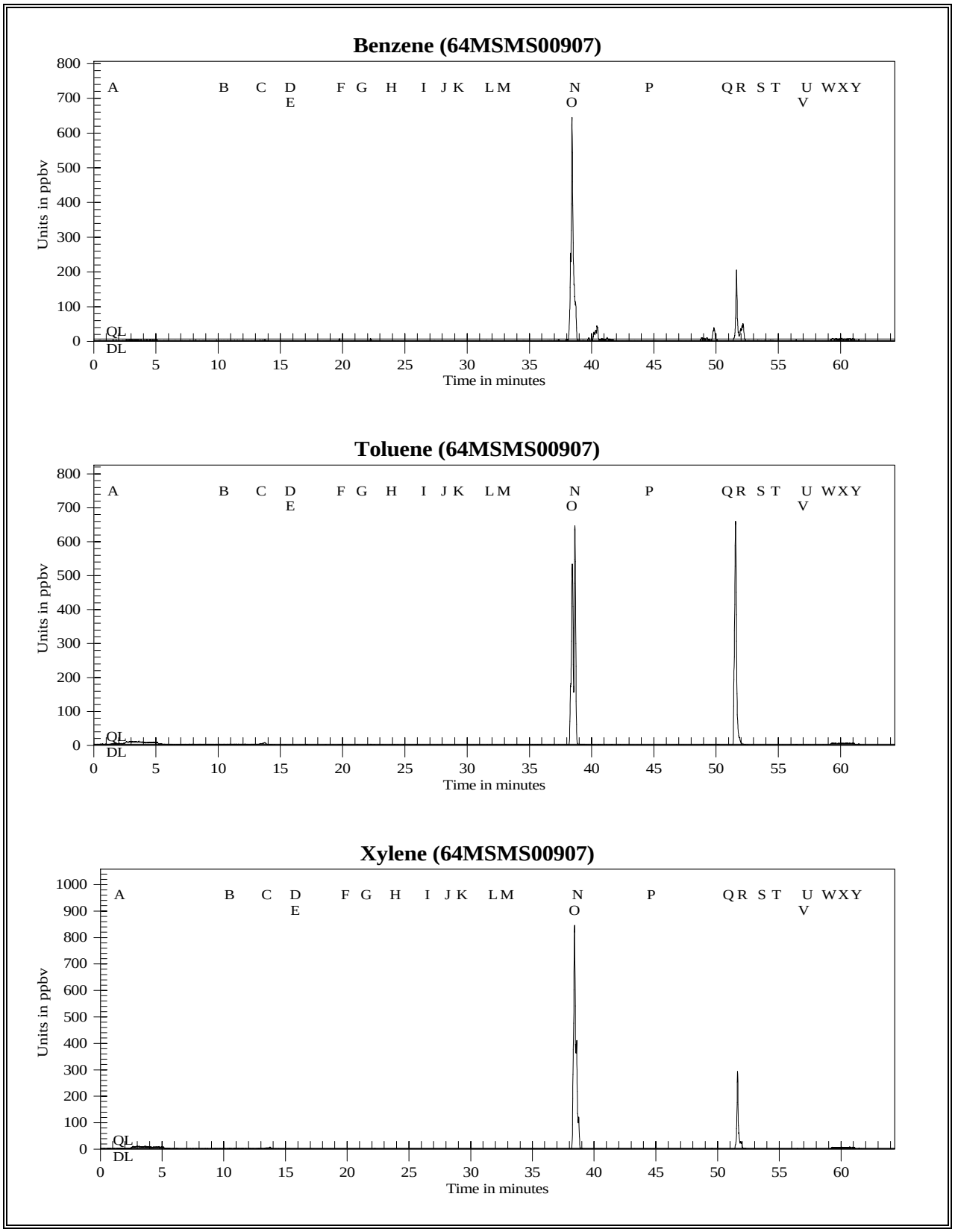


Figure 116c Mobile Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

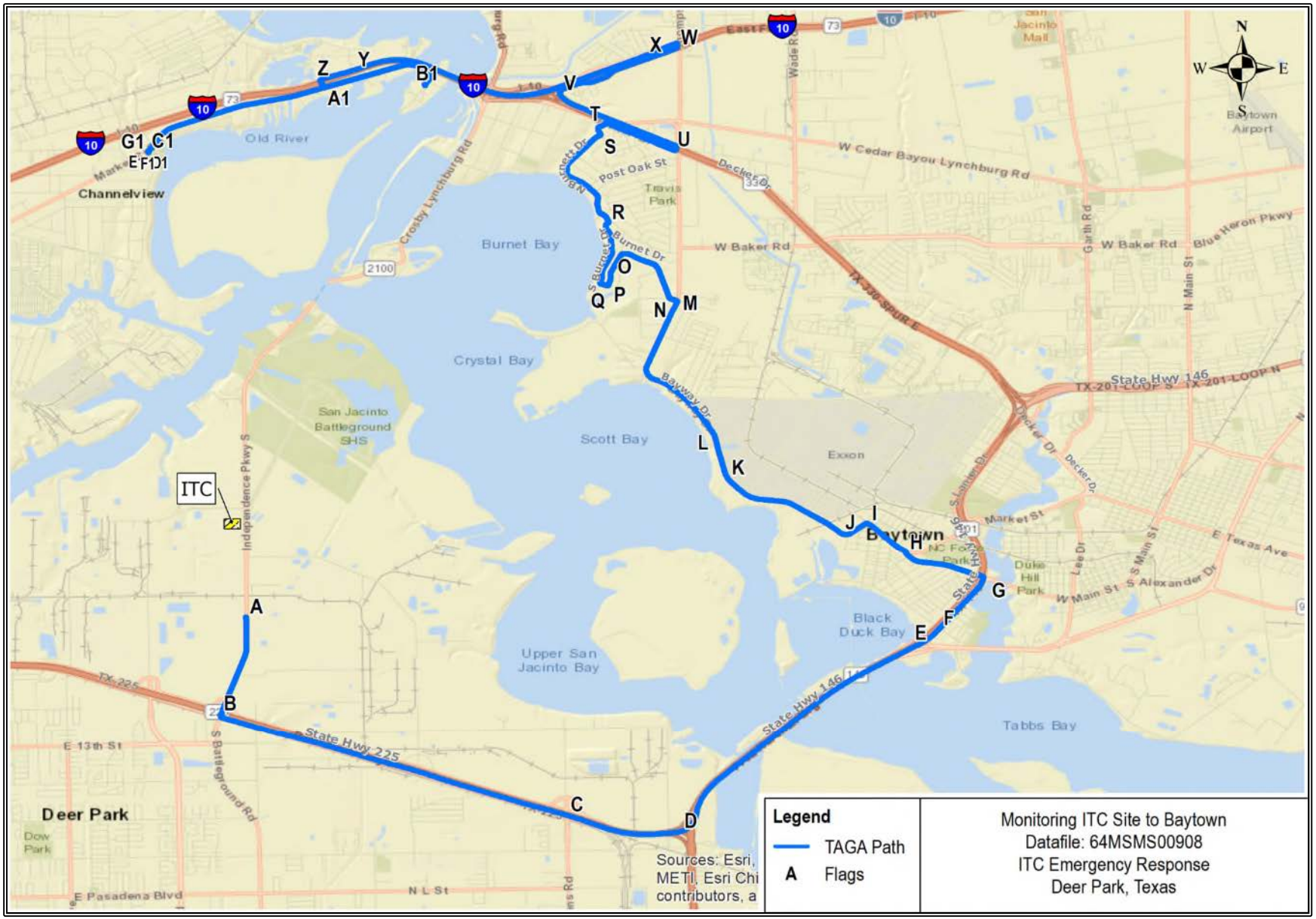


Figure 117a Monitoring ITC Site to Baytown Path, 64MSMS00908

Figure 117b

TAGA File Event Summary
File: 64MSMS00908 Acquired on 09 April 2019 at 10:11:51
Title: Monitoring ITC Site to Baytown

Flag	Time	Sequence	Description
A	1.3	124	Start mobile monitoring on Independence Parkway
B	3.9	375	Left turn onto Highway 225 East
C	7.3	693	Cross Sens Road
D	8.3	788	Merge onto Highway 146 North
E	11.4	1086	Exit onto Robert C Lanier Drive
F	12.3	1175	Cross Missouri Street
G	15.1	1433	Left turn onto Main Street
H	17.5	1669	Left turn onto Market Street
I	19.2	1831	Left turn to continue on Market Street
J	20.2	1921	Continue onto Bayway Drive
K	23.3	2214	Passing ExxonMobil Baytown
L	24.2	2301	Passing ExxonMobil Chemical
M	27.3	2595	Left turn onto W Shreck Street
N	27.7	2631	Right turn onto Greenbriar Drive
O	30.2	2869	Left turn onto Yaupon Drive
P	31.5	2992	Right turn onto Winkler Drive
Q	32.0	3041	Right turn onto S Burnett Drive
R	34.7	3296	Left turn onto N Burnett Drive
S	39.3	3737	Left turn onto Rollingwood Road
T	40.2	3823	Right turn onto Decker Drive
U	41.4	3941	U-turn on Decker Drive
V	43.6	4149	Continuing onto East Freeway Service Road
W	46.0	4371	U-turn on East Freeway Service Road at Thompson Road
X	47.1	4475	Merge onto Highway 10 West
Y	53.6	5096	Exit onto East Freeway Service Road
Z	54.3	5160	Left turn onto Monmouth Street
A1	54.9	5225	Left turn onto Market Street
B1	58.2	5537	U-turn on Market Street at Southwest Shipyard
C1	67.0	6366	End mobile monitoring at River Terrace Park
D1	68.0	6464	Start ambient
E1	69.2	6581	End ambient
F1	70.4	6697	Start 30 mL/min spike
G1	71.4	6793	End 30 mL/min spike

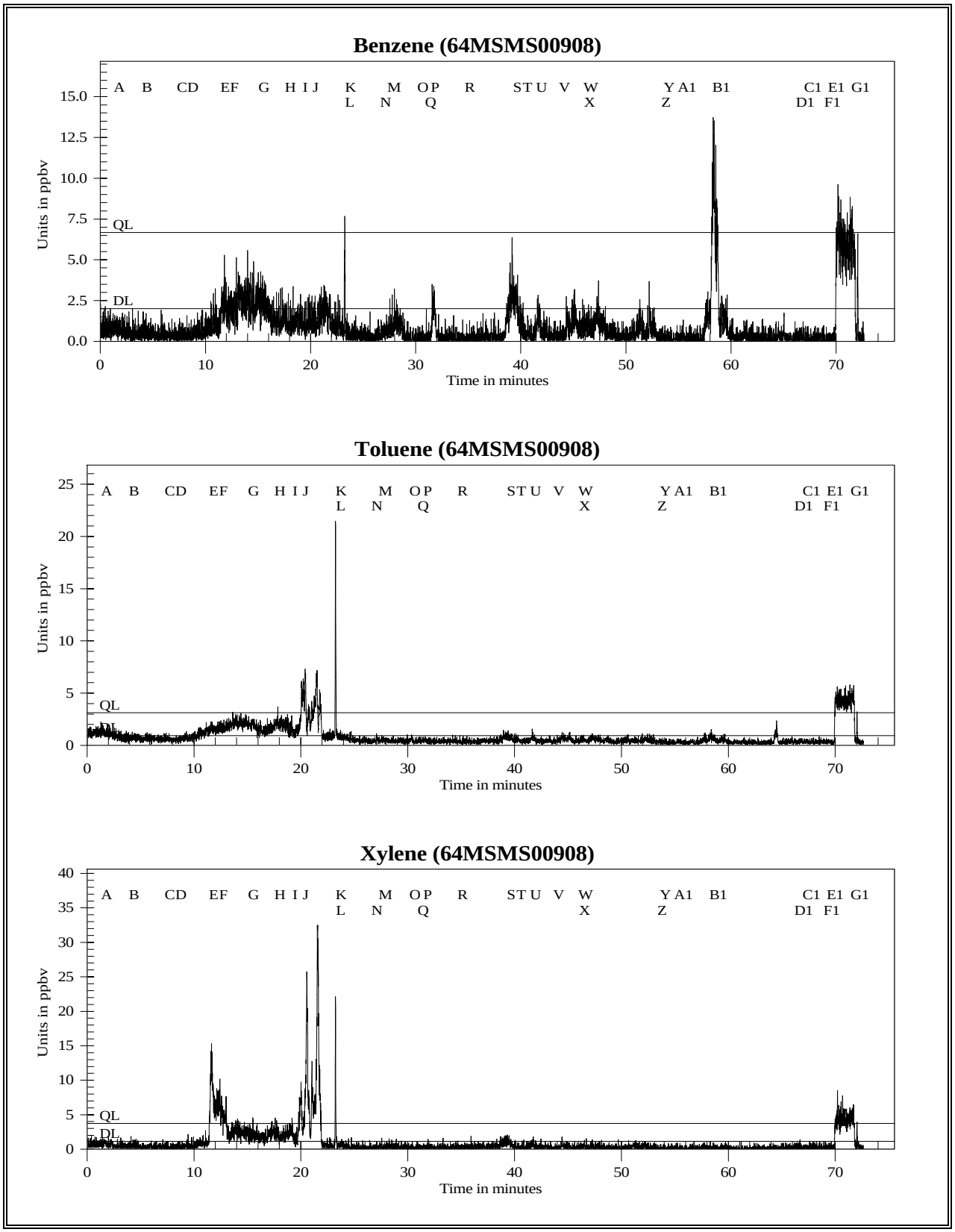


Figure 117c Mobile Monitoring ITC Site to Baytown in ppbv for Benzene, Toluene, and Xylenes

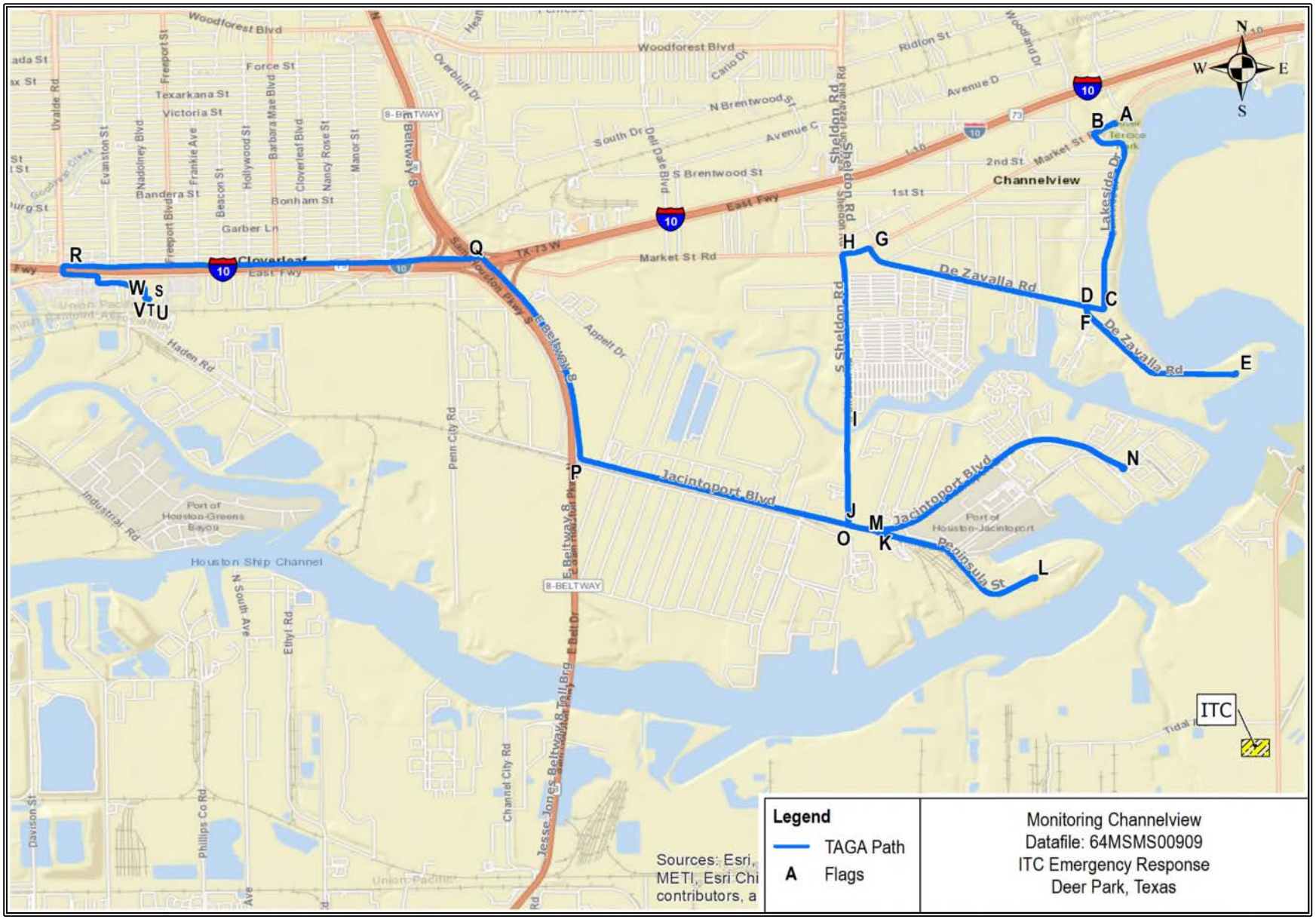


Figure 118a Monitoring Channelview Path, 64MSMS00909

Figure 118b

TAGA File Event Summary
File: 64MSMS00909 Acquired on 09 April 2019 at 11:26:56
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	0.8	78	Start mobile monitoring at River Terrace Park
B	2.3	224	Left turn onto Lakeside Drive
C	5.8	554	Continuing onto Lakeside Drive
D	6.2	593	Left turn onto Dezavala Road
E	10.8	1027	U-turn on Dezavala Road
F	17.2	1633	Left turn to continue on Dezavala Road
G	19.9	1894	Left turn onto Market Street
H	20.4	1943	Left turn onto Sheldon Road
I	22.6	2154	Cross Carpenter's Bayou
J	24.8	2355	Left turn onto Jacintoport Boulevard
K	25.5	2427	Right turn onto San Jacinto Boulevard
L	29.3	2785	U-turn on San Jacinto Boulevard/Peninsula Street at Coastal Cargo
M	34.5	3285	Right turn onto Jacintoport Boulevard
N	38.5	3658	U-turn on Jacintoport Boulevard
O	43.2	4105	Cross Sheldon Road
P	47.5	4521	Right turn onto Highway 8 Service Road
Q	50.5	4806	Left turn onto East Freeway Service Road
R	54.8	5214	U-turn on East Freeway Service Road at Uvalde Road
S	57.8	5496	End mobile monitoring at shopping center on East Freeway Service Road
T	58.3	5545	Start ambient
U	60.0	5703	End ambient
V	61.2	5819	Start 30 mL/min spike
W	62.4	5933	End 30 mL/min spike

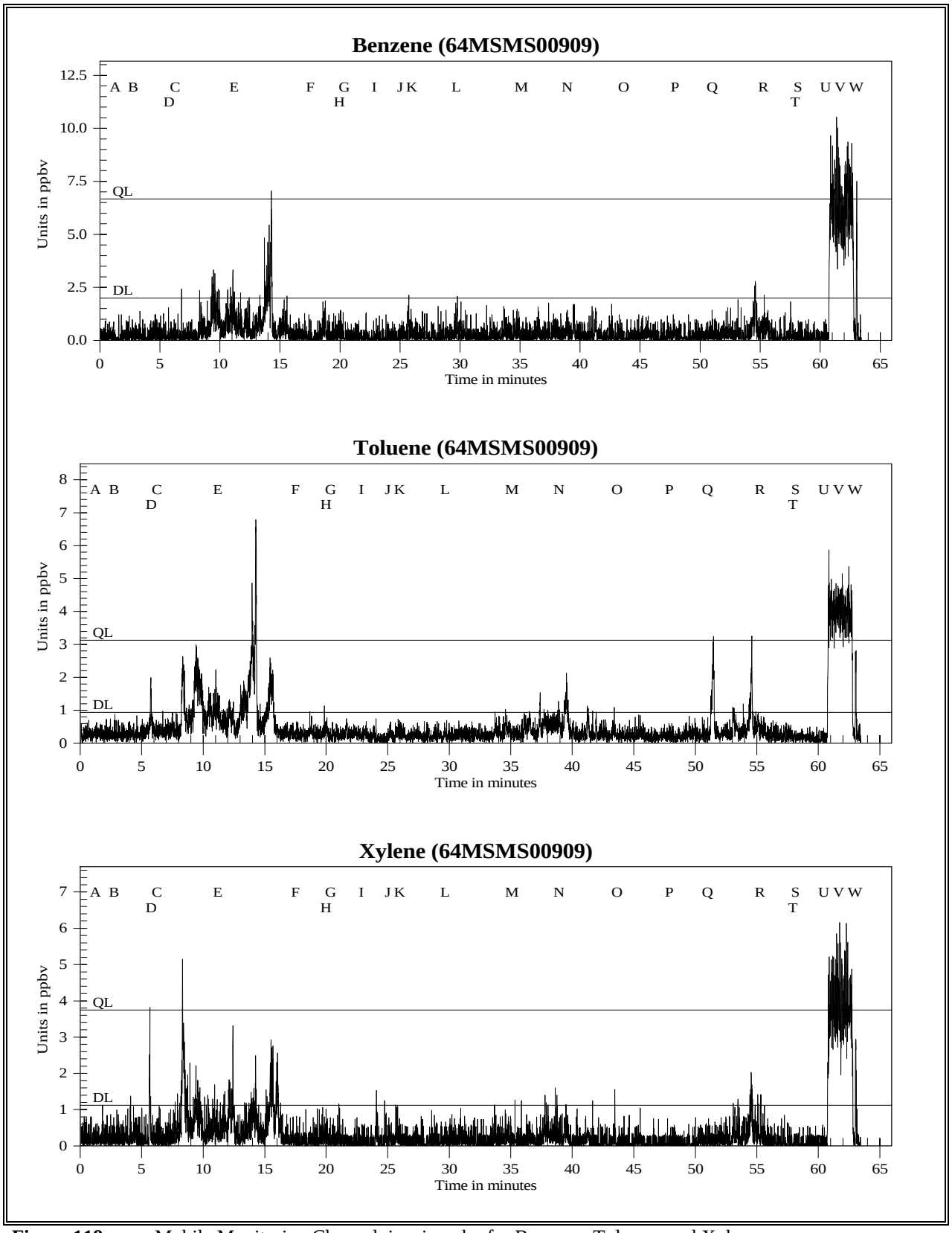


Figure 118c Mobile Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

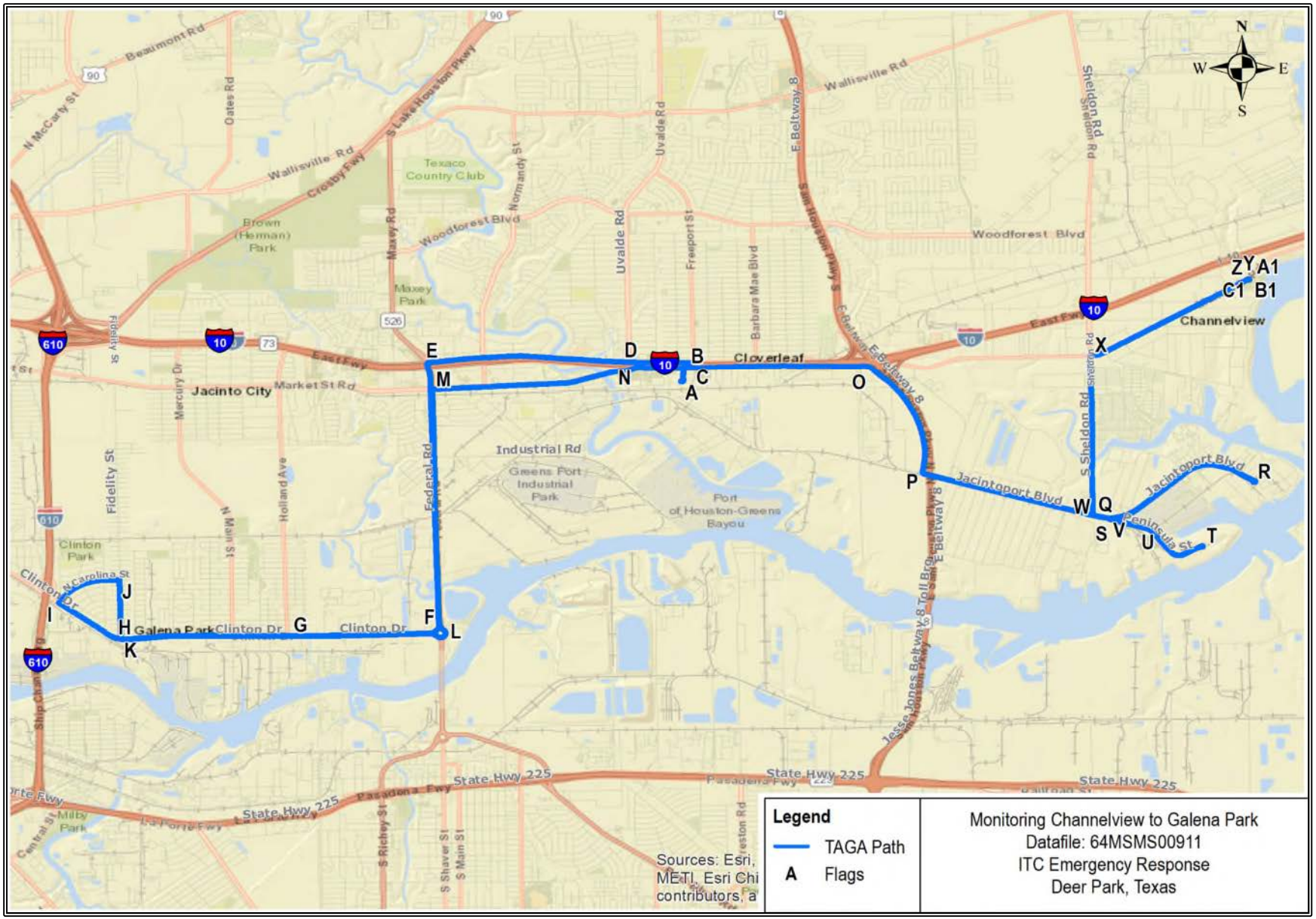


Figure 119a Monitoring Channelview to Galena Park Path, 64MSMS00911

Figure 119b

TAGA File Event Summary
File: 64MSMS00911 Acquired on 09 April 2019 at 13:37:02
Title: Monitoring Channelview to Galena Park

Flag	Time	Sequence	Description
A	1.7	162	Start mobile monitoring at shopping center on East Freeway Service Road
B	3.7	354	Right turn onto East Freeway Service Road
C	4.1	386	U-turn on East Freeway Service Road
D	14.9	1422	Cross Uvalde Road
E	19.3	1835	Left turn onto Federal Road
F	25.6	2439	Right turn onto Clinton Drive
G	28.1	2672	Cross Holland Avenue
H	32.4	3084	Cross Fidelity Street
I	33.8	3214	Right turn onto North Carolina Street
J	36.5	3469	Right turn onto Fidelity Street
K	38.8	3691	Left turn onto Clinton Drive
L	45.5	4331	Left turn onto Federal Street
M	52.5	4993	Right turn onto Market Street
N	60.1	5719	Merge onto East Freeway Service Road
O	64.7	6152	Right turn onto Highway 8 Service Road
P	66.5	6326	Left turn onto Jaccintoport Boulevard
Q	70.3	6684	Cross Sheldon Road
R	74.8	7112	U-turn on Jacintoport Boulevard
S	79.7	7579	Left turn on San Jacinto Boulevard
T	84.1	7999	U-turn on San Jacinto Boulevard/Peninsula Street
U	87.7	8343	Continuing onto San Jacinto Boulevard
V	89.1	8468	Left turn onto Jacintoport Boulevard
W	89.4	8500	Right turn onto Sheldon Road
X	93.7	8909	Right turn onto Market Street
Y	98.0	9321	End mobile monitoring at River Terrace Park
Z	98.4	9360	Start ambient
A1	99.4	9449	End ambient
B1	100.8	9582	Start 30 mL/min spike
C1	101.8	9677	End 30 mL/min spike

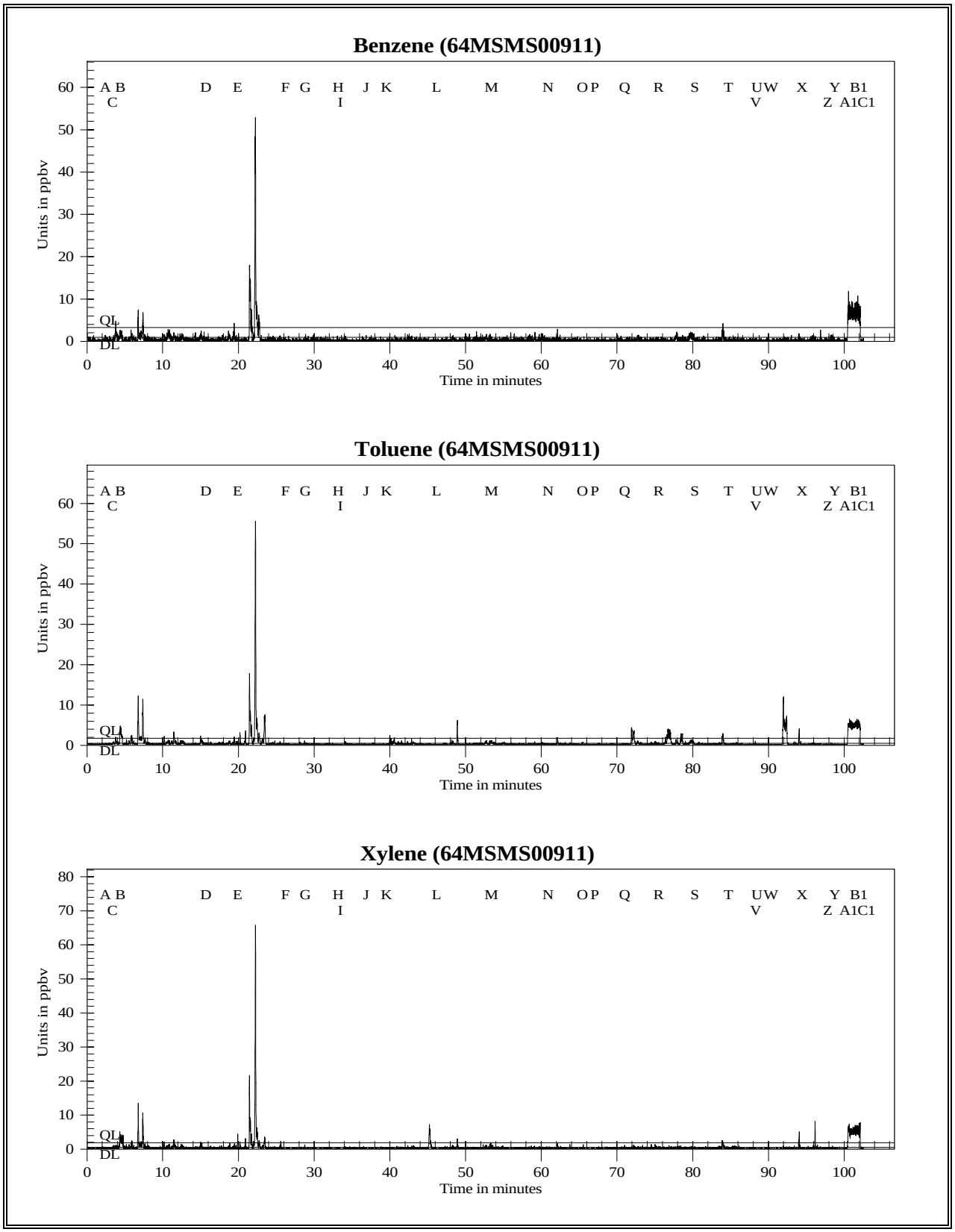


Figure 119c Mobile Monitoring Channelview to Galena Park in ppbv for Benzene, Toluene, and Xylenes

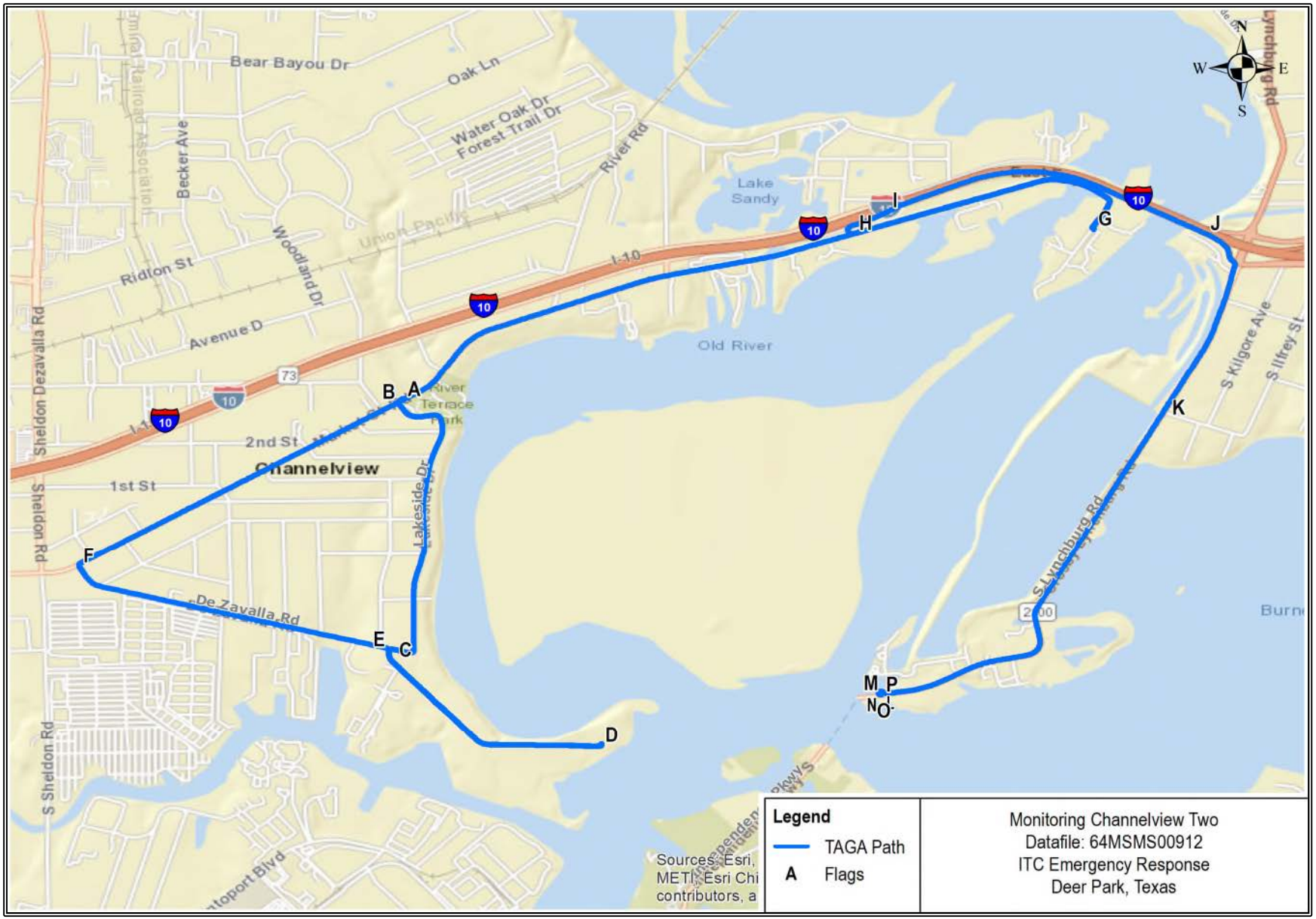


Figure 120a Monitoring Channelview Two Path, 64MSMS00912

Figure 120b

TAGA File Event Summary
File: 64MSMS00912 Acquired on 09 April 2019 at 15:28:24
Title: Monitoring Channelview Two

Flag	Time	Sequence	Description
A	1.5	148	Start mobile monitoring at River Terrace Park
B	2.5	238	Left turn onto Lakeside Drive
C	6.0	576	Left turn onto Dezavala Road
D	10.1	962	U-turn on Dezavala Road
E	15.8	1506	Left turn to continue on Dezavala Road
F	18.4	1748	Right turn onto Market Street
G	28.5	2712	U-turn on Market Street at Southwest Shipyard
H	32.7	3106	Right turn onto East Freeway Service Road
I	33.3	3163	Merge onto Highway 10 East
J	35.6	3390	Exit onto Independence Parkway North
K	37.6	3580	Cross Lakeview Drive
L	42.2	4009	Exit mobile monitoring at Lynchburg Ferry
M	42.6	4047	Start ambient
N	43.6	4143	End ambient
O	44.7	4250	Start 30 mL/min spike
P	45.7	4349	End 30 mL/min spike

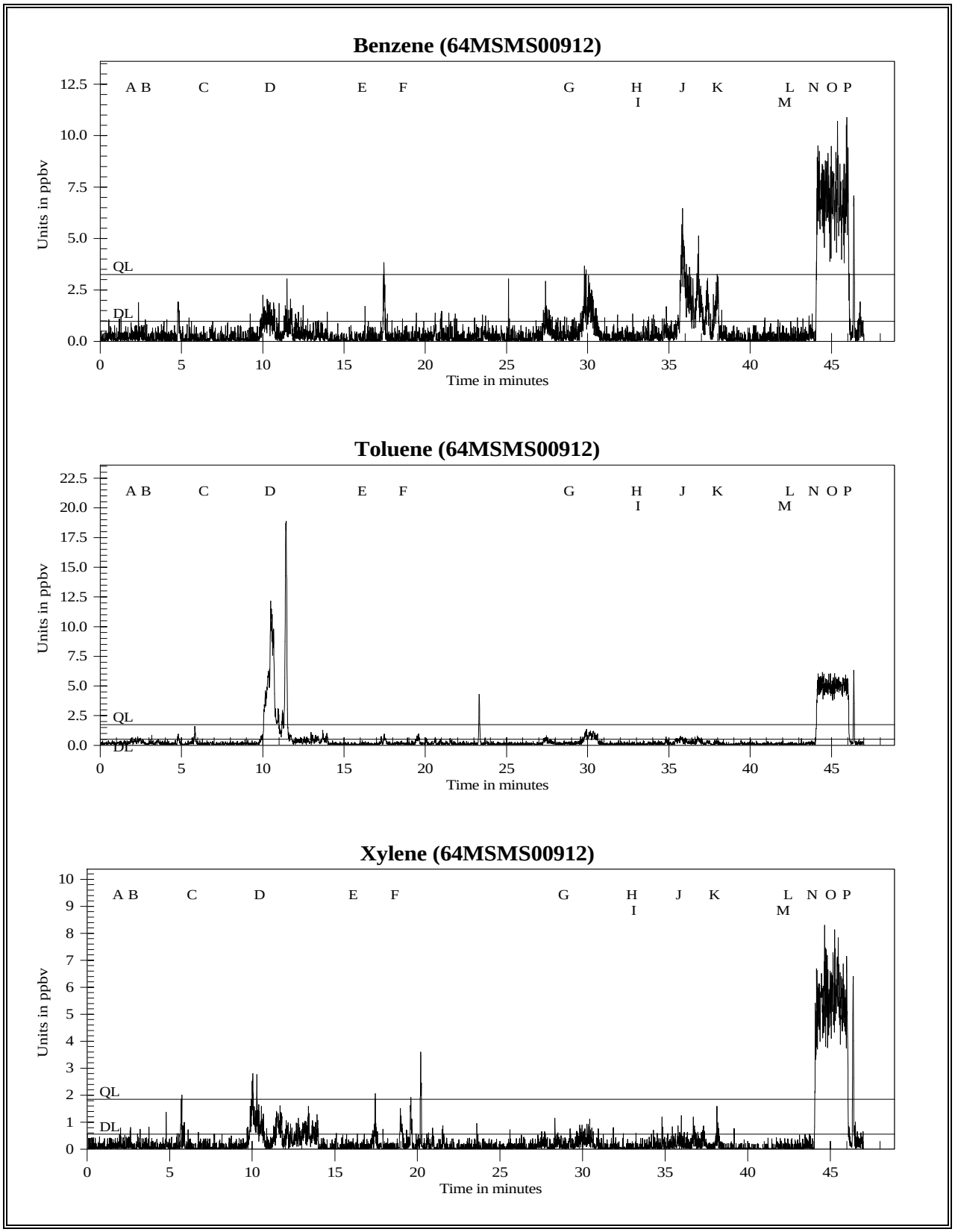


Figure 120c Mobile Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

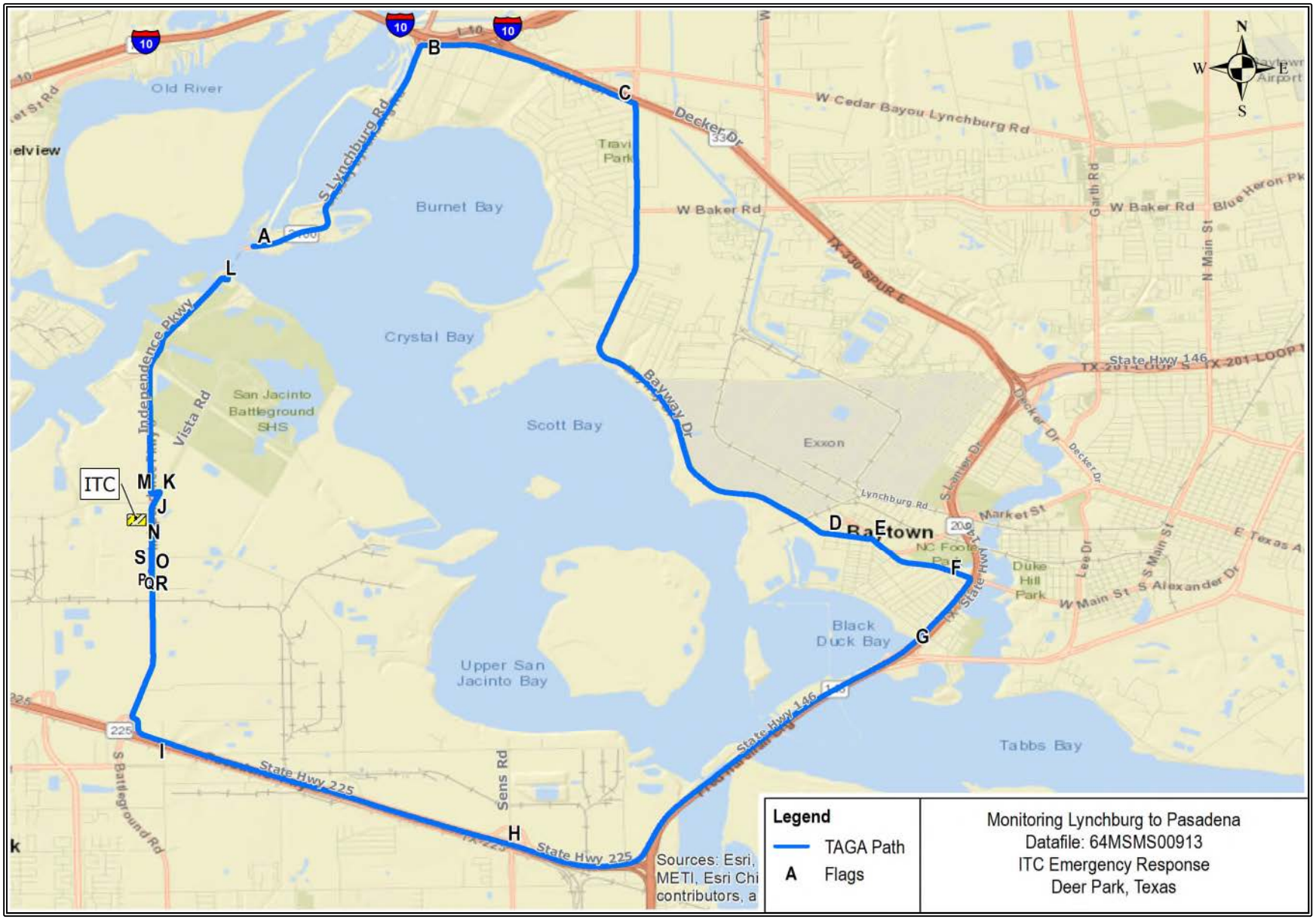


Figure 121a Monitoring Lynchburg to Pasadena Path, 64MSMS00913

Figure 121b

TAGA File Event Summary
File: 64MSMS00913 Acquired on 09 April 2019 at 16:19:46
Title: Monitoring Lynchburg to Pasadena

Flag	Time	Sequence	Description
A	1.2	119	Start mobile monitoring at Lynchburg Ferry
B	10.0	955	Right turn onto Decker Drive
C	13.2	1257	Right turn onto Bayway Drive
D	22.3	2122	Continuing onto Wisconsin Street
E	23.8	2268	Right turn onto Market Street
F	26.3	2504	Right turn onto Robert C Lanier Drive
G	28.3	2693	Merge onto Highway 146 South
H	32.2	3065	Cross Sens Road on Highway 225 West
I	35.2	3346	Exit onto Independence Parkway
J	40.6	3864	Passing ITC Site
K	41.3	3932	Cross Vista Road
L	45.8	4353	U-turn on Independence Parkway at Juan Seguin Park
M	50.6	4816	Cross Vista Road
N	52.2	4968	Passing ITC Site
O	53.2	5058	End mobile monitoring on Independence Parkway
P	53.6	5092	Start ambient
Q	54.5	5187	End ambient
R	55.6	5288	Start 30 mL/min spike
S	56.6	5383	End 30 mL/min spike

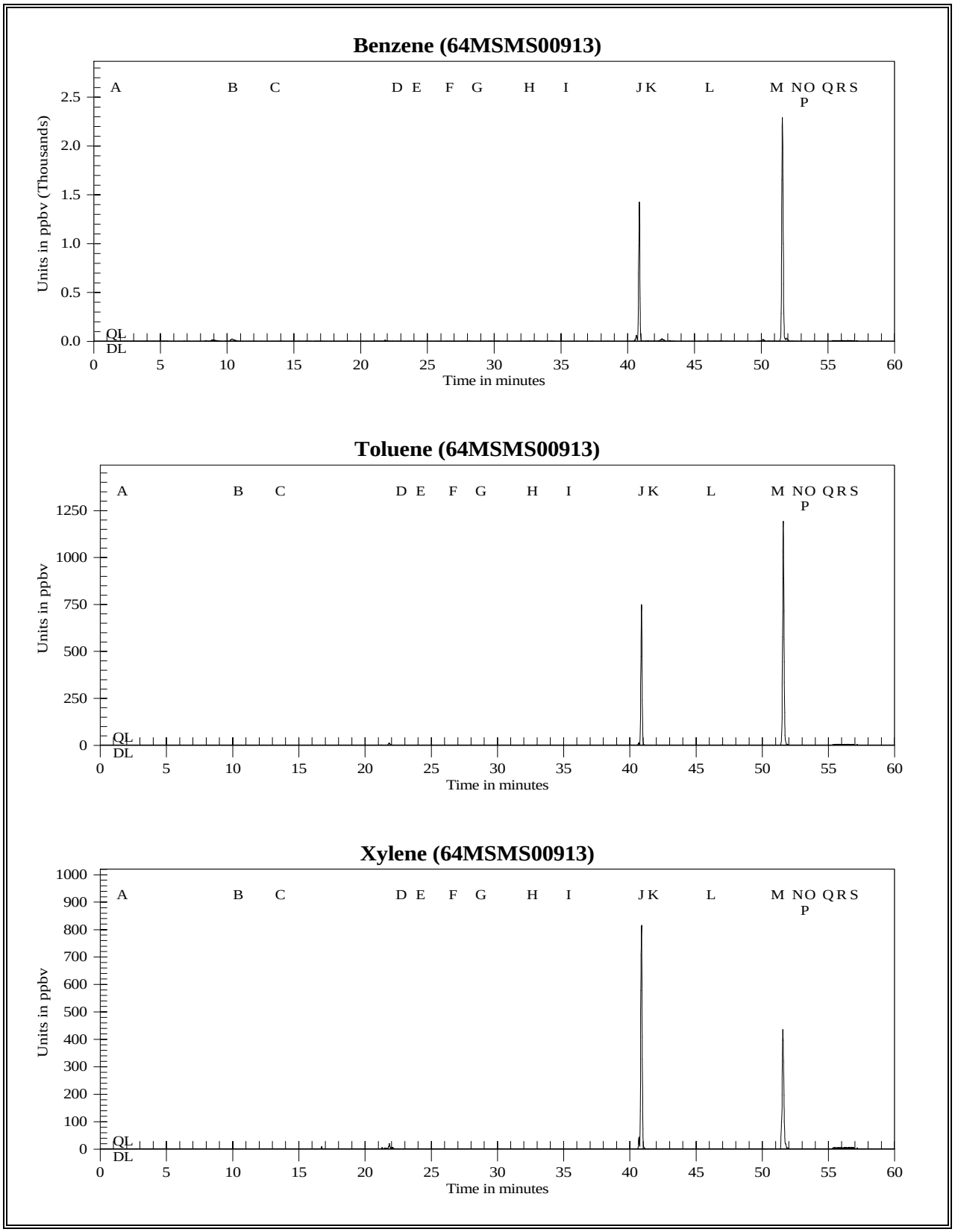


Figure 121c Mobile Monitoring Lynchburg to Pasadena in ppbv for Benzene, Toluene, and Xylenes

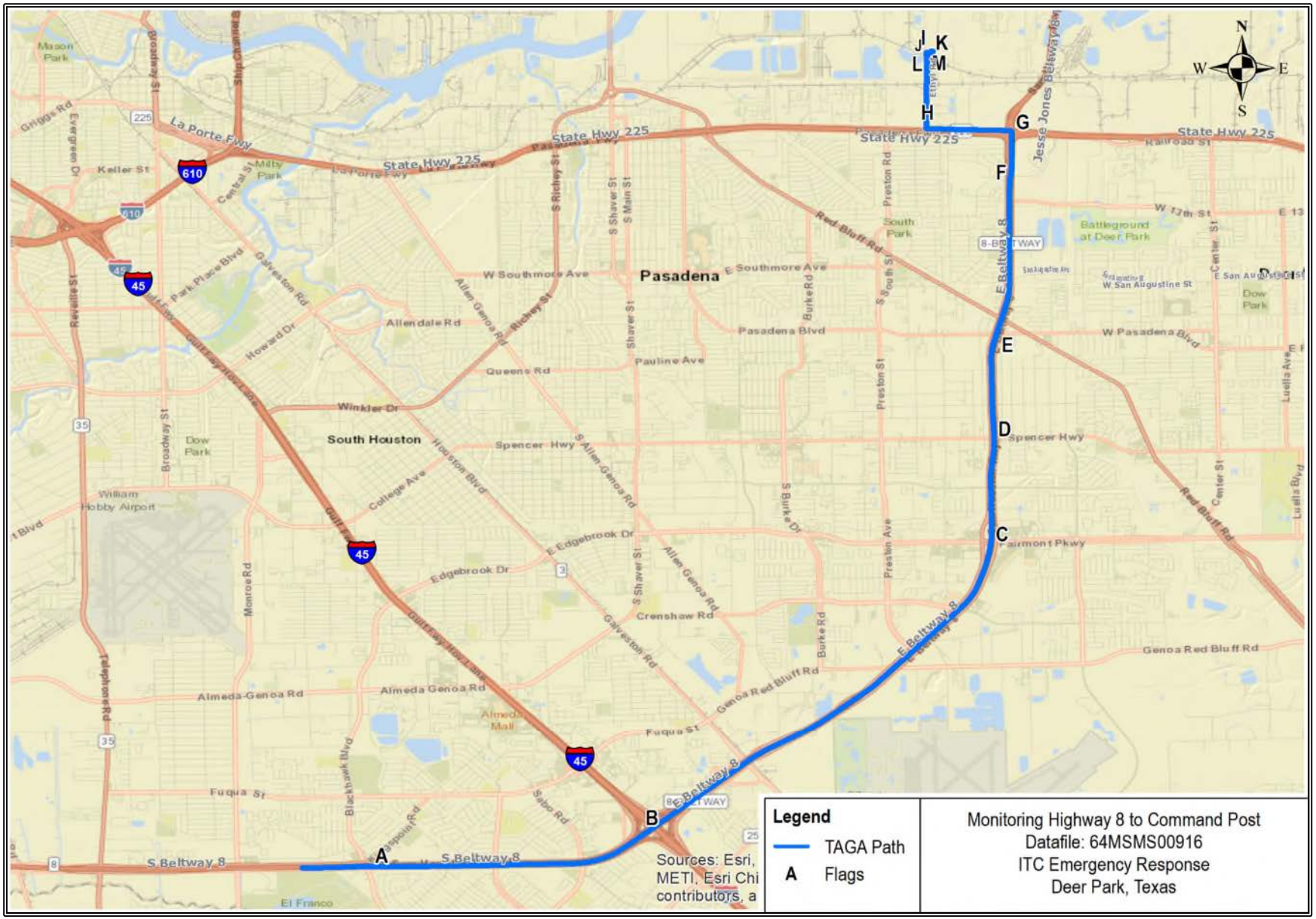


Figure 122a Monitoring Highway 8 to Command Post Path, 64MSMS00916

Figure 122b

TAGA File Event Summary
File: 64MSMS00916 Acquired on 10 April 2019 at 07:56:22
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	1.1	107	Start mobile monitoring on Highway 8 North at Blackhawk Boulevard
B	4.0	381	Cross Highway 45
C	8.9	844	Cross Fairmont Parkway
D	10.1	961	Cross Spencer Highway
E	11.6	1103	Cross Pasadena Boulevard
F	14.8	1409	Exit onto Highway 8 Service Road
G	16.9	1607	Left turn onto Pasadena Freeway Frontage Road
H	18.4	1752	Right turn onto Ethyl Road
I	22.7	2156	End mobile monitoring at EPA Command Post
J	23.0	2189	Start ambient
K	24.0	2284	End ambient
L	25.6	2430	Start 30 mL/min spike
M	27.0	2566	End 30 mL/min spike

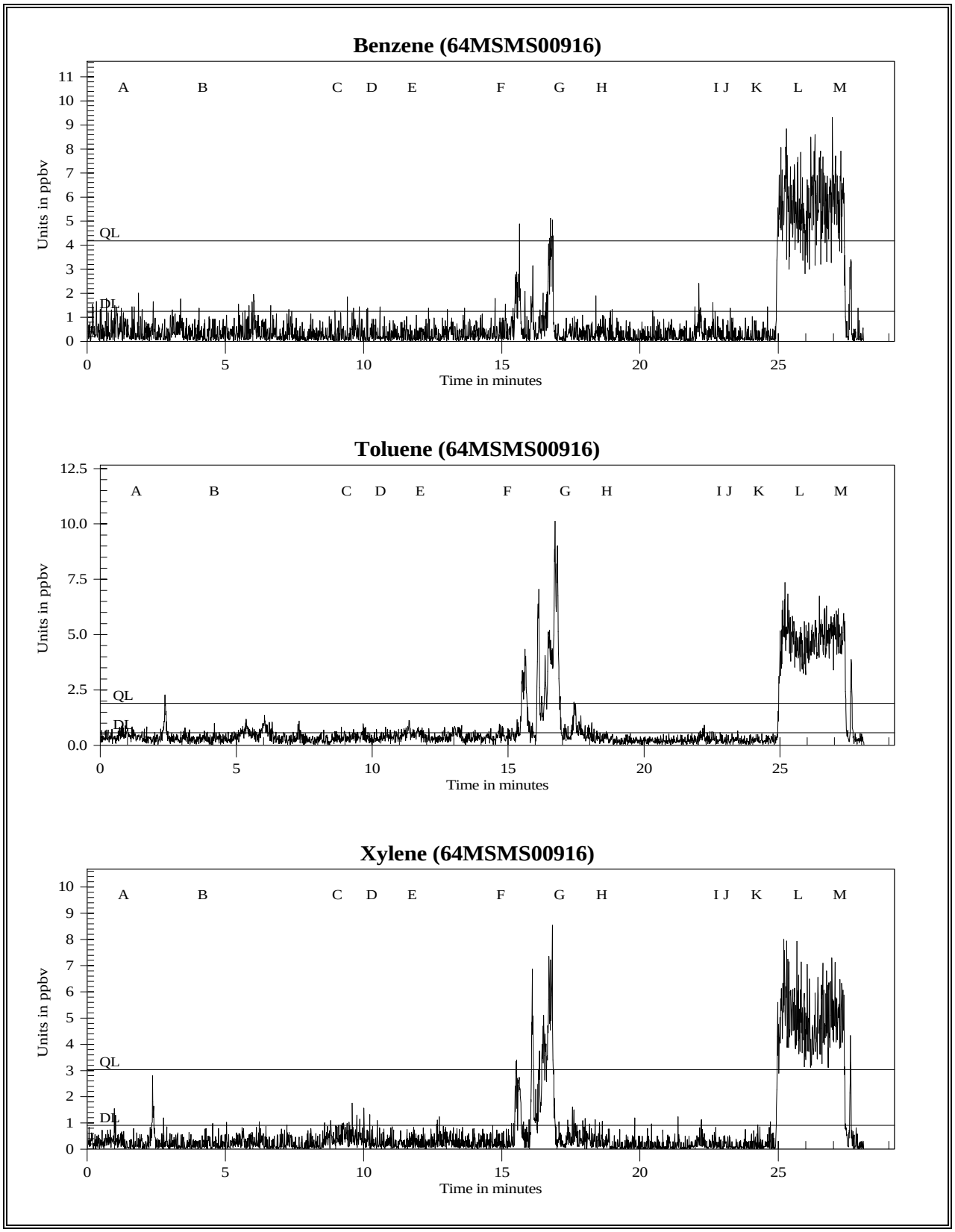


Figure 122c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

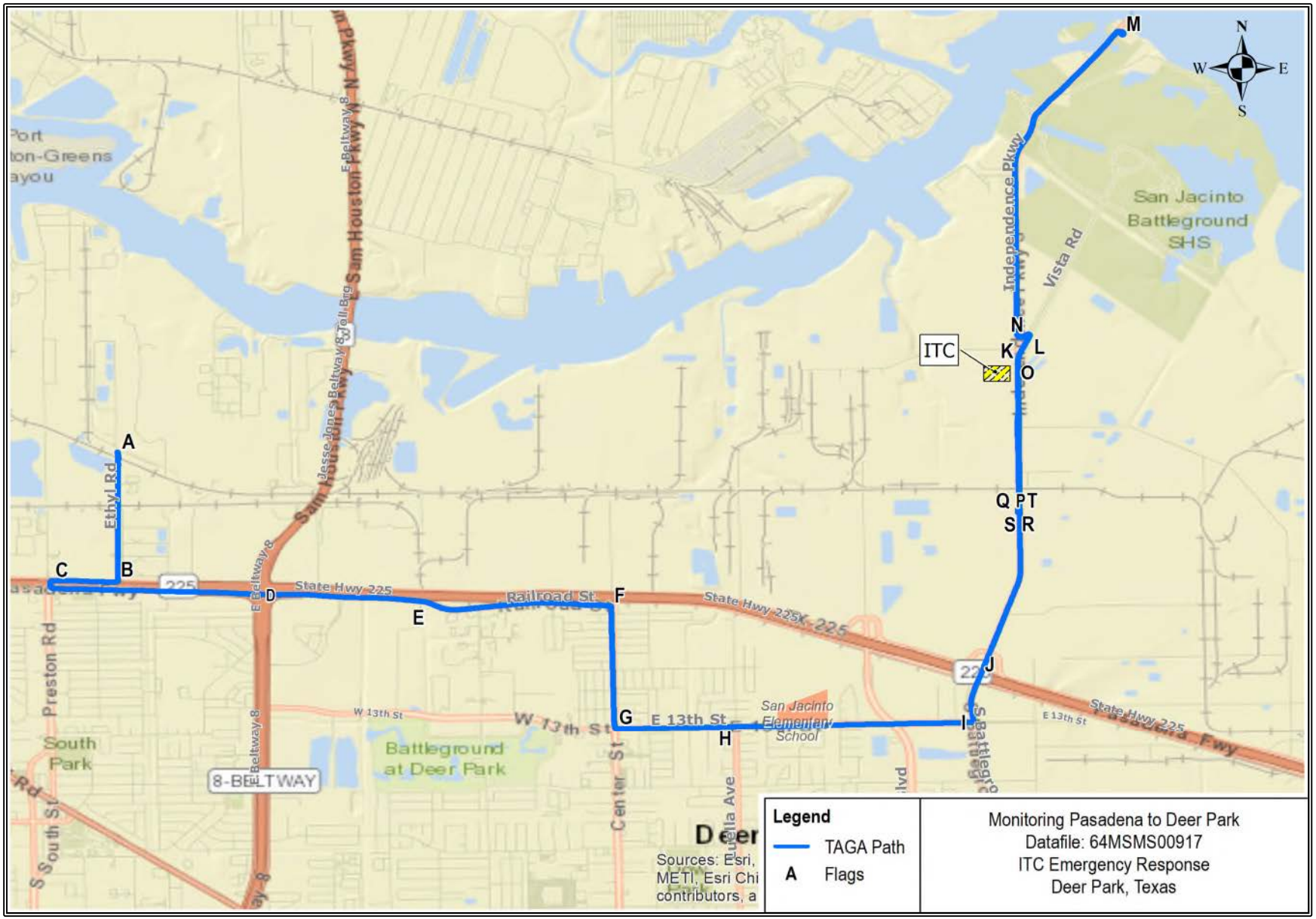


Figure 123a Monitoring Pasadena to Deer Park Path, 64MSMS00917

Figure 123b

TAGA File Event Summary
File: 64MSMS00917 Acquired on 10 April 2019 at 08:34:25
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	1.2	112	Start mobile monitoring at EPA Command Post
B	6.5	617	Right turn onto Pasadena Freeway Frontage Road
C	7.3	695	U-turn on Pasadena Freeway Frontage Road at Preston Road
D	10.4	988	Cross Highway 8
E	11.9	1134	Continuing onto Railroad Street
F	14.6	1390	Right turn onto Center Street
G	18.3	1742	Left turn onto E 13th Street
H	19.8	1885	Cross Luella Avenue
I	23.3	2216	Left turn onto Battleground Road
J	24.1	2295	Continuing onto Independence Parkway
K	30.1	2866	Passing ITC Site
L	30.6	2908	Cross Vista Road
M	35.6	3388	U-turn on Independence Parkway at Juan Seguin Park
N	41.1	3910	Cross Vista Road
O	42.3	4021	Passing ITC Site
P	51.5	4900	End mobile monitoring on Independence Parkway
Q	51.9	4938	Start ambient
R	53.0	5038	End ambient
S	54.4	5169	Start 30 mL/min spike
T	55.4	5268	End 30 mL/min spike

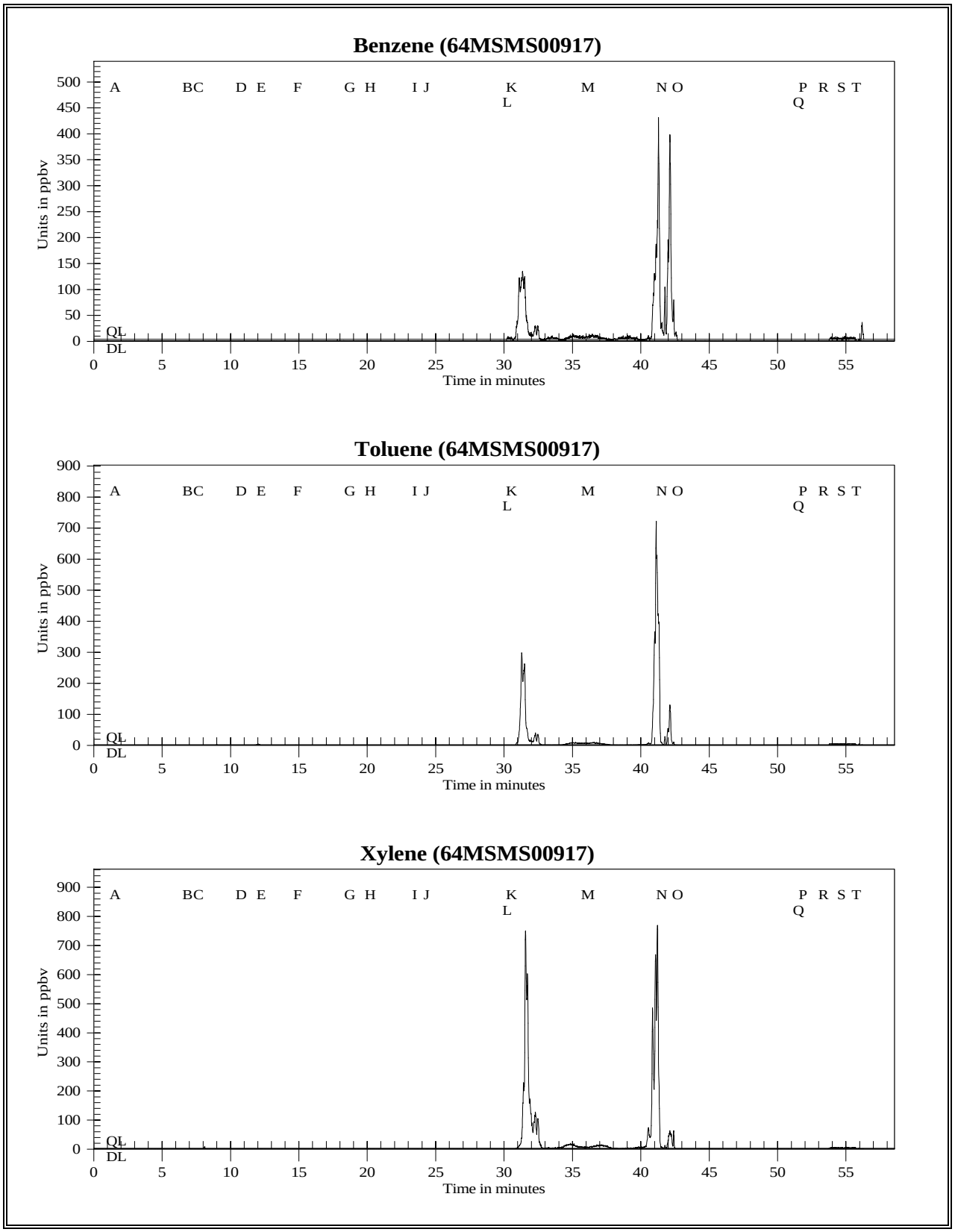


Figure 123c Mobile Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

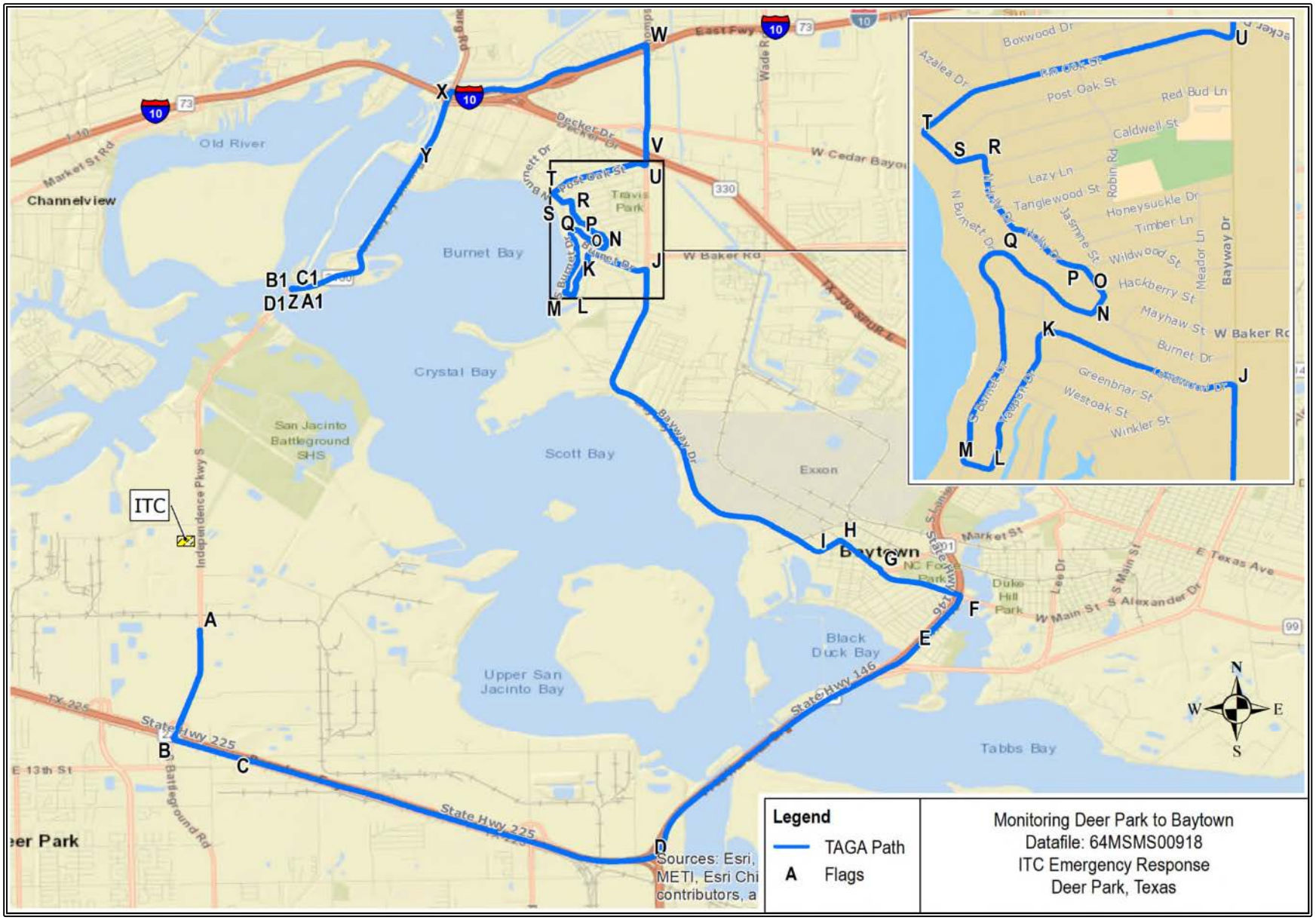


Figure 124a Monitoring Deer Park to Baytown Path, 64MSMS00918

Figure 124b

TAGA File Event Summary
File: 64MSMS00918 Acquired on 10 April 2019 at 09:33:19
Title: Monitoring Deer Park to Baytown

Flag	Time	Sequence	Description
A	0.7	66	Start mobile monitoring on Independence Parkway
B	4.0	378	Left turn onto Pasadena Freeway Frontage Road
C	4.9	462	Merge onto Highway 225 East
D	8.6	823	Merge onto Highway 146 North
E	11.9	1134	Cross Missouri Street
F	14.2	1351	Left turn onto W Main Street
G	16.3	1555	Left turn onto Market Street
H	17.5	1669	Left turn to continue onto Market Street
I	18.3	1737	Continuing onto Bayway Drive
J	25.6	2433	Left turn onto Lakewood Drive
K	27.8	2640	Left turn onto Yaupon Drive
L	29.2	2780	Right turn onto Winkler Drive
M	29.7	2829	Right turn onto S Burnett Drive
N	34.0	3230	Left turn onto Hackberry Street
O	34.4	3271	Left turn onto Holly Drive
P	34.8	3306	Left turn to continue onto Holly Drive
Q	35.7	3398	Right turn onto N Holly Drive
R	36.9	3509	Left turn onto Red Bud Lane
S	37.4	3553	Right turn onto N Burnett Drive
T	37.8	3599	Right turn onto Pin Oak Drive
U	41.6	3959	Left turn onto Bayway Drive
V	42.9	4079	Cross Highway 330 to continue onto Thompson Road
W	47.5	4516	Left turn onto East Freeway Service Road
X	50.8	4833	Left turn onto Independence Parkway North
Y	52.7	5012	Cross Lakeview Drive
Z	57.6	5475	End mobile monitoring at Lynchburg Ferry
A1	58.2	5534	Start ambient
B1	59.6	5664	End ambient
C1	60.9	5794	Start 30 mL/min spike
D1	62.1	5901	End 30 mL/min spike

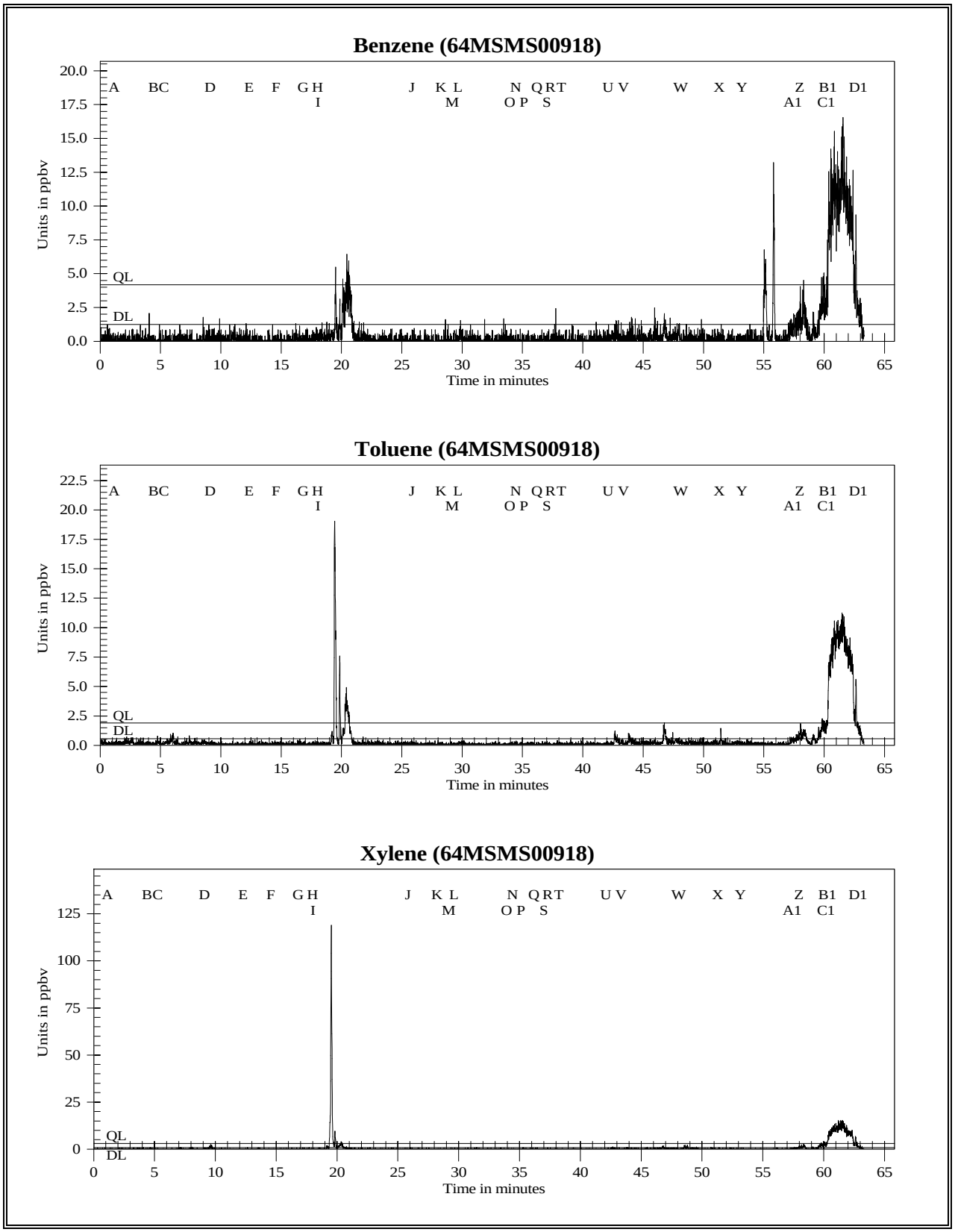


Figure 124c Mobile Monitoring Deer Park to Baytown in ppbv for Benzene, Toluene, and Xylenes

Figure 125a Monitoring Lynchburg to Channelview Path, 64MSMS00919

Figure 125b

TAGA File Event Summary
File: 64MSMS00919 Acquired on 10 April 2019 at 10:48:47
Title: Monitoring Lynchburg to Channelview

Flag	Time	Sequence	Description
A	0.6	61	Start mobile monitoring at Lynchburg Ferry
B	5.0	476	Cross Lakeview Drive
C	10.4	986	Right turn onto Jones Road
D	14.1	1340	Right turn onto Thompson Road
E	15.9	1517	Right turn onto East Freeway Service Road
F	16.6	1580	Merge onto Highway 10 West
G	24.9	2371	Exit onto East Freeway Service Road
H	25.2	2401	Left turn onto Monmouth Street
I	25.9	2461	Left turn onto Market Street
J	29.5	2802	U-turn on Market Street at Southeast Shipyard
K	36.0	3420	Cross Magnolia Street
L	38.9	3702	End mobile monitoring at River Terrace Park
M	39.3	3740	Start ambient
N	40.3	3835	End ambient
O	41.9	3986	Start 30 mL/min spike
P	43.0	4090	End 30 mL/min spike

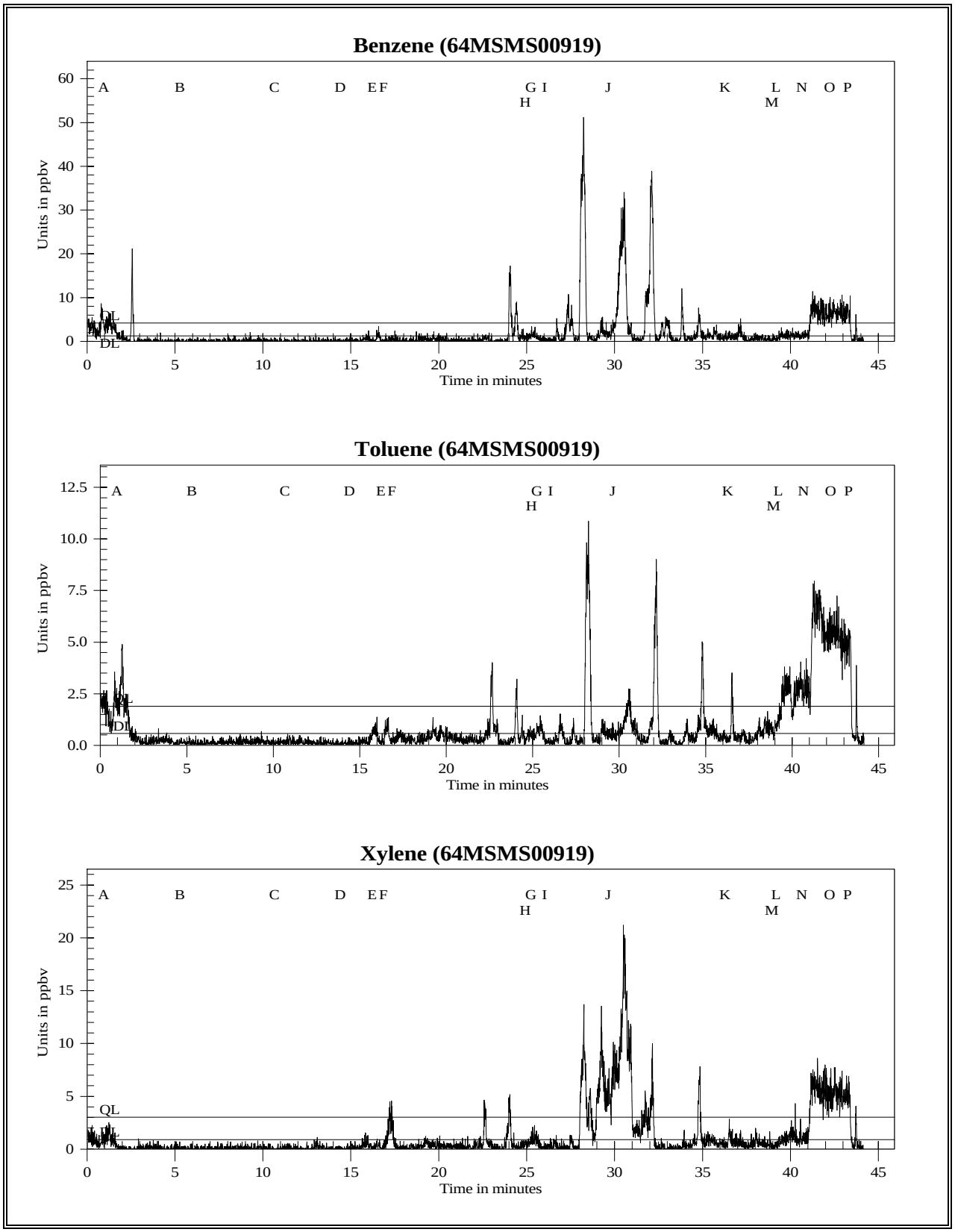


Figure 125c Mobile Monitoring Lynchburg to Channelview in ppbv for Benzene, Toluene, and Xylenes

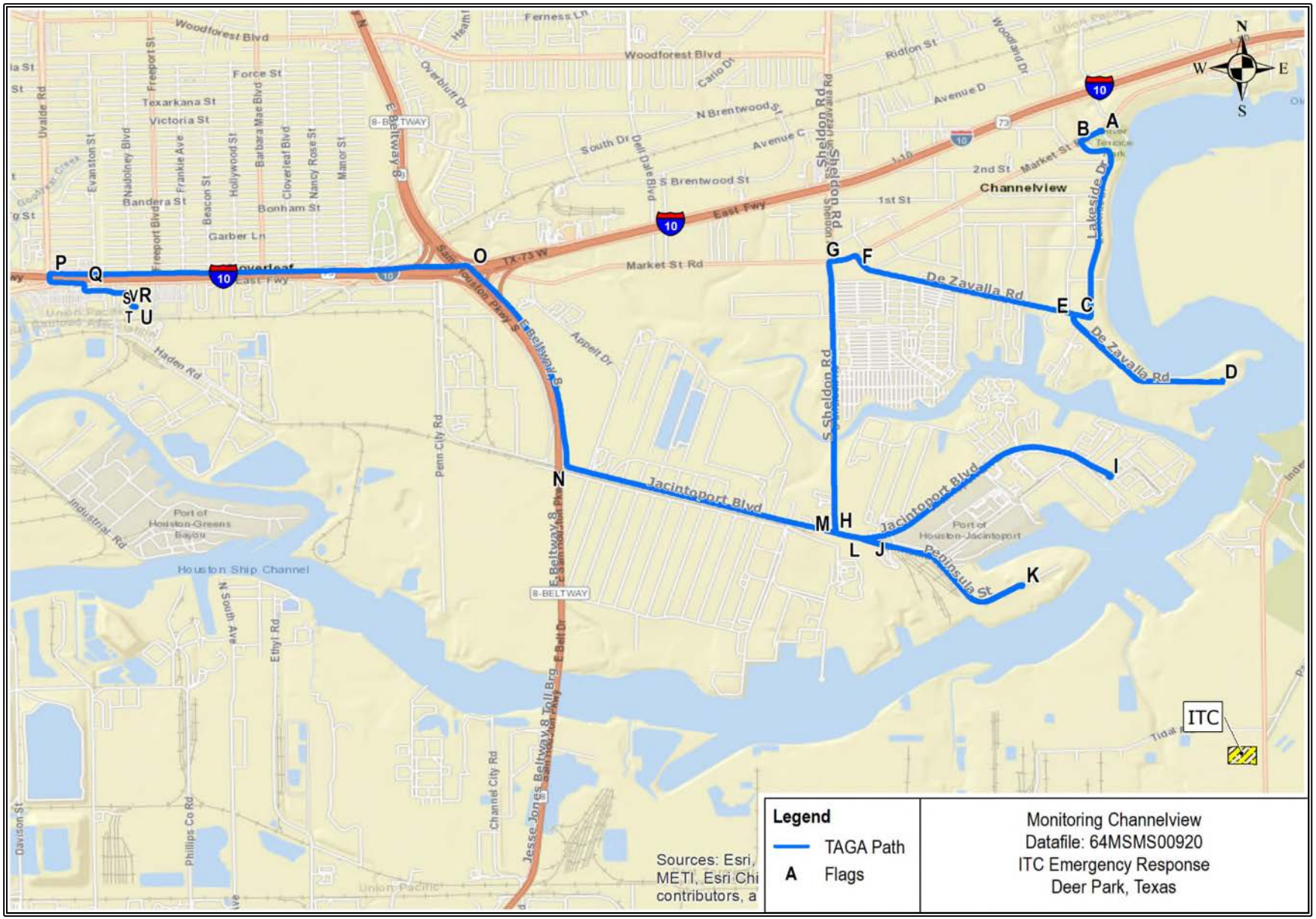


Figure 126a Monitoring Channelview Path, 64MSMS00920

Figure 126b

TAGA File Event Summary
File: 64MSMS00920 Acquired on 10 April 2019 at 11:38:21
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	0.9	91	Start mobile monitoring at River Terrace Park
B	2.1	197	Left turn onto Lakeside Drive
C	5.7	541	Left turn onto Dezavala Road
D	14.7	1403	U-turn on Dezavala Road
E	22.7	2156	Left turn to continue on Dezavala Road
F	25.4	2419	Left turn onto Market Street
G	27.6	2628	Left turn onto Sheldon Road
H	32.8	3117	Left turn onto Jacintoport Boulevard
I	38.1	3621	U-turn on Jacintoport Boulevard
J	43.2	4106	Left turn onto San Jacinto Boulevard
K	47.9	4555	U-turn on San Jacinto Boulevard/Peninsula Street at Coastal Cargo
L	53.6	5101	Merge onto Jacintoport Boulevard
M	54.7	5206	Cross Sheldon Road
N	58.1	5529	Left turn onto Highway 8 Service Road
O	61.1	5805	Left turn onto East Freeway Service Road
P	65.4	6215	U-turn on East Freeway Service Road at Uvalde Road
Q	66.6	6332	Right turn into shopping center on East Freeway Service Road
R	69.3	6592	End mobile monitoring at shopping center
S	69.7	6624	Start ambient
T	71.4	6786	End ambient
U	73.0	6942	Start 30 mL/min spike
V	74.2	7052	End 30 mL/min spike

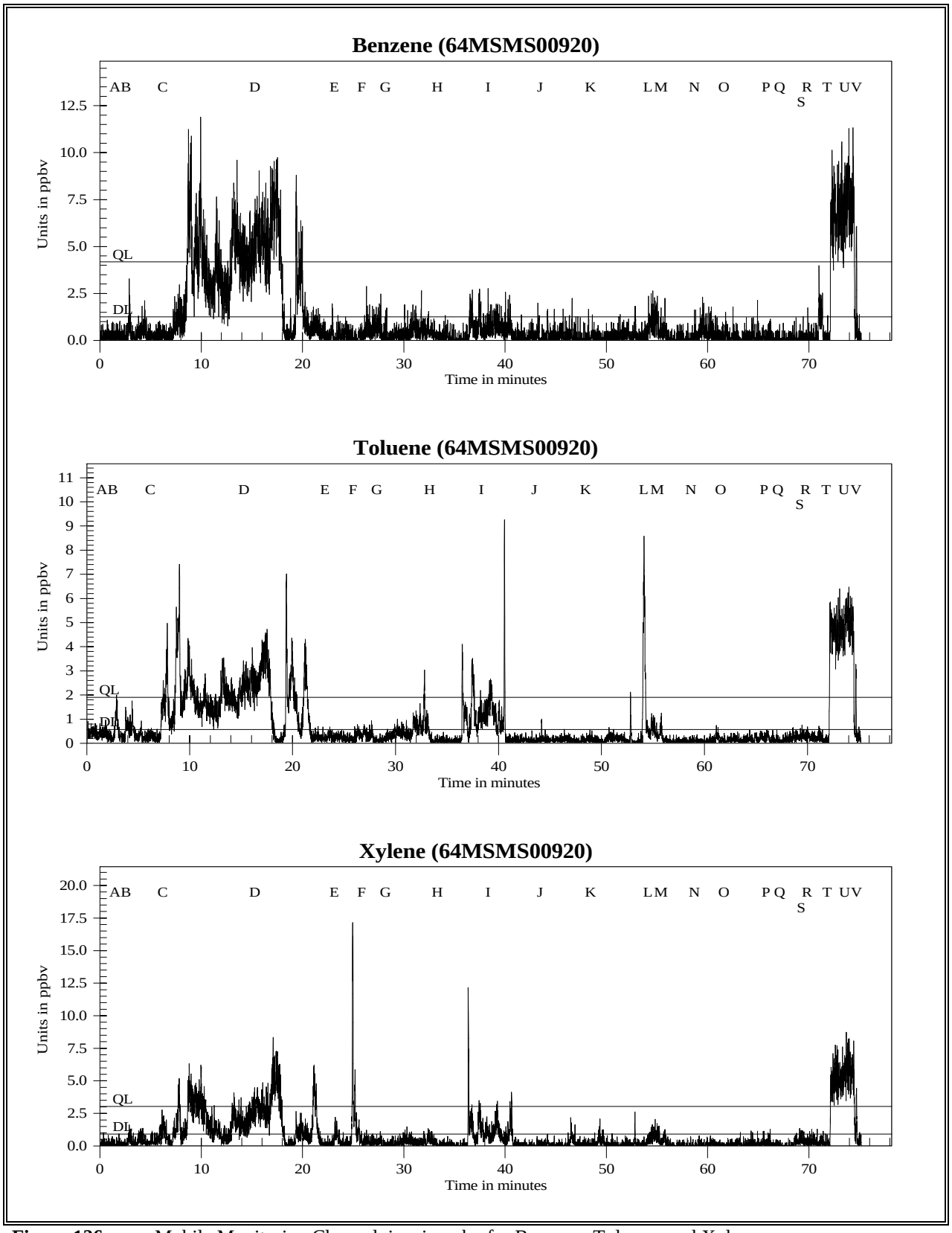


Figure 126c Mobile Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

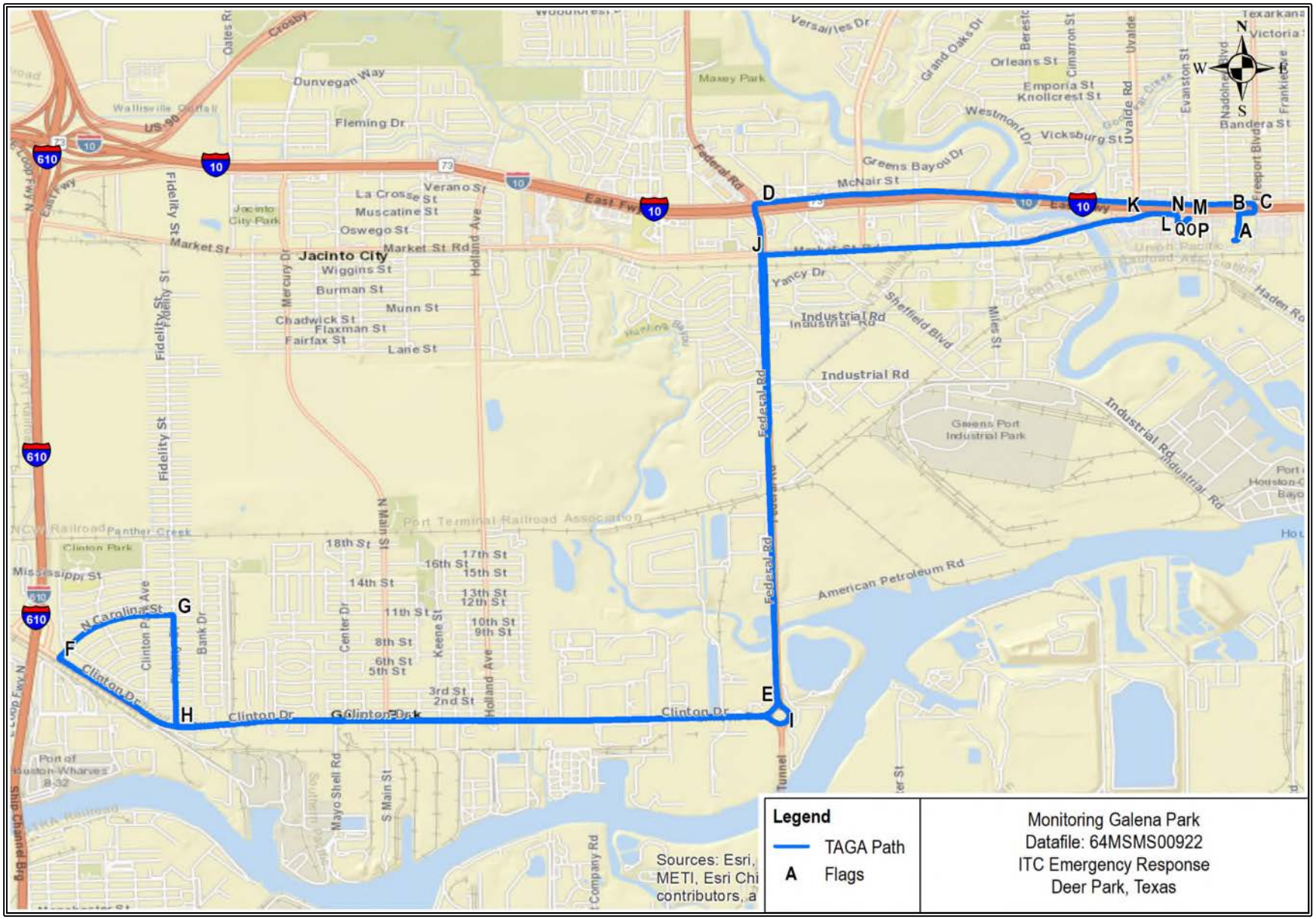


Figure 127a Monitoring Galena Park Path, 64MSMS00922

Figure 127b

TAGA File Event Summary
File: 64MSMS00922 Acquired on 10 April 2019 at 13:55:21
Title: Monitoring Galena Park

Flag	Time	Sequence	Description
A	1.7	167	Start mobile monitoring at shopping center on East Freeway Service Road
B	4.7	446	Right turn onto East Freeway Service Road
C	5.1	487	U-turn on East Freeway Service Road at Freeport Street
D	17.3	1647	Left turn onto Federal Road
E	24.2	2298	Right turn onto Clinton Drive
F	33.1	3143	Right turn onto North Carolina Street
G	36.3	3452	Right turn onto Fidelity Street
H	39.0	3713	Left turn onto Clinton Drive
I	46.4	4410	Left turn onto Federal Road
J	55.2	5250	Right turn onto Market Street
K	61.3	5828	Merge onto East Freeway Service Road
L	61.7	5863	Right turn onto shopping center on East Freeway Service Road
M	62.5	5946	End mobile monitoring at shopping center on East Freeway Service Road
N	62.8	5976	Start ambient
O	63.9	6080	End ambient
P	65.4	6214	Start 30 mL/min spike
Q	66.4	6309	End 30 mL/min spike

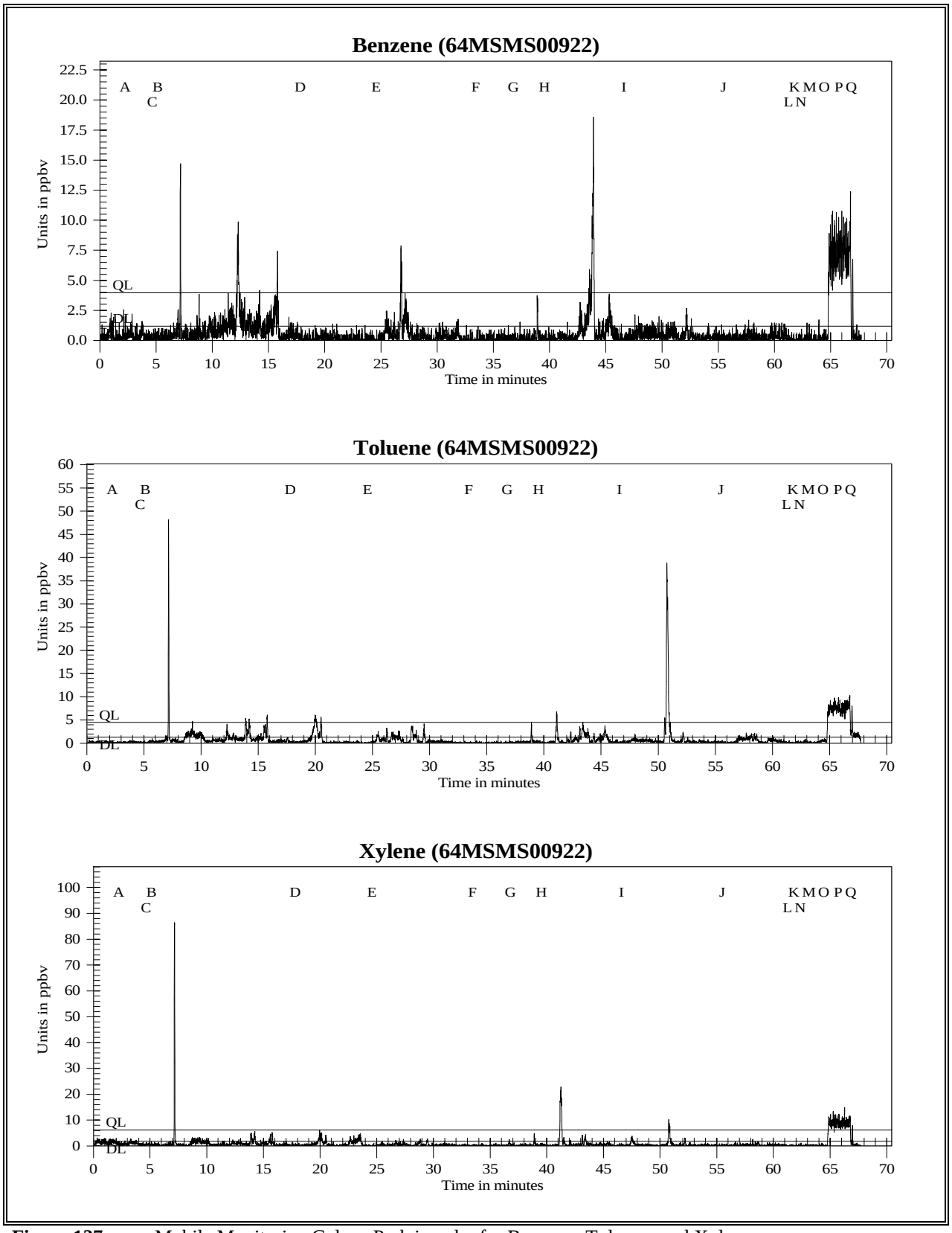


Figure 127c Mobile Monitoring Galena Park in ppbv for Benzene, Toluene, and Xylenes

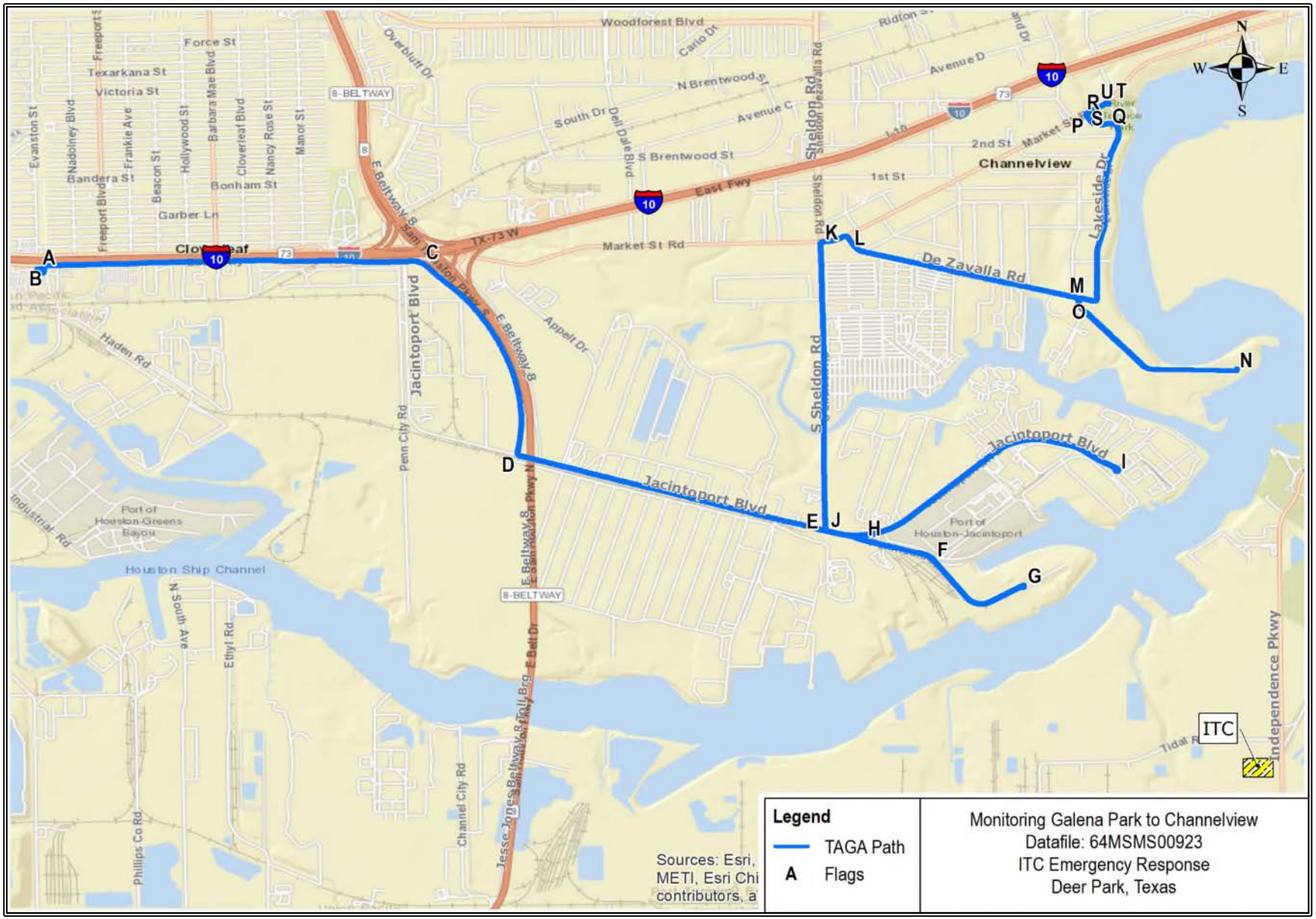


Figure 128a Monitoring Galena Park to Channelview Path, 64MSMS00923

Figure 128b

TAGA File Event Summary
File: 64MSMS00923 Acquired on 10 April 2019 at 15:10:00
Title: Monitoring Galena Park to Channelview

Flag	Time	Sequence	Description
A	0.9	89	Start mobile monitoring at shopping center on East Freeway Service Road
B	2.7	256	Right turn onto East Freeway Service Road
C	6.5	617	Merge onto Highway 8 Service Road
D	8.5	810	Left turn onto Jacintoport Boulevard
E	12.4	1183	Cross Sheldon Road
F	14.2	1354	Merge onto San Jacinto Boulevard
G	16.9	1603	U-turn on San Jacinto Boulevard/Peninsula Street at Coastal Cargo
H	22.3	2123	Right turn onto Jacintoport Boulevard
I	26.5	2522	U-turn on Jacintoport Boulevard
J	31.6	3008	Right turn onto Sheldon Road
K	35.5	3374	Right turn onto Market Street
L	36.1	3430	Right turn onto Dezavala Road
M	38.8	3685	Right turn to continue onto Dezavala Road
N	43.3	4116	U-turn on Dezavala Road
O	49.6	4715	Right turn onto Lakeside Drive
P	53.3	5070	Right turn onto Market Street
Q	53.9	5128	End mobile monitoring at River Terrace Park
R	54.5	5179	Start ambient
S	56.1	5334	End ambient
T	58.0	5516	Start 30 mL/min spike
U	59.4	5646	End 30 mL/min spike

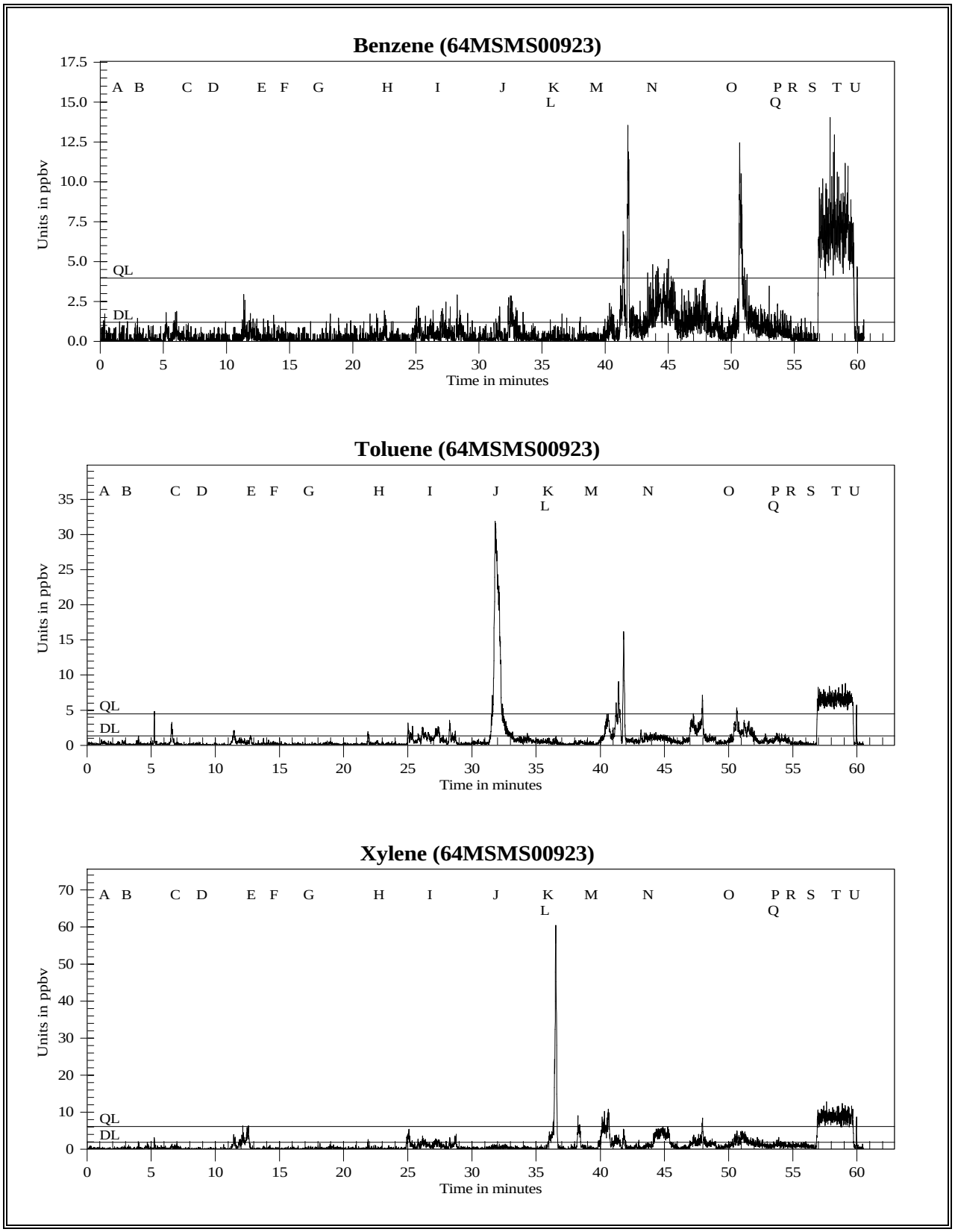


Figure 128c Mobile Monitoring Galena Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

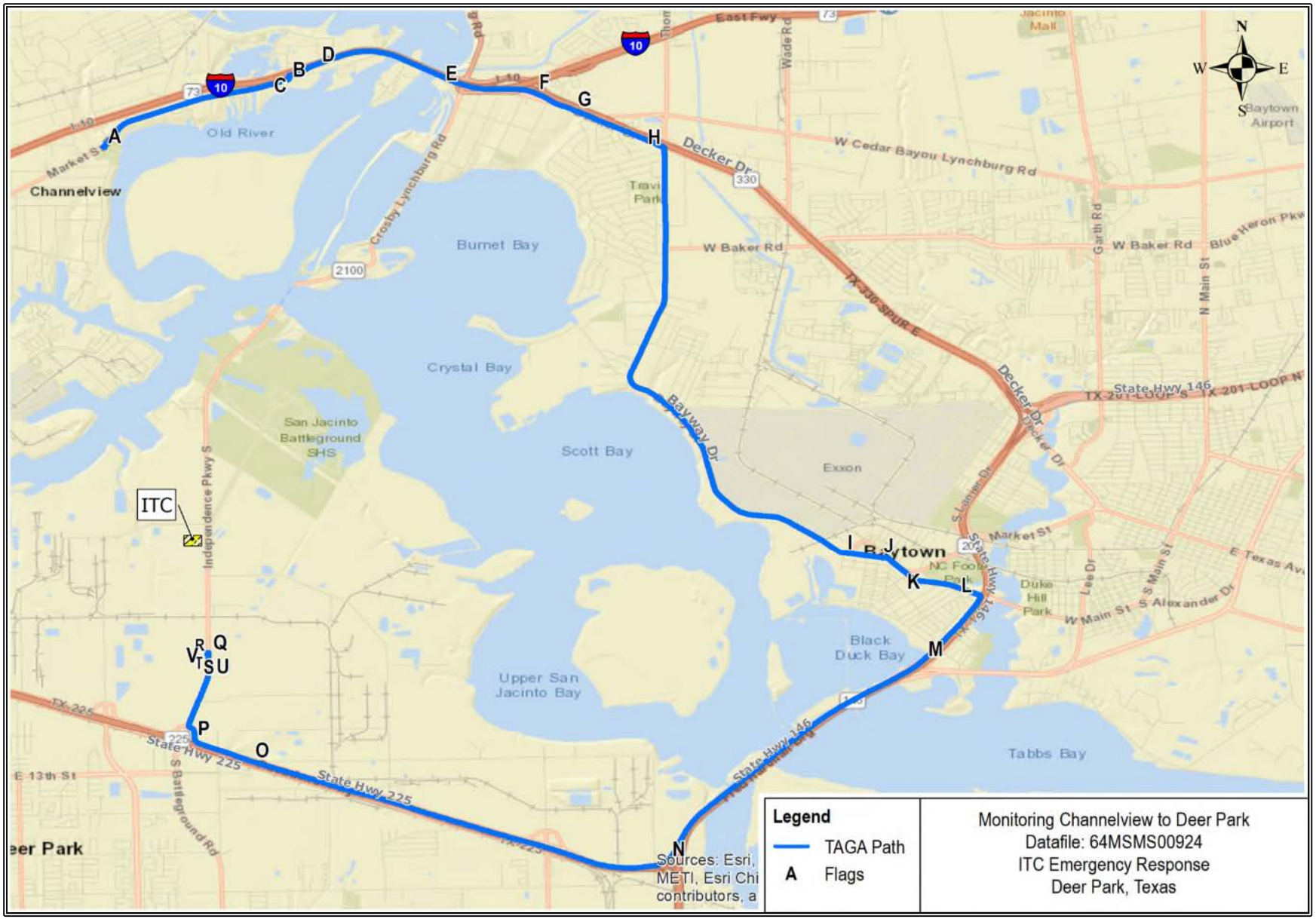


Figure 129a Monitoring Channelview to Deer Park Path, 64MSMS00924

Figure 129b

TAGA File Event Summary
File: 64MSMS00924 Acquired on 10 April 2019 at 16:13:28
Title: Monitoring Channelview to Deer Park

Flag	Time	Sequence	Description
A	1.0	99	Start mobile monitoring at River Terrace Park
B	5.3	506	Left turn onto Woodleigh Street
C	5.6	538	Right turn onto East Freeway Service Road
D	6.1	581	Merge onto Highway 10 East
E	7.6	720	Cross S Main Street
F	8.3	793	Merge onto Highway 330 South
G	8.9	847	Exit onto Decker Drive
H	11.0	1048	Right turn onto Bayway Drive
I	20.1	1915	Continuing onto Wisconsin Street
J	21.5	2043	Right turn onto Market Street
K	22.5	2138	Continuing onto W Main Street
L	24.2	2306	Right turn onto Robert C Lanier Freeway
M	25.6	2439	Merge onto Highway 146 South
N	29.2	2775	Merge onto Highway 225 West
O	33.0	3143	Exit onto Pasadena Freeway Frontage Road
P	33.8	3211	Right turn onto Independence Parkway
Q	36.1	3437	U-turn on Independence Parkway
R	36.6	3479	End mobile monitoring on Independence Parkway
S	37.0	3515	Start ambient
T	38.0	3610	End ambient
U	39.2	3731	Start 30 mL/min spike
V	40.3	3829	End 30 mL/min spike

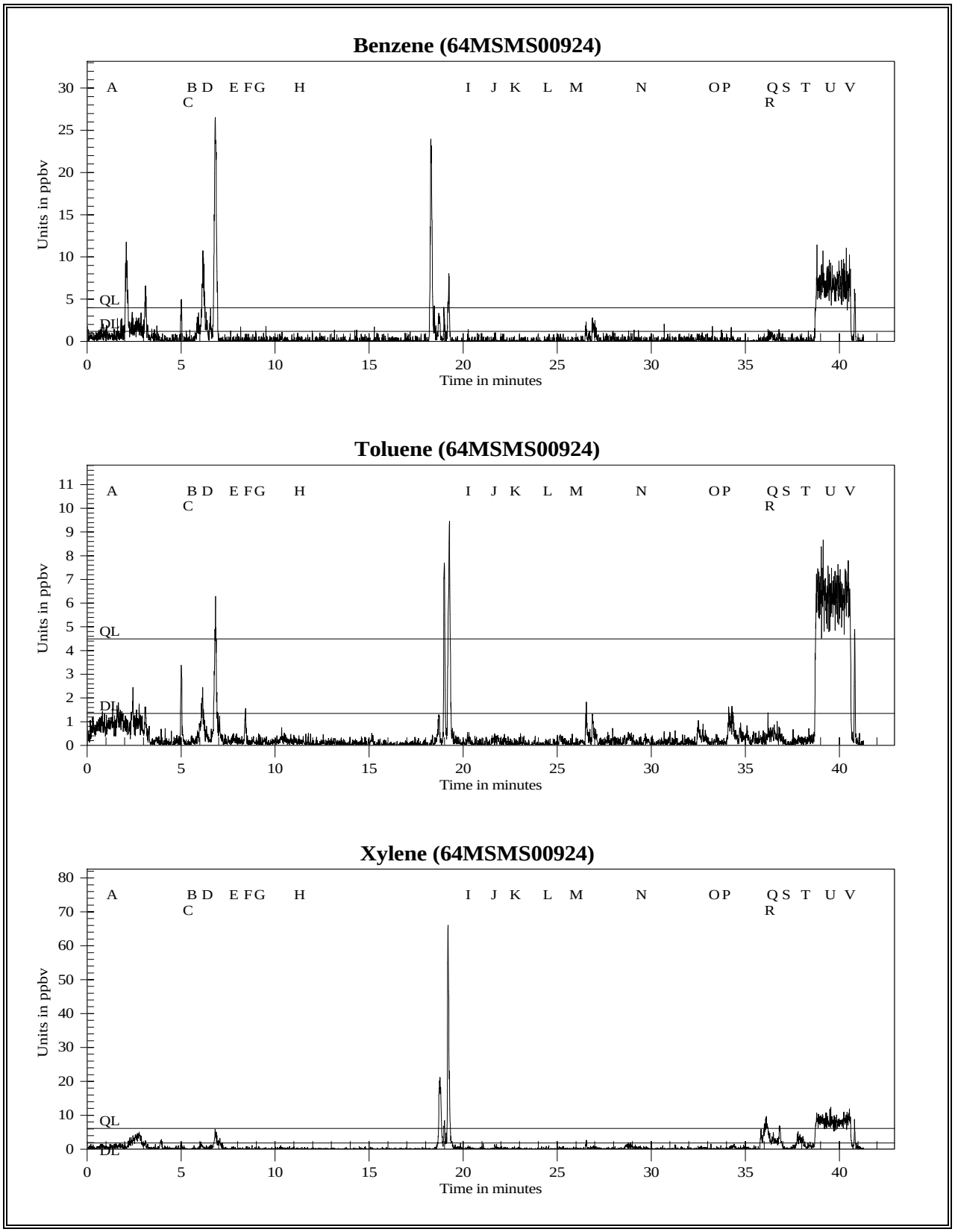


Figure 129c Mobile Monitoring Channelview to Deer Park in ppbv for Benzene, Toluene, and Xylenes

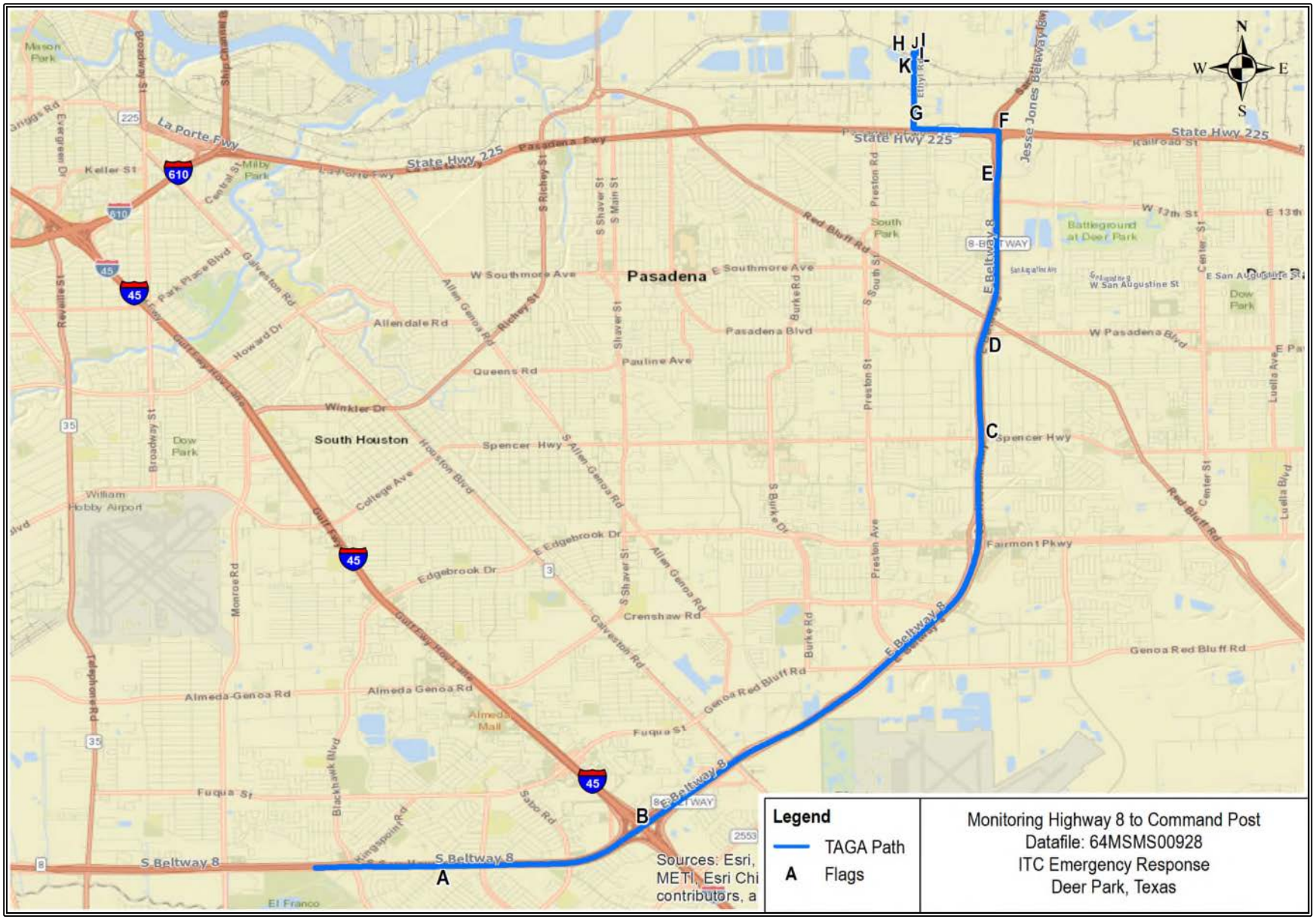


Figure 130a Monitoring Highway 8 to Command Post Path, 64MSMS00928

Figure 130b

TAGA File Event Summary
File: 64MSMS00928 Acquired on 11 April 2019 at 08:37:33
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	1.2	118	Start mobile monitoring on Highway 8 North
B	3.4	327	Cross Highway 45
C	8.9	848	Cross Spencer Highway
D	10.2	970	Cross Pasadena Boulevard
E	19.2	1823	Exit onto Highway 8 Service Road
F	20.2	1920	Left turn onto Pasadena Freeway Frontage Road
G	21.6	2059	Right turn onto Ethyl Road
H	25.4	2412	End mobile monitoring at EPA Command Post
I	26.0	2471	Start ambient
J	27.4	2610	End ambient
K	29.5	2807	Start 30 mL/min spike
L	31.1	2954	End 30 mL/min spike

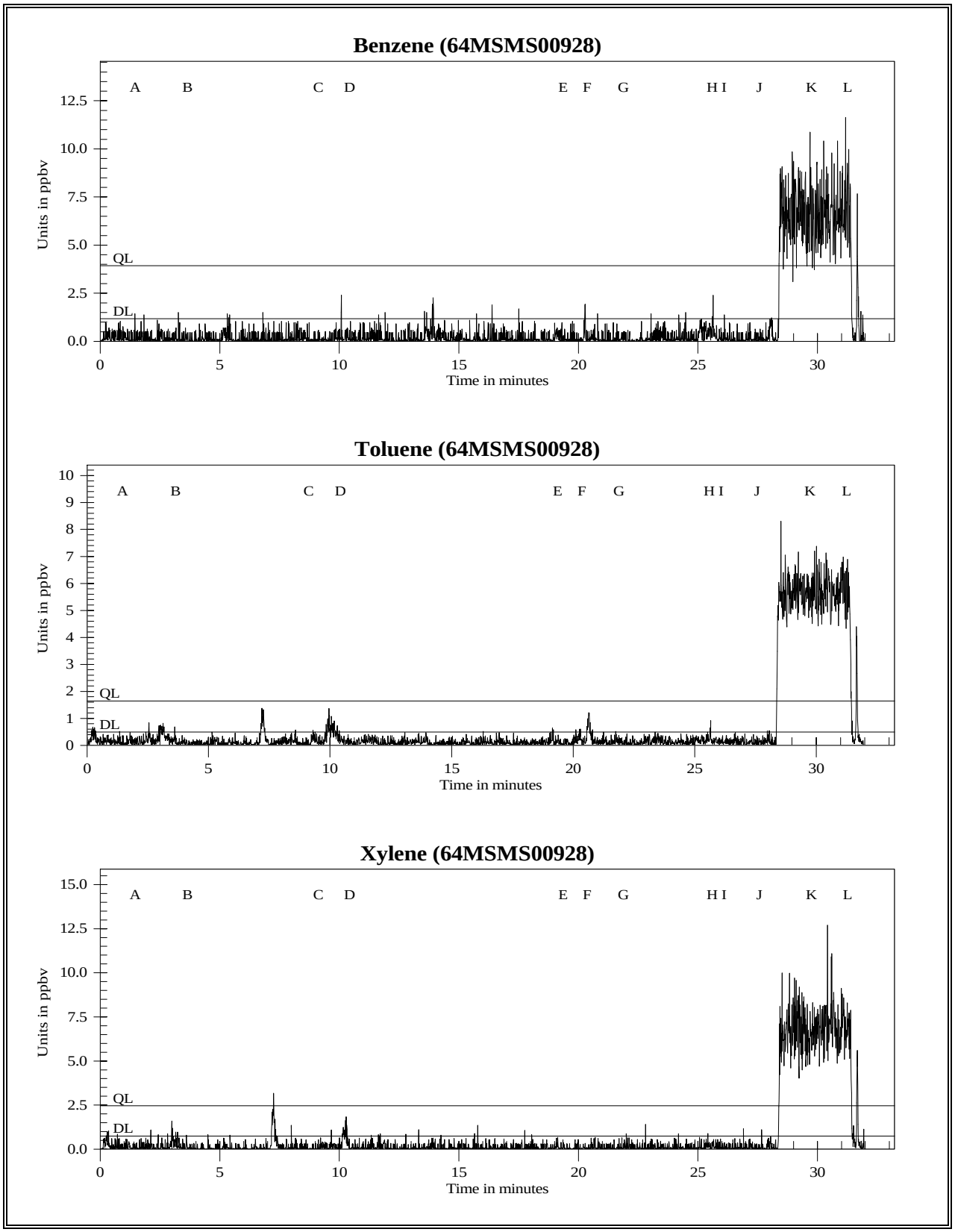


Figure 130c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

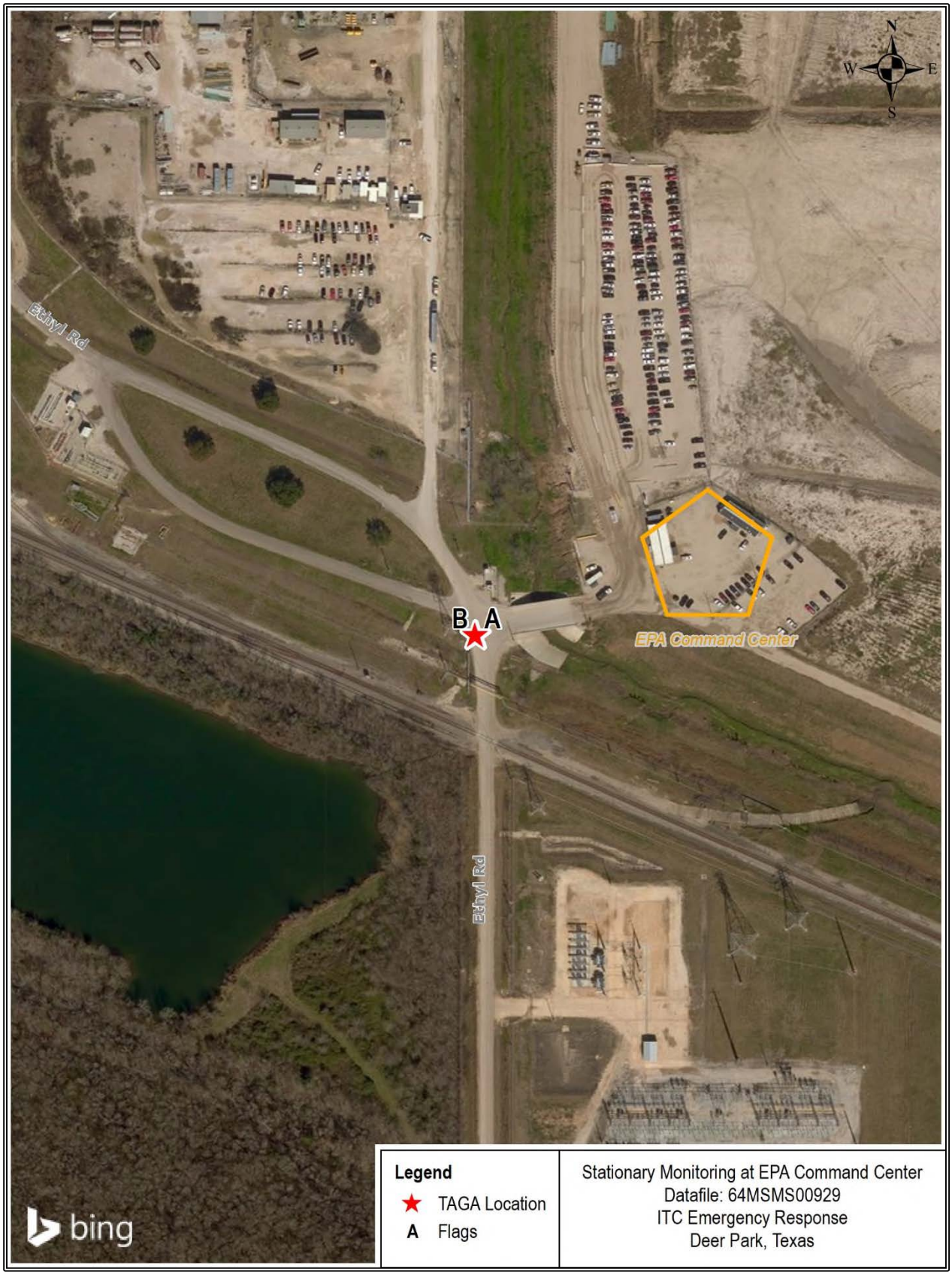


Figure 131a Stationary Monitoring at EPA Command Post Location, 64MSMS00929

Figure 131b

TAGA File Event Summary File: 64MSMS00929 Acquired on 11 April 2019 at 09:23:24 Title: Stationary Monitoring at EPA Command Post			
Flag	Time	Sequence	Description
A	2.0	194	Start stationary monitoring at EPA Command Post
B	6.8	646	End stationary monitoring at EPA Command Post
Notes:		Run aborted. No Spike.	

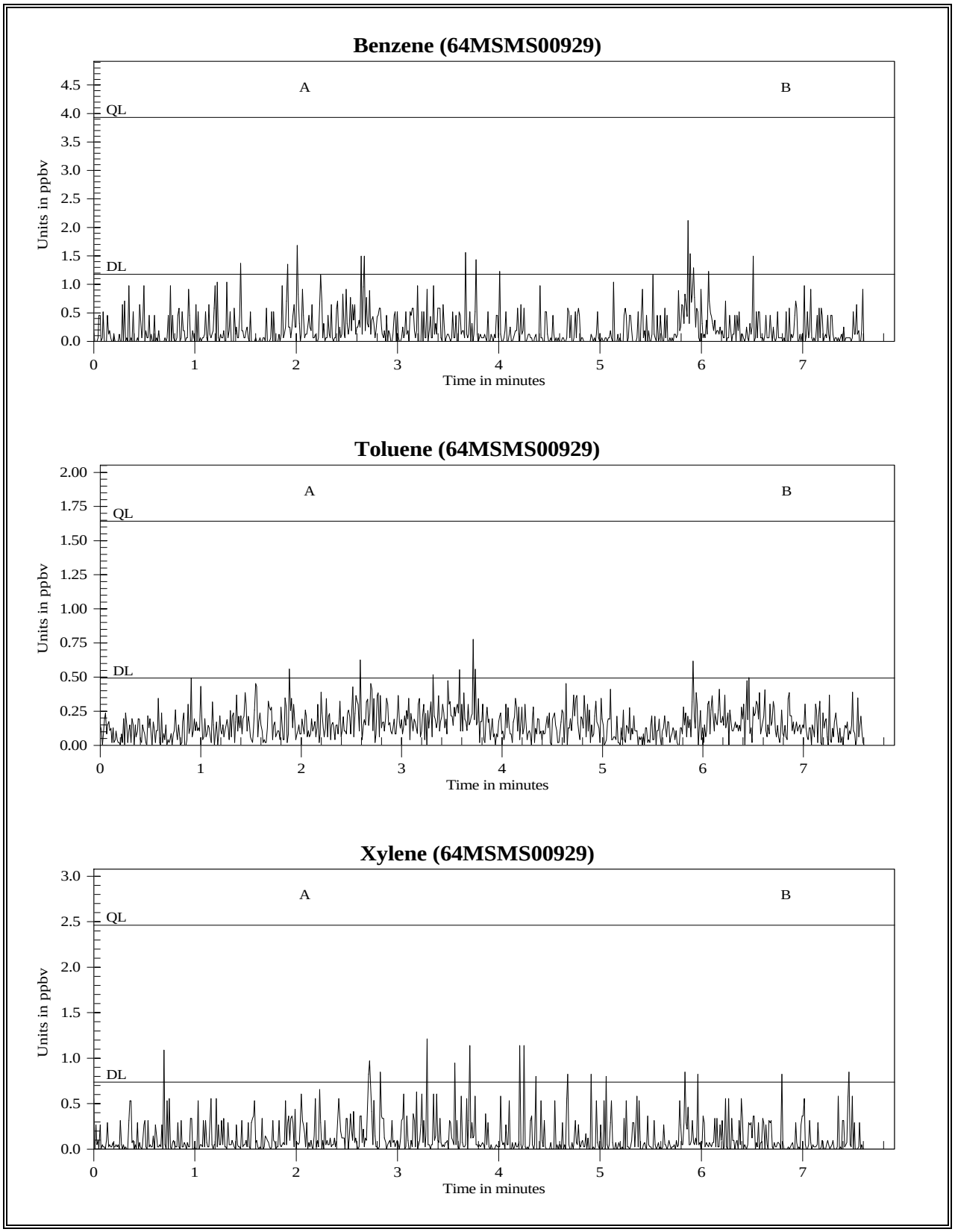


Figure 131c Stationary Monitoring at EPA Command Post in ppbv for Benzene, Toluene, and Xylenes

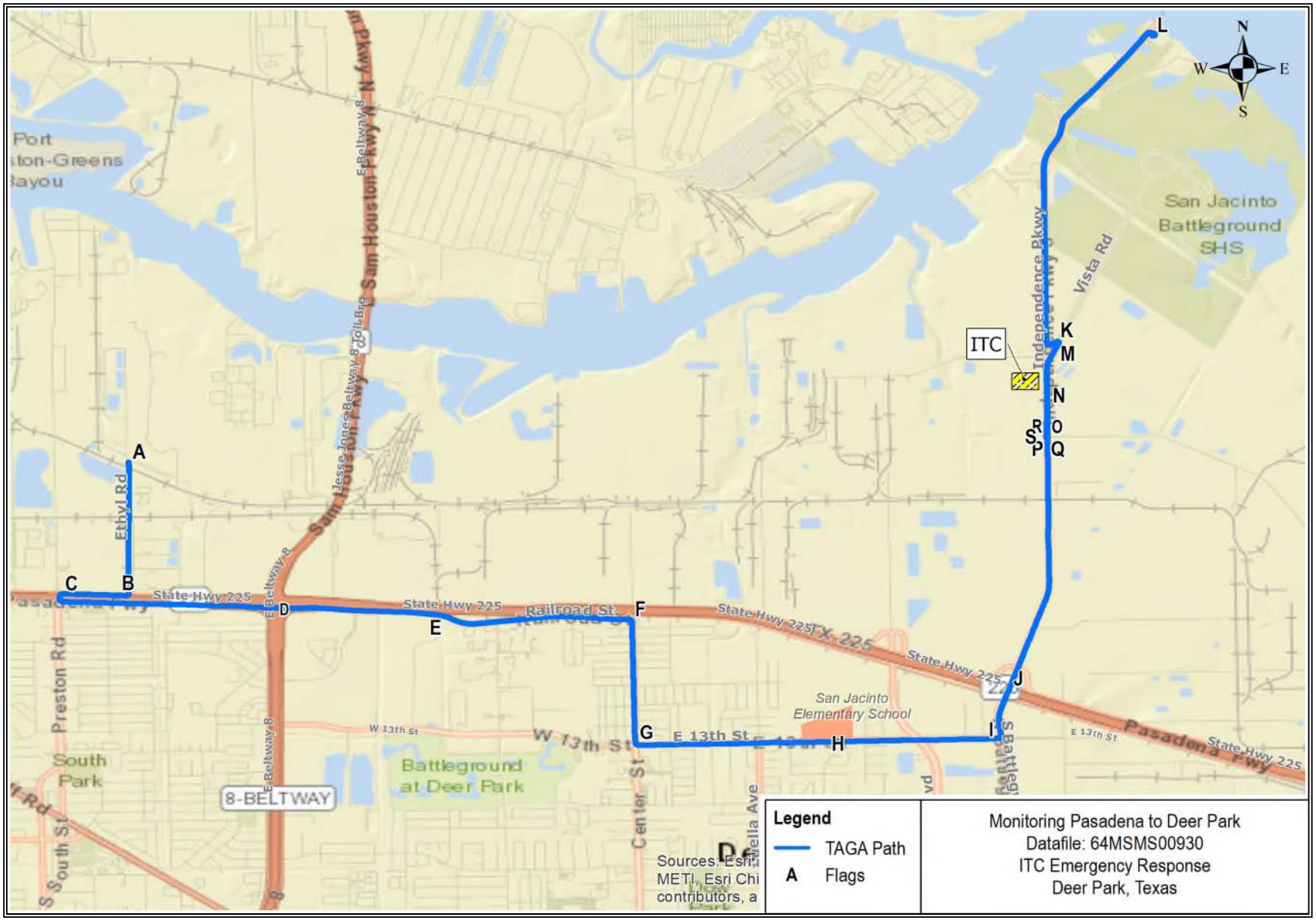


Figure 132a Monitoring Pasadena to Deer Park Path, 64MSMS00930

Figure 132b

TAGA File Event Summary
File: 64MSMS00930 Acquired on 11 April 2019 at 10:06:59
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	1.4	132	Start mobile monitoring at EPA Command Post
B	4.9	465	Right turn onto Pasadena Freeway Frontage Road
C	5.7	543	U-turn on Pasadena Freeway Frontage Road at Preston Road
D	9.4	896	Cross Highway 8
E	11.2	1064	Continuing onto Railroad Street
F	14.6	1389	Right turn onto Center Street
G	17.8	1691	Left turn onto E 13th Street
H	20.7	1970	Passing San Jacinto Elementary School
I	23.7	2254	Left turn onto Battleground Road
J	25.7	2444	Continuing onto Independence Parkway
K	31.6	3006	Cross Vista Road
L	37.2	3541	U-turn on Independence Parkway at Juan Seguin Park
M	43.6	4143	Cross Vista Road
N	44.9	4271	Passing ITC Site
O	46.3	4401	End mobile monitoring on Independence Parkway
P	46.8	4447	Start ambient
Q	48.5	4610	End ambient
R	50.2	4772	Start 30 mL/min spike
S	51.4	4884	End 30 mL/min spike

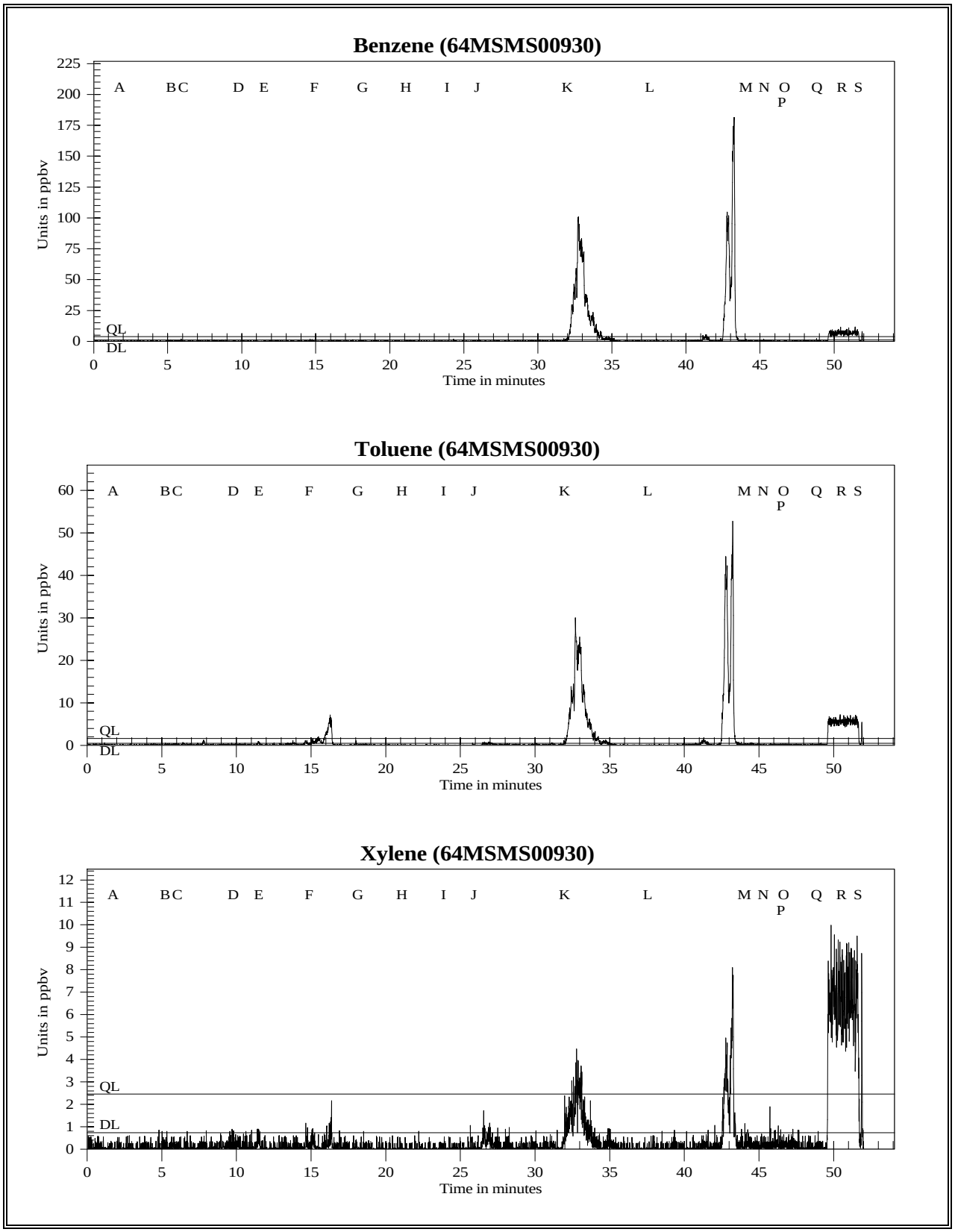


Figure 132c Mobile Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

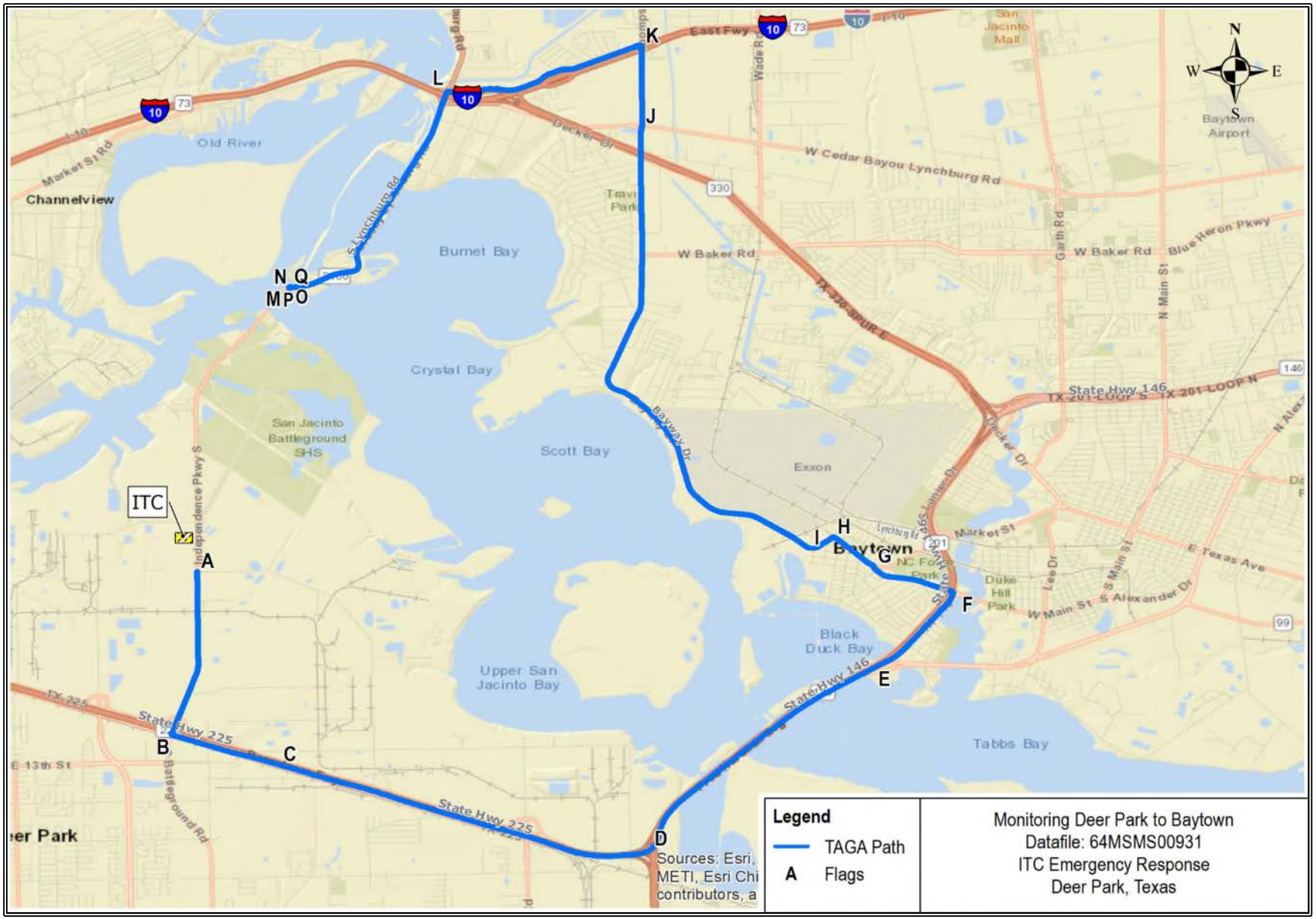


Figure 133a Monitoring Deer Park to Baytown Path, 64MSMS00931

Figure 133b

TAGA File Event Summary
File: 64MSMS00931 Acquired on 11 April 2019 at 11:05:07
Title: Monitoring Deer Park to Baytown

Flag	Time	Sequence	Description
A	0.7	67	Start mobile monitoring at Independence Parkway
B	7.1	680	Left turn onto Pasadena Freeway Frontage Road
C	8.5	812	Merge onto Highway 225 East
D	11.8	1127	Merge onto Highway 146 North
E	14.5	1384	Exit onto Robert C Lanier Drive
F	17.9	1699	Left turn onto W Main Street
G	19.9	1897	Left turn onto Market Street
H	21.8	2070	Left turn to continue on Market Street
I	22.6	2148	Right turn to continue on Bayway Drive
J	33.9	3220	Cross N Market Loop
K	35.6	3388	Left turn onto East Freeway Service Road
L	39.6	3770	Left turn onto Independence Parkway North
M	46.4	4415	End mobile monitoring at Lynchburg Ferry
N	46.7	4445	Start ambient
O	48.2	4583	End ambient
P	49.7	4730	Start 30 mL/min spike
Q	50.9	4837	End 30 mL/min spike

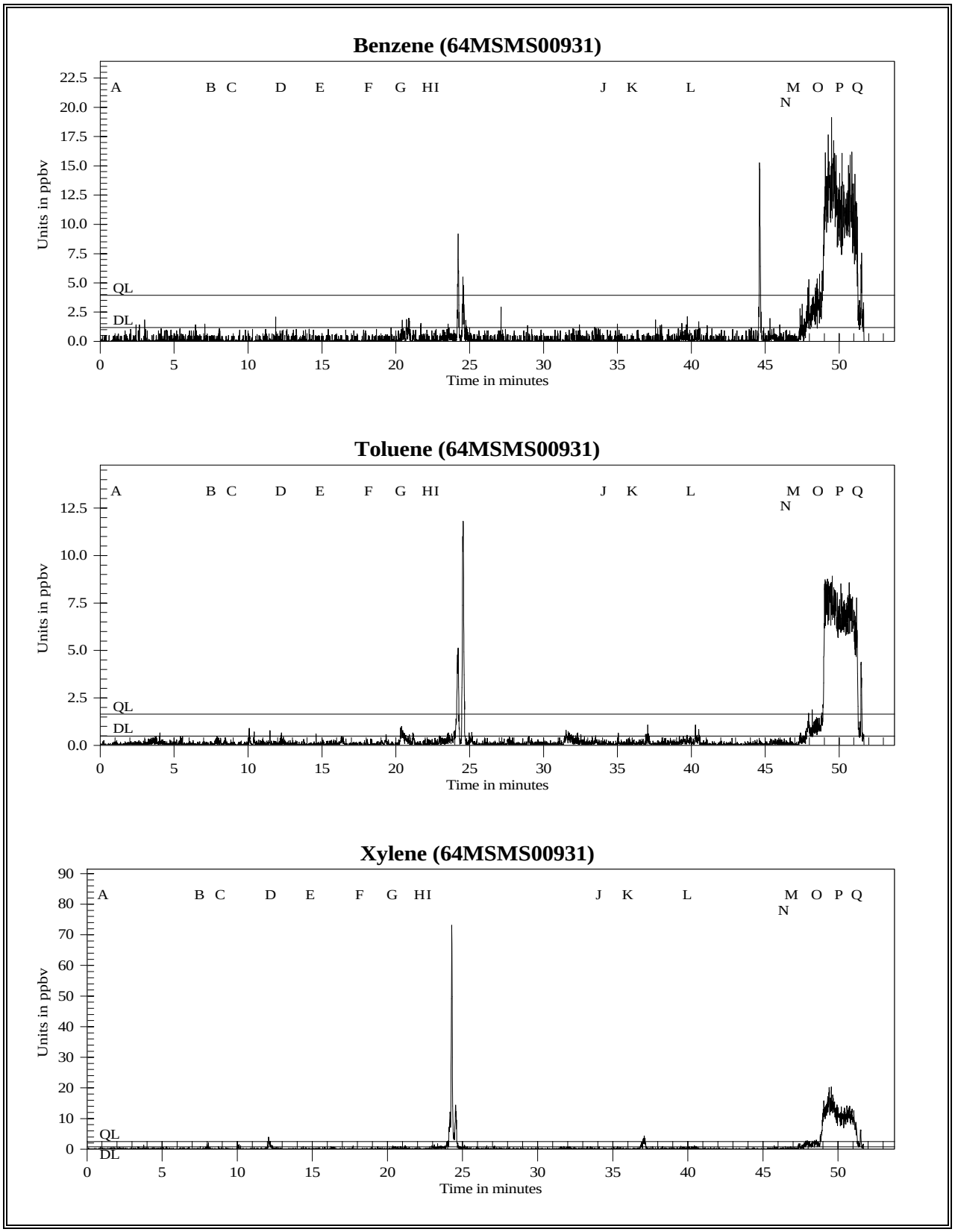


Figure 133c Mobile Monitoring Deer Park to Baytown in ppbv for Benzene, Toluene, and Xylenes

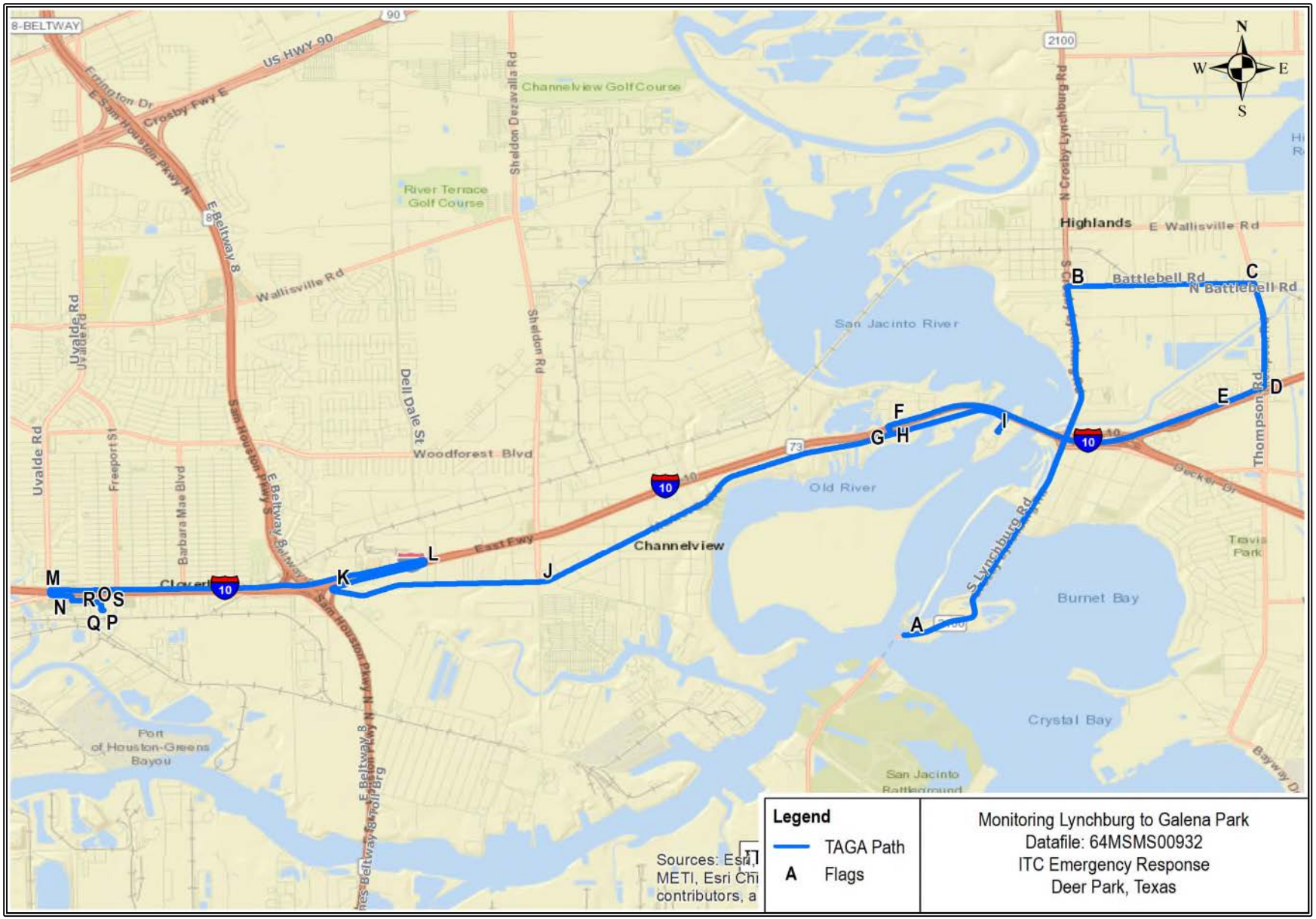


Figure 134a Monitoring Lynchburg to Galena Park Path, 64MSMS00932

Figure 134b

TAGA File Event Summary
File: 64MSMS00932 Acquired on 11 April 2019 at 12:01:26
Title: Monitoring Lynchburg to Galena Park

Flag	Time	Sequence	Description
A	0.8	81	Start mobile monitoring at Lynchburg Ferry
B	10.5	995	Right turn onto Battlebell Road
C	13.7	1306	Right turn onto Thompson Road
D	16.1	1531	Right turn onto East Freeway Service Road
E	17.2	1633	Merge onto Highway 10 West
F	23.6	2241	Exit onto East Freeway Service Road
G	23.9	2276	Left turn onto Monmouth Street
H	24.4	2322	Left turn onto Market Street
I	27.5	2613	U-turn on Market Street at Southeast Shipyard
J	38.6	3674	Cross Sheldon Road
K	42.2	4010	Right turn onto East Freeway Service Road
L	43.7	4152	U-turn on East Freeway Service Road at Dell Dale Street
M	50.7	4818	U-turn on East Freeway Service Road at Uvalde Road
N	51.4	4887	Right turn into shopping center on East Freeway Service Road
O	53.8	5111	End mobile monitoring at shopping center on East Freeway Service Road
P	54.1	5147	Start ambient
Q	55.4	5271	End ambient
R	57.1	5431	Start 30 mL/min spike
S	58.2	5534	End 30 mL/min spike

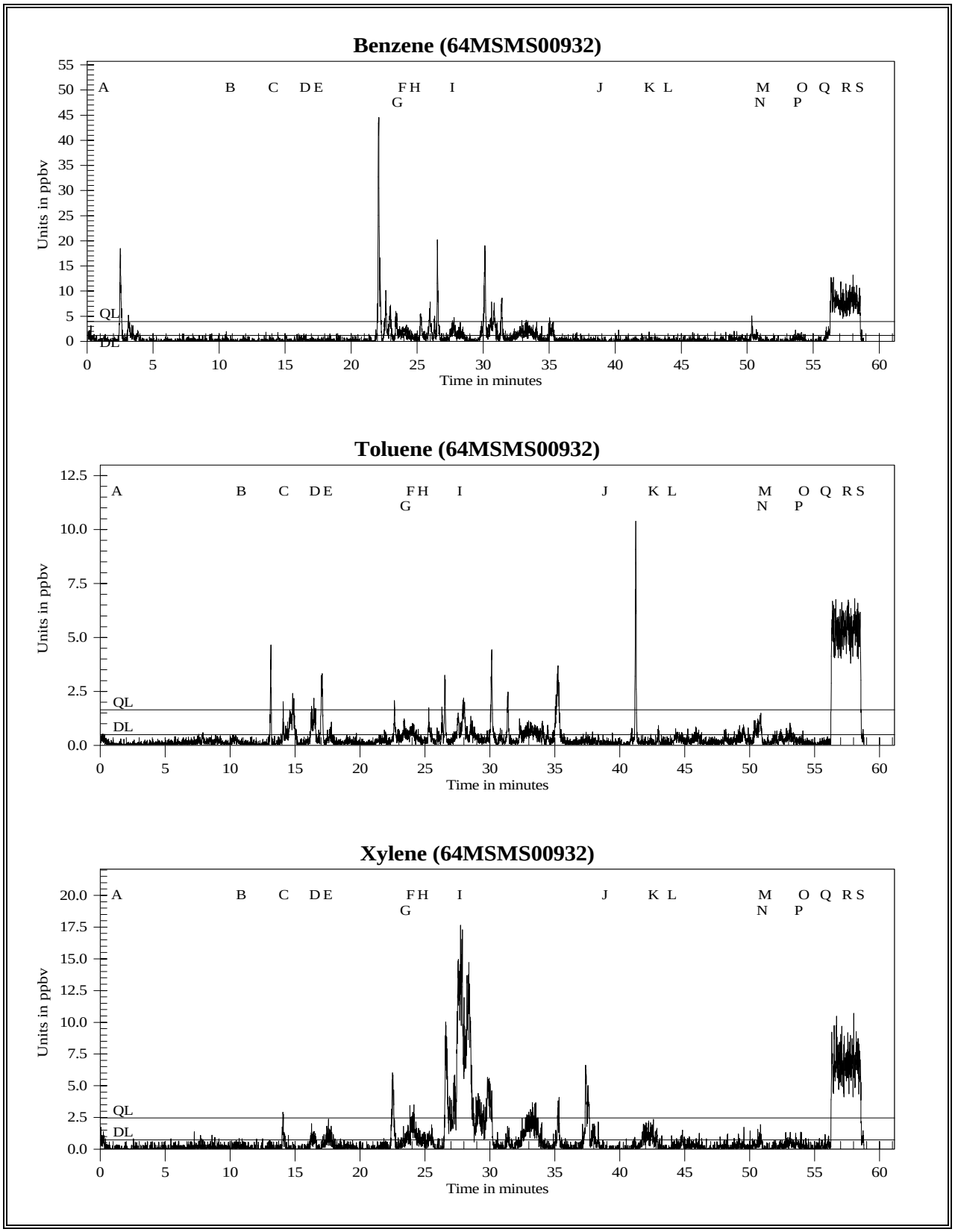


Figure 134c Mobile Monitoring Lynchburg to Galena Park in ppbv for Benzene, Toluene, and Xylenes

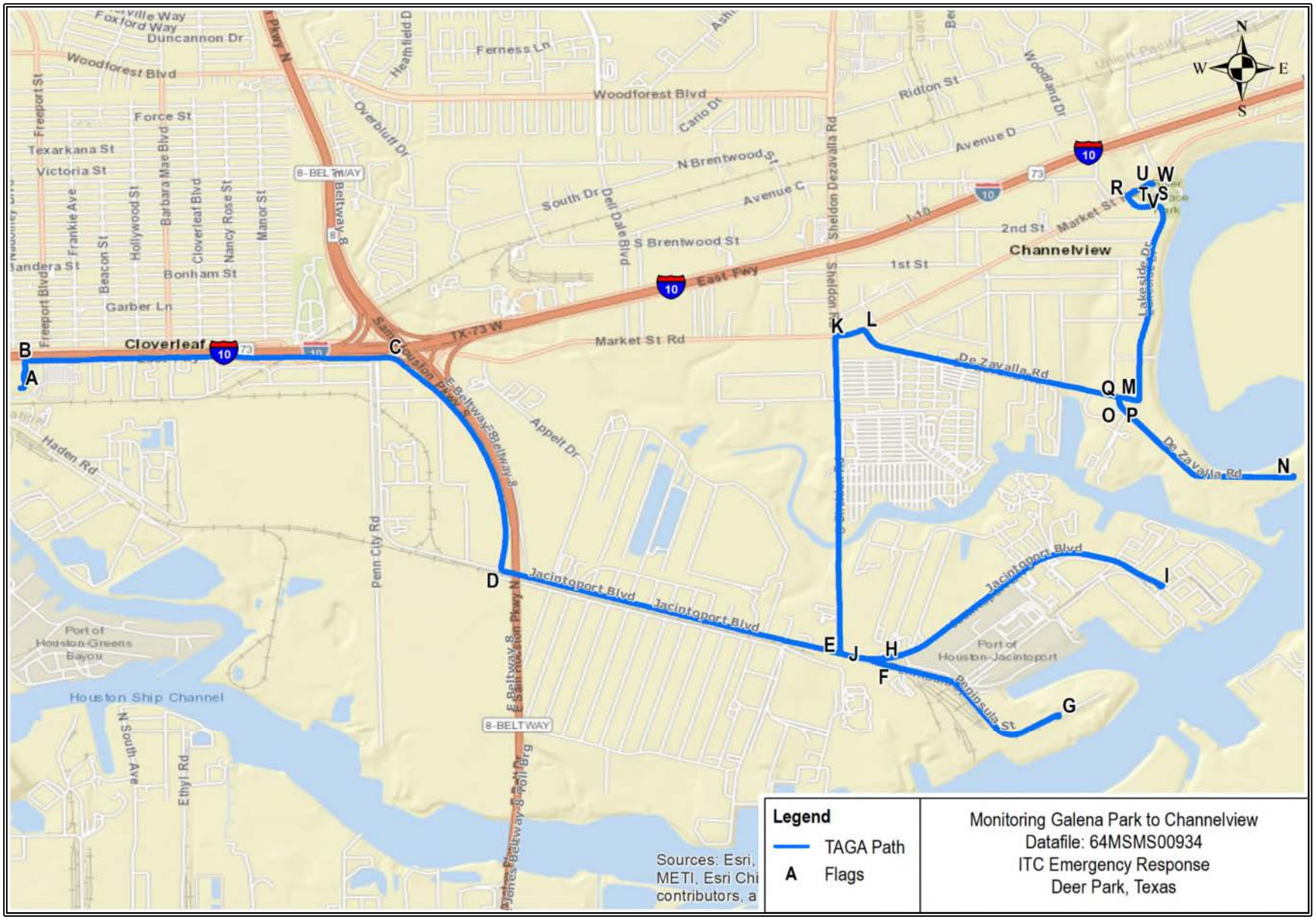


Figure 135a Monitoring Galena Park to Channelview Path, 64MSMS00934

Figure 135b

TAGA File Event Summary
File: 64MSMS00934 Acquired on 11 April 2019 at 14:05:06
Title: Monitoring Galena Park to Channelview

Flag	Time	Sequence	Description
A	1.0	96	Start mobile monitoring at shopping center on East Freeway Service Road
B	4.5	428	Right turn onto East Freeway Service Road
C	7.3	695	Right turn onto Highway 8 Service Road
D	9.3	888	Left turn onto Jacintoport Boulevard
E	12.6	1197	Cross Sheldon Road
F	13.2	1252	Merge onto San Jacinto Boulevard
G	16.5	1572	U-turn on San Jacinto Boulevard/Peninsula Street at Coastal Cargo
H	22.4	2129	Right turn onto Jacintoport Boulevard
I	26.6	2526	U-turn on Jacintoport Boulevard
J	32.0	3046	Right turn onto Sheldon Road
K	39.1	3715	Right turn onto Market Street
L	39.6	3762	Right turn onto Dezavala Road
M	43.7	4157	Right turn to continue on Dezavala Road
N	48.5	4608	U-turn on Dezavala Road
O	55.2	5250	Stationary on Dezavala Road
P	58.3	5540	Resume mobile monitoring on Dezavala Road
Q	58.7	5585	Right turn onto Lakeside Drive
R	62.2	5916	Right turn onto Market Street
S	63.0	5989	End mobile monitoring at River Terrace Park
T	63.7	6060	Start ambient
U	64.8	6166	End ambient
V	66.4	6312	Start 30 mL/min spike
W	67.5	6416	End 30 mL/min spike

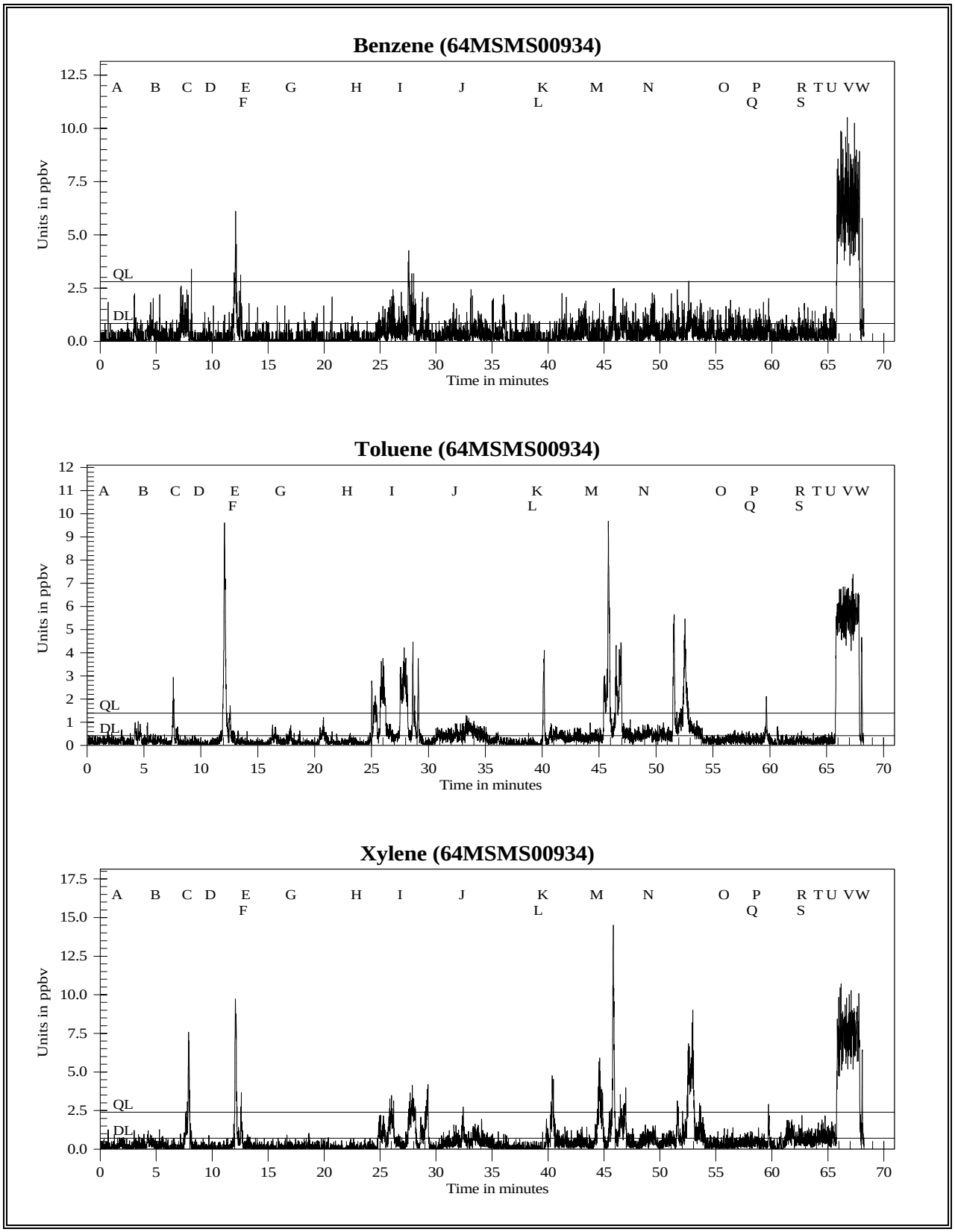


Figure 135c Mobile Monitoring Galena Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

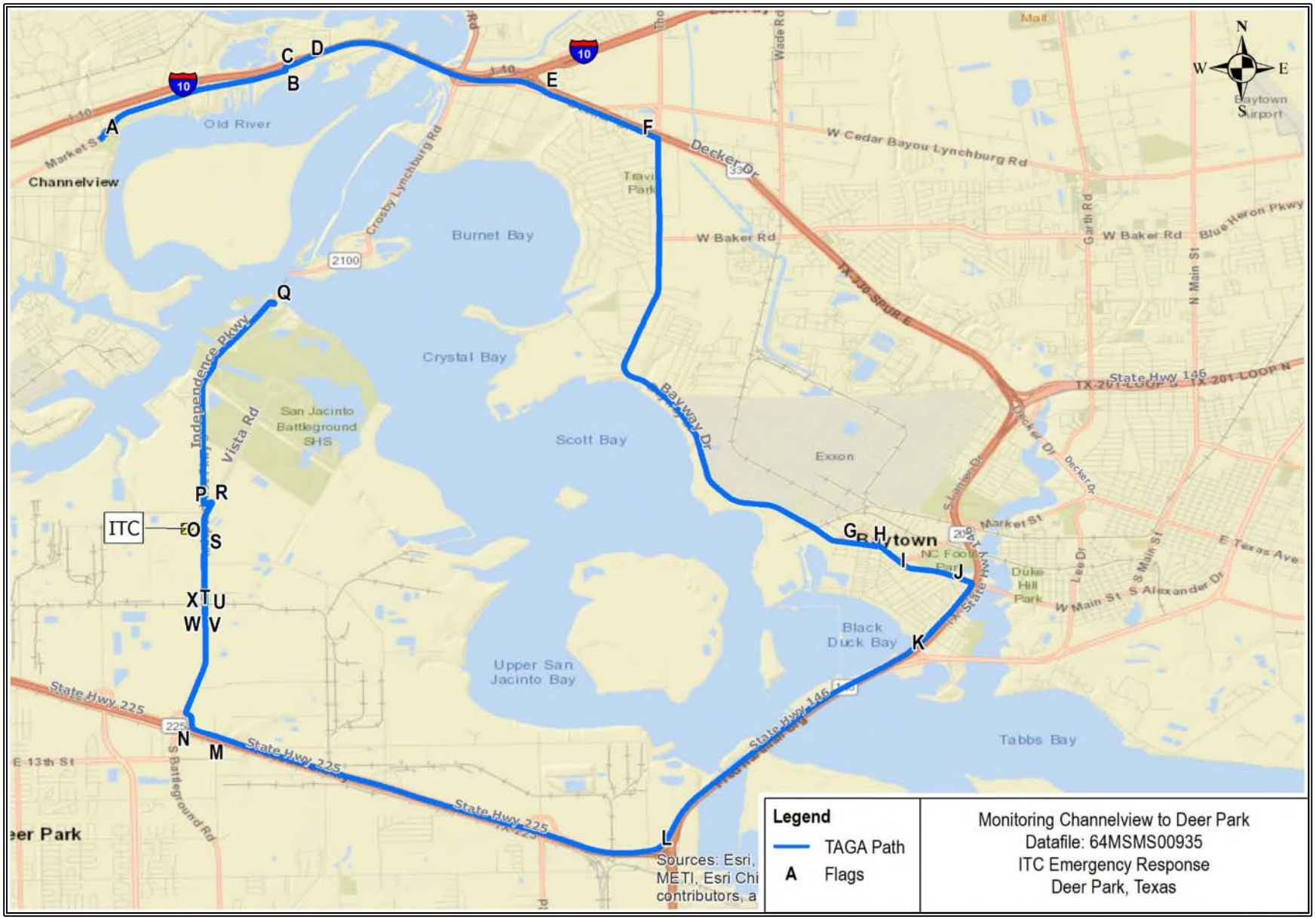


Figure 136a Monitoring Channelview to Deer Park Path, 64MSMS00935

Figure 136b

TAGA File Event Summary
File: 64MSMS00935 Acquired on 11 April 2019 at 15:22:24
Title: Monitoring Channelview to Deer Park

Flag	Time	Sequence	Description
A	0.6	59	Start mobile monitoring at River Terrace Park
B	5.5	527	Left turn onto Woodleigh Street
C	5.7	547	Right turn onto East Freeway Service Road
D	6.2	590	Merge onto Highway 10 East
E	9.8	928	Exit onto Decker Drive
F	11.4	1089	Right turn onto Bayway Drive
G	20.0	1905	Continuing onto Wisconsin Street
H	21.3	2029	Right turn onto Market Street
I	22.0	2089	Continuing onto W Main Street
J	23.5	2236	Right turn onto Robert C Lanier Drive
K	25.2	2395	Merge onto Highway 146 South
L	28.4	2704	Merge onto Highway 225 West
M	32.4	3083	Exit onto Pasadena Freeway Frontage Road
N	32.9	3124	Right turn onto Independence Parkway
O	38.0	3609	Passing ITC Site
P	38.4	3655	Cross Vista Road
Q	43.4	4128	U-turn on Independence Parkway at Juan Seguin Park
R	48.4	4605	Cross Vista Road
S	49.5	4710	Passing ITC Site
T	52.1	4957	End mobile monitoring on Independence Parkway
U	52.6	5001	Start ambient
V	53.7	5106	End ambient
W	55.0	5233	Start 30 mL/min spike
X	56.3	5352	End 30 mL/min spike

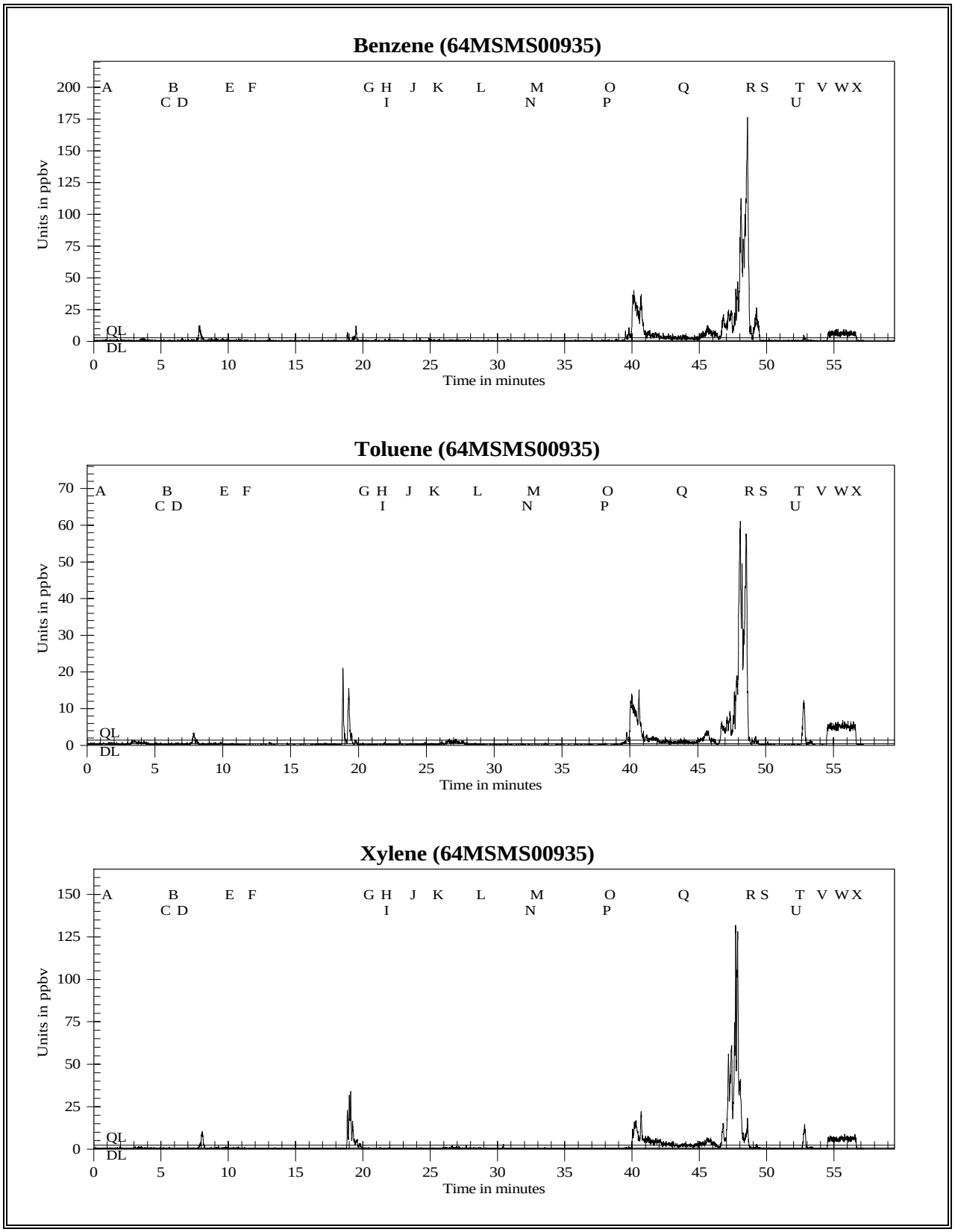


Figure 136c Mobile Monitoring Channelview to Deer Park in ppbv for Benzene, Toluene, and Xylenes

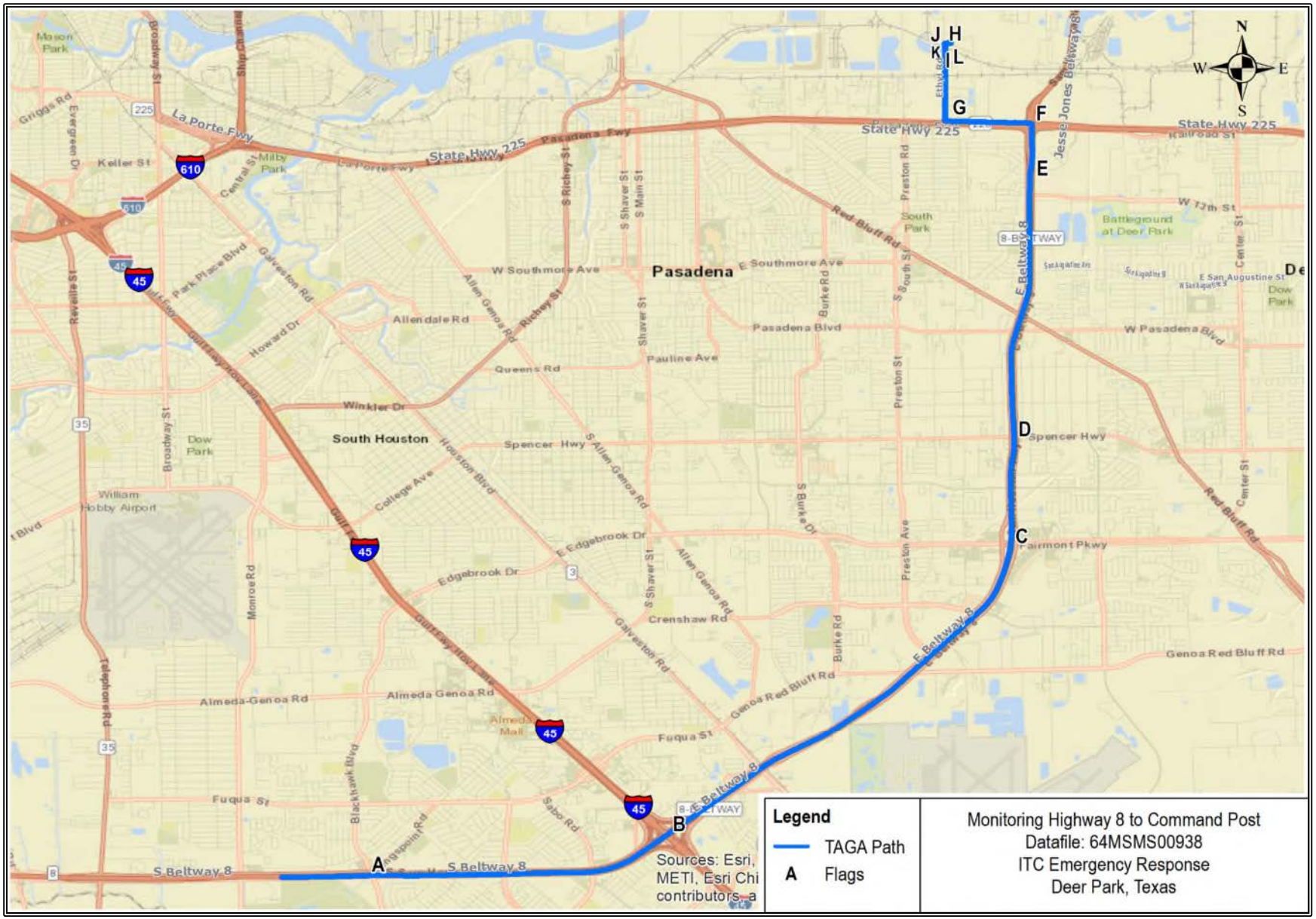


Figure 137a Monitoring Highway 8 to Command Post Path, 64MSMS00938

Figure 137b

TAGA File Event Summary
File: 64MSMS00938 Acquired on 12 April 2019 at 10:46:01
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	0.8	77	Start mobile monitoring on Highway 8 North at Blackhawk Boulevard
B	3.5	335	Cross Highway 45
C	7.6	723	Cross Fairmont Parkway
D	8.7	828	Cross Spencer Highway
E	14.3	1363	Exit onto Highway 8 Service Road
F	15.3	1460	Left turn onto Pasadena Freeway Frontage Road
G	16.7	1585	Right turn onto Ethyl Road
H	20.2	1924	End mobile monitoring at EPA Command Post
I	20.6	1959	Start ambient
J	22.5	2137	End ambient
K	25.3	2409	Start 30 mL/min spike
L	26.6	2528	End 30 mL/min spike

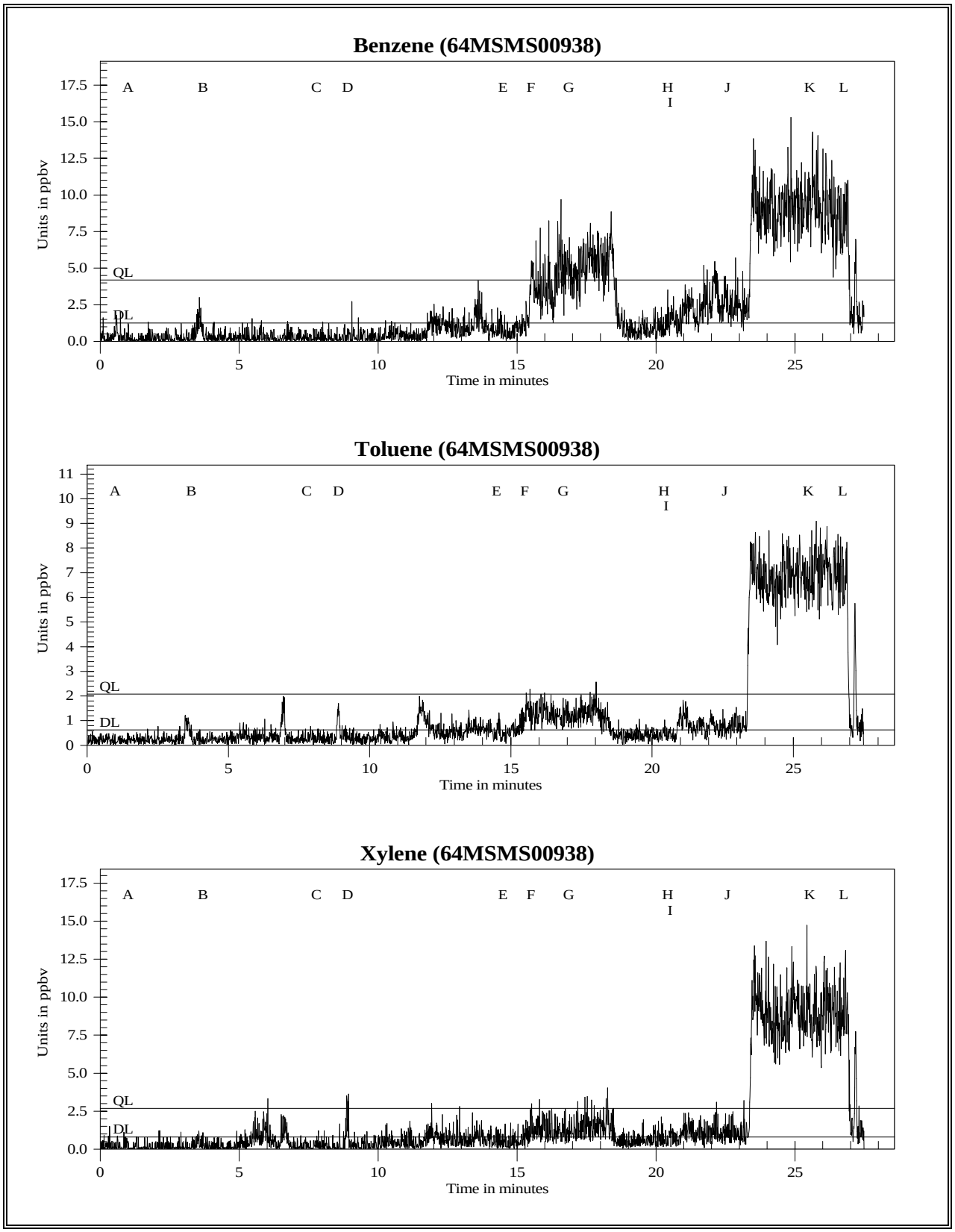


Figure 137c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

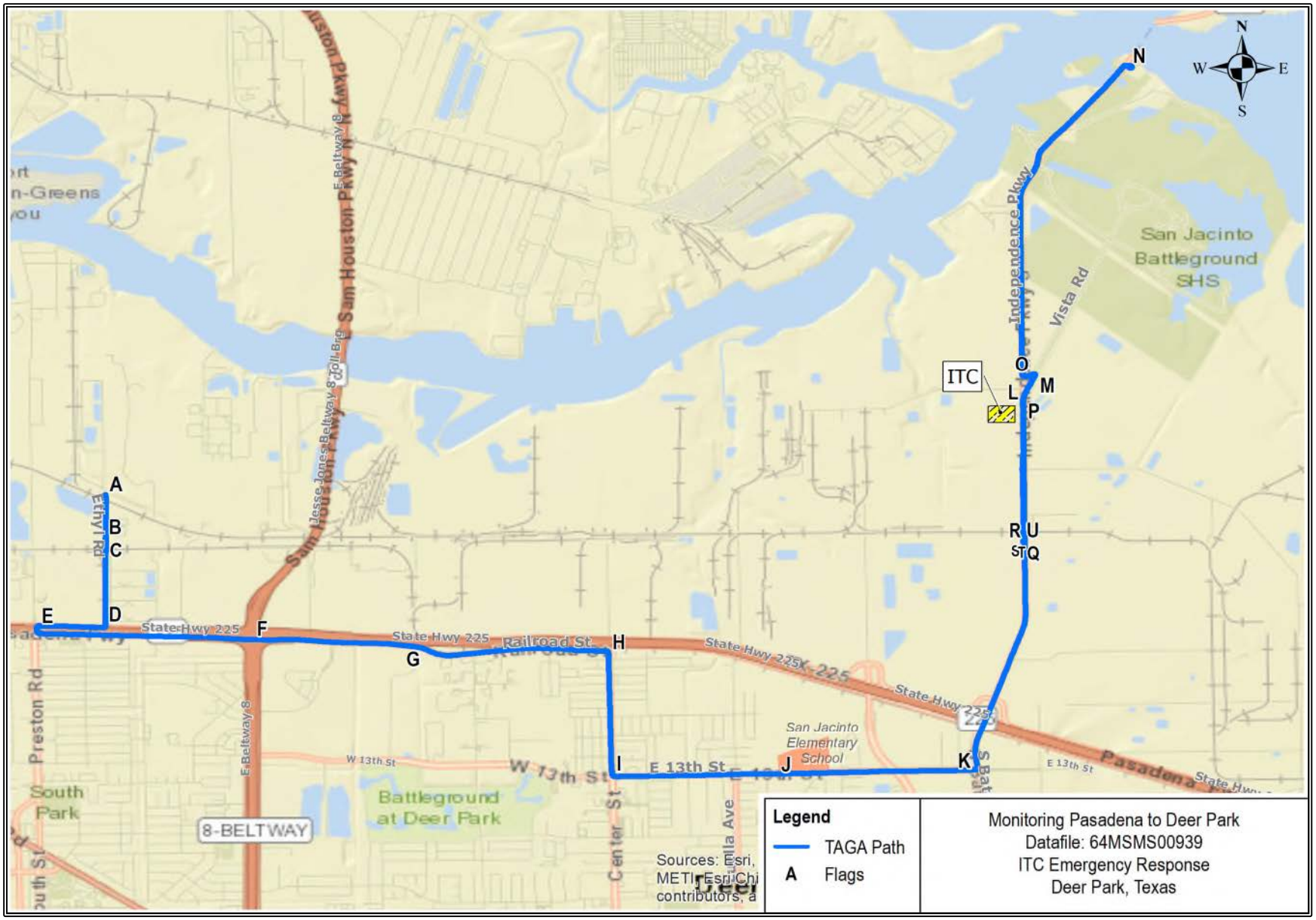


Figure 138a Monitoring Pasadena to Deer Park Path, 64MSMS00939

Figure 138b

TAGA File Event Summary
File: 64MSMS00939 Acquired on 12 April 2019 at 11:17:06
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	0.8	75	Start mobile monitoring at EPA Command Post
B	2.8	268	Stationary at railroad crossing on Ethyl Road
C	23.8	2260	Resume mobile monitoring on Ethyl Road
D	25.8	2455	Right turn onto Pasadena Freeway Frontage Road
E	26.6	2533	U-turn on Pasadena Freeway Frontage Road at Preston Road
F	29.6	2816	Cross Highway 8
G	31.1	2956	Continuing onto Railroad Street
H	33.4	3181	Right turn onto Center Street
I	35.3	3360	Left turn onto E 13th Street
J	37.9	3604	Passing San Jacinto Elementary School
K	41.2	3918	Left turn onto Battleground Road
L	47.2	4485	Passing ITC Site
M	48.4	4604	Cross Vista Road
N	53.6	5100	U-turn on Independence Parkway at Juan Seguin Park
O	59.4	5645	Cross Vista Road
P	60.3	5732	Passing ITC Site
Q	63.5	6036	End mobile monitoring on Independence Parkway
R	63.8	6068	Start ambient
S	64.9	6168	End ambient
T	66.7	6340	Start 30 mL/min spike
U	67.8	6445	End 30 mL/min spike

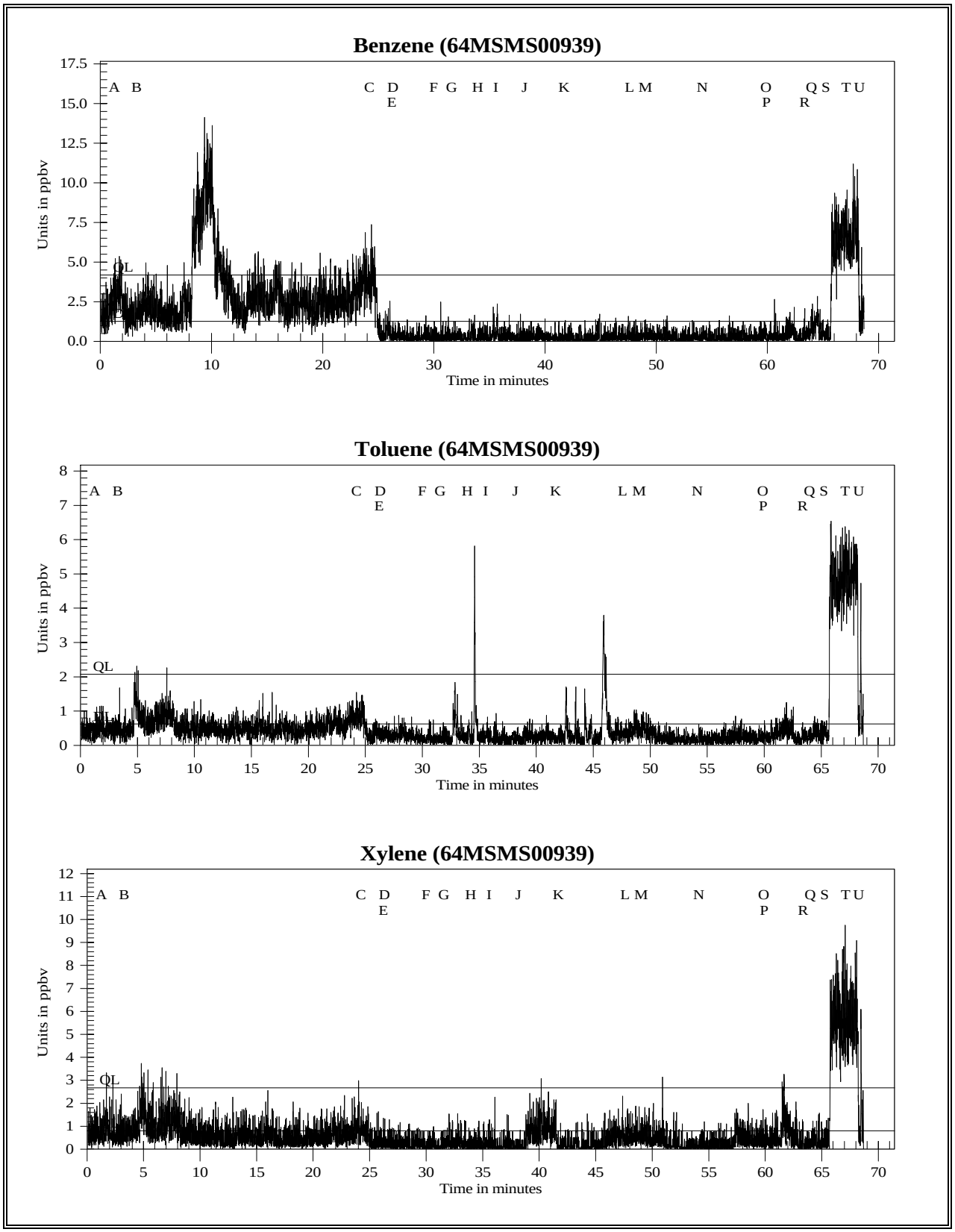


Figure 138c Mobile Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

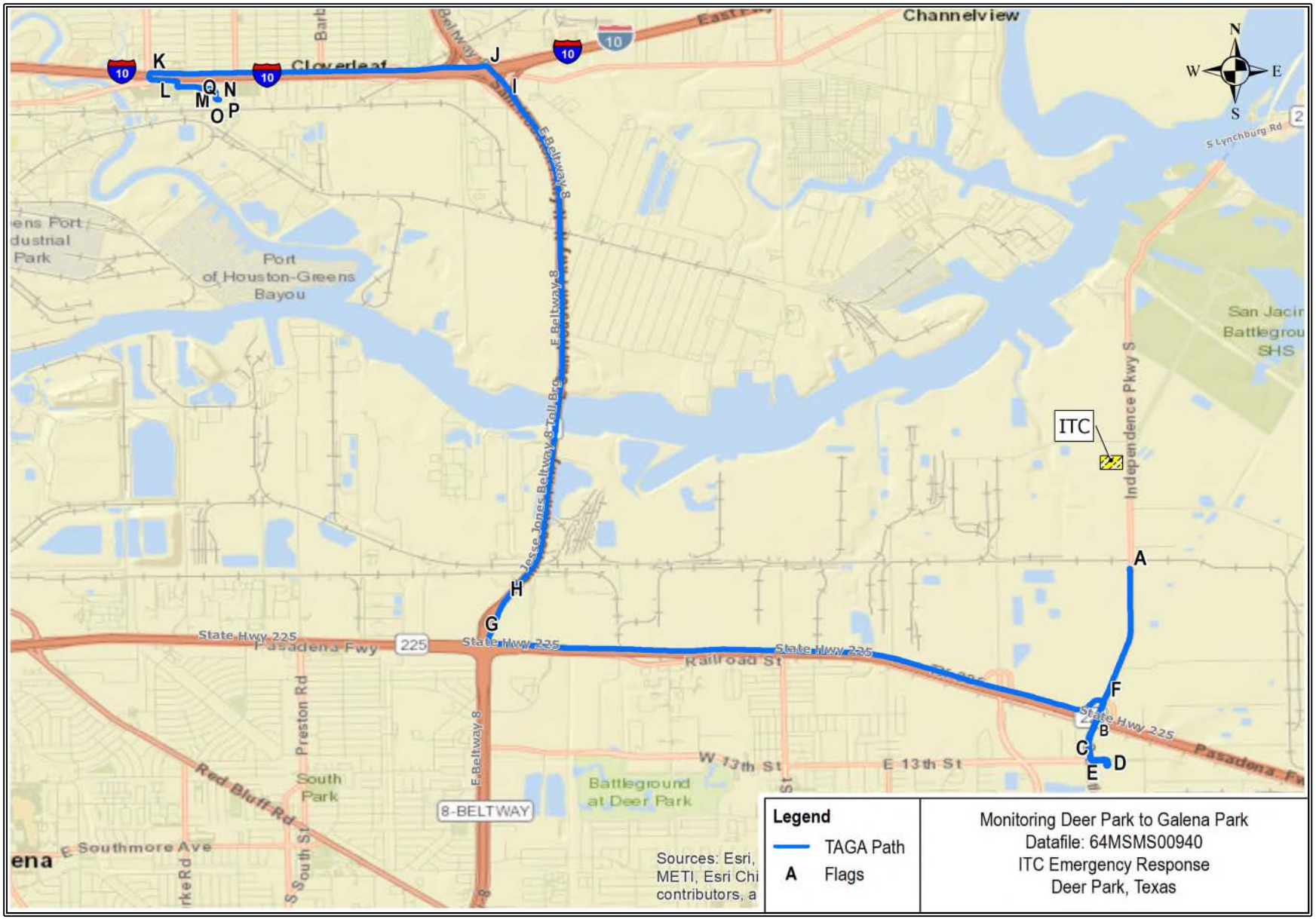


Figure 139a Monitoring Deer Park to Galena Park Path, 64MSMS00940

Figure 139b

TAGA File Event Summary
File: 64MSMS00940 Acquired on 12 April 2019 at 12:31:27
Title: Monitoring Deer Park to Galena Park

Flag	Time	Sequence	Description
A	0.9	85	Start mobile monitoring on Independence Parkway
B	3.5	338	Cross Highway 225 continuing onto Battleground Road
C	4.7	449	Left turn onto E 13th Street
D	5.7	543	U-turn on E 13th Street
E	6.4	606	Right turn onto Battleground Road
F	8.2	785	Left turn onto Pasadena Freeway Frontage Road
G	17.1	1626	Right turn onto Highway 8 Service Road
H	17.6	1677	Merge onto Highway 8 North
I	22.7	2156	Exit onto Highway 8 Service Road
J	23.1	2201	Left turn onto East Freeway Service Road
K	27.8	2642	U-turn on East Freeway Service Road at Uvalde Road
L	28.5	2707	Right turn into shopping center on East Freeway Service Road
M	31.3	2979	End mobile monitoring at shopping center on East Freeway Service Road
N	31.7	3010	Start ambient
O	32.8	3121	End ambient
P	35.0	3328	Start 30 mL/min spike
Q	36.6	3485	End 30 mL/min spike

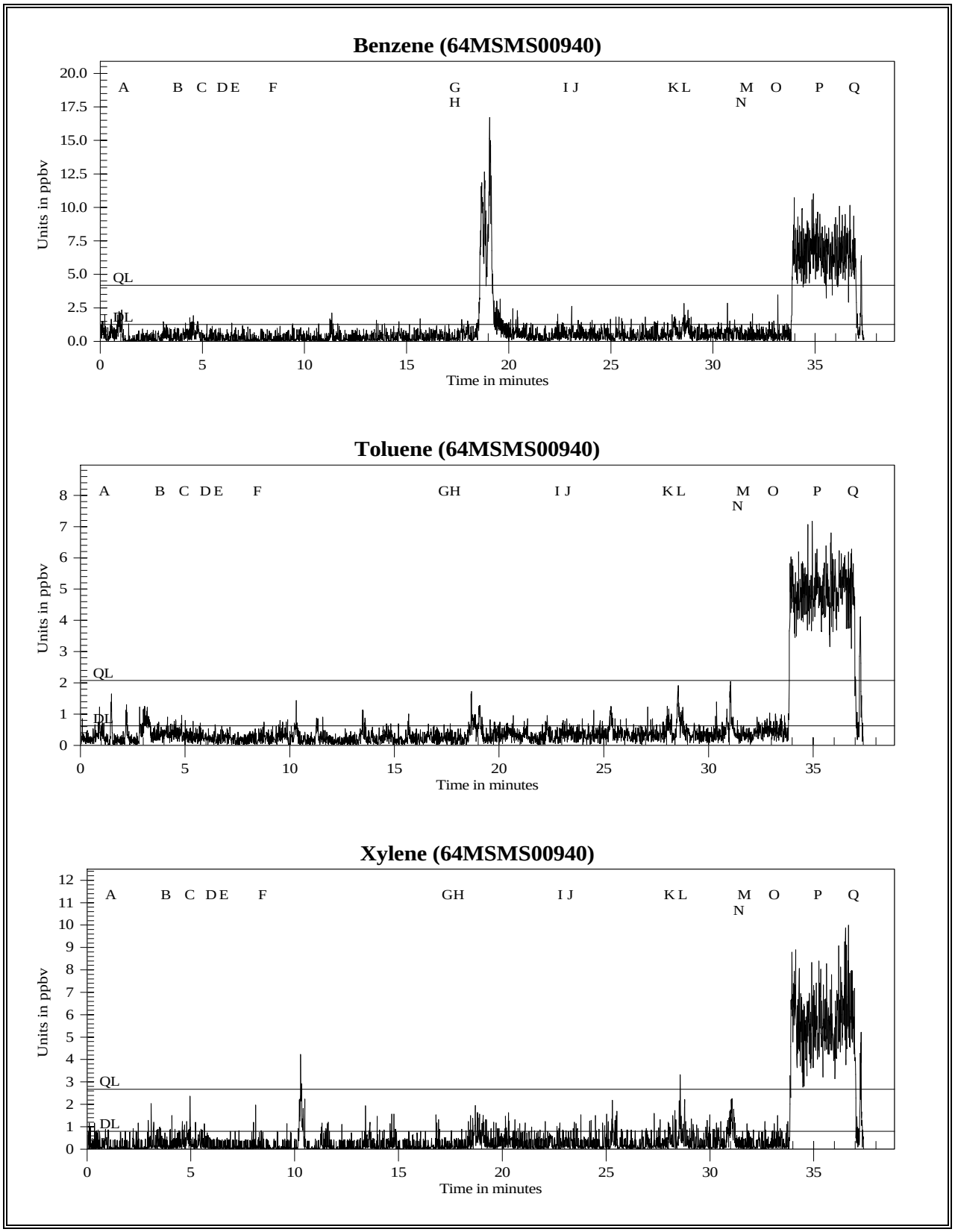


Figure 139c Mobile Monitoring Deer Park to Galena Park in ppbv for Benzene, Toluene, and Xylenes

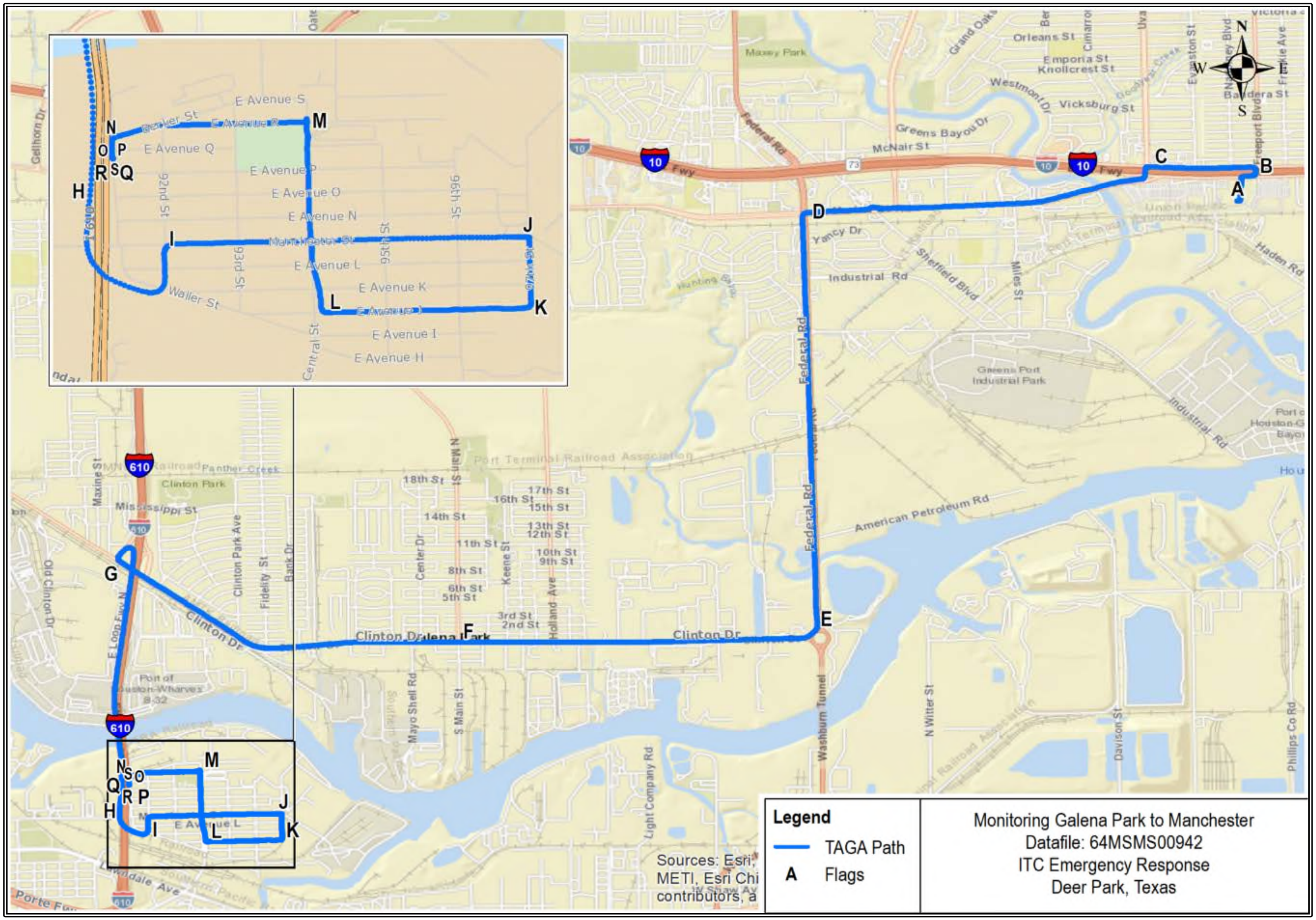


Figure 140a Monitoring Galena Park to Manchester Path, 64MSMS00942

Figure 140b

TAGA File Event Summary
File: 64MSMS00942 Acquired on 12 April 2019 at 14:04:32
Title: Monitoring Galena Park to Manchester

Flag	Time	Sequence	Description
A	0.8	78	Start mobile monitoring at shopping center on East Freeway Service Road
B	3.2	308	U-turn on East Freeway Service Road at Freeport Street
C	5.4	514	Left turn onto Market Street
D	12.4	1178	Left turn onto Federal Road
E	18.4	1753	Right turn onto Clinton Drive
F	22.0	2094	Cross S Main Street
G	27.5	2612	Right turn onto Highway 610 South
H	29.9	2840	Exit onto 92nd Street
I	30.9	2935	Right turn onto Manchester Street
J	33.2	3160	Right turn onto 97th Street
K	34.3	3260	Right turn onto Avenue J
L	37.4	3561	Right turn onto Central Street
M	40.6	3862	Left turn onto Avenue R
N	43.6	4144	Left turn onto Concrete Street
O	44.7	4253	End mobile monitoring on Concrete Street
P	45.6	4333	Start ambient
Q	46.6	4429	End ambient
R	48.1	4570	Start 30 mL/min spike
S	49.1	4665	End 30 mL/min spike

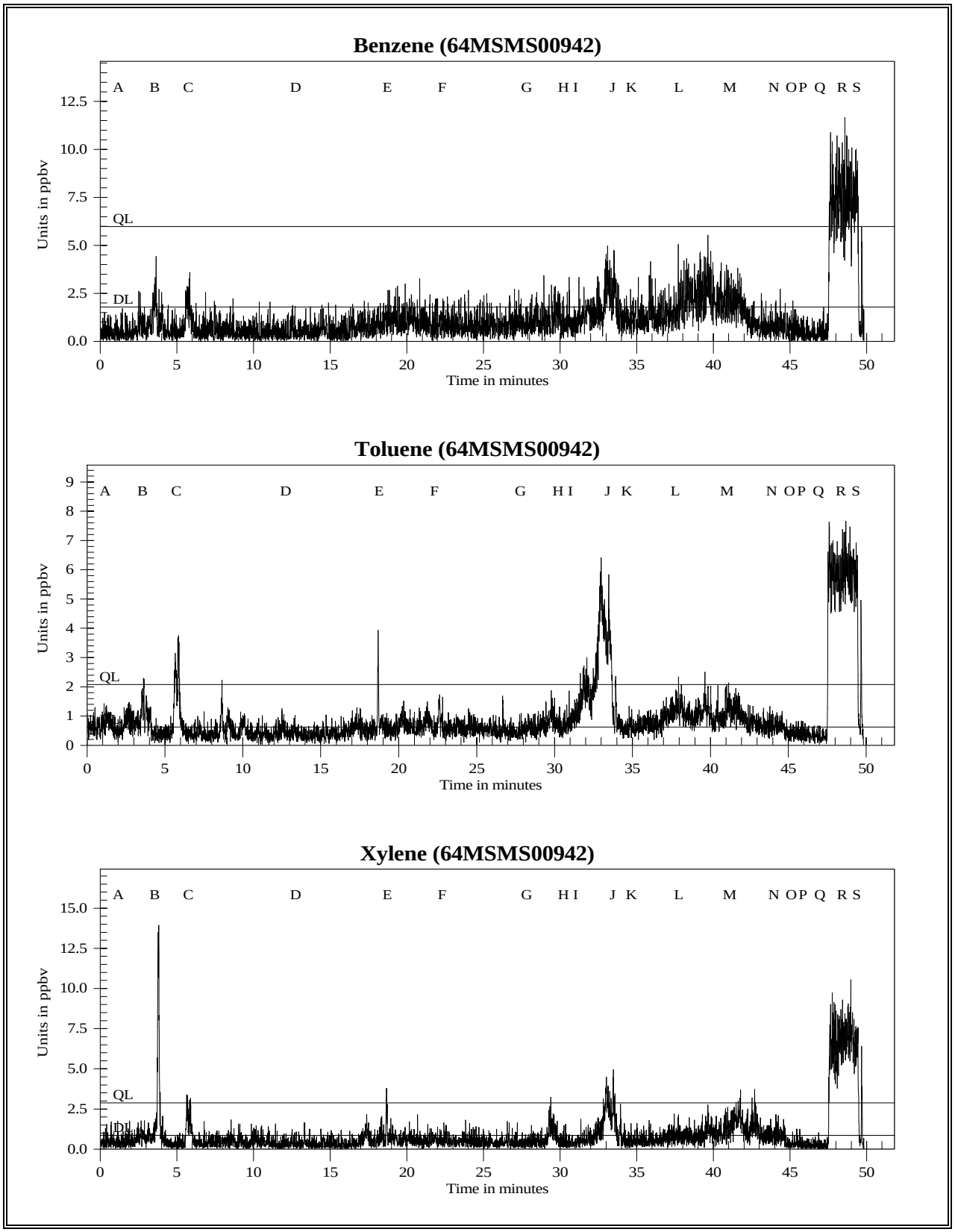


Figure 140c Mobile Monitoring Galena Park to Manchester in ppbv for Benzene, Toluene, and Xylenes

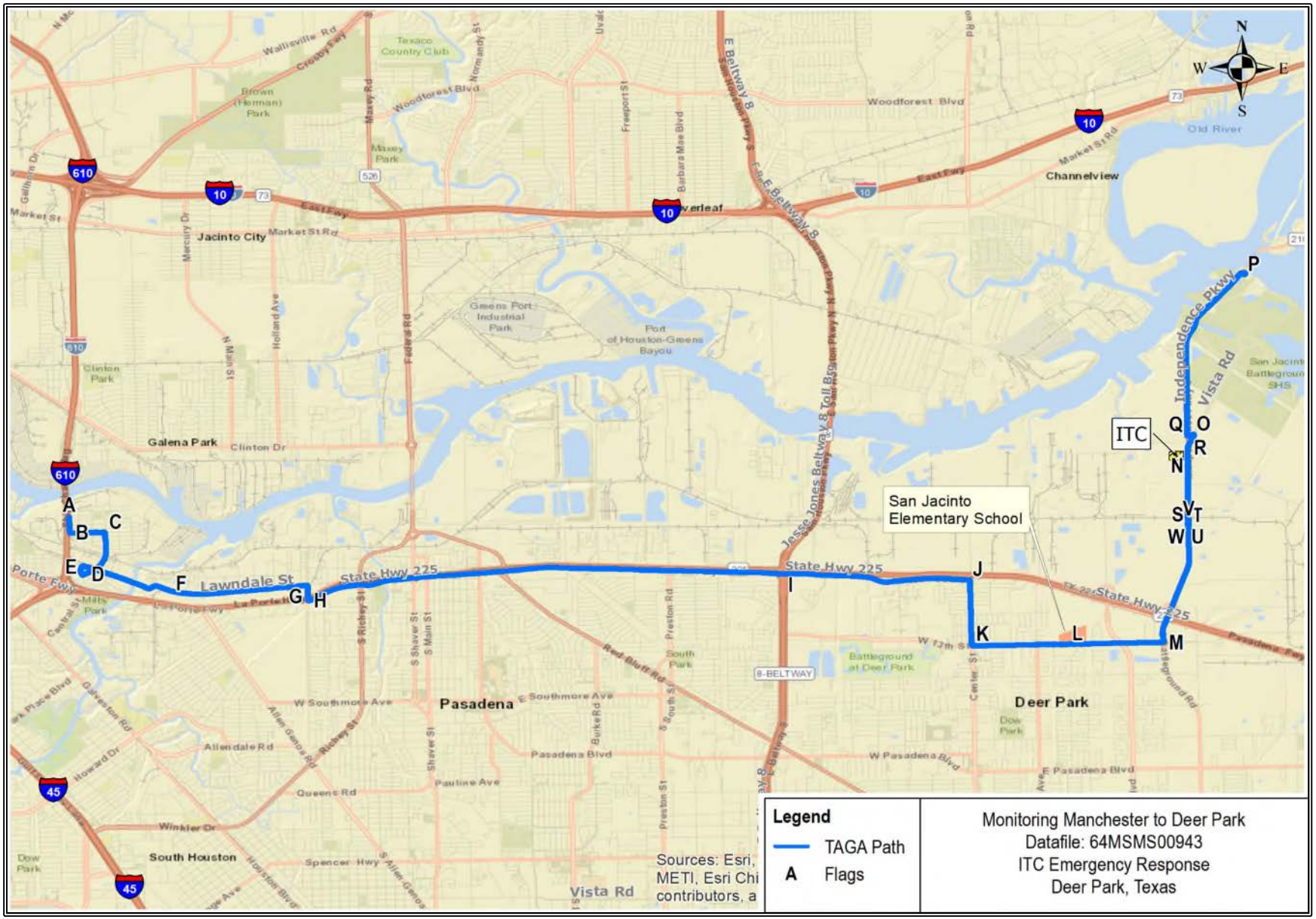


Figure 141a Monitoring Manchester to Deer Park Path, 64MSMS00943

Figure 141b

TAGA File Event Summary
File: 64MSMS00943 Acquired on 12 April 2019 at 14:56:35
Title: Monitoring Manchester to Deer Park

Flag	Time	Sequence	Description
A	1.0	100	Start mobile monitoring on Concrete Street
B	2.6	246	Left turn onto Manchester Street
C	3.9	376	Right turn onto Central Street
D	5.5	527	Right turn onto Highway 610 ramp connector
E	6.1	581	Right turn onto Lawndale Street
F	10.0	953	Cross Allen Genoa Road
G	12.7	1205	Right turn onto Scarborough Lane
H	13.9	1325	Left turn onto Pasadena Freeway Frontage Road
I	25.4	2412	Cross Highway 8
J	29.7	2826	Right turn onto Center Street
K	33.5	3189	Left turn onto E 13th Street
L	36.8	3502	Passing San Jacinto Elementary School
M	40.4	3842	Left turn onto Battleground Road
N	47.1	4483	Passing ITC Site
O	47.9	4558	Cross Vista Road
P	54.0	5138	U-turn on Independence Parkway at Juan Seguin Park
Q	60.0	5708	Cross Vista Road
R	61.2	5817	Passing ITC Site
S	64.3	6117	End mobile monitoring on Independence Parkway
T	64.7	6156	Start ambient
U	65.9	6269	End ambient
V	67.9	6459	Start 30 mL/min spike
W	69.0	6557	End 30 mL/min spike

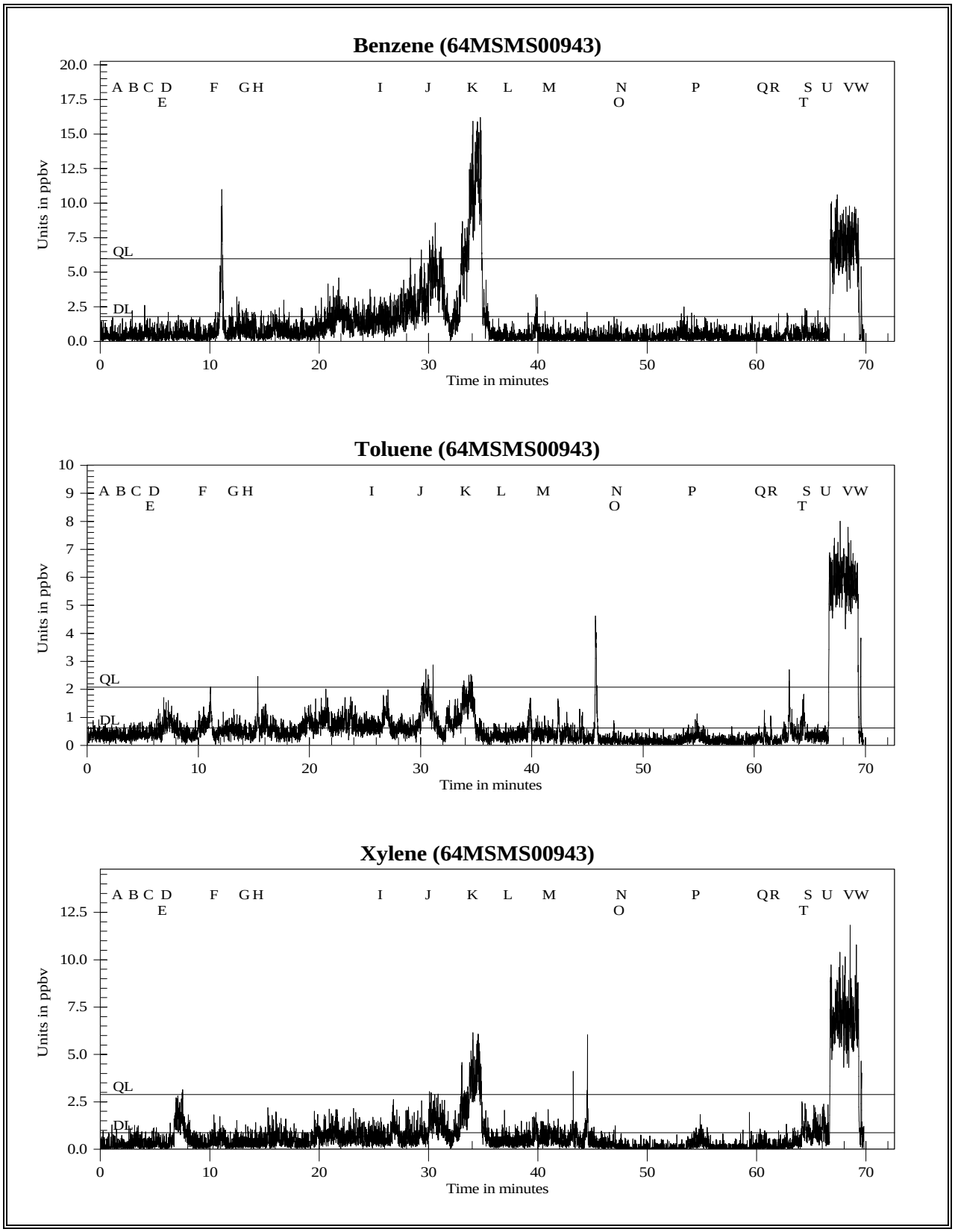


Figure 141c Mobile Monitoring Manchester to Deer Park in ppbv for Benzene, Toluene, and Xylenes

Figure 142a Monitoring Highway 8 to Command Post Path, 64MSMS00946

Figure 142b

TAGA File Event Summary
File: 64MSMS00946 Acquired on 13 April 2019 at 08:23:52
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	1.1	102	Start mobile monitoring on Highway 8 North at Beamer Road
B	2.7	253	Cross Highway 45
C	7.6	723	Cross Spencer Highway
D	10.2	972	Exit onto Highway 8 Service Road
E	11.3	1078	Right turn onto Pasadena Freeway Frontage Road
F	12.6	1200	U-turn on Pasadena Freeway Frontage Road at Railroad Street
G	19.6	1866	Cross Highway 8
H	20.9	1992	Right turn onto Ethyl Road
I	24.8	2362	End mobile monitoring at EPA Command Post
J	25.2	2396	Start ambient
K	27.9	2655	End ambient
L	29.8	2831	Start 30 mL/min spike
M	32.4	3083	End 30 mL/min spike

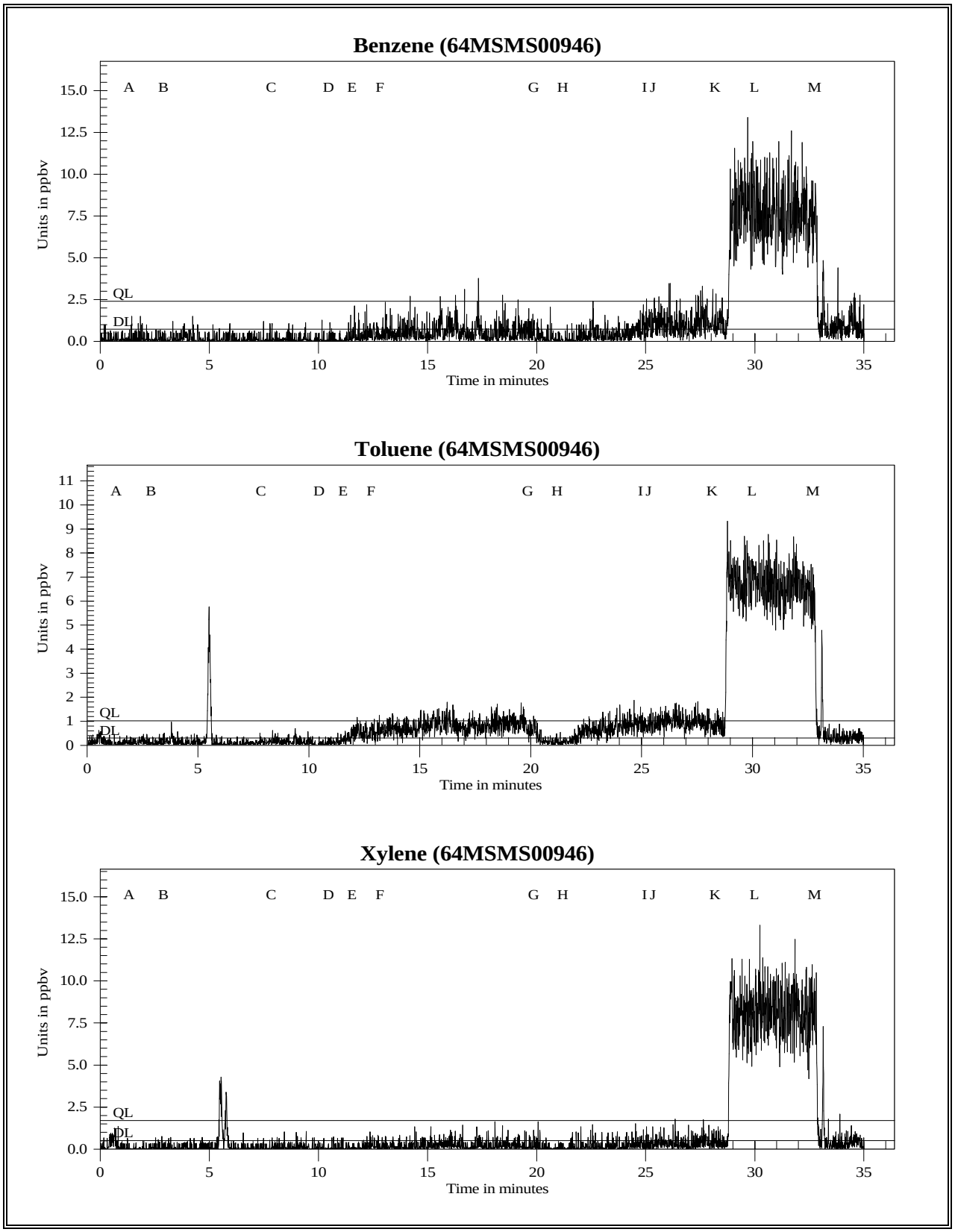


Figure 142c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

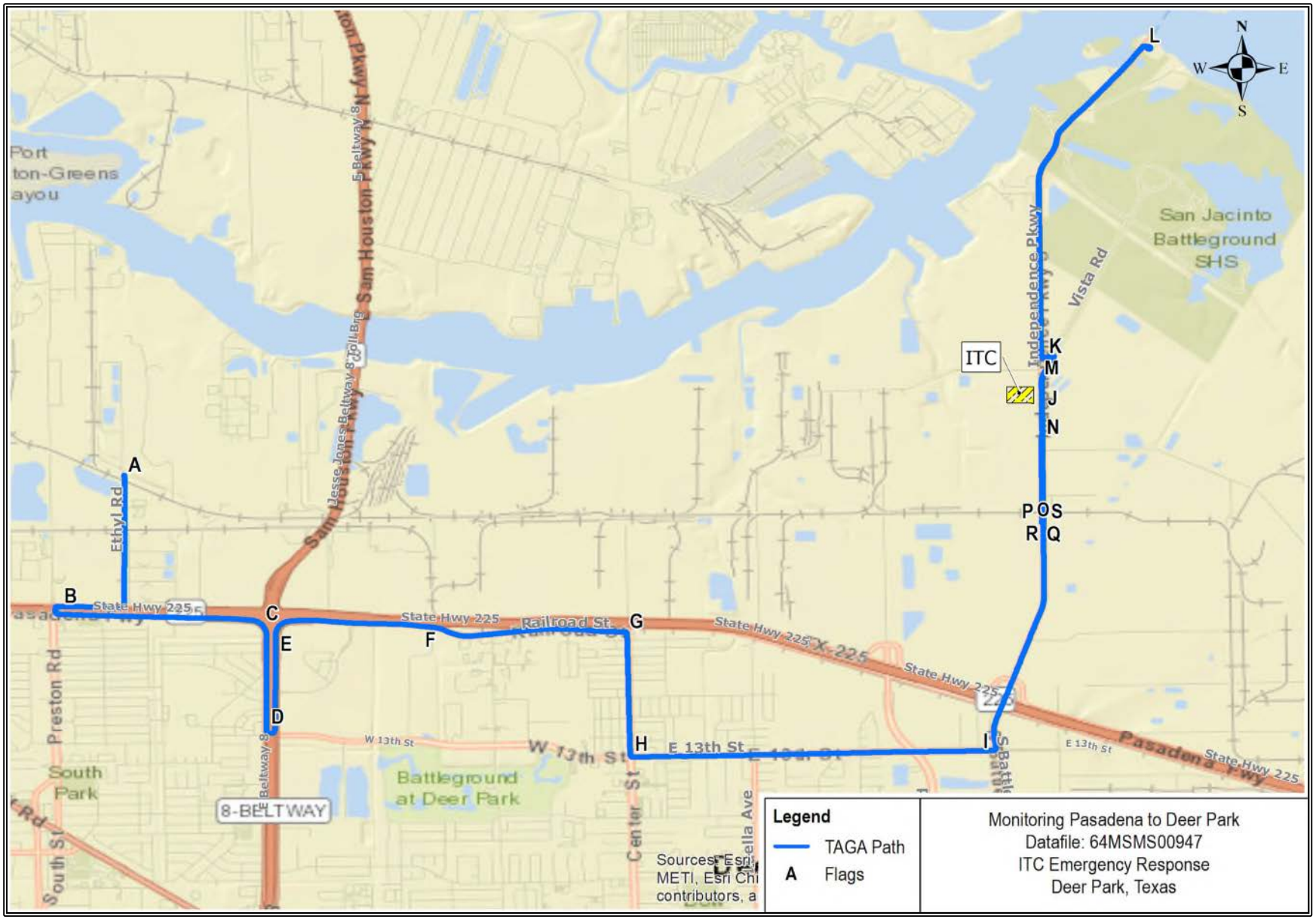


Figure 143a Monitoring Pasadena to Deer Park Path, 64MSMS00947

Figure 143b

TAGA File Event Summary
File: 64MSMS00947 Acquired on 13 April 2019 at 09:03:01
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	0.9	86	Start mobile monitoring at EPA Command Post
B	5.7	539	U-turn on Pasadena Freeway Frontage Road at Preston Road
C	8.0	760	Right turn onto Highway 8 Service Road
D	9.2	871	U-turn on Highway 8 Service Road at Greenshadow Drive
E	10.6	1010	Right turn onto Pasadena Freeway Frontage Road
F	12.0	1143	Continuing onto Railroad Street
G	15.2	1447	Right turn onto Center Street
H	18.0	1715	Left turn onto E 13th Street
I	23.2	2206	Left turn onto Battleground Road
J	29.5	2807	Passing ITC Site
K	30.1	2867	Cross Vista Road
L	35.4	3368	U-turn on Independence Parkway at Juan Seguin Park
M	41.9	3983	Cross Vista Road
N	43.8	4166	Passing ITC Site
O	46.1	4383	End mobile monitoring on Independence Parkway
P	47.1	4477	Start ambient
Q	48.8	4643	End ambient
R	51.1	4860	Start 30 mL/min spike
S	53.1	5046	End 30 mL/min spike

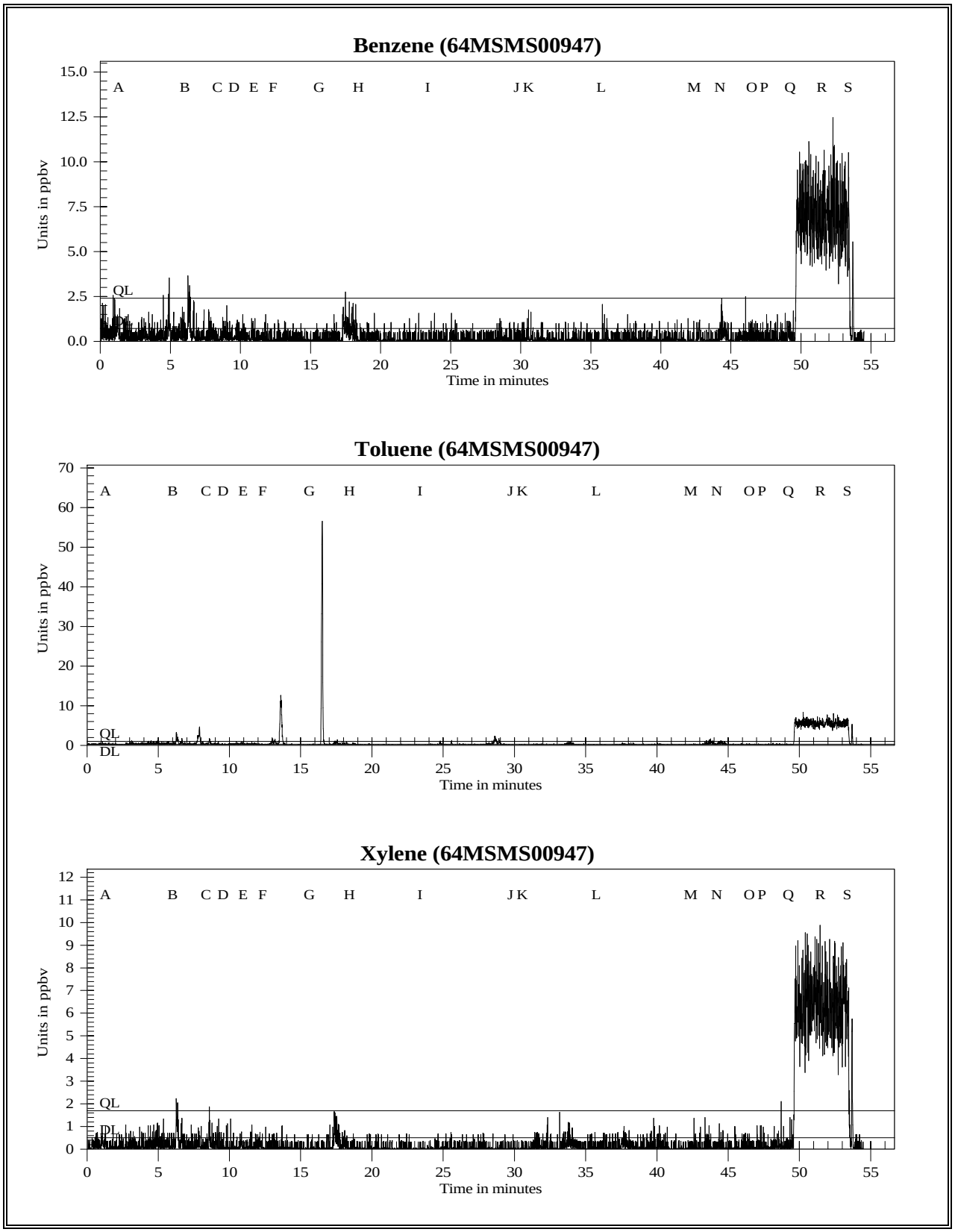


Figure 143c Mobile Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

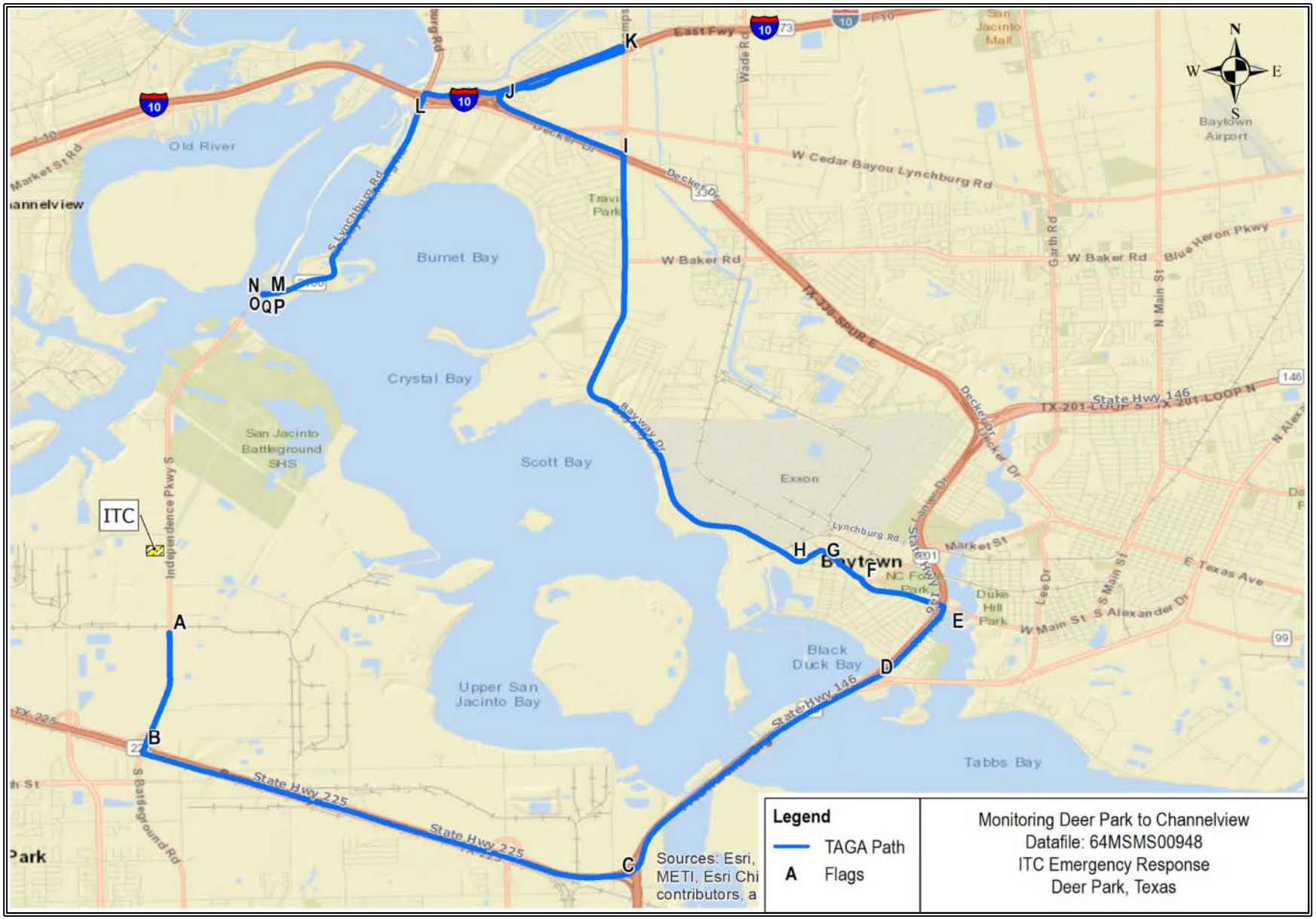


Figure 144a Monitoring Deer Park to Channelview Path, 64MSMS00948

Figure 144b

TAGA File Event Summary
File: 64MSMS00948 Acquired on 13 April 2019 at 10:02:38
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	0.6	59	Start mobile monitoring on Independence Parkway
B	3.8	364	Left turn onto Pasadena Freeway Frontage Road
C	8.5	809	Merge onto Highway 146 North
D	11.6	1102	Exit onto Robert C Lanier Drive
E	14.9	1414	Left turn onto W Main Street
F	17.5	1664	Left turn onto Market Street
G	19.4	1843	Left turn to continue on Market Street
H	20.1	1916	Continuing onto Bayway Drive
I	30.8	2932	Left turn onto Decker Drive
J	32.7	3105	Continuing onto East Freeway Service Road
K	35.0	3331	U-turn on East Freeway Service Road at Thompson Road
L	38.2	3631	Left turn onto Independence Parkway North
M	44.1	4190	End mobile monitoring at Lynchburg Ferry
N	45.0	4276	Start ambient
O	46.3	4406	End ambient
P	47.7	4536	Start 30 mL/min spike
Q	48.8	4642	End 30 mL/min spike

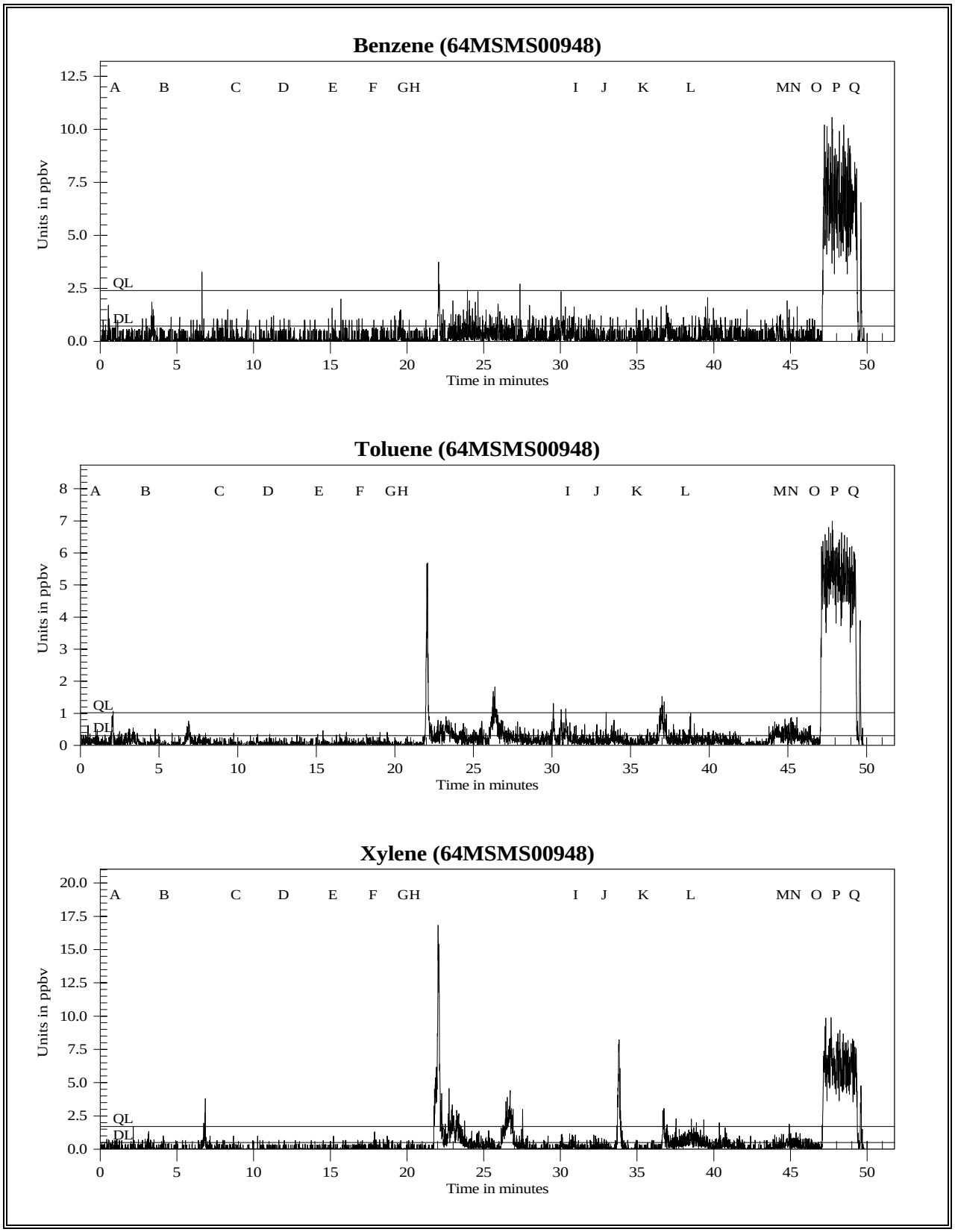


Figure 144c Mobile Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

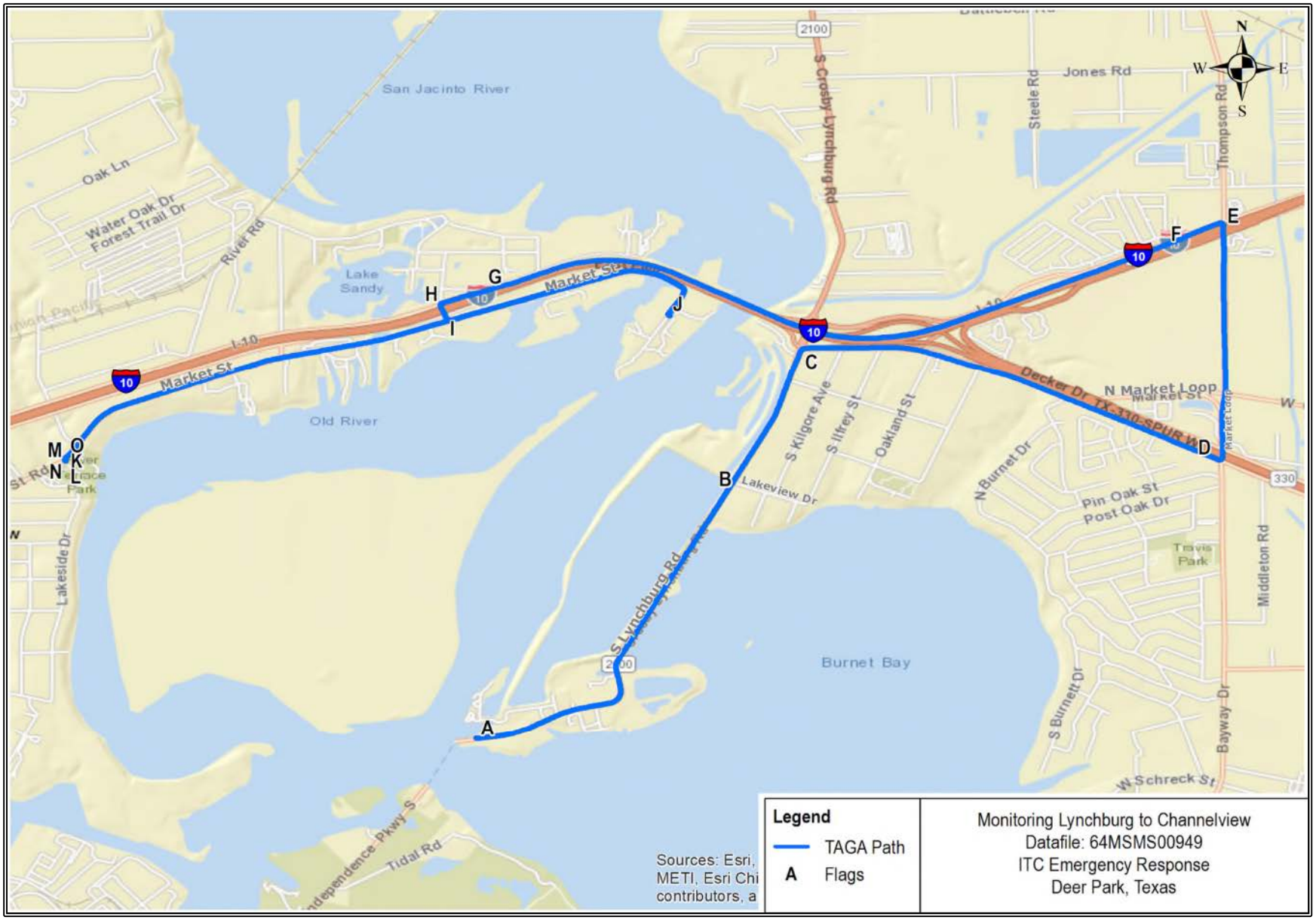


Figure 145a Monitoring Lynchburg to Channelview Path, 64MSMS00949

Figure 145b

TAGA File Event Summary
File: 64MSMS00949 Acquired on 13 April 2019 at 10:59:11
Title: Monitoring Lynchburg Ferry to Channelview

Flag	Time	Sequence	Description
A	0.8	81	Start mobile monitoring at Lynchburg Ferry
B	5.6	538	Cross Lakeview Drive
C	7.4	701	Right turn onto Decker Drive
D	10.4	989	Left turn onto Thompson Road
E	15.2	1444	Left turn onto East Freeway Service Road
F	15.9	1509	Merge onto Highway 10 West
G	24.1	2290	Exit onto East Freeway Service Road
H	24.6	2335	Left turn onto Woodleigh Street
I	25.0	2381	Left turn onto Market Street
J	29.1	2763	U-turn on Market Street
K	37.9	3601	End mobile monitoring at River Terrace Park
L	38.2	3634	Start ambient
M	39.3	3734	End ambient
N	41.6	3960	Start 30 mL/min spike
O	43.1	4103	End 30 mL/min spike

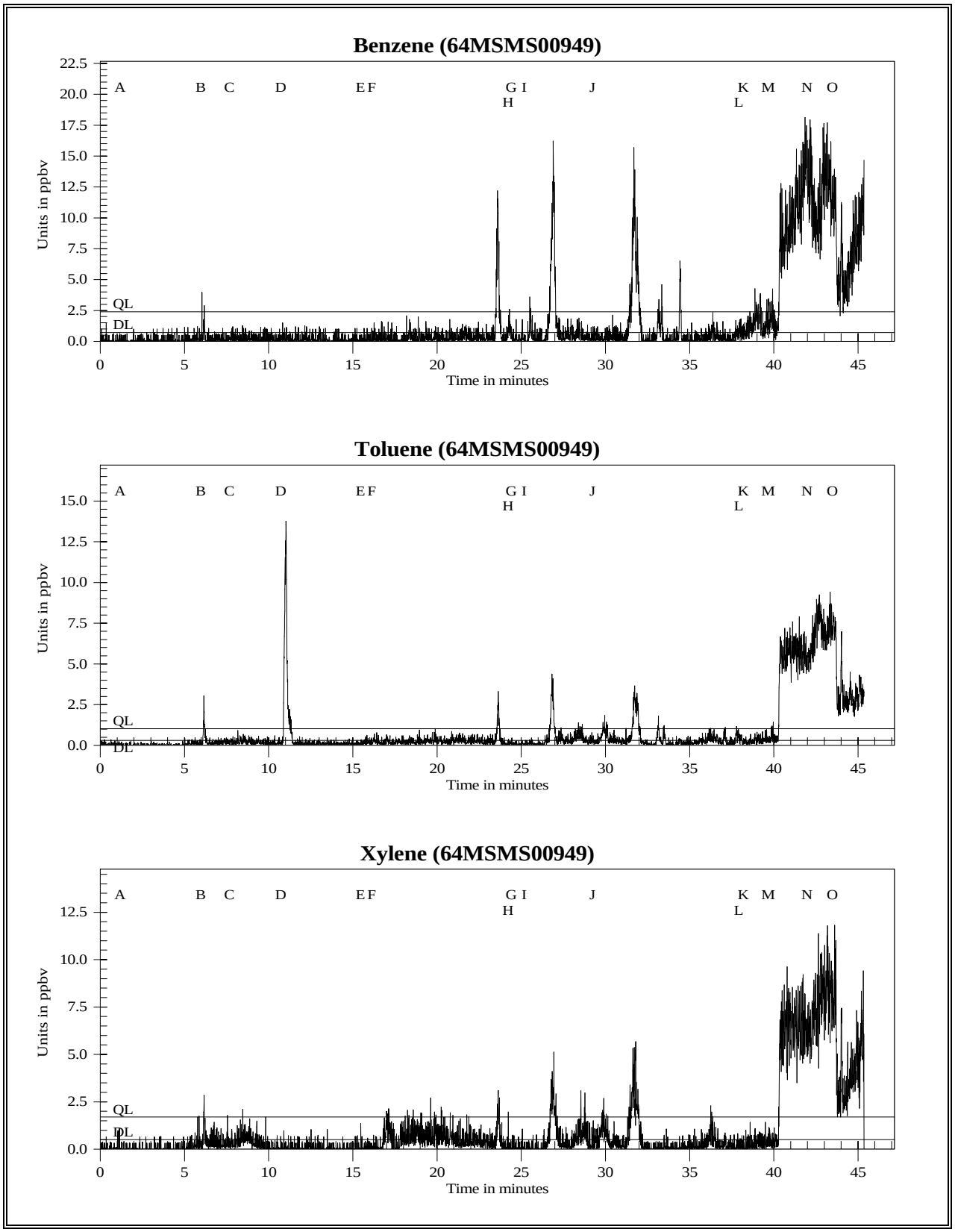


Figure 145c Mobile Monitoring Lynchburg to Channelview in ppbv for Benzene, Toluene, and Xylenes

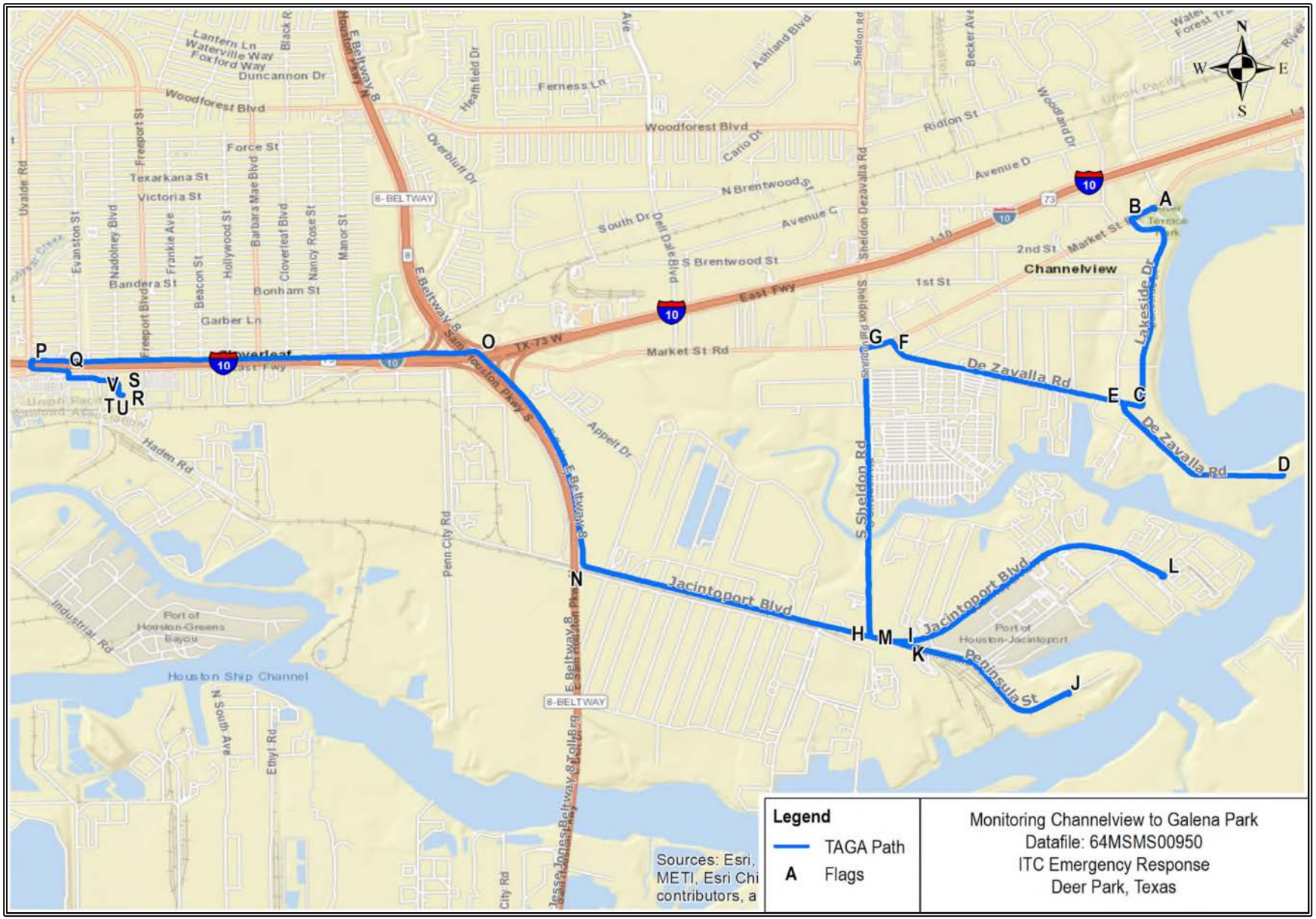


Figure 146a Monitoring Channelview to Galena Park Path, 64MSMS00950

Figure 146b

TAGA File Event Summary
File: 64MSMS00950 Acquired on 13 April 2019 at 11:47:54
Title: Monitoring Channelview to Galena Park

Flag	Time	Sequence	Description
A	1.1	105	Start mobile monitoring at River Terrace Park
B	2.5	242	Left turn onto Lakeside Drive
C	6.0	576	Left turn onto Dezavala Road
D	11.9	1134	U-turn on Dezavala Road
E	19.0	1810	Left turn to continue on Dezavala Road
F	21.7	2061	Left turn onto Market Street
G	23.9	2271	Left turn onto Sheldon Road
H	27.9	2653	Left turn onto Jacintoport Boulevard
I	28.8	2740	Merge onto San Jacinto Boulevard
J	32.1	3057	U-turn on San Jacinto Boulevard/Peninsula Street at Coastal Cargo
K	37.7	3588	Right turn on Jacintoport Boulevard
L	42.2	4015	U-turn onto Jacintoport Boulevard
M	47.3	4499	Cross Sheldon Road
N	50.3	4786	Right turn Highway 8 Service Road
O	52.9	5028	Left turn onto East Freeway Service Road
P	57.8	5496	U-turn on East Freeway Service Road at Uvalde Road
Q	58.7	5585	Right turn into shopping center on East Freeway Service Road
R	61.5	5849	End mobile monitoring at shopping center on East Freeway Service Road
S	61.9	5882	Start ambient
T	62.9	5979	End ambient
U	64.6	6147	Start 30 mL/min spike
V	65.8	6260	End 30 mL/min spike

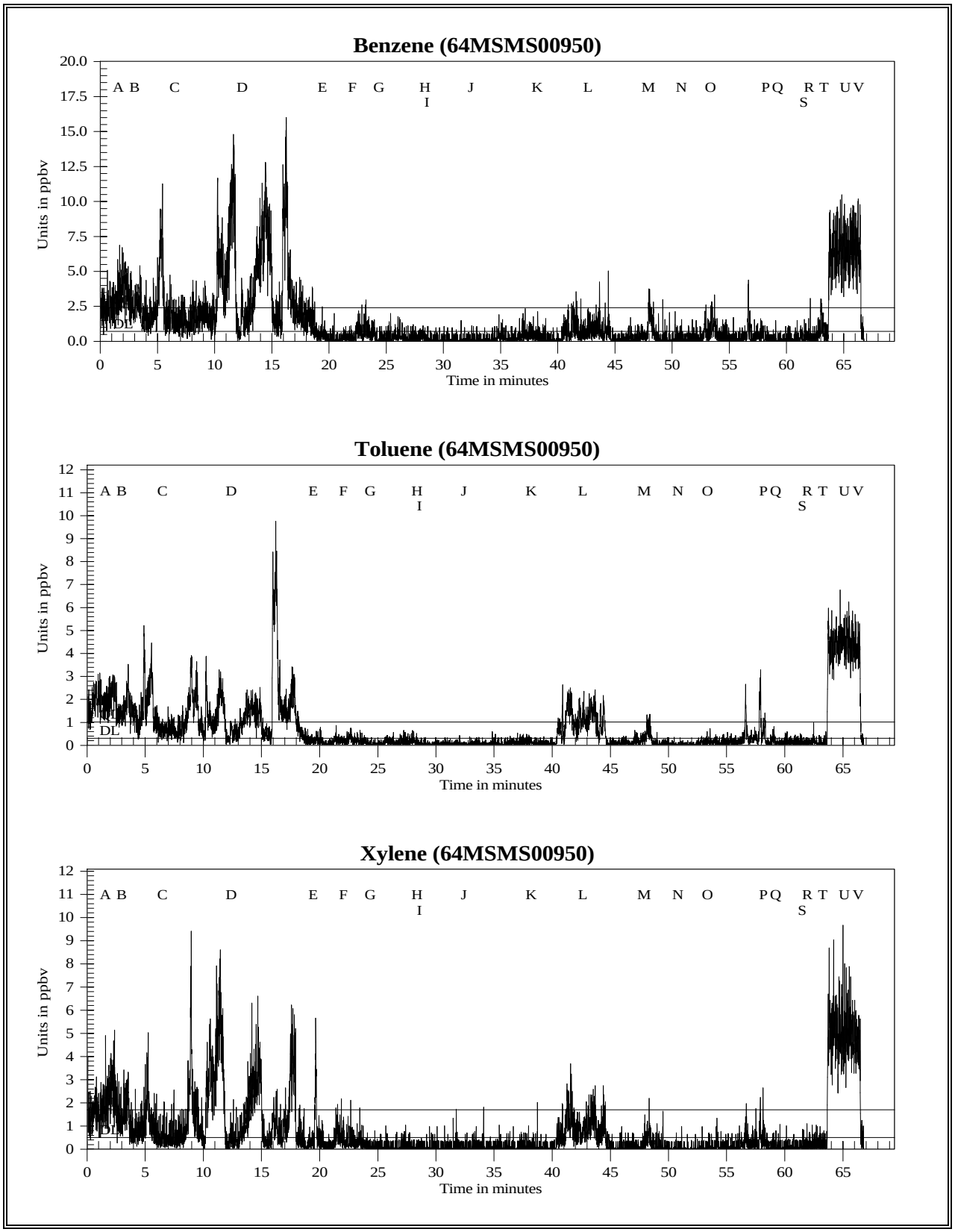


Figure 146c Mobile Monitoring Channelview to Galena Park in ppbv for Benzene, Toluene, and Xylenes

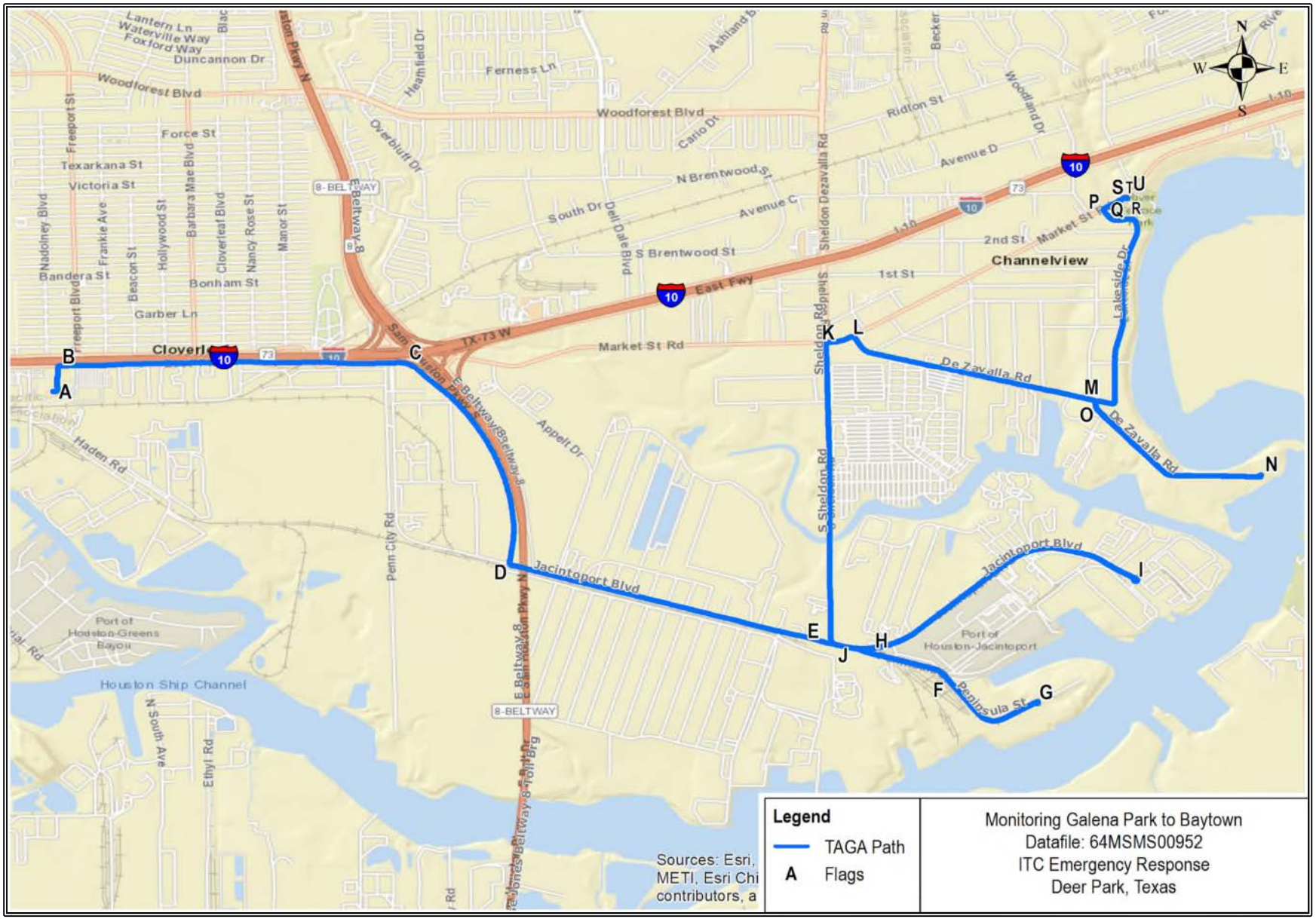


Figure 147a Monitoring Galena Park to Baytown Path, 64MSMS00952

Figure 147b

TAGA File Event Summary
File: 64MSMS00952 Acquired on 13 April 2019 at 13:55:34
Title: Monitoring Galena Park to Baytown

Flag	Time	Sequence	Description
A	1.5	146	Start mobile monitoring at shopping center on East Freeway Service Road
B	3.7	349	Right turn onto East Freeway Service Road
C	6.9	655	Right turn onto Highway 8 Service Road
D	8.9	844	Left turn onto Jacintoport Boulevard
E	12.0	1143	Cross Sheldon Road
F	13.8	1314	Continuing onto San Jacinto Boulevard
G	16.3	1550	U-turn on San Jacinto Boulevard/Peninsula Street at Coastal Cargo
H	21.9	2080	Right turn onto Jacintoport Boulevard
I	26.2	2493	U-turn on Jacintoport Boulevard
J	31.4	2983	Right turn onto Sheldon Road
K	35.2	3349	Right turn onto Market Street
L	35.6	3388	Right turn onto Dzavala Road
M	38.6	3672	Right turn to continue on Dezavala Road
N	43.9	4174	U-turn on Dezavala Road
O	50.3	4786	Right turn onto Lakeside Drive
P	54.1	5146	Right turn onto Market Street
Q	54.8	5212	End mobile monitoring at River Terrace Park
R	55.2	5245	Start ambient
S	56.3	5353	End ambient
T	57.7	5489	Start 30 mL/min spike
U	58.7	5585	End 30 mL/min spike

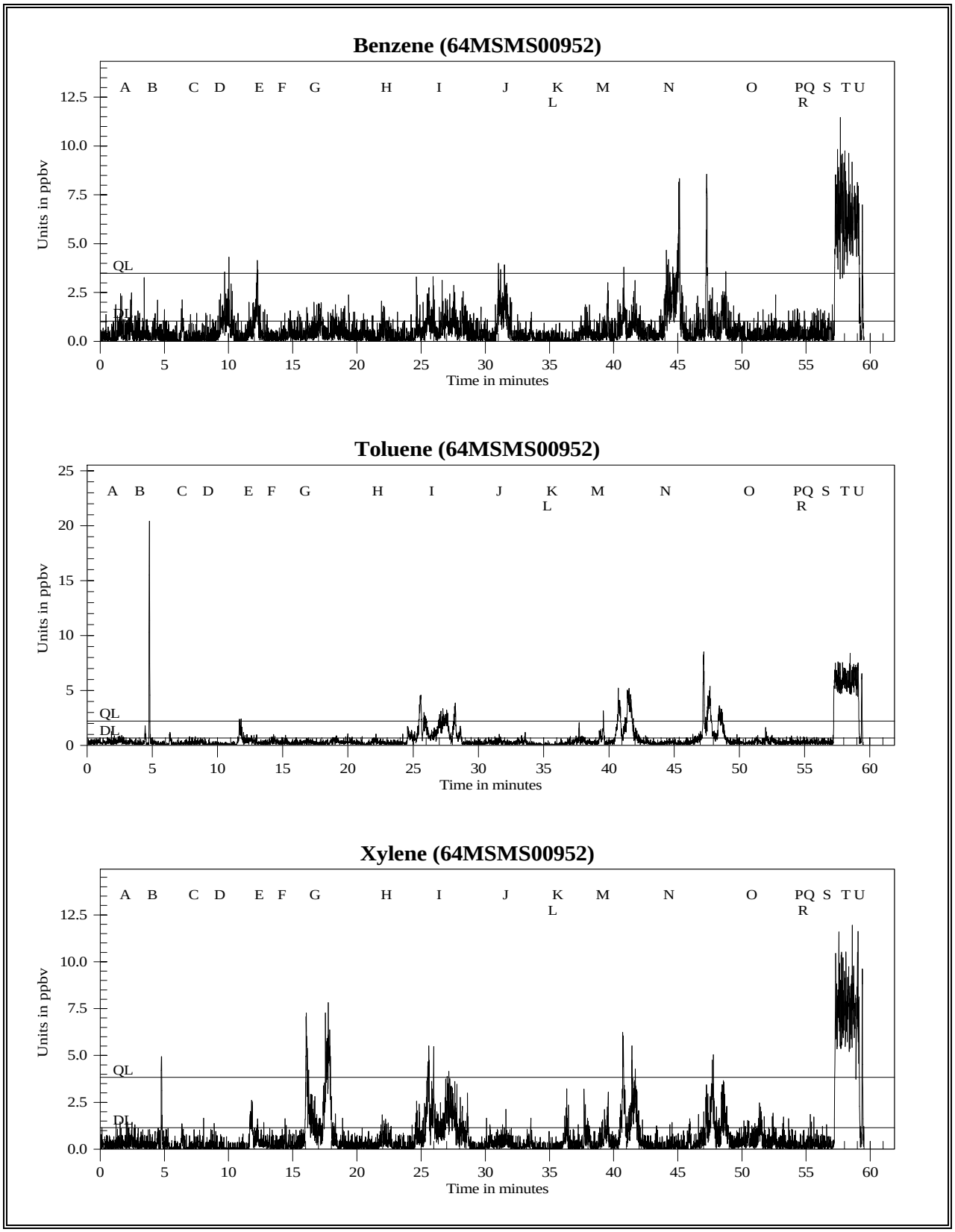


Figure 147c Mobile Monitoring Galena Park to Baytown in ppbv for Benzene, Toluene, and Xylenes

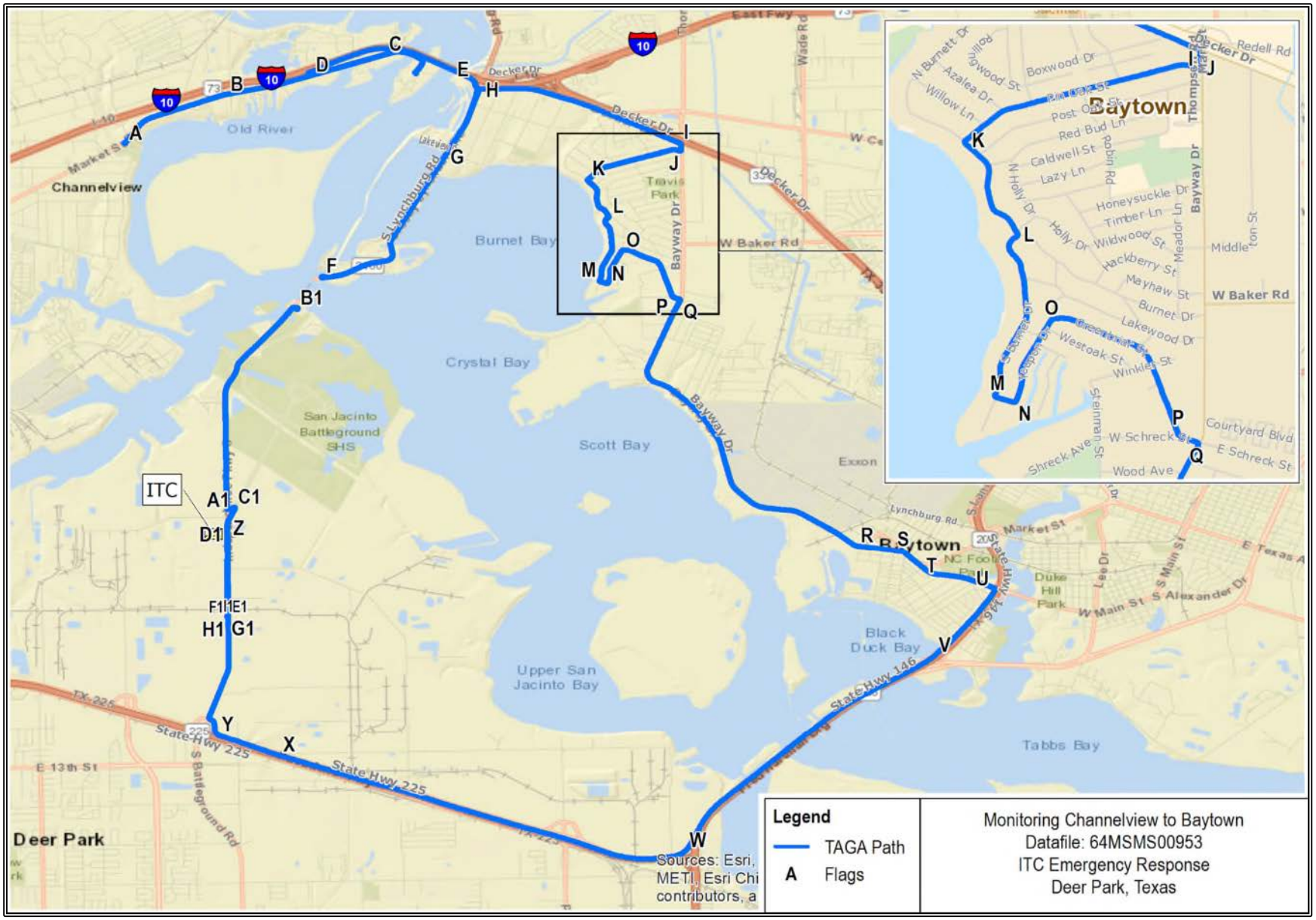


Figure 148a Monitoring Channelview to Baytown Path, 64MSMS00953

Figure 148b

TAGA File Event Summary
File: 64MSMS00953 Acquired on 13 April 2019 at 15:06:45
Title: Monitoring Channelview to Baytown

Flag	Time	Sequence	Description
A	0.9	85	Start mobile monitoring ot River Terrace Park
B	4.1	395	Cross Magnolia Street
C	10.0	950	U-turn on Market Street at Southwest Shipyard
D	15.0	1428	Right turn to merge onto Highway 10 East
E	17.3	1645	Exit onto Independence Parkway North
F	23.9	2270	U-turn on Independence Parkway North at Lynchburg Ferry
G	29.2	2778	Cross Lakeview Drive
H	31.1	2959	Right turn onto Decker Drive
I	34.5	3279	Right turn onto Bayway Drive
J	34.9	3316	Right turn onto Pin Oak Drive
K	38.4	3653	Left turn onto N Burnett Street
L	40.2	3821	Right turn onto S Burnett Street
M	42.9	4082	Left turn onto Winkler Drive
N	43.4	4128	Left turn onto Yaupon Drive
O	45.0	4277	Right turn onto Greenbriar Drive
P	47.9	4555	Left turn onto Shreck Street
Q	48.3	4596	Right turn onto Bayway Drive
R	54.9	5222	Continuing onto Wisconsin Street
S	56.3	5358	Right turn onto Market Street
T	57.0	5418	Continuing onto W Main Street
U	58.5	5566	Right turn onto Robert C Lanier Drive
V	60.0	5703	Merge onto Highway 146 South
W	63.0	5995	Merge onto Highway 225 West
X	66.7	6344	Exit onto Pasadena Freeway Frontage Road
Y	67.4	6413	Right turn onto Independence Parkway
Z	72.4	6887	Passing ITC Site
A1	73.1	6946	Cross Vista Road
B1	77.5	7370	U-turn on Independence Parkway at Juan Seguin Park
C1	82.5	7844	Cross Vista Road
D1	83.3	7920	Passing ITC Site
E1	85.9	8167	End mobile monitoring on Independence Parkway
F1	86.3	8205	Start ambient
G1	87.3	8302	End ambient
H1	88.7	8429	Start 30 mL/min spike

Figure 148b (continued)

TAGA File Event Summary
File: 64MSMS00953 Acquired on 13 April 2019 at 15:06:45
Title: Monitoring Channelview to Baytown

Flag	Time	Sequence	Description
I1	89.7	8525	End 30 mL/min spike

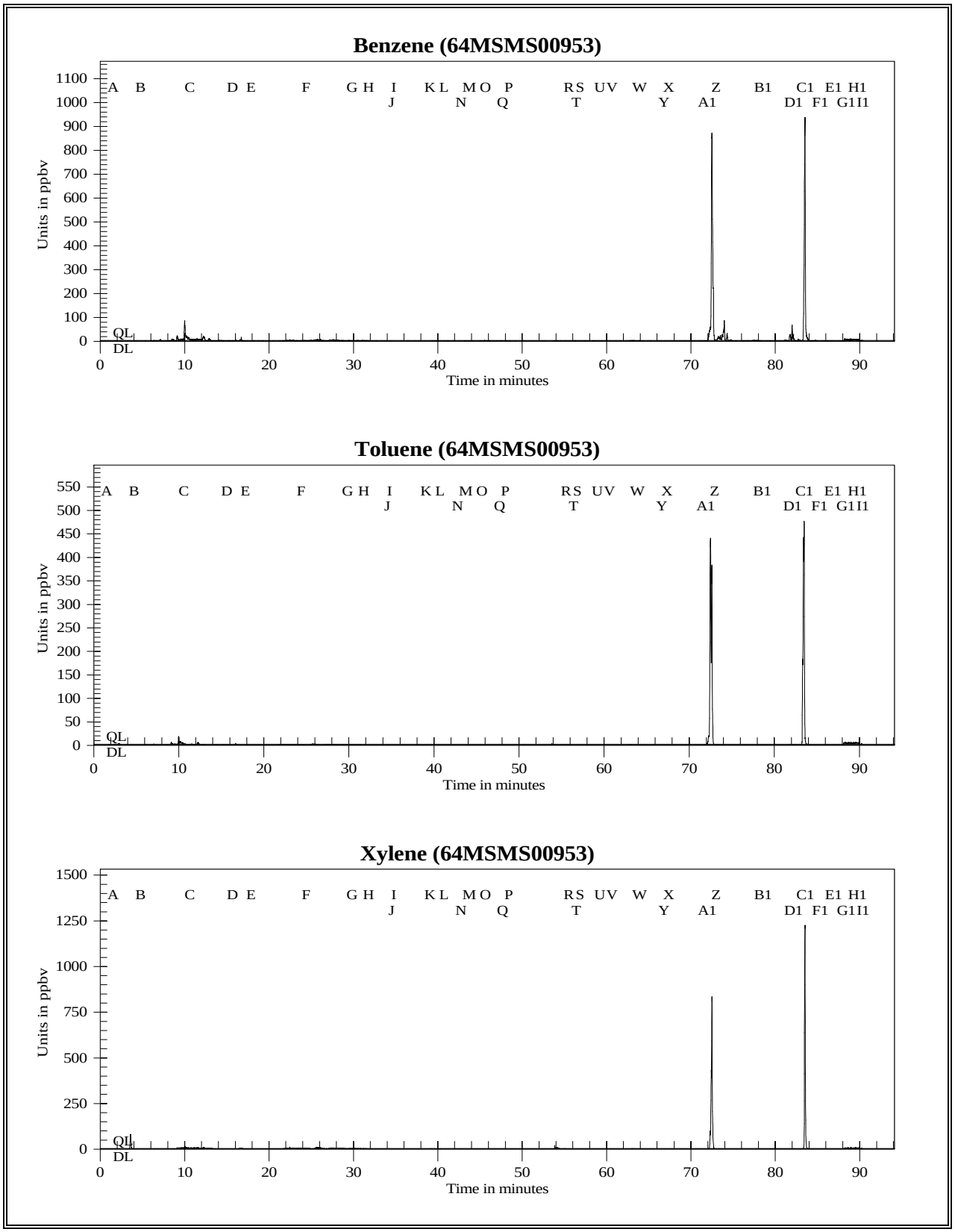


Figure 148c Mobile Monitoring Channelview to Baytown in ppbv for Benzene, Toluene, and Xylenes

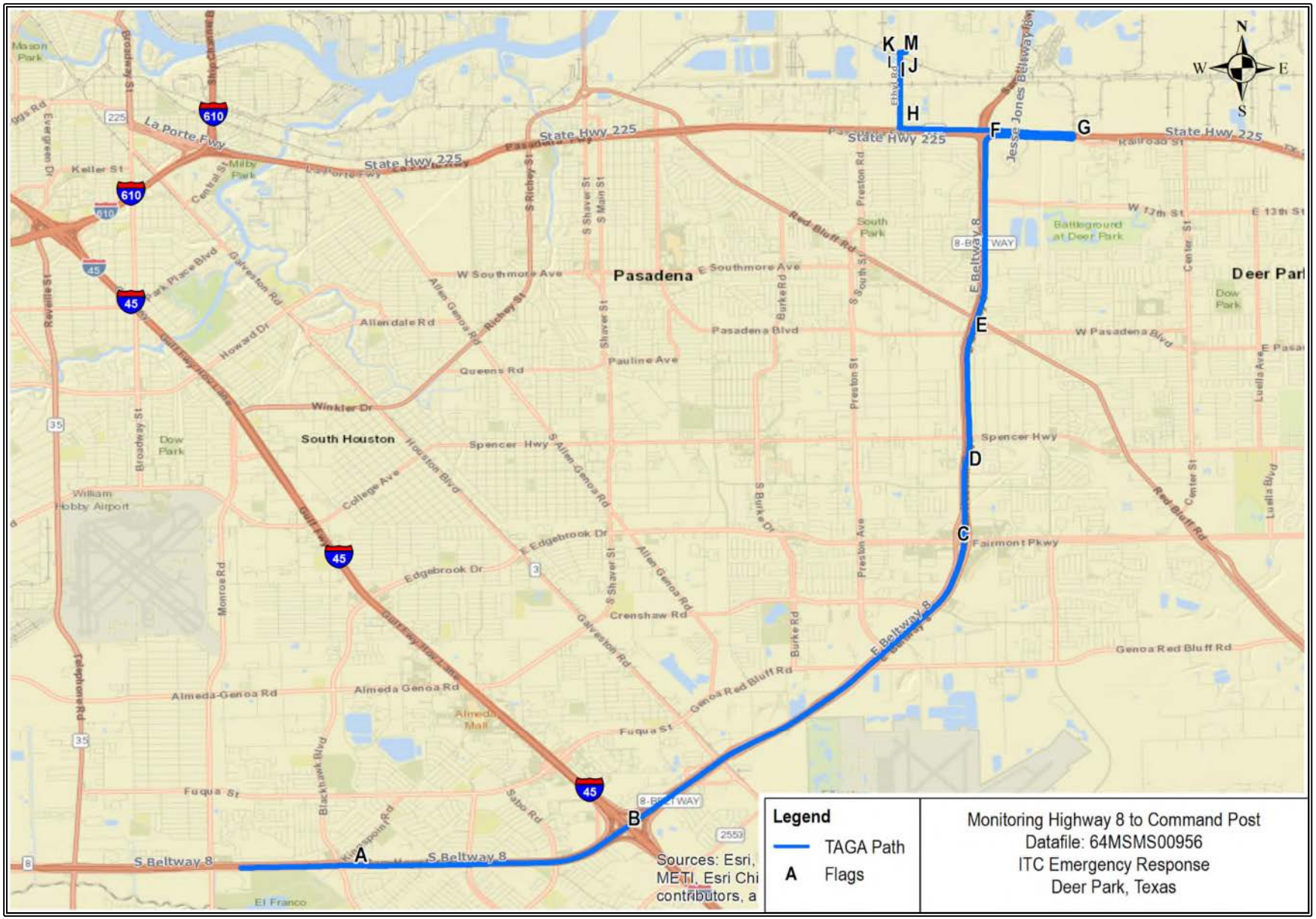


Figure 149a Monitoring Highway 8 to Command Post Path, 64MSMS00956

Figure 149b

TAGA File Event Summary
File: 64MSMS00956 Acquired on 14 April 2019 at 08:05:52
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	1.0	93	Start mobile monitoring on Highway 8 North at Blackhawk Boulevard
B	3.3	319	Cross Highway 45
C	7.5	712	Cross Fairmont Parkway
D	8.3	791	Exit onto Highway 8 Service Road
E	10.6	1010	Cross Pasadena Boulevard
F	14.4	1371	Right turn onto Pasadena Freeway Frontage Road
G	15.6	1484	U-turn on Pasadena Freeway Frontage Road at Railroad Street
H	19.4	1850	Right turn onto Ethyl Road
I	22.7	2160	End mobile monitoring at EPA Command Post
J	23.0	2190	Start ambient
K	24.8	2358	End ambient
L	28.2	2683	Start 30 mL/min spike
M	29.2	2780	End 30 mL/min spike

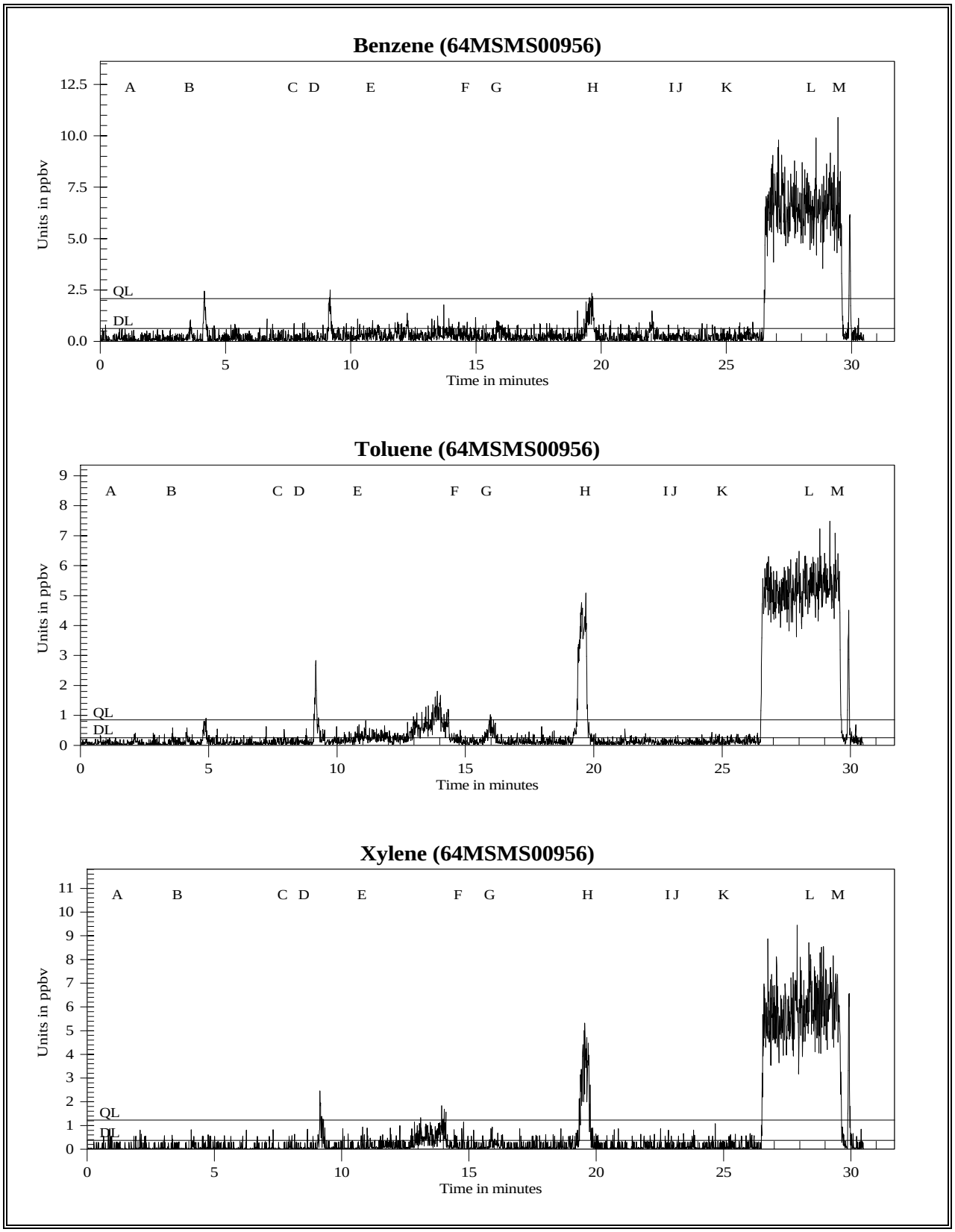


Figure 149c Mobile Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

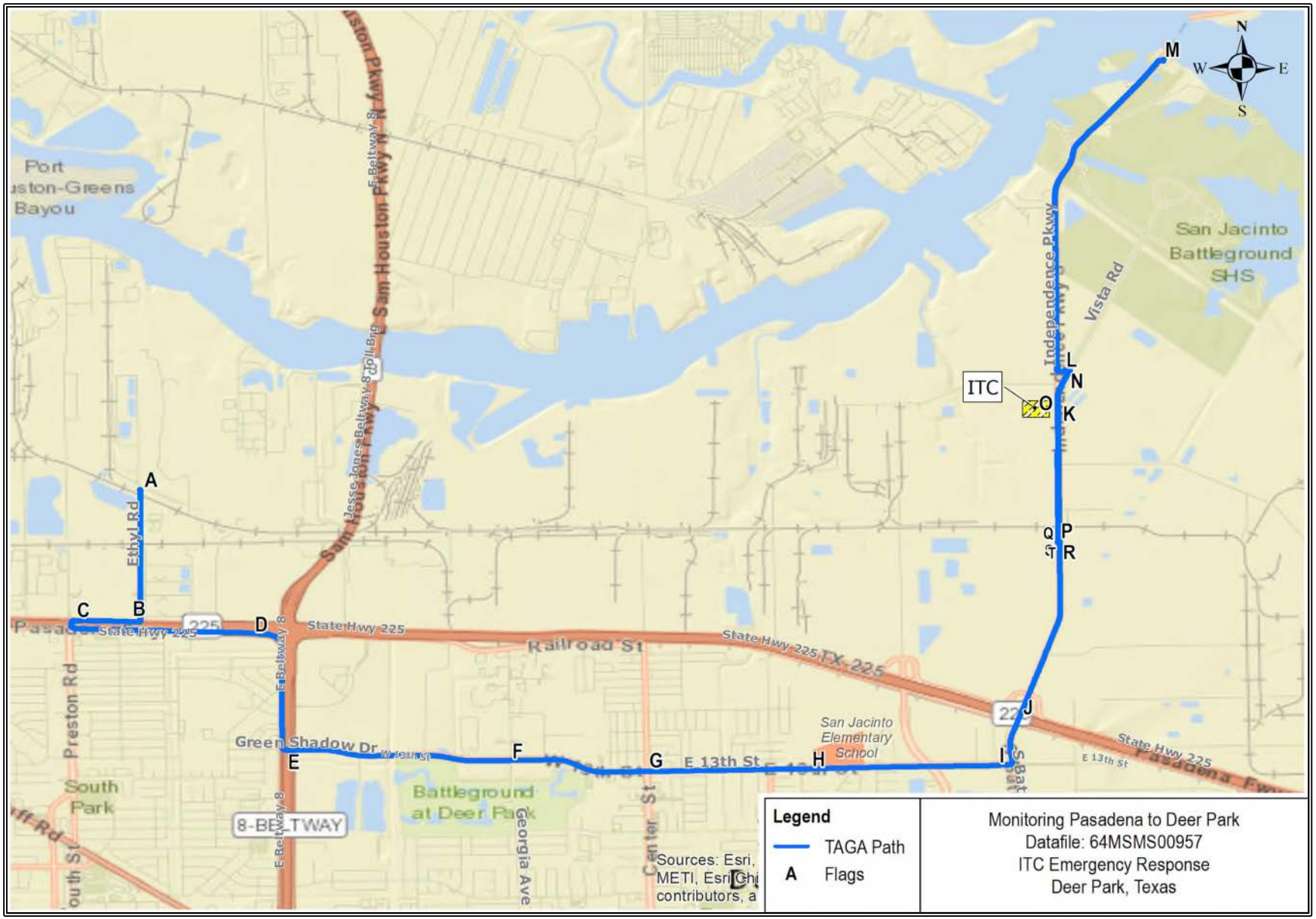


Figure 150a Monitoring Pasadena to Deer Park Path, 64MSMS00957

Figure 150b

TAGA File Event Summary
File: 64MSMS00957 Acquired on 14 April 2019 at 12:34:47
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	3.7	354	Start mobile monitoring at EPA Command Post
B	6.2	590	Right turn onto Pasadena Freeway Frontage Road
C	7.0	669	U-turn on Pasadena Freeway Frontage Road at Preston Road
D	9.1	867	Right turn onto Highway 8 Service Road
E	11.0	1050	Left turn onto Greenshadow Drive
F	14.1	1341	Cross Georgia Avenue continuing onto W 13th Street
G	15.8	1504	Cross Center Street
H	17.9	1707	Passing San Jacinto Elementary School
I	20.2	1924	Left turn onto Battleground Road
J	21.0	2000	Continuing onto Independence Parkway
K	27.1	2574	Passing ITC Site
L	28.3	2694	Cross Vista Road
M	36.9	3506	U-turn on Independence Parkway at Juan Seguin Park
N	42.4	4030	Cross Vista Road
O	43.7	4154	Passing ITC Site
P	47.7	4540	End mobile monitoring on Independence Parkway
Q	48.1	4578	Start ambient
R	49.8	4732	End ambient
S	50.9	4841	Start 30 mL/min spike
T	52.0	4944	End 30 mL/min spike

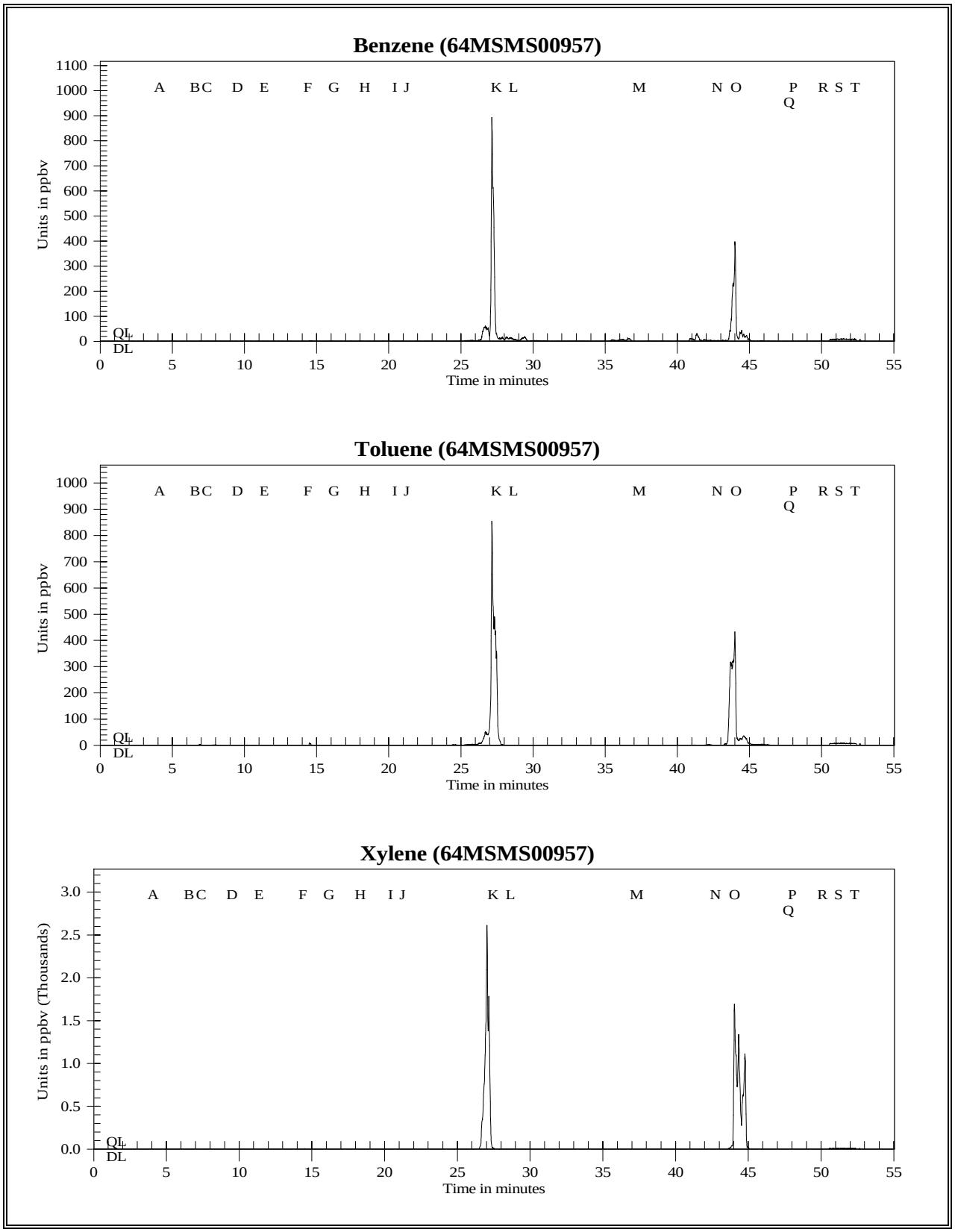


Figure 150c Mobile Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

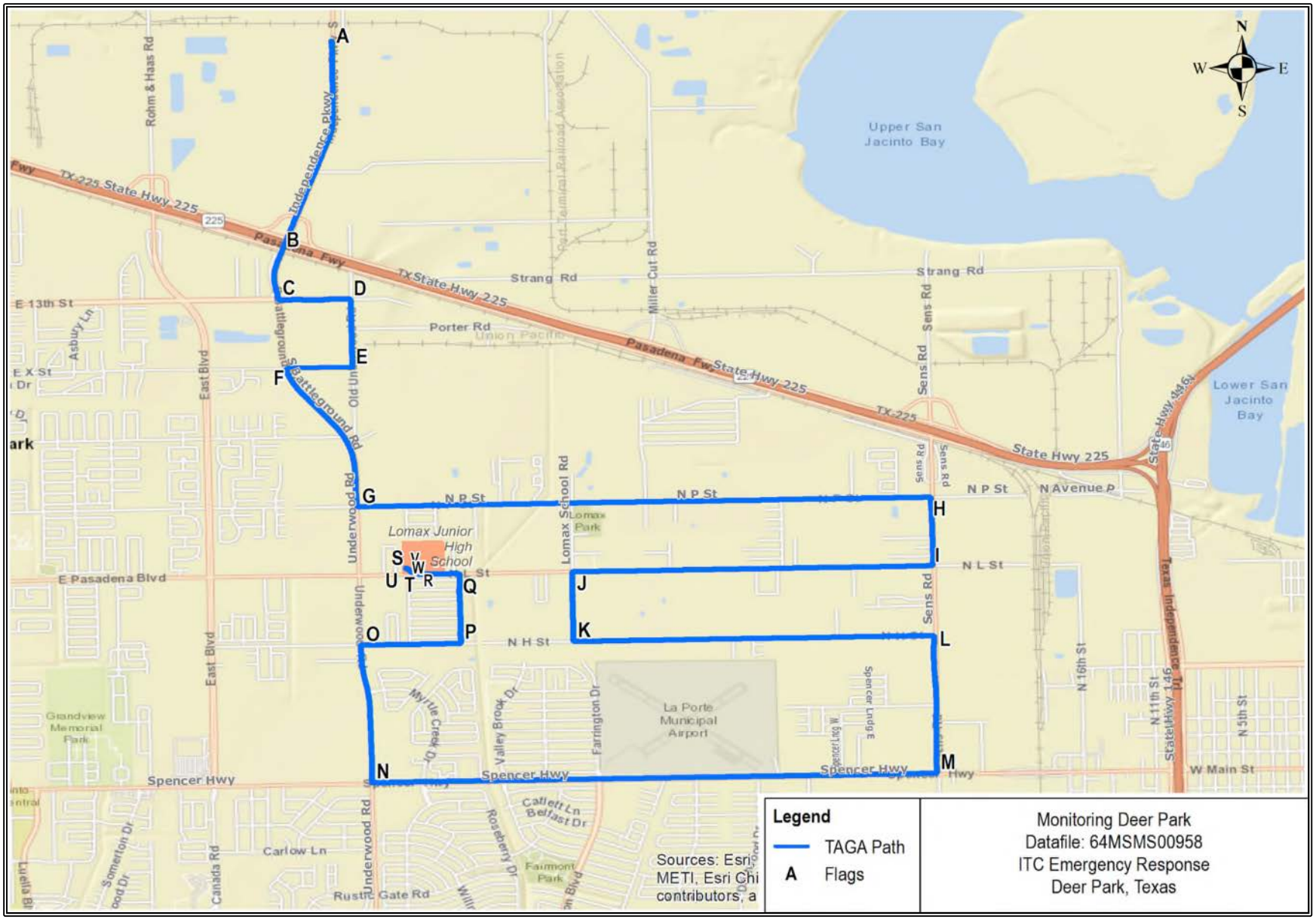


Figure 151a Monitoring Deer Park Path, 64MSMS00958

Figure 151b

TAGA File Event Summary
File: 64MSMS00958 Acquired on 14 April 2019 at 13:29:48
Title: Monitoring Deer Park

Flag	Time	Sequence	Description
A	2.3	218	Start mobile monitoring on Independence Parkway
B	5.7	544	Cross Highway 225
C	6.5	615	Left turn onto E 13th Street
D	7.8	747	Right turn onto Old Underwood Road
E	9.4	896	Right turn onto East Avenue X
F	11.3	1077	Left turn onto Battleground Road
G	14.7	1400	Left turn onto North P Street
H	22.5	2138	Right turn onto Sens Road
I	23.9	2273	Right turn onto L Street
J	29.4	2797	Left turn onto Lomax School Road
K	31.9	3033	Left turn onto North H Street
L	38.9	3699	Right turn onto Sens Road
M	41.5	3943	Right turn onto Spencer Highway
N	50.3	4780	Right turn onto Underwood Road
O	52.7	5011	Right turn onto North H Street
P	54.4	5171	Left turn onto Meadowlark Lane
Q	56.6	5382	Left turn onto North L Street
R	57.3	5451	Right turn into Lomax Junior High School
S	57.9	5507	End mobile monitoring at Lomax Junior High School
T	58.3	5545	Start ambient
U	59.4	5645	End ambient
V	60.9	5790	Start 30 mL/min spike
W	62.1	5901	End 30 mL/min spike

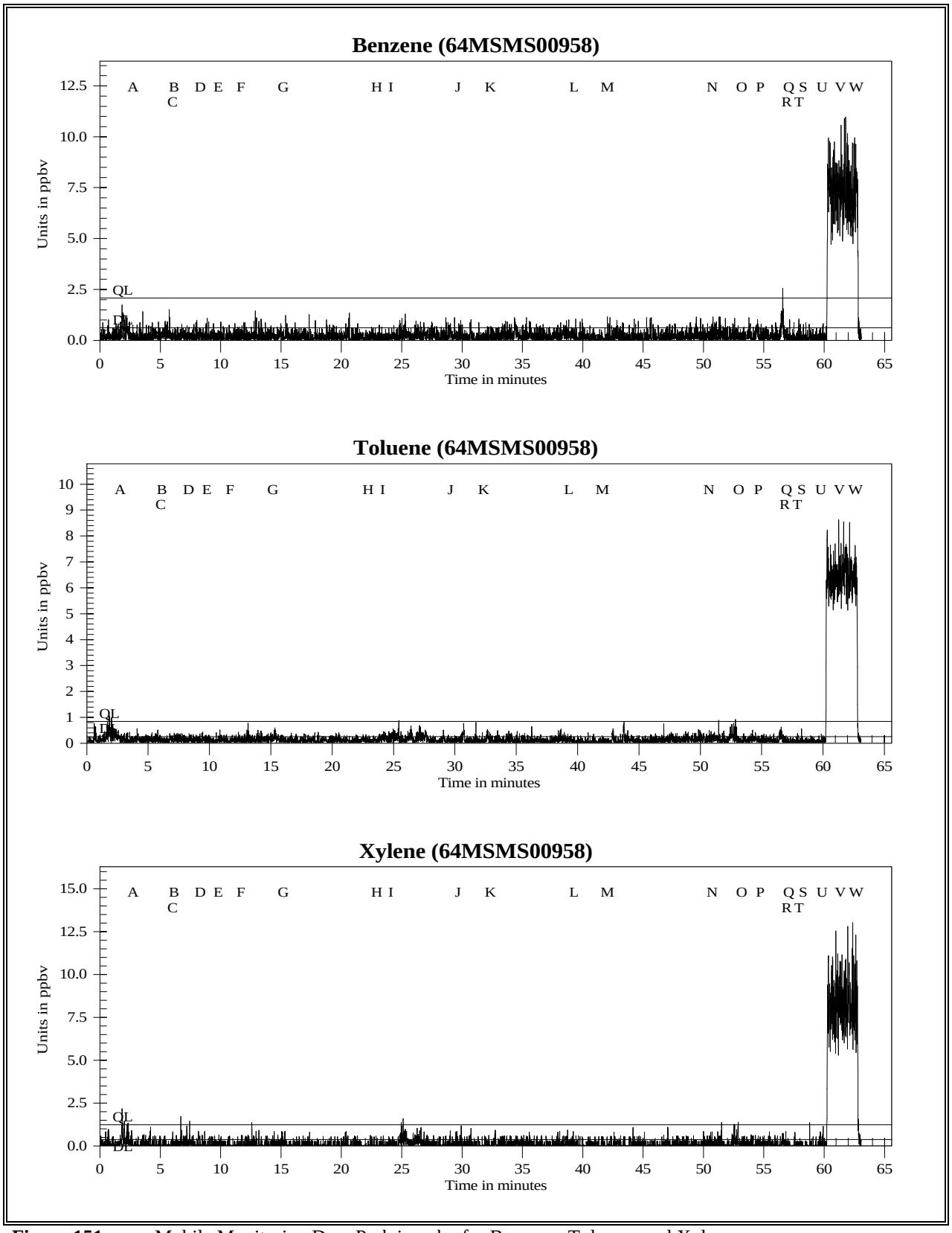


Figure 151c Mobile Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

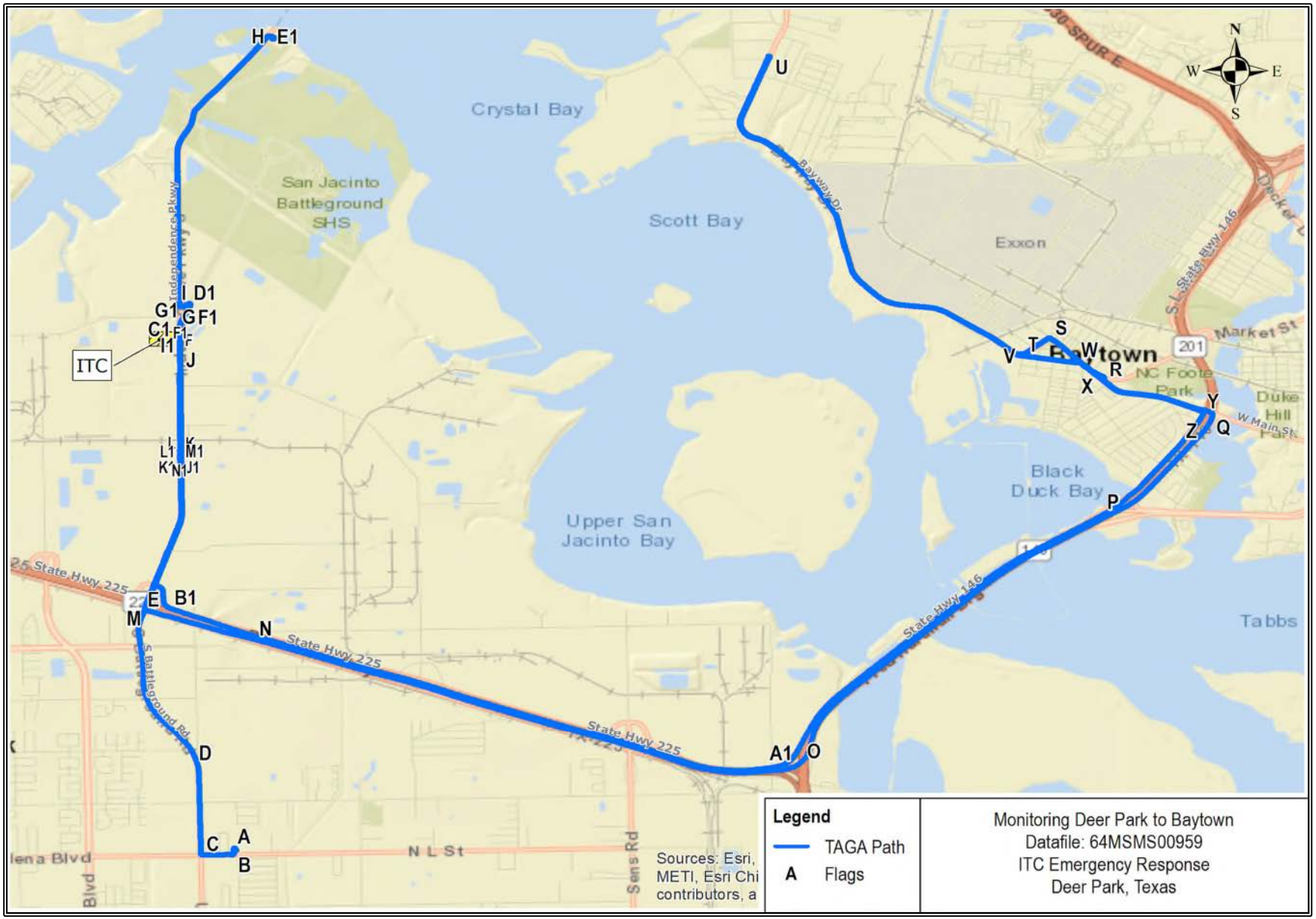


Figure 152a Monitoring Deer Park to Baytown Path, 64MSMS00959

Figure 152b

TAGA File Event Summary
File: 64MSMS00959 Acquired on 14 April 2019 at 14:35:10
Title: Monitoring Deer Park to Baytown

Flag	Time	Sequence	Description
A	1.9	181	Start mobile monitoring at Lomax Junior High School
B	3.3	313	Right turn onto North L Street
C	4.0	381	Right turn onto Underwood Road
D	6.1	585	Continuing onto Battleground Road
E	8.6	823	Continuing onto Independence Parkway
F	15.4	1465	Passing ITC Site
G	16.4	1563	Cross Vista Road
H	21.7	2062	U-turn on Independence Parkway at Juan Seguin Park
I	28.5	2706	Cross Vista Road
J	29.2	2774	Passing ITC Site
K	31.9	3037	Stationary on Independence Parkway
L	37.2	3533	Resume mobile monitoring on Independence Parkway
M	41.0	3903	Left turn onto Pasadena Freeway Frontage Road
N	42.2	4013	Merge onto Highway 225 East
O	45.6	4340	Merge onto Highway 146 North
P	48.3	4591	Exit onto Robert C Lanier Drive
Q	51.9	4938	Left turn onto W Main Street
R	54.0	5134	Left turn onto Market Street
S	55.5	5279	Left turn to continue on Market Street
T	56.3	5356	Merge onto Bayway Drive
U	63.2	6008	U-turn on Bayway Drive at Weaver Street
V	70.2	6679	Continuing onto Wisconsin Street
W	71.7	6820	Right turn onto Market Street
X	72.8	6920	Continuing onto W Main Street
Y	74.3	7064	Right turn onto Robert C Lanier Drive
Z	76.5	7274	Merge onto Highway 146 South
A1	79.4	7546	Merge onto Highway 225 West
B1	83.3	7925	Right turn onto Independence Parkway
C1	89.7	8530	Passing ITC Site
D1	90.5	8603	Cross Vista Road
E1	96.5	9173	U-turn on Independence Parkway at Juan Seguin Park
F1	102.7	9768	Left turn onto Vista Road
G1	103.9	9882	Stationary on Vista Road
H1	105.4	10024	Resume mobile monitoring on Vista Road

Figure 152b (continued)

TAGA File Event Summary
File: 64MSMS00959 Acquired on 14 April 2019 at 14:35:10
Title: Monitoring Deer Park to Baytown

Flag	Time	Sequence	Description
I1	105.8	10056	Passing ITC Site
J1	108.8	10348	End mobile monitoring on Independence Parkway
K1	109.3	10389	Start ambient
L1	110.3	10484	End ambient
M1	111.5	10601	Start 30 mL/min spike
N1	112.5	10696	End 30 mL/spike

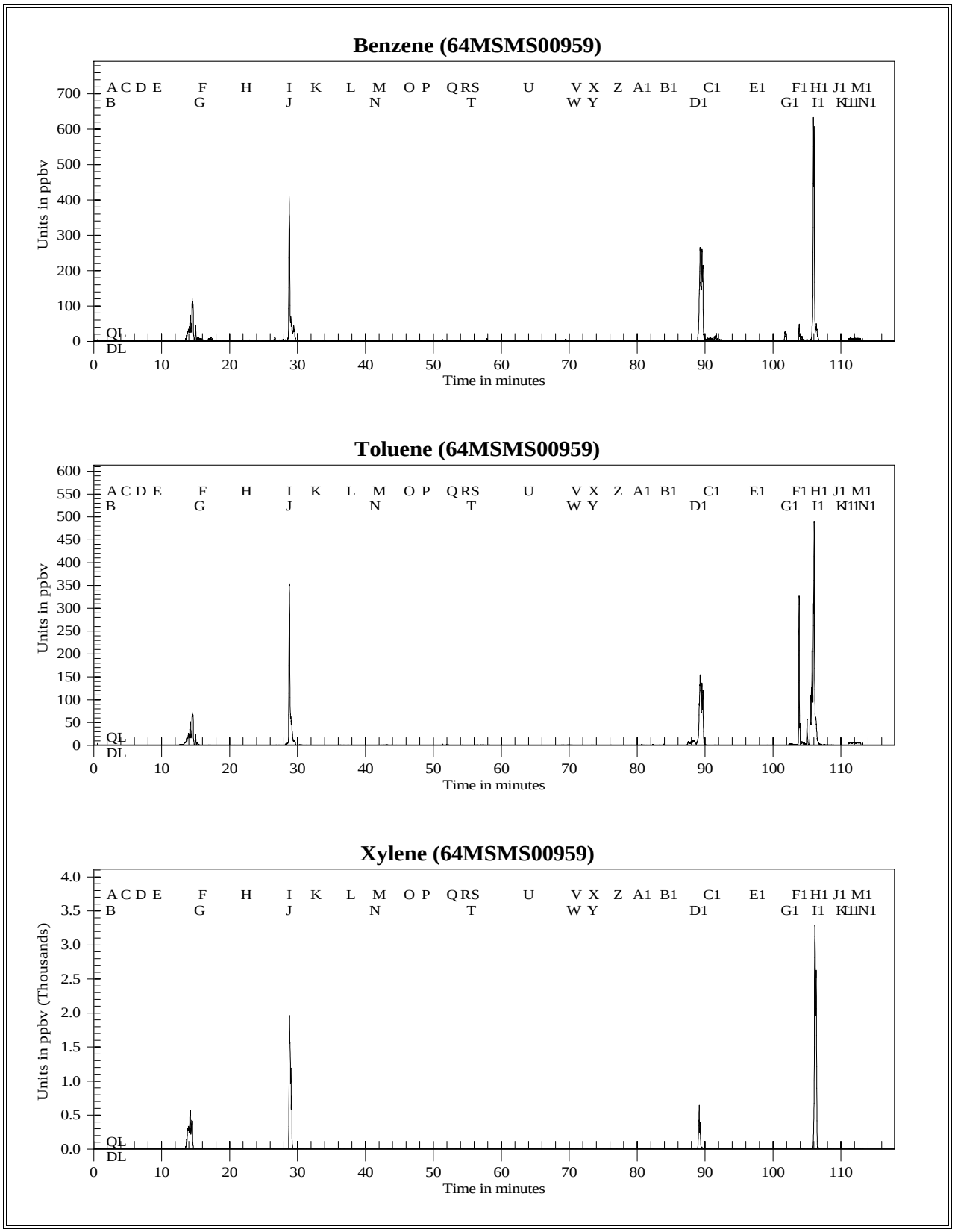


Figure 152c Mobile Monitoring Deer Park to Baytown in ppbv for Benzene, Toluene, and Xylenes

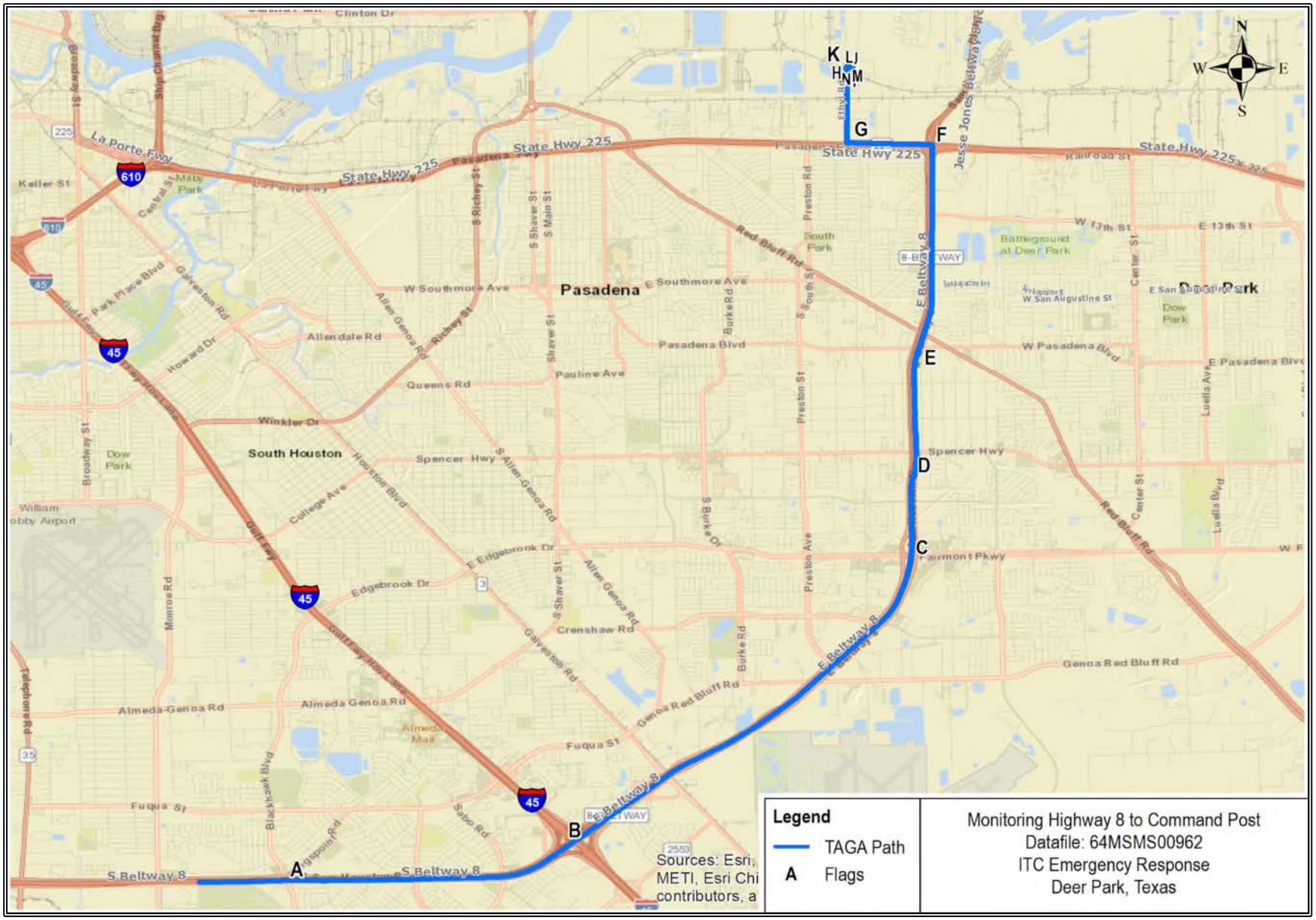


Figure 153a Monitoring Highway 8 to Command Post Path, 64MSMS00962

Figure 153b

TAGA File Event Summary
File: 64MSMS00962 Acquired on 15 April 2019 at 07:57:57
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	1.8	175	Start mobile monitoring on Highway 8 North at Blackhawk Boulevard
B	4.7	443	Cross Highway 45
C	8.8	837	Cross Fairmont Parkway
D	9.7	926	Exit onto Highway 8 Service Road
E	14.1	1344	Cross Pasadena Boulevard
F	19.9	1891	Left turn onto Pasadena Freeway Frontage Road
G	21.1	2010	Right turn onto Ethyl Road
H	23.4	2224	Stationary at railroad crossing on Ethyl Road
I	28.0	2663	Resume mobile monitoring on Ethyl Road
J	30.2	2870	End mobile monitoring at EPA Command Post
K	31.9	3038	Start ambient
L	33.0	3135	End ambient
M	35.2	3347	Start 30 mL/min spike
N	36.4	3463	End 30 mL/min spike

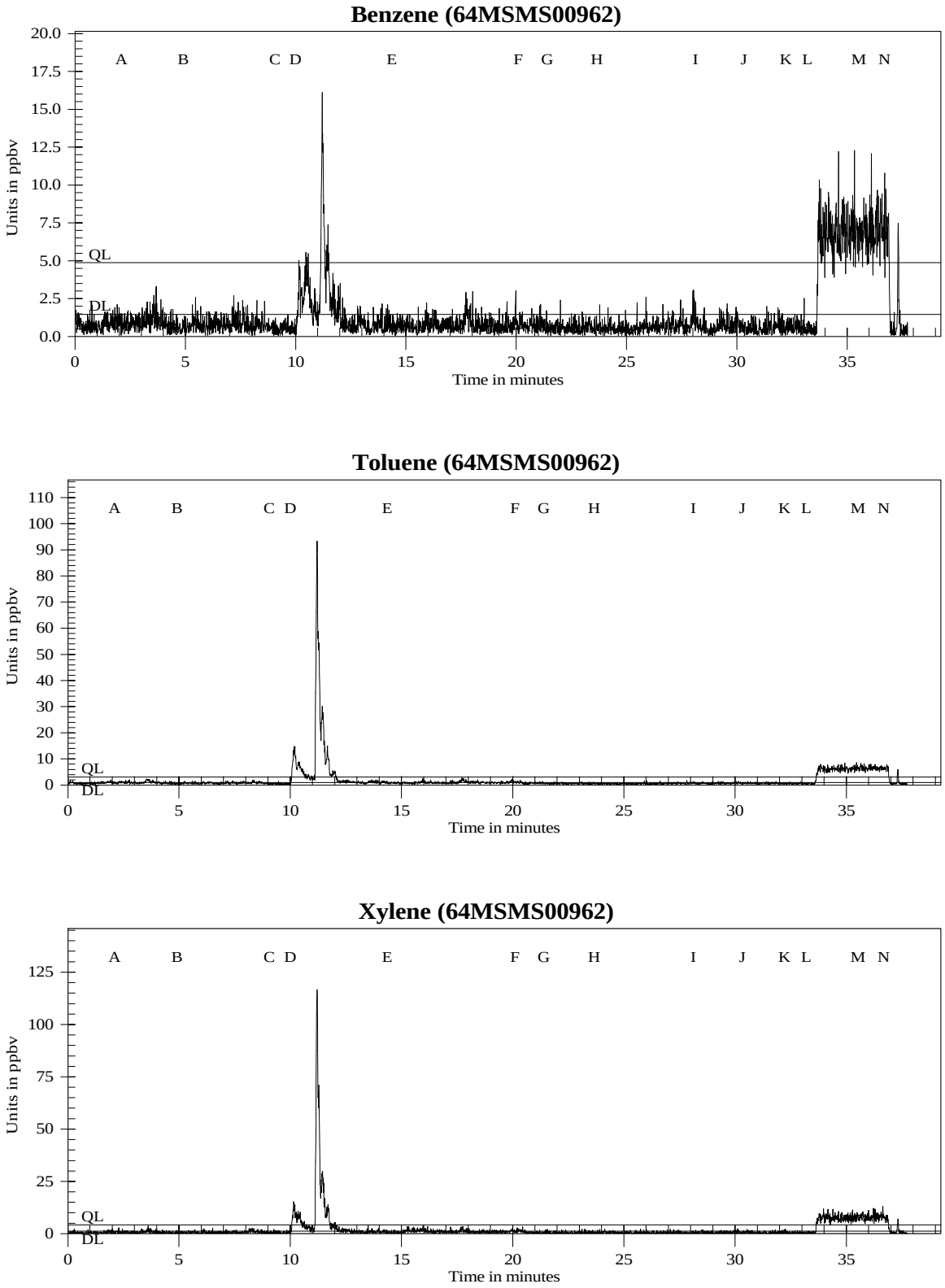


Figure 153c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

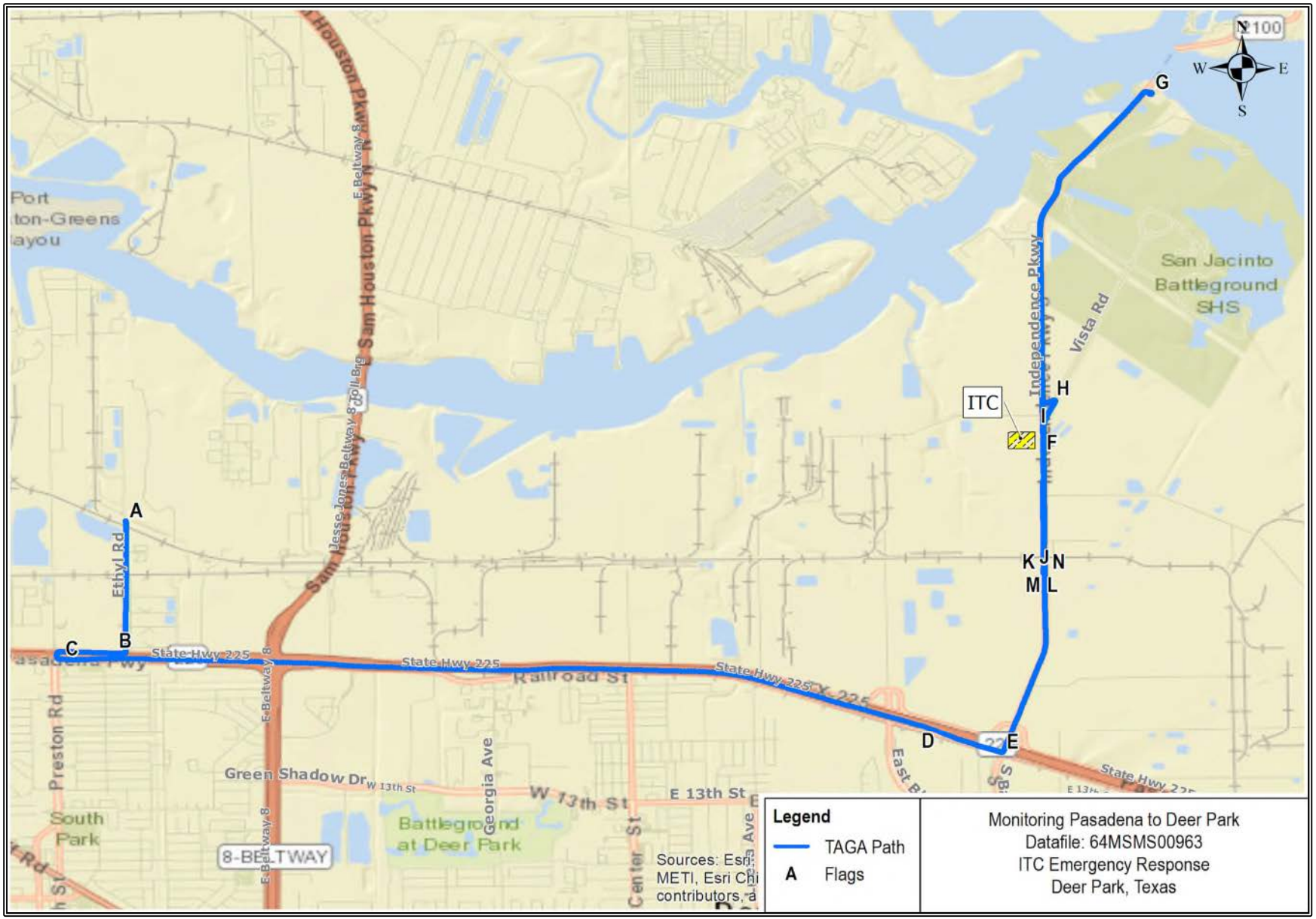


Figure 154a Monitoring Pasadena to Deer Park Path, 64MSMS00963

Figure 154b

TAGA File Event Summary
File: 64MSMS00963 Acquired on 15 April 2019 at 08:52:36
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	1.0	93	Start mobile monitoring at EPA Command Post
B	3.9	376	Right turn Pasadena Freeway Frontage Road
C	5.0	473	U-turn on Pasadena Freeway Frontage Road at Preston Road
D	9.5	905	Exit Highway 225 onto Pasadena Freeway Frontage Road
E	10.9	1040	Left turn onto Independence Parkway
F	16.7	1593	Passing ITC Site
G	23.9	2274	U-turn on Independence Parkway at Juan Seguin Park
H	31.7	3011	Cross Vista Road
I	32.9	3130	Passing ITC Site
J	36.3	3456	End mobile monitoring on Independence Parkway
K	36.8	3501	Start ambient
L	38.0	3613	End ambient
M	39.1	3718	Start 30 mL/min spike
N	40.2	3822	End 30 mL/min spike

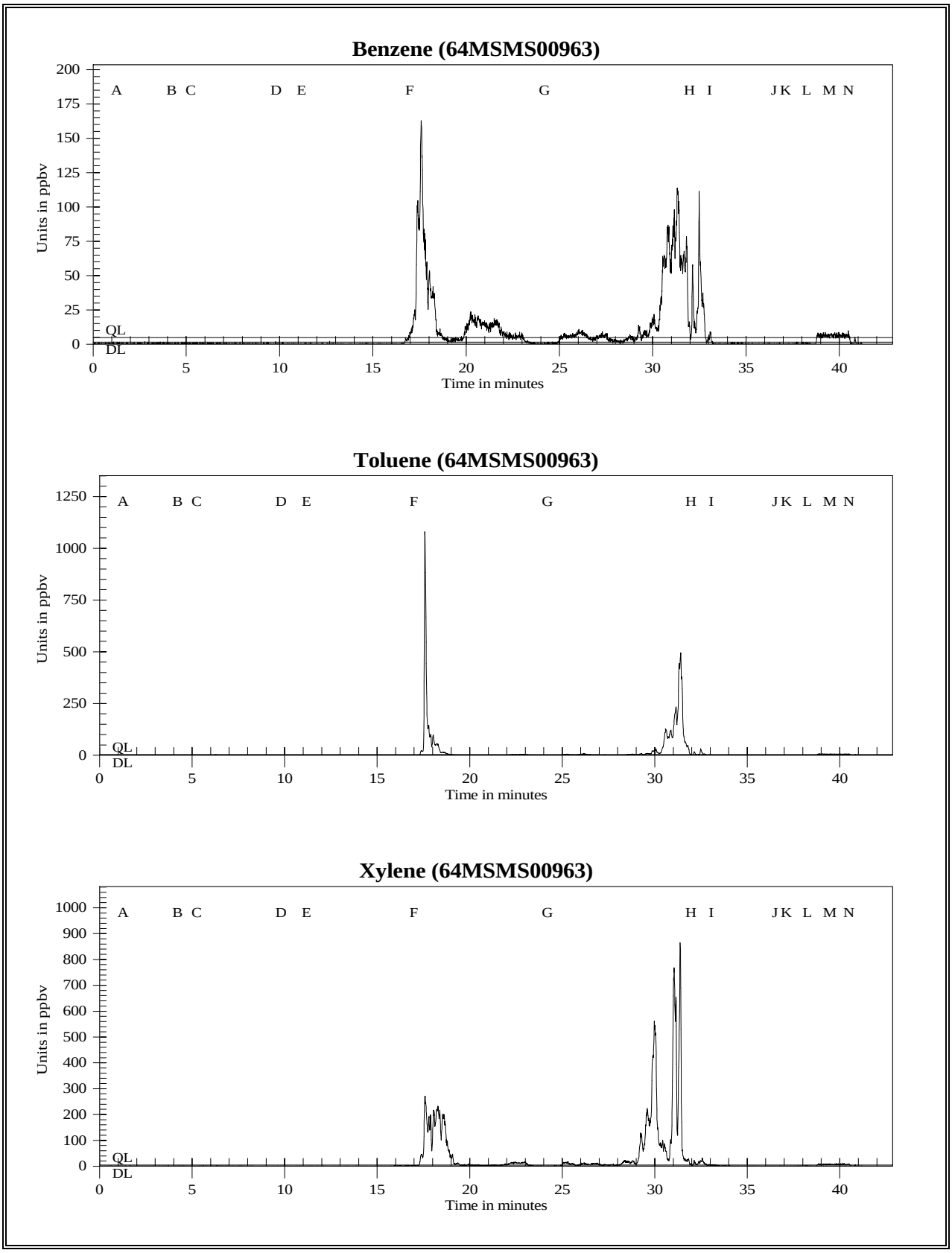


Figure 154c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

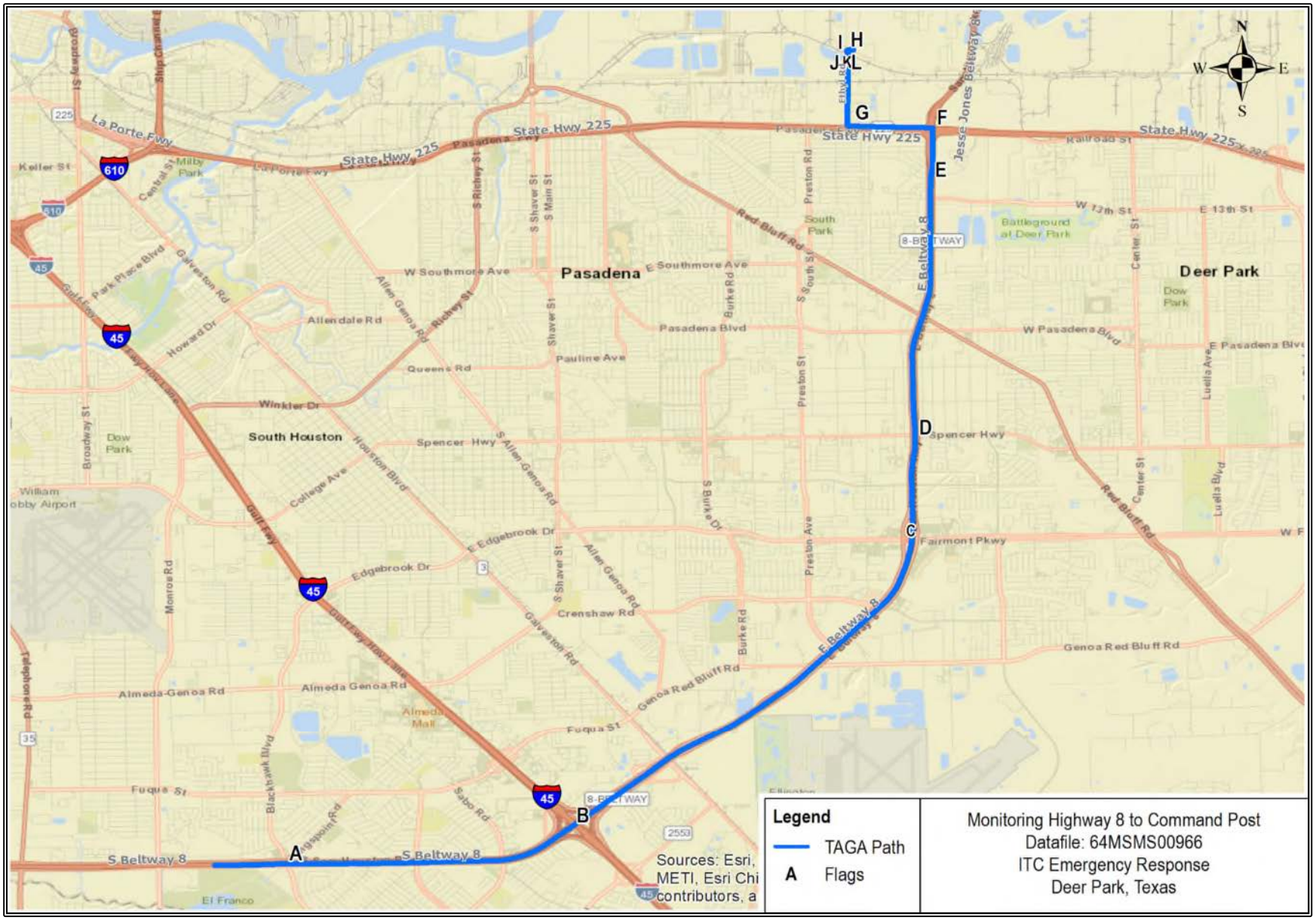


Figure 155a Monitoring Highway 8 to Command Post Path, 64MSMS00966

Figure 155b

TAGA File Event Summary
File: 64MSMS00966 Acquired on 17 April 2019 at 08:09:14
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	0.8	80	Start mobile monitoring on Highway 8 North at Blackhawk Boulevard
B	3.7	349	Cross Highway 45
C	8.1	771	Cross Fairmont Parkway
D	9.3	883	Cross Spencer Highway
E	12.2	1162	Exit onto Highway 8 Service Road
F	14.7	1395	Left turn onto Pasadena Freeway Frontage Road
G	16.0	1525	Right turn onto Ethyl Road
H	19.8	1880	End mobile monitoring at EPA Command Post
I	21.7	2062	Start ambient
J	24.4	2320	End ambient
K	27.1	2580	Start 30 mL/min spike
L	28.4	2705	End 30 mL/min spike

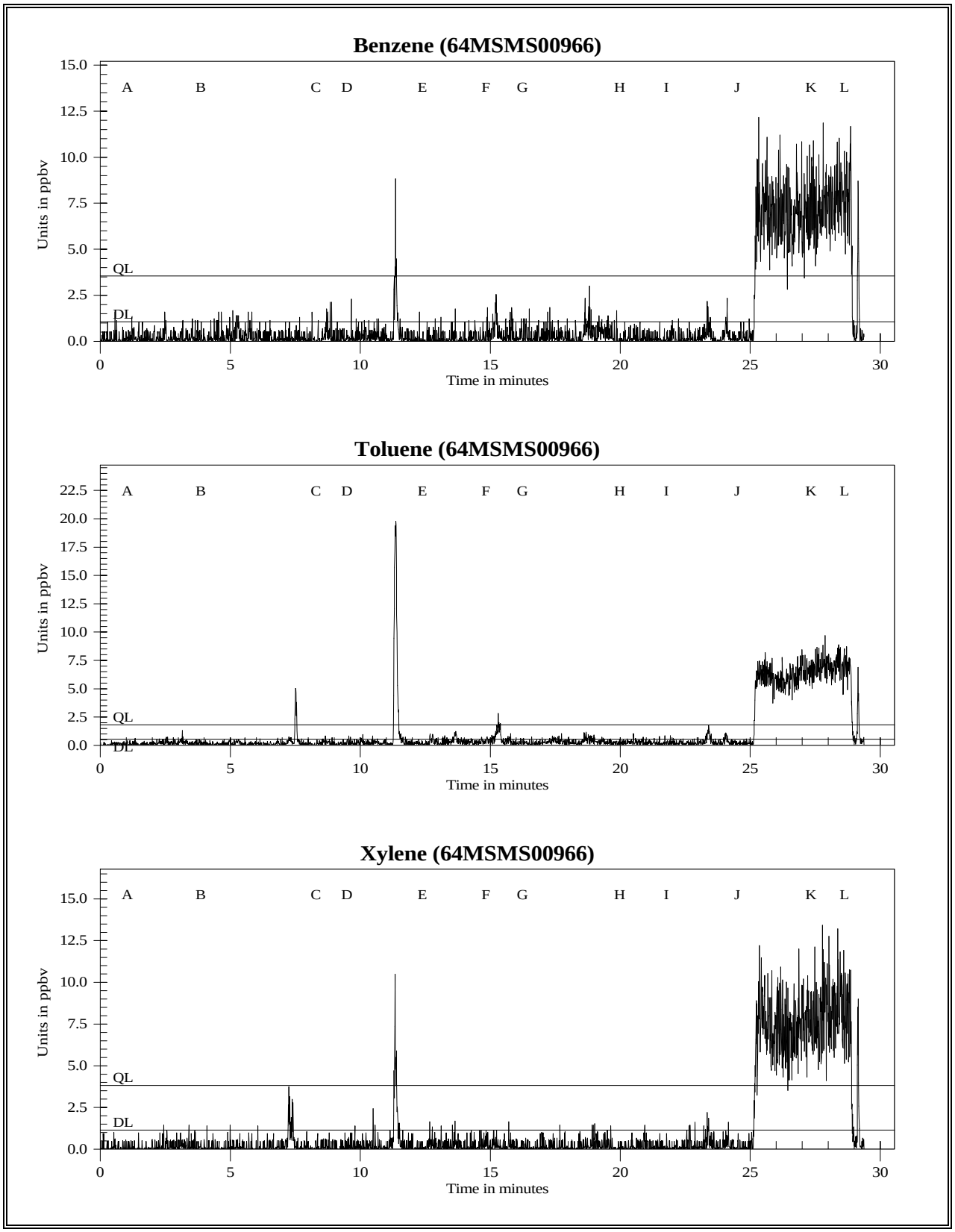


Figure 155c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

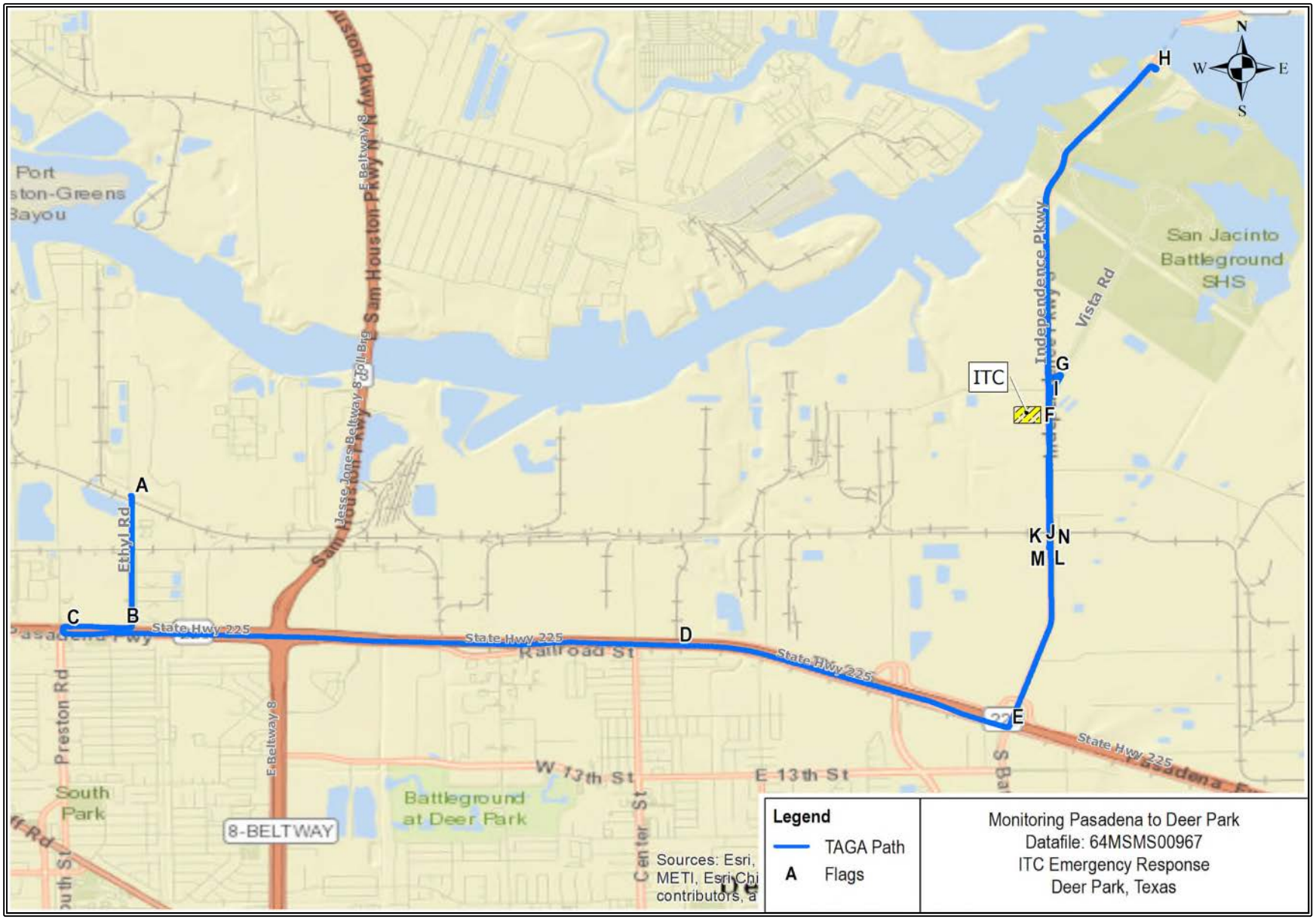


Figure 156a Monitoring Pasadena to Deer Park Path, 64MSMS00967

Figure 156b

TAGA File Event Summary
File: 64MSMS00967 Acquired on 17 April 2019 at 08:51:22
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	3.2	302	Start mobile monitoring at EPA Command Post
B	6.6	625	Right turn onto Pasadena Freeway Frontage Road
C	7.4	701	U-turn on Pasadena Freeway Frontage Road at Preston Road
D	10.9	1034	Cross Center Street
E	14.0	1335	Left turn onto Independence Parkway
F	19.5	1855	Passing ITC Site
G	20.2	1918	Cross Vista Road
H	27.4	2606	U-turn on Independence Parkway at Juan Seguin Park
I	35.3	3358	Passing ITC Site
J	39.2	3727	End mobile monitoring on Independence Parkway
K	39.6	3764	Start ambient
L	40.6	3861	End ambient
M	41.9	3983	Start 30 mL/min spike
N	43.2	4105	End 30 mL/min spike

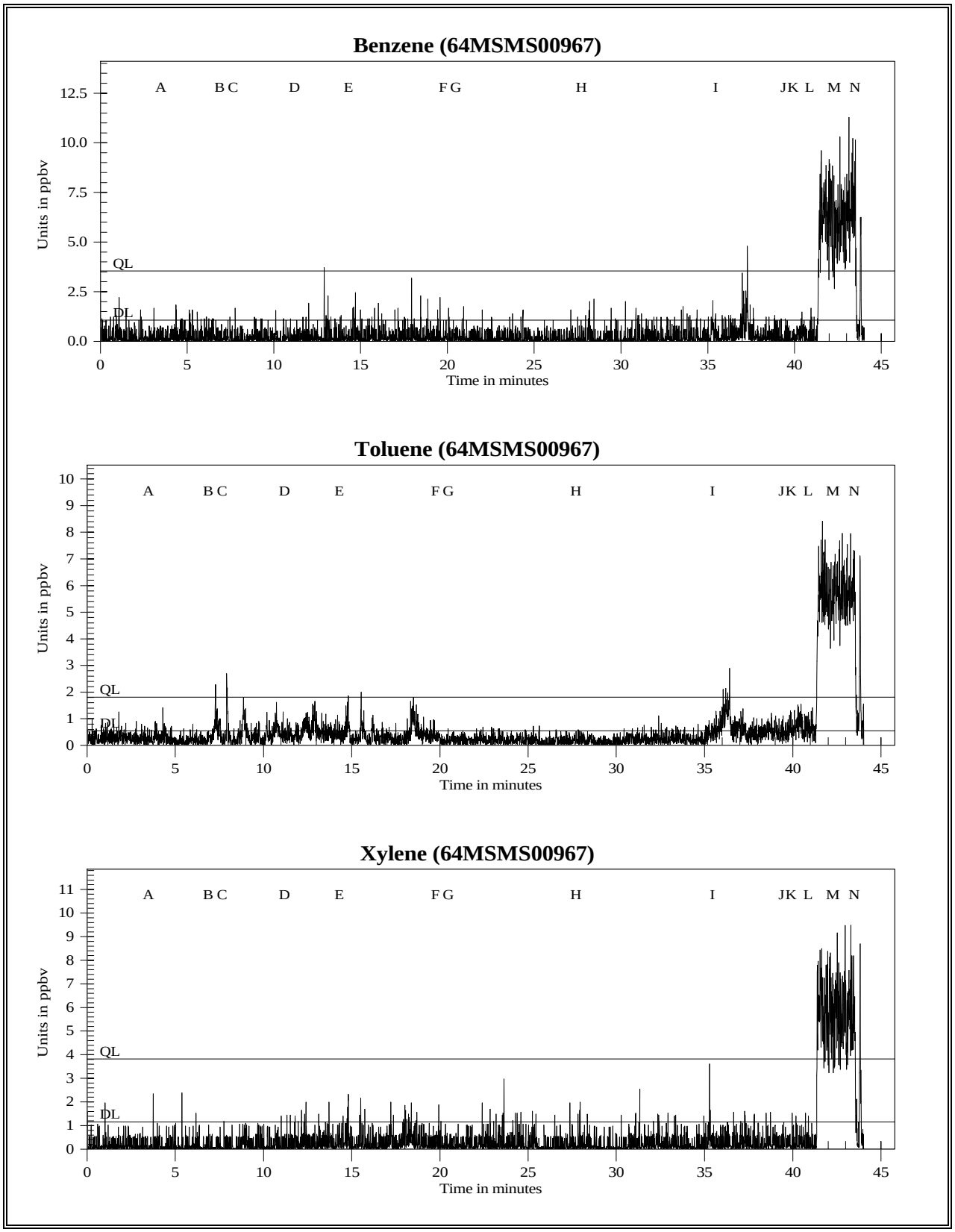


Figure 156c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

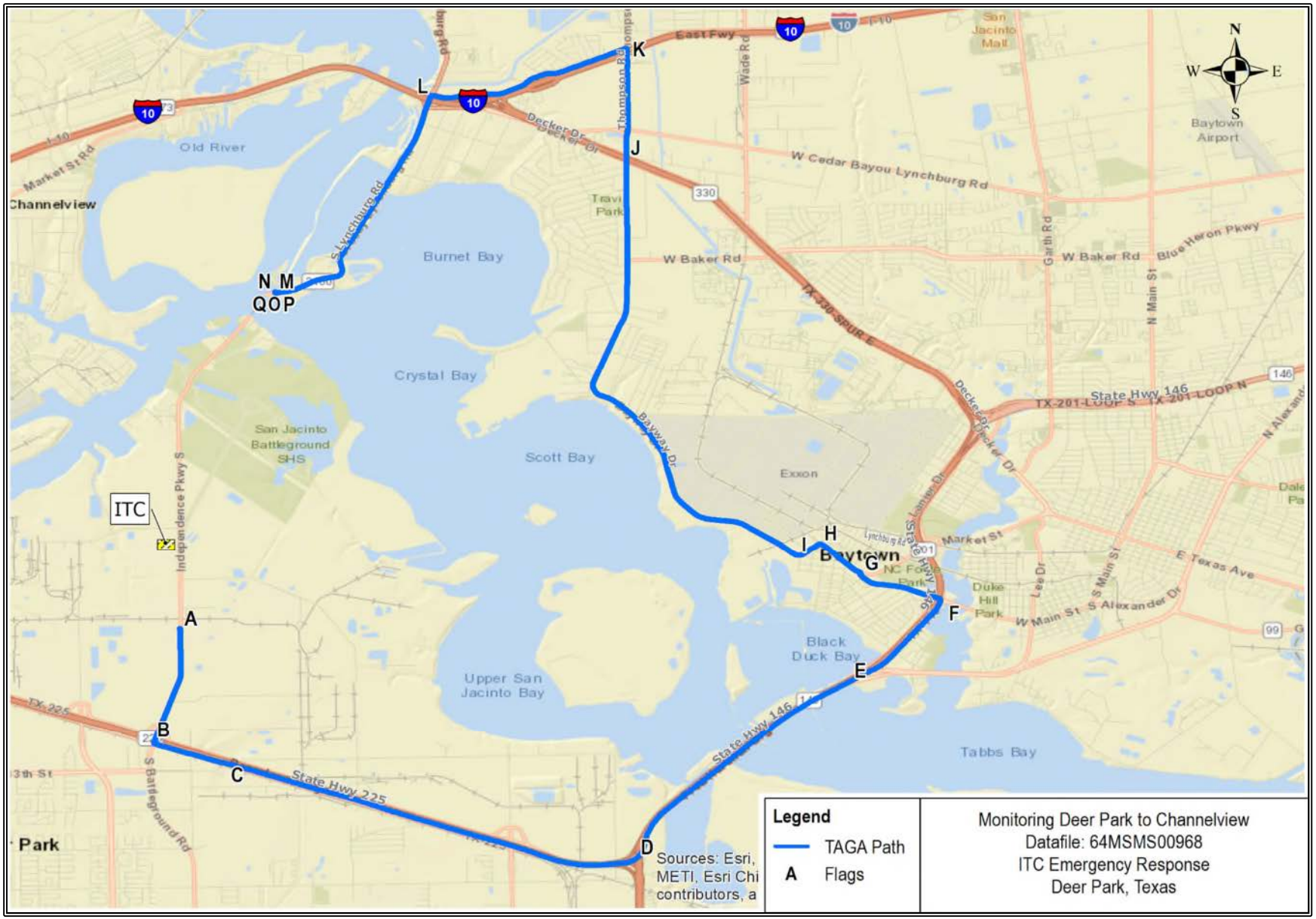


Figure 157a Monitoring Deer Park to Channelview Path, 64MSMS00968

Figure 157b

TAGA File Event Summary
File: 64MSMS00968 Acquired on 17 April 2019 at 09:40:13
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	0.9	88	Start mobile monitoring on Independence Parkway
B	4.3	409	Left turn onto Pasadena Freeway Frontage Road
C	5.2	495	Merge onto Highway 225 East
D	8.6	817	Merge onto Highway 146 North
E	10.9	1040	Exit onto Robert C Lanier Drive
F	14.9	1416	Left turn onto W Main Street
G	16.9	1606	Left turn onto Market Street
H	18.8	1791	Left turn to continue onto Market Street
I	19.6	1869	Merge onto Bayway Drive
J	30.0	2856	Cross highway 330 continuing onto Thompson Road
K	32.4	3083	Left turn onto East Freeway Service Road
L	35.7	3398	Left turn onto Independence Parkway North
M	42.3	4019	End mobile monitoring at Lynchburg Ferry
N	42.6	4055	Start ambient
O	43.7	4154	End ambient
P	45.1	4285	Start 30 mL/min spike
Q	46.1	4380	End 30 mL/min spike

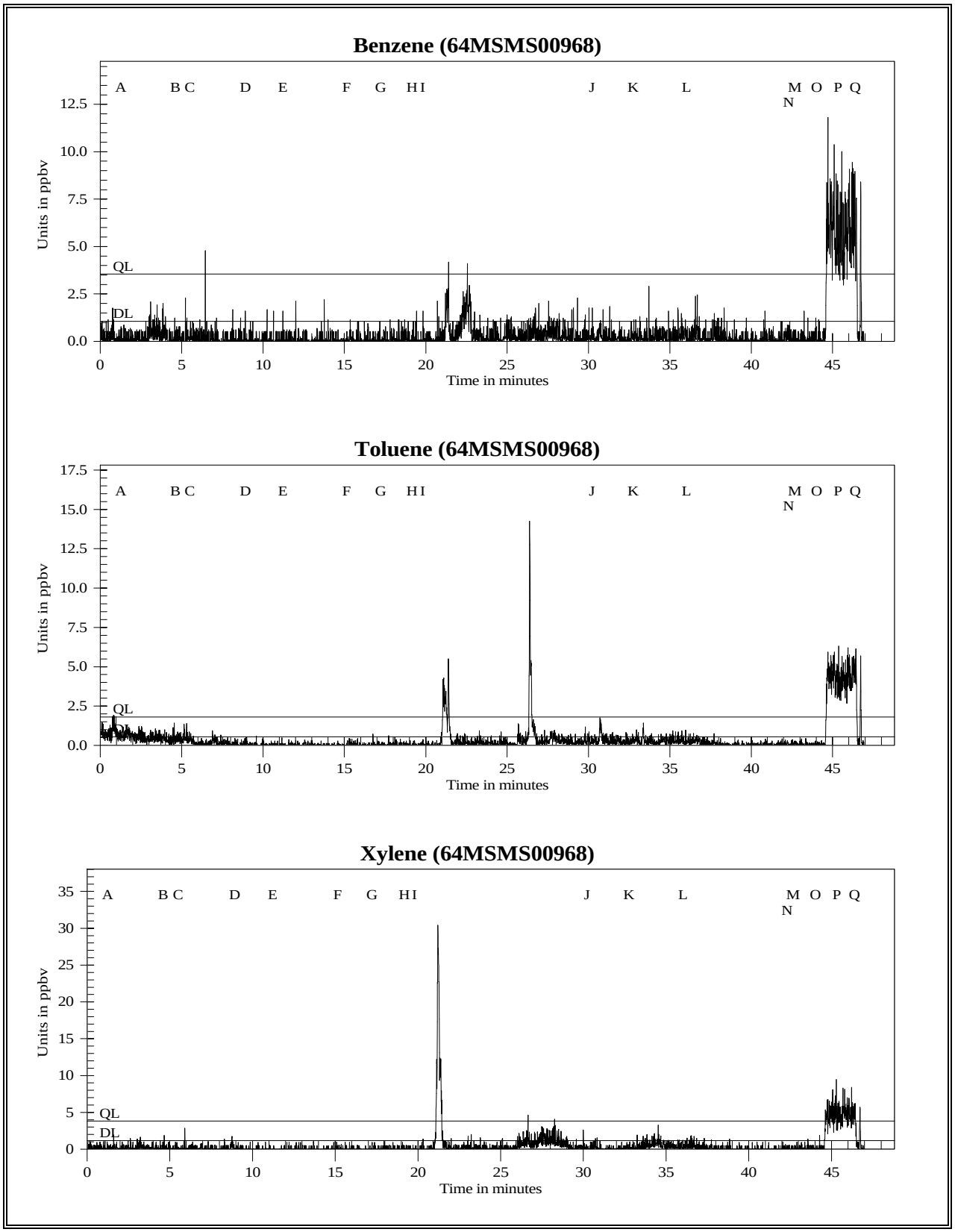


Figure 157c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

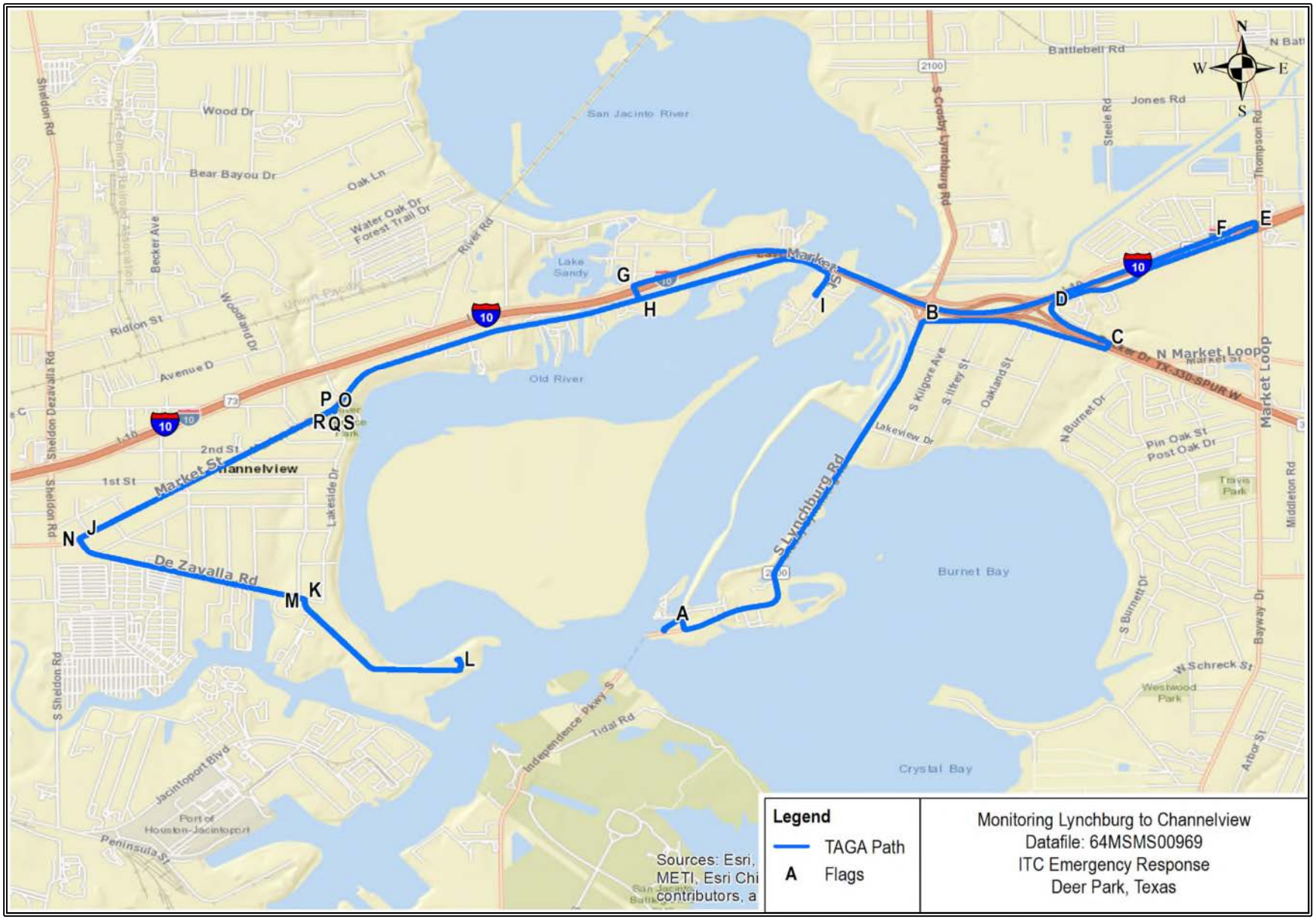


Figure 158a Monitoring Lynchburg to Channelview Path, 64MSMS00969

Figure 158b

TAGA File Event Summary
File: 64MSMS00969 Acquired on 17 April 2019 at 10:29:50
Title: Monitoring Lynchburg to Channelview

Flag	Time	Sequence	Description
A	1.4	137	Start mobile monitoring at Lynchburg Ferry
B	7.5	718	Right turn onto Decker Drive
C	9.3	883	U-turn on Decker Drive
D	10.1	958	Merge onto East Freeway Service Road
E	12.0	1137	U-turn on East Freeway Service Road at Thompson Road
F	12.9	1232	Merge onto Highway 10 West
G	19.0	1807	Left turn onto Monmouth Street
H	19.6	1861	Left turn onto Market Street
I	23.8	2260	U-turn on Market Street at Southwest Shipyard
J	35.7	3398	Left turn onto Dezavala Road
K	38.3	3640	Right turn to continue on Dezavala Road
L	43.6	4143	U-turn on Dezavala Road
M	49.7	4729	Left turn to continue onto Dezavala Road
N	52.4	4982	Right turn onto Market Street
O	58.6	5569	End mobile monitoring at River Terrace Park
P	58.9	5602	Start ambient
Q	60.9	5794	End ambient
R	62.0	5900	Start 30 mL/min spike
S	63.1	6001	End 30 mL/min spike

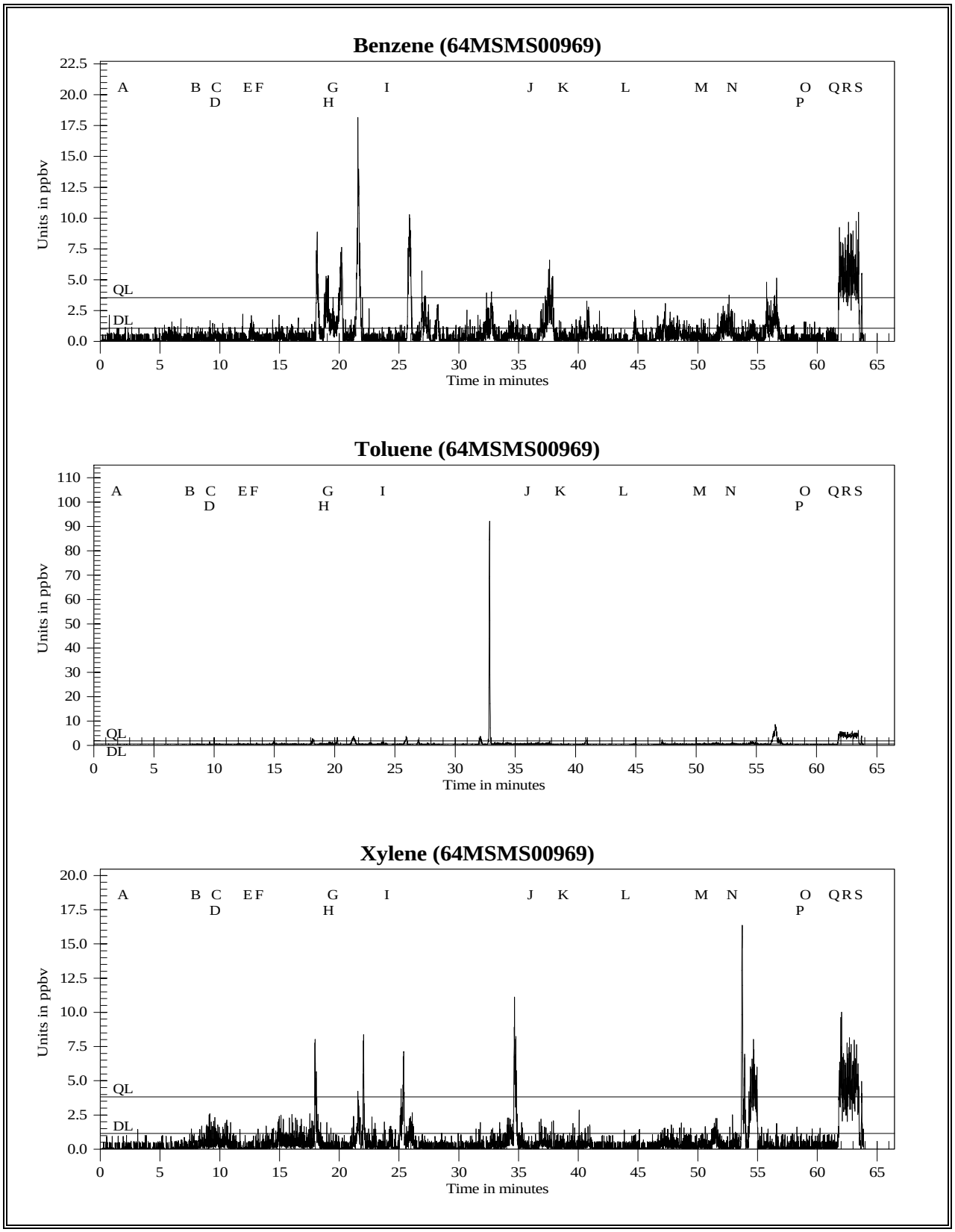


Figure 158c Monitoring Lynchburg to Channelview in ppbv for Benzene, Toluene, and Xylenes

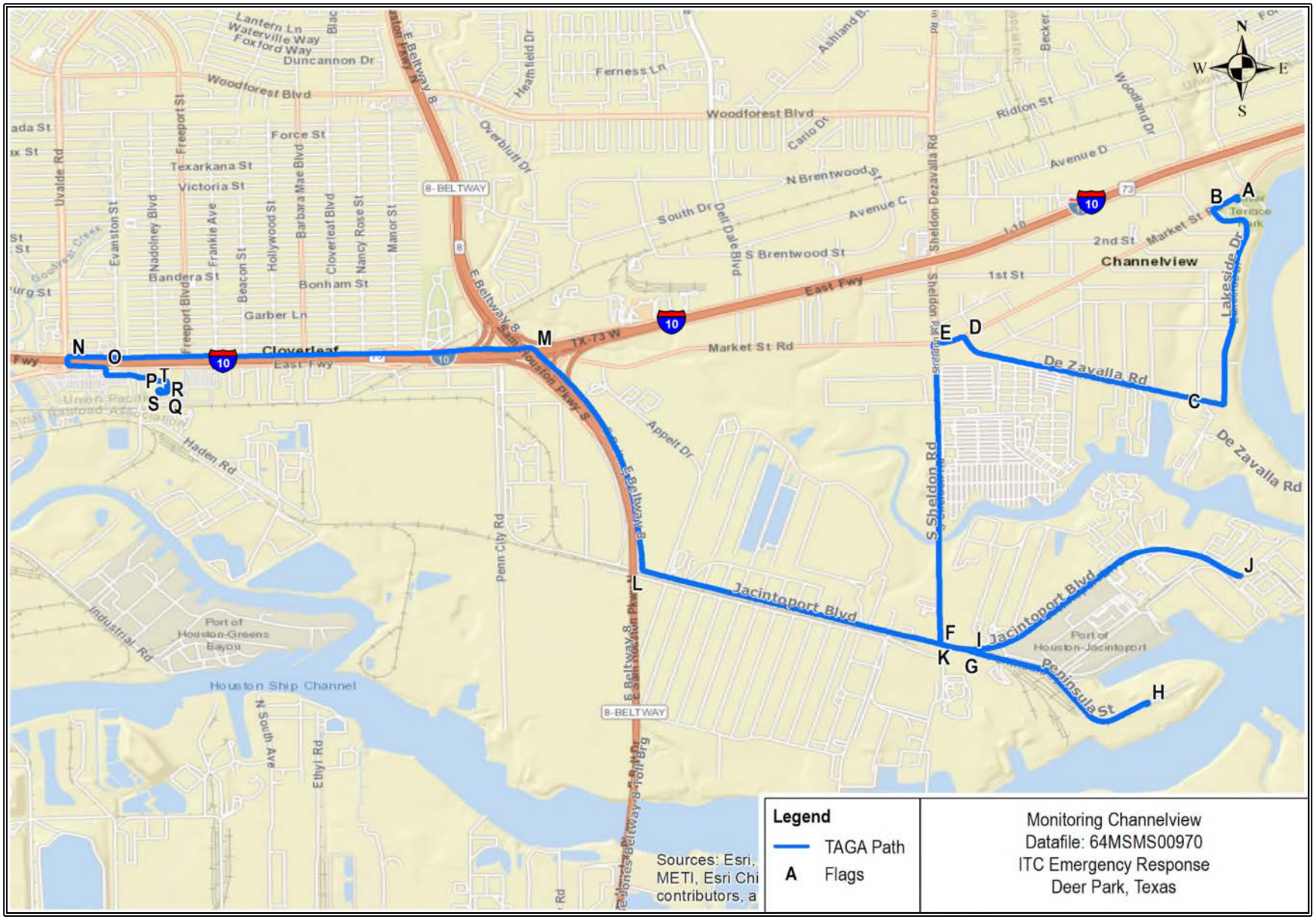


Figure 159a Monitoring Channelview Path, 64MSMS00970

Figure 159b

TAGA File Event Summary
File: 64MSMS00970 Acquired on 17 April 2019 at 11:36:38
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	1.6	154	Start mobile monitoring at River Terrace Park
B	3.0	286	Left turn onto Lakeside Drive
C	6.6	631	Continuing onto Dezavala Road
D	9.5	905	Left turn onto Market Street
E	11.2	1061	Left turn onto Sheldon Road
F	14.4	1367	Left turn onto Jacintoport Boulevard
G	15.0	1424	Merge onto San Jacinto Boulevard
H	19.6	1866	U-turn on San Jacinto Boulevard/Peninsula Street at Coastal Cargo
I	23.4	2225	Right turn onto Jacintoport Boulevard
J	28.2	2686	U-turn on Jacintoport Boulevard
K	33.7	3201	Cross Sheldon Road
L	36.8	3501	Right turn onto Highway 8 Service Road
M	39.7	3772	Left turn onto East Freeway Service Road
N	44.0	4185	U-turn on East Freeway Service Road at Uvalde Road
O	44.5	4230	Right turn into shopping center on East Freeway Service Road
P	47.5	4520	End mobile monitoring at shopping center on East Freeway Service Road
Q	47.9	4558	Start ambient
R	49.0	4656	End ambient
S	51.2	4870	Start 30 mL/min spike
T	52.3	4976	End 30 mL/min spike

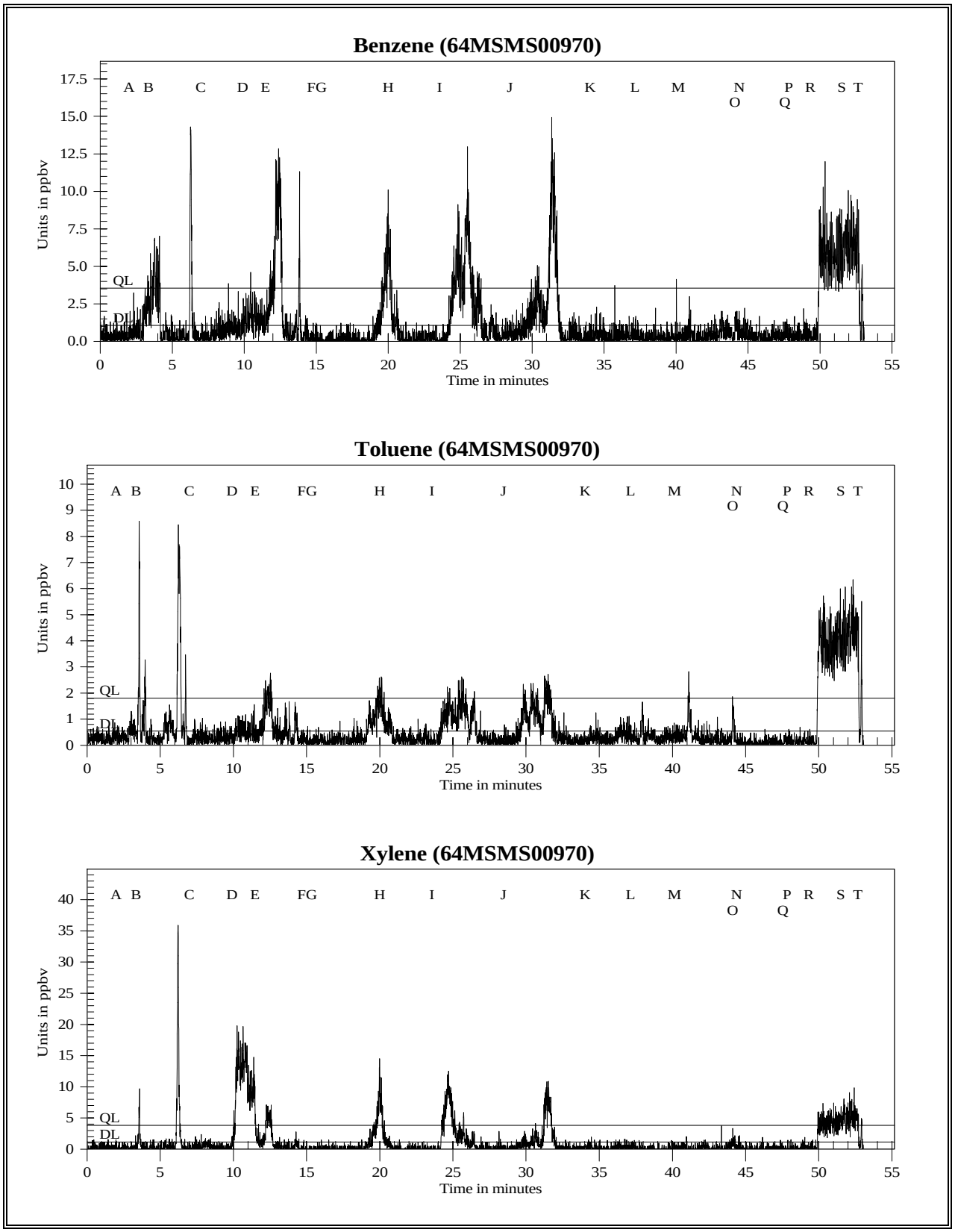


Figure 159c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

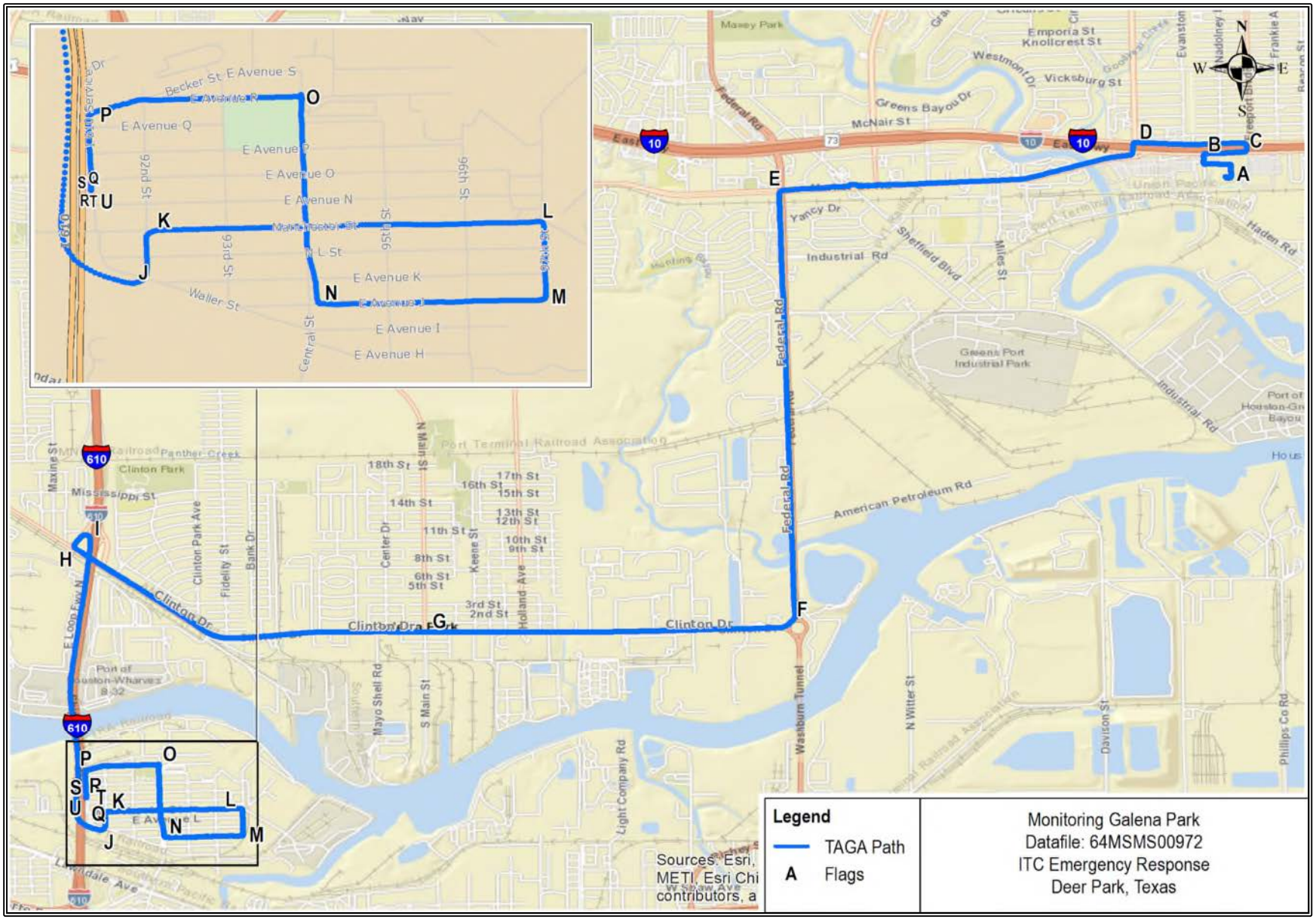


Figure 160a Monitoring Galena Park Path, 64MSMS00972

Figure 160b

TAGA File Event Summary
File: 64MSMS00972 Acquired on 17 April 2019 at 13:22:08
Title: Monitoring Galena Park

Flag	Time	Sequence	Description
A	3.1	294	Start mobile monitoring at shopping center of East Freeway Service Road
B	4.9	462	Right turn onto East Freeway Service Road
C	5.4	516	U-turn on East Freeway Service Road at Freeport Street
D	7.3	699	Left turn onto Market Street
E	12.9	1229	Left turn onto Federal Road
F	18.3	1744	Right turn onto Clinton Drive
G	22.5	2141	Cross N Main Street
H	28.2	2682	Right turn on Highway 610 ramp
I	28.7	2729	Merge onto Highway 610 South
J	31.0	2945	Exit onto 92nd Street
K	31.5	2997	Right turn onto Manchester Street
L	34.0	3235	Right turn onto 97th Street
M	34.7	3296	Right turn onto Avenue J
N	37.1	3525	Right turn onto Central Street
O	39.4	3746	Left turn onto Avenue R
P	41.6	3956	Left turn onto Concrete Street
Q	42.4	4030	End mobile monitoring on Concrete Street
R	42.7	4062	Start ambient
S	43.7	4158	End ambient
T	45.2	4298	Start 30 mL/min spike
U	46.8	4448	End 30 mL/min spike

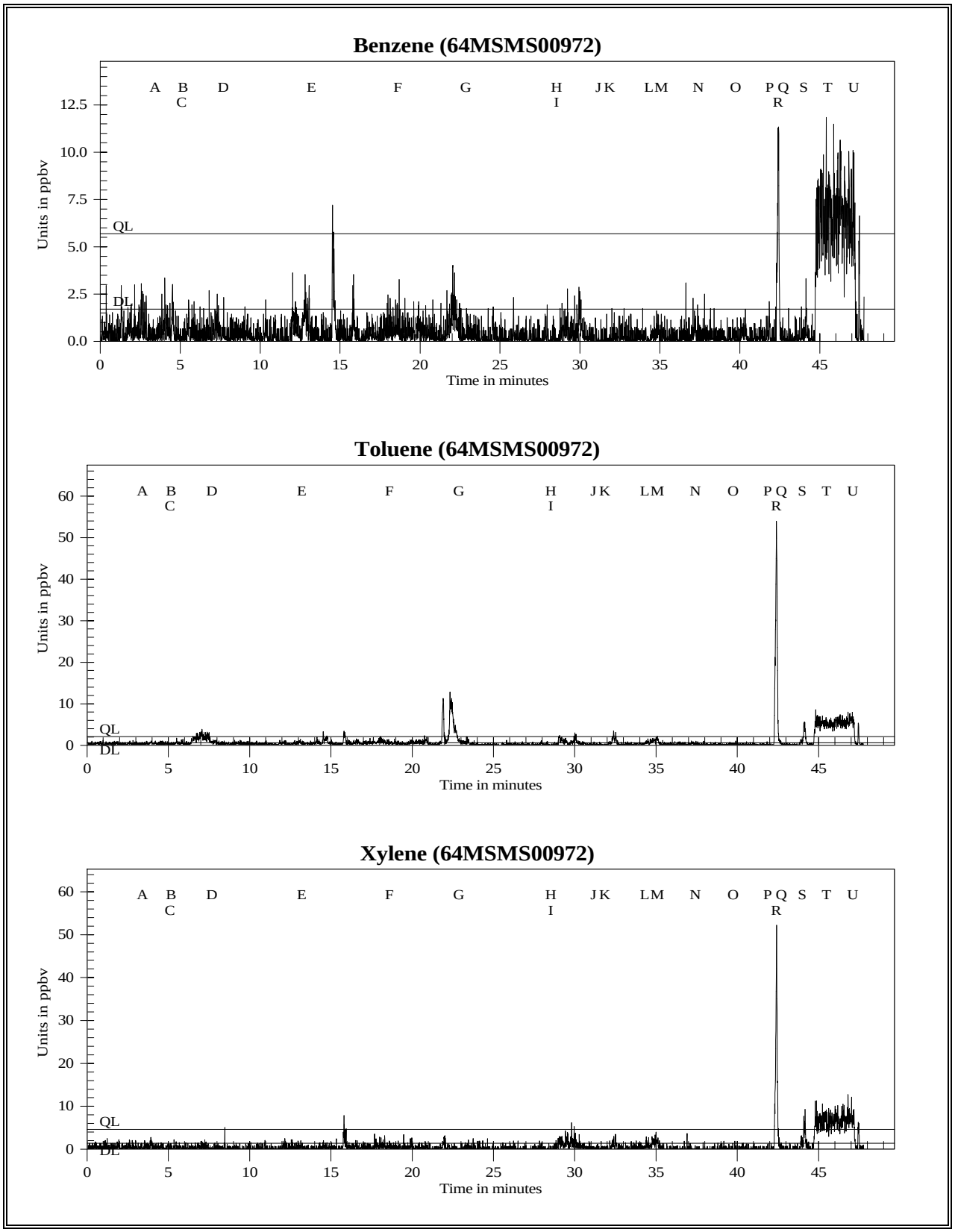


Figure 160c Monitoring Galena Park in ppbv for Benzene, Toluene, and Xylenes

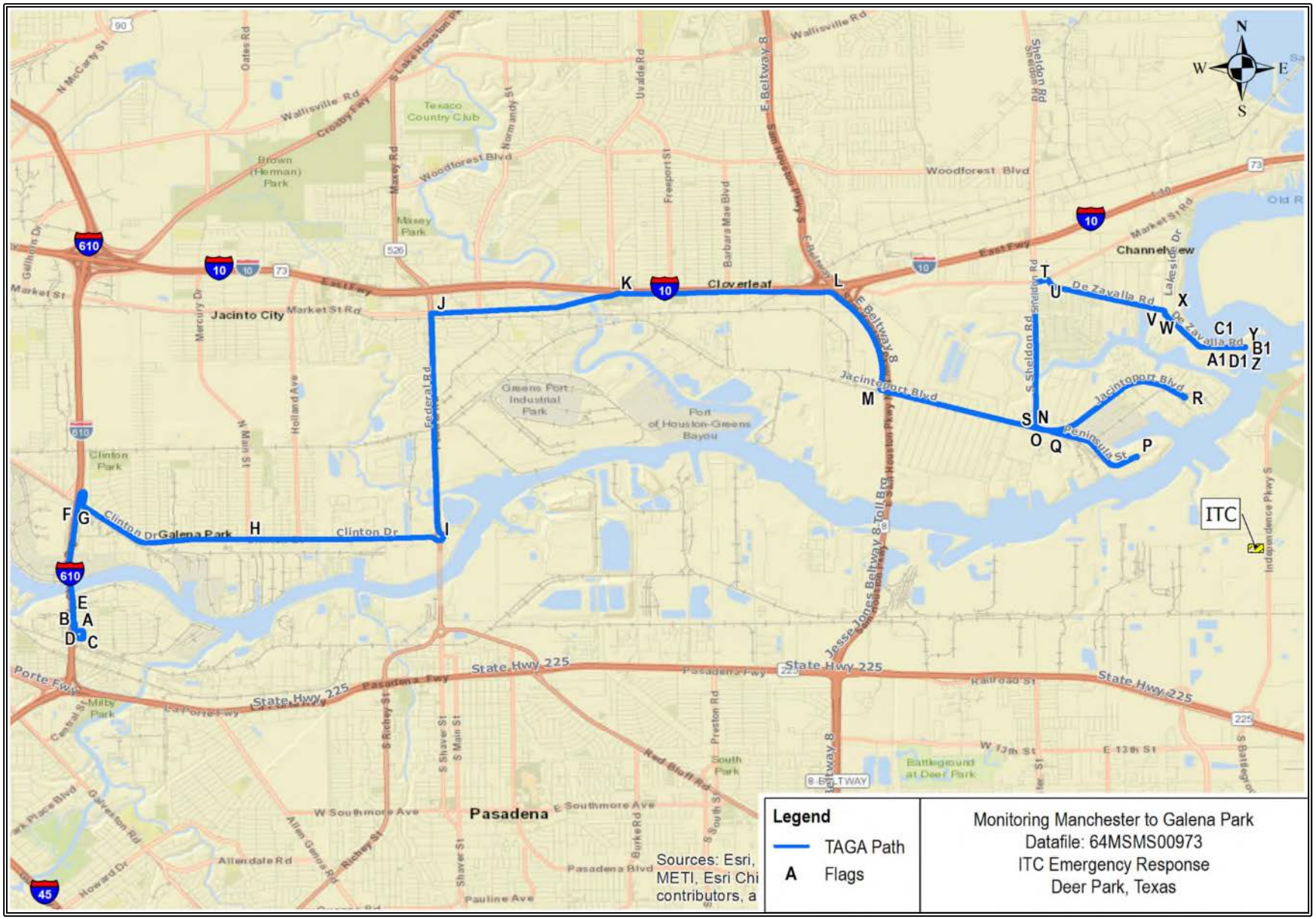


Figure 161a Monitoring Manchester to Galena Park Path, 64MSMS00973

Figure 161b

TAGA File Event Summary
File: 64MSMS00973 Acquired on 17 April 2019 at 14:11:58
Title: Monitoring Manchester to Galena Park

Flag	Time	Sequence	Description
A	1.7	162	Start mobile monitoring on Concrete Street
B	2.0	188	Left turn onto Manchester Street
C	2.3	219	Right turn onto 92nd Street
D	2.6	251	Right turn onto Highway 610 ramp
E	3.3	313	Merge onto Highway 610 North
F	5.0	474	Exit onto Highway 610 ramp
G	5.8	552	Left turn onto Clinton Street
H	10.4	985	Cross N Main Street
I	14.9	1417	Left turn onto Federal Road
J	20.9	1988	Right turn onto Market Street
K	25.4	2420	Merge onto East Freeway Service Road
L	29.8	2835	Merge onto Highway 8 Service Road
M	32.3	3073	Left turn onto Jacintoport Boulevard
N	34.9	3322	Cross Sheldon Road
O	35.3	3357	Merge onto San Jacinto Boulevard
P	38.5	3659	U-turn on San Jacinto Boulevard/Peninsula Street at Coastal Cargo
Q	42.6	4054	Right turn onto Jacintoport Boulevard
R	46.9	4456	U-turn on Jacintoport Boulevard
S	51.2	4873	Right turn onto Sheldon Road
T	54.7	5201	Right turn onto Market Street
U	55.1	5238	Right turn onto Dezavala Road
V	57.5	5470	Right turn to continue on Dezavala Road
W	57.9	5510	Stationary on Dezavala Road
X	66.4	6309	Resume mobile monitoring on Dezavala Road
Y	70.8	6733	U-turn on Dezavala Road
Z	74.6	7093	End mobile monitoring on Dezavala Road
A1	75.8	7209	Start ambient
B1	76.8	7305	End ambient
C1	78.4	7456	Start 30 mL/min spike
D1	79.5	7560	End 30 mL/min spike

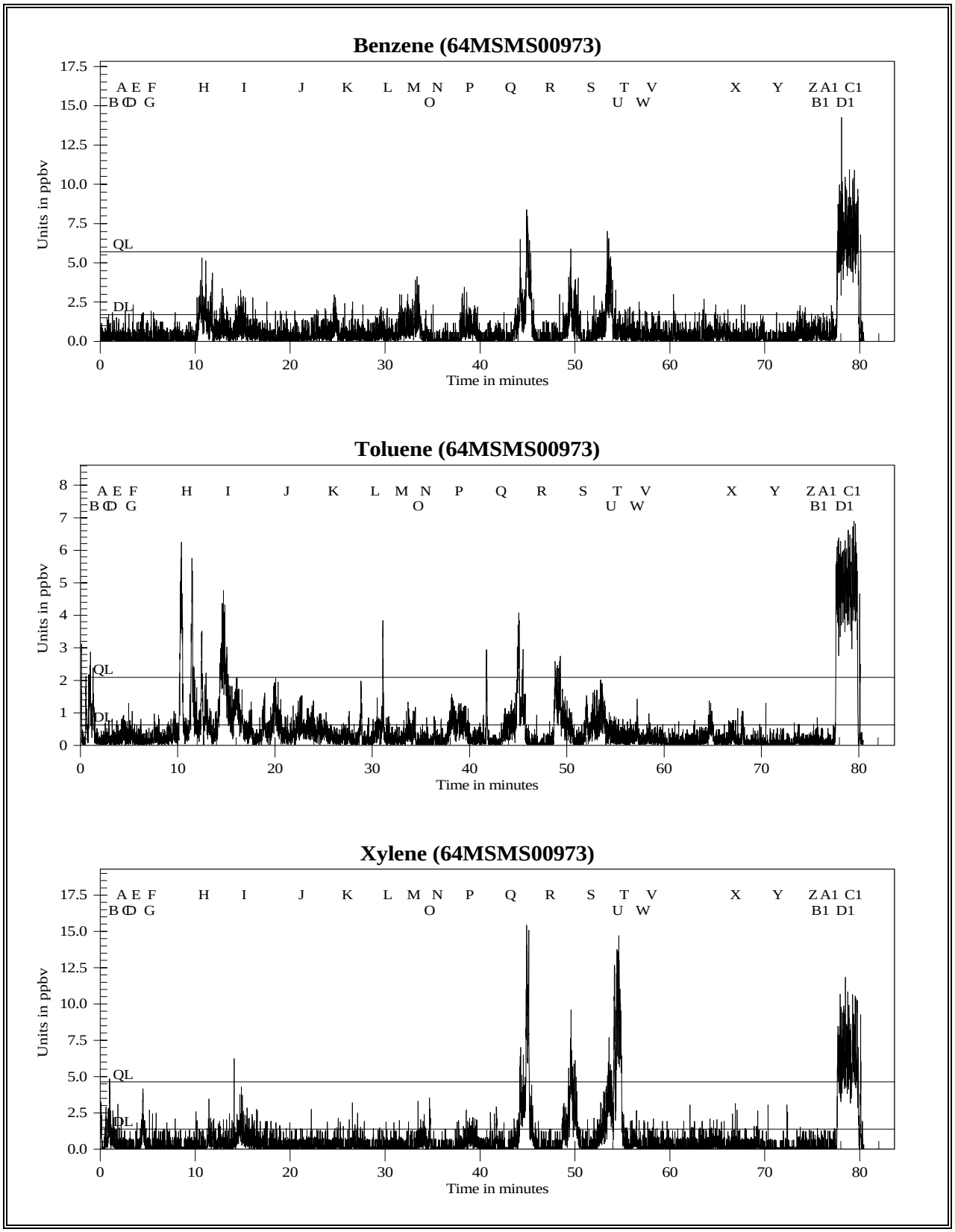


Figure 161c Monitoring Manchester to Galena Park in ppbv for Benzene, Toluene, and Xylenes

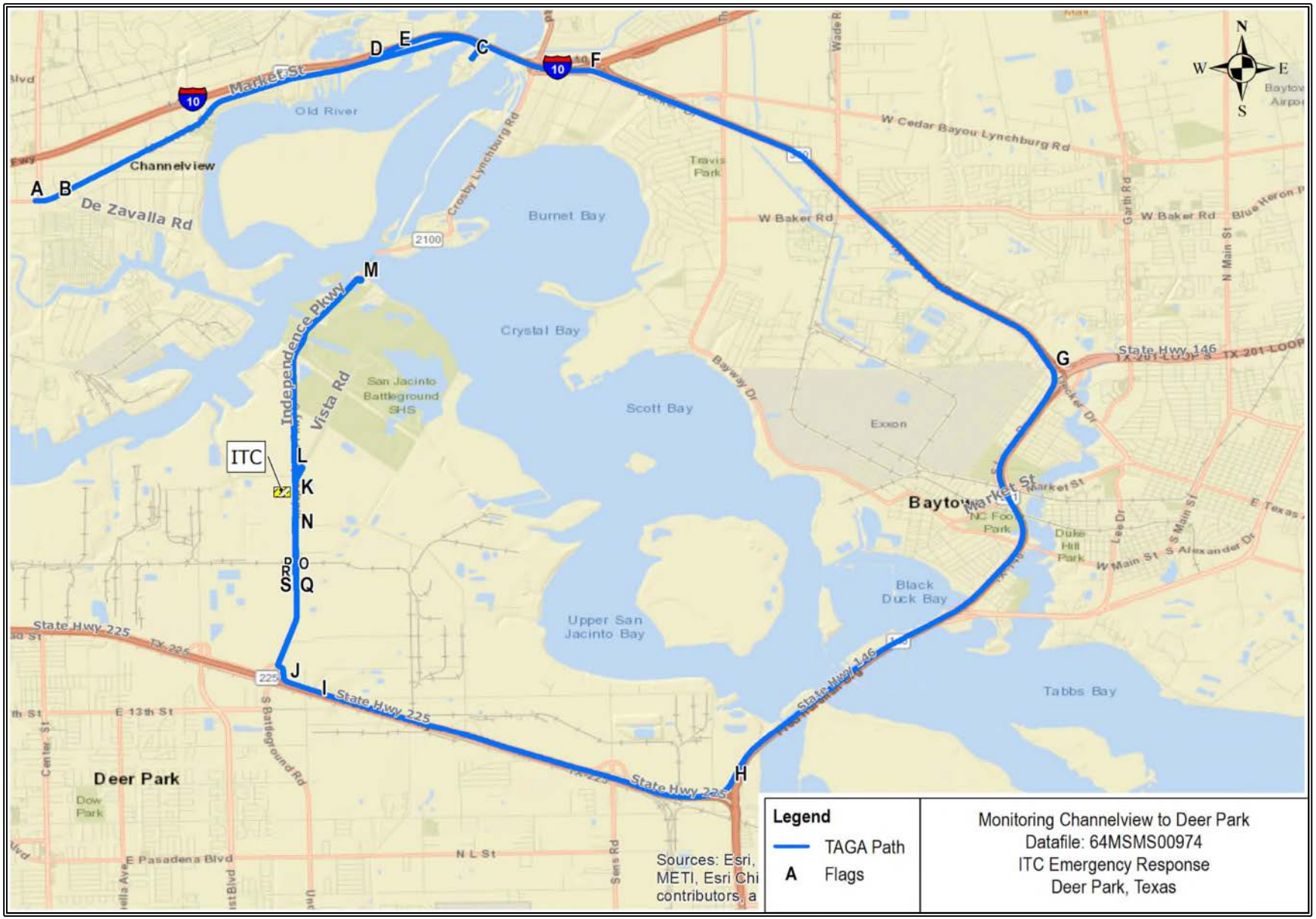


Figure 162a Monitoring Channelview to Deer Park Path, 64MSMS00974

Figure 162b

TAGA File Event Summary
File: 64MSMS00974 Acquired on 17 April 2019 at 15:58:18
Title: Monitoring Channelview to Deer Park

Flag	Time	Sequence	Description
A	0.8	77	Start mobile monitoring at Market Street and Sheldon Road
B	1.9	186	Cross Dezavala Road on Market Street
C	12.4	1178	U-turn on Market Street at Southwest Shipyard
D	15.9	1517	Right turn onto East Freeway Service Road
E	16.6	1576	Merge onto Highway 10 East
F	18.5	1764	Merge onto Highway 330 South
G	23.8	2263	Merge onto Highway 146 South
H	29.2	2781	Merge onto Highway 225 West
I	32.9	3124	Exit onto Pasadena Freeway Frontage Road
J	33.3	3171	Right turn onto Independence Parkway
K	40.3	3832	Passing ITC Site
L	41.0	3899	Cross Vista Road
M	47.4	4510	U-turn on Independence Parkway at Juan Seguin Park
N	55.9	5320	Passing ITC Site
O	57.7	5491	End mobile monitoring on Independence Parkway
P	58.1	5527	Start ambient
Q	59.1	5616	End ambient
R	60.3	5733	Start 30 mL/min spike
S	61.4	5835	End 30 mL/min spike

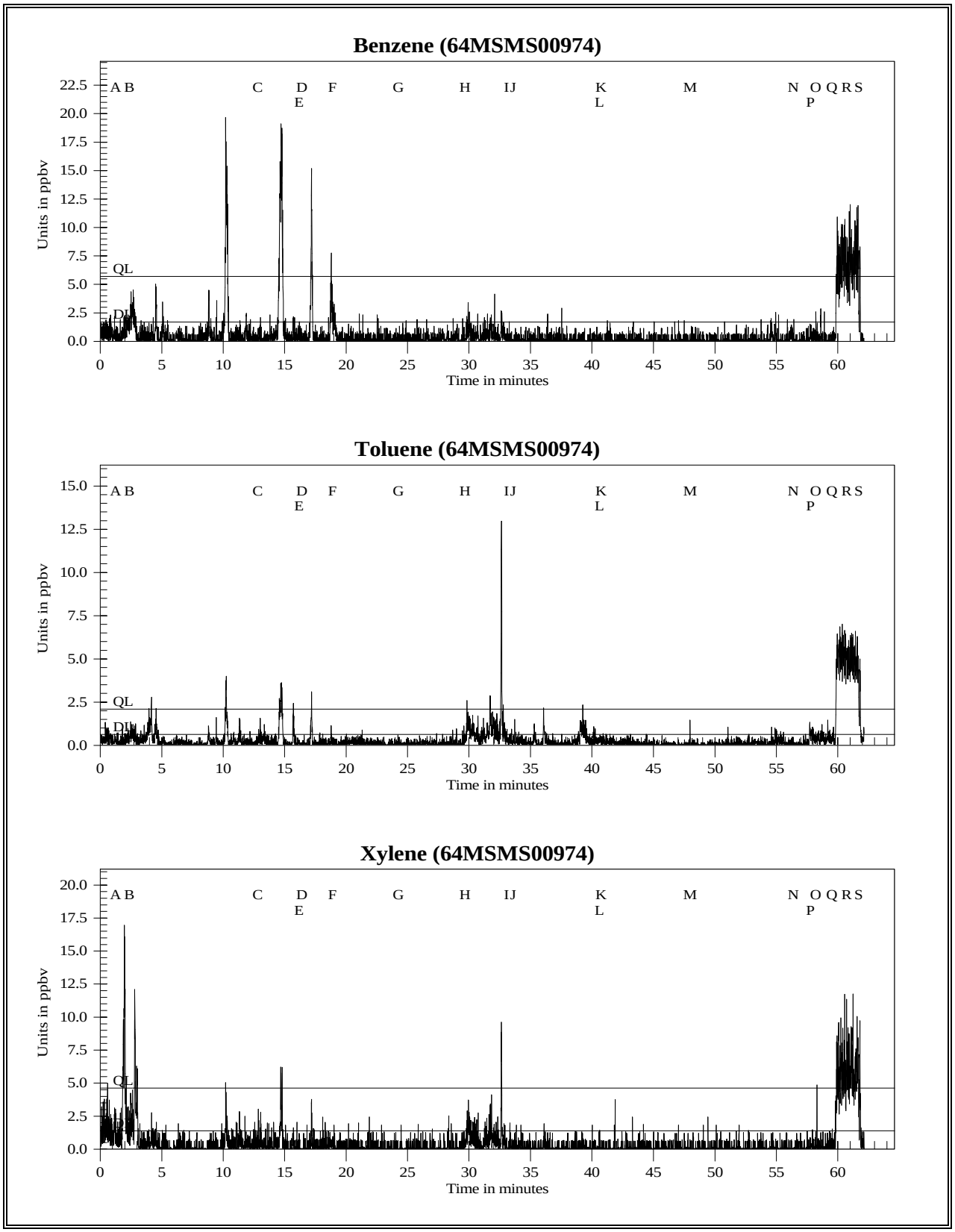


Figure 162c Monitoring Channelview to Deer Park in ppbv for Benzene, Toluene, and Xylenes

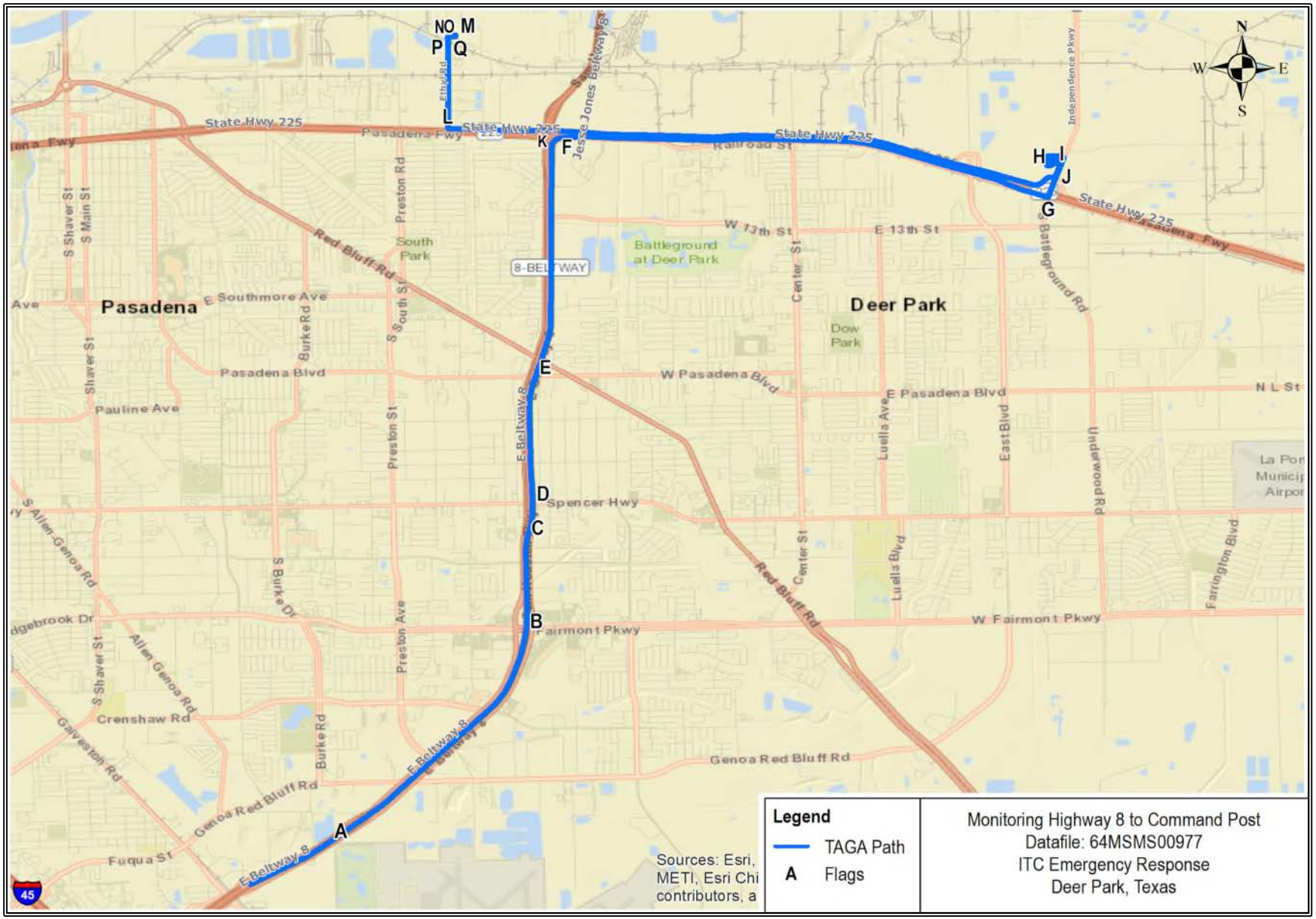


Figure 163a Monitoring Highway 8 to Command Post Path, 64MSMS00977

Figure 163b

TAGA File Event Summary
File: 64MSMS00977 Acquired on 18 April 2019 at 08:40:52
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	1.0	96	Start mobile monitoring on Highway 8 North at Duffer Lane
B	3.7	354	Cross Fairmont Parkway
C	4.7	447	Exit onto Highway 8 Service Road
D	5.6	531	Cross Spencer Highway
E	8.8	834	Cross Pasadena Boulevard
F	14.4	1367	Right turn onto Pasadena Freeway Frontage Road
G	20.6	1958	Left turn onto Independence Parkway
H	22.8	2168	Fueling at Love’s Travel Plaza on Independence Parkway
I	41.1	3913	Resume mobile monitoring on Independence Parkway
J	43.5	4133	Right turn onto Pasadena Freeway Frontage Road
K	52.5	4989	Cross Highway 8
L	53.8	5111	Right turn onto Ethyl Road
M	56.6	5386	End mobile monitoring at EPA Command Post
N	58.1	5526	Start ambient
O	59.5	5659	End ambient
P	60.2	5726	Start 30 mL/min spike
Q	61.6	5862	End 30 mL/min spike

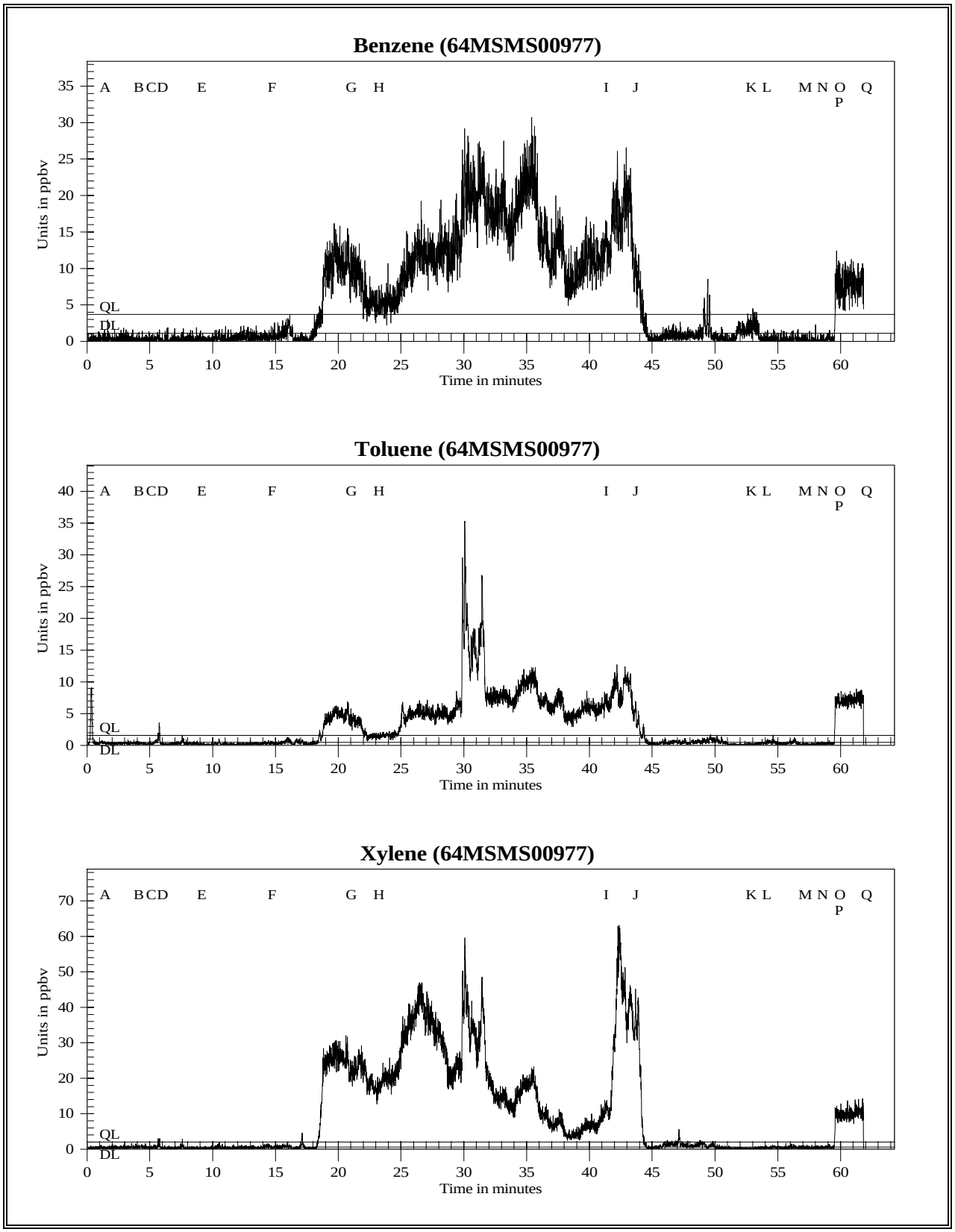


Figure 163c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

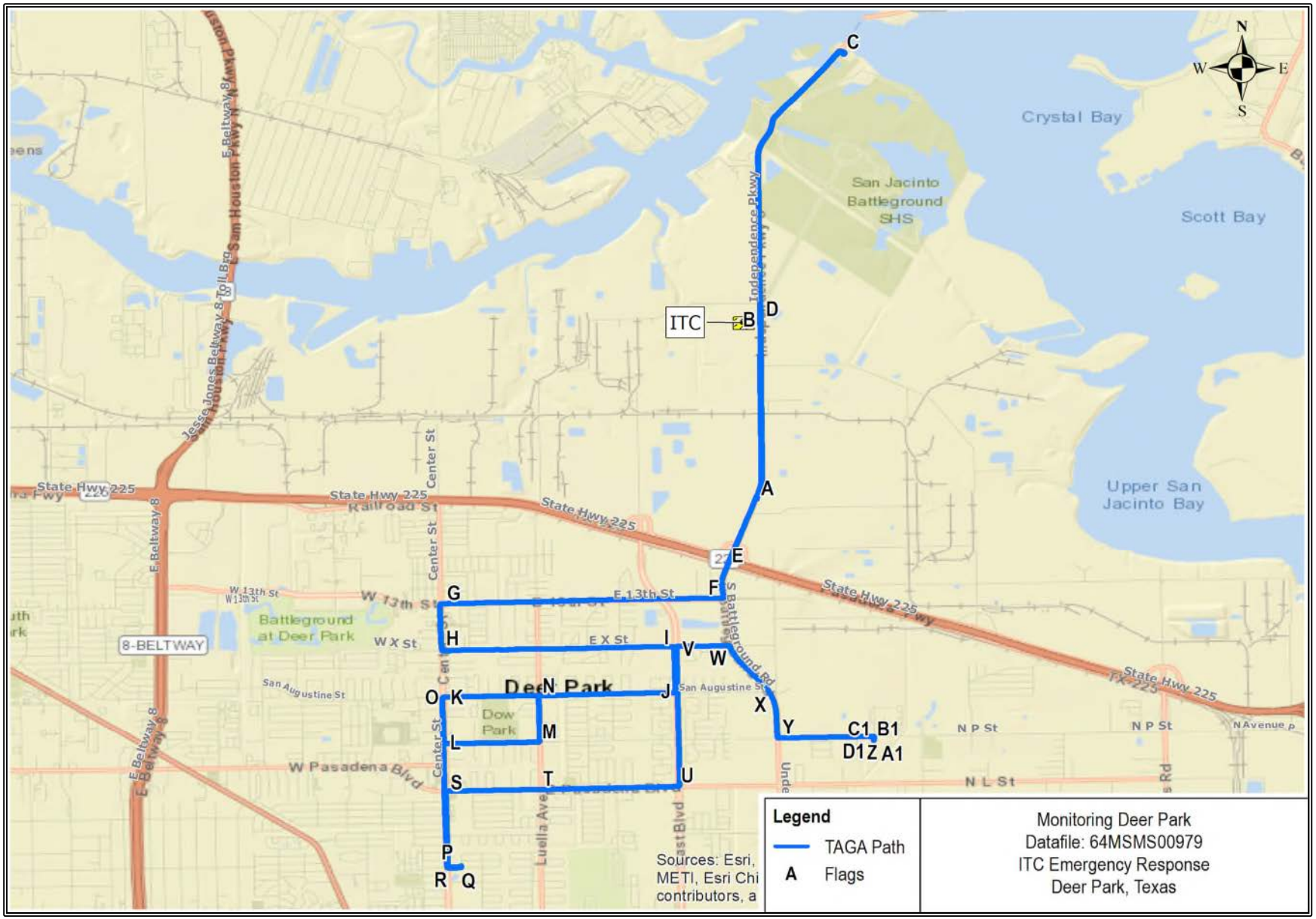


Figure 164a Monitoring Deer Park Path, 64MSMS00979

Figure 164b

TAGA File Event Summary
File: 64MSMS00979 Acquired on 18 April 2019 at 10:10:18
Title: Monitoring Deer Park

Flag	Time	Sequence	Description
A	0.6	58	Stat mobile monitoring on Independence Parkway
B	7.0	671	Passing ITC Site
C	13.6	1294	U-turn on Independence Parkway at Juan Seguin Park
D	20.9	1991	Passing ITC Site
E	27.5	2615	Continuing onto Battleground Road
F	28.1	2675	Right turn onto E 13th Street
G	35.6	3388	Left turn onto Center Street
H	37.2	3539	Left turn onto X Street
I	42.9	4079	Right turn onto East Boulevard
J	44.1	4198	Right turn onto San Augustine Street
K	50.5	4800	Left turn onto Center Street
L	52.8	5016	Left turn onto P Street
M	55.1	5239	Left turn onto Luella Avenue
N	56.6	5385	Left turn onto San Augustine Street
O	59.3	5634	Left turn onto Center Street
P	63.0	5992	Left turn onto E Temperance Lane
Q	63.5	6042	U-turn on E Temperance Lane at W Grant Street
R	65.2	6196	Right turn onto Center Street
S	67.2	6386	Right turn onto Pasadena Boulevard
T	69.5	6608	Cross Luella Avenue
U	73.1	6954	Left turn onto East Boulevard
V	75.3	7159	Right turn onto X Street
W	77.5	7367	Right turn onto Battleground Road
X	78.5	7467	Continue onto Underwood Road
Y	79.9	7595	Left turn onto P Street
Z	81.8	7781	End mobile monitoring at Northwest Park
A1	82.2	7820	Start ambient
B1	83.3	7917	End ambient
C1	84.7	8058	Start 30 mL/min spike
D1	85.8	8161	End 30 mL/min spike

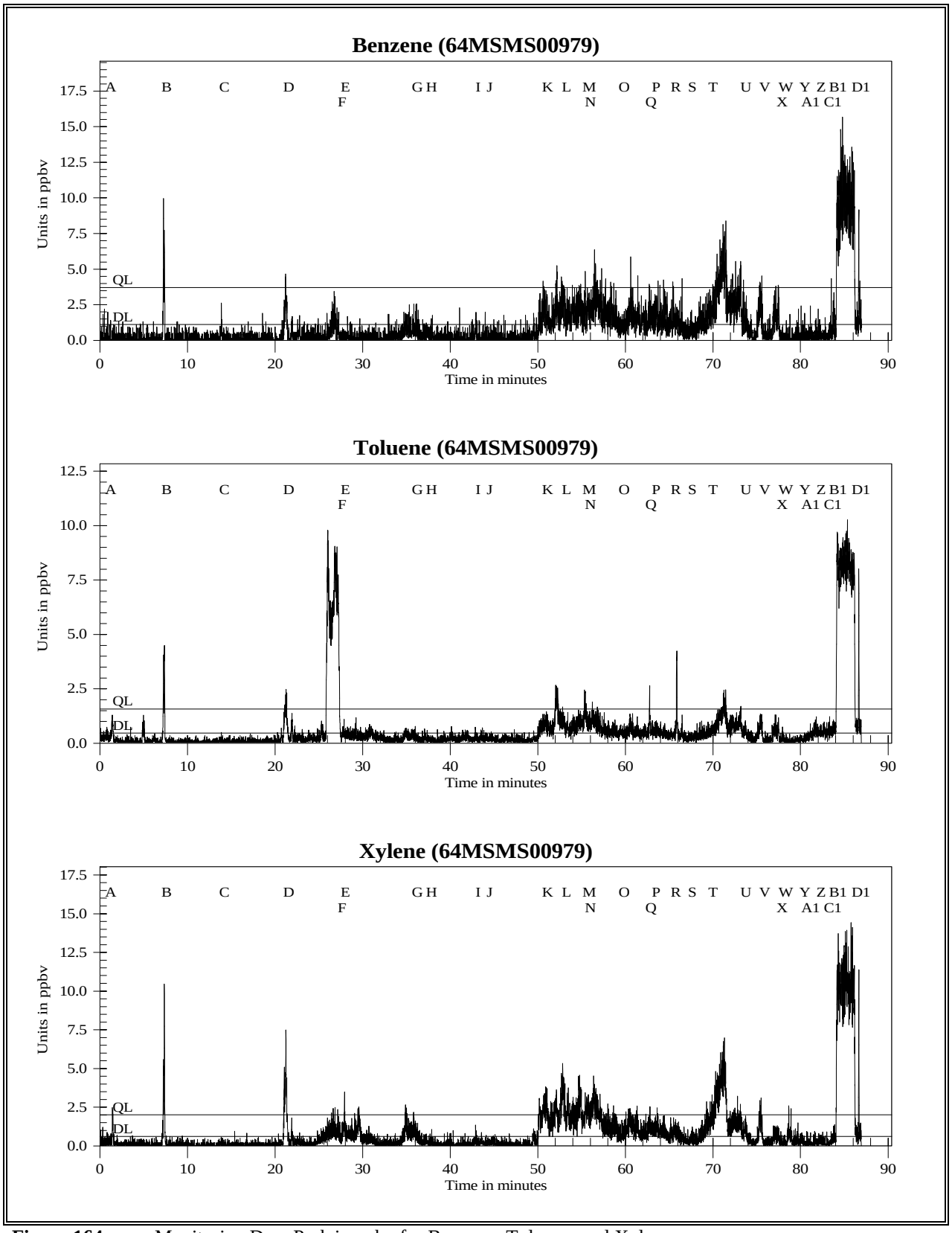


Figure 164c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

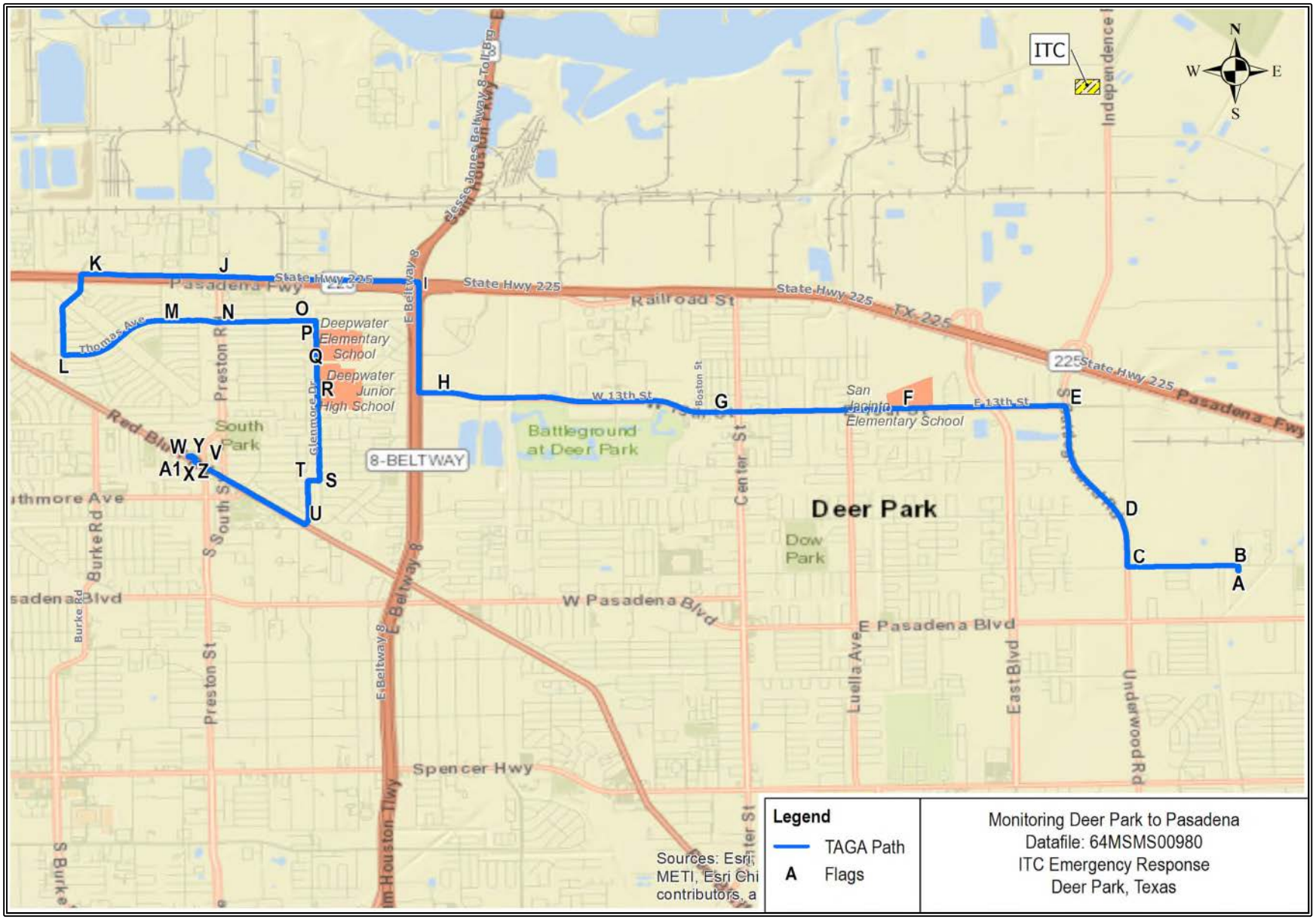


Figure 165a Monitoring Deer Park to Pasadena Path, 64MSMS00980

Figure 165b

TAGA File Event Summary
File: 64MSMS00980 Acquired on 18 April 2019 at 11:40:13
Title: Monitoring Deer Park to Pasadena

Flag	Time	Sequence	Description
A	1.9	178	Start mobile monitoring at Northwest Park
B	3.0	287	Left turn onto North P Street
C	4.9	462	Right turn onto Underwood Road
D	5.6	533	Continuing onto Battleground Road
E	8.4	801	Left turn onto E 13th Street
F	11.2	1062	Passing San Jacinto Elementary School
G	15.0	1427	Cross Boston Street
H	19.8	1885	Right turn onto Highway 8 Service Road
I	21.5	2049	Left turn onto Pasadena Freeway Frontage Road
J	24.7	2349	Cross Preston Road
K	26.3	2499	Left turn onto Bearle Street
L	29.2	2774	Left turn onto Thomas Avenue
M	32.8	3119	Cross Burke Road
N	34.6	3290	Cross Preston Road continuing onto Washington Street
O	37.2	3539	Cross Sherman Avenue
P	37.7	3583	Right turn onto Glenmore Drive
Q	38.4	3655	Passing Deepwater Elementary School
R	39.5	3758	Passing Deepwater Junior High School
S	43.1	4095	Right turn onto Suiter Way
T	43.5	4141	Left turn onto Orrel Drive
U	46.3	4402	Right turn onto Red Bluff Road
V	48.5	4612	Cross Preston Road
W	51.2	4870	End mobile monitoring at shopping center on Red Bluff Road
X	51.6	4902	Start ambient
Y	52.5	4992	End ambient
Z	54.6	5187	Start 30 mL/min spike
A1	55.6	5283	End 30 mL/min spike

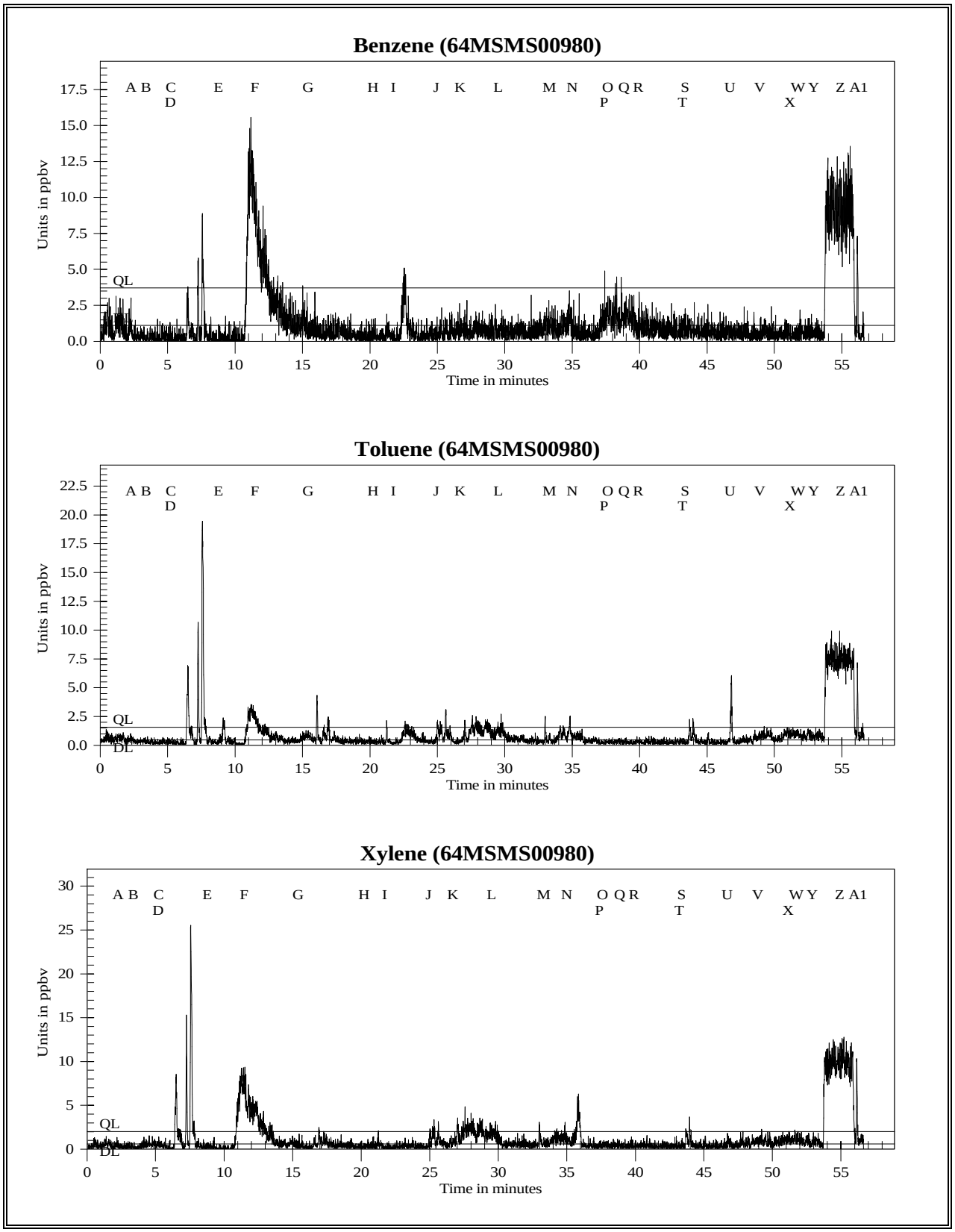


Figure 165c Monitoring Deer Park to Pasadena in ppbv for Benzene, Toluene, and Xylenes

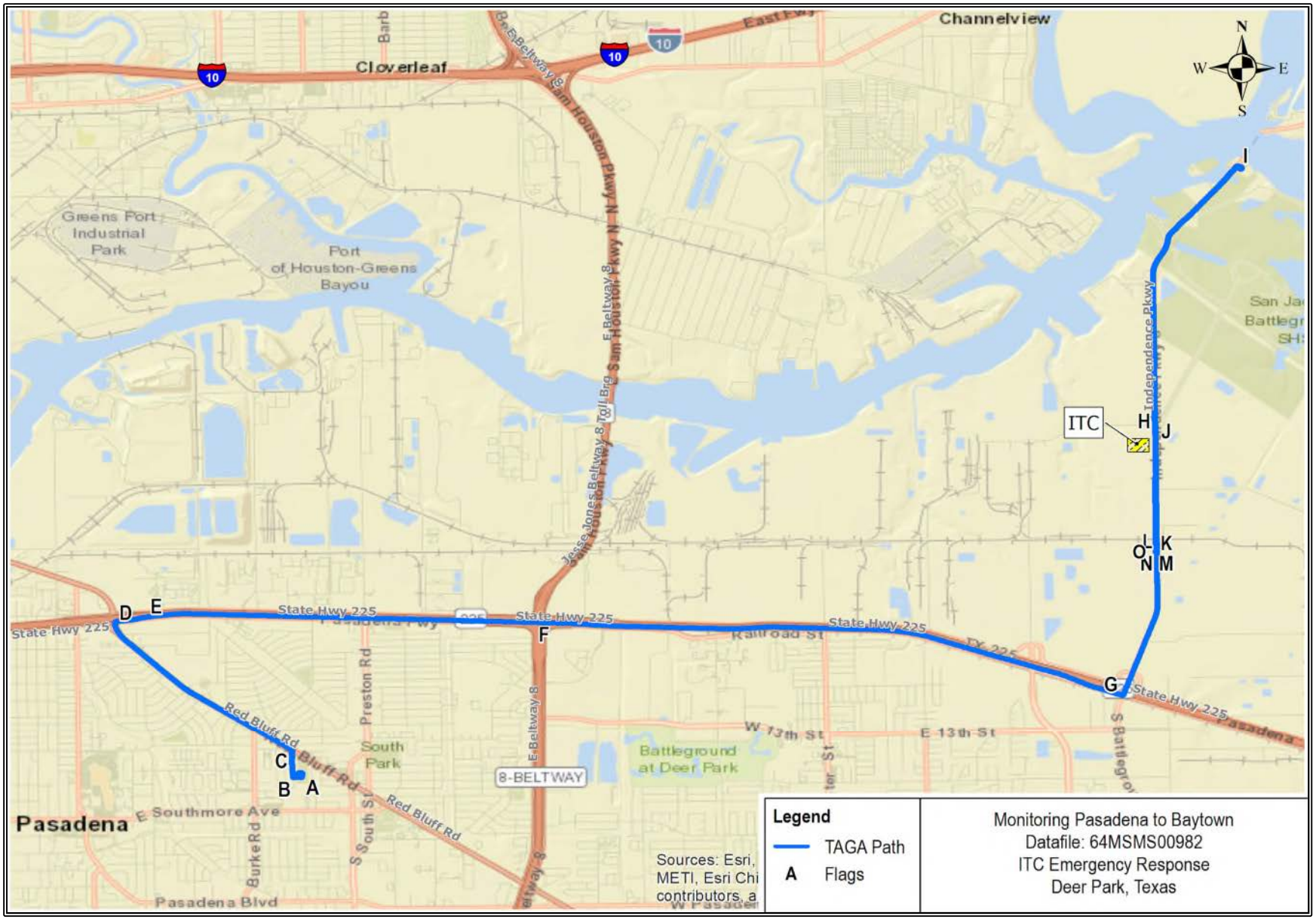


Figure 166a Monitoring Pasadena to Baytown Path, 64MSMS00982

Figure 166b

TAGA File Event Summary
File: 64MSMS00982 Acquired on 18 April 2019 at 13:52:52
Title: Monitoring Pasadena to Baytown

Flag	Time	Sequence	Description
A	1.4	138	Start mobile monitoring at Satsuma Park
B	2.7	254	Right turn onto Satsuma Street
C	5.7	544	Left turn onto Red Bluff Road
D	10.0	953	Right turn onto Pasadena Freeway Frontage Road
E	10.4	993	Merge onto Highway 225 East
F	12.9	1227	Cross Highway 8
G	17.0	1617	Left turn onto Independence Parkway
H	24.2	2303	Passing ITC Site
I	33.2	3160	U-turn on Independence Parkway at Juan Seguin Park
J	41.7	3968	Passing ITC Site
K	45.2	4296	End mobile monitoring on Independence Parkway
L	45.5	4326	Start ambient
M	46.8	4450	End ambient
N	49.7	4724	Start 30 mL/min spike
O	50.8	4827	End 30 mL/min spike

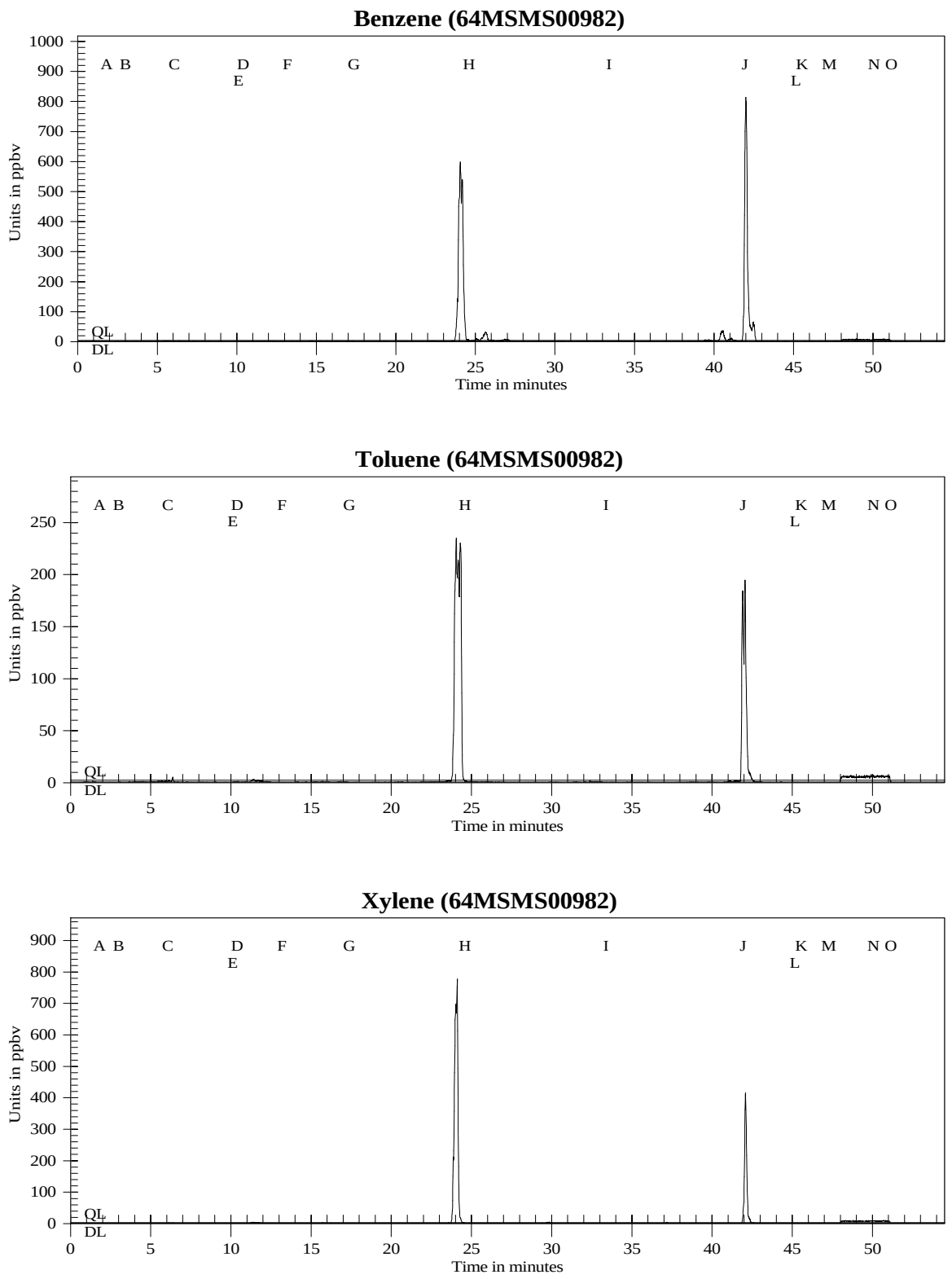


Figure 166c Monitoring Pasadena to Baytown in ppbv for Benzene, Toluene, and Xylenes

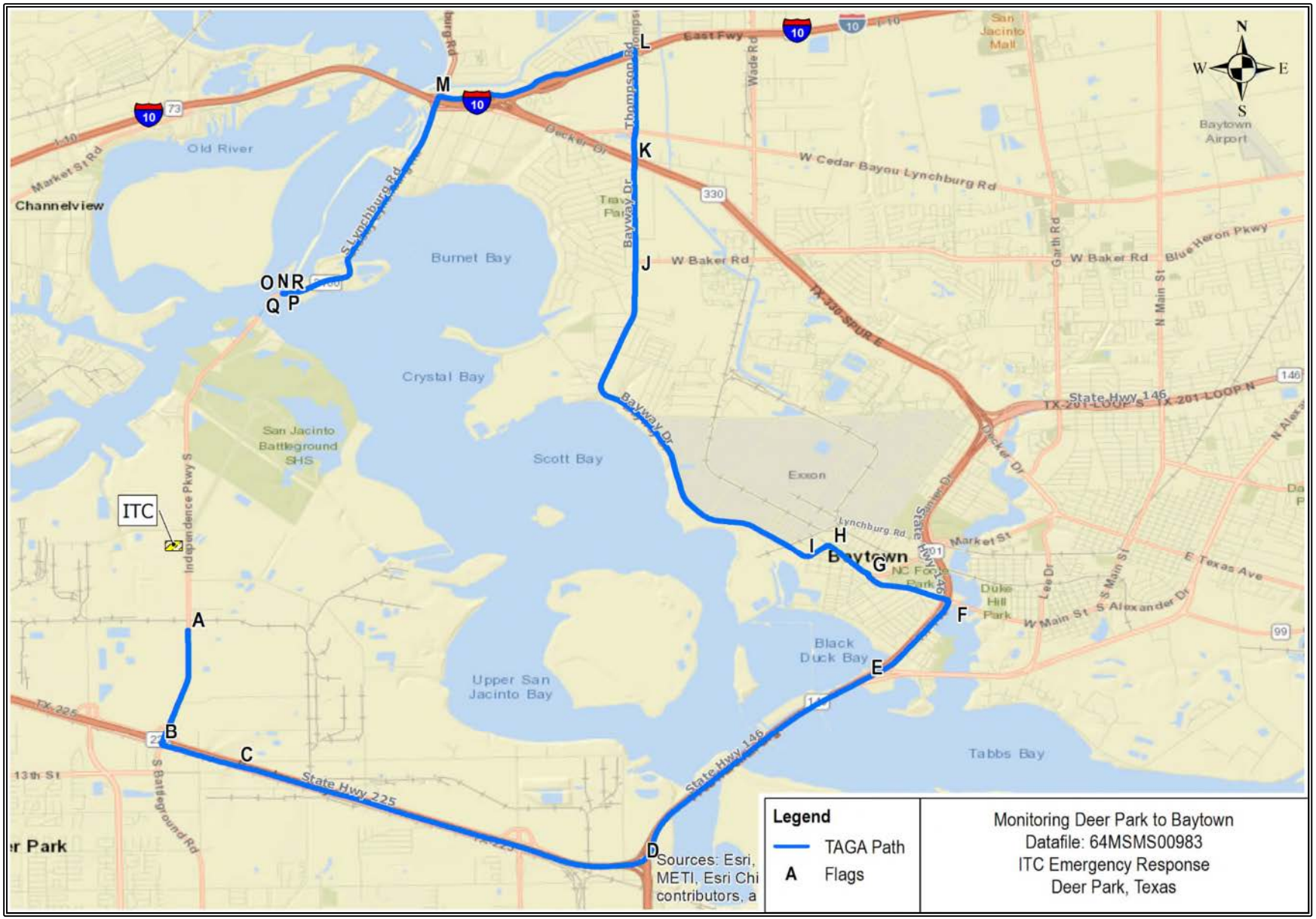


Figure 167a Monitoring Deer Park to Baytown Path, 64MSMS00983

Figure 167b

TAGA File Event Summary
File: 64MSMS00983 Acquired on 18 April 2019 at 14:59:06
Title: Monitoring Deer Park to Baytown

Flag	Time	Sequence	Description
A	0.9	86	Start mobile monitoring on Independence Parkway
B	3.6	340	Left turn onto Pasadena Freeway Frontage Road
C	4.5	428	Merge onto Highway 225 East
D	7.7	737	Merge onto Highway 146 North
E	10.3	978	Exit onto Robert C Lanier Drive
F	13.0	1233	Left turn onto W Main Street
G	15.0	1430	Left turn onto Market Street
H	16.7	1585	Left turn to continue onto Market Street
I	17.5	1666	Merge onto Bayway Drive
J	26.8	2552	Cross W Baker Road
K	29.3	2786	Cross Highway 330 continuing onto Thompson Road
L	34.7	3300	Left turn onto East Freeway Service Road
M	37.9	3601	Left turn onto Independence Parkway North
N	45.0	4280	End mobile monitoring at Lynchburg Ferry
O	45.4	4318	Start ambient
P	46.5	4417	End ambient
Q	47.7	4534	Start 30 mL/min spike
R	48.7	4631	End 30 mL/min spike

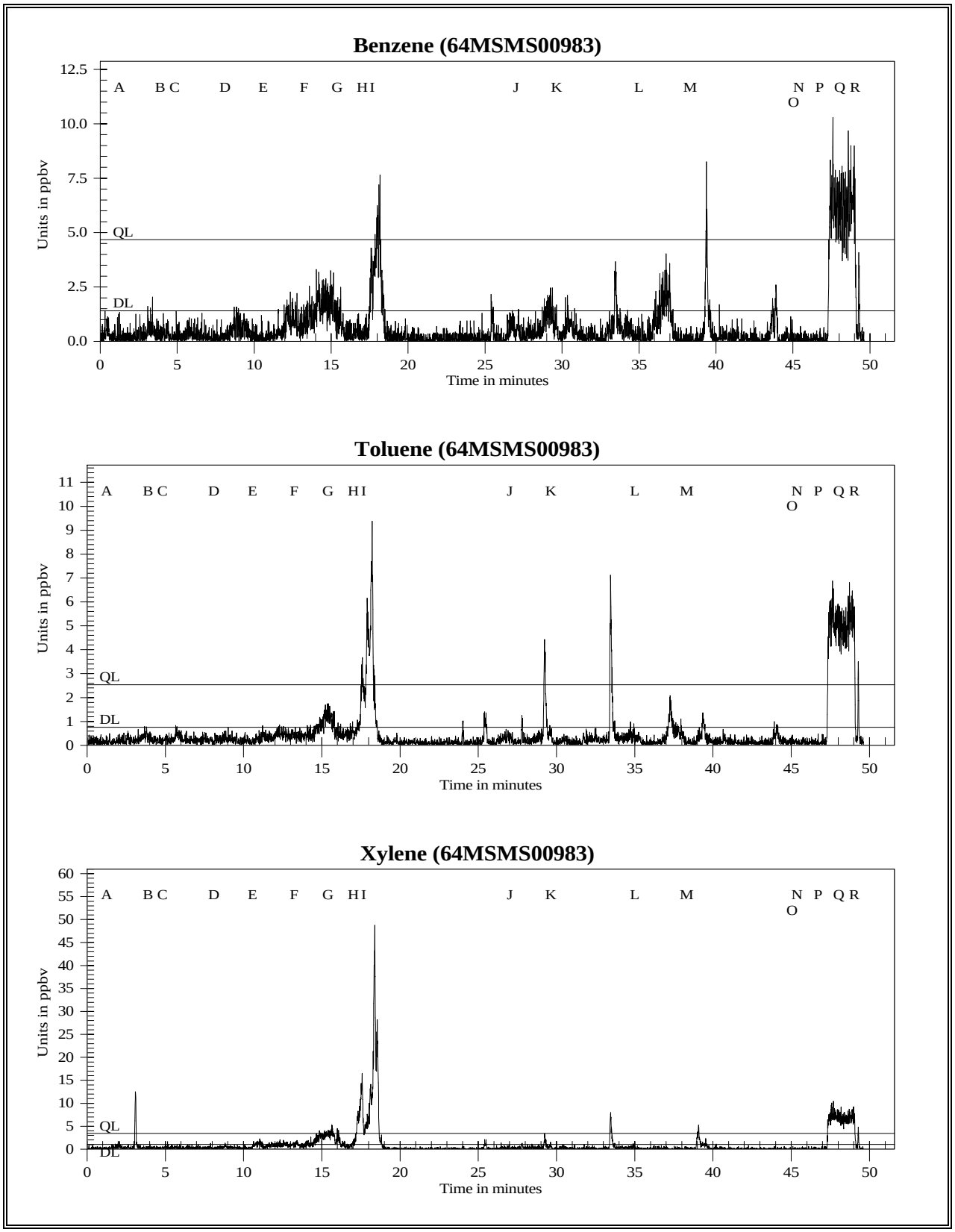


Figure 167c Monitoring Deer Park to Baytown in ppbv for Benzene, Toluene, and Xylenes

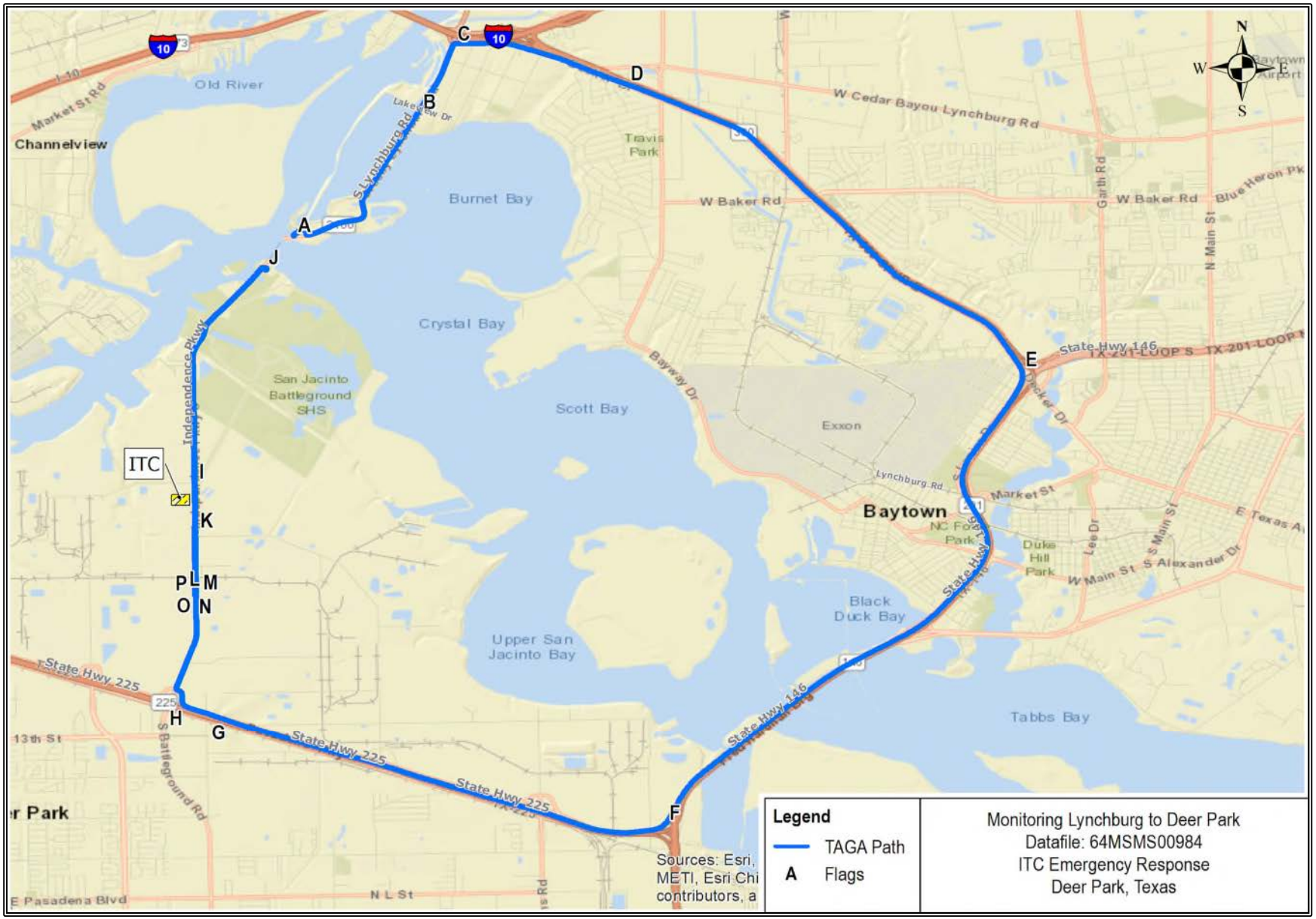


Figure 168a Monitoring Lynchburg to Deer Park Path, 64MSMS00984

Figure 168b

TAGA File Event Summary
File: 64MSMS00984 Acquired on 18 April 2019 at 15:50:31
Title: Monitoring Lynchburg to Deer Park

Flag	Time	Sequence	Description
A	1.3	127	Start mobile monitoring at Lynchburg Ferry
B	6.4	611	Cross Lakeview Drive
C	7.8	744	Right turn onto Decker Drive
D	9.9	940	Merge onto Highway 330 South
E	14.1	1343	Merge onto Highway 146 South
F	19.6	1864	Merge onto Highway 225 West
G	23.2	2210	Exit onto Pasadena Freeway Frontage Road
H	23.6	2249	Right turn onto Independence Parkway
I	30.5	2905	Passing ITC Site
J	36.6	3485	U-turn on Independence Parkway at Juan Seguin Park
K	42.9	4076	Passing ITC Site
L	45.8	4352	End mobile monitoring on Independence Parkway
M	46.4	4414	Start ambient
N	47.6	4523	End ambient
O	49.4	4694	Start 30 mL/min spike
P	50.6	4810	End 30 mL/min spike

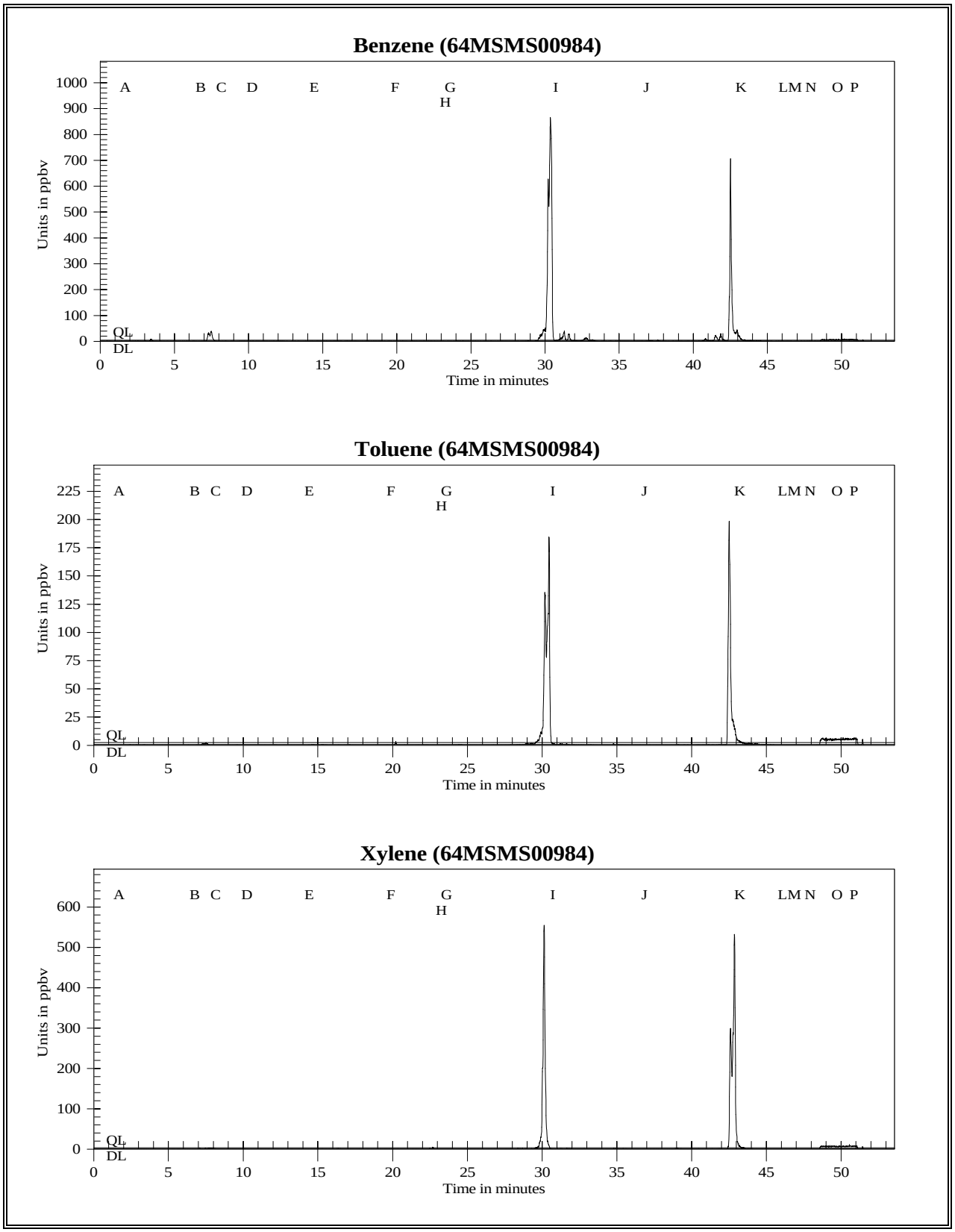


Figure 168c Monitoring Lynchburg to Deer Park in ppbv for Benzene, Toluene, and Xylenes

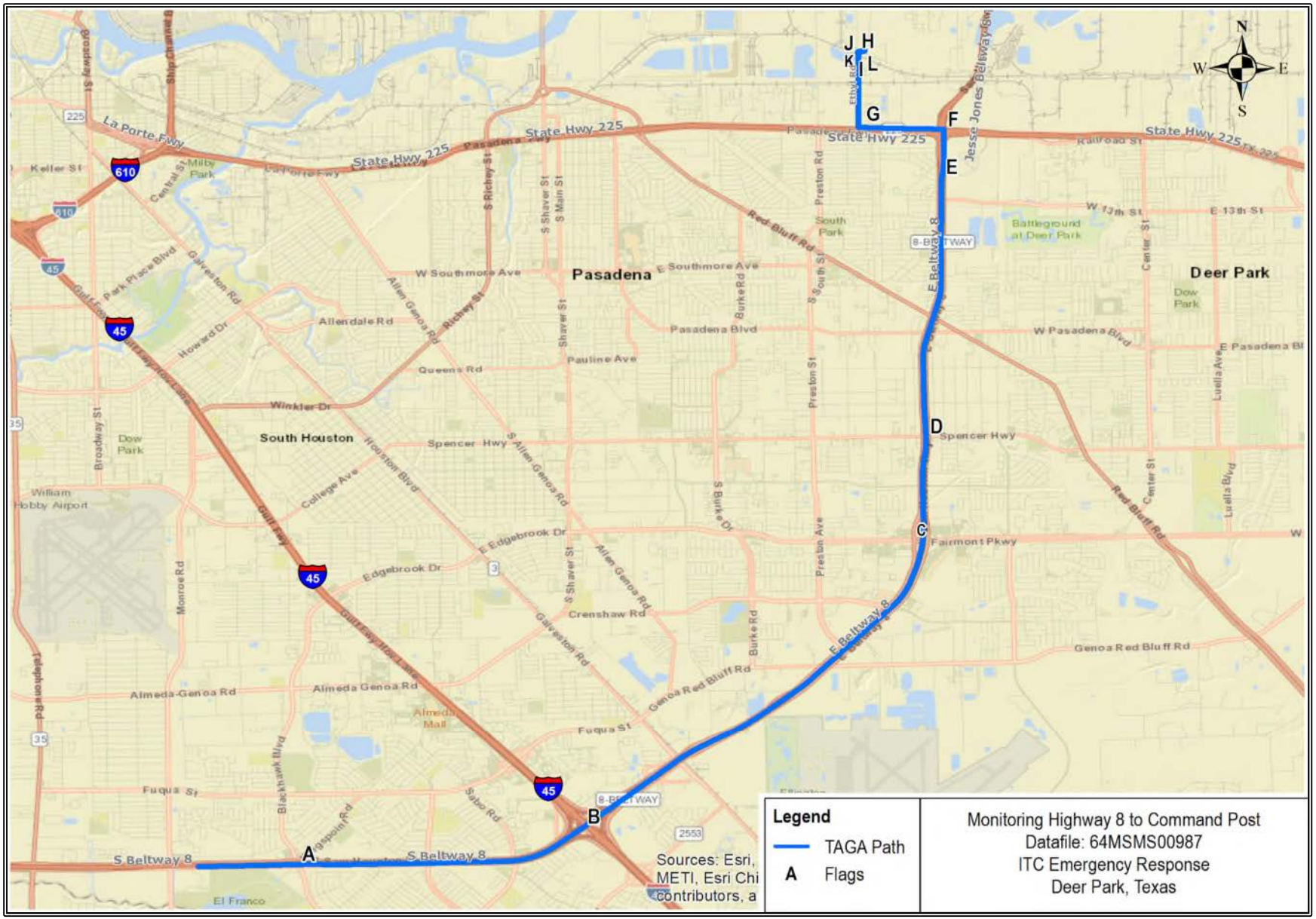


Figure 169a Monitoring Highway 8 to Command Post Path, 64MSMS00987

Figure 169b

TAGA File Event Summary
File: 64MSMS00987 Acquired on 19 April 2019 at 07:57:47
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	0.8	81	Start mobile monitoring on Highway 8 North at Blackhawk Boulevard
B	3.4	327	Cross Highway 45
C	7.7	730	Cross Fairmont Parkway
D	8.8	836	Cross Spencer Highway
E	11.6	1099	Exit onto Highway 8 Service Road
F	12.8	1219	Left turn onto Pasadena Freeway Frontage Road
G	14.2	1349	Right turn onto Ethyl Road
H	18.3	1739	End mobile monitoring at EPA Command Post
I	18.7	1774	Start ambient
J	19.6	1867	End ambient
K	21.3	2027	Start 30 mL/min spike
L	22.5	2138	End 30 mL/min spike

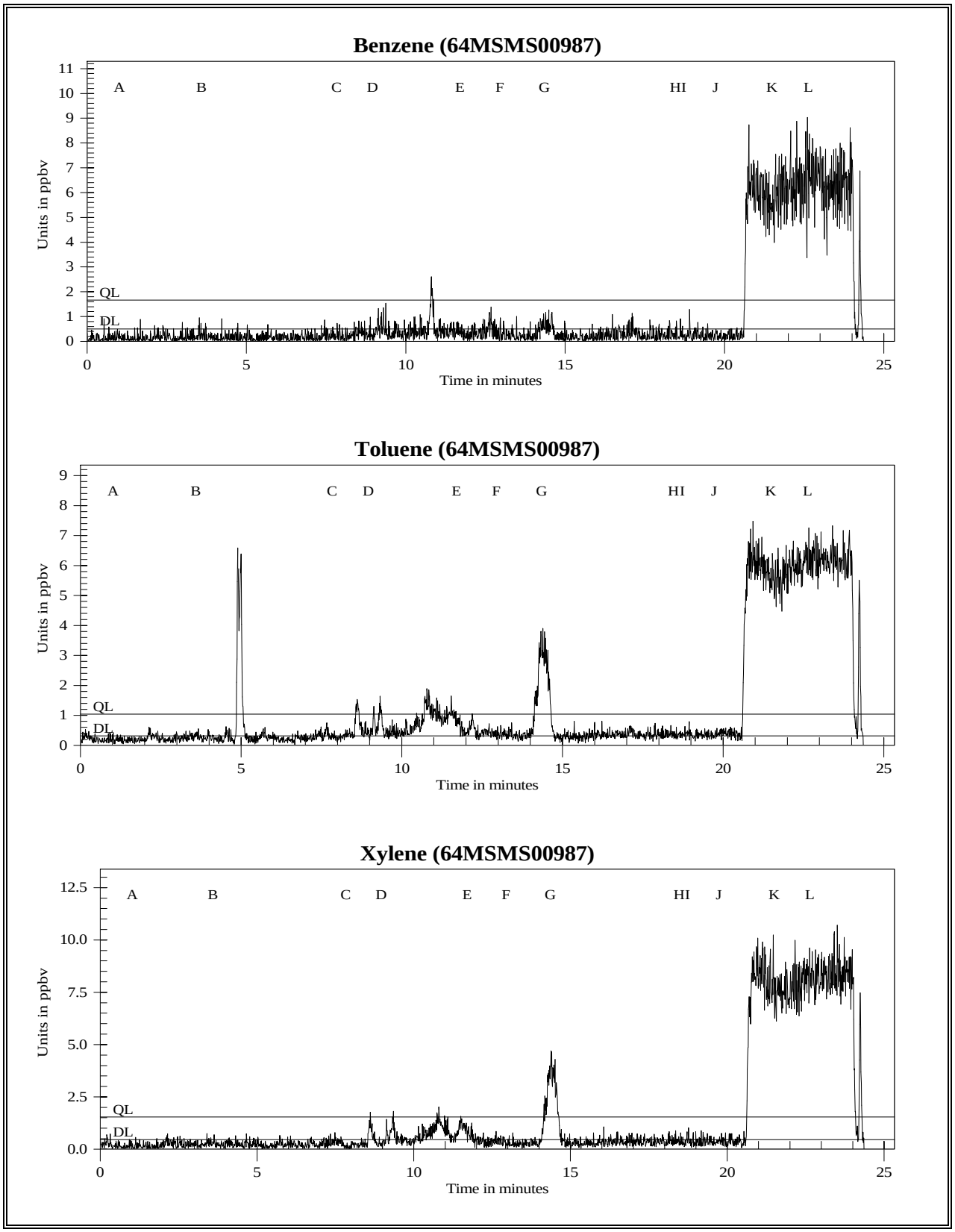


Figure 169c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

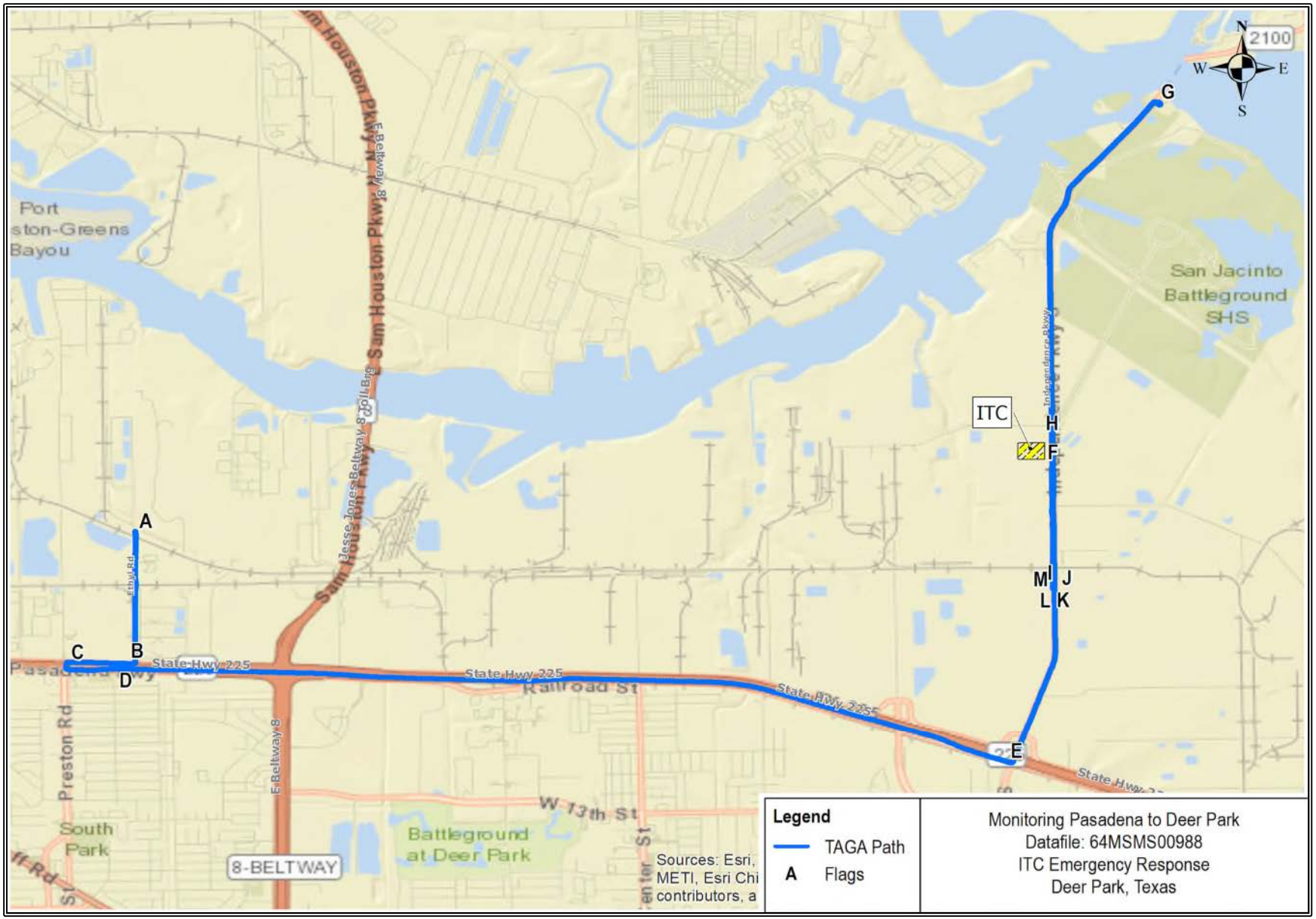


Figure 170a Monitoring Pasadena to Deer Park Path, 64MSMS00988

Figure 170b

TAGA File Event Summary
File: 64MSMS00988 Acquired on 19 April 2019 at 08:42:14
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	1.9	183	Start mobile monitoring at EPA Command Post
B	5.0	473	Right turn onto Pasadena Freeway Frontage Road
C	5.8	550	U-turn on Pasadena Freeway Frontage Road at Preston Road
D	6.4	612	Merge onto Highway 225 East
E	11.3	1075	Left turn onto Independence Parkway
F	18.1	1718	Passing ITC Site
G	25.0	2374	U-turn on Independence Parkway at Juan Seguin Park
H	32.7	3111	Passing ITC Site
I	37.2	3542	End mobile monitoring on Independence Parkway
J	37.6	3572	Start ambient
K	38.6	3672	End ambient
L	40.0	3800	Start 30 mL/min spike
M	41.0	3897	End 30 mL/min spike

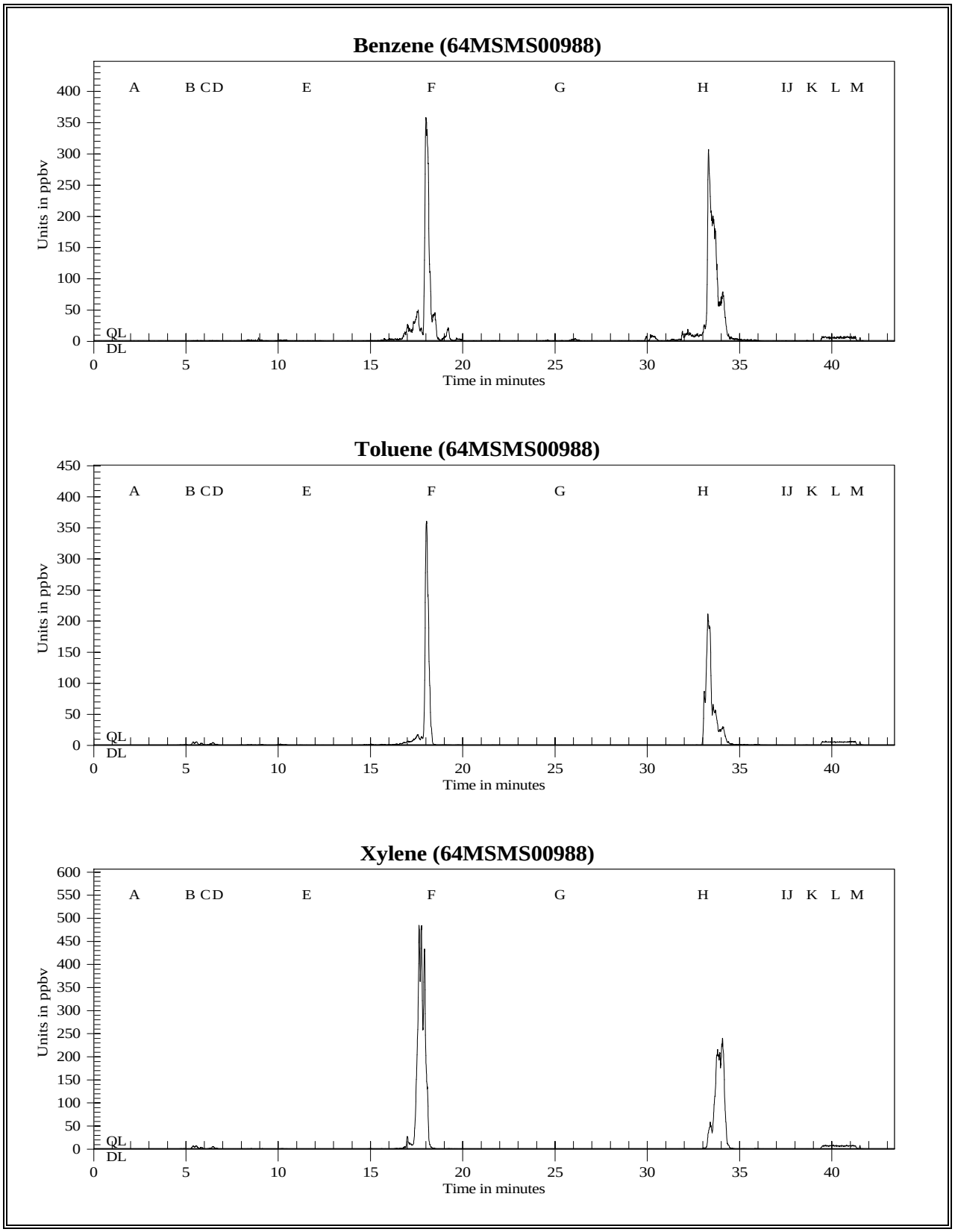


Figure 170c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

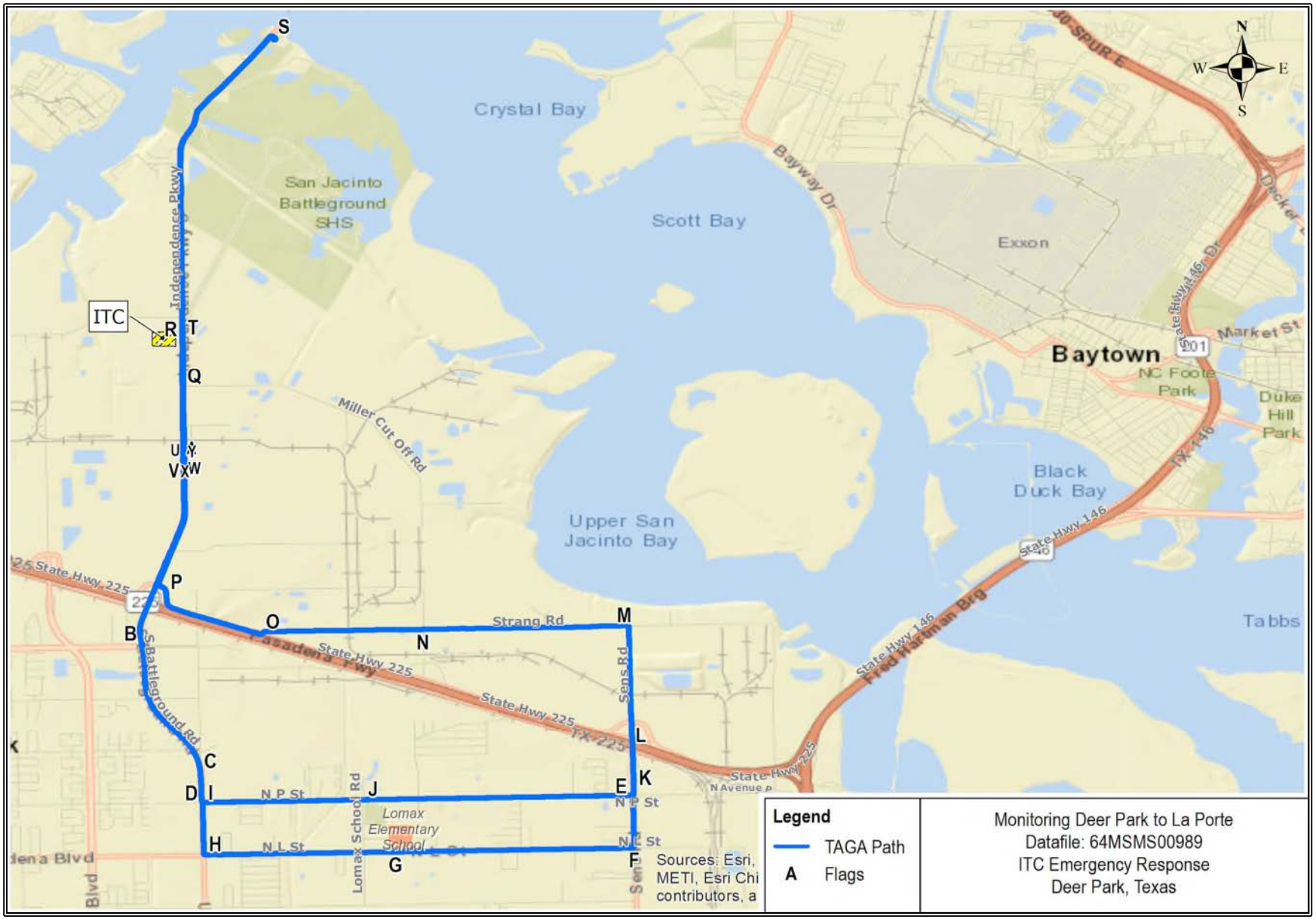


Figure 171a Monitoring Deer Park to La Porte Path, 64MSMS00989

Figure 171b

TAGA File Event Summary
File: 64MSMS00989 Acquired on 19 April 2019 at 09:29:22
Title: Monitoring Deer Park to La Porte

Flag	Time	Sequence	Description
A	1.1	104	Start mobile monitoring on Independence Parkway
B	4.8	454	Cross Highway 225 continuing onto Battleground Road
C	7.4	704	Cross San Augustine Street continuing onto Underwood Road
D	8.1	774	Left turn onto North P Street
E	15.9	1511	Right turn onto Sens Road
F	17.3	1647	Right turn onto North L Street
G	22.3	2118	Passing Lomax Elementary School
H	26.2	2493	Right turn onto Underwood Road
I	27.7	2633	Right turn onto North P Street
J	31.4	2984	Cross Lomax School Road
K	37.6	3572	Left turn onto Sens Road
L	39.1	3721	Cross Highway 225
M	44.3	4209	Left turn onto Strang Road
N	48.8	4637	Cross Miller Cut-Off Road
O	52.5	4995	Right turn onto Pasadena Freeway Frontage Road
P	54.5	5182	Right turn onto Independence Parkway
Q	60.6	5765	Cross Miller Cut-Off Road
R	63.2	6006	Passing ITC Site
S	71.0	6751	U-turn on Independence Parkway at Juan Seguin Park
T	79.4	7546	Passing ITC Site
U	83.6	7947	End mobile monitoring on Independence Parkway
V	84.3	8012	Start ambient
W	86.1	8182	End ambient
X	87.5	8323	Start 30 mL/min spike
Y	88.5	8418	End 30 mL/min spike

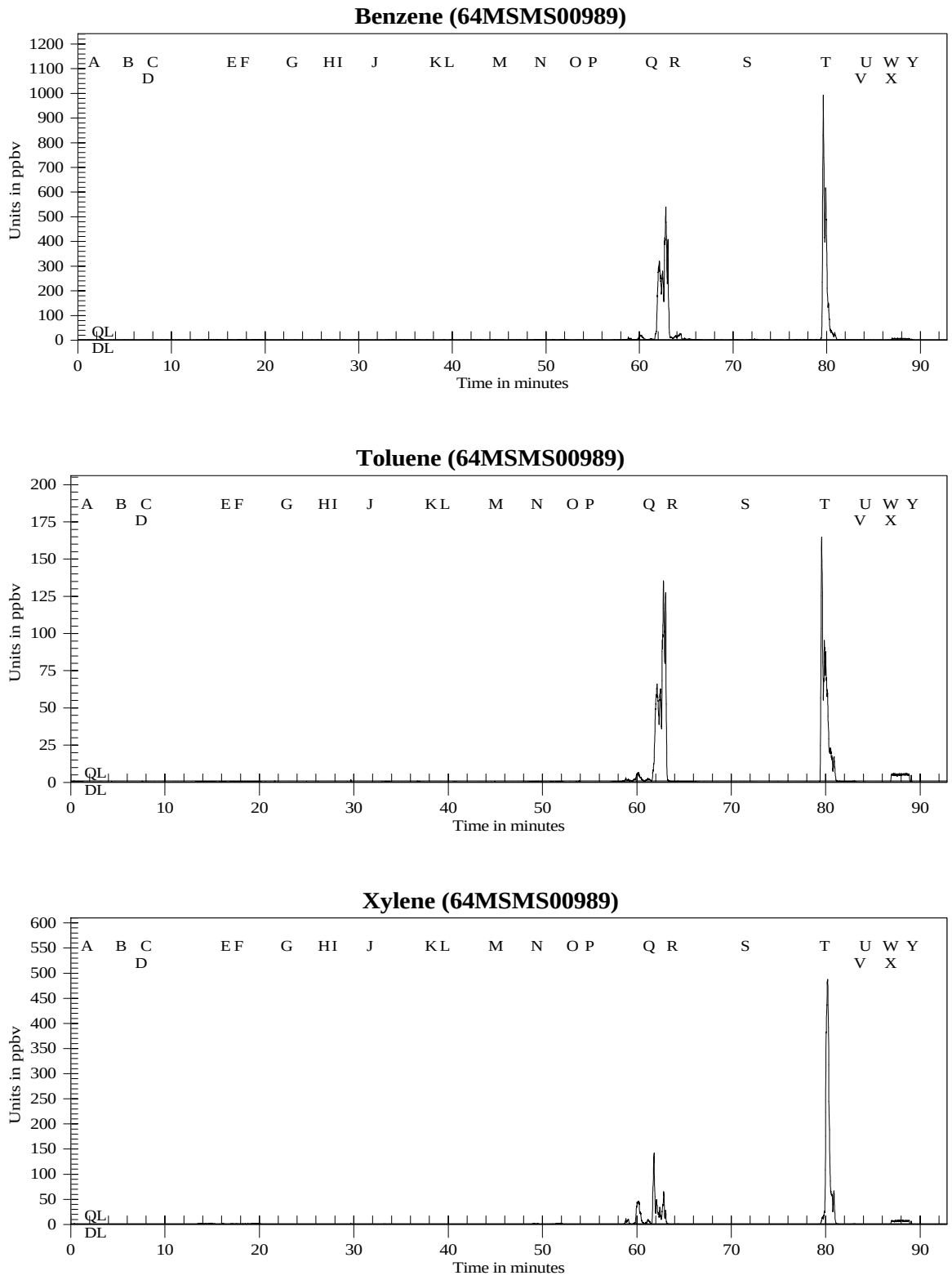


Figure 171c Monitoring Deer Park to La Porte in ppbv for Benzene, Toluene, and Xylenes

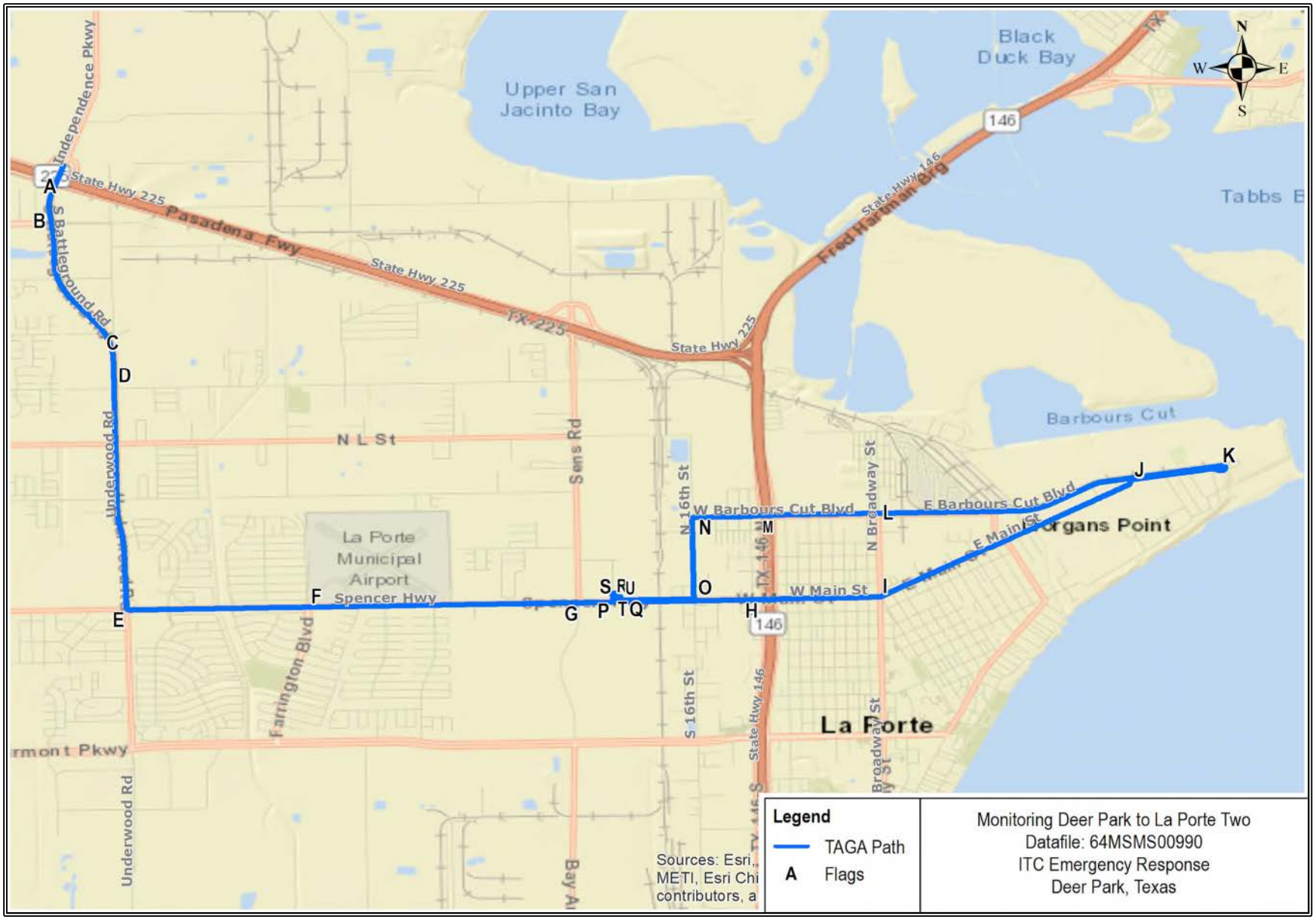


Figure 172a Monitoring Deer Park to La Porte Two Path, 64MSMS00990

Figure 172b

TAGA File Event Summary
File: 64MSMS00990 Acquired on 19 April 2019 at 11:29:00
Title: Monitoring Deer Park to La Porte Two

Flag	Time	Sequence	Description
A	0.6	62	Start mobile monitoring on Battleground Road
B	1.0	94	Cross E 13th Street
C	2.8	268	Continuing onto Underwood Road
D	3.7	348	Cross North P Street
E	7.7	730	Left turn onto Spencer Highway
F	10.6	1004	Cross Farrington Drive
G	13.8	1317	Cross Bay Area Boulevard
H	17.3	1644	Cross Highway 146 continuing onto W Main Street
I	19.6	1862	Cross Broadway Street continuing onto E Main Street
J	24.4	2317	Right turn onto Barbours Cut Boulevard
K	26.7	2538	U-turn on Barbours Cut Boulevard
L	33.2	3155	Cross Broadway Street
M	35.4	3368	Cross Highway 146
N	36.9	3507	Left turn onto North 16th Street
O	38.8	3685	Right turn onto Spencer Highway
P	40.2	3822	Right turn onto North 23rd Street
Q	41.3	3924	End mobile monitoring at La Porte Municipal Courthouse
R	41.7	3967	Start ambient
S	42.9	4082	End ambient
T	44.5	4228	Start 30 mL/min spike
U	45.7	4345	End 30 mL/min spike

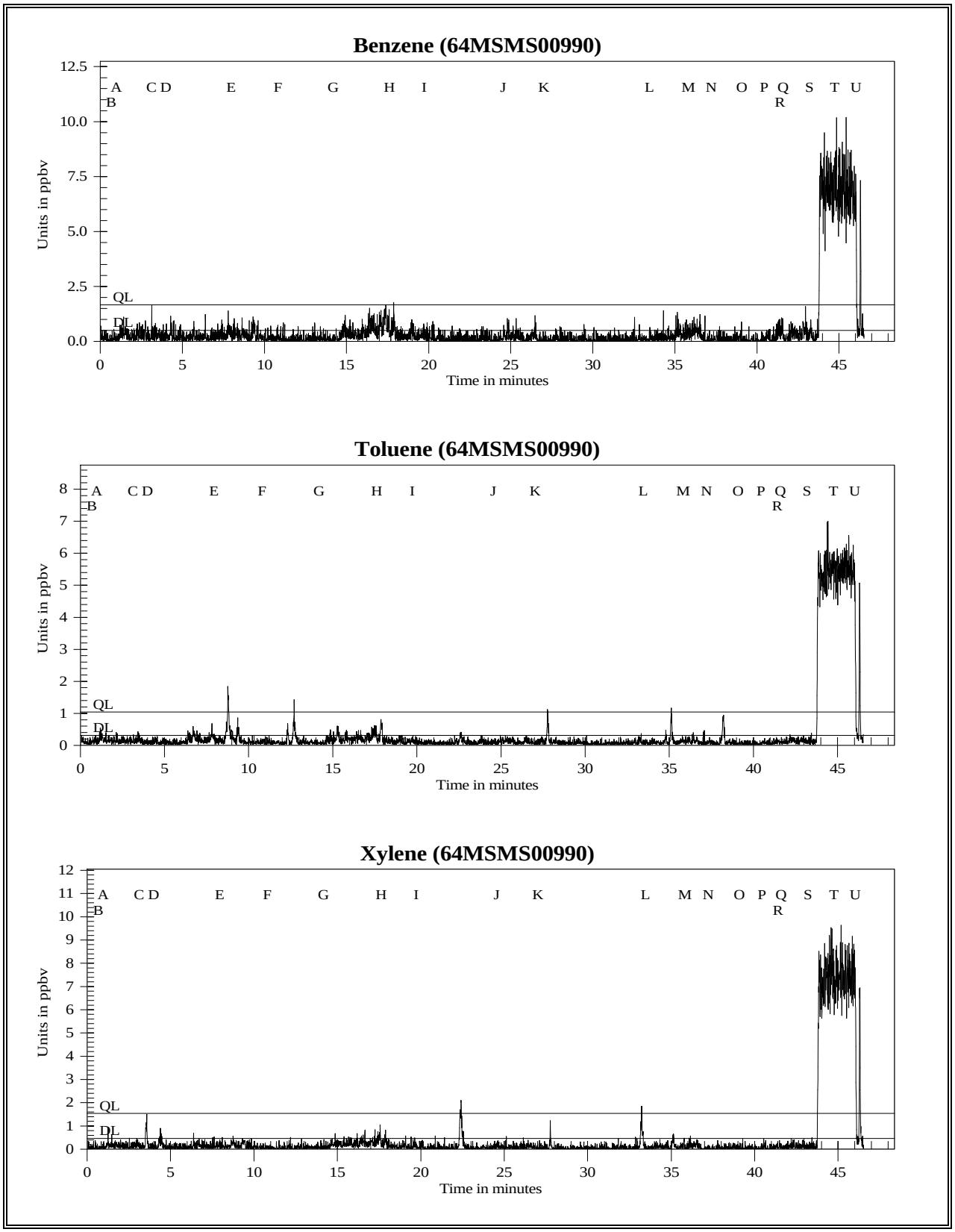


Figure 172c Monitoring Deer Park to La Porte Two in ppbv for Benzene, Toluene, and Xylenes

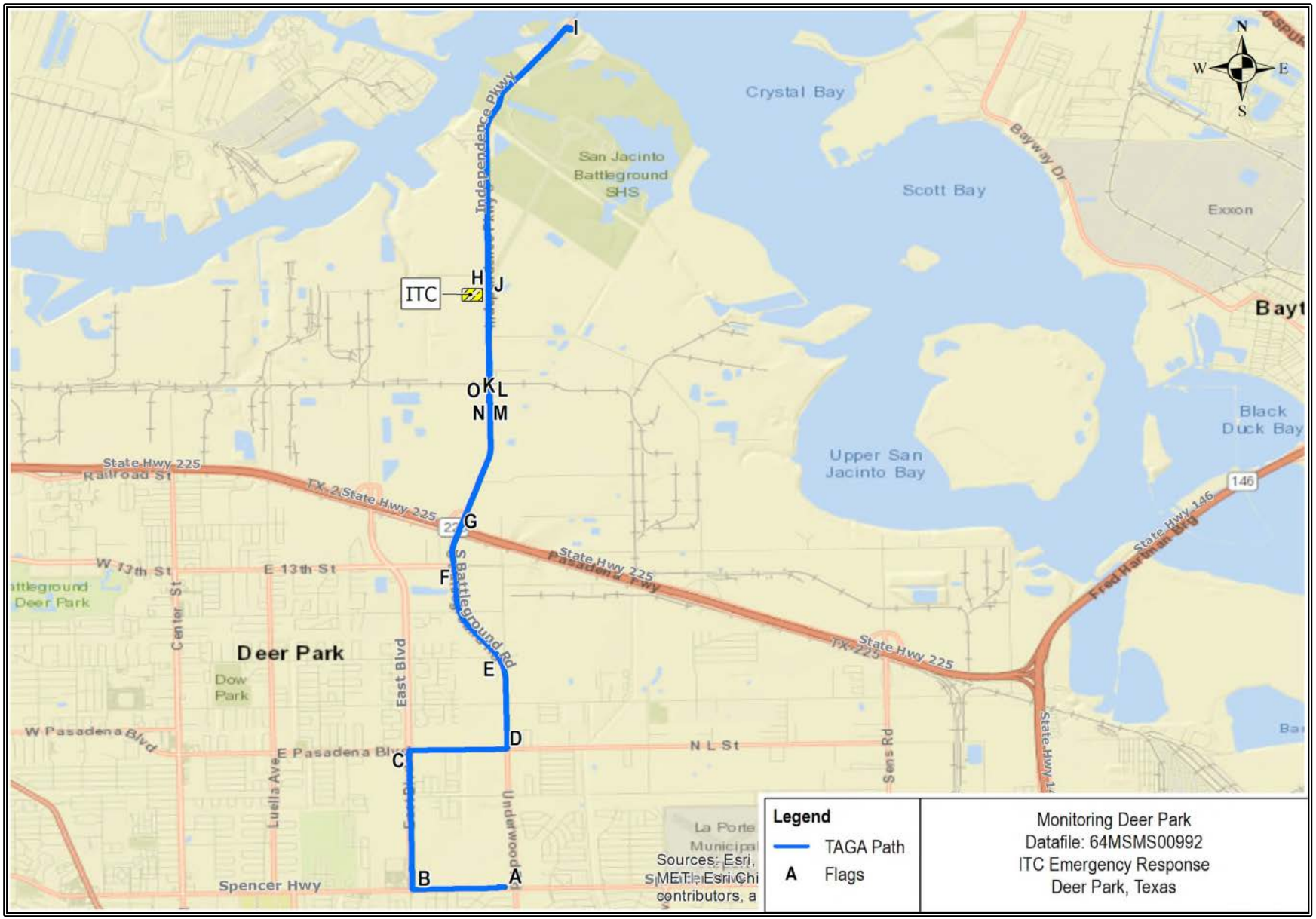


Figure 173a Monitoring Deer Park Path, 64MSMS00992

Figure 173b

TAGA File Event Summary
File: 64MSMS00992 Acquired on 19 April 2019 at 13:18:23
Title: Monitoring Deer Park

Flag	Time	Sequence	Description
A	0.8	77	Start mobile monitoring on Spencer Highway
B	4.2	403	Right turn onto East Boulevard
C	7.4	703	Right turn onto Pasadena Boulevard
D	9.6	912	Left turn onto Underwood Road
E	11.4	1083	Continuing onto Battleground Road
F	13.0	1240	Cross E 13th Street
G	14.1	1346	Cross Highway 225 continuing onto Independence Parkway
H	21.7	2062	Passing ITC Site
I	29.5	2804	U-turn on Independence Parkway at Juan Seguin Park
J	36.8	3504	Passing ITC Site
K	40.8	3884	End mobile monitoring on Independence Parkway
L	41.2	3916	Start ambient
M	42.6	4054	End ambient
N	43.9	4176	Start 30 mL/min spike
O	45.3	4303	End 30 mL/min spike

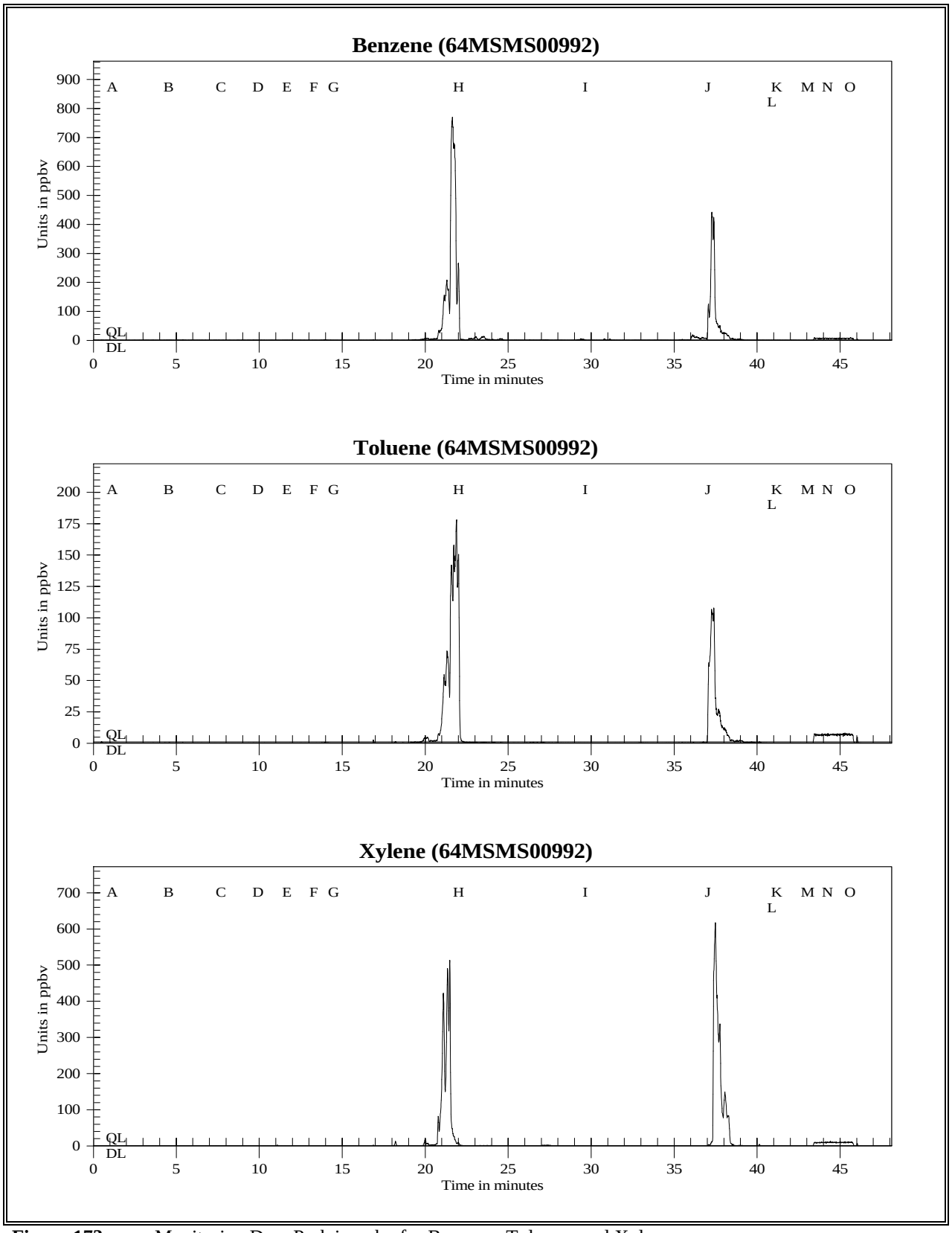


Figure 173c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

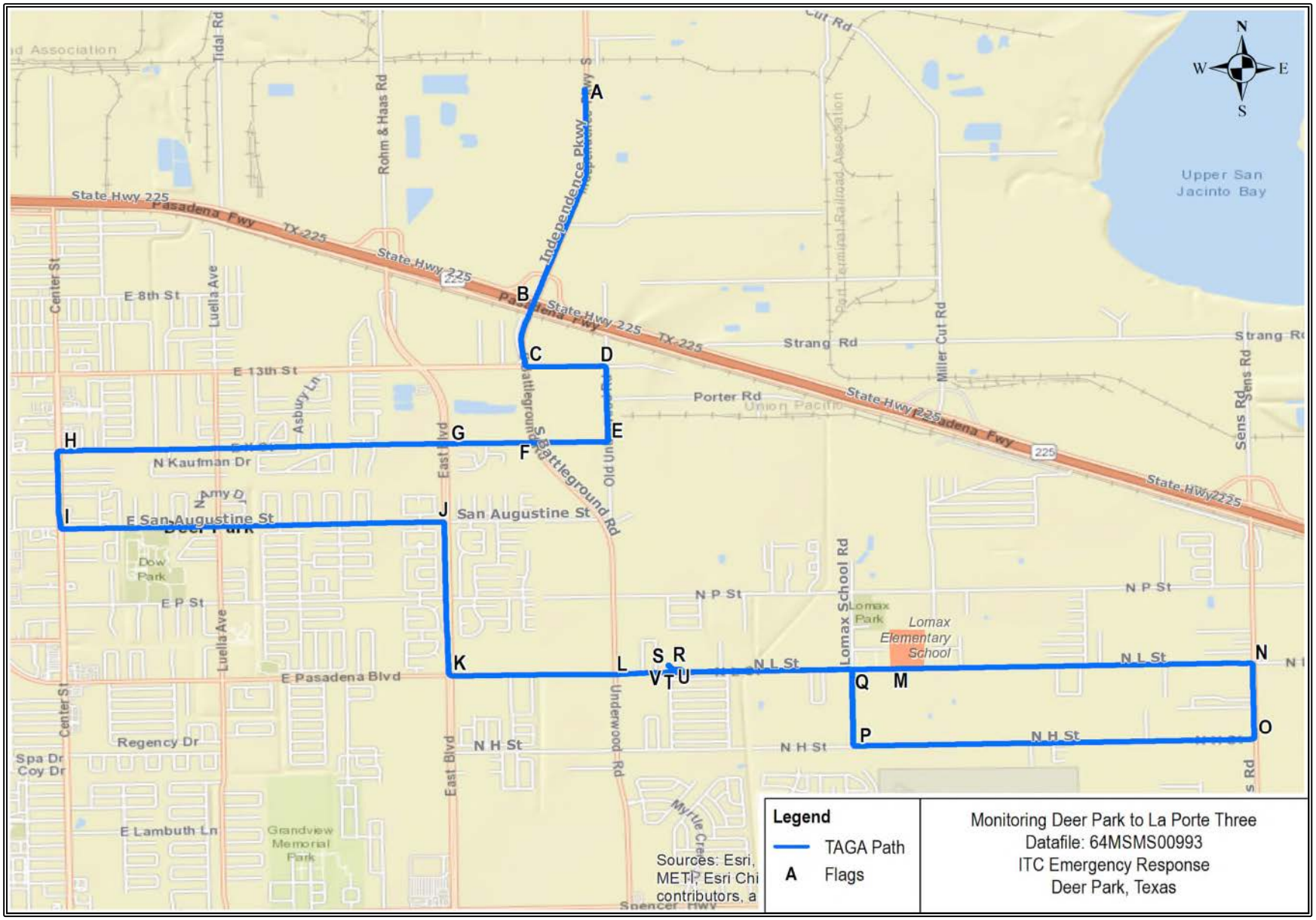


Figure 174a Monitoring Deer Park to La Porte Three Path, 64MSMS00993

Figure 174b

TAGA File Event Summary
File: 64MSMS00993 Acquired on 19 April 2019 at 14:07:31
Title: Monitoring Deer Park to La Porte Three

Flag	Time	Sequence	Description
A	2.8	265	Start mobile monitoring on Independence Parkway
B	4.9	463	Cross Highway 225 continuing onto Battleground Road
C	5.9	565	Left turn onto E 13th Street
D	7.3	698	Right turn onto Old Underwood Road
E	8.8	839	Right turn onto East X Street
F	11.0	1045	Cross Battleground Road
G	12.7	1210	Cross East Boulevard
H	18.6	1772	Left turn onto Center Street
I	20.1	1908	Left turn onto San Augustine Avenue
J	25.4	2420	Right turn onto East Boulevard
K	29.4	2799	Left turn onto Pasadena Boulevard
L	32.5	3086	Cross Underwood Road continuing onto North L Street
M	35.8	3401	Passing Lomax Elementary School
N	40.9	3887	Right turn onto Sens Road
O	42.4	4032	Right turn onto North H Street
P	48.0	4564	Right turn onto Lomax School Road
Q	49.7	4724	Left turn onto North L Street
R	52.2	4959	End mobile monitoring at Lomax Junior High School
S	52.6	4998	Start ambient
T	53.8	5120	End ambient
U	55.2	5252	Start 30 mL/min spike
V	56.3	5352	End 30 mL/min spike

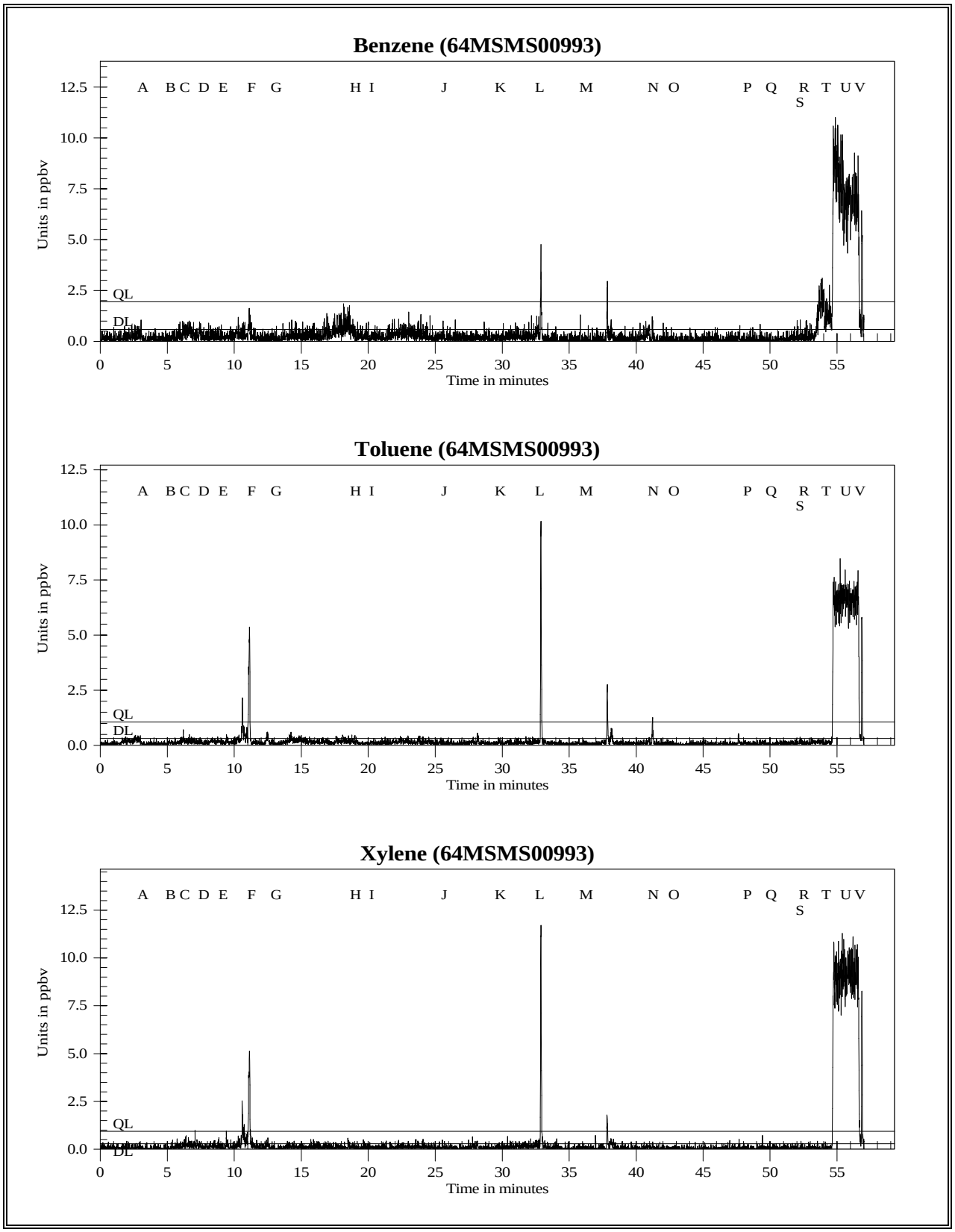


Figure 174c Monitoring Deer Park to La Porte Three in ppbv for Benzene, Toluene, and Xylenes

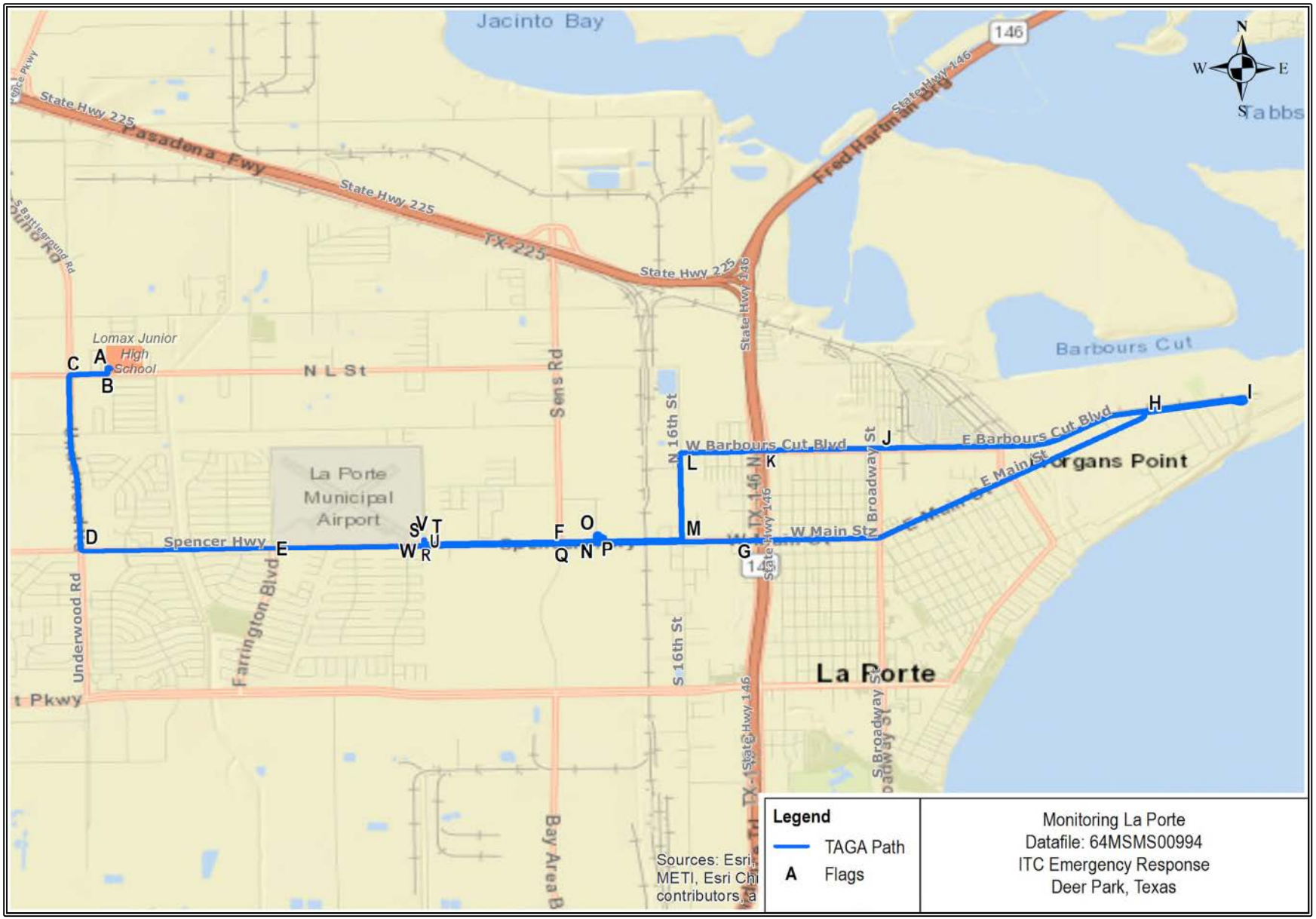


Figure 175a Monitoring La Porte Path, 64MSMS00994

Figure 175b

TAGA File Event Summary
File: 64MSMS00994 Acquired on 19 April 2019 at 15:07:12
Title: Monitoring La Porte

Flag	Time	Sequence	Description
A	1.3	124	Start mobile monitoring at Lomax Junior High School
B	2.9	281	Right turn onto North L Street
C	4.0	379	Left turn onto Underwood Road
D	7.2	687	Left turn onto Spencer Highway
E	9.9	945	Cross Farrington Drive
F	14.4	1368	Cross Bay Area Boulevard
G	17.3	1641	Cross Highway 146 continuing onto W Main Street
H	25.0	2381	Right turn onto Barbours Cut Boulevard
I	27.0	2572	U-turn on Barbours Cut Boulevard
J	34.4	3271	Cross Broadway Street
K	36.2	3447	Cross Highway 146
L	37.8	3597	Left turn onto North 16th Street
M	40.1	3816	Right turn onto Spencer Highway
N	41.3	3930	Right turn onto 23rd street
O	43.6	4143	U-turn on 23rd Street
P	44.5	4231	Right turn onto Spencer Highway
Q	45.7	4349	Cross Sens Road
R	47.5	4512	Right turn onto Airport Boulevard
S	47.9	4556	End mobile monitoring on Airport Boulevard
T	48.2	4588	Start ambient
U	49.3	4684	End ambient
V	51.0	4849	Start 30 mL/min spike
W	52.1	4957	End 30 mL/min spike

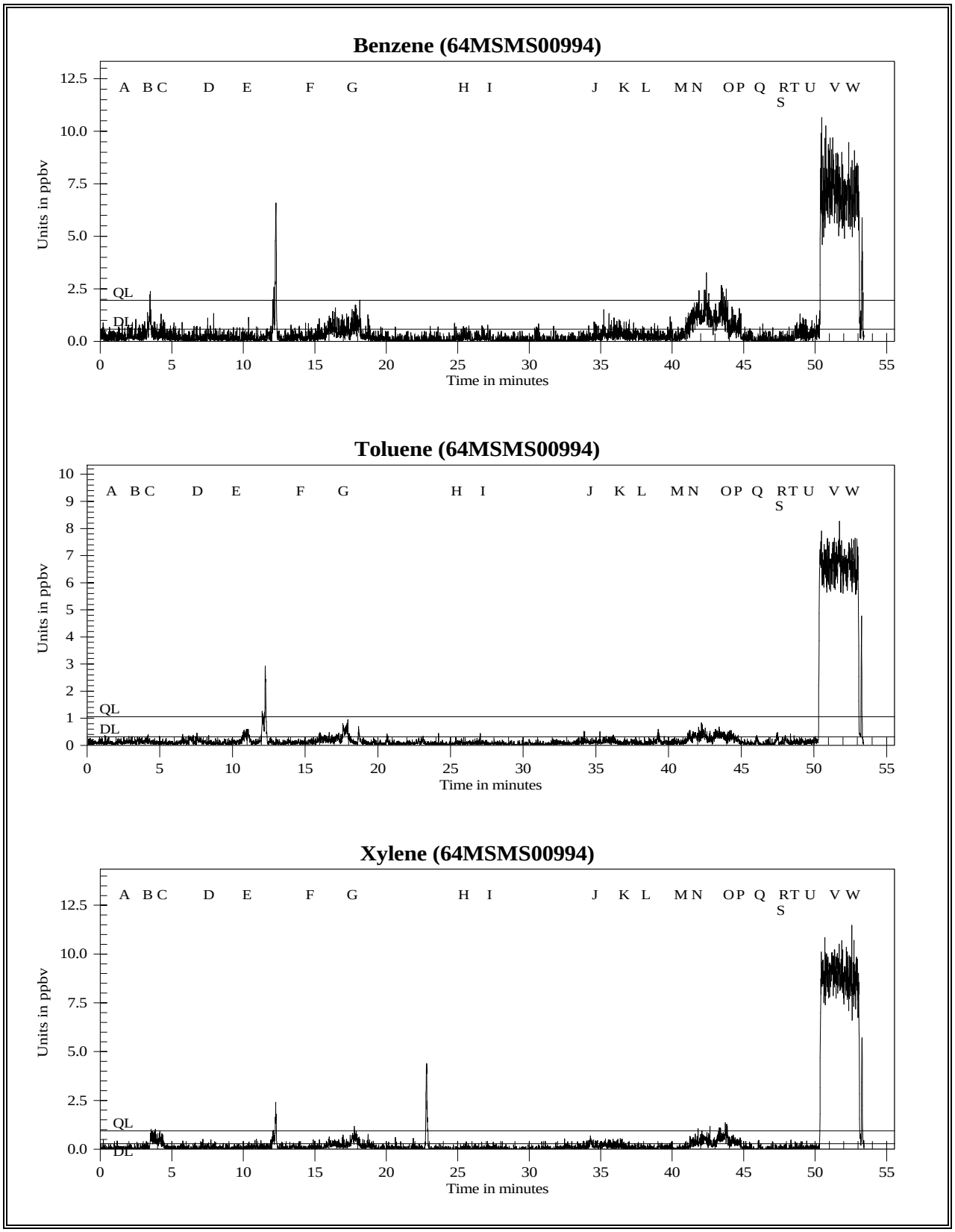


Figure 175c Monitoring La Porte in ppbv for Benzene, Toluene, and Xylenes

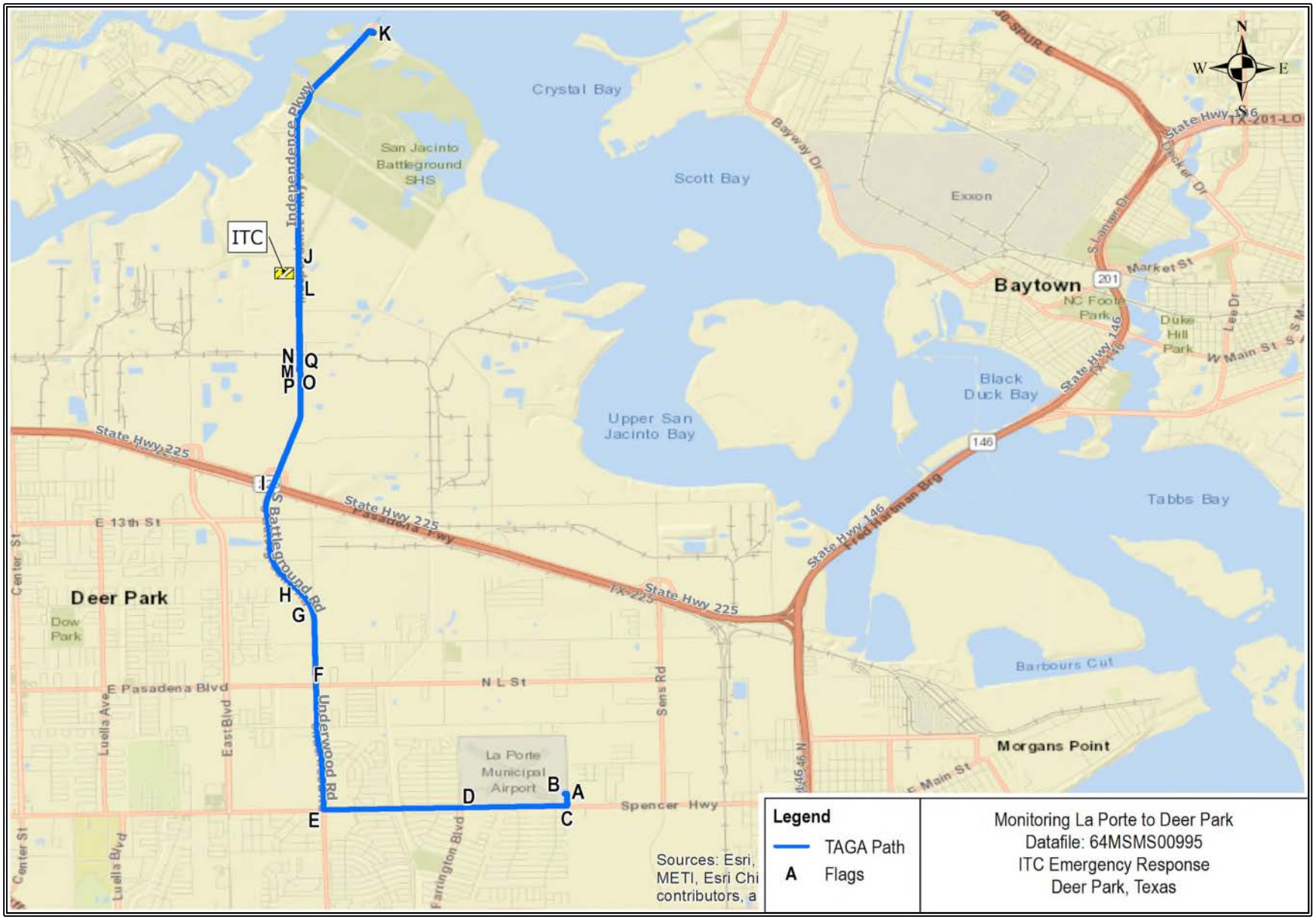


Figure 176a Monitoring La Porte to Deer Park Path, 64MSMS00995

Figure 176b

TAGA File Event Summary
File: 64MSMS00995 Acquired on 19 April 2019 at 16:02:31
Title: Monitoring La Porte to Deer Park

Flag	Time	Sequence	Description
A	1.1	107	Start mobile monitoring on Airport Boulevard
B	1.9	177	U-turn on Airport Boulevard
C	3.8	365	Right turn onto Spencer Highway
D	6.7	634	Cross Farrington Street
E	10.1	964	Right turn onto Underwood Road
F	12.9	1226	Cross North L Street
G	14.4	1374	Continuing onto Battleground Road
H	16.7	1588	Cross E 13th Street
I	17.8	1696	Cross Highway 225 continuing onto Independence Parkway
J	25.2	2400	Passing ITC Site
K	32.9	3124	U-turn on Independence Parkway at Juan Seguin Park
L	39.0	3710	Passing ITC Site
M	42.1	4002	End mobile monitoring on Independence Parkway
N	42.4	4033	Start ambient
O	43.4	4131	End ambient
P	44.8	4261	Start 30 mL/min spike
Q	45.8	4358	End 30 mL/min spike

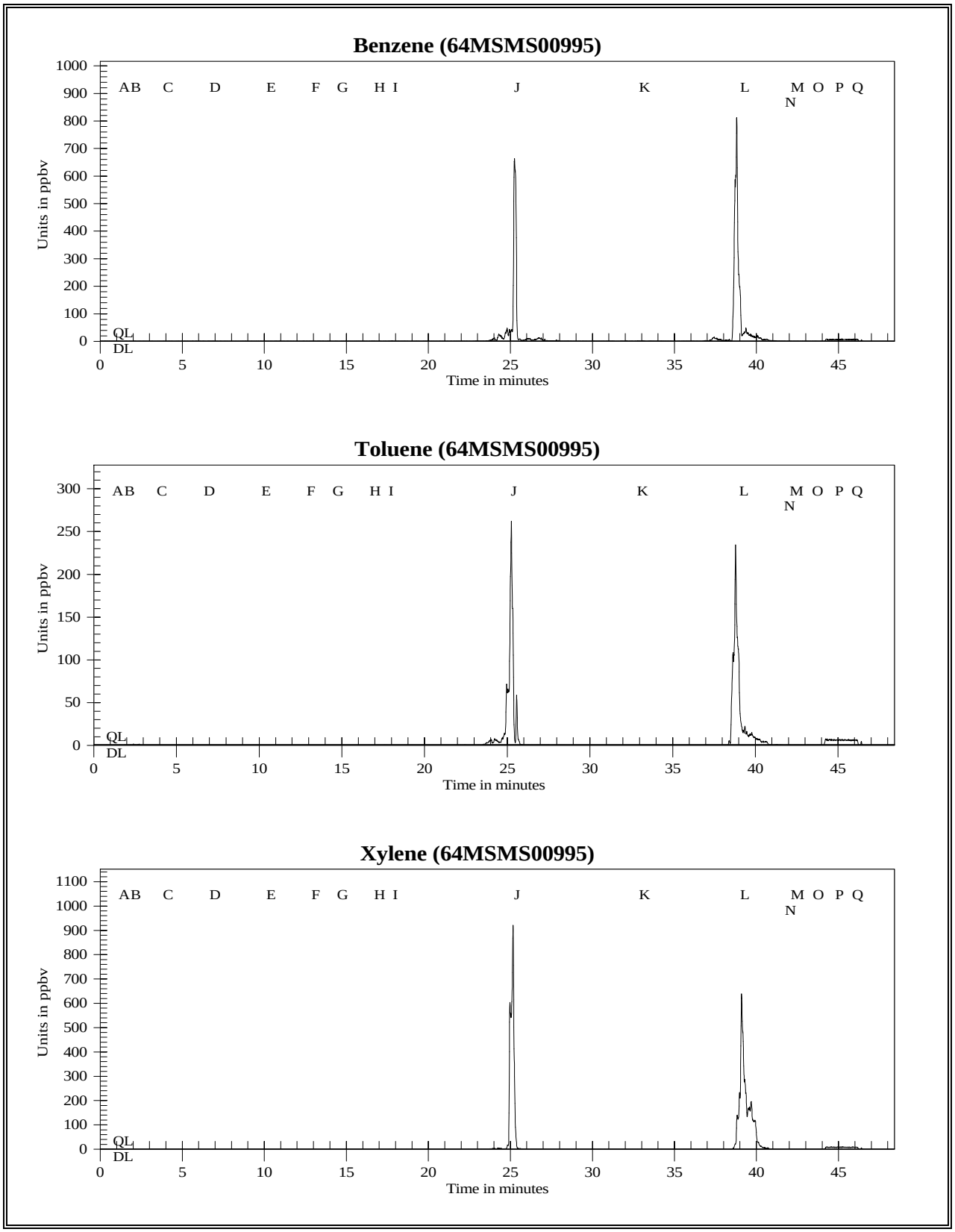


Figure 176c Monitoring La Porte to Deer Park in ppbv for Benzene, Toluene, and Xylenes

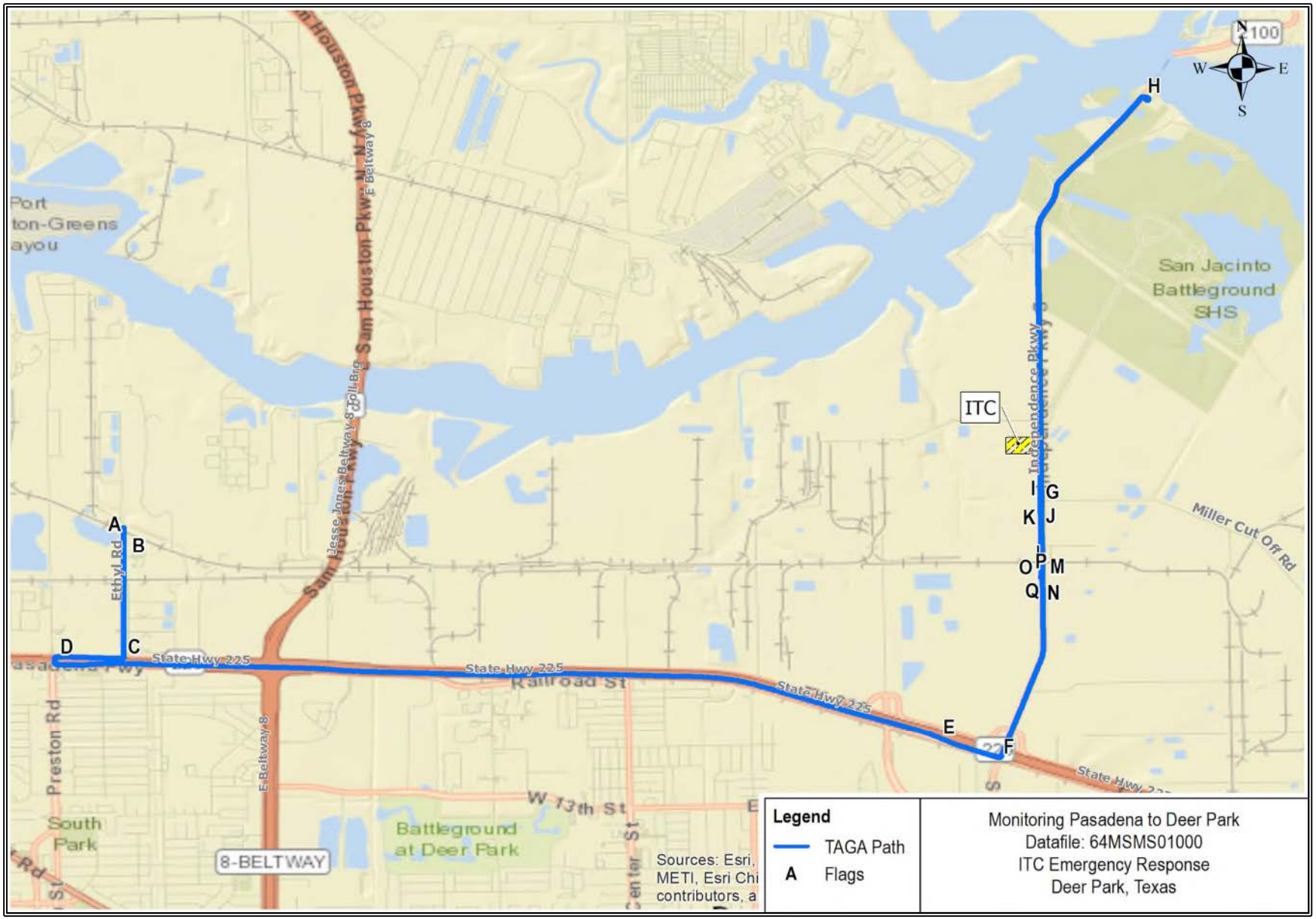


Figure 177a Monitoring Pasadena to Deer Park Path, 64MSMS01000

Figure 177b

TAGA File Event Summary
File: 64MSMS01000 Acquired on 20 April 2019 at 09:39:01
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	1.1	107	Start mobile monitoring at EPA Command Post
B	1.8	172	Continuing onto Ethyl Road
C	4.5	430	Right turn onto Pasadena Freeway Frontage Road
D	5.3	503	U-turn on Pasadena Freeway Frontage Road at Preston Road
E	10.7	1016	Exit Highway 225 onto Pasadena Freeway Frontage Road
F	12.2	1164	Left turn onto Independence Parkway
G	15.5	1471	Cross Miller Cut-Off Road
H	23.6	2240	U-turn on Independence Parkway at Juan Seguin Park
I	31.8	3022	Cross Miller Cut-Off Road
J	32.5	3090	Stationary on Independence Parkway
K	39.6	3761	Resume mobile monitoring on Independence Parkway
L	40.6	3859	Continuing on Independence Parkway
M	41.0	3903	End mobile monitoring on Independence Parkway
N	41.3	3924	Start ambient
O	42.3	4022	End ambient
P	44.1	4189	Start 30 mL/min spike
Q	45.1	4291	End 30 mL/min spike

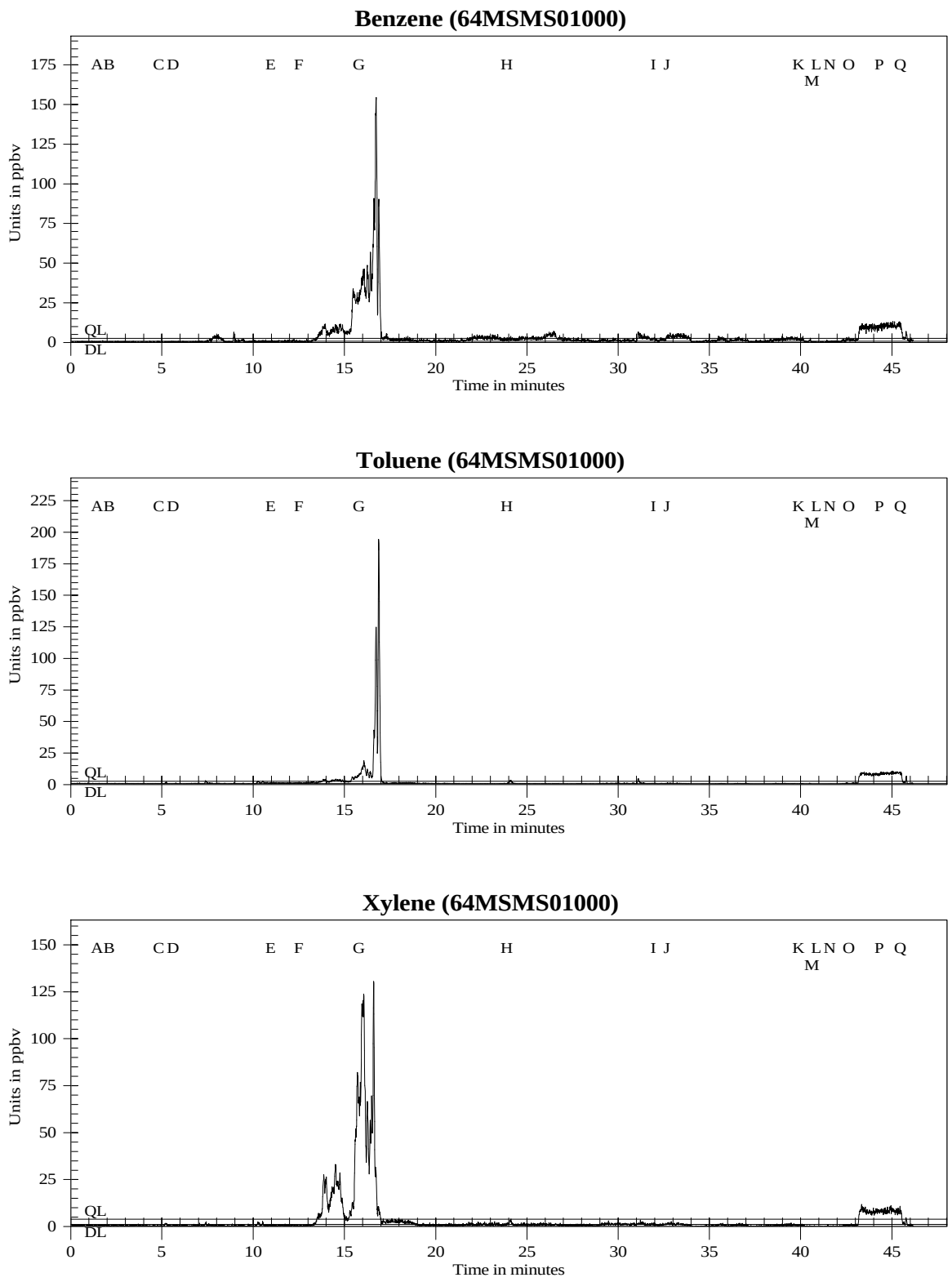


Figure 177c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

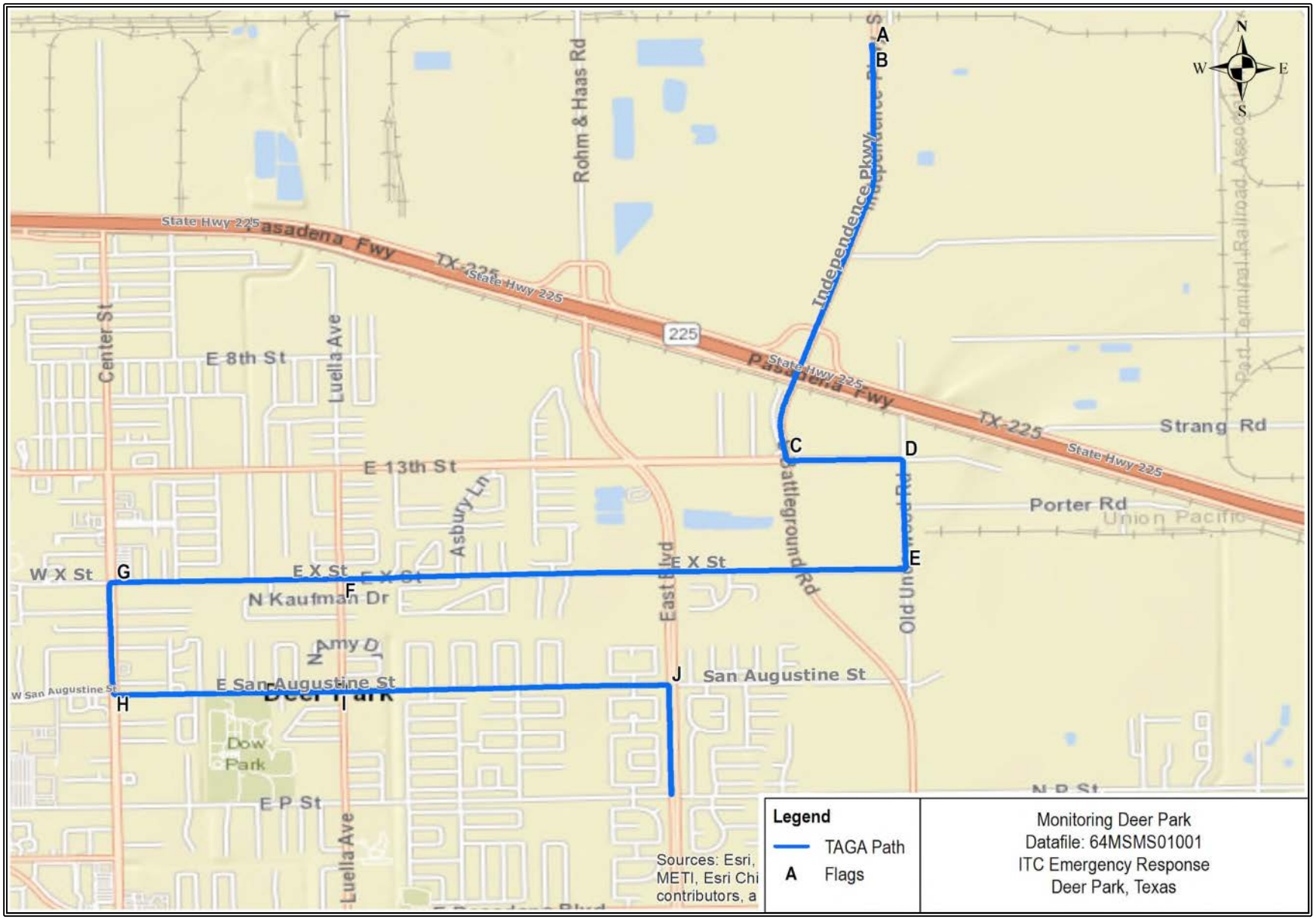


Figure 178a Monitoring Deer Park Path, 64MSMS01001

Figure 178b

TAGA File Event Summary
File: 64MSMS01001 Acquired on 20 April 2019 at 10:28:33
Title: Monitoring Deer Park

Flag	Time	Sequence	Description
A	0.9	86	Start mobile monitoring on Independence Parkway
B	1.5	145	Continuing onto Independence Parkway
C	4.4	421	Left turn onto E 13th Street
D	5.6	536	Right turn onto Old Underwood Road
E	6.8	652	Right turn onto East X Street
F	11.9	1134	Cross Luella Avenue
G	14.4	1370	Left turn onto Center Street
H	16.4	1560	Left turn onto San Augustine Street
I	18.4	1753	Cross Luella Avenue
J	21.5	2049	Right turn onto East Boulevard
Notes:		Run aborted. Interface pump lost vacuum and was restarted. Post-run spike was not performed.	

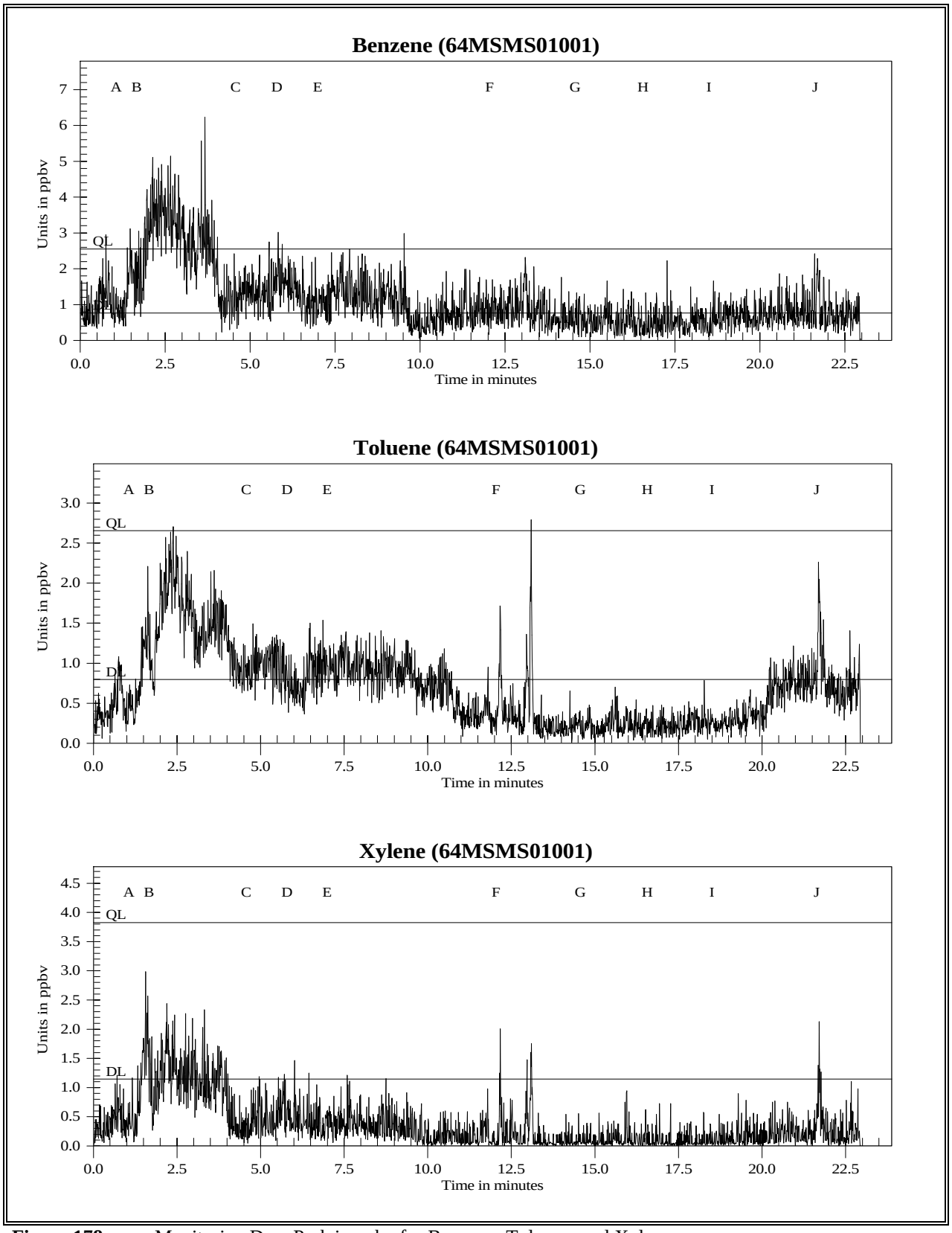


Figure 178c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

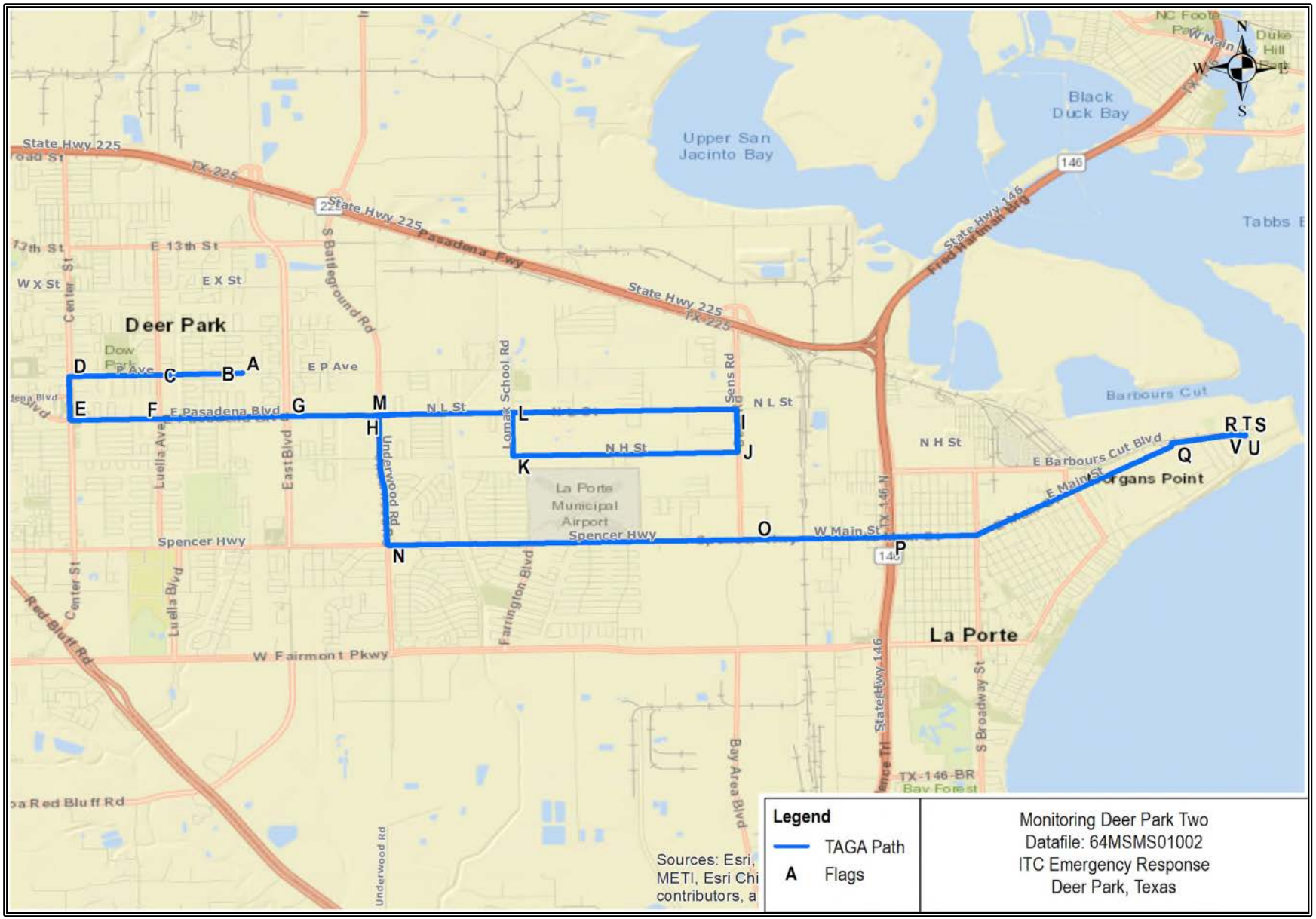


Figure 179a Monitoring Deer Park Two Path, 64MSMS01002

Figure 179b

TAGA File Event Summary
File: 64MSMS01002 Acquired on 20 April 2019 at 11:01:15
Title: Monitoring Deer Park Two

Flag	Time	Sequence	Description
A	1.2	115	Start mobile monitoring on East P Street
B	1.7	167	Continuing onto East P Street
C	3.7	351	Cross Luella Avenue
D	10.1	964	Left turn onto Center Street
E	12.4	1178	Left turn onto Pasadena Boulevard
F	14.1	1341	Cross Luella Avenue
G	17.5	1661	Cross East Boulevard
H	19.9	1896	Merge onto North L Street
I	26.1	2487	Right turn onto Sens Road
J	27.1	2580	Right turn onto North H Street
K	31.5	2999	Right turn onto Lomax School Road
L	33.0	3135	Left turn onto North L Street
M	36.2	3441	Left turn onto Underwood Road
N	39.6	3767	Left turn onto Spencer Highway
O	46.7	4444	Cross Sens Road
P	48.8	4643	Merge onto Main Street
Q	54.6	5193	Right turn onto Barbours Cut Boulevard
R	56.3	5352	End mobile monitoring on Barbours Cut Boulevard
S	56.6	5383	Start ambient
T	57.6	5478	End ambient
U	60.1	5719	Start 30 mL/min spike
V	61.2	5817	End 30 mL/min spike

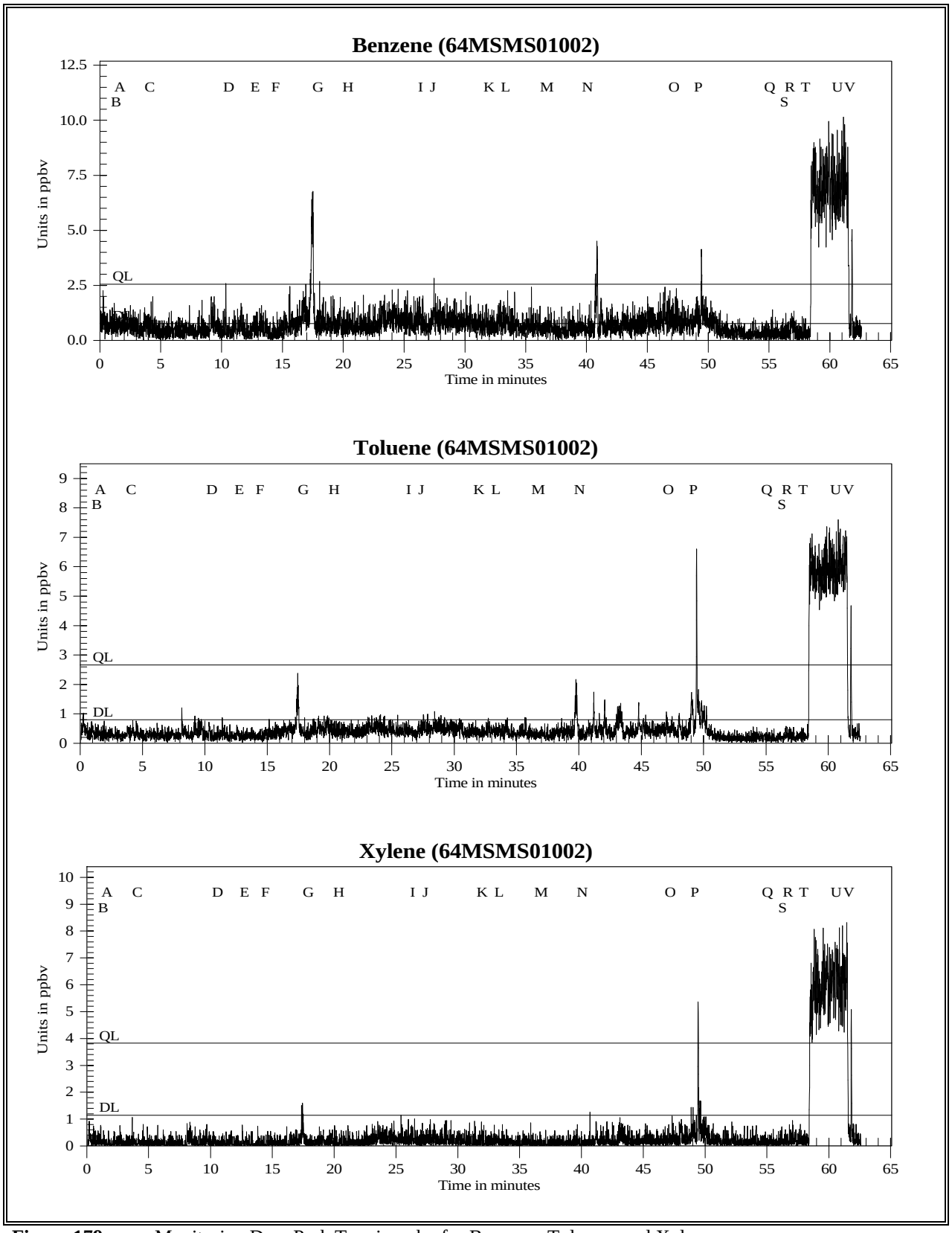


Figure 179c Monitoring Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

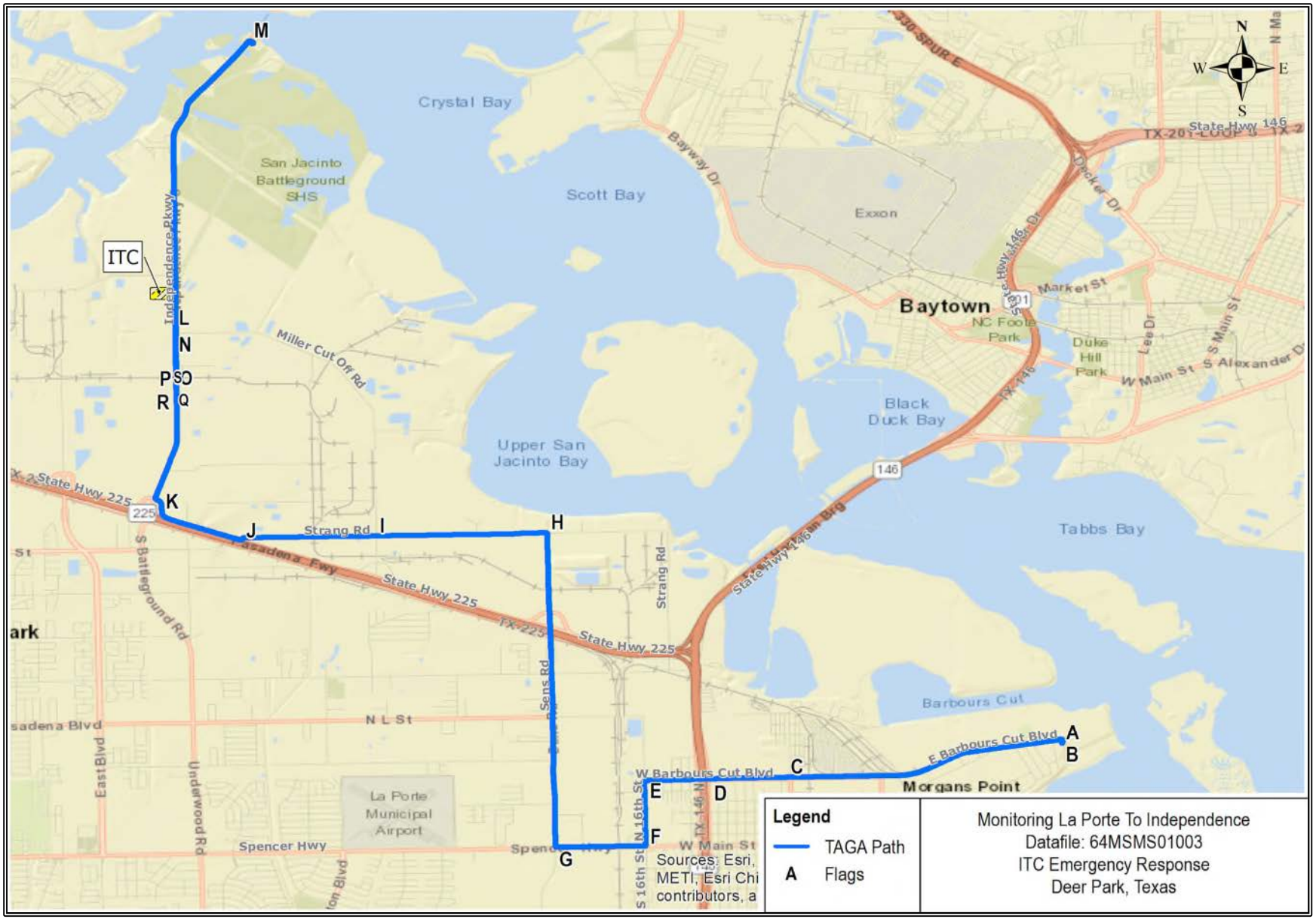


Figure 180a Monitoring La Porte to Independence Parkway Path, 64MSMS01003

Figure 180b

TAGA File Event Summary
File: 64MSMS01003 Acquired on 20 April 2019 at 12:08:00
Title: Monitoring La Porte to Independence

Flag	Time	Sequence	Description
A	0.8	80	Start mobile monitoring on Barbours Cut Boulevard
B	1.7	165	Continuing onto Barbours Cut Boulevard
C	7.9	755	Cross Broadway Street
D	10.6	1008	Cross Highway 146
E	11.8	1119	Left turn onto North 16th Street
F	13.6	1294	Right turn onto Spencer Highway
G	15.0	1424	Right turn onto Sens Road
H	21.9	2087	Left turn onto Strang Road
I	25.2	2400	Cross Miller Cut-Off Road
J	28.3	2691	Right turn onto Pasadena Freeway Frontage Road
K	29.5	2807	Right turn onto Independence Parkway
L	33.0	3140	Cross Miller Cut-Off Road
M	39.3	3734	U-turn on Independence Parkway at Juan Seguin Park
N	46.2	4393	Cross Miller Cut-Off Road
O	47.9	4555	End mobile monitoring on Independence Parkway
P	48.2	4581	Start ambient
Q	49.2	4681	End ambient
R	50.6	4808	Start 30 mL/min spike
S	51.6	4911	End 30 mL/min spike

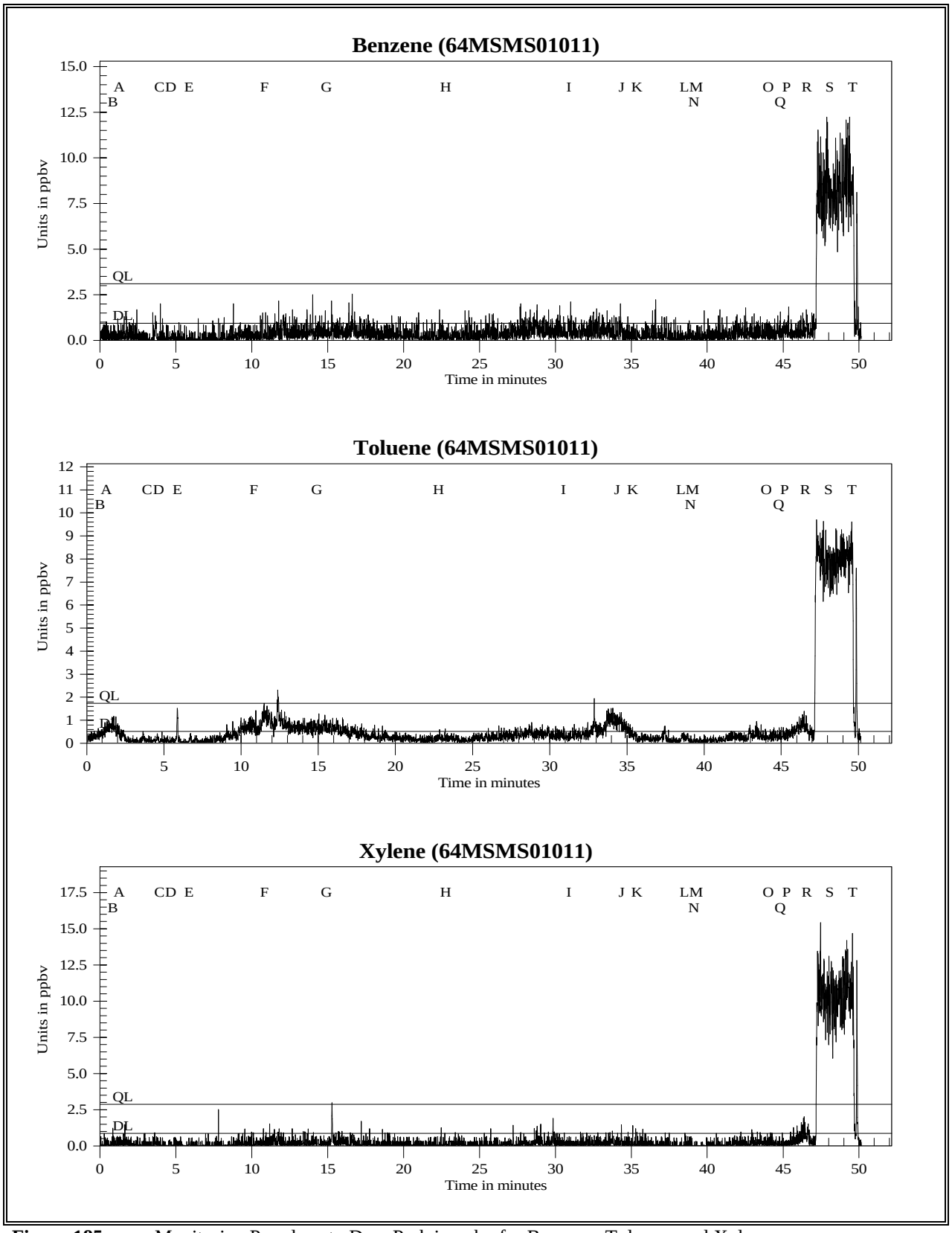


Figure 185c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

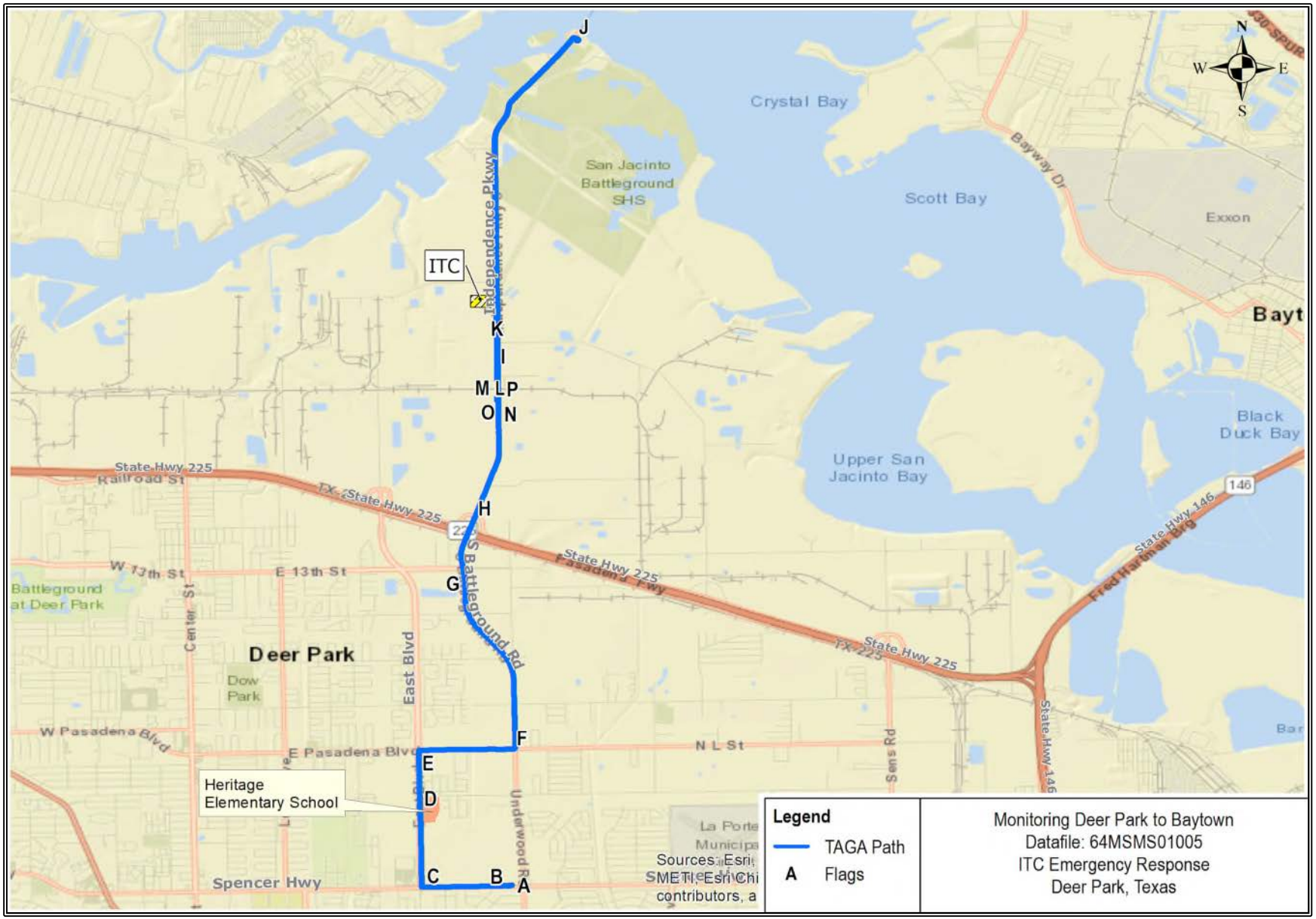


Figure 181a Monitoring Deer Park to Baytown Path, 64MSMS01005

Figure 181b

TAGA File Event Summary
File: 64MSMS01005 Acquired on 20 April 2019 at 14:26:16
Title: Monitoring Deer Park to Baytown

Flag	Time	Sequence	Description
A	0.7	67	Start mobile monitoring on Spencer Highway
B	1.4	138	Continuing onto Spencer Highway
C	3.1	298	Right turn onto East Boulevard
D	4.8	454	Passing Heritage Elementary School
E	5.9	558	Right turn onto Pasadena Boulevard
F	7.7	736	Left turn onto Underwood Road
G	10.4	985	Continuing onto Battleground Road
H	12.5	1187	Continuing onto Independence Parkway
I	15.2	1450	Cross Miller Cut-Off Road
J	22.6	2154	U-turn on Independence Parkway at Juan Seguin Park
K	31.0	2945	Cross Miller Cut-Off Road
L	32.6	3102	End mobile monitoring on Independence Parkway
M	32.9	3132	Start ambient
N	33.9	3220	End ambient
O	36.1	3431	Start 30 mL/min spike
P	37.2	3537	End 30 mL/min spike

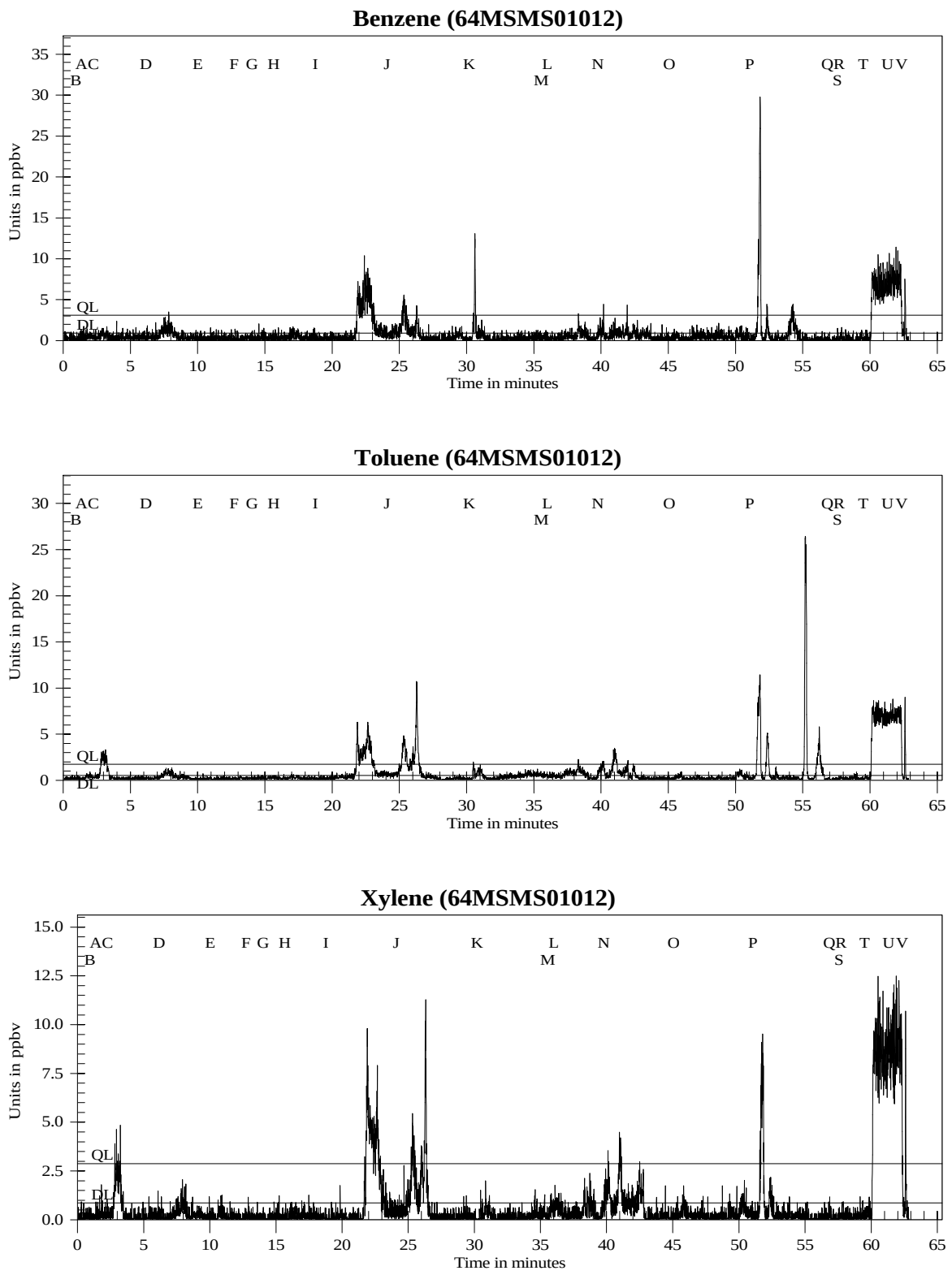


Figure 186c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

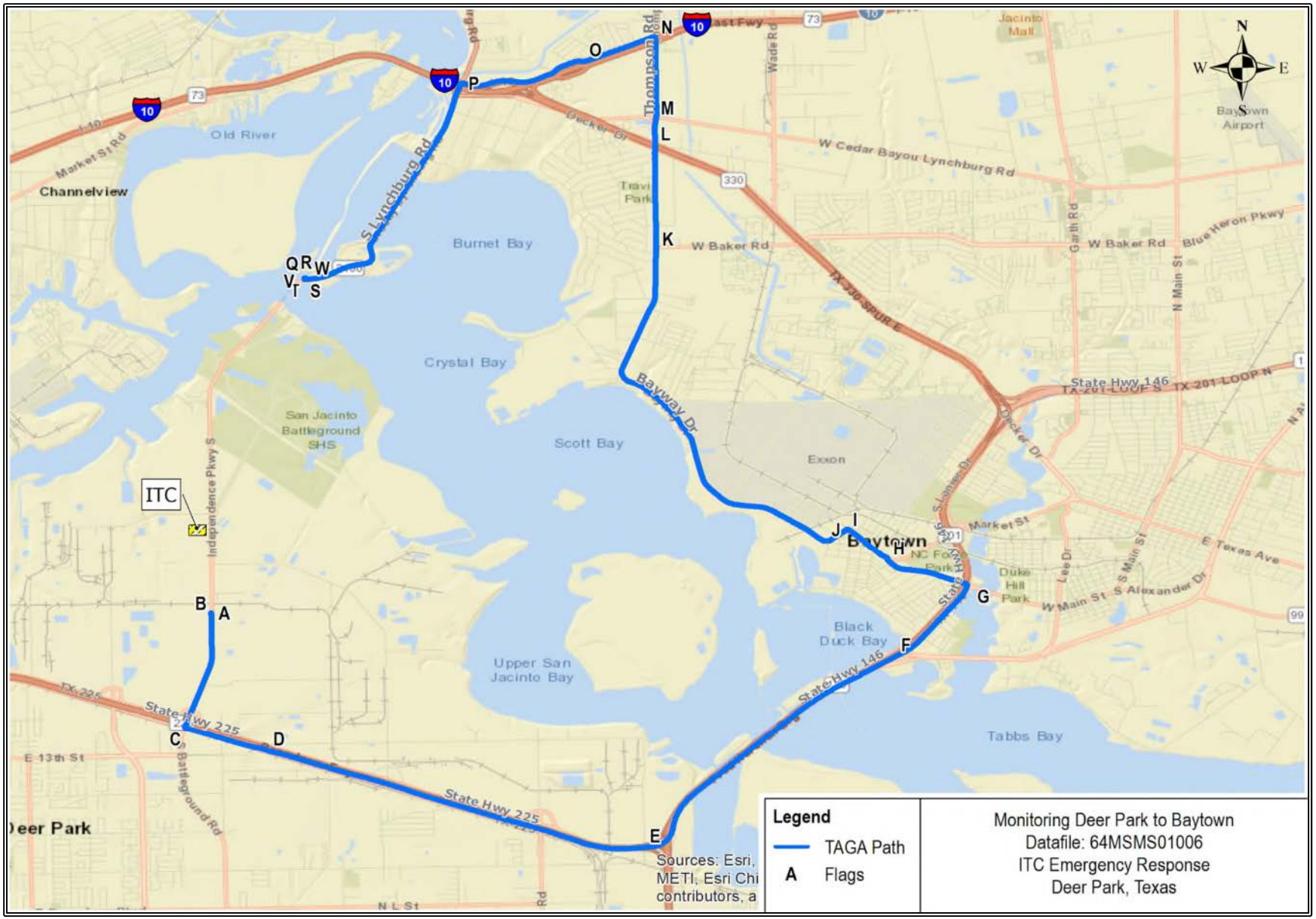


Figure 182a Monitoring Deer Park to Baytown Path, 64MSMS01006

Figure 182b

TAGA File Event Summary
File: 64MSMS01006 Acquired on 20 April 2019 at 15:07:12
Title: Monitoring Deer Park to Baytown Two

Flag	Time	Sequence	Description
A	1.6	153	Start mobile monitoring on Independence Parkway
B	3.0	283	Continuing onto Independence Parkway
C	4.9	468	Left turn onto Pasadena Freeway Frontage Road
D	5.9	565	Merge onto Highway 225 East
E	9.1	863	Merge onto Highway 146 North
F	11.9	1130	Exit onto Robert C Lanier Drive
G	14.2	1349	Left turn onto Main Street
H	16.0	1525	Left turn onto Market Street
I	17.3	1648	Left turn to continue onto Market Street
J	17.9	1701	Right turn onto Bayway Drive
K	25.6	2431	Cross W Baker Road
L	28.6	2717	Cross Highway 330
M	29.2	2775	Continuing onto Thompson Road
N	31.6	3006	Left turn onto East Freeway Service Road
O	32.9	3125	Continuing onto East Freeway Service Road
P	35.2	3347	Left turn onto Independence Parkway North
Q	41.3	3924	U-turn on Independence Parkway North at Lynchburg Ferry
R	41.9	3989	End mobile monitoring on Independence Parkway North
S	42.3	4019	Start ambient
T	43.3	4117	End ambient
V	46.4	4414	Start 30 mL/min spike
W	47.4	4512	End 30 mL/min spike

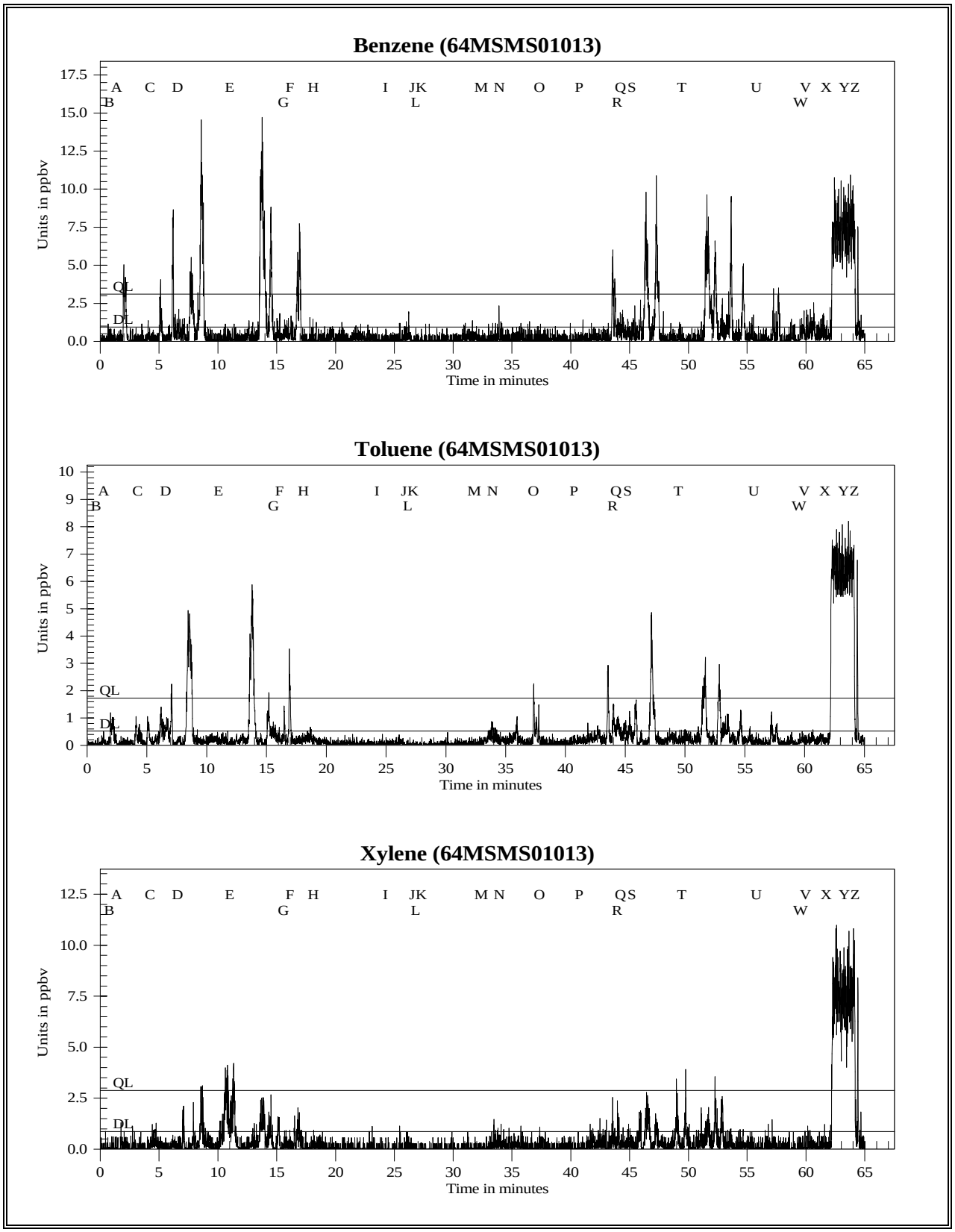


Figure 187c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

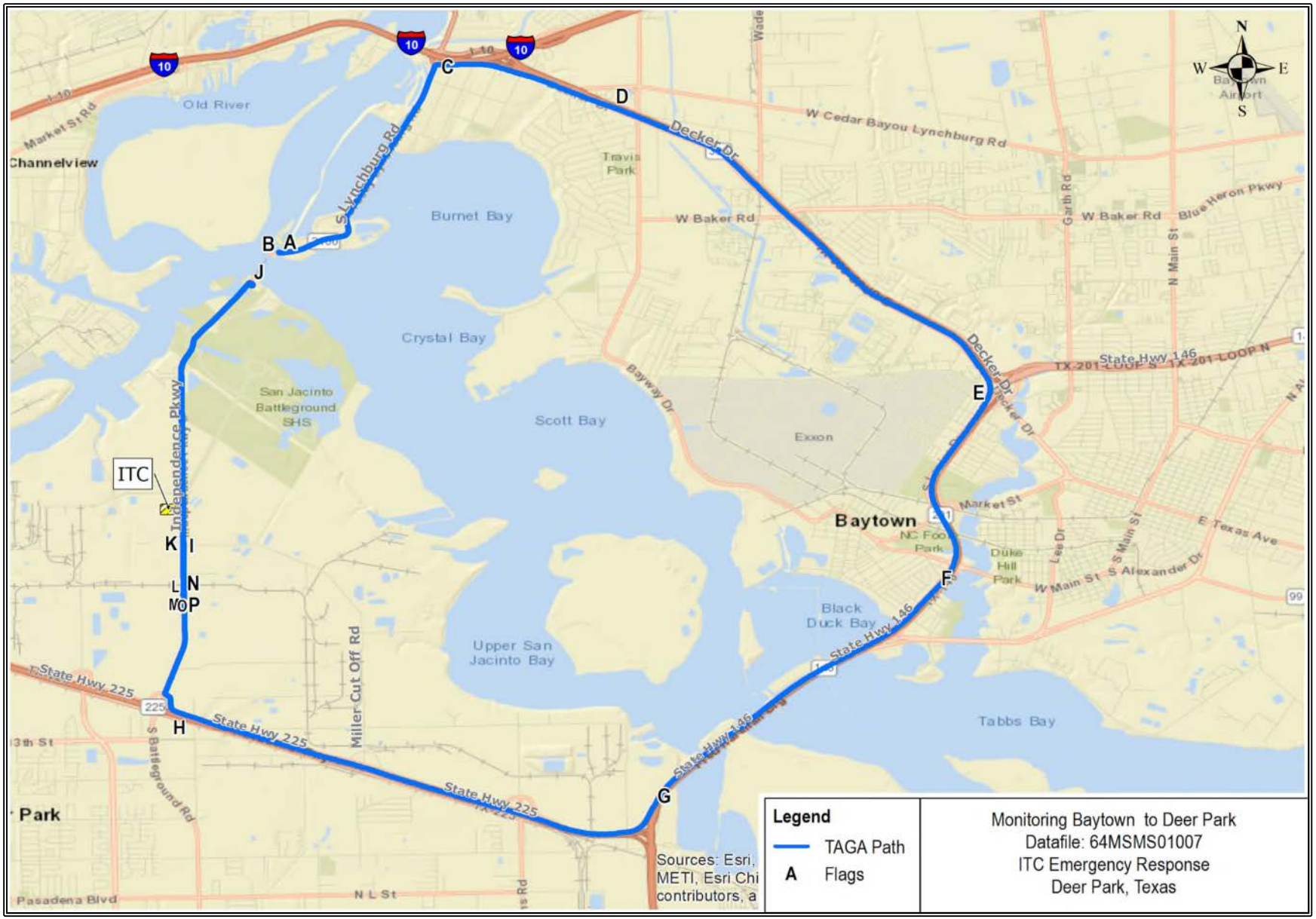


Figure 183a Monitoring Baytown to Deer Park Path, 64MSMS01007

Figure 183b

TAGA File Event Summary
File: 64MSMS01007 Acquired on 20 April 2019 at 16:03:22
Title: Monitoring Baytown to Deer Park

Flag	Time	Sequence	Description
A	1.2	112	Start mobile monitoring on Independence Parkway North
B	1.9	186	Continuing onto Independence Parkway North
C	8.2	779	Right turn onto Decker Drive
D	10.8	1032	Merge onto Highway 330 South
E	15.0	1424	Merge onto Highway 146 South
F	16.9	1609	Cross Main Street
G	20.1	1915	Merge onto Highway 225 West
H	23.8	2268	Right turn onto Independence Parkway
I	27.6	2621	Cross Miller Cut-Off Road
J	33.6	3198	U-turn on Independence Parkway at Juan Seguin Park
K	40.1	3816	Cross Miller Cut-Off Road
L	41.7	3970	End mobile monitoring on Independence Parkway
M	42.0	3998	Start ambient
N	43.0	4093	End ambient
O	45.3	4303	Start 30 mL/min spike
P	46.3	4399	End 30 mL/min spike

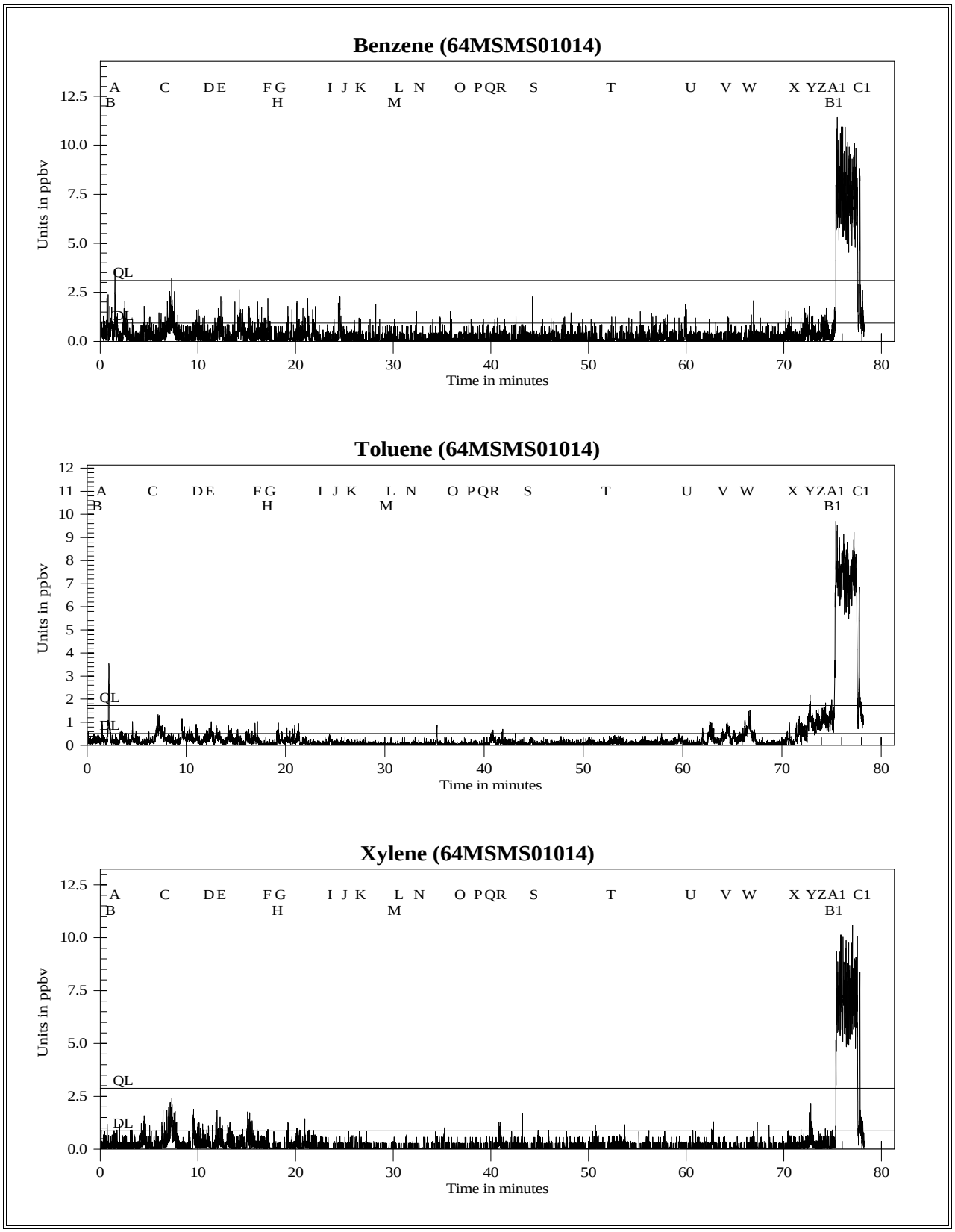


Figure 188c Monitoring Channelview to Deer Park in ppbv for Benzene, Toluene, and Xylenes

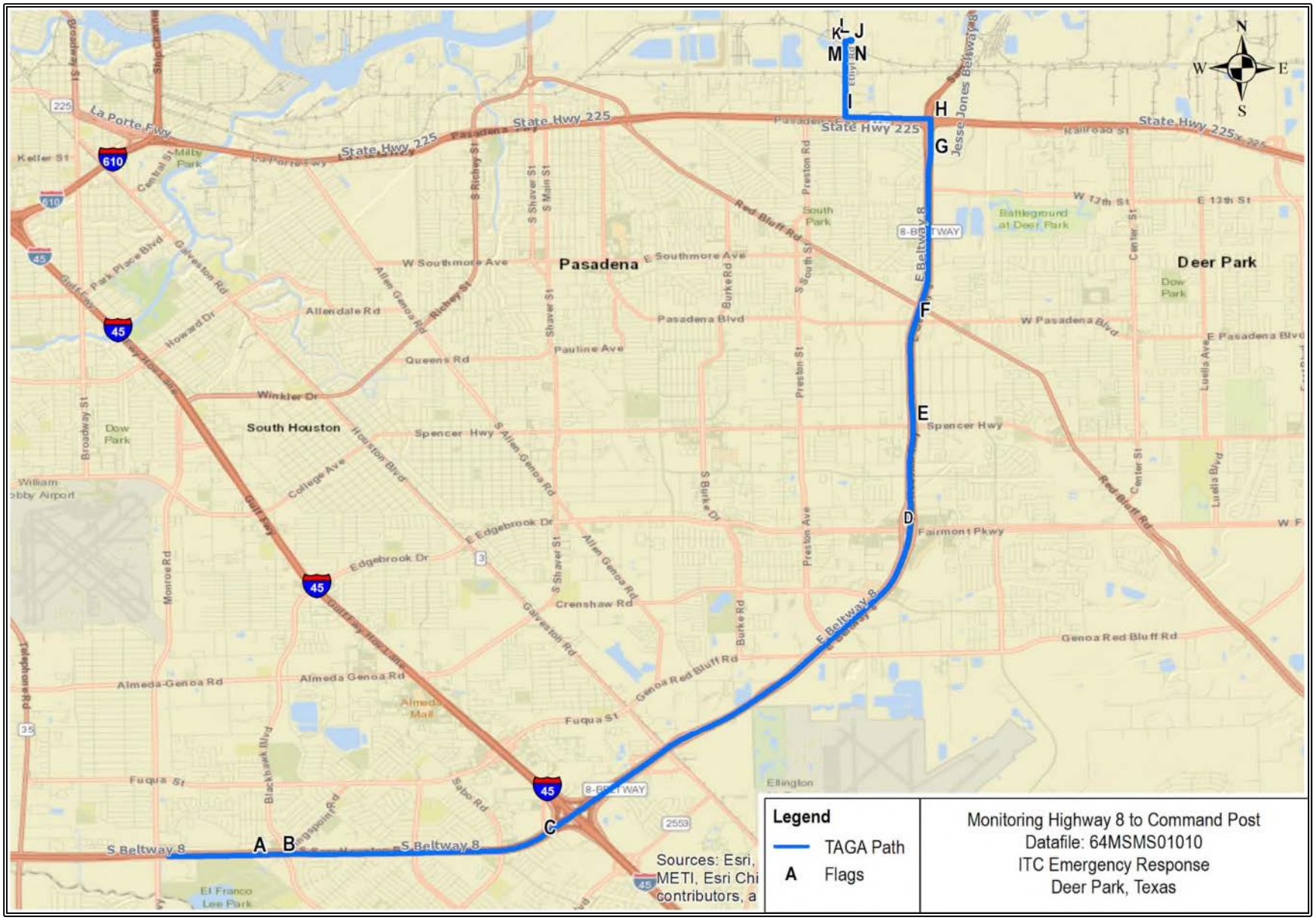


Figure 184a Monitoring Highway 8 to Command Post Path, 64MSMS01010

Figure 184b

TAGA File Event Summary
File: 64MSMS01010 Acquired on 21 April 2019 at 08:30:22
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	1.0	97	Start mobile monitoring on Highway 8 North
B	1.3	123	Continuing onto Highway 8 North
C	3.6	345	Cross Highway 45
D	8.1	772	Cross Fairmont Parkway
E	9.2	875	Cross Spencer Highway
F	10.3	980	Cross Pasadena Boulevard
G	12.2	1162	Exit onto Highway 8 Service Road
H	13.7	1302	Left turn onto Pasadena Freeway Frontage Road
I	15.0	1427	Right turn onto Ethyl Road
J	18.8	1785	End mobile monitoring at EPA Command Post
K	19.6	1866	Start ambient
L	20.7	1965	End ambient
M	22.9	2176	Start 30 mL/min spike
N	24.1	2292	End 30 mL/min spike

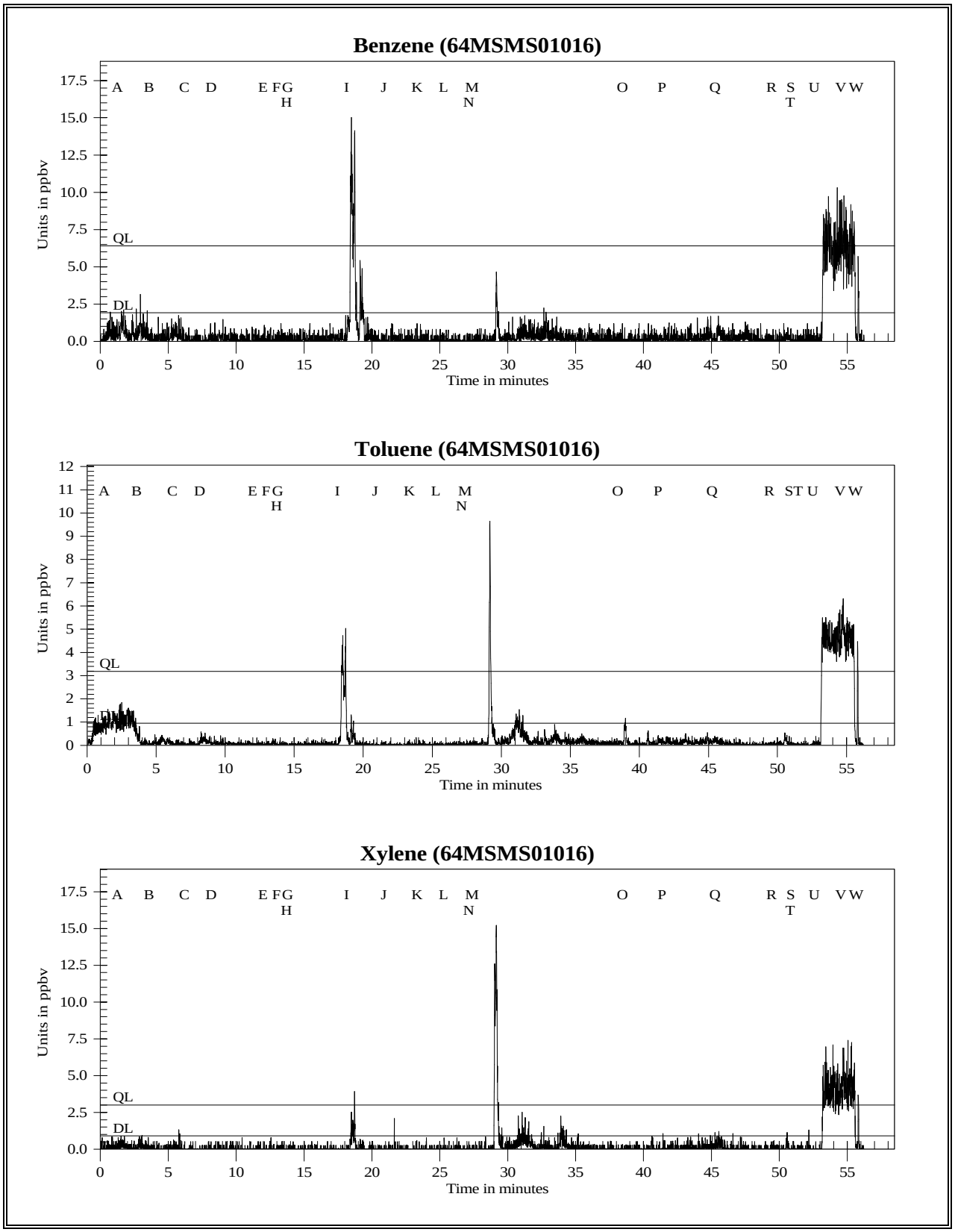


Figure 189c Monitoring Deer Park to Baytown in ppbv for Benzene, Toluene, and Xylenes

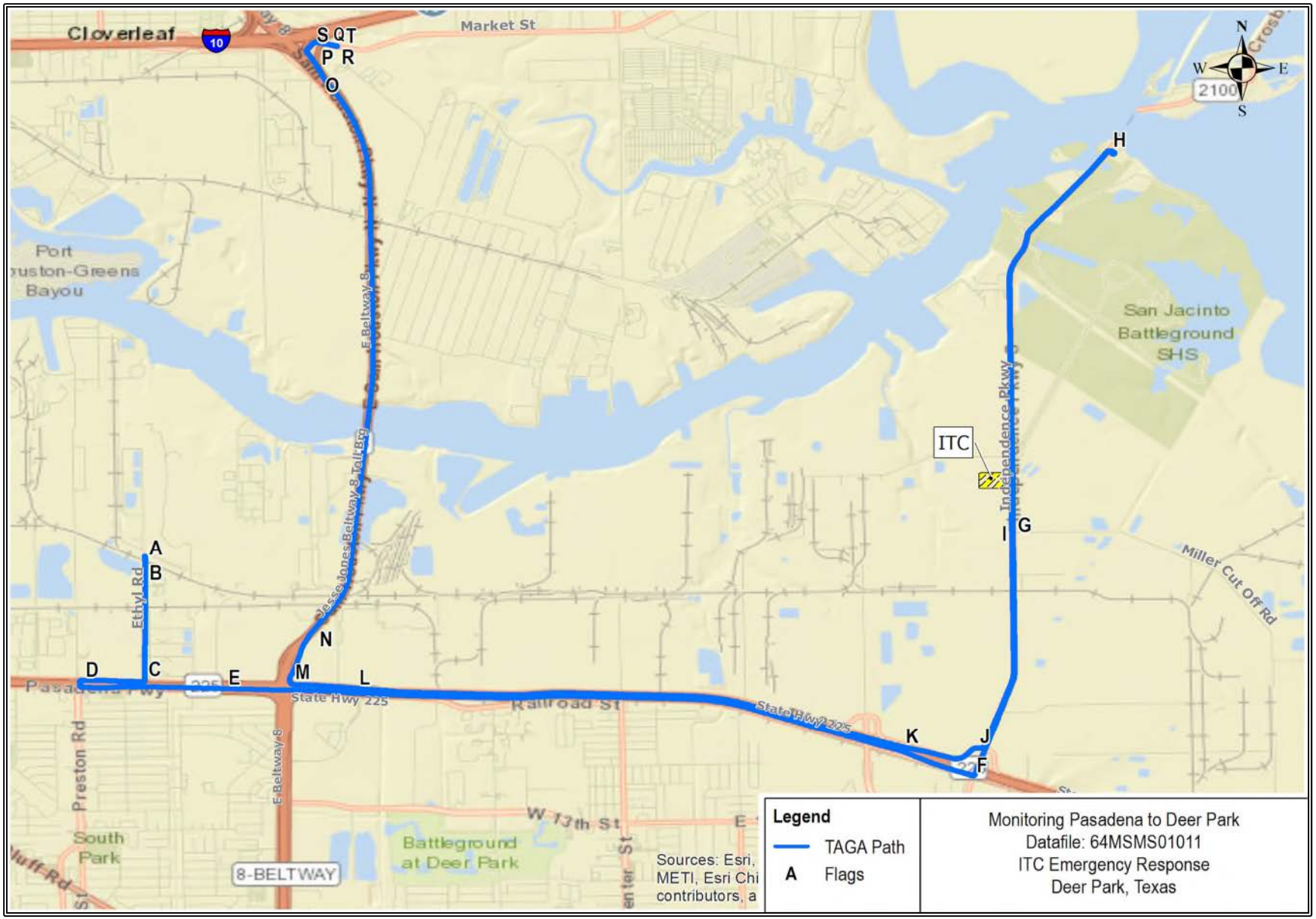


Figure 185a Monitoring Pasadena to Deer Park Path, 64MSMS01011

Figure 185b

TAGA File Event Summary
File: 64MSMS01011 Acquired on 21 April 2019 at 09:04:00
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	0.9	88	Start mobile monitoring at EPA Command Post
B	1.2	115	Continuing onto Ethyl Road
C	3.6	340	Right turn onto Pasadena Freeway Frontage Road
D	4.3	409	U-turn on Pasadena Freeway Frontage Road at Preston Road
E	5.6	530	Merge onto Highway 225 East
F	10.6	1004	Left turn onto Independence Parkway
G	14.5	1384	Cross Miller Cut-Off Road
H	22.4	2133	U-turn on Independence Parkway at Juan Seguin Park
I	30.7	2922	Cross Miller Cut-Off Road
J	34.2	3250	Right turn onto Pasadena Freeway Frontage Road
K	35.0	3330	Merge onto Highway 225 West
L	38.2	3631	Exit onto Pasadena Freeway Frontage Road
M	38.8	3691	Right turn onto Highway 8 Service Road
N	39.5	3754	Merge onto Highway 8 North
O	43.7	4152	Right turn onto Market Street
P	44.9	4274	End mobile monitoring on Market Street
Q	45.2	4296	Start ambient
R	46.2	4395	End ambient
S	47.8	4543	Start 30 mL/min spike
T	49.3	4685	End 30 mL/min spike

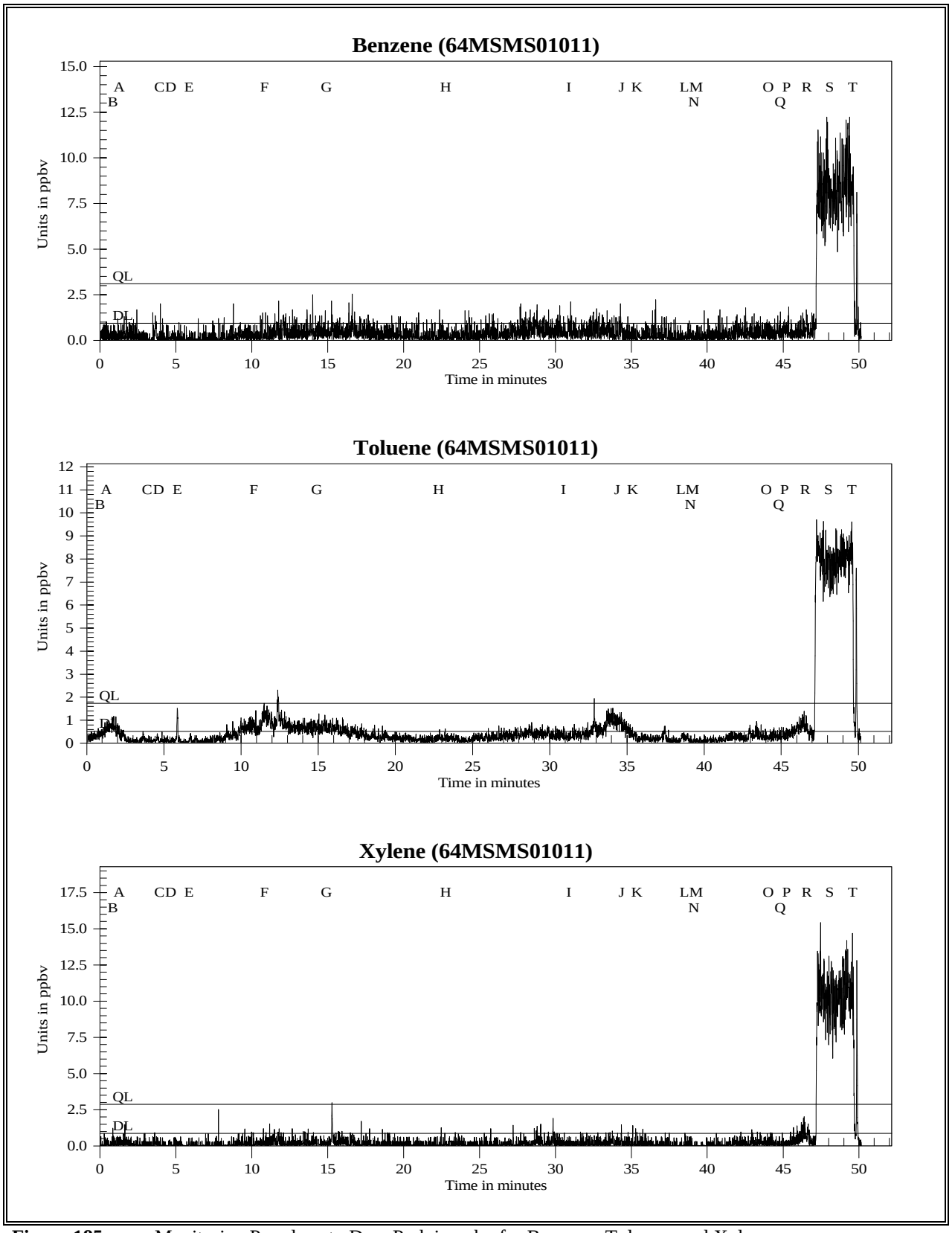


Figure 185c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

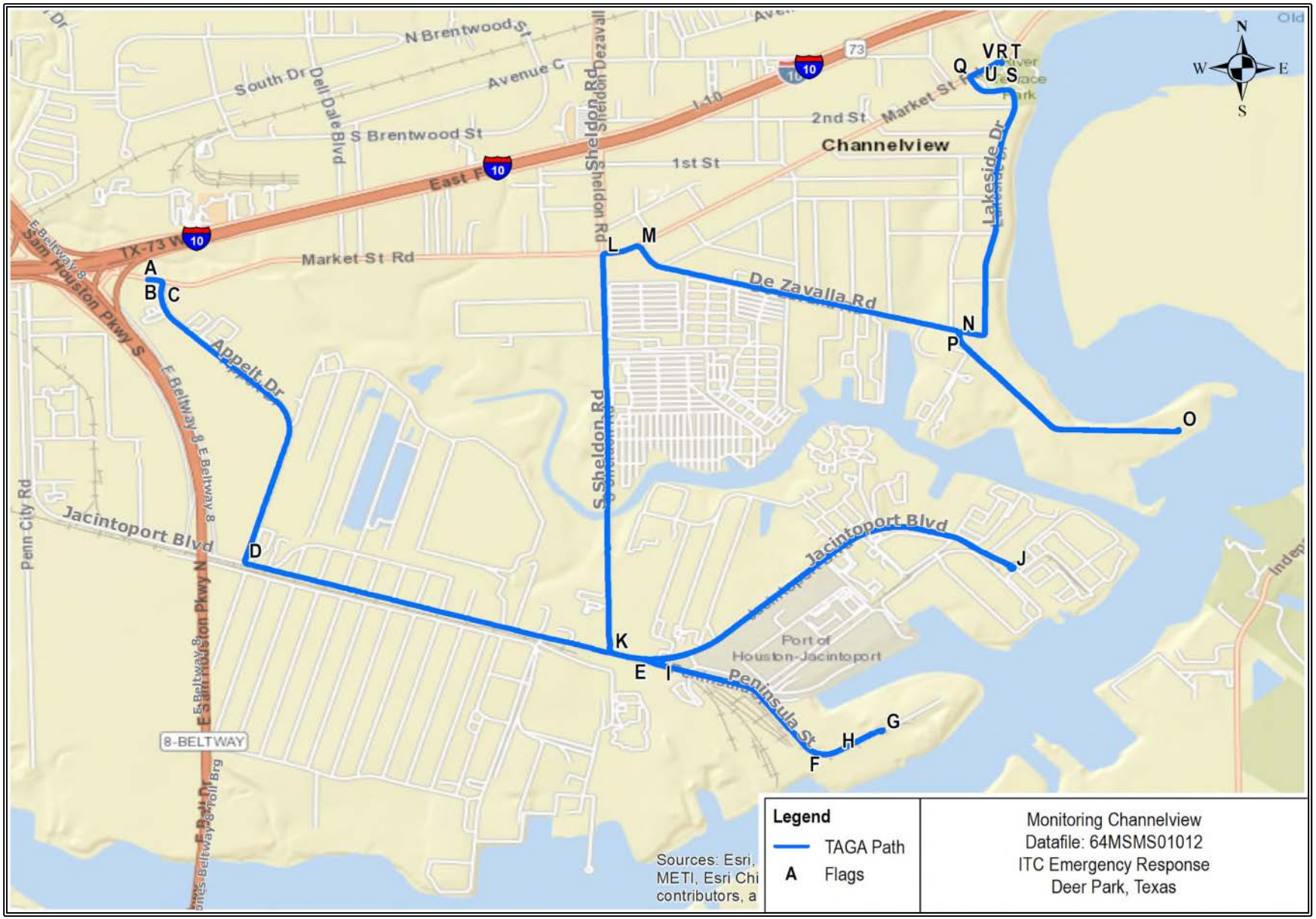


Figure 186a Monitoring Channelview Path, 64MSMS01012

Figure 186b

TAGA File Event Summary
File: 64MSMS01012 Acquired on 21 April 2019 at 09:57:21
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	0.9	88	Start mobile monitoring on Market Street
B	1.4	131	Continuing onto Market Street
C	1.9	177	Right turn onto Appelt Drive
D	5.7	543	Left turn onto Jacintoport Boulevard
E	9.6	917	Right turn onto San Jacinto Boulevard
F	12.4	1178	Continuing onto Peninsula Street
G	13.6	1292	U-turn on Peninsula Street
H	15.2	1447	Continuing onto San Jacinto Boulevard
I	18.6	1767	Right turn onto Jacintoport Boulevard
J	23.9	2270	U-turn onto Jacintoport Boulevard
K	29.7	2829	Right turn onto Sheldon Road
L	35.6	3388	Right turn onto Market Street
M	36.1	3436	Right turn onto Dezavala Road
N	39.3	3739	Right turn to continue on Dezavala Road
O	44.6	4242	U-turn on Dezavala Road
P	50.7	4821	Right turn onto Lakeside Drive
Q	56.4	5361	Right turn onto Market Street
R	57.3	5448	End mobile monitoring at River Terrace Park
S	57.9	5508	Start ambient
T	59.1	5621	End ambient
U	60.9	5787	Start 30 mL/min spike
V	61.9	5884	End 30 mL/min spike

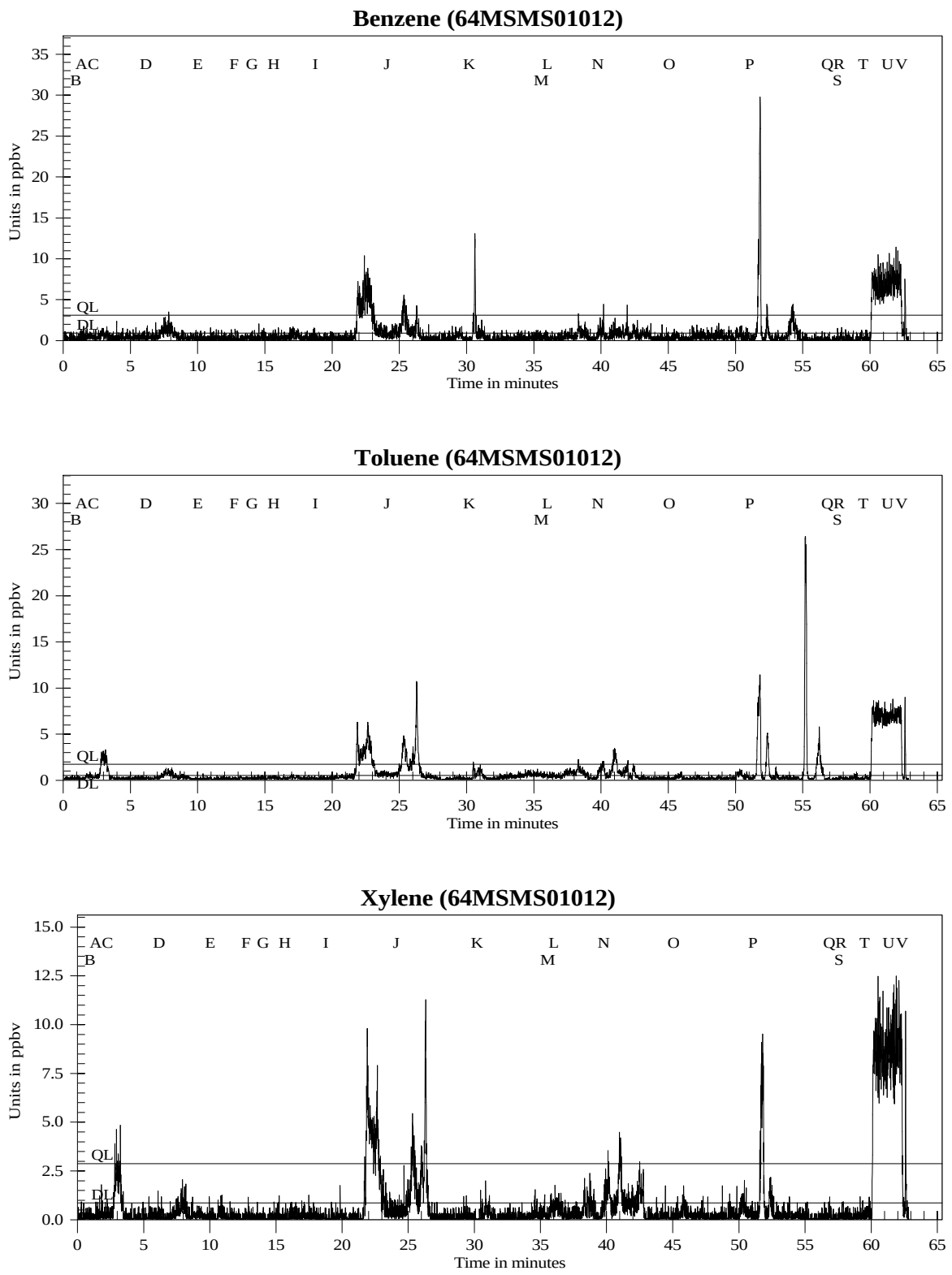


Figure 186c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

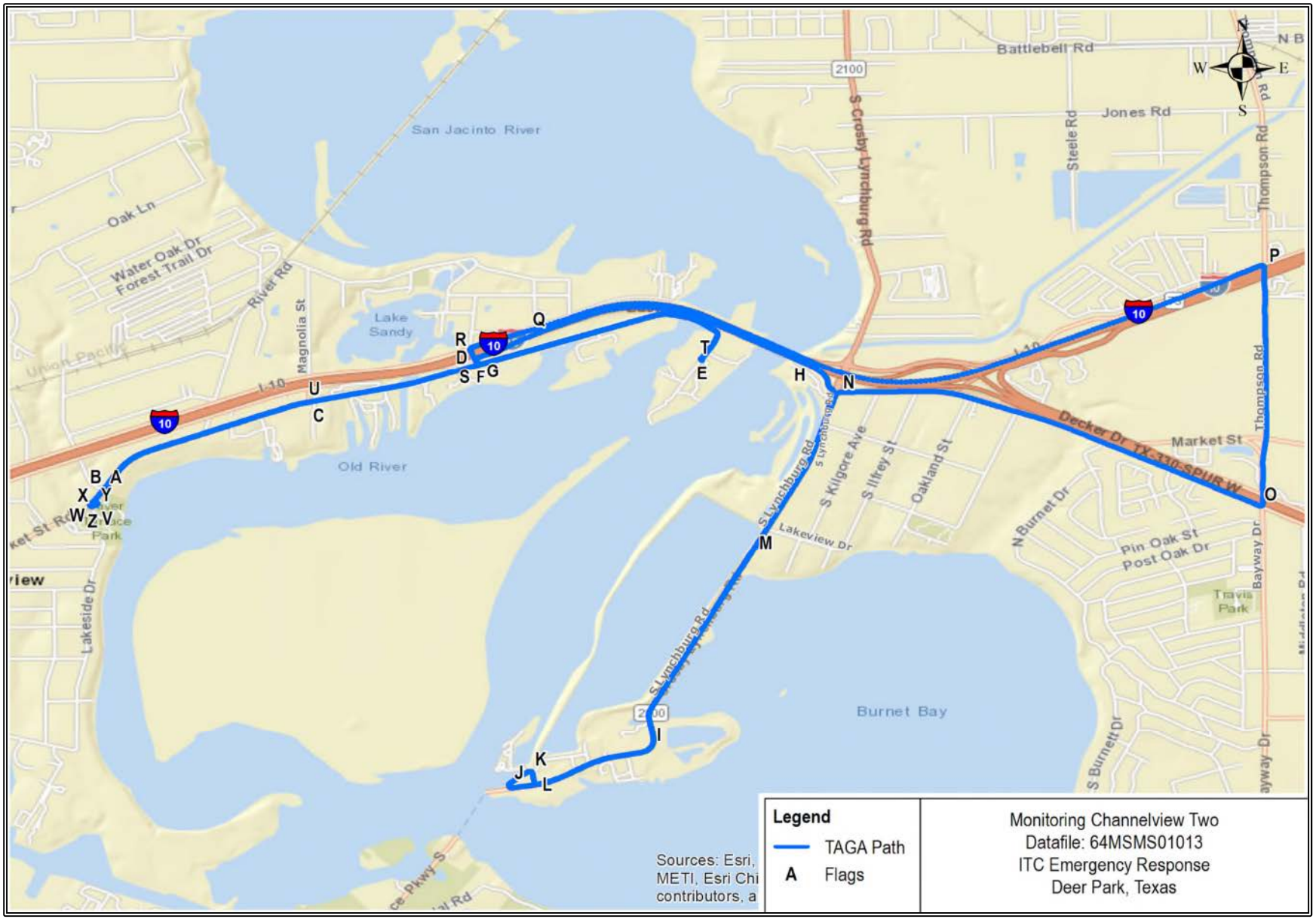


Figure 187a Monitoring Channelview Two Path, 64MSMS01013

Figure 187b

TAGA File Event Summary
File: 64MSMS01013 Acquired on 21 April 2019 at 11:12:48
Title: Monitoring Channelview Two

Flag	Time	Sequence	Description
A	0.9	88	Start mobile monitoring at River Terrace Park
B	1.2	116	Continuing onto Market Street
C	3.8	362	Cross Magnolia Street
D	6.1	581	Cross Monmouth Street
E	10.6	1008	U-turn on Market Street
F	15.7	1498	Right turn onto Monmouth Street
G	16.1	1527	Merge onto Highway 10 East
H	17.6	1677	Right turn onto Independence Parkway North
I	24.0	2286	Continuing onto Independence Parkway North
J	26.3	2498	Right turn onto Lynchburg Road at Lynchburg Ferry
K	26.8	2549	Right turn onto Crokett Street
L	27.2	2587	Left turn onto Independence Parkway North
M	31.8	3024	Cross Lakeview Drive
N	33.4	3181	Right turn onto Decker Drive
O	36.9	3506	Left turn onto Thompson Road
P	40.4	3838	Left turn onto Highway 10 West
Q	43.8	4162	Exit onto East Freeway Service Road
R	44.4	4220	Left turn onto Monmouth Street
S	44.9	4265	Left turn onto Market Street
T	49.0	4662	U-turn on Market Street
U	55.3	5258	Cross Magnolia Street
V	59.5	5657	End mobile monitoring on Market Street
W	60.1	5718	Start ambient
X	61.2	5822	End ambient
Y	62.8	5970	Start 30 mL/min spike
Z	63.8	6065	End 30 mL/min spike

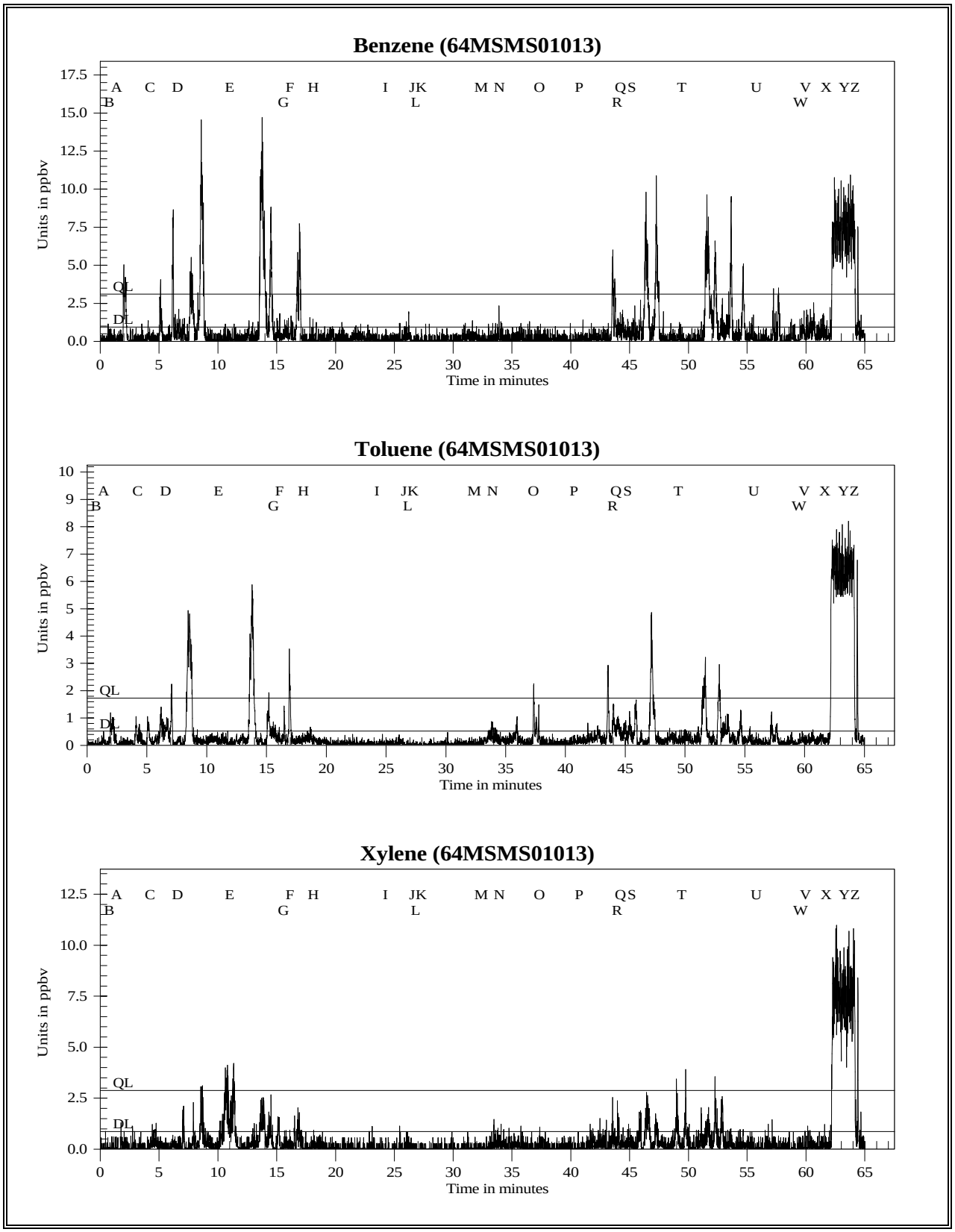


Figure 187c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

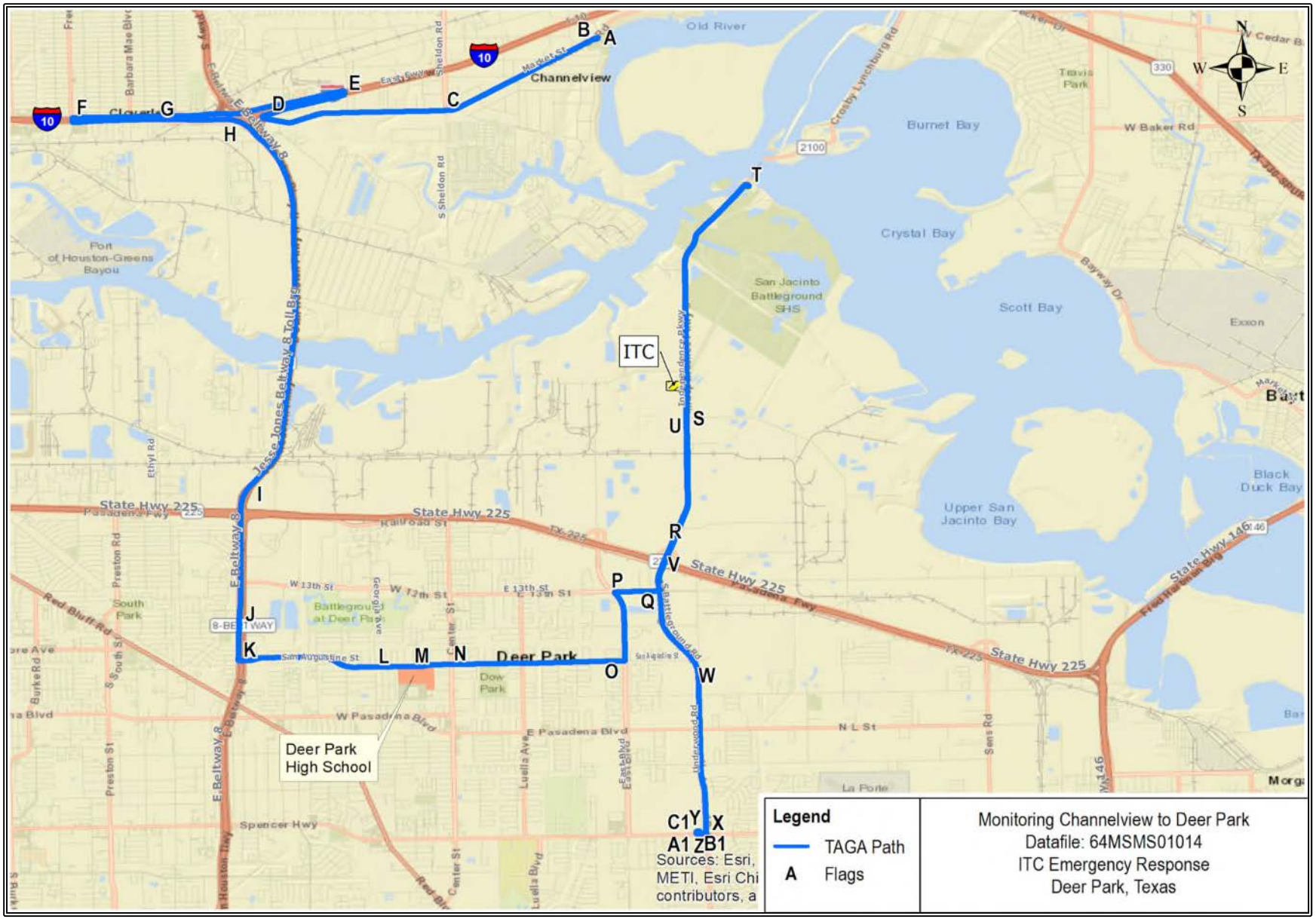


Figure 188a Monitoring Channelview to Deer Park Path, 64MSMS01014

Figure 188b

TAGA File Event Summary
File: 64MSMS01014 Acquired on 21 April 2019 at 12:21:26
Title: Monitoring Channelview to Deer Park

Flag	Time	Sequence	Description
A	0.9	89	Start mobile monitoring on Market Street
B	1.6	150	Continuing onto Market Street
C	6.1	579	Cross Sheldon Road
D	10.6	1005	Right turn onto East Freeway Service Road
E	11.9	1134	U-turn on East Freeway Service Road
F	16.7	1587	U-turn on East Freeway Service Road
G	17.9	1702	Merge onto Highway 10 East
H	18.7	1780	Merge onto Highway 8 South
I	23.2	2211	Continuing onto Highway 8 South
J	24.7	2352	Exit onto Highway 8 Service Road
K	26.1	2482	Left turn onto San Augustine Avenue
L	30.1	2864	Cross Georgia Avenue
M	30.8	2932	Passing Deer Park High School
N	32.1	3052	Cross Center Street
O	36.3	3450	Left turn onto East Boulevard
P	38.2	3637	Right turn onto East 13th Street
Q	39.4	3743	Left turn onto Battleground Road
R	40.5	3856	Merge onto Independence Parkway
S	44.0	4181	Cross Miller Cut-Off Road
T	51.8	4925	U-turn on Independence Parkway at Juan Seguin Park
U	59.9	5692	Cross Miller Cut-Off Road
V	63.5	6038	Continue onto Battleground Road
W	65.7	6250	Right turn onto Underwood Road
X	70.5	6705	Right turn onto Spencer Highway
Y	72.3	6871	End mobile monitoring on Spencer Highway
Z	73.5	6985	Start ambient
A1	74.5	7082	End ambient
B1	76.1	7232	Start 30 mL/min spike
C1	77.1	7331	End 30 mL/min spike

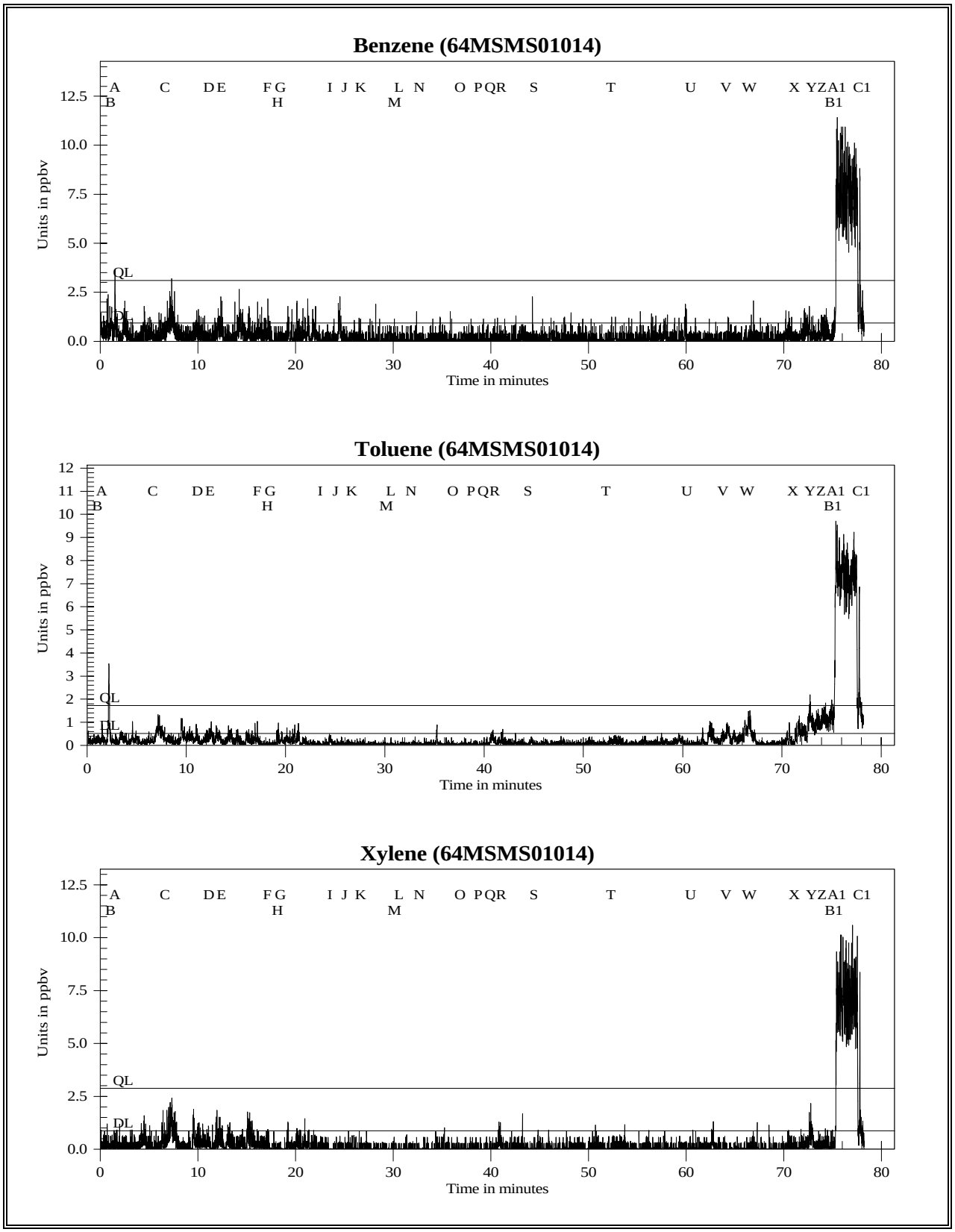


Figure 188c Monitoring Channelview to Deer Park in ppbv for Benzene, Toluene, and Xylenes

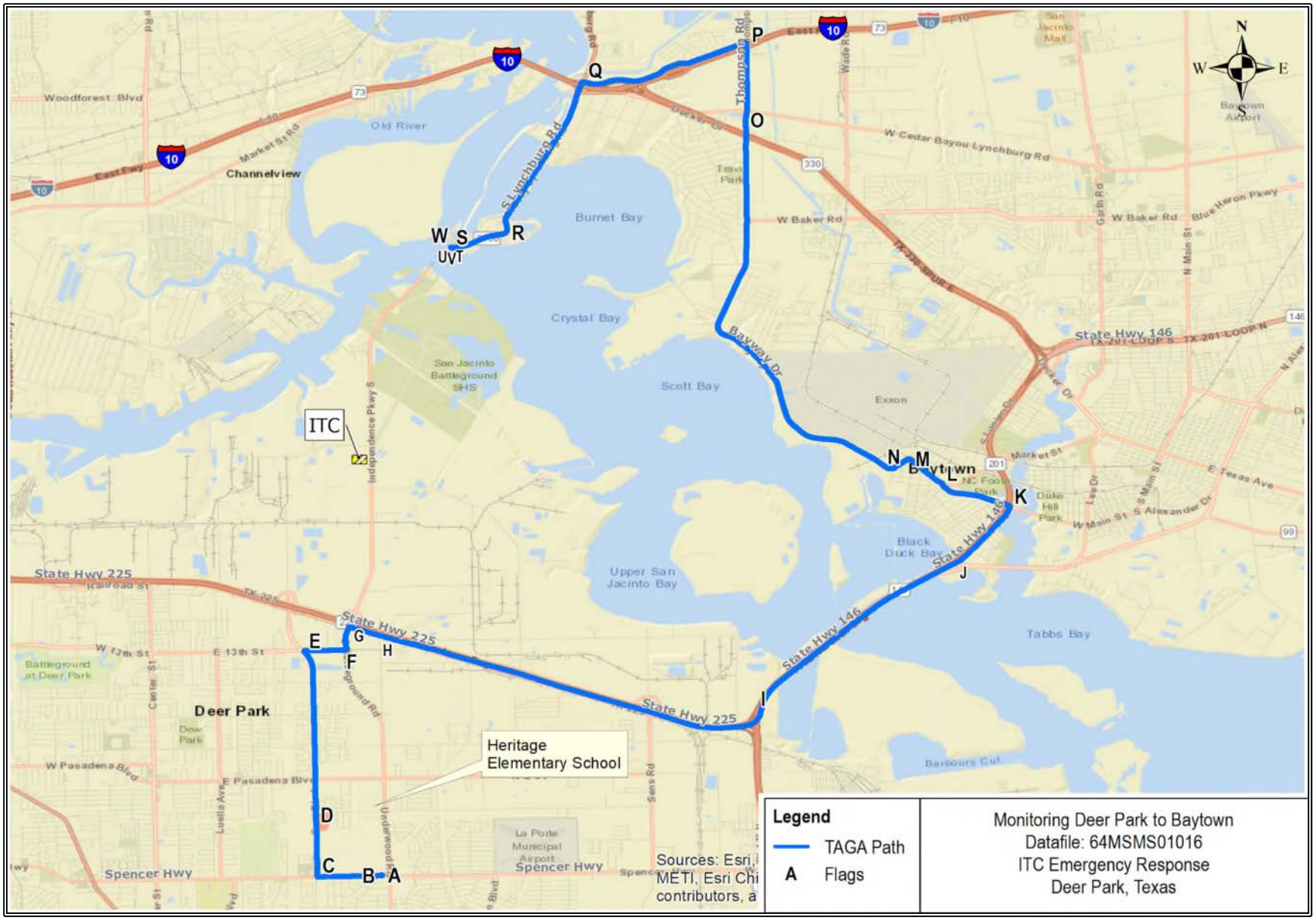


Figure 189a Monitoring Deer Park to Baytown Path, 64MSMS01016

Figure 189b

TAGA File Event Summary
File: 64MSMS01016 Acquired on 21 April 2019 at 14:43:23
Title: Monitoring Deer Park to Baytown

Flag	Time	Sequence	Description
A	0.8	80	Start mobile monitoring on Spencer Highway
B	3.2	306	Continuing onto Spencer Highway
C	5.8	554	Right turn onto East Boulevard
D	7.7	737	Passing Heritage Elementary School
E	11.6	1107	Right turn onto East 13th Street
F	12.6	1203	Left turn onto Battleground Road
G	13.4	1275	Right turn onto Pasadena Freeway Frontage Road
H	14.1	1344	Merge onto Highway 225 East
I	17.9	1707	Merge onto Highway 146 North
J	20.6	1964	Exit onto Robert C Lanier Drive
K	22.9	2181	Left turn onto Main Street
L	24.9	2370	Left turn onto Market Street
M	26.9	2555	Left turn to continue onto Market Street
N	27.5	2618	Right turn onto Bayway Drive
O	38.0	3617	Merge onto Thompson Road
P	41.0	3902	Left turn onto East Freeway Service Road
Q	44.9	4265	Left turn onto Independence Parkway North
R	49.0	4664	Continue onto Independence Parkway North
S	50.5	4805	End mobile monitoring at Lynchburg Ferry
T	51.2	4864	Start ambient
U	52.2	4960	End ambient
V	54.1	5147	Start 30 mL/min spike
W	55.1	5242	End 30 mL/min spike

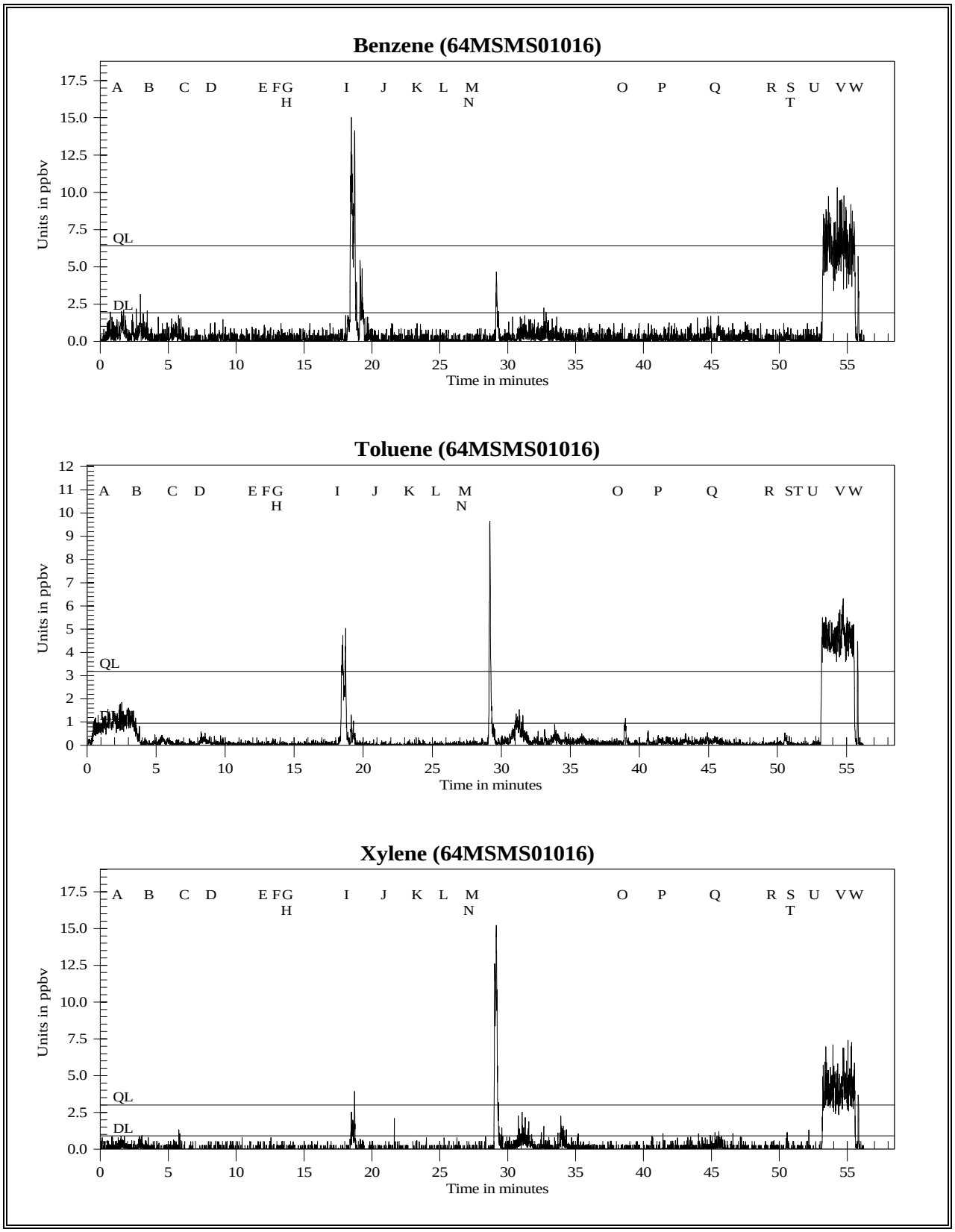


Figure 189c Monitoring Deer Park to Baytown in ppbv for Benzene, Toluene, and Xylenes

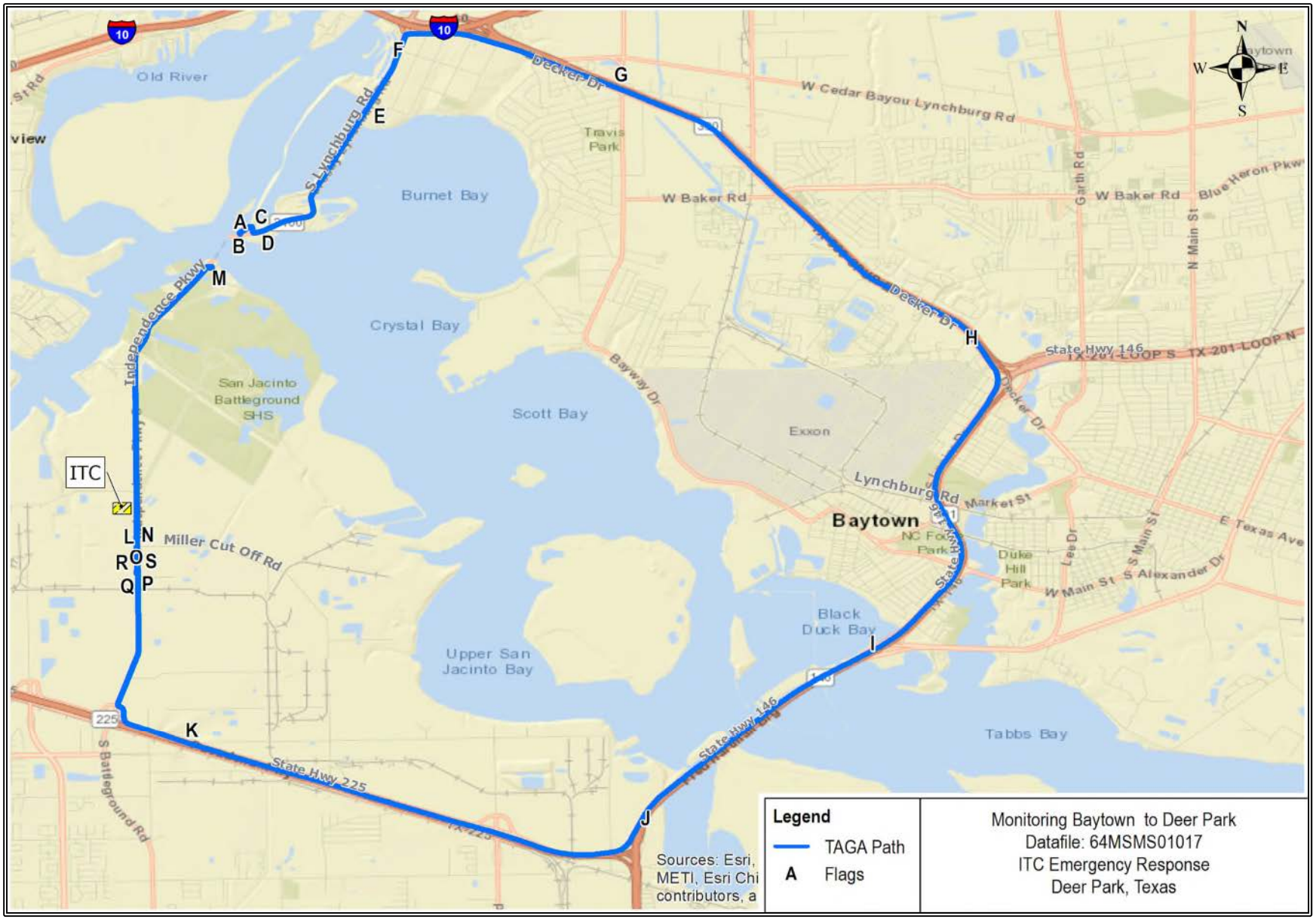


Figure 190a Monitoring Baytown to Deer Park Path, 64MSMS01017

Figure 190b

TAGA File Event Summary
File: 64MSMS01017 Acquired on 21 April 2019 at 15:49:10
Title: Monitoring Baytown to Deer Park

Flag	Time	Sequence	Description
A	0.9	83	Start mobile monitoring at Lynchburg Ferry
B	1.5	146	Right turn onto Lynchburg Road
C	2.1	199	Right turn onto Crokett Street
D	2.7	256	Left turn onto Independence Parkway North
E	6.1	582	Cross Lakeview Drive
F	7.8	747	Right turn onto Decker Drive
G	10.3	977	Merge onto Highway 330 South
H	13.8	1309	Merge onto Highway 146 South
I	17.3	1649	Cross Fred Hartman Bridge
J	19.6	1867	Merge onto Highway 225 West
K	23.2	2203	Right turn onto Independence Parkway
L	28.0	2663	Cross Miller Cut-Off Road
M	35.6	3384	U-turn on Independence Parkway at Juan Seguin Park
N	42.9	4078	Cross Miller Cut-Off Road
O	44.1	4192	End mobile monitoring on Independence Parkway
P	44.5	4236	Start ambient
Q	45.6	4334	End ambient
R	46.9	4463	Start 30 mL/min spike
S	47.9	4559	End 30 mL/min spike

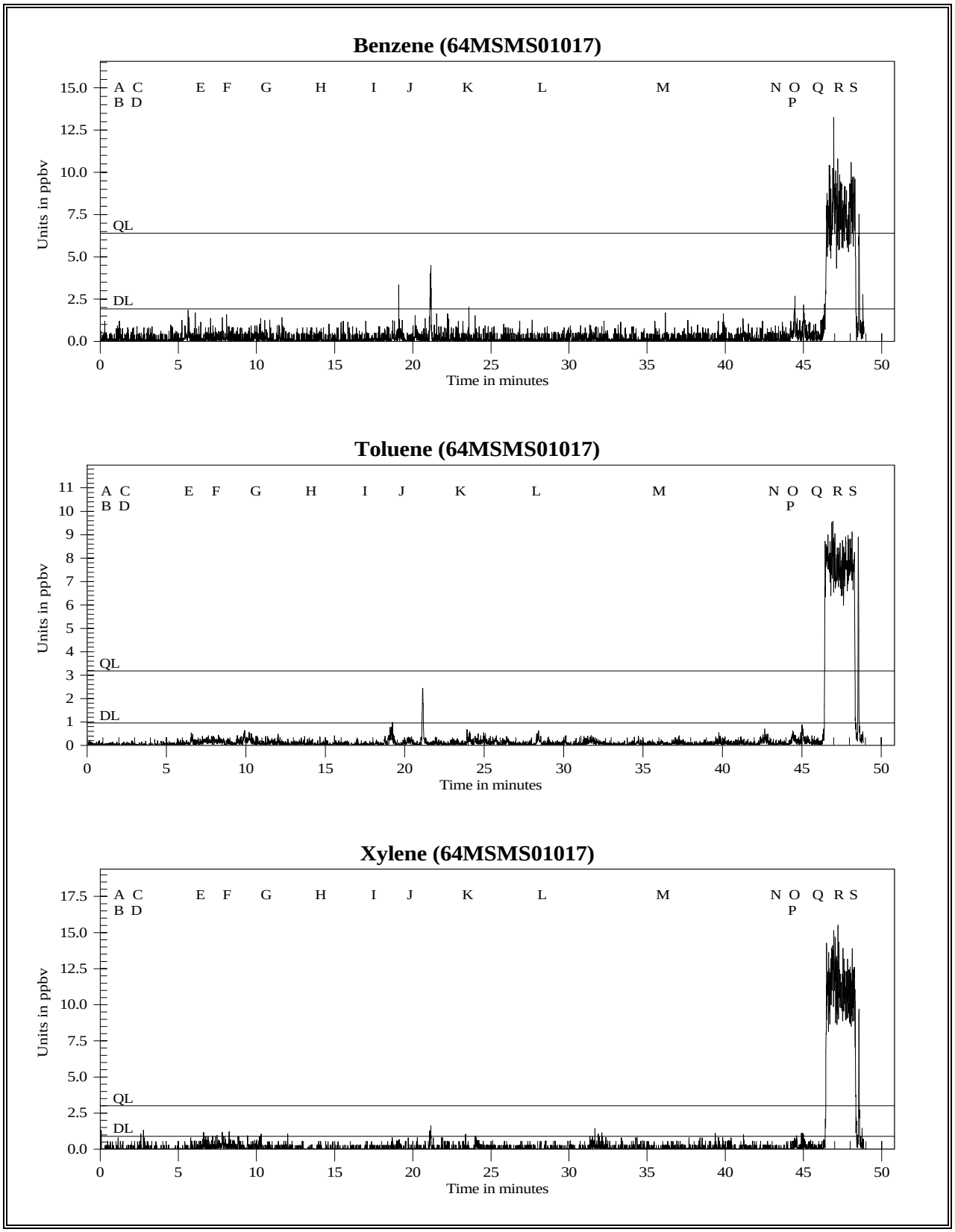


Figure 190c Monitoring Baytown to Deer Park in ppbv for Benzene, Toluene, and Xylenes

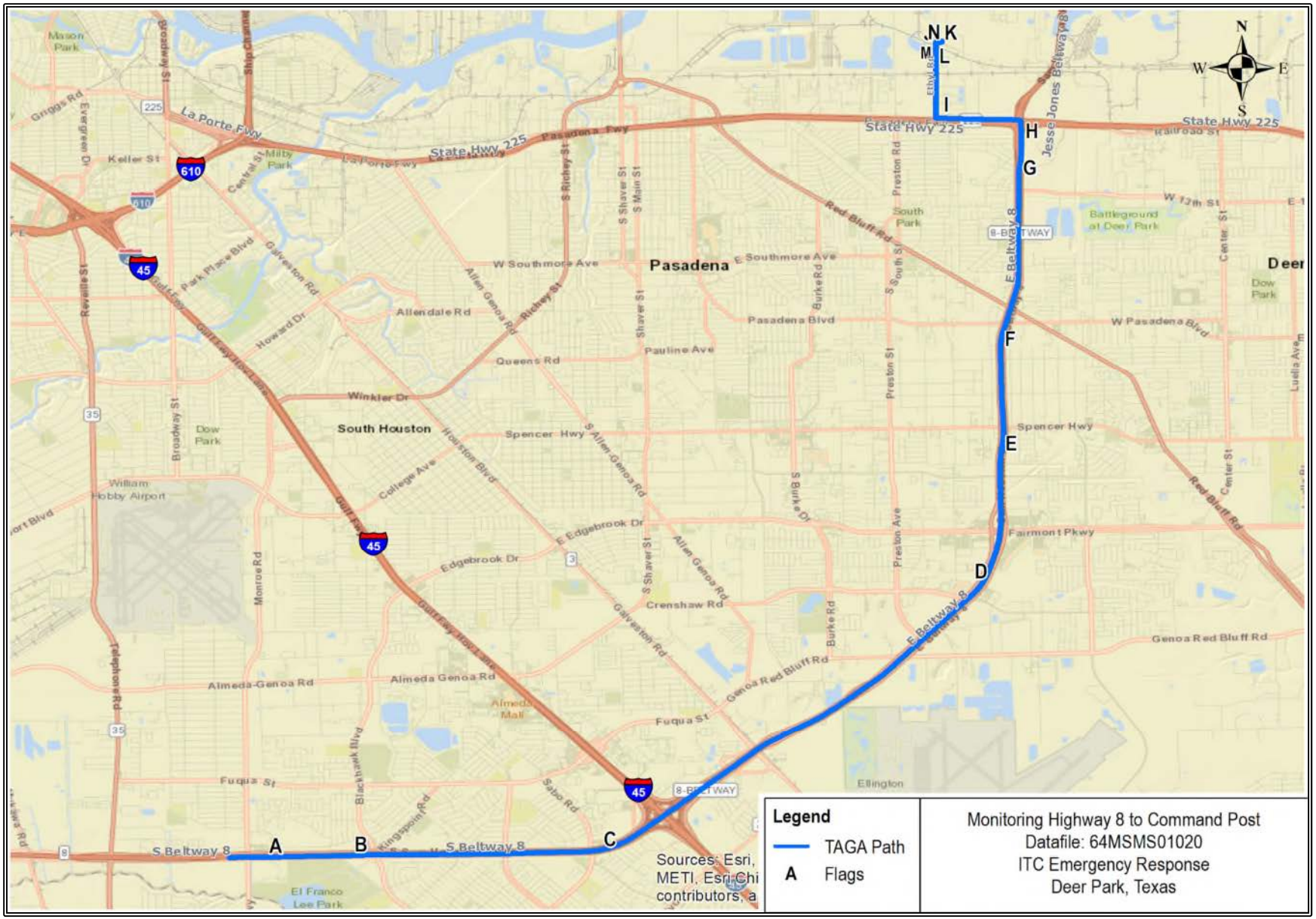


Figure 191a Monitoring Highway 8 to Command Post Path, 64MSMS01020

Figure 191b

TAGA File Event Summary
File: 64MSMS01020 Acquired on 22 April 2019 at 08:45:46
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	0.8	75	Start mobile monitoring on Highway 8 North
B	1.3	123	Continuing onto Highway 8 North
C	3.3	318	Cross Highway 45
D	7.6	720	Cross Fairmont Parkway
E	8.6	818	Cross Spencer Highway
F	9.6	917	Cross Pasadena Boulevard
G	11.3	1073	Exit onto Highway 8 Service Road
H	12.0	1141	Left turn onto Pasadena Freeway Frontage Road
I	13.1	1246	Right turn onto Ethyl Road
J	16.1	1535	End mobile monitoring at EPA Command Post
K	16.6	1579	Start ambient
L	17.6	1672	End ambient
M	19.8	1880	Start 30 mL/min spike
N	20.9	1985	End 30 mL/min spike

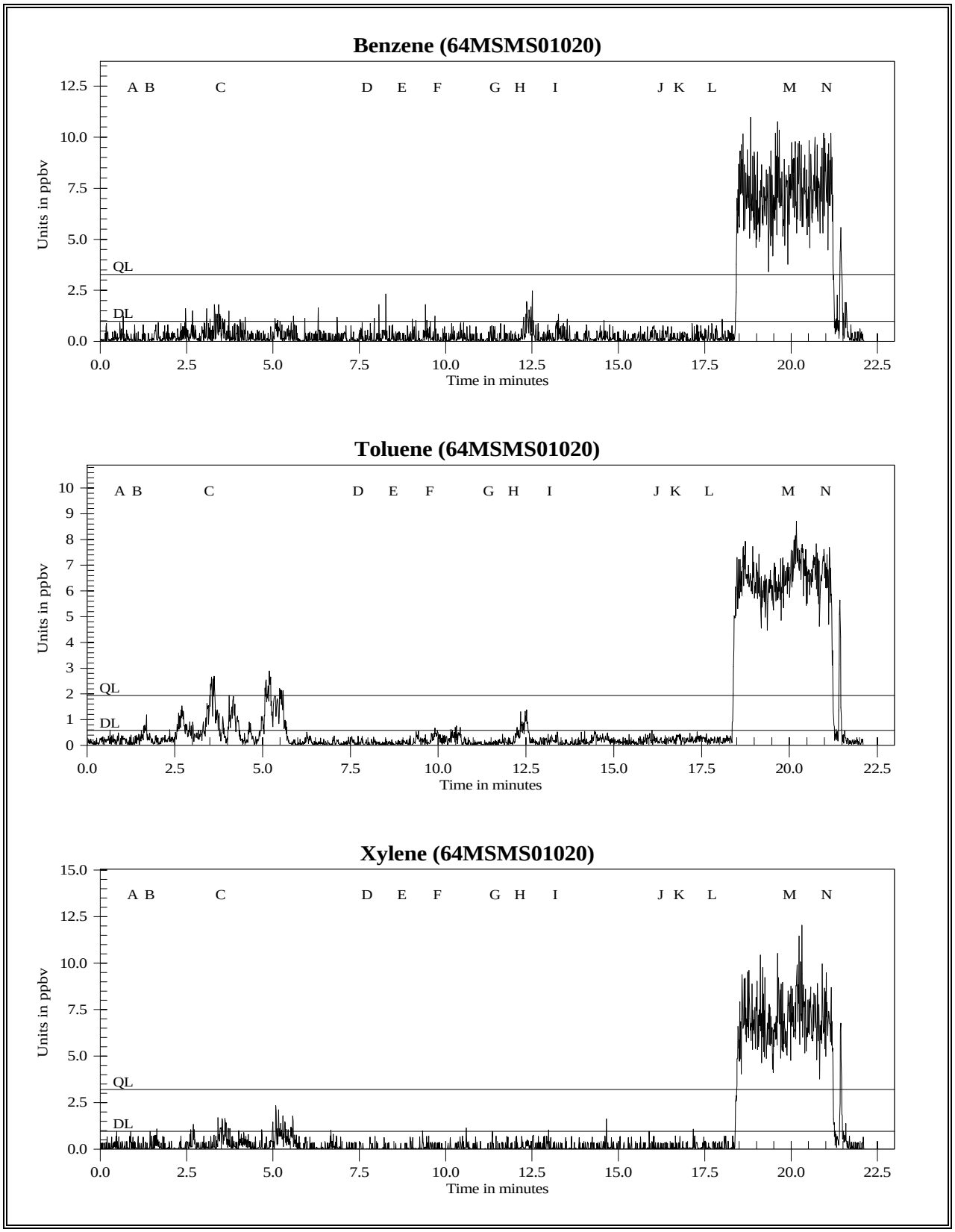


Figure 191c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

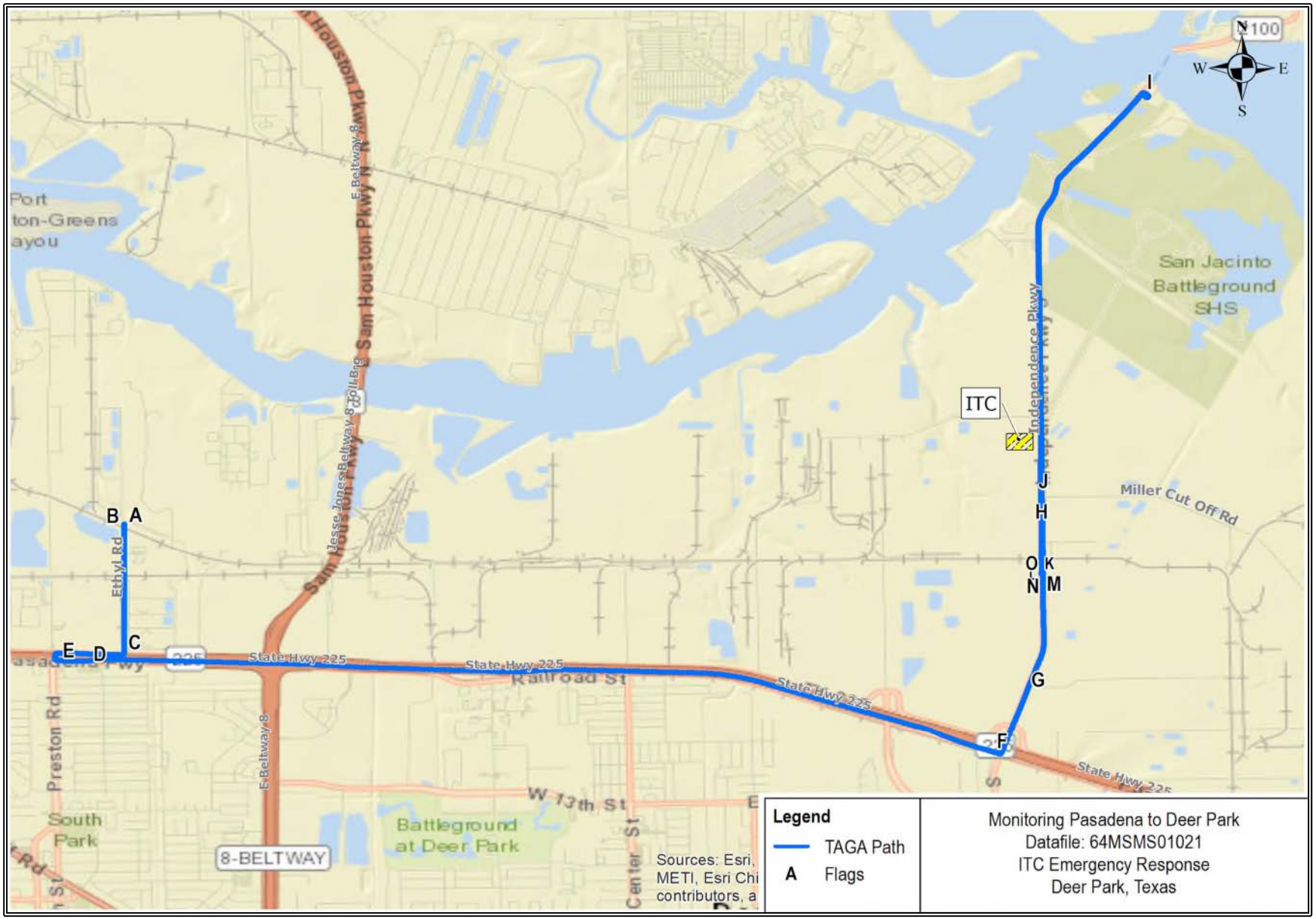


Figure 192a Monitoring Pasadena to Deer Park Path, 64MSMS01021

Figure 192b

TAGA File Event Summary
File: 64MSMS01021 Acquired on 22 April 2019 at 09:17:26
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	0.9	91	Start mobile monitoring at EPA Command Post
B	1.7	161	Continuing onto Ethyl Road
C	4.1	392	Right turn onto Pasadena Freeway Frontage Road
D	4.9	465	U-turn on Pasadena Freeway Frontage Road at Preston Road
E	5.7	541	Merge onto Highway 225 East
F	10.4	986	Left turn onto Independence Parkway
G	12.1	1149	Continuing onto Independence Parkway
H	17.2	1633	Cross Miller Cut-Off Road
I	24.2	2297	U-turn on Independence Parkway at Juan Seguin Park
J	31.3	2976	Cross Miller Cut-Off Road
K	33.0	3141	End mobile monitoring on Independence Parkway
L	33.8	3219	Start ambient
M	34.8	3314	End ambient
N	36.7	3494	Start 30 mL/min spike
O	37.8	3597	End 30 mL/min spike

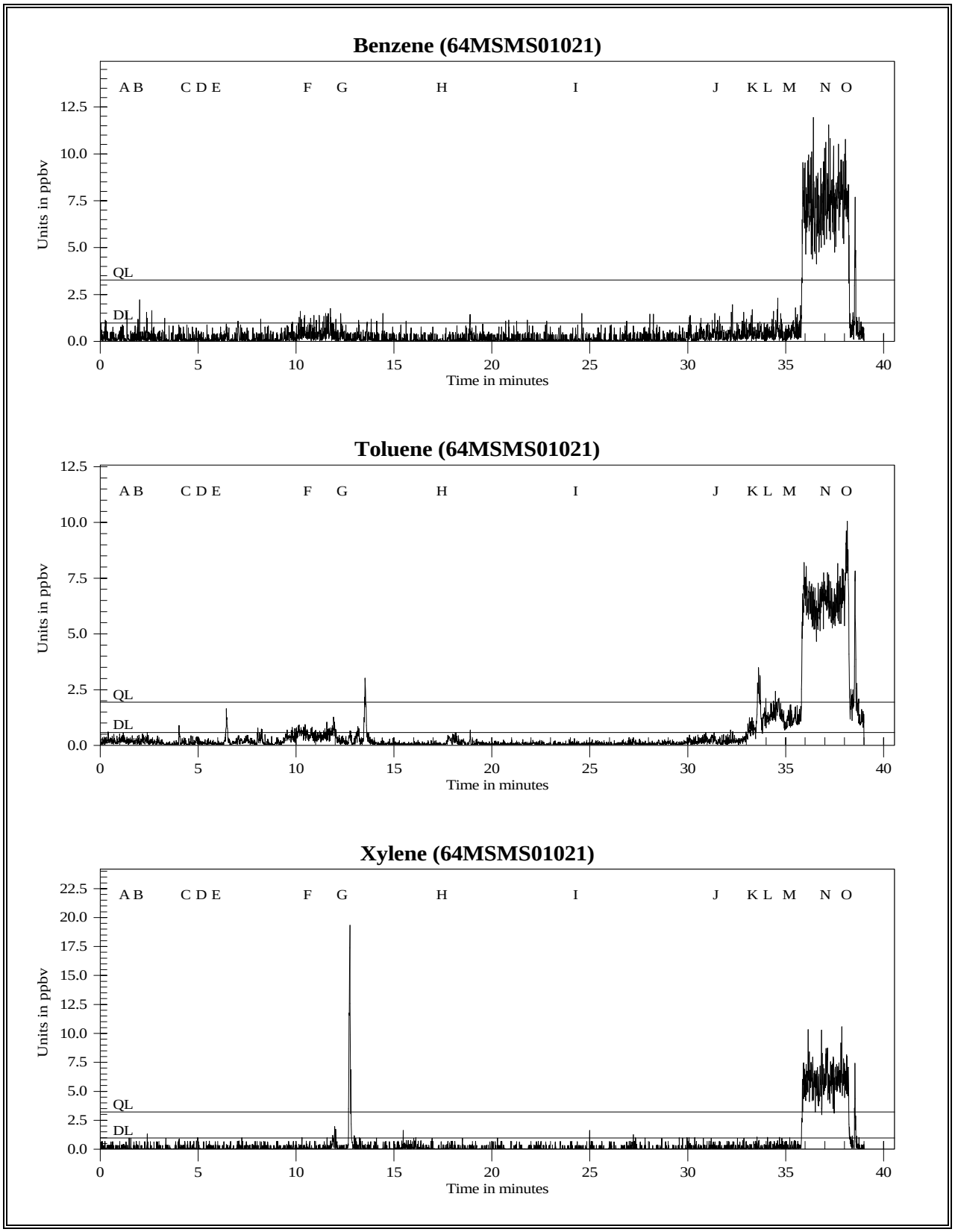


Figure 192c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

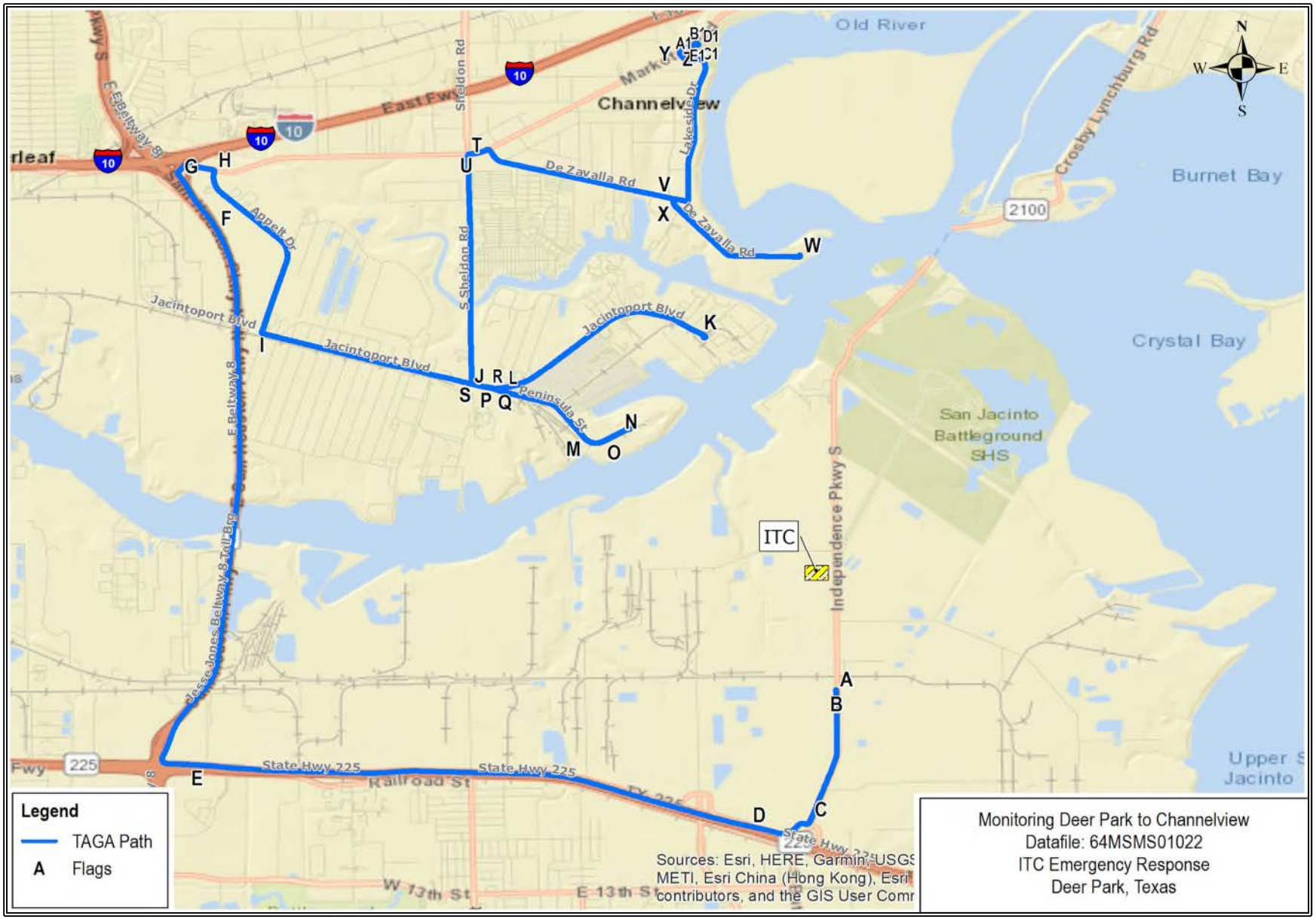


Figure 193a Monitoring Deer Park to Channelview Path, 64MSMS01022

Figure 193b

TAGA File Event Summary
File: 64MSMS01022 Acquired on 22 April 2019 at 10:00:06
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	0.7	72	Start mobile monitoring on Independence Parkway
B	1.4	134	Continuing onto Independence Parkway
C	3.3	319	Right turn onto Pasadena Freeway Frontage Road
D	4.2	397	Merge onto Highway 225 West
E	8.0	761	Merge onto Highway 8 North
F	12.8	1216	Exit onto Highway 8 Service Road
G	13.2	1259	Right turn onto Market Street
H	14.2	1351	Right turn onto Appelt Drive
I	19.2	1826	Left turn onto Jacintoport Boulevard
J	22.5	2138	Continuing onto Jacintoport Boulevard
K	26.9	2555	U-turn on Jacintoport Boulevard
L	31.2	2968	Left turn onto San Jacinto Boulevard
M	34.3	3266	Continuing onto Peninsula Street
N	35.8	3406	U-turn on Peninsula Street
O	37.8	3598	Continuing onto San Jacinto Boulevard
P	41.2	3918	Stationary at railroad crossing
Q	46.1	4382	Resume mobile monitoring on San Jacinto Boulevard
R	46.3	4399	Left turn onto Jacintoport Boulevard
S	47.3	4493	Right turn onto Sheldon Road
T	51.2	4868	Right turn onto Market Street
U	51.6	4910	Right turn onto Dezavala Road
V	54.4	5177	Right turn to continue on Dezavala Road
W	59.6	5665	U-turn on Dezavala Road
X	65.5	6228	Right turn onto Lakeside Drive
Y	69.2	6576	Right turn onto Market Street
Z	69.7	6627	Right turn into River Terrace Park
A1	70.4	6697	End mobile monitoring at River Terrace Park
B1	70.9	6744	Start ambient
C1	72.2	6862	End ambient
D1	73.5	6992	Start 30 mL/min spike
E1	74.5	7088	End 30 mL/min spike

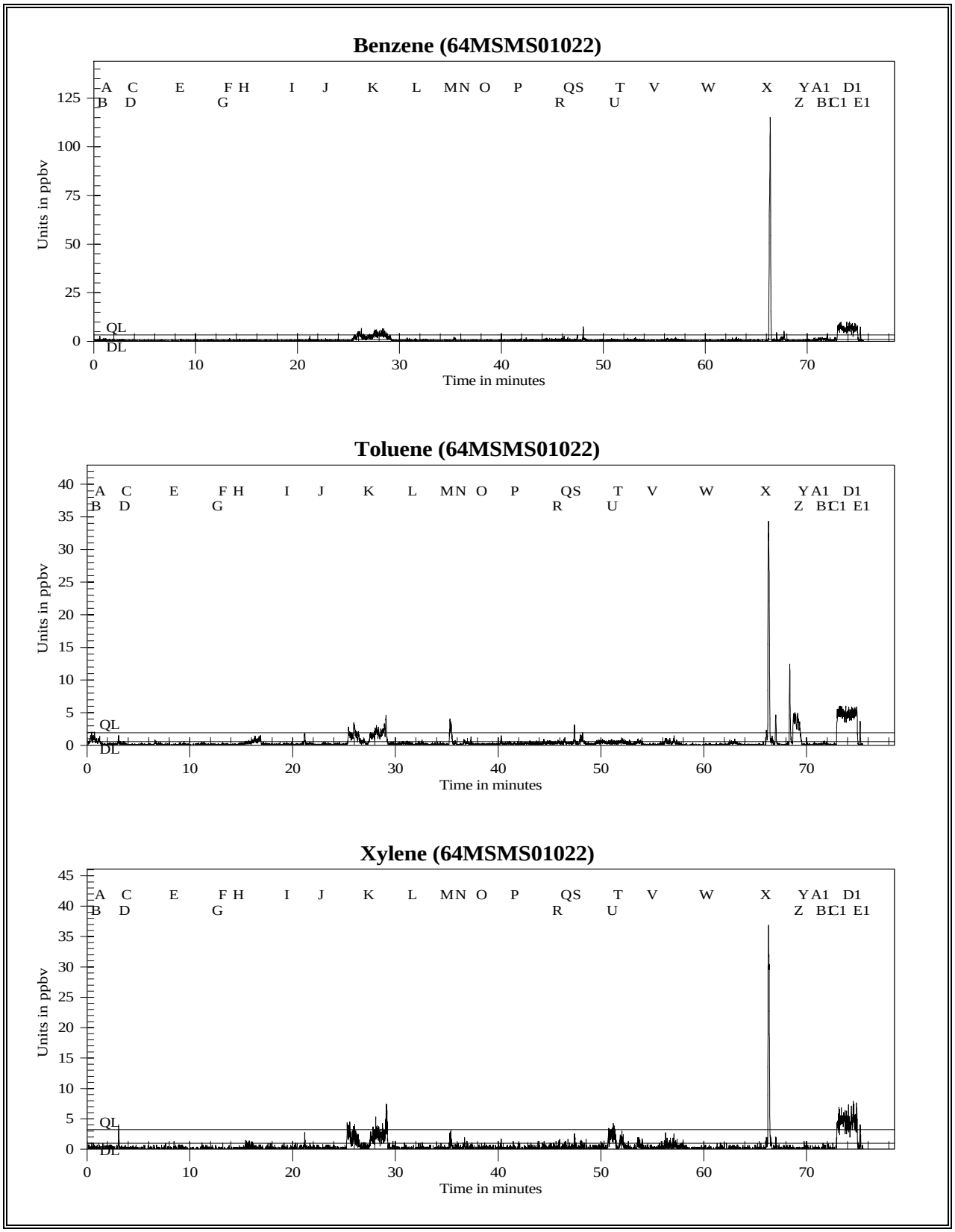


Figure 193c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

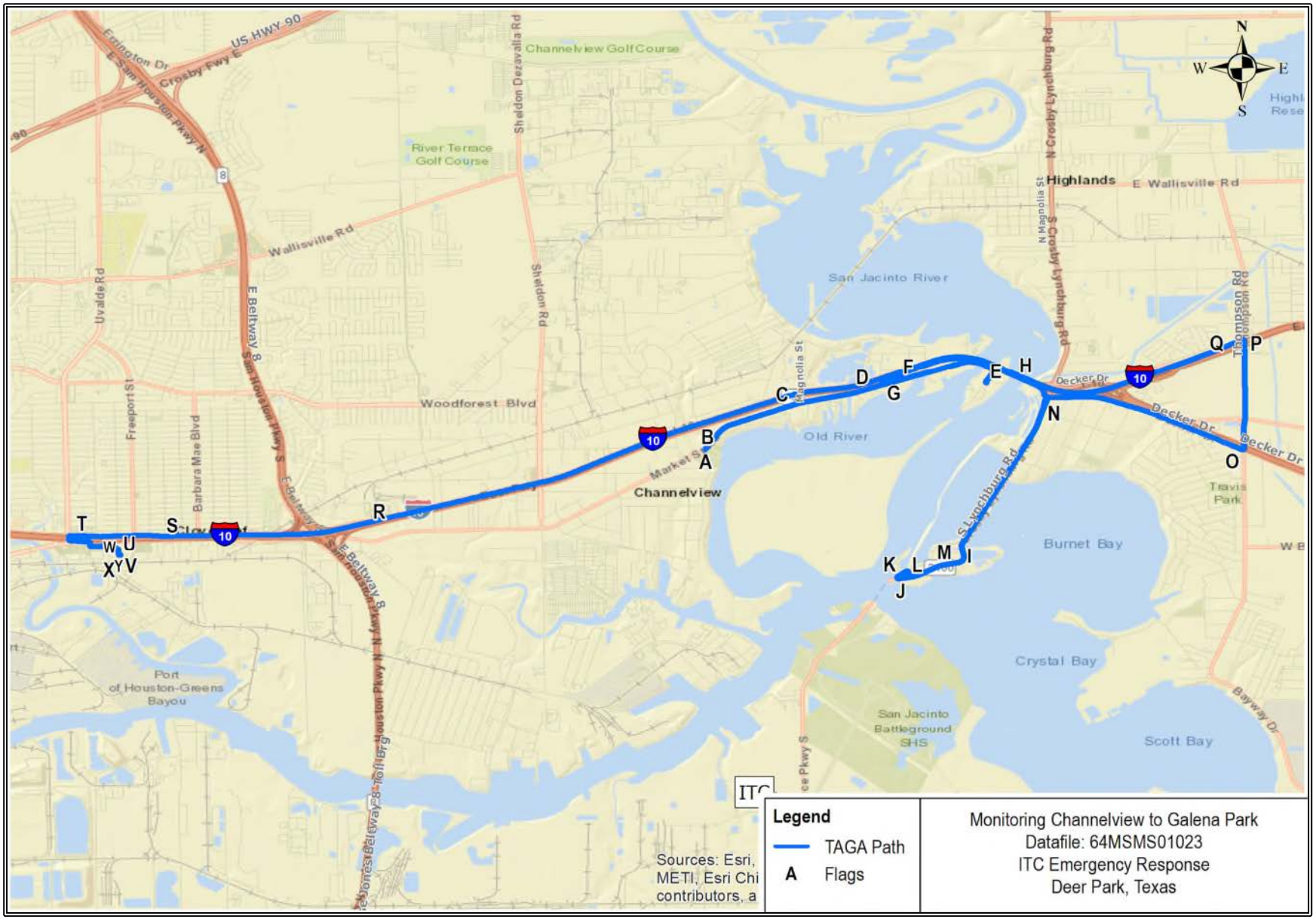


Figure 194a Monitoring Channelview to Galena Park Path, 64MSMS01023

Figure 194b

TAGA File Event Summary
File: 64MSMS01023 Acquired on 22 April 2019 at 11:24:44
Title: Monitoring Channelview to Galena Park

Flag	Time	Sequence	Description
A	1.0	96	Start mobile monitoring at River Terrace Park
B	1.4	138	Continuing onto Market Street
C	3.9	375	Cross Magnolia Street
D	5.7	541	Cross Monmouth Street
E	8.7	832	U-turn on Market Street
F	11.9	1135	Right turn onto Monmouth Street
G	12.2	1160	Merge onto Highway 10 East
H	13.7	1308	Exit onto Independence Parkway North
I	17.9	1704	Right turn to continue on Independence Parkway North
J	19.3	1831	Right turn onto Lynchburg Road at Lynchburg Ferry
K	19.8	1881	Right turn onto Crokett Street
L	20.2	1921	Left turn onto Independence Parkway North
M	21.4	2037	Left turn to continue on Independence Parkway North
N	24.9	2368	Right turn onto Decker Drive
O	28.8	2736	Left turn onto Thompson Road
P	32.3	3070	Left turn onto East Freeway Service Road
Q	33.3	3163	Merge onto Highway 10 West
R	44.9	4271	Cross Highway 8
S	46.4	4414	Exit onto East Freeway Service Road
T	47.7	4534	U-turn on East Freeway Service Road
U	50.7	4821	End mobile monitoring at shopping center on East Freeway Service Road
V	51.1	4860	Start ambient
W	52.1	4957	End ambient
X	53.6	5093	Start 30 mL/min spike
Y	54.6	5190	End 30 mL/min spike

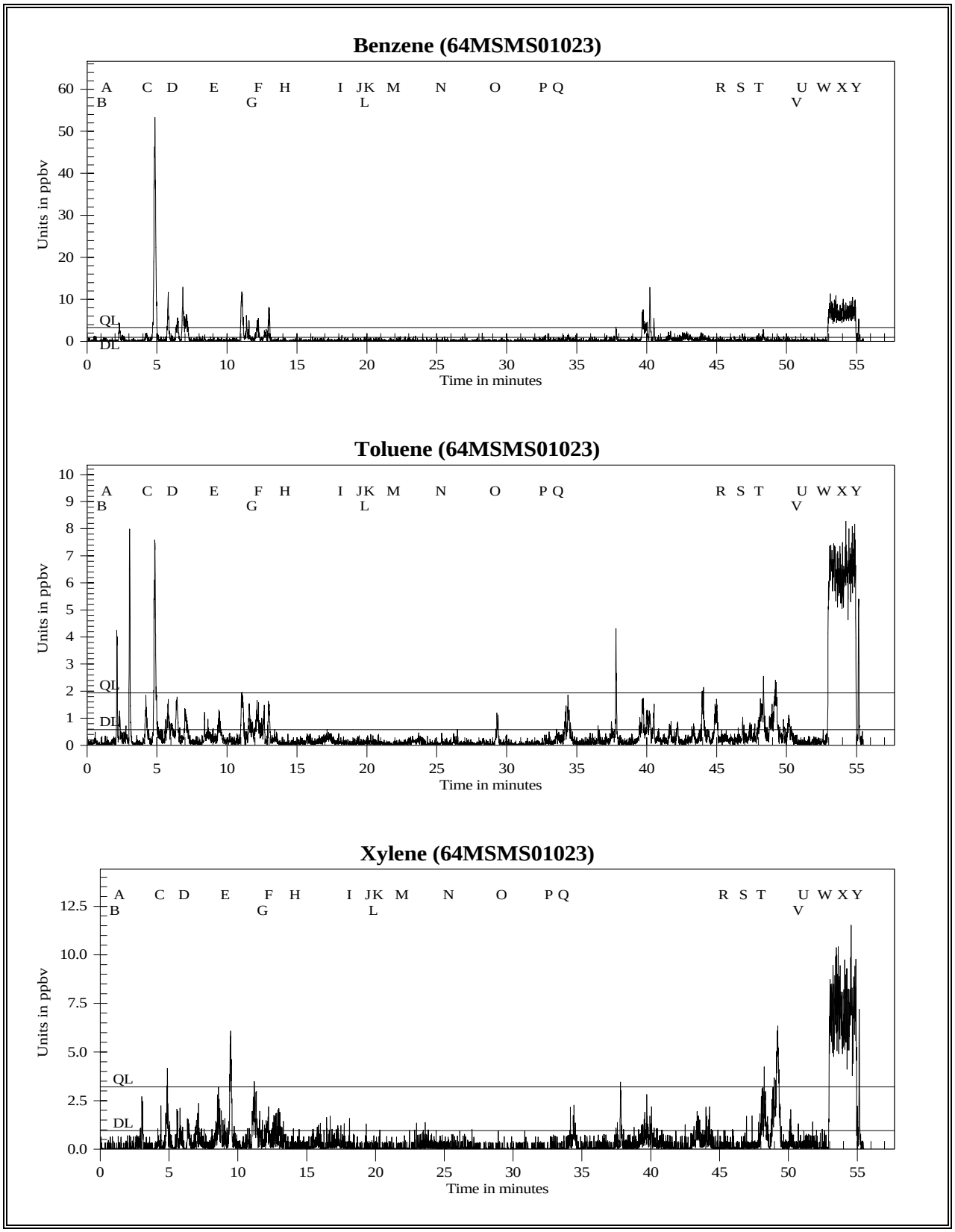


Figure 194c Monitoring Channelview to Galena Park in ppbv for Benzene, Toluene, and Xylenes

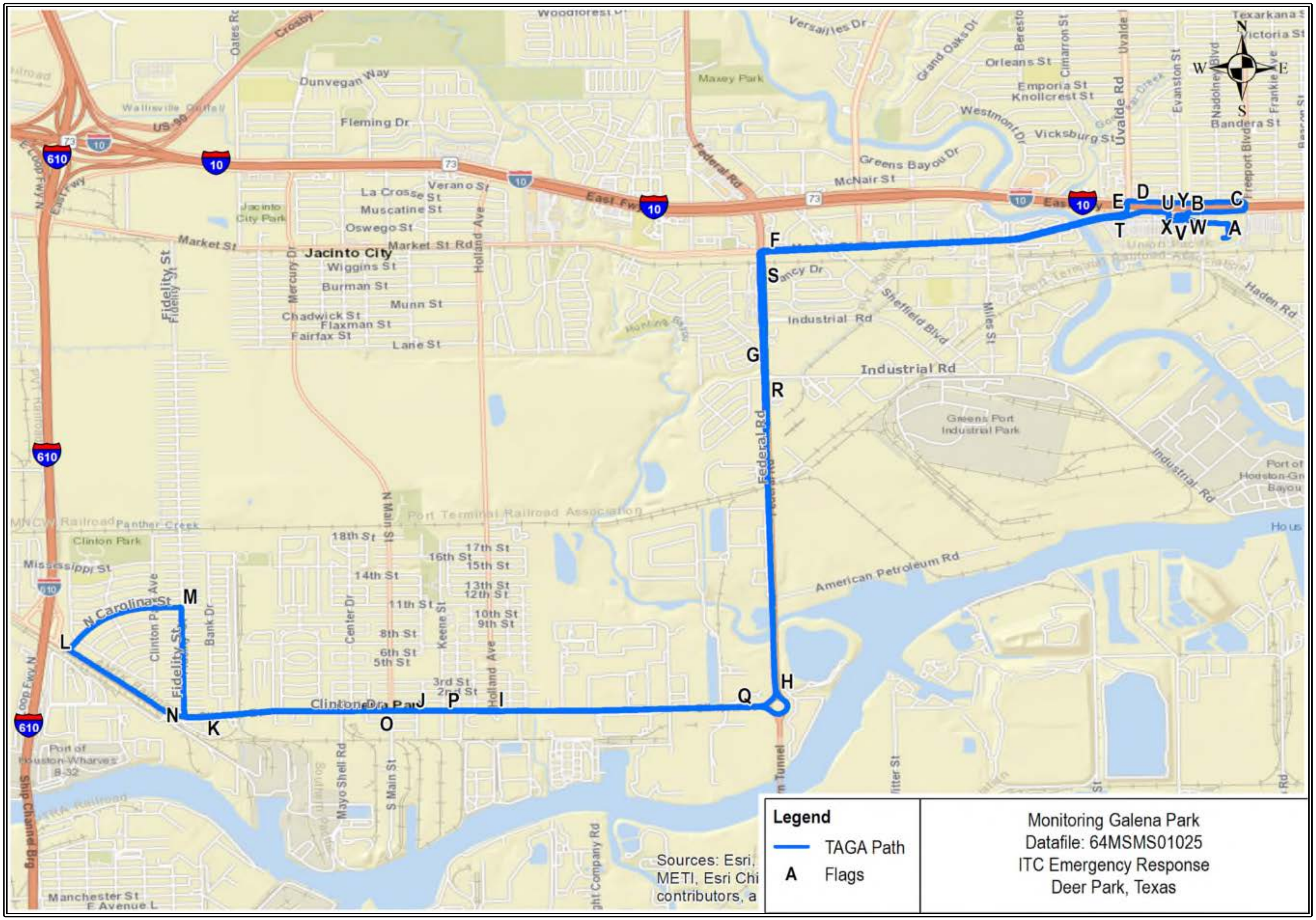


Figure 195a Monitoring Galena Park Path, 64MSMS01025

Figure 195b

TAGA File Event Summary
File: 64MSMS01025 Acquired on 22 April 2019 at 13:21:35
Title: Monitoring Galena Park

Flag	Time	Sequence	Description
A	0.9	85	Start mobile monitoring at shopping center on East Freeway Service Road
B	3.6	343	Right turn onto East Freeway Service Road
C	4.3	405	U-turn on East Freeway Service Road
D	6.5	617	Left turn onto Uvalde Road
E	6.8	650	Right turn onto Market Street
F	10.5	999	Left turn onto Federal Road
G	12.4	1176	Cross Industrial Road
H	16.1	1536	Right turn onto Clinton Drive
I	19.3	1839	Cross Holland Avenue
J	20.5	1950	Cross Main Street
K	23.3	2219	Cross Fidelity Road
L	25.1	2390	Right turn onto North Carolina Street
M	28.0	2666	Right turn onto Fidelity Street
N	30.7	2915	Left turn onto Clinton Drive
O	34.1	3243	Cross Main Street
P	35.0	3327	Cross Holland Avenue
Q	37.6	3577	Left turn onto Federal Road
R	43.0	4087	Cross Industrial Road
S	46.0	4372	Right turn onto Market Street
T	50.5	4806	Right turn onto East Freeway Service Road
U	52.3	4971	End mobile monitoring on East Freeway Service Road
V	52.5	4993	Start ambient
W	53.5	5090	End ambient
X	55.0	5230	Start 30 mL/min spike
Y	56.0	5328	End 30 mL/min spike

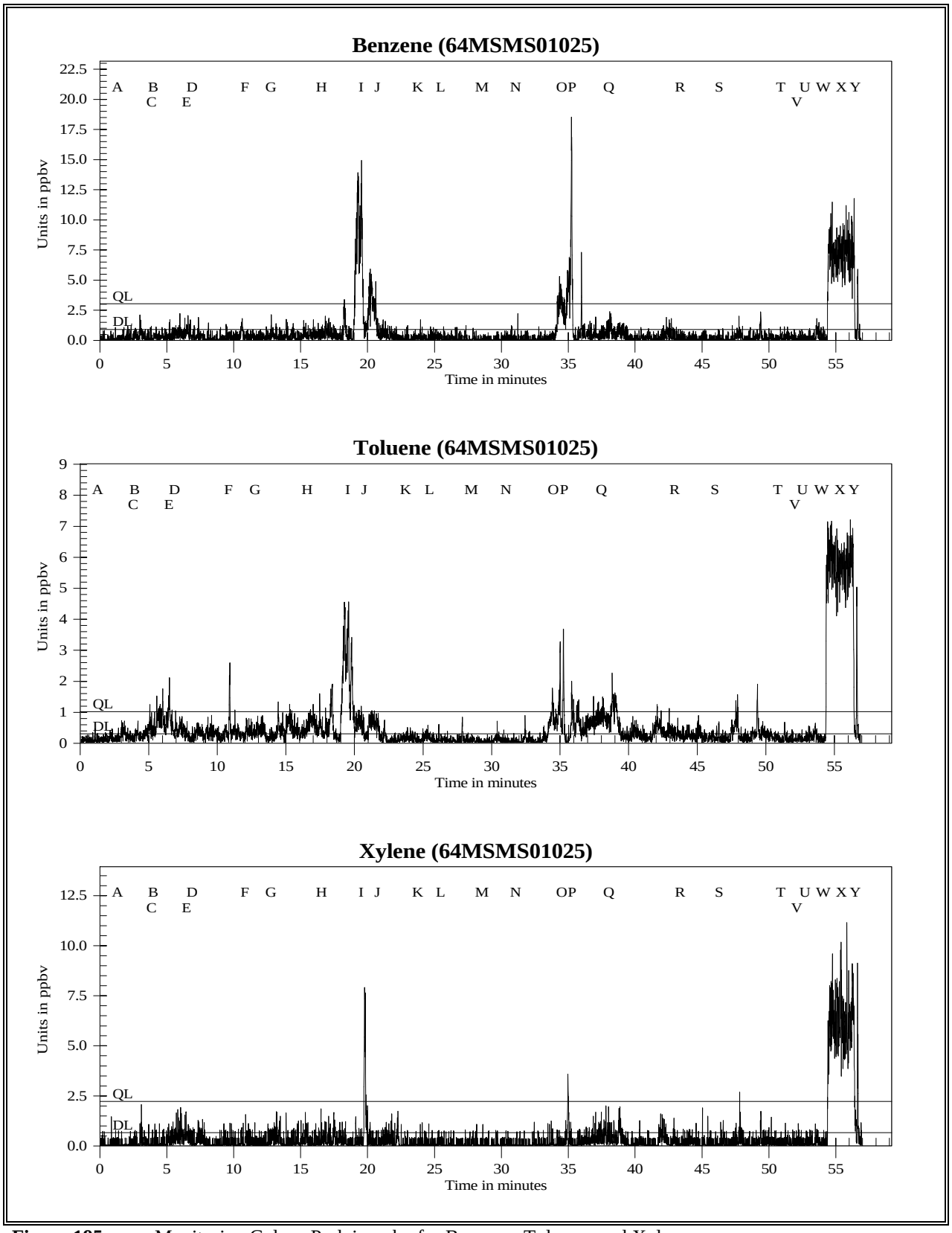


Figure 195c Monitoring Galena Park in ppbv for Benzene, Toluene, and Xylenes

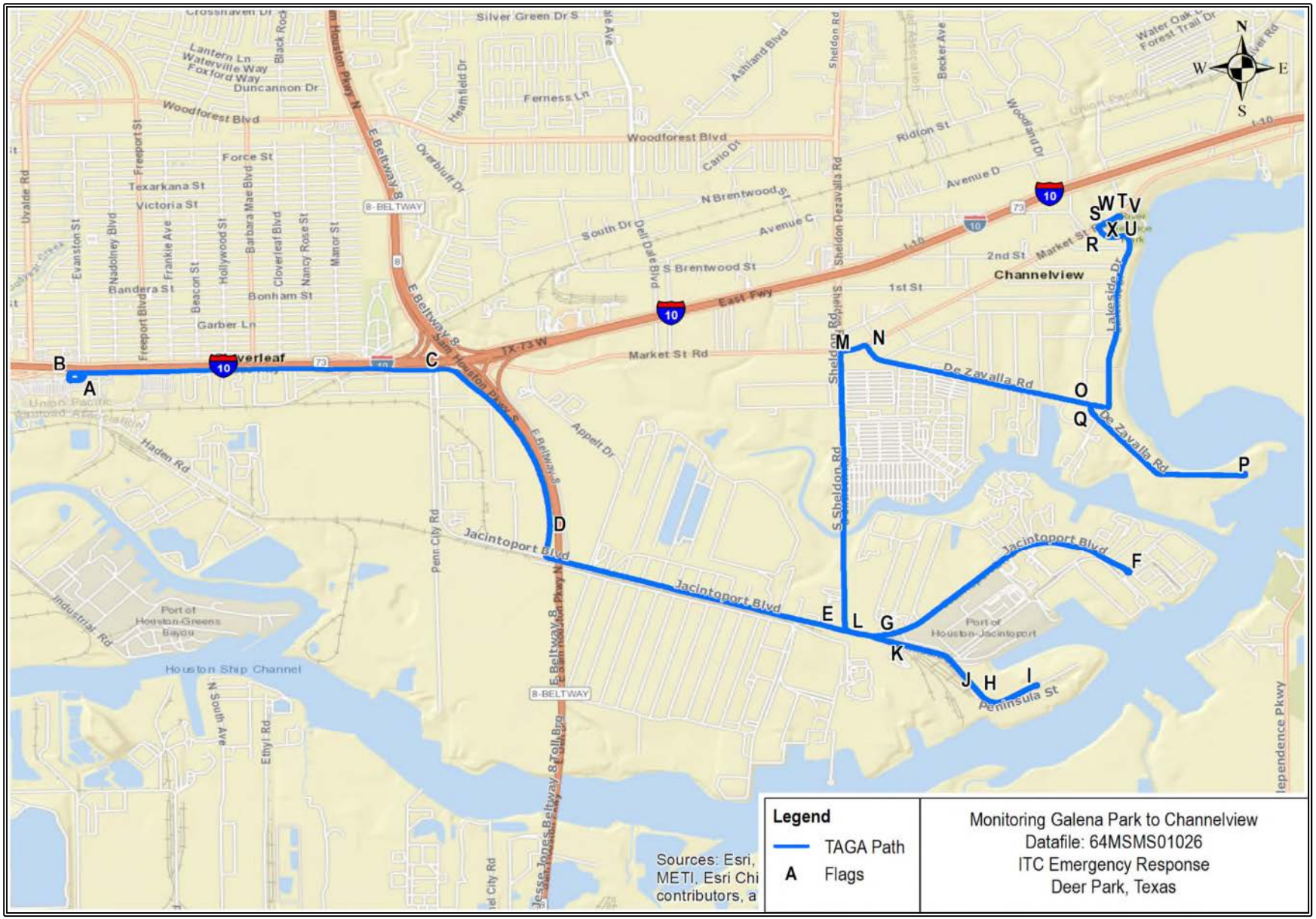


Figure 196a Monitoring Galena Park to Channelview Path, 64MSMS01026

Figure 196b

TAGA File Event Summary
File: 64MSMS01026 Acquired on 22 April 2019 at 14:20:57
Title: Monitoring Galena Park to Channelview

Flag	Time	Sequence	Description
A	0.9	89	Start mobile monitoring on East Freeway Service Road
B	3.3	314	Right turn onto East Freeway Service Road
C	7.5	718	Right turn onto Highway 8 Service Road
D	9.8	936	Left turn onto Jacintoport Boulevard
E	13.6	1290	Cross Sheldon Road
F	18.3	1736	U-turn on Jacintoport Boulevard
G	22.2	2110	Left turn onto San Jacinto Boulevard
H	24.9	2366	Continuing onto Peninsula Street
I	26.1	2480	U-turn on Peninsula Street
J	28.7	2732	Continuing onto San Jacinto Boulevard
K	30.5	2904	Left turn onto Jacintoport Boulevard
L	31.3	2973	Right turn onto Sheldon Road
M	36.3	3449	Right turn onto Market Street
N	36.7	3488	Right turn onto Dezavala Road
O	39.2	3731	Right turn to continue onto Dezavala Road
P	43.9	4171	U-turn on Dezavala Road
Q	49.0	4664	Right turn onto Lakeside Drive
R	52.4	4979	Right turn onto Market Street
S	53.0	5038	Right turn into River Terrace Park
T	53.6	5093	End mobile monitoring at River Terrace Park
U	53.8	5117	Start ambient
V	54.8	5212	Start ambient
W	56.5	5372	Start 30 mL/min spike
X	57.5	5467	End 30 mL/min spike

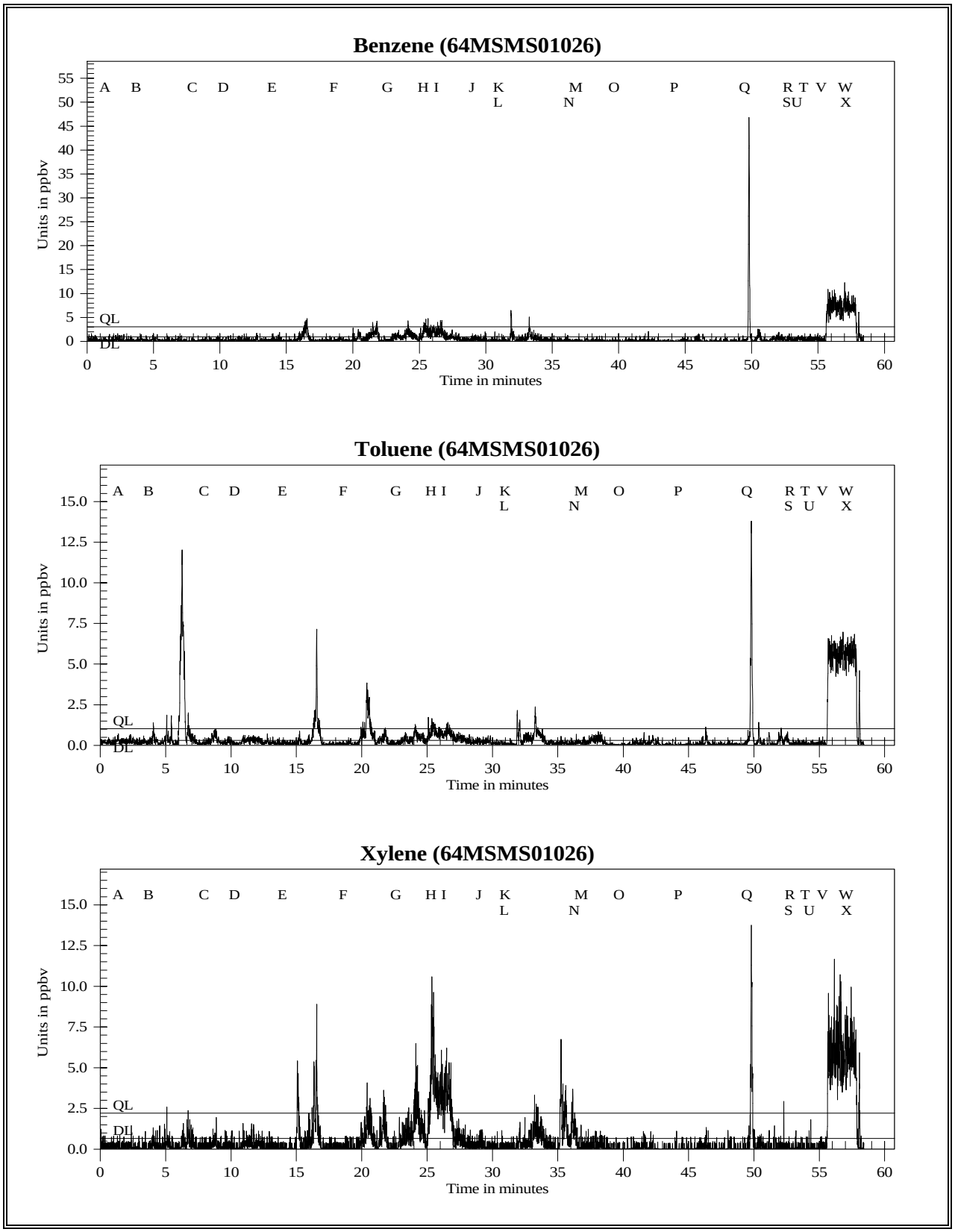


Figure 196c Monitoring Galena Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

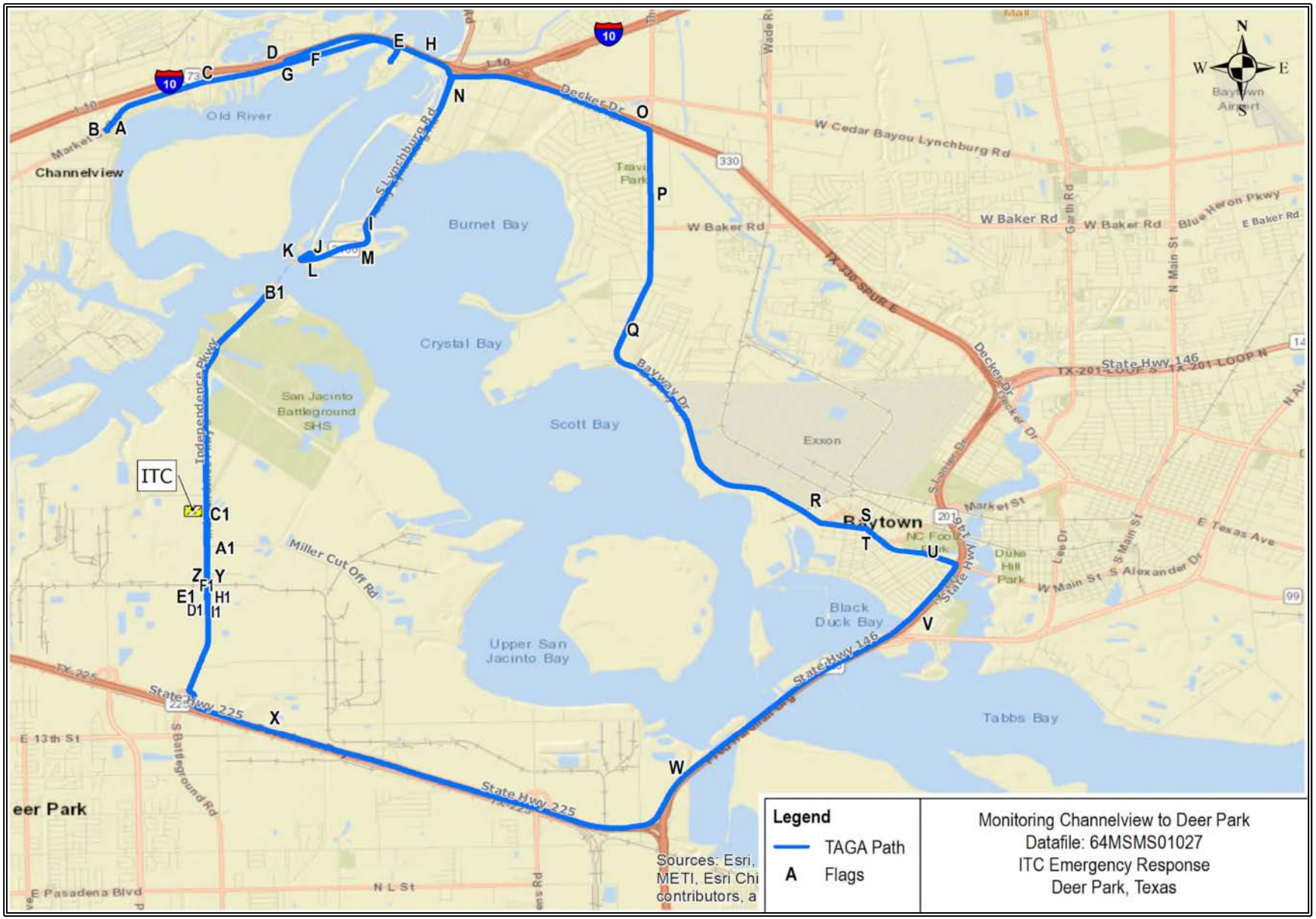


Figure 197a Monitoring Channelview to Deer Park Two Path, 64MSMS01027

Figure 197b

TAGA File Event Summary
File: 64MSMS01027 Acquired on 22 April 2019 at 15:27:20
Title: Monitoring Channelview to Deer Park

Flag	Time	Sequence	Description
A	1.2	112	Start mobile monitoring at River Terrace Park
B	2.5	240	Continuing onto Market Street
C	4.7	447	Cross Magnolia Street
D	6.2	590	Cross Monmouth Street
E	9.0	858	U-turn on Market Street
F	12.8	1214	Right turn onto Monmouth Street
G	13.0	1233	Right turn onto Highway 10 East
H	14.7	1397	Right turn onto Independence Parkway North
I	18.4	1747	Right turn to continue on Independence Parkway North
J	19.5	1858	Right turn onto Lynchburg Road at Lynchburg Ferry
K	20.0	1901	Right turn onto Crokett Street
L	20.3	1929	Left turn onto Independence Parkway North
M	21.5	2048	Left turn to continue on Independence Parkway North
N	25.0	2381	Right turn onto Decker Drive
O	28.0	2659	Right turn onto Bayway Drive
P	30.0	2853	Cross Baker Road
Q	32.5	3095	Left turn to continue onto Bayway Drive
R	38.0	3610	Left turn onto Wisconsin Street
S	39.3	3735	Right turn onto Market Street
T	39.8	3781	Right turn onto Main Street
U	41.6	3959	Right turn onto Robert C Lanier Drive
V	42.9	4084	Merge onto Highway 146 South
W	45.4	4318	Merge onto Highway 225 West
X	49.5	4704	Right turn onto Independence Parkway
Y	53.2	5063	Stationary at railroad crossing
Z	54.3	5168	Resume mobile monitoring on Independence Parkway
A1	56.2	5347	Cross Miller Cut-Off Road
B1	63.0	5990	U-turn on Independence Parkway at Juan Seguin Park
C1	70.0	6657	Cross Miller Cut-Off Road
D1	71.4	6792	End mobile monitoring on Independence Parkway
E1	72.7	6912	Start ambient
F1	73.7	7009	End ambient
H1	76.3	7259	Start 30 mL/min spike
I1	77.4	7358	End 30 mL/min spike

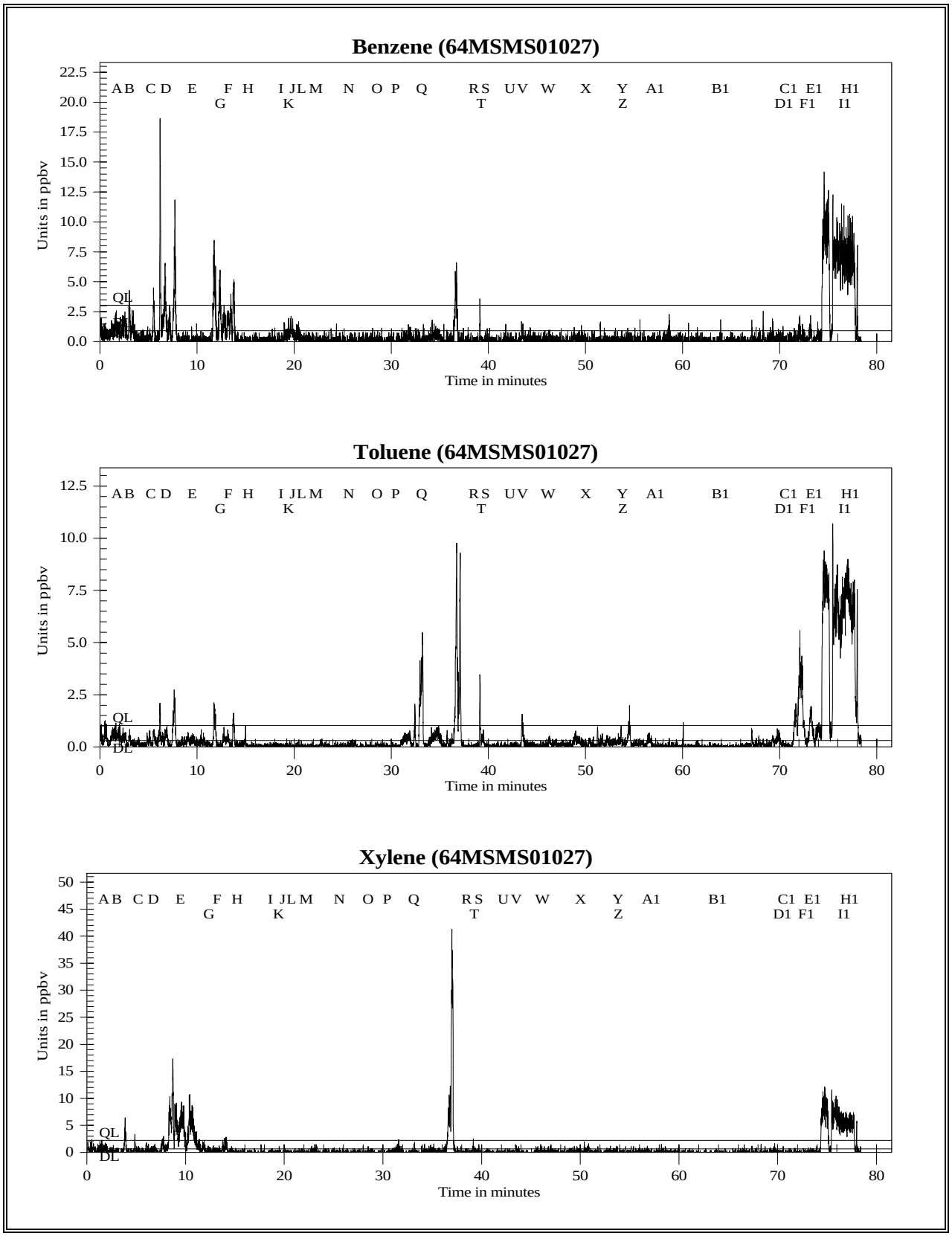


Figure 197c Monitoring Channelview to Deer Park in ppbv for Benzene, Toluene, and Xylenes

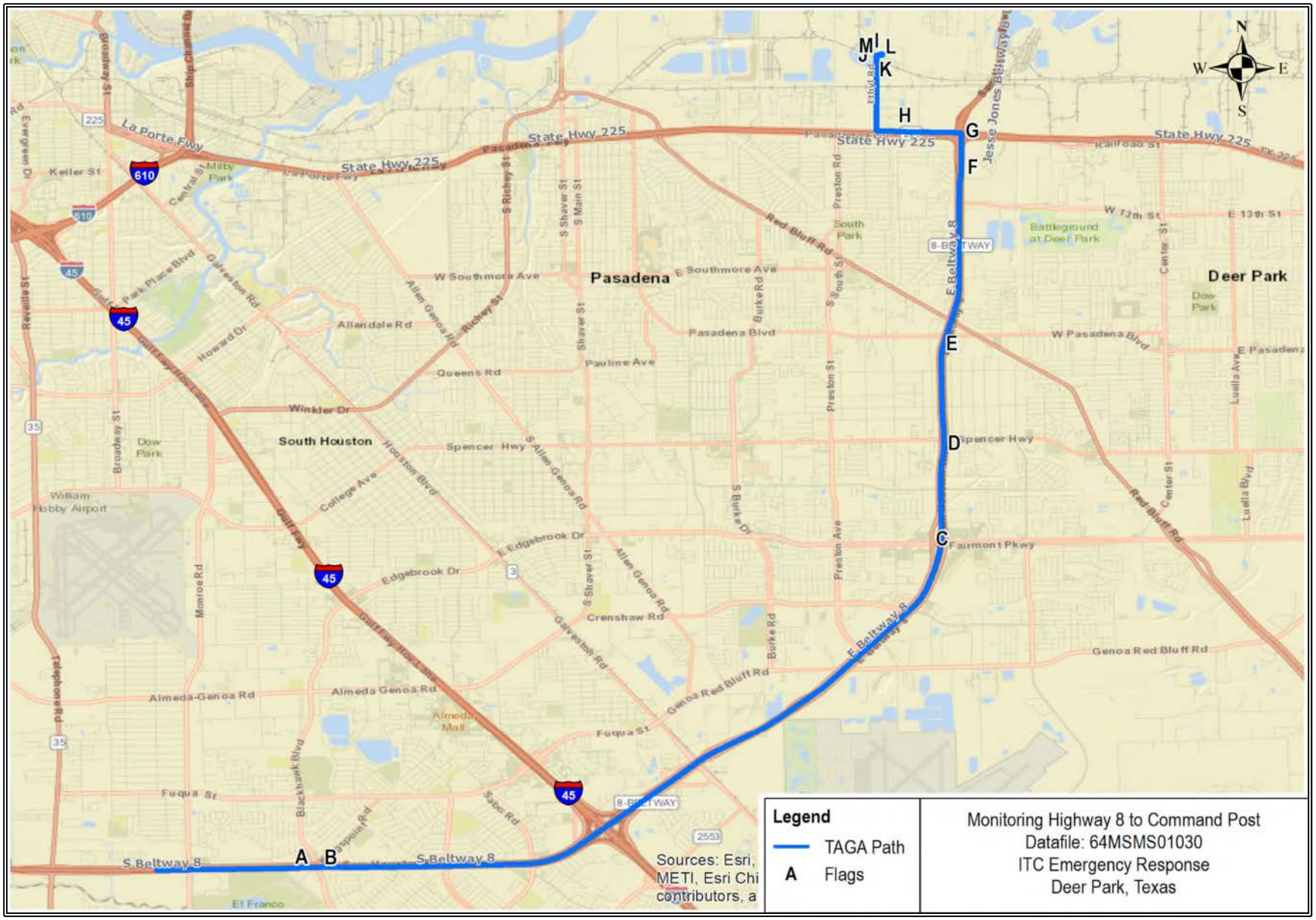


Figure 198a Monitoring Highway 8 to Command Post Path, 64MSMS01030

Figure 198b

TAGA File Event Summary
File: 64MSMS01030 Acquired on 23 April 2019 at 08:16:48
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	2.2	211	Start mobile monitoring on Highway 8 North
B	2.4	232	Continuing onto Highway 8 North
C	9.1	867	Cross Fairmont Parkway
D	10.4	989	Cross Spencer Highway
E	11.5	1096	Cross Pasadena boulevard
F	13.5	1286	Exit onto Highway 8 Service Road
G	14.8	1412	Left turn onto Pasadena Freeway Frontage Road
H	15.9	1517	Right turn onto Ethyl Road
I	19.0	1810	End mobile monitoring at EPA Command Post
J	19.3	1836	Start ambient
K	20.3	1934	End ambient
L	22.1	2100	Start 30 mL/min spike
M	23.1	2197	End 30 mL/min spike

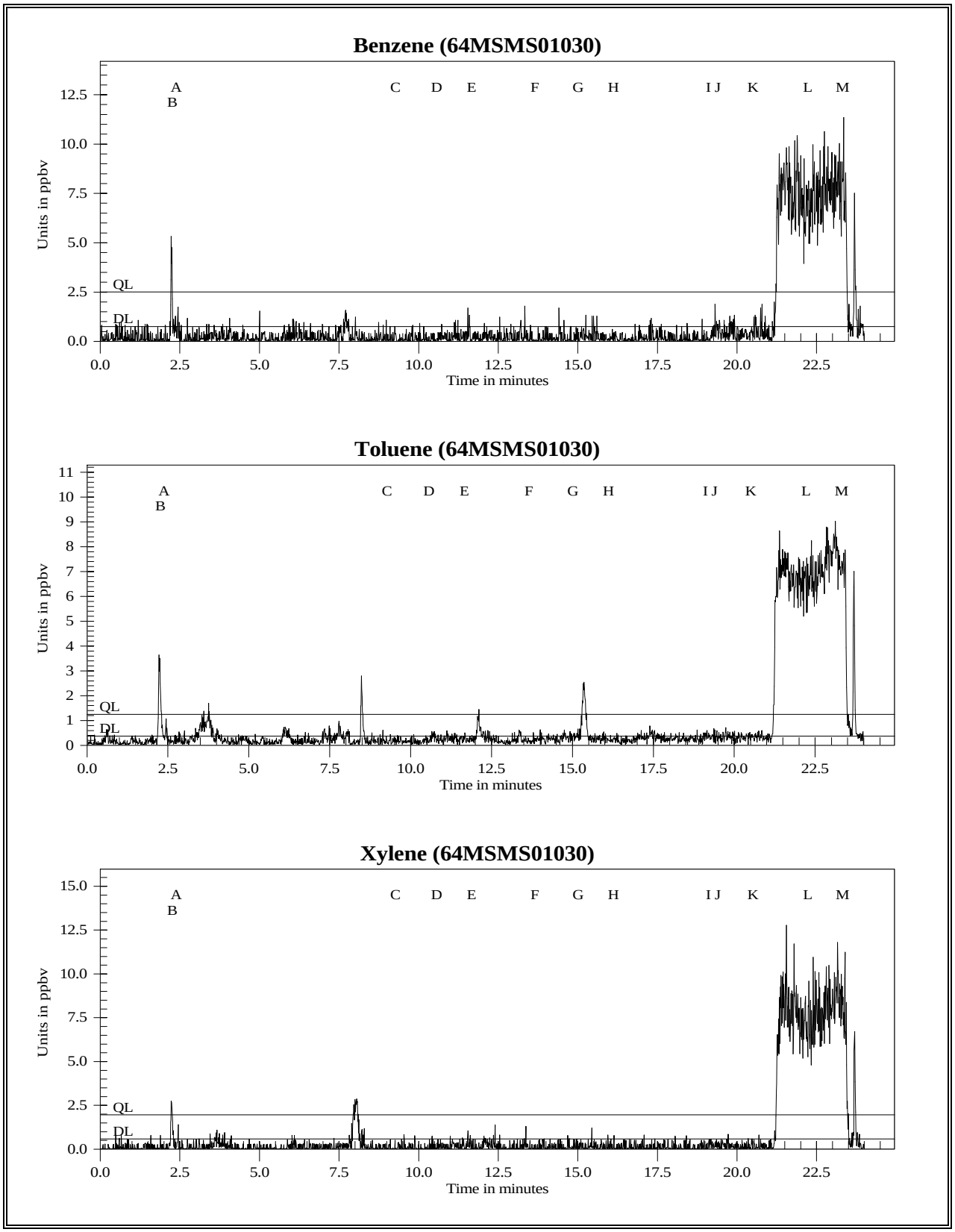


Figure 198c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

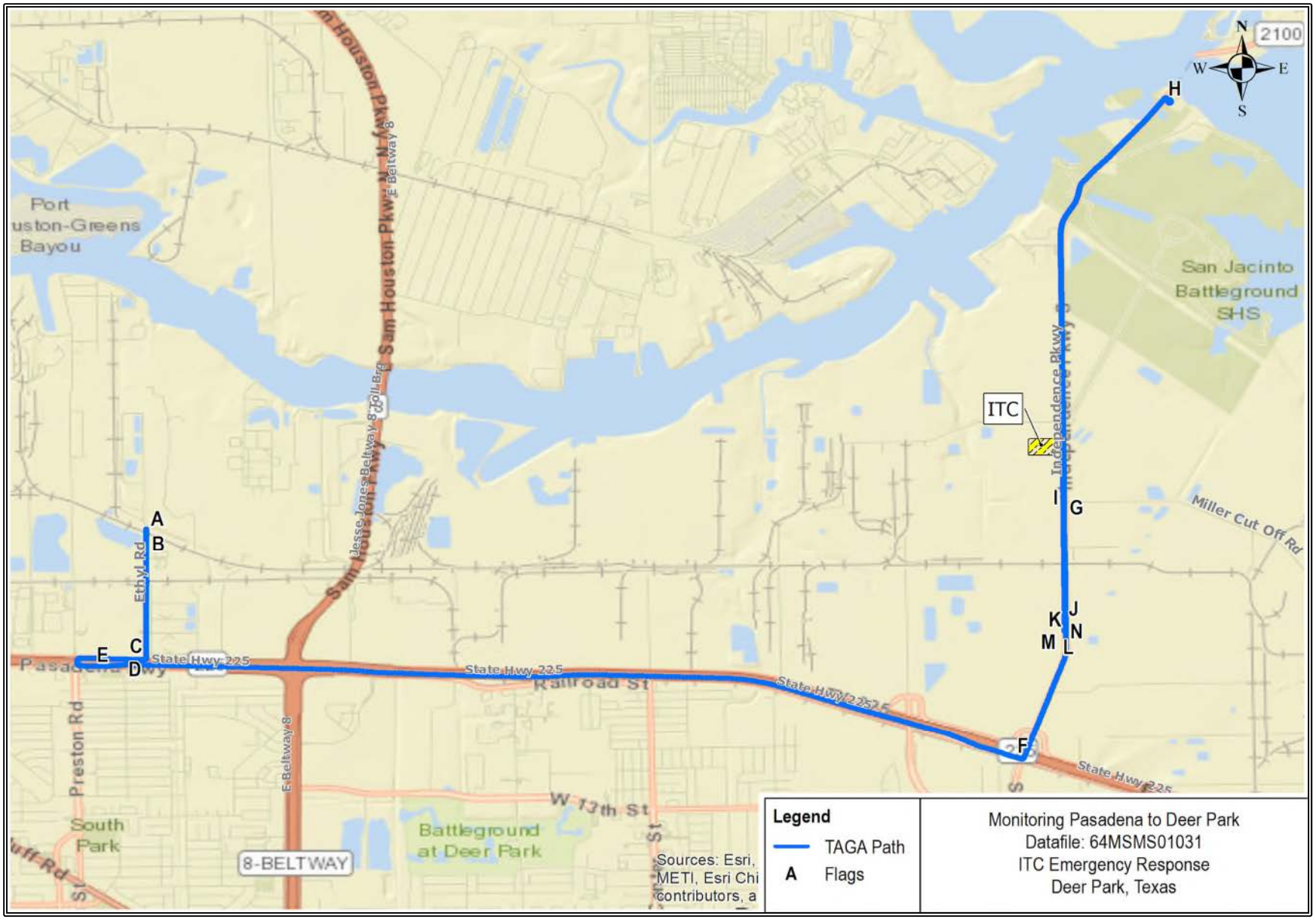


Figure 199a Monitoring Pasadena to Deer Park Two Path, 64MSMS01031

Figure 199b

TAGA File Event Summary
File: 64MSMS01031 Acquired on 23 April 2019 at 08:57:15
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	1.0	100	Start mobile monitoring at EPA Command Post
B	2.3	216	Continuing onto Ethyl Road
C	4.2	403	Right turn onto Pasadena Freeway Frontage Road
D	4.9	466	U-turn on Pasadena Freeway Frontage Road at Preston Road
E	5.8	550	Merge onto Highway 225 East
F	10.3	980	Left turn onto Independence Parkway
G	13.3	1268	Cross Miller Cut-Off Road
H	19.2	1831	U-turn on Independence Parkway at Juan Seguin Park
I	26.3	2498	Cross Miller Cut-Off Road
J	28.8	2742	End mobile monitoring on Independence Parkway
K	29.4	2793	Start ambient
L	30.4	2891	End ambient
M	31.7	3014	Start 30 mL/min spike
N	32.7	3108	End 30 mL/min spike

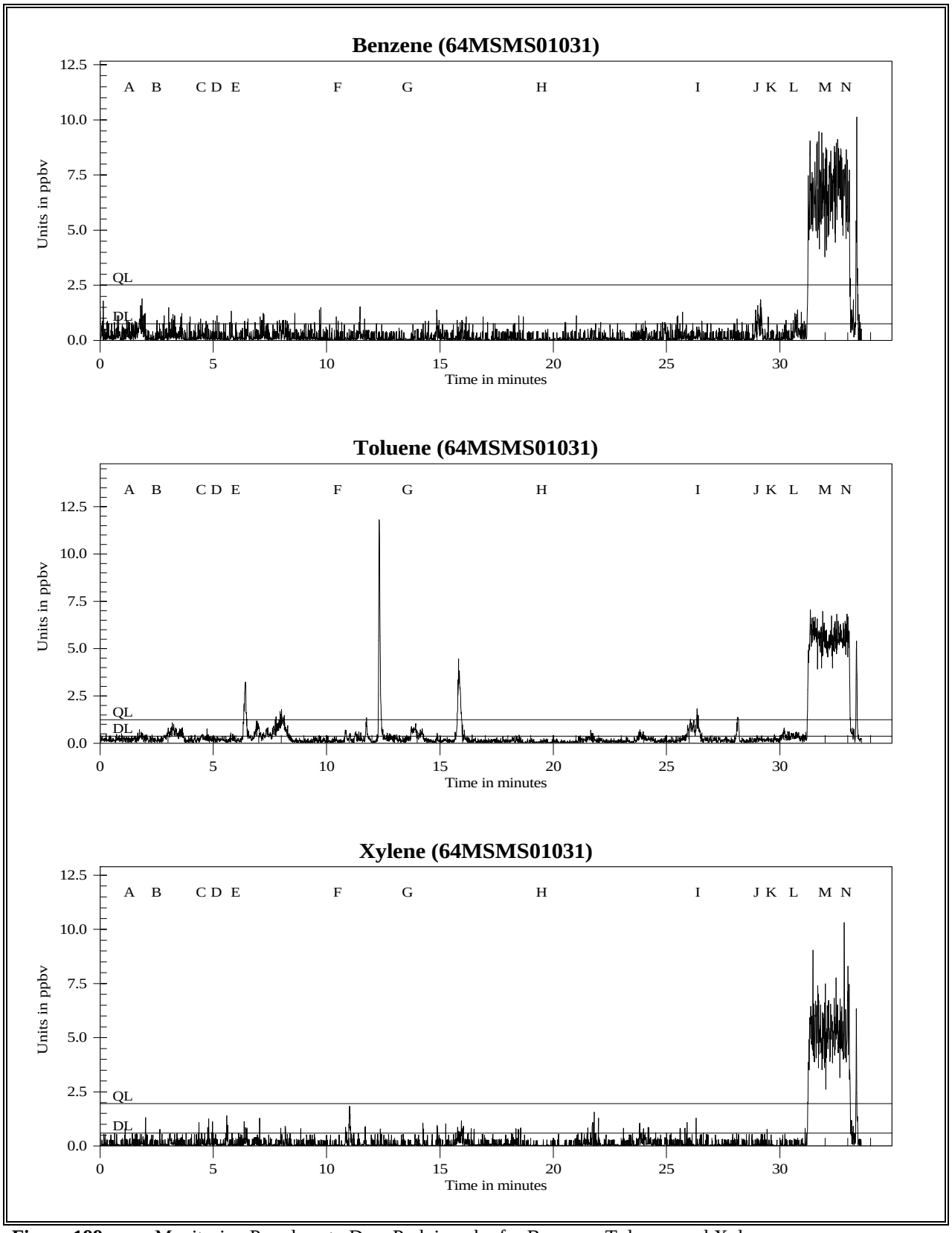


Figure 199c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

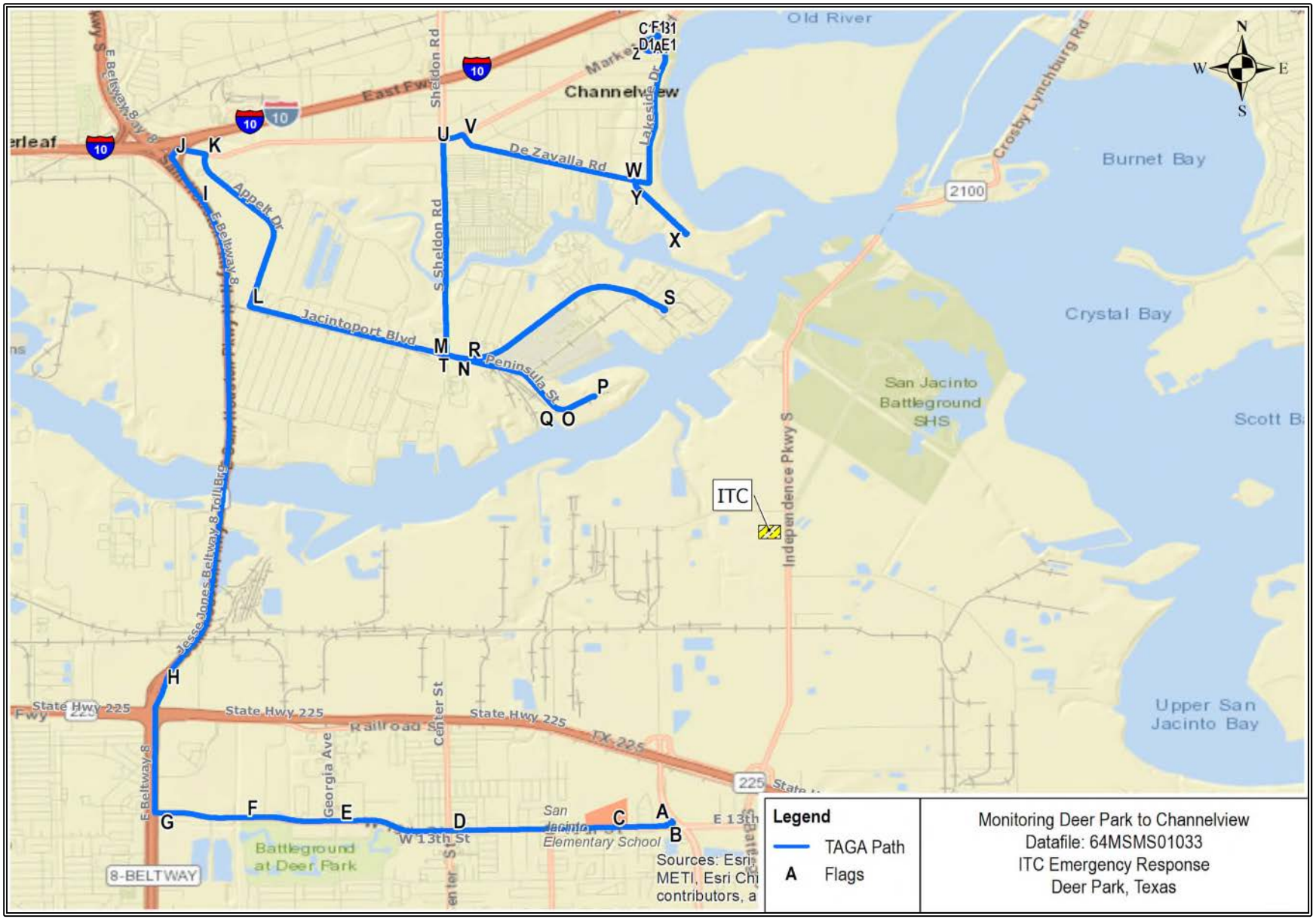


Figure 200a Monitoring Deer Park to Channelview Path, 64MSMS01033

Figure 200b

TAGA File Event Summary
File: 64MSMS01033 Acquired on 23 April 2019 at 09:47:20
Title: Monitoring Deer Park to Channelview Two

Flag	Time	Sequence	Description
A	1.0	97	Start mobile monitoring on East 13th Street
B	2.7	262	Continuing onto East 13th Street
C	4.2	403	Passing San Jacinto Elementary School
D	8.7	831	Cross Center Street
E	11.9	1135	Cross Georgia Avenue
F	14.1	1341	Continuing onto Greenshadow Drive
G	16.1	1536	Right turn onto Highway 8 Service Road
H	18.5	1758	Merge onto Highway 8 North
I	22.6	2145	Exit onto Highway 8 Service Road
J	23.1	2194	Right turn onto Market Street
K	24.2	2300	Right turn onto Appelt Street
L	29.5	2804	Left turn onto Jacintoport Boulevard
M	33.2	3160	Cross Sheldon Road
N	33.7	3208	Right turn onto San Jacinto Boulevard
O	36.4	3464	Continuing onto Peninsula Street
P	37.8	3594	U-turn on Peninsula Street
Q	39.4	3750	Continuing onto San Jacinto Boulevard
R	42.0	3998	Right turn onto Jacintoport Boulevard
S	47.4	4510	U-turn on Jacintoport Boulevard
T	53.3	5065	Right turn onto Sheldon Road
U	58.4	5550	Right turn onto Market Street
V	58.8	5588	Right turn onto Dezavala Road
W	61.2	5816	Right turn to continue on Dezavala Road
X	64.4	6128	U-turn on Dezavala Road
Y	68.7	6529	Right turn onto Lakeside Drive
Z	72.0	6847	Right turn onto Market Street
A1	72.5	6895	Right turn into River Terrace Park
B1	73.4	6980	End mobile monitoring at River Terrace Park
C1	73.8	7020	Start ambient
D1	74.9	7123	End ambient
E1	76.4	7266	Start 30 mL/min spike
F1	77.4	7364	End 30 mL/min spike

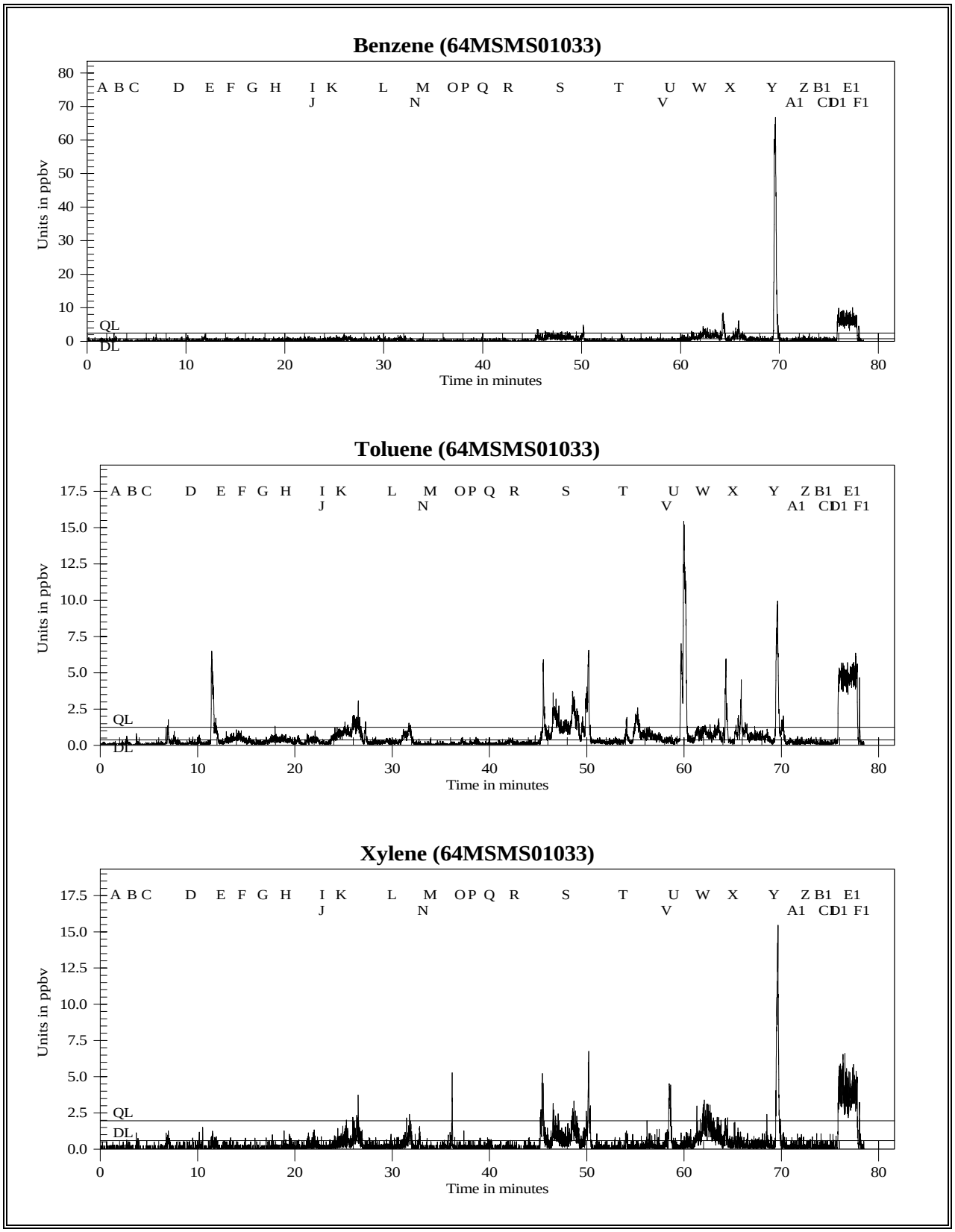


Figure 200c Monitoring Deer Park to Channelview Two in ppbv for Benzene, Toluene, and Xylenes

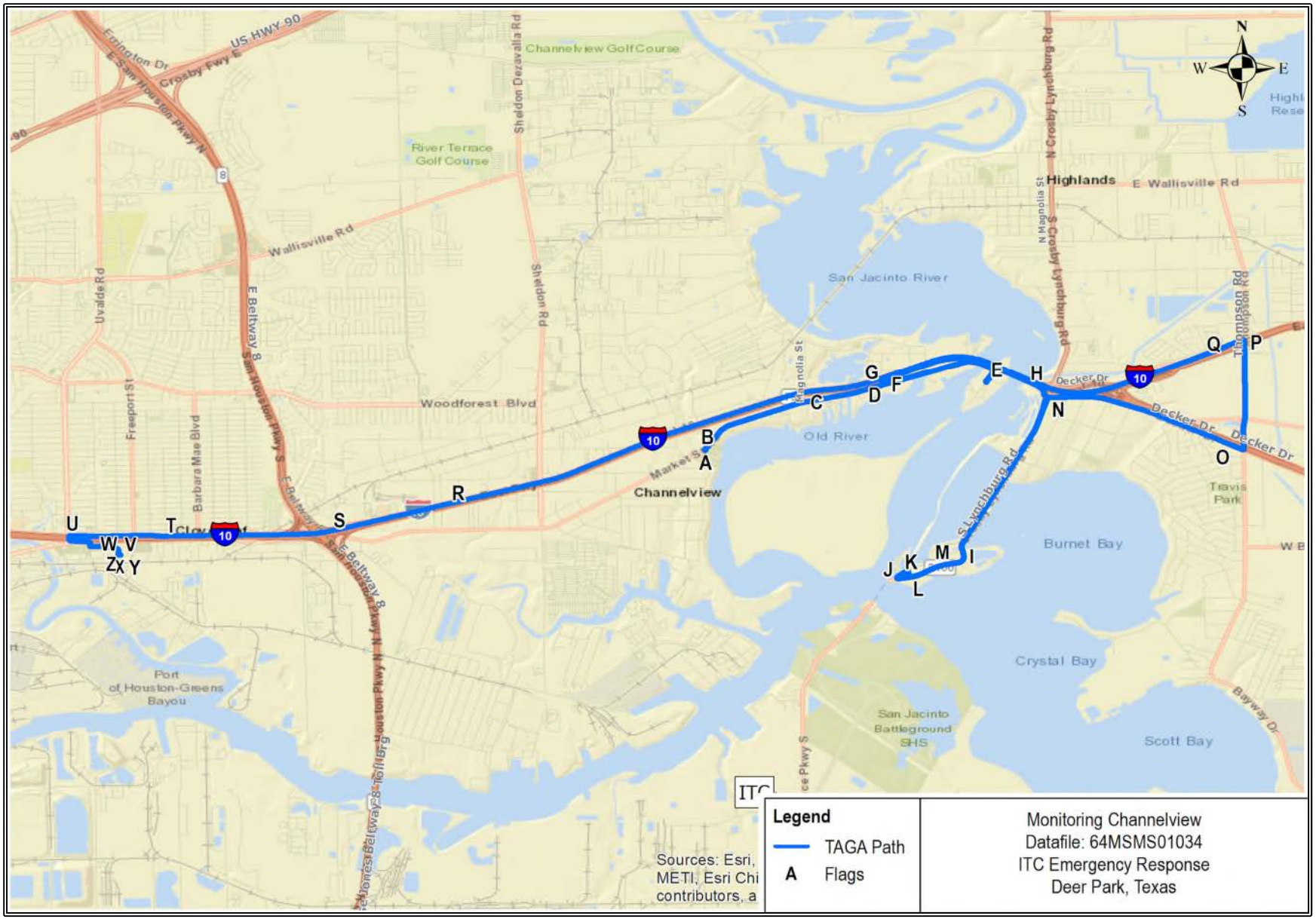


Figure 201a Monitoring Channelview Path, 64MSMS01034

Figure 201b

TAGA File Event Summary
File: 64MSMS01034 Acquired on 23 April 2019 at 11:13:49
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	0.6	61	Start mobile monitoring at River Terrace Park
B	2.4	230	Continuing onto Market Street
C	5.1	489	Cross Magnolia Street
D	7.2	690	Cross Monmouth Street
E	10.5	997	U-turn on Market Street
F	15.2	1443	Right turn onto Monmouth Street
G	15.4	1469	Merge onto Highway 10 East
H	17.2	1633	Right turn onto Independence Parkway North
I	21.6	2057	Right turn to continue on Independence Parkway North
J	23.2	2205	Right turn onto Lynchburg Road at Lynchburg Ferry
K	23.7	2257	Right turn onto Crokett Street
L	24.0	2287	Left turn onto Independence Parkway North
M	25.5	2428	Left turn to continue onto Independence Parkway North
N	29.8	2837	Right turn onto Decker Drive
O	32.9	3125	Left turn onto Thompson Road
P	35.2	3346	Left turn onto East Freeway Service Road
Q	36.2	3439	Merge onto Highway 10 West
R	45.3	4304	Cross Dell Dale Street
S	46.1	4387	Cross Highway 8
T	47.7	4539	Exit onto East Freeway Service Road
U	50.3	4780	U-turn on East Freeway Service Road at Uvalde Road
V	53.1	5049	End mobile monitoring at shopping center on East Freeway Service Road
W	53.5	5085	Start ambient
X	54.5	5187	End ambient
Y	56.2	5345	Start 30 mL/min spike
Z	57.2	5440	End 30 mL/min spike

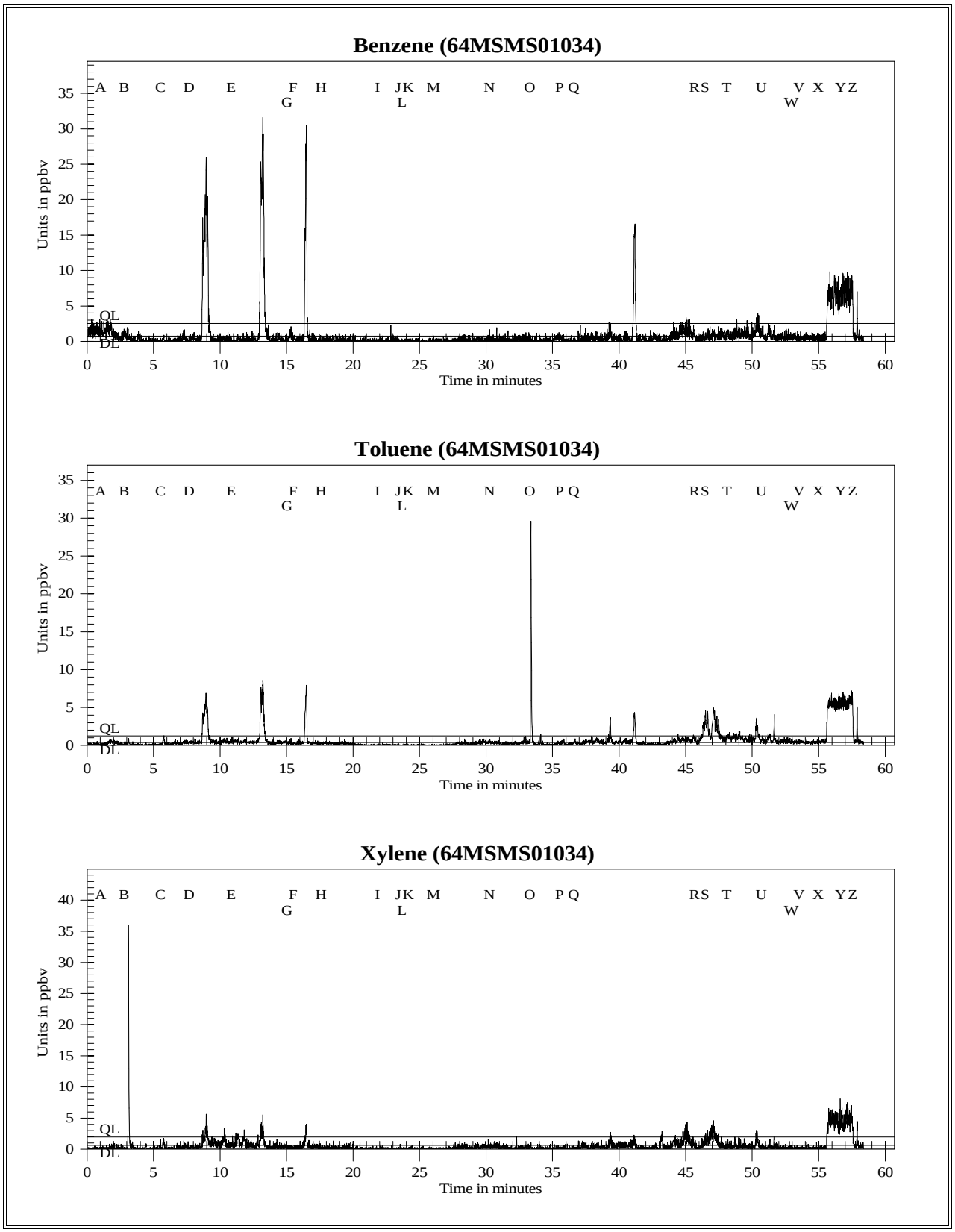


Figure 201c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

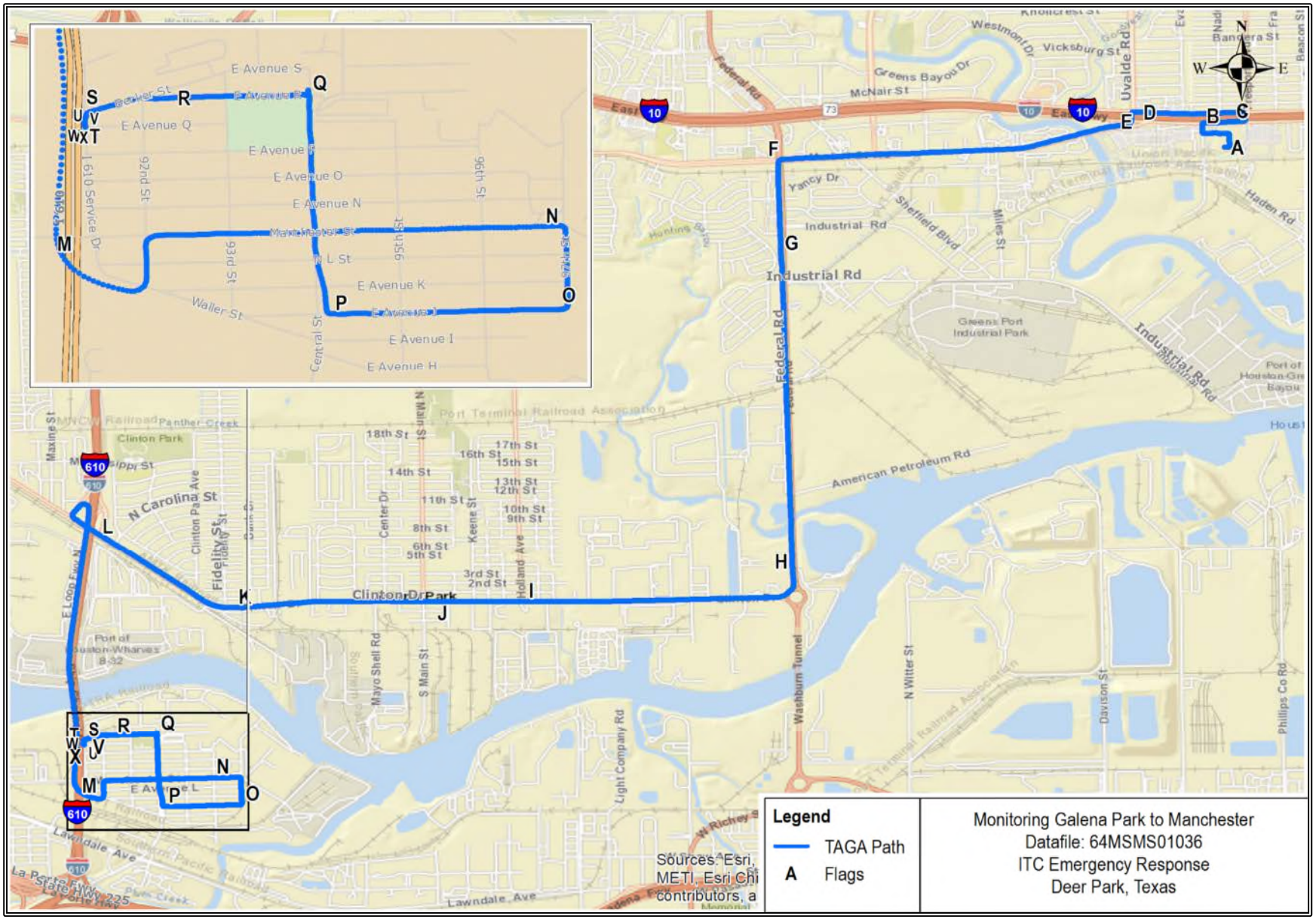


Figure 202a Monitoring Galena Park to Manchester Path, 64MSMS01036

Figure 202b

TAGA File Event Summary
File: 64MSMS01036 Acquired on 23 April 2019 at 13:18:26
Title: Monitoring Galena Park to Manchester

Flag	Time	Sequence	Description
A	0.8	81	Start mobile monitoring at shopping center on East Freeway Service Road
B	3.8	364	Right turn onto East Freeway Service Road
C	4.4	422	U-turn on East Freeway Service Road
D	6.7	639	Left turn onto Uvalde Road
E	7.0	668	Right turn onto Market Street
F	12.2	1161	Left turn onto Federal Road
G	13.9	1327	Cross Industrial Road
H	17.5	1668	Right turn onto Clinton Drive
I	20.3	1931	Cross Holland Avenue
J	21.3	2030	Cross Main Street
K	24.2	2300	Cross Fidelity Street
L	26.9	2560	Right turn onto Highway 610 South
M	30.4	2888	Exit onto Manchester Street
N	33.4	3174	Right turn onto 97th Street
O	34.3	3260	Right turn onto Avenue J
P	37.2	3536	Merge onto Central Street
Q	40.5	3848	Left turn onto Avenue R
R	42.8	4068	Left turn onto Becker Street
S	43.5	4135	Left turn onto Concrete Street
T	44.1	4192	End mobile monitoring on Concrete Street
U	44.4	4225	Start ambient
V	45.5	4322	End ambient
W	47.0	4469	Start 30 mL/min spike
X	48.0	4569	En d30 mL/min spike

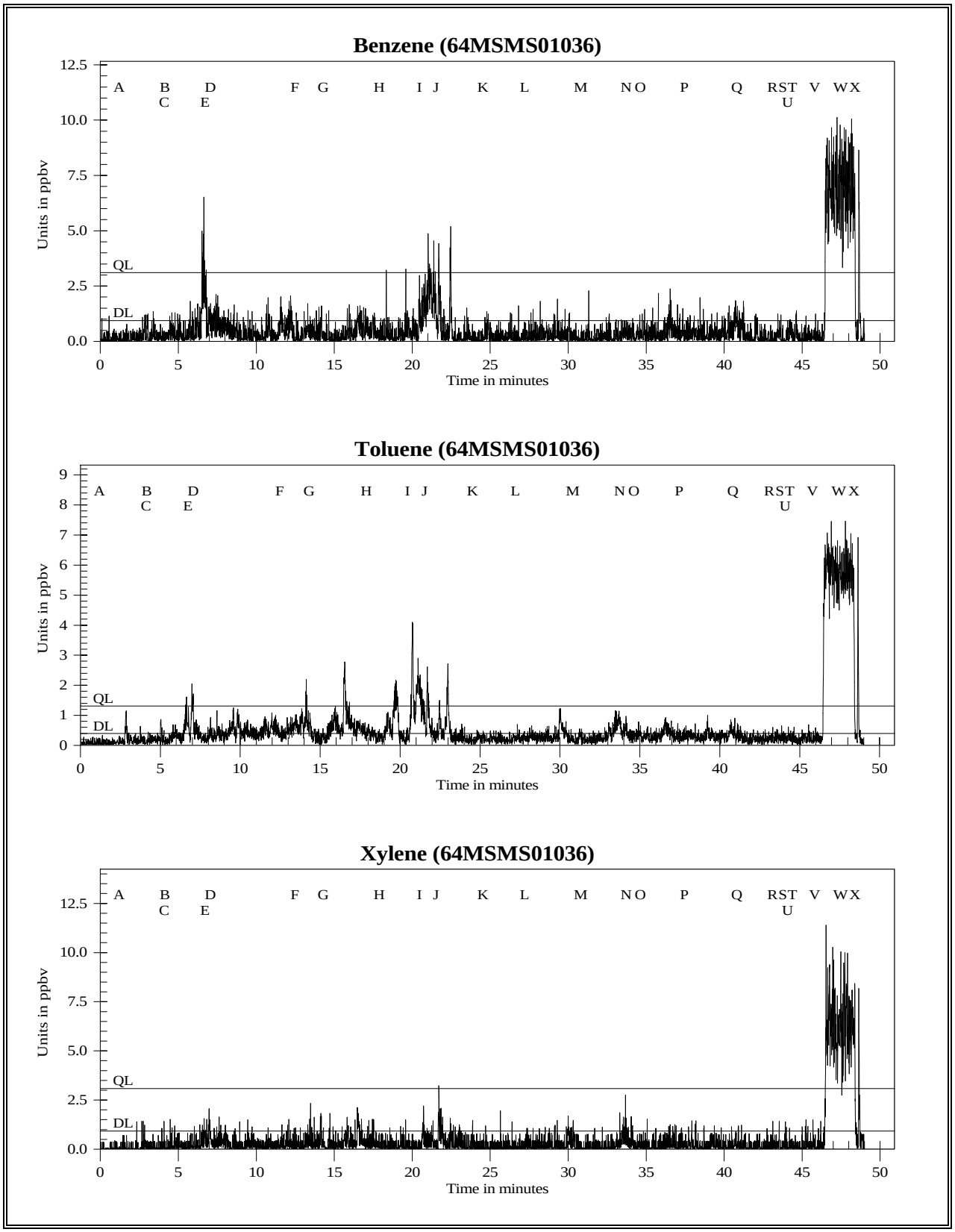


Figure 202c Monitoring Galena Park to Manchester in ppbv for Benzene, Toluene, and Xylenes

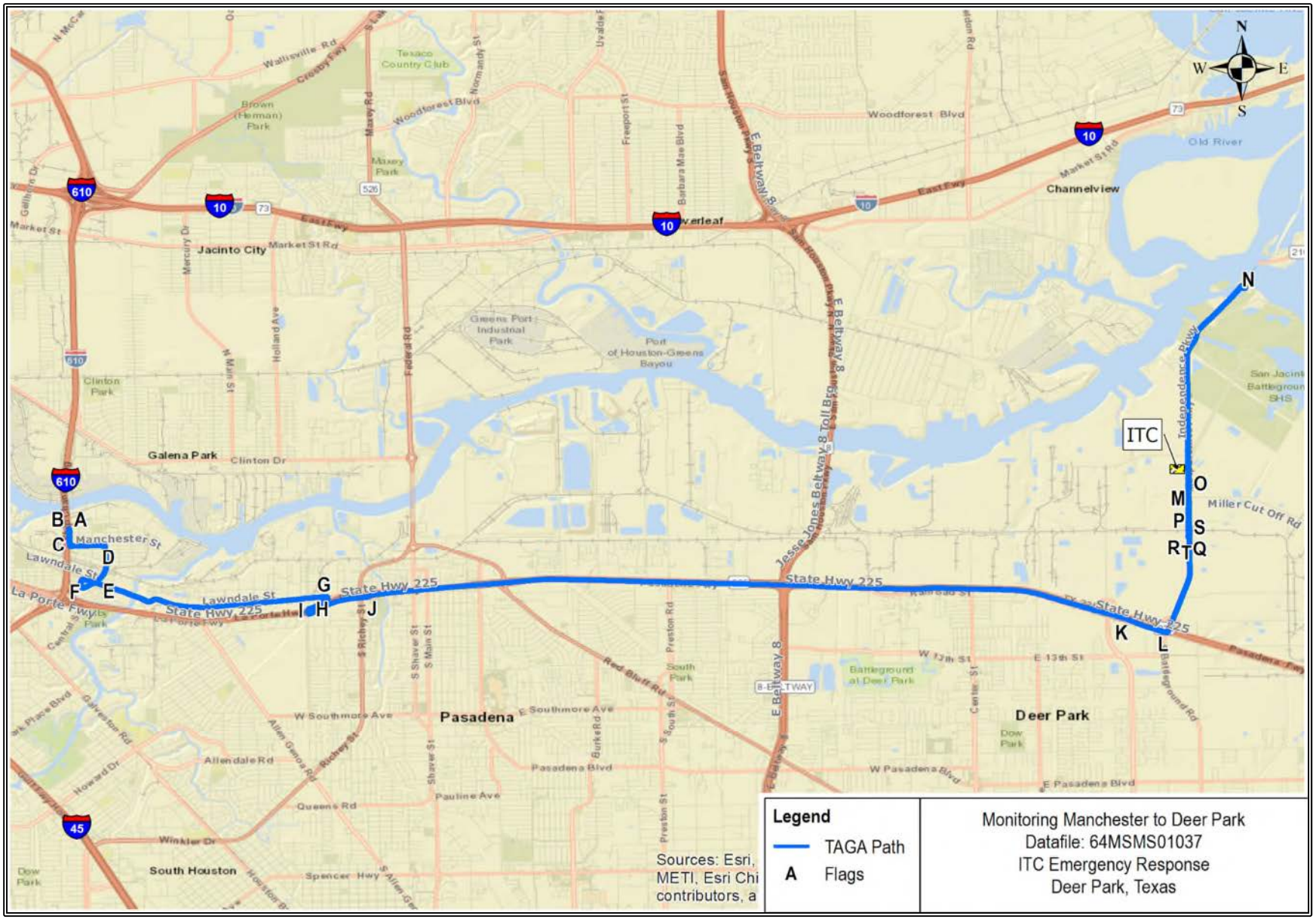


Figure 203a Monitoring Manchester to Deer Park Path, 64MSMS01037

Figure 203b

TAGA File Event Summary
File: 64MSMS01037 Acquired on 23 April 2019 at 14:09:56
Title: Monitoring Manchester to Deer Park

Flag	Time	Sequence	Description
A	0.8	81	Start mobile monitoring on Concrete Street
B	1.3	129	Continuing onto Concrete Street
C	2.2	213	Left turn onto Manchester Street
D	3.6	346	Right turn onto Central Street
E	4.9	471	Continuing onto Highway 610 connector
F	5.7	539	Right turn onto Lawndale Street
G	14.8	1406	Right turn onto Glasgow Street
H	15.6	1487	Left turn onto Scarborough Lane
I	15.9	1514	Left turn onto Pasadena Freeway Frontage Road
J	17.9	1701	Merge onto Highway 225 East
K	25.2	2400	Exit onto Pasadena Freeway Frontage Road
L	27.7	2631	Left turn onto Independence Parkway
M	30.9	2938	Cross Miller Cut-Off Road
N	37.6	3574	U-turn on Independence Parkway at Juan Seguin Park
O	44.4	4223	Cross Miller Cut-Off Road
P	46.0	4371	End mobile monitoring on Independence Parkway
Q	46.4	4409	Start ambient
R	47.4	4504	End ambient
S	48.8	4642	Start 30 mL/min spike
T	49.8	4738	End 30 mL/min spike

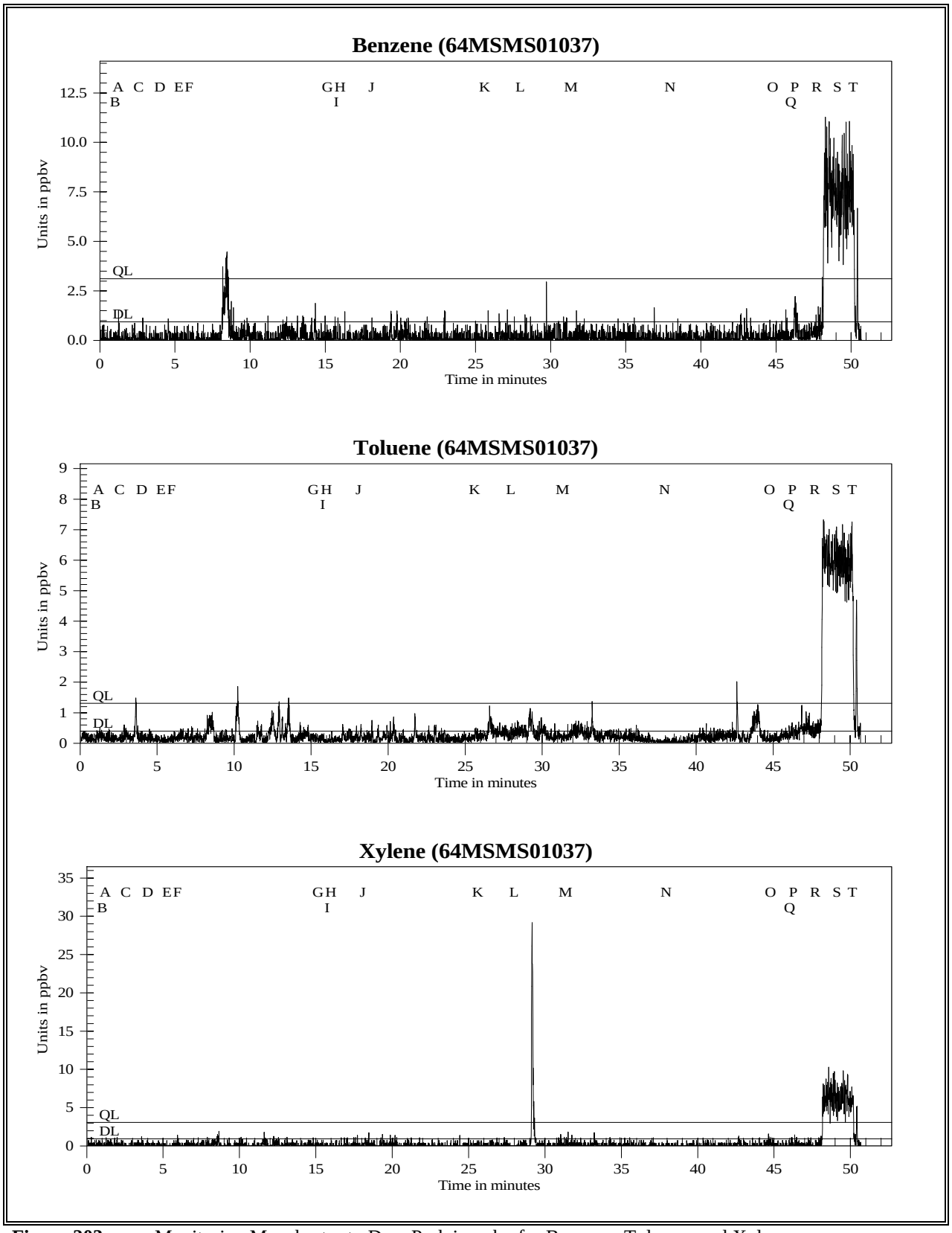


Figure 203c Monitoring Manchester to Deer Park in ppbv for Benzene, Toluene, and Xylenes

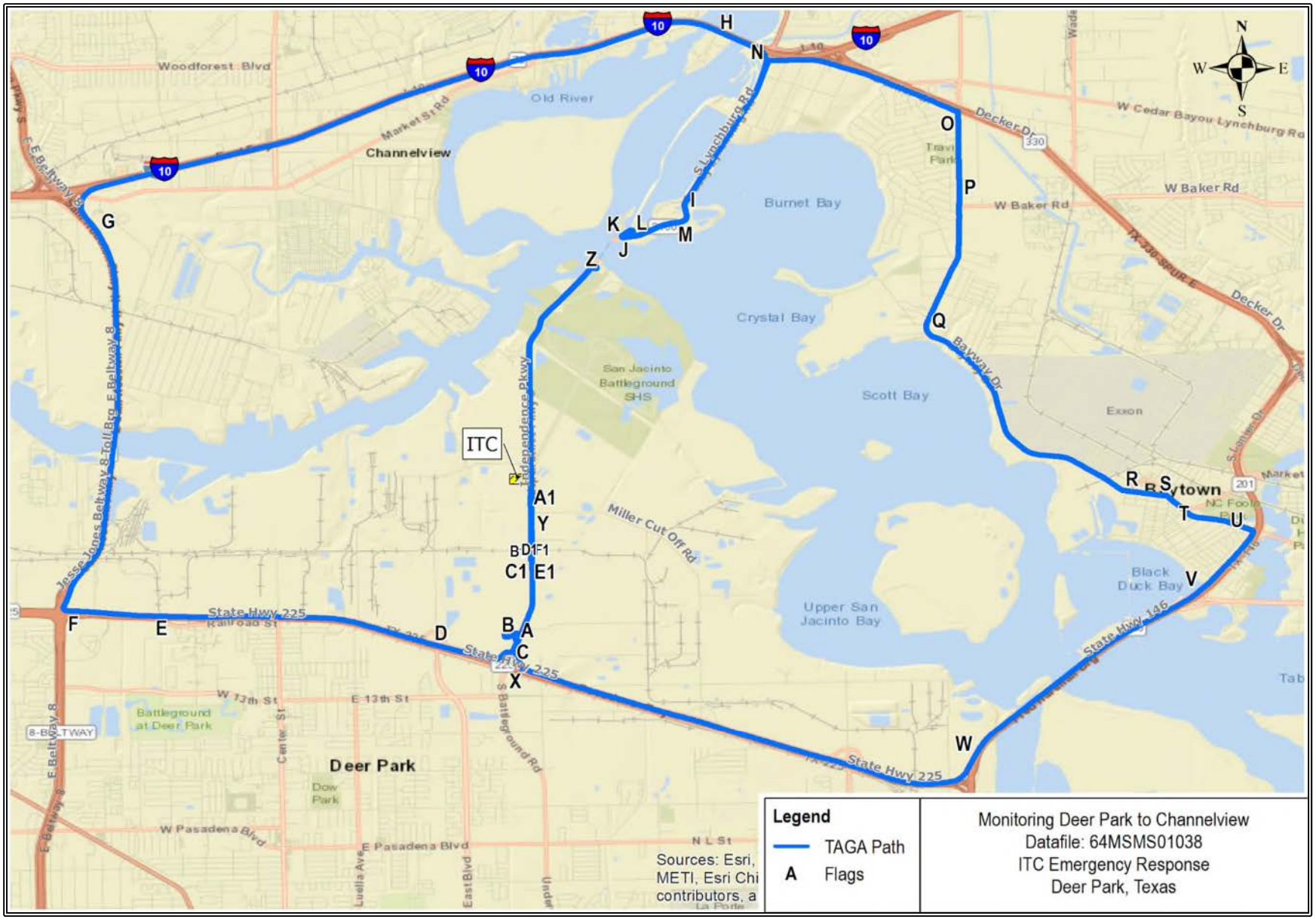


Figure 204a Monitoring Deer Park to Channelview Path, 64MSMS01038

Figure 204b

TAGA File Event Summary
File: 64MSMS01038 Acquired on 23 April 2019 at 15:22:16
Title: Monitoring Deer Park to Channelview Three

Flag	Time	Sequence	Description
A	0.8	77	Start mobile monitoring on Independence Parkway
B	3.6	341	Right turn onto Independence Parkway
C	4.4	419	Right turn onto Pasadena Freeway Frontage Road
D	5.5	524	Merge onto Highway 225 West
E	8.0	758	Exit onto Pasadena Freeway Frontage Road
F	8.6	821	Right turn onto Highway 8 North
G	13.3	1265	Merge onto Highway 10 East
H	19.9	1897	Right turn onto Independence Parkway North
I	24.7	2350	Right turn to continue onto Independence Parkway North
J	26.4	2509	Right turn onto Lynchburg Road at Lynchburg Ferry
K	26.9	2558	Right turn onto Crokett Street
L	27.2	2591	Left turn onto Independence Parkway North
M	28.7	2731	Left turn to continue on Independence Parkway North
N	32.4	3078	Right turn onto Decker Drive
O	35.2	3350	Right turn onto Bayway Drive
P	37.7	3586	Cross Baker Road
Q	40.5	3854	Left turn to continue on Bayway Drive
R	45.2	4295	Left turn onto Wisconsin Street
S	46.4	4410	Right turn onto Market Street
T	47.3	4499	Right turn onto Main Street
U	49.3	4689	Right turn onto Robert C Lanier Drive
V	51.6	4908	Merge onto Highway 146 South
W	54.1	5144	Merge onto Highway 225 West
X	58.2	5535	Right turn onto Independence Parkway
Y	61.5	5848	Cross Miller Cut-Off Road
Z	67.4	6413	U-turn on Independence Parkway at Juan Seguin Park
A1	75.1	7145	Cross Miller Cut-Off Road
B1	76.4	7266	End mobile monitoring on Independence Parkway
C1	76.7	7294	Start ambient
D1	77.7	7392	End ambient
E1	78.9	7502	Start 30 mL/min spike
F1	79.9	7598	End 30 mL/min spike

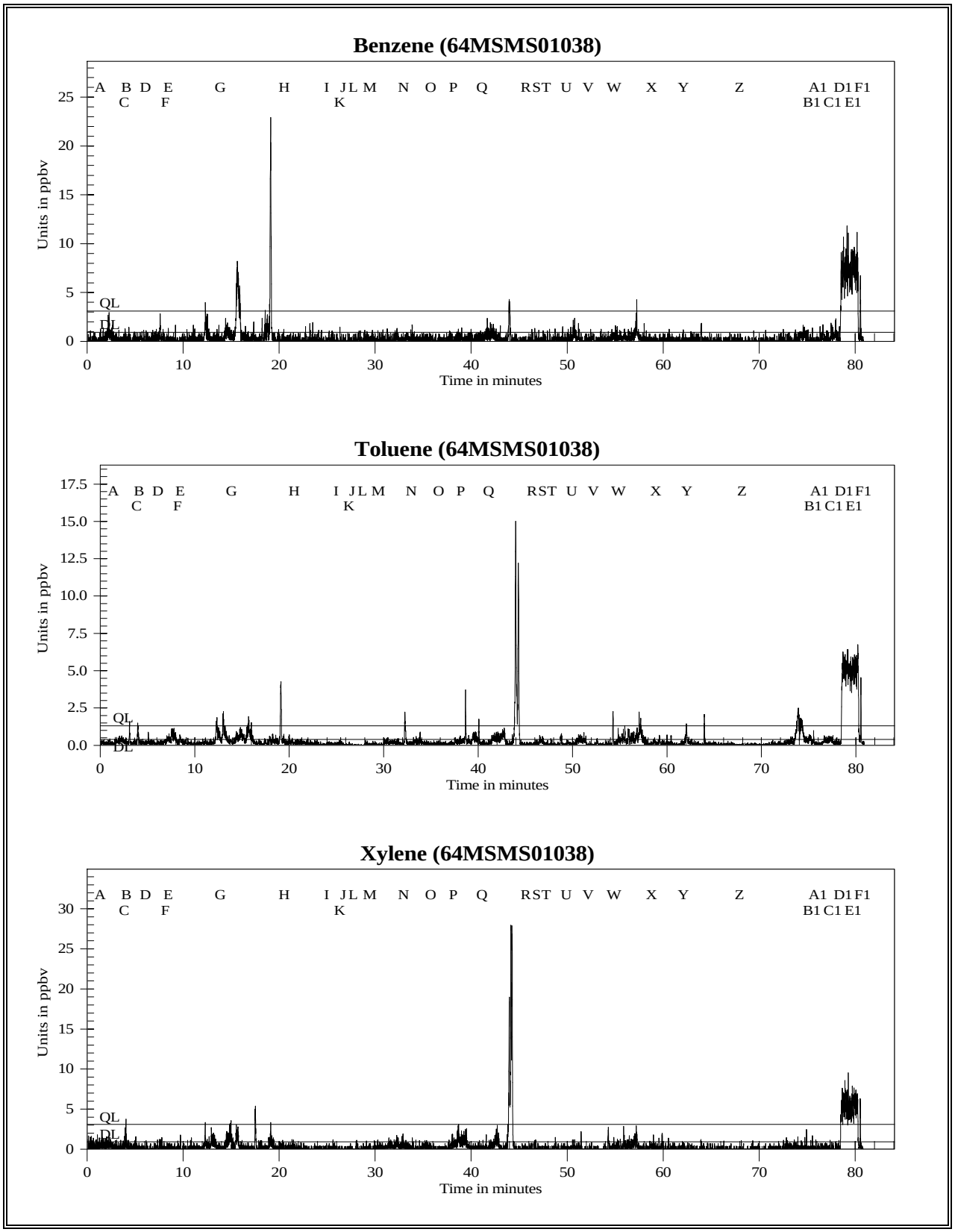


Figure 204c Monitoring Deer Park to Channelview Three in ppbv for Benzene, Toluene, and Xylenes

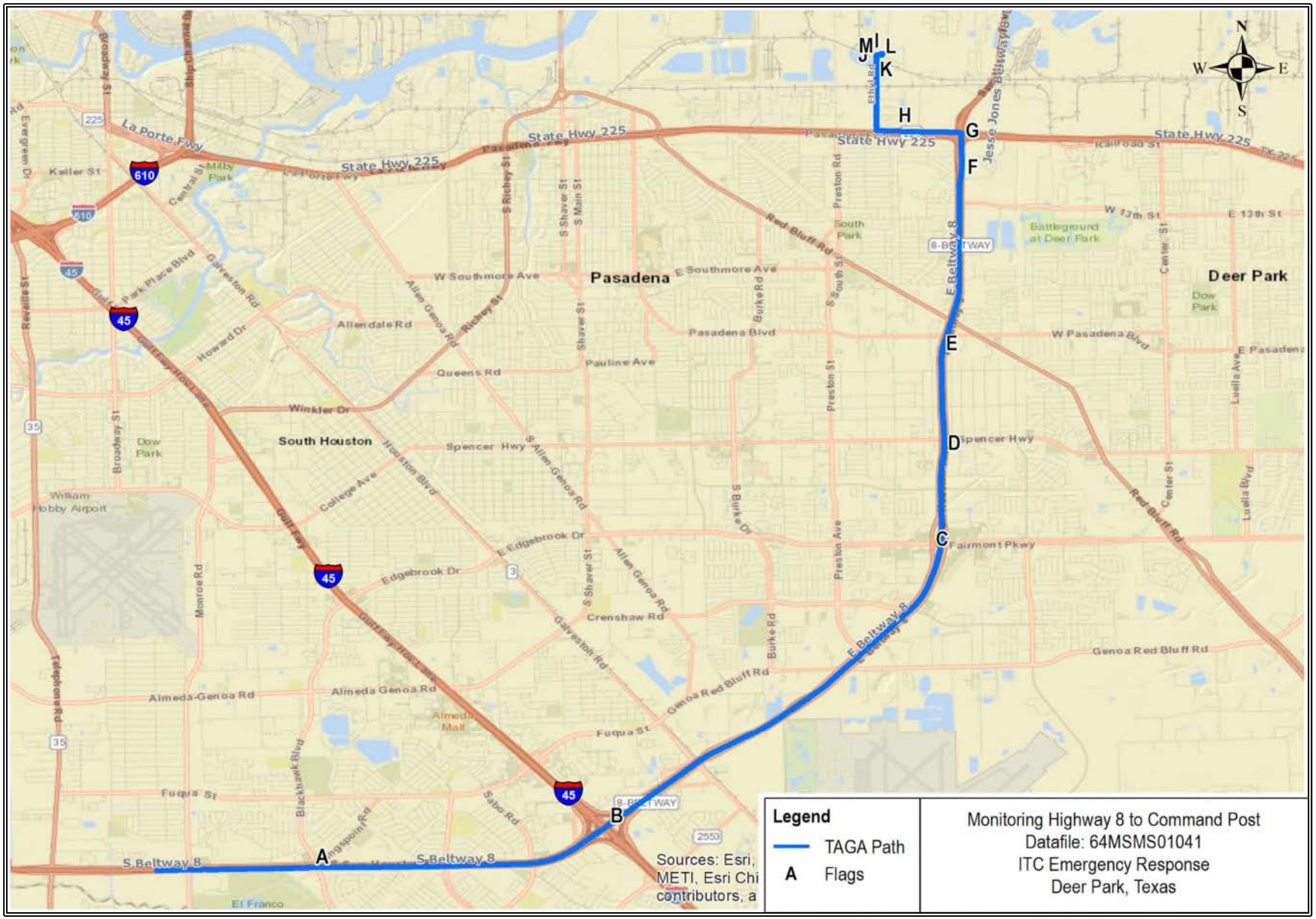


Figure 205a Monitoring Highway 8 to Command Post Path, 64MSMS01041

Figure 205b

TAGA File Event Summary
File: 64MSMS01041 Acquired on 24 April 2019 at 08:46:55
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	3.5	329	Start mobile monitoring on Highway 8 North
B	3.7	348	Cross Highway 45
C	7.8	742	Cross Fairmont Boulevard
D	8.9	845	Cross Spencer Highway
E	10.0	950	Cross Pasadena Boulevard
F	11.9	1134	Exit onto Highway 8 Service Road
G	12.6	1203	Left turn onto Pasadena Freeway Frontage Road
H	13.7	1302	Right turn onto Ethyl Road
I	17.2	1639	End mobile monitoring at EPA Command Post
J	18.0	1712	Start ambient
K	19.1	1813	End ambient
L	20.7	1969	Start 30 mL/min spike
M	21.7	2064	End 30 mL/min spike

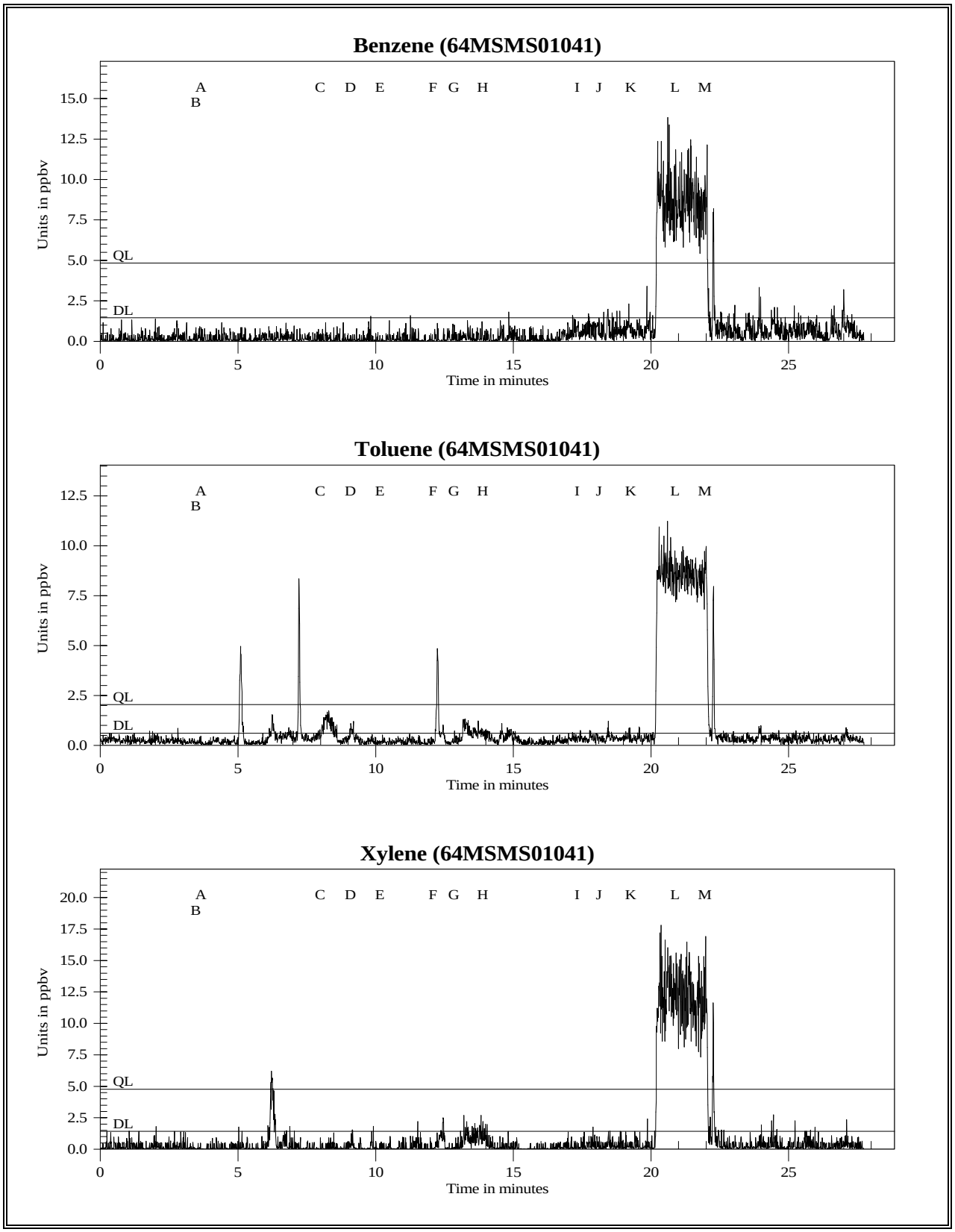


Figure 205c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

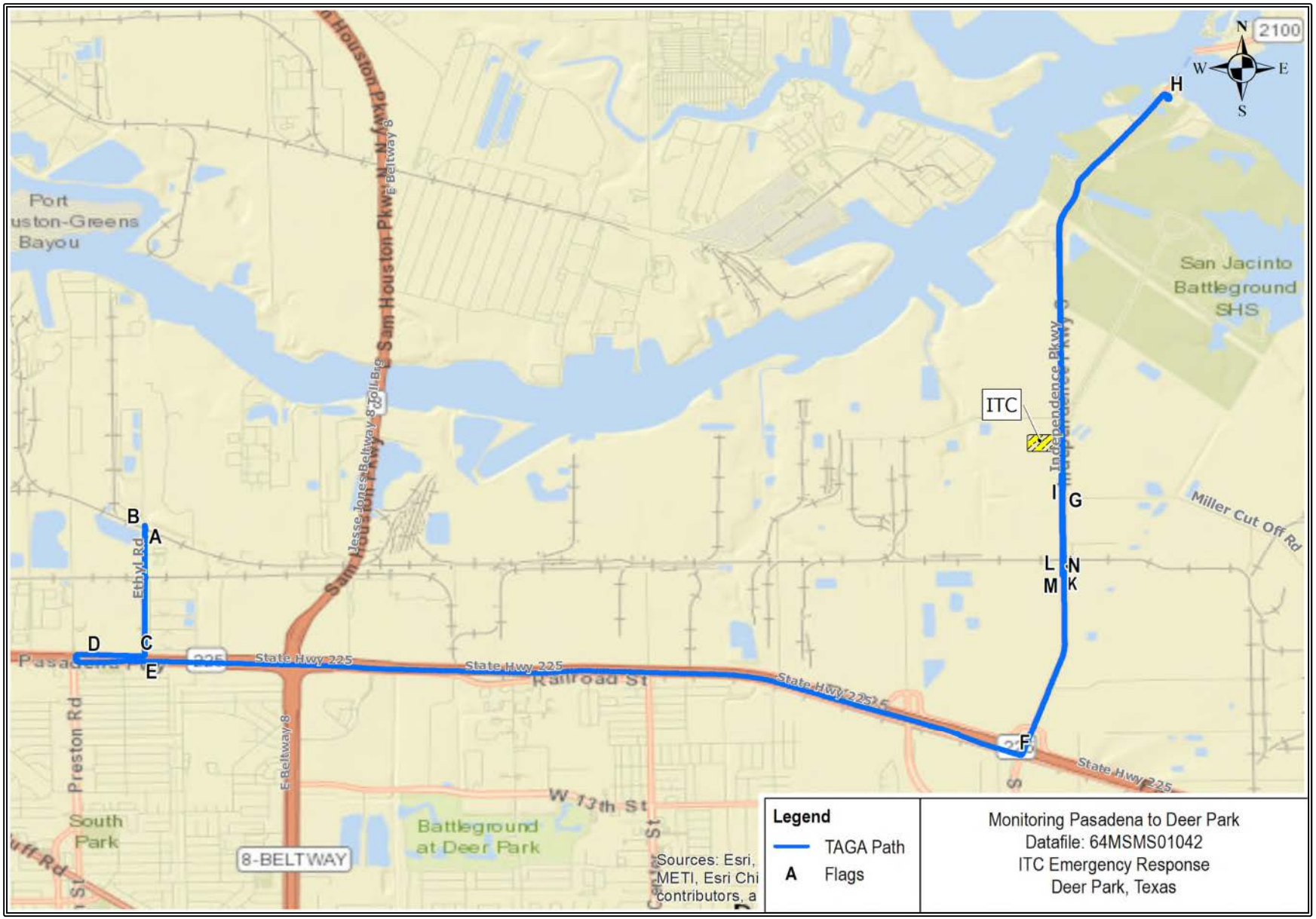


Figure 206a Monitoring Pasadena to Deer Park Path, 64MSMS01042

Figure 206b

TAGA File Event Summary
File: 64MSMS01042 Acquired on 24 April 2019 at 09:17:34
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	0.7	67	Start mobile monitoring at EPA Command Post
B	3.9	376	Continuing onto Ethyl Road
C	6.7	638	Right turn onto Pasadena Freeway Frontage Road
D	7.4	704	U-turn on Pasadena Freeway Frontage Road at Preston Road
E	8.4	798	Merge onto Highway 225 East
F	13.8	1314	Left turn onto Independence Parkway
G	17.4	1656	Cross Miller Cut-Off Road
H	24.1	2293	U-turn on Independence Parkway at Juan Seguin Park
I	32.8	3122	Cross Miller Cut-Off Road
J	34.5	3277	End mobile monitoring on Independence Parkway
K	34.7	3304	Start ambient
L	35.7	3399	End ambient
M	38.2	3632	Start 30 mL/min spike
N	39.2	3729	End 30 mL/min spike

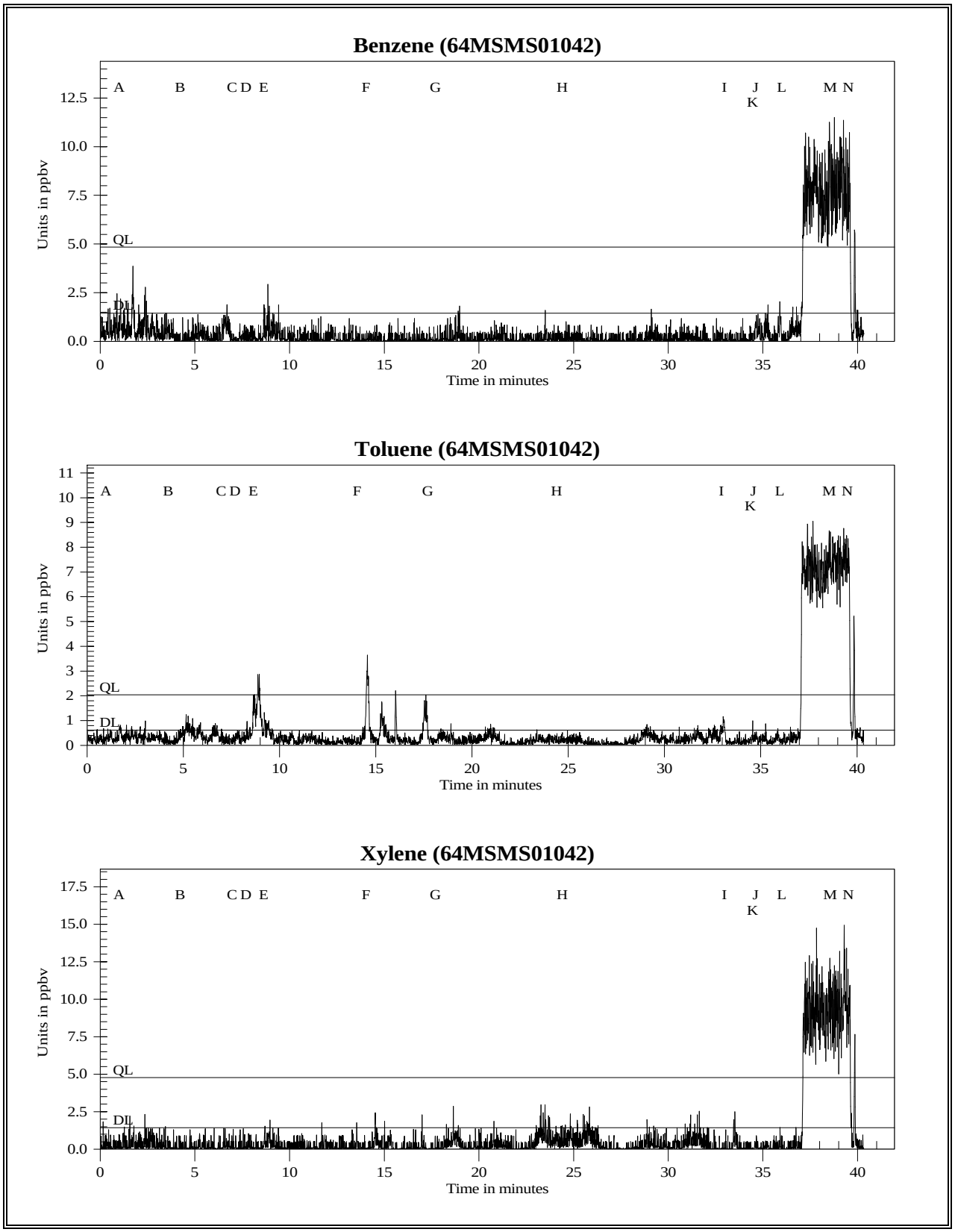


Figure 206c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

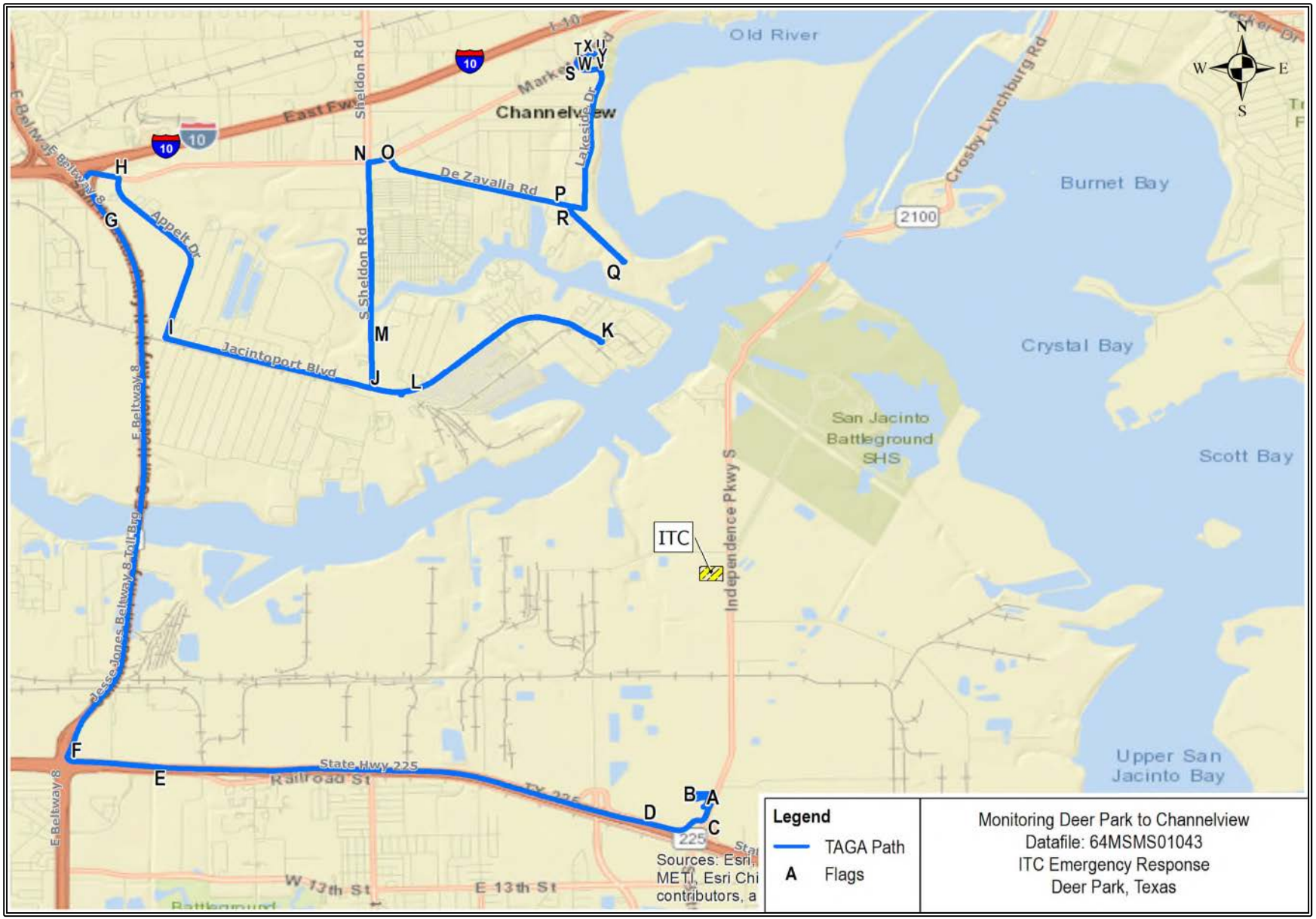


Figure 207a Monitoring Deer Park to Channelview Path, 64MSMS01043

Figure 207b

TAGA File Event Summary
File: 64MSMS01043 Acquired on 24 April 2019 at 10:12:32
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	1.1	107	Start mobile monitoring on Independence Parkway
B	2.9	272	Right turn onto Independence Parkway
C	3.4	327	Right turn onto Pasadena Freeway Frontage Road
D	4.3	405	Merge onto Highway 225 West
E	7.2	684	Exit onto Pasadena Freeway Frontage Road
F	8.0	764	Right turn onto Highway 8 North
G	13.1	1251	Right turn onto Market Street
H	14.4	1374	Right turn onto Appelt Drive
I	20.4	1943	Left turn onto Jacintoport Boulevard
J	24.6	2344	Cross Sheldon Road
K	30.3	2880	U-turn on Jacintoport Boulevard
L	36.4	3460	Continuing onto Jacintoport Boulevard
M	40.7	3875	Right turn onto Sheldon Road
N	44.0	4187	Right turn onto Market Street
O	44.5	4228	Right turn onto Dezavala Road
P	47.3	4499	Right turn to continue on Dezavala Road
Q	50.4	4795	U-turn on Dezavala Road
R	54.3	5163	Right turn onto Lakeside Drive
S	58.2	5531	Right turn onto Market Street
T	58.6	5575	Right turn into River Terrace Park
U	59.1	5615	End mobile monitoring at River Terrace Park
V	59.2	5629	Start ambient
W	60.3	5737	End ambient
X	61.5	5846	Start 30 mL/min spike
Y	62.5	5946	End 30 mL/min spike

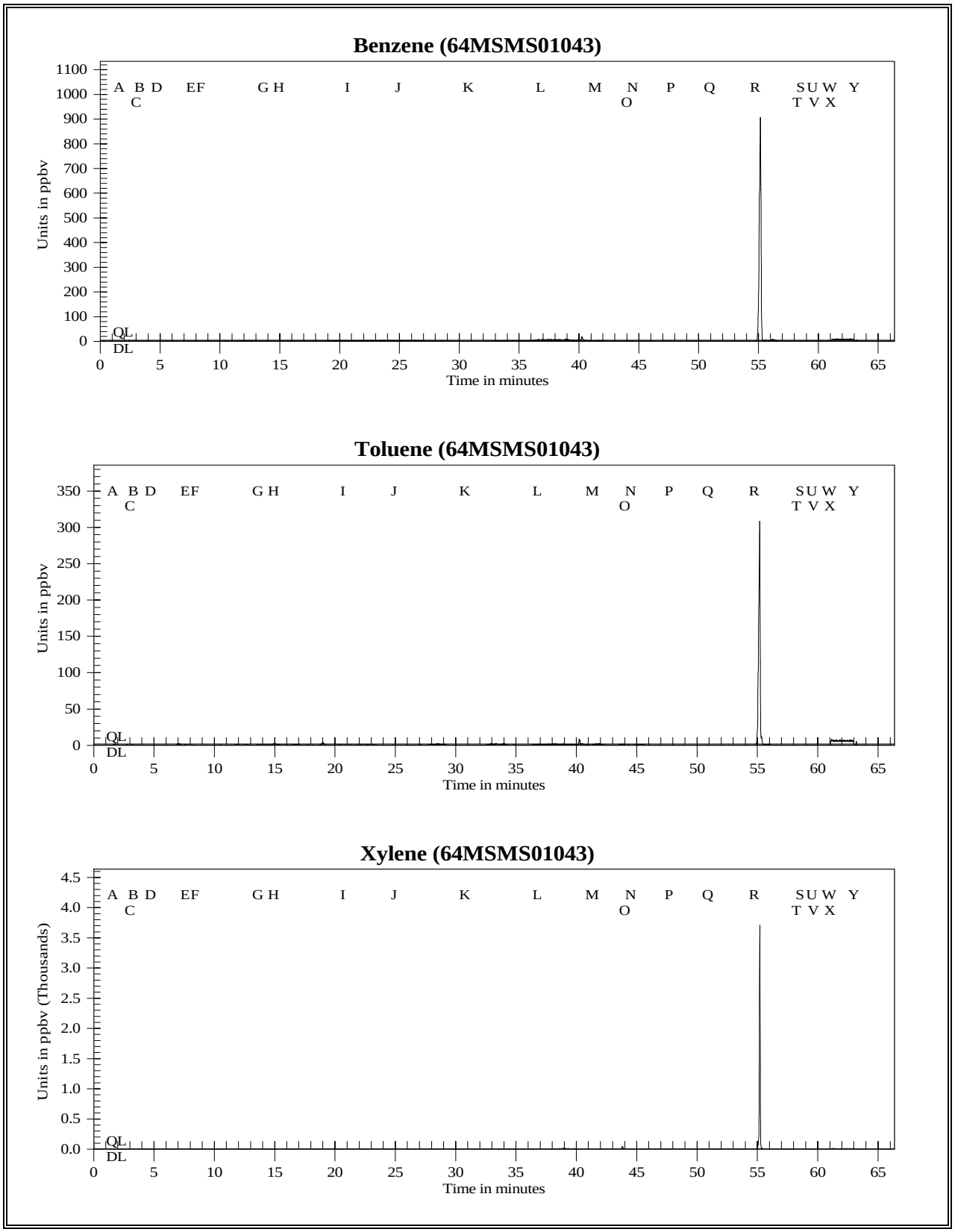


Figure 207c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

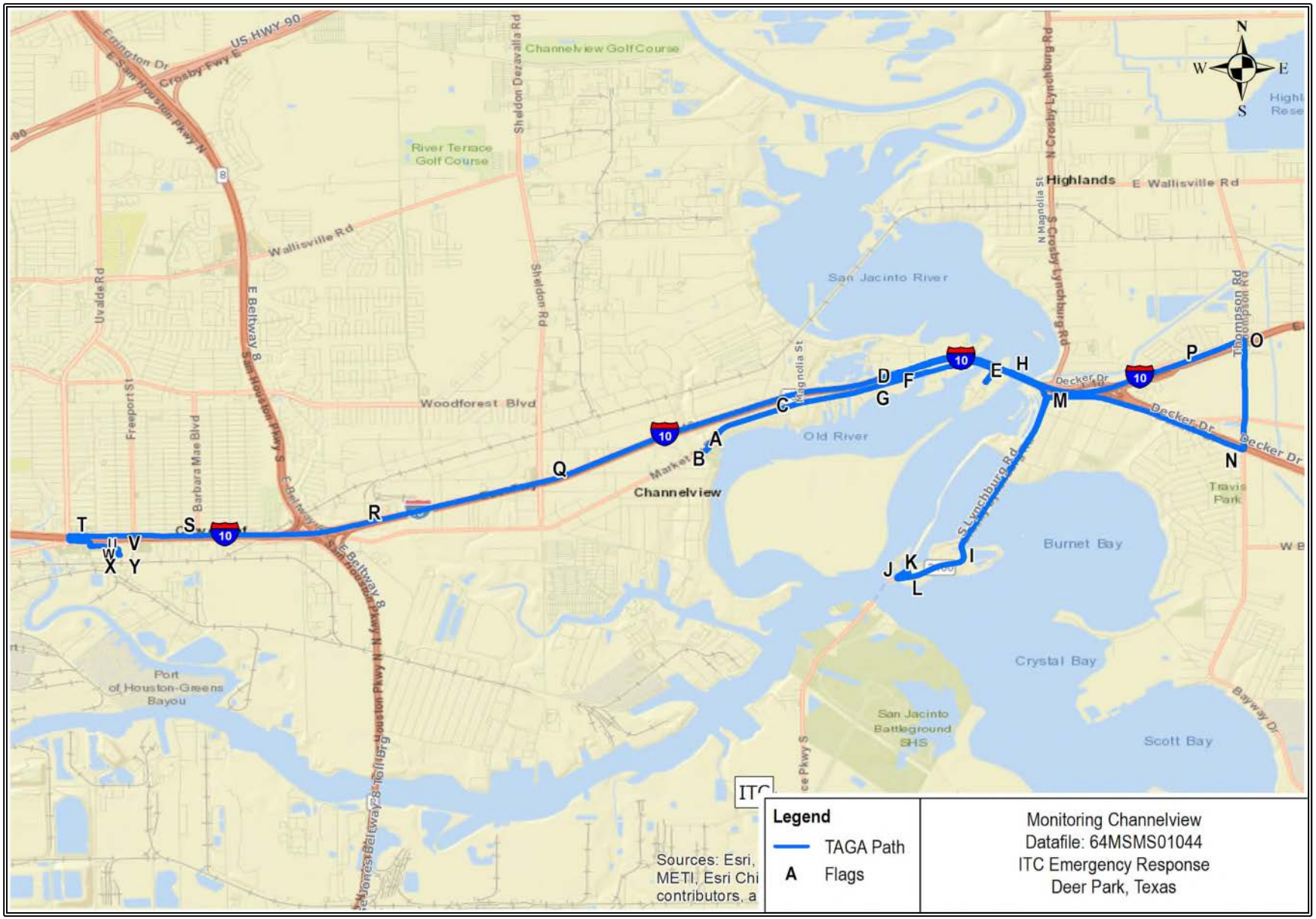


Figure 208a Monitoring Channelview Path, 64MSMS01044

Figure 208b

TAGA File Event Summary
File: 64MSMS01044 Acquired on 24 April 2019 at 11:23:53
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	1.0	97	Start mobile monitoring at River Terrace Park
B	2.2	208	Right turn onto Market Street
C	4.7	446	Cross Magnolia Street
D	6.3	604	Cross Monmouth Street
E	9.3	888	U-turn on Market Street
F	13.8	1316	Right turn onto Monmouth Street
G	14.2	1349	Right turn onto Highway 10 East
H	15.9	1509	Right turn onto Independence Parkway North
I	21.5	2048	Right turn to continue on Independence Parkway North
J	23.2	2206	Right turn onto Lynchburg Road at Lynchburg Ferry
K	23.9	2270	Right turn onto Crokett Street
L	24.2	2303	Left turn onto Independence Parkway
M	30.4	2889	Right turn onto Decker Drive
N	35.0	3328	Left turn onto Thompson Road
O	41.1	3910	Left turn onto East Freeway Service Road
P	42.6	4054	Merge onto Highway 10 West
Q	52.0	4946	Cross Sheldon Road
R	54.0	5131	Cross Highway 8
S	55.4	5264	Exit onto East Freeway Service Road
T	56.9	5415	U-turn on East Freeway Service Road at Uvalde Road
U	59.6	5668	End mobile monitoring at shopping center on East Freeway Service Road
V	59.9	5692	Start ambient
W	61.1	5806	End ambient
X	62.8	5971	Start 30 mL/min spike
Y	64.2	6101	End 30 mL/min spike

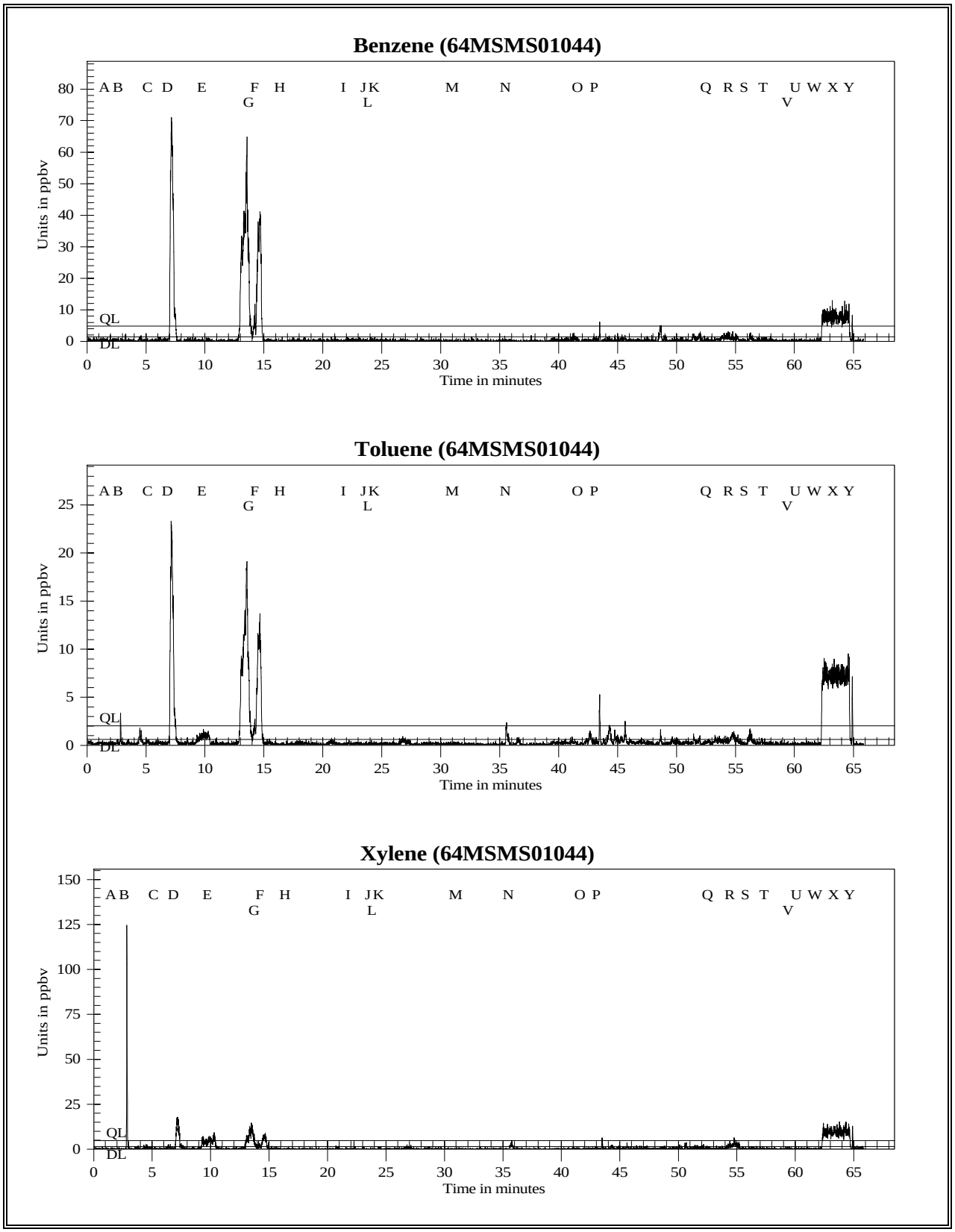


Figure 208c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

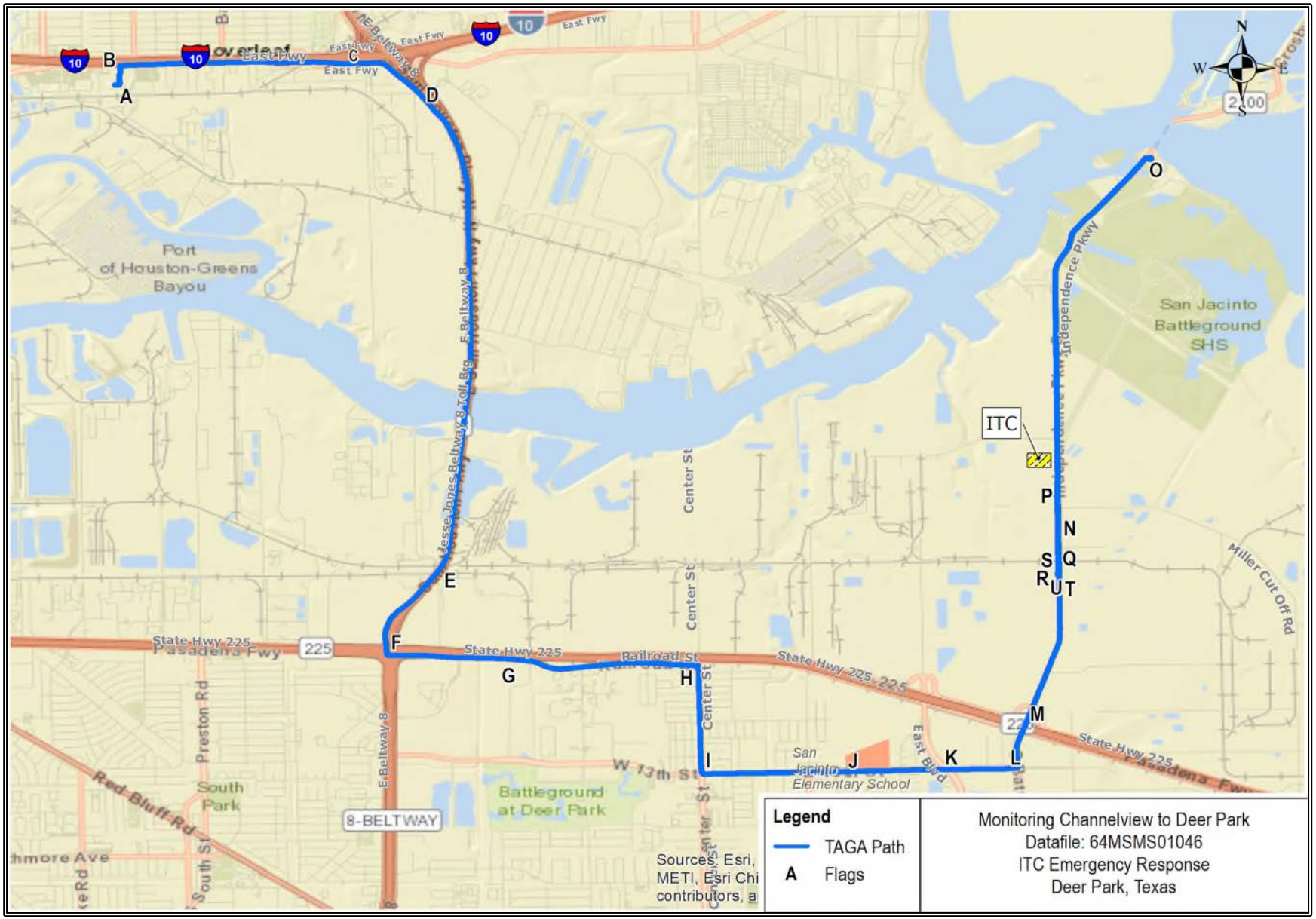


Figure 209a Monitoring Channelview to Deer Park Path, 64MSMS01046

Figure 209b

TAGA File Event Summary
File: 64MSMS01046 Acquired on 24 April 2019 at 13:31:08
Title: Monitoring Channelview to Deer Park

Flag	Time	Sequence	Description
A	0.7	72	Start mobile monitoring at shopping center on East Freeway Service Road
B	3.0	286	Right turn onto East Freeway Service Road
C	6.0	570	Right turn onto Highway 8 Service Road
D	6.9	655	Merge onto Highway 8 South
E	10.9	1039	Exit onto Highway 8 Service Road
F	12.1	1153	Left turn onto Pasadena Freeway Frontage Road
G	13.4	1275	Continuing onto Railroad Street
H	15.6	1485	Right turn onto Center Street
I	17.8	1693	Left turn onto East 13th Street
J	20.5	1953	Passing San Jacinto Elementary School
K	22.6	2154	Cross East Boulevard
L	24.0	2279	Left turn onto Battleground Road
M	25.7	2446	Continuing onto Independence Parkway
N	28.6	2718	Cross Miller Cut-Off Road
O	35.2	3352	U-turn on Independence Parkway at Juan Seguin Park
P	43.1	4100	Cross Miller Cut-Off Road
Q	44.6	4238	End mobile monitoring on Independence Parkway
R	46.1	4388	Start ambient
S	47.2	4485	End ambient
T	48.8	4645	Start 30 mL/min spike
U	49.9	4743	End 30 mL/min spike

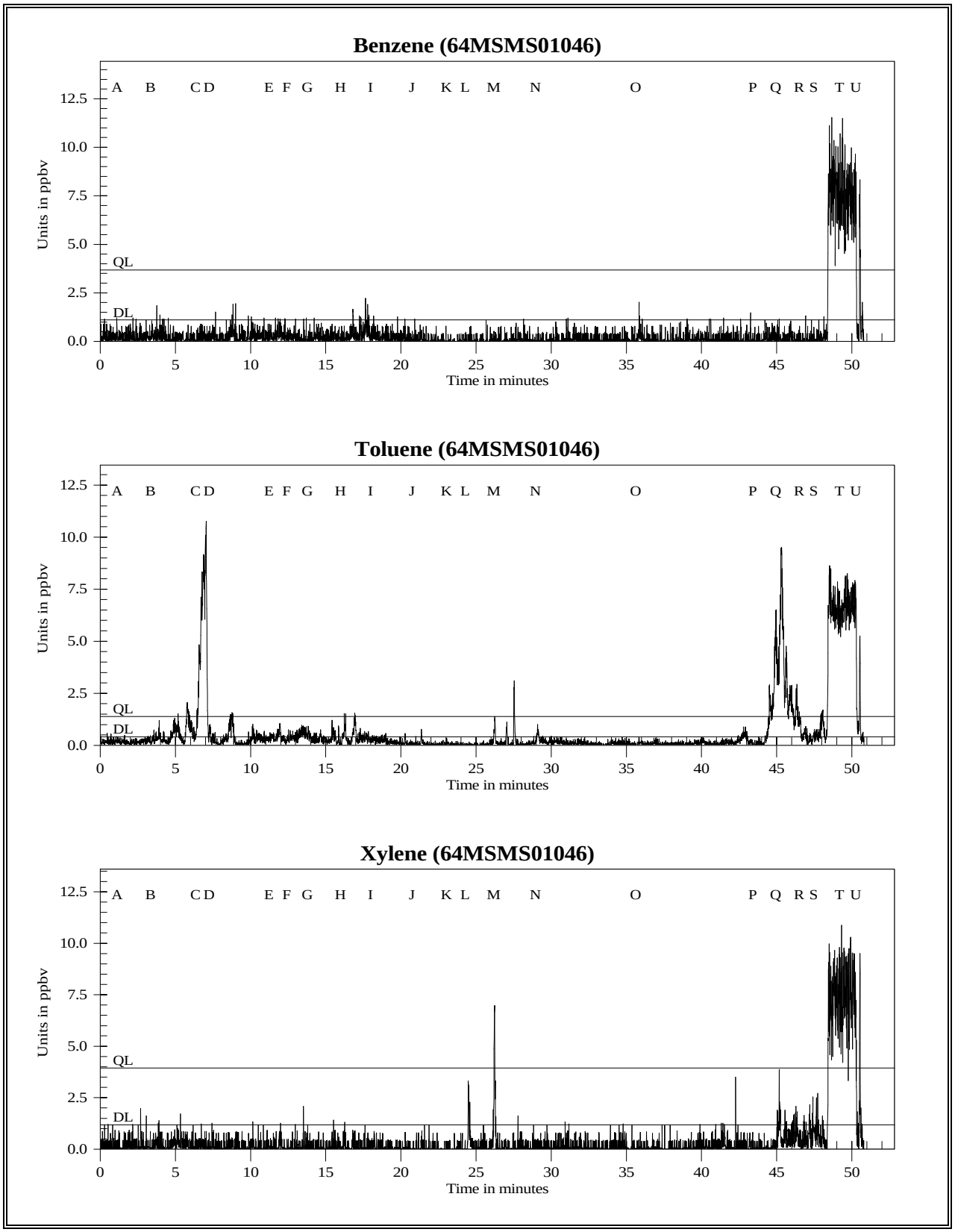


Figure 209c Monitoring Channelview to Deer Park in ppbv for Benzene, Toluene, and Xylenes

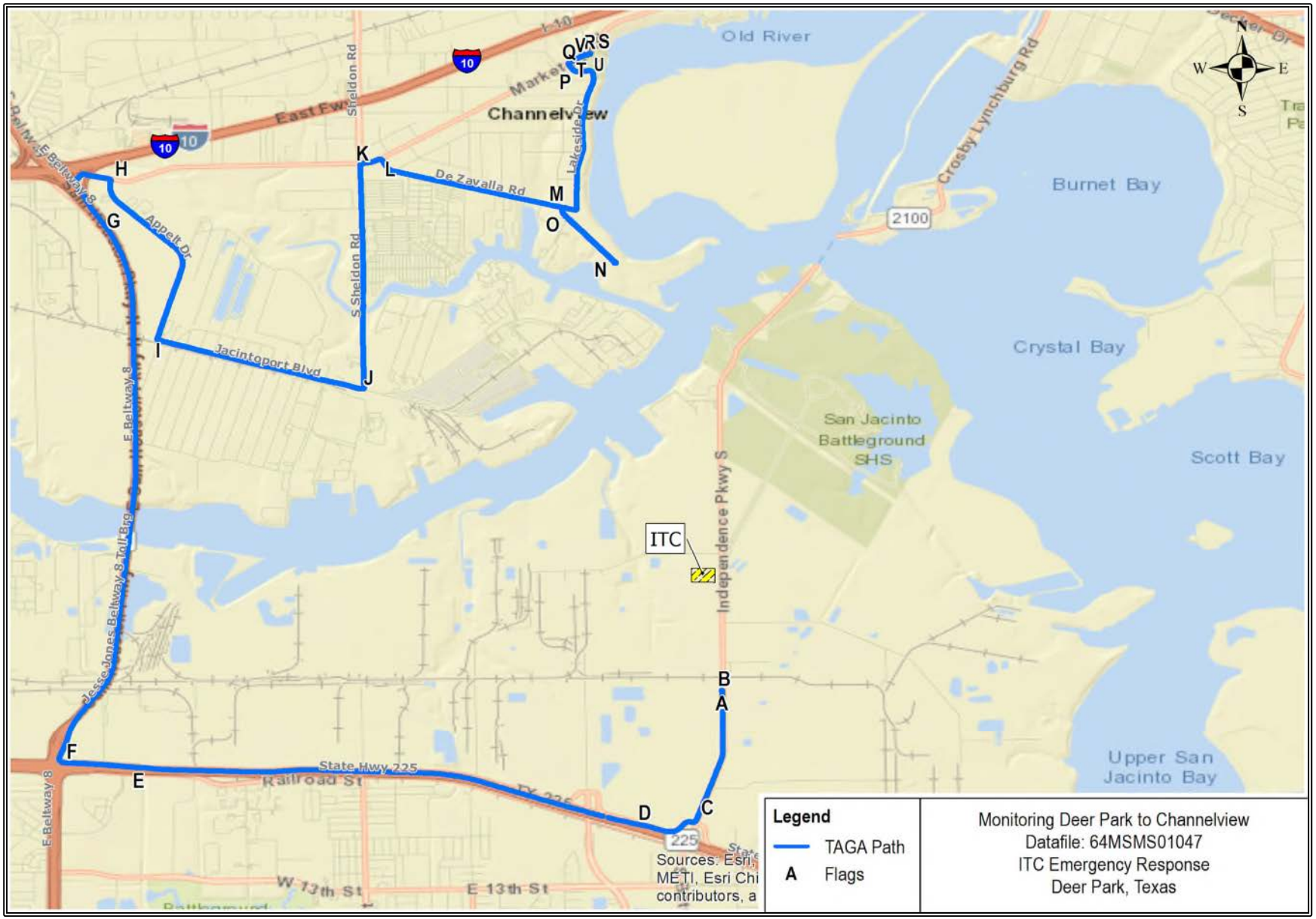


Figure 210a Monitoring Deer Park to Channelview Path, 64MSMS01047

Figure 210b

TAGA File Event Summary
File: 64MSMS01047 Acquired on 24 April 2019 at 14:24:52
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	0.8	81	Start mobile monitoring on Independence Parkway
B	1.3	124	Continuing onto Independence Parkway
C	3.5	338	Right turn onto Pasadena Freeway Frontage Road
D	4.4	422	Merge onto Highway 225 West
E	7.2	687	Exit onto Pasadena Freeway Frontage Road
F	8.0	766	Merge onto Highway 8 North
G	13.5	1289	Right turn onto Market Street
H	15.2	1443	Right turn onto Appelt Drive
I	20.7	1972	Left turn onto Jacintoport Boulevard
J	25.9	2460	Left turn onto Sheldon Road
K	31.2	2964	Right turn onto Market Street
L	31.7	3010	Right turn onto Dezavala Road
M	34.4	3273	Right turn to continue on Dezavala Road
N	37.8	3594	U-turn on Dezavala Road
O	41.8	3973	Right turn onto Lakeside Drive
P	45.6	4333	Right turn onto Market Street
Q	46.1	4382	Right turn into River Terrace Park
R	46.7	4436	End mobile monitoring at River Terrace Park
S	47.3	4499	Start ambient
T	48.4	4602	End ambient
U	49.9	4748	Start 30 mL/min spike
V	51.0	4846	End 30 mL/min spike

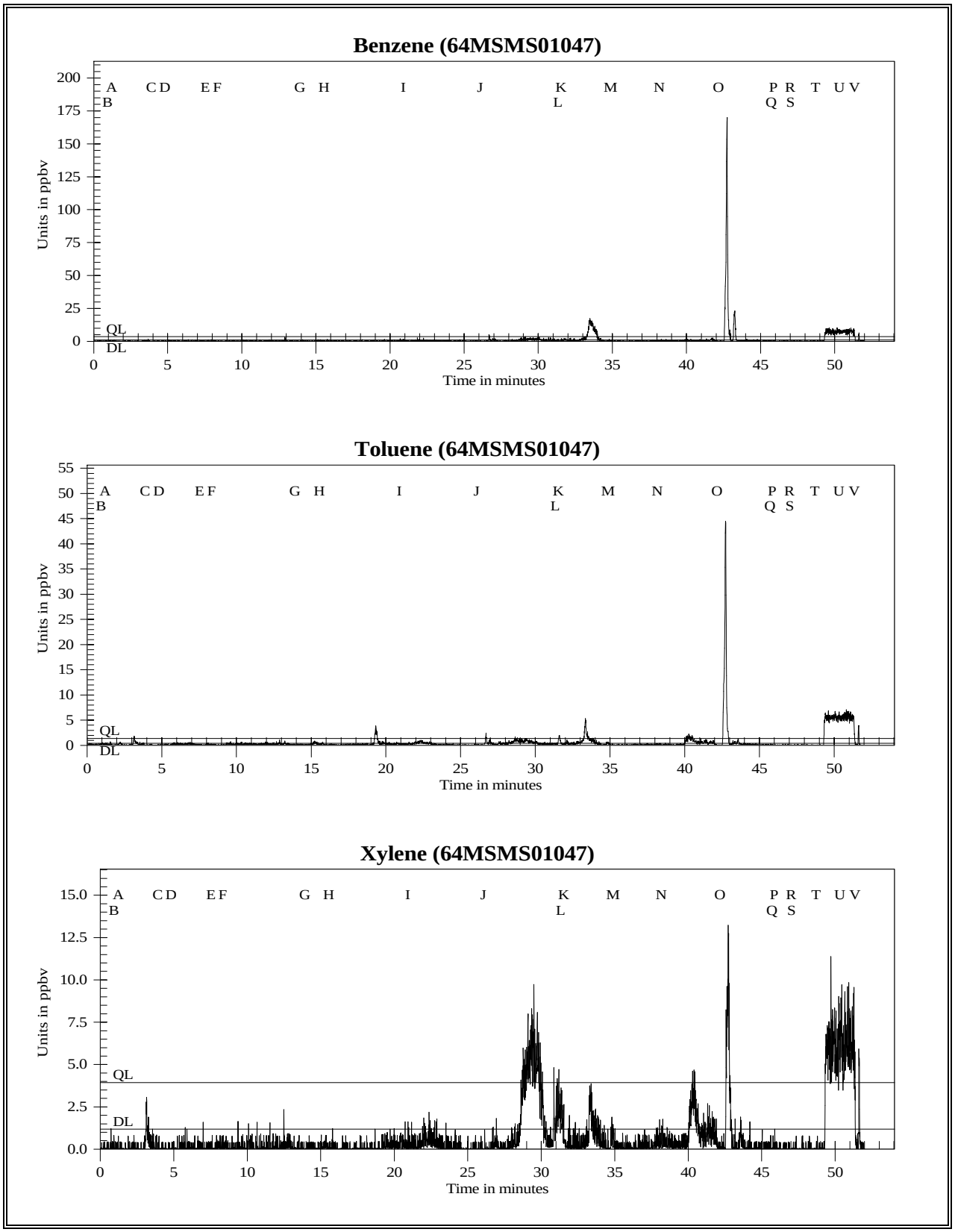


Figure 210c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

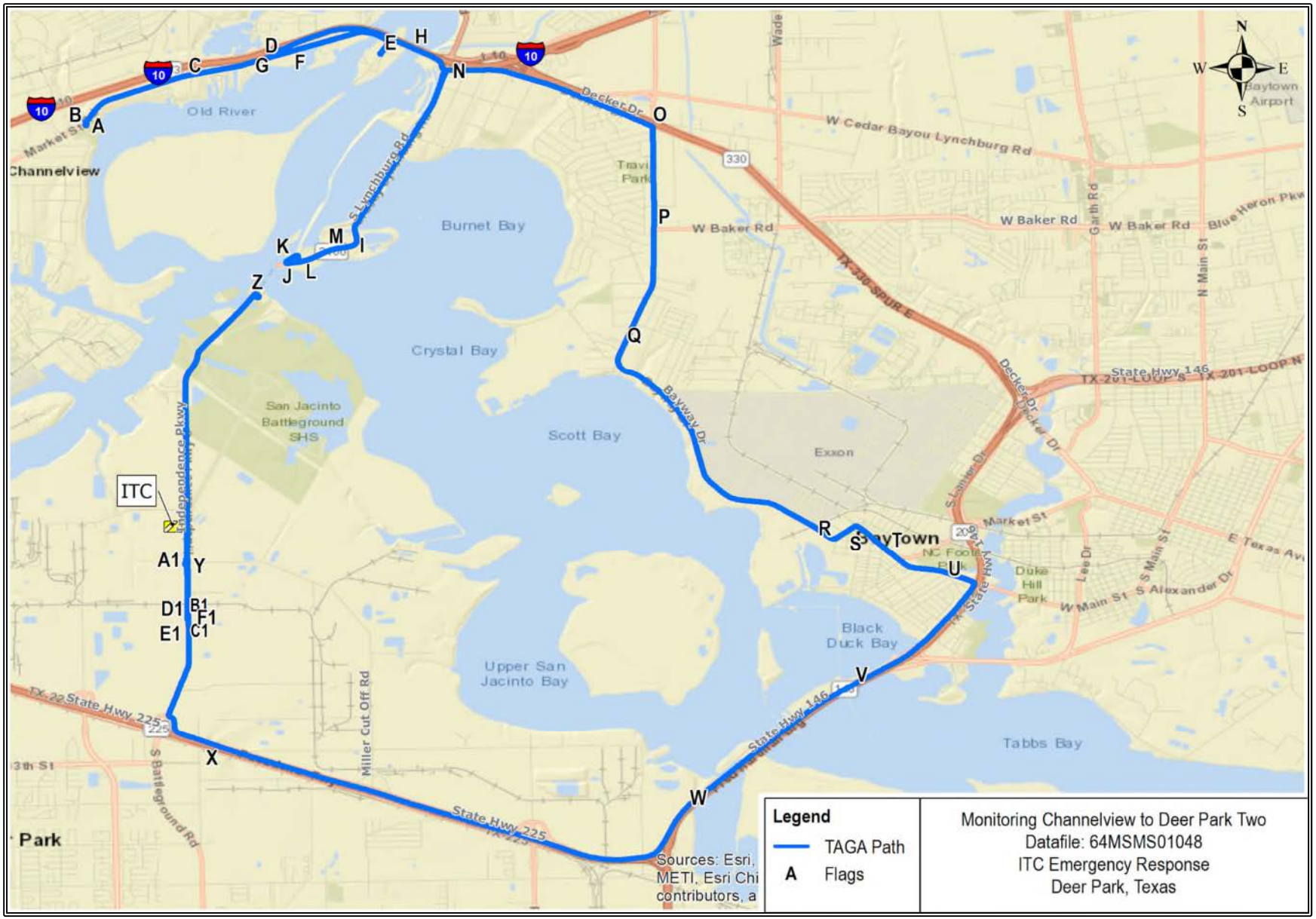


Figure 211a Monitoring Channelview to Deer Park Two Path, 64MSMS01048

Figure 211b

TAGA File Event Summary
File: 64MSMS01048 Acquired on 24 April 2019 at 15:23:08
Title: Monitoring Channelview to Deer Park Two

Flag	Time	Sequence	Description
A	1.3	123	Start mobile monitoring at River Terrace Park
B	2.4	229	Right turn onto Market Street
C	5.2	497	Cross Magnolia Street
D	7.0	669	Cross Monmouth Street
E	10.1	959	U-turn on Market Street
F	13.8	1314	Right turn onto Monmouth Street
G	14.1	1340	Merge onto Highway 10 East
H	16.0	1520	Right turn onto Independence Parkway North
I	20.4	1939	Right turn to continue on Independence Parkway North
J	22.1	2100	Right turn onto Lynchburg Road at Lynchburg Ferry
K	22.7	2159	Right turn onto Crokett Street
L	23.0	2191	Left turn onto Independence Parkway North
M	24.6	2338	Left turn to continue on Independence Parkway North
N	29.7	2823	Right turn onto Decker Drive
O	32.8	3117	Right turn onto Bayway Drive
P	35.1	3341	Cross Baker Road
Q	37.8	3593	Left turn to continue on Bayway Drive
R	43.1	4101	Left turn onto Market Street
S	43.7	4158	Right turn to continue on Market Street
T	45.9	4369	Right turn onto Main Street
U	47.7	4540	Right turn onto Robert C Lanier Drive
V	49.3	4688	Merge onto Highway 146 South
W	51.7	4919	Merge onto Highway 225 West
X	55.7	5298	Right turn onto Independence Parkway
Y	59.1	5621	Cross Miller Cut-Off Road
Z	65.4	6220	U-turn on Independence Parkway at Juan Seguin Park
A1	74.2	7057	Cross Miller Cut-Off Road
B1	75.7	7196	End mobile monitoring on Independence Parkway
C1	75.9	7221	Start ambient
D1	76.9	7316	End ambient
E1	78.1	7426	Start 30 mL/min spike
F1	79.1	7519	End 30 mL/min spike

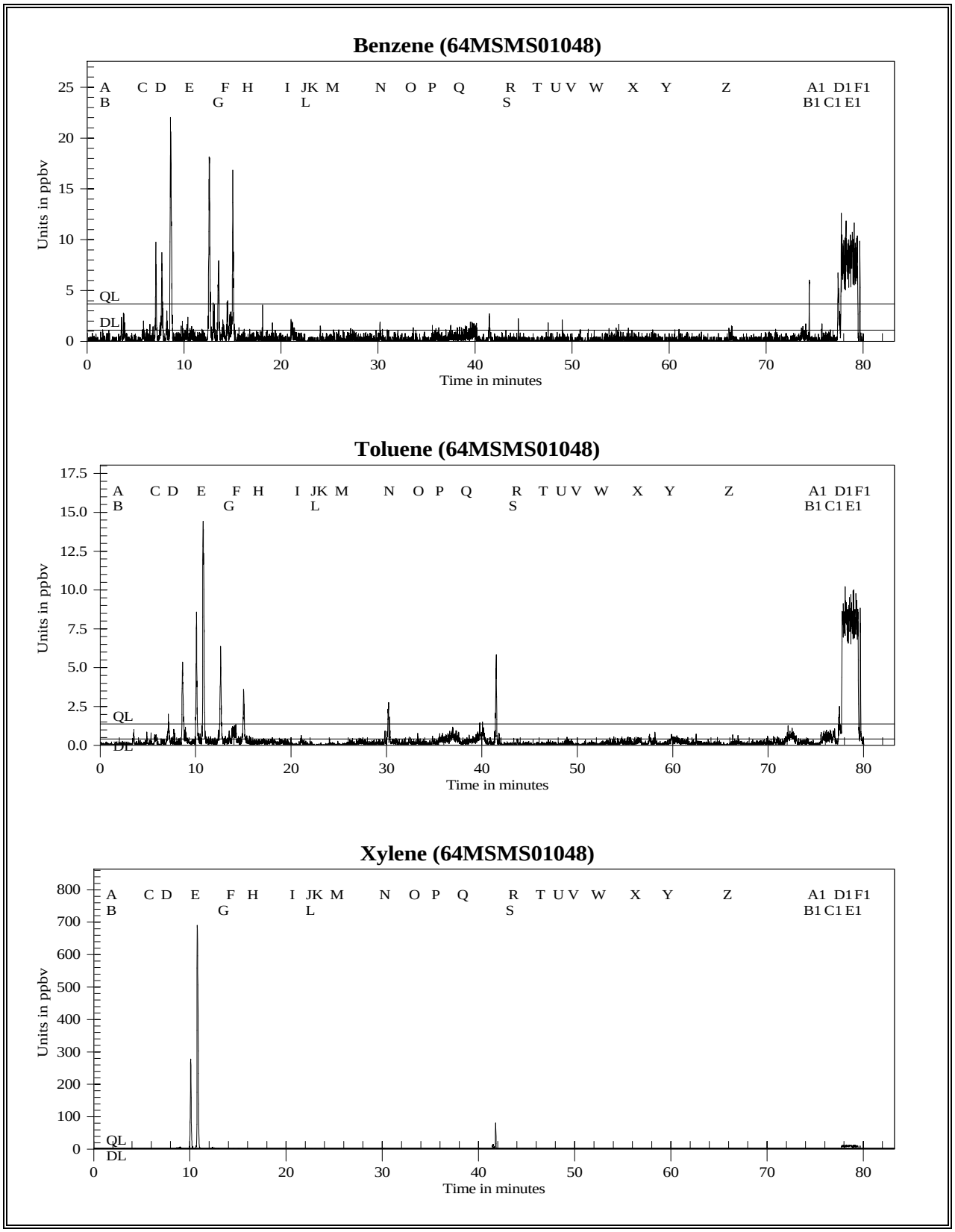


Figure 211c Monitoring Channelview to Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

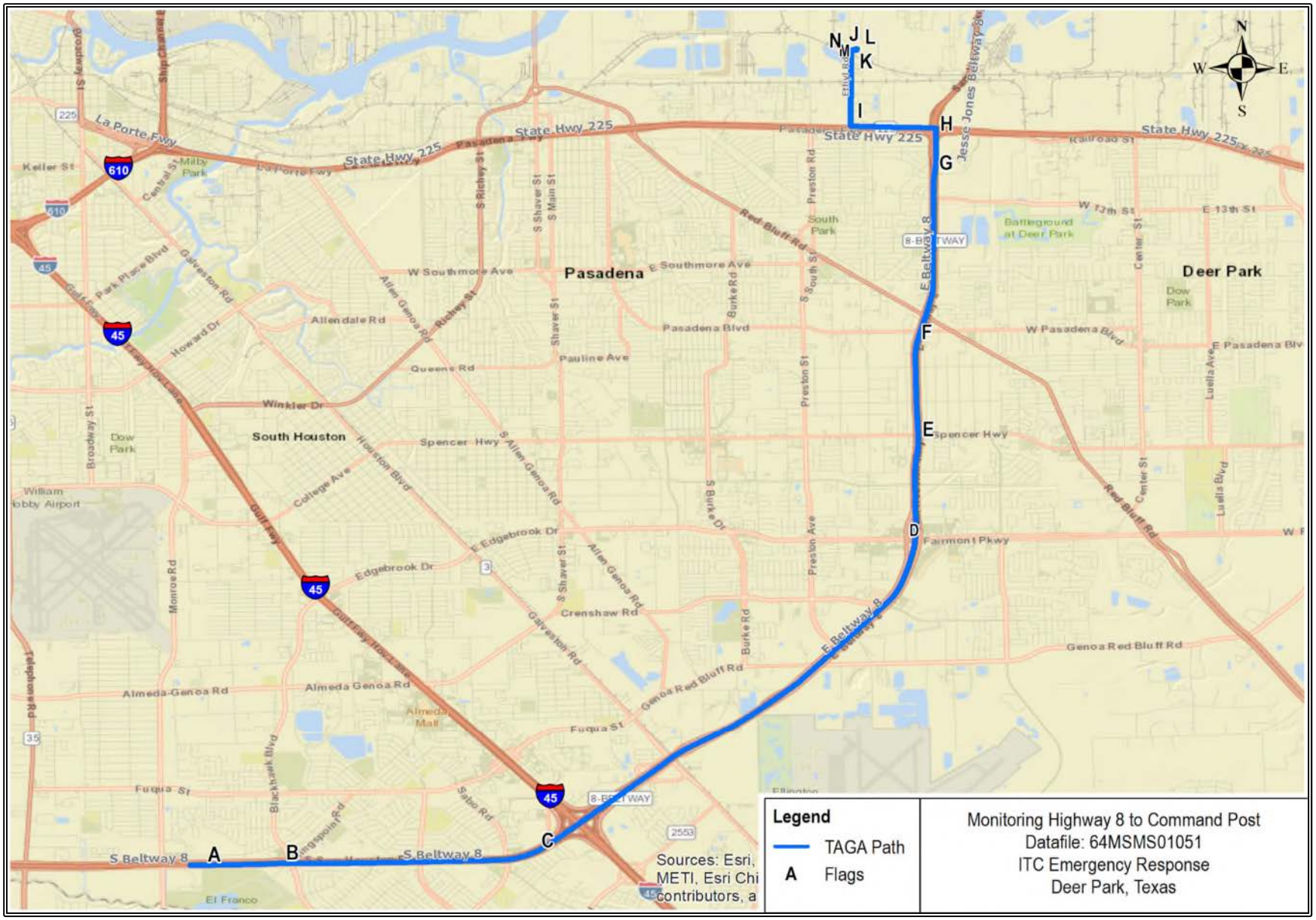


Figure 212a Monitoring Highway 8 to Command Post Path, 64MSMS01051

Figure 212b

TAGA File Event Summary
File: 64MSMS01051 Acquired on 25 April 2019 at 08:45:56
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	0.7	72	Start mobile monitoring on Highway 8 North
B	1.2	112	Continuing onto Highway 8 North
C	3.6	340	Cross Highway 45
D	8.0	763	Cross Fairmont Parkway
E	9.2	874	Cross Spencer Highway
F	10.3	980	Cross Pasadena Boulevard
G	12.1	1153	Exit onto Highway 8 Service Road
H	13.9	1321	Left turn onto Pasadena Freeway Frontage Road
I	15.2	1444	Right turn onto Ethyl Road
J	18.9	1801	End mobile monitoring at EPA Command Post
K	19.3	1832	Start ambient
L	20.2	1926	End ambient
M	21.9	2084	Start 30 mL/min spike
N	22.9	2179	End 30 mL/min spike

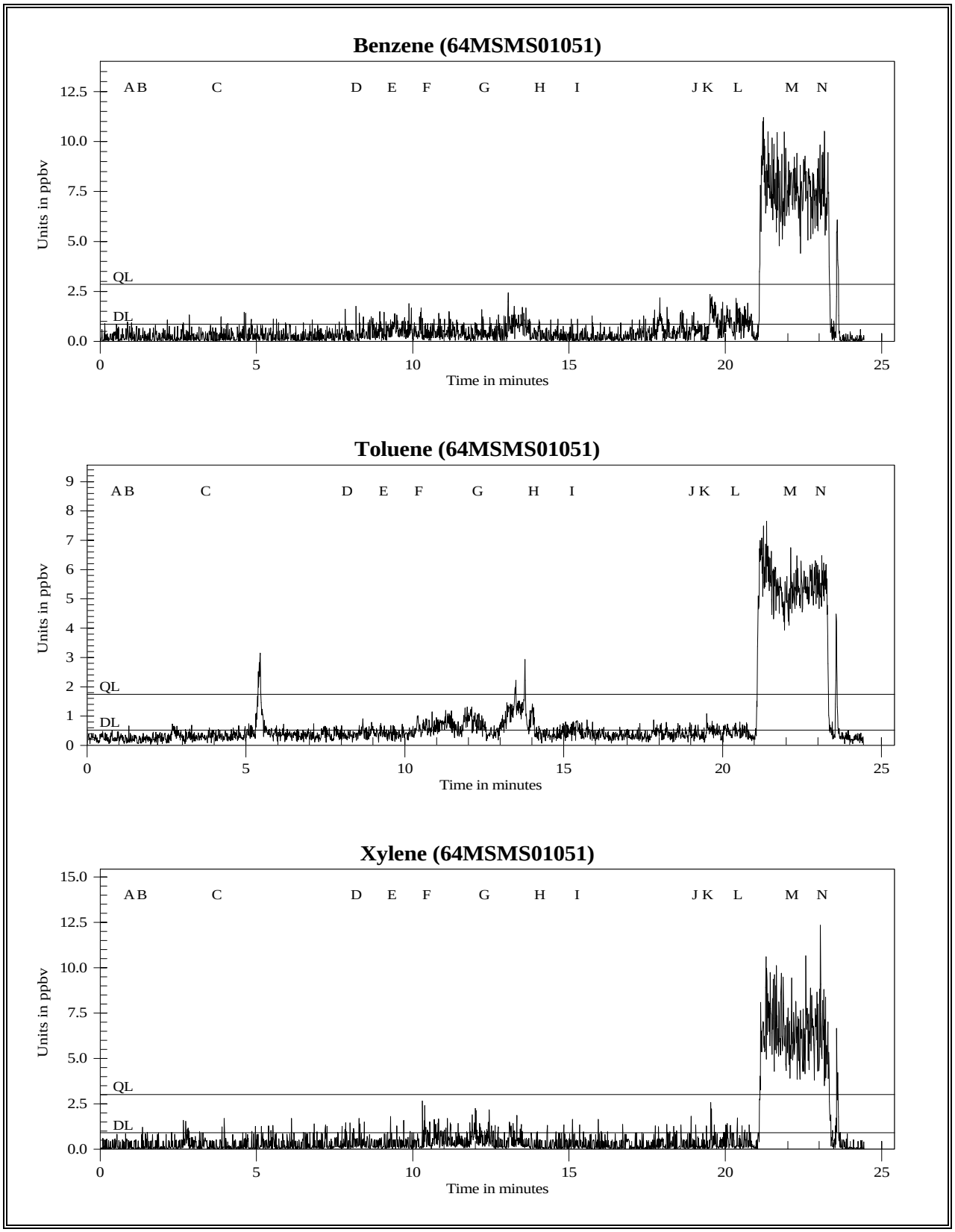


Figure 212c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

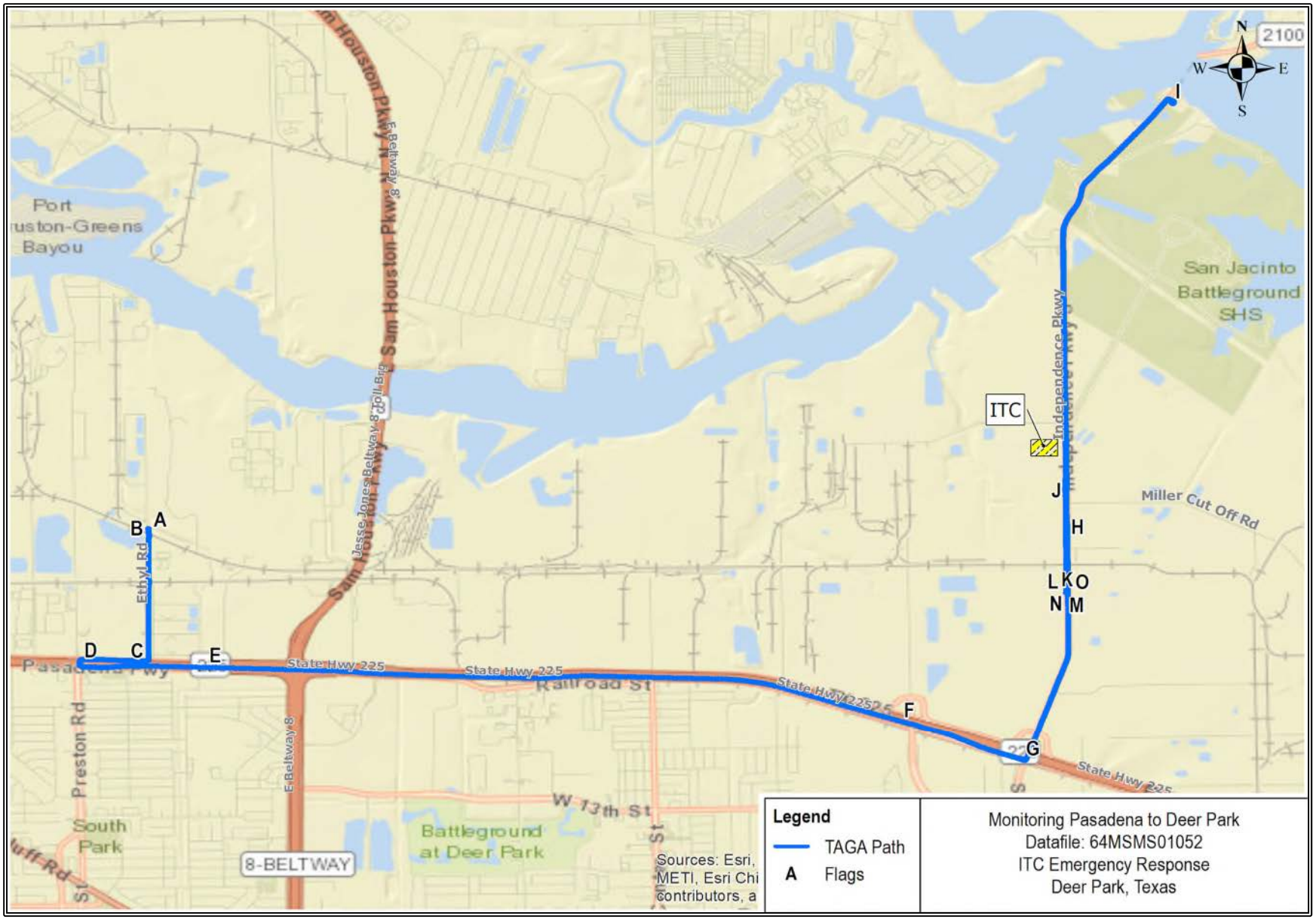


Figure 213a Monitoring Pasadena to Deer Path, 64MSMS01052

Figure 213b

TAGA File Event Summary
File: 64MSMS01052 Acquired on 25 April 2019 at 09:13:32
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	0.5	50	Start mobile monitoring at EPA Command Post
B	1.0	94	Continuing onto Ethyl Road
C	3.3	311	Right turn onto Pasadena Freeway Frontage Road
D	4.0	379	U-turn on Pasadena Freeway Frontage Road at Preston Road
E	5.1	484	Merge onto Highway 225 East
F	8.7	829	Exit onto Pasadena Freeway Frontage Road
G	10.6	1005	Left turn onto Independence Parkway
H	14.8	1412	Cross Miller Cut-Off Road
I	23.0	2192	U-turn on Independence Parkway at Juan Seguin Park
J	30.3	2877	Cross Miller Cut-Off Road
K	32.4	3081	End mobile monitoring on Independence Parkway
L	32.5	3094	Start ambient
M	33.5	3190	End ambient
N	34.7	3301	Start 30 mL/min spike
O	35.7	3399	End 30 mL/min spike

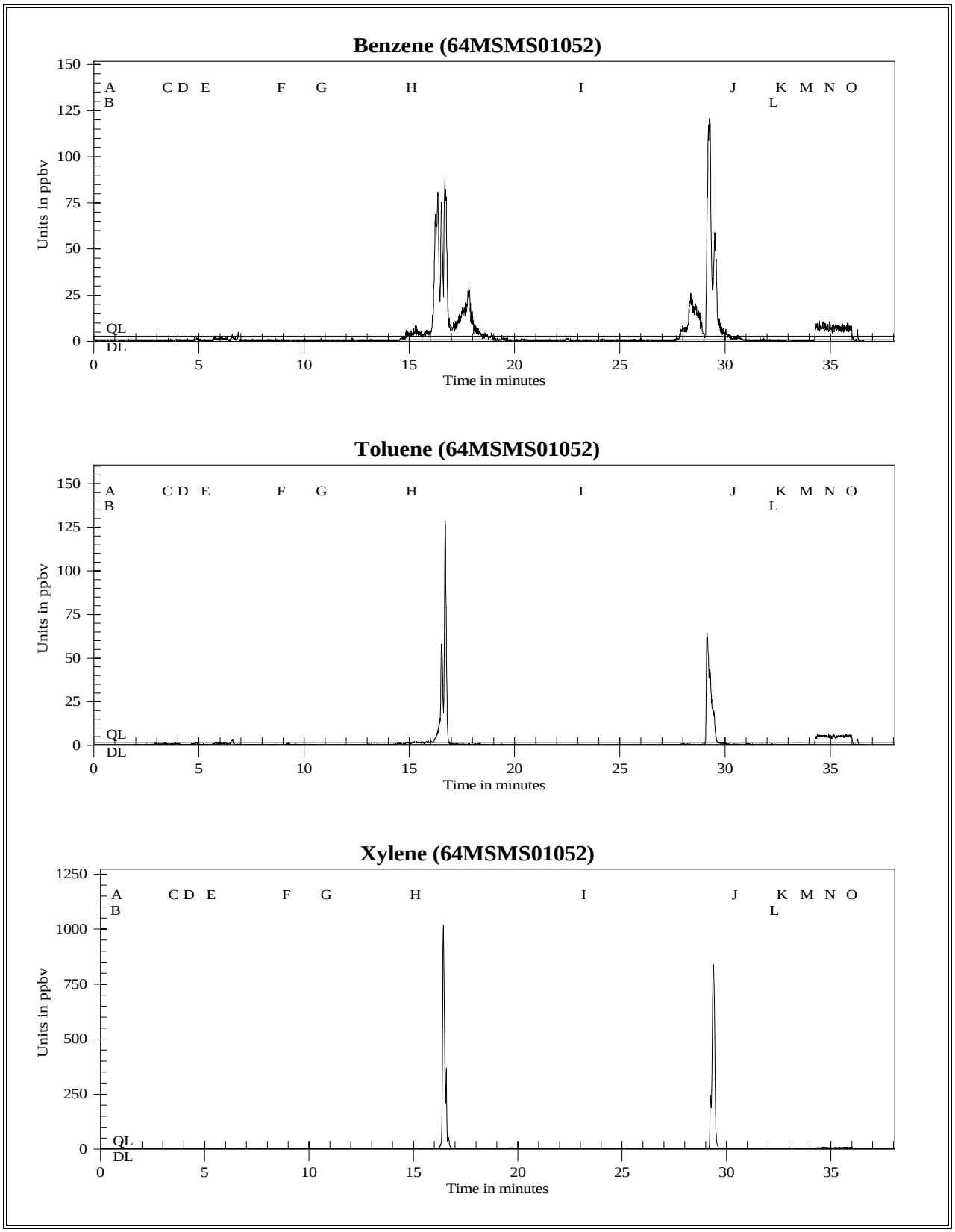


Figure 213c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

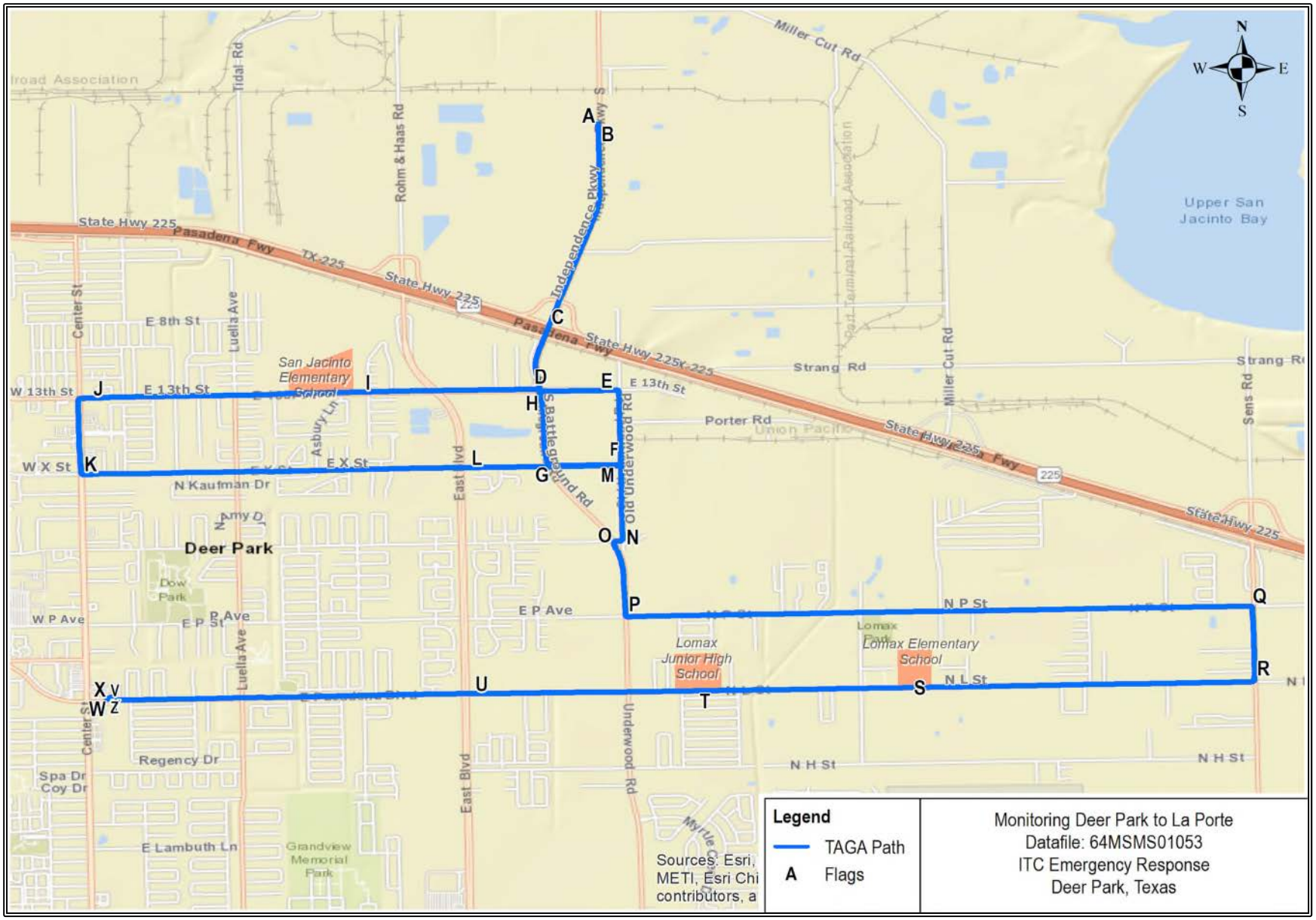


Figure 214a Monitoring Deer Park to La Porte Path, 64MSMS01053

Figure 214b

TAGA File Event Summary
File: 64MSMS01053 Acquired on 25 April 2019 at 09:52:25
Title: Monitoring Deer Park to La Porte

Flag	Time	Sequence	Description
A	0.6	61	Start mobile monitoring on Independence Parkway
B	1.3	124	Continuing onto Independence Parkway
C	3.7	349	Merge onto Battleground Road
D	4.8	460	Left turn onto East 13th Street
E	5.9	560	Right turn onto Old Underwood Road
F	6.9	657	Right turn onto East X Street
G	8.3	788	Right turn onto Battleground Road
H	9.4	899	Left turn onto East 13th Street
I	12.0	1138	Passing San Jacinto Elementary School
J	15.0	1428	Left turn onto Center Street
K	17.0	1620	Left turn onto East X Street
L	22.3	2124	Cross East Boulevard
M	24.8	2354	Right turn onto Old Underwood Road
N	25.9	2460	Right turn onto San Augustine Street
O	26.3	2499	Left turn onto Underwood Road
P	27.6	2626	Left turn onto North P Street
Q	34.4	3273	Right turn onto Sens Road
R	35.9	3411	Right turn onto North L Street
S	40.1	3810	Passing Lomax Elementary School
T	42.2	4017	Passing Lomax Junior High School
U	45.5	4328	Cross East Boulevard
V	50.2	4776	End mobile monitoring on North L Street
W	50.5	4799	Start ambient
X	51.4	4892	End ambient
Y	52.8	5017	Start 30 mL/min spike
Z	53.8	5115	End 30 mL/min spike

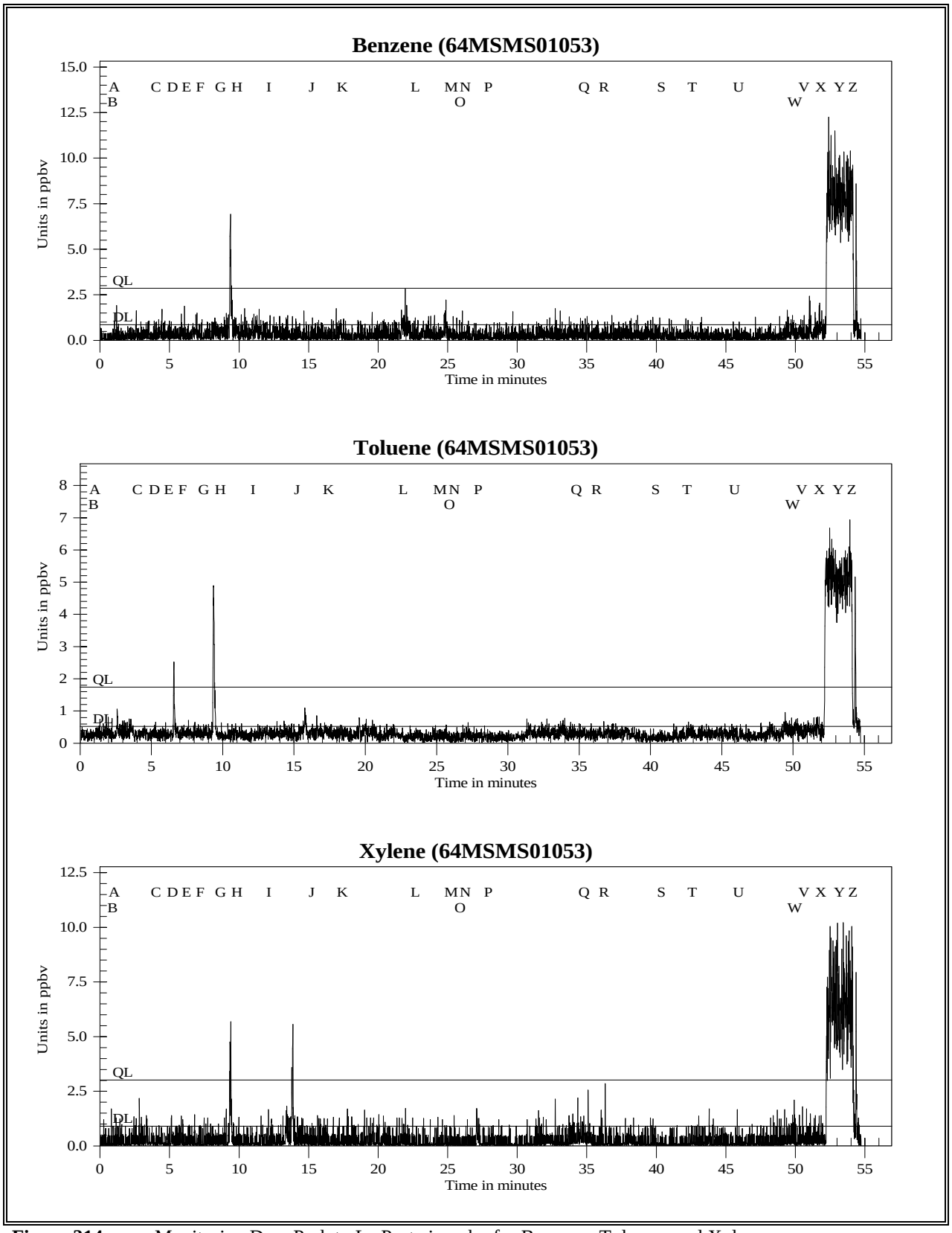


Figure 214c Monitoring Deer Park to La Porte in ppbv for Benzene, Toluene, and Xylenes

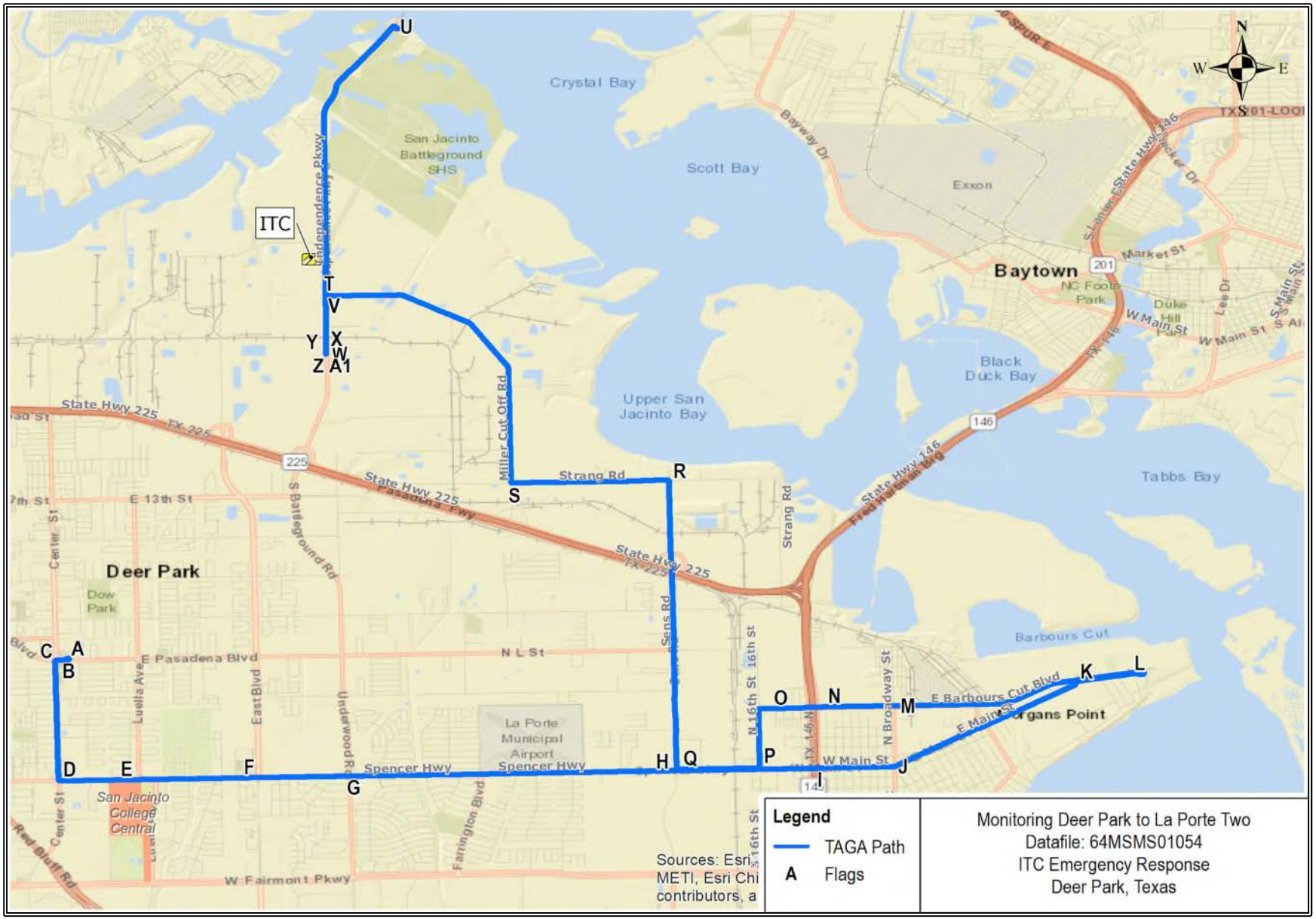


Figure 215a Monitoring Deer Park to La Porte Two Path, 64MSMS01054

Figure 215b

TAGA File Event Summary
File: 64MSMS01054 Acquired on 25 April 2019 at 11:09:02
Title: Monitoring Deer Park to La Porte Two

Flag	Time	Sequence	Description
A	0.6	59	Start mobile monitoring on Pasadena Boulevard
B	3.0	284	Continuing onto Pasadena Boulevard
C	4.7	446	Left turn onto Center Street
D	8.0	764	Left turn onto Spencer Highway
E	9.5	907	Passing San Jacinto College
F	12.8	1214	Cross East Boulevard
G	14.5	1384	Cross Underwood Road
H	21.2	2018	Cross Sens Road
I	25.3	2408	Merge onto Main Street
J	27.7	2637	Cross Broadway Street
K	33.1	3152	Right turn onto Barbours Cut Boulevard
L	34.6	3289	U-turn on Barbours Cut Boulevard
M	42.0	3992	Cross Broadway Street
N	43.6	4150	Cross Highway 146
O	44.9	4274	Left turn onto North 16th Street
P	47.5	4521	Right turn onto Spencer Highway
Q	49.1	4670	Right turn onto Sens Road
R	57.4	5461	Left turn onto Strang Road
S	62.3	5925	Right turn onto Miller Cut-Off Road
T	69.4	6600	Right turn onto Independence Parkway
U	78.2	7440	U-turn on Independence Parkway at Juan Seguin Park
V	87.9	8357	Cross Miller Cut-Off Road
W	89.5	8514	End mobile monitoring on Independence Parkway
X	89.7	8530	Start ambient
Y	90.8	8633	End ambient
Z	92.0	8747	Start 30 mL/min spike
A1	93.0	8841	End 30 mL/min spike

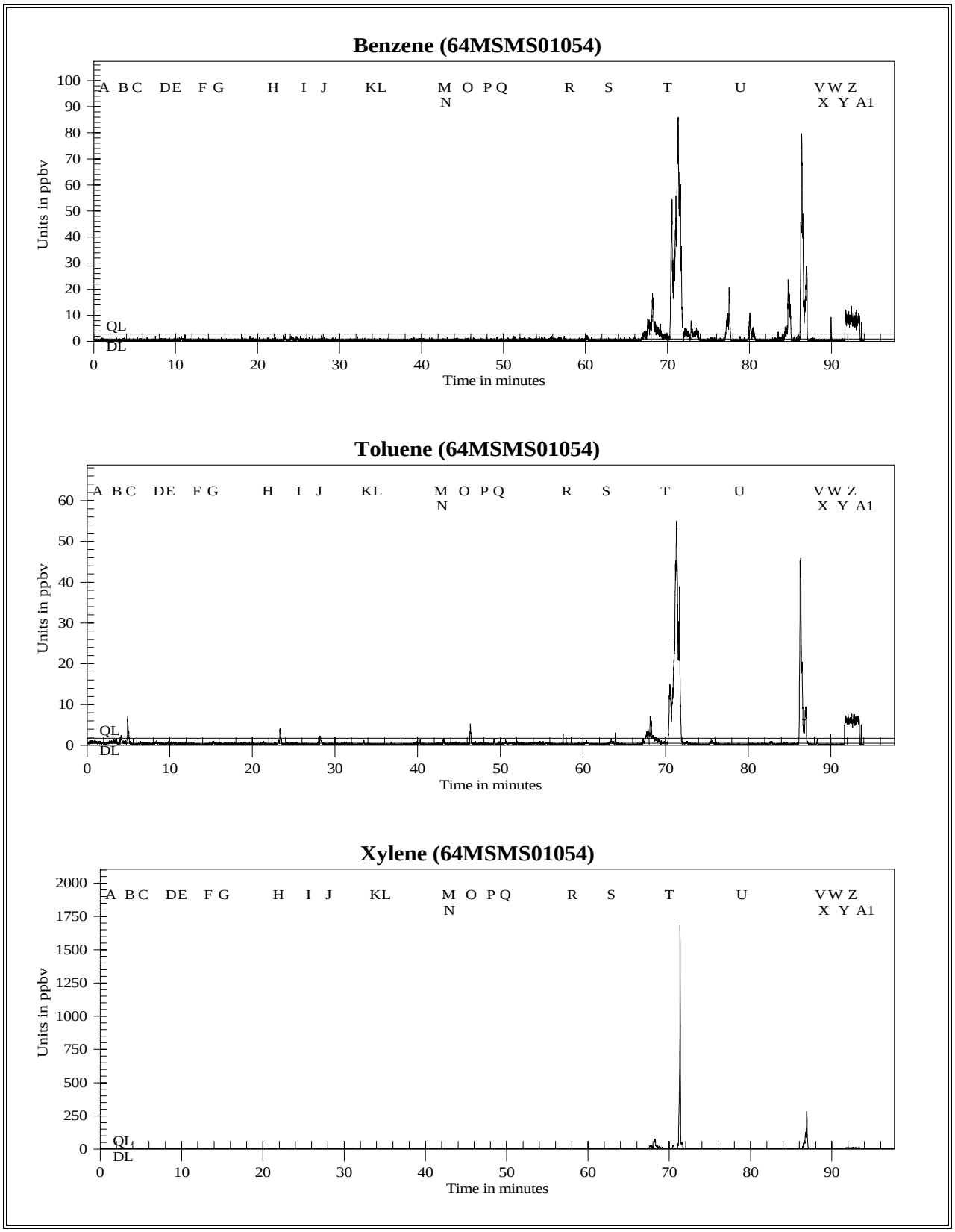


Figure 215c Monitoring Deer Park to La Porte Two in ppbv for Benzene, Toluene, and Xylenes

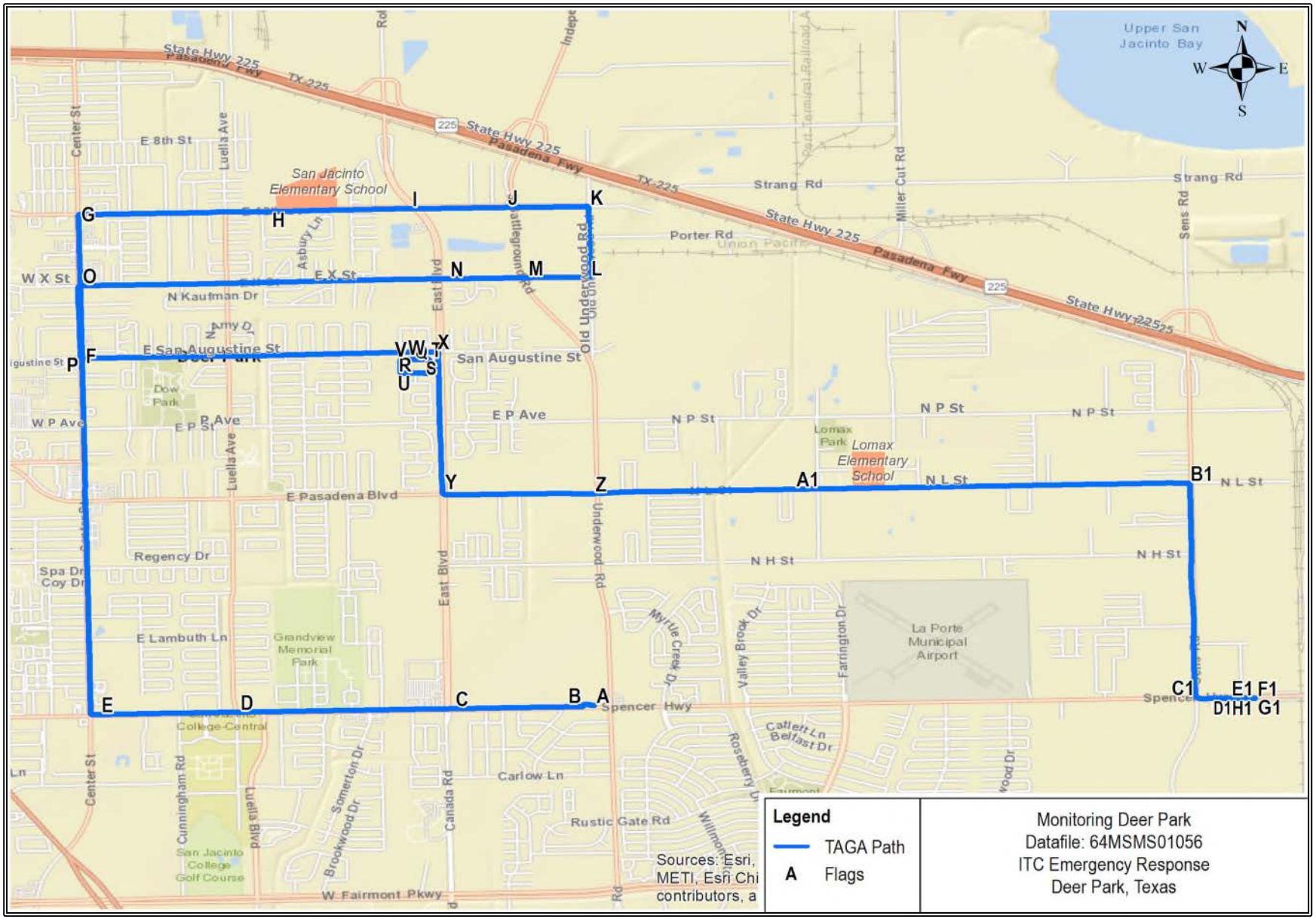


Figure 216a Monitoring Deer Park Path, 64MSMS01056

Figure 216b

TAGA File Event Summary
File: 64MSMS01056 Acquired on 25 April 2019 at 13:56:22
Title: Monitoring Deer Park

Flag	Time	Sequence	Description
A	0.6	55	Start mobile monitoring on Spencer Highway
B	3.5	333	Continuing onto Spencer Highway
C	6.4	611	Cross East Boulevard
D	9.7	923	Passing San Jacinto College
E	12.5	1187	Right turn onto Center Street
F	18.1	1718	Cross San Augustine Avenue
G	20.5	1954	Right turn onto East 13th Street
H	23.3	2216	Passing San Jacinto Elementary School
I	25.4	2411	Cross East Boulevard
J	26.7	2539	Cross Battleground Road
K	28.0	2667	Right turn onto Old Underwood Road
L	29.0	2756	Right turn onto East X Street
M	30.5	2897	Cross Battleground Road
N	31.6	3005	Cross East Boulevard
O	37.0	3523	Left turn onto Center Street
P	38.9	3696	Left turn onto San Augustine Avenue
Q	43.1	4101	Stationary on Comal Springs Drive
R	46.8	4447	Resume mobile monitoring on Comal Springs Drive
S	47.7	4540	Right turn onto Pine Lake Drive
T	48.0	4566	Right turn onto Canyon Lake Drive
U	48.6	4624	Right turn onto Aspen Springs Drive
V	49.1	4669	Right turn onto Comal Springs Drive
W	49.8	4735	Right turn onto San Augustine Street
X	50.2	4775	Right turn onto East Boulevard
Y	53.0	5043	Left turn onto Pasadena Boulevard
Z	55.6	5291	Cross Underwood Road
A1	58.8	5592	Passing Lomax Elementary School
B1	62.9	5982	Right turn onto Sens Road
C1	66.1	6285	Left turn onto Spencer Highway
D1	66.9	6362	End mobile monitoring on Spencer Highway
E1	67.2	6393	Start ambient
F1	68.2	6489	End ambient
G1	69.8	6635	Start 30 mL/min spike
H1	70.9	6738	End 30 mL/min spike

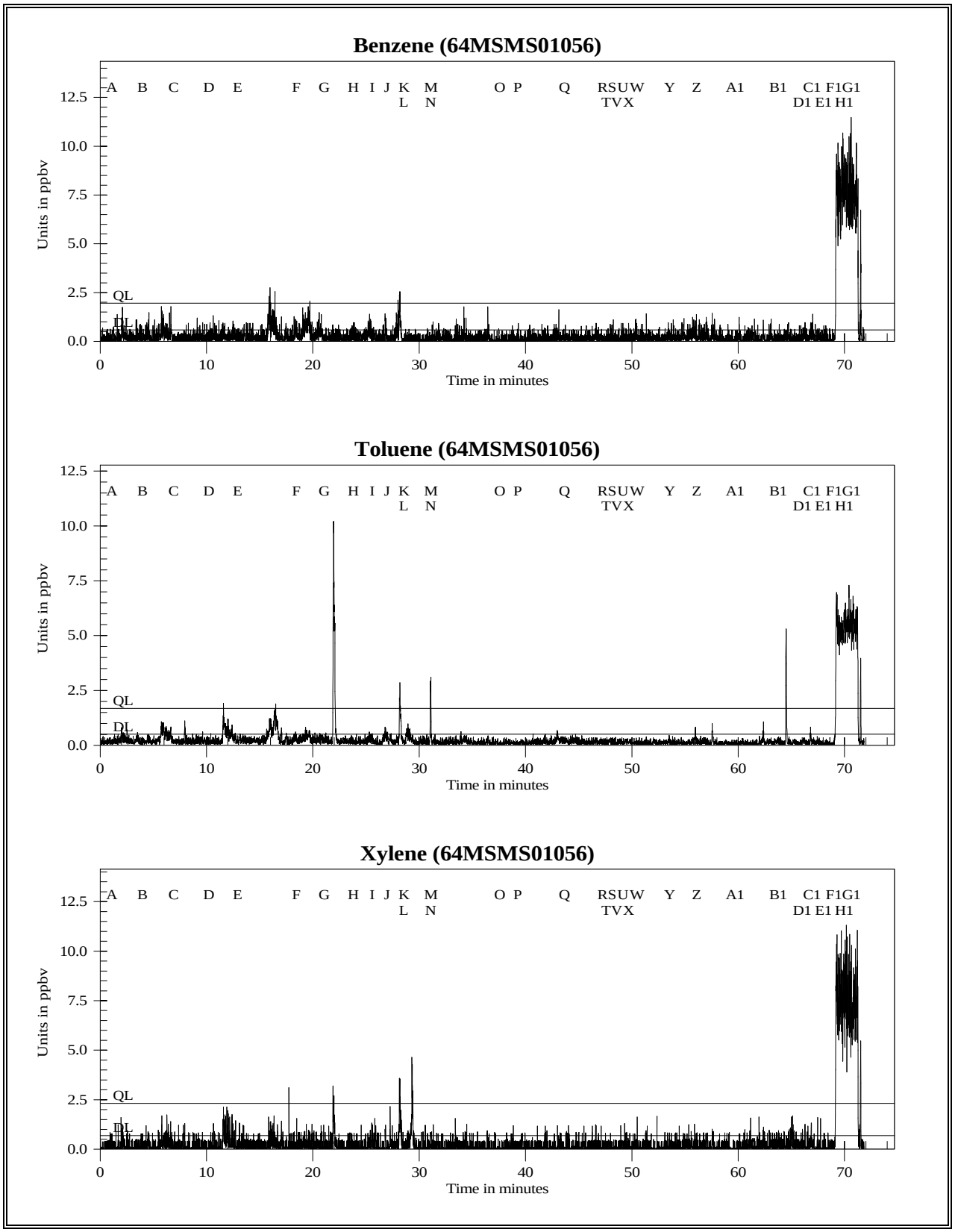


Figure 216c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

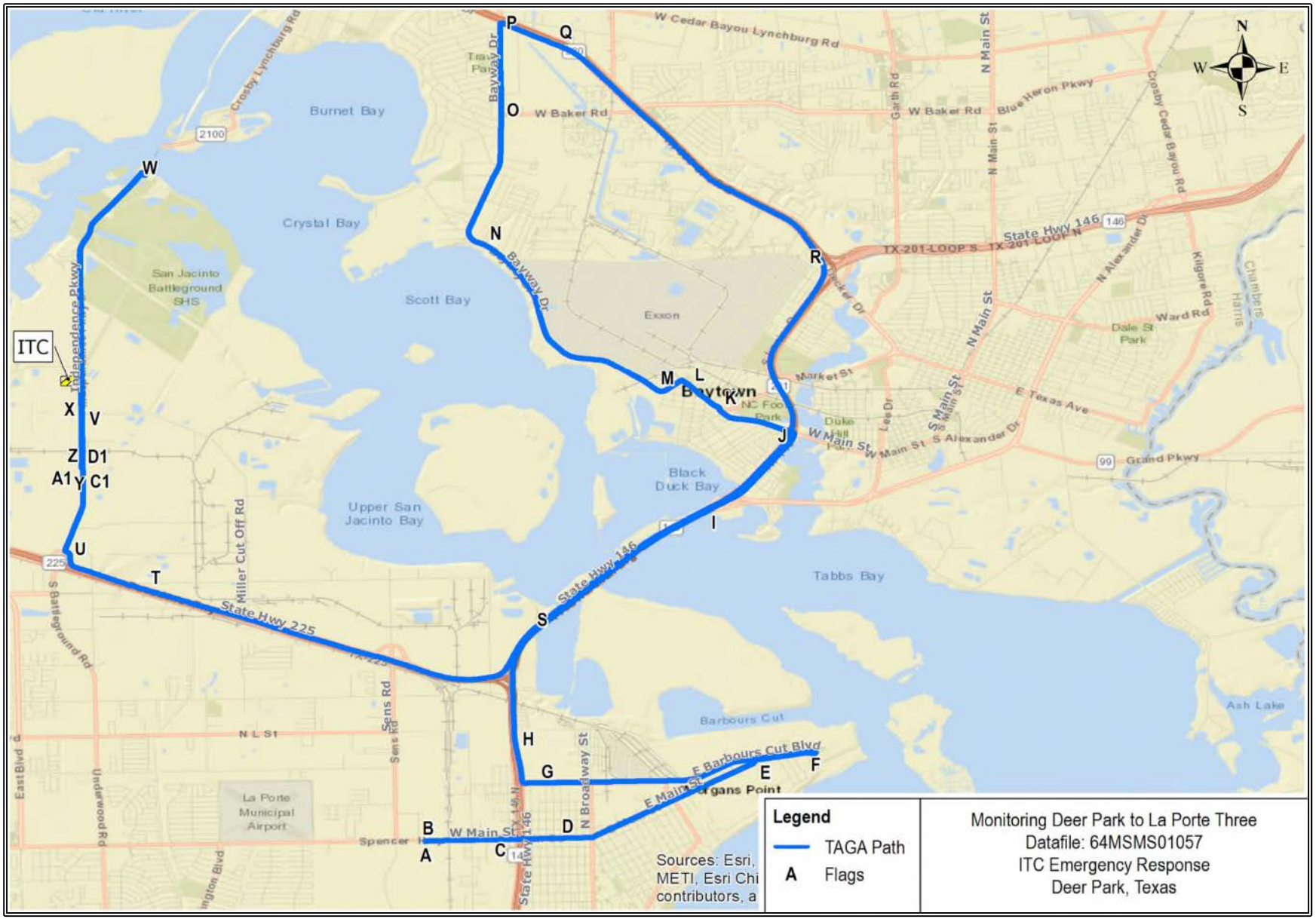


Figure 217a Monitoring Deer Park to La Porte Three Path, 64MSMS01057

Figure 217b

TAGA File Event Summary
File: 64MSMS01057 Acquired on 25 April 2019 at 15:10:22
Title: Monitoring Deer Park to La Porte Three

Flag	Time	Sequence	Description
A	0.7	69	Start mobile monitoring on Spencer Highway
B	1.0	94	Continuing onto Spencer Highway
C	3.7	352	Merge onto Main Street
D	5.7	539	Cross Broadway Street
E	10.8	1032	Right turn onto Barbours Cut Boulevard
F	12.4	1184	U-turn on Barbours Cut Boulevard
G	19.6	1866	Right turn onto Highway 146 Service Road
H	20.3	1929	Merge onto Highway 146 North
I	23.8	2265	Exit onto Robert C Lanier Drive
J	25.2	2393	Left turn onto Main Street
K	27.3	2595	Left turn onto Market Street
L	29.5	2807	Left turn to continue on Market Street
M	30.2	2872	Right turn onto Bayway Drive
N	35.7	3396	Right turn to continue on Bayway Drive
O	38.3	3645	Cross Baker Road
P	40.7	3867	Right turn onto Decker Drive
Q	42.0	3995	Merge onto Highway 330 South
R	45.3	4307	Merge onto Highway 146 South
S	50.8	4832	Merge onto Highway 225 West
T	54.8	5214	Exit onto Pasadena Freeway Frontage Road
U	55.8	5304	Right turn onto Independence Parkway
V	59.7	5676	Cross Miller Cut-Off Road
W	66.8	6351	U-turn on Independence Parkway at Juan Seguin Park
X	74.5	7080	Cross Miller Cut-Off Road
Y	76.3	7253	End mobile monitoring on Independence Parkway
Z	76.6	7285	Start ambient
A1	77.6	7380	End ambient
C1	80.1	7614	Start 30 mL/min spike
D1	81.1	7711	End 30 mL/min spike

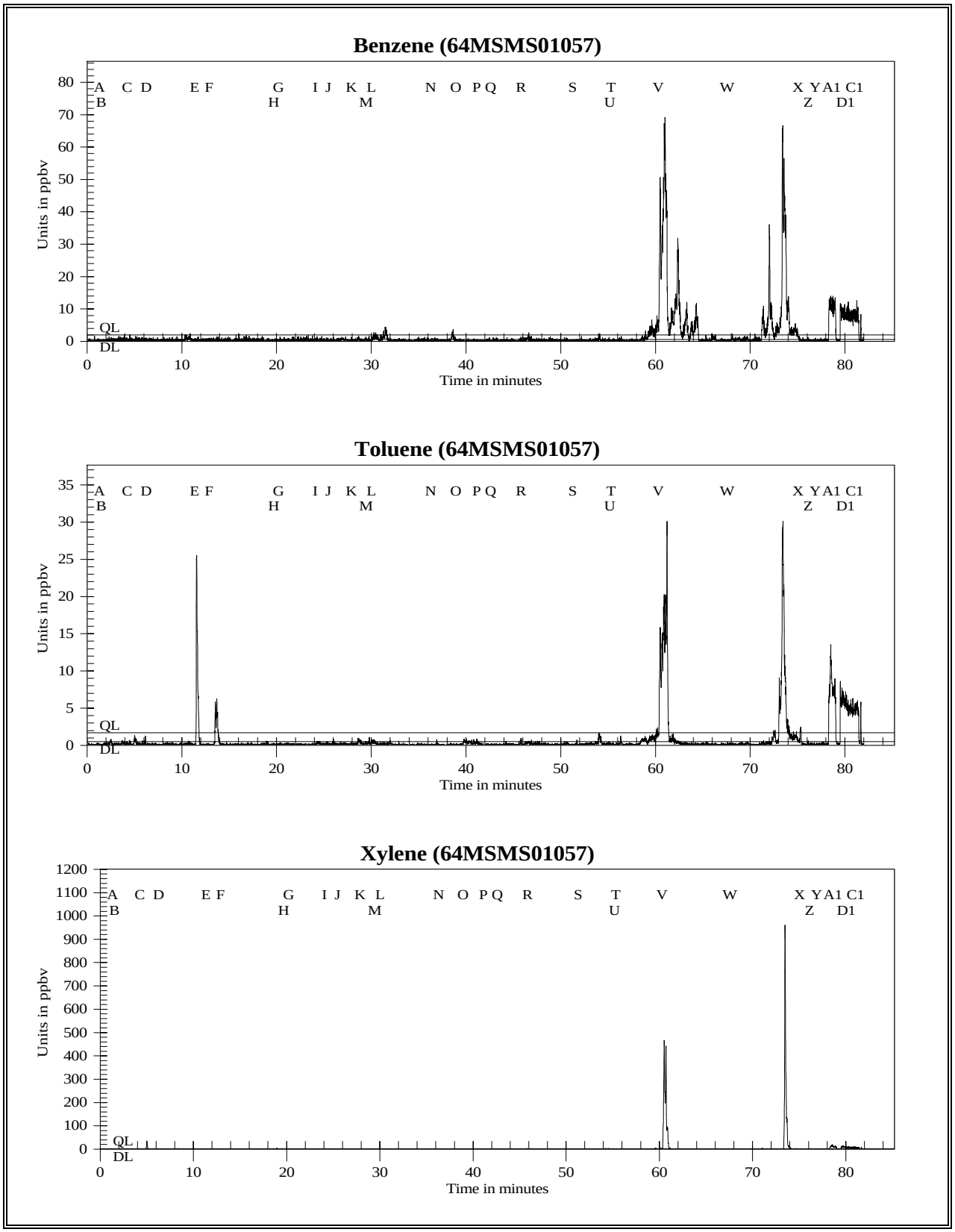


Figure 217c Monitoring Deer Park to La Porte Three in ppbv for Benzene, Toluene, and Xylenes

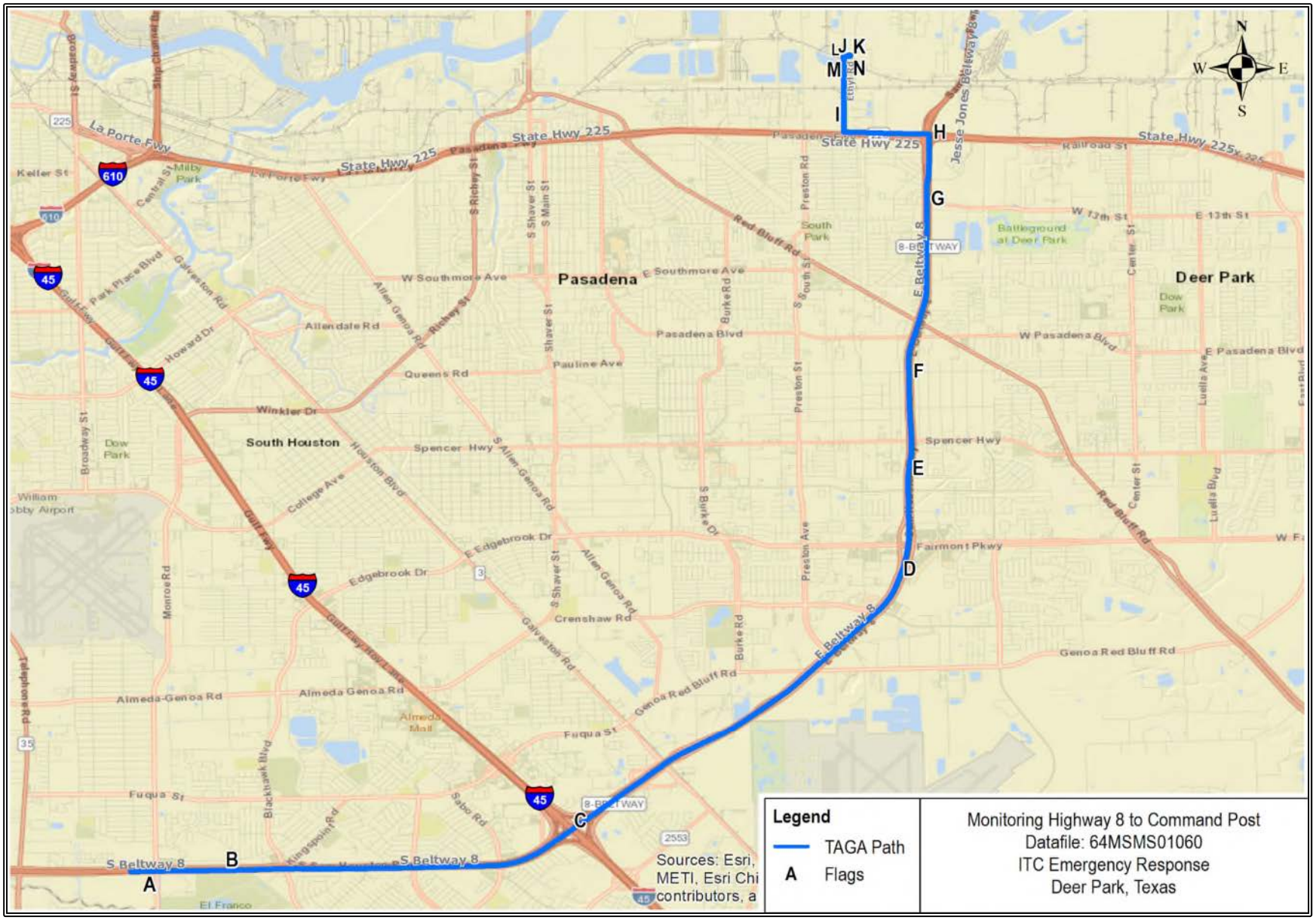


Figure 218a Monitoring Highway 8 to Command Post Path, 64MSMS01060

Figure 218b

TAGA File Event Summary
File: 64MSMS01060 Acquired on 26 April 2019 at 08:22:27
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	0.7	72	Start mobile monitoring on Highway 8 North
B	1.1	105	Continuing onto Highway 8 North
C	4.0	378	Cross Highway 45
D	8.4	801	Cross Fairmont Parkway
E	9.6	915	Cross Spencer Highway
F	10.6	1013	Cross Pasadena Boulevard
G	12.3	1170	Exit onto Highway 8 Service Road
H	13.4	1271	Left turn onto Pasadena Freeway Frontage Road
I	14.6	1393	Right turn onto Ethyl Road
J	18.7	1777	End mobile monitoring at EPA Command Post
K	19.0	1804	Start ambient
L	20.0	1901	End ambient
M	21.5	2046	Start 30 mL/min spike
N	22.5	2141	End 30 mL/min spike

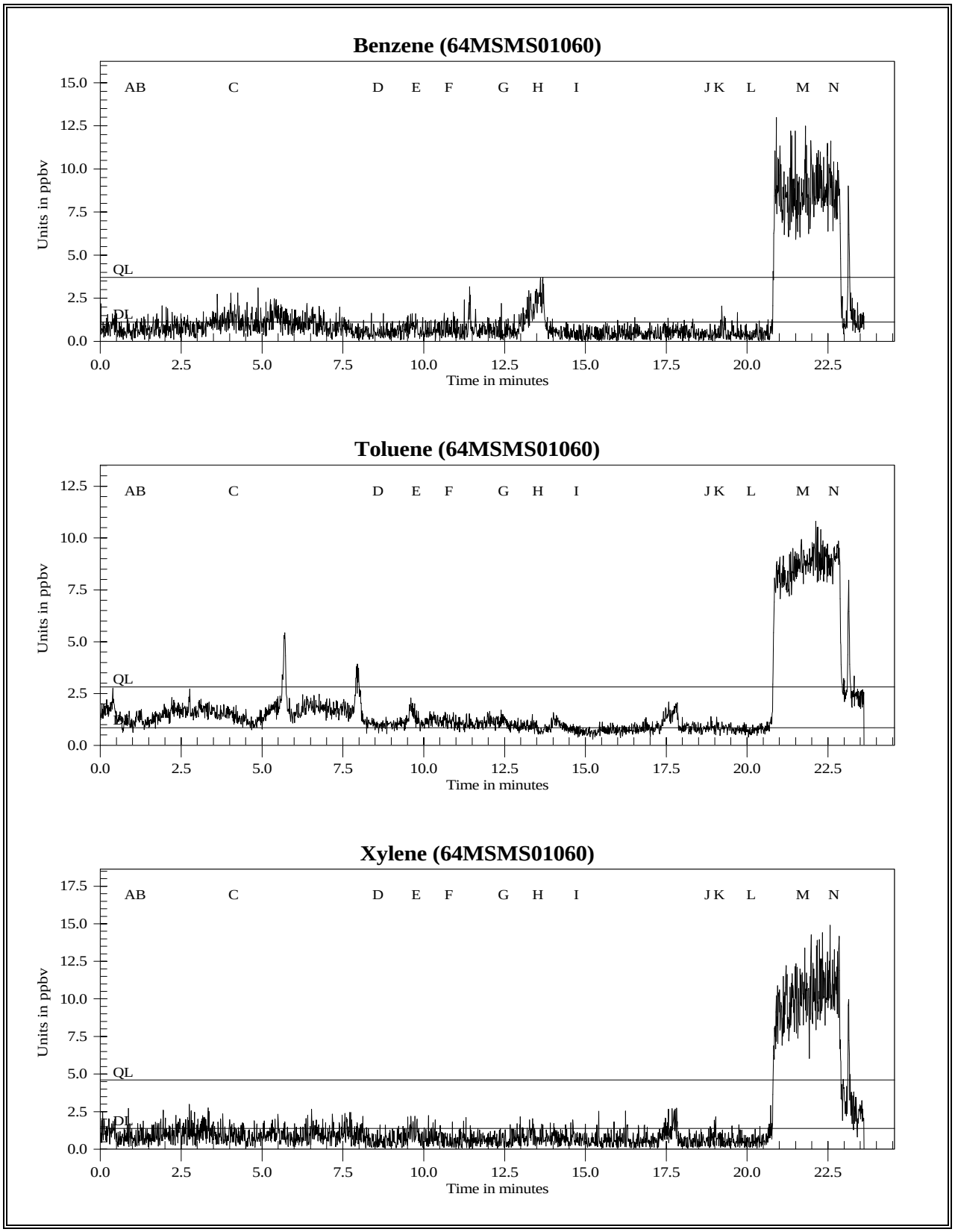


Figure 218c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

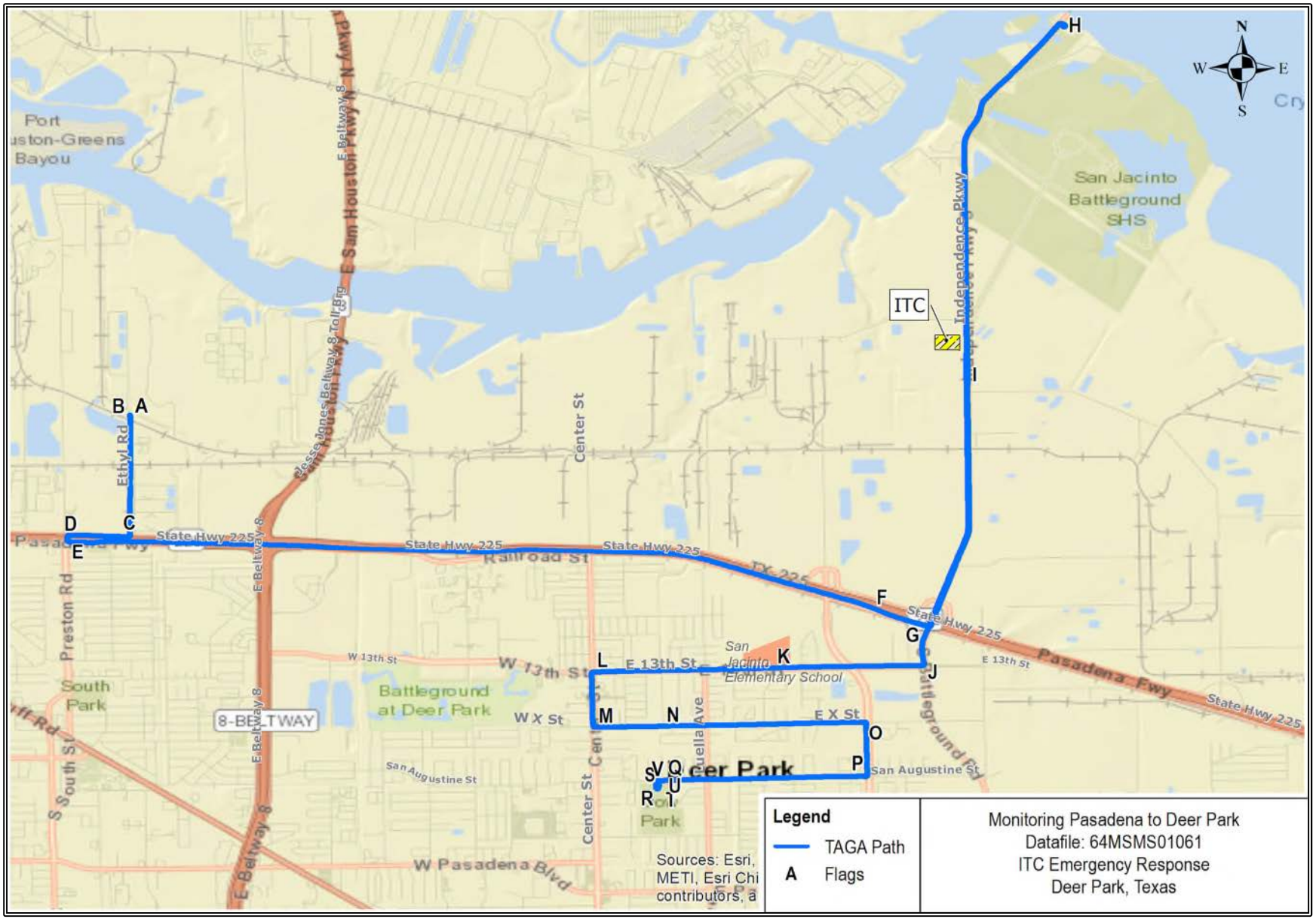


Figure 219a Monitoring Pasadena to Deer Park Path, 64MSMS01061

Figure 219b

TAGA File Event Summary
File: 64MSMS01061 Acquired on 26 April 2019 at 08:50:30
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	0.9	85	Start mobile monitoring at EPA Command Post
B	1.3	127	Continuing onto Ethyl Road
C	4.2	398	Right turn onto Pasadena Freeway Frontage Road
D	4.8	460	U-turn on Pasadena Freeway Frontage Road at Preston Road
E	5.5	522	Merge onto Highway 225 East
F	9.8	932	Exit onto Pasadena Freeway Frontage Road
G	11.1	1059	Left turn onto Independence Parkway
H	22.0	2095	U-turn on Independence Parkway at Juan Seguin Park
I	28.4	2704	Cross Miller Cut-Off Road
J	32.9	3127	Right turn onto East 13th Street
K	35.5	3376	Passing San Jacinto Elementary School
L	39.4	3746	Left turn onto Center Street
M	41.6	3952	Left turn onto East X Street
N	44.0	4182	Cross Luella Avenue
O	47.8	4545	Right turn onto East Boulevard
P	49.3	4689	Right turn onto San Augustine Street
Q	53.5	5087	Right turn into Deer Park City Hall
R	54.8	5212	End mobile monitoring at Deer Park City Hall
S	55.4	5266	Start ambient
T	56.4	5361	End ambient
U	57.8	5499	Start 30 mL/min spike
V	58.8	5594	End 30 mL/min spike

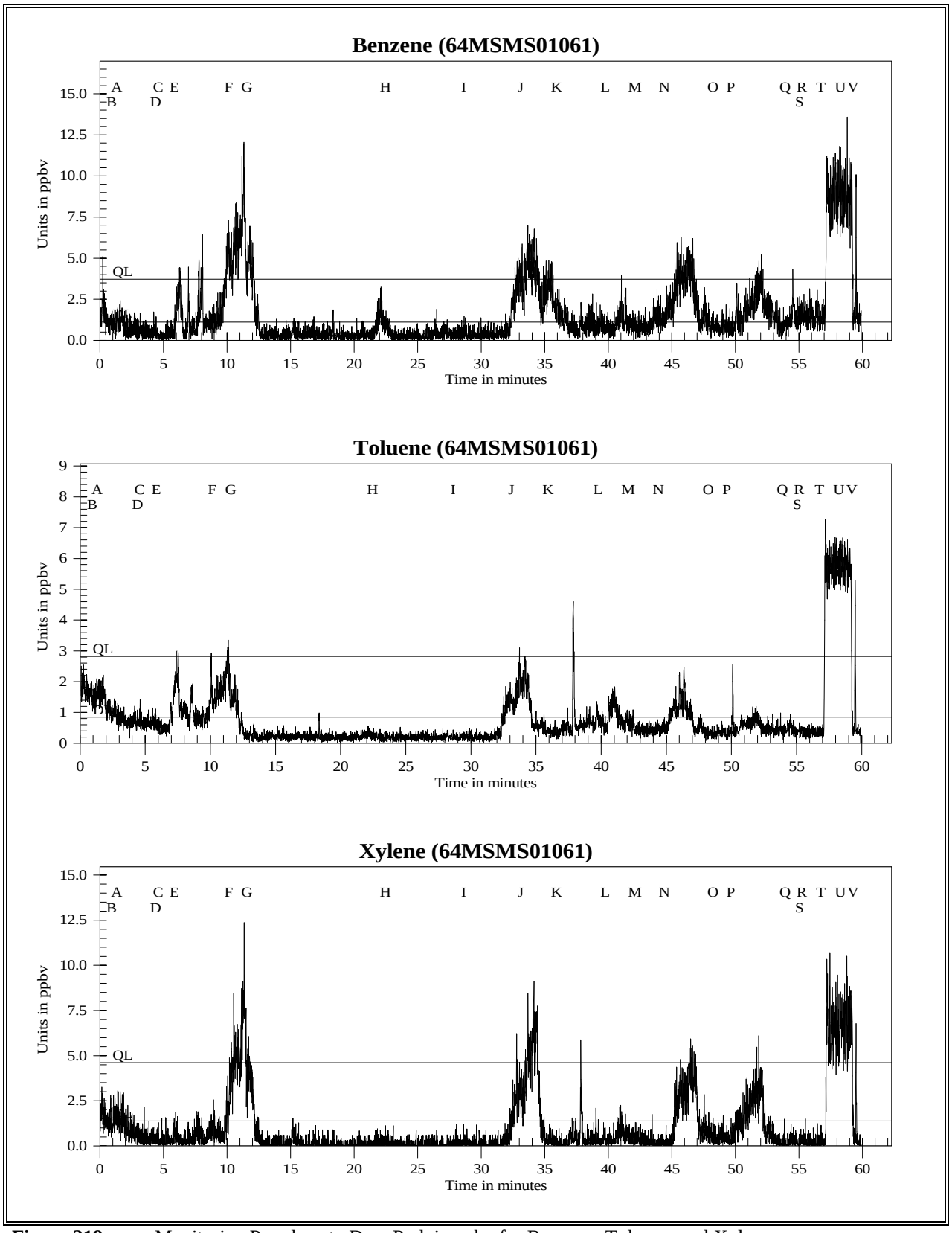


Figure 219c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

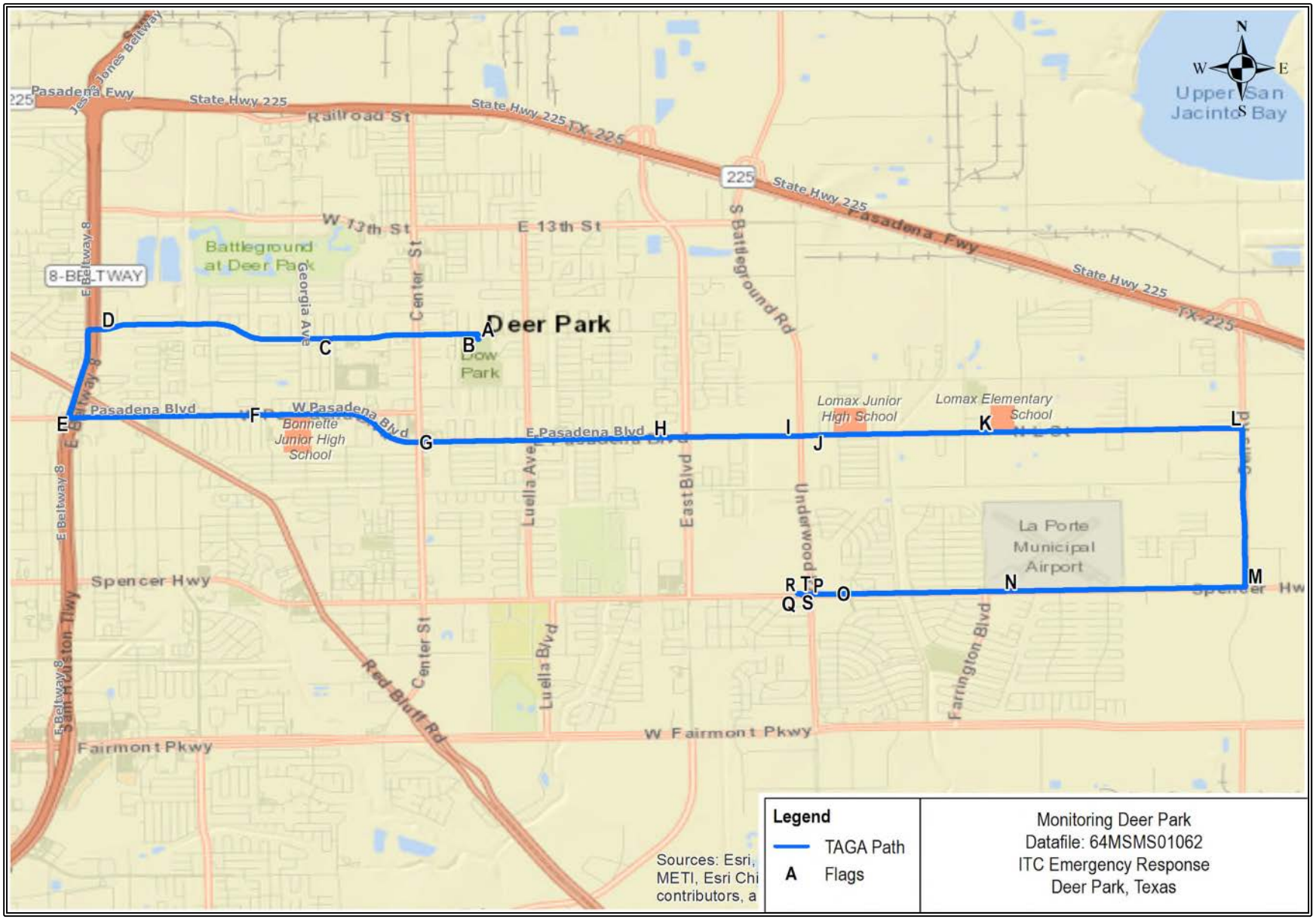


Figure 220a Monitoring Deer Park Path, 64MSMS01062

Figure 220b

TAGA File Event Summary
File: 64MSMS01062 Acquired on 26 April 2019 at 09:53:19
Title: Monitoring Deer Park

Flag	Time	Sequence	Description
A	0.6	59	Start mobile monitoring at Deer Park City Hall
B	1.6	153	Continuing onto San Augustine Street
C	4.7	452	Cross Georgia Avenue
D	8.8	837	Left turn onto Highway 8 Service Road
E	11.5	1097	Left turn onto Pasadena Boulevard
F	16.3	1546	Passing Bonnette Junior High School
G	19.4	1842	Cross Center Street
H	23.9	2273	Cross East Boulevard
I	25.5	2428	Cross Underwood Road
J	26.2	2495	Passing Lomax Junior High School
K	28.2	2682	Passing Lomax Elementary School
L	31.7	3016	Right turn onto Sens Road
M	35.5	3373	Right turn onto Spencer Highway
N	39.0	3708	Cross Farrington Drive
O	41.3	3930	Cross Underwood Road
P	41.9	3986	End mobile monitoring on Underwood Road
Q	42.6	4052	Start ambient
R	43.6	4147	End ambient
S	45.1	4284	Start 30 mL/min spike
T	46.1	4379	End 30 mL/min spike

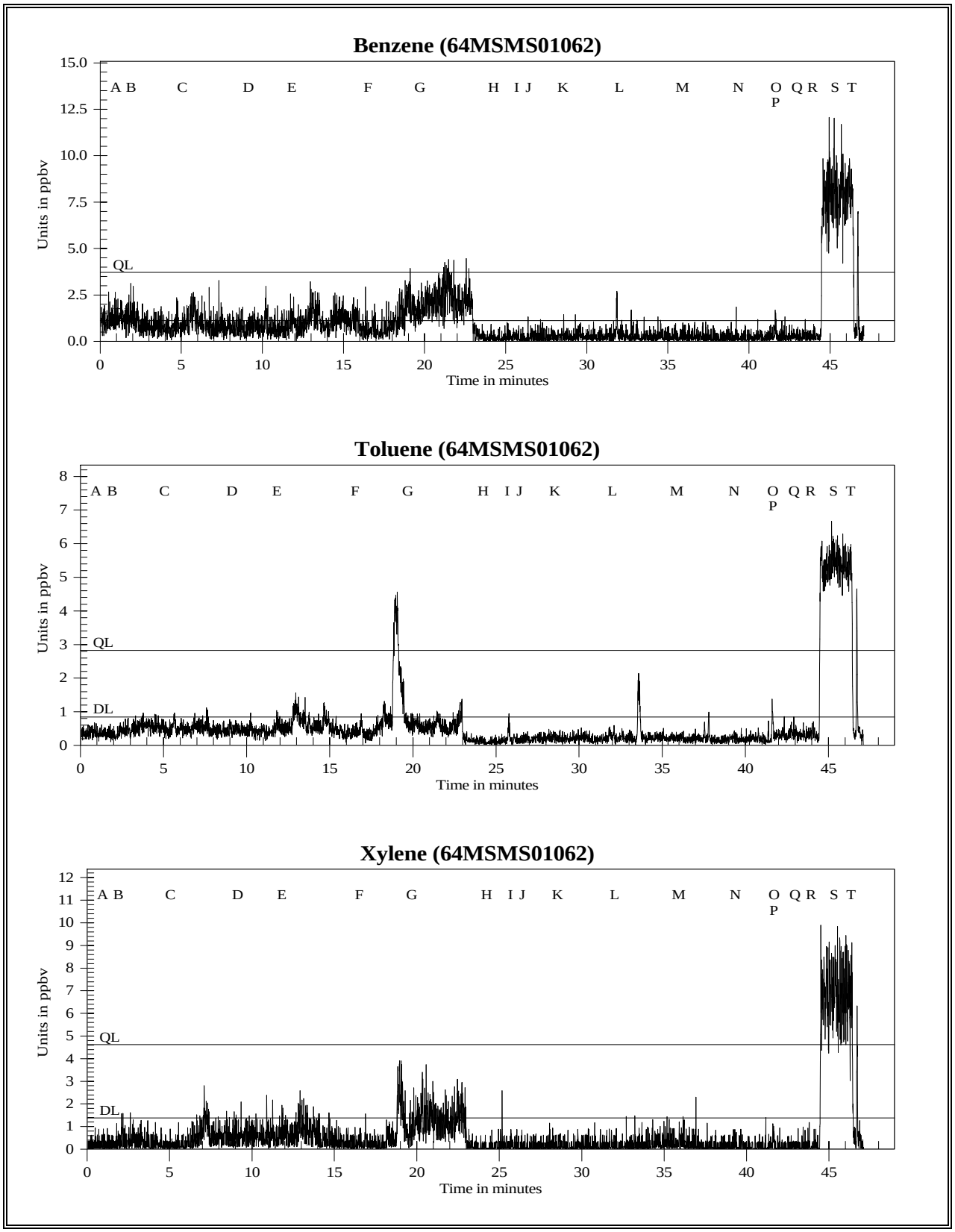


Figure 220c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

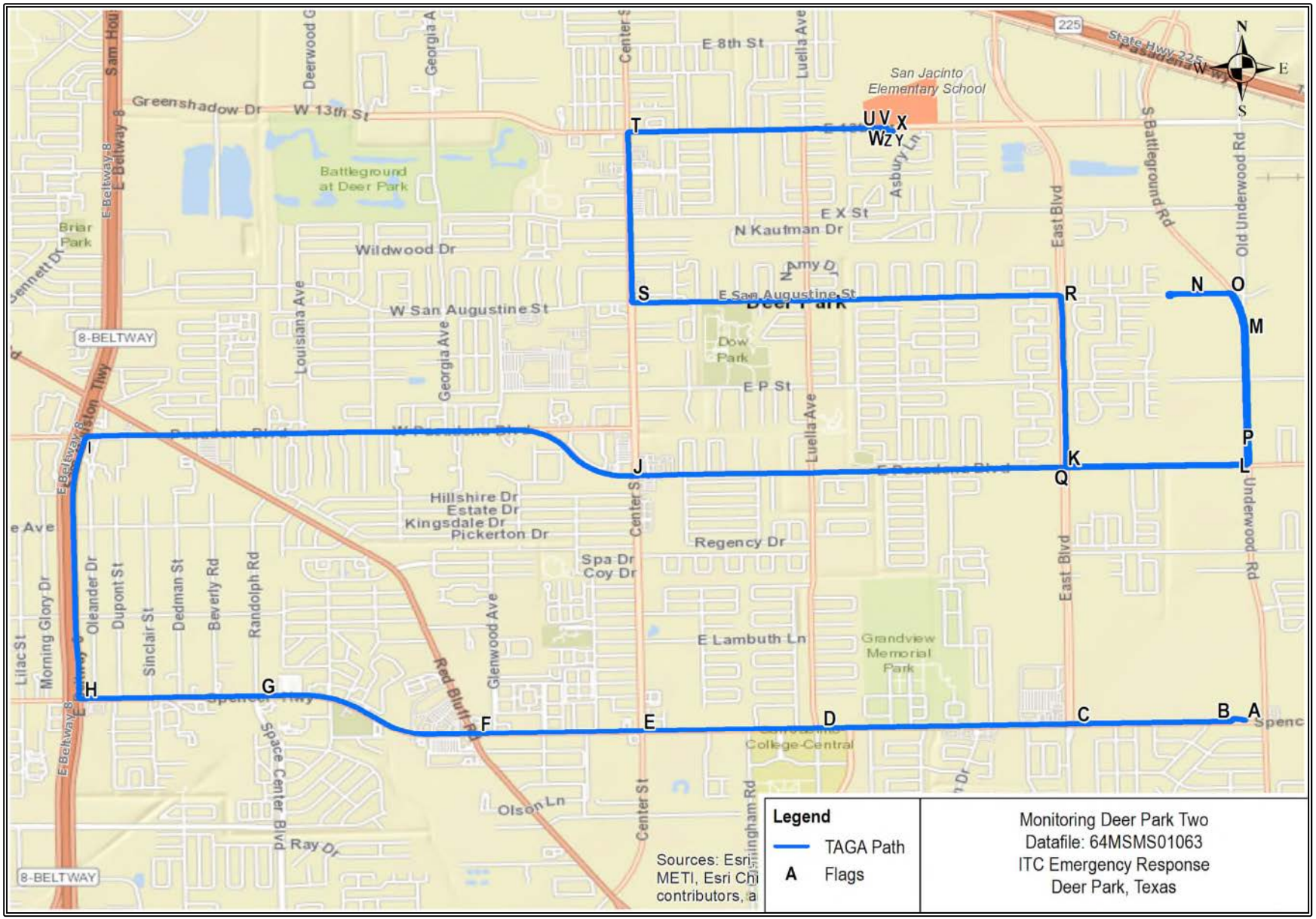


Figure 221a Monitoring Deer Park Two Path, 64MSMS01063

Figure 221b

TAGA File Event Summary
File: 64MSMS01063 Acquired on 26 April 2019 at 10:56:48
Title: Monitoring Deer Park Two

Flag	Time	Sequence	Description
A	0.6	59	Start mobile monitoring on Spencer Highway
B	4.1	392	Continuing onto Spencer Highway
C	6.7	639	Cross East Boulevard
D	9.3	882	Passing San Jacinto College
E	10.6	1008	Cross Center Street
F	12.7	1211	Cross Red Bluff Road
G	14.9	1414	Cross Randolph Road
H	17.9	1701	Right turn onto Highway 8 Service Road
I	21.2	2021	Right turn onto Pasadena Boulevard
J	27.3	2596	Cross Center Street
K	30.8	2926	Cross East Boulevard
L	32.6	3097	Left turn onto Underwood Road
M	34.6	3295	Left turn onto San Augustine Street
N	35.8	3409	U-turn onto San Augustine Street
O	37.5	3563	Right turn onto Underwood Road
P	39.2	3726	Right turn onto Pasadena Boulevard
Q	41.2	3922	Right turn onto East Boulevard
R	43.9	4179	Left turn onto San Augustine Street
S	49.1	4673	Right turn onto Center Street
T	52.4	4981	Right turn onto East 13th Street
U	55.2	5249	Passing San Jacinto Elementary School
V	55.7	5299	End mobile monitoring on East 13th Street
W	55.9	5320	Start ambient
X	56.9	5415	End ambient
Y	58.4	5550	Start 30 mL/min spike
Z	59.4	5645	End 30 mL/min spike

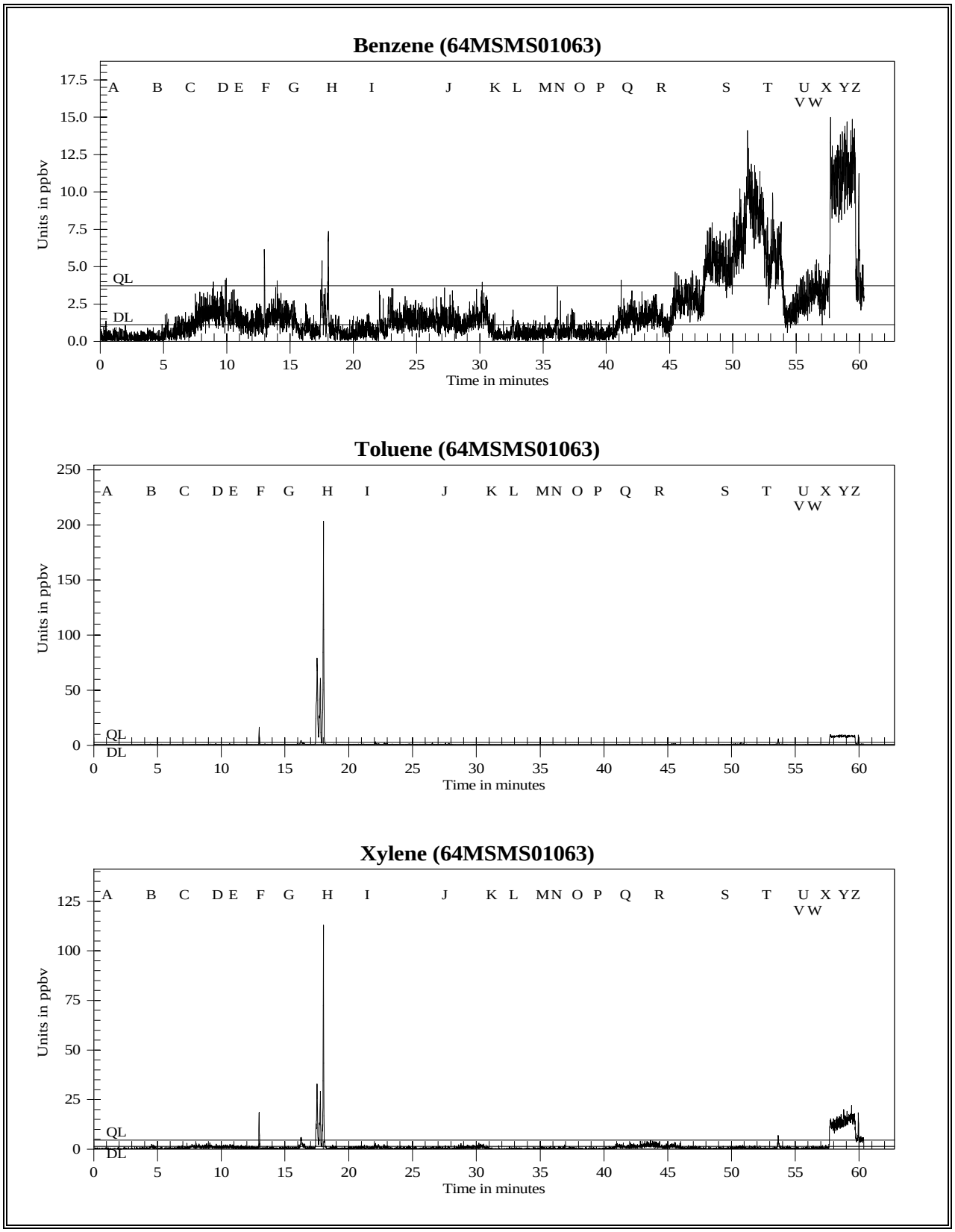


Figure 221c Monitoring Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

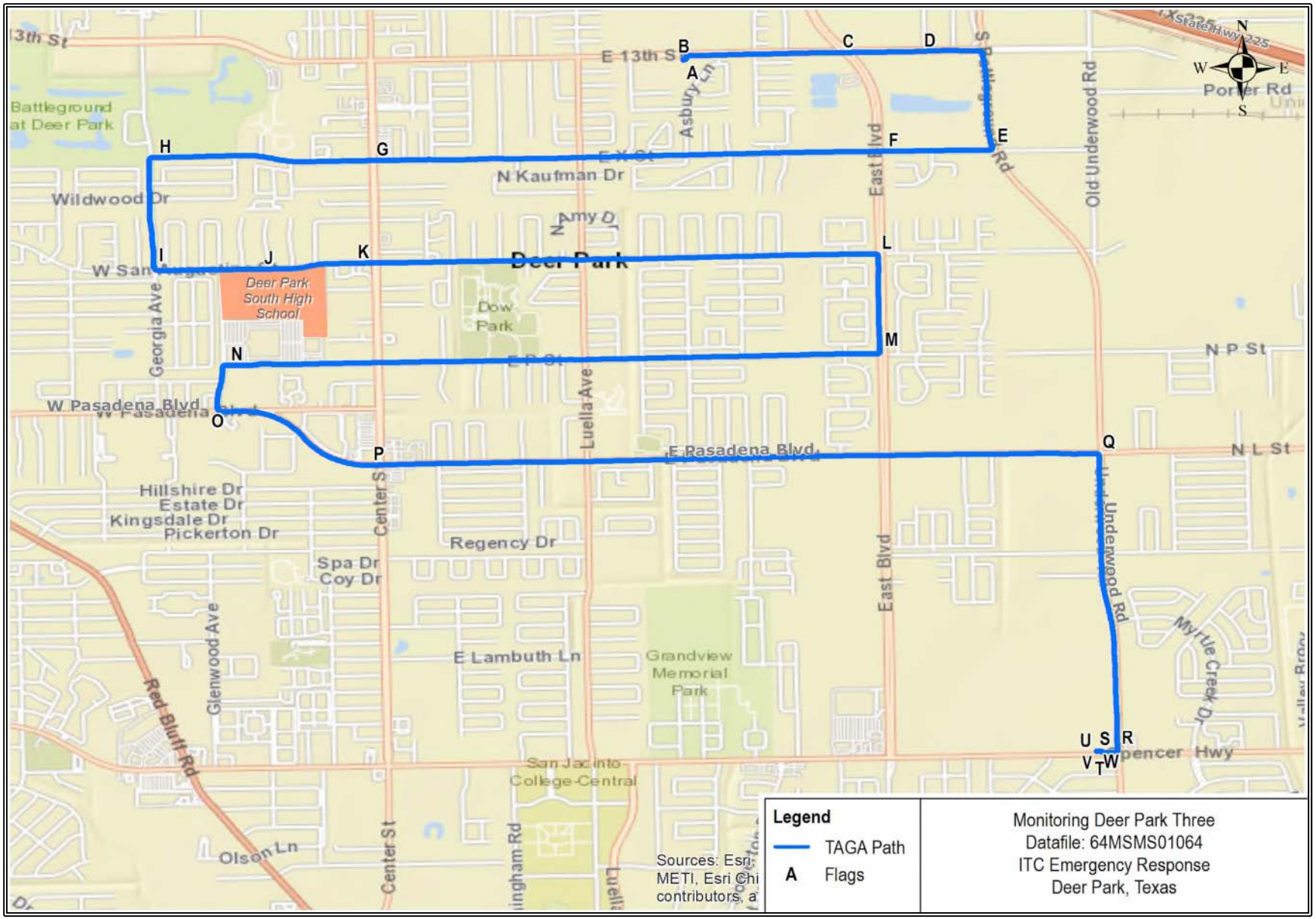


Figure 222a Monitoring Deer Park Three Path, 64MSMS01064

Figure 222b

TAGA File Event Summary
File: 64MSMS01064 Acquired on 26 April 2019 at 12:01:31
Title: Monitoring Deer Park Three

Flag	Time	Sequence	Description
A	0.6	58	Start mobile monitoring on East 13th Street
B	1.9	178	Continuing onto East 13th Street
C	3.8	365	Cross East Boulevard
D	5.0	474	Right turn onto Battleground Road
E	6.6	628	Right turn onto East X Street
F	8.3	794	Cross East Boulevard
G	13.3	1264	Cross Center Street
H	15.2	1447	Left turn onto Georgia Avenue
I	17.3	1645	Left turn onto San Augustine Avenue
J	18.3	1742	Passing Deer Park High School
K	19.6	1869	Cross Center Street
L	23.9	2271	Right turn onto East Boulevard
M	25.6	2433	Right turn onto East P Street
N	33.6	3195	Left turn onto Texas Avenue
O	34.1	3244	Left turn onto Pasadena Boulevard
P	36.4	3458	Cross Center Street
Q	43.5	4136	Right turn onto Underwood Road
R	47.7	4539	Right turn onto Spencer Highway
S	48.3	4593	End mobile monitoring on Spencer Highway
T	48.8	4642	Start ambient
U	49.9	4742	End ambient
V	51.4	4889	Start 30 mL/min spike
W	52.4	4986	End 30 mL/min spike

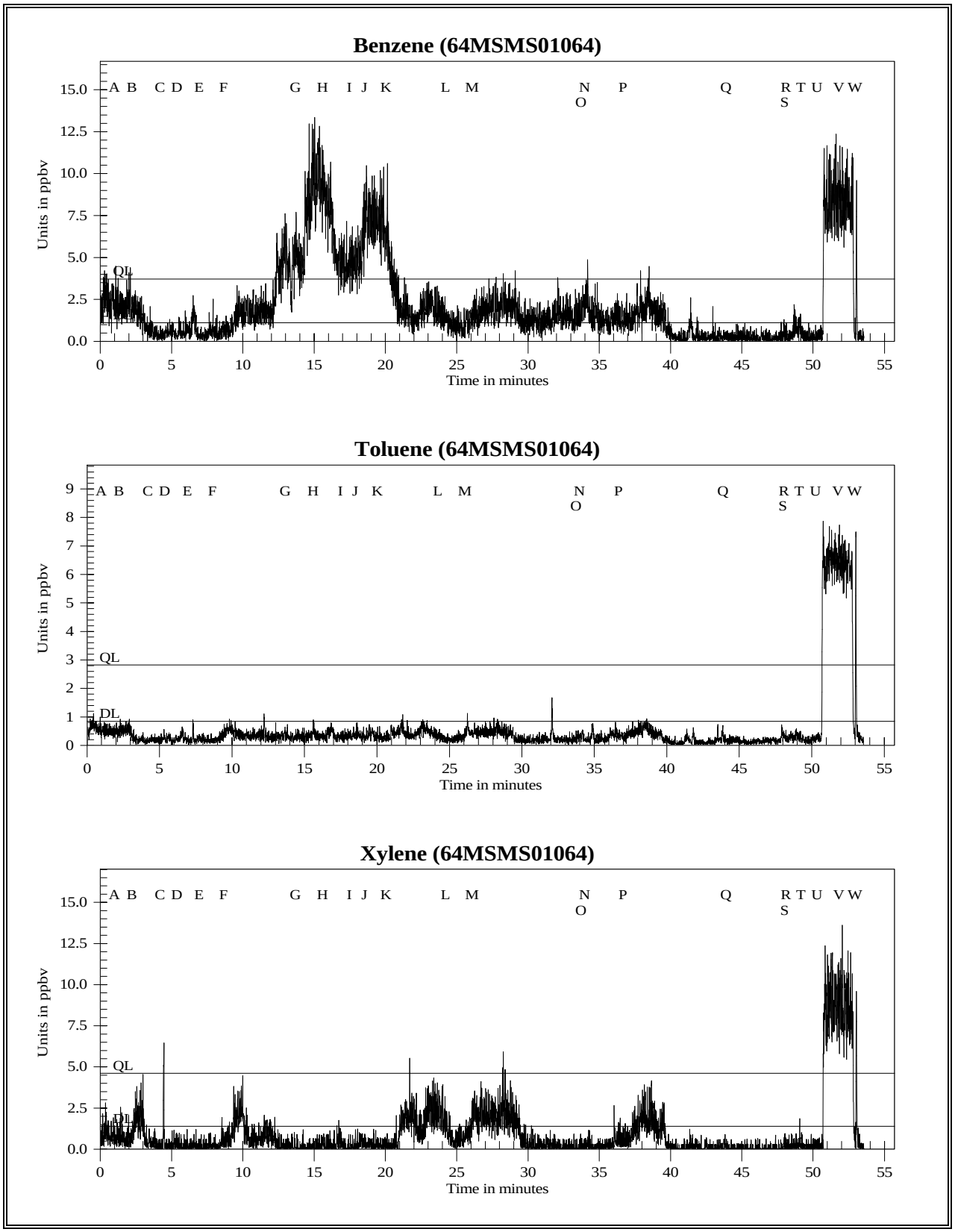


Figure 222c Monitoring Deer Park Three in ppbv for Benzene, Toluene, and Xylenes

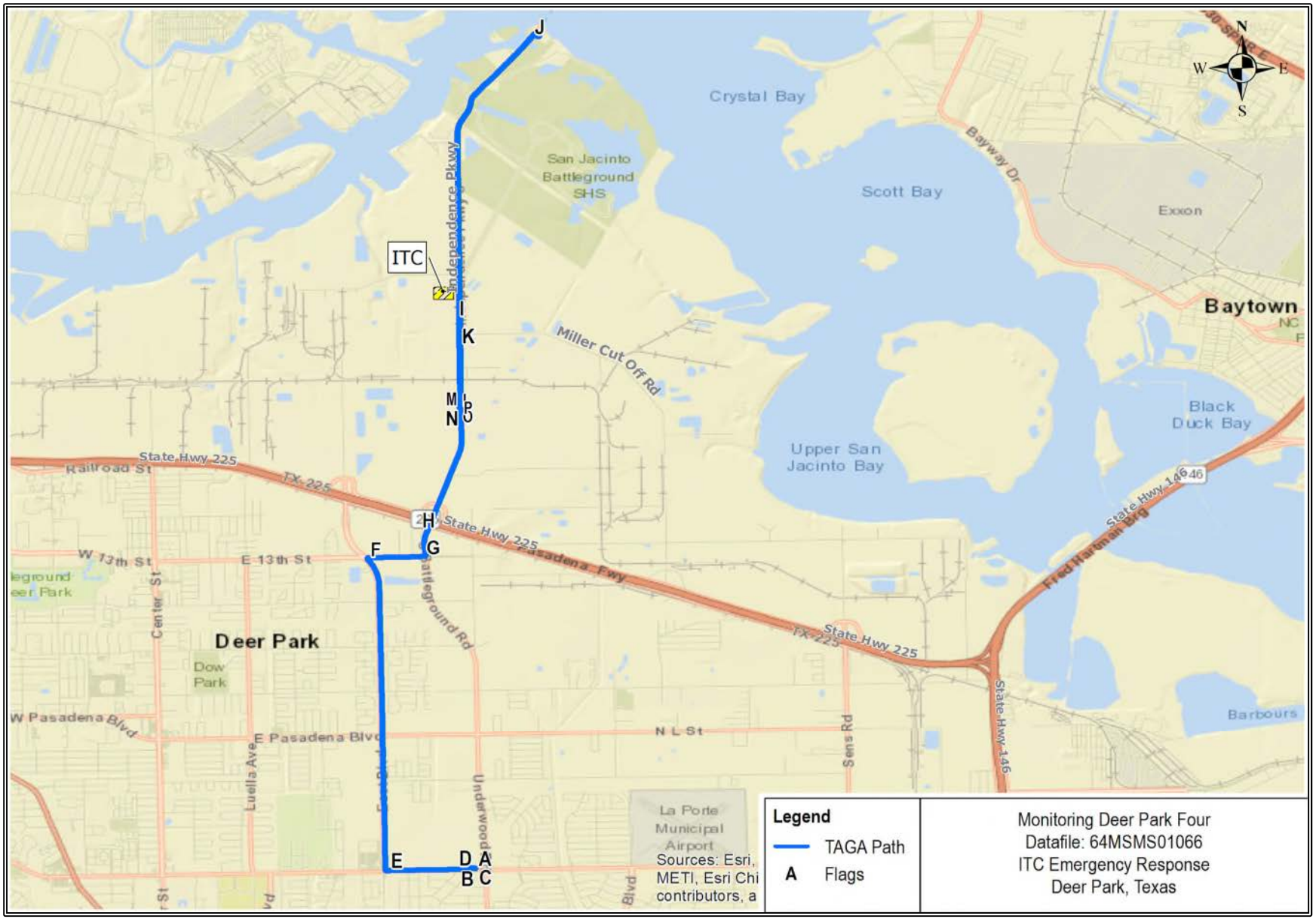


Figure 223a Monitoring Deer Park Four Path, 64MSMS01066

Figure 223b

TAGA File Event Summary
File: 64MSMS01066 Acquired on 26 April 2019 at 14:02:40
Title: Monitoring Deer Park Four

Flag	Time	Sequence	Description
A	1.8	169	Start mobile monitoring on Spencer Highway
B	23.1	2194	Stationary on Spencer Highway
C	30.3	2886	Resume mobile monitoring on Spencer Highway
D	31.0	2946	Continuing onto Spencer Highway
E	32.2	3059	Right turn onto East Boulevard
F	39.4	3745	Right turn onto East 13th Street
G	40.6	3865	Left turn onto Battleground Road
H	41.8	3973	Continuing onto Independence Parkway
I	48.2	4582	Cross Miller Cut-Off Road
J	55.6	5285	U-turn on Independence Parkway at Juan Seguin Park
K	65.9	6264	Cross Miller Cut-Off Road
L	68.1	6477	End mobile monitoring on Independence Parkway
M	68.5	6516	Start ambient
N	69.6	6614	End ambient
O	71.3	6776	Start 30 mL/min spike
P	72.3	6873	End 30 mL/min spike

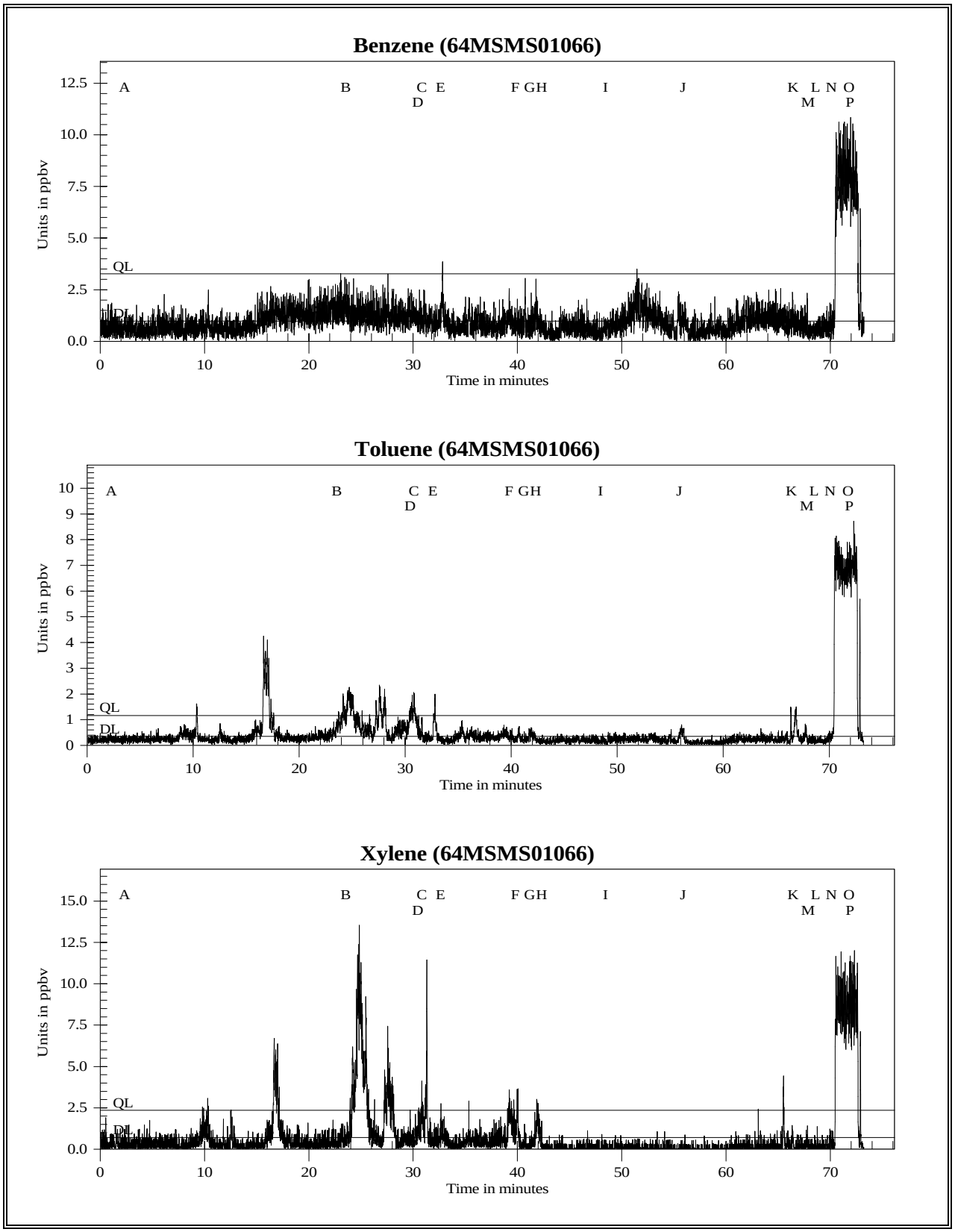


Figure 223c Monitoring Deer Park Four in ppbv for Benzene, Toluene, and Xylenes

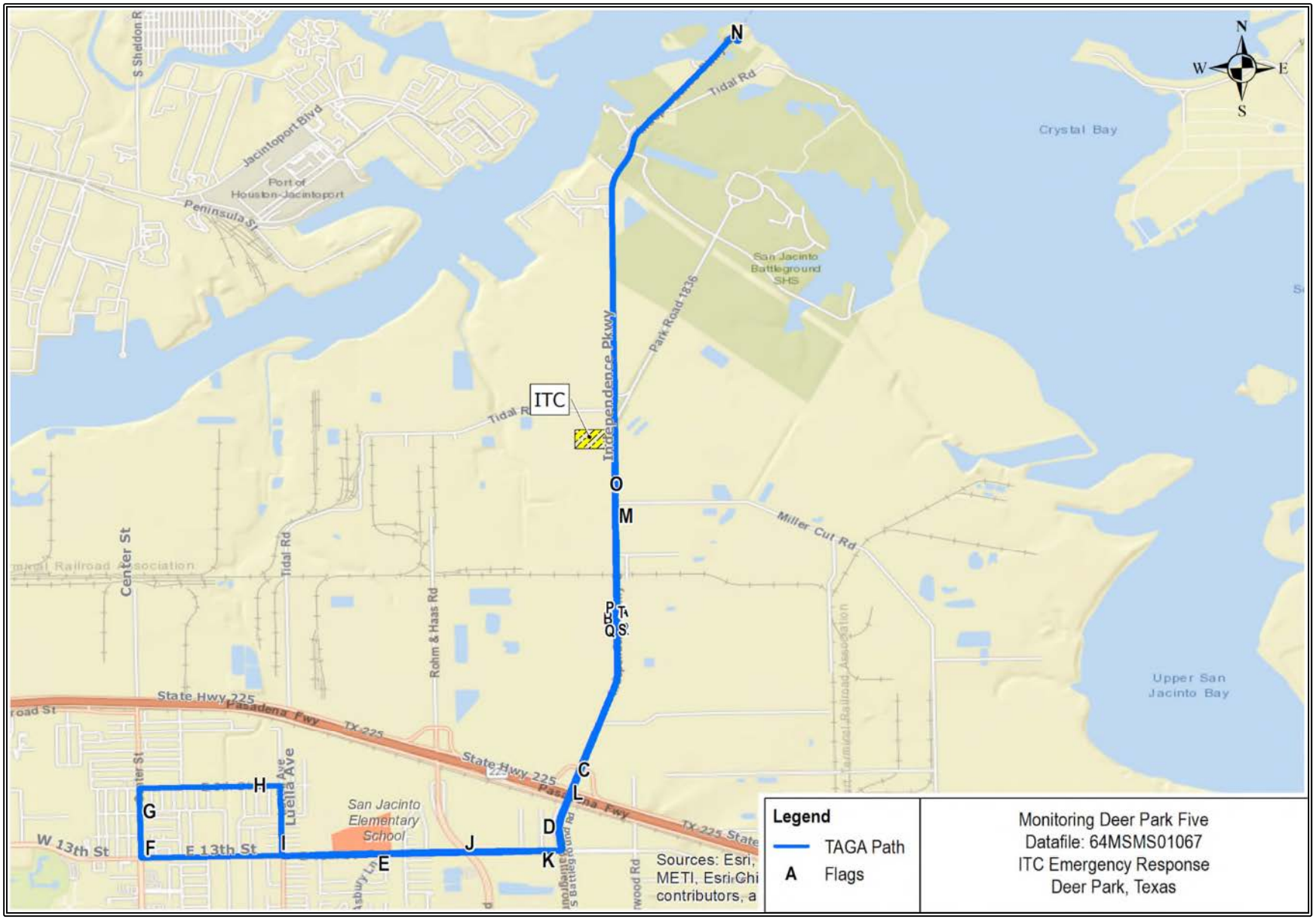


Figure 224a Monitoring Deer Park Five Path, 64MSMS01067

Figure 224b

TAGA File Event Summary
File: 64MSMS01067 Acquired on 26 April 2019 at 15:18:03
Title: Monitoring Deer Park Five

Flag	Time	Sequence	Description
A	0.7	67	Start mobile monitoring on Independence Parkway
B	1.9	178	Continuing onto Independence Parkway
C	4.0	378	Continuing onto Battleground Road
D	4.6	436	Right turn onto East 13th Street
E	7.9	749	Passing San Jacinto Elementary School
F	12.2	1157	Right turn onto Center Street
G	13.7	1302	Right turn onto East 8th Street
H	24.9	2365	Right turn onto Luella Avenue
I	29.7	2821	Left turn onto East 13th Street
J	33.6	3195	Cross East Boulevard
K	35.3	3358	Left turn onto Battleground Road
L	37.5	3569	Continuing onto Independence Parkway
M	42.4	4029	Cross Miller Cut-Off Road
N	51.4	4884	U-turn on Independence Parkway at Juan Seguin Park
O	60.4	5743	Cross Miller Cut-Off Road
P	62.6	5954	End mobile monitoring on Independence Parkway
Q	63.0	5989	Start ambient
R	64.0	6084	End ambient
S	65.3	6207	Start 30 mL/min spike
T	66.3	6302	End 30 mL/min spike

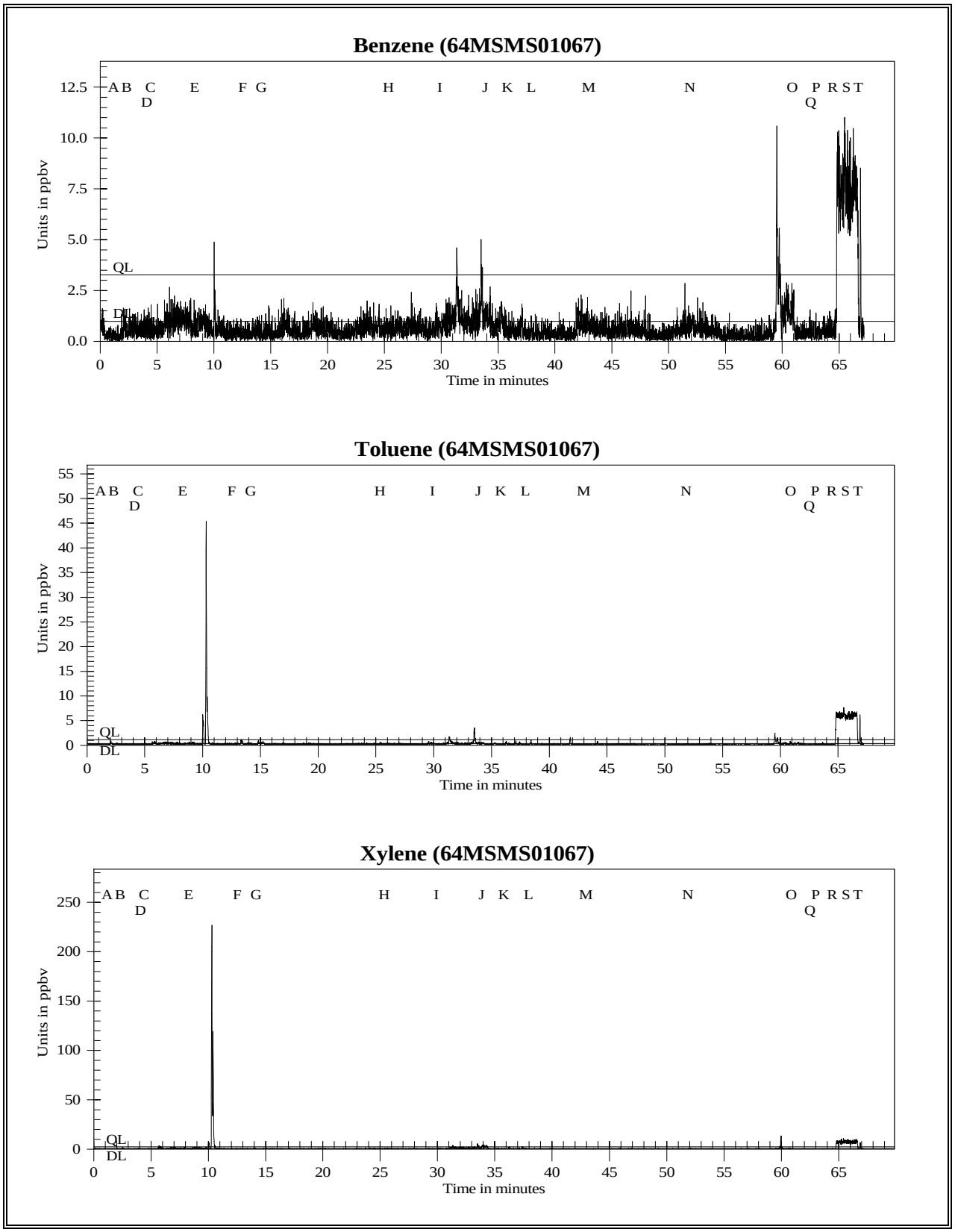


Figure 224c Monitoring Deer Park Five in ppbv for Benzene, Toluene, and Xylenes

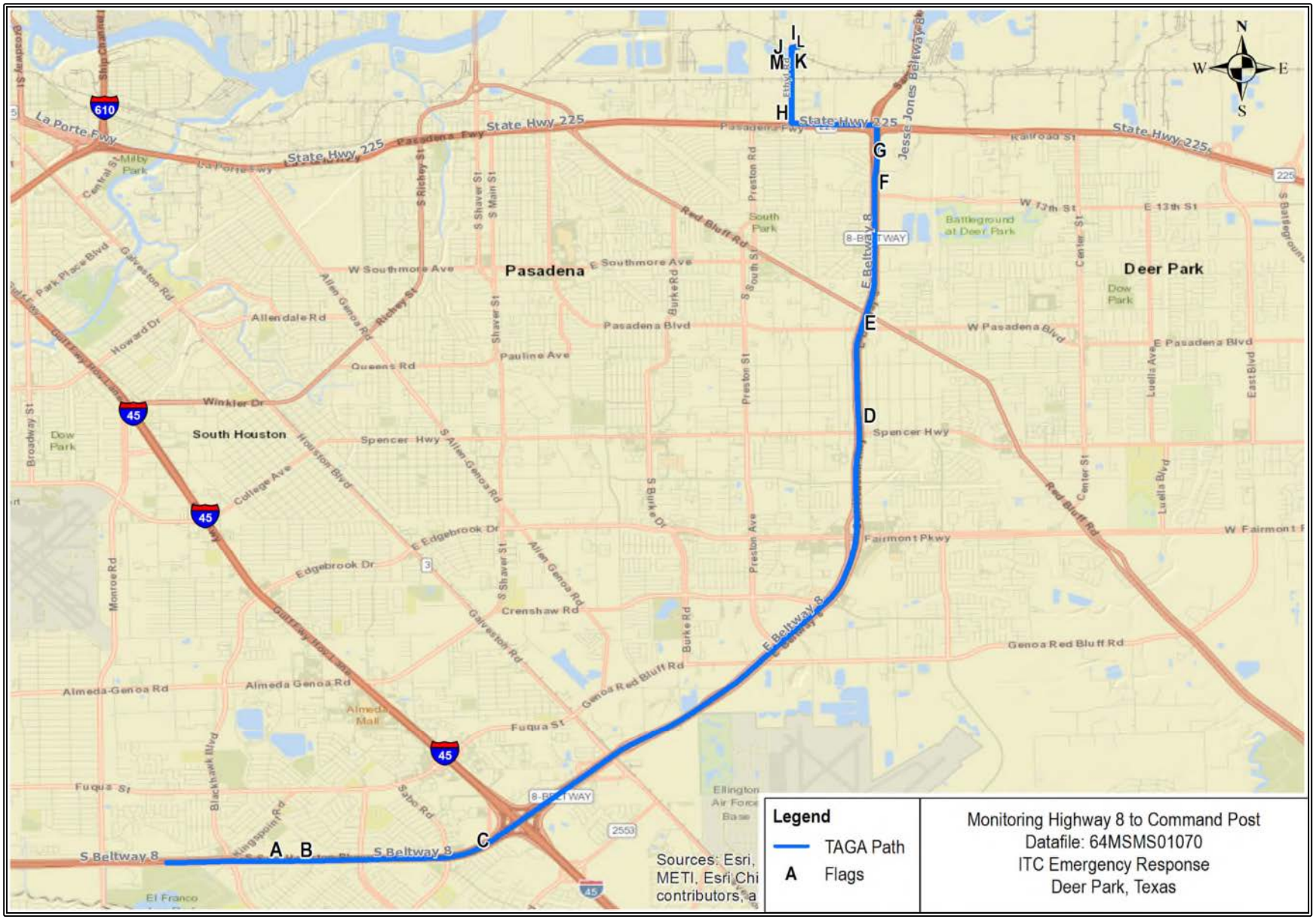


Figure 225a Monitoring Highway 8 to Command Post Path, 64MSMS01070

Figure 225b

TAGA File Event Summary
File: 64MSMS01070 Acquired on 27 April 2019 at 08:07:19
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	1.2	118	Start mobile monitoring on Highway 8 North
B	1.5	140	Continuing onto Highway 8 North
C	2.9	275	Cross Highway 45
D	7.6	728	Cross Spencer Highway
E	8.3	793	Cross Pasadena Boulevard
F	9.7	921	Exit onto Highway 8 Service Road
G	11.0	1048	Left turn onto Pasadena Freeway Frontage Road
H	12.1	1151	Right turn onto Ethyl Road
I	15.5	1479	End mobile monitoring at EPA Command Post
J	15.8	1501	Start ambient
K	16.8	1599	End ambient
L	18.8	1791	Start 30 mL/min spike
M	19.8	1885	End 30 mL/min spike

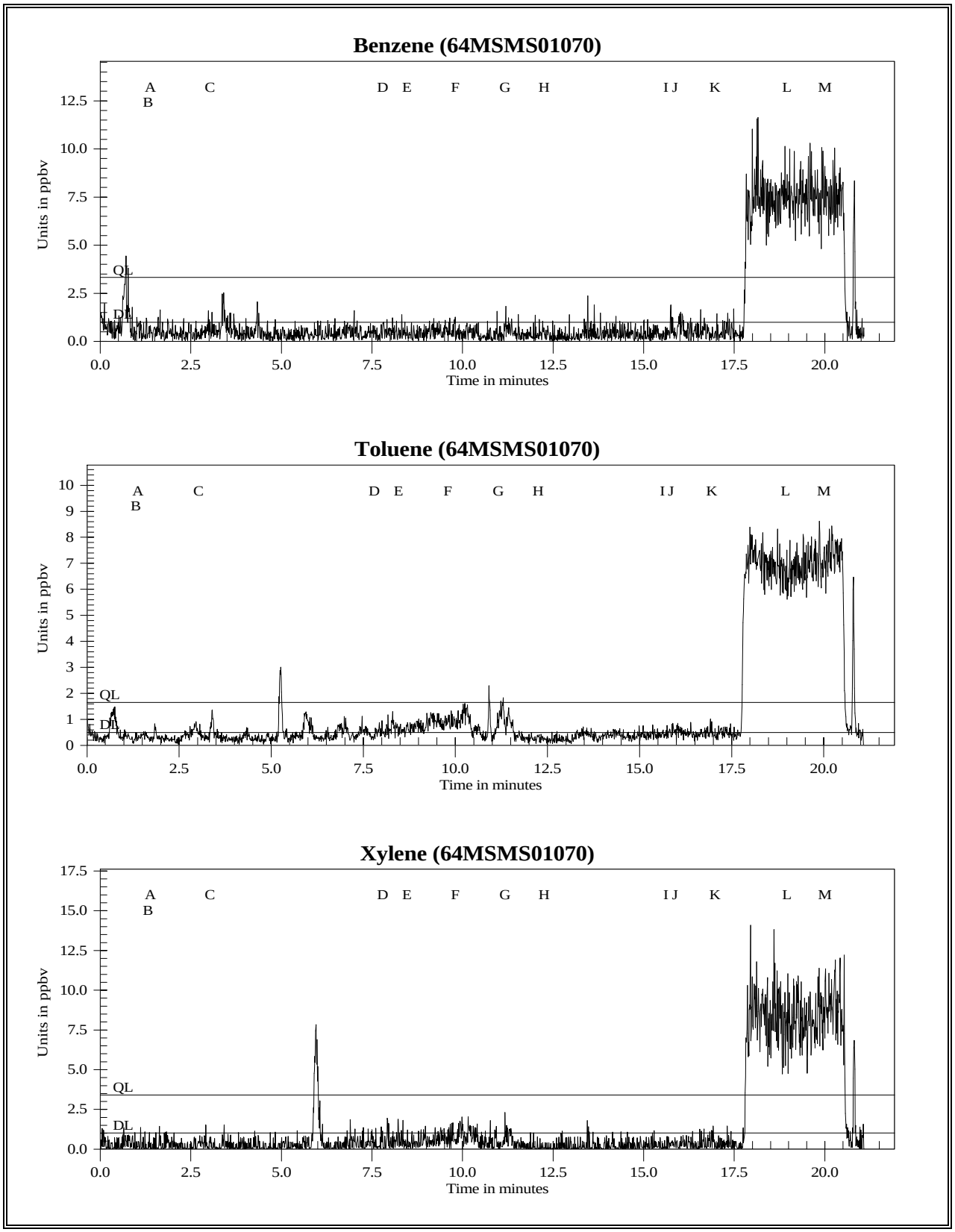


Figure 225c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

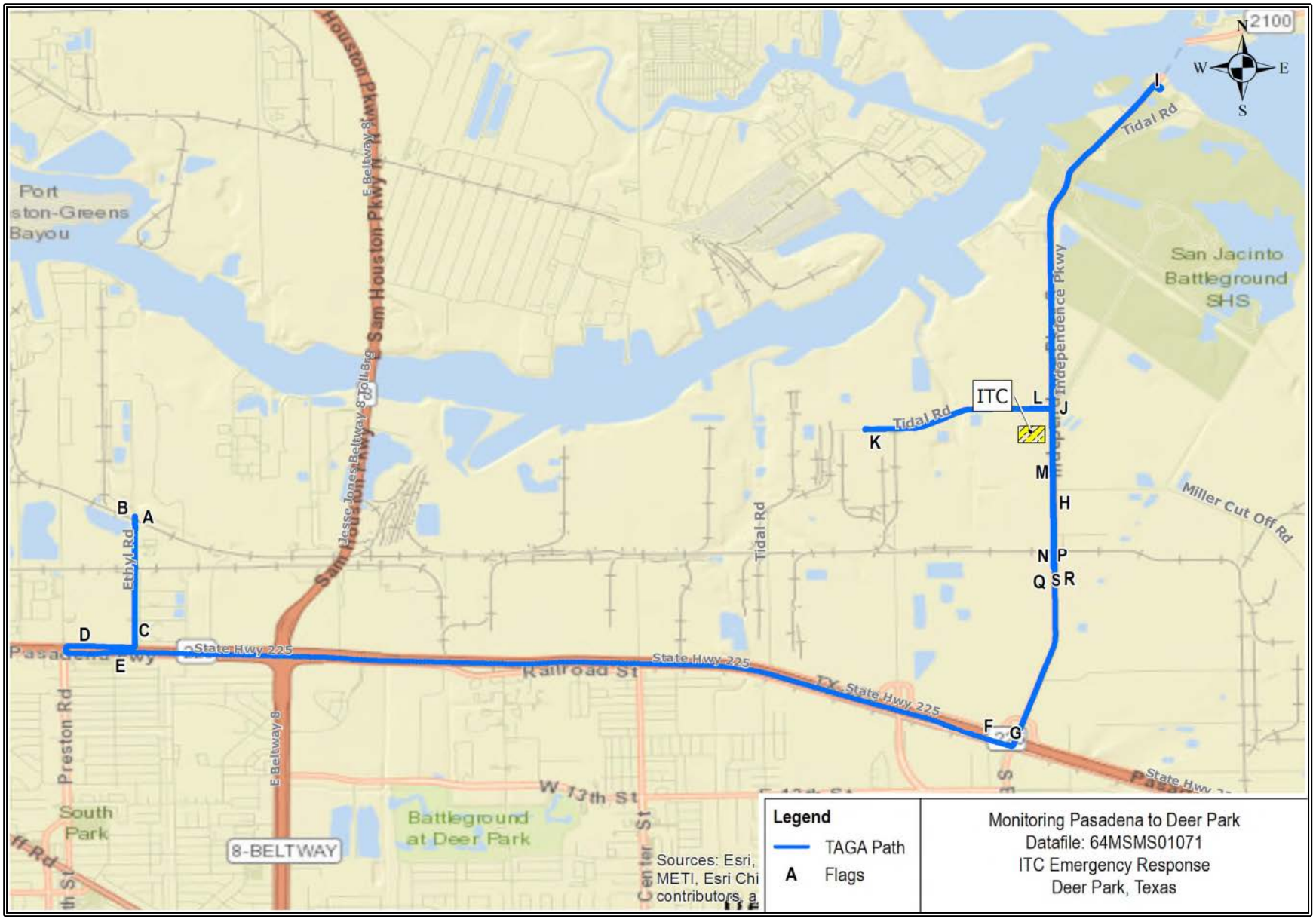


Figure 226a Monitoring Pasadena to Deer Park Path, 64MSMS01071

Figure 226b

TAGA File Event Summary
File: 64MSMS01071 Acquired on 27 April 2019 at 08:39:19
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	0.6	58	Start mobile monitoring at EPA Command Post
B	1.1	102	Continuing onto Ethyl Road
C	4.6	435	Right turn onto Pasadena Freeway Frontage Road
D	5.3	509	U-turn on Pasadena Freeway Frontage Road at Preston Road
E	6.0	574	Merge onto Highway 225 East
F	10.2	967	Exit onto Pasadena Freeway Frontage Road
G	10.4	988	Left turn onto Independence Parkway
H	14.1	1341	Cross Miller Cut-Off Road
I	20.9	1986	U-turn on Independence Parkway at Juan Seguin Park
J	27.4	2606	Right turn onto Tidal Road
K	33.2	3157	U-turn on Tidal Road
L	38.6	3666	Right turn onto Independence Parkway
M	40.3	3834	Cross Miller Cut-Off Road
N	42.3	4027	End mobile monitoring on Independence Parkway
P	43.2	4108	Start ambient
Q	44.3	4214	End ambient
R	45.4	4317	Start 30 mL/min spike
S	46.5	4417	End 30 mL/min spike

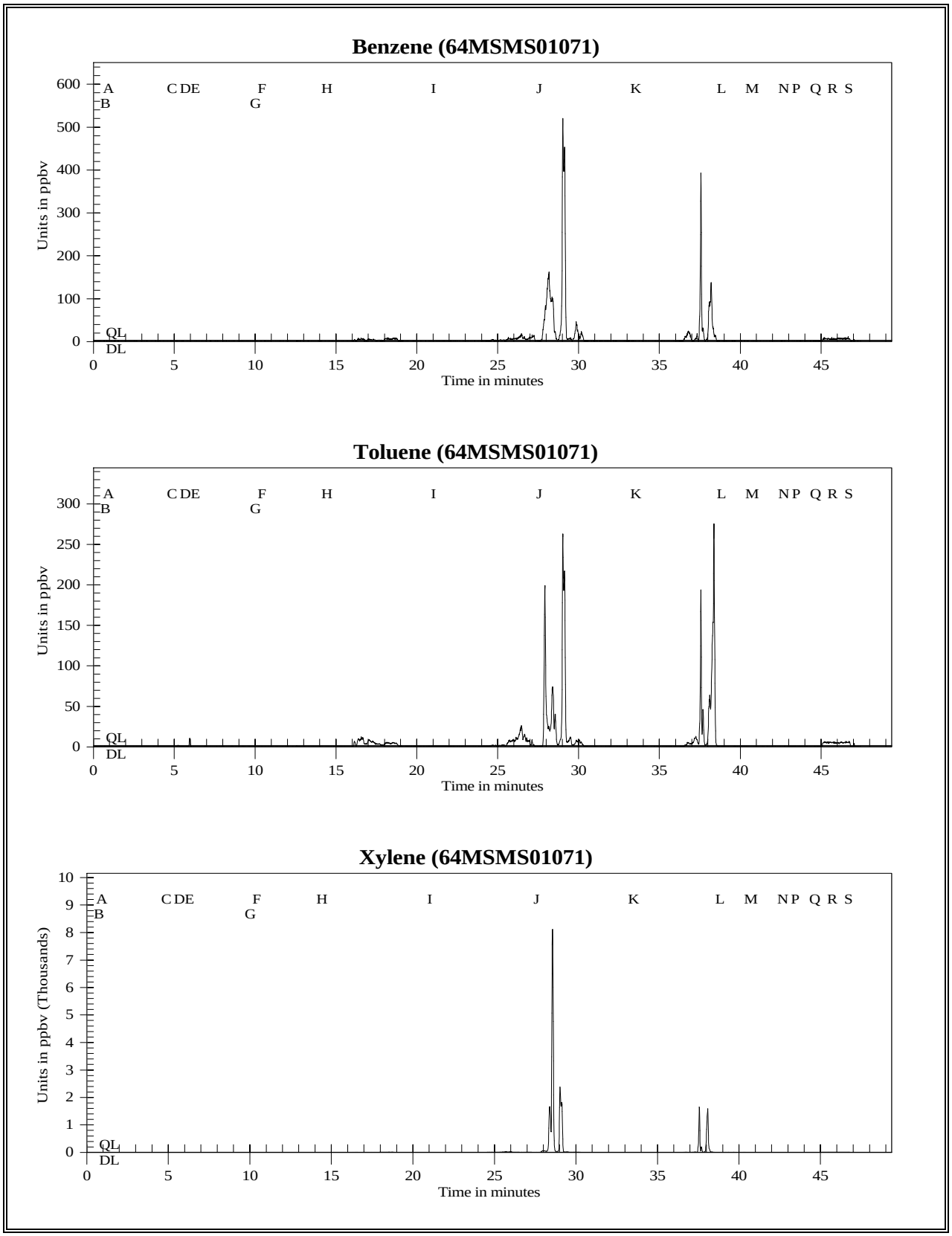


Figure 226c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

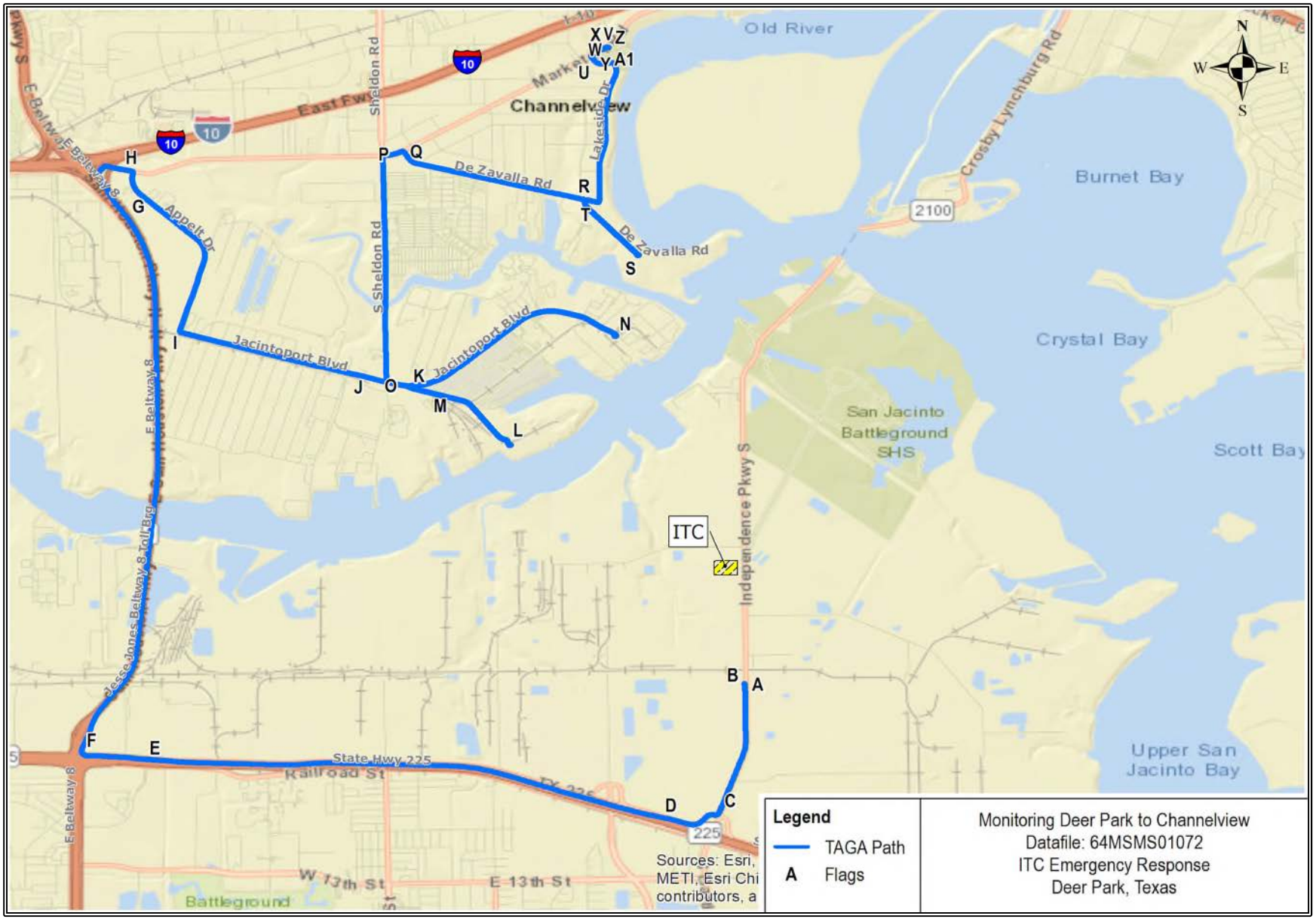


Figure 227a Monitoring Deer Park to Channelview Path, 64MSMS01072

Figure 227b

TAGA File Event Summary
File: 64MSMS01072 Acquired on 27 April 2019 at 09:29:31
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	0.7	69	Start mobile monitoring on Independence Parkway
B	1.2	118	Continuing mobile monitoring on Independence Parkway
C	3.3	314	Right turn onto Pasadena Freeway Frontage Road
D	4.1	389	Merge onto Highway 225 West
E	7.3	698	Exit onto Pasadena Freeway Frontage Road
F	7.8	742	Right turn onto Highway 8 North
G	12.5	1192	Right turn onto Market Street
H	13.9	1325	Right turn onto Appelt Drive
I	19.3	1840	Left turn onto Jacintoport Boulevard
J	22.7	2160	Cross Sheldon Road
K	23.1	2200	Right turn onto San Jacinto Boulevard
L	33.5	3189	U-turn on San Jacinto Boulevard/Peninsula Street
M	38.0	3612	Right turn onto Jacintoport Boulevard
N	42.8	4071	U-turn on Jacintoport Boulevard
O	49.0	4657	Right turn onto Sheldon Road
P	53.6	5096	Right turn onto Market Street
Q	54.0	5138	Right turn onto Dezavala Road
R	57.1	5426	Right turn to continue onto Dezavala Road
S	60.1	5710	U-turn on Dezavala Road
T	64.0	6082	Right turn onto Lakeside Drive
U	67.5	6421	Right turn onto Market Street
V	68.0	6467	Right turn into River Terrace Park
W	68.5	6510	End mobile monitoring at River Terrace Park
X	68.6	6524	Start ambient
Y	69.6	6619	End ambient
Z	70.8	6730	Start 30 mL/min spike
A1	71.8	6828	End 30 mL/min spike

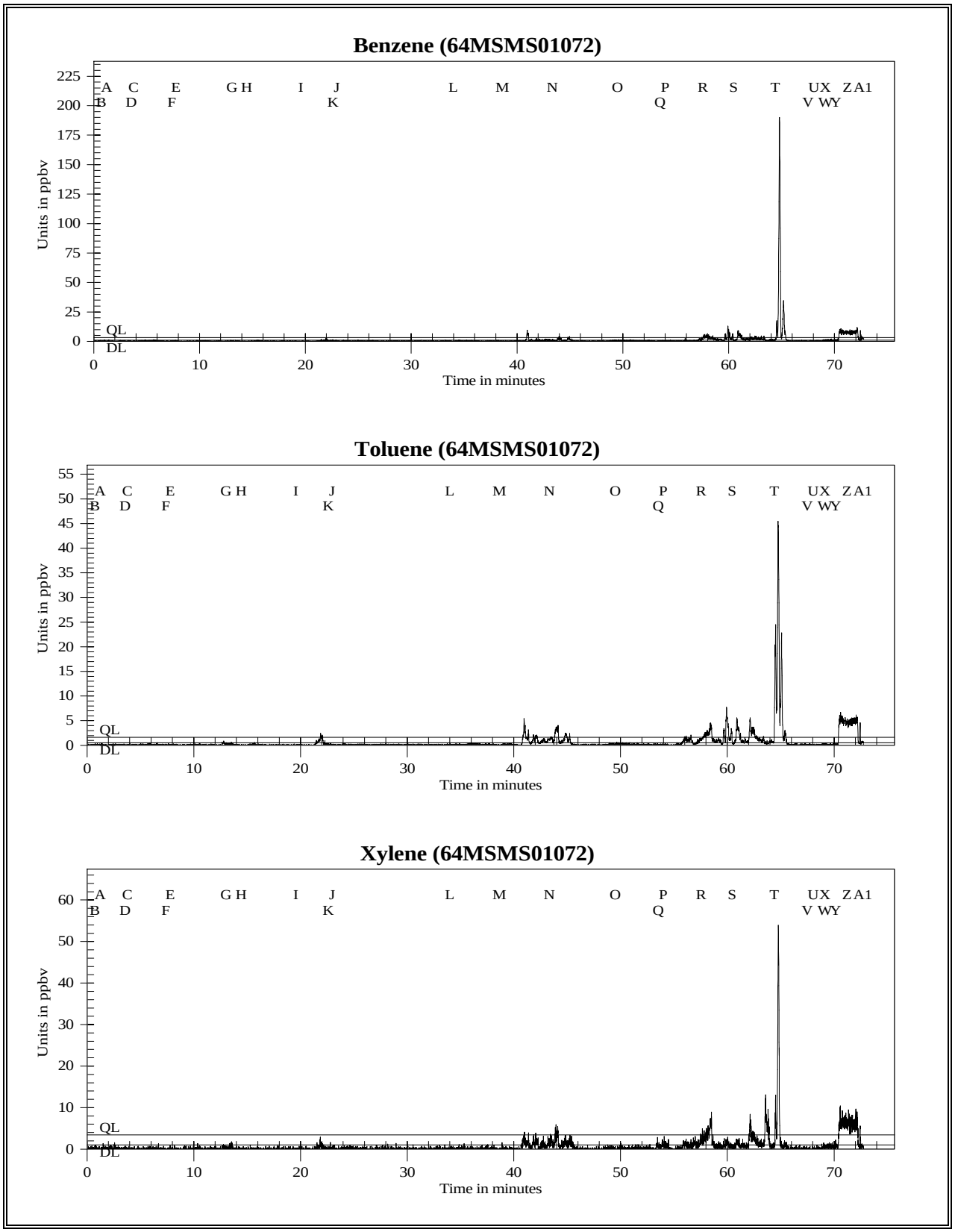


Figure 227c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

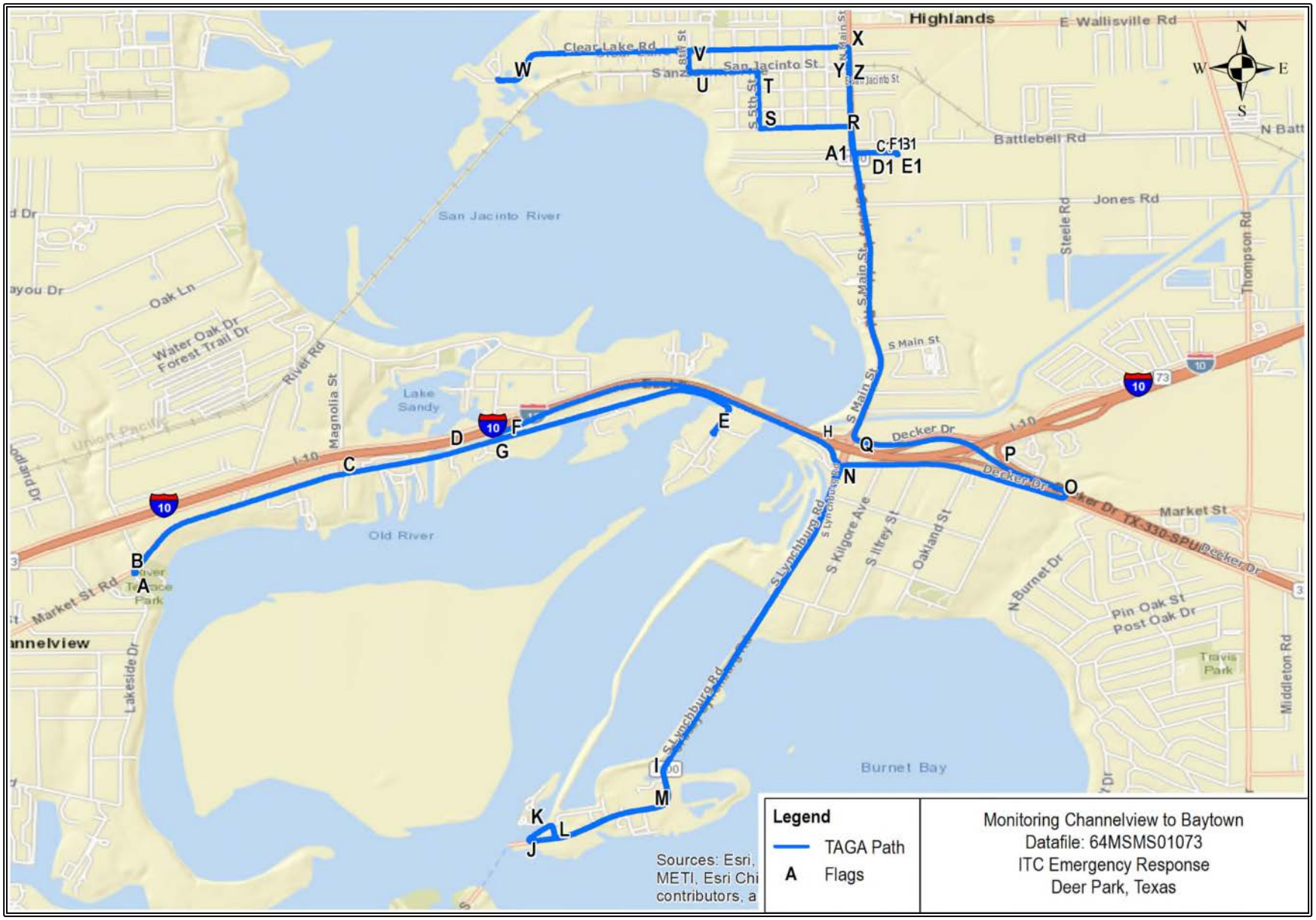


Figure 228a Monitoring Channelview to Baytown Path, 64MSMS01073

Figure 228b

TAGA File Event Summary
File: 64MSMS01073 Acquired on 27 April 2019 at 10:44:56
Title: Monitoring Channelview to Baytown

Flag	Time	Sequence	Description
A	0.6	58	Start mobile monitoring River Terrace Park
B	2.0	191	Continuing onto Market Street
C	5.0	479	Cross Magnolia Street
D	6.9	661	Cross Monmouth Street
E	10.5	1002	U-turn on Market Street
F	15.1	1435	Right turn onto Monmouth Street
G	15.5	1473	Right turn onto Highway 10 East
H	17.2	1634	Right turn onto Independence Parkway North
I	21.9	2086	Right turn to continue on Independence Parkway North
J	23.7	2251	Right turn onto Lynchburg Road at Lynchburg Ferry
K	24.2	2306	Right turn onto Crokett Street
L	24.7	2347	Left turn onto Independence Parkway North
M	26.5	2525	Left turn to continue on Independence Parkway North
N	30.5	2896	Right turn onto Decker Drive
O	32.2	3065	U-turn on Decker Drive
P	33.1	3149	Merge onto Highway 330 South
Q	35.2	3346	Right turn onto Main Street
R	38.6	3669	Left turn onto Avenue E
S	40.0	3807	Right turn onto 5th Street
T	41.5	3943	Left turn onto San Jacinto Street
U	42.6	4054	Right turn onto North 8th Street
V	43.7	4157	Left turn onto Clear Lake Road
W	46.9	4463	U-turn on Clear Lake Road
X	54.1	5144	Right turn onto Main Street
Y	54.7	5203	Stationary at railroad crossing
Z	59.3	5640	Resume mobile monitoring at Main Street
A1	61.5	5848	Left turn onto Listi Lane
B1	62.5	5939	End mobile monitoring on Listi Lane
C1	62.7	5963	Start ambient
D1	63.8	6066	End ambient
E1	65.1	6187	Start 30 mL/min spike
F1	66.0	6280	End 30 mL/min spike

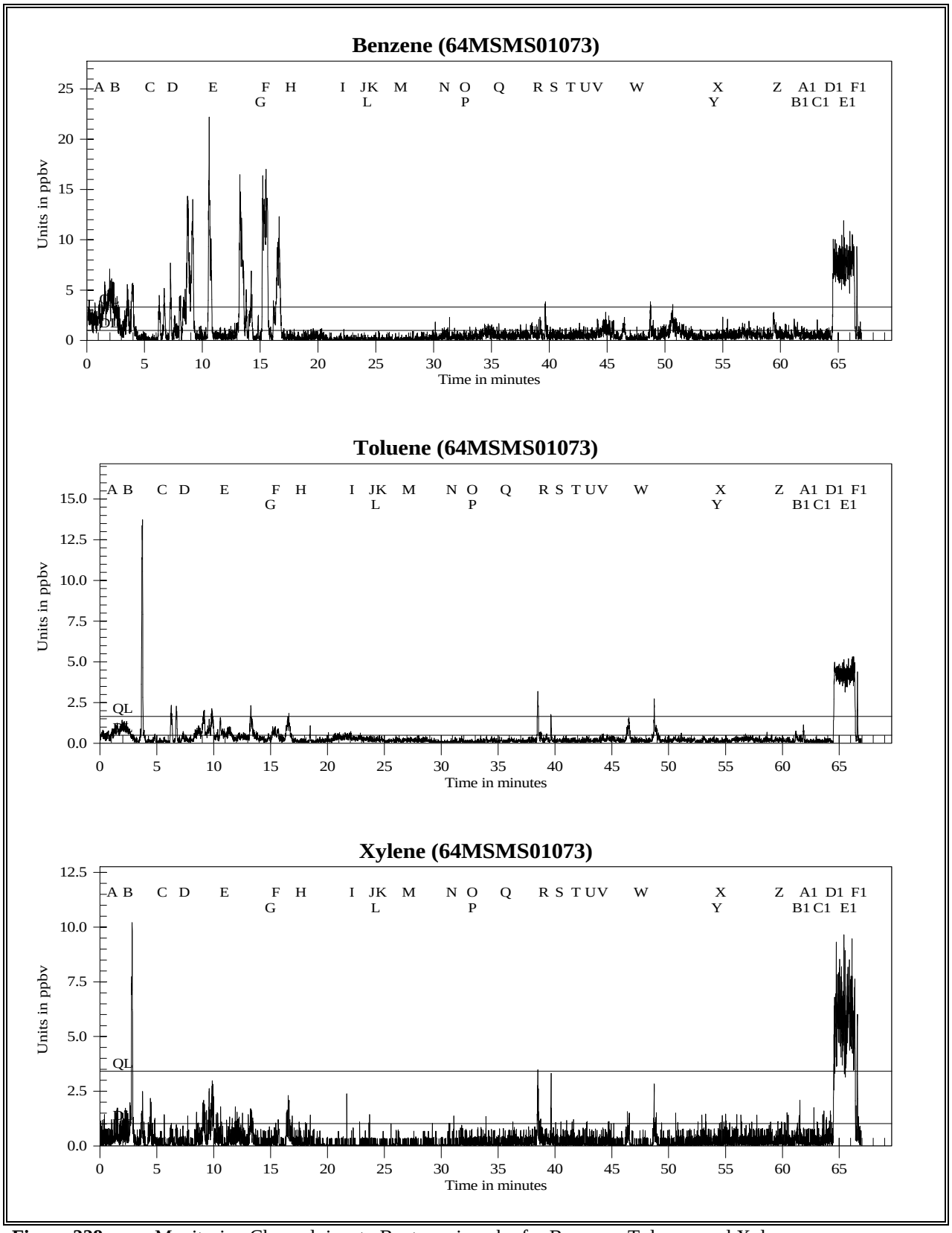


Figure 228c Monitoring Channelview to Baytown in ppbv for Benzene, Toluene, and Xylenes

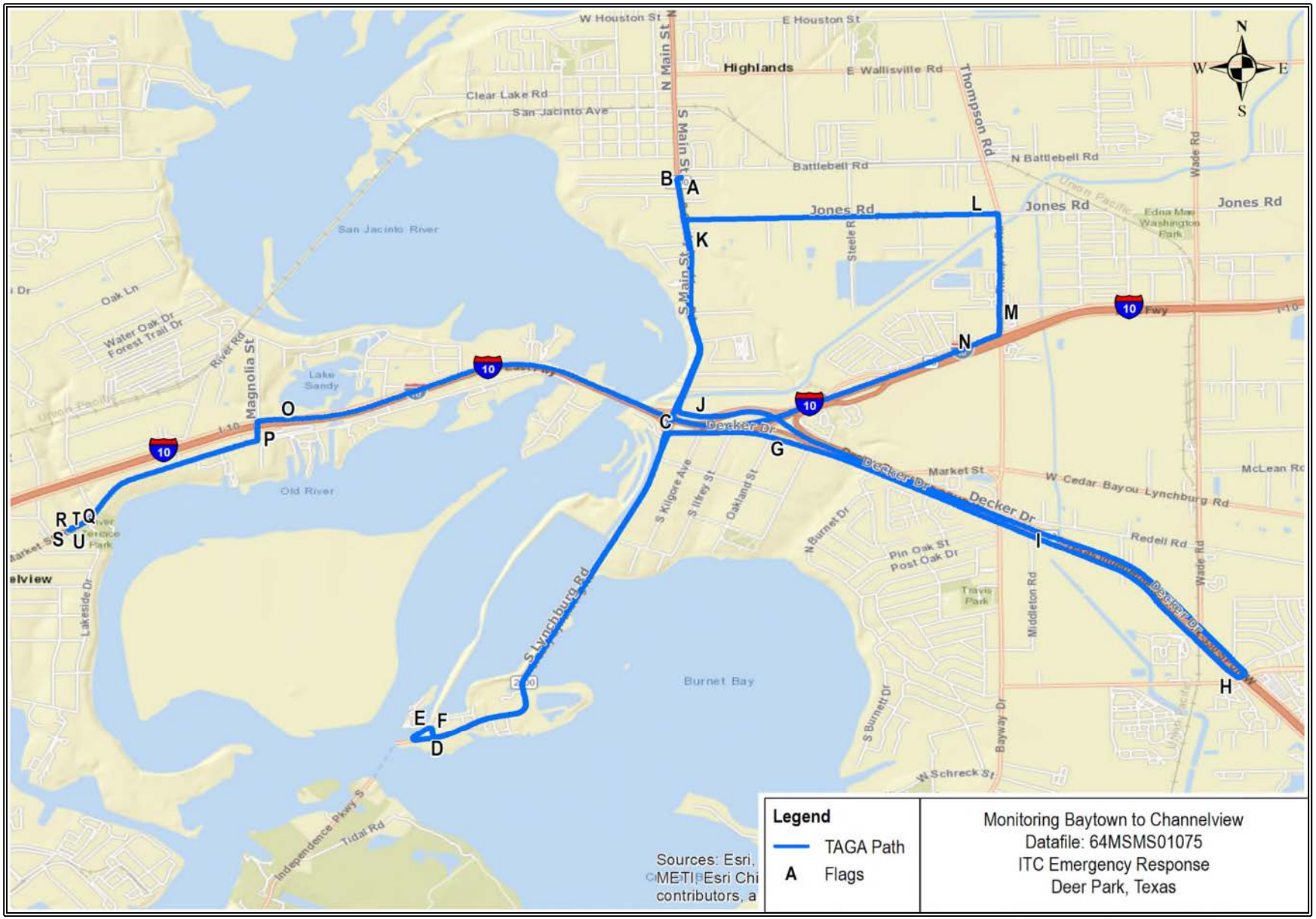


Figure 229a Monitoring Baytown to Channelview Path, 64MSMS01075

Figure 229b

TAGA File Event Summary
File: 64MSMS01075 Acquired on 27 April 2019 at 13:10:07
Title: Monitoring Baytown to Channelview

Flag	Time	Sequence	Description
A	0.5	48	Start mobile monitoring on Main street
B	1.6	151	Continuing onto Main street
C	9.3	888	Merge onto Independence Parkway North
D	14.7	1397	Right turn onto Lynchburg Road at Lynchburg Ferry
E	15.2	1449	Right turn onto Crokett Street
F	15.5	1479	Left turn onto Independence Parkway North
G	21.4	2038	Right turn onto Decker Drive
H	27.9	2658	U-turn on Decker Drive
I	30.2	2875	Merge onto Highway 330 North
J	32.9	3130	Right turn onto Main Street
K	34.8	3312	Right turn onto Jones Road
L	37.6	3580	Right turn onto Thompson Road
M	38.9	3702	Right turn onto Decker Drive
N	39.5	3758	Merge onto Highway 10 West
O	43.6	4143	Left turn onto Magnolia Street
P	44.2	4200	Right turn onto Market Street
Q	46.8	4447	End mobile monitoring at River Terrace Park
R	47.0	4467	Start ambient
S	48.0	4563	End ambient
T	49.5	4704	Start 30 mL/min spike
U	50.5	4800	End 30 mL/min spike

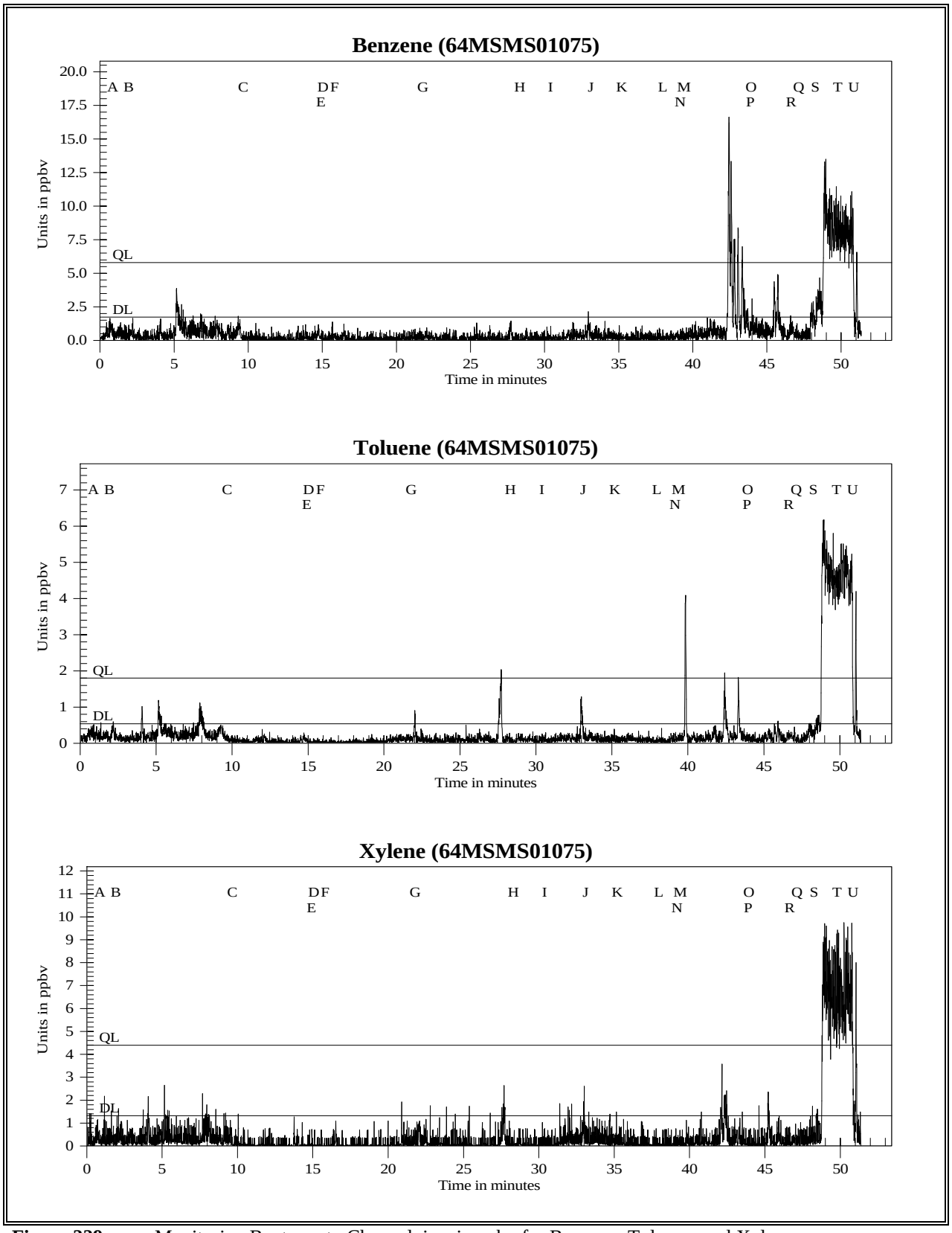


Figure 229c Monitoring Baytown to Channelview in ppbv for Benzene, Toluene, and Xylenes

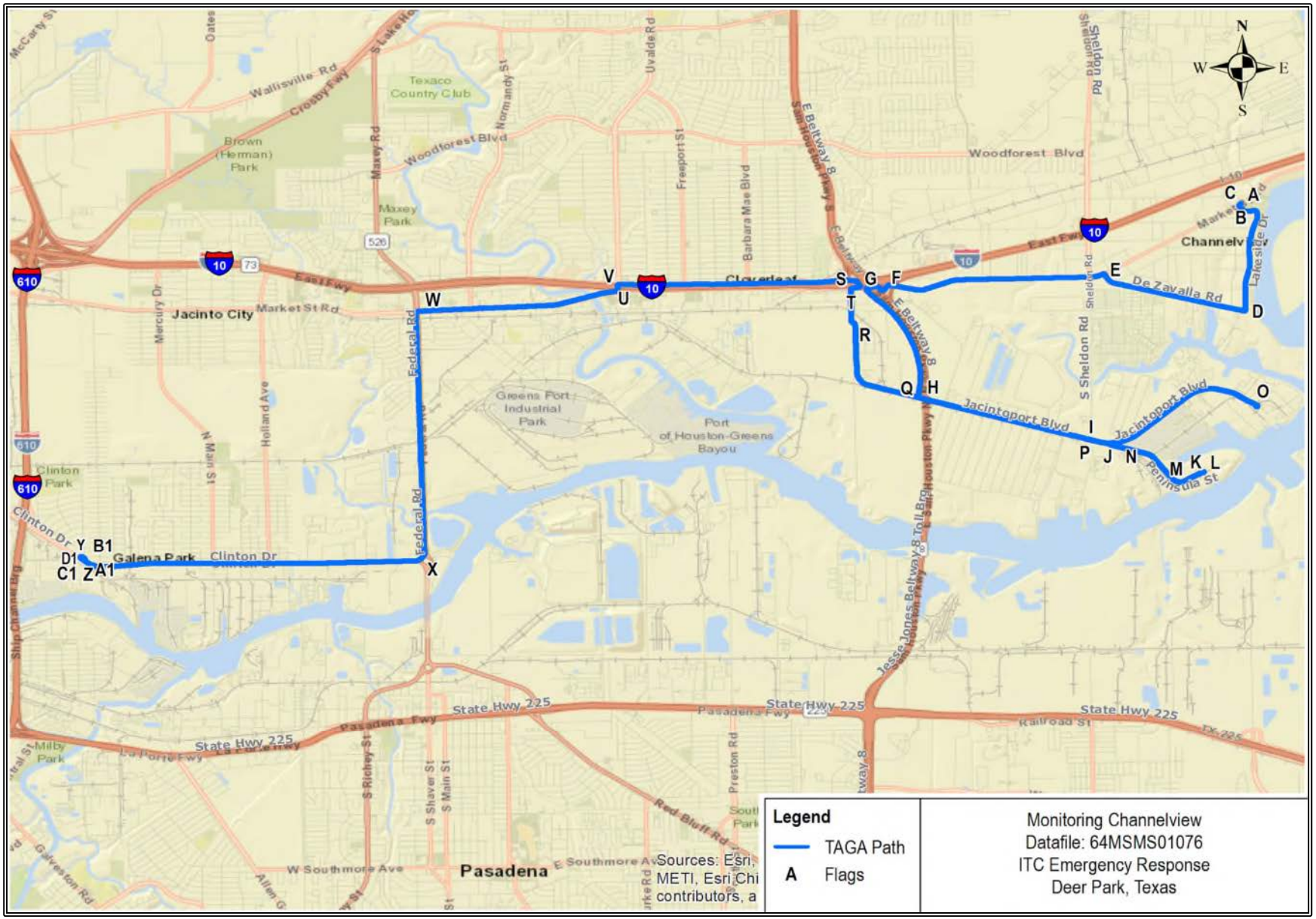


Figure 230a Monitoring Channelview Path, 64MSMS01076

Figure 230b

TAGA File Event Summary
File: 64MSMS01076 Acquired on 27 April 2019 at 14:05:35
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	0.7	69	Start mobile monitoring at River Terrace Park
B	1.4	138	Continuing onto Market Street
C	1.6	157	Left turn onto Lakeside Drive
D	4.7	444	Continuing onto Dezavala Road
E	6.8	650	Left turn onto Market Street
F	12.3	1168	Right turn onto Highway 8 Service Road
G	12.6	1199	U-turn on Highway 8 Service Road
H	14.6	1392	Left turn onto Jacintoport Boulevard
I	17.6	1671	Cross Sheldon Road
J	17.9	1704	Right turn onto San Jacinto Boulevard
K	21.0	2000	Continuing onto Peninsula Street
L	21.7	2065	U-turn on Peninsula Street
M	22.8	2167	Continuing onto San Jacinto Boulevard
N	25.6	2439	Right turn onto Jacintoport Boulevard
O	29.9	2839	U-turn on Jacintoport Boulevard
P	34.4	3269	Cross Sheldon Road
Q	38.0	3615	Cross Highway 8
R	43.1	4101	Merge onto Penn City Road
S	44.3	4217	Right turn onto Market Street
T	44.6	4244	Left turn onto East Freeway Service Road
U	49.9	4748	Left turn onto Uvalde Drive
V	50.2	4776	Right turn onto Market Street
W	55.3	5257	Left turn onto Federal Road
X	61.0	5797	Right turn onto Clinton Drive
Y	68.1	6475	Right turn onto Mascot Street
Z	68.7	6532	End mobile monitoring on Mascot Street
A1	69.3	6589	Start ambient
B1	70.4	6690	End ambient
C1	71.4	6793	Start 30 mL/min spike
D1	72.5	6893	End 30 mL/min spike

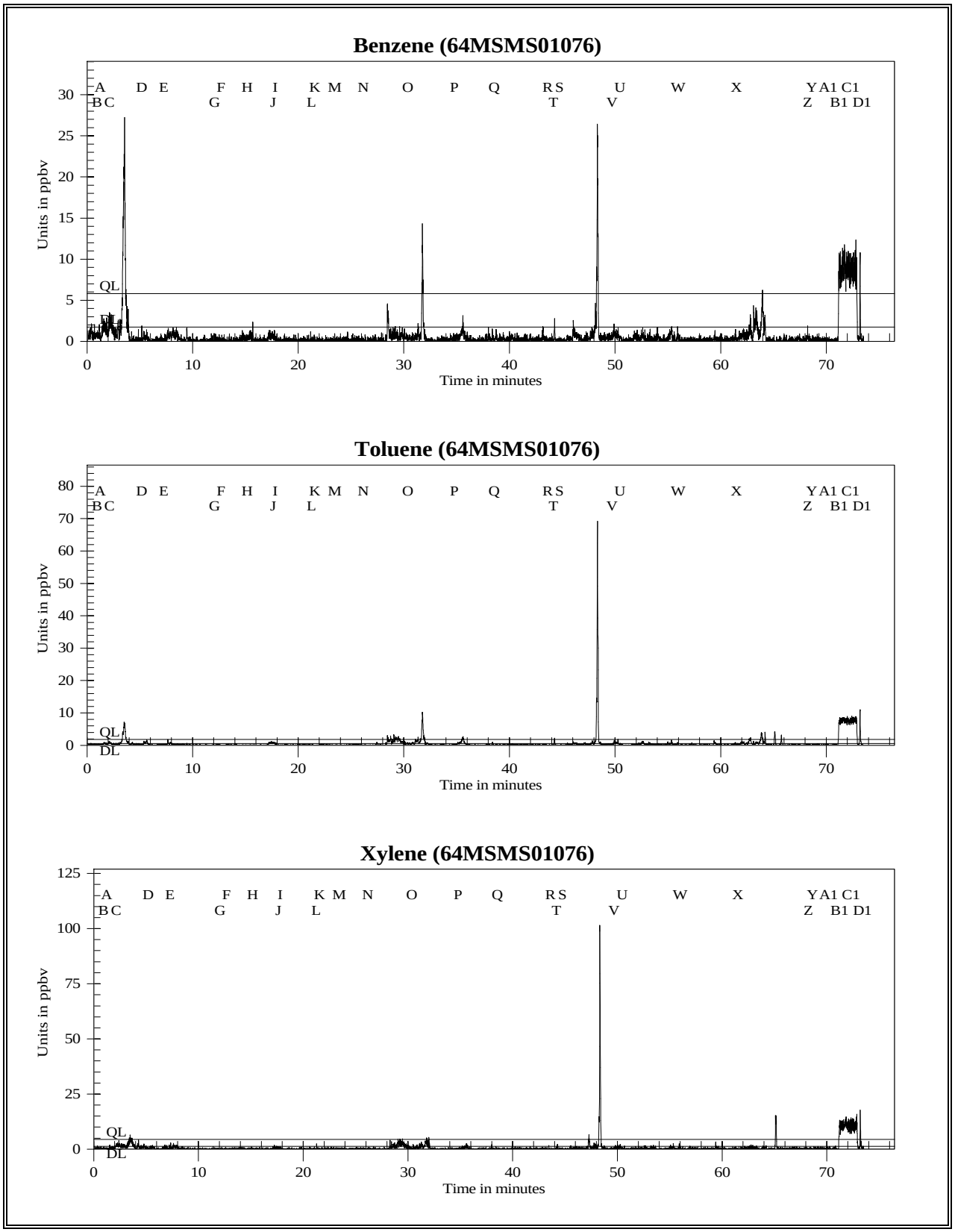


Figure 230c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

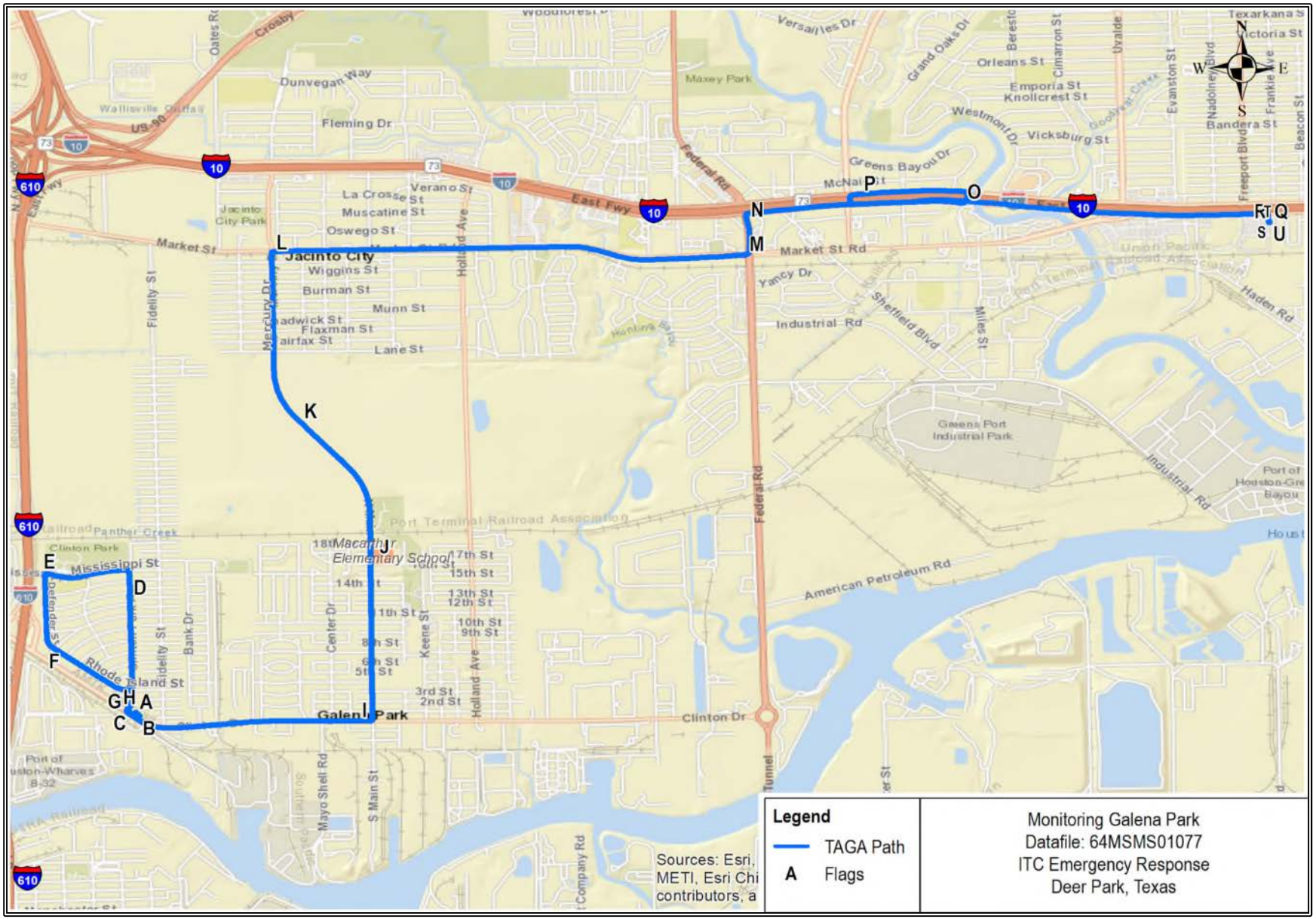


Figure 231a Monitoring Galena Park Path, 64MSMS01077

Figure 231b

TAGA File Event Summary
File: 64MSMS01077 Acquired on 27 April 2019 at 15:22:03
Title: Monitoring Galena Park

Flag	Time	Sequence	Description
A	0.7	67	Start mobile monitoring on Clinton Drive
B	1.3	121	Continuing onto Clinton Drive
C	1.7	164	Right turn onto Clinton Park Street
D	4.8	460	Left turn onto Mississippi Street
E	6.2	587	Left turn onto Defender Street
F	8.2	777	Merge onto Rhode Island Street
G	10.6	1008	Right turn onto Clinton Park Street
H	11.2	1070	Left turn onto Clinton Drive
I	15.0	1424	Left turn onto Main Street
J	18.6	1771	Passing MacArthur Elementary School
K	21.7	2065	Merge onto Mercury Drive
L	24.2	2304	Right turn onto Market Street
M	29.7	2827	Left turn onto Federal Road
N	30.3	2886	Right turn onto East Freeway Service Road
O	33.1	3146	U-turn on East Freeway Service Road
P	34.4	3274	U-turn on East Freeway Service Road
Q	40.2	3826	End mobile monitoring on East Freeway Service Road
R	40.5	3854	Start ambient
S	41.5	3949	End ambient
T	42.7	4060	Start 30 mL/min spike
U	43.7	4157	End 30 mL/min spike

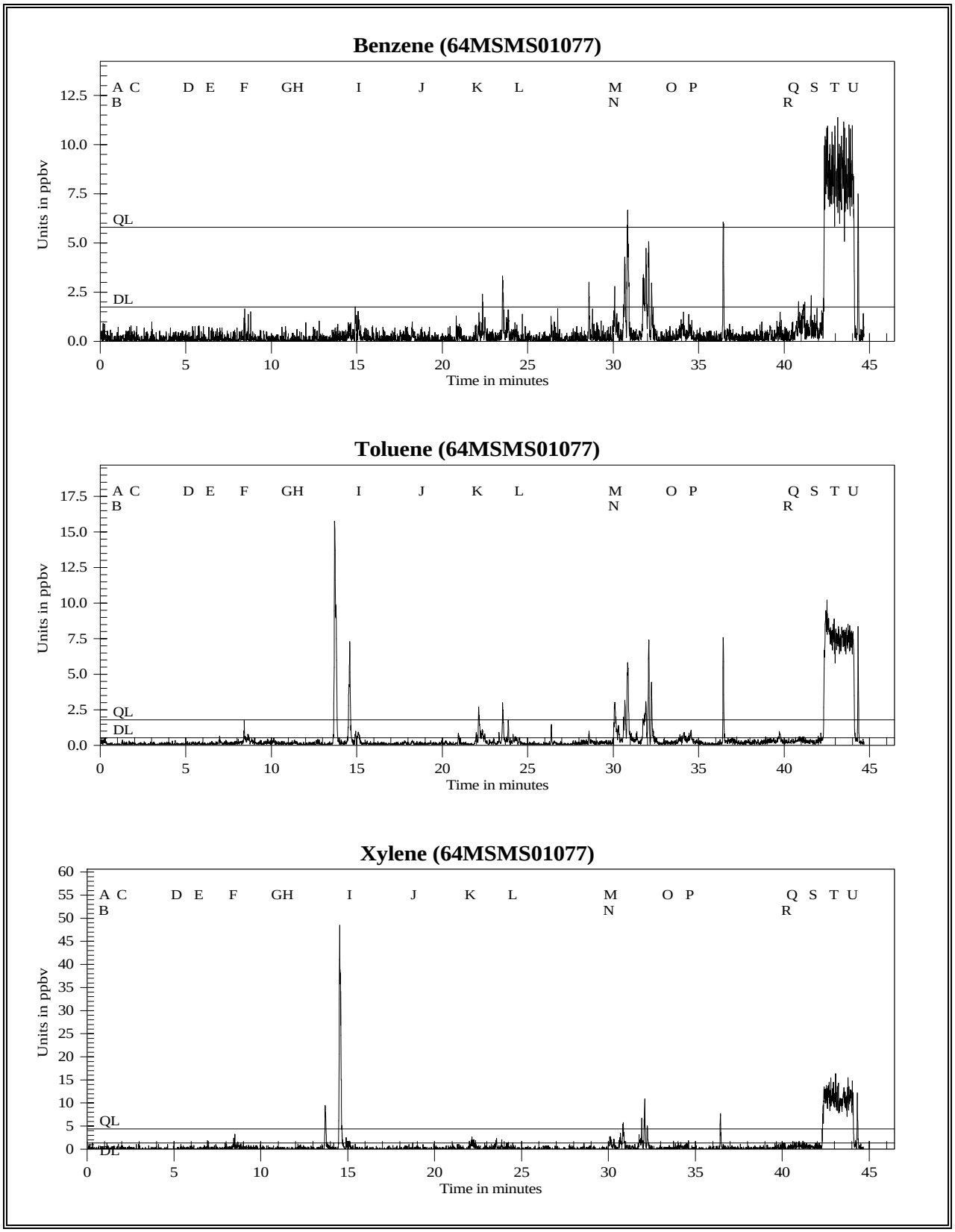


Figure 231c Monitoring Galena Park in ppbv for Benzene, Toluene, and Xylenes

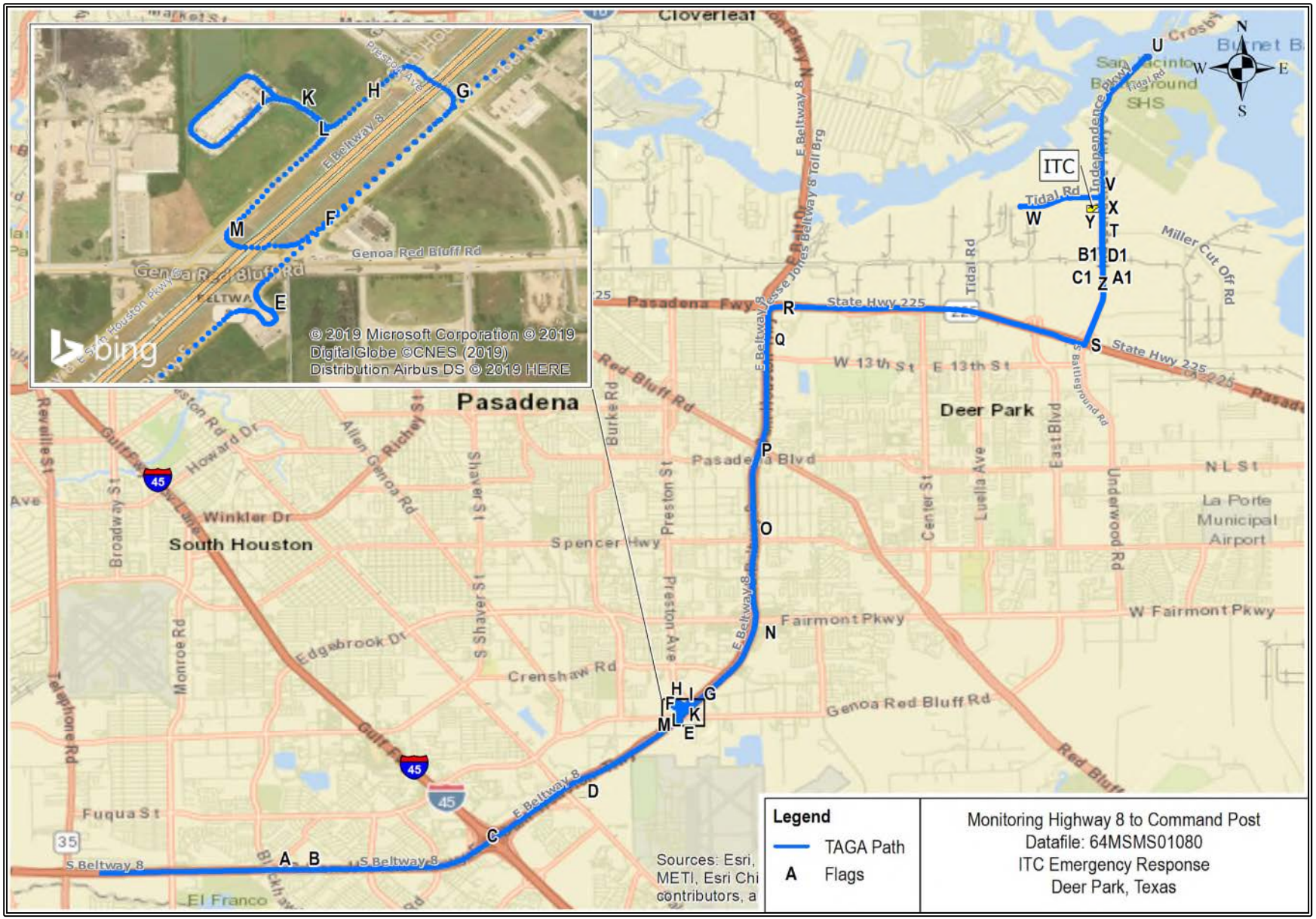


Figure 232a Monitoring Highway 8 to Command Post Path, 64MSMS01080

Figure 232b

TAGA File Event Summary
File: 64MSMS01080 Acquired on 28 April 2019 at 08:09:20
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	2.3	219	Start mobile monitoring on Highway 8 North
B	2.6	246	Continuing onto Highway 8 North
C	4.4	422	Cross Highway 45
D	5.8	555	Exit onto Highway 8 Service Road
E	7.8	747	Stationary on Highway 8 Service Road
F	11.5	1092	Right turn onto Red Bluff Road
G	11.8	1118	Left turn onto Preston Road
H	12.8	1219	Left turn onto Highway 8 Service Road
I	13.7	1305	End mobile monitoring on Highway 8 Service Road
K	15.3	1452	Resume mobile monitoring on Highway 8 Service Road
L	16.3	1555	Continuing onto Highway 8 Service Road
M	16.7	1593	U-turn on Highway 8 Service Road
N	20.0	1905	Cross Fairmont Parkway
O	21.3	2030	Cross Spencer Highway
P	22.5	2140	Cross Pasadena Boulevard
Q	24.2	2297	Merge onto Highway 8 Service Road
R	24.8	2358	Right turn onto Highway 225 East
S	29.9	2843	Left turn onto Independence Parkway
T	33.1	3144	Cross Miller Cut-Off Road
U	40.2	3826	U-turn on Independence Parkway at Juan Seguin Park
V	46.7	4440	Right turn onto Tidal Road
W	54.0	5134	U-turn on Tidal Road
X	59.2	5632	Right turn onto Independence Parkway
Y	60.8	5781	Cross Miller Cut-Off Road
Z	62.7	5958	End mobile monitoring on Independence Parkway
A1	63.0	5993	Start ambient
B1	64.1	6092	End ambient
C1	65.8	6260	Start 30 mL/min spike
D1	66.9	6358	End 30 mL/min spike

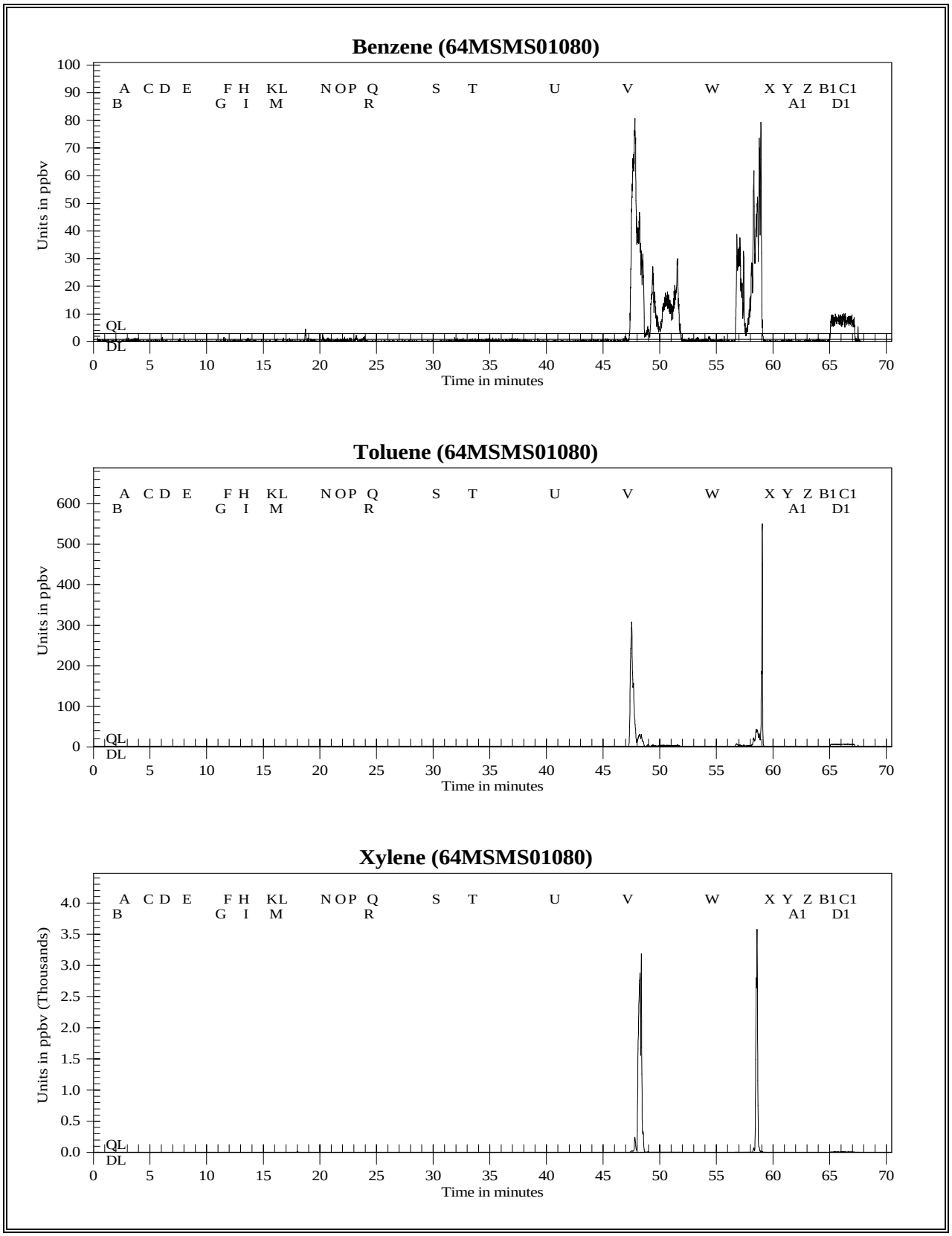


Figure 232c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

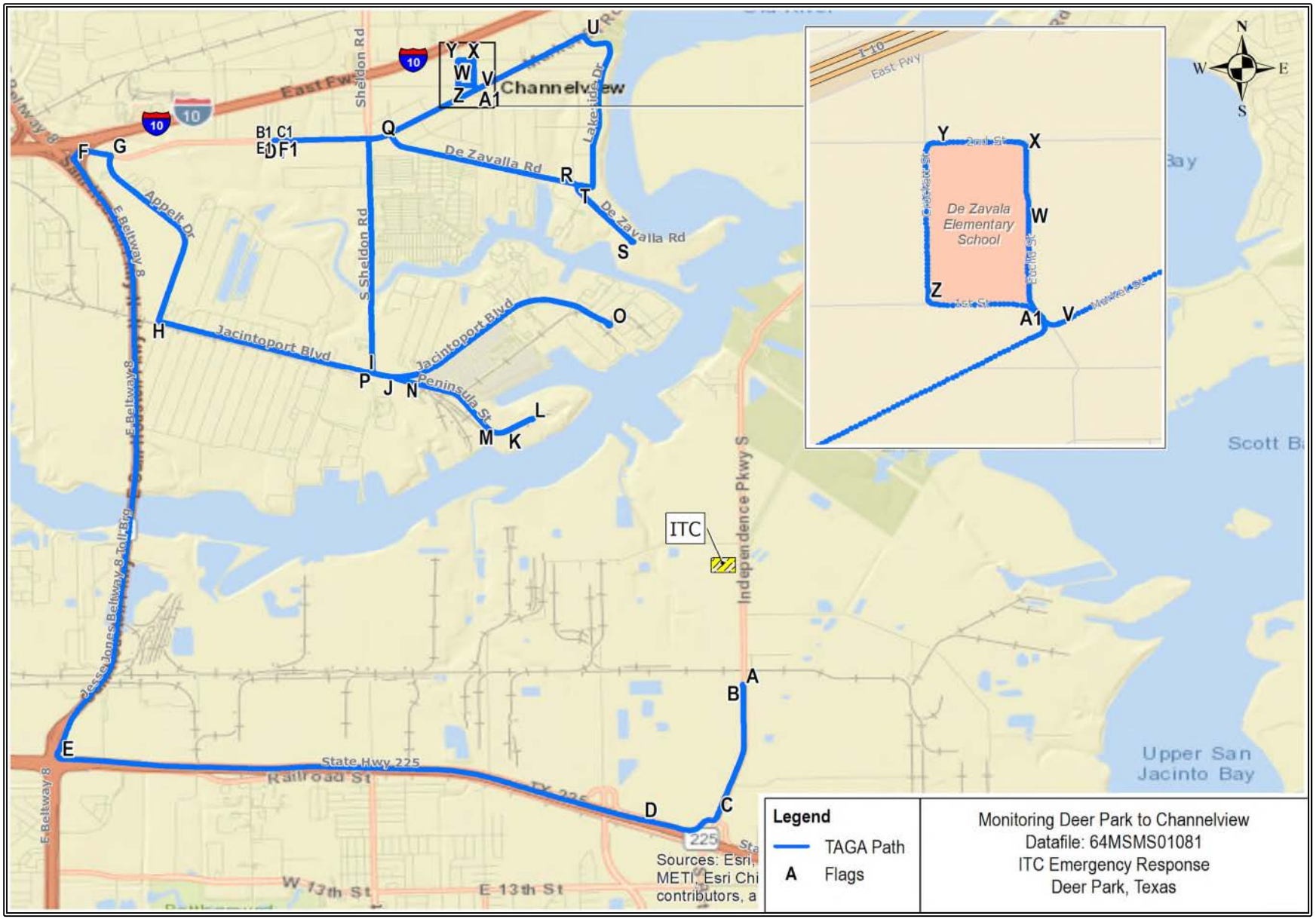


Figure 233a Monitoring Deer Park to Channelview Path, 64MSMS01081

Figure 233b

TAGA File Event Summary
File: 64MSMS01081 Acquired on 28 April 2019 at 09:20:17
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	0.9	85	Start mobile monitoring on Independence Parkway
B	1.1	108	Continuing onto Independence Parkway
C	3.1	292	Right turn onto Pasadena Freeway Frontage Road
D	4.1	387	Merge onto Highway 225 West
E	7.6	726	Right turn onto Highway 8 North
F	12.5	1192	Right turn onto Market Street
G	13.6	1292	Right turn onto Appelt Drive
H	18.4	1753	Left turn onto Jacintoport Boulevard
I	21.1	2011	Cross Sheldon Road
J	21.8	2075	Right turn onto San Jacinto Boulevard
K	24.2	2301	Continuing onto Peninsula Street
L	25.1	2385	U-turn on Peninsula Street
M	27.4	2604	Continuing onto San Jacinto Boulevard
N	30.0	2856	Right turn onto Jacintoport Boulevard
O	35.1	3335	U-turn on Jacintoport Boulevard
P	41.0	3895	Right turn onto Sheldon Road
Q	46.7	4444	Right turn onto Dezavala Drive
R	49.6	4721	Right turn to continue on Dezavala Drive
S	52.8	5024	U-turn on Dezavala Drive
T	56.8	5402	Right turn onto Lakeside Drive
U	61.1	5813	Left turn onto Market Street
V	63.6	6050	Right turn onto Euclid Street
W	64.3	6117	Passing Dezavala Elementary School
X	64.8	6157	Left turn onto 2nd Street
Y	65.2	6203	Left turn onto Crockett Street
Z	66.1	6286	Left turn onto 1st Street
A1	66.8	6348	Right turn onto Market Street
B1	71.7	6820	End mobile monitoring on Market Street
C1	72.1	6857	Start ambient
D1	73.1	6950	End ambient
E1	74.5	7080	Start 30 mL/min spike
F1	76.1	7232	End 30 mL/min spike

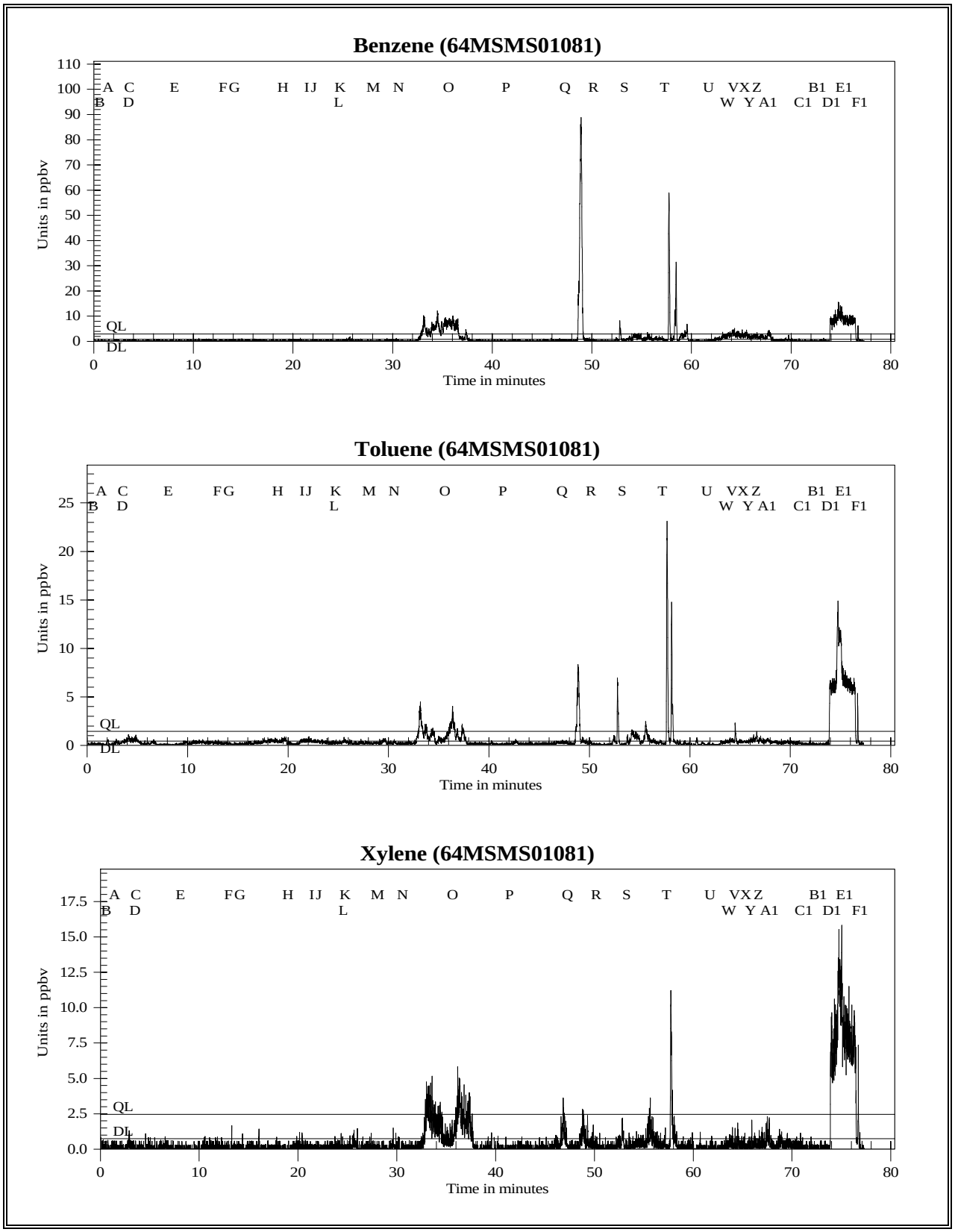


Figure 233c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

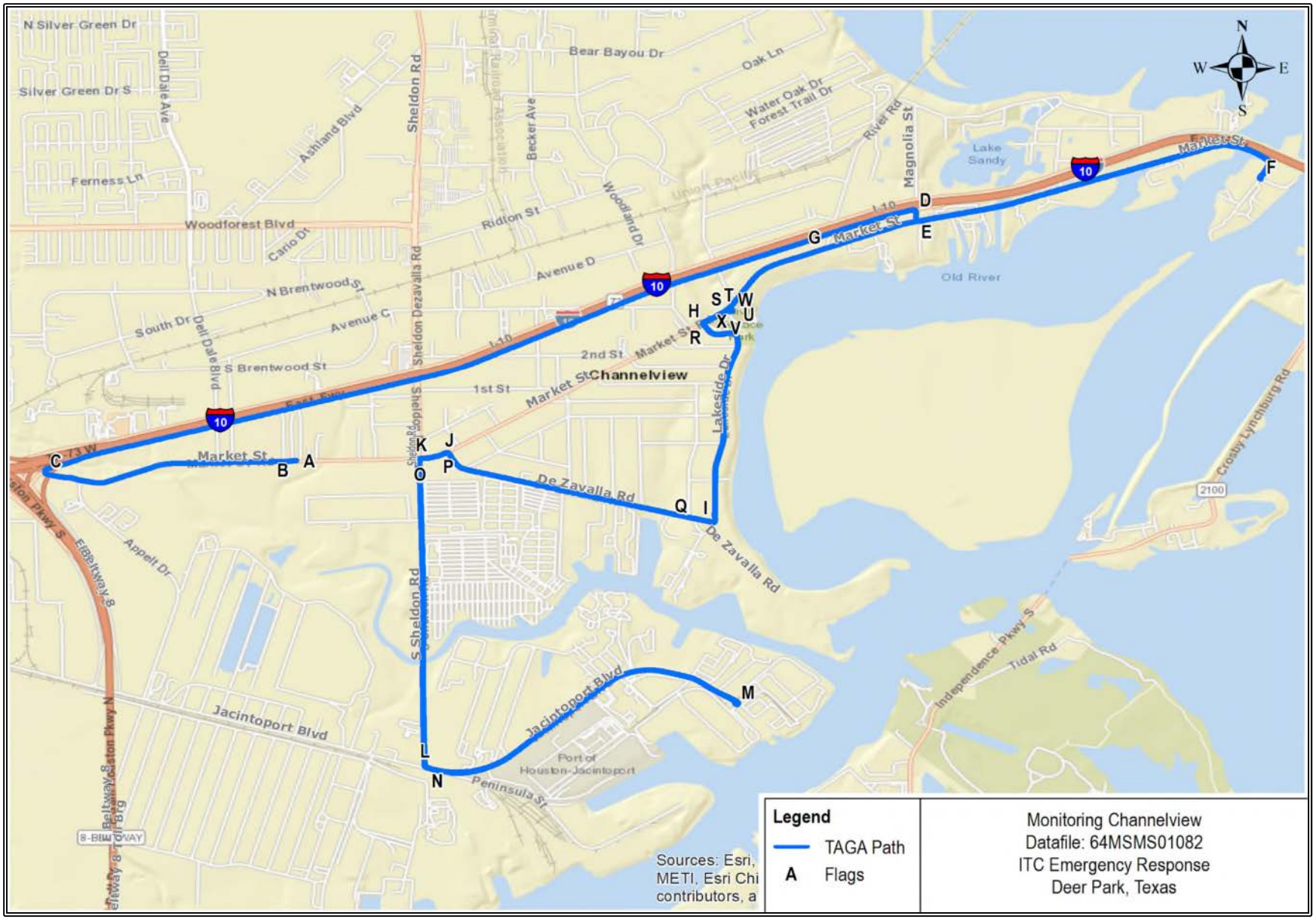


Figure 234a Monitoring Channelview Path, 64MSMS01082

Figure 234b

TAGA File Event Summary
File: 64MSMS01082 Acquired on 28 April 2019 at 10:39:32
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	1.0	96	Start mobile monitoring on Market Street
B	1.4	131	Continuing onto Market Street
C	6.1	584	Right turn onto East Freeway Service Road
D	18.5	1761	Right turn onto Magnolia Street
E	19.1	1815	Left turn onto Market Street
F	24.6	2338	U-turn on Market Street
G	32.4	3084	Cross River Road
H	34.2	3257	Left turn onto Lakeside Drive
I	38.2	3629	Continuing onto Dezavala Road
J	41.2	3916	Left turn onto Market Street
K	41.7	3968	Left turn onto Sheldon Road
L	47.0	4467	Left turn onto Jacintoport Boulevard
M	52.3	4976	U-turn on Jacintoport Boulevard
N	57.9	5505	Right turn onto Sheldon Road
O	62.6	5954	Right turn onto Market Street
P	63.0	5995	Right turn onto Dezavala Road
Q	65.6	6234	Continuing onto Lakeside Drive
R	68.9	6551	Right turn onto Market Street
S	69.3	6589	Right turn into River Terrace Park
T	69.8	6633	End mobile monitoring at River Terrace Park
U	70.2	6671	Start ambient
V	71.2	6768	End ambient
W	72.6	6900	Start 30 mL/min spike
X	73.8	7017	End 30 mL/min spike

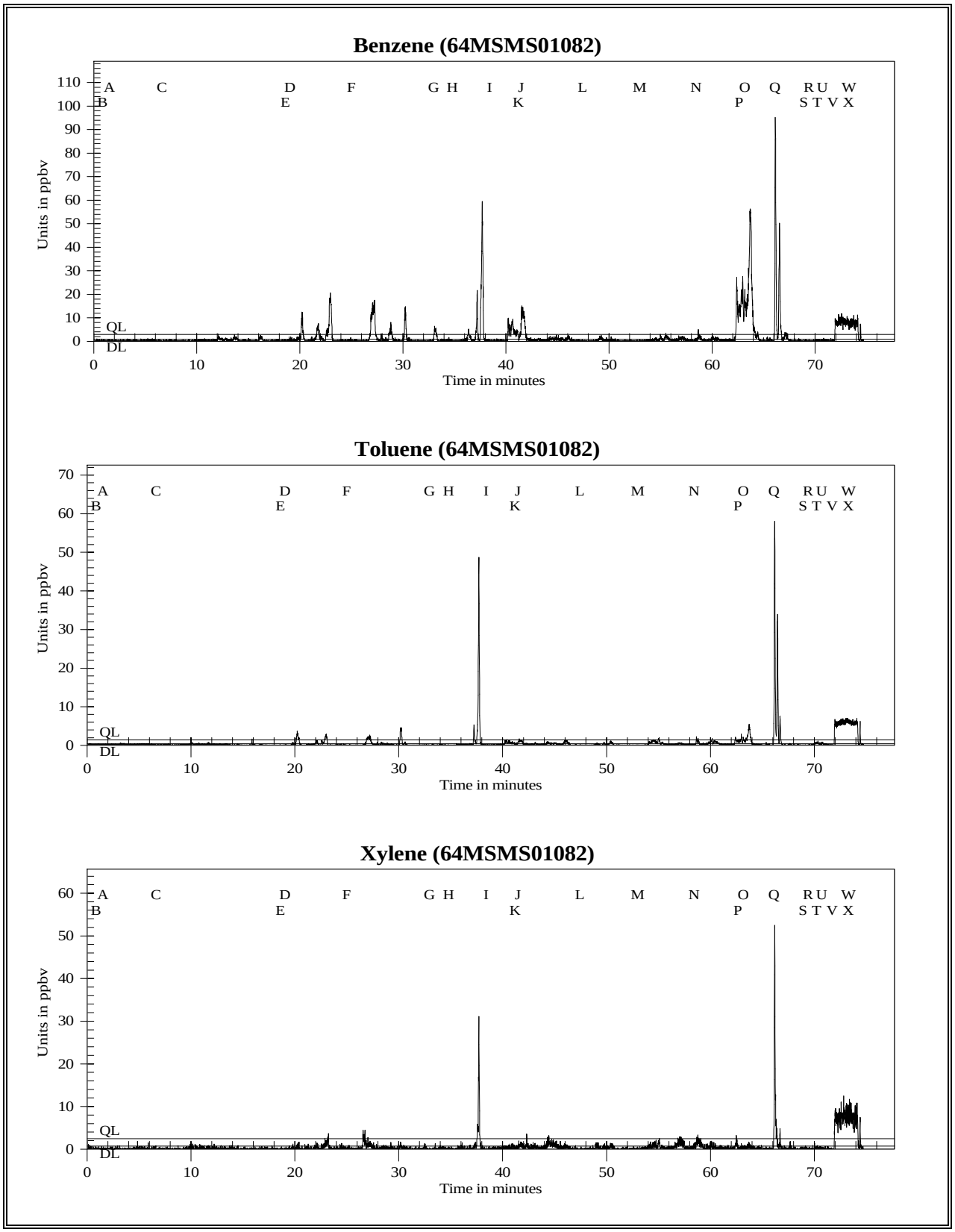


Figure 234c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

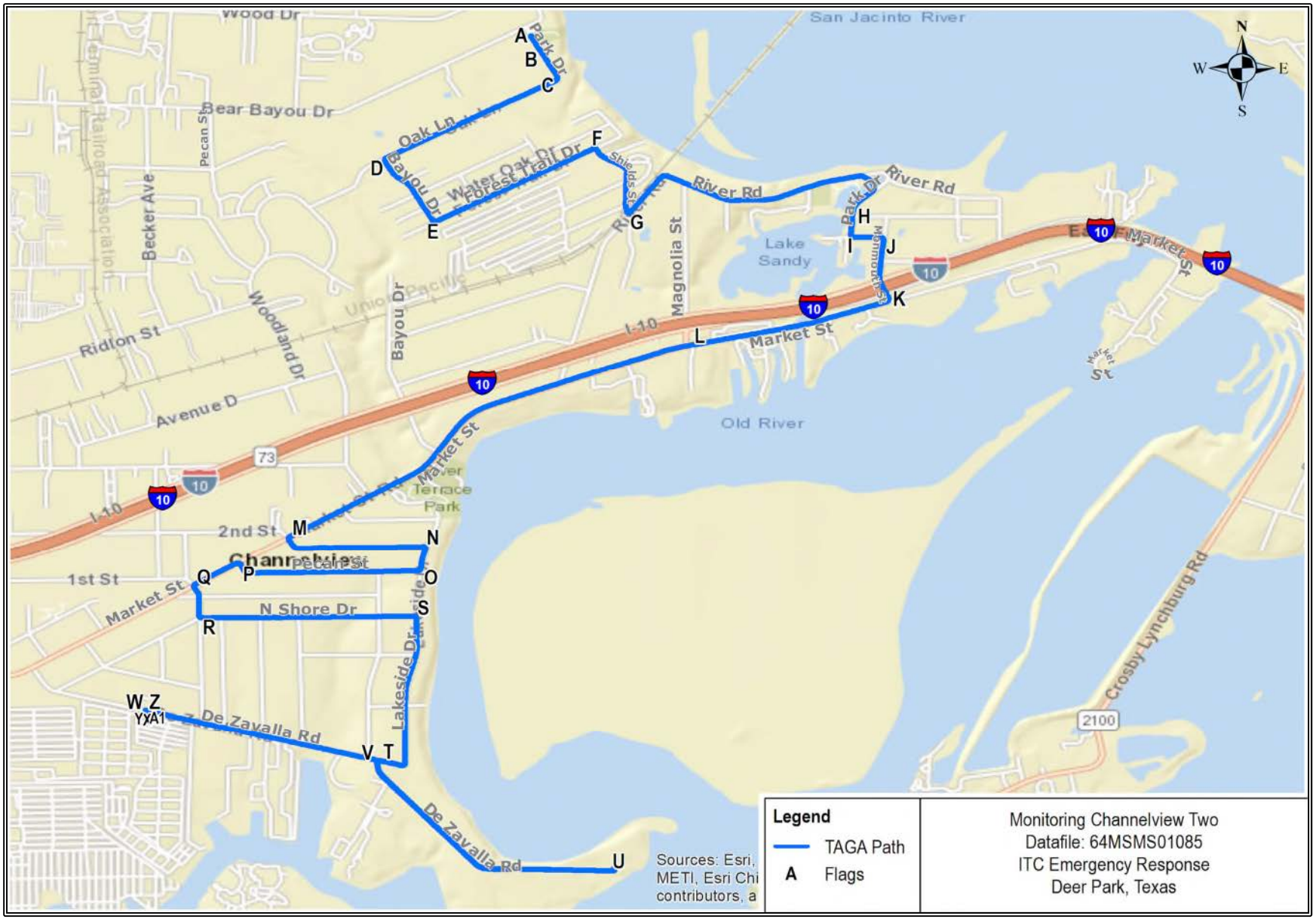


Figure 235a Monitoring Channelview Two Path, 64MSMS01085

Figure 235b

TAGA File Event Summary
File: 64MSMS01085 Acquired on 28 April 2019 at 13:32:00
Title: Monitoring Channelview Two

Flag	Time	Sequence	Description
A	0.5	53	Start mobile monitoring on Park Drive
B	1.0	100	Continuing onto Park Drive
C	1.5	143	Right turn onto Oak Lane
D	3.2	303	Left turn onto Bayou Drive
E	4.2	400	Left turn onto Forest Trail Drive
F	5.9	563	Right turn onto Shields Street
G	7.2	687	Left turn onto River Road
H	10.2	972	Right turn onto Park Drive
I	10.8	1023	Left turn onto Moreland Drive
J	11.1	1054	Right turn onto Monmouth Street
K	15.0	1431	Right turn onto Market Street
L	17.0	1617	Cross Magnolia Street
M	20.9	1992	Left turn onto 2nd Street
N	22.7	2157	Right turn onto Lakeside Drive
O	23.1	2200	Right turn onto Pecan Street
P	26.0	2477	Left turn onto Market Street
Q	26.7	2537	Left turn onto Pemberton Street
R	27.2	2590	Left turn onto N Shore Drive
S	29.5	2804	Right turn onto Lakeside Drive
T	31.7	3014	Left turn onto Dezavala Road
U	36.5	3471	U-turn on Dezavala Road
V	43.1	4101	Left turn to continue onto Dezavala Road
W	45.9	4368	End mobile monitoring on Dezavala Road
X	46.3	4404	Start ambient
Y	47.5	4512	End ambient
Z	48.8	4642	Start 30 mL/min spike
A1	49.9	4748	End 30 mL/min spike

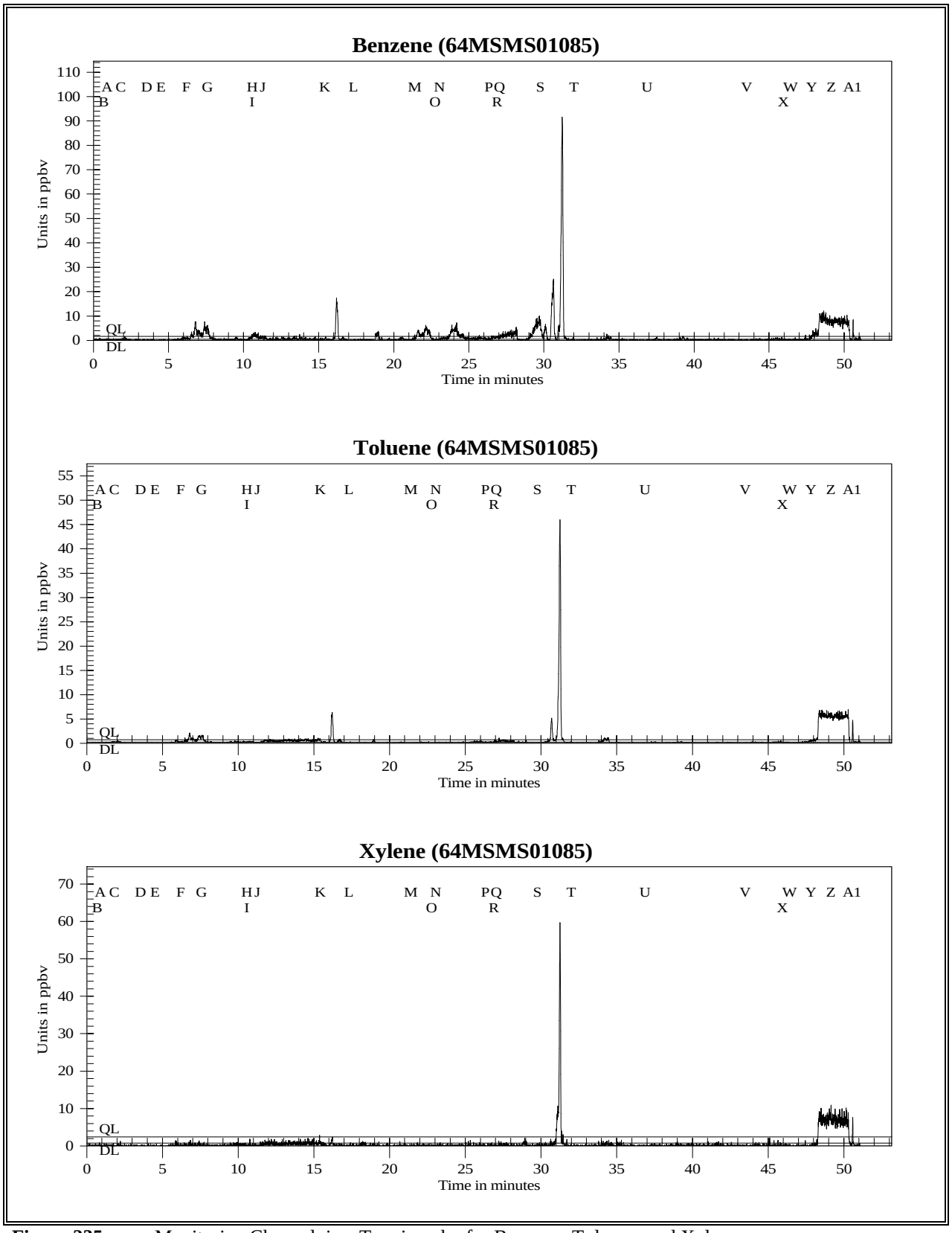


Figure 235c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

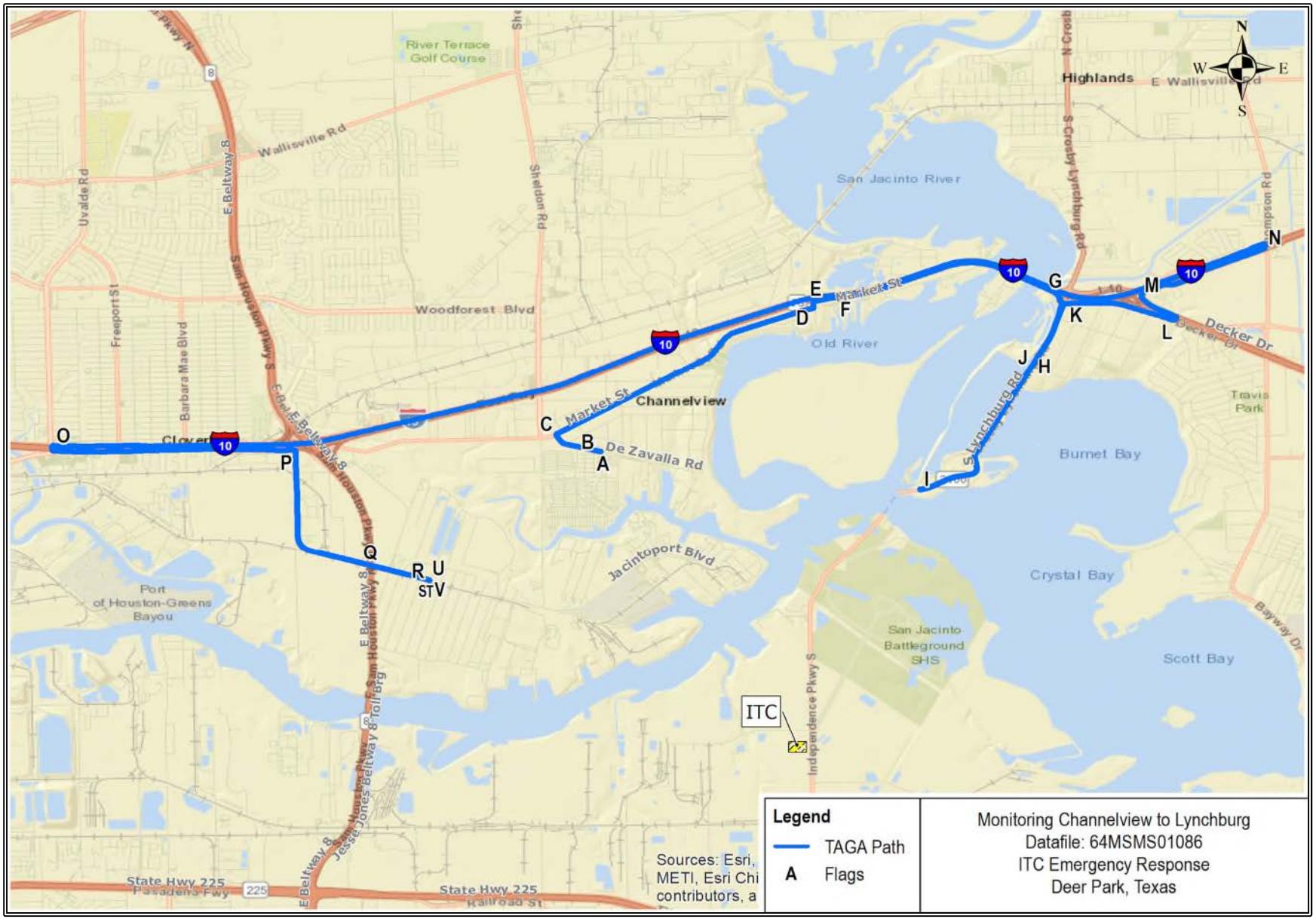


Figure 236a Monitoring Channelview to Lynchburg Path, 64MSMS01086

Figure 236b

TAGA File Event Summary
File: 64MSMS01086 Acquired on 28 April 2019 at 14:26:26
Title: Monitoring Channelview to Lynchburg

Flag	Time	Sequence	Description
A	0.9	89	Start mobile monitoring on Dezavala Road
B	1.2	115	Continuing onto Dezavala Road
C	2.3	219	Right turn onto Market Street
D	7.8	744	Left turn onto Magnolia Street
E	8.2	780	Right turn onto East Freeway Service Road
F	8.5	806	Merge onto Highway 10 East
G	10.4	989	Right turn onto Independence Parkway North
H	13.3	1264	Cross Lakeview Drive
I	17.9	1701	U-turn on Independence Parkway North at Lynchburg Ferry
J	22.8	2171	Cross Lakeview Drive
K	24.8	2355	Right turn onto Decker Drive
L	26.5	2518	U-turn on Decker Drive
M	27.3	2596	Right turn onto East Freeway Service Road
N	29.3	2789	U-turn on East Freeway Service Road at Thompson Road
O	42.6	4054	U-turn on East Freeway Service Road at Uvalde Drive
P	47.6	4528	Right turn onto Jacintoport Boulevard
Q	56.5	5374	Cross Highway 8
R	58.5	5565	End mobile monitoring on Jacintoport Boulevard
S	58.9	5600	Start ambient
T	60.2	5724	End ambient
U	62.1	5909	Start 30 mL/min spike
V	63.2	6006	End 30 mL/min spike

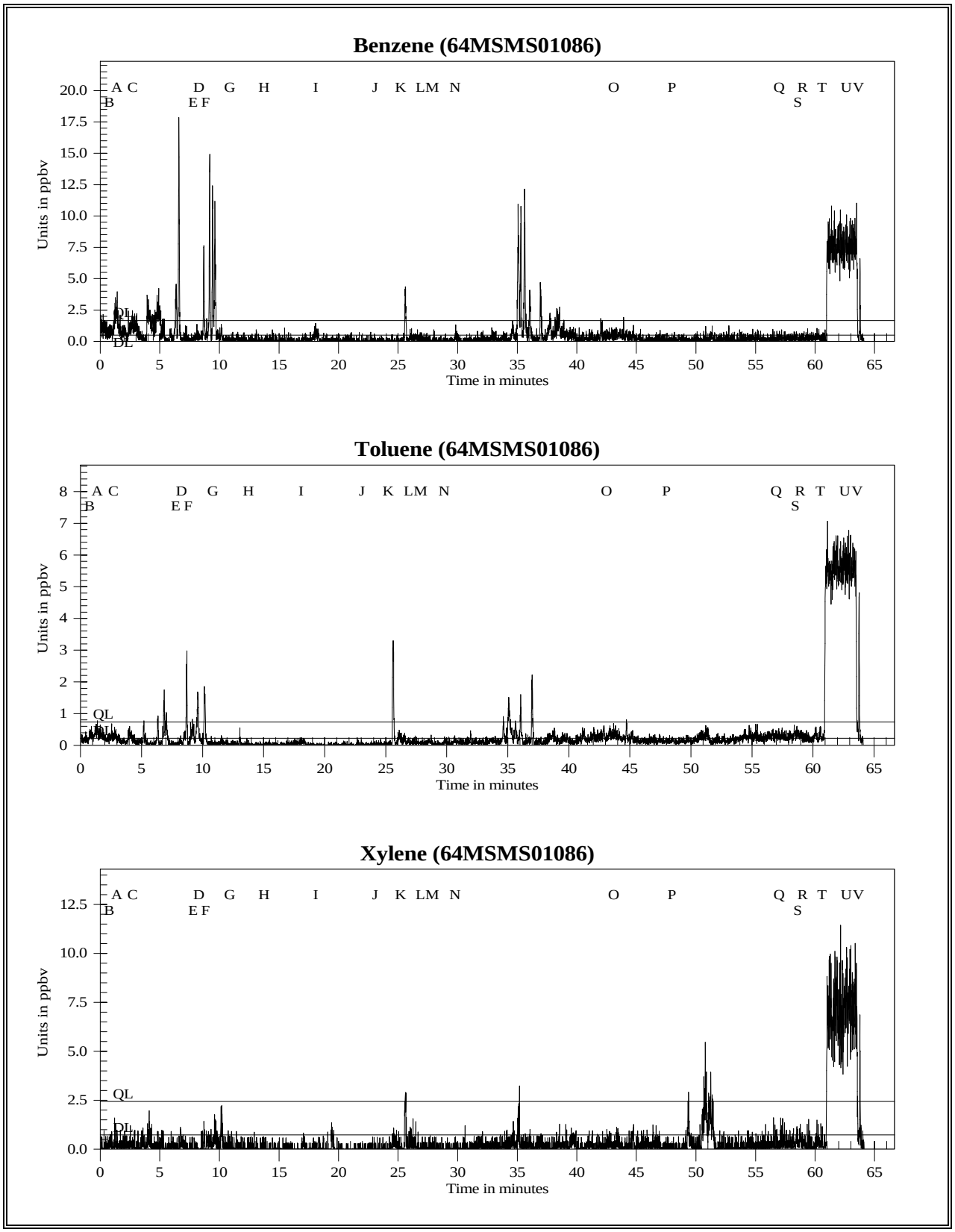


Figure 236c Monitoring Channelview to Lynchburg in ppbv for Benzene, Toluene, and Xylenes

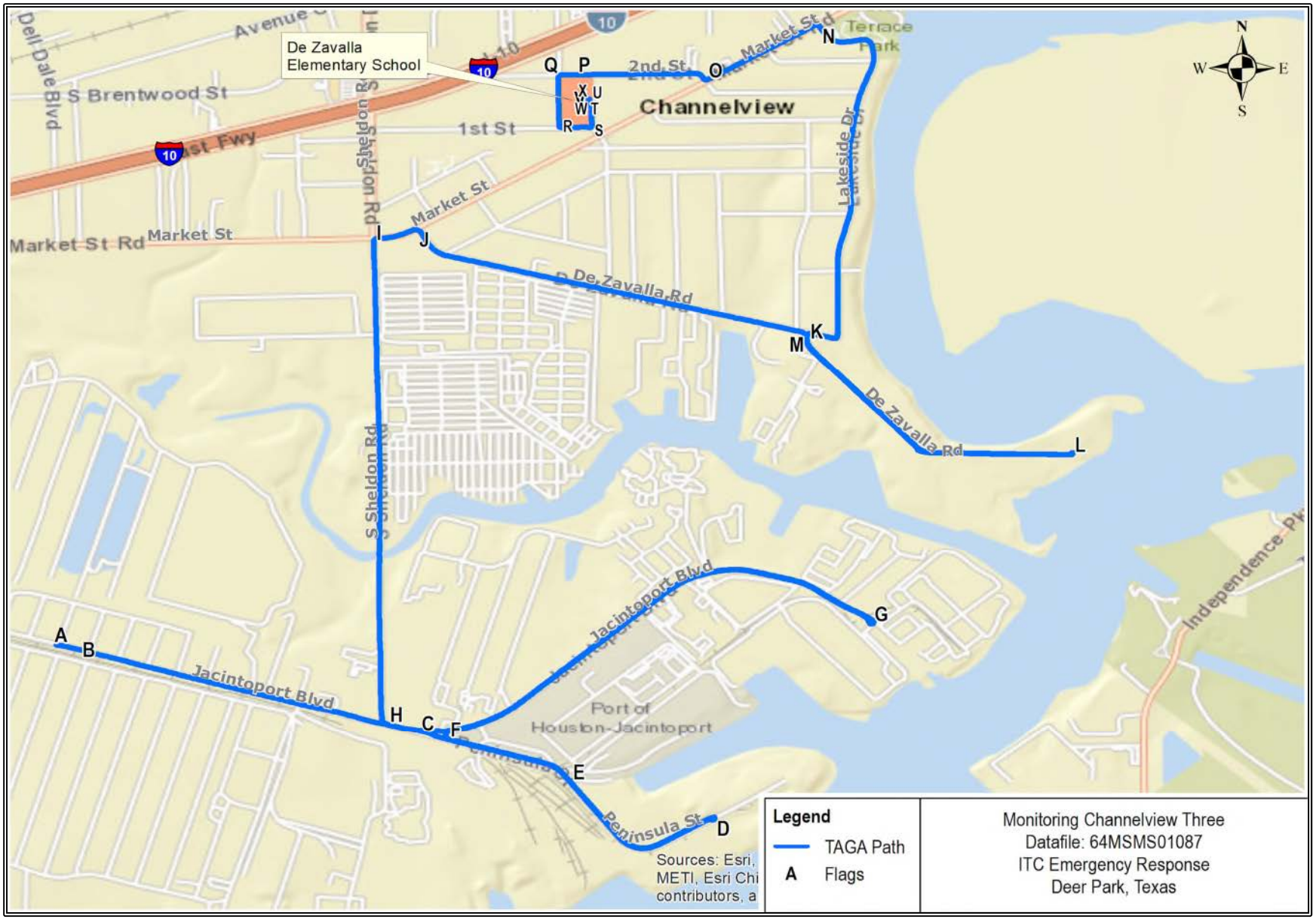


Figure 237a Monitoring Channelview Three Path, 64MSMS01087

Figure 237b

TAGA File Event Summary
File: 64MSMS01087 Acquired on 28 April 2019 at 15:32:38
Title: Monitoring Channelview Three

Flag	Time	Sequence	Description
A	0.6	59	Start mobile monitoring on Jacintoport Boulevard
B	0.7	70	Continuing onto Jacintoport Boulevard
C	4.6	435	Right turn onto San Jacinto Boulevard
D	9.7	924	U-turn on San Jacinto Boulevard/Peninsula Street
E	13.2	1252	Continuing onto San Jacinto Boulevard
F	15.0	1431	Right turn onto Jacintoport Boulevard
G	21.1	2011	U-turn on Jacintoport Boulevard
H	27.4	2609	Right turn onto Sheldon Road
I	32.0	3046	Right turn onto Market Street
J	32.6	3097	Right turn onto Dezavala Road
K	36.1	3430	Right turn to continue on Dezavala Road
L	41.2	3918	U-turn on Dezavala Road
M	47.9	4559	Right turn onto Lakeside Drive
N	52.5	4993	Left turn onto Market Street
O	53.8	5111	Right turn onto 2nd Street
P	55.3	5257	Passing Dezavala Elementary School
Q	55.5	5276	Left turn onto Crockett Street
R	56.4	5360	Left turn onto 1st Street
S	56.9	5413	Left turn onto Euclid Street
T	57.4	5458	End mobile monitoring on Euclid Street
U	57.7	5483	Start ambient
V	58.7	5578	End ambient
W	59.8	5688	Start 30 mL/min spike
X	60.9	5786	End 30 mL/min spike

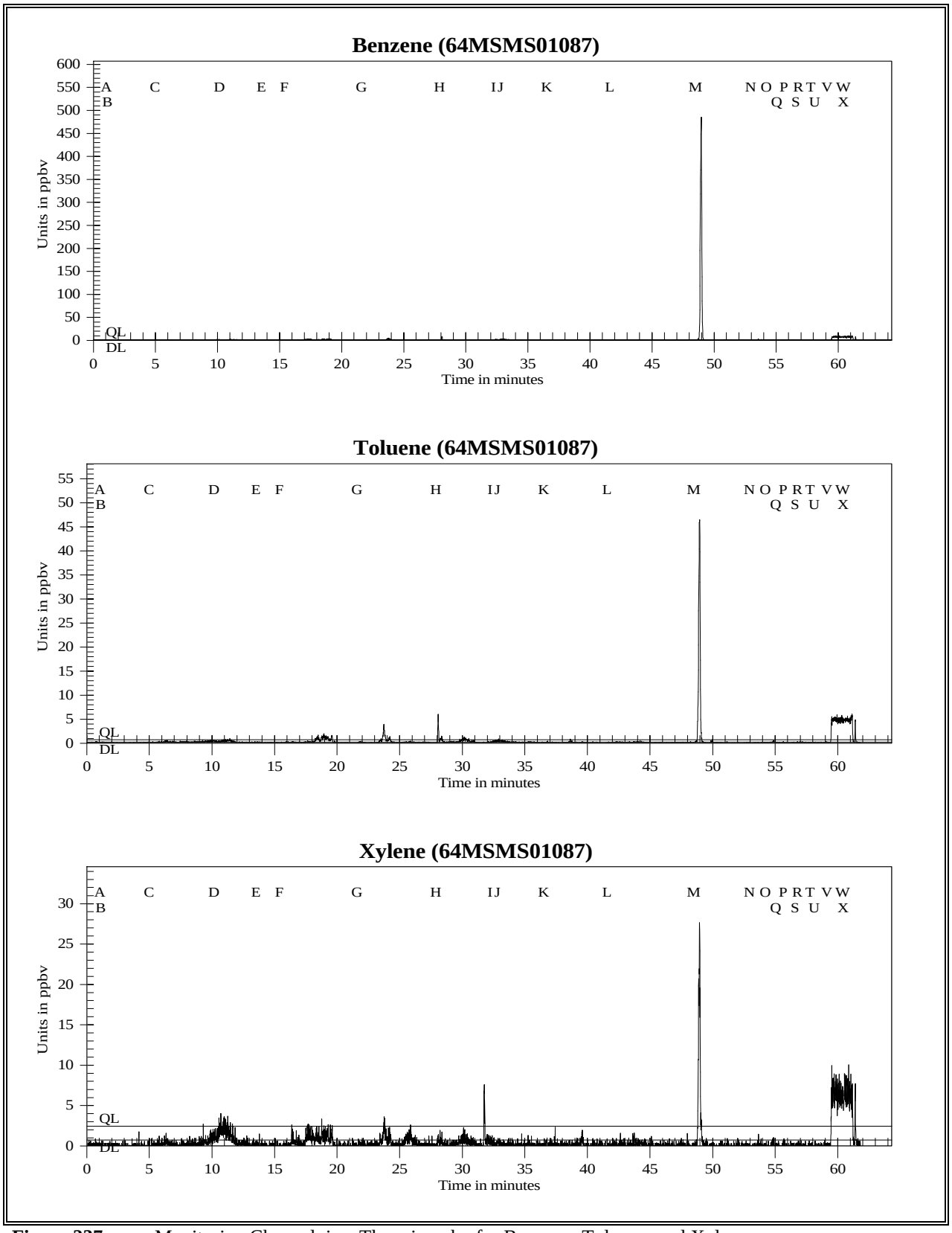


Figure 237c Monitoring Channelview Three in ppbv for Benzene, Toluene, and Xylenes

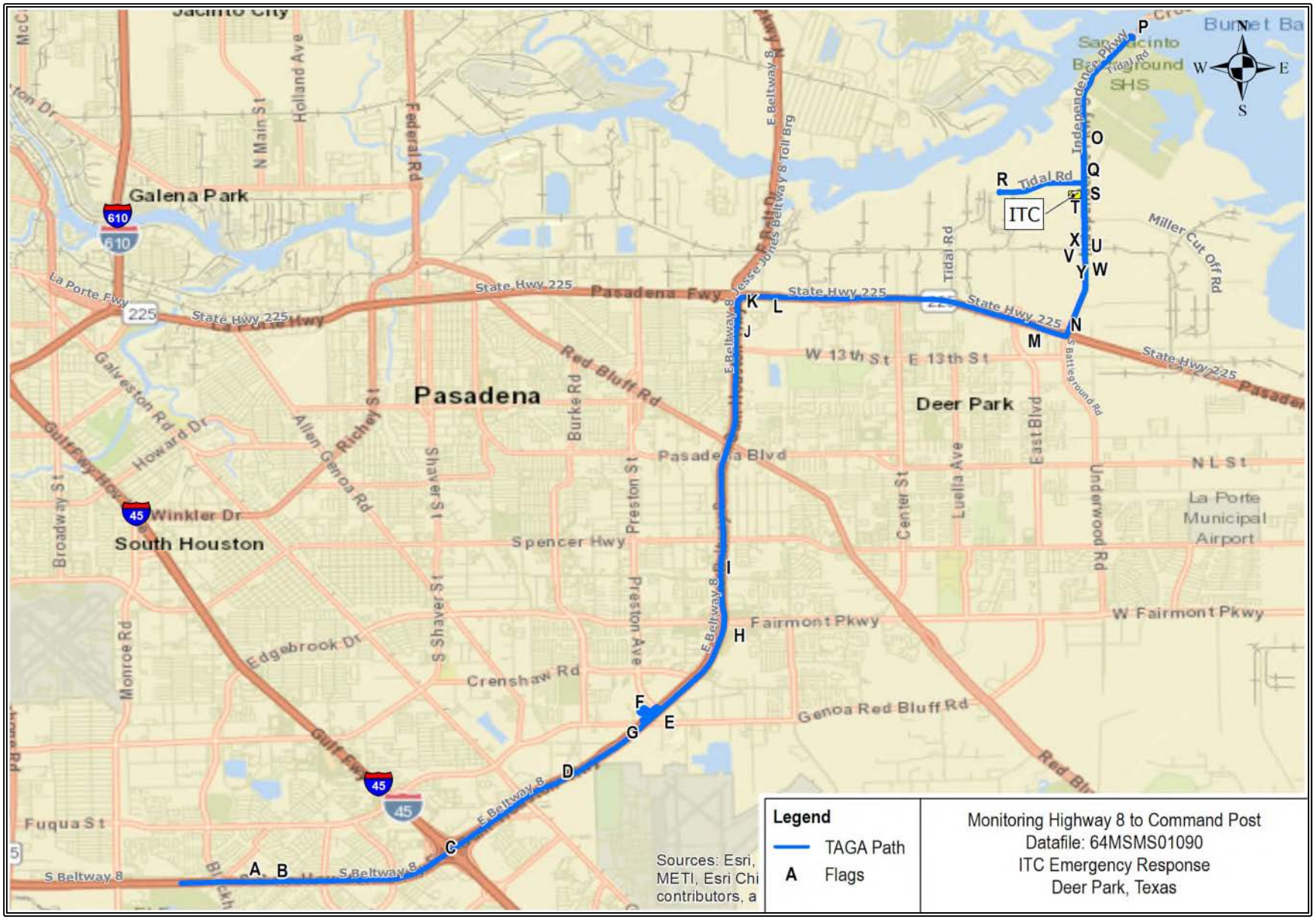


Figure 238a Monitoring Highway 8 to Command Post Path, 64MSMS01090

Figure 238b

TAGA File Event Summary
File: 64MSMS01090 Acquired on 29 April 2019 at 08:40:24
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	1.8	172	Start mobile monitoring on Highway 8 North
B	2.0	188	Continuing onto Highway 8 North
C	3.6	346	Cross Highway 45
D	5.3	501	Exit onto Highway 8 Service Road
E	7.3	696	Left turn onto Preston Road
F	8.0	766	Left turn onto Highway 8 Service Road
G	11.0	1051	U-turn on Highway 8 Service Road
H	14.4	1374	Cross Fairmont Parkway
I	15.2	1449	Merge onto Highway 8 North
J	18.5	1755	Exit onto Highway 8 Service Road
K	19.6	1869	Right turn onto Pasadena Freeway Frontage Road
L	20.2	1926	Merge onto Highway 225 East
M	23.3	2217	Exit onto Pasadena Freeway Frontage Road
N	25.2	2398	Left turn onto Independence Parkway
O	31.5	2997	Continuing onto Independence Parkway
P	35.6	3388	U-turn on Independence Parkway
Q	42.9	4082	Right turn onto Tidal Road
R	49.2	4678	U-turn on Tidal Road
S	56.1	5337	Right turn onto Independence Parkway
T	58.0	5515	Cross Miller Cut-Off Road
U	59.7	5675	End mobile monitoring on Independence Parkway
V	59.8	5689	Start ambient
W	60.8	5784	End ambient
X	62.3	5924	Start 30 mL/min spike
Y	63.3	6022	End 30 mL/min spike

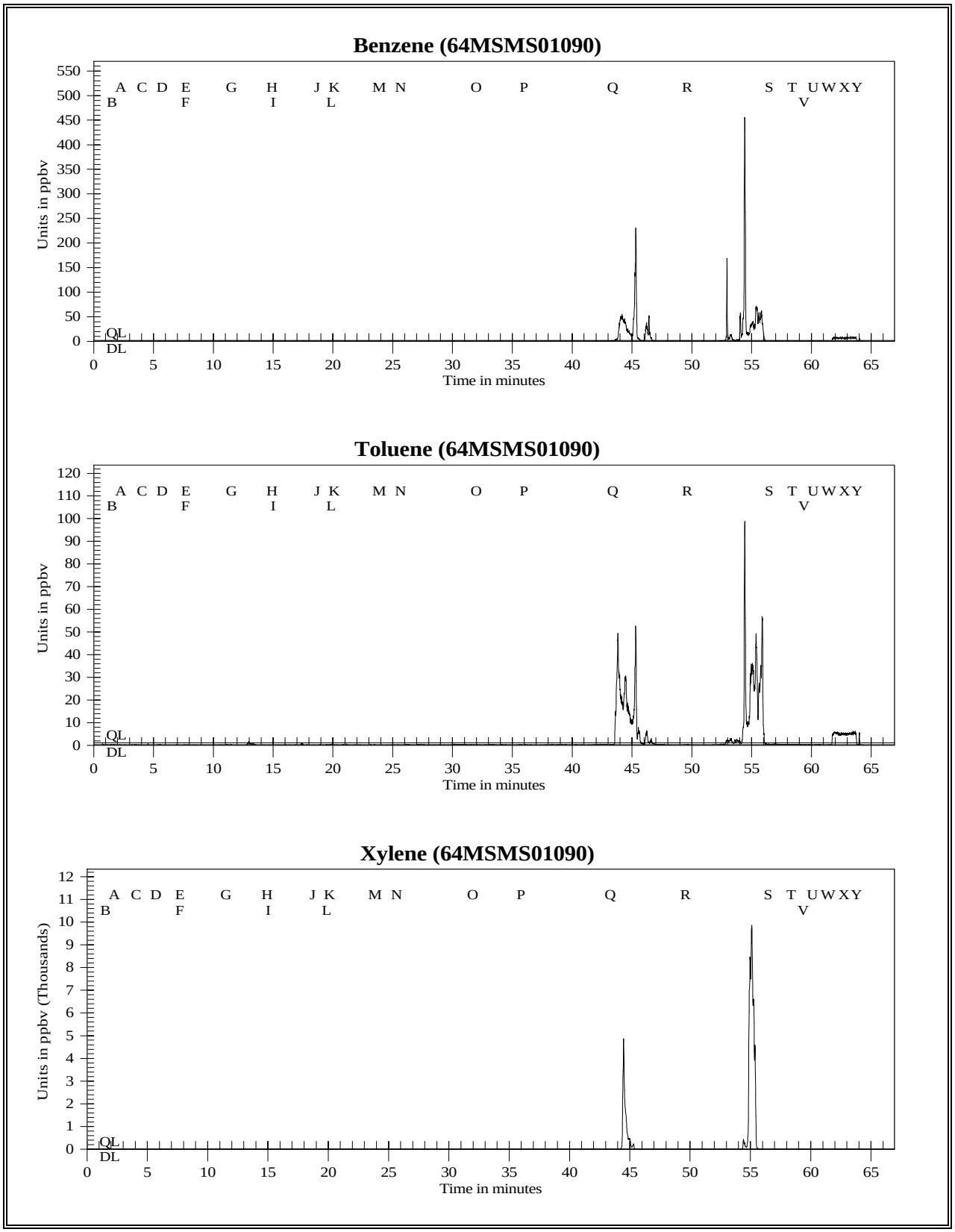


Figure 238c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

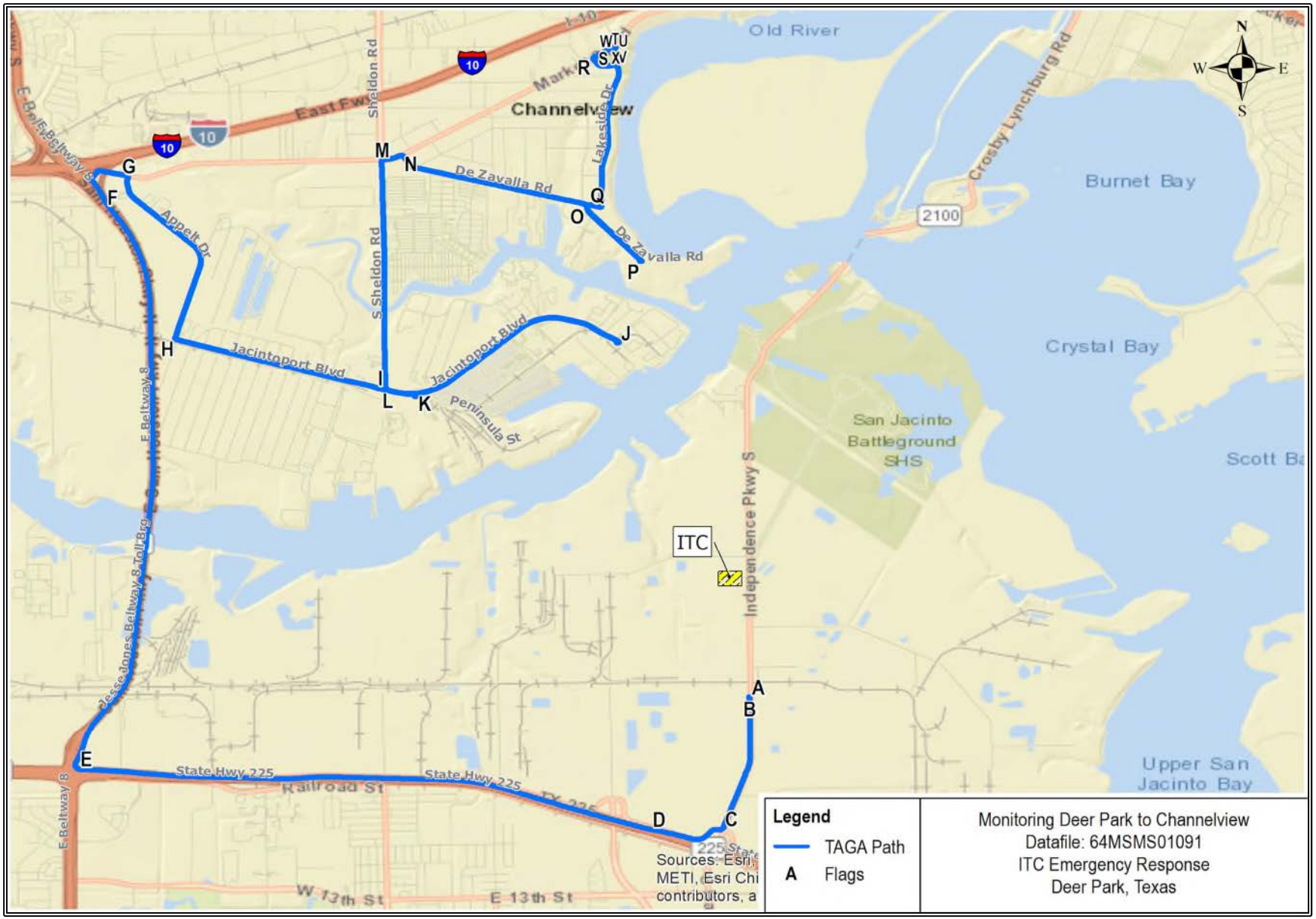


Figure 239a Monitoring Deer Park to Channelview Path, 64MSMS01091

Figure 239b

TAGA File Event Summary
File: 64MSMS01091 Acquired on 29 April 2019 at 09:48:23
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	0.7	66	Start mobile monitoring on Independence Parkway
B	1.1	108	Continuing onto Independence Parkway
C	3.8	360	Right turn onto Pasadena Freeway Frontage Road
D	4.7	452	Merge onto Highway 225 West
E	8.6	820	Right turn onto Highway 8 North
F	13.1	1251	Right turn onto Market Street
G	14.5	1384	Right turn onto Appelt Drive
H	21.7	2064	Left turn onto Jacintoport Boulevard
I	26.0	2476	Cross Sheldon Road
J	32.1	3054	U-turn on Jacintoport Boulevard
K	37.9	3602	Continuing onto Jacintoport Boulevard
L	39.4	3742	Right turn onto Sheldon Road
M	44.6	4244	Right turn onto Market Street
N	45.1	4285	Right turn onto Dezavala Road
O	48.5	4615	Right turn to continue on Dezavala Road
P	51.8	4924	U-turn on Dezavala Road
Q	56.0	5325	Right turn onto Lakeside Drive
R	60.9	5792	Right turn onto Market Street
S	61.3	5833	Right turn into Terrace River Park
T	61.7	5870	End mobile monitoring at Terrace River Park
U	62.3	5927	Start ambient
V	63.4	6025	End ambient
W	66.1	6288	Start 30 mL/min spike
X	67.2	6386	End 30 mL/min spike

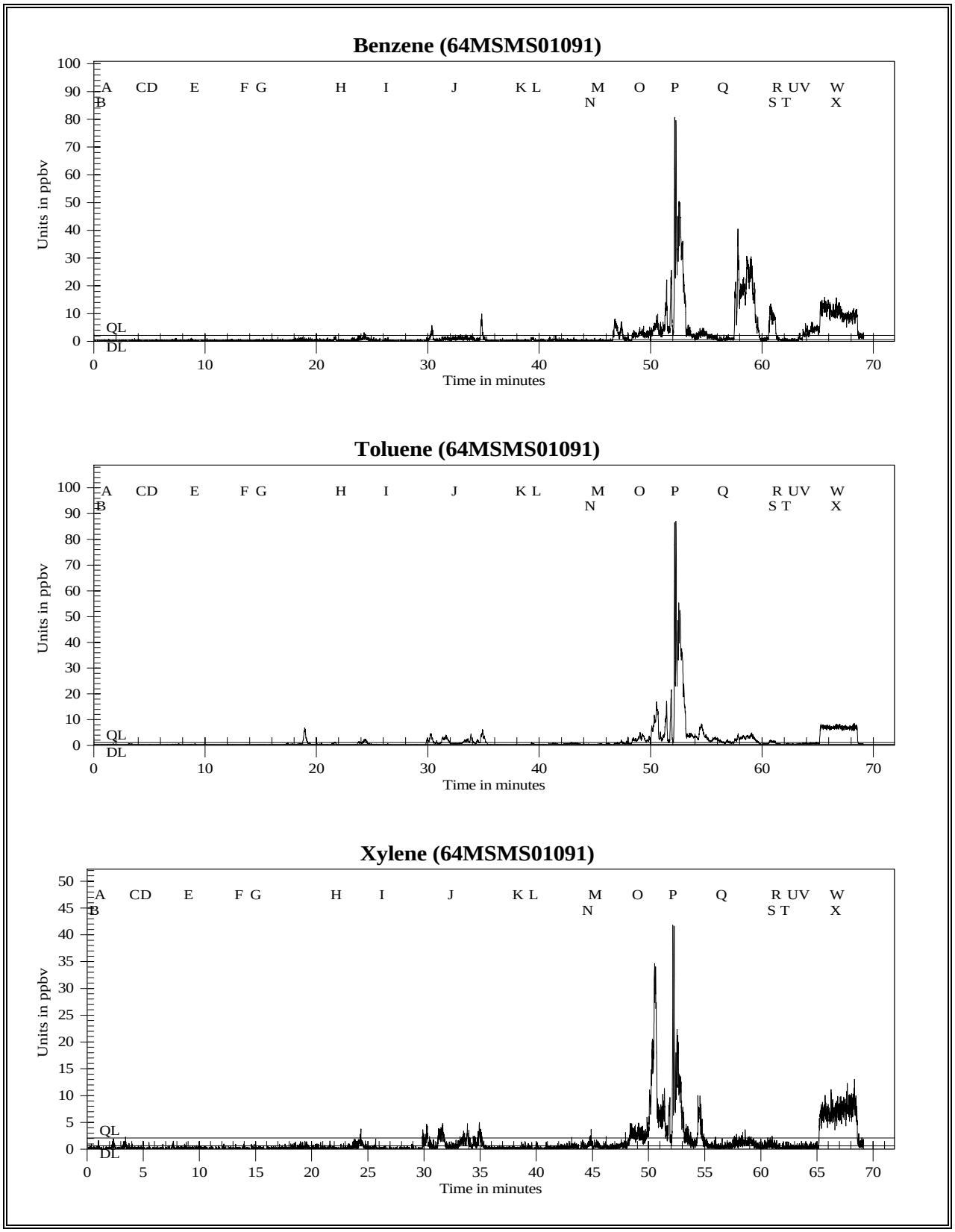


Figure 239c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

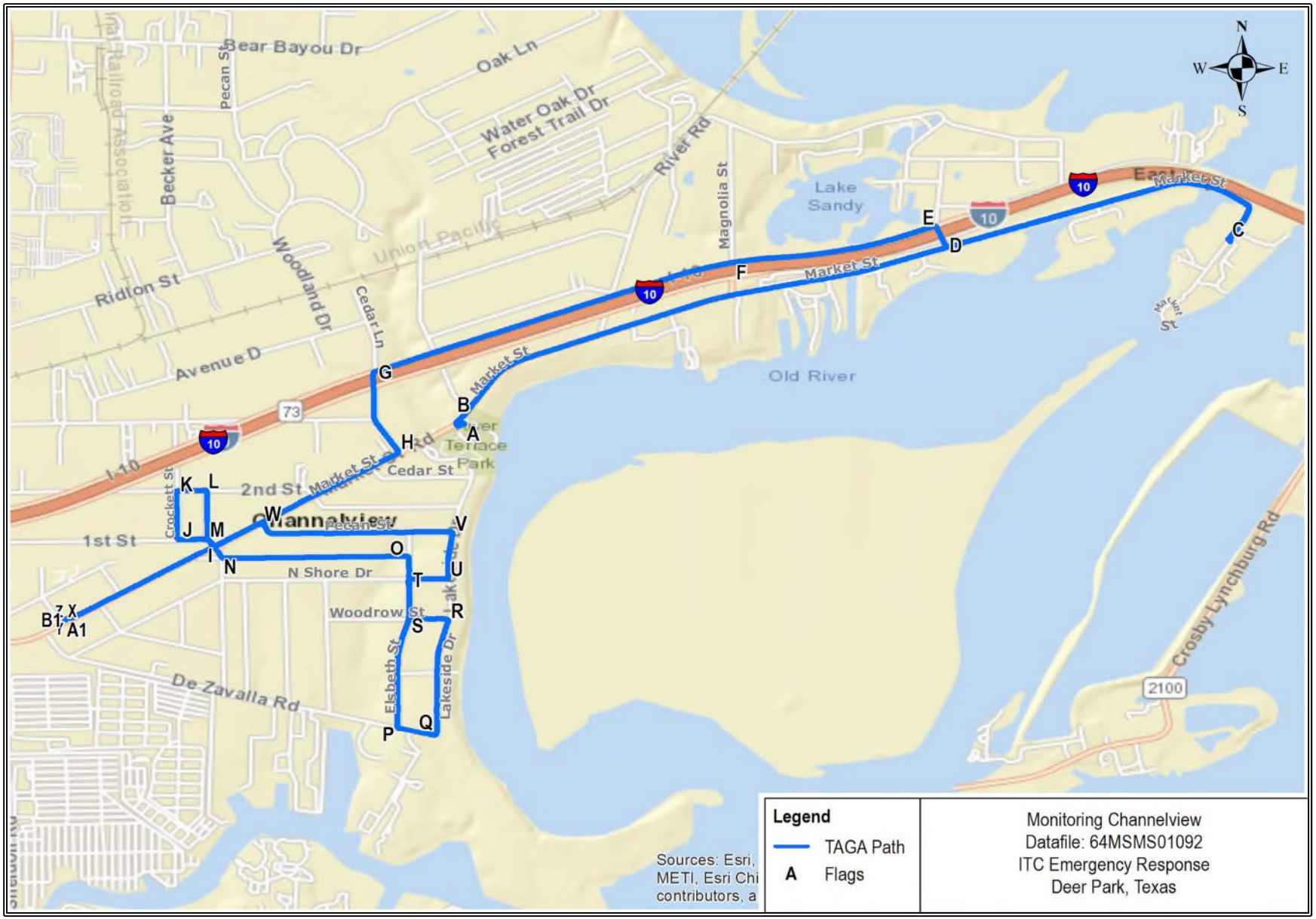


Figure 240a Monitoring Channelview Path, 64MSMS01092

Figure 240b

TAGA File Event Summary
File: 64MSMS01092 Acquired on 29 April 2019 at 11:03:17
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	0.6	62	Start mobile monitoring at River Terrace Park
B	2.3	221	Continuing onto Market Street
C	11.2	1069	U-turn on Market Street
D	16.5	1565	Right turn onto Monmouth Street
E	16.9	1604	Left turn onto East Freeway Service Road
F	19.4	1843	Cross Magnolia Street
G	23.3	2219	Left turn onto Cedar Lane
H	25.0	2374	Right turn onto Market Street
I	27.5	2615	Right turn onto 1st Street
J	28.0	2667	Right turn onto Crockett Street
K	29.0	2758	Right turn onto 2nd Street
L	29.5	2805	Right turn onto Euclid Street
M	30.3	2886	Left turn onto 1st Street
N	31.1	2959	Left turn to continue on 1st Street
O	33.6	3197	Right turn onto Elsbeth Road
P	36.5	3468	Left turn onto Dezavala Road
Q	36.8	3495	Continuing onto Lakeside Drive
R	38.8	3694	Left turn onto Woodrow Street
S	42.0	3990	Right turn onto Elsbeth Road
T	42.8	4074	Right turn onto N Shore Drive
U	43.6	4146	Left turn onto Lakeside Drive
V	44.4	4222	Left turn onto Pecan Street
W	47.9	4551	Left turn onto Market Street
X	50.0	4756	End mobile monitoring on Market Street
Y	50.3	4781	Start ambient
Z	51.3	4876	End ambient
A1	52.6	5006	Start 30 mL/min spike
B1	53.7	5104	End 30 mL/min spike

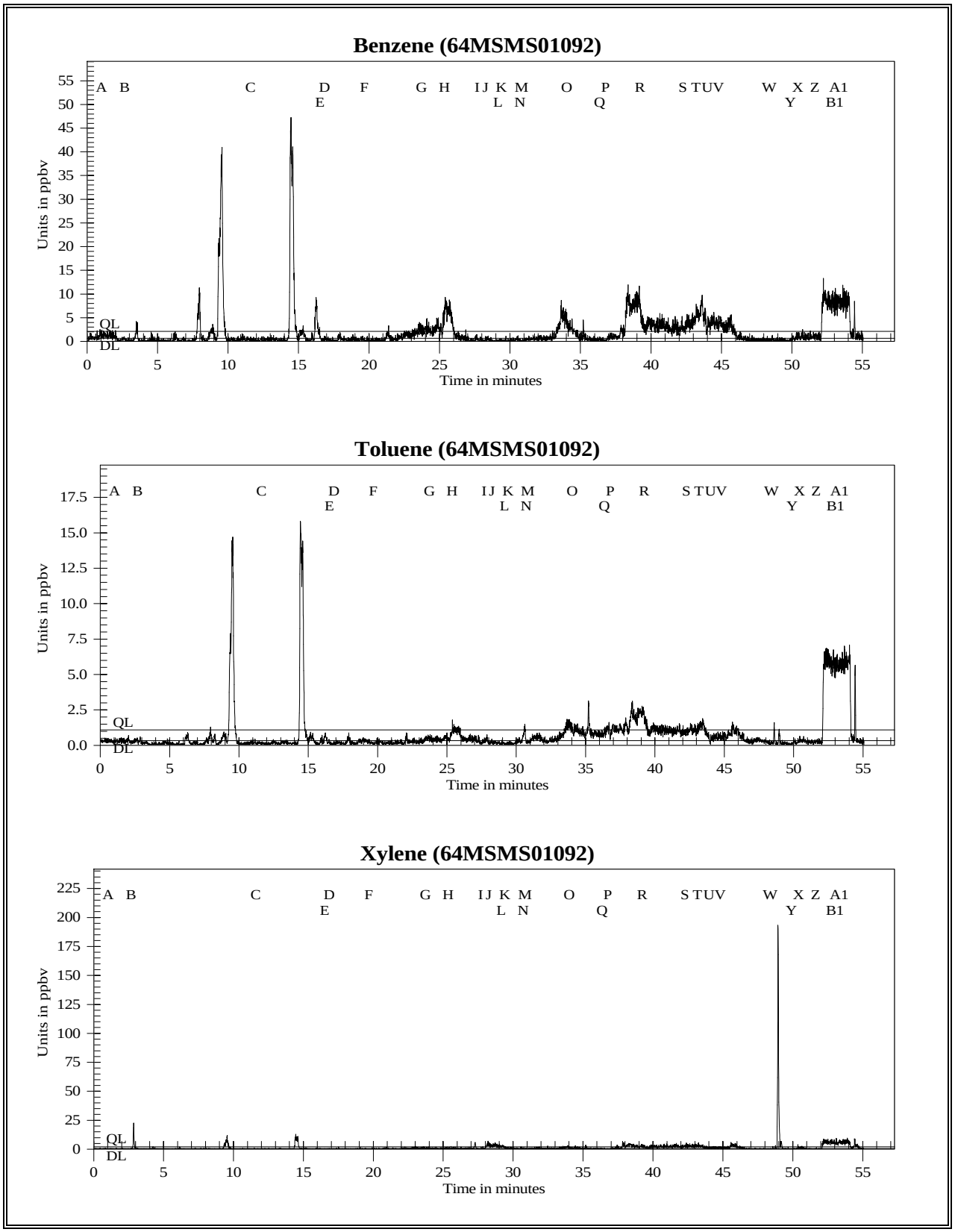


Figure 240c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

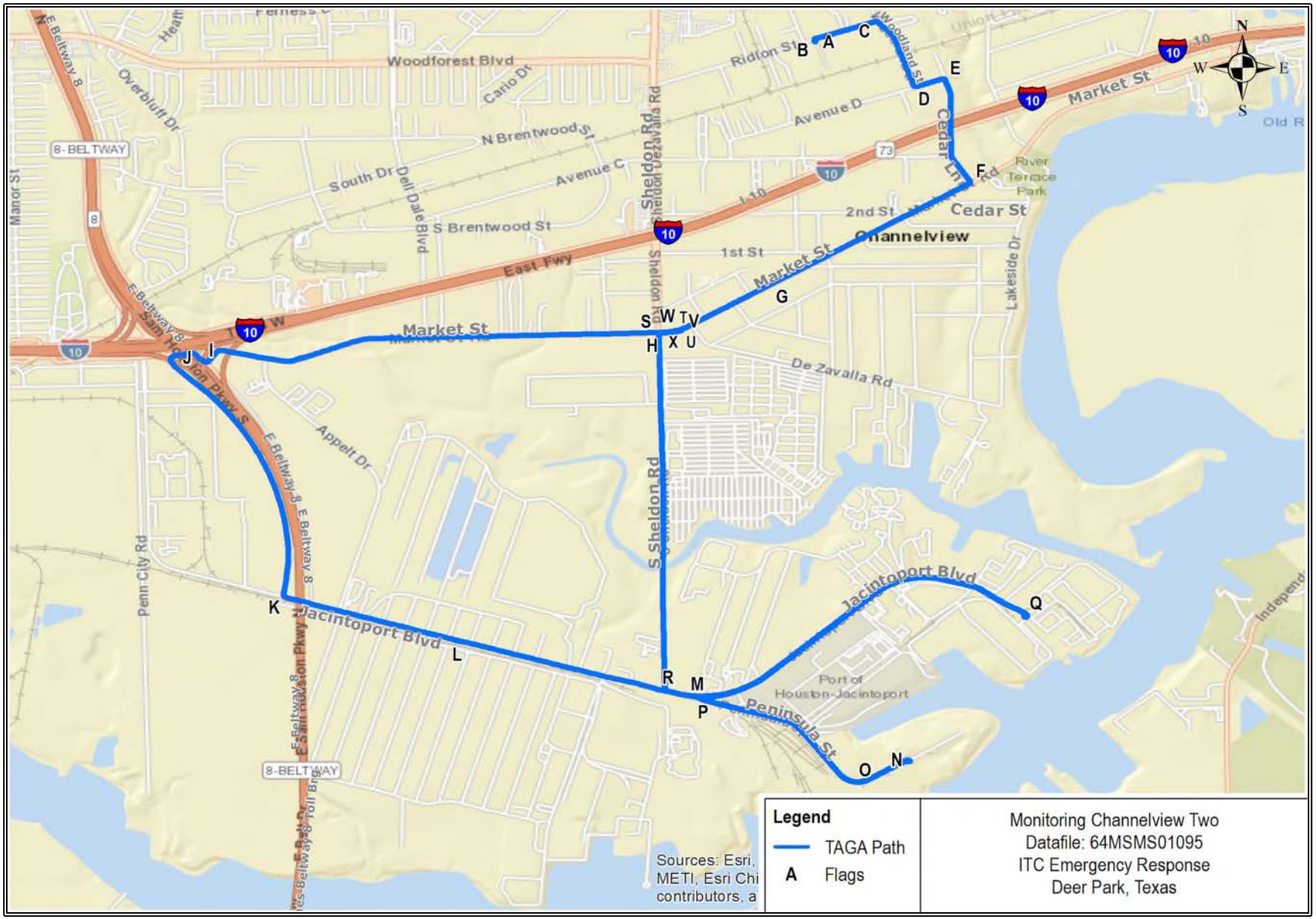


Figure 241a Monitoring Channelview Two Path, 64MSMS01095

Figure 241b

TAGA File Event Summary
File: 64MSMS01095 Acquired on 29 April 2019 at 13:16:46
Title: Monitoring Channelview Two

Flag	Time	Sequence	Description
A	0.8	78	Start mobile monitoring on Ridlon Avenue
B	1.5	140	Continuing onto Ridlon Avenue
C	2.7	260	Right turn onto Woodland Street
D	4.3	406	Left turn onto Avenue D
E	4.8	459	Right turn onto Cedar Lane
F	7.1	677	Right turn onto Market Street
G	10.7	1021	Passing Best Way Oil Field Piping
H	13.7	1306	Cross Sheldon Road
I	18.7	1783	Right turn onto Highway 8 Service Road
J	19.2	1823	U-turn onto Highway 8 Service Road
K	22.0	2095	Left turn onto Jacintoport Boulevard
L	24.6	2343	Continuing onto Jacintoport Boulevard
M	27.4	2607	Right turn onto San Jacinto Boulevard
N	30.5	2897	U-turn on Peninsula Street
O	32.9	3125	Continuing onto San Jacinto Boulevard
P	35.9	3418	Right turn onto Jacintoport Boulevard
Q	41.5	3946	U-turn on Jacintoport Boulevard
R	47.9	4553	Right turn onto Sheldon Road
S	53.6	5098	Right turn onto Market Street
T	54.2	5149	End mobile monitoring on Market Street
U	54.7	5203	Start ambient
V	55.7	5301	End ambient
W	57.0	5424	Start 30 mL/min spike
X	58.1	5521	End 30 mL/min spike

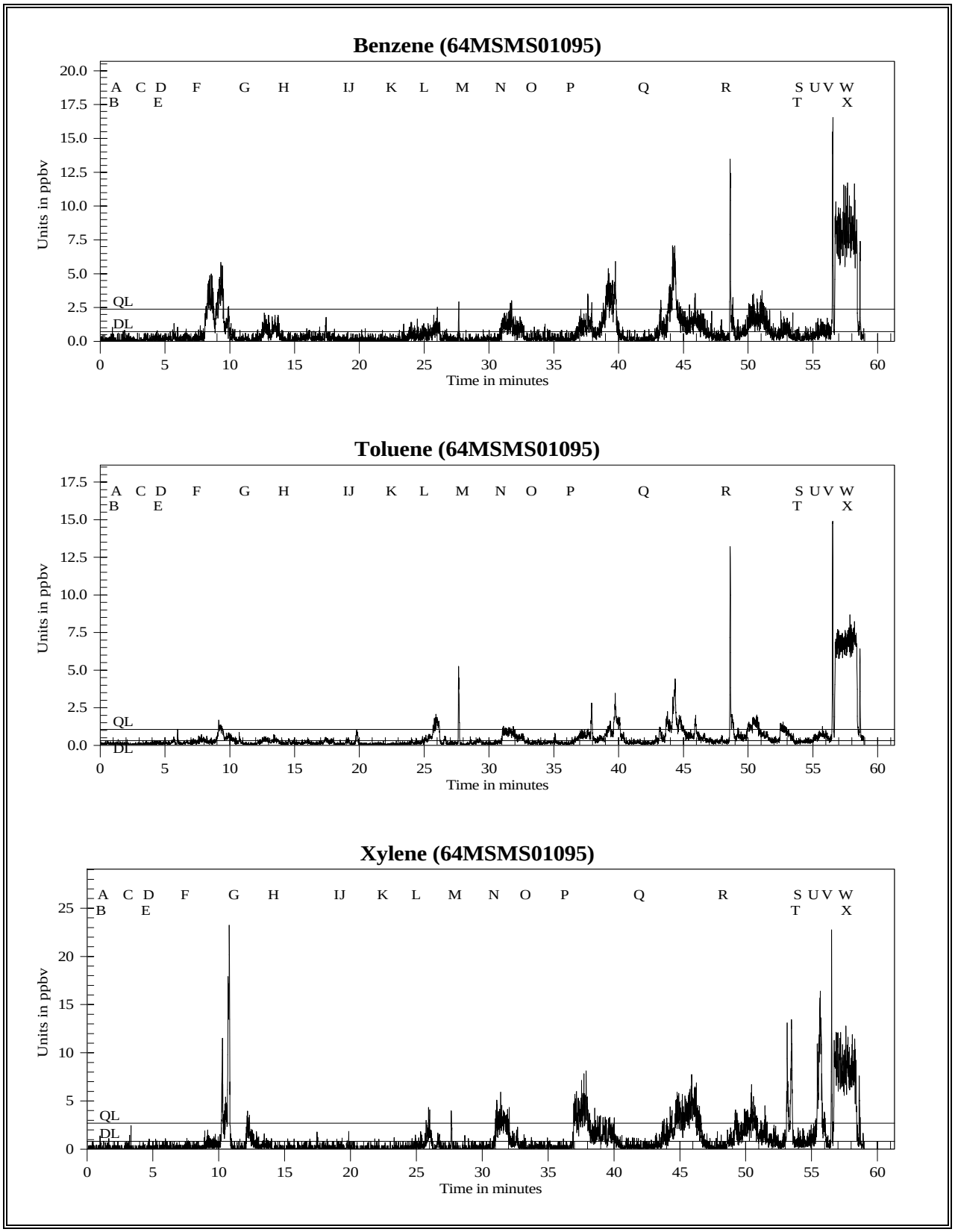


Figure 241c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

Figure 242a Monitoring Channelview Three Path, 64MSMS01096

Figure 242b

TAGA File Event Summary
File: 64MSMS01096 Acquired on 29 April 2019 at 14:23:52
Title: Monitoring Channelview Three

Flag	Time	Sequence	Description
A	0.6	61	Start mobile monitoring on Market Street
B	2.1	204	Continuing onto Market Street
C	2.5	237	Left turn onto Lakeside Drive
D	6.4	612	Passing K-Solv
E	7.0	663	Left turn onto Dezavala Road
F	12.9	1224	U-turn on Dezavala Road
G	19.5	1853	Left turn to continue on Dezavala Road
H	23.1	2198	Right turn onto Market Street
I	30.9	2941	Cross Magnolia Street
J	33.1	3144	Cross Monmouth Street
K	36.6	3480	U-turn on Market Street
L	41.2	3919	Cross Monmouth Street
M	45.4	4317	End mobile monitoring on Market Street
N	45.7	4341	Start ambient
O	46.8	4450	End ambient
P	48.1	4575	Start 30 mL/min spike
Q	49.1	4670	End 30 mL/min spike

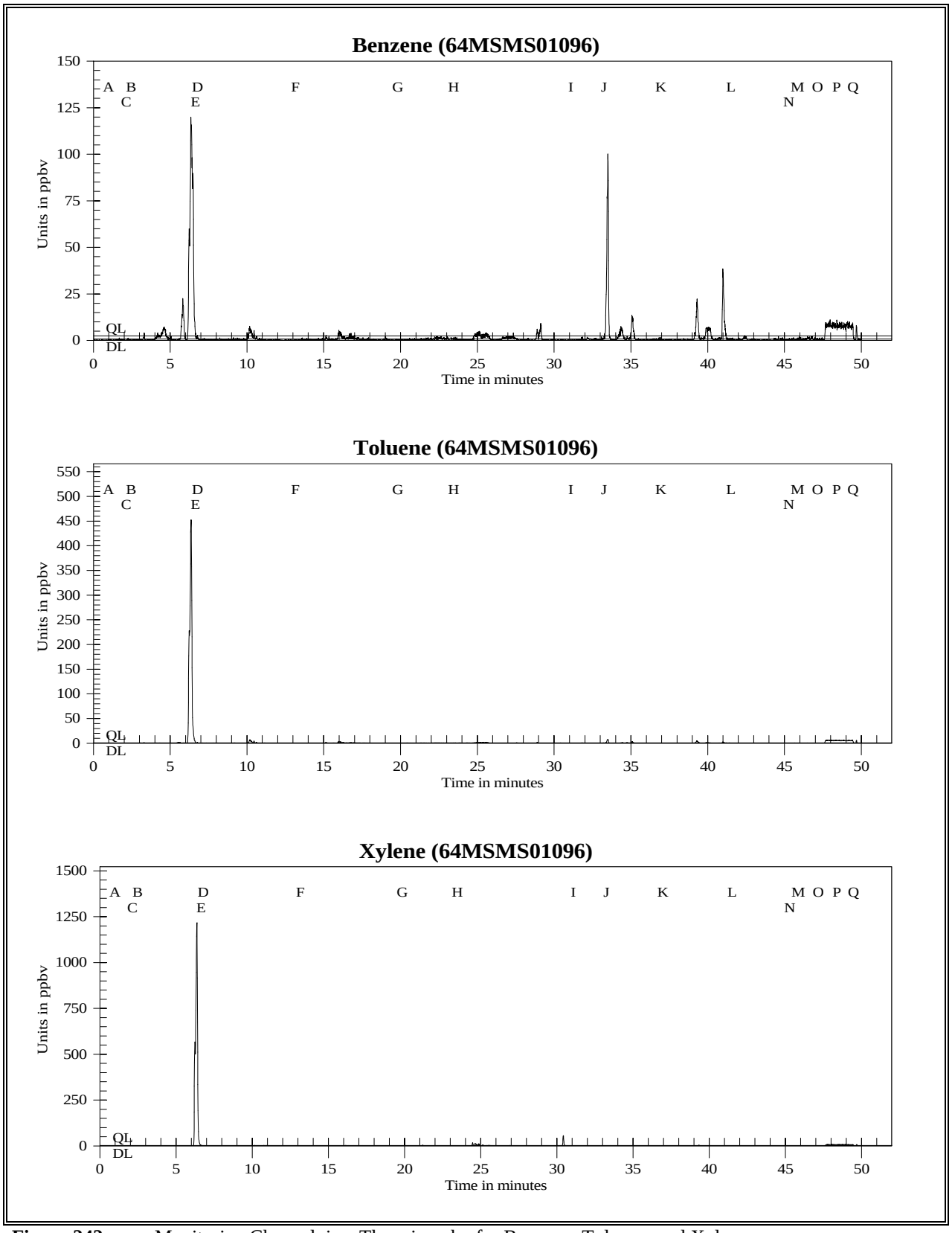


Figure 242c Monitoring Channelview Three in ppbv for Benzene, Toluene, and Xylenes

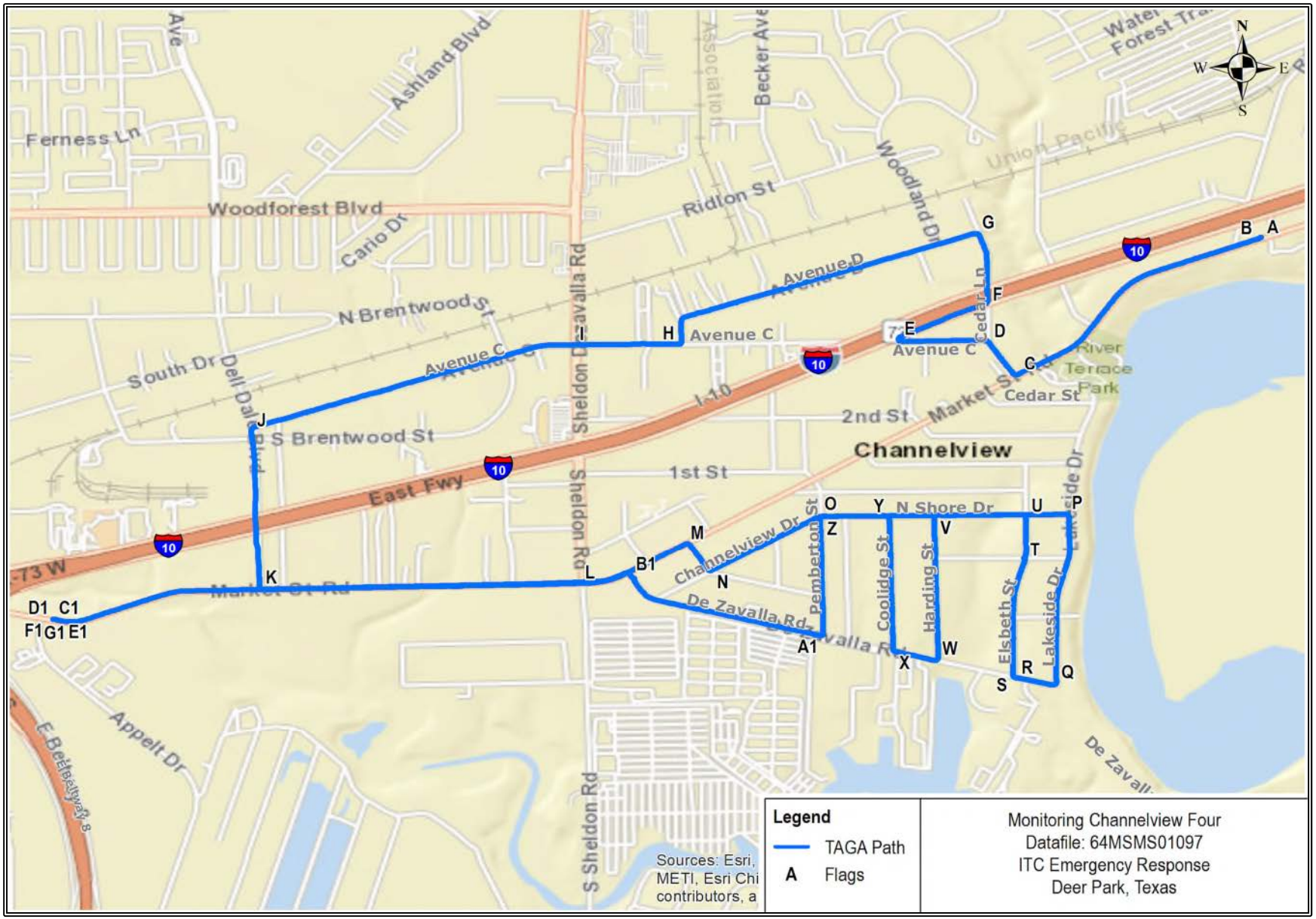


Figure 243a Monitoring Channelview Four Path, 64MSMS01097

Figure 243b

TAGA File Event Summary
File: 64MSMS01097 Acquired on 29 April 2019 at 15:16:57
Title: Monitoring Channelview Four

Flag	Time	Sequence	Description
A	0.8	74	Start mobile monitoring on Market Street
B	1.1	107	Continuing onto Market Street
C	3.8	360	Right turn onto Cedar Lane
D	4.4	419	Left turn onto Avenue C
E	5.9	558	Right turn onto East Freeway Service Road
F	7.0	666	Left turn onto Cedar Lane
G	8.2	780	Left turn onto Avenue D
H	11.8	1122	Right turn onto Avenue C
I	13.2	1257	Cross Sheldon Road
J	17.5	1669	Left turn onto Dell Dale Road
K	20.1	1910	Left turn onto Market Street
L	24.4	2322	Cross Sheldon Road
M	25.5	2425	Right turn onto Red Oak Road
N	26.2	2491	Left turn onto Channelview Drive
O	27.9	2653	Right turn onto N Shore Drive
P	30.7	2921	Right turn onto Lakeside Drive
Q	32.9	3128	Passing K-Solv
R	33.4	3173	Continuing onto Dezavala Road
S	33.6	3195	Right turn onto Elsbeth Road
T	35.5	3373	Continuing onto Elsbeth Road
U	36.7	3487	Left turn onto N Shore Drive
V	38.2	3628	Left turn onto Harding Street
W	40.5	3856	Right turn onto Dezavala Road
X	41.1	3907	Right turn onto Coolidge Street
Y	43.7	4152	Left turn onto N Shore Drive
Z	44.9	4266	Left turn onto Pemberton Street
A1	46.9	4463	Right turn onto Dezavala Road
B1	49.6	4716	Left turn onto Market Street
C1	54.4	5169	End mobile monitoring on Market Street
D1	54.5	5184	Start ambient
E1	55.5	5282	End ambient
F1	56.7	5393	Start 30 mL/min spike
G1	57.8	5499	End 30 mL/min spike

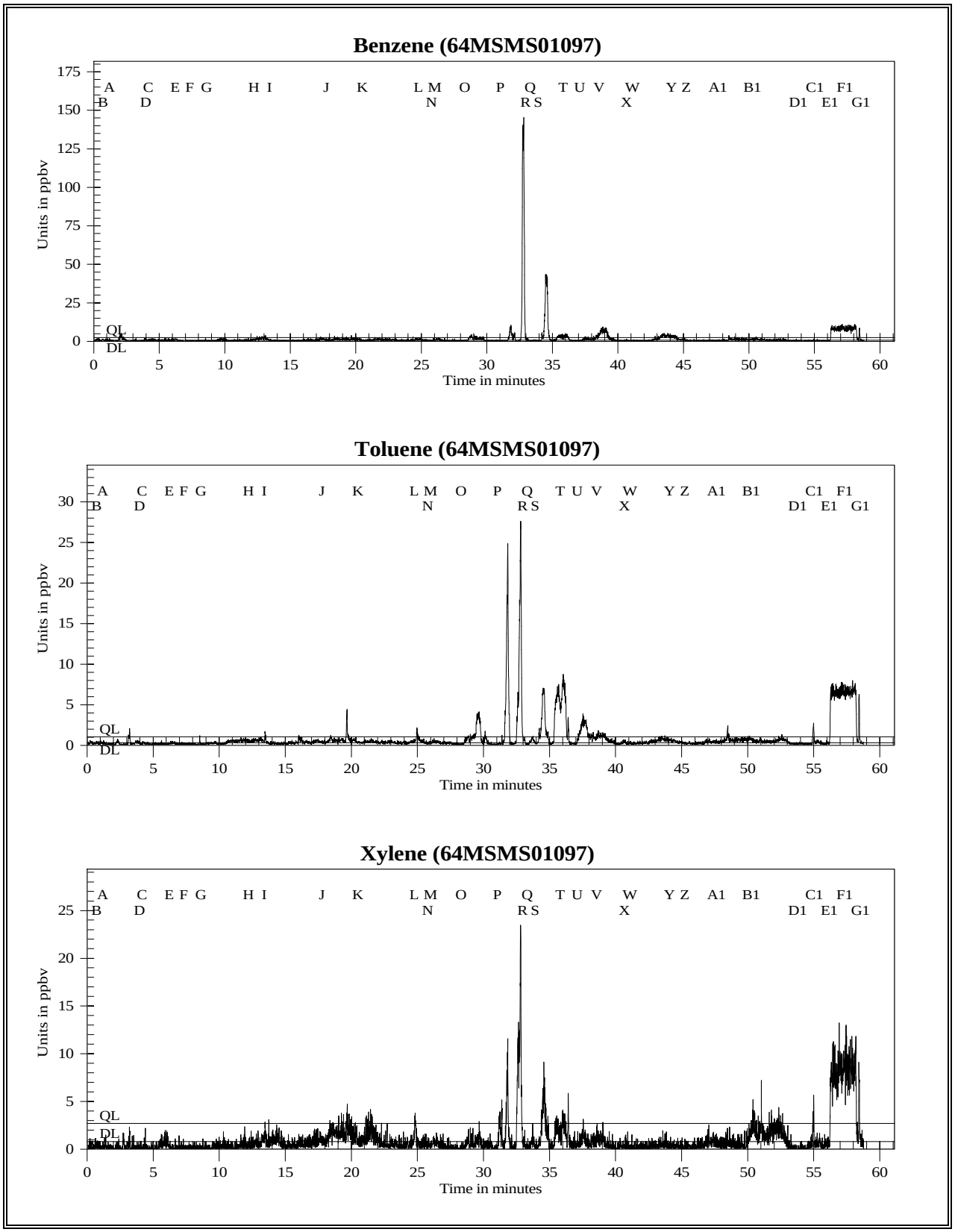


Figure 243c Monitoring Channelview Four in ppbv for Benzene, Toluene, and Xylenes

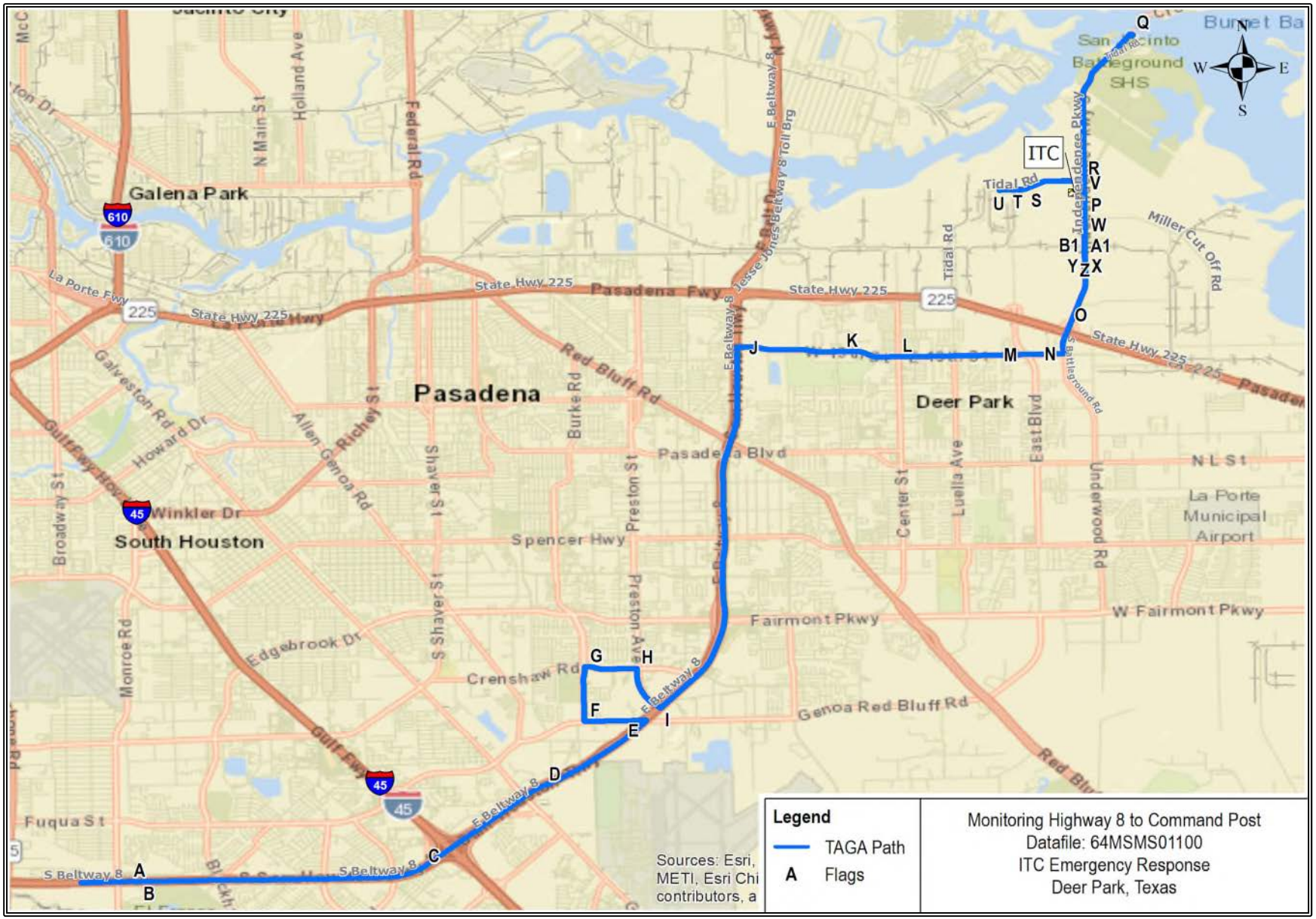


Figure 244a Monitoring Highway 8 to Command Post Path, 64MSMS01100

Figure 244b

TAGA File Event Summary
File: 64MSMS01100 Acquired on 30 April 2019 at 08:47:09
Title: Monitoring Highway 8 to Deer Park

Flag	Time	Sequence	Description
A	1.3	127	Start mobile monitoring on Highway 8 North
B	1.4	135	Continuing onto Highway 8 North
C	4.7	452	Cross Highway 45
D	6.3	600	Exit onto Highway 8 Service Road
E	8.9	850	Left turn onto Genoa Red Bluff Road
F	11.2	1061	Right turn onto Burke Road
G	13.2	1259	Right turn onto Crenshaw Road
H	14.8	1408	Right turn onto Preston Road
I	17.1	1626	Left turn onto Highway 8 Service Road
J	29.5	2810	Right turn onto Greenshadow Drive
K	32.0	3040	Continuing onto West 13th Street
L	33.9	3224	Cross Center Street
M	37.4	3552	Cross East Boulevard
N	38.9	3699	Left turn onto Battleground Road
O	40.5	3849	Continuing onto Independence Parkway
P	42.9	4078	Cross Miller Cut-Off Road
Q	48.6	4624	U-turn on Independence Parkway at Juan Seguin Park
R	54.4	5171	Right turn onto Tidal Road
S	58.0	5515	Stationary on Tidal Road
T	62.5	5943	Resume mobile monitoring on Tidal Road
U	64.4	6120	U-turn on Tidal Road
V	69.3	6594	Right turn onto Independence Parkway
W	70.8	6732	Cross Miller Cut-Off Road
X	72.5	6890	End mobile monitoring on Independence Parkway
Y	72.7	6914	Start ambient
Z	73.7	7009	End ambient
A1	75.1	7140	Start 30 mL/min spike
B1	76.2	7243	End 30 mL/min spike

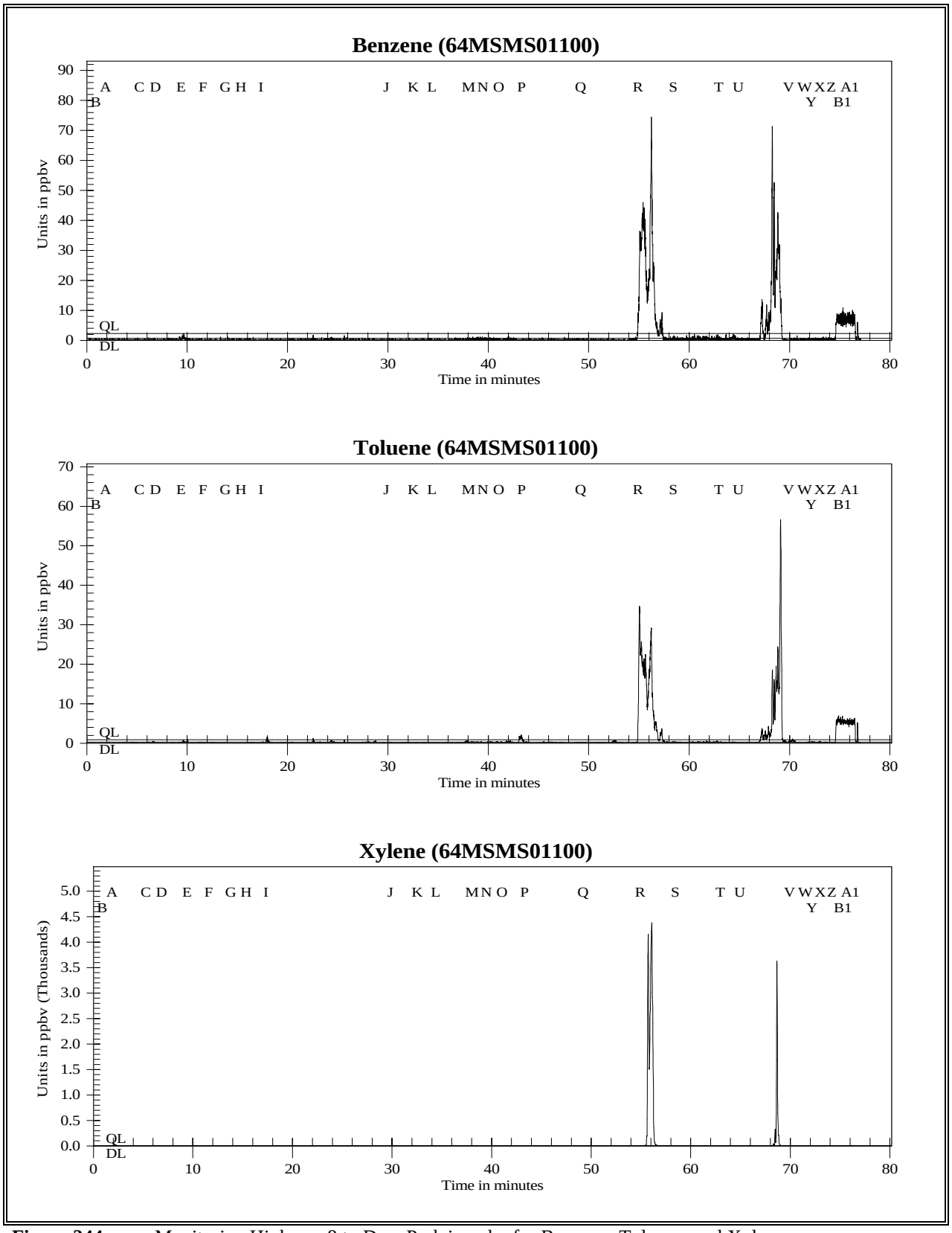


Figure 244c Monitoring Highway 8 to Deer Park in ppbv for Benzene, Toluene, and Xylenes

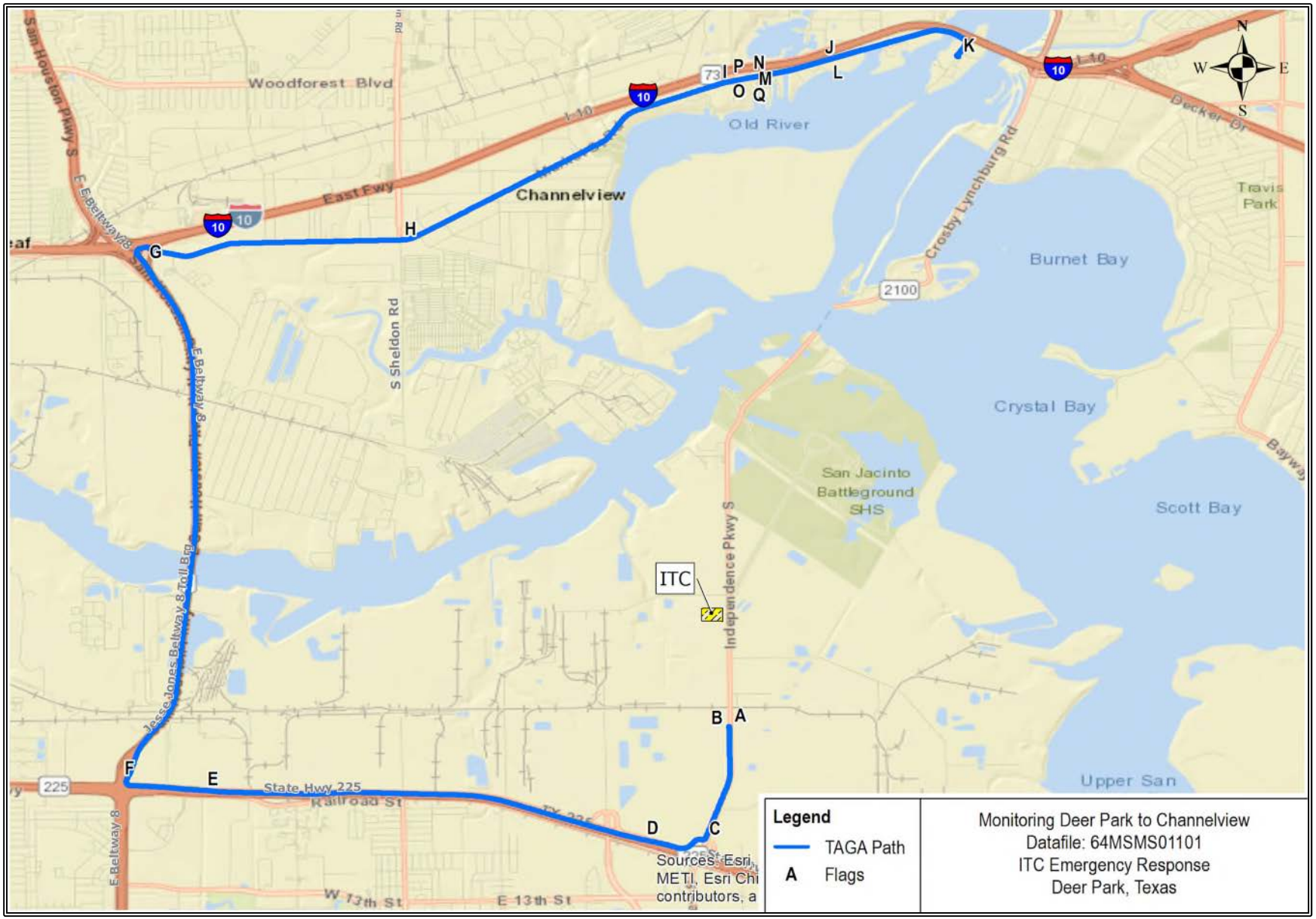


Figure 245a Monitoring Deer Park to Channelview Path, 64MSMS01101

Figure 245b

TAGA File Event Summary
File: 64MSMS01101 Acquired on 30 April 2019 at 10:06:50
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	0.6	62	Start mobile monitoring on Independence Parkway
B	1.1	105	Continuing onto Independence Parkway
C	2.9	272	Right turn onto Pasadena Freeway Frontage Road
D	3.8	360	Merge onto Highway 225 West
E	6.7	638	Exit onto Pasadena Freeway Frontage Road
F	7.7	734	Right turn onto Highway 8 North
G	12.5	1192	Right turn onto Market Street
H	17.4	1652	Cross Sheldon Road
I	23.7	2257	Cross Magnolia Street
J	25.2	2398	Cross Monmouth Street
K	28.5	2709	U-turn on Market Street
L	33.7	3205	Cross Monmouth Street
M	35.8	3404	End mobile monitoring at River Terrace Park
N	36.1	3436	Start ambient
O	37.2	3534	End ambient
P	38.4	3650	Start 30 mL/min spike
Q	39.4	3748	End 30 mL/min spike

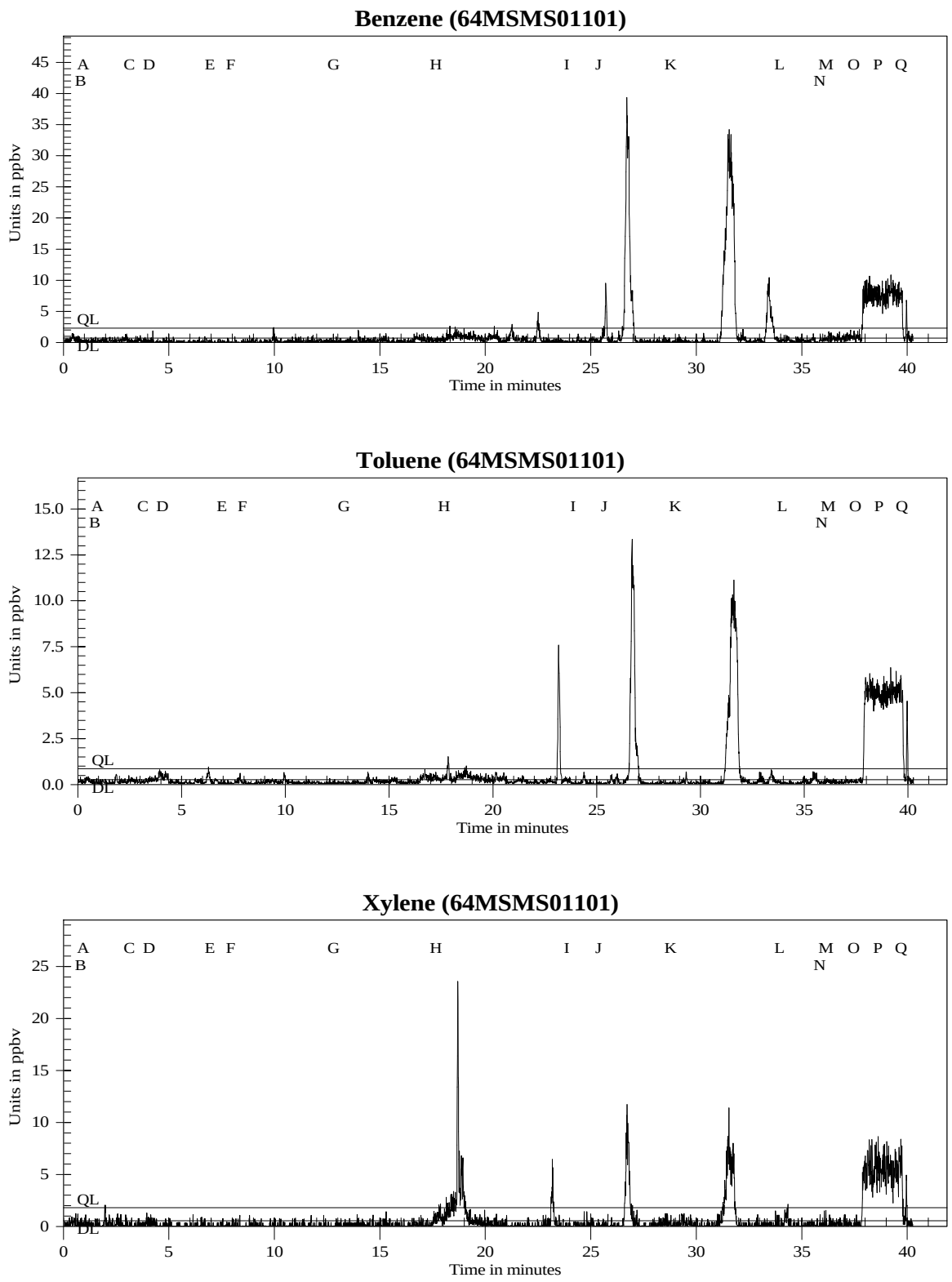


Figure 245c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

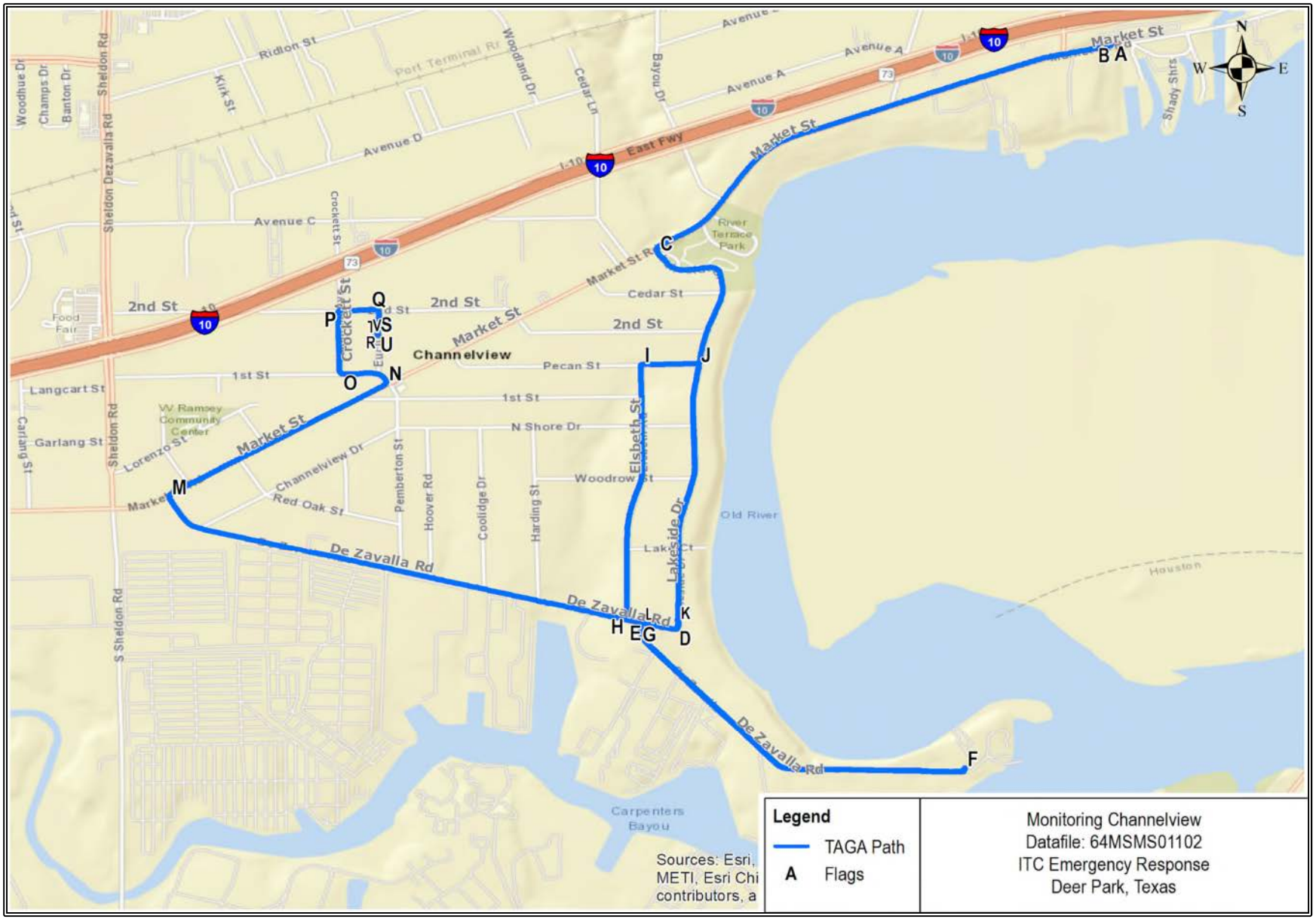


Figure 246a Monitoring Channelview Path, 64MSMS01102

Figure 246b

TAGA File Event Summary
File: 64MSMS01102 Acquired on 30 April 2019 at 10:49:28
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	0.8	75	Start mobile monitoring at River Terrace Park
B	1.2	115	Continuing onto Market Street
C	4.9	466	Left turn onto Lakeside Drive
D	8.9	848	Passing K-Solv
E	9.4	891	Left turn onto Dezavala Road
F	15.1	1438	U-turn on Dezavala Road
G	23.1	2194	Left turn to continue onto Dezavala Road
H	23.3	2217	Right turn onto Elsbeth Road
I	27.6	2626	Right turn onto Pecan Street
J	28.4	2701	Right turn onto Lakeside Drive
K	31.2	2967	Passing K-Solv
L	31.8	3021	Continuing onto Dezavala Road
M	35.5	3374	Right turn onto Market Street
N	37.7	3582	Left turn onto 1st Street
O	38.3	3642	Right turn onto Crockett Street
P	39.4	3751	Right turn onto 2nd Street
Q	40.0	3803	Right turn onto Euclid Street
R	40.6	3862	End mobile monitoring on Euclid Street
S	40.8	3884	Start ambient
T	41.9	3981	End ambient
U	43.2	4112	Start 30 mL/min spike
V	44.3	4208	End 30 mL/min spike

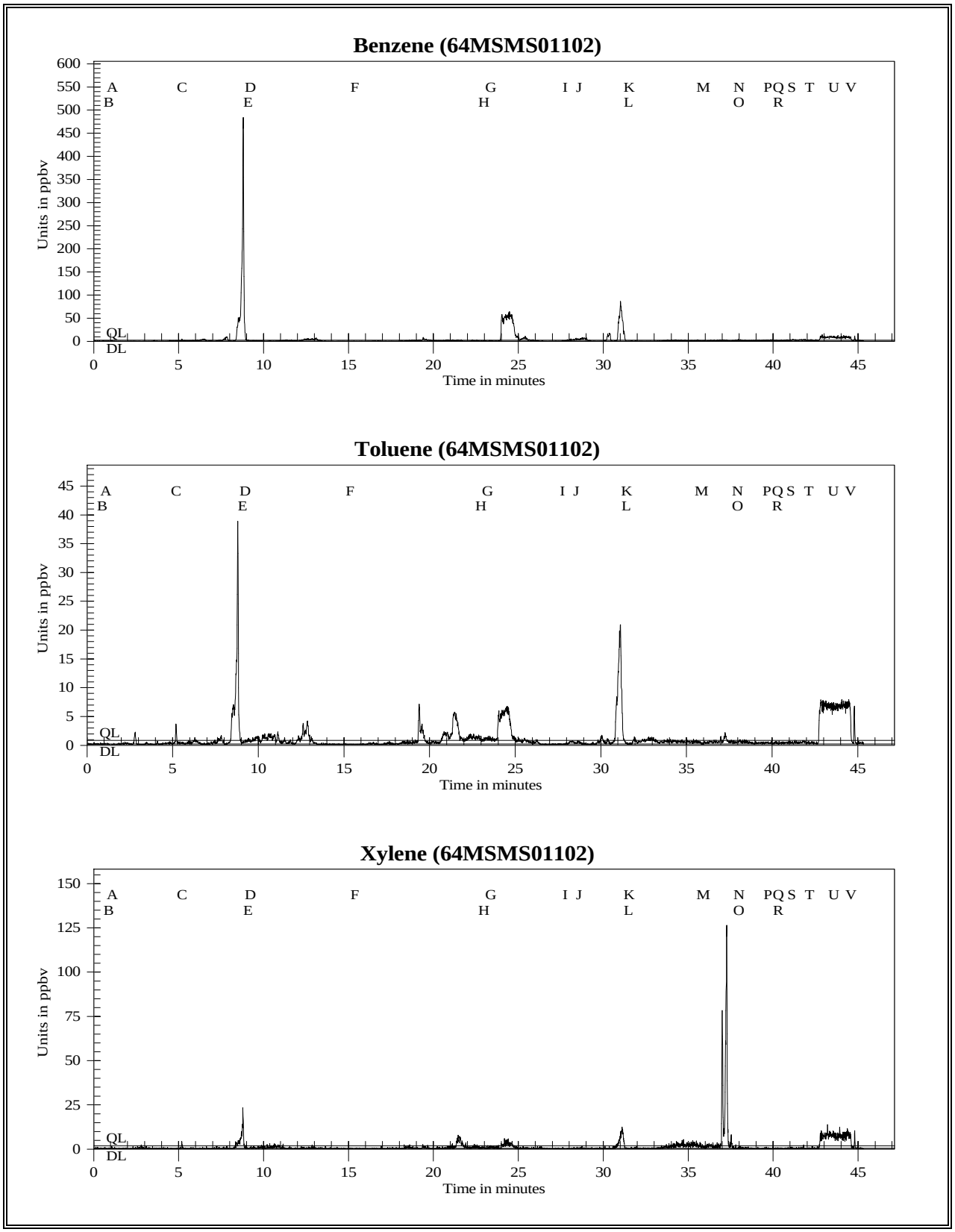


Figure 246c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

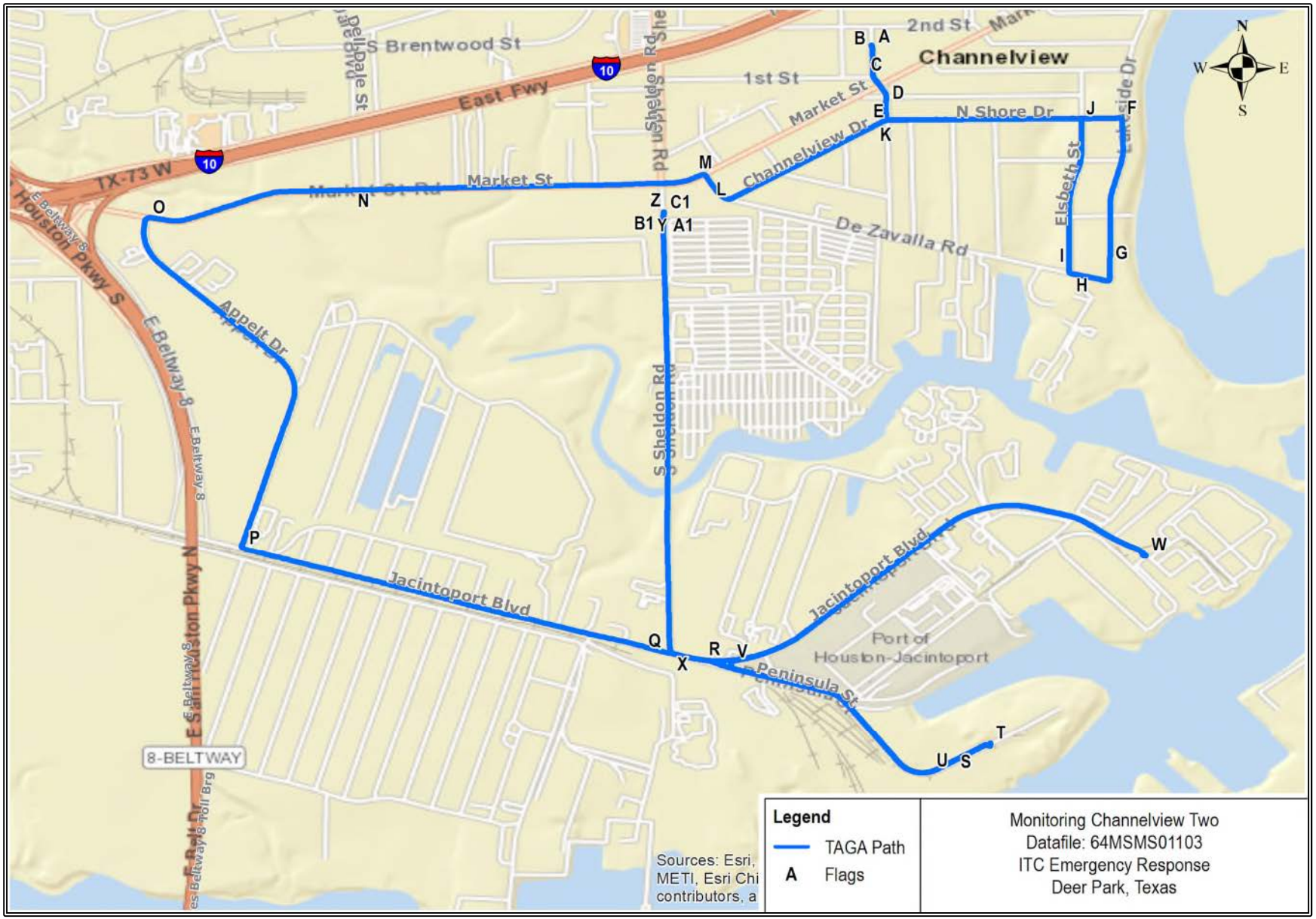


Figure 247a Monitoring Channelview Two Path, 64MSMS01103

Figure 247b

TAGA File Event Summary
File: 64MSMS01103 Acquired on 30 April 2019 at 11:36:36
Title: Monitoring Channelview Two

Flag	Time	Sequence	Description
A	0.6	62	Start mobile monitoring on Euclid Street
B	1.0	99	Continuing onto Euclid Street
C	1.6	157	Left turn onto 1st Street
D	2.3	221	Continuing onto Pemberton Street
E	2.7	260	Left turn onto N Shore Drive
F	5.7	539	Right turn onto Lakeside Drive
G	7.6	720	Passing K-Solv
H	8.9	845	Continuing onto Dezavala Road
I	9.1	866	Right turn onto Elsbeth Road
J	11.8	1126	Left turn onto N Shore Drive
K	14.1	1343	Left turn onto E Channelview Drive
L	16.6	1577	Right turn onto Dezavala Road
M	17.7	1679	Left turn onto Market Street
N	21.0	1999	Cross Dell Dale Street
O	23.1	2194	Left turn onto Appelt Drive
P	28.9	2750	Left turn onto Jacintoport Boulevard
Q	32.9	3125	Cross Sheldon Road
R	33.3	3171	Right turn onto San Jacinto Boulevard
S	37.4	3561	Continuing onto Peninsula Street
T	38.6	3667	U-turn on Peninsula Street
U	40.4	3838	Continuing onto San Jacinto Boulevard
V	44.1	4197	Right turn onto Jacintoport Boulevard
W	49.4	4694	U-turn on Jacintoport Boulevard
X	55.2	5245	Right turn onto Sheldon Road
Y	59.8	5686	End mobile monitoring on Sheldon Road
Z	60.2	5726	Start ambient
A1	61.3	5832	End ambient
B1	62.5	5944	Start 30 mL/min spike
C1	63.5	6041	End 30 mL/min spike

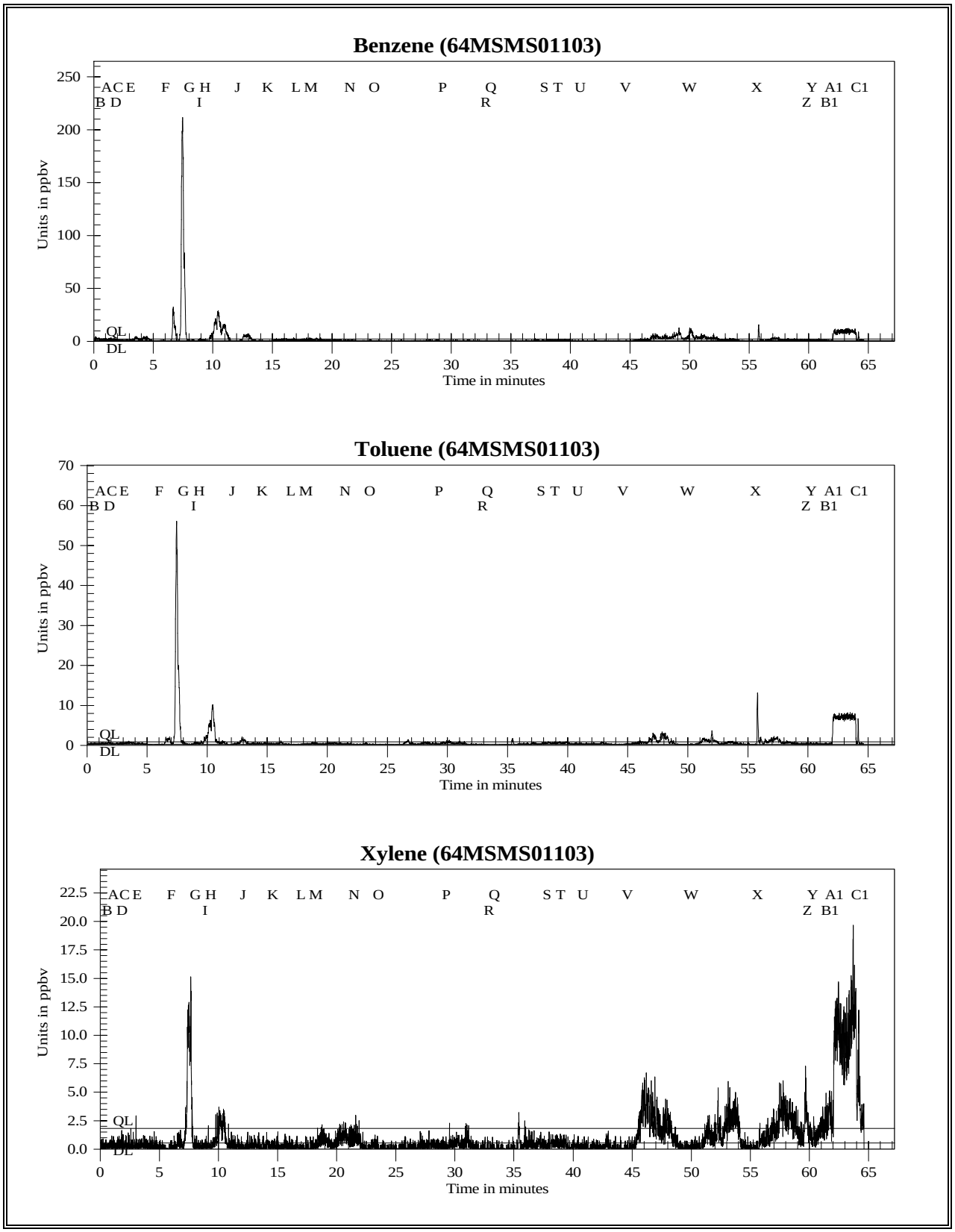


Figure 247c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

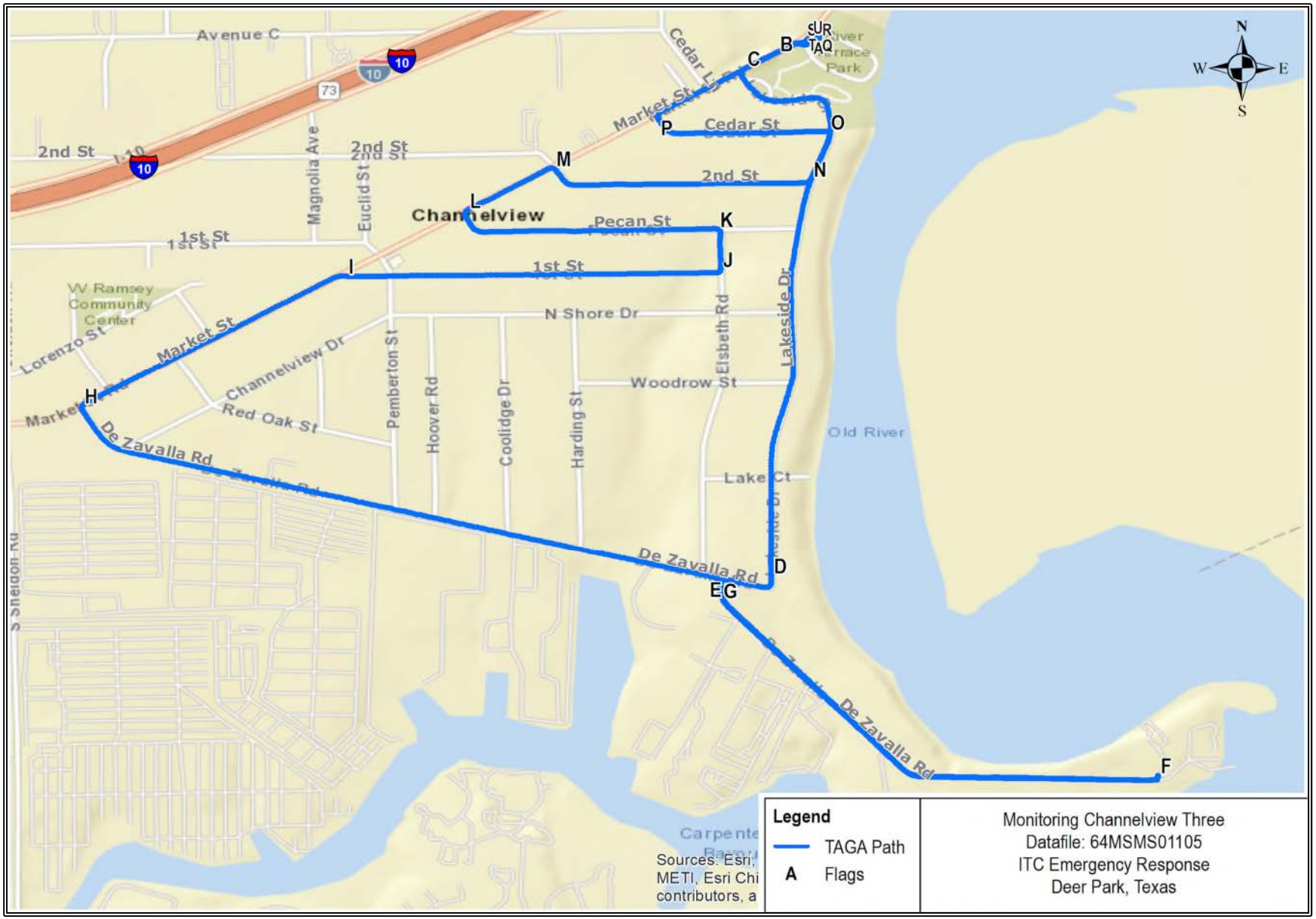


Figure 248a Monitoring Channelview Three Path, 64MSMS01105

Figure 248b

TAGA File Event Summary
File: 64MSMS01105 Acquired on 30 April 2019 at 14:21:11
Title: Monitoring Channelview Three

Flag	Time	Sequence	Description
A	0.5	53	Start mobile monitoring on Market Street
B	9.9	942	Left turn onto Market Street
C	10.4	985	Left turn onto Lakeside Drive
D	14.1	1346	Passing K-Solv
E	14.8	1412	Left turn onto Dezavala Road
F	21.6	2057	U-turn on Dezavala Road
G	29.4	2793	Left turn to continue onto Dezavala Road
H	33.5	3182	Right turn onto Market Street
I	35.1	3339	Right turn onto 1st Street
J	37.9	3604	Left turn onto Elsbeth Road
K	38.5	3659	Left turn onto Pecan Street
L	40.8	3884	Right turn onto Market Street
M	41.6	3954	Right turn onto 2nd Street
N	43.8	4168	Left turn onto Lakeside Drive
O	44.3	4215	Left turn onto Cedar Street
P	46.0	4374	Right turn onto Market Street
Q	47.7	4534	End mobile monitoring at River Terrace Park
R	48.0	4561	Start ambient
S	49.0	4657	End ambient
T	50.3	4787	Start 30 mL/min spike
U	51.4	4884	End 30 mL/min spike

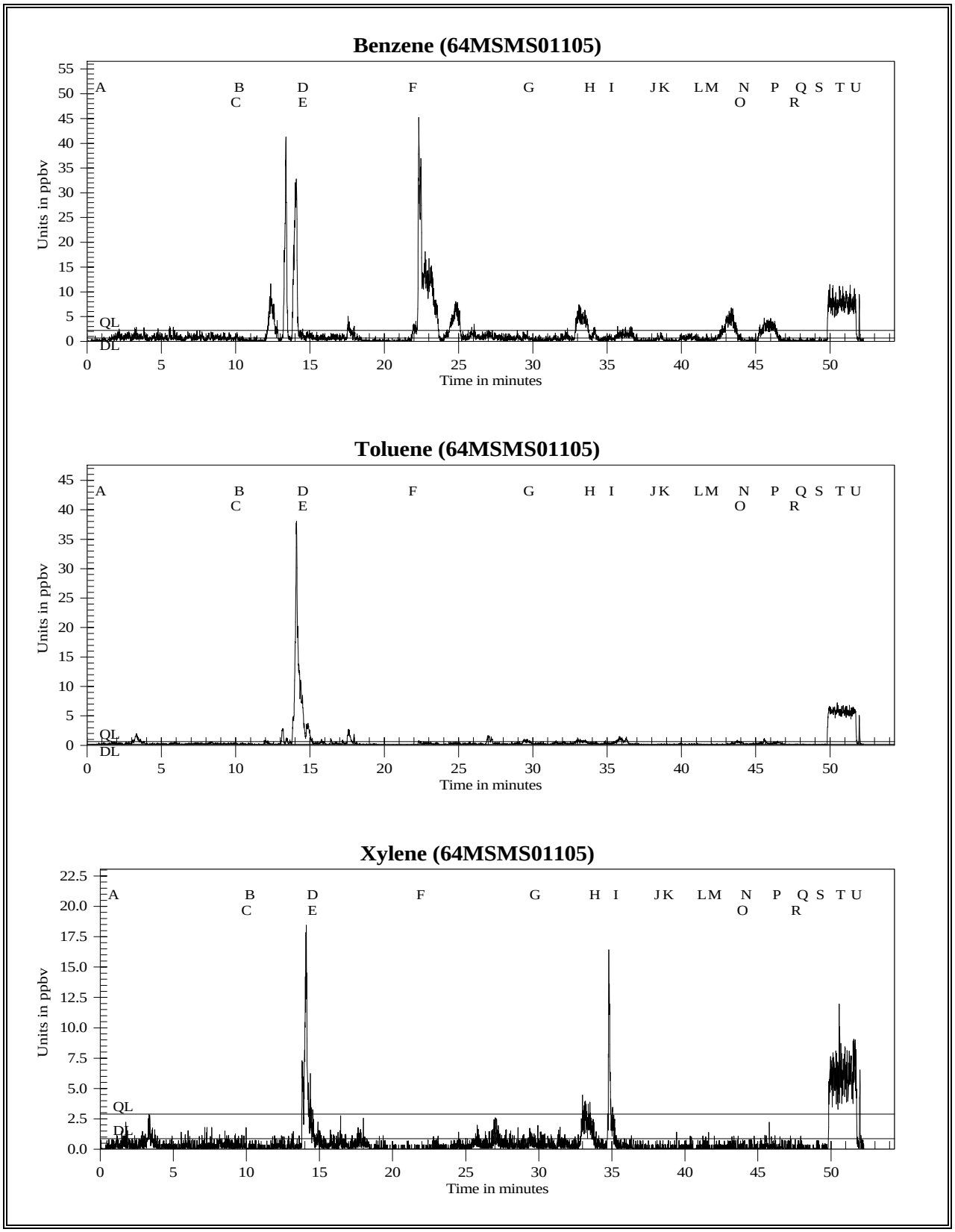


Figure 248c Monitoring Channelview Three in ppbv for Benzene, Toluene, and Xylenes

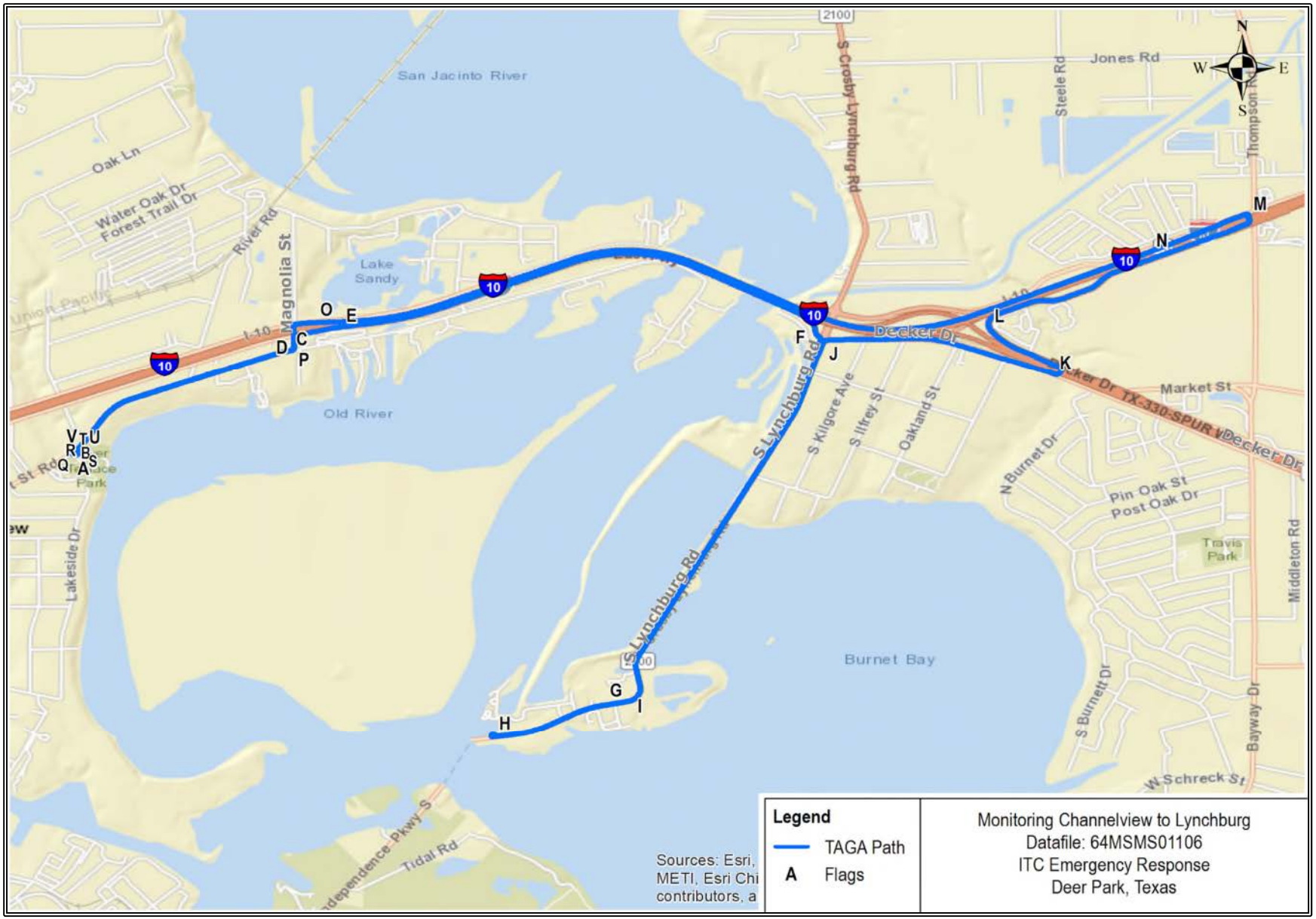


Figure 249a Monitoring Channelview to Lynchburg Path, 64MSMS01106

Figure 249b

TAGA File Event Summary
File: 64MSMS01106 Acquired on 30 April 2019 at 15:16:10
Title: Monitoring Channelview to Lynchburg

Flag	Time	Sequence	Description
A	0.8	74	Start mobile monitoring at River Terrace Park
B	1.8	172	Right turn onto Market Street
C	5.2	497	Left turn onto Magnolia Street
D	5.6	530	Right turn East Freeway Service Road
E	6.0	574	Merge onto Highway 10 East
F	8.3	788	Right turn onto Independence Parkway North
G	13.8	1311	Right turn to continue on Independence Parkway North
H	15.5	1476	U-turn on Independence Parkway North at Lynchburg Ferry
I	18.5	1755	Left turn to continue onto Independence Parkway North
J	23.4	2230	Right turn onto Decker Drive
K	25.3	2403	U-turn on Decker Drive
L	26.3	2498	Continuing onto East Freeway Service Road
M	31.7	3013	U-turn on East Freeway Service Road at Thompson Road
N	33.9	3227	Merge onto Highway 10 West
O	41.7	3965	Left turn onto Magnolia Street
P	42.7	4059	Right turn onto Market Street
Q	45.9	4366	Left turn into River Terrace Park
R	47.3	4499	End mobile monitoring at River Terrace Park
S	47.7	4532	Start ambient
T	48.7	4627	End ambient
U	50.0	4751	Start 30 mL/min spike
V	51.0	4851	End 30 mL/min spike

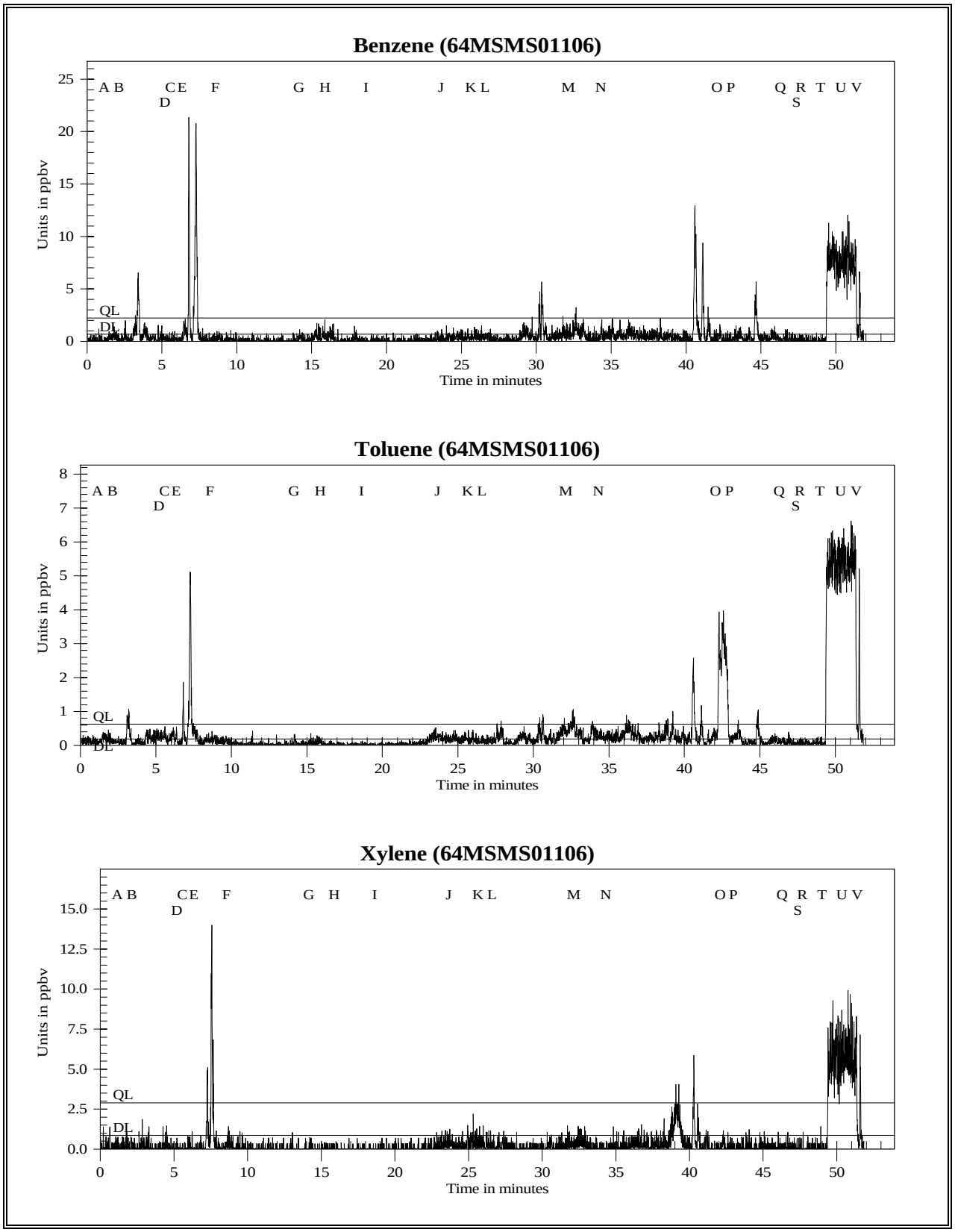


Figure 249c Monitoring Channelview to Lynchburg in ppbv for Benzene, Toluene, and Xylenes

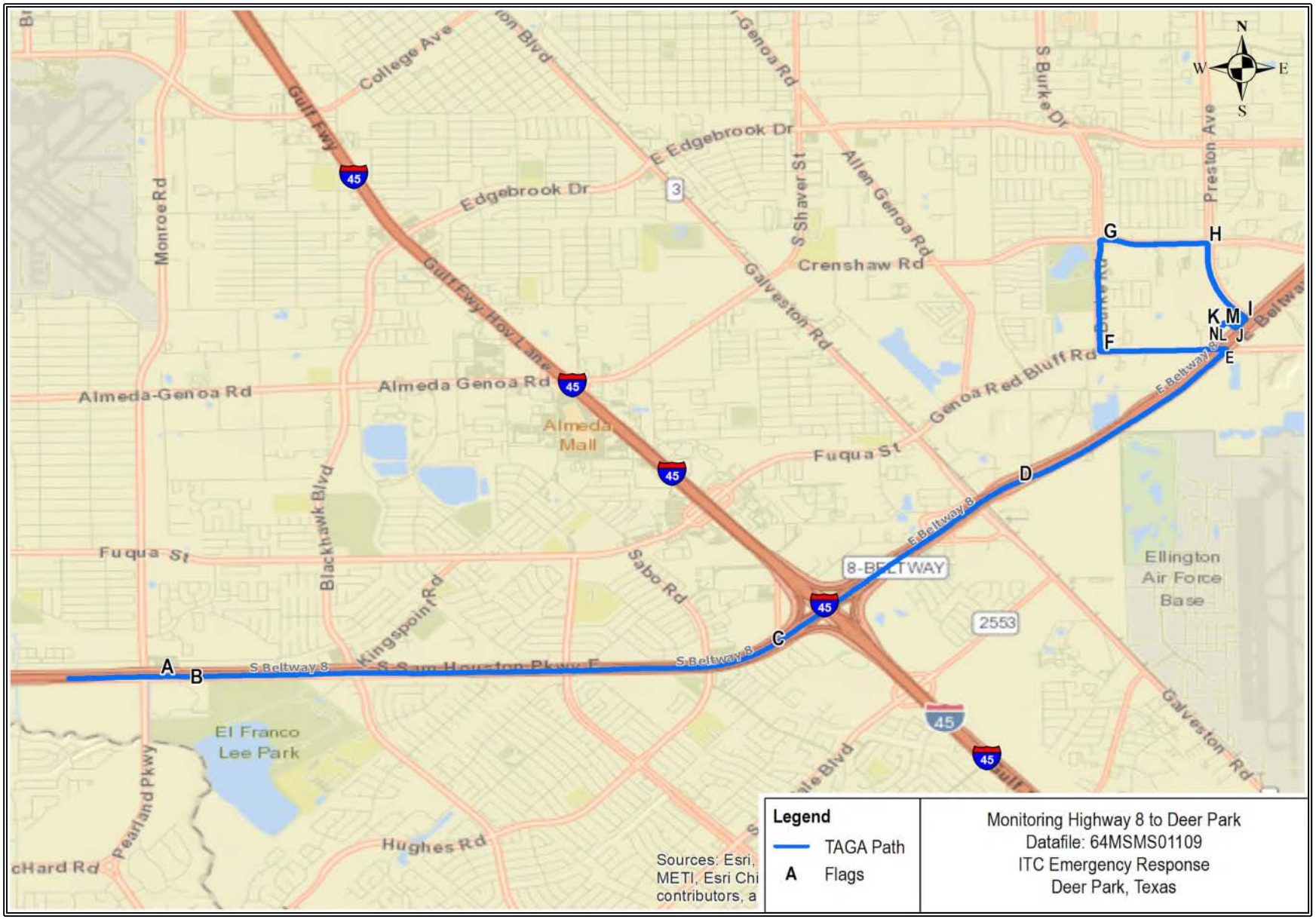


Figure 250a Monitoring Highway 8 to Command Post, 64MSMS01109

Figure 250b

TAGA File Event Summary
File: 64MSMS01109 Acquired on 01 May 2019 at 08:25:00
Title: Monitoring Highway 8 to Deer Park

Flag	Time	Sequence	Description
A	2.3	218	Start mobile monitoring on Highway 8 North
B	2.7	262	Continuing onto Highway 8 North
C	4.1	392	Cross Highway 45
D	5.7	539	Exit onto Highway 8 Service Road
E	8.0	761	Left turn onto Genoa Red Bluff Road
F	10.4	989	Right turn onto Burke Road
G	12.1	1148	Right turn onto Crenshaw Road
H	13.9	1321	Right turn onto Preston Road
I	15.6	1484	Right turn onto Highway 8 Service Road
J	17.2	1639	End mobile monitoring on Highway 8 Service Road
K	17.4	1655	Start ambient
L	18.4	1752	End ambient
M	19.7	1875	Start 30 mL/min spike
N	20.7	1970	End 30 mL/min spike

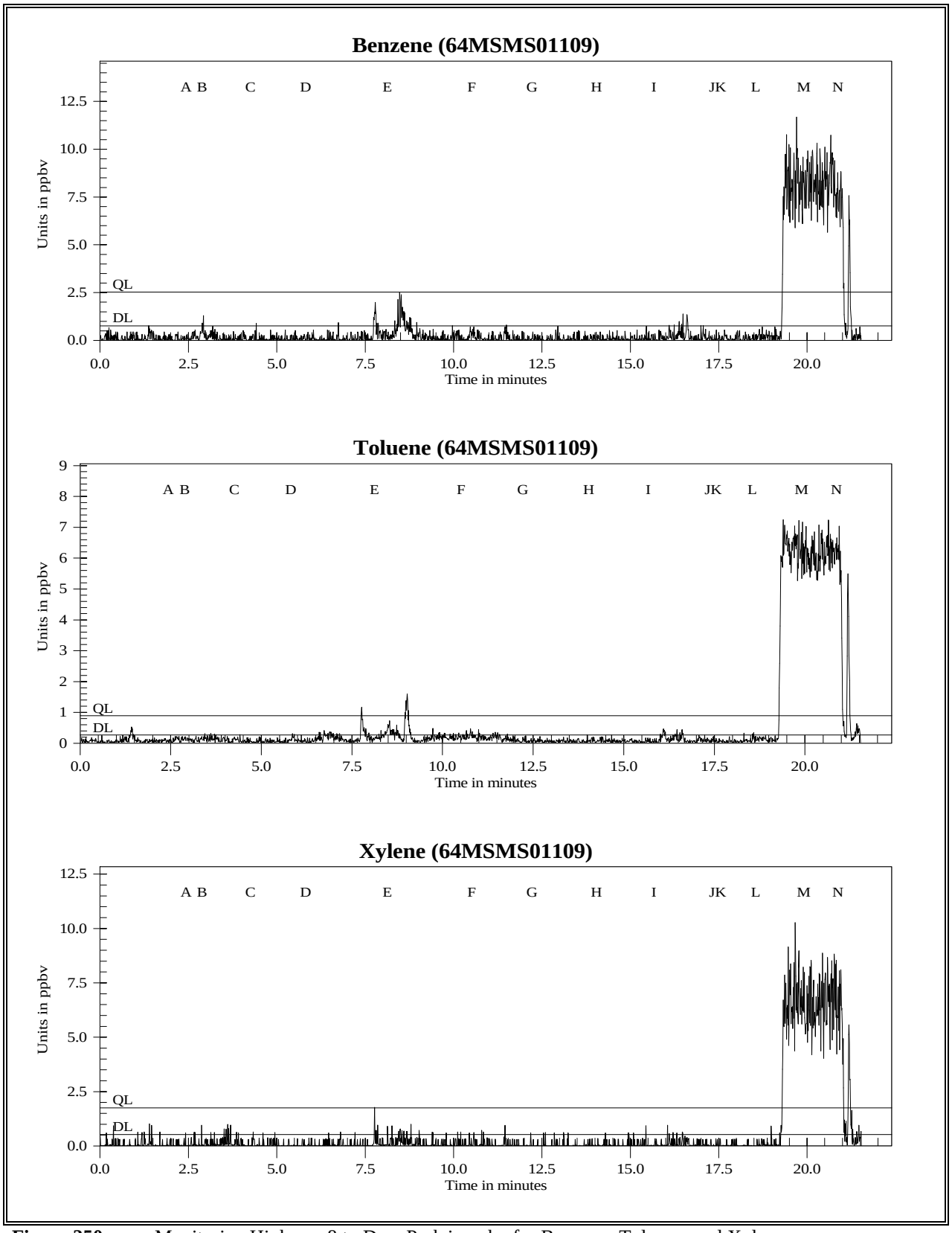


Figure 250c Monitoring Highway 8 to Deer Park in ppbv for Benzene, Toluene, and Xylenes

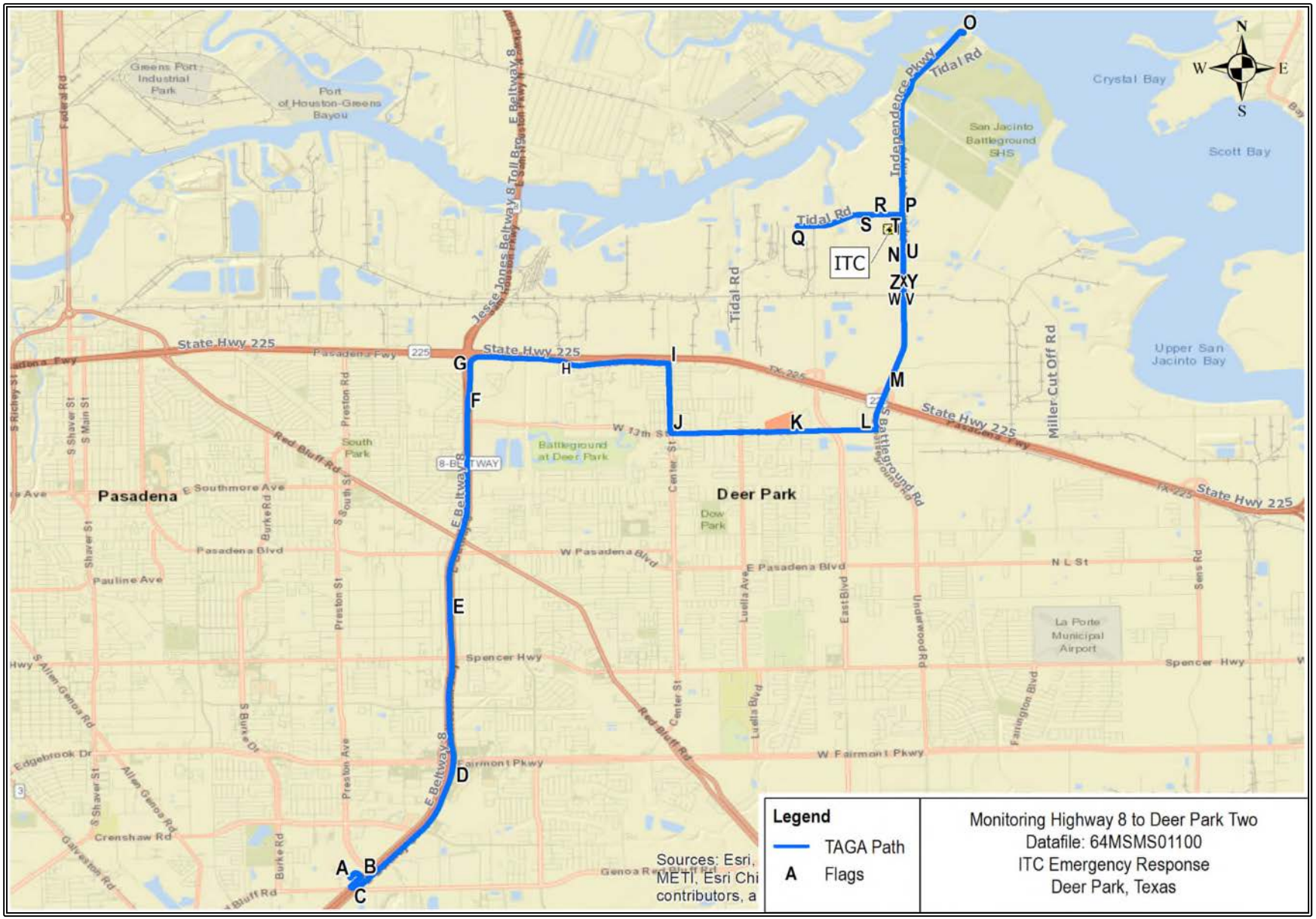


Figure 251a Monitoring Highway 8 to Deer Park Two Path, 64MSMS01110

Figure 251b

TAGA File Event Summary
File: 64MSMS01110 Acquired on 01 May 2019 at 08:58:08
Title: Monitoring Highway 8 to Deer Park Two

Flag	Time	Sequence	Description
A	0.5	53	Start mobile monitoring on Highway 8 Service Road
B	2.3	215	Right turn onto Highway 8 Service Road
C	2.8	264	U-turn on Highway 8 Service Road
D	7.5	715	Cross Fairmont Parkway
E	9.6	913	Merge onto Highway 8 North
F	11.9	1129	Exit onto Highway 8 Service Road
G	12.7	1206	Right turn onto Pasadena Freeway Frontage Road
H	14.4	1367	Continuing onto Railroad Street
I	16.9	1611	Right turn onto Center Street
J	19.7	1878	Left turn onto East 13th Street
K	23.2	2203	Passing San Jacinto Elementary School
L	26.0	2476	Left turn onto Battleground Road
M	27.7	2631	Continuing onto Independence Parkway
N	30.8	2932	Cross Miller Cut-Off Road
O	36.9	3510	U-turn on Independence Parkway at Juan Seguin Park
P	45.7	4344	Right turn onto Tidal Road
Q	51.2	4865	U-turn on Tidal Road
R	55.8	5304	Stationary on Tidal Road at railroad crossing
S	66.7	6345	Resume mobile monitoring on Tidal Road
T	68.1	6472	Right turn onto Independence Parkway
U	69.2	6578	Cross Miller Cut-Off Road
V	70.4	6697	End mobile monitoring on Independence Parkway
W	70.8	6733	Start ambient
X	72.5	6893	End ambient
Y	73.6	7001	Start 30 mL/min spike
Z	74.7	7101	End 30 mL/min spike
Notes:		GPS offline at approximately 1 hour into monitoring run.	

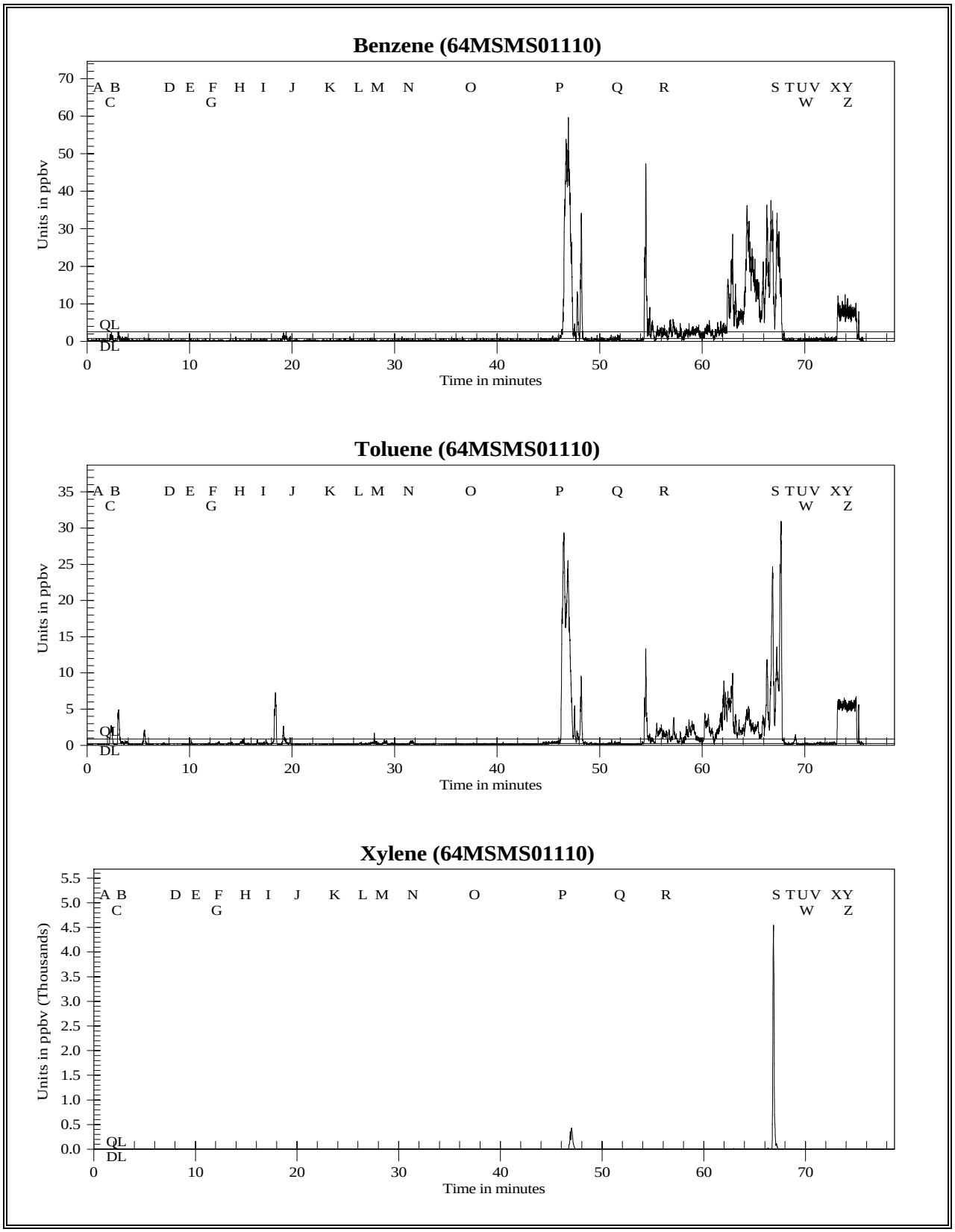


Figure 251c Monitoring Highway 8 to Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

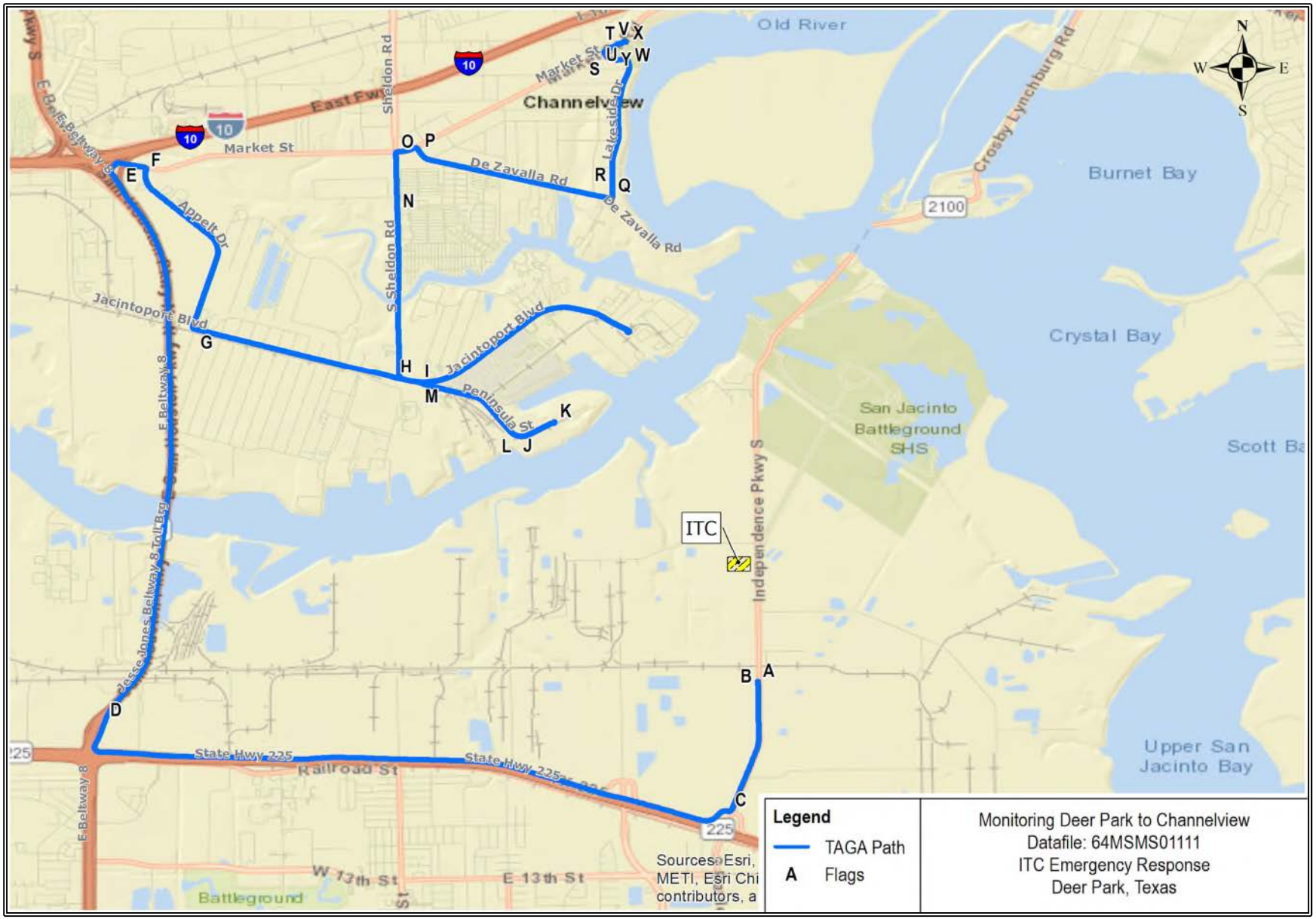


Figure 252a Monitoring Deer Park to Channelview Path, 64MSMS01111

Figure 252b

TAGA File Event Summary
File: 64MSMS01111 Acquired on 01 May 2019 at 10:36:27
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	0.6	62	Start mobile monitoring on Independence Parkway
B	1.0	99	Continuing onto Independence Parkway
C	2.9	280	Right turn onto Pasadena Freeway Frontage Road
D	10.8	1032	Right turn onto Highway 8 North
E	15.6	1487	Right turn onto Market Street
F	17.2	1637	Right turn onto Appelt Drive
G	22.1	2105	Left turn onto Jacintoport Boulevard
H	25.9	2465	Cross Sheldon Road
I	26.5	2522	Right turn onto San Jacinto Boulevard
J	29.7	2827	Continuing onto Peninsula Street
K	31.2	2964	U-turn on Peninsula Street
L	33.2	3160	Continuing onto San Jacinto Boulevard
M	36.6	3477	Right turn onto Jacintoport Boulevard
N	52.4	4987	Continuing onto Sheldon Road
O	54.1	5144	Right turn onto Market Street
P	54.9	5217	Right turn onto Dezavala Road
Q	58.9	5599	Continuing onto Lakeside Drive
R	59.2	5632	Passing K-Solv
S	62.7	5963	Right turn onto Market Street
T	63.2	6014	Right turn into River Terrace Park
U	63.9	6080	End mobile monitoring at River Terrace Park
V	64.1	6099	Start ambient
W	65.1	6194	End ambient
X	66.4	6312	Start 30 mL/min spike
Y	67.4	6405	End 30 mL/min spike

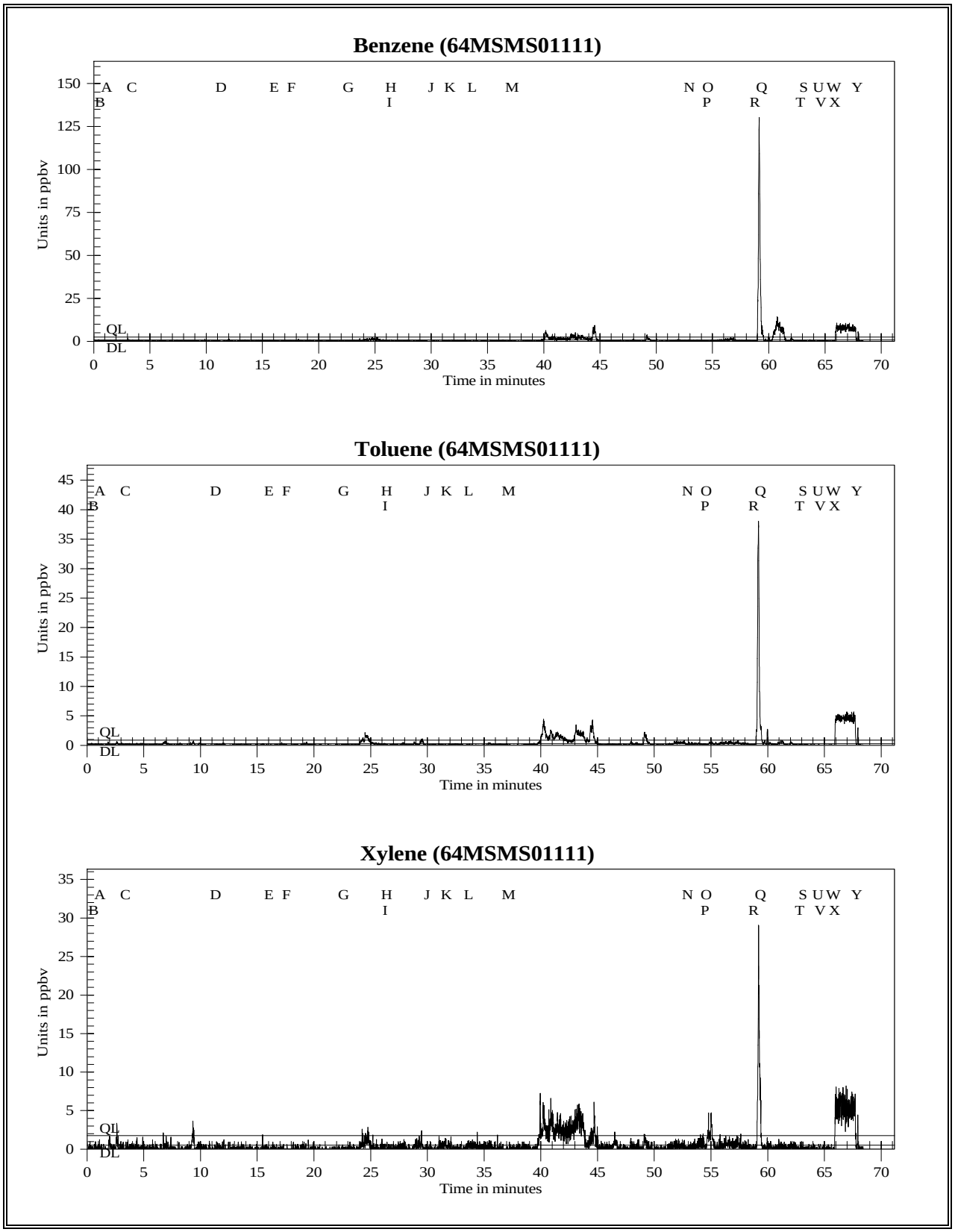


Figure 252c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

Figure 253a Monitoring Channelview Path, 64MSMS01112

Figure 253b

TAGA File Event Summary
File: 64MSMS01112 Acquired on 01 May 2019 at 11:46:54
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	1.7	165	Start mobile monitoring at River Terrace Park
B	2.9	280	Right turn onto Market Street
C	5.9	565	Cross Magnolia Street
D	8.0	763	Cross Monmouth Street
E	12.4	1184	U-turn on Market Street
F	17.6	1674	Cross Monmouth Street
G	19.8	1886	Cross Magnolia Boulevard
H	23.5	2238	Left turn onto Lakeside Drive
I	27.2	2585	Passing K-Solv
J	28.2	2678	Left turn onto Dezavala Road
K	33.8	3211	U-turn on Dezavala Road
L	41.6	3960	Left turn to continue on Dezavala Road
M	41.9	3989	Right turn onto Elsbeth Road
N	43.9	4171	Right turn onto Woodrow Street
O	44.9	4269	Right turn onto Lakeside Drive
P	46.8	4452	Passing K-Solv
Q	47.4	4507	Continuing onto Dezavala Road
R	49.7	4723	End mobile monitoring on Dezavala Road
S	50.0	4756	Start ambient
T	51.0	4851	End ambient
U	52.1	4957	Start 30 mL/min spike
V	53.2	5054	End 30 mL/min spike

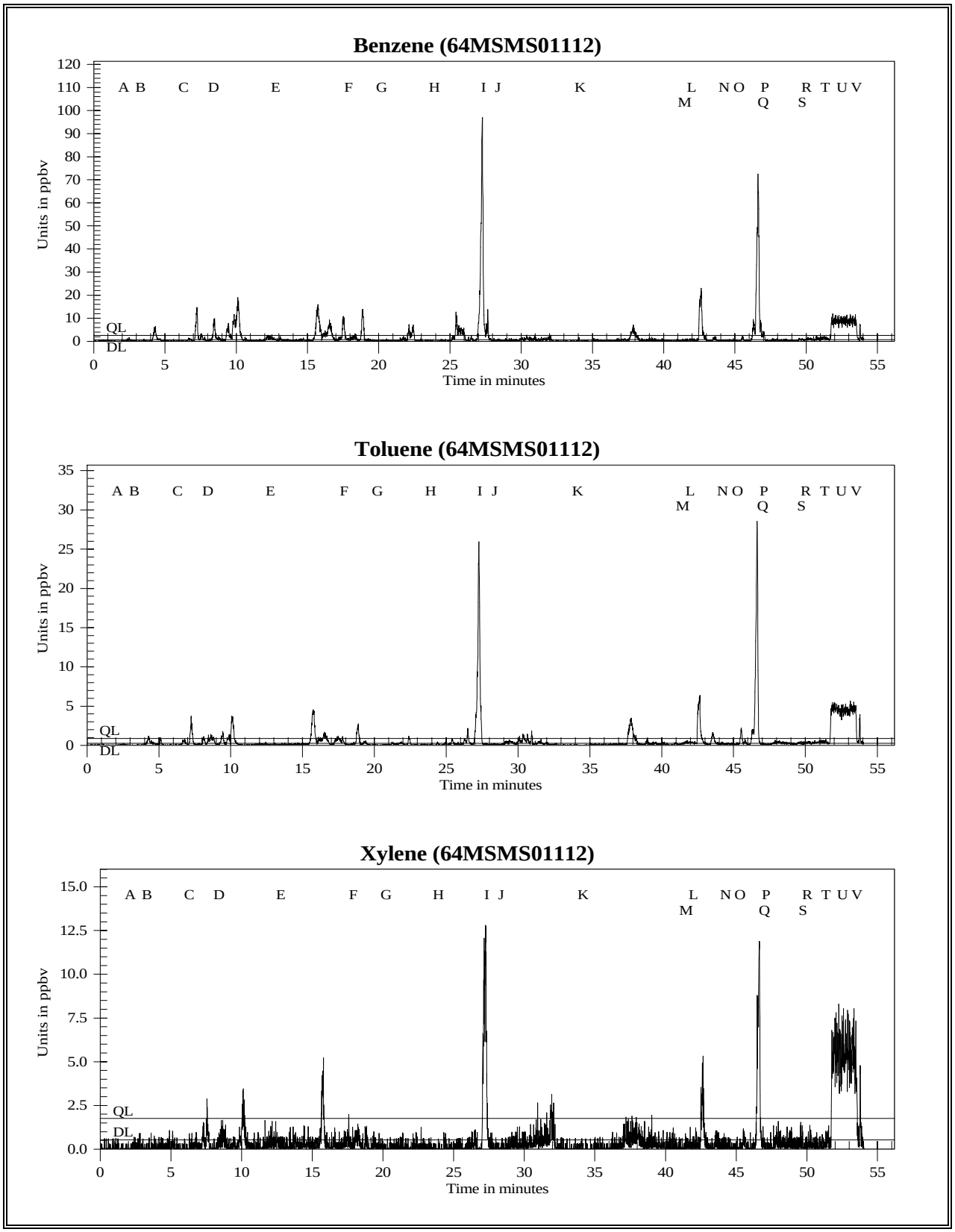


Figure 253c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

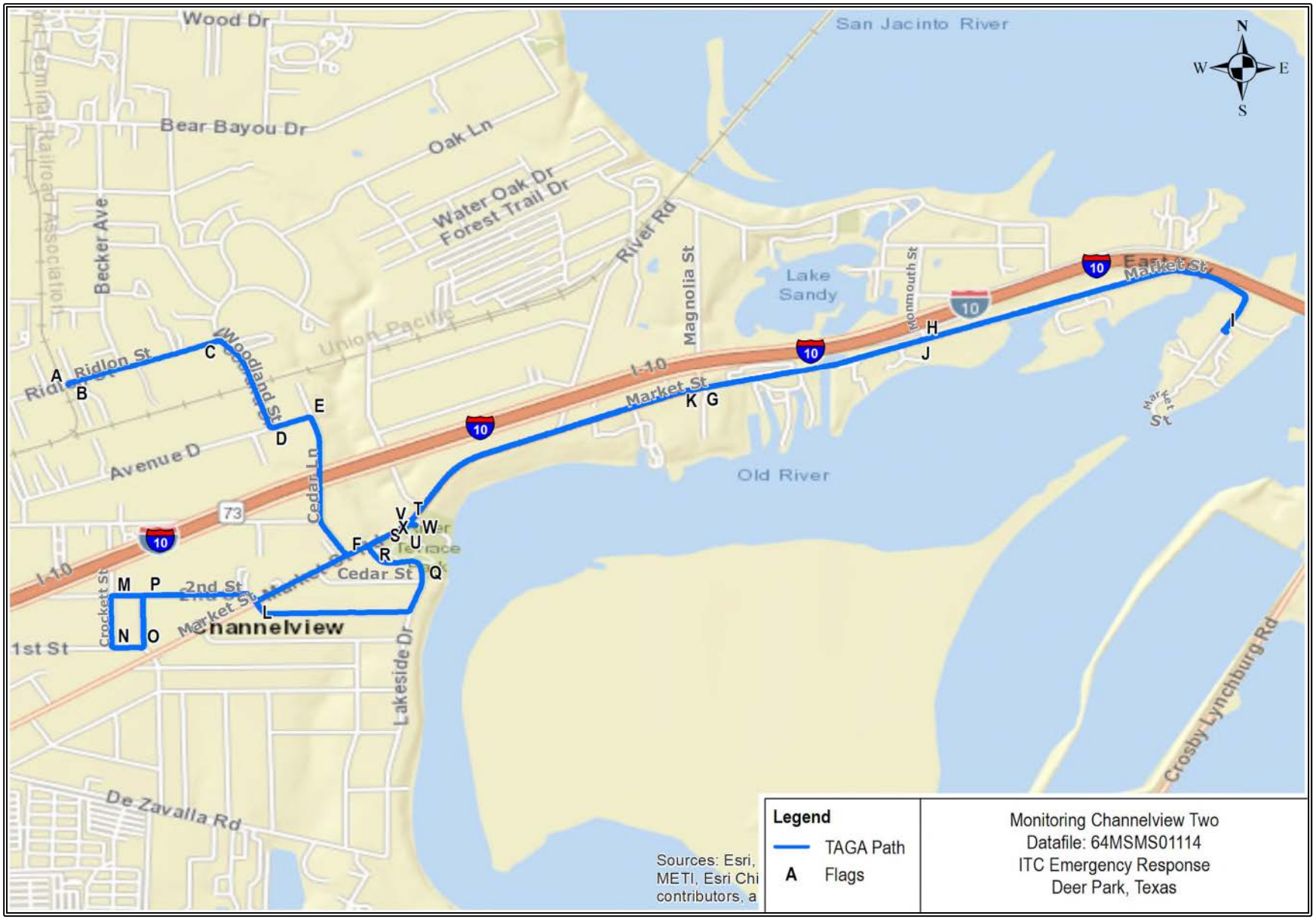


Figure 254a Monitoring Channelview Two Path, 64MSMS01114

Figure 254b

TAGA File Event Summary
File: 64MSMS01114 Acquired on 01 May 2019 at 14:03:26
Title: Monitoring Channelview Two

Flag	Time	Sequence	Description
A	0.6	61	Start mobile monitoring on Ridlon Avenue
B	1.2	119	Continuing onto Ridlon Avenue
C	2.7	253	Right turn onto Woodland Street
D	3.9	367	Left turn onto Avenue D
E	4.4	422	Right turn onto Cedar Lane
F	6.6	633	Left turn onto Market Street
G	9.7	926	Cross Magnolia Street
H	11.5	1094	Cross Monmouth Street
I	15.4	1469	U-turn on Market Street
J	20.7	1973	Cross Monmouth Street
K	23.0	2183	Cross Magnolia Street
L	27.9	2658	Right turn onto 2nd Street
M	29.6	2816	Left turn onto Crockett Street
N	30.5	2904	Left turn onto 1st Street
O	30.9	2943	Left turn onto Euclid Street
P	32.1	3048	Right turn onto 2nd Street
Q	36.6	3477	Left turn onto Lakeside Drive
R	37.4	3560	Right turn onto Market Street
S	37.8	3593	Right turn into River Terrace Park
T	38.2	3628	End mobile monitoring at River Terrace Park
U	38.6	3672	Start ambient
V	39.6	3765	End ambient
W	41.0	3895	Start 30 mL/min spike
X	42.0	3990	End 30 mL/min spike

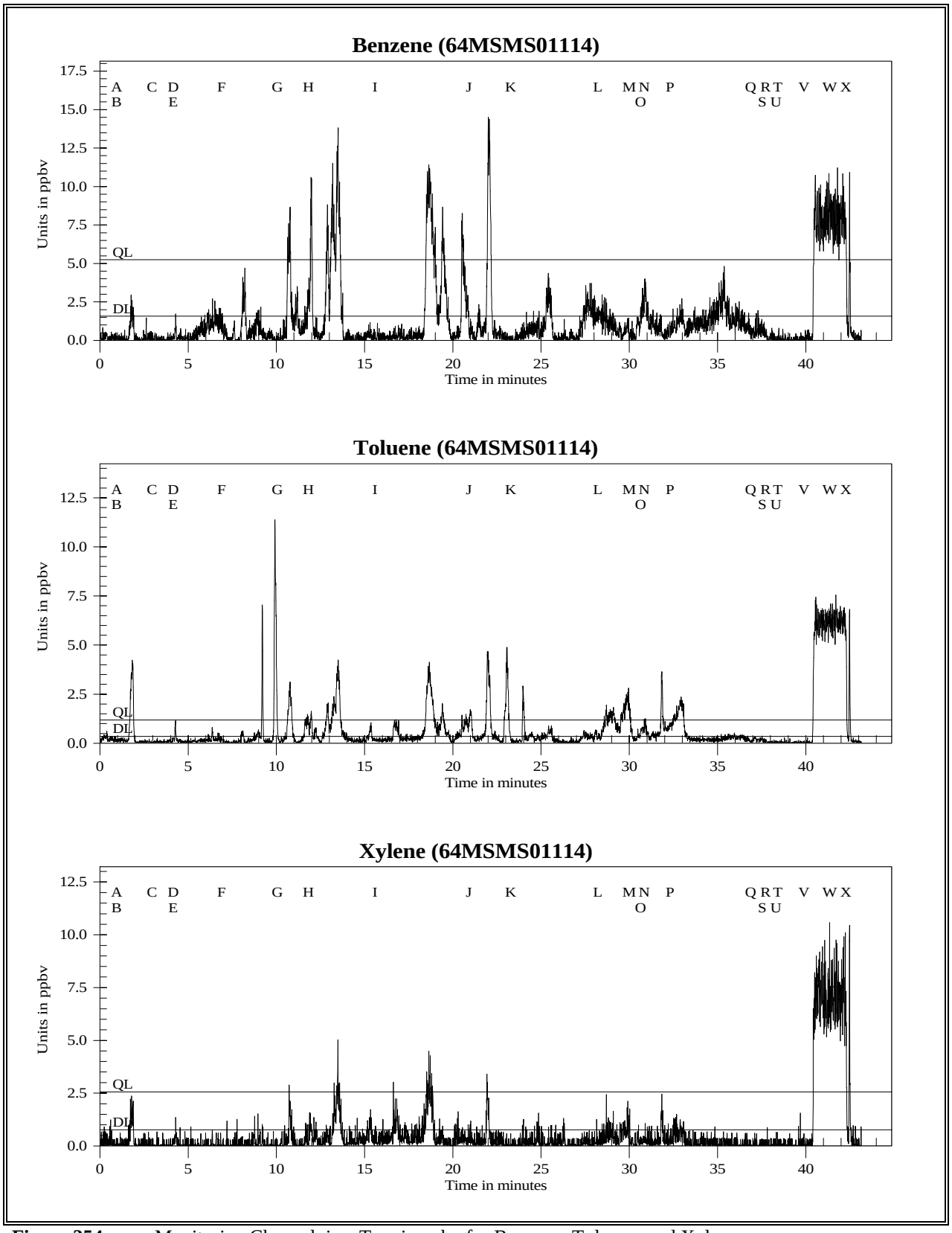


Figure 254c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

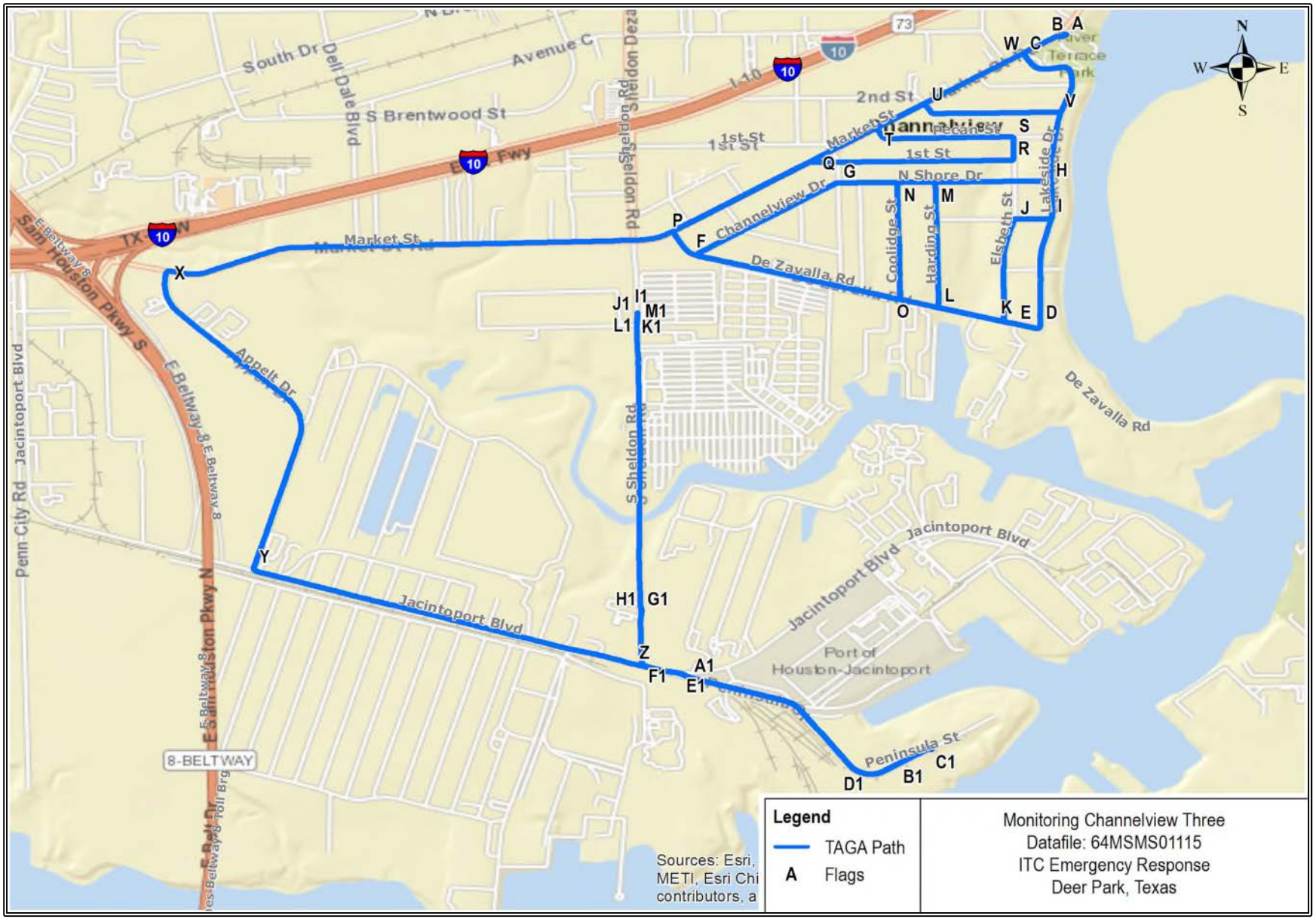


Figure 255a Monitoring Channelview Three Path, 64MSMS01115

Figure 255b

TAGA File Event Summary
File: 64MSMS01115 Acquired on 01 May 2019 at 14:55:40
Title: Monitoring Channelview Three

Flag	Time	Sequence	Description
A	0.6	61	Start mobile monitoring at River Terrace Park
B	1.7	165	Left turn onto Market Street
C	2.2	211	Left turn onto Lakeside Drive
D	6.3	596	Passing K-Solv
E	6.9	655	Continuing onto Dezavala Road
F	10.5	997	Right turn onto E Channelview Drive
G	13.1	1248	Right turn onto N Shore Drive
H	16.0	1520	Right turn onto Lakeside Drive
I	16.7	1593	Right turn onto Woodrow Street
J	18.1	1725	Left turn onto Elsbeth Road
K	19.8	1883	Right turn onto Dezavala Road
L	20.7	1965	Right turn onto Harding Street
M	23.2	2205	Left turn onto N Shore Drive
N	23.8	2262	Left turn onto Coolidge Street
O	27.3	2596	Right turn onto Dezavala Road
P	29.6	2813	Right turn onto Market Street
Q	31.4	2984	Right turn onto 1st Street
R	34.4	3269	Left turn onto Elsbeth Road
S	35.1	3338	Left turn onto Pecan Street
T	38.4	3648	Right turn onto Market Street
U	39.1	3716	Right turn onto 2nd Street
V	41.4	3938	Left turn onto Lakeside Drive
W	43.4	4124	Left turn onto Market Street
X	52.1	4952	Left turn onto Appelt Drive
Y	57.3	5445	Left turn onto Jacintoport Boulevard
Z	60.9	5790	Cross Sheldon Road
A1	61.5	5849	Right turn onto San Jacinto Boulevard
B1	65.3	6207	Continuing onto Peninsula Street
C1	66.5	6320	U-turn on Peninsula Street
D1	68.2	6484	Continuing onto San Jacinto Boulevard
E1	71.9	6838	Left turn onto Jacintoport Boulevard
F1	72.6	6901	Right turn onto Sheldon Road
G1	73.5	6985	Continuing onto Sheldon Road
H1	75.0	7128	Continuing onto Sheldon Road

Figure 255b (continued)

TAGA File Event Summary
File: 64MSMS01115 Acquired on 01 May 2019 at 14:55:40
Title: Monitoring Channelview Three

Flag	Time	Sequence	Description
I1	77.8	7399	End mobile monitoring on Sheldon Road
J1	78.0	7416	Start ambient
K1	79.0	7513	End ambient
L1	80.0	7602	Start 30 mL/min spike
M1	81.0	7697	End 30 mL/min spike

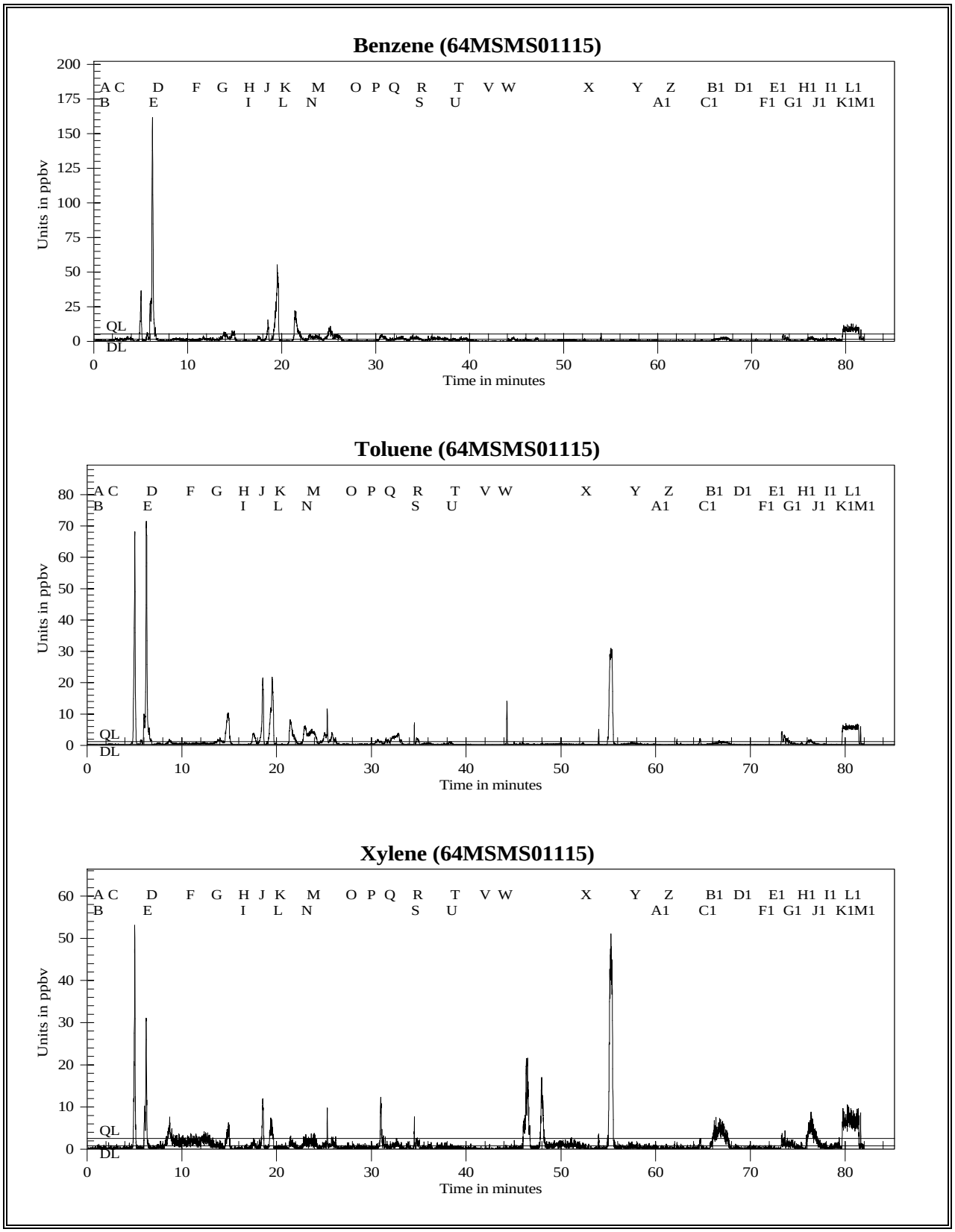


Figure 255c Monitoring Channelview Three in ppbv for Benzene, Toluene, and Xylenes

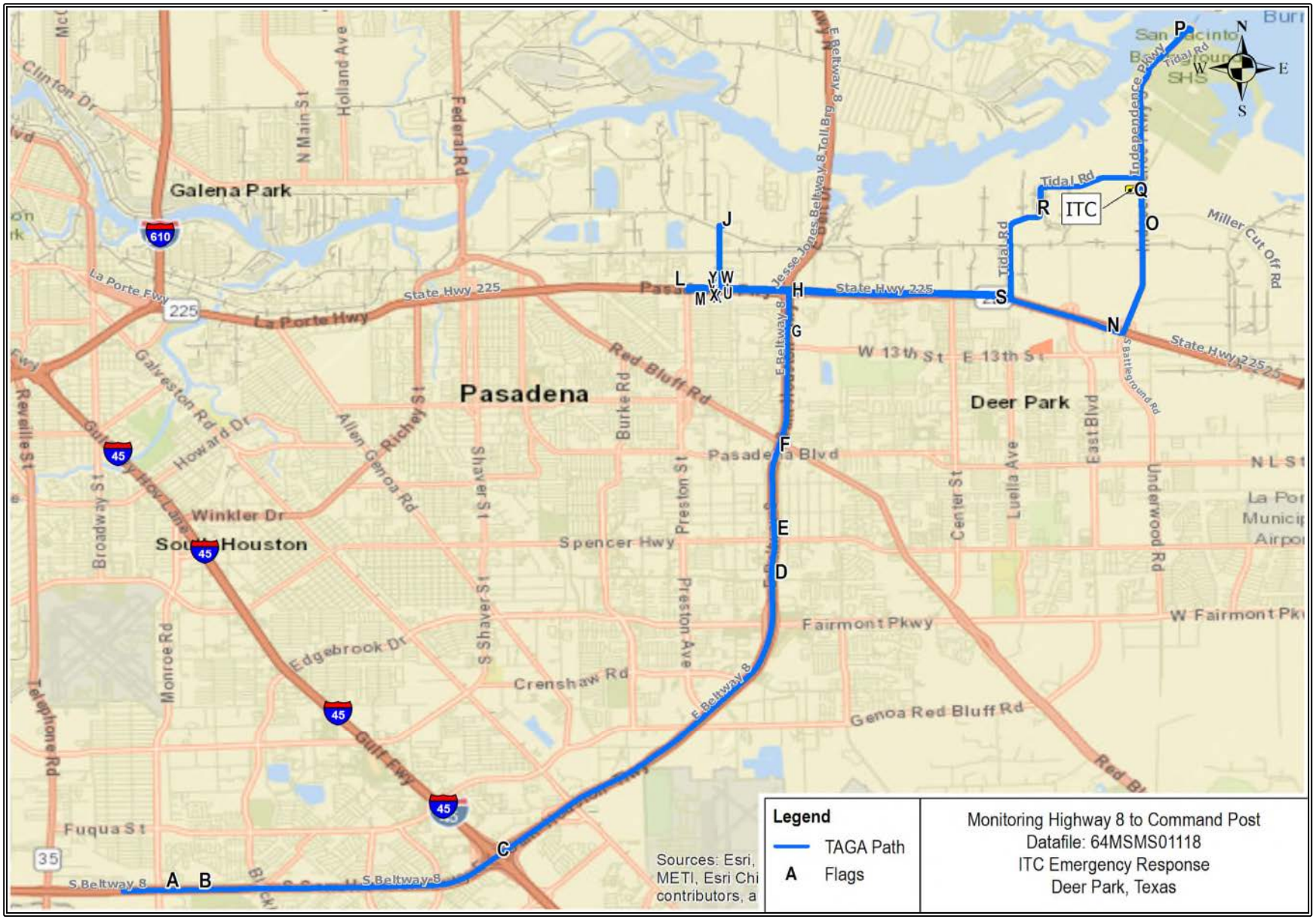


Figure 256a Monitoring Highway 8 to Command Post Path, 64MSMS01118

Figure 256b

TAGA File Event Summary
File: 64MSMS01118 Acquired on 02 May 2019 at 08:22:02
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	0.8	75	Start mobile monitoring on Highway 8 North
B	1.0	99	Continuing onto Highway 8 North
C	4.3	405	Cross Highway 45
D	8.6	818	Cross Vista Road
E	9.1	866	Cross Spencer Highway
F	10.2	966	Cross Pasadena Boulevard
G	11.9	1134	Exit onto Highway 8 North
H	13.5	1286	Left turn onto Pasadena Freeway Frontage Road
I	14.5	1381	Right turn onto Ethyl Road
J	19.2	1824	U-turn on Ethyl Road at EPA Command Post
K	22.4	2127	Right turn onto Pasadena Freeway Frontage Road
L	23.0	2184	U-turn on Pasadena Freeway Frontage Road at Preston Road
M	23.7	2251	Merge onto Highway 225 East
N	29.4	2796	Left turn onto Independence Parkway
O	32.6	3102	Cross Miller Cut-Off Road
P	40.0	3807	U-turn on Independence Parkway at Juan Seguin Park
Q	47.1	4477	Right turn onto Tidal Road
R	55.0	5234	Continuing onto Tidal Road
S	60.4	5743	Right turn onto Pasadena Freeway Frontage Road
T	66.7	6342	Right turn onto Ethyl Road
U	68.7	6530	End mobile monitoring on Ethyl Road
V	68.9	6550	Start ambient
W	70.2	6675	End ambient
X	72.5	6892	Start 30 mL/min spike
Y	73.5	6992	End 30 mL/min spike

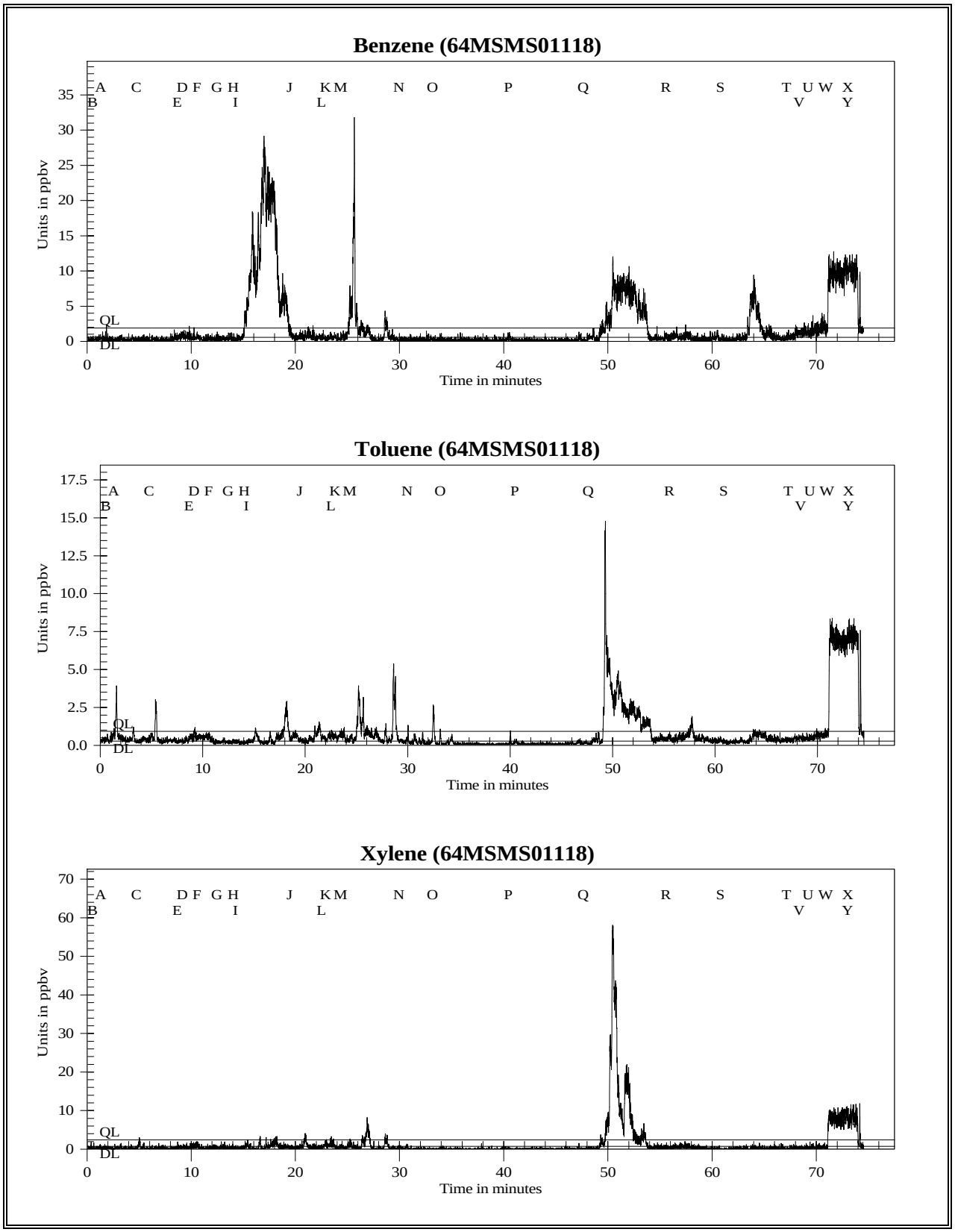


Figure 256c Monitoring Highway to Command Post in ppbv for Benzene, Toluene, and Xylenes

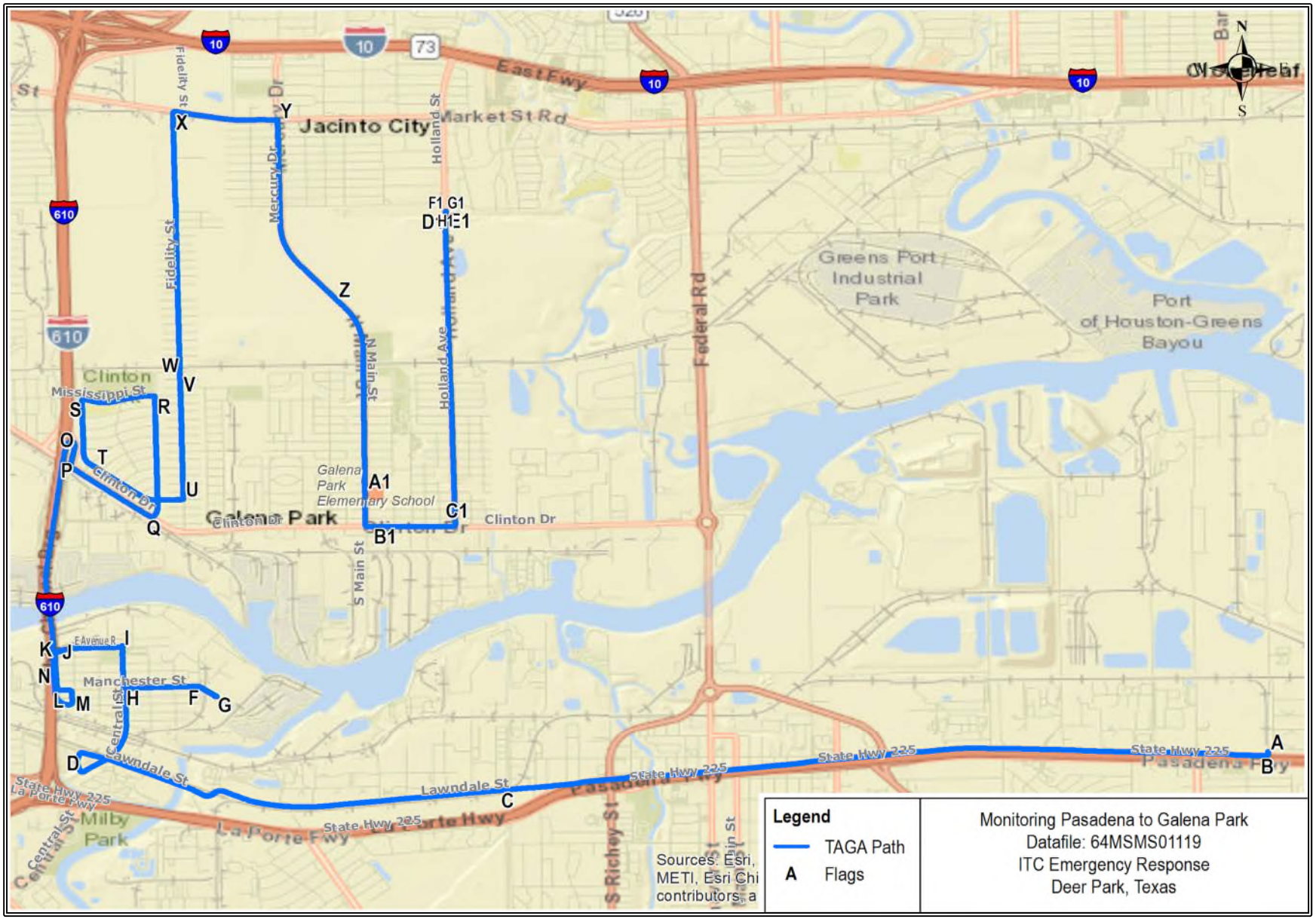


Figure 257a Monitoring Pasadena to Galena Park Path, 64MSMS01119

Figure 257b

TAGA File Event Summary
File: 64MSMS01119 Acquired on 02 May 2019 at 09:39:11
Title: Monitoring Pasadena to Galena Park

Flag	Time	Sequence	Description
A	0.8	75	Start mobile monitoring on Ethyl Road
B	1.3	127	Right turn onto Pasadena Freeway Frontage Road
C	12.5	1192	Right turn onto Lawndale Street
D	20.5	1951	Left loop onto Central Street
E	22.3	2125	Right turn onto Manchester Street
F	23.9	2274	Right turn to continue on Manchester Street
G	25.1	2387	U-turn on Manchester Street
H	27.5	2613	Right turn onto Central Street
I	29.2	2781	Left turn onto Avenue R
J	31.3	2973	Left turn onto Becker Street
K	31.6	3006	Left turn onto Concrete Street
L	32.4	3083	Left turn onto Manchester Street
M	33.0	3138	Right turn onto Walker Street
N	33.5	3189	Merge onto Highway 610 North
O	35.2	3352	Exit onto Highway 610 Ramp
P	36.1	3436	Left turn onto Clinton Drive
Q	37.2	3537	Left turn onto Clinton Park Street
R	40.6	3861	Left turn onto Mississippi Street
S	42.0	3998	Left turn onto Defender Street
T	44.1	4190	Left turn onto Rhode Island Street
U	47.9	4553	Left turn onto Fidelity Street
V	52.7	5014	Stationary at railroad crossing on Fidelity Street
W	53.1	5047	Resume mobile monitoring on Fidelity Street
X	60.4	5741	Right turn onto Market Street
Y	61.8	5873	Right turn onto Mercury Drive
Z	64.7	6156	Merge onto Main Street
A1	69.1	6567	Passing Galena Park Elementary School
B1	70.0	6656	Left turn onto Clinton Drive
C1	71.0	6751	Left turn onto Holland Avenue
D1	75.6	7186	End mobile monitoring on Holland Avenue
E1	76.0	7228	Start ambient
F1	77.0	7324	End ambient
G1	78.2	7435	Start 30 mL/min spike
H1	79.4	7549	End 30 mL/min spike

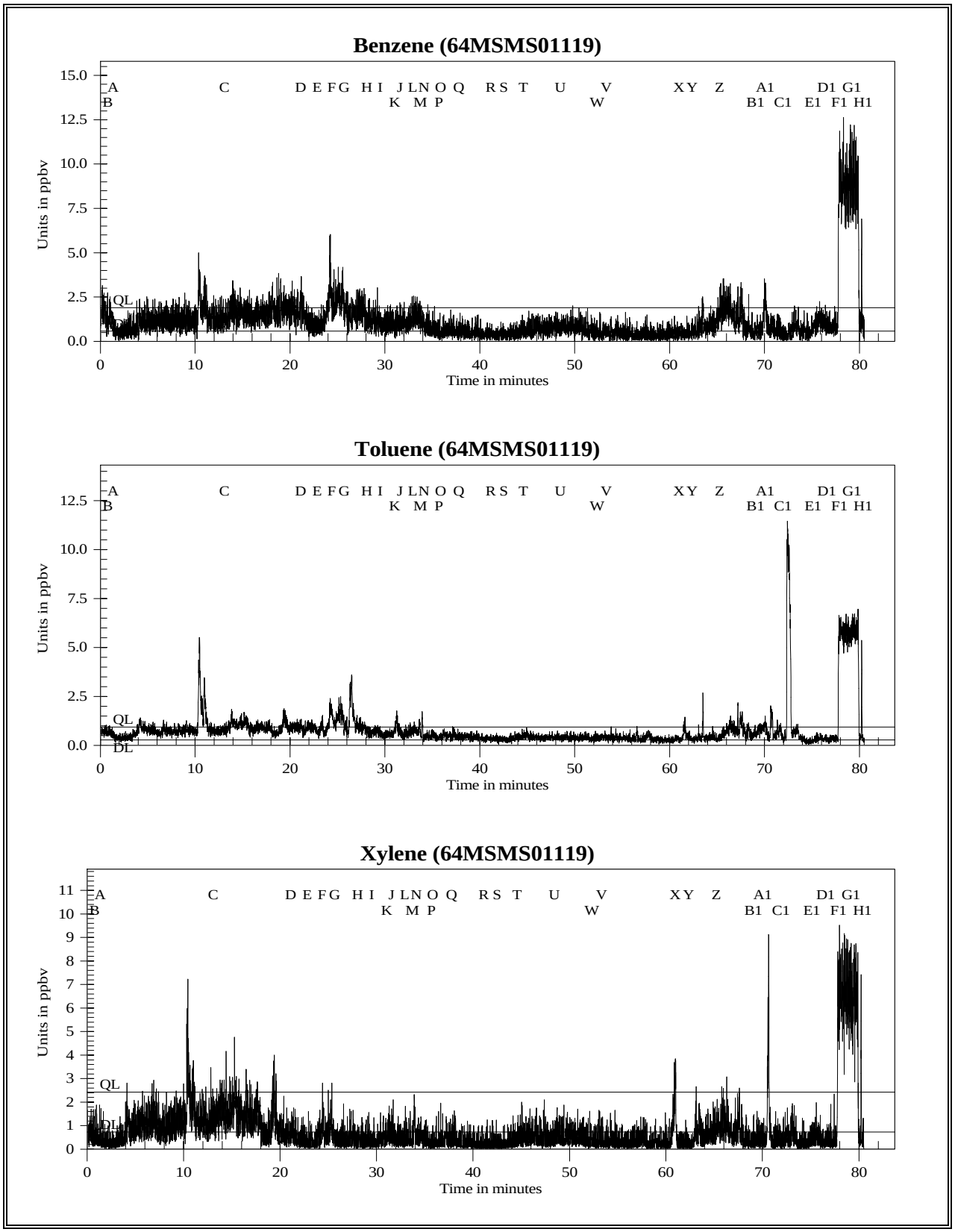


Figure 257c Monitoring Pasadena to Galena Park in ppbv for Benzene, Toluene, and Xylenes

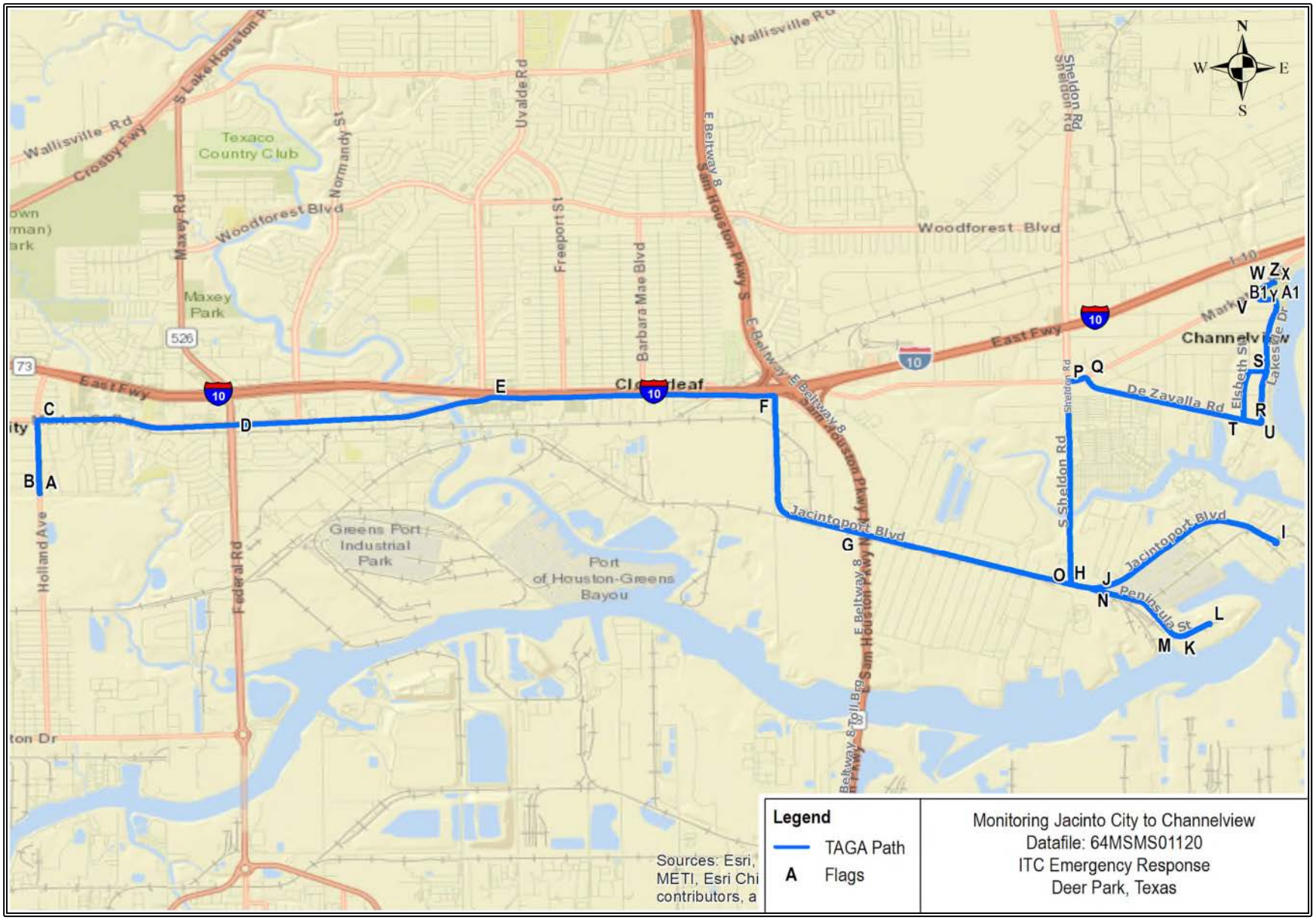


Figure 258a Monitoring Jacinto City to Channelview Path, 64MSMS01120

Figure 258b

TAGA File Event Summary
File: 64MSMS01120 Acquired on 02 May 2019 at 11:01:51
Title: Monitoring Jacinto City to Channelview

Flag	Time	Sequence	Description
A	0.6	61	Start mobile monitoring on Holland Avenue
B	1.1	102	Continuing onto Holland Avenue
C	3.0	287	Right turn onto Market Street
D	6.8	649	Cross Federal Road
E	11.6	1100	Right turn onto East Freeway Service Road
F	15.4	1469	Right turn onto Jacintoport Boulevard
G	22.3	2125	Cross Highway 8
H	25.8	2452	Cross Sheldon Road
I	30.0	2854	U-turn on Jacintoport Boulevard
J	34.5	3279	Left turn onto San Jacinto Boulevard
K	38.0	3609	Continuing onto Peninsula Street
L	38.9	3702	U-turn on Peninsula Street
M	40.6	3857	Continuing onto San Jacinto Boulevard
N	43.3	4120	Left turn onto Jacintopot Boulevard
O	44.5	4233	Right turn onto Sheldon Road
P	49.1	4669	Right turn onto Market Street
Q	49.5	4708	Right turn onto Dezavala Road
R	52.5	4993	Continuing onto Lakeside Drive
S	54.9	5218	Left turn onto Elsbeth Road
T	56.6	5382	Left turn onto Dezavala Road
U	57.0	5421	Continuing onto Lakeside Drive
V	61.0	5797	Right turn onto Market Street
W	61.3	5832	Right turn into River Terrace Park
X	62.4	5933	End mobile monitoring at River Terrace Park
Y	62.7	5958	Start ambient
Z	63.7	6058	End ambient
A1	64.9	6171	Start 30 mL/min spike
B1	66.0	6275	End 30 mL/min spike

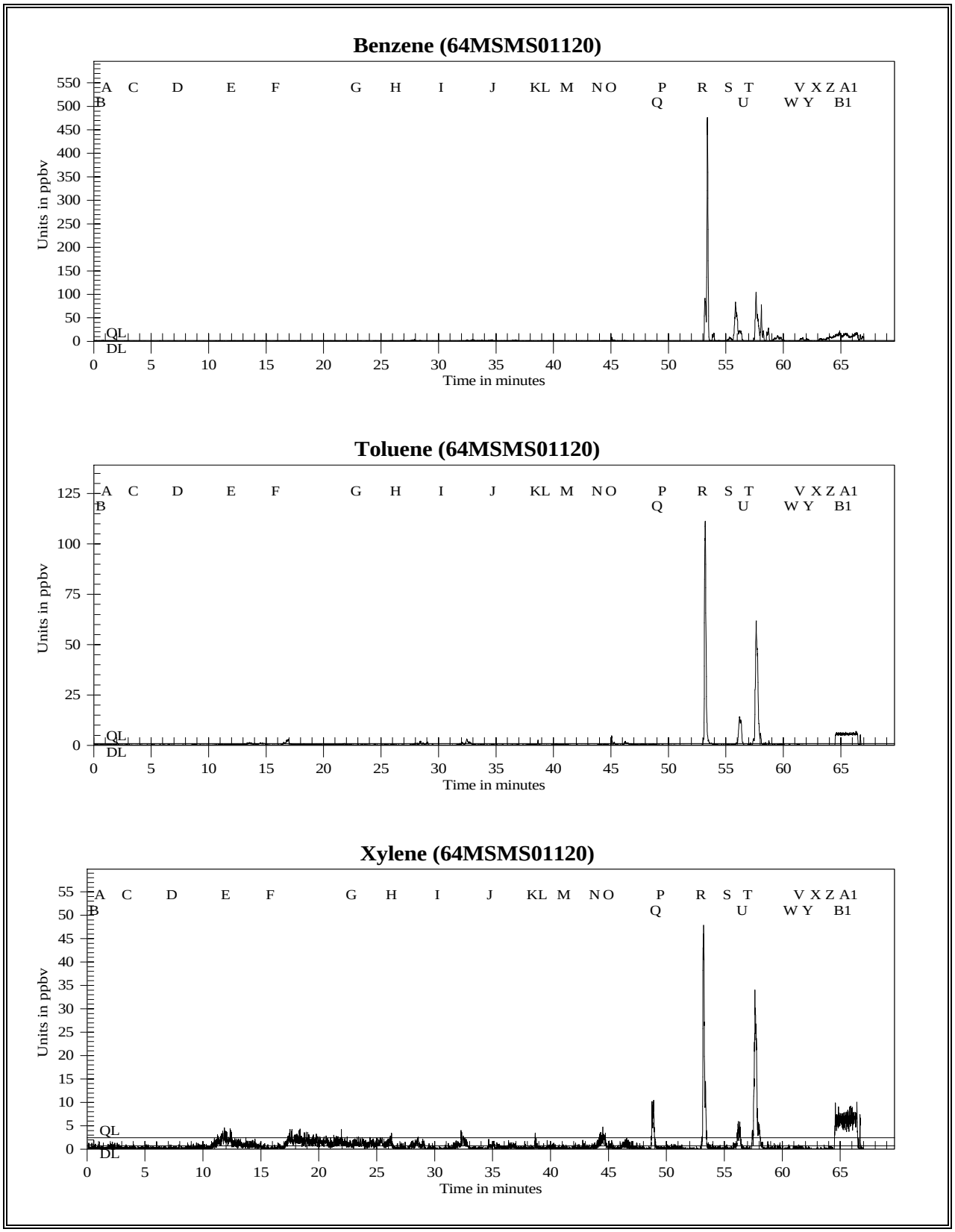


Figure 258c Monitoring Jacinto City to Channelview in ppbv for Benzene, Toluene, and Xylenes

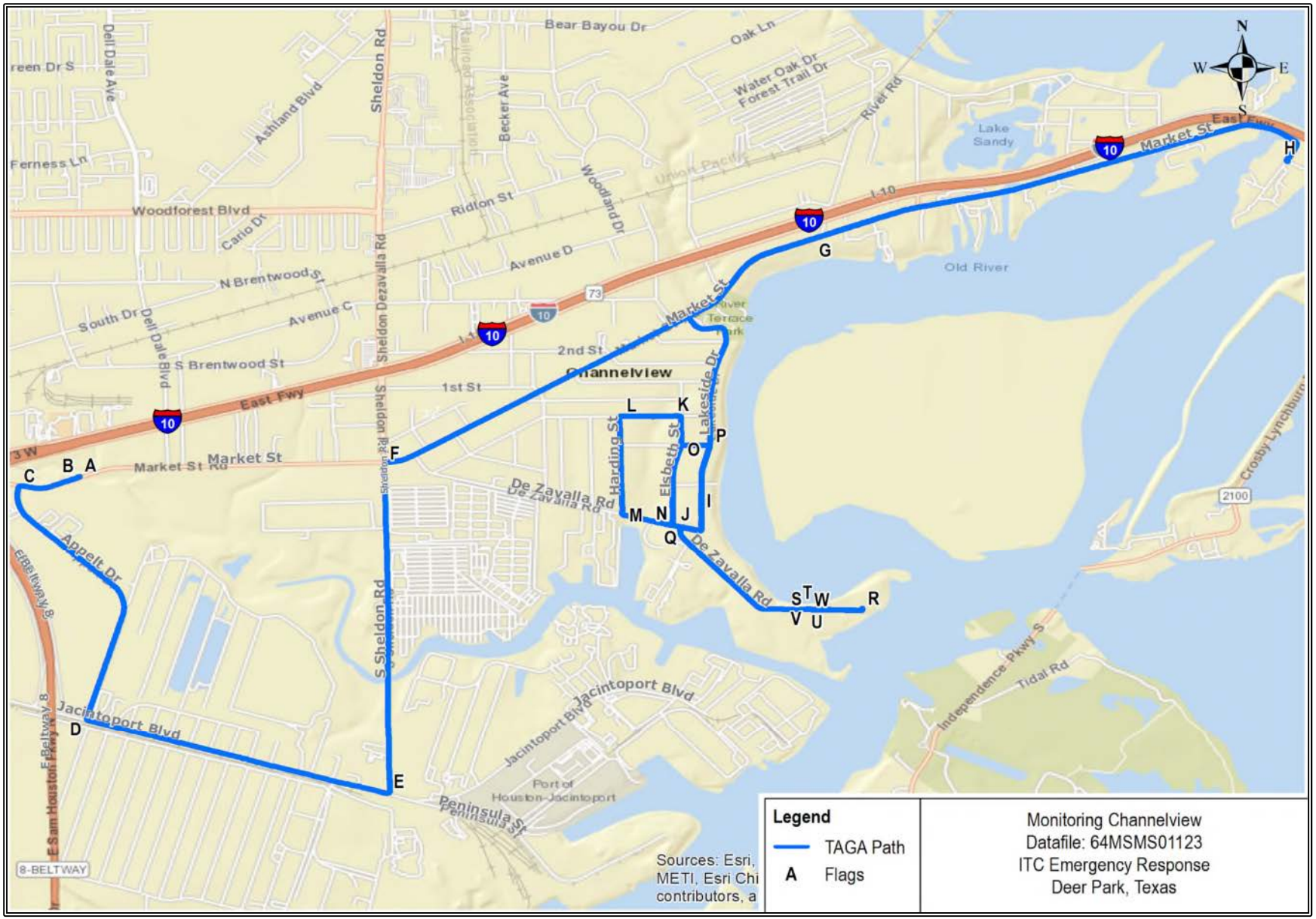


Figure 259a Monitoring Channelview Path, 64MSMS01123

Figure 259b

TAGA File Event Summary
File: 64MSMS01123 Acquired on 02 May 2019 at 13:43:38
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	0.6	55	Start mobile monitoring on Market Street
B	0.9	91	Continuing onto Market Street
C	1.8	170	Left turn onto Appelt Drive
D	6.5	615	Left turn onto Jacintoport Boulevard
E	9.4	898	Left turn onto Sheldon Road
F	15.4	1469	Right turn onto Market Street
G	21.2	2019	Cross River Road
H	27.3	2595	U-turn on Market Street
I	40.4	3840	Passing K-Solv
J	41.3	3930	Right turn onto Elsbeth Road
K	44.0	4184	Left turn onto N Shore Drive
L	45.1	4292	Left turn onto Harding Street
M	47.6	4531	Left turn onto Dezavala Road
N	48.4	4605	Left turn onto Elsbeth Street
O	50.2	4773	Right turn onto Woodrow Street
P	51.0	4854	Right turn onto Lakeside Drive
Q	53.3	5071	Left turn onto Dezavala Road
R	58.8	5594	U-turn on Dezavala Road
S	61.1	5814	End mobile monitoring on Dezavala Road
T	61.4	5835	Start ambient
U	62.4	5930	End ambient
V	63.7	6061	Start 30 mL/min spike
W	64.7	6155	End 30 mL/min spike

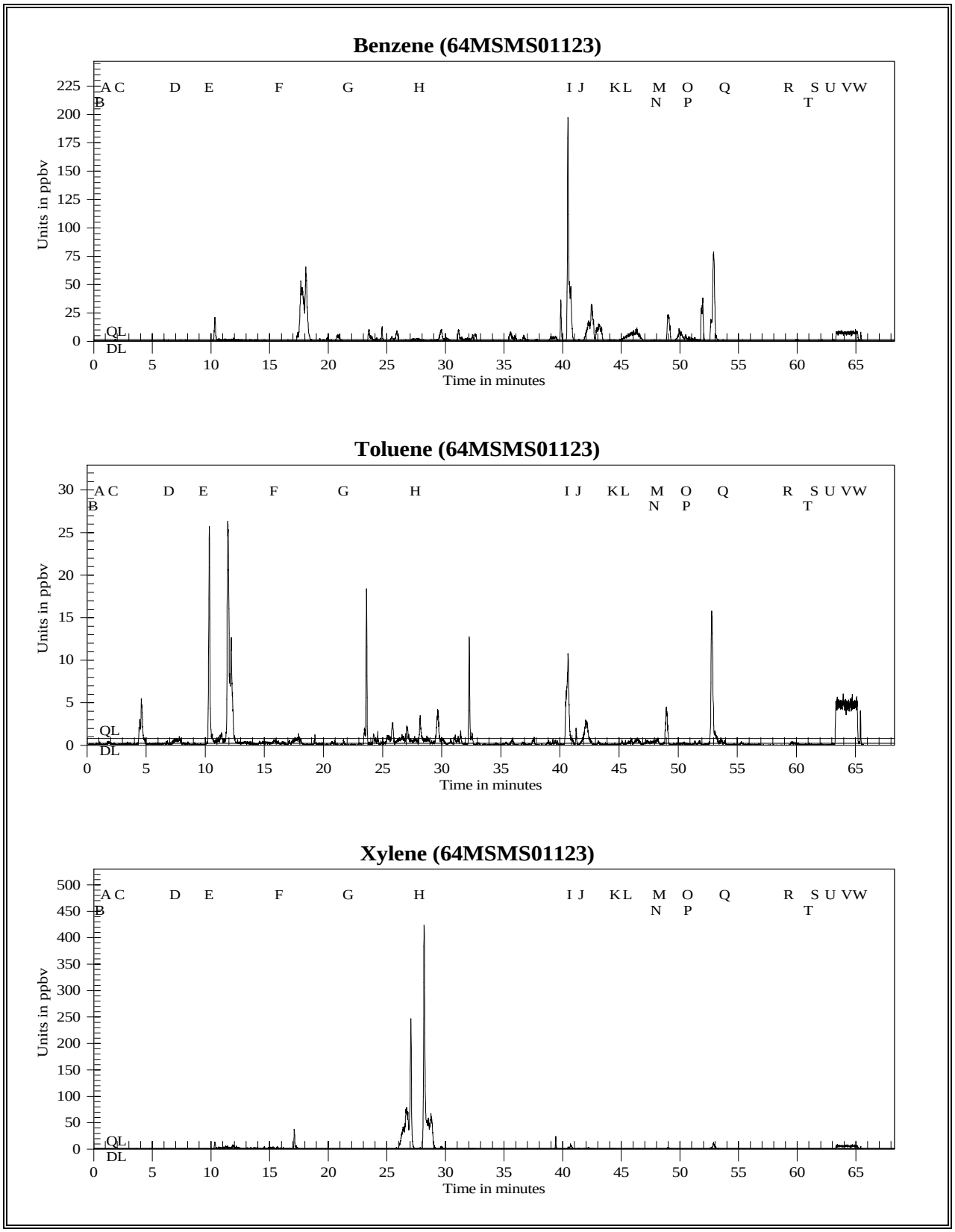


Figure 259c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

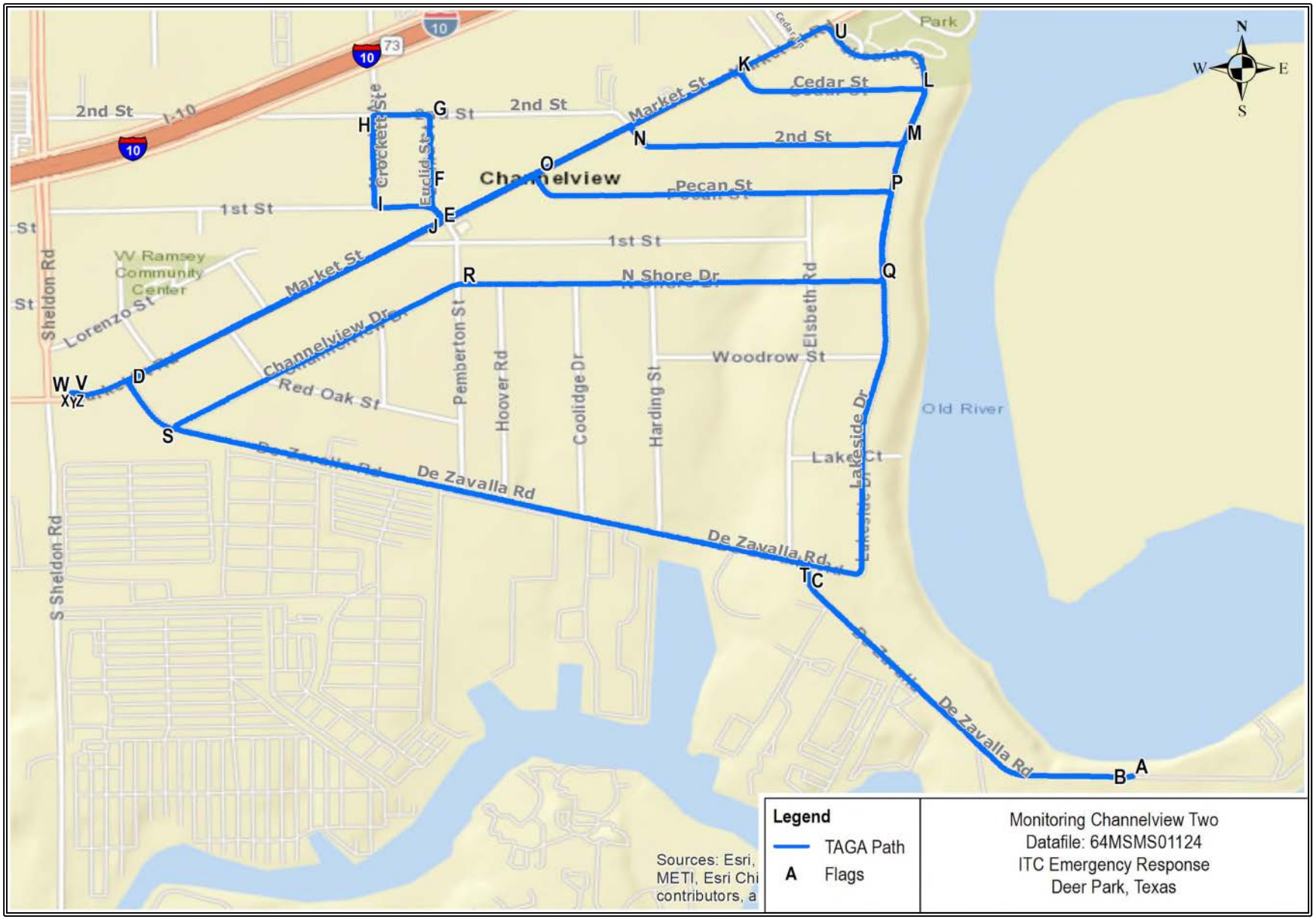


Figure 260a Monitoring Channelview Two Path, 64MSMS01124

Figure 260b

TAGA File Event Summary
File: 64MSMS01124 Acquired on 02 May 2019 at 14:50:25
Title: Monitoring Channelview Two

Flag	Time	Sequence	Description
A	1.4	134	Start mobile monitoring on Dezavala Road
B	1.8	169	Continuing onto Dezavala Road
C	6.5	615	Left turn to continuing onto Dezavala Road
D	10.2	967	Right turn onto Market Street
E	13.0	1233	Left turn onto 1st Street
F	13.4	1271	Right turn onto Euclid Street
G	14.2	1349	Left turn onto 2nd Street
H	15.1	1441	Left turn onto Crocket Street
I	16.9	1611	Left turn onto 1st Street
J	17.7	1682	Left turn onto Market Street
K	19.9	1896	Right turn onto Cedar Street
L	21.6	2053	Right turn onto Lakeside Drive
M	22.2	2108	Right turn onto 2nd Street
N	25.0	2373	Left turn onto Market Street
O	25.6	2433	Left turn onto Pecan Street
P	28.5	2715	Right turn onto Lakeside Drive
Q	29.6	2813	Right turn onto N Shore Drive
R	32.5	3095	Left turn onto E Channelview Drive
S	35.3	3357	Left turn onto Dezavala Drive
T	39.9	3791	Continuing onto Lakeside Drive
U	45.0	4277	Left turn onto Market Street
V	50.4	4794	End mobile monitoring Market Street at Sheldon Road
W	50.8	4827	Start ambient
X	51.8	4927	End ambient
Y	53.0	5041	Start 30 mL/min spike
Z	54.0	5138	End 30 mL/min spike

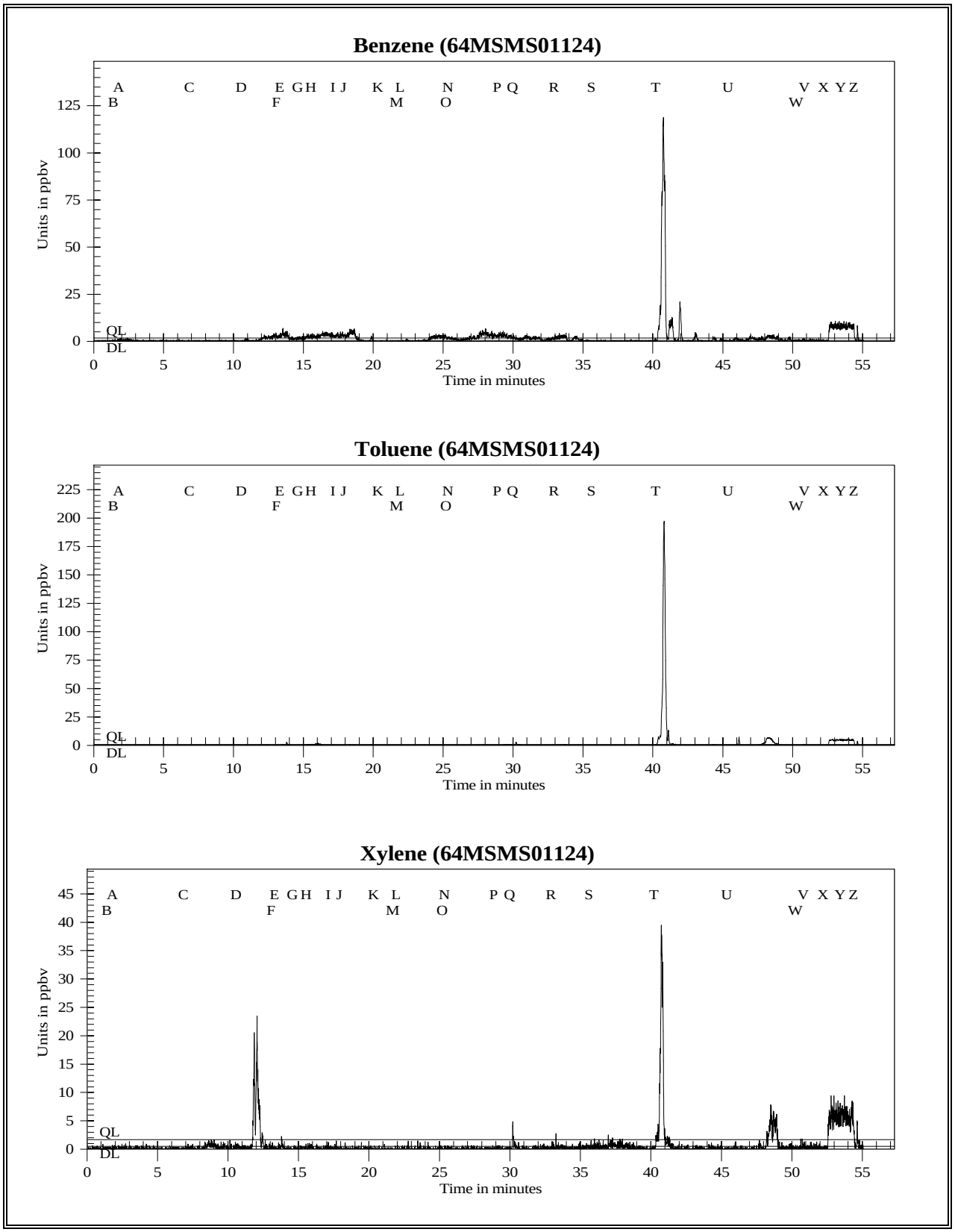


Figure 260c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

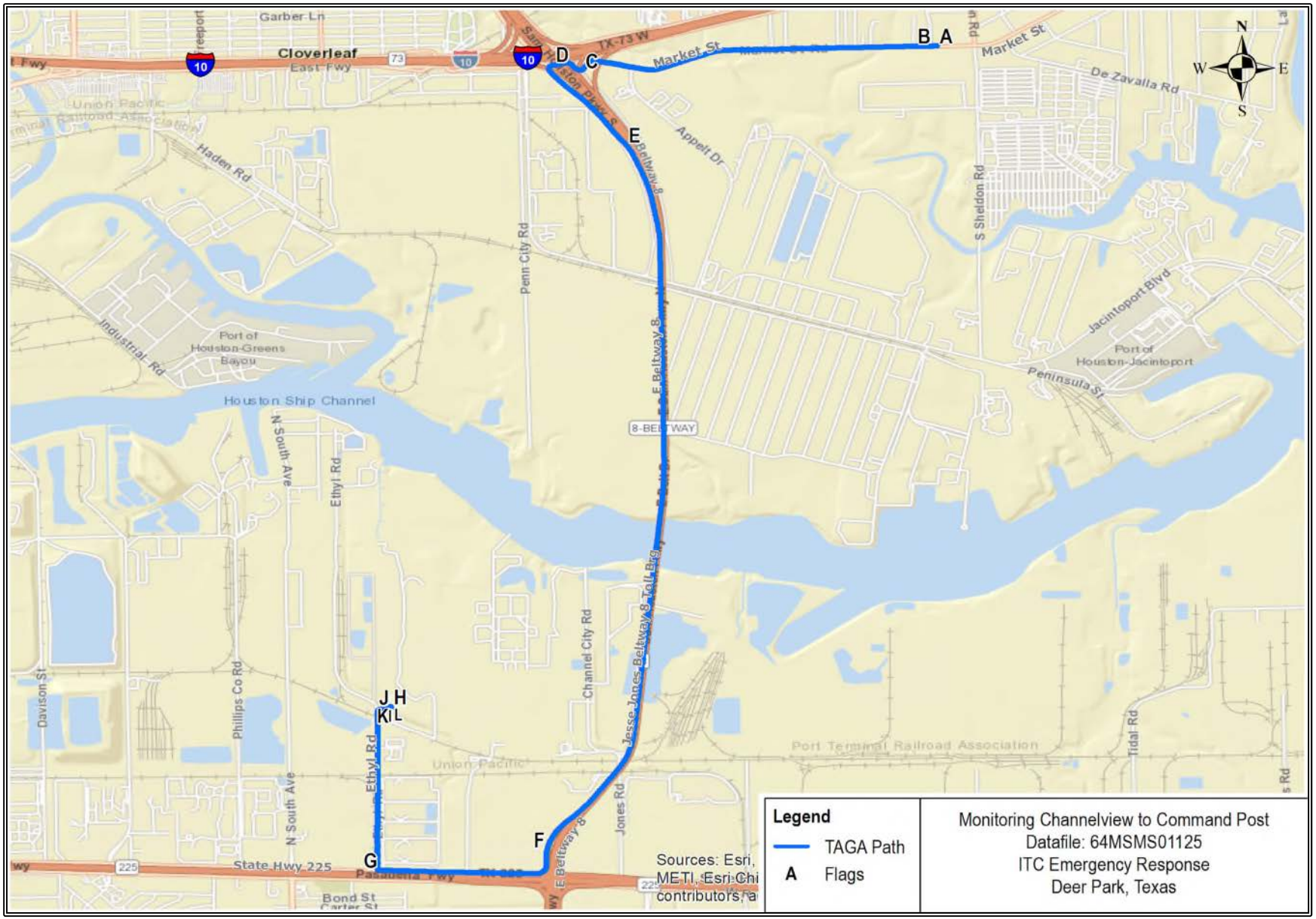


Figure 261a Monitoring Channelview to Command Post Path, 64MSMS01125

Figure 261b

TAGA File Event Summary
File: 64MSMS01125 Acquired on 02 May 2019 at 16:05:05
Title: Monitoring Channelview to Command Post

Flag	Time	Sequence	Description
A	0.6	59	Start mobile monitoring on Market Street at Sheldon Road
B	1.3	123	Continuing onto Market Street
C	7.1	677	Right turn onto Highway 8 Service Road
D	7.3	699	U-turn on Highway 8 Service Road
E	8.7	831	Merge onto Highway 8 South
F	13.1	1243	Exit onto Pasadena Freeway Frontage Road
G	14.8	1406	Right turn onto Ethyl Road
H	18.1	1717	End mobile monitoring at EPA Command Post
I	18.3	1740	Start ambient
J	19.3	1836	End ambient
K	20.5	1954	Start 30 mL/min spike
L	21.6	2053	End 30 mL/min spike

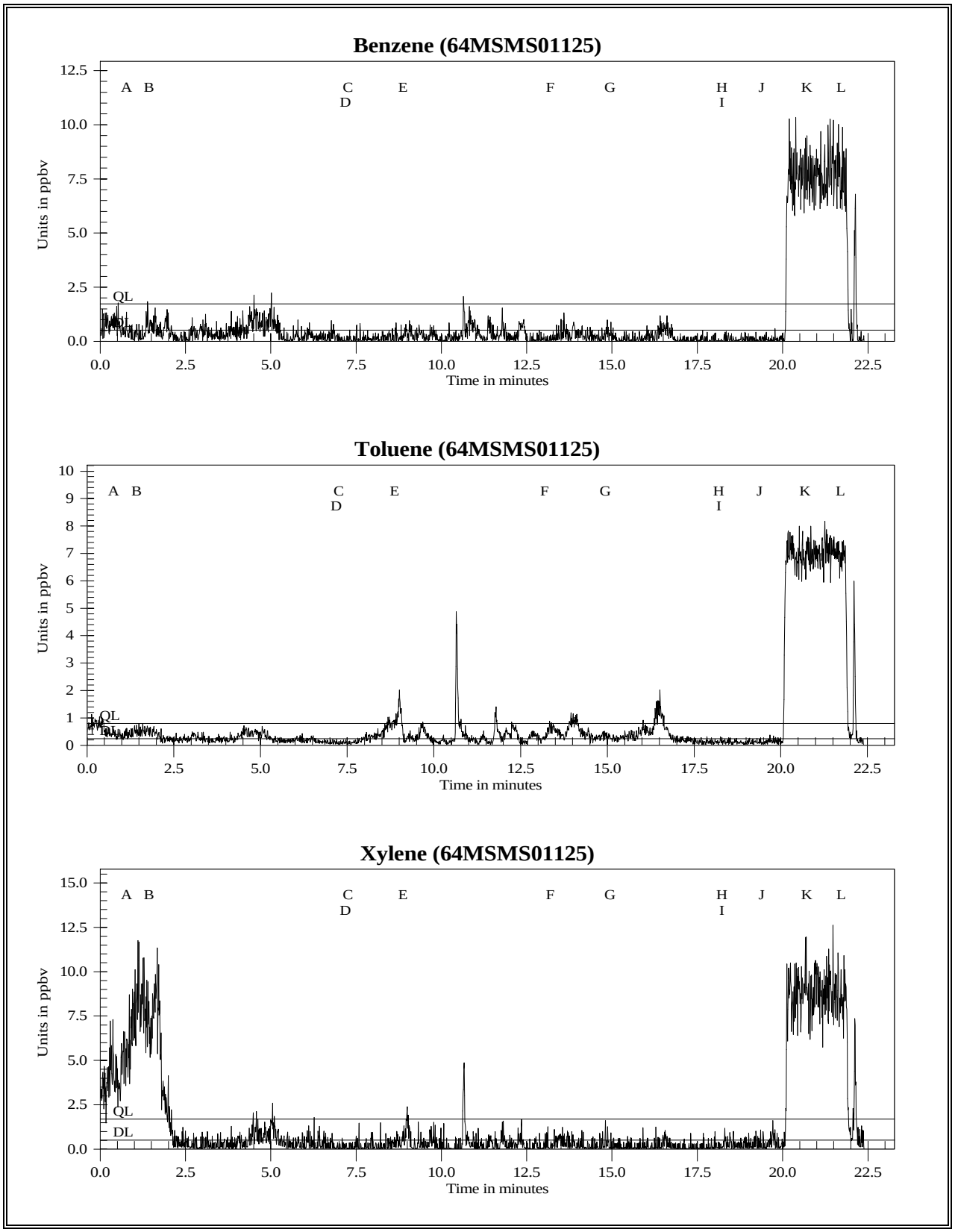


Figure 261c Monitoring Channelview to Command Post in ppbv for Benzene, Toluene, and Xylenes

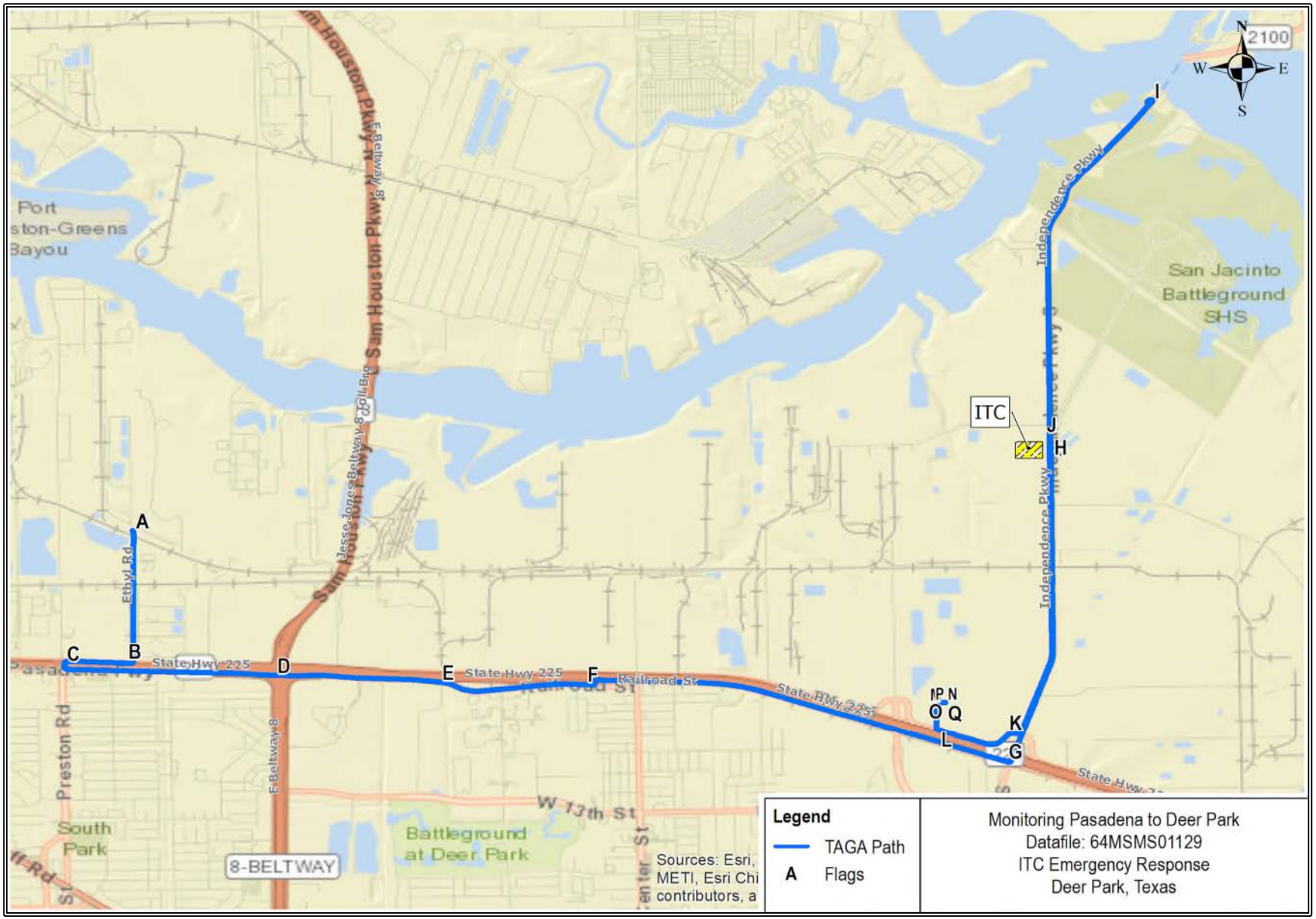


Figure 262a Monitoring Pasadena to Deer Park Path, 64MSMS01129

Figure 262b

TAGA File Event Summary
File: 64MSMS01129 Acquired on 07 May 2019 at 12:41:27
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	0.9	88	Start mobile monitoring at EPA Command Post
B	4.4	416	Right turn onto Pasadena Freeway Frontage Road
C	5.2	495	U-turn on Pasadena Freeway Frontage Road at Preston Road
D	7.2	690	Cross Highway 8
E	8.7	826	Continuing onto Railroad Street
F	11.7	1113	Left turn onto Pasadena Freeway Frontage Road
G	17.5	1666	Left turn onto Independence Parkway
H	22.3	2124	Passing ITC Site
I	29.3	2785	U-turn on Independence Parkway at Juan Seguin Park
J	38.0	3613	Passing ITC Site
K	42.8	4070	Right turn onto Pasadena Freeway Frontage Road
L	43.8	4162	Right turn onto service road
M	45.2	4296	End mobile monitoring on service road
N	45.9	4368	Start ambient
O	47.4	4510	End ambient
P	49.5	4708	Start 30 mL/min spike
Q	50.6	4814	End 30 mL/min spike

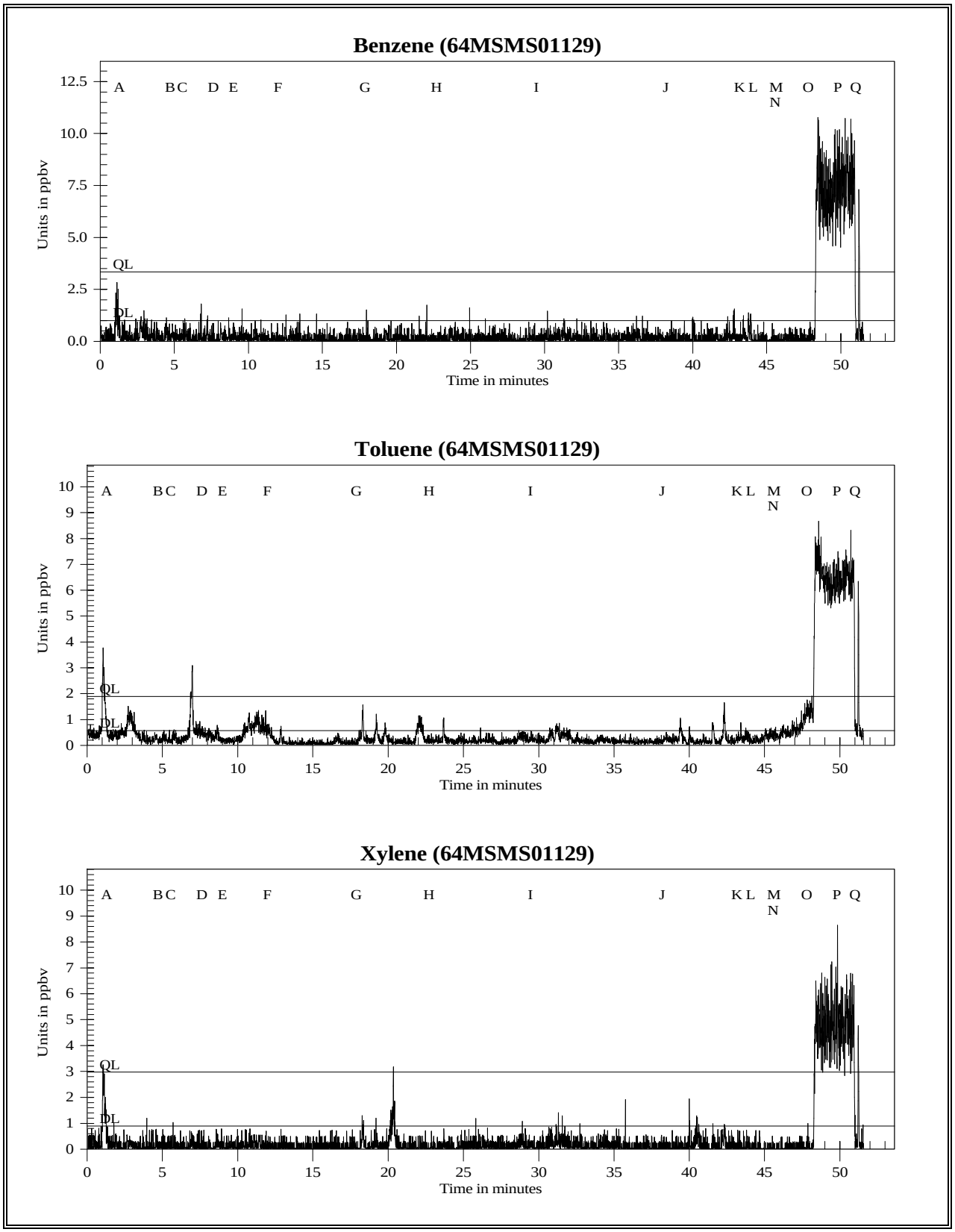


Figure 262c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

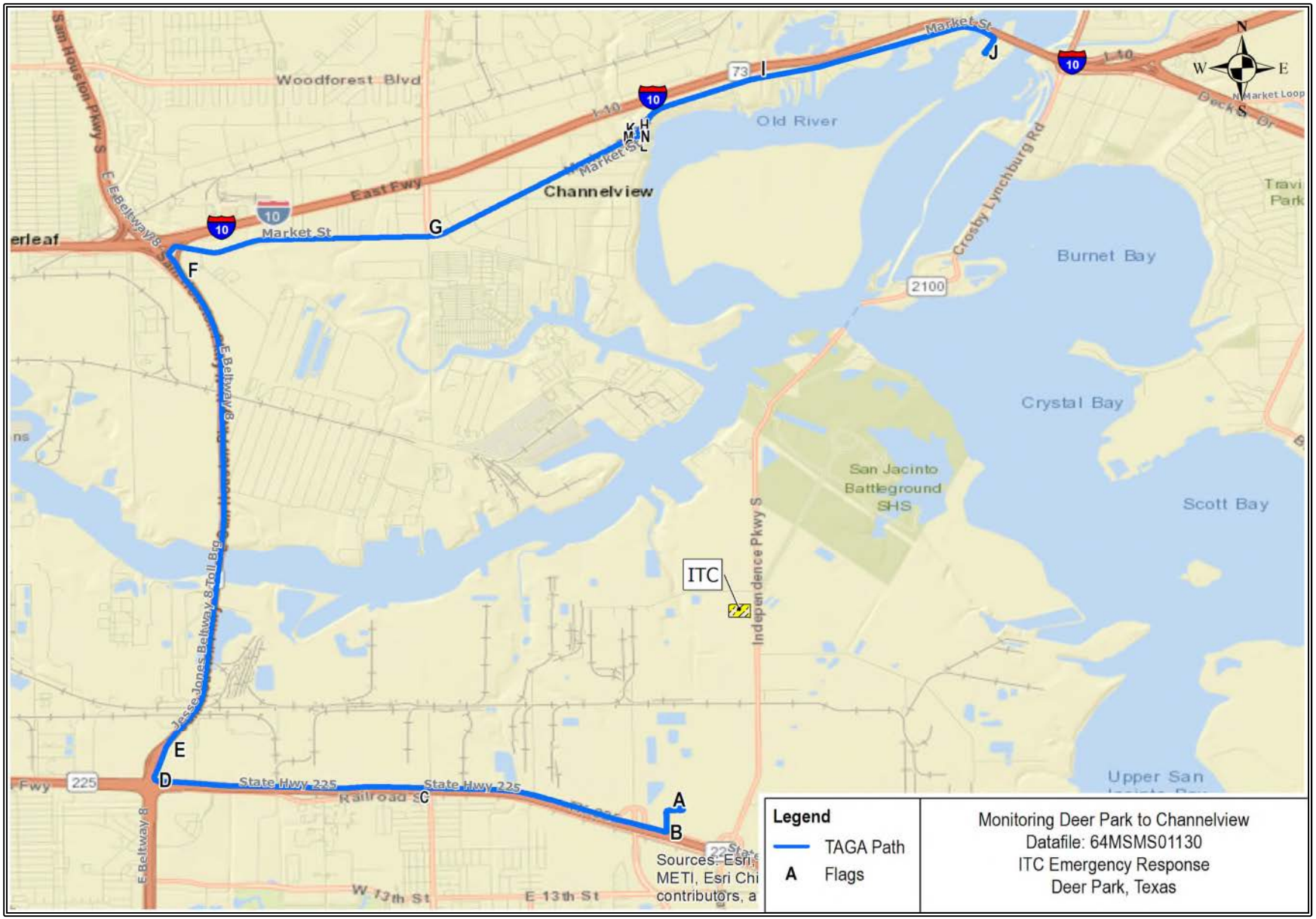


Figure 263a Monitoring Deer Park to Channelview Path, 64MSMS01130

Figure 263b

TAGA File Event Summary
File: 64MSMS01130 Acquired on 07 May 2019 at 13:35:50
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	22.9	2175	Start mobile monitoring on service road
B	24.7	2352	Right turn onto Pasadena Freeway Frontage Road
C	29.7	2827	Cross Center Street
D	33.4	3173	Right turn onto Highway 8 Service Road
E	34.0	3233	Merge onto Highway 8 North
F	38.2	3629	Exit onto Market Street
G	43.7	4155	Cross Sheldon Road
H	47.3	4502	Passing River Terrace Park
I	49.6	4713	Cross Magnolia Street
J	55.0	5234	U-turn at Southwest Shipyard
K	64.6	6142	End mobile monitoring at River Terrace Park
L	65.1	6187	Start ambient
M	66.6	6328	End ambient
N	68.4	6505	Start 30 mL/min spike
O	69.5	6611	End 30 mL/min spike

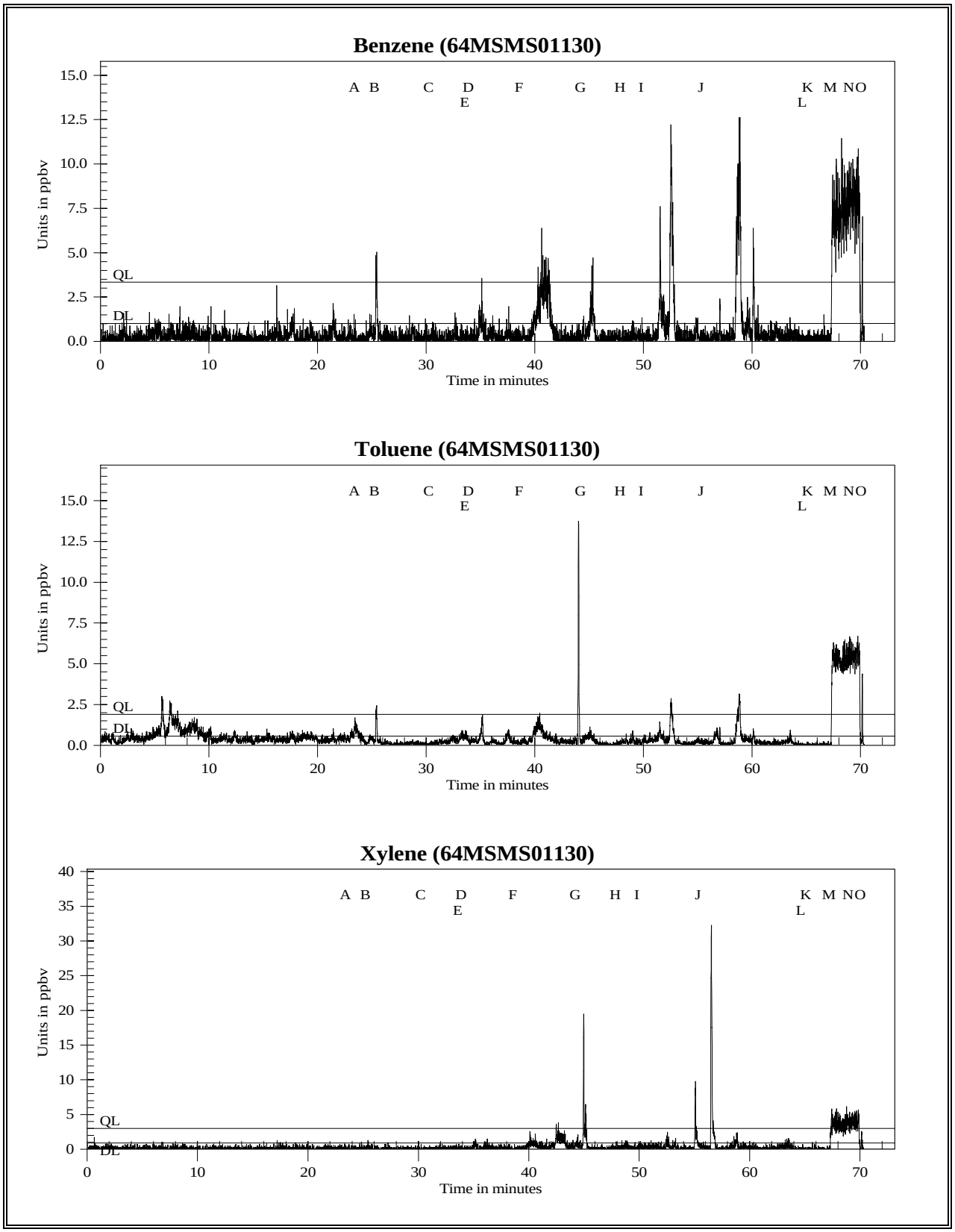


Figure 263c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

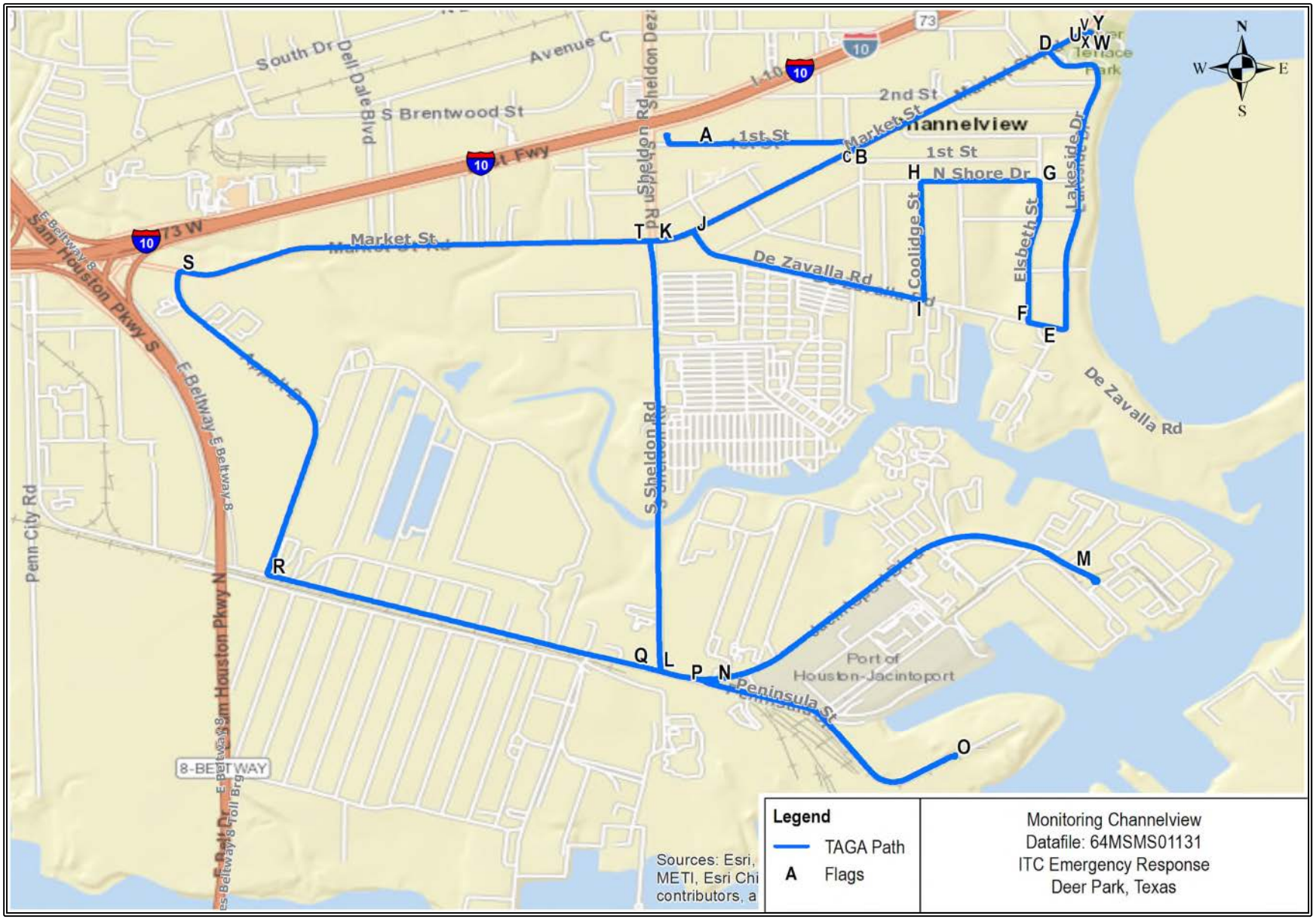


Figure 264a Monitoring Channelview Path, 64MSMS01131

Figure 264b

TAGA File Event Summary
File: 64MSMS01131 Acquired on 07 May 2019 at 15:31:29
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	3.4	322	Start mobile monitoring at Sheldon Road and 1st Street
B	4.7	444	Right turn onto Pemberton Street
C	5.0	474	Left turn onto Market Street
D	6.4	609	Right turn onto Lakeside Drive
E	10.4	994	Continuing onto Dezavala Road
F	10.7	1020	Right turn onto Elsbeth Street
G	12.9	1232	Left turn onto N Shore Drive
H	14.2	1348	Left turn onto Coolidge Street
I	16.1	1531	Right turn onto Dezavala Road
J	18.3	1736	Left turn onto Market Street
K	19.0	1804	Left turn onto Sheldon Road
L	23.2	2206	Left turn onto Jacintoport Boulevard
M	29.0	2755	U-turn on Jacintoport Boulevard
N	33.1	3152	Left turn onto San Jacinto Boulevard
O	37.6	3572	U-turn on San Jacinto Boulevard/Peninsula Street at Coast Cargo
P	43.0	4092	Continuing onto Jacintoport Boulevard
Q	43.6	4147	Cross Sheldon Road
R	46.8	4450	Right turn onto Appelt Drive
S	50.5	4806	Right turn onto Market Street
T	55.0	5226	Cross Sheldon Road
U	58.9	5600	End mobile monitoring at River Terrace Park
V	59.5	5661	Start ambient
W	60.8	5781	End ambient
X	62.3	5927	Start 30 mL/min spike
Y	63.4	6025	End 30 mL/min spike

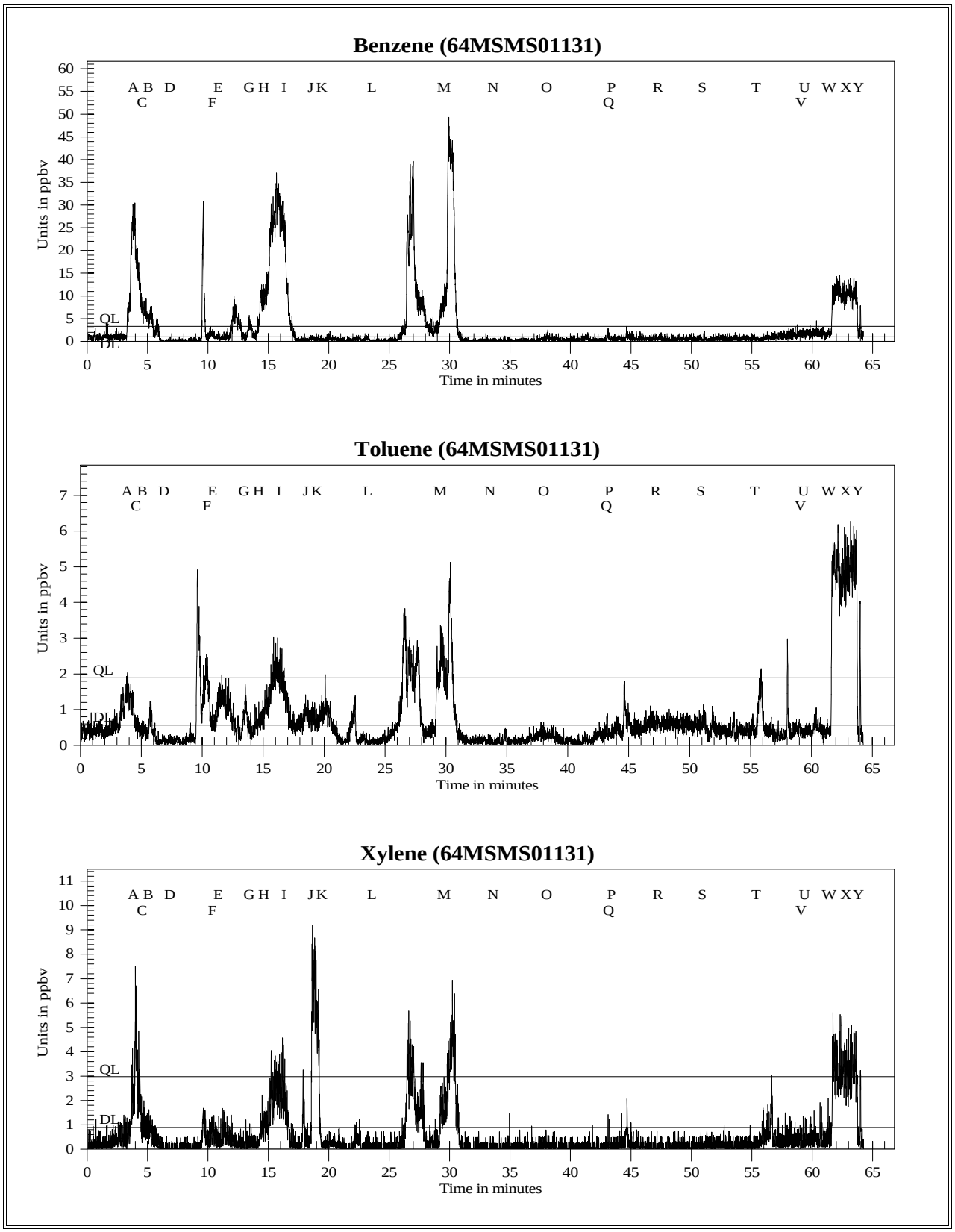


Figure 264c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

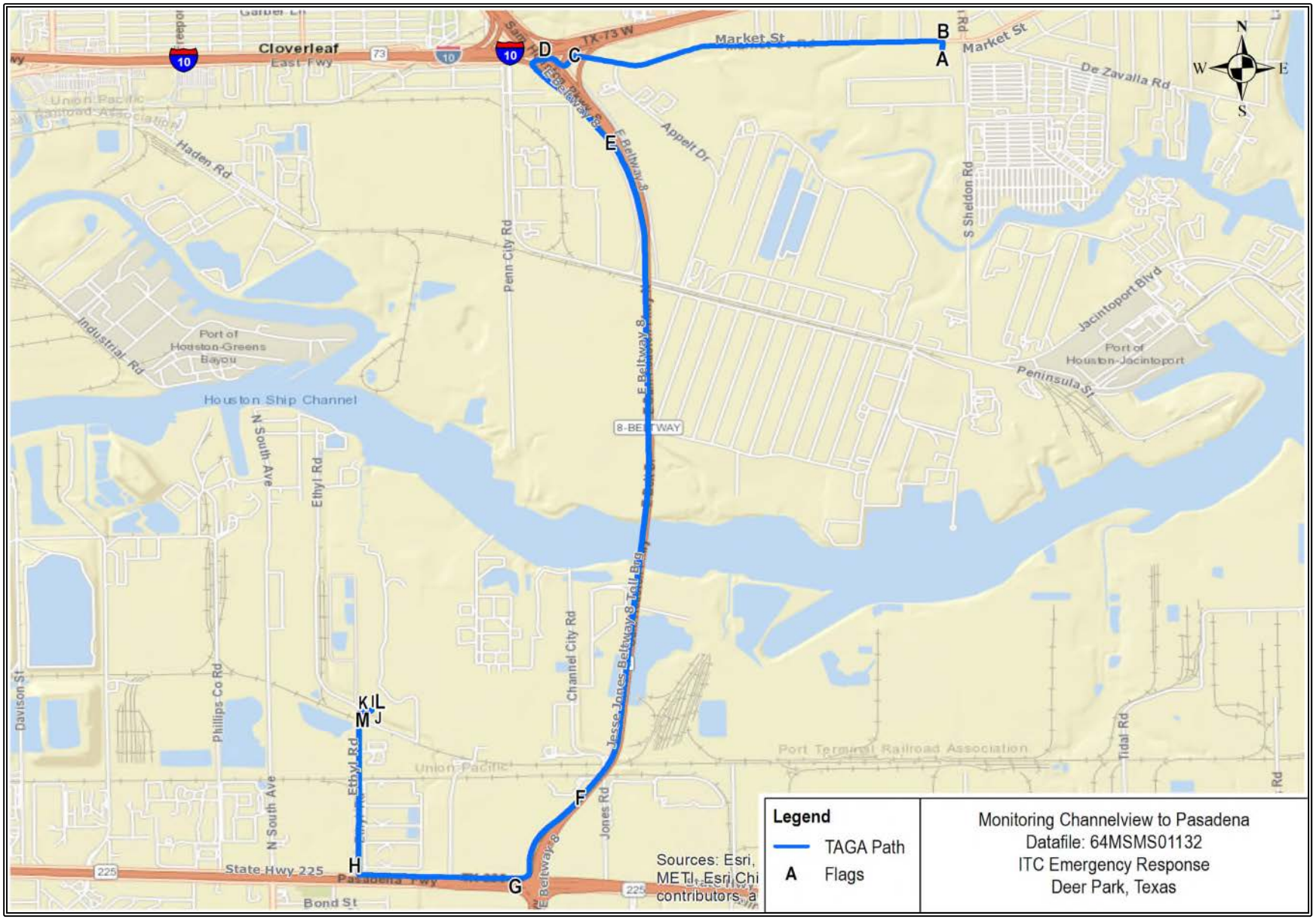


Figure 265a Monitoring Channelview to Pasadena Path, 64MSMS01132

Figure 265b

TAGA File Event Summary
File: 64MSMS01132 Acquired on 07 May 2019 at 16:55:04
Title: Monitoring Channelview to Pasadena

Flag	Time	Sequence	Description
A	0.7	67	Start mobile monitoring at the Flying J truck stop
B	1.4	137	Left turn onto Market Street
C	4.6	435	Right turn onto Highway 8 Service Road
D	4.8	460	U-turn on Highway 8 Service Road
E	6.2	587	Merge onto Highway 8 South
F	23.9	2276	Exit onto Highway 8 Service Road
G	27.9	2655	Right turn onto Pasadena Freeway Frontage Road
H	29.1	2766	Right turn onto Ethyl Road
I	32.3	3076	End mobile monitoring at EPA Command Post
J	32.7	3105	Start ambient
K	33.6	3200	End ambient
L	34.8	3306	Start 30 mL/min spike
M	35.9	3415	End 30 mL/min spike

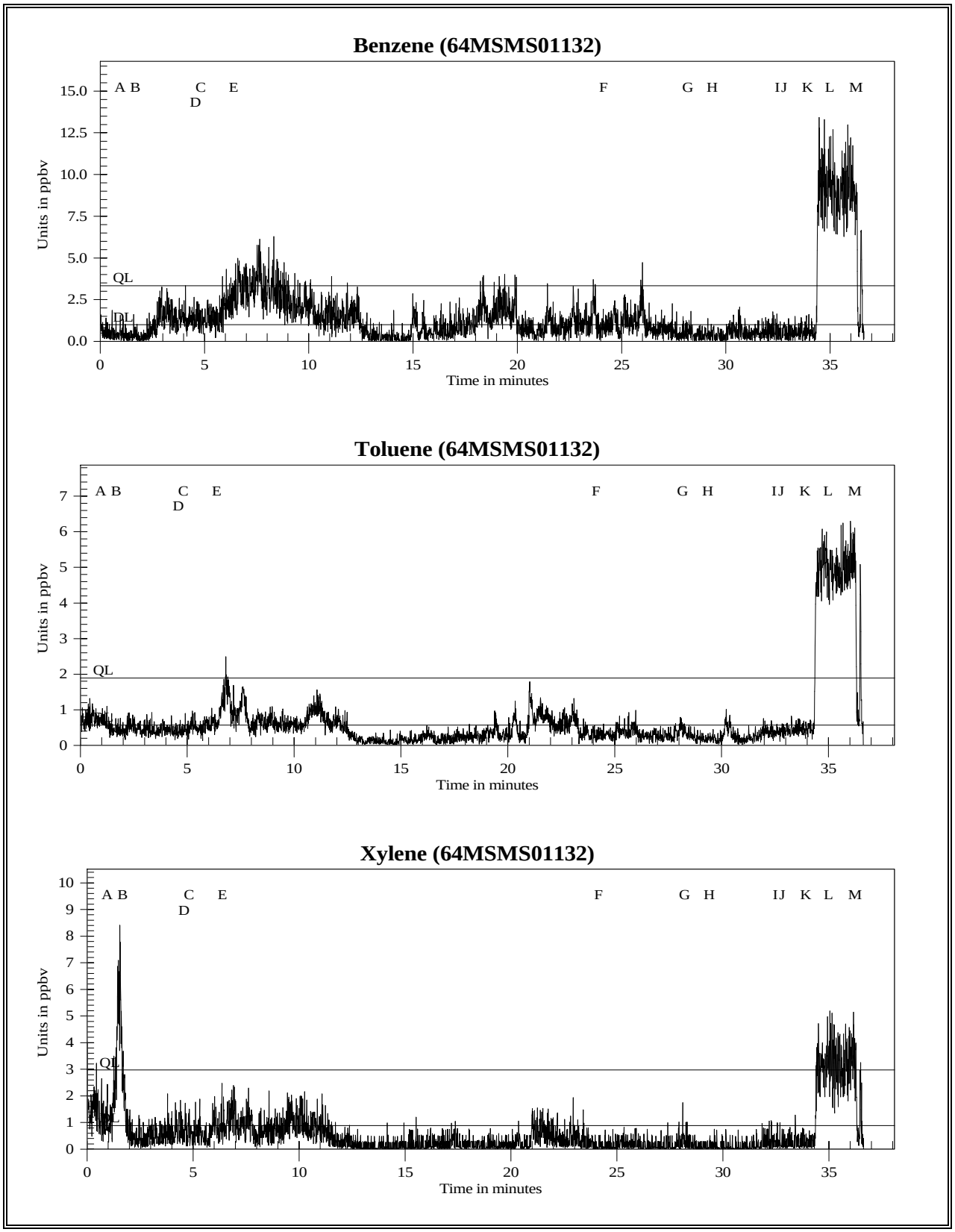


Figure 265c Monitoring Channelview to Pasadena in ppbv for Benzene, Toluene, and Xylenes

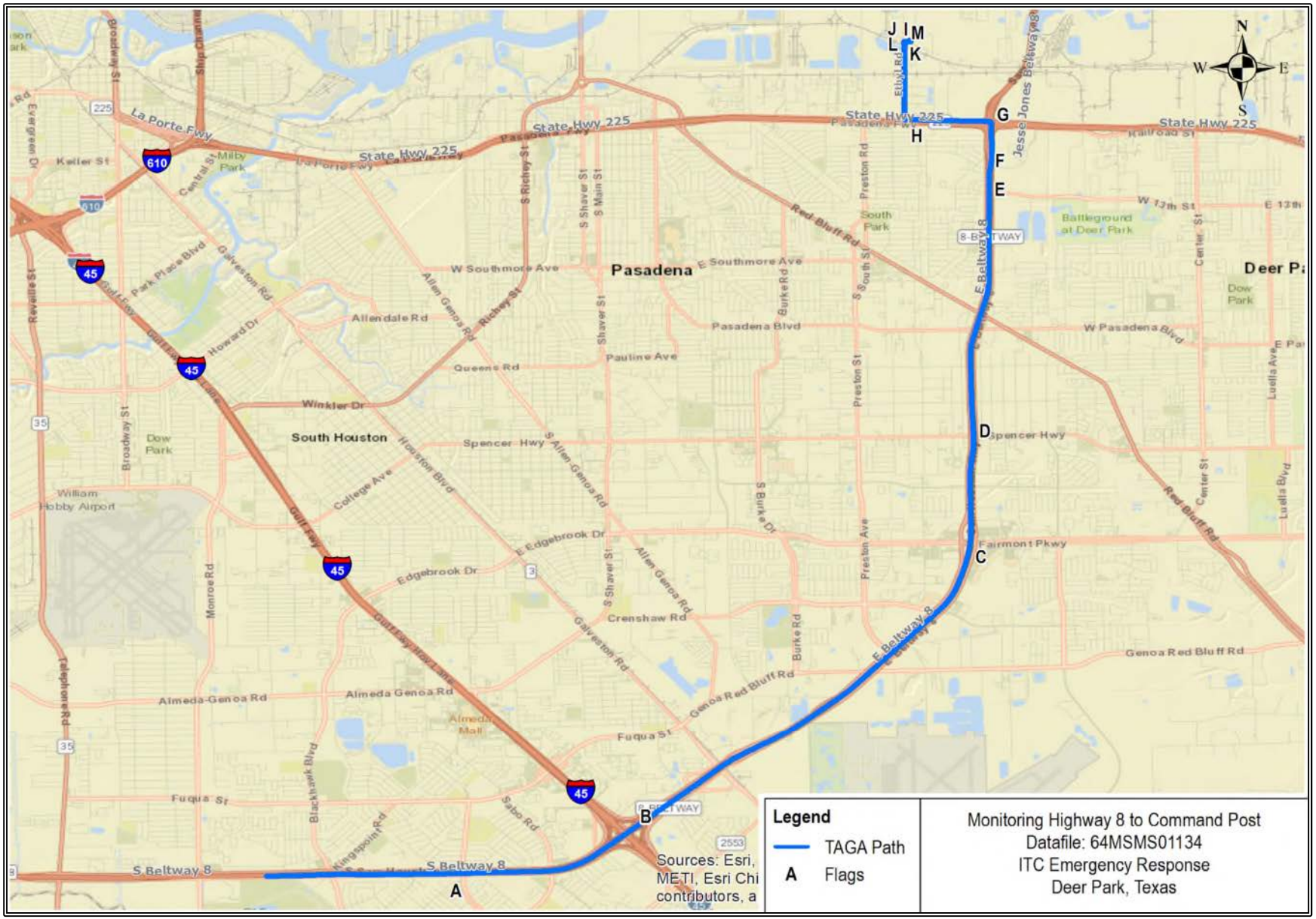
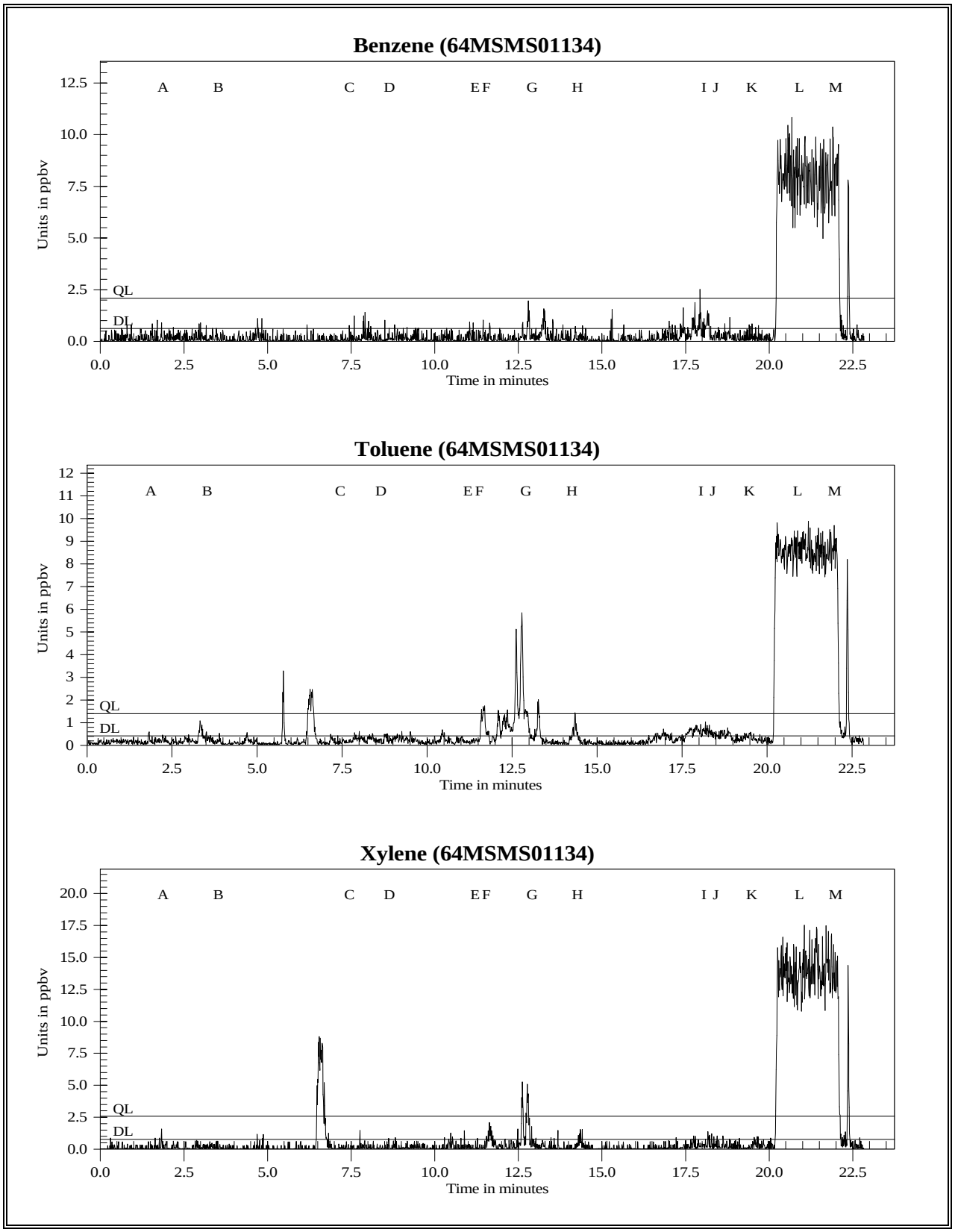


Figure 266a Monitoring Highway 8 to Command Post Path, 64MSMS01134

Figure 266b

TAGA File Event Summary
File: 64MSMS01134 Acquired on 08 May 2019 at 11:55:50
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	1.7	164	Start mobile monitoring on Highway 8 North at Beamer Road
B	3.4	322	Cross Highway 45
C	7.3	695	Cross Fairmont Parkway
D	8.5	807	Cross Spencer Highway
E	11.1	1053	Cross Greenshadow Drive
F	11.4	1086	Exit onto Highway 8 Service Road
G	12.7	1213	Left turn onto Pasadena Freeway Frontage Road
H	14.1	1341	Right turn onto Ethyl Road
I	18.0	1710	End mobile monitoring at EPA Command Post
J	18.3	1742	Start ambient
K	19.3	1837	End ambient
L	20.8	1975	Start 30 mL/min spike
M	21.8	2072	End 30 mL/min spike



Figur 266c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

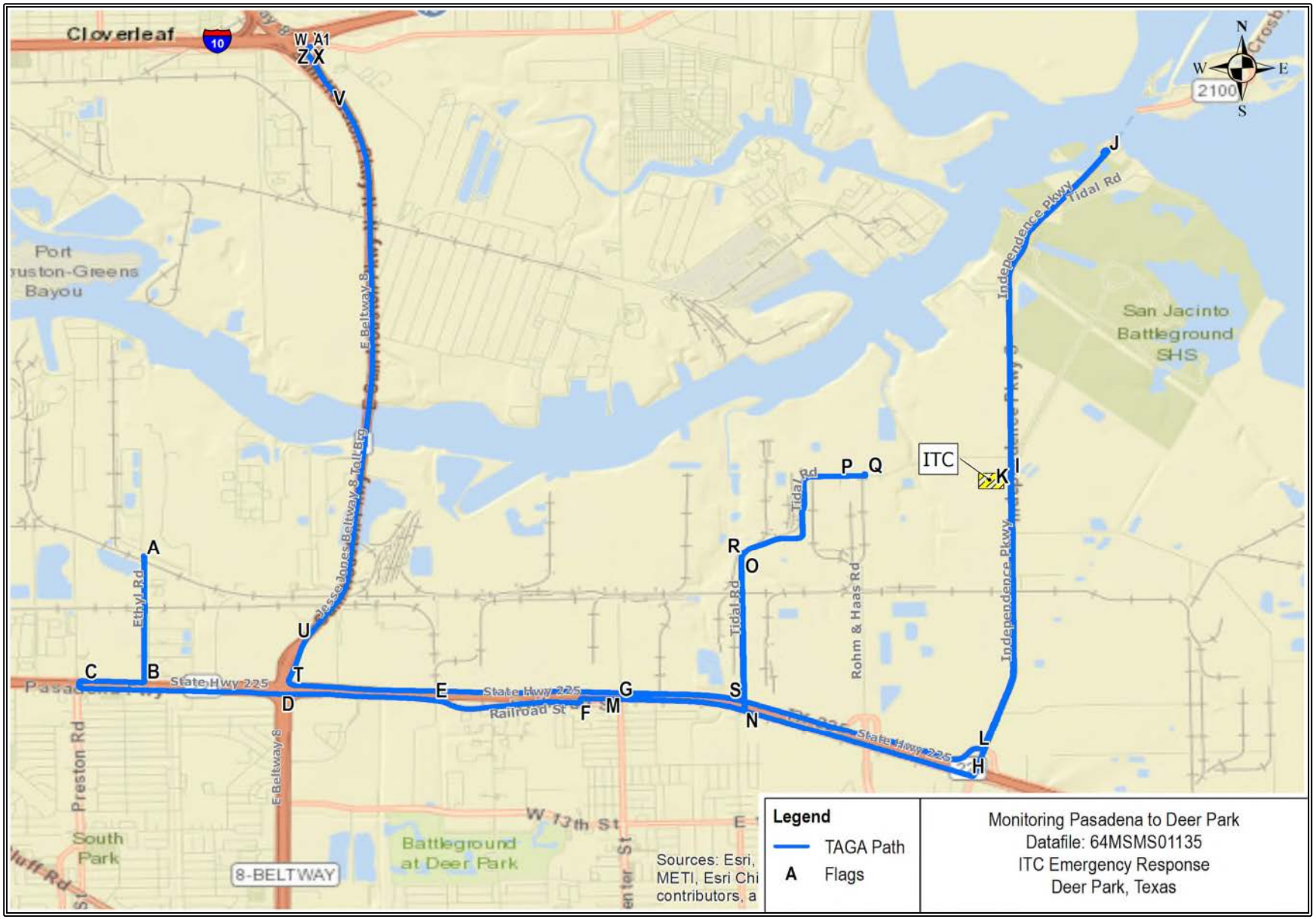


Figure 267a Monitoring Pasadena to Deer Park Path, 64MSMS01135

Figure 267b

TAGA File Event Summary
File: 64MSMS01135 Acquired on 08 May 2019 at 12:24:49
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	1.5	140	Start mobile monitoring at EPA Command Post
B	4.5	424	Right turn onto Pasadena Freeway Frontage Road
C	5.3	503	U-turn on Pasadena Freeway Frontage Road at Preston Road
D	9.7	926	Cross Highway 8
E	11.2	1067	Continuing onto Railroad Street
F	12.7	1211	Left turn onto Pasadena Freeway Frontage Road
G	14.6	1393	Cross Center Street
H	19.5	1858	Left turn onto Independence Parkway
I	23.8	2263	Passing ITC Site
J	30.3	2883	U-turn on Independence Parkway at Juan Seguin Park
K	37.2	3542	Passing ITC Site
L	42.5	4043	Right turn onto Pasadena Freeway Frontage Road
M	46.2	4396	U-turn onto Center Street
N	47.6	4528	Left turn onto Tidal Road
O	51.0	4845	Continuing onto Tidal Road
P	54.5	5185	Cross Rohm and Haas Road
Q	55.1	5241	U-turn on Tidal Road
R	60.6	5760	Continuing onto Tidal Road
S	63.0	5992	Right turn onto Pasadena Freeway Frontage Road
T	68.8	6546	Right turn onto Highway 8 Service Road
U	69.5	6610	Merge onto Highway 8 North
V	73.5	6993	Exit onto Market Street
W	74.3	7068	End mobile monitoring on Market Street
X	74.6	7095	Start ambient
Y	75.6	7190	End ambient
Z	76.9	7315	Start 30 mL/min spike
A1	77.9	7411	End 30 mL/min spike

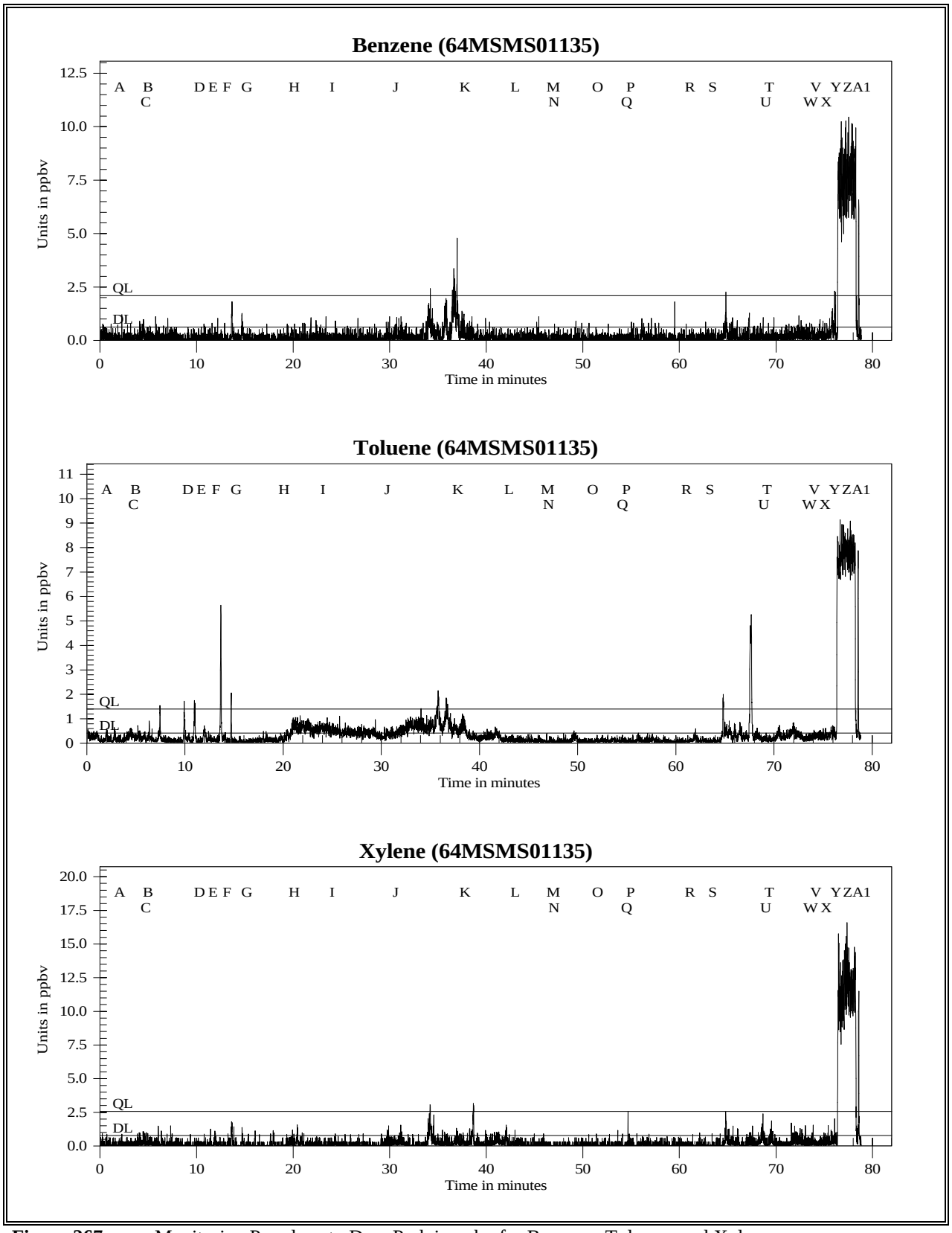


Figure 267c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

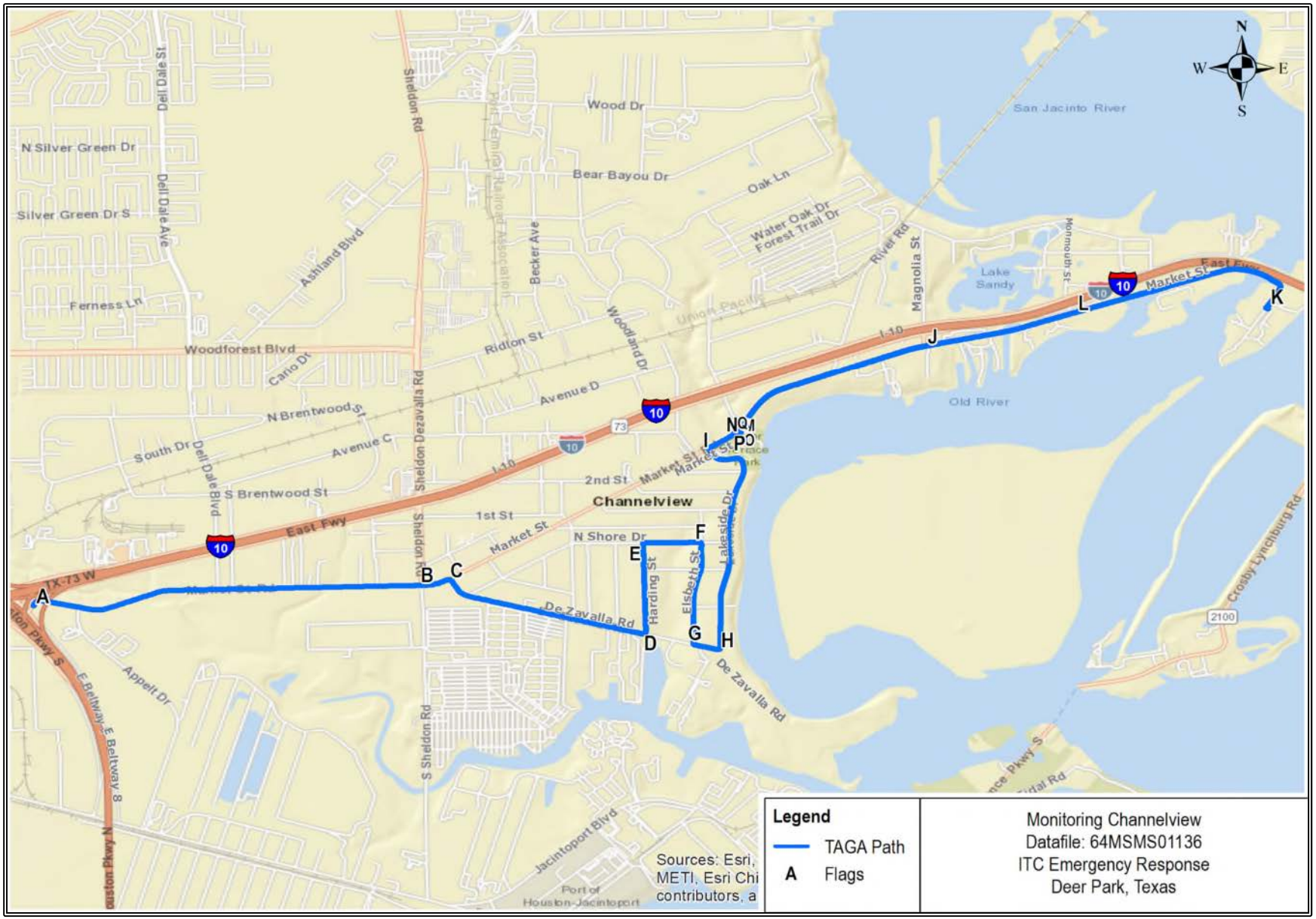


Figure 268a Monitoring Channelview Path, 64MSMS01136

Figure 268b

TAGA File Event Summary
File: 64MSMS01136 Acquired on 08 May 2019 at 13:46:10
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	0.7	70	Start mobile monitoring at Market Street and Highway 8
B	5.8	554	Cross Sheldon Road
C	6.1	581	Right turn onto Dezavala Road
D	8.3	794	Left turn onto Harding Street
E	10.5	1002	Right turn onto N Shore Drive
F	11.5	1096	Right turn onto Elsbeth Road
G	13.6	1297	Right turn onto Dezavala Road
H	14.1	1346	Continuing onto Lakeside Drive
I	18.0	1710	Right turn onto Market Street
J	21.4	2040	Cross Magnolia Street
K	27.3	2601	U-turn on Market Street at Southwest Shipyard
L	32.7	3113	Cross Monmouth Street
M	38.6	3674	End mobile monitoring at River Terrace Park
N	39.0	3704	Start ambient
O	40.1	3810	End ambient
P	41.5	3949	Start 30 mL/min spike
Q	42.9	4078	End 30 mL/min spike

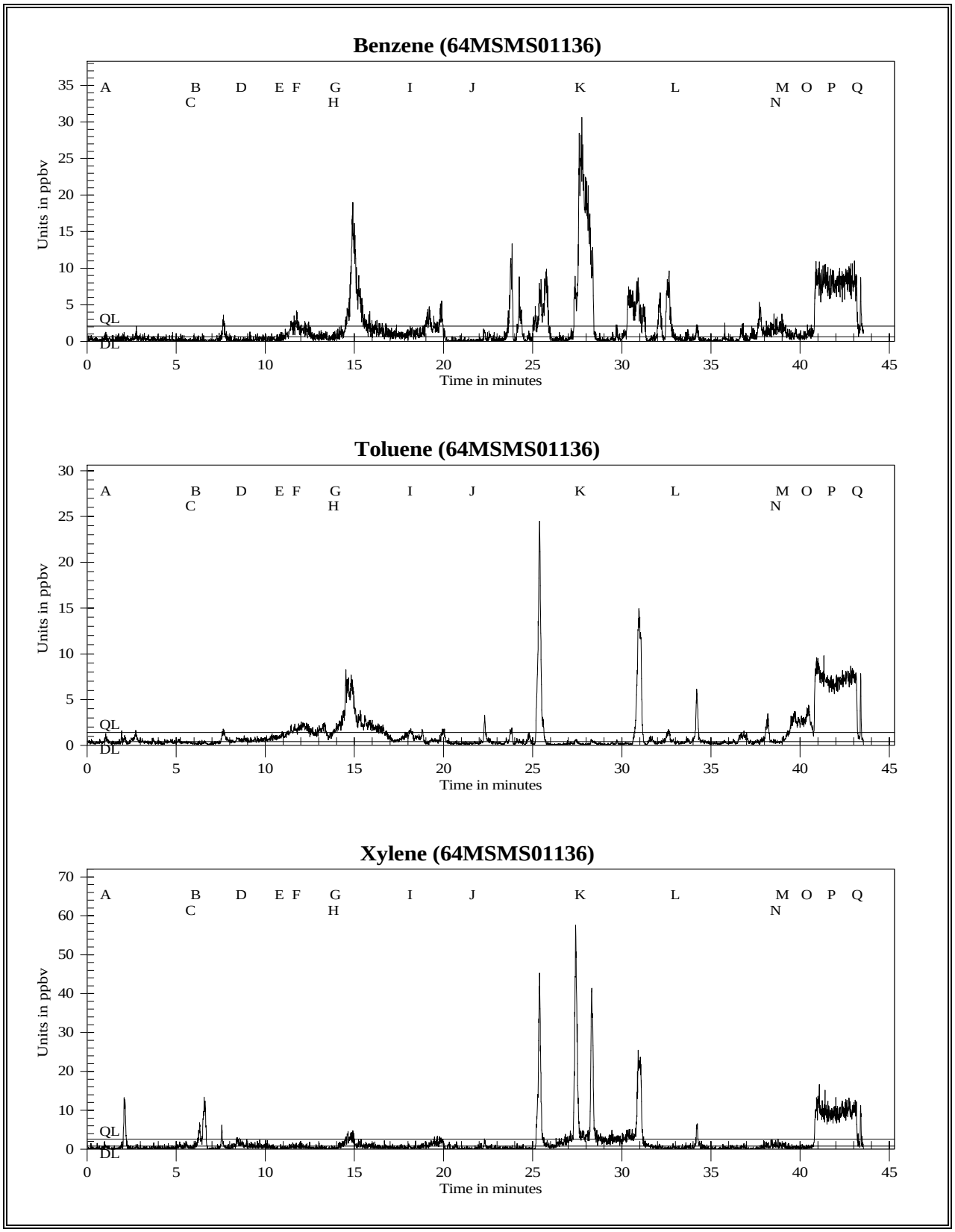


Figure 268c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

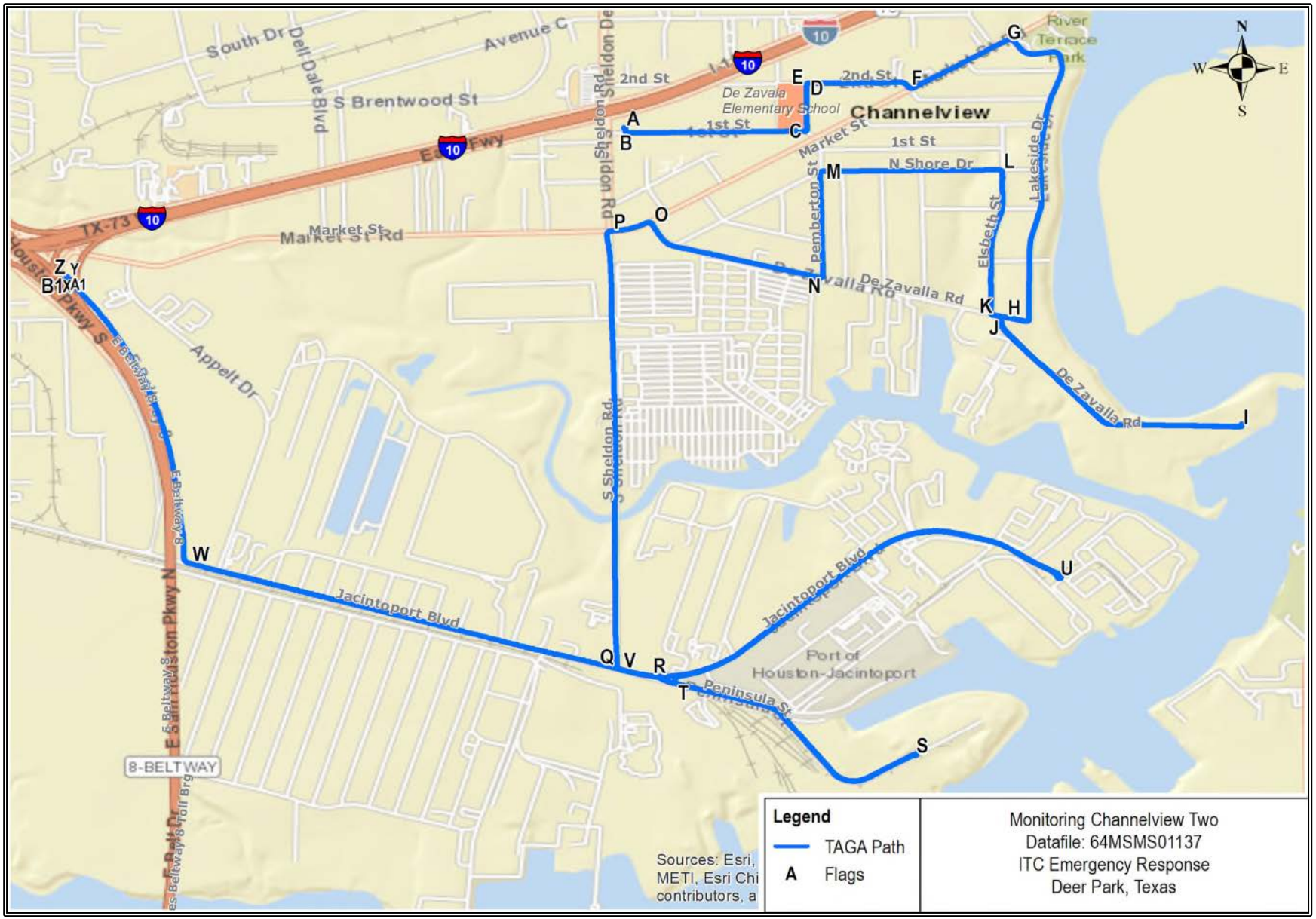


Figure 269a Monitoring Channelview Two Path, 64MSMS01137

Figure 269b

TAGA File Event Summary
File: 64MSMS01137 Acquired on 08 May 2019 at 15:04:05
Title: Monitoring Channelview Two

Flag	Time	Sequence	Description
A	1.3	123	Start mobile monitoring at 1st Street and Sheldon Road
B	2.2	211	Left turn onto 1st Street
C	3.9	370	Left turn onto Euclid Street
D	4.7	452	Passing Dezavala Elementary School
E	5.2	492	Right turn onto 2nd Street
F	6.6	633	Left turn onto Market Street
G	7.5	715	Right turn onto Lakeside Drive
H	11.9	1130	Left turn onto Dezavala Road
I	17.3	1647	U-turn on Dezavala Road
J	24.4	2317	Left turn to continue on Dezavala Road
K	24.6	2339	Right turn onto Elsbeth Road
L	27.4	2606	Left turn onto N Shore Drive
M	29.4	2794	Left turn onto Pemberton Street
N	31.3	2978	Right turn onto Dezavala Road
O	33.2	3154	Left turn onto Market Street
P	34.5	3279	Left turn onto Sheldon Road
Q	40.2	3821	Left turn onto Jacintoport Boulevard
R	40.7	3875	Right turn onto San Jacinto Boulevard
S	44.8	4263	U-turn on San Jacinto Boulevard/Peninsula Street at Coast Cargo
T	50.1	4768	Right turn onto Jacintoport Boulevard
U	55.2	5245	U-turn on Jacintoport Boulevard
V	62.3	5924	Cross Sheldon Road
W	66.0	6280	Right turn onto Highway 8 Service Road
X	68.6	6526	End mobile monitoring on Highway 8 Service Road
Y	69.2	6581	Start ambient
Z	70.5	6702	End ambient
A1	71.8	6831	Start 30 mL/min spike
B1	72.9	6928	End 30 mL/min spike

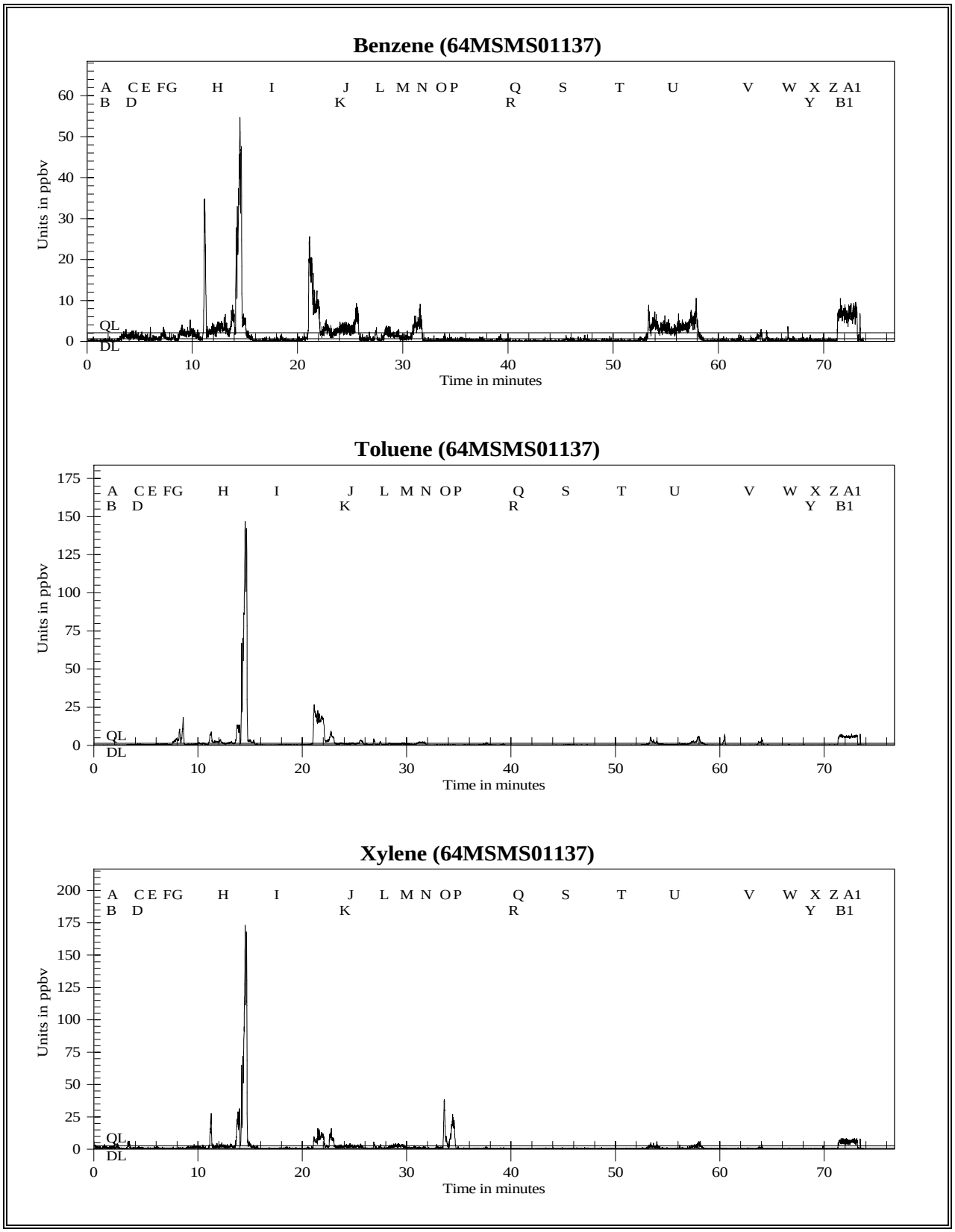


Figure 269c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

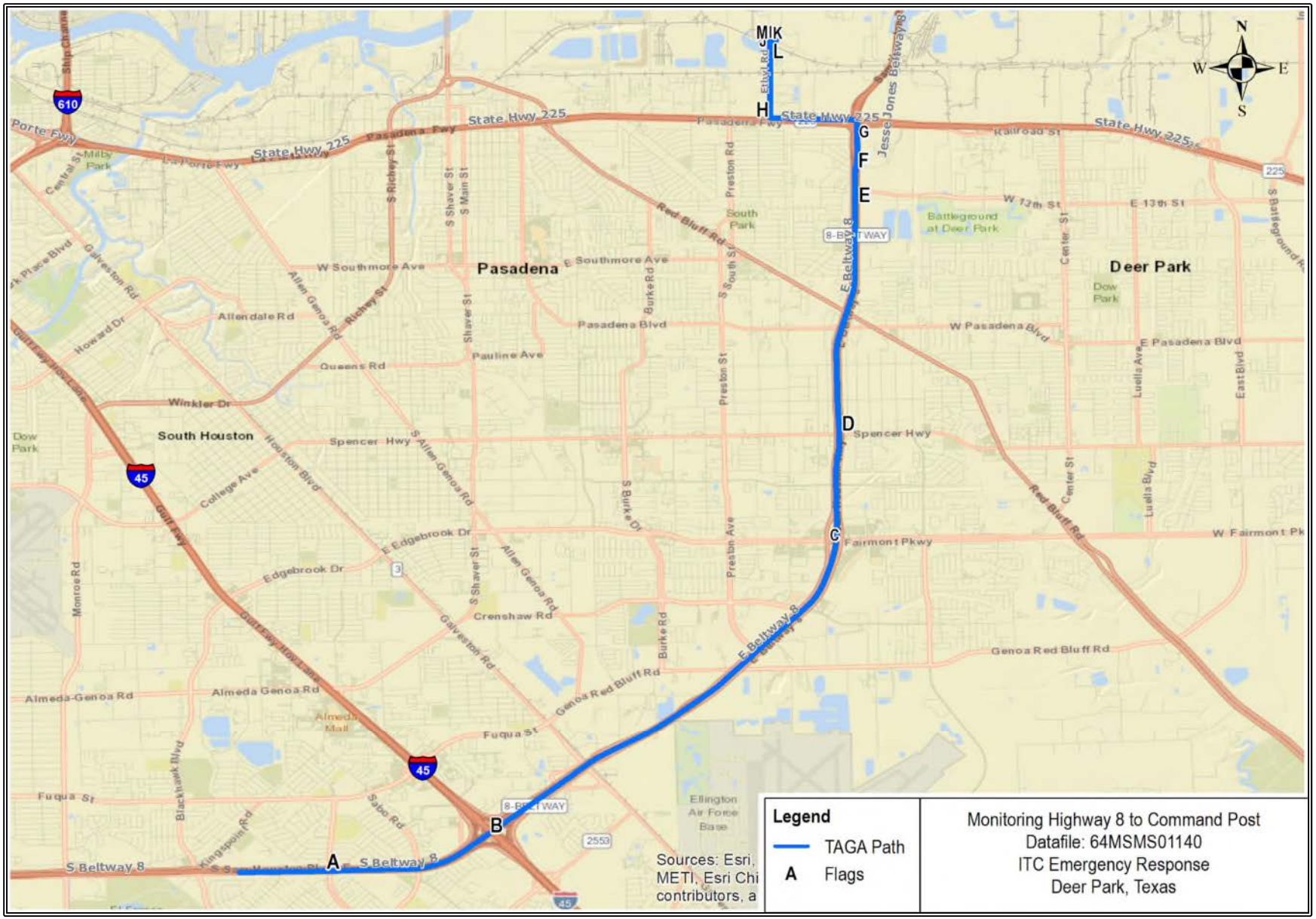


Figure 270a Monitoring Highway 8 to Command Post Path, 64MSMS01140

Figure 270b

TAGA File Event Summary
File: 64MSMS01140 Acquired on 09 May 2019 at 08:04:45
Title: Monitoring Highway 8 to Command Post

Flag	Time	Sequence	Description
A	0.7	70	Start mobile monitoring on Highway 8 North at Beamer Road
B	2.3	216	Cross Highway 45
C	6.2	590	Cross Fairmont Parkway
D	7.3	693	Cross Spencer Highway
E	12.6	1197	Cross Greenshadow Drive
F	13.1	1246	Exit onto Highway 8 Service Road
G	14.3	1365	Left turn onto Pasadena Freeway Frontage Road
H	15.7	1495	Right turn onto Ethyl Road
I	19.3	1837	End mobile monitoring at EPA Command Post
J	19.7	1870	Start ambient
K	20.8	1978	End ambient
L	23.4	2224	Start 30 mL/min spike
M	24.4	2320	End 30 mL/min spike

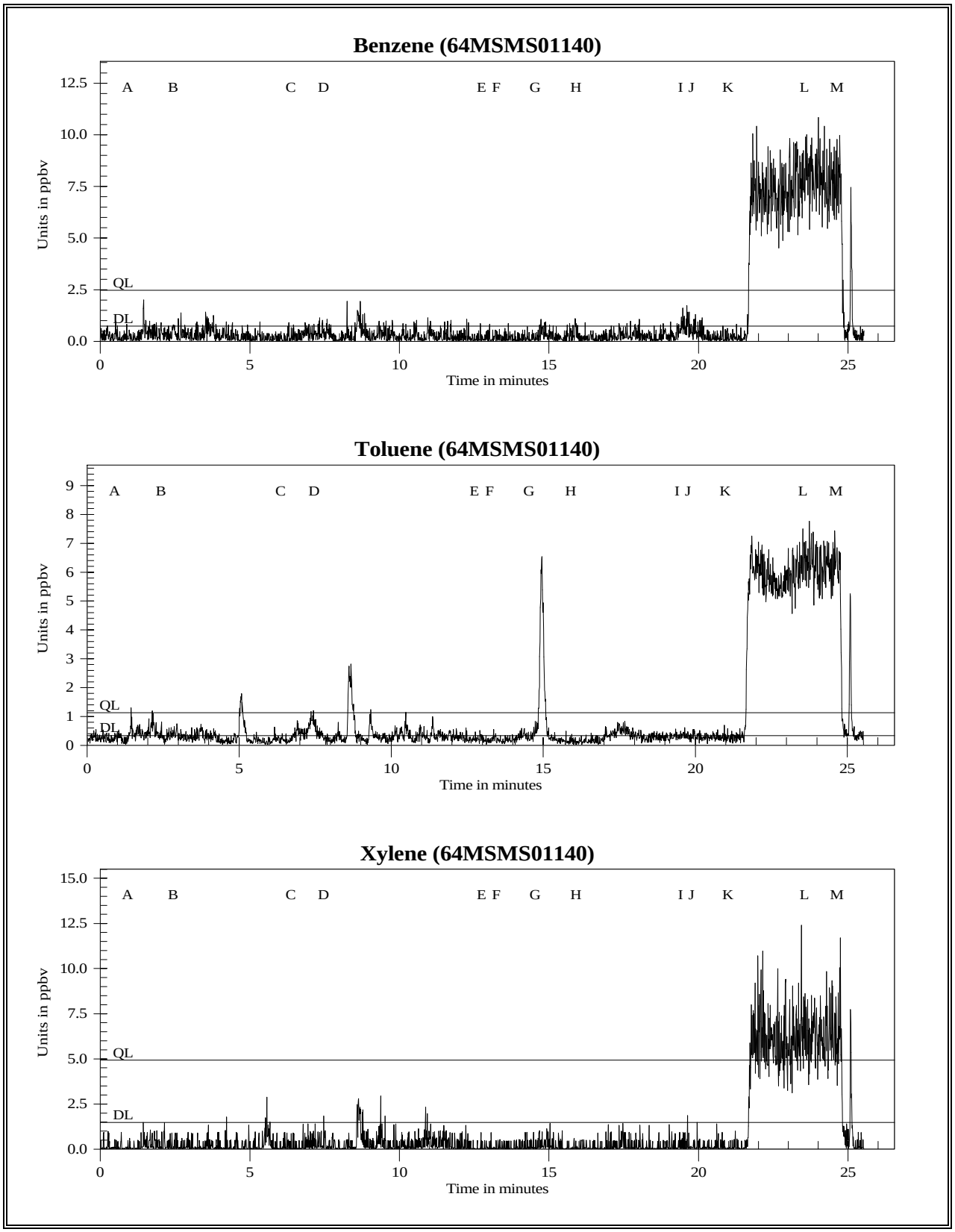


Figure 270c Monitoring Highway 8 to Command Post in ppbv for Benzene, Toluene, and Xylenes

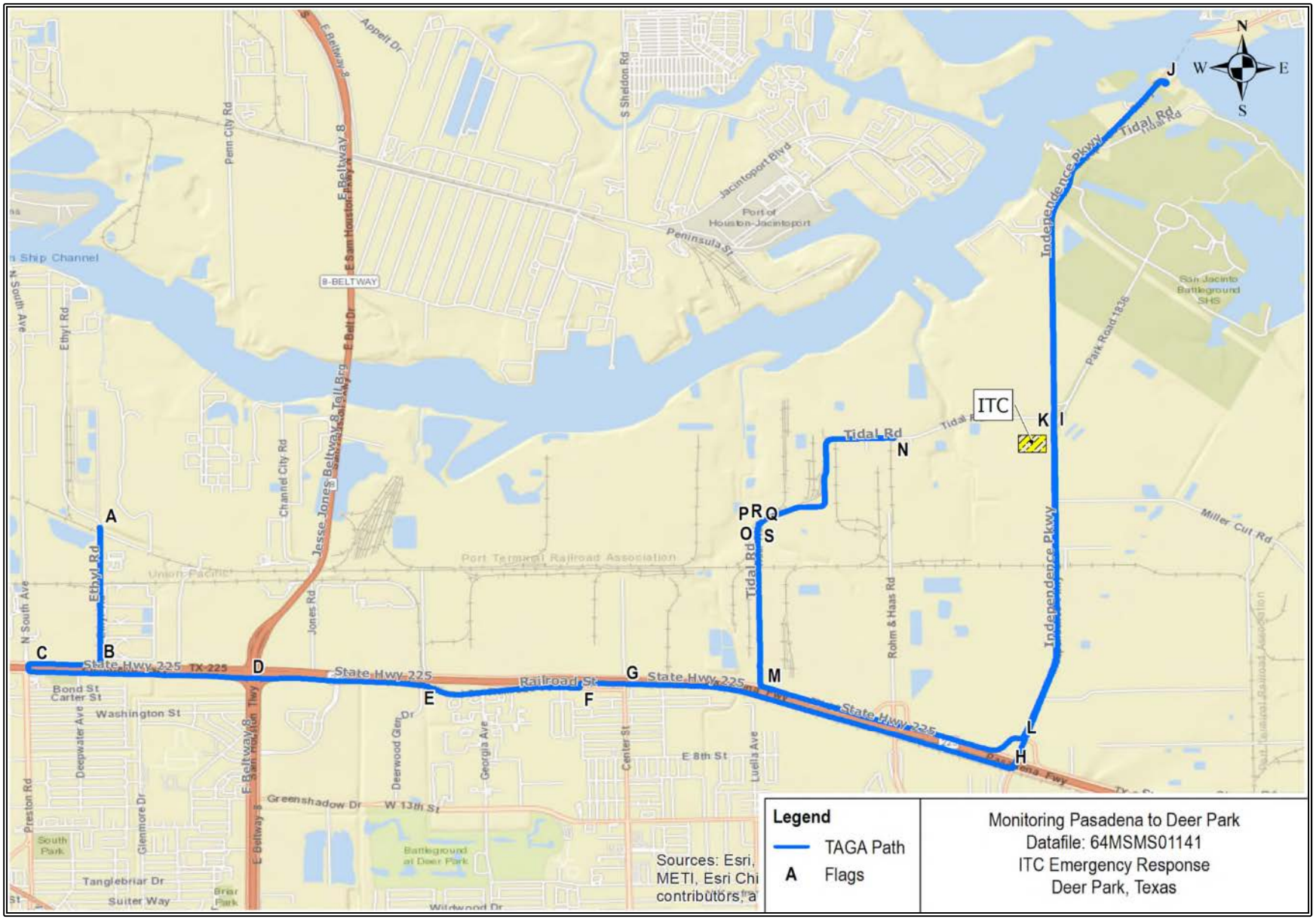


Figure 271a Monitoring Pasadena to Deer Park Path, 64MSMS01141

Figure 271b

TAGA File Event Summary
File: 64MSMS01141 Acquired on 09 May 2019 at 08:54:28
Title: Monitoring Pasadena to Deer Park

Flag	Time	Sequence	Description
A	1.9	178	Start mobile monitoring at EPA Command Post
B	4.7	449	Right turn onto Pasadena Freeway Frontage Road
C	5.5	522	U-turn on Pasadena Freeway Frontage Road at Preston Road
D	7.6	725	Cross Highway 8
E	9.1	867	Continuing onto Railroad Street
F	11.2	1065	Left turn onto Pasadena Freeway Frontage Road
G	12.6	1197	Cross Center Street
H	17.0	1618	Left turn onto Independence Parkway
I	21.5	2042	Passing ITC Site
J	26.7	2536	U-turn on Independence Parkway at Juan Seguin Park
K	32.3	3075	Passing ITC Site
L	37.4	3559	Right turn onto Pasadena Freeway Frontage Road
M	40.3	3830	Right turn onto Tidal Road
N	47.3	4497	U-turn on Tidal Road at Rohm and Haas Road
O	52.4	4978	End mobile monitoring on Tidal Road
P	52.6	5006	Start ambient
Q	53.7	5103	End ambient
R	55.1	5239	Start 30 mL/min spike
S	56.1	5336	End 30 mL/min spike

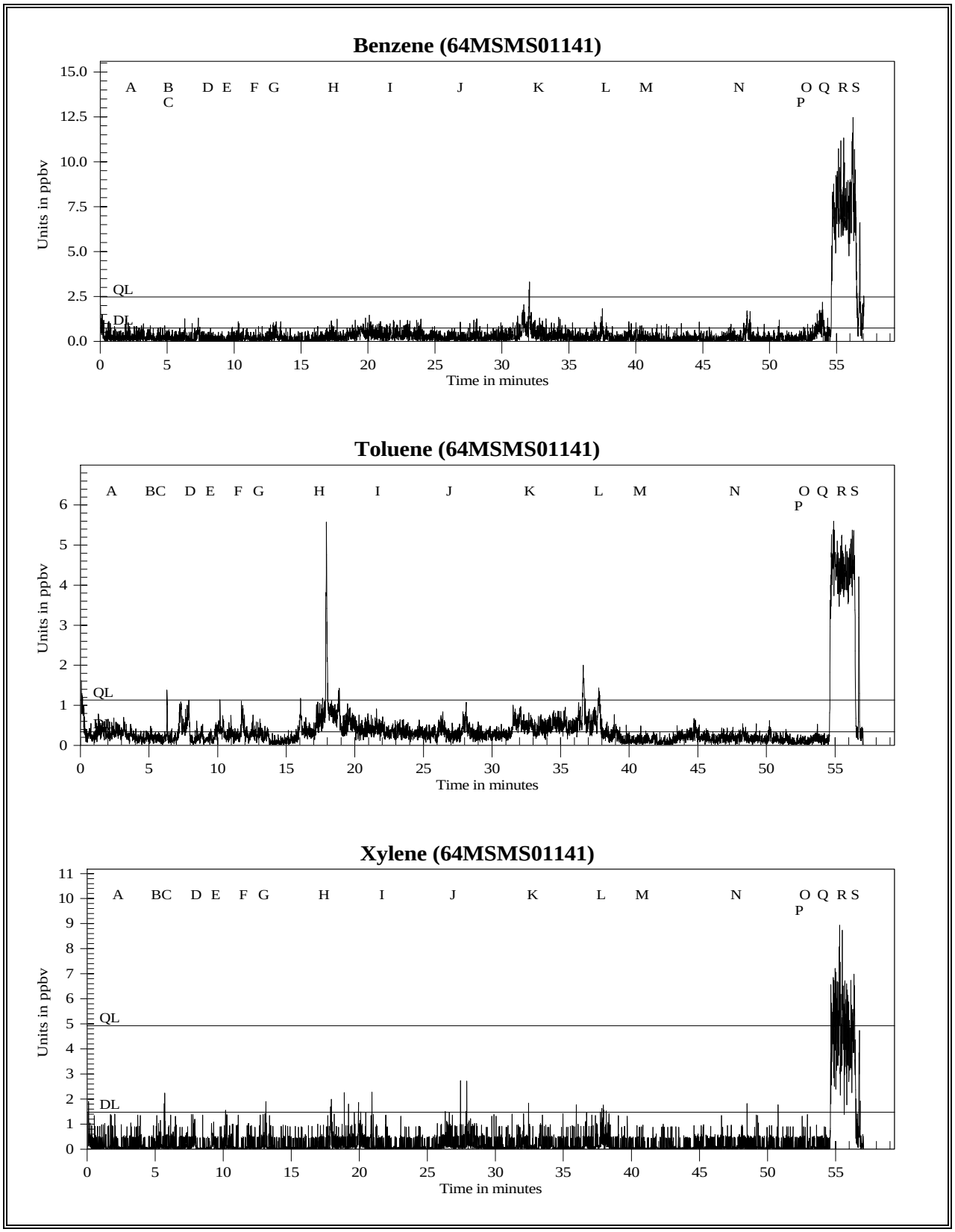


Figure 271c Monitoring Pasadena to Deer Park in ppbv for Benzene, Toluene, and Xylenes

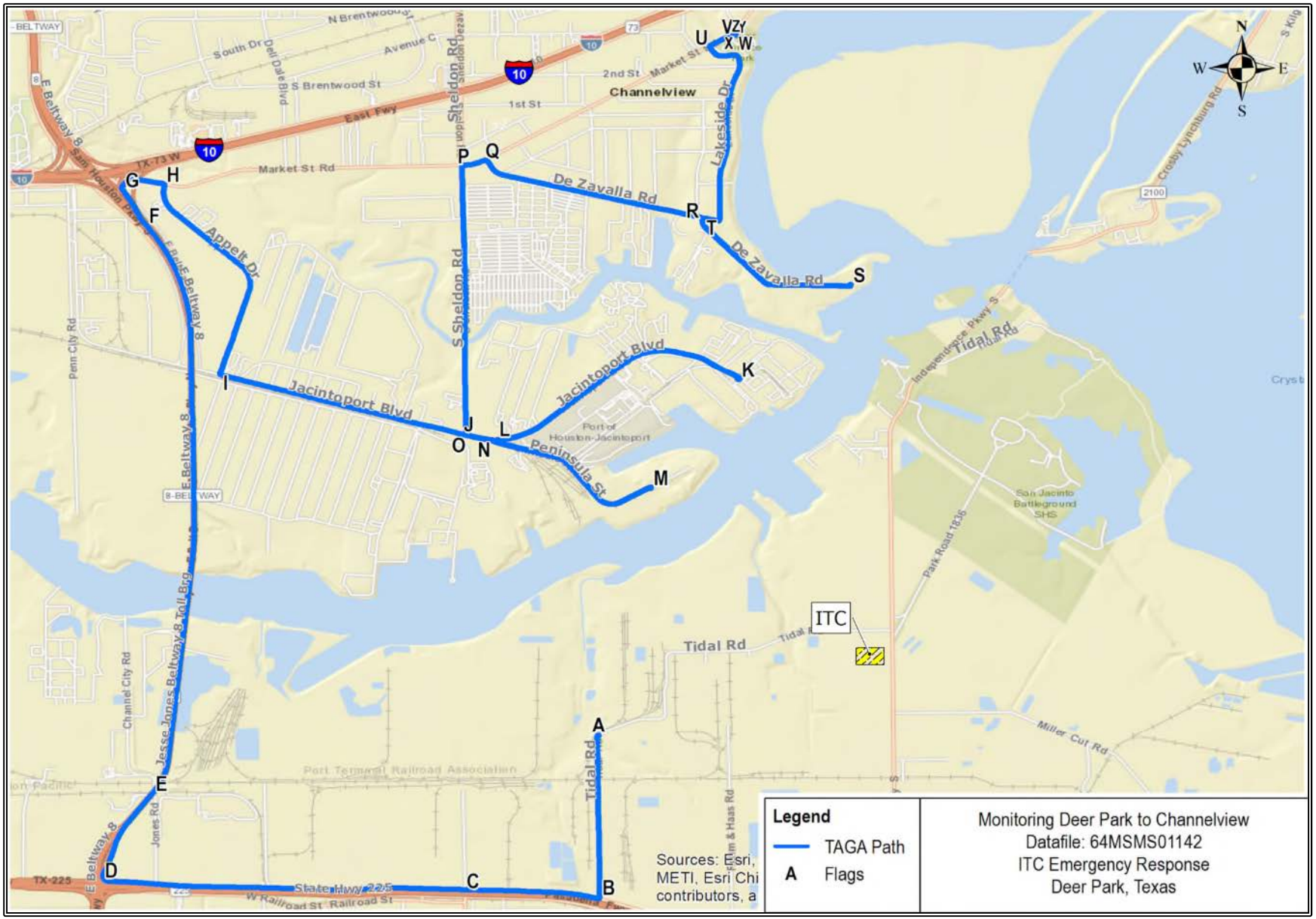


Figure 272a Monitoring Deer Park to Channelview Path, 64MSMS01142

Figure 272b

TAGA File Event Summary
File: 64MSMS01142 Acquired on 09 May 2019 at 09:53:38
Title: Monitoring Deer Park to Channelview

Flag	Time	Sequence	Description
A	0.7	72	Start mobile monitoring on Tidal Road
B	4.1	387	Right turn onto Pasadena Freeway Frontage Road
C	5.9	563	Cross Center Street
D	9.9	945	Right turn onto Highway 8 Service Road
E	11.0	1043	Merge onto Highway 8 North
F	14.9	1420	Exit onto Highway 8 Service Road
G	15.4	1469	Right turn onto Market Street
H	16.3	1552	Right turn onto Appelt Drive
I	19.8	1885	Left turn onto Jacintoport Boulevard
J	23.1	2194	Cross Sheldon Road
K	27.7	2631	U-turn on Jacintoport Boulevard
L	32.2	3064	Left turn onto San Jacinto Boulevard
M	36.8	3499	U-turn on San Jacinto Boulevard/Peninsula Street at Coastal Cargo
N	42.2	4017	Continuing onto Jacintoport Boulevard
O	42.8	4070	Right turn onto Sheldon Road
P	47.0	4469	Right turn onto Market Street
Q	47.4	4506	Right turn onto Dezavala Road
R	50.3	4786	Right turn to continue on Dezavala Road
S	54.9	5225	U-turn on Dezavala Road
T	61.9	5882	Right turn onto Lakeside Drive
U	65.4	6220	right turn onto Market Street
V	66.1	6285	End mobile monitoring at River Terrace Park
W	66.6	6334	Start ambient
X	67.7	6434	End ambient
Y	69.2	6578	Start 30 mL/min spike
Z	70.2	6673	End 30 mL/min spike

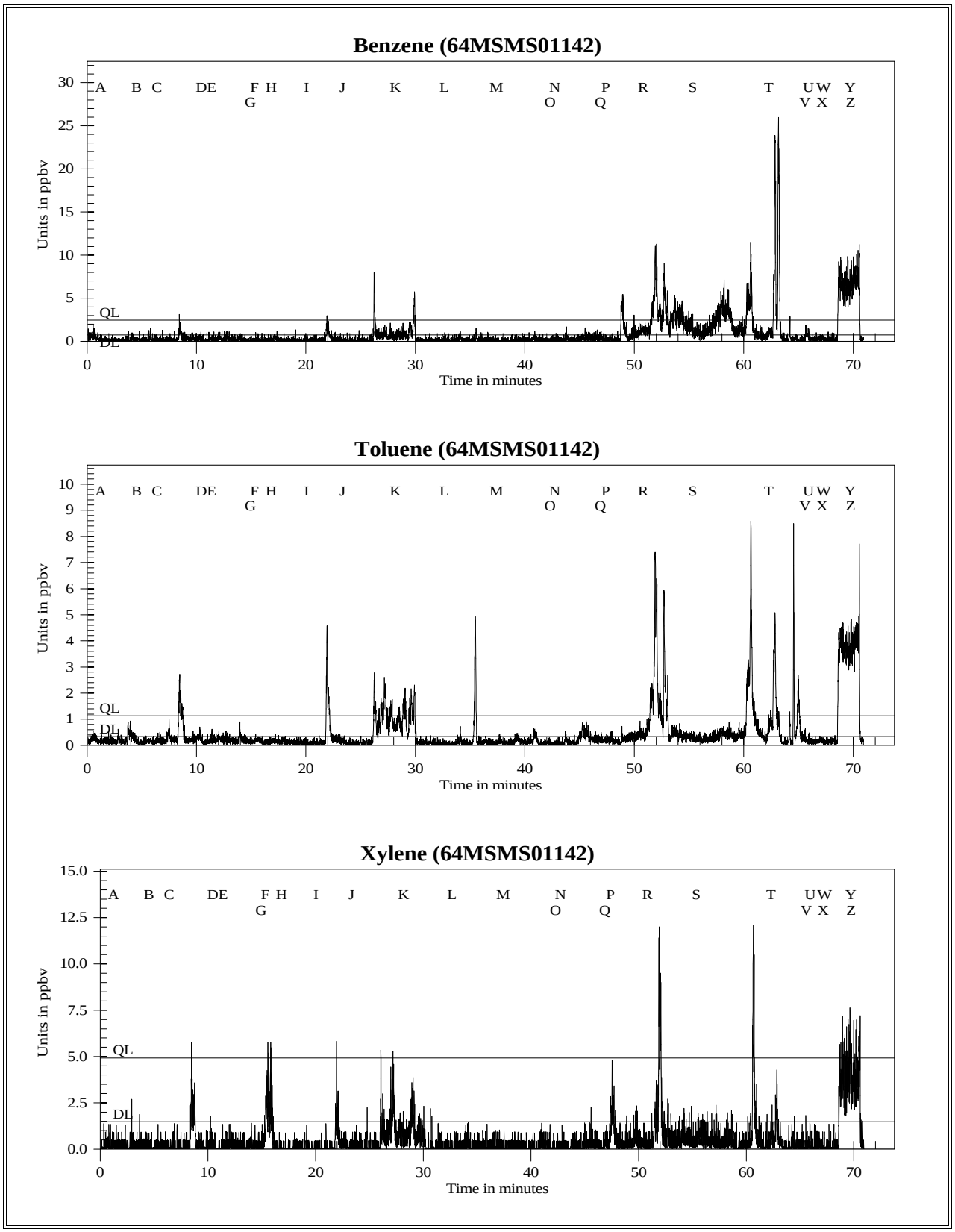


Figure 272c Monitoring Deer Park to Channelview in ppbv for Benzene, Toluene, and Xylenes

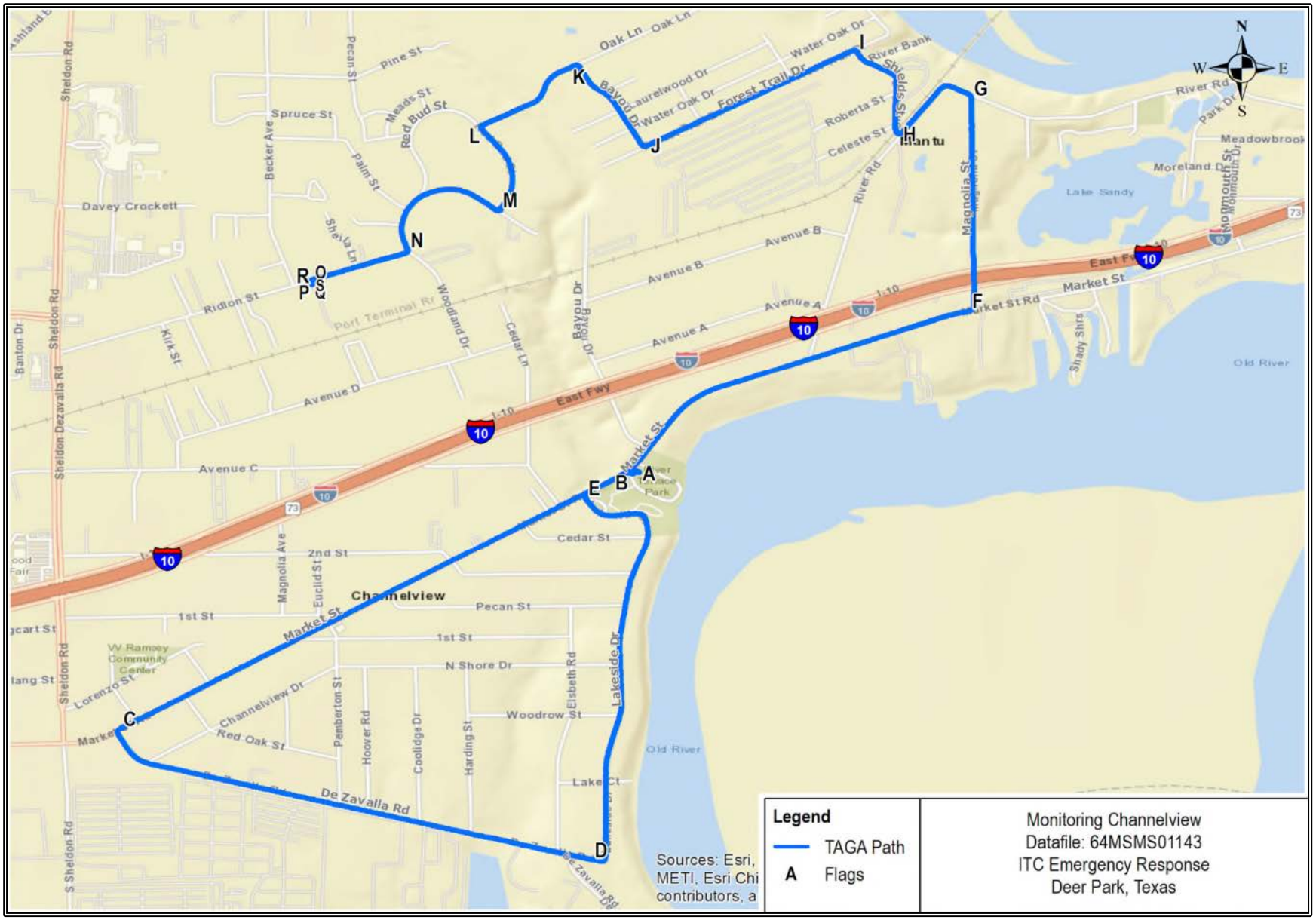


Figure 273a Monitoring Channelview Path, 64MSMS01143

Figure 273b

TAGA File Event Summary
File: 64MSMS01143 Acquired on 09 May 2019 at 11:09:06
Title: Monitoring Channelview

Flag	Time	Sequence	Description
A	0.8	78	Start mobile monitoring at River Terrace Park
B	2.1	205	Left turn onto Market Street
C	5.9	566	Left turn onto Dezavala Road
D	9.0	856	Continuing onto Lakeside Drive
E	13.2	1260	Right turn onto Market Street
F	16.5	1566	Left turn onto Magnolia Street
G	19.2	1831	Left turn onto River Road
H	20.2	1926	Right turn onto Shields Street
I	21.7	2061	Left turn onto Forest Trail Drive
J	23.6	2244	Right turn onto Bayou Drive
K	24.9	2368	Left turn onto Oak Lane
L	26.3	2499	Left turn onto Red Bud Street
M	27.5	2613	Right turn onto Woodland Street
N	30.0	2851	Right turn onto Ridlon Avenue
O	31.1	2959	End mobile monitoring at Ridlon Street and Becker Street
P	31.7	3013	Start ambient
Q	32.7	3106	End ambient
R	33.9	3224	Start 30 mL/min spike
S	35.0	3333	End 30 mL/min spike

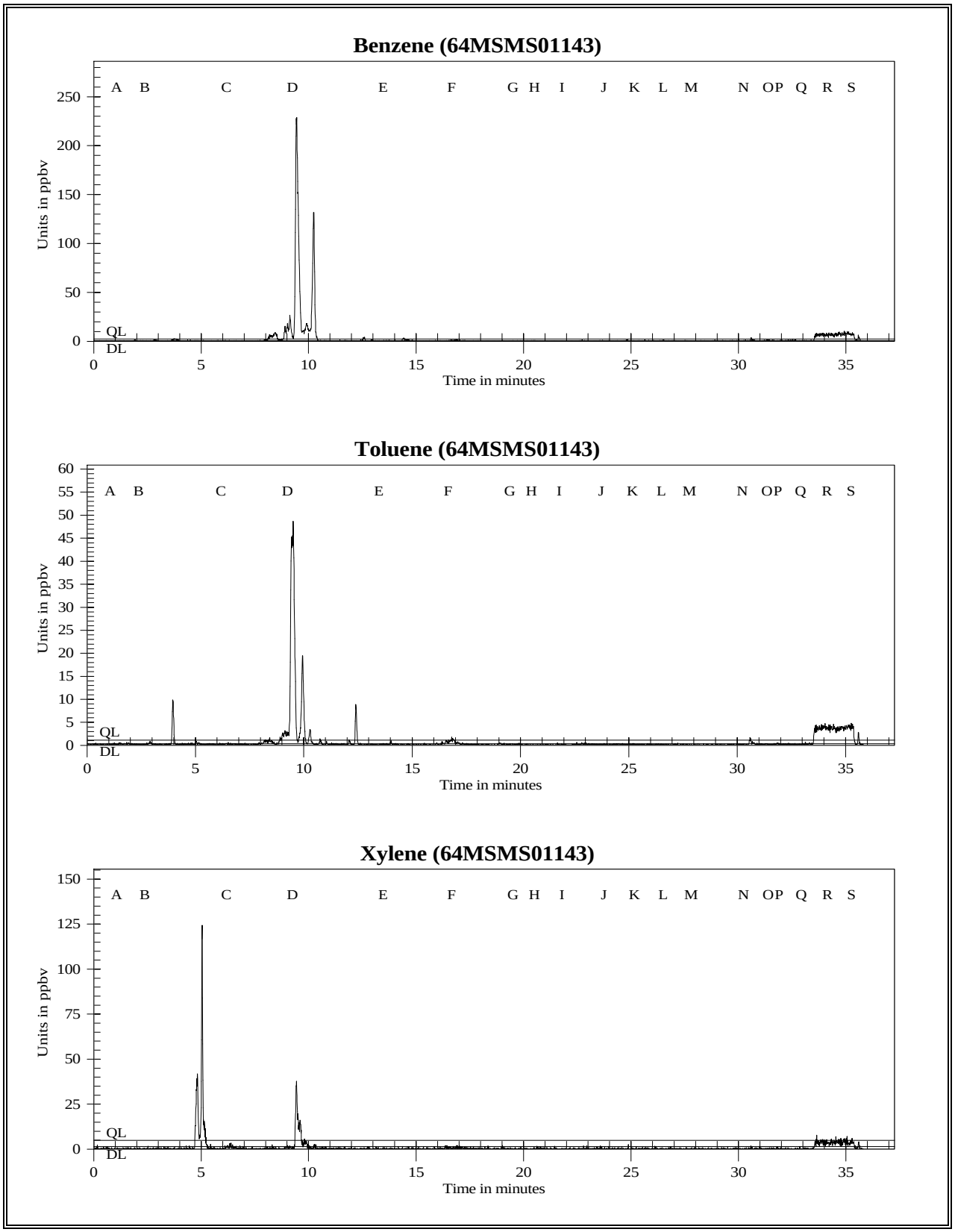


Figure 273c Monitoring Channelview in ppbv for Benzene, Toluene, and Xylenes

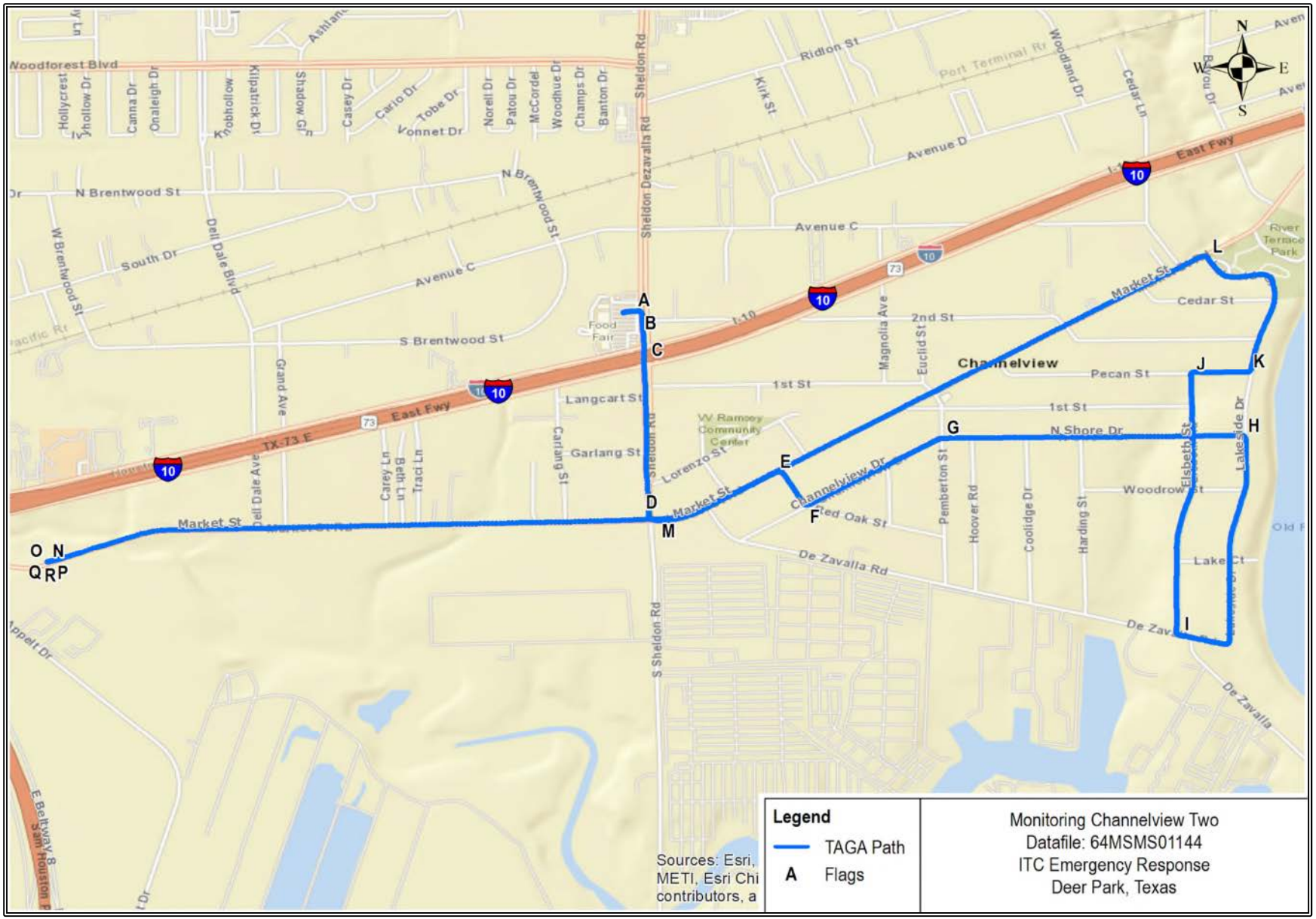


Figure 274a Monitoring Channelview Two Path, 64MSMS01144

Figure 274b

TAGA File Event Summary
File: 64MSMS01144 Acquired on 09 May 2019 at 12:46:44
Title: Monitoring Channelview Two

Flag	Time	Sequence	Description
A	1.5	146	Start mobile monitoring at Sheldon Road and 2nd Street
B	2.7	257	Right turn onto Sheldon Road
C	3.4	321	Cross Highway 10
D	5.8	549	Left turn onto Market Street
E	6.7	642	Right turn onto Red Oak Road
F	7.3	695	Left turn onto E Channelview Drive
G	8.6	818	Continuing onto N Shore Drive
H	10.5	996	Right turn onto Lakeside Drive
I	12.6	1195	Right turn onto Elsbeth Road
J	15.6	1482	Right turn onto Pecan Street
K	16.5	1566	Left turn onto Lakeside Drive
L	17.9	1702	Left turn onto Market Street
M	21.3	2024	Cross Sheldon Road
N	24.5	2328	End mobile monitoring on Market Street
O	24.9	2366	Start ambient
P	25.9	2463	End ambient
Q	27.2	2587	Start 30 mL/min spike
R	28.3	2693	End 30 mL/min spike

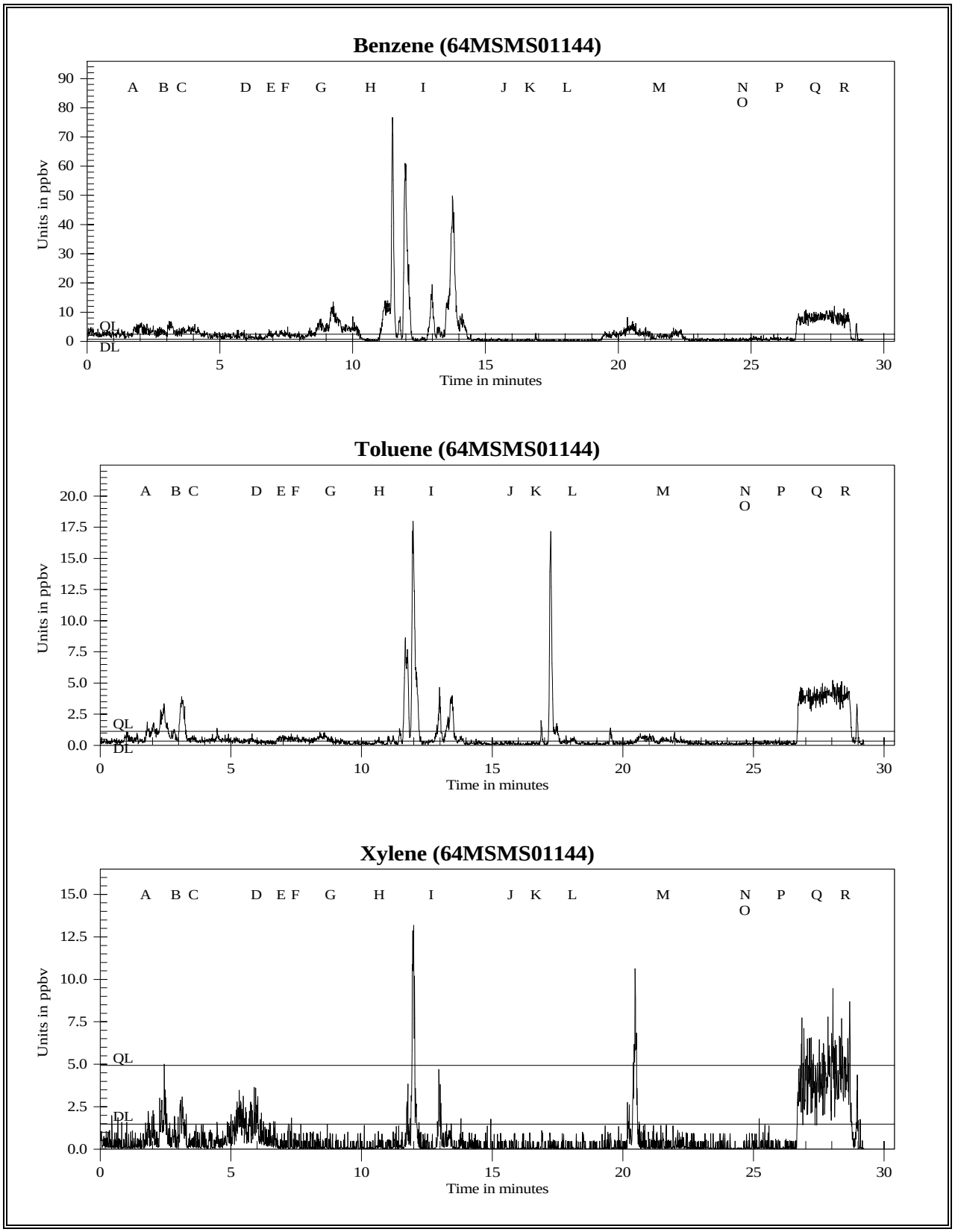


Figure 274c Monitoring Channelview Two in ppbv for Benzene, Toluene, and Xylenes

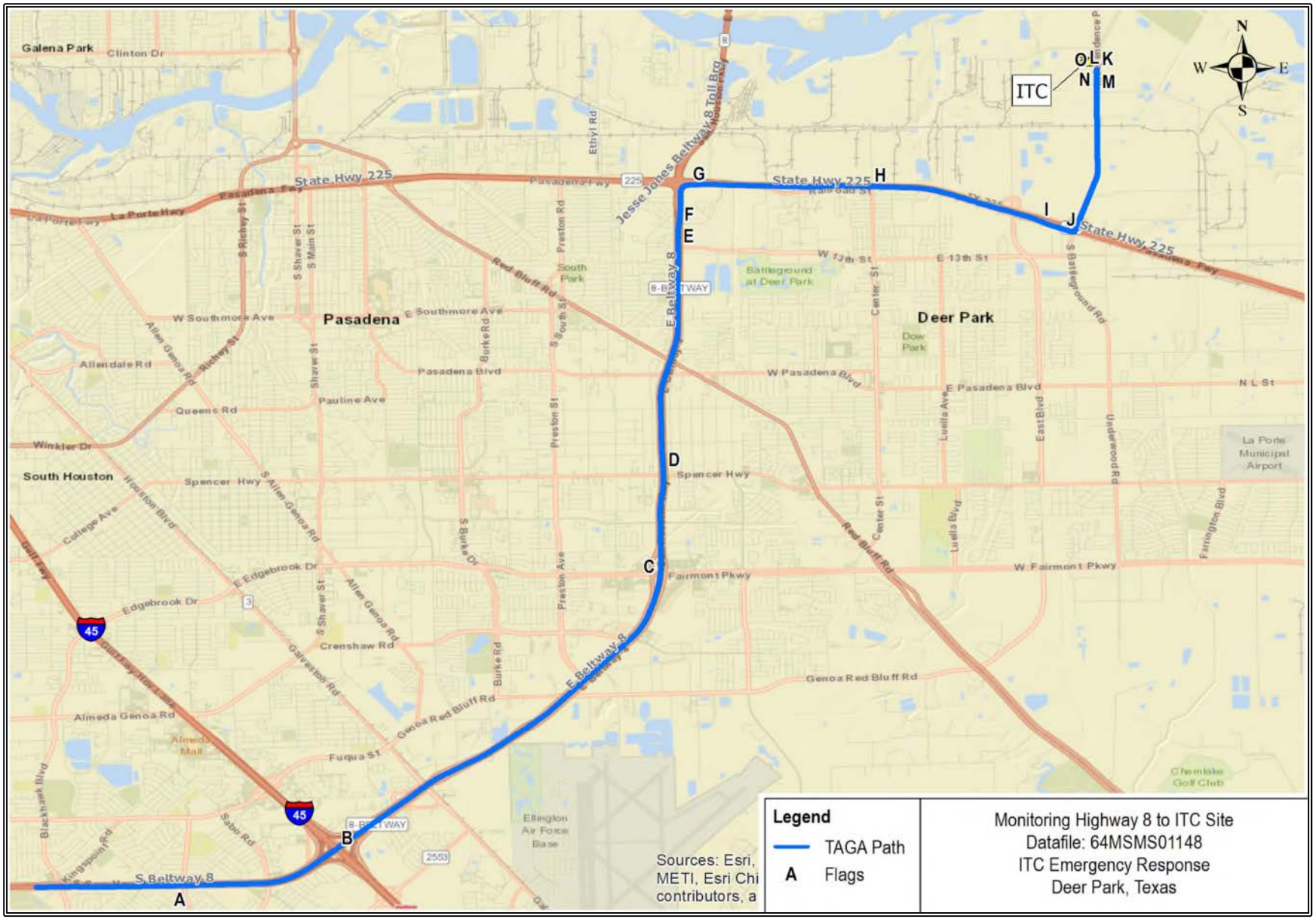


Figure 275a Monitoring Highway 8 to ITC Site Path, 64MSMS01148

Figure 275b

TAGA File Event Summary
File: 64MSMS01148 Acquired on 10 May 2019 at 09:30:17
Title: Monitoring Highway 8 to ITC Site

Flag	Time	Sequence	Description
A	1.6	151	Start mobile monitoring on Highway 8 North at Beamer Road
B	3.1	291	Cross Highway 45
C	7.1	677	Cross Fairmont Parkway
D	8.1	775	Cross Spencer Highway
E	10.7	1020	Cross Greenshadow Drive
F	11.0	1050	Exit onto Highway 8 Service Road
G	11.9	1134	Right turn onto Highway 225 East
H	13.7	1303	Cross Center Street
I	15.2	1446	Exit onto Pasadena Freeway Frontage Road
J	16.1	1527	Left turn onto Independence Parkway
K	20.4	1945	End mobile monitoring at ITC Site
L	20.7	1972	Start ambient
M	21.7	2067	End ambient
N	23.4	2228	Start 30 mL/min spike
O	24.7	2349	End 30 mL/min spike

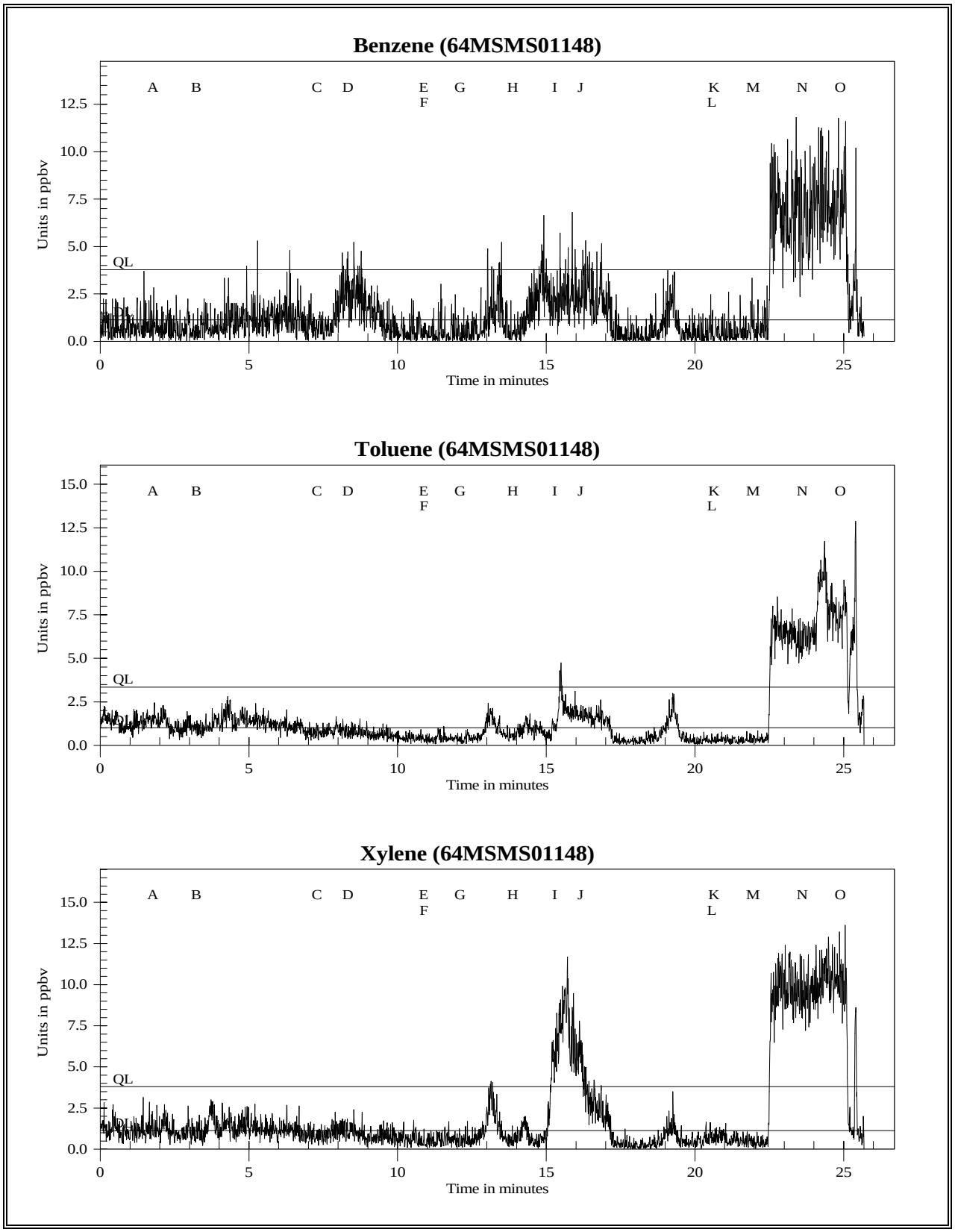


Figure 275c Monitoring Highway 8 to ITC Site in ppbv for Benzene, Toluene, and Xylenes

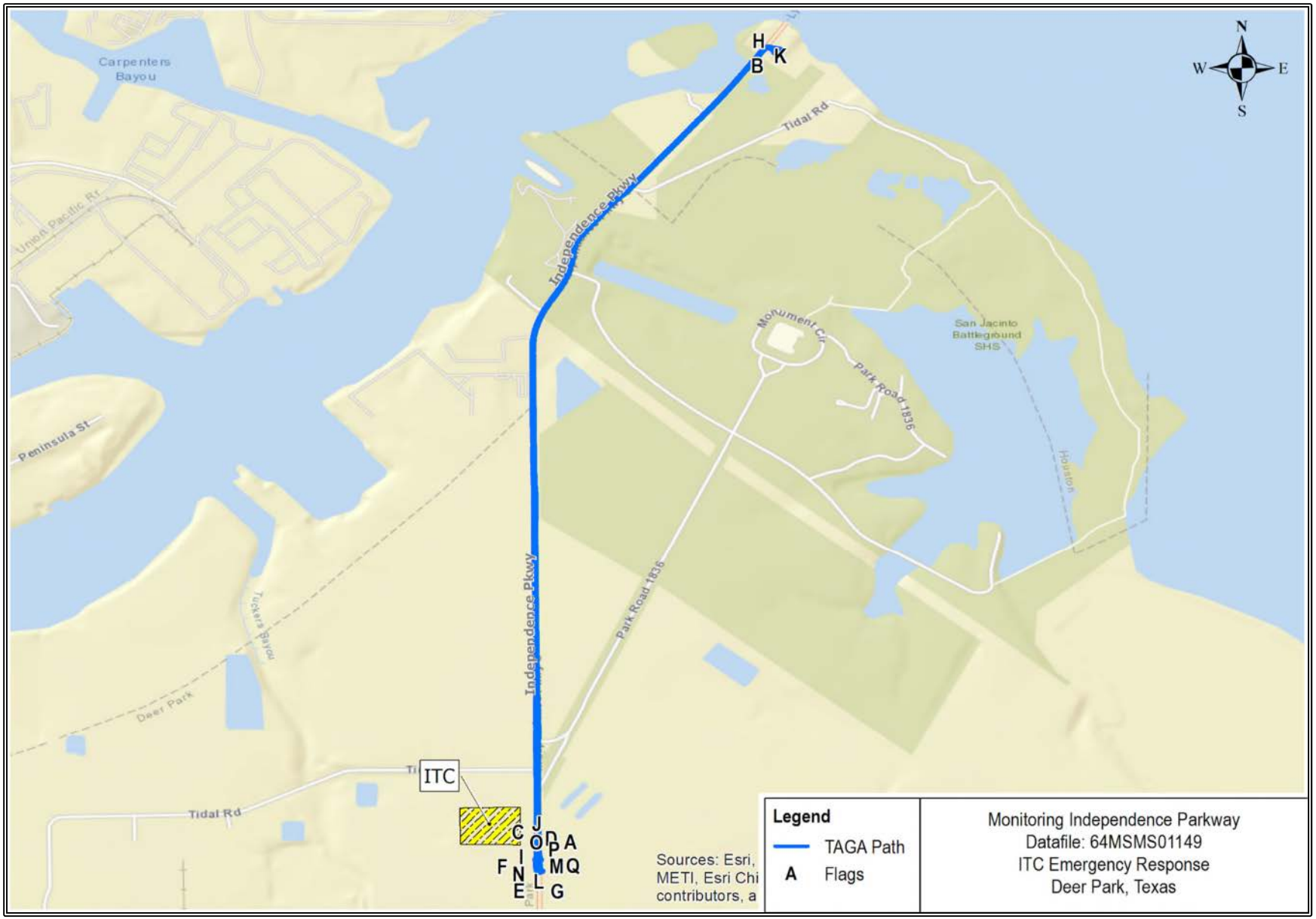


Figure 276a Monitoring Independence Parkway Path, 64MSMS01149

Figure 276b

TAGA File Event Summary
File: 64MSMS01149 Acquired on 10 May 2019 at 10:12:15
Title: Monitoring Independence Parkway

Flag	Time	Sequence	Description
A	3.4	324	Start mobile monitoring at ITC Site
B	10.4	994	U-turn on Independence Parkway at Juan Seguin Park
C	19.2	1831	End mobile monitoring at ITC Site
D	19.5	1856	Start ambient
E	20.9	1984	End ambient
F	21.0	2002	Stationary at ITC Site
G	36.4	3458	U-turn on Independence Parkway at ITC Site
H	45.3	4311	U-turn on Independence Parkway at Juan Seguin Park
I	53.9	5128	Stationary at ITC Site
J	76.2	7243	U-turn on Independence Parkway at ITC Site
K	84.9	8077	U-turn on Independence Parkway at Juan Seguin Park
L	94.0	8940	Stationary at ITC Site
M	98.9	9402	End mobile monitoring at ITC Site
N	99.2	9432	Start ambient
O	100.2	9530	End ambient
P	101.8	9680	Start 30 mL/min spike
Q	103.6	9848	End 30 mL/min spike

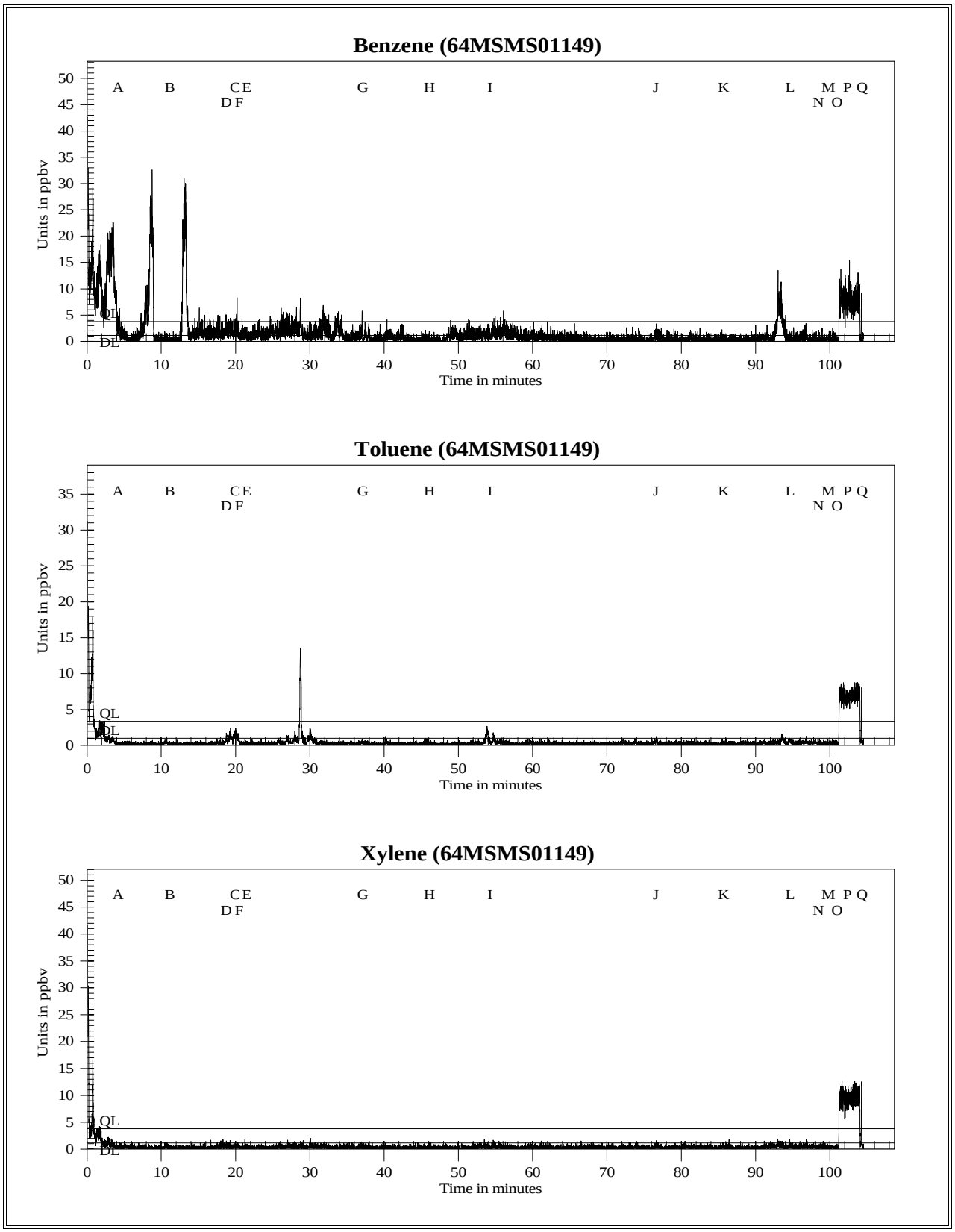


Figure 276c Monitoring Independence Parkway in ppbv for Benzene, Toluene, and Xylenes

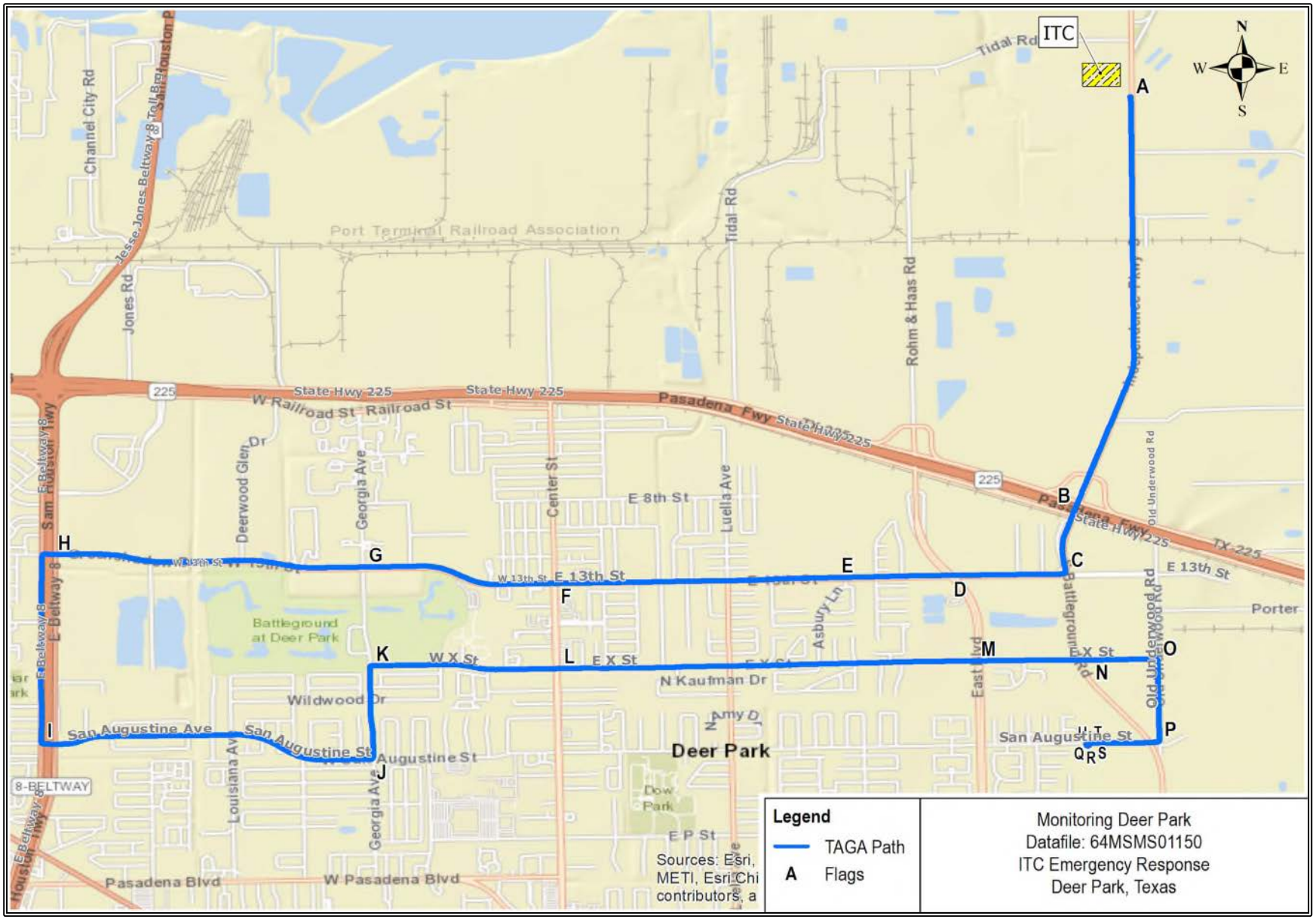


Figure 277a Monitoring Deer Park Path, 64MSMS01150

Figure 277b

TAGA File Event Summary
File: 64MSMS01150 Acquired on 10 May 2019 at 12:00:07
Title: Monitoring Deer Park

Flag	Time	Sequence	Description
A	3.1	300	Start mobile monitoring at ITC Site
B	9.9	940	Cross Highway 225 continuing onto Battleground Road
C	11.1	1054	Right turn onto E 13th Street
D	12.7	1207	Cross East Boulevard
E	14.0	1328	Passing San Jacinto Elementary School
F	18.9	1793	Cross Center Street
G	21.2	2018	Cross Georgia Avenue
H	24.8	2362	Left turn onto Highway 8 Service Road
I	27.9	2656	Left turn onto San Augustine Avenue
J	33.7	3209	Left turn onto Georgia Avenue
K	35.1	3336	Right turn onto West X Street
L	37.4	3555	Cross Center Street
M	42.6	4055	Cross East Boulevard
N	44.2	4204	Cross Battleground Road
O	45.3	4312	Right turn onto Old Underwood Road
P	46.7	4436	Right turn onto San Augustine Street
Q	48.7	4627	End mobile monitoring on San Augustine Street
R	49.0	4662	Start ambient
S	50.0	4756	End ambient
T	51.4	4883	Start 30 mL/min spike
U	52.4	4979	End 30 mL/min spike

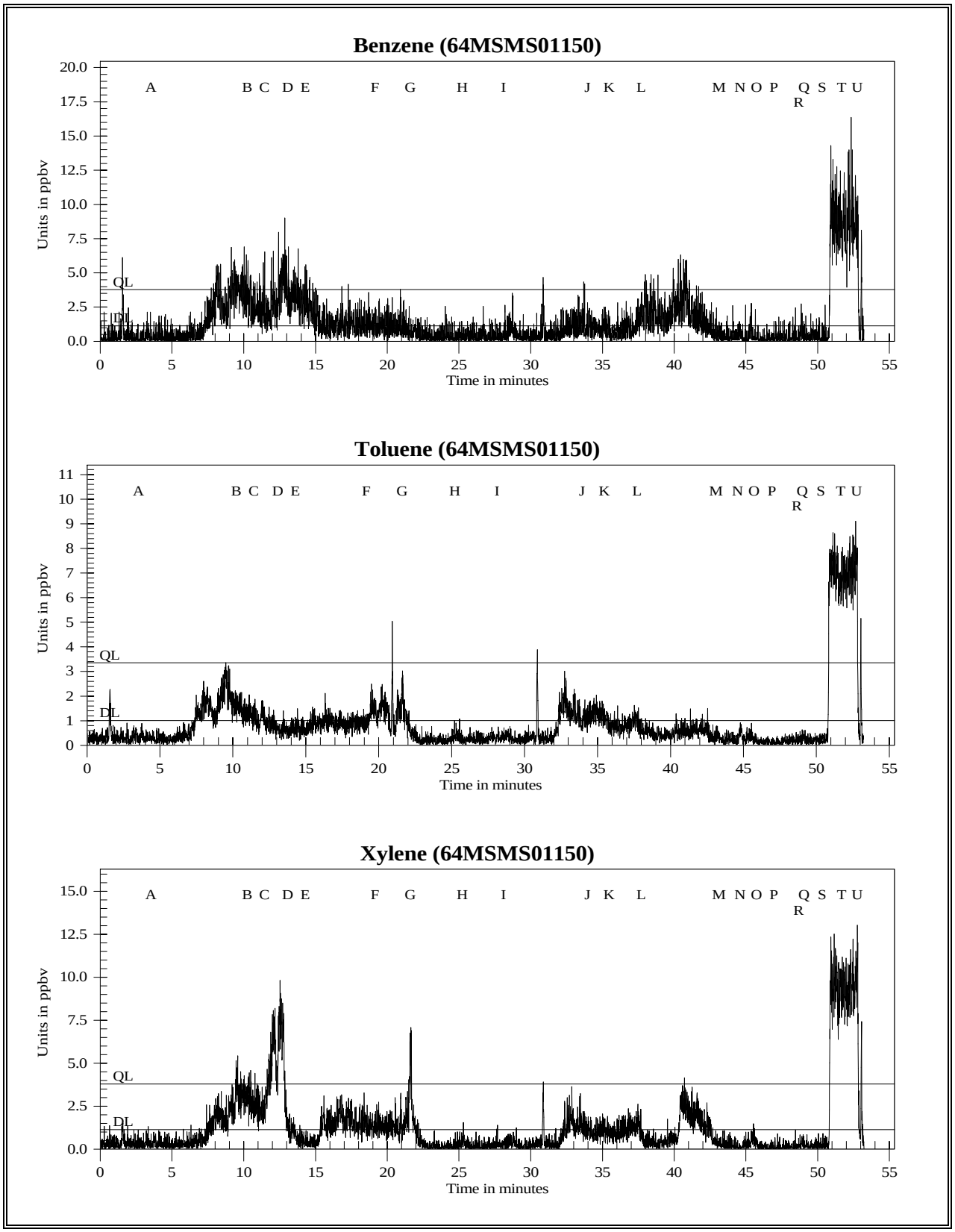


Figure 277c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

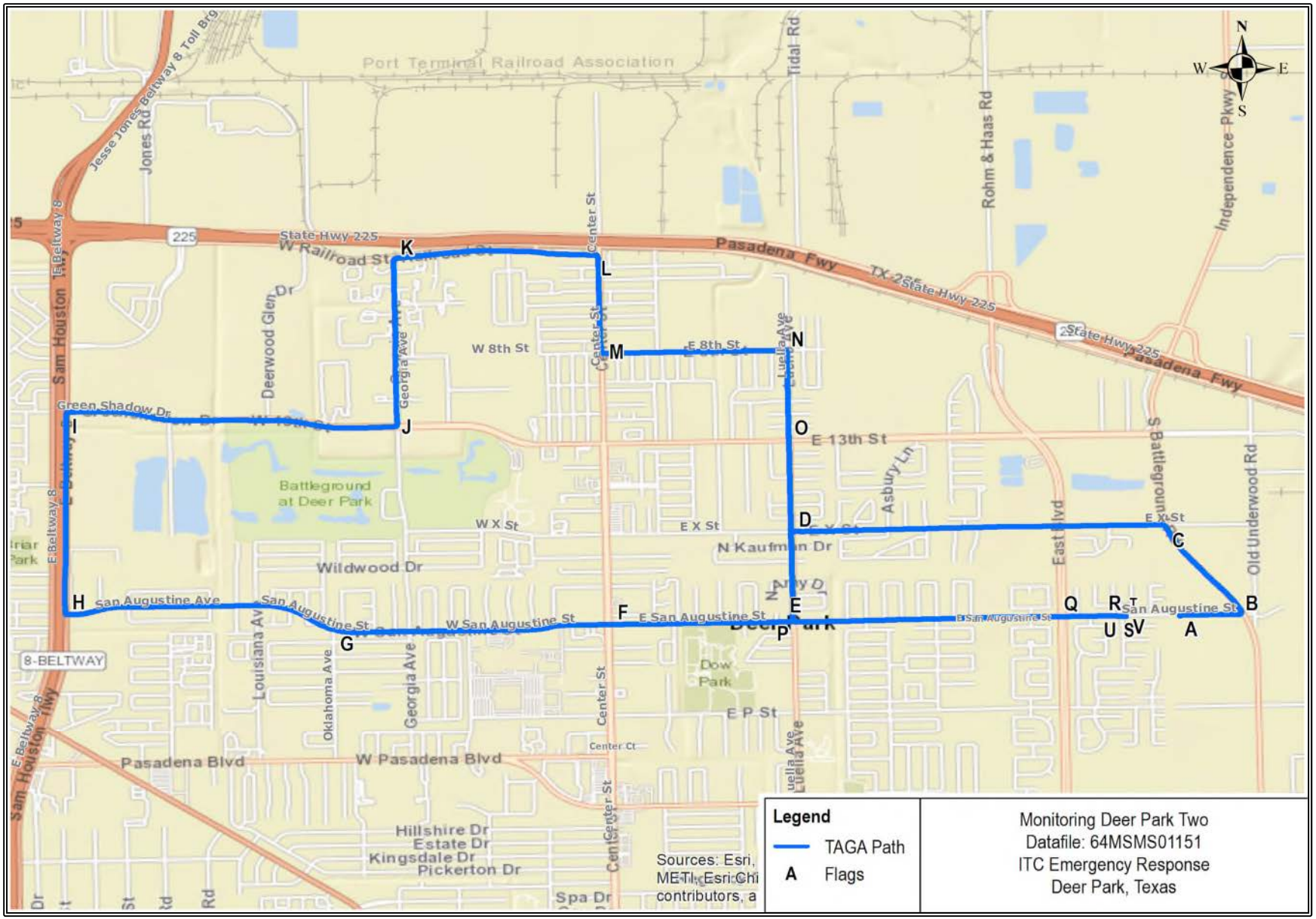


Figure 278a Monitoring Deer Park Two Path, 64MSMS01151

Figure 278b

TAGA File Event Summary
File: 64MSMS01151 Acquired on 10 May 2019 at 12:55:42
Title: Monitoring Deer Park Two

Flag	Time	Sequence	Description
A	1.0	97	Start mobile monitoring San Augustine Street
B	2.1	202	Left turn onto Battleground Road
C	3.7	349	Left turn onto East X Street
D	7.8	742	Left turn onto Luella Avenue
E	9.1	867	Right turn onto San Augustine Street
F	11.8	1124	Cross Center Street
G	14.8	1405	Cross Oklahoma Avenue
H	18.2	1734	Right turn onto Highway 8 Service Road
I	21.0	2002	Right turn onto Greenshadow Drive
J	24.8	2355	Left turn onto Georgia Avenue
K	27.0	2566	Right turn onto Railroad Street
L	29.4	2797	Right turn onto Center Street
M	30.9	2941	Left turn onto E 8th Street
N	33.2	3162	Right turn onto Luella Avenue
O	34.8	3311	Cross E 13th Street
P	37.7	3582	Left turn onto San Augustine Street
Q	40.8	3881	Cross East Boulevard
R	41.7	3965	End mobile monitoring at San Augustine Street and Shiprock Drive
S	42.4	4030	Start ambient
T	43.4	4125	End ambient
U	44.7	4252	Start 30 mL/min spike
V	45.7	4347	End 30 mL/min spike

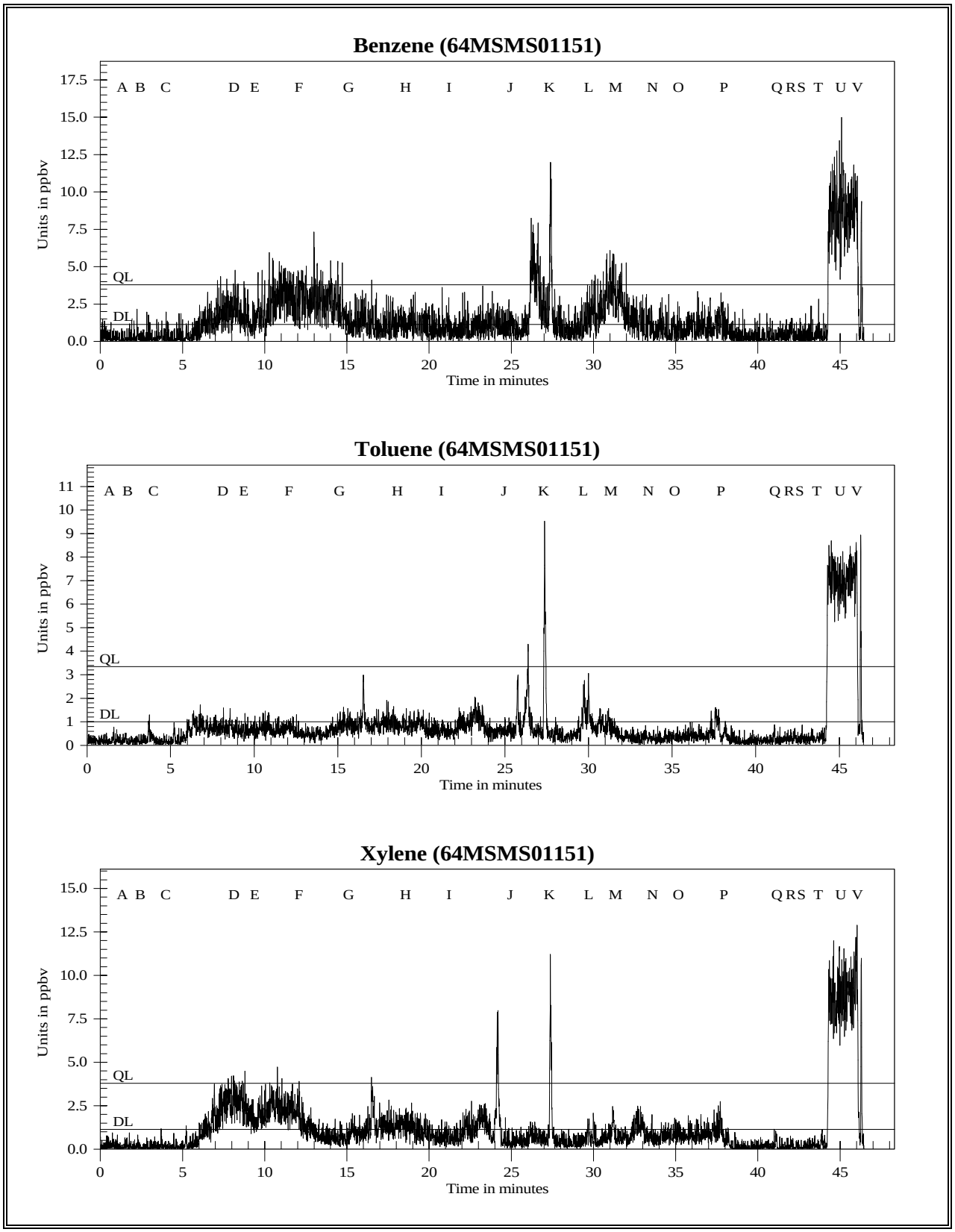


Figure 278c Monitoring Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

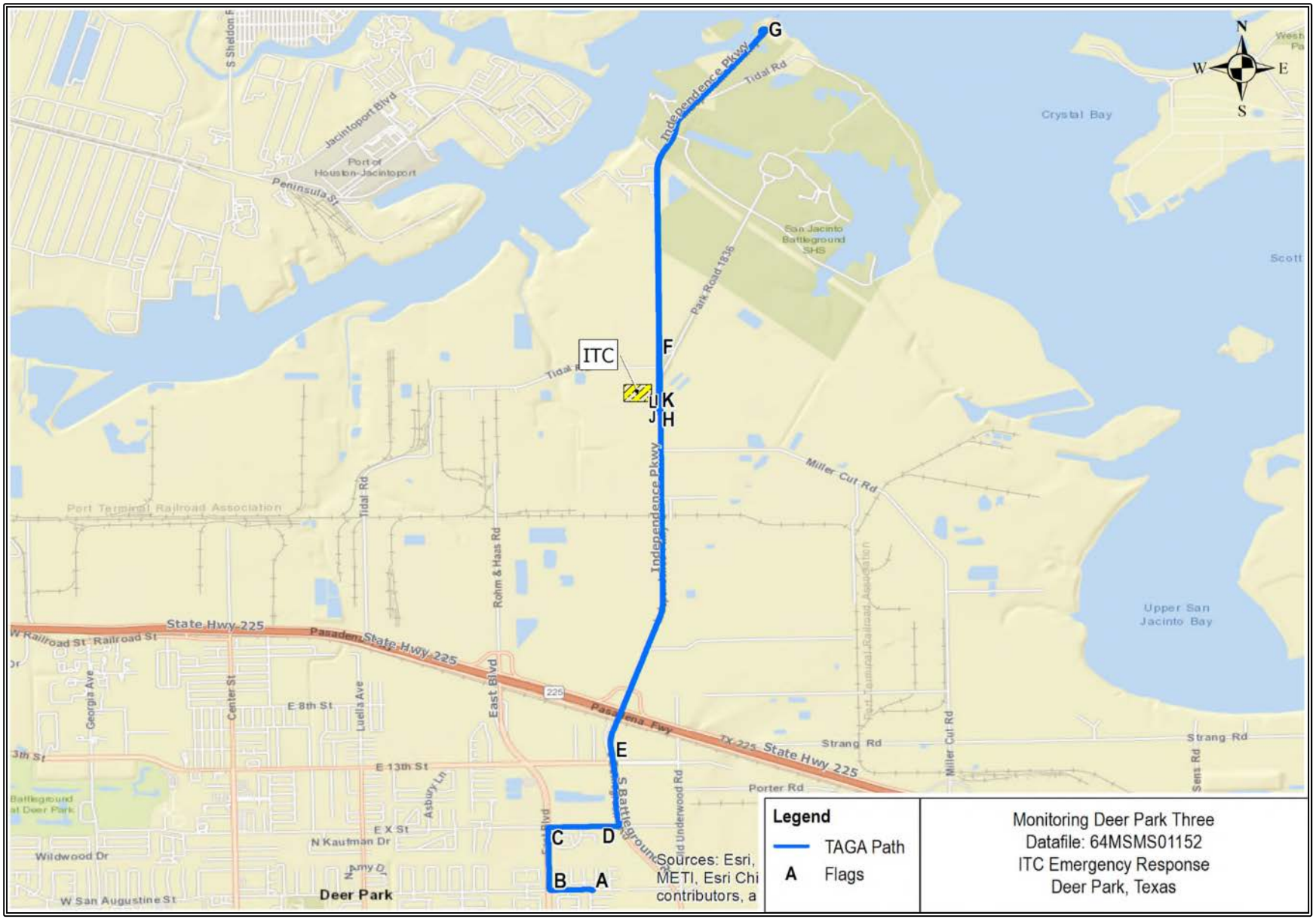


Figure 279a Monitoring Deer Park Three Path, 64MSMS01152

Figure 279b

TAGA File Event Summary
File: 64MSMS01152 Acquired on 10 May 2019 at 13:43:54
Title: Monitoring Deer Park Three

Flag	Time	Sequence	Description
A	1.6	153	Start mobile monitoring at San Augustine Street and Shiprock Drive
B	3.9	371	Right turn onto East Boulevard
C	5.2	492	Right turn onto East X Street
D	6.8	652	Left turn onto Battleground Road
E	9.3	886	Cross Highway 225 continuing onto Independence Parkway
F	16.1	1528	Passing ITC Site
G	23.0	2191	U-turn on Independence Parkway at Juan Seguin Park
H	31.1	2956	End mobile monitoring at ITC Site
I	31.5	2991	Start ambient
J	33.1	3151	End ambient
K	34.7	3296	Start 30 mL/min spike
L	35.8	3401	End 30 mL/min spike

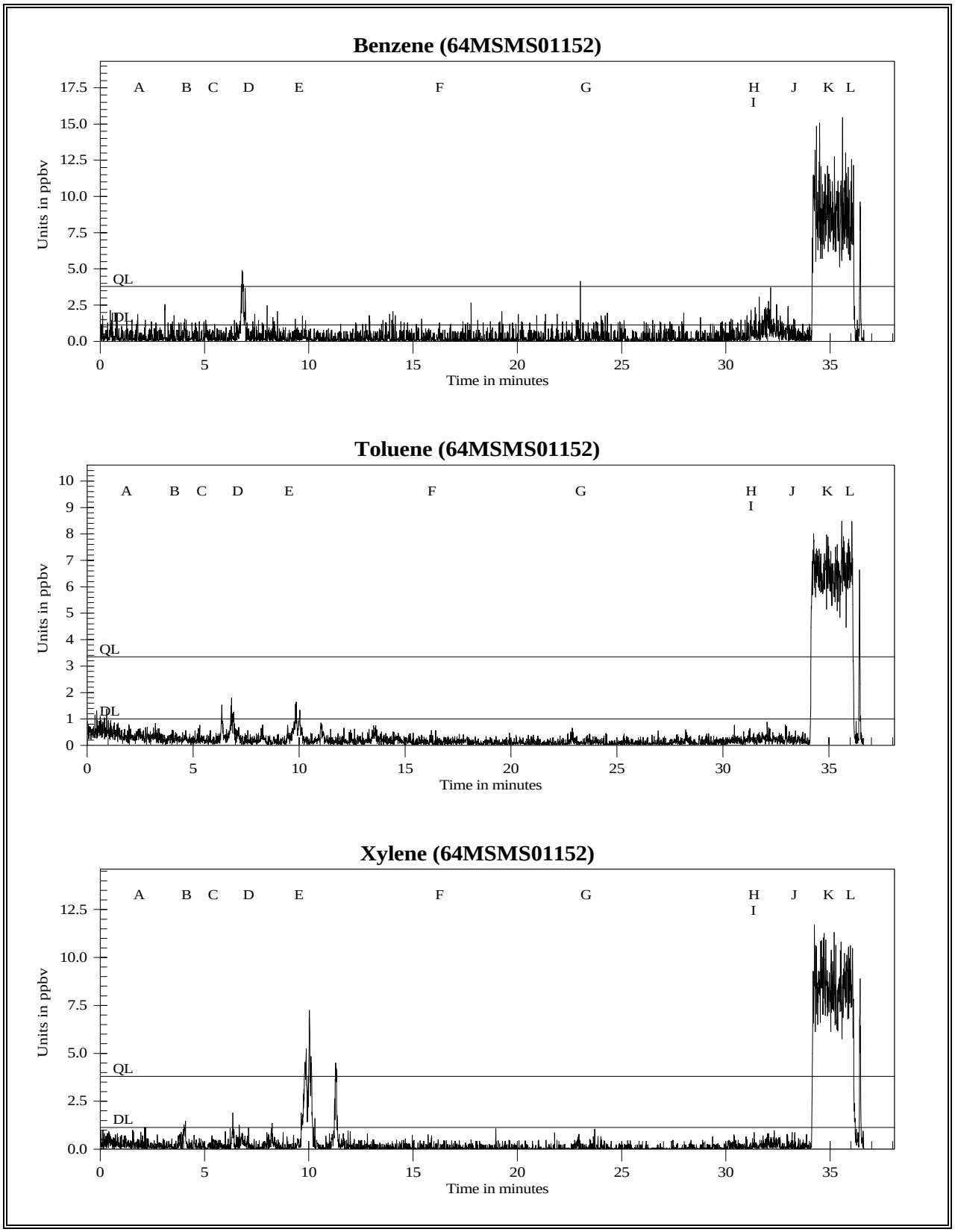


Figure 279c Monitoring Deer Park Three in ppbv for Benzene, Toluene, and Xylenes

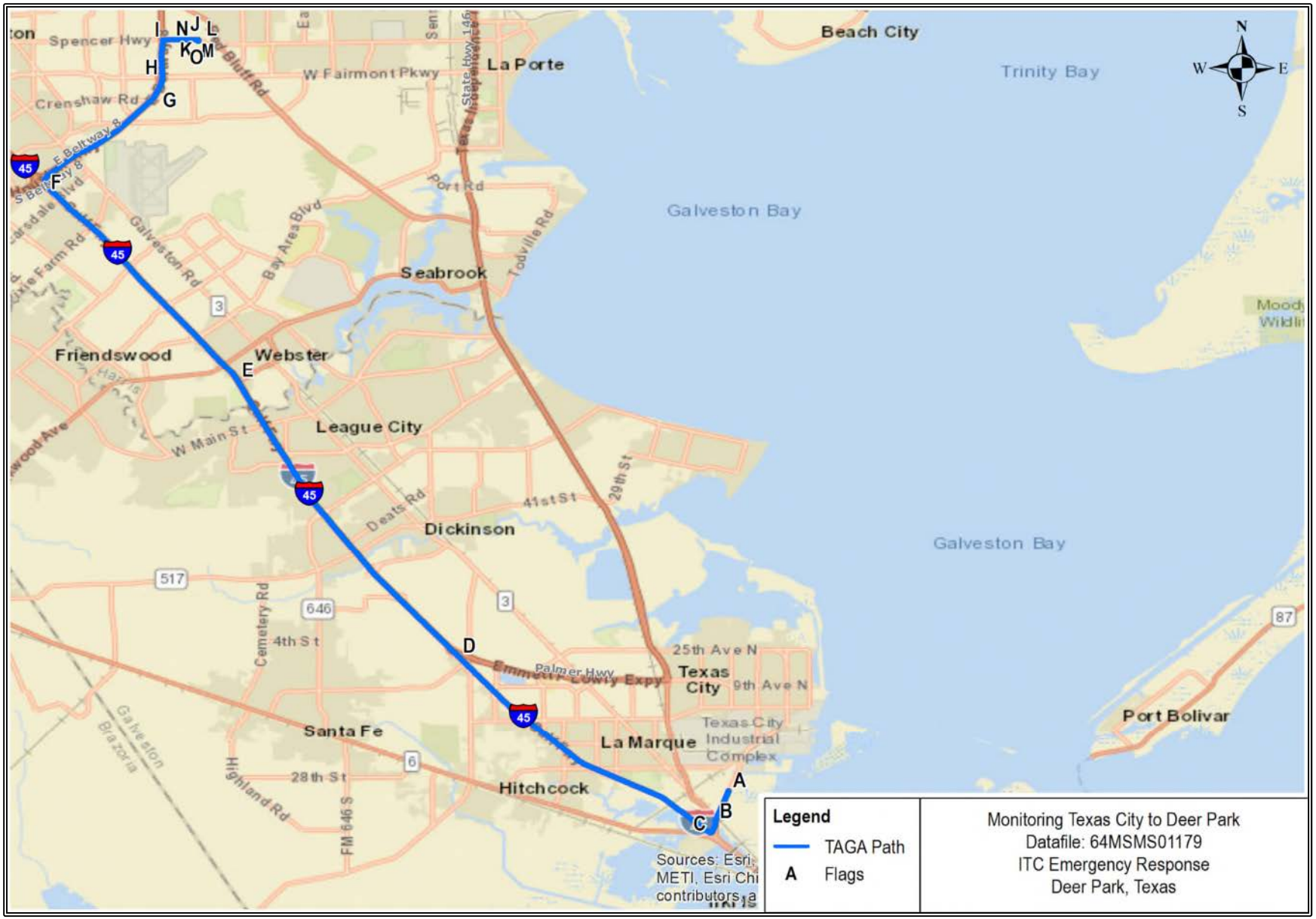


Figure 280a Monitoring Texas City to Deer Park Path, 64MSMS01179

Figure 280b

TAGA File Event Summary
File: 64MSMS01179 Acquired on 13 May 2019 at 12:16:29
Title: Monitoring Texas City to Deer Park

Flag	Time	Sequence	Description
A	1.2	113	Start mobile monitoring on Highway 197 West
B	3.5	329	Merge onto Highway 146 South
C	4.0	383	Right turn onto Highway 45 North
D	11.6	1105	Cross Emmett Lowry Expressway
E	21.0	1995	Cross NASA Bypass
F	27.8	2642	Merge onto Highway 8 North
G	31.8	3022	Exit onto Pasadena Freeway Frontage Road
H	35.9	3417	Cross Fairmont Parkway
I	38.7	3678	Right turn onto Spencer Highway
J	41.7	3967	Left turn into shopping center at Trebor Street
K	43.0	4092	End mobile monitoring at shopping center
L	43.4	4125	Start ambient
M	44.5	4236	End ambient
N	46.0	4374	Start 30 mL/min spike
O	47.2	4485	End 30 mL/min spike

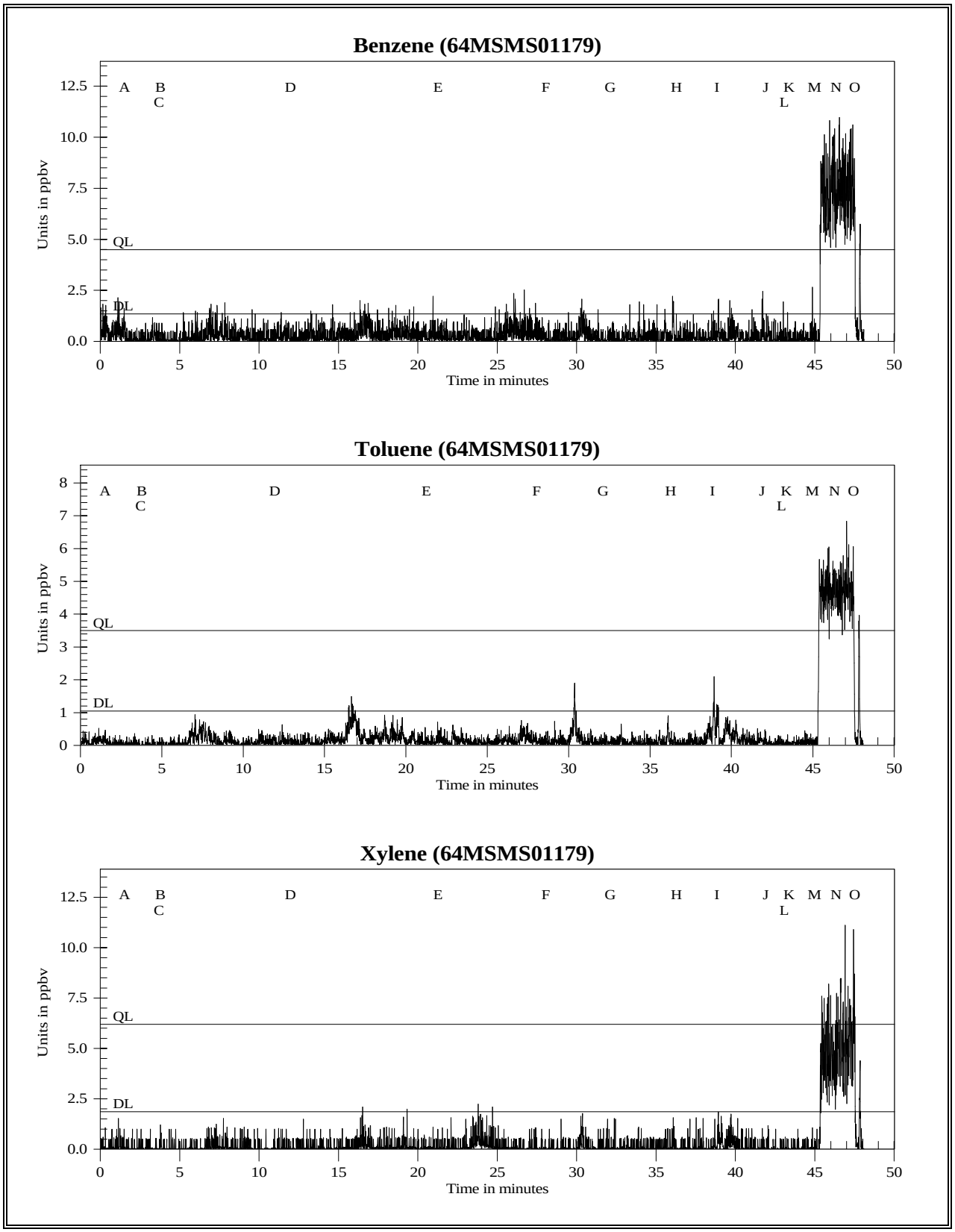


Figure 280c Monitoring Texas City to Deer Park in ppbv for Benzene, Toluene, and Xylenes

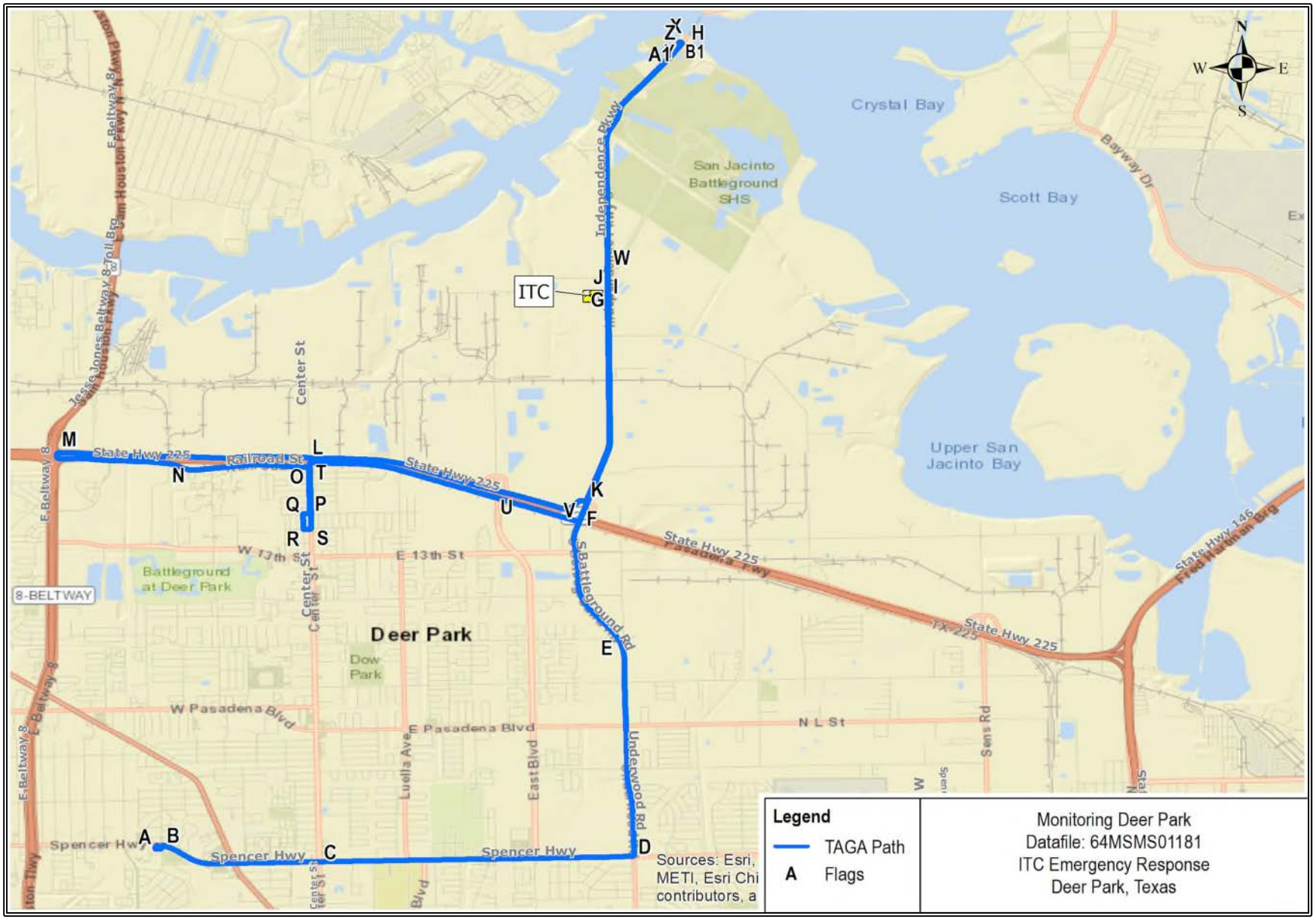


Figure 281a Monitoring Deer Park Path, 64MSMS01181

Figure 281b

TAGA File Event Summary
File: 64MSMS01181 Acquired on 13 May 2019 at 13:53:39
Title: Monitoring Deer Park

Flag	Time	Sequence	Description
A	1.9	184	Start mobile monitoring at Spencer Highway and Trebor Street
B	3.4	324	Right turn onto Spencer Highway
C	6.6	631	Cross Center Street
D	14.0	1335	Left turn onto Underwood Road
E	18.6	1772	Continuing onto Battleground Road
F	21.7	2061	Cross Highway 225 to continue onto Independence Parkway
G	26.1	2480	Passing ITC Site
H	31.9	3029	U-turn on Independence Parkway at Juan Seguin Park
I	39.0	3704	Stationary at ITC Site
J	41.3	3930	Resume mobile monitoring on Independence Parkway
K	46.5	4418	Right turn onto Pasadena Freeway Frontage Road
L	51.6	4905	Cross Center Street
M	56.0	5325	U-turn on Pasadena Freeway Frontage Road at Highway 8
N	58.0	5512	Continuing onto Railroad Street
O	60.4	5745	Right turn onto Center Street
P	61.8	5879	Right turn onto West 8th Street
Q	62.2	5914	Left turn onto Elm Street
R	62.8	5971	Left turn onto West 9th Street
S	63.2	6009	Left turn onto Center Street
T	65.0	6183	Right turn onto Pasadena Freeway Frontage Road
U	68.5	6513	Cross East Boulevard
V	71.1	6763	Left turn onto Independence Parkway
W	76.1	7237	Passing ITC Site
X	81.9	7790	End mobile monitoring on Independence Parkway at Juan Seguin Park
Y	82.5	7844	Start ambient
Z	83.7	7960	End ambient
A1	85.2	8099	Start 30 mL/min spike
B1	86.5	8226	End 30 mL/min spike

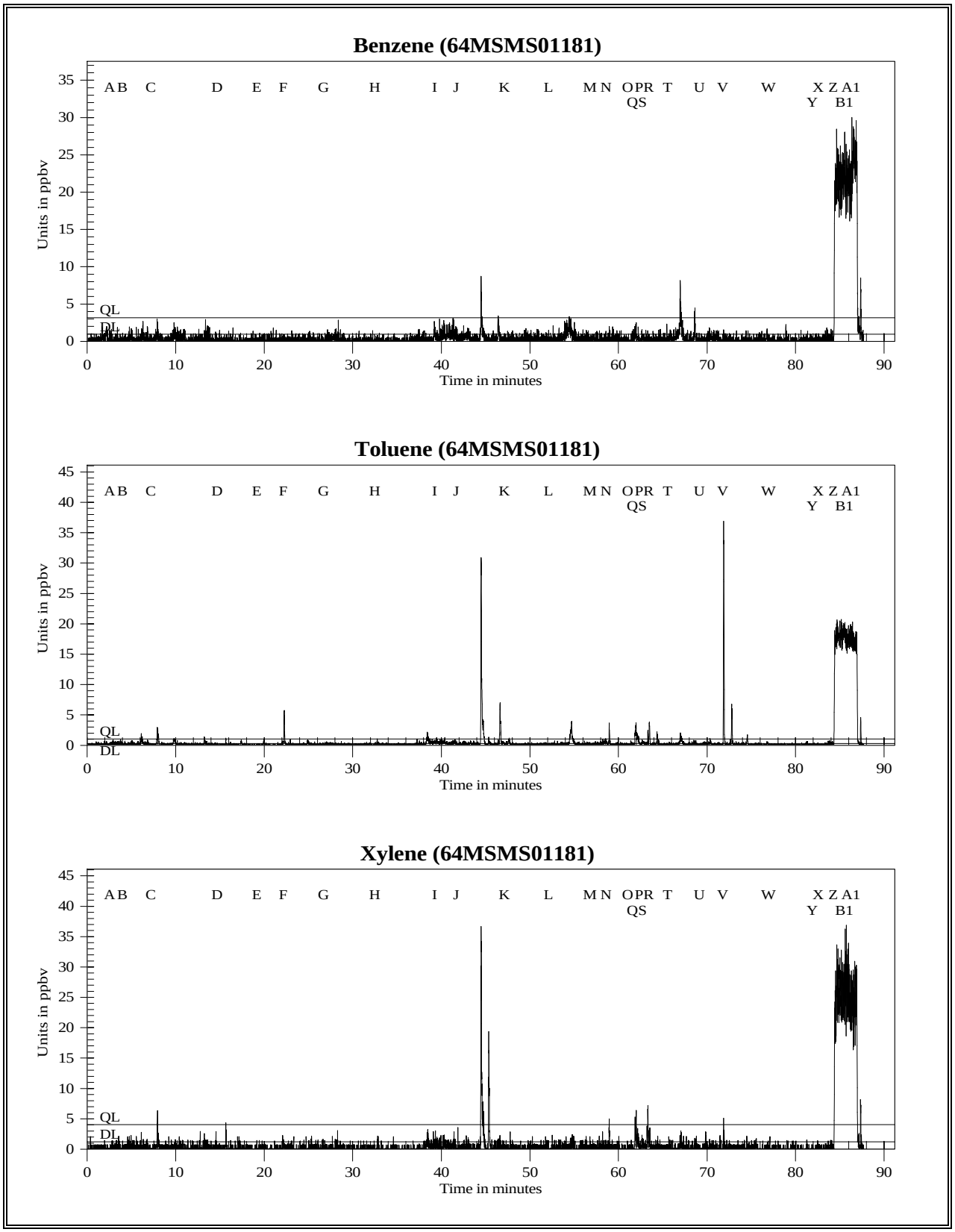


Figure 281c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

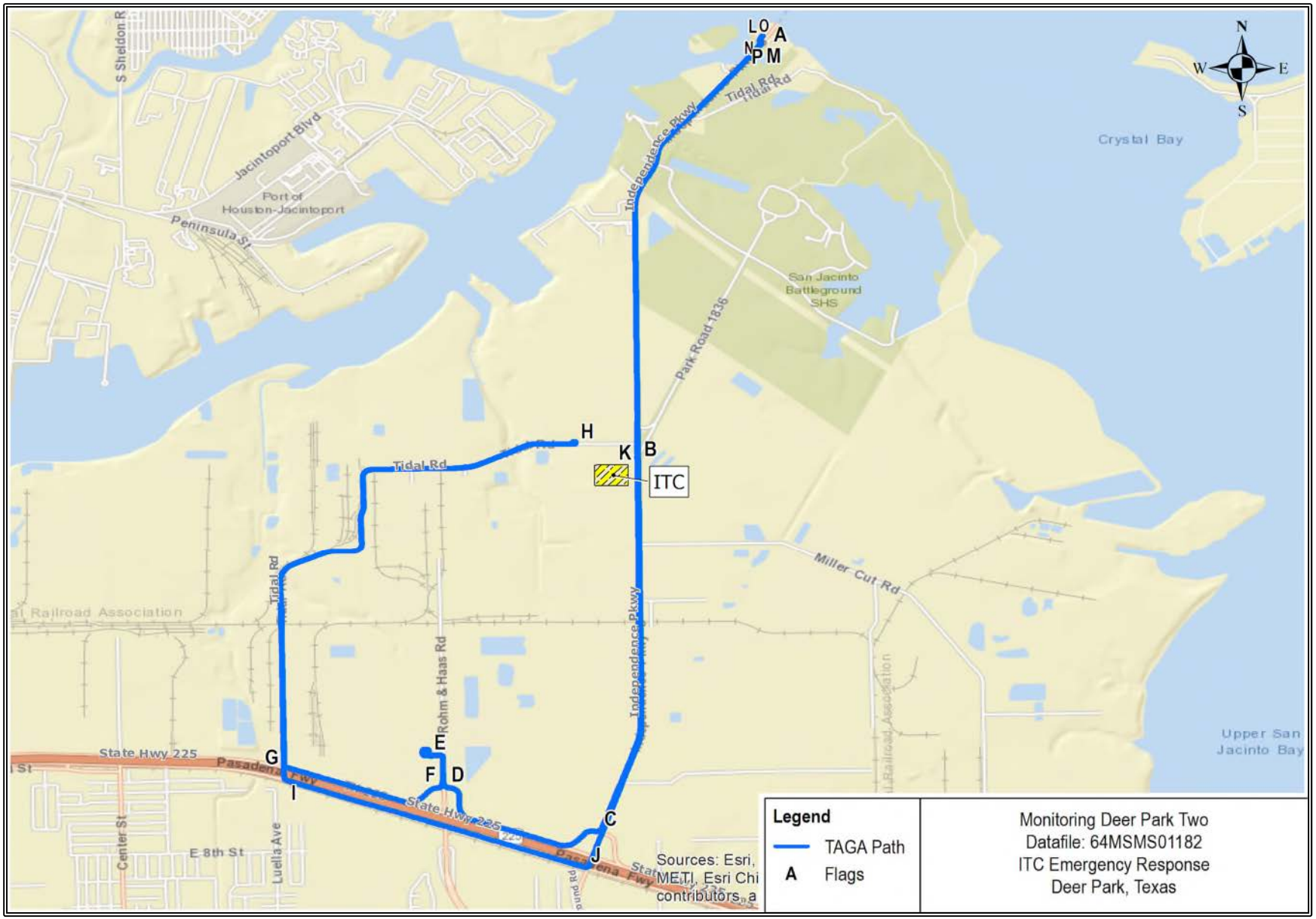


Figure 282a Monitoring Deer Park Two Path, 64MSMS01182

Figure 282b

TAGA File Event Summary
File: 64MSMS01182 Acquired on 13 May 2019 at 15:28:00
Title: Monitoring Deer Park Two

Flag	Time	Sequence	Description
A	1.7	165	Start mobile monitoring on Independence Parkway at Juan Seguin Park
B	7.3	695	Passing ITC Site
C	12.1	1154	Right turn onto Pasadena Freeway Frontage Road
D	14.1	1344	Right turn onto Rohm and Haas Road
E	16.6	1580	U-turn on Rohm and Haas Road
F	18.4	1750	Right turn onto Pasadena Freeway Frontage Road
G	19.9	1896	Right turn onto Tidal Road
H	30.5	2902	U-turn on Tidal Road
I	41.7	3965	Left turn onto Pasadena Freeway Frontage Road
J	44.4	4222	Left turn onto Independence Parkway
K	49.0	4661	Passing ITC Site
L	54.3	5166	End mobile monitoring at Juan Seguin Park
M	54.7	5201	Start ambient
N	55.8	5310	End ambient
O	58.0	5516	Start 30 mL/min spike
P	59.1	5618	End 30 mL/min spike

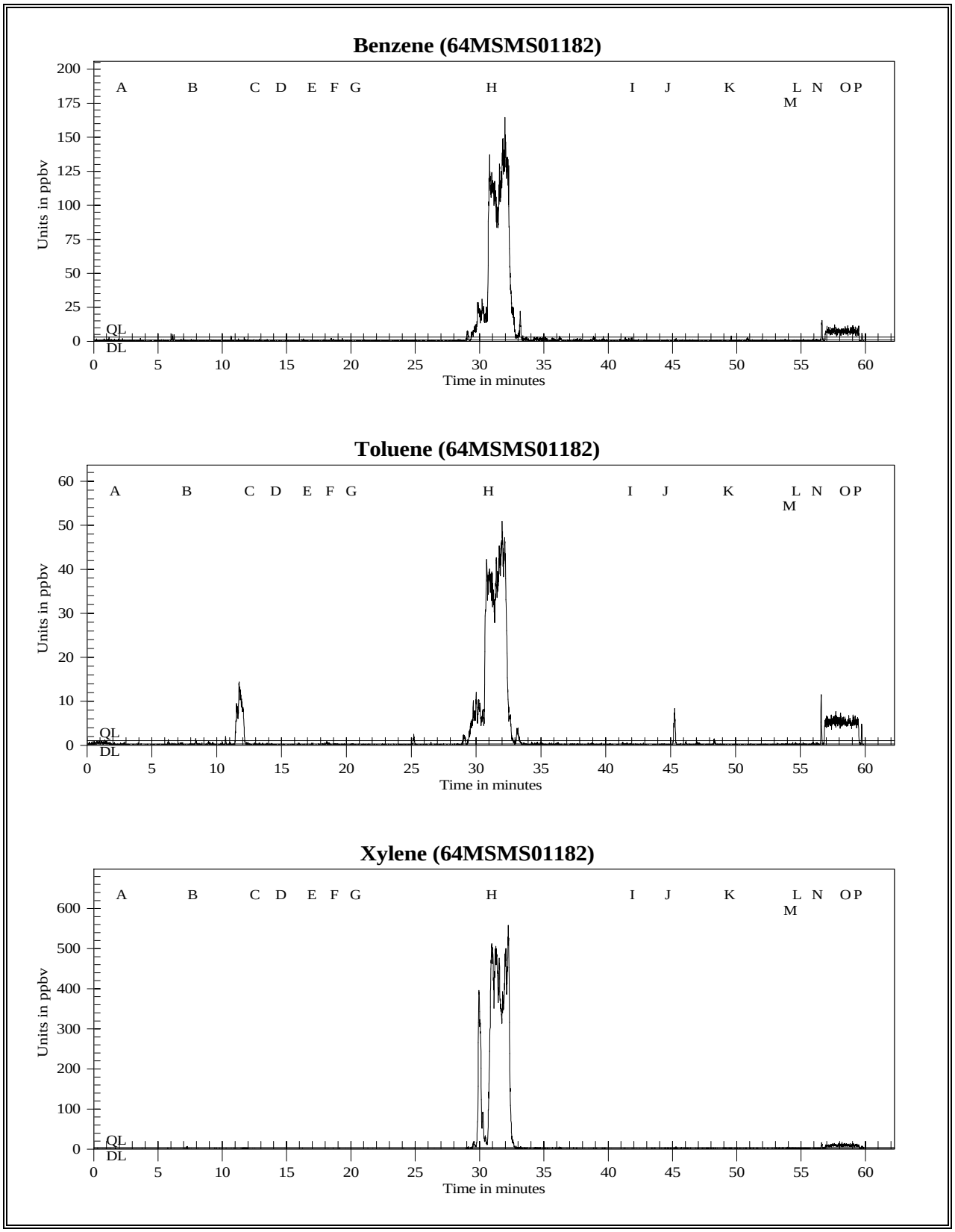


Figure 282c Monitoring Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

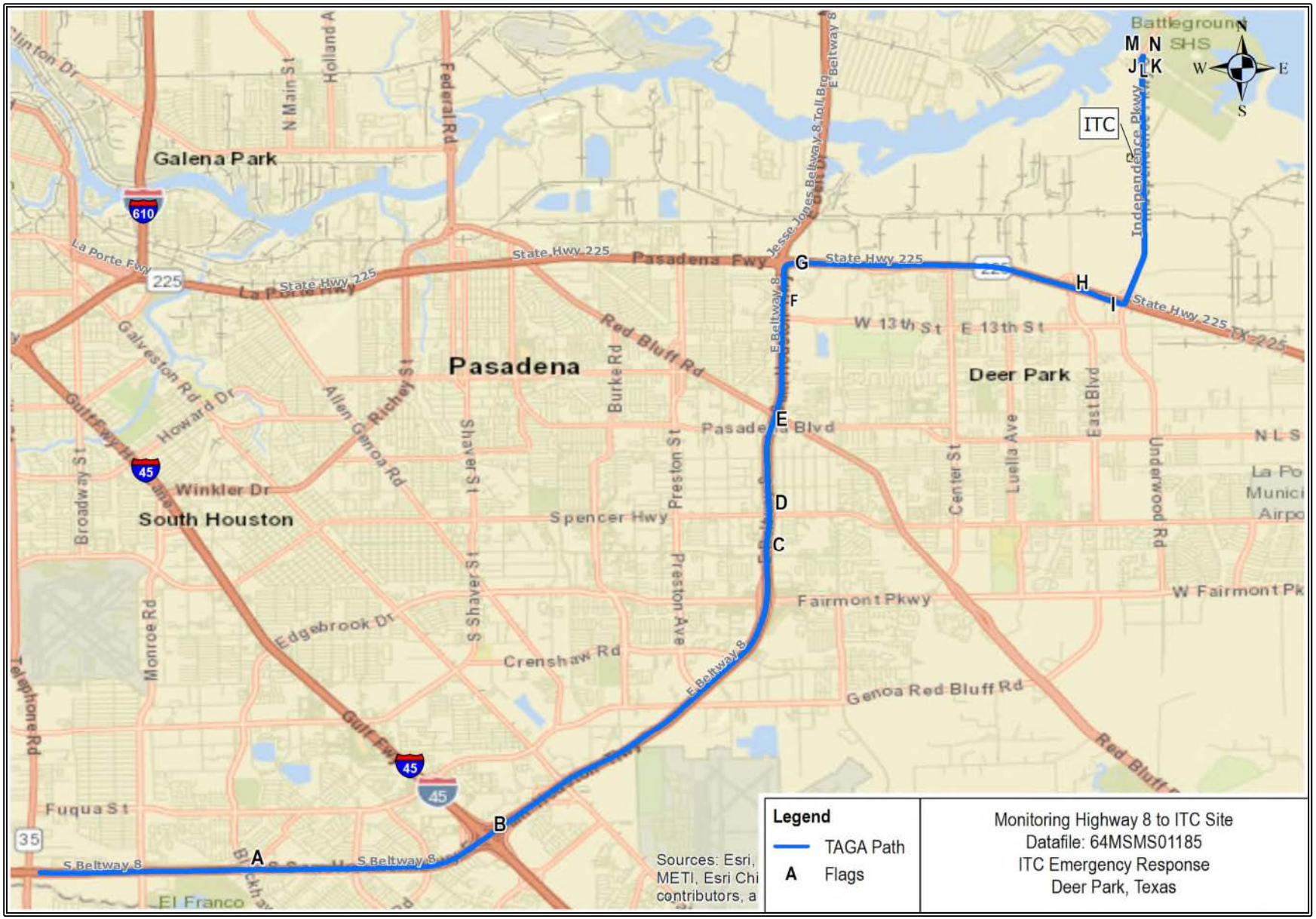


Figure 283a Monitoring Highway 8 to ITC Site Path, 64MSMS01185

Figure 283b

TAGA File Event Summary
File: 64MSMS01185 Acquired on 14 May 2019 at 08:51:17
Title: Monitoring Highway 8 to ITC Site

Flag	Time	Sequence	Description
A	2.3	218	Start mobile monitoring on Highway 8 North at Blackhawk Boulevard
B	4.8	459	Cross Highway 45
C	9.6	915	Cross Vista Road
D	11.0	1045	Cross Spencer Highway
E	16.4	1563	Cross Pasadena Boulevard
F	18.4	1748	Exit onto Highway 8 Service Road
G	19.3	1840	Merge right onto Highway 225 East
H	23.2	2203	Exit onto Pasadena Freeway Frontage Road
I	24.0	2282	Left turn onto Independence Parkway
J	31.2	2965	End mobile monitoring on Independence Parkway
K	31.7	3011	Start ambient
L	32.7	3106	End ambient
M	34.0	3238	Start 30 mL/min spike
N	35.4	3365	End 30 mL/min spike

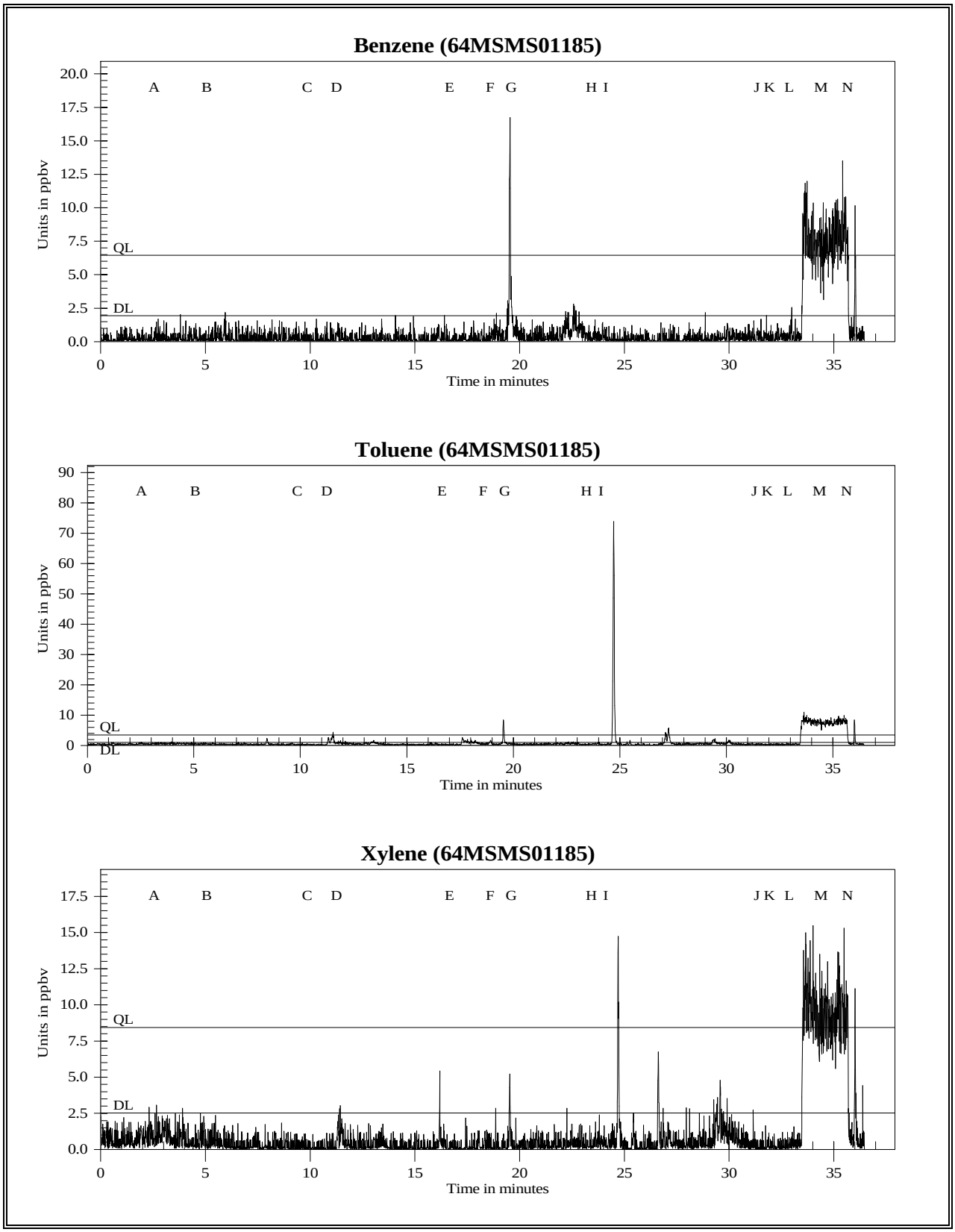


Figure 283c Monitoring Highway 8 to ITC Site in ppbv for Benzene, Toluene, and Xylenes

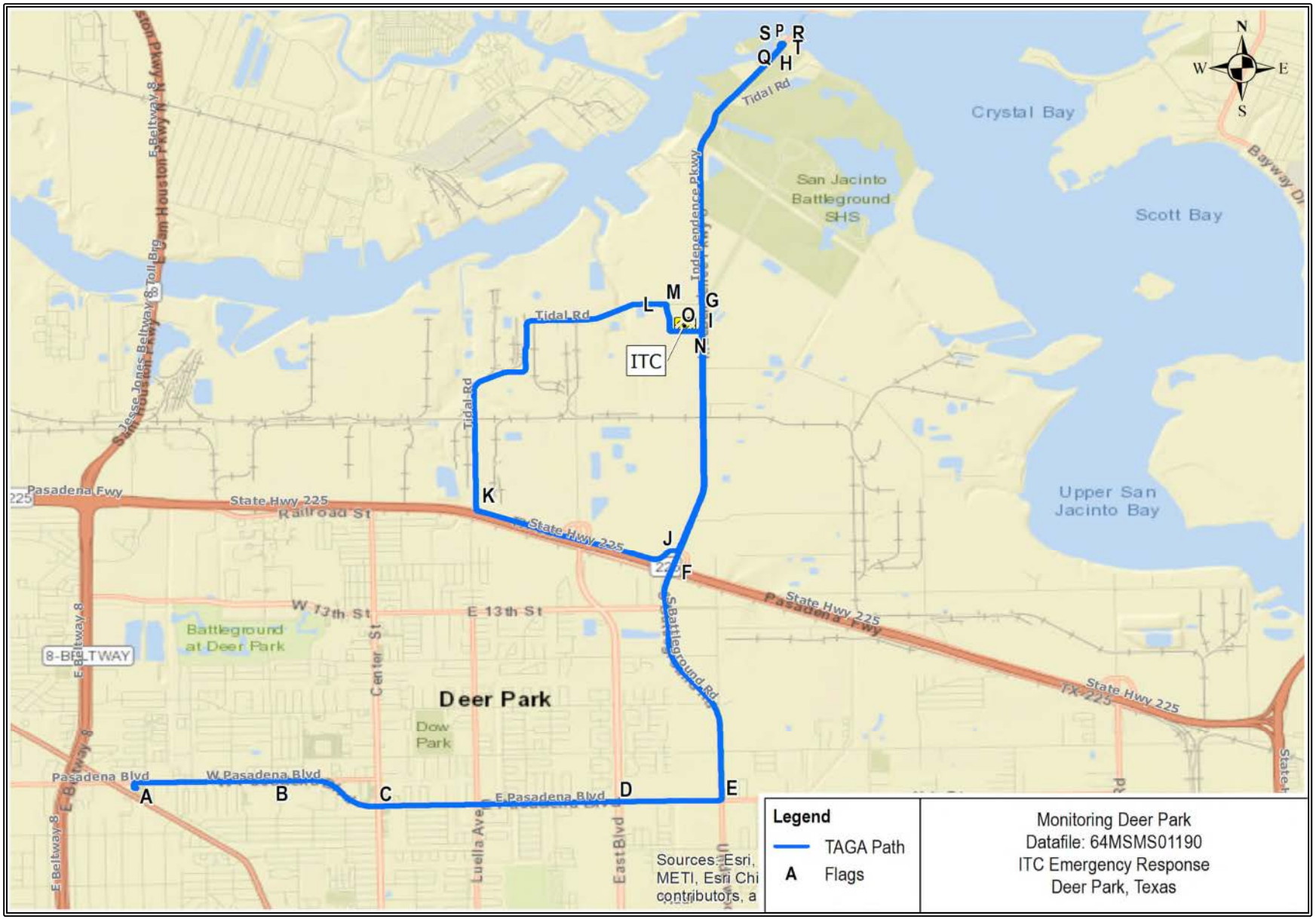


Figure 284a Monitoring Deer Park Path, 64MSMS01190

Figure 284b

TAGA File Event Summary
File: 64MSMS01190 Acquired on 14 May 2019 at 14:09:58
Title: Monitoring Deer Park

Flag	Time	Sequence	Description
A	4.0	384	Start mobile monitoring at Pasadena Boulevard and Red Bluff Road
B	6.5	623	Cross Georgia Avenue on Pasadena Boulevard
C	8.7	826	Cross Center Street
D	12.3	1173	Cross East Boulevard
E	15.2	1443	Left turn onto Battleground Road
F	20.2	1923	Cross Highway 225 continuing onto Independence Parkway
G	24.7	2347	Passing ITC Site
H	31.4	2984	U-turn on Independence Parkway at Juan Seguin Park
I	38.4	3648	Passing ITC Site
J	44.5	4236	Right turn onto Pasadena Freeway Frontage Road
K	47.5	4515	Right turn onto Tidal Road
L	56.1	5337	Stationary on Tidal Road
M	59.6	5664	Resume mobile monitoring; Driving through ITC facility
N	63.5	6035	Left turn onto Independence Parkway
O	64.1	6093	Passing ITC Site
P	70.5	6703	End mobile monitoring on Independence Parkway at Juan Seguin Park
Q	70.9	6738	Start ambient
R	72.4	6882	End ambient
S	74.0	7036	Start 30 mL/min spike
T	75.1	7142	End 30 mL/min spike

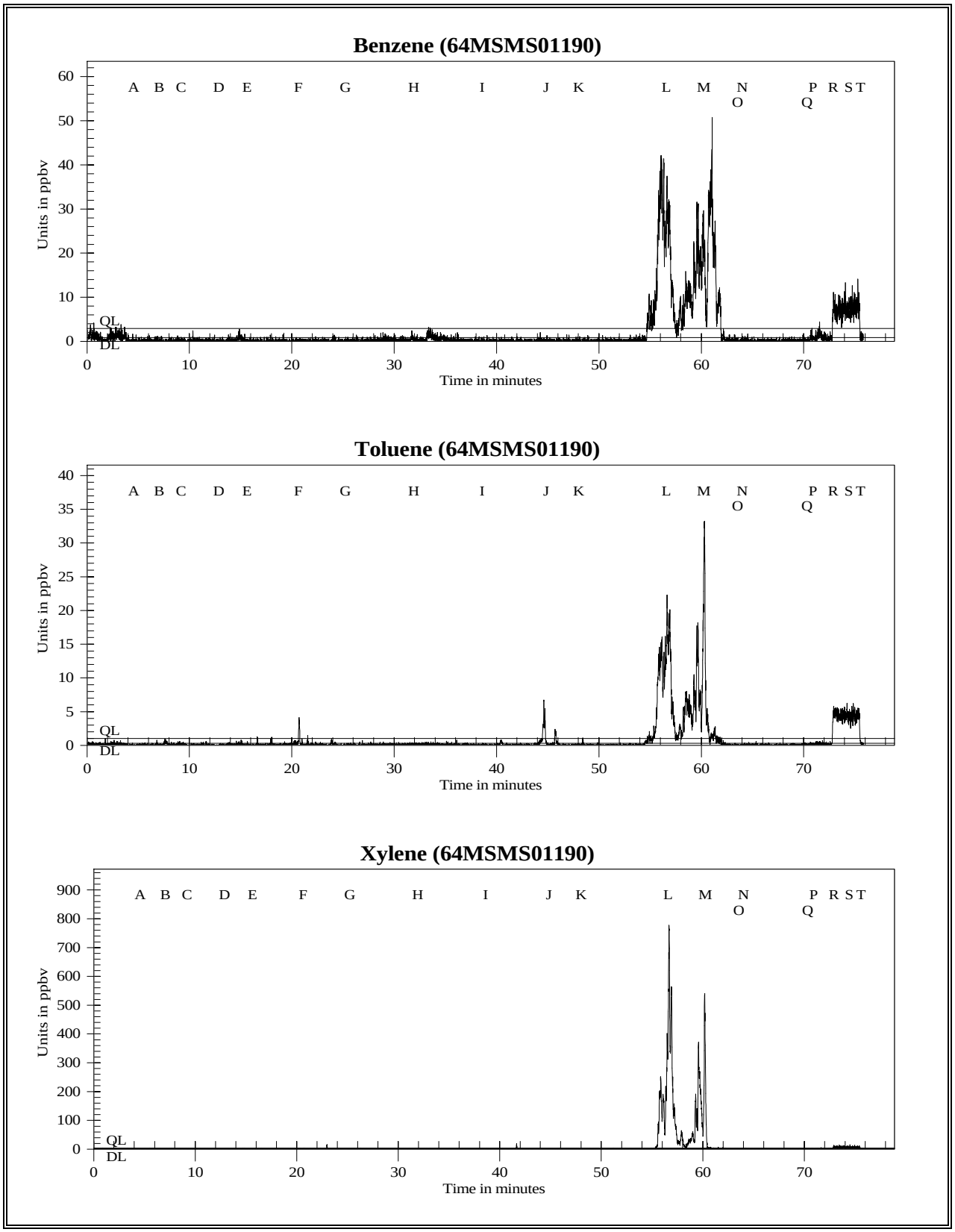


Figure 284c Monitoring Deer Park in ppbv for Benzene, Toluene, and Xylenes

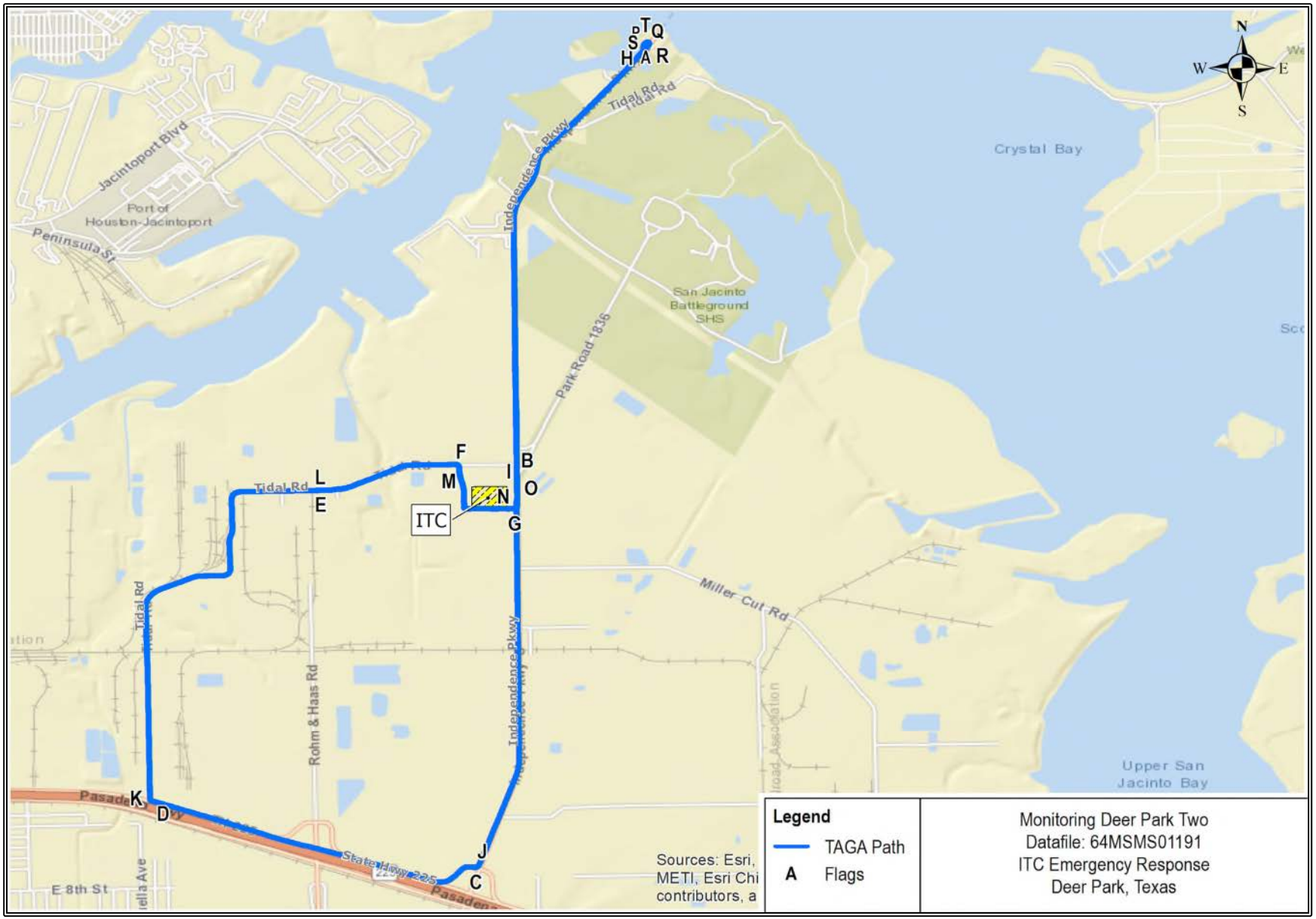


Figure 285a Monitoring Deer Park Two Path, 64MSMS01191

Figure 285b

TAGA File Event Summary
File: 64MSMS01191 Acquired on 14 May 2019 at 15:28:14
Title: Monitoring Deer Park Two

Flag	Time	Sequence	Description
A	1.1	107	Start mobile monitoring on Independence Parkway at Juan Seguin Park
B	7.7	736	Passing ITC Site
C	13.9	1324	Right turn onto Pasadena Freeway Frontage Road
D	16.6	1579	Right turn onto Tidal Road
E	22.4	2130	Cross Rohm and Haas Road
F	25.1	2384	Monitoring through ITC facility
G	29.4	2796	Left turn onto Independence Parkway
H	36.7	3487	U-turn on Independence Parkway at Juan Seguin Park
I	42.1	4006	Passing ITC Site
J	47.3	4499	Right turn onto Pasadena Freeway Frontage Road
K	50.0	4757	Right turn onto Tidal Road
L	55.4	5271	Cross Rohm and Haas Road
M	58.2	5535	Monitoring through ITC Facility
N	61.5	5846	Left turn onto Independence Parkway
O	61.9	5887	Passing ITC Site
P	66.6	6336	End mobile monitoring on Independence Parkway at Juan Seguin Park
Q	67.0	6374	Start ambient
R	68.0	6470	End ambient
S	70.6	6717	Start 30 mL/min spike
T	71.7	6814	End 30 mL/min spike

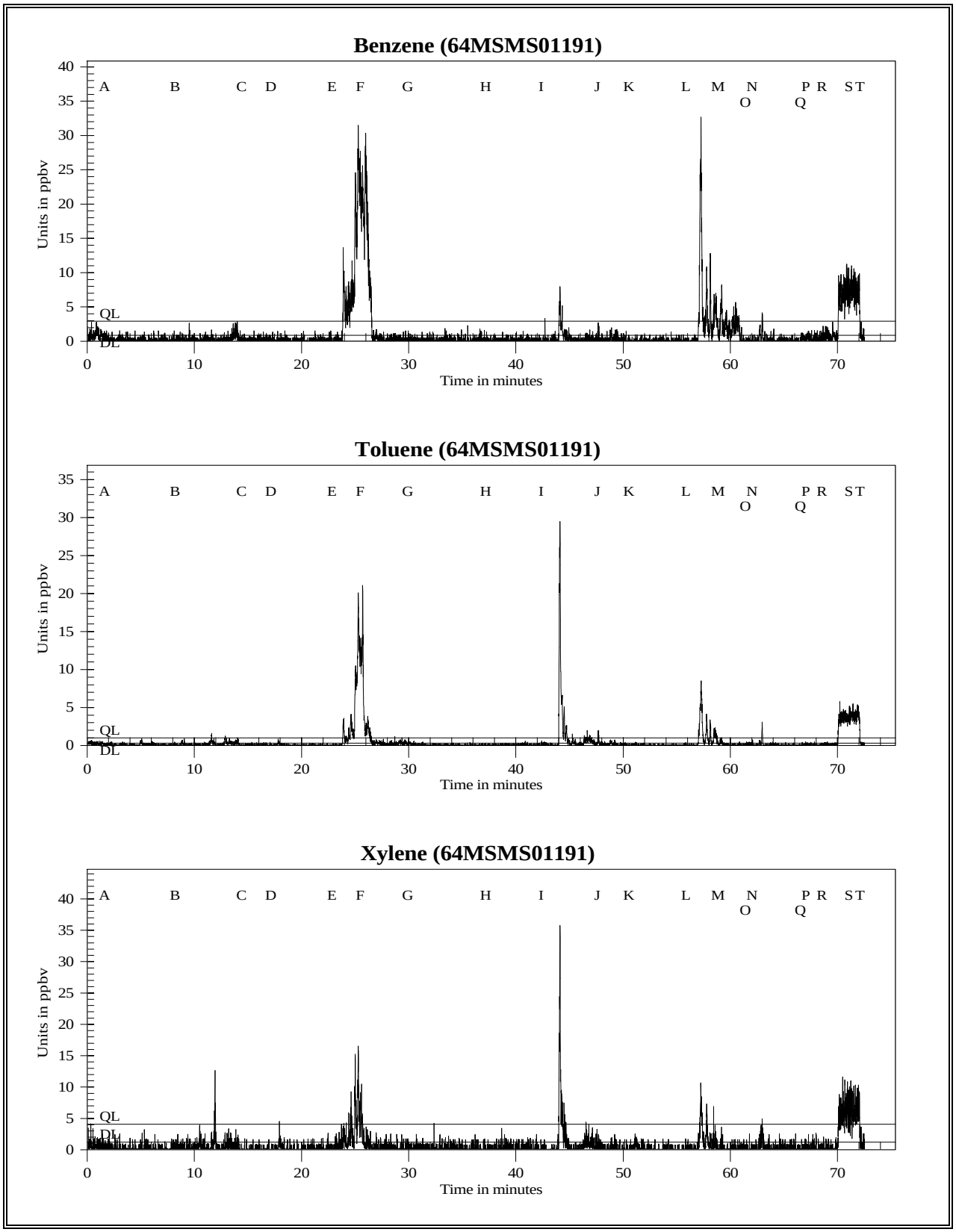


Figure 285c Monitoring Deer Park Two in ppbv for Benzene, Toluene, and Xylenes

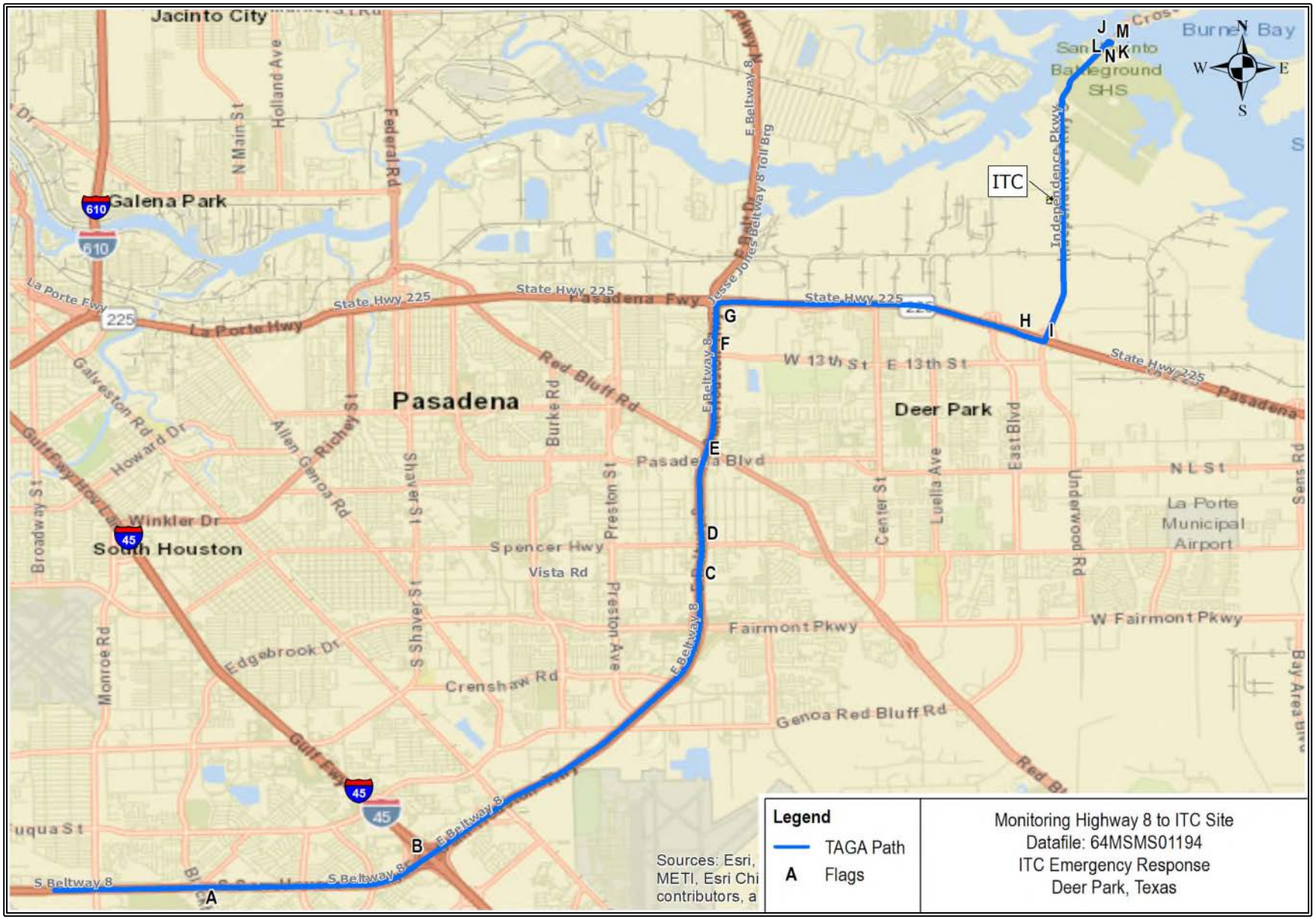


Figure 286a Monitoring Highway 8 to ITC Site Path, 64MSMS01194

Figure 286b

TAGA File Event Summary
File: 64MSMS01194 Acquired on 16 May 2019 at 08:03:48
Title: Monitoring Highway 8 to ITC Site

Flag	Time	Sequence	Description
A	3.2	303	Start mobile monitoring on Highway 8 North at Blackhawk Boulevard
B	6.1	584	Cross Highway 45
C	11.0	1045	Cross Vista Road
D	11.7	1111	Cross Spencer Highway
E	12.9	1227	Cross Pasadena Boulevard
F	14.4	1371	Exit onto Highway 8 Service Road
G	15.4	1469	Right merge onto Highway 225 East
H	18.9	1794	Exit onto Pasadena Freeway Frontage Road
I	20.2	1921	Left turn onto Independence Parkway
J	29.1	2764	End mobile monitoring at Juan Seguin Park
K	29.5	2802	Start ambient
L	30.6	2910	End ambient
M	33.1	3151	Start 30 mL/min spike
N	34.2	3257	End 30 mL/min spike

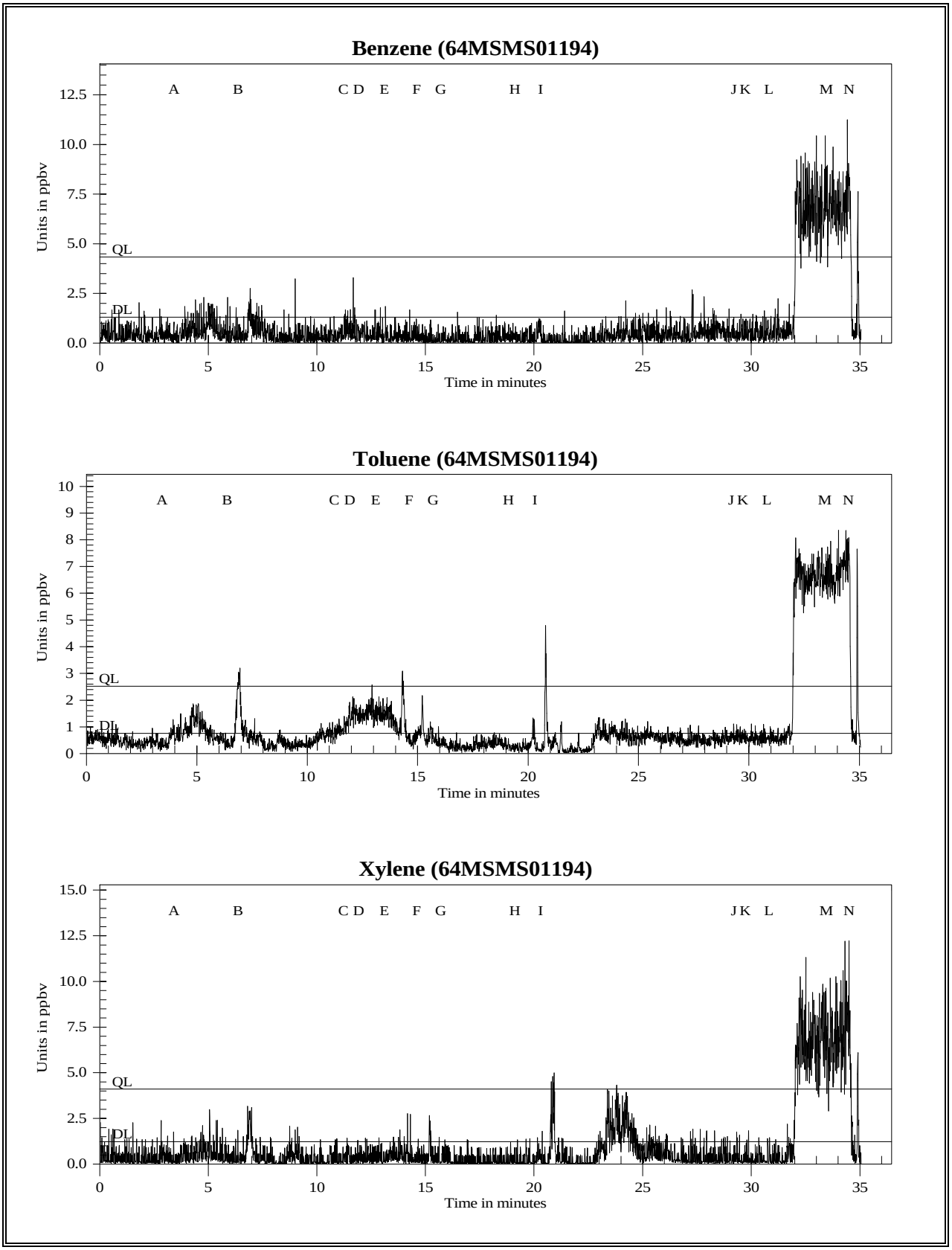


Figure 286c Monitoring Highway 8 to ITC Site in ppbv for Benzene, Toluene, and Xylenes

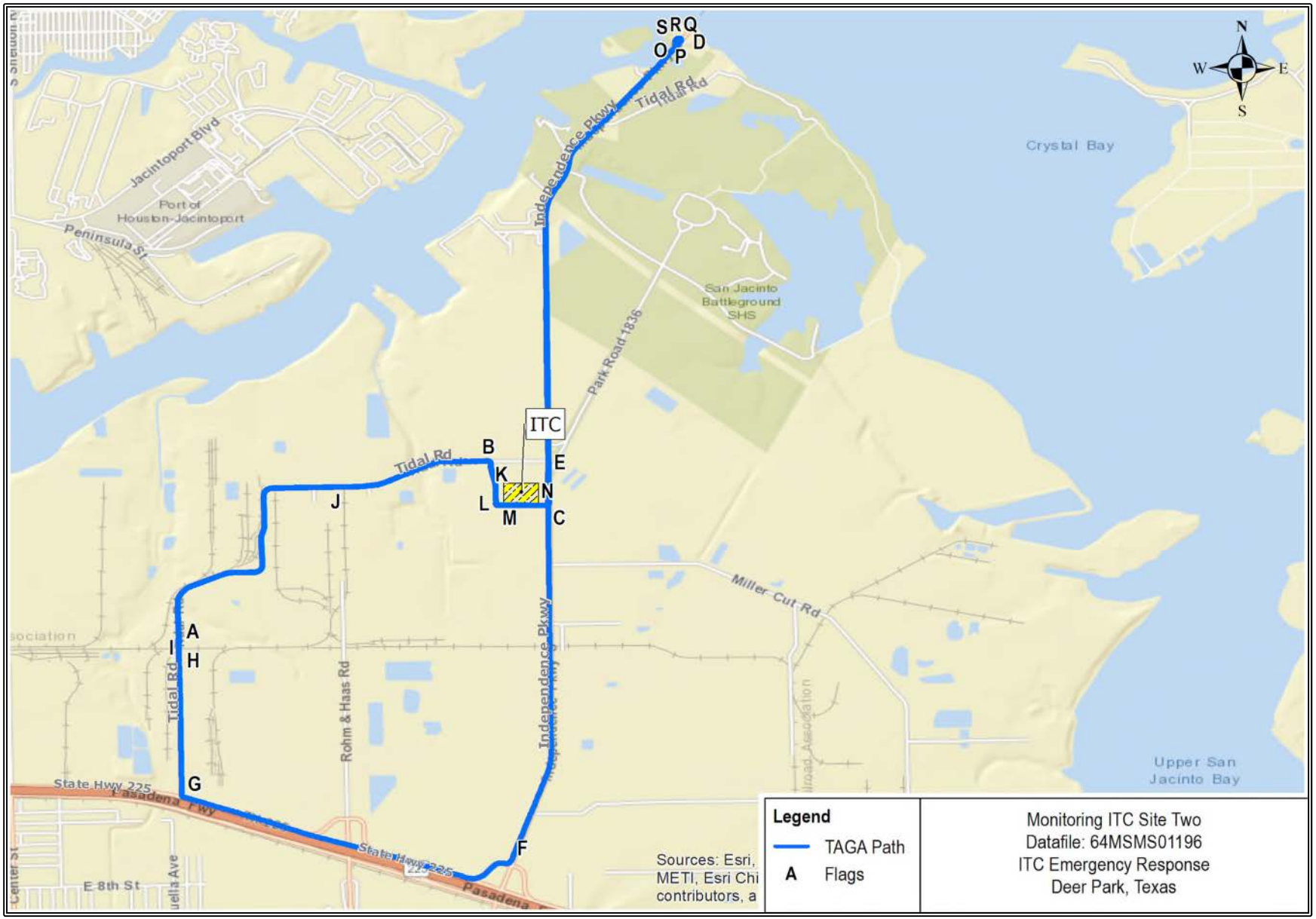


Figure 287a Monitoring ITC Site Two Path, 64MSMS01196

Figure 287b

TAGA File Event Summary
File: 64MSMS01196 Acquired on 16 May 2019 at 09:25:10
Title: Monitoring ITC Site Two

Flag	Time	Sequence	Description
A	0.7	70	Start mobile monitoring on Tidal Road
B	6.9	660	Right turn monitoring through ITC facility
C	10.1	961	Left turn onto Independence Parkway
D	15.2	1446	U-turn on Independence Parkway at Juan Seguin Park
E	21.3	2030	Passing ITC Site
F	25.6	2438	Right turn onto Pasadena Freeway Frontage Road
G	28.4	2702	Right turn onto Tidal Road
H	30.7	2916	Stationary at railroad crossing on Tidal Road
I	44.9	4265	Resume mobile monitoring on Tidal Road
J	49.1	4667	Cross Rohm and Haas Road
K	51.8	4921	Right turn; Monitoring through ITC facility
L	53.7	5109	Stationary at railroad crossing in ITC facility
M	79.1	7521	Resume mobile monitoring in ITC facility
N	80.3	7636	Left turn onto Independence Parkway
O	85.2	8099	End mobile monitoring on Independence Parkway at Juan Seguin Park
P	85.5	8134	Start ambient
Q	86.8	8253	End ambient
R	88.5	8411	Start 30 mL/min spike
S	90.1	8567	End 30 mL/min spike

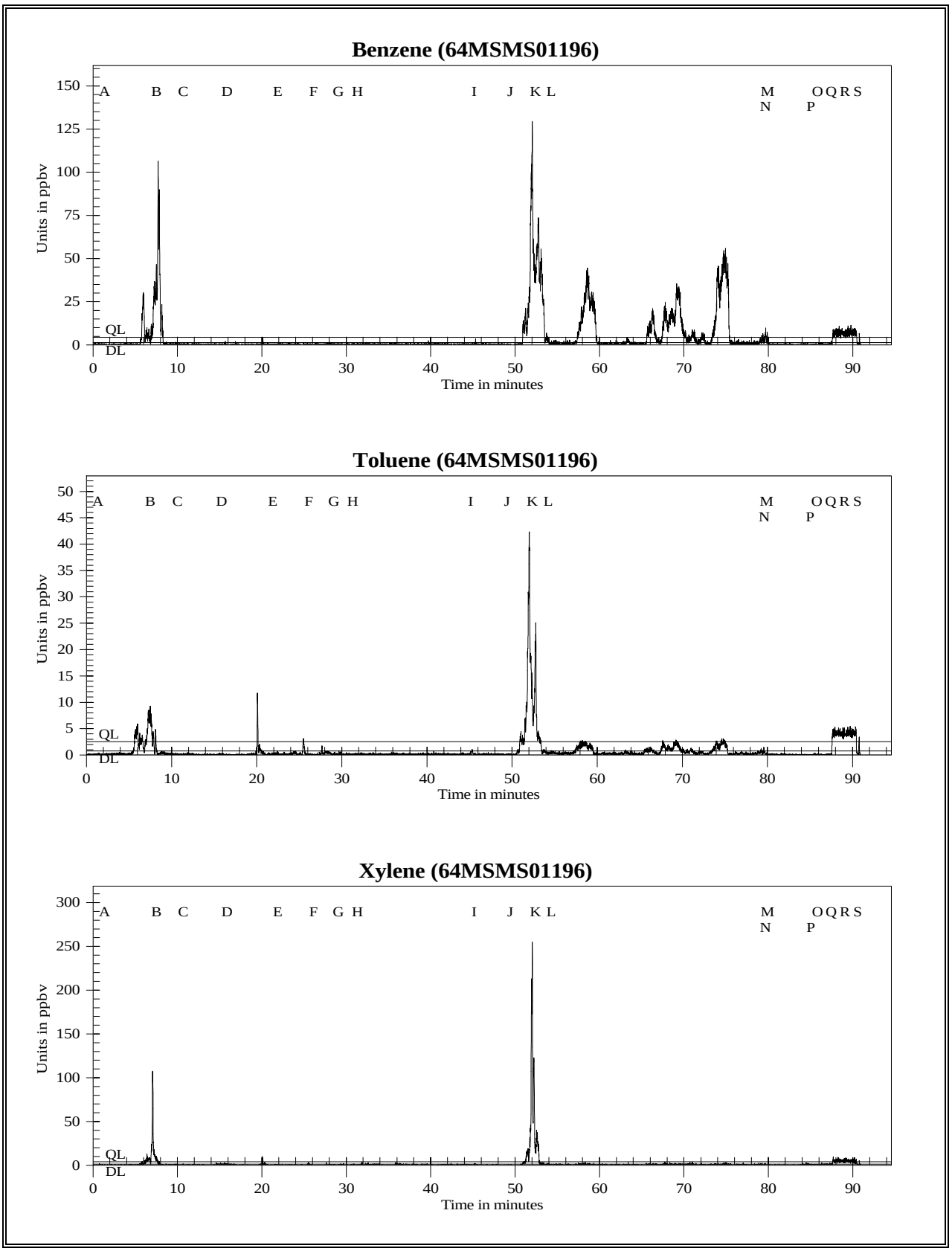


Figure 287c Monitoring ITC Site Two in ppbv for Benzene, Toluene, and Xylenes

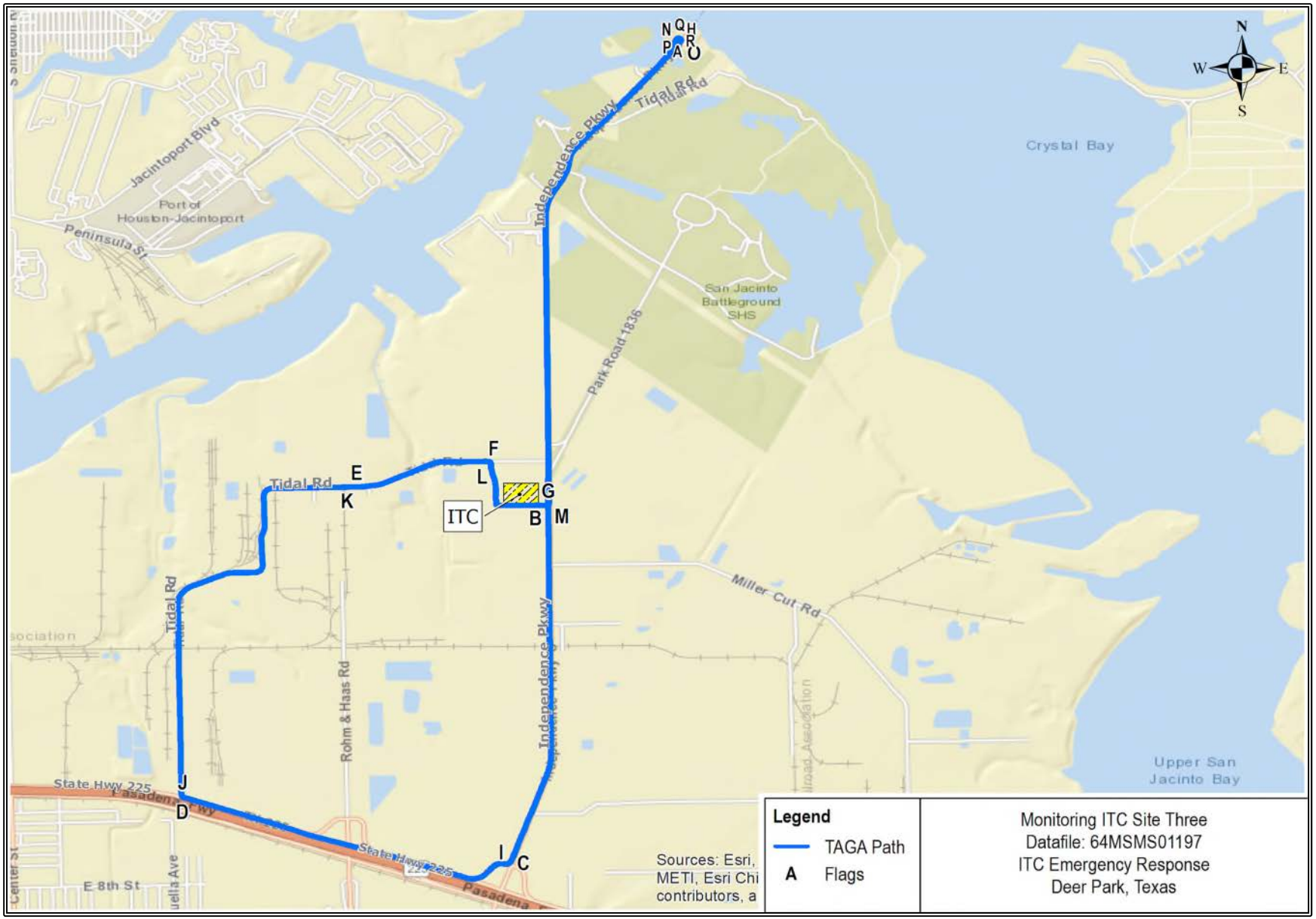


Figure 288a Monitoring ITC Site Three Path, 64MSMS01197

Figure 288b

TAGA File Event Summary
File: 64MSMS01197 Acquired on 16 May 2019 at 10:57:26
Title: Monitoring ITC Site Three

Flag	Time	Sequence	Description
A	1.1	102	Start mobile monitoring at Juan Seguin Park
B	6.9	661	Passing ITC Site
C	10.5	996	Right turn on Pasadena Freeway Frontage Road
D	12.9	1226	Right turn onto Tidal Road
E	22.6	2149	Cross Rohm and Haas Road
F	25.6	2431	Right turn; Monitoring through ITC facility
G	29.2	2775	Left turn onto Independence Parkway
H	34.2	3252	U-turn on Independence Parkway at Juan Seguin Park
I	43.3	4120	Right turn onto Pasadena Freeway Frontage Road
J	46.0	4377	Right turn onto Tidal Road
K	51.6	4905	Cross Rohm and Haas Road
L	54.4	5171	Right turn; Monitoring through ITC facility
M	57.5	5470	Left turn onto Independence Parkway
N	62.7	5962	End mobile monitoring at on Independence Parkway at Juan Seguin Park
O	63.1	6001	Start ambient
P	64.1	6099	End ambient
Q	66.0	6272	Start 30 mL/min spike
R	67.0	6369	End 30 mL/min spike

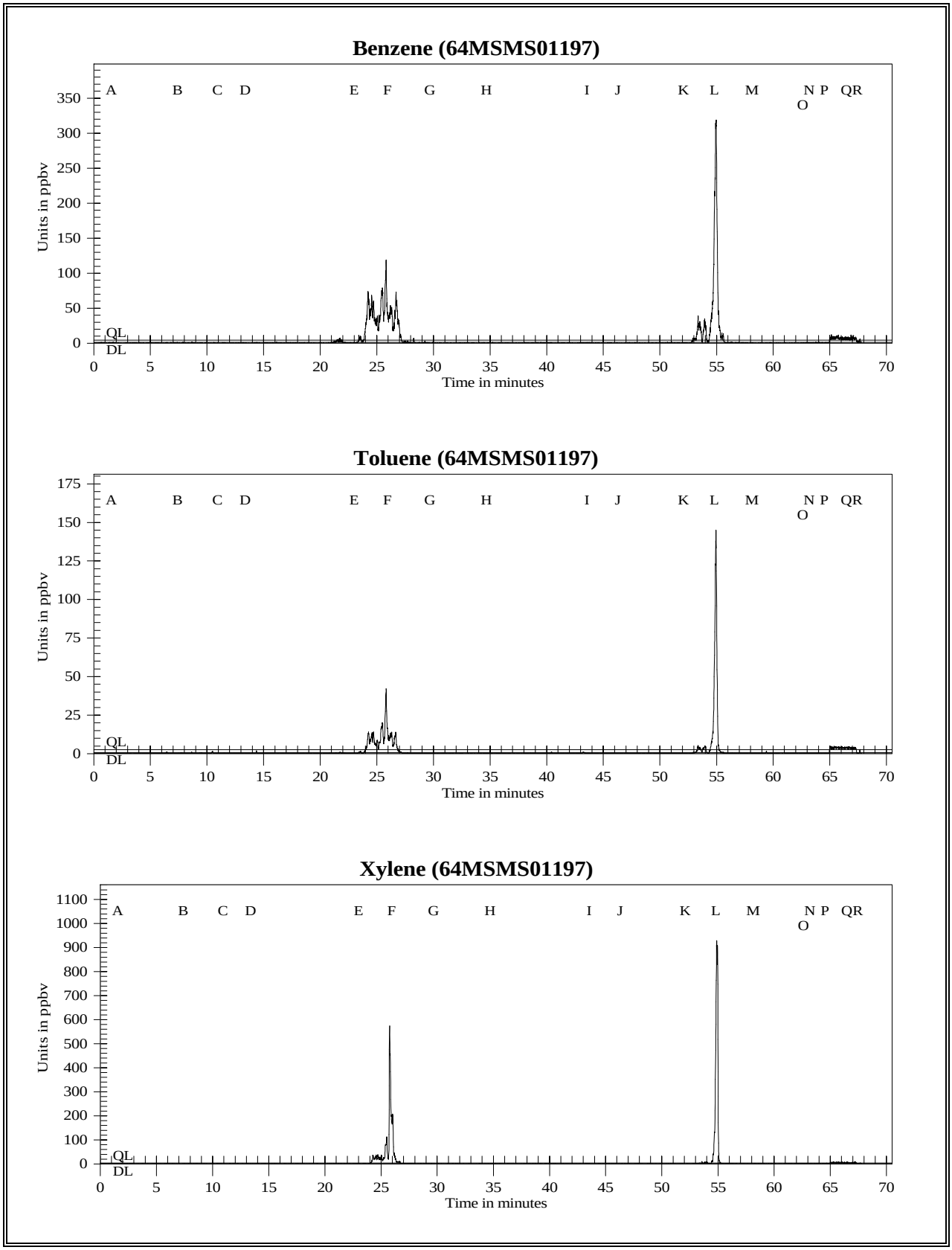


Figure 288c Monitoring ITC Site Three in ppbv for Benzene, Toluene, and Xylenes

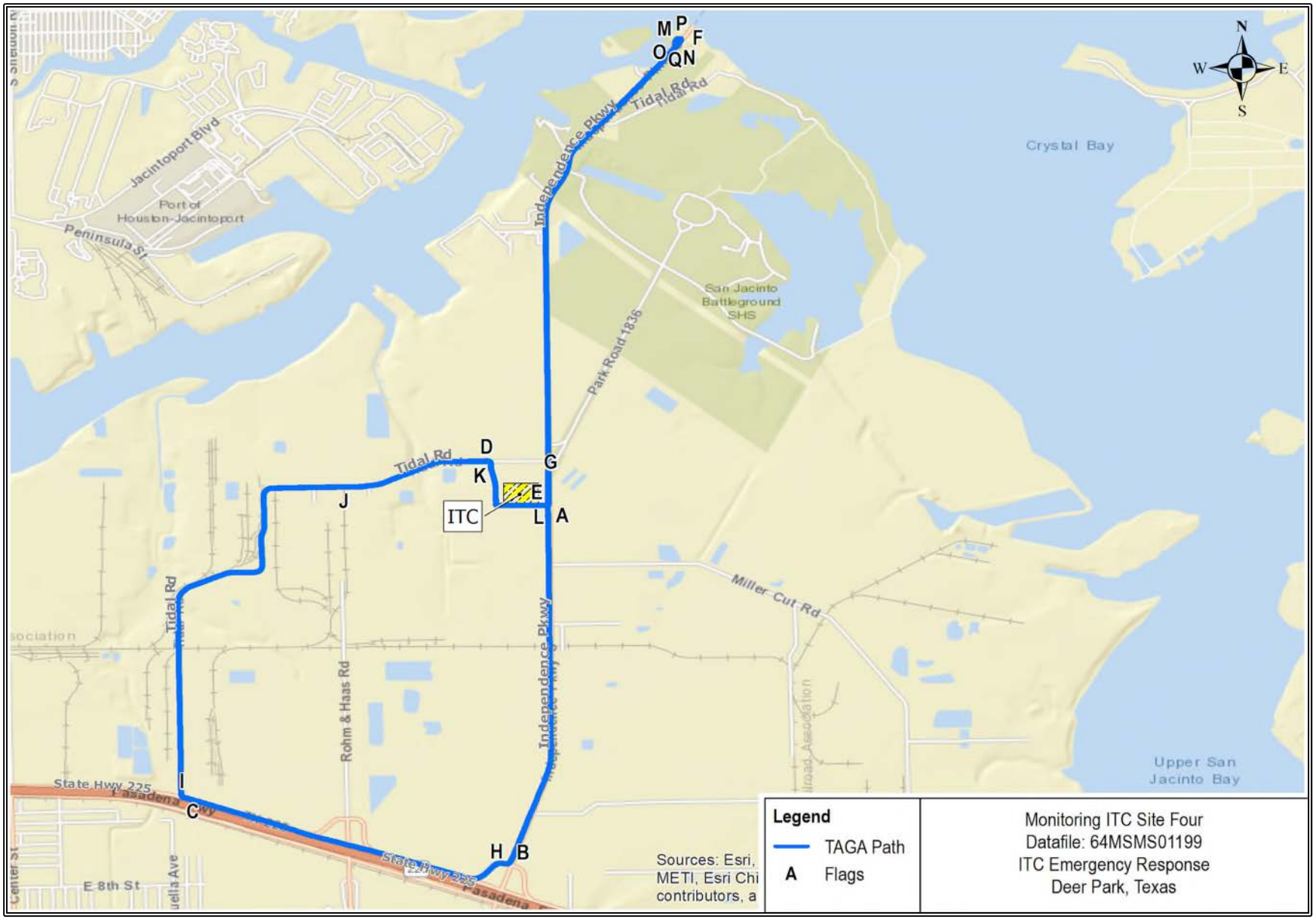


Figure 289a Monitoring ITC Site Four Path, 64MSMS01199

Figure 289b

TAGA File Event Summary
File: 64MSMS01199 Acquired on 16 May 2019 at 13:41:31
Title: Monitoring ITC Site Four

Flag	Time	Sequence	Description
A	0.5	53	Start mobile monitoring on Independence Parkway
B	4.2	400	Right turn onto Pasadena Freeway Frontage Road
C	6.5	617	Right turn onto Tidal Road
D	14.2	1351	Right turn; Monitoring through ITC facility
E	18.0	1709	Left turn onto Independence Parkway
F	22.4	2127	U-turn on Independence Parkway at Juan Seguin Park
G	26.7	2538	Passing ITC Site
H	30.9	2940	Right tun onto Pasadena Freeway Frontage Road
I	33.4	3174	Right turn onto Tidal Road
J	38.7	3678	Cross Rohm and Haas Road
K	41.3	3926	Right turn; Monitoring through ITC facility
L	44.6	4239	Left turn onto Independence Parkway
M	49.4	4700	End mobile monitoring on Independence Parkway at Juan Seguin Park
N	49.8	4735	Start ambient
O	50.8	4833	End ambient
P	53.2	5063	Start 30 mL/min spike
Q	54.8	5212	End 30 mL/min spike

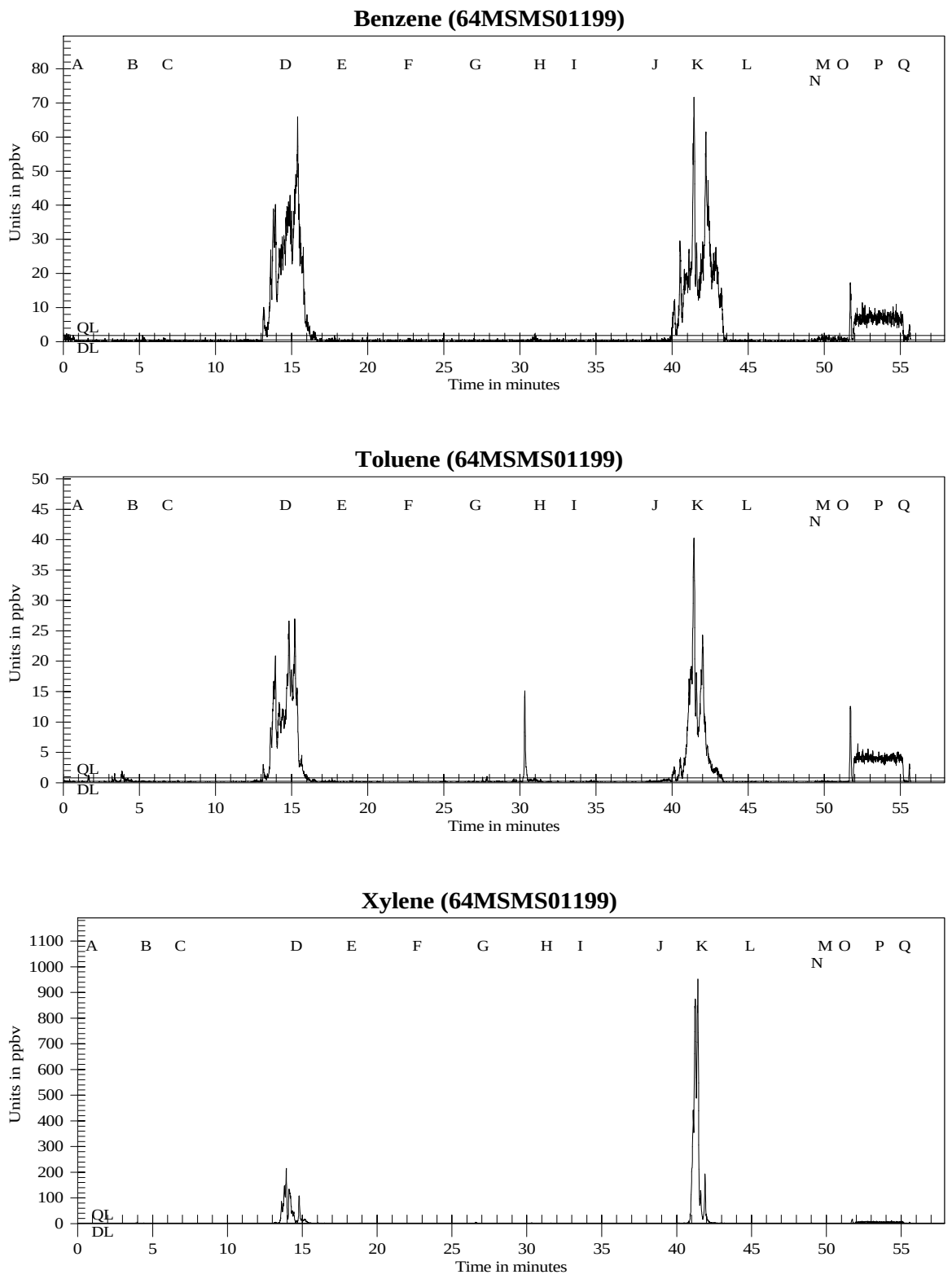


Figure 289c Monitoring ITC Site Four in ppbv for Benzene, Toluene, and Xylenes

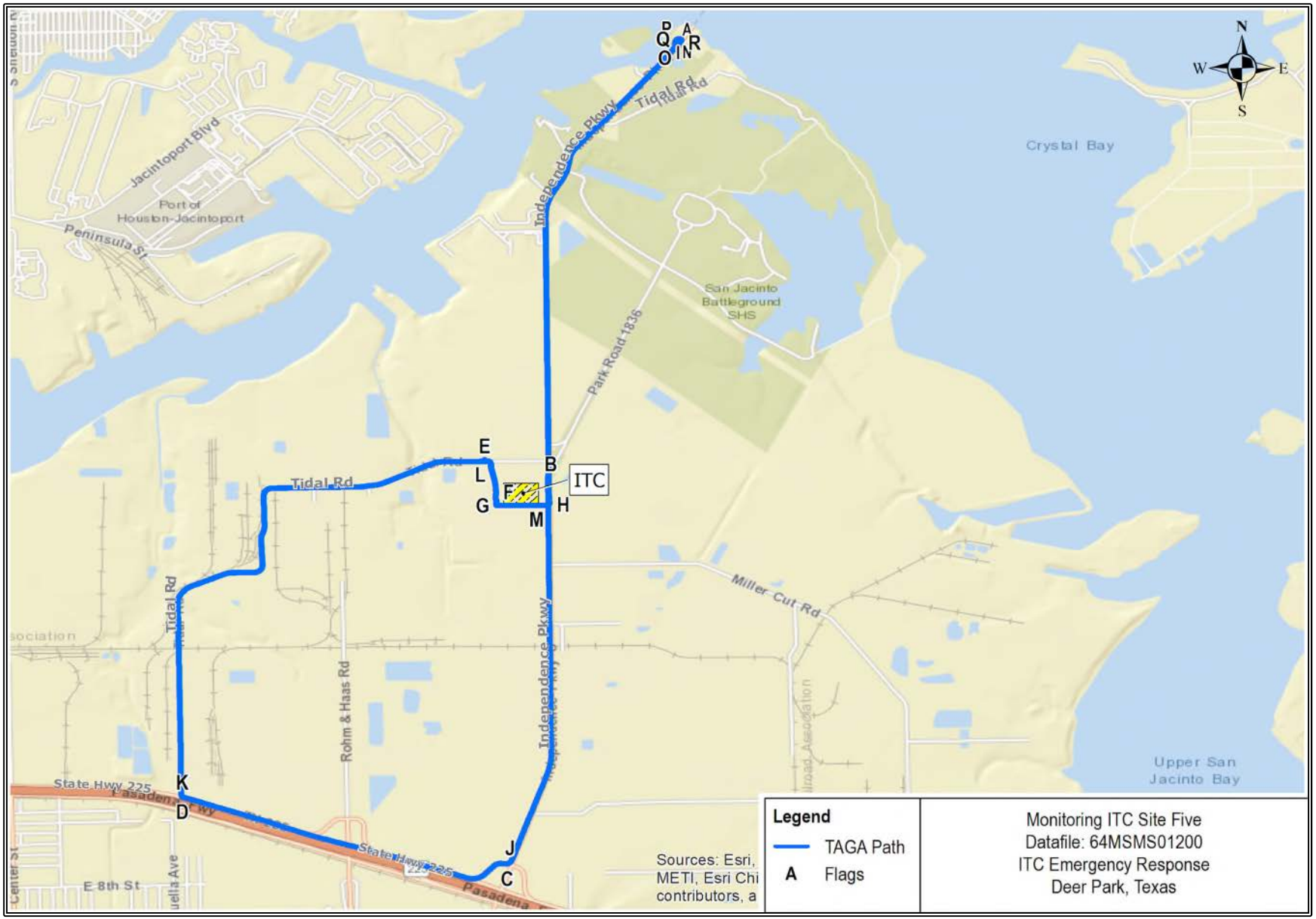


Figure 290a Monitoring ITC Site Five Path, 64MSMS01200

Figure 290b

TAGA File Event Summary
File: 64MSMS01200 Acquired on 16 May 2019 at 14:38:59
Title: Monitoring ITC Site Five

Flag	Time	Sequence	Description
A	0.6	61	Start mobile monitoring at Juan Seguin Park
B	5.2	495	Passing ITC Site
C	8.6	818	Right turn onto Pasadena Freeway Frontage Road
D	10.9	1037	Right turn onto Tidal Road
E	19.1	1821	Right turn; Monitoring through ITC facility
F	21.5	2045	Stationary at railroad crossing in ITC facility
G	22.3	2124	Resume mobile monitoring through ITC facility
H	23.7	2254	Left turn onto Independence Parkway
I	28.5	2712	U-turn on Independence Parkway at Juan Seguin Park
J	36.1	3436	Right turn onto Pasadena Freeway Frontage Road
K	38.5	3664	Right turn onto Tidal Road
L	46.3	4398	Right turn; Monitoring through ITC facility
M	49.5	4710	Left turn onto Independence Parkway
N	54.4	5169	End mobile monitoring on Independence Parkway at Juan Seguin Park
O	54.8	5212	Start ambient
P	55.8	5310	End ambient
Q	57.3	5450	Start 30 mL/min spike
R	58.3	5548	End 30 mL/min spike

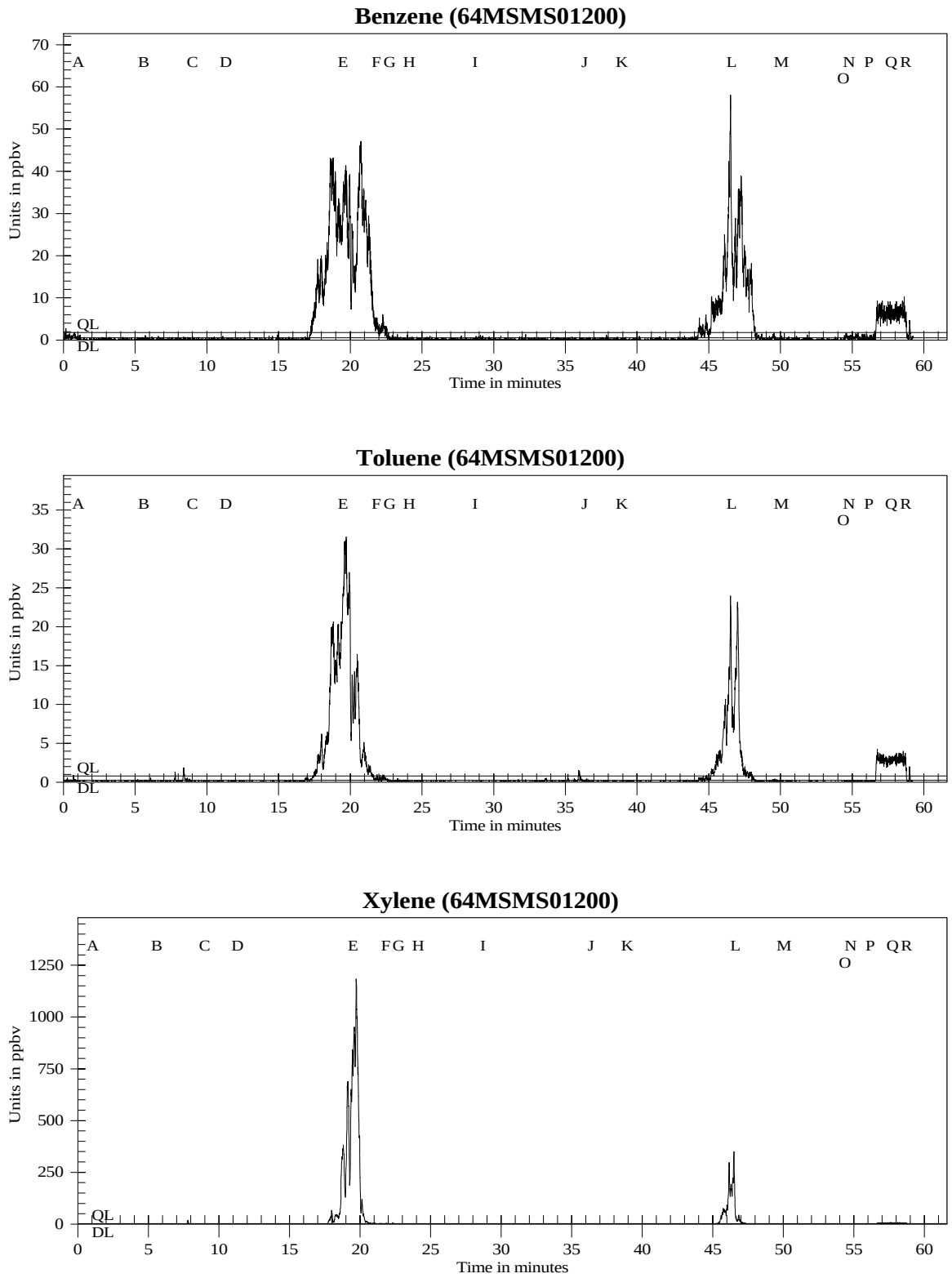


Figure 290c Monitoring ITC Site Five in ppbv for Benzene, Toluene, and Xylenes

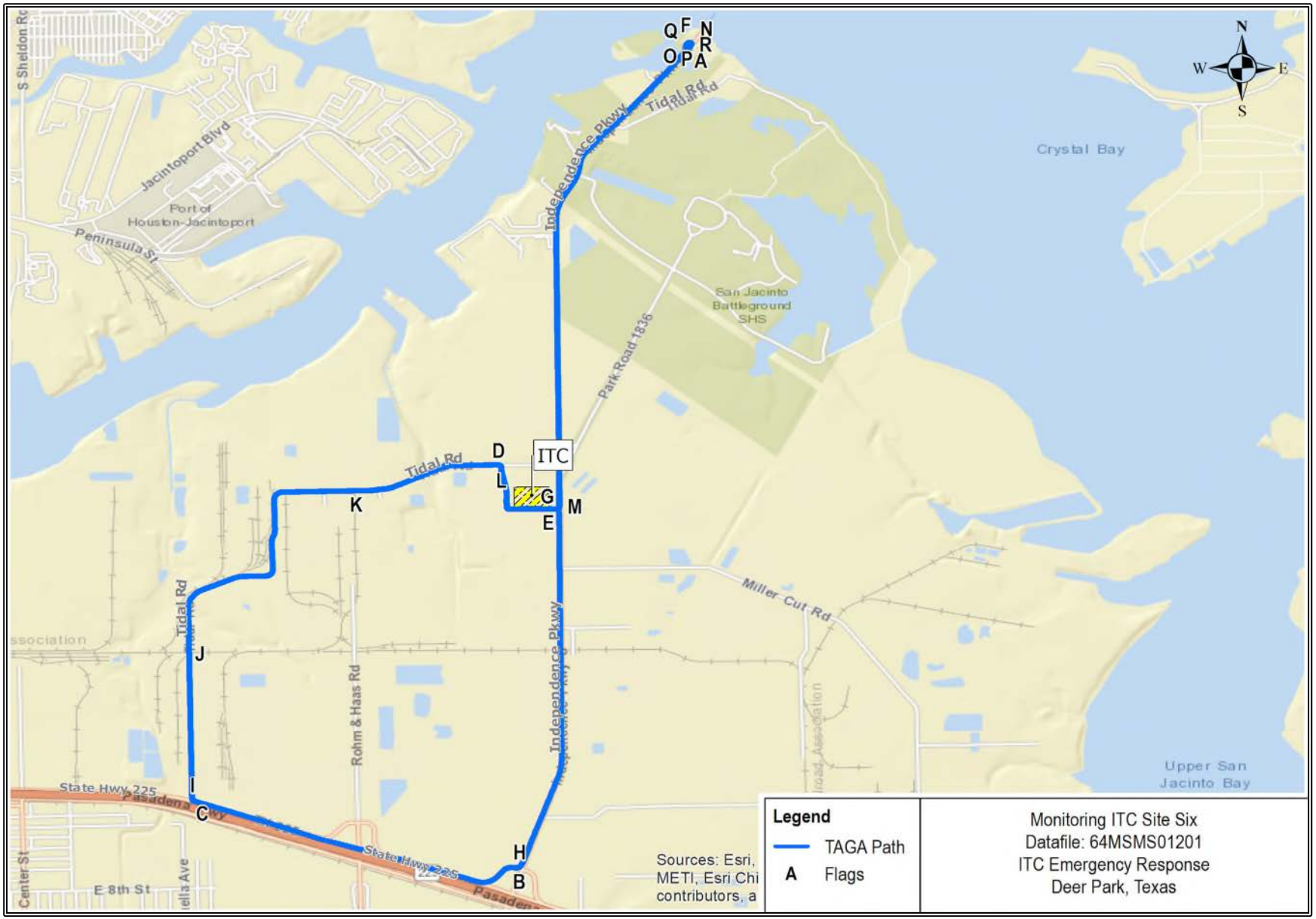


Figure 291a Monitoring ITC Site Six Path, 64MSMS01201

Figure 291b

TAGA File Event Summary
File: 64MSMS01201 Acquired on 16 May 2019 at 15:47:35
Title: Monitoring ITC Site Six

Flag	Time	Sequence	Description
A	0.5	51	Start mobile monitoring at Juan Seguin Park
B	7.4	709	Right turn onto Pasadena Freeway Frontage Road
C	9.8	936	Right turn onto Tidal Road
D	16.5	1574	Right turn; Monitoring through ITC facility
E	19.5	1856	Left turn onto Independence Parkway
F	23.5	2233	U-turn on Independence Parkway at Juan Seguin Park
G	27.4	2604	Passing ITC Site
H	30.8	2926	Right turn onto Pasadena Freeway Frontage Road
I	32.9	3132	Right turn onto Tidal Road
J	34.5	3282	Stationary at railroad crossing on Tidal Road
K	39.2	3729	Cross Rohm and Haas Road
L	41.4	3935	Right turn; Monitoring through ITC facility
M	44.3	4217	Left turn onto Independence Parkway
N	48.5	4616	End mobile monitoring on Independence Parkway at Juan Seguin Park
O	49.1	4672	Start ambient
P	50.3	4787	End ambient
Q	51.8	4925	Start 30 mL/min spike
R	53.0	5044	End 30 mL/min spike

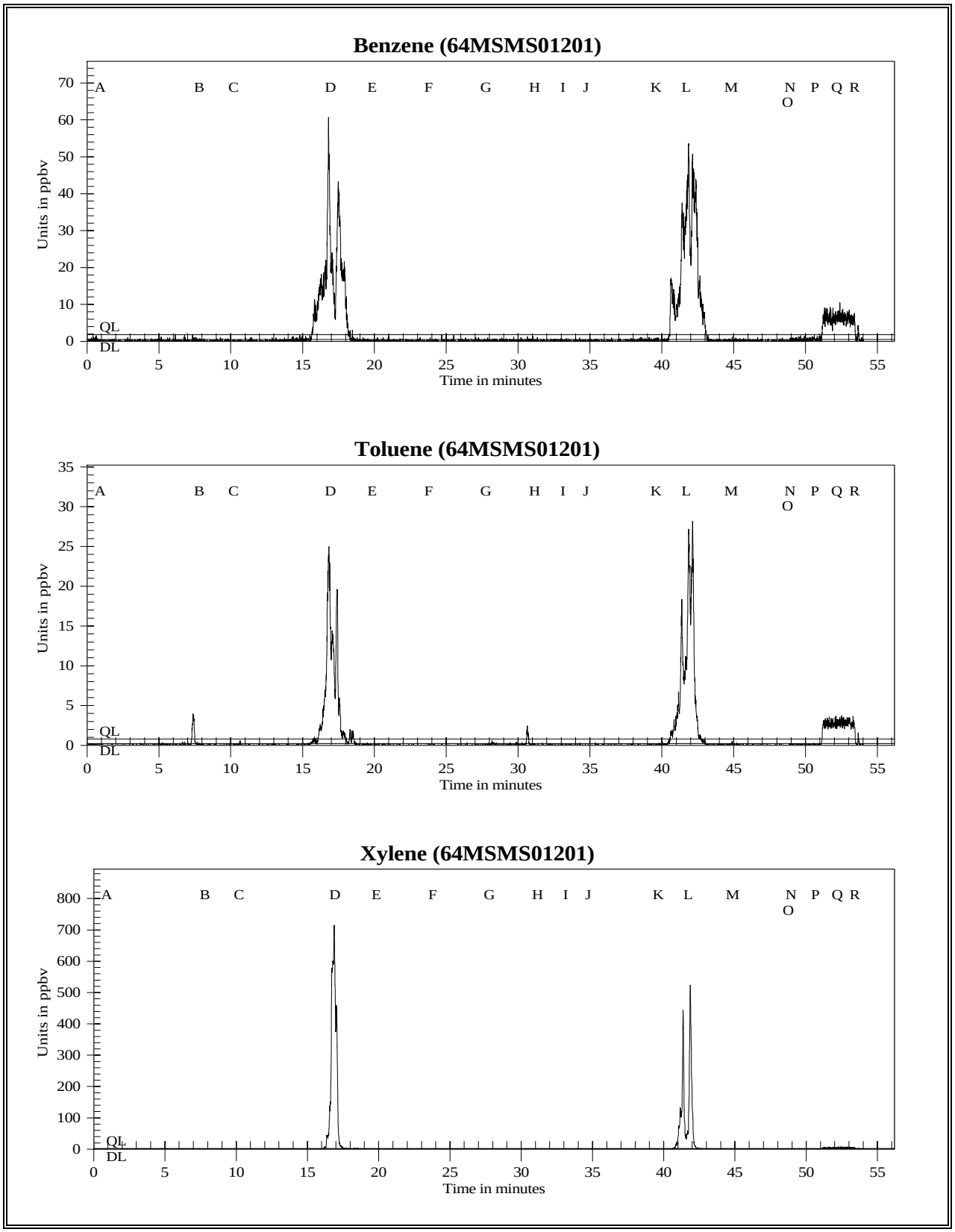


Figure 291c Monitoring ITC Site Six in ppbv for Benzene, Toluene, and Xylenes

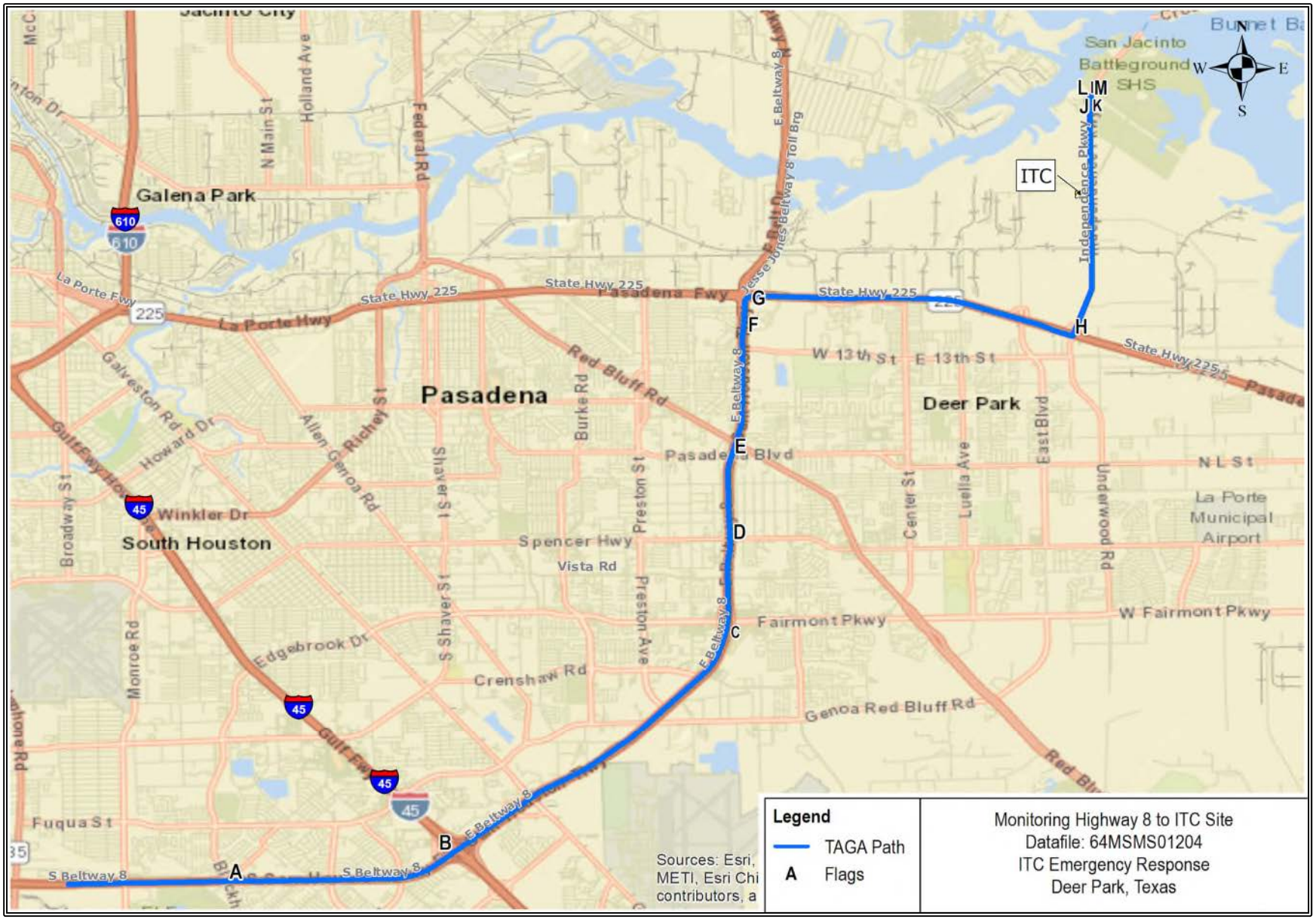


Figure 292a Monitoring Highway 8 to ITC Site Path, 64MSMS01204

Figure 292b

TAGA File Event Summary
File: 64MSMS01204 Acquired on 17 May 2019 at 07:52:33
Title: Monitoring Highway 8 to ITC Site

Flag	Time	Sequence	Description
A	2.3	218	Start mobile monitoring on Highway 8 North at Blackhawk Boulevard
B	5.3	505	Cross Highway 8
C	9.1	867	Cross Fairmont Parkway
D	10.2	970	Cross Spencer Highway
E	11.3	1075	Cross Pasadena Boulevard
F	13.1	1248	Exit onto Highway 8 Service Road
G	13.8	1316	Right turn onto Highway 225 East
H	19.2	1823	Left turn onto Independence Parkway
I	24.9	2365	End mobile monitoring on Independence Parkway
J	25.2	2395	Start ambient
K	26.2	2491	End ambient
L	27.8	2648	Start 30 mL/min spike
M	29.8	2837	End 30 mL/min spike

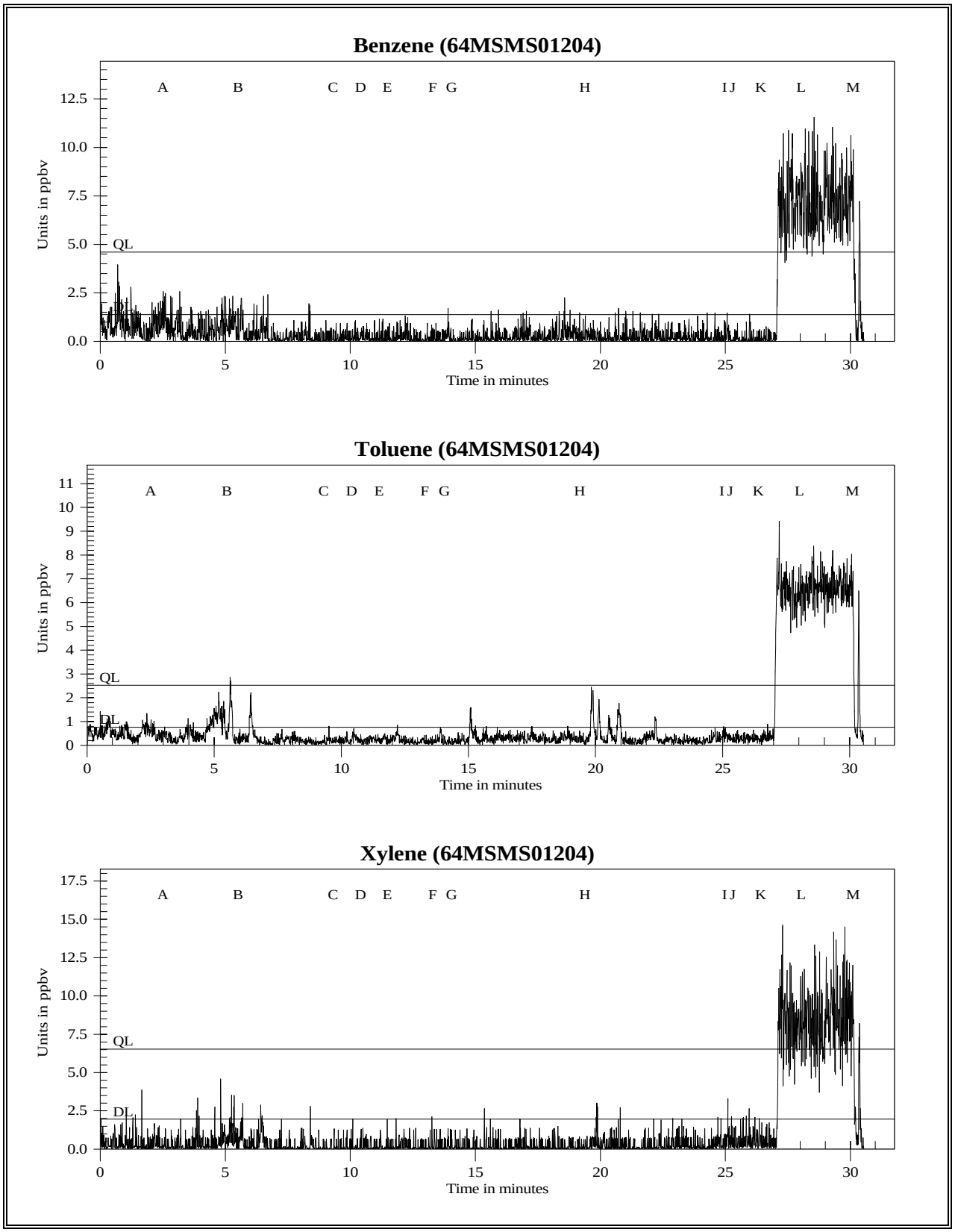


Figure 292c Monitoring Highway 8 to ITC Site in ppbv for Benzene, Toluene, and Xylenes

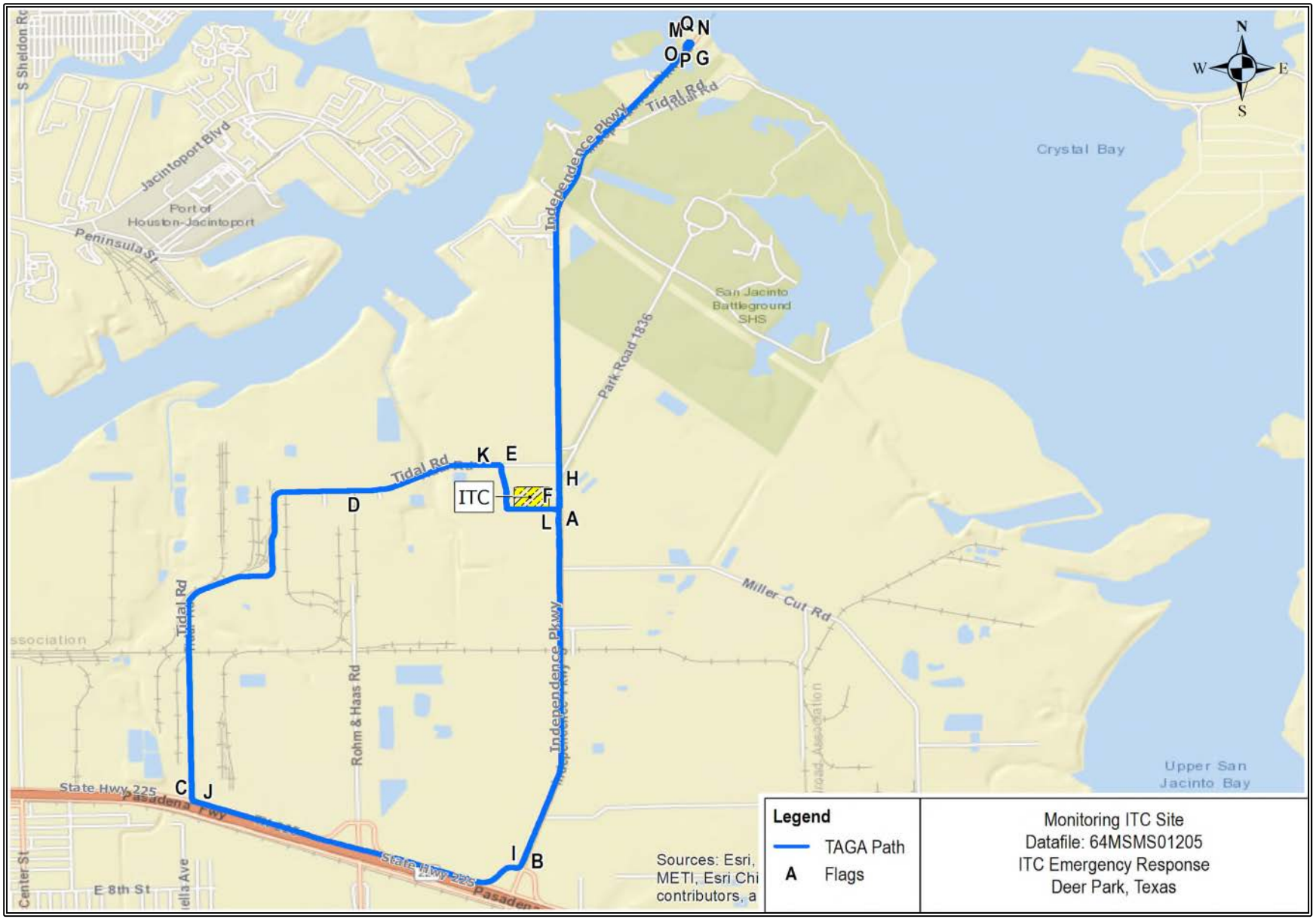


Figure 293a Monitoring ITC Site Path, 64MSMS01205

Figure 293b

TAGA File Event Summary
File: 64MSMS01205 Acquired on 17 May 2019 at 08:39:39
Title: Monitoring ITC Site

Flag	Time	Sequence	Description
A	1.3	129	Start mobile monitoring on Independence Parkway at ITC Site
B	4.9	463	Right turn onto Pasadena Freeway Frontage Road
C	7.4	702	Right turn onto Tidal Road
D	13.4	1279	Cross Rohm and Haas Road
E	16.2	1539	Right turn; Monitoring through ITC facility
F	19.5	1856	Left turn onto Independence Parkway
G	23.8	2260	U-turn on Independence Parkway at Juan Seguin Park
H	29.0	2758	Passing ITC Site
I	32.7	3108	Right turn onto Pasadena Freeway Frontage Road
J	35.2	3346	Right turn onto Tidal Road
K	43.4	4127	Right turn; Monitoring through ITC facility
L	46.4	4415	Left turn onto Independence Parkway
M	51.2	4873	End mobile monitoring on Independence Parkway at Juan Seguin Park
N	51.7	4917	Start ambient
O	52.9	5027	End ambient
P	54.8	5212	Start 30 mL/min spike
Q	55.9	5317	End 30 mL/min spike

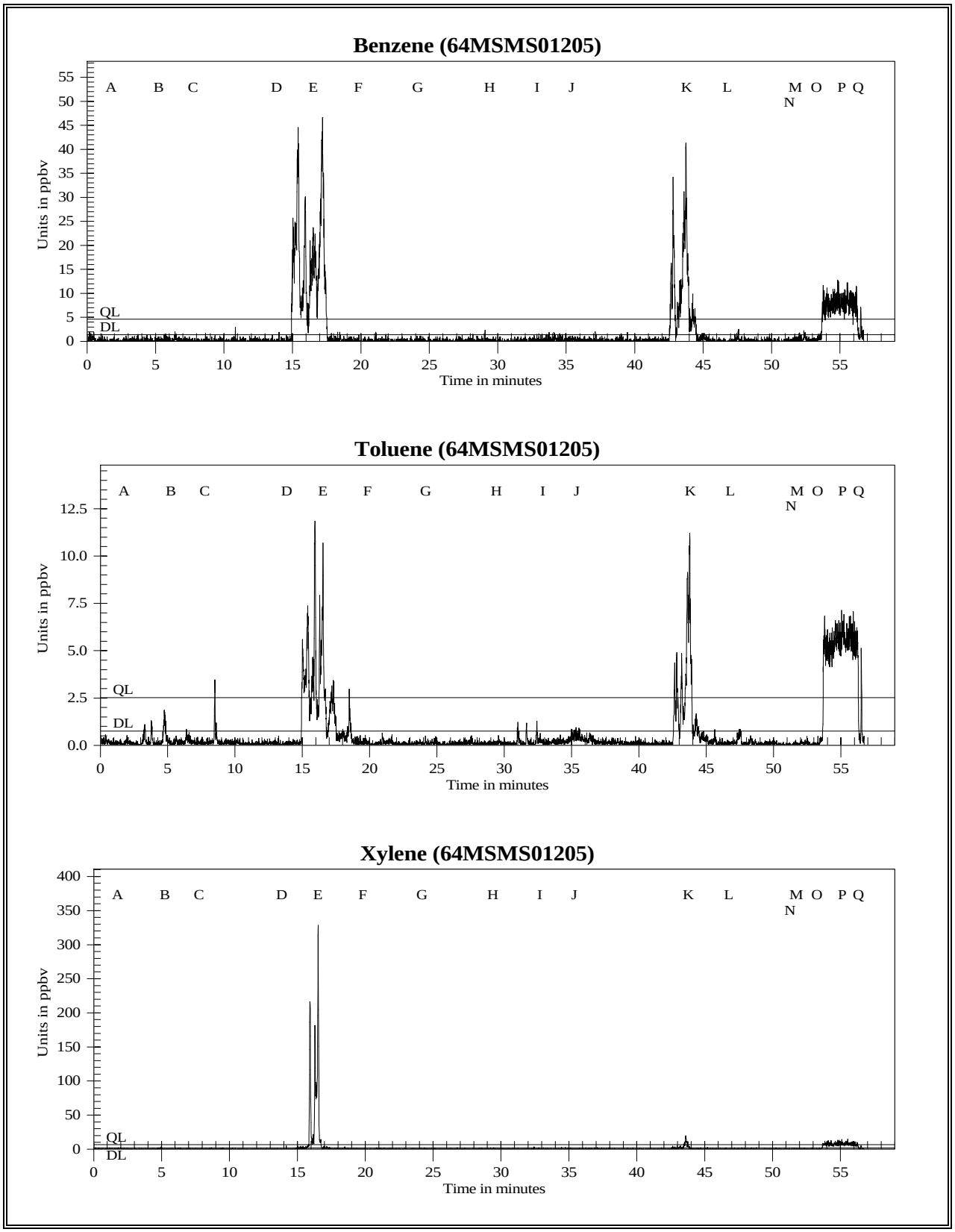


Figure 293c Monitoring ITC Site in ppbv for Benzene, Toluene, and Xylenes

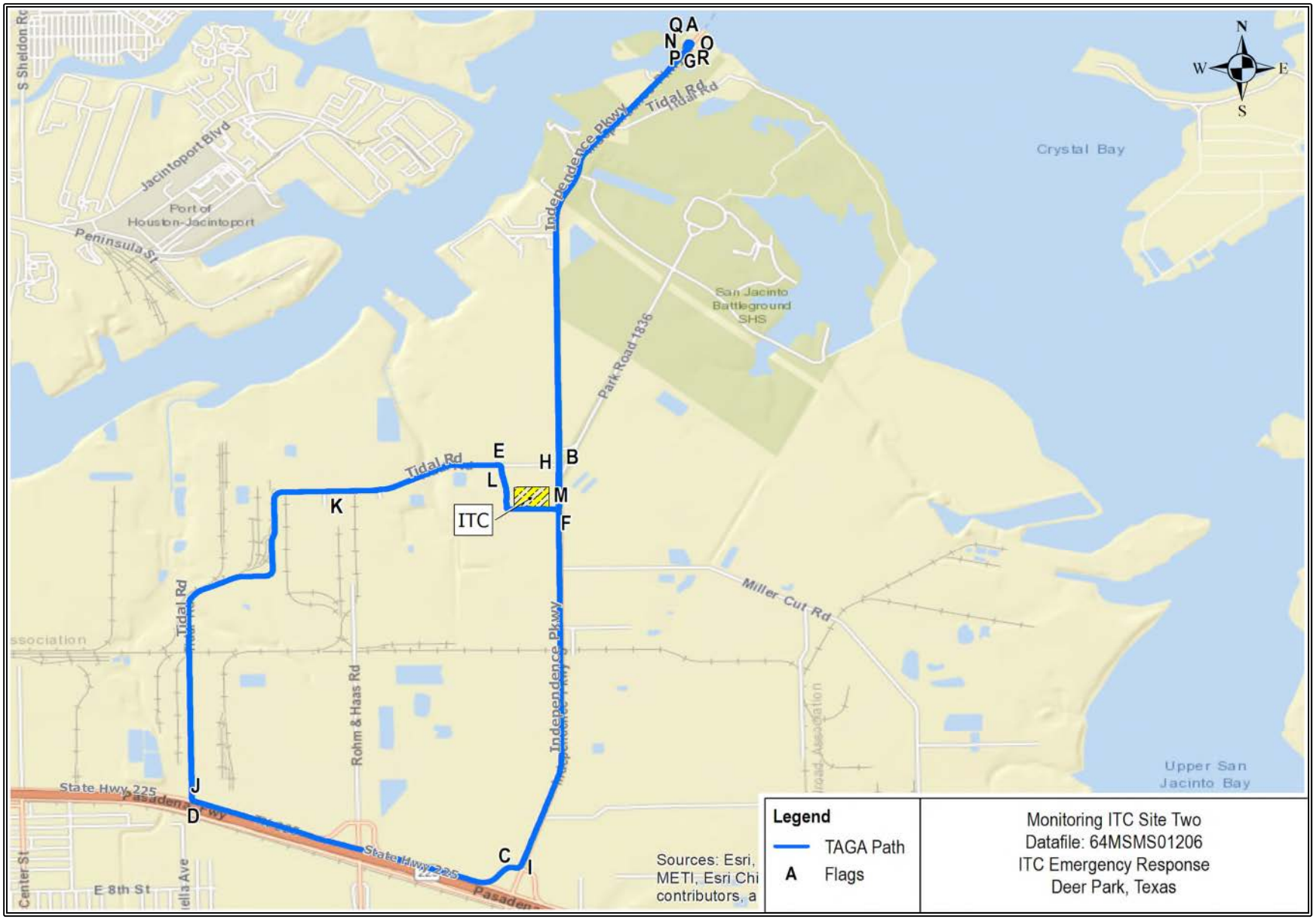


Figure 294a Monitoring ITC Site Two Path, 64MSMS01206

Figure 294b

TAGA File Event Summary
File: 64MSMS01206 Acquired on 17 May 2019 at 09:38:19
Title: Monitoring ITC Site Two

Flag	Time	Sequence	Description
A	0.8	74	Start mobile monitoring at Juan Seguin Park
B	5.5	528	Passing ITC Site
C	9.4	893	Right turn onto Pasadena Freeway Frontage Road
D	12.0	1137	Right turn onto Tidal Road
E	20.1	1915	Right turn; Monitoring through ITC facility
F	24.0	2287	Left turn onto Independence Parkway
G	29.8	2832	U-turn on Independence Parkway at Juan Seguin Park
H	34.0	3230	Passing ITC Site
I	38.4	3656	Right turn onto Pasadena Freeway Frontage Road
J	41.1	3907	Right turn onto Tidal Road
K	47.4	4505	Cross Rohm and Haas Road
L	50.8	4833	Right turn; Monitoring through ITC facility
M	54.7	5204	Left turn onto Independence Parkway
N	59.5	5657	End mobile monitoring on Independence Parkway at Juan Seguin Park
O	59.9	5695	Start ambient
P	62.2	5914	End ambient
Q	63.6	6047	Start 30 mL/min spike
R	64.7	6149	End 30 mL/min spike

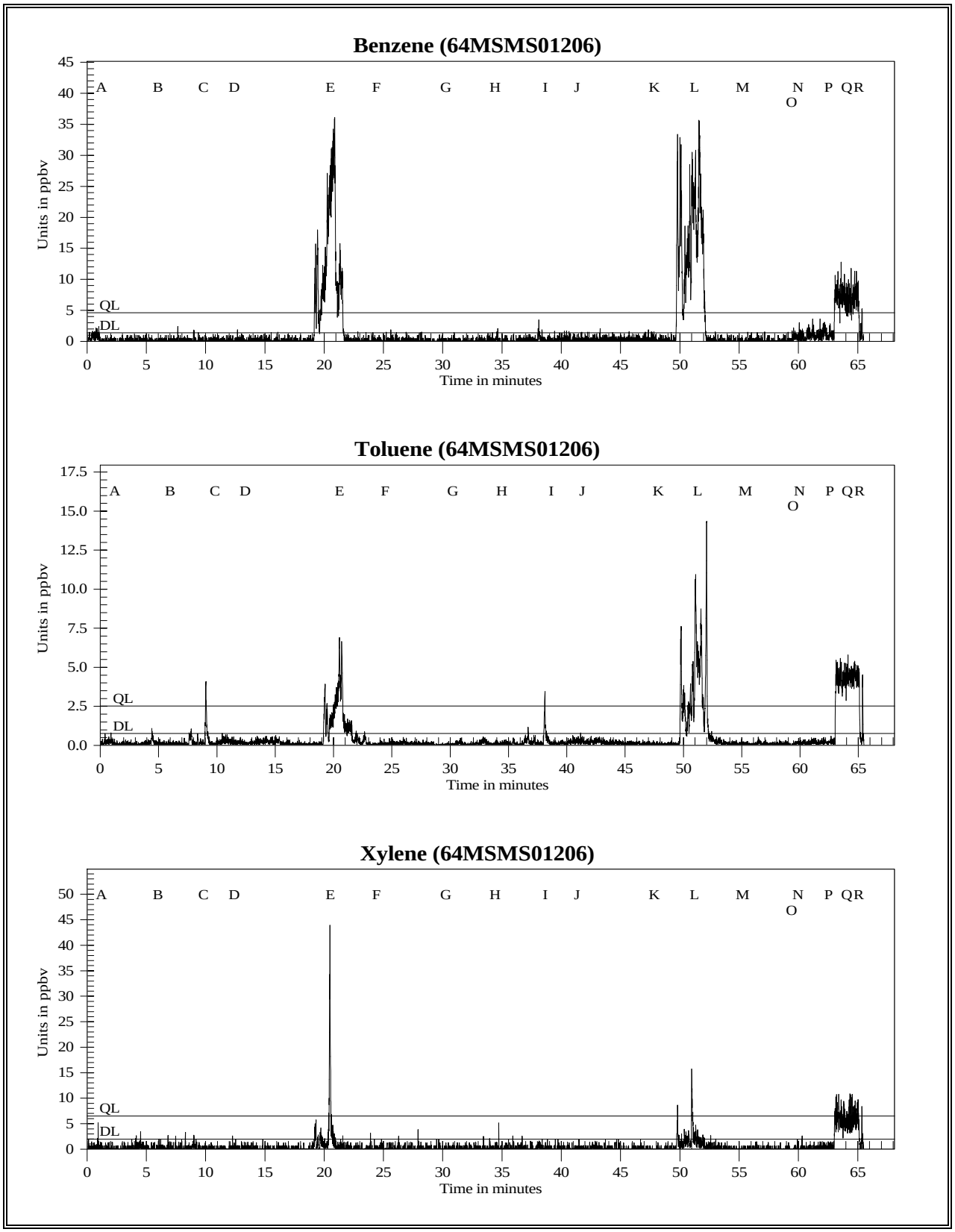


Figure 294c Monitoring ITC Site Two in ppbv for Benzene, Toluene, and Xylenes

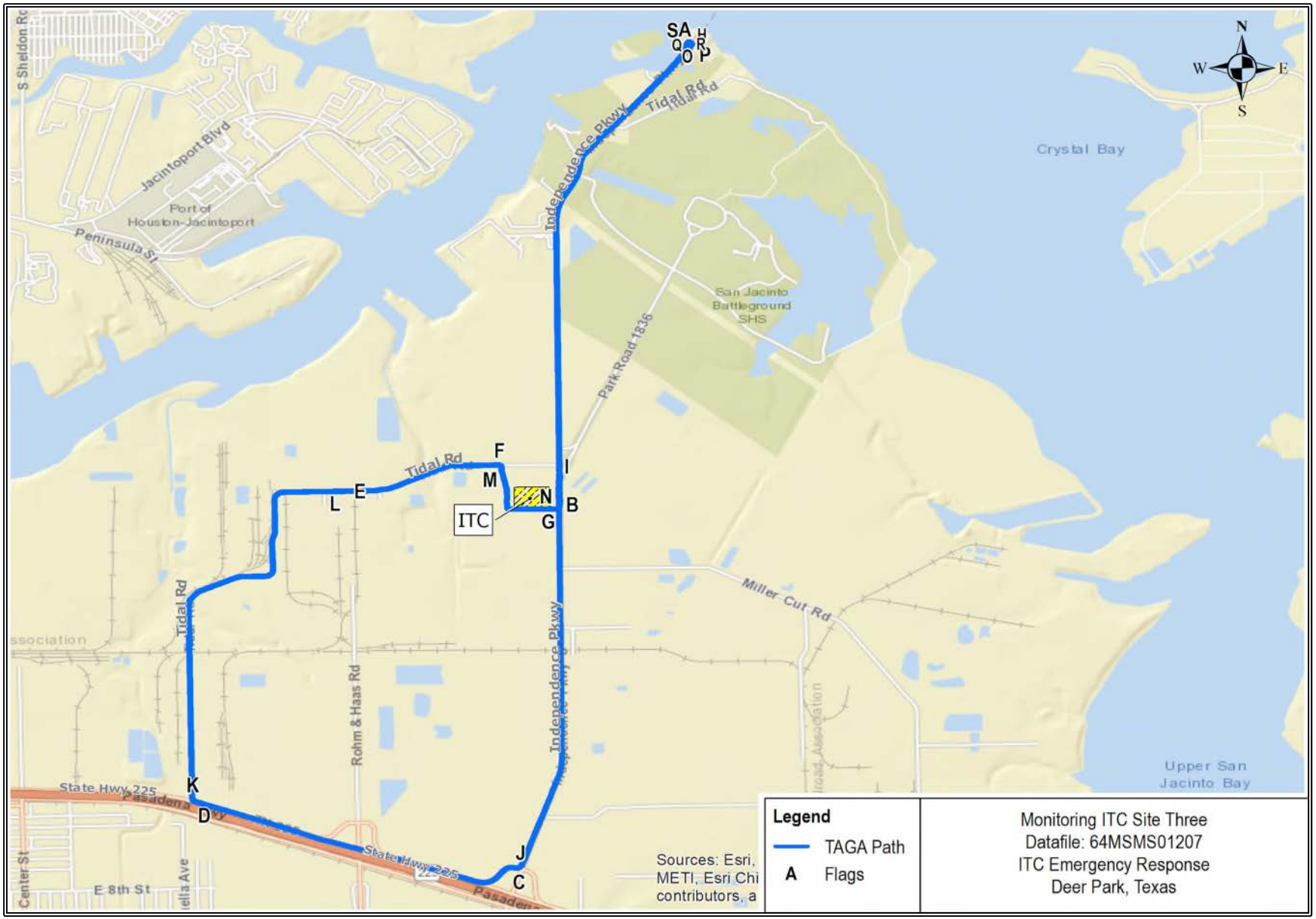


Figure 295a Monitoring ITC Site Three Path, 64MSMS01207

Figure 295b

TAGA File Event Summary
File: 64MSMS01207 Acquired on 17 May 2019 at 10:57:14
Title: Monitoring ITC Site Three

Flag	Time	Sequence	Description
A	0.7	67	Start mobile monitoring at Juan Seguin Park
B	5.5	522	Passing ITC Site
C	9.0	855	Right turn onto Pasadena Freeway Frontage Road
D	11.3	1073	Right turn onto Tidal Road
E	17.5	1669	Cross Rohm and Haas Road
F	20.4	1940	Right turn; Monitoring through facility
G	23.8	2262	Left turn onto Independence Parkway
H	28.2	2678	U-turn on Independence Parkway at Juan Seguin Park
I	32.5	3086	Passing ITC Site
J	36.3	3455	Right turn onto Pasadena Freeway Frontage Road
K	38.9	3699	Right turn onto Tidal Road
L	45.0	4277	Cross Rohm and Haas Road
M	47.8	4550	Right turn; Monitoring through facility
N	51.0	4846	Left turn onto Independence Parkway
O	55.5	5280	End mobile monitoring on Independence Parkway at Juan Seguin Park
P	55.9	5313	Start ambient
Q	56.9	5415	End ambient
R	58.7	5581	Start 30 mL/min spike
S	59.7	5681	End 30 mL/min spike

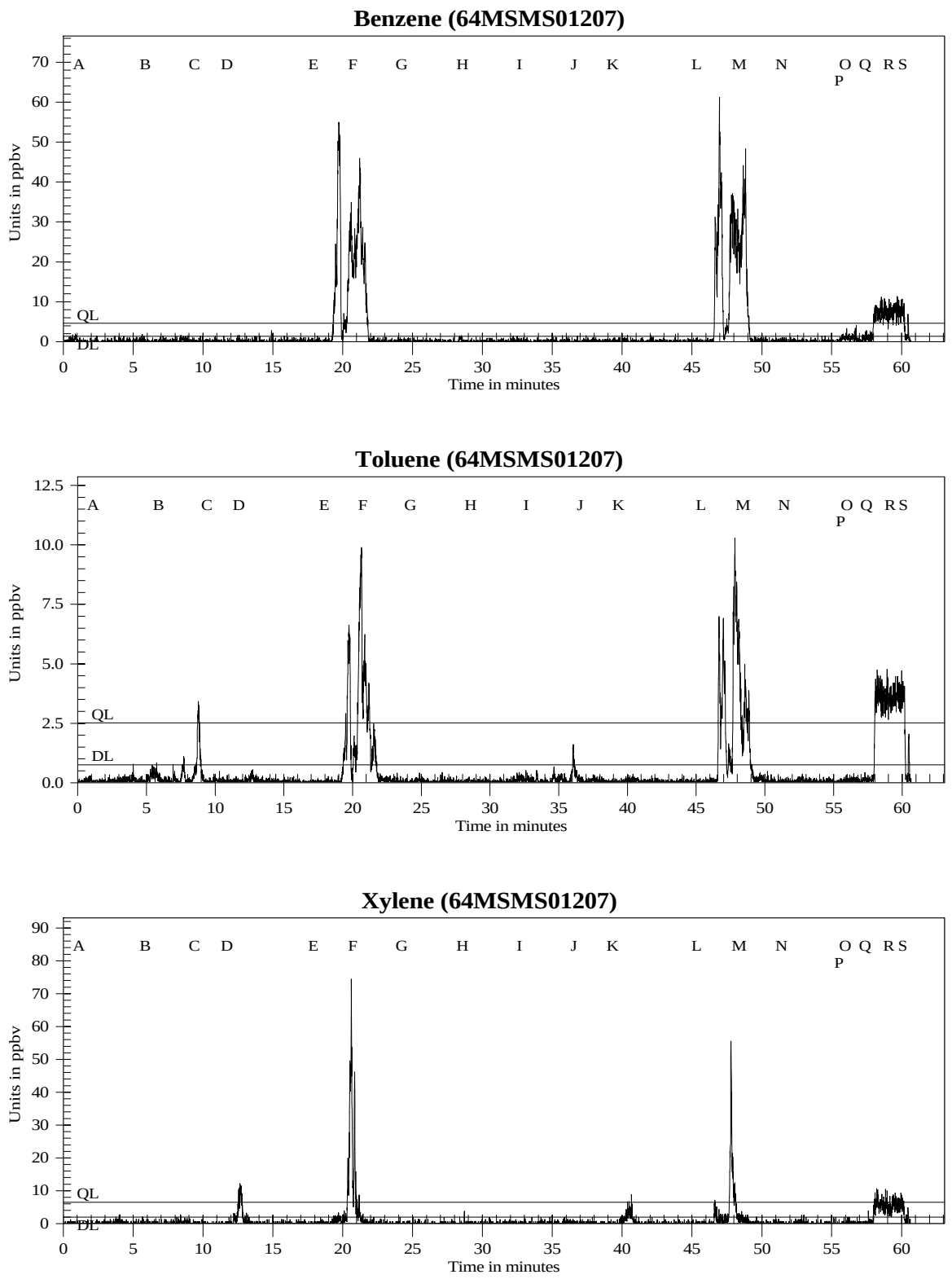


Figure 295c Monitoring ITC Site Three in ppbv for Benzene, Toluene, and Xylenes

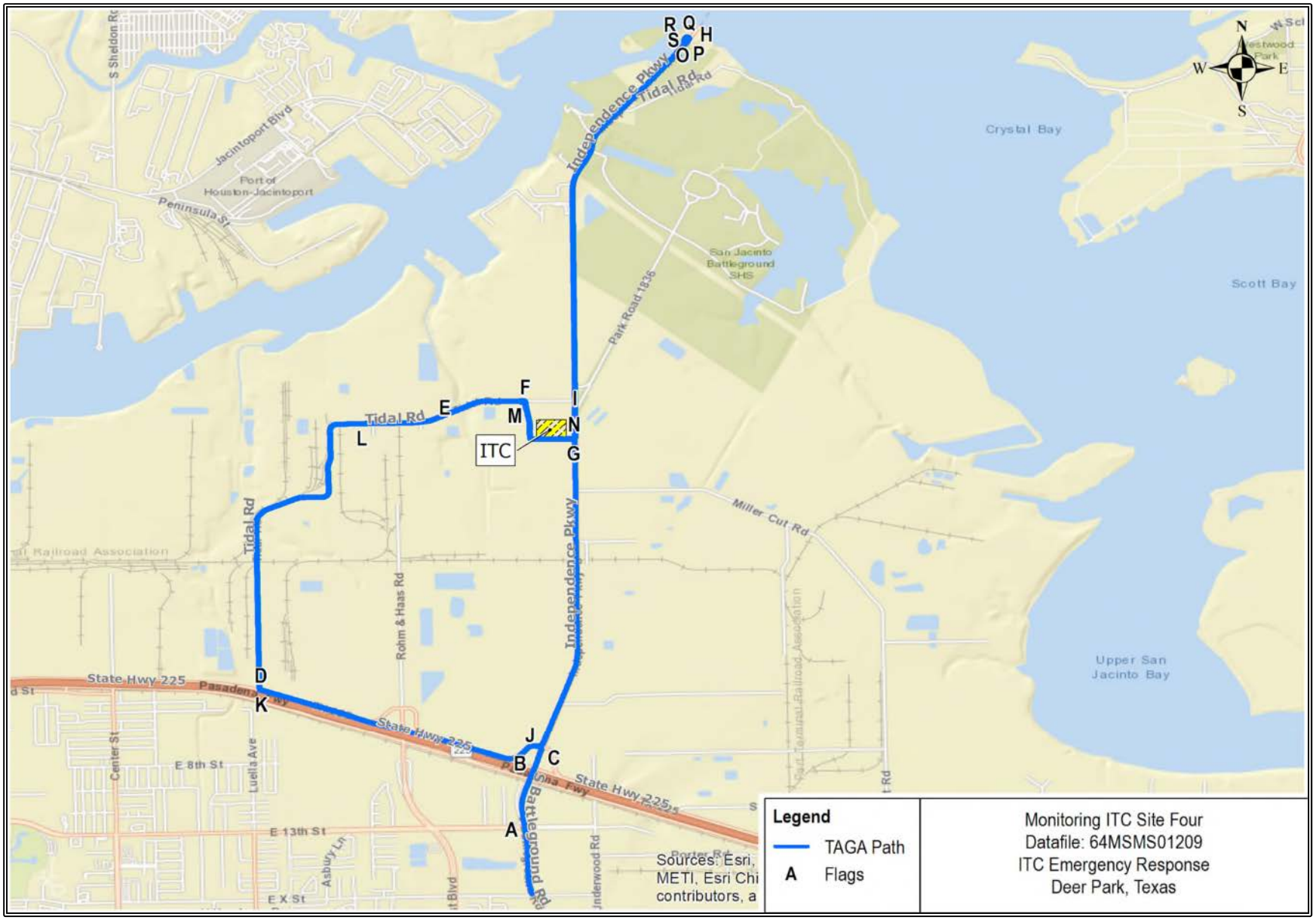


Figure 296a Monitoring ITC Site Four Path, 64MSMS01209

Figure 296b

TAGA File Event Summary
File: 64MSMS01209 Acquired on 17 May 2019 at 13:28:18
Title: Monitoring ITC Site Four

Flag	Time	Sequence	Description
A	0.9	83	Start mobile monitoring on Battleground Road
B	1.5	140	Cross Highway 225 to continue onto Independence Parkway
C	1.9	183	Left turn onto Pasadena Freeway Frontage Road
D	4.2	402	Right turn onto Tidal Road
E	10.6	1010	Cross Rohm and Haas Road
F	12.4	1183	Right turn; Monitoring through ITC facility
G	15.4	1465	Left turn onto Independence Parkway
H	19.8	1880	U-turn on Independence Parkway at Juan Seguin Park
I	24.2	2304	Passing ITC Site
J	28.0	2659	Right turn onto Pasadena Freeway Frontage Road
K	30.5	2897	Right turn onto Tidal Road
L	35.8	3409	Cross Rohm and Haas Road
M	39.6	3770	Right turn; Monitoring through ITC facility
N	42.8	4068	Left turn onto Independence Parkway
O	47.6	4528	End mobile monitoring on Independence Parkway at Juan Seguin Park
P	48.0	4561	Start ambient
Q	48.9	4651	End ambient
R	51.0	4849	Start 30 mL/min spike
S	52.2	4960	End 30 mL/min spike

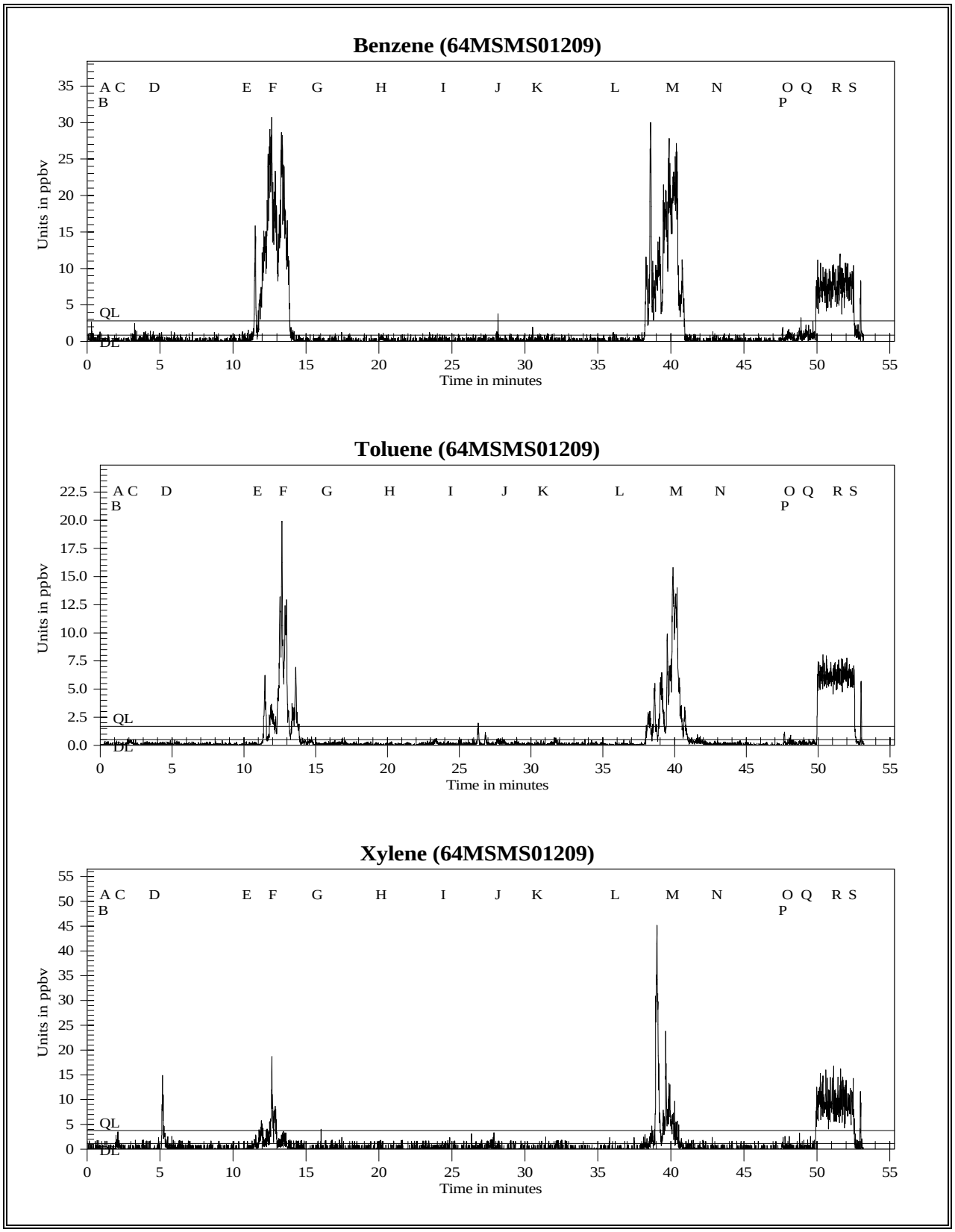


Figure 296c Monitoring ITC Site Four in ppbv for Benzene, Toluene, and Xylenes

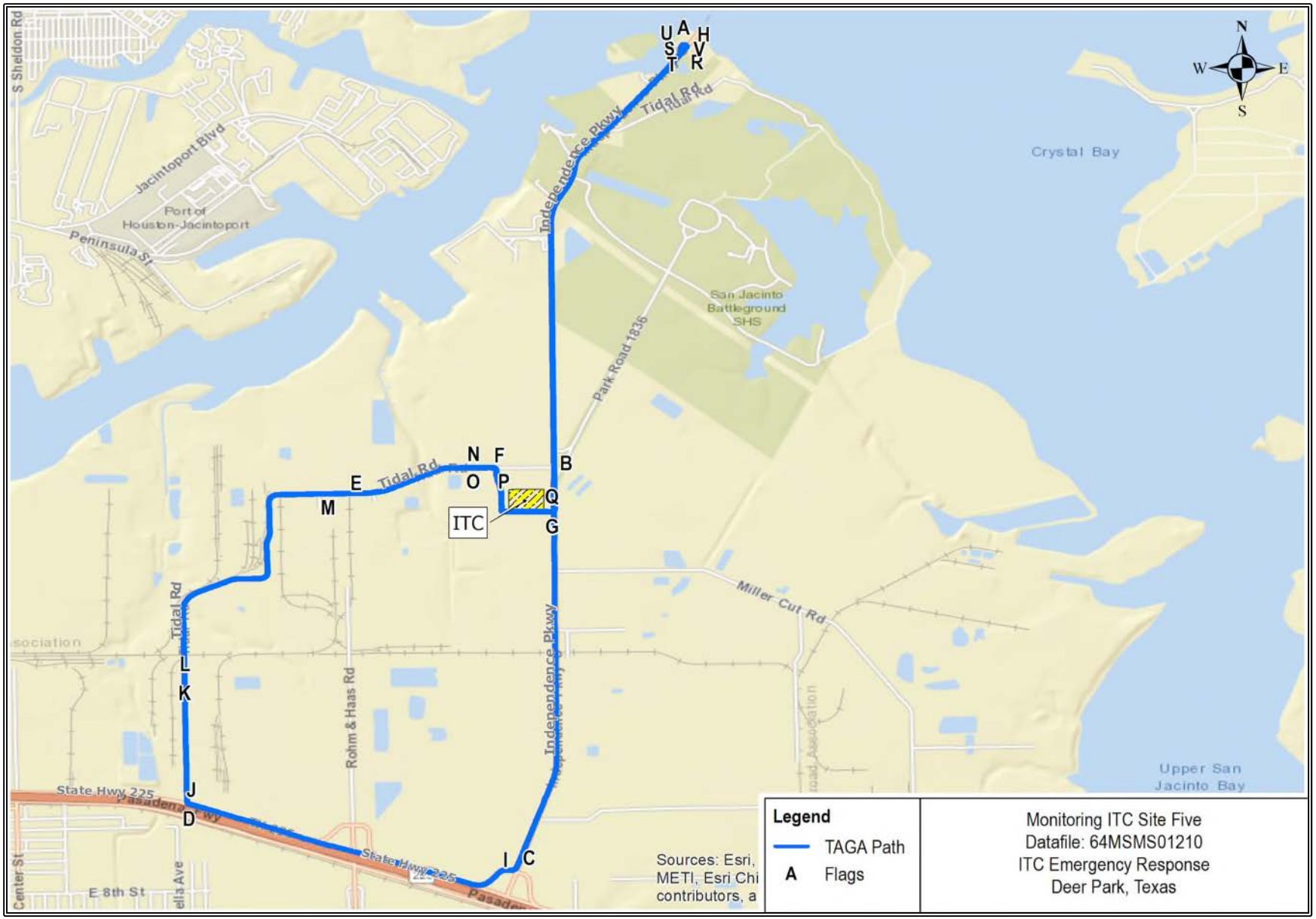


Figure 297a Monitoring ITC Site Five Path, 64MSMS01210

Figure 297b

TAGA File Event Summary
File: 64MSMS01210 Acquired on 17 May 2019 at 14:26:44
Title: Monitoring ITC Site Five

Flag	Time	Sequence	Description
A	0.6	62	Start mobile monitoring at Juan Seguin Park
B	4.9	468	Passing ITC Site
C	8.2	780	Right turn onto Pasadena Freeway Frontage Road
D	10.5	1000	Right turn onto Tidal Road
E	15.7	1496	Cross Rohm and Haas Road
F	19.4	1842	Right turn; Monitoring through facility
G	22.7	2157	Left turn onto Independence Parkway
H	28.6	2720	U-turn on Independence Parkway at Juan Seguin Park
I	36.2	3439	Right turn onto Independence Parkway
J	38.5	3663	Right turn onto Tidal Road
K	40.4	3845	Stationary at railroad crossing on Tidal Road
L	64.7	6155	Resume mobile monitoring on Tidal Road
M	71.2	6771	Cross Rohm and Haas Road
N	74.4	7071	Stationary at railroad crossing on Tidal Road
O	77.0	7321	Resume mobile monitoring on Tidal Road
P	77.3	7353	Right turn; Monitoring through ITC facility
Q	82.8	7876	Left turn onto Independence Parkway
R	88.2	8388	End mobile monitoring on Independence Parkway at Juan Seguin Road
S	88.8	8445	Start ambient
T	89.8	8541	End ambient
U	91.3	8681	Start 30 mL/min spike
V	92.6	8804	End 30 mL/min spike
Notes:		High background was observed for the post run ambient location.	

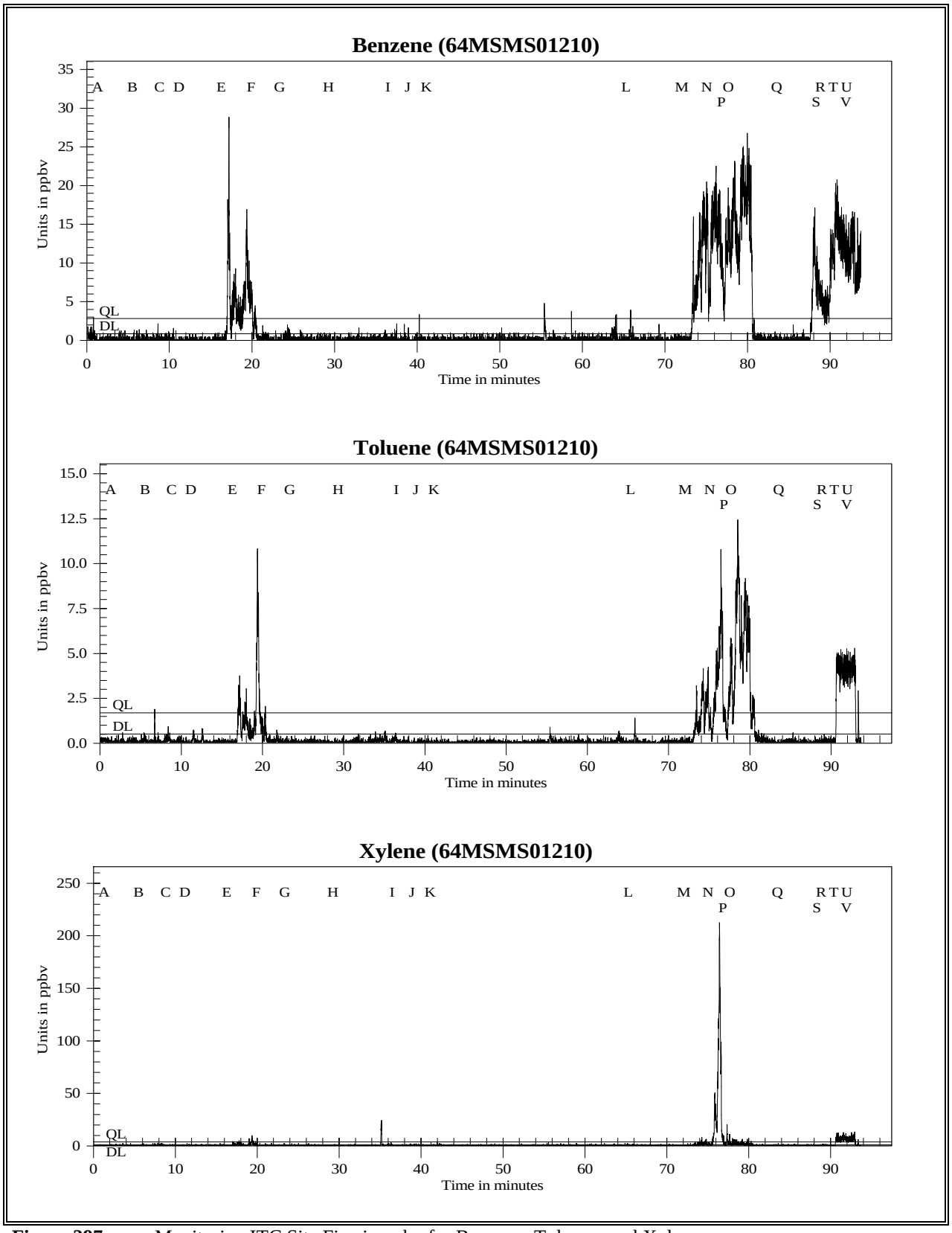


Figure 297c Monitoring ITC Site Five in ppbv for Benzene, Toluene, and Xylenes

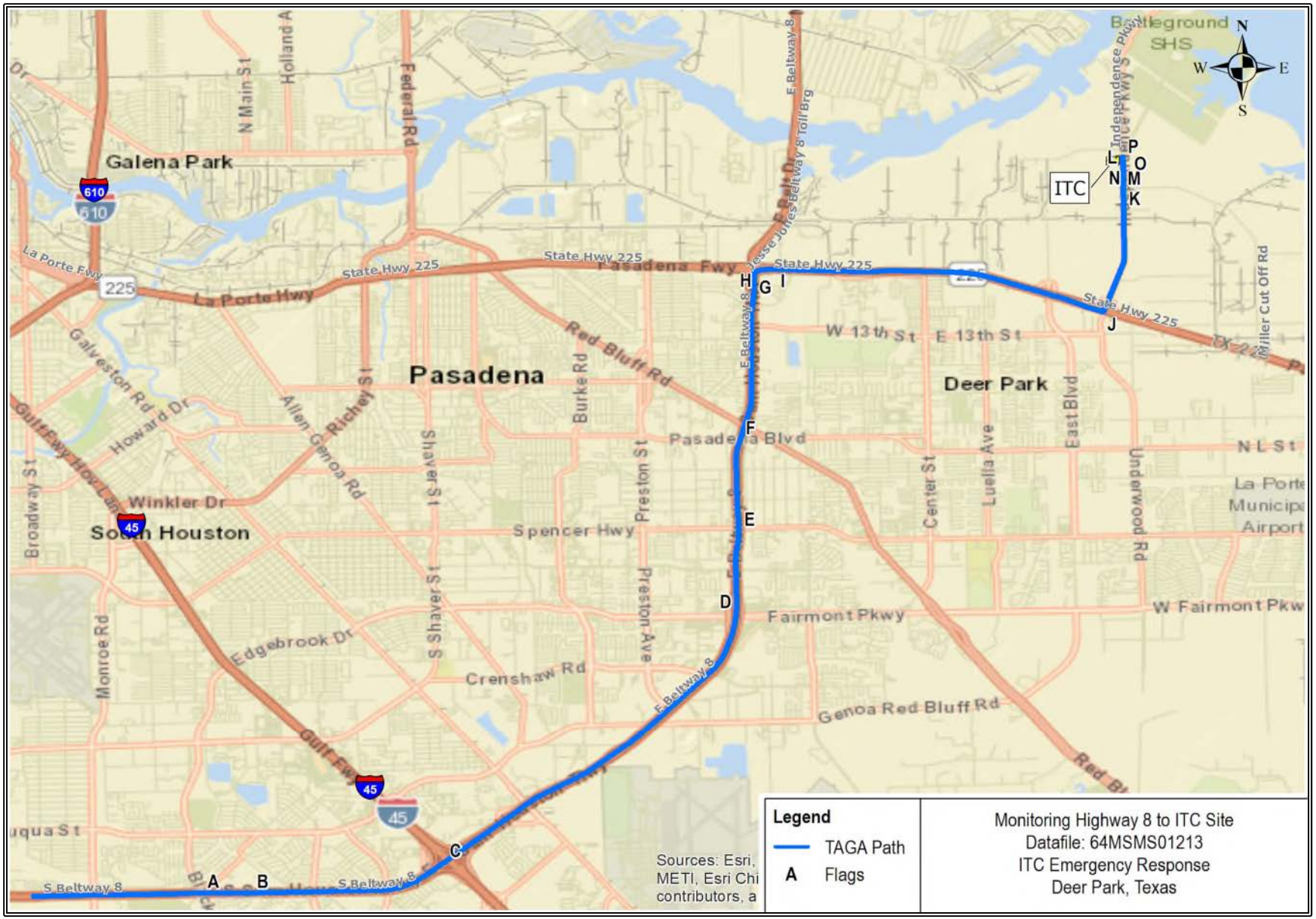


Figure 298a Monitoring Highway 8 to ITC Site Path, 64MSMS01213

Figure 298b

TAGA File Event Summary
File: 64MSMS01213 Acquired on 18 May 2019 at 08:14:54
Title: Monitoring Highway 8 to ITC Site

Flag	Time	Sequence	Description
A	1.6	154	Start mobile monitoring on Highway 8 North
B	1.8	170	Continuing onto Highway 8 North
C	3.9	368	Cross Highway 45
D	8.2	780	Cross Fairmont Parkway
E	9.1	867	Cross Spencer Highway
F	10.2	969	Cross Pasadena Boulevard
G	11.9	1130	Exit onto Highway 8 Service Road
H	12.4	1183	Right turn onto Pasadena Freeway Frontage Road
I	12.9	1229	Merge onto Highway 225 East
J	16.9	1604	Left turn onto Independence Parkway
K	19.6	1861	Cross Miller Cut-Off Road
L	20.7	1967	End mobile monitoring on Independence Parkway
M	21.2	2018	Start ambient
N	22.2	2116	End ambient
O	24.2	2303	Start 30 mL/min spike
P	25.2	2400	End 30 mL/min spike

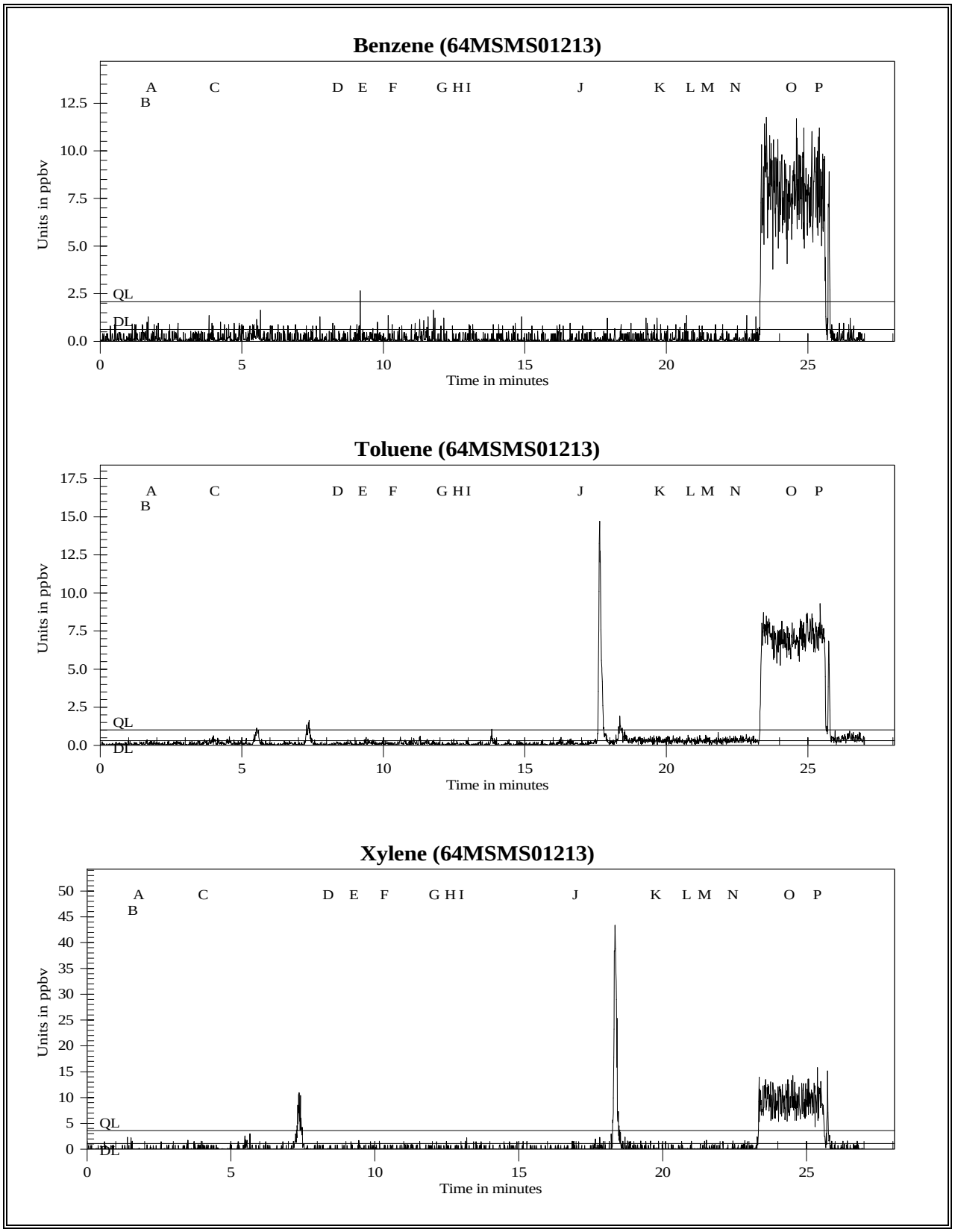


Figure 298c Monitoring Highway 8 to ITC Site in ppbv for Benzene, Toluene, and Xylenes

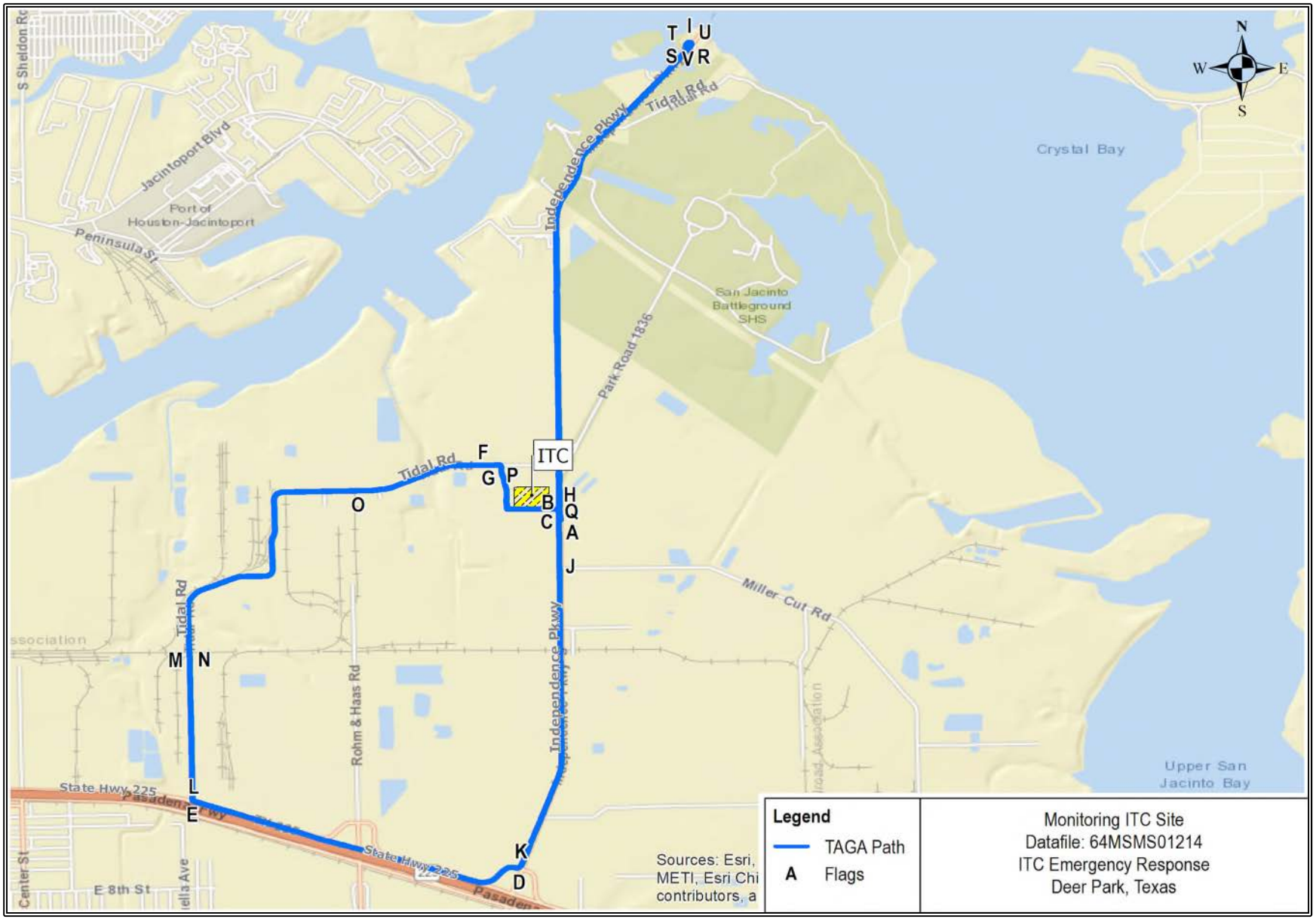


Figure 299a Monitoring ITC Site Path, 64MSMS01214

Figure 299b

TAGA File Event Summary
File: 64MSMS01214 Acquired on 18 May 2019 at 08:47:05
Title: Monitoring ITC Site

Flag	Time	Sequence	Description
A	1.2	116	Start mobile monitoring on Independence Parkway
B	2.0	188	Continuing onto Independence Parkway
C	2.2	210	U-turn on Independence Parkway
D	6.0	573	Right turn onto Pasadena Freeway Frontage Road
E	8.3	791	Right turn onto Tidal Road
F	16.6	1580	Cross railroad tracks on Tidal Road
G	17.1	1630	Right turn; monitoring through ITC facility
H	20.4	1939	Left turn onto Independence Parkway
I	26.6	2530	U-turn on Independence Parkway at Juan Seguin Park
J	35.3	3355	Cross Miller Cut-Off Road
K	39.1	3721	Right turn onto Pasadena Freeway Frontage Road
L	41.9	3987	Right turn onto Tidal Road
M	44.4	4219	Stationary at railroad crossing on Tidal Road
N	44.8	4260	Resume mobile monitoring on Tidal Road
O	48.8	4637	Cross Rohm and Haas Road
P	51.2	4871	Right turn; monitoring through ITC facility
Q	54.8	5207	Left turn onto Independence Parkway
R	62.7	5962	End mobile monitoring on Independence Parkway at Juan Seguin Park
S	63.1	5996	Start ambient
T	64.2	6107	End ambient
U	65.8	6256	Start 30 mL/min spike
V	66.8	6353	End 30 mL/min spike

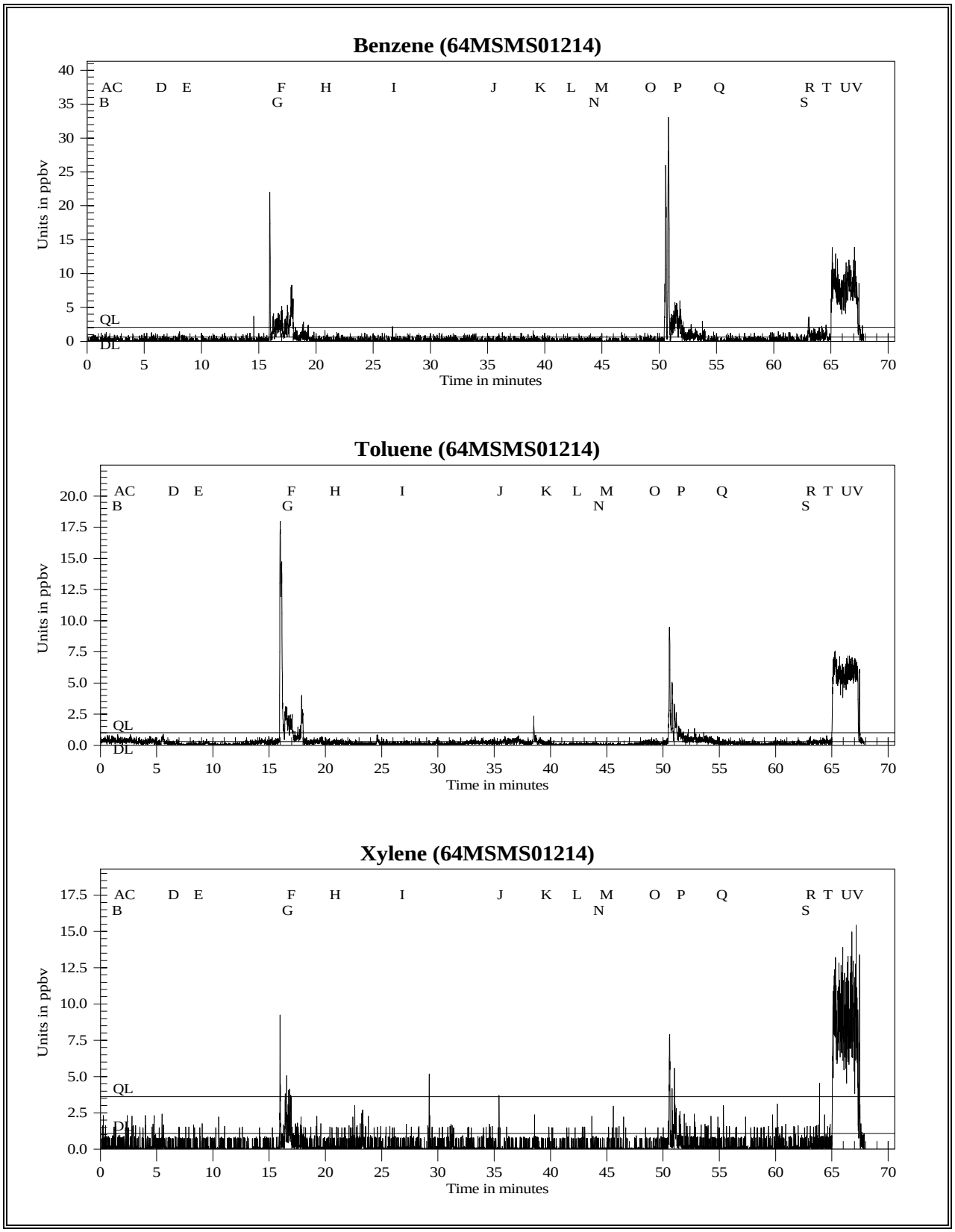


Figure 299c Monitoring ITC Site in ppbv for Benzene, Toluene, and Xylenes

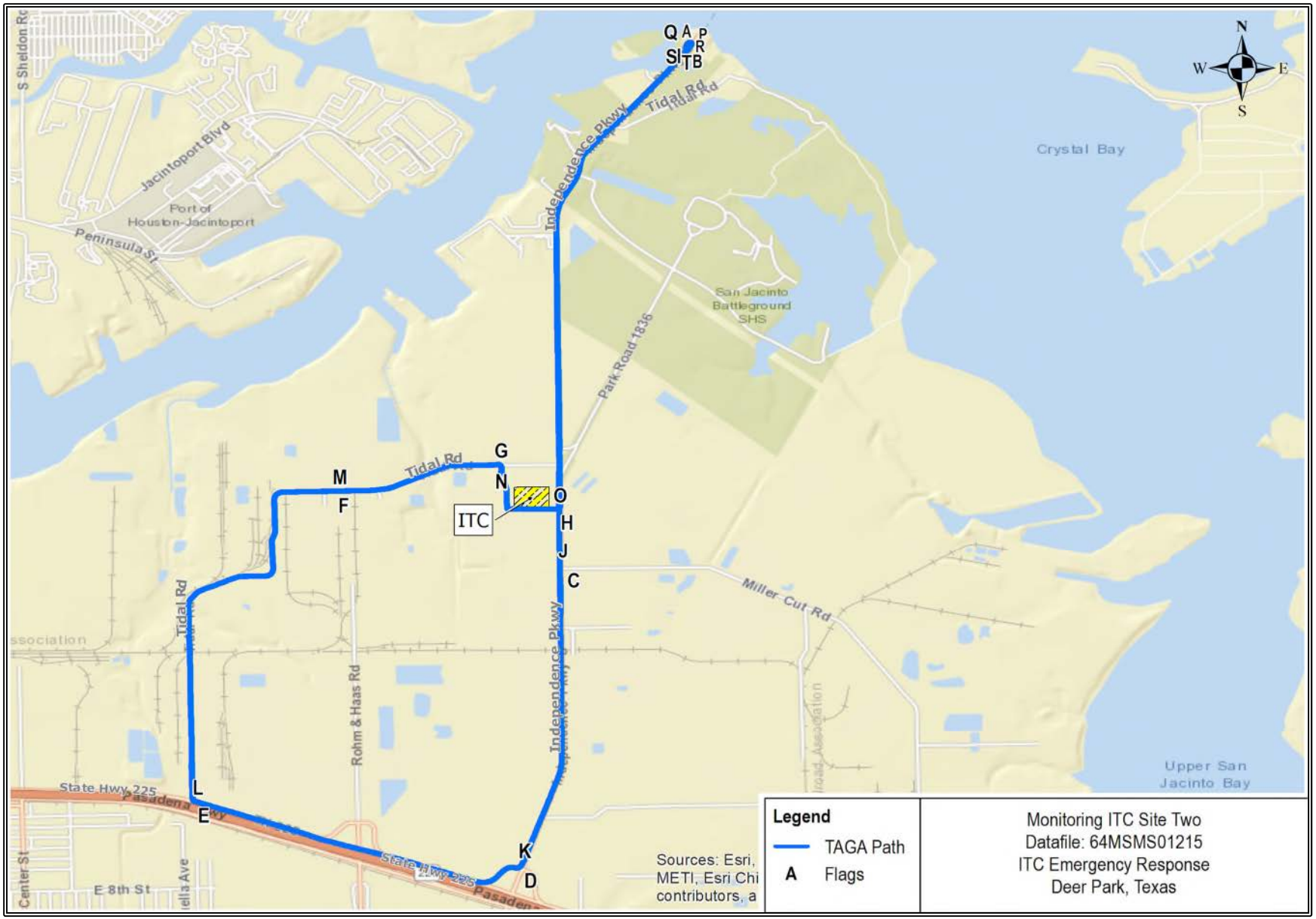


Figure 300a Monitoring ITC Site Two Path, 64MSMS01215

Figure 300b

TAGA File Event Summary
File: 64MSMS01215 Acquired on 18 May 2019 at 09:57:50
Title: Monitoring ITC Site Two

Flag	Time	Sequence	Description
A	0.9	86	Start mobile monitoring on Independence Parkway at Juan Seguin Park
B	1.4	134	Continuing onto Independence Parkway
C	9.5	901	Cross Miller Cut-Off Road
D	13.2	1256	Right turn onto Pasadena Freeway Frontage Road
E	16.0	1519	Right turn onto Tidal Road
F	22.1	2103	Cross Rohm and Haas Road
G	24.7	2349	Right turn; monitoring through ITC facility
H	28.0	2667	Left turn onto Independence Parkway
I	34.9	3315	U-turn on Independence Parkway at Juan Seguin Park
J	43.5	4135	Cross Miller Cut-Off Road
K	47.7	4539	Right turn onto Pasadena Freeway Frontage Road
L	50.8	4829	Right turn onto Tidal Road
M	57.5	5469	Cross Rohm and Haas Road
N	61.2	5821	Right turn; monitoring through ITC facility
O	64.7	6149	Left turn onto Independence Parkway
P	71.9	6832	End mobile monitoring on Independence Parkway at Juan Seguin Park
Q	72.3	6871	Start ambient
R	73.3	6968	End ambient
S	74.7	7098	Start 30 mL/min spike
T	75.6	7193	End 30 mL/min spike

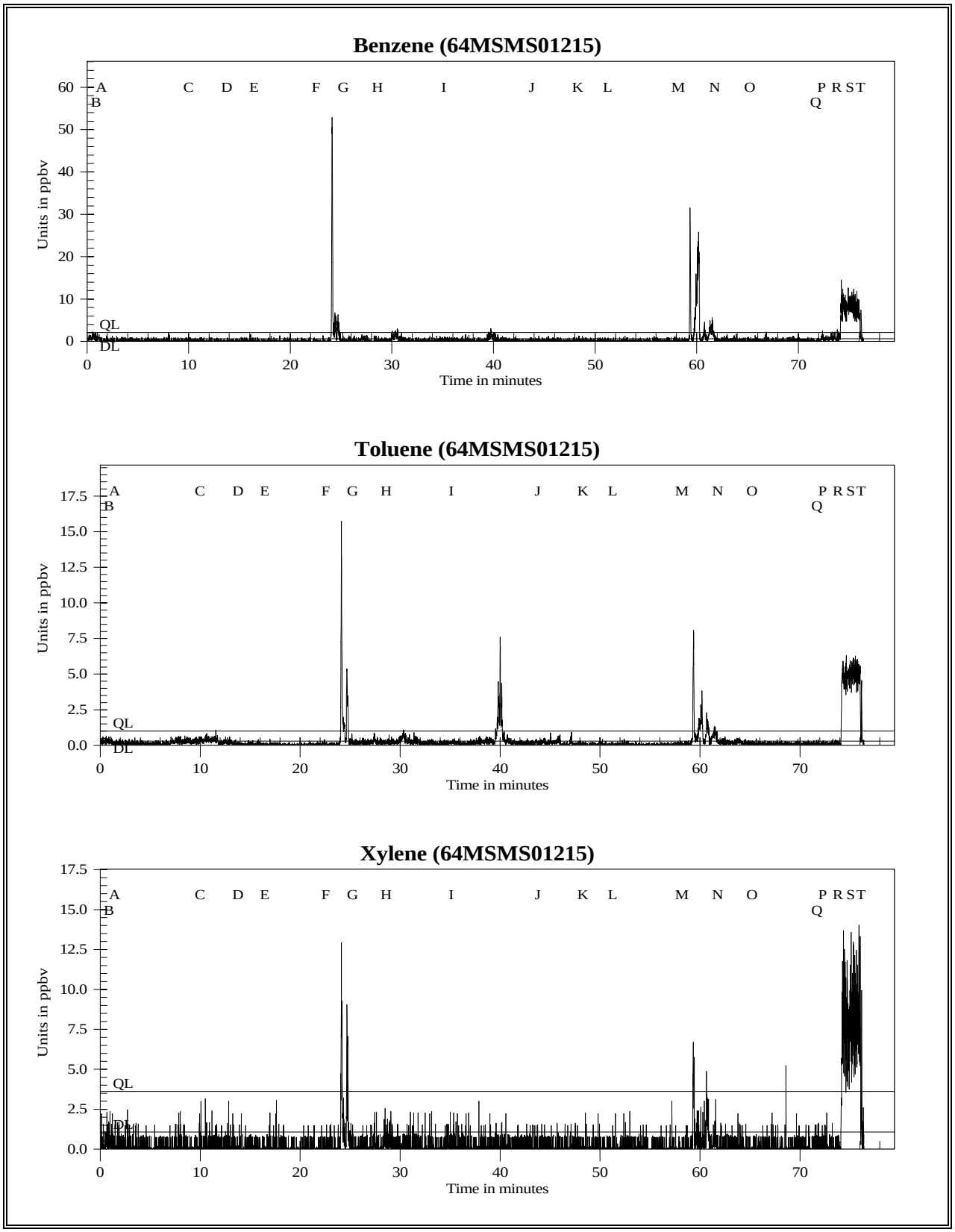


Figure 300c Monitoring ITC Site Two in ppbv for Benzene, Toluene, and Xylenes

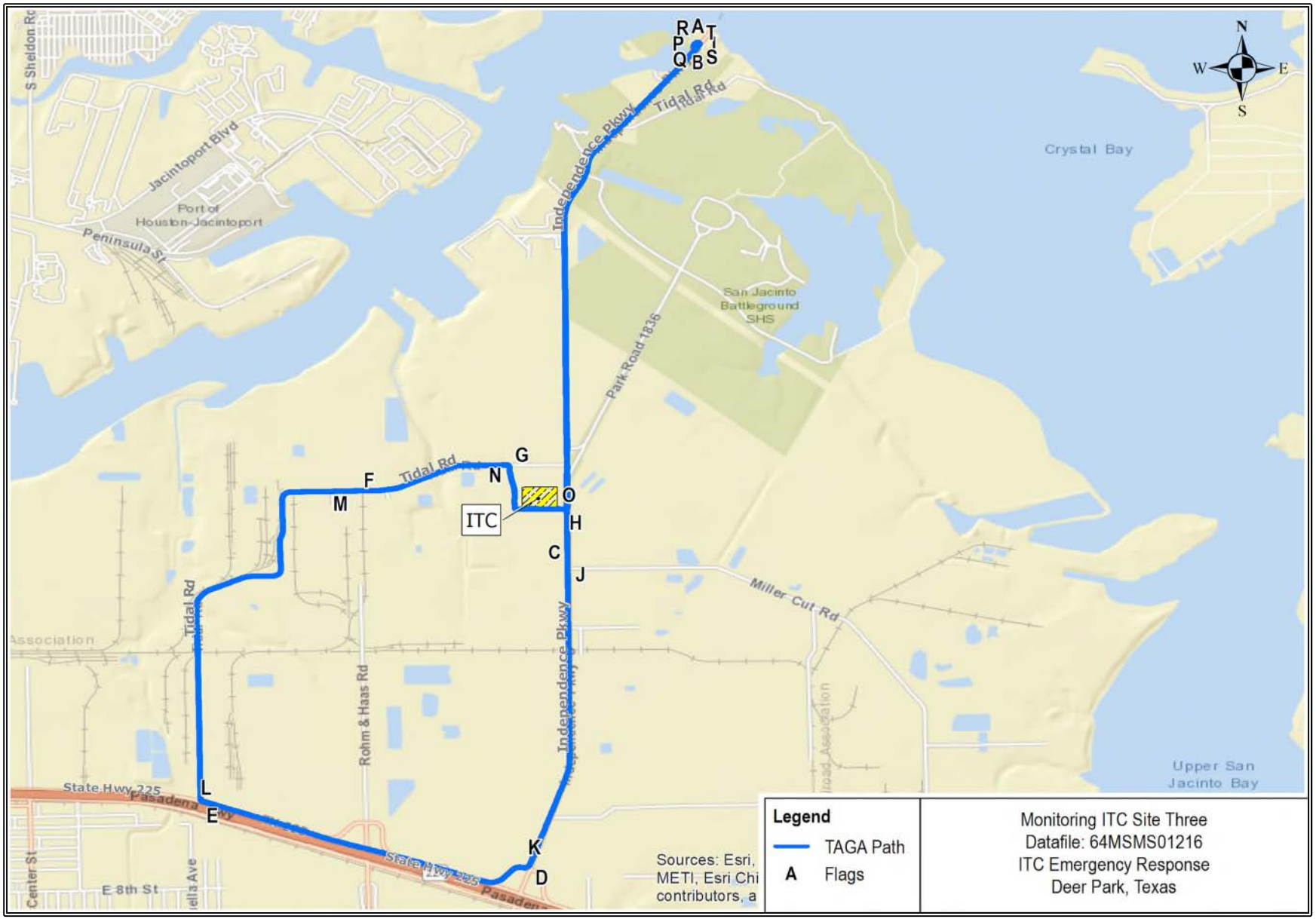


Figure 301a Monitoring ITC Site Three Path, 64MSMS01216

Figure 301b

TAGA File Event Summary
File: 64MSMS01216 Acquired on 18 May 2019 at 11:17:52
Title: Monitoring ITC Site Three

Flag	Time	Sequence	Description
A	0.9	88	Start mobile monitoring on Independence Parkway at Juan Seguin Park
B	2.1	197	Continuing onto Independence Parkway
C	11.5	1094	Cross Miller Cut-Off Road
D	15.9	1511	Right turn onto Pasadena Freeway Frontage Road
E	19.0	1805	Right turn onto Tidal Road
F	25.9	2466	Cross Rohm and Haas Road
G	29.7	2824	Right turn; monitoring through ITC facility
H	33.5	3182	Left turn onto Independence Parkway
I	41.1	3910	U-turn on Independence Parkway at Juan Seguin Park
J	49.9	4742	Cross Miller Cut-Off Road
K	53.6	5095	Right turn onto Pasadena Freeway Frontage Road
L	56.5	5374	Right turn onto Tidal Road
M	63.4	6028	Cross Rohm and Haas Road
N	67.3	6402	Right turn; monitoring through ITC facility
O	71.0	6755	Left turn onto Independence Parkway
P	78.5	7462	End mobile monitoring on Independence Parkway at Juan Seguin Park
Q	79.2	7526	Start ambient
R	80.2	7622	End ambient
S	81.4	7743	Start 30 mL/min spike
T	82.4	7838	End 30 mL/min spike

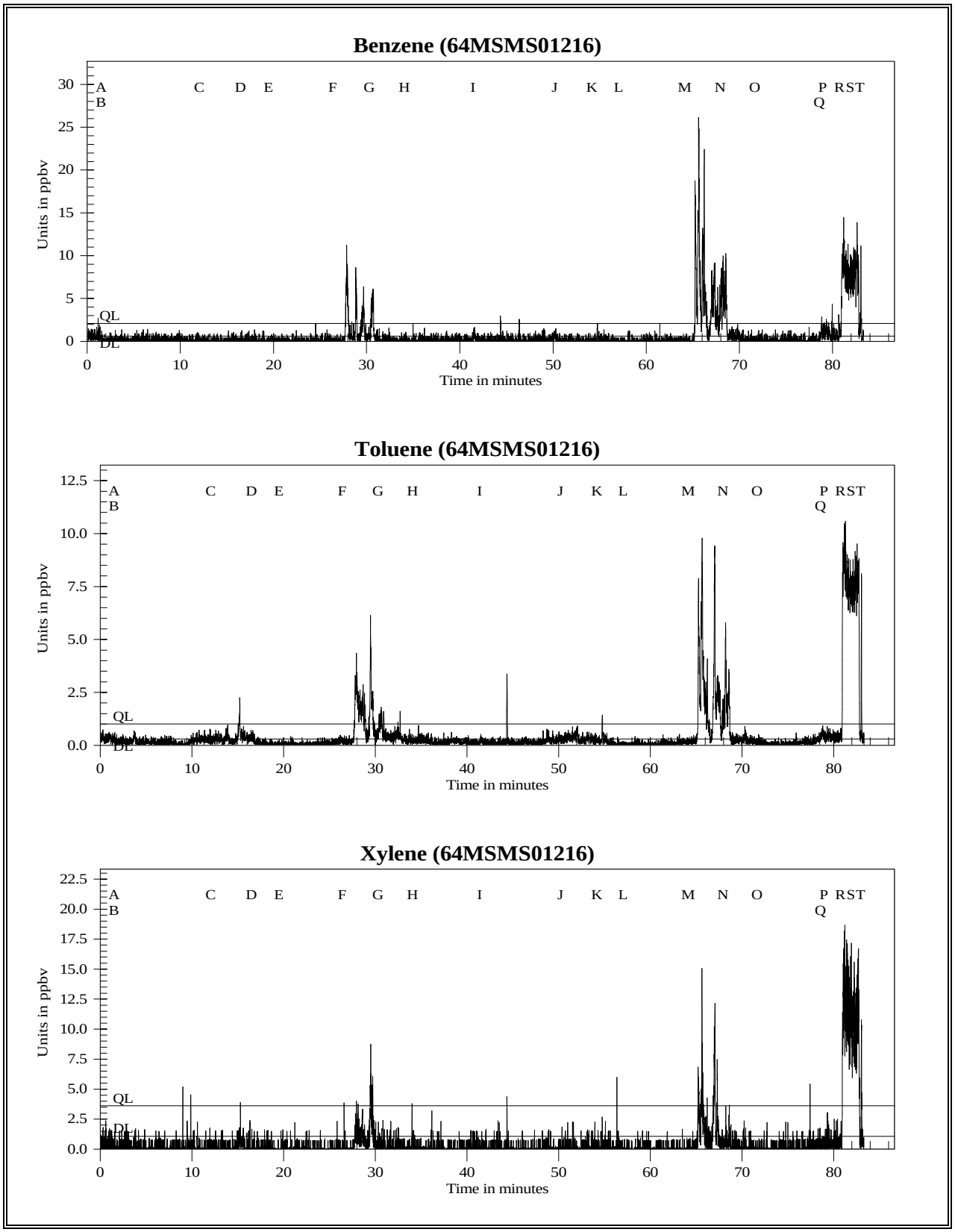


Figure 301c Monitoring ITC Site Three in ppbv for Benzene, Toluene, and Xylenes

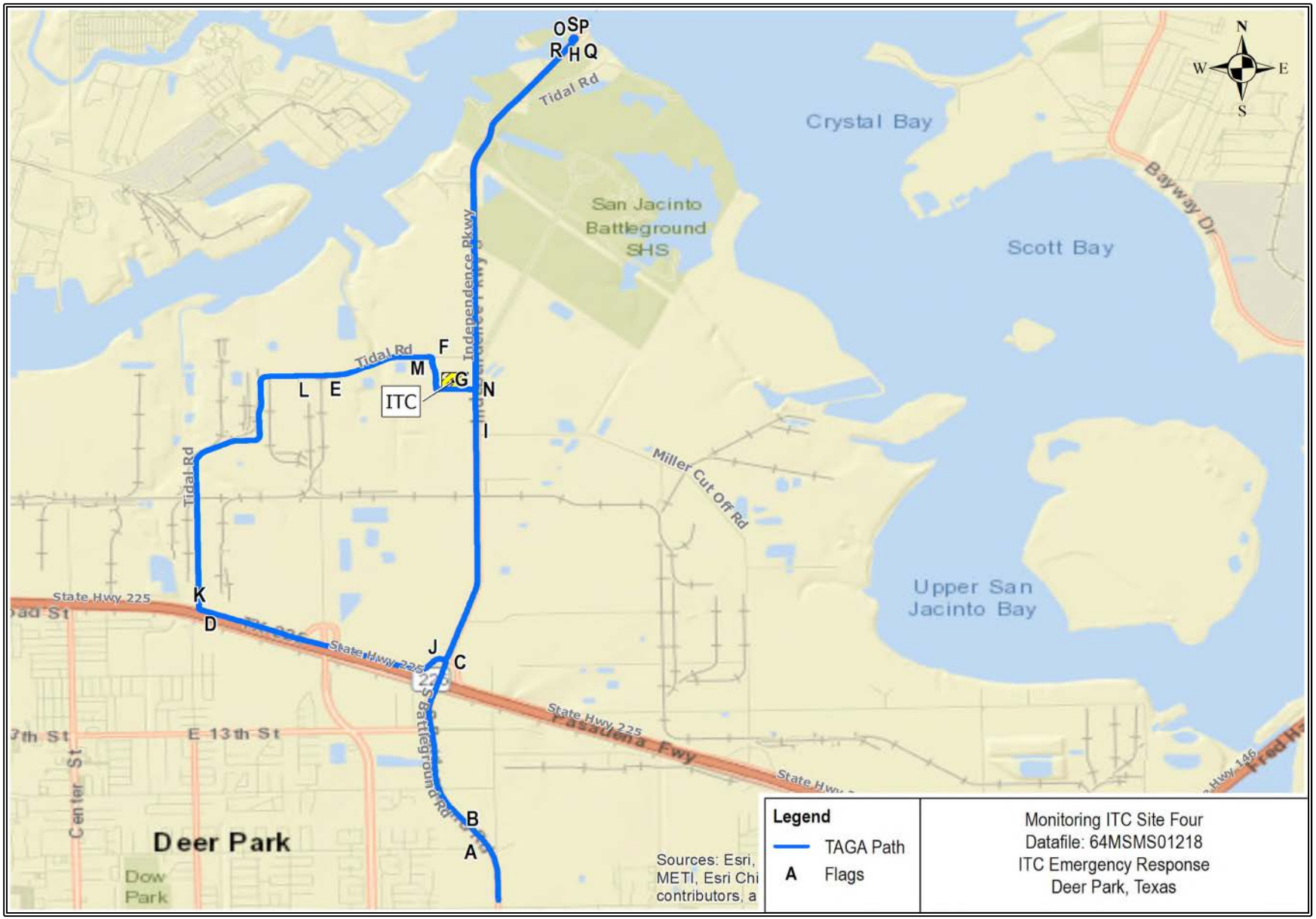


Figure 302a Monitoring ITC Site Four Path, 64MSMS01218

Figure 302b

TAGA File Event Summary
File: 64MSMS01218 Acquired on 18 May 2019 at 14:31:05
Title: Monitoring ITC Site Four

Flag	Time	Sequence	Description
A	1.1	105	Start mobile monitoring Battleground Road
B	1.2	115	Continuing onto Battleground Road
C	4.8	460	Left turn onto Pasadena Freeway Frontage Road
D	7.4	703	Right turn onto Tidal Road
E	13.5	1287	Cross Rohm and Haas Road
F	16.6	1580	Right turn; monitoring through ITC facility
G	20.6	1956	Left turn onto Independence Parkway
H	28.2	2683	U-turn on Independence Parkway at Juan Seguin Park
I	37.0	3514	Cross Miller Cut-Off Road
J	41.4	3940	Right turn onto Pasadena Freeway Frontage Road
K	44.6	4239	Right turn onto Tidal Road
L	50.6	4816	Cross Rohm and Haas Road
M	54.3	5163	Right turn; monitoring through ITC facility
N	57.9	5504	Left turn onto Independence Parkway
O	65.0	6185	End mobile monitoring on Independence Parkway at Juan Seguin Park
P	65.3	6209	Start ambient
Q	66.3	6305	End ambient
R	67.5	6421	Start 30 mL/min spike
S	68.5	6518	End 30 mL/min spike

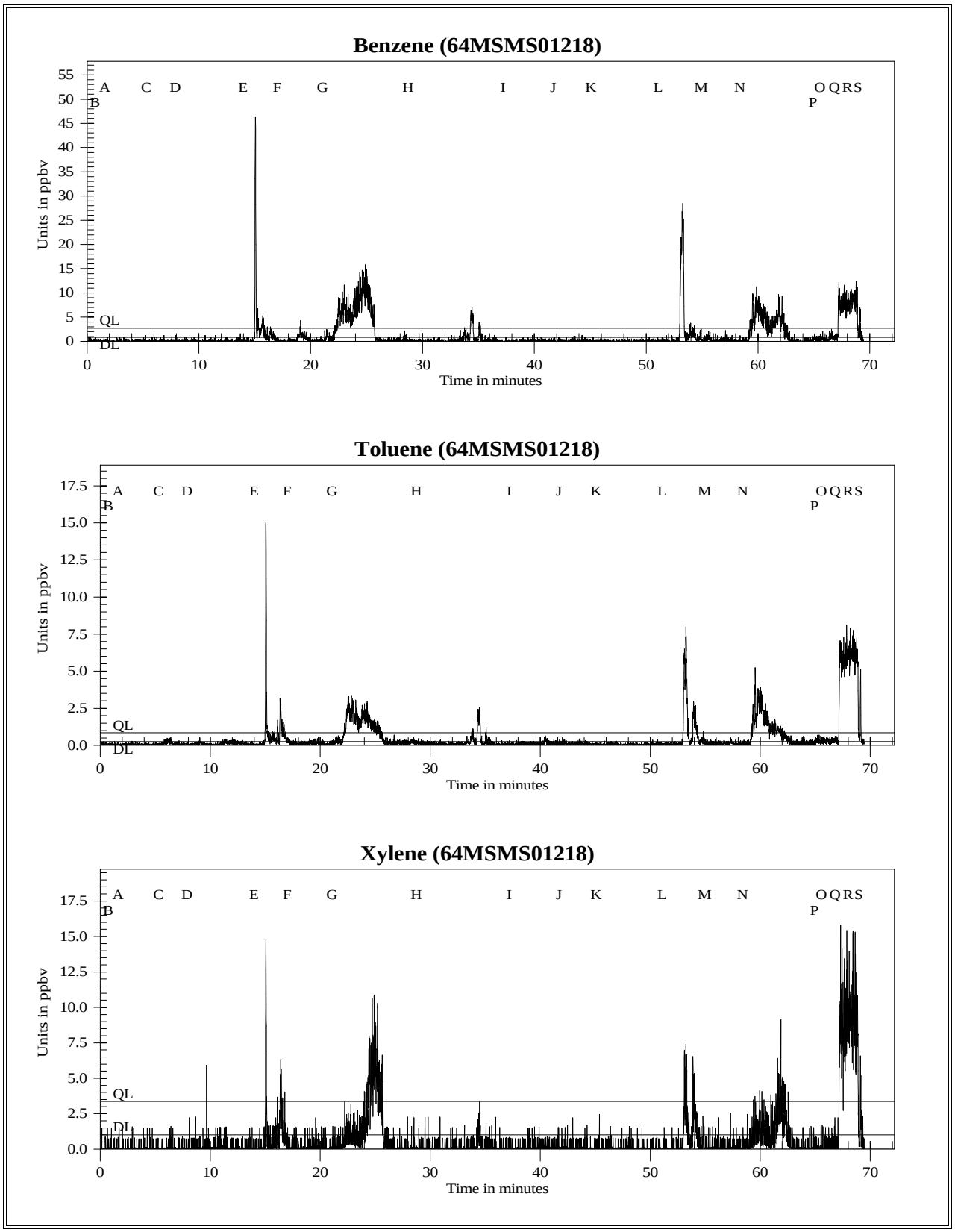


Figure 302c Monitoring ITC Site Four in ppbv for Benzene, Toluene, and Xylenes

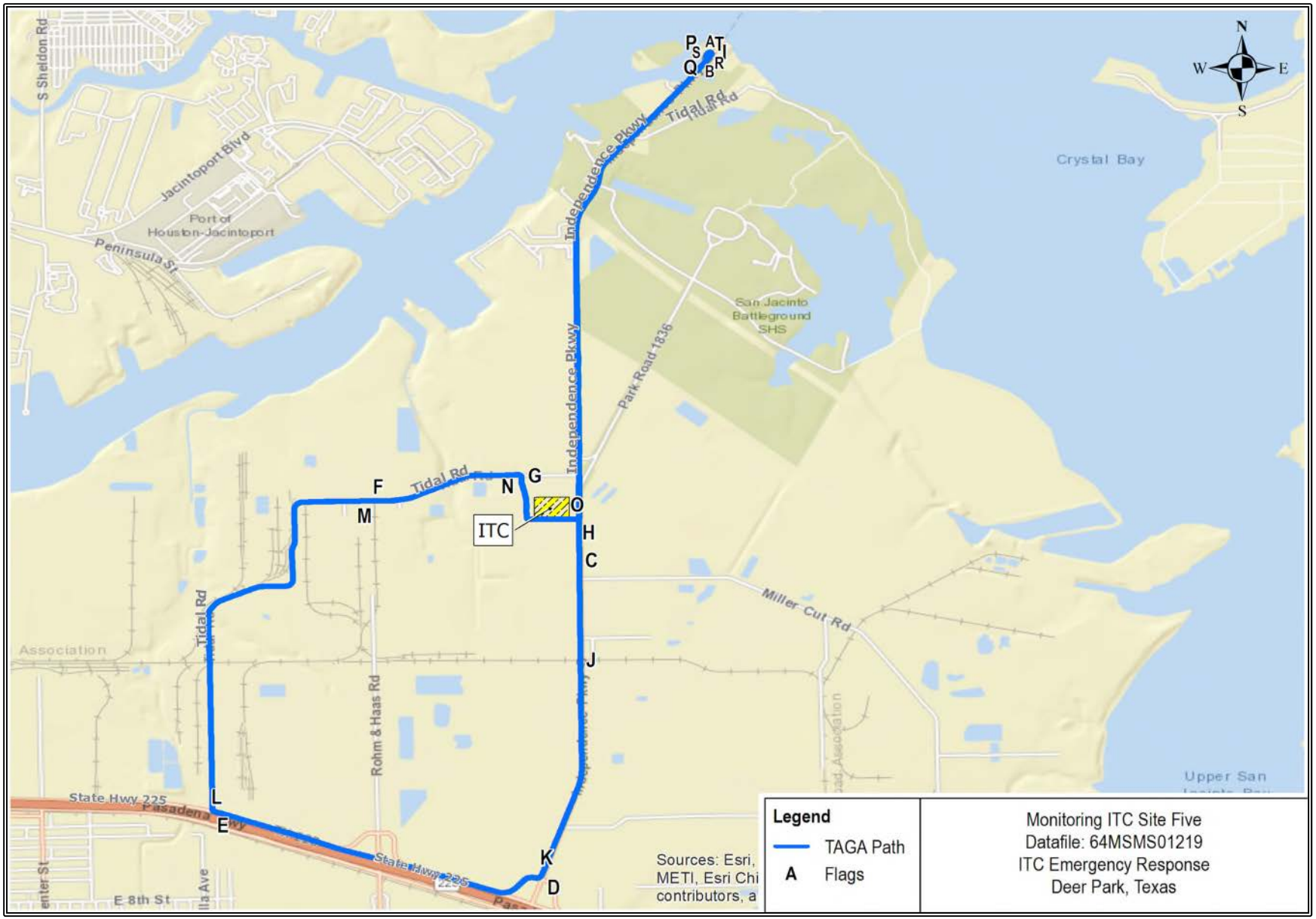


Figure 303a Monitoring ITC Site Five Path, 64MSMS01219

Figure 303b

TAGA File Event Summary
File: 64MSMS01219 Acquired on 18 May 2019 at 15:42:44
Title: Monitoring ITC Site Five

Flag	Time	Sequence	Description
A	0.8	78	Start mobile monitoring on Independence Parkway at Juan Seguin Park
B	1.5	146	Continuing onto Independence Parkway
C	8.8	839	Cross Miller Cut-Off Road
D	12.4	1178	Right turn onto Pasadena Freeway Frontage Road
E	15.3	1457	Right turn onto Tidal Road
F	21.0	2002	Cross Rohm and Haas Road
G	23.8	2262	Right turn; monitoring through ITC facility
H	26.8	2550	Left turn onto Independence Parkway
I	34.5	3284	U-turn on Independence Parkway at Juan Seguin Park
J	42.4	4029	Cross Miller Cut-Off Road
K	44.3	4217	Right turn onto Pasadena Freeway Frontage Road
L	47.0	4466	Right turn onto Tidal Road
M	52.3	4970	Cross Rohm and Haas Road
N	55.1	5242	Right turn; monitoring through ITC facility
O	58.0	5513	Left turn onto Independence Parkway
P	64.0	6090	End mobile monitoring on Independence Parkway at Juan Seguin Park
Q	64.3	6114	Start ambient
R	65.3	6209	End ambient
S	66.5	6325	Start 30 mL/min spike
T	67.5	6420	End 30 mL/min spike

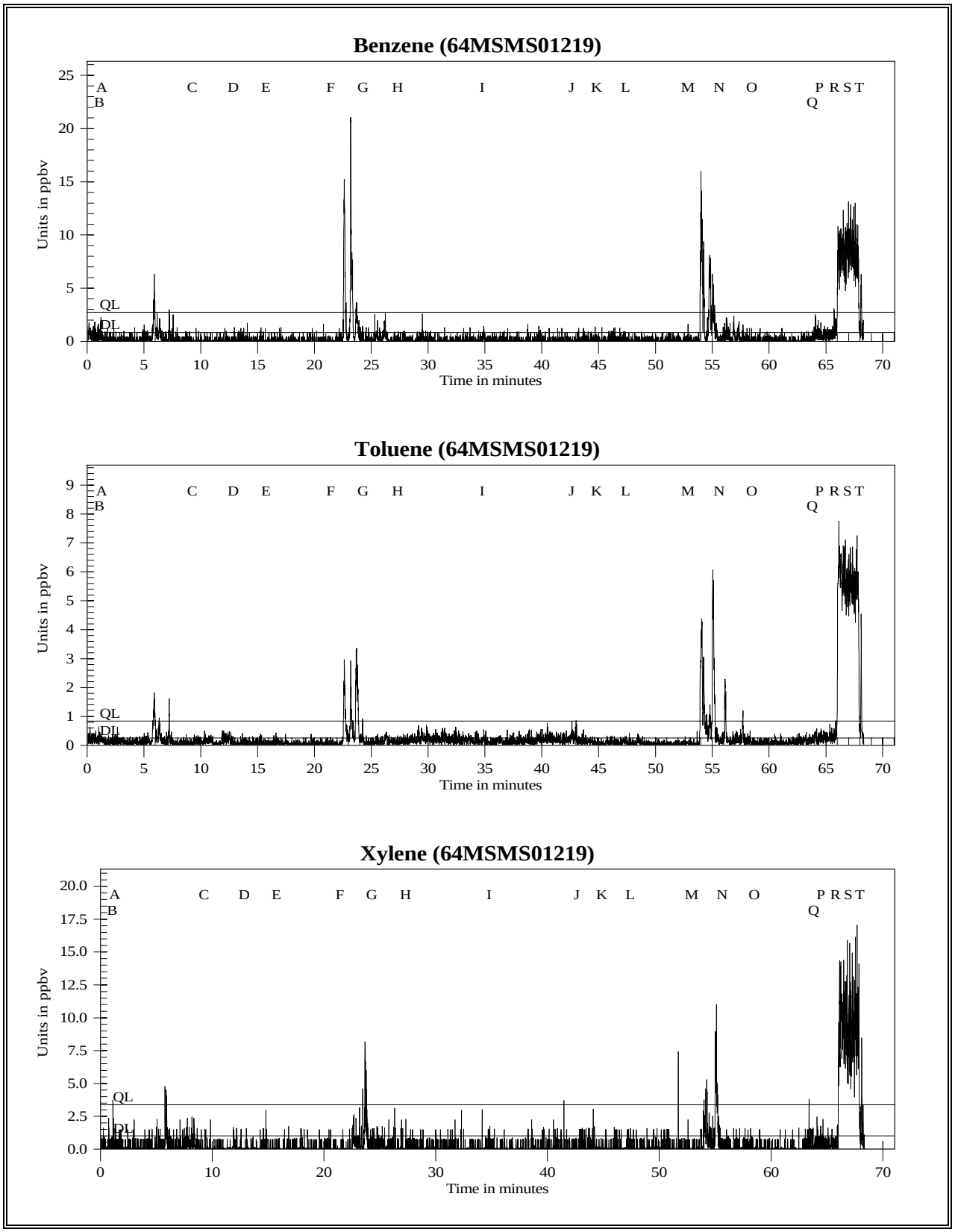


Figure 303c Monitoring ITC Site Five in ppbv for Benzene, Toluene, and Xylenes

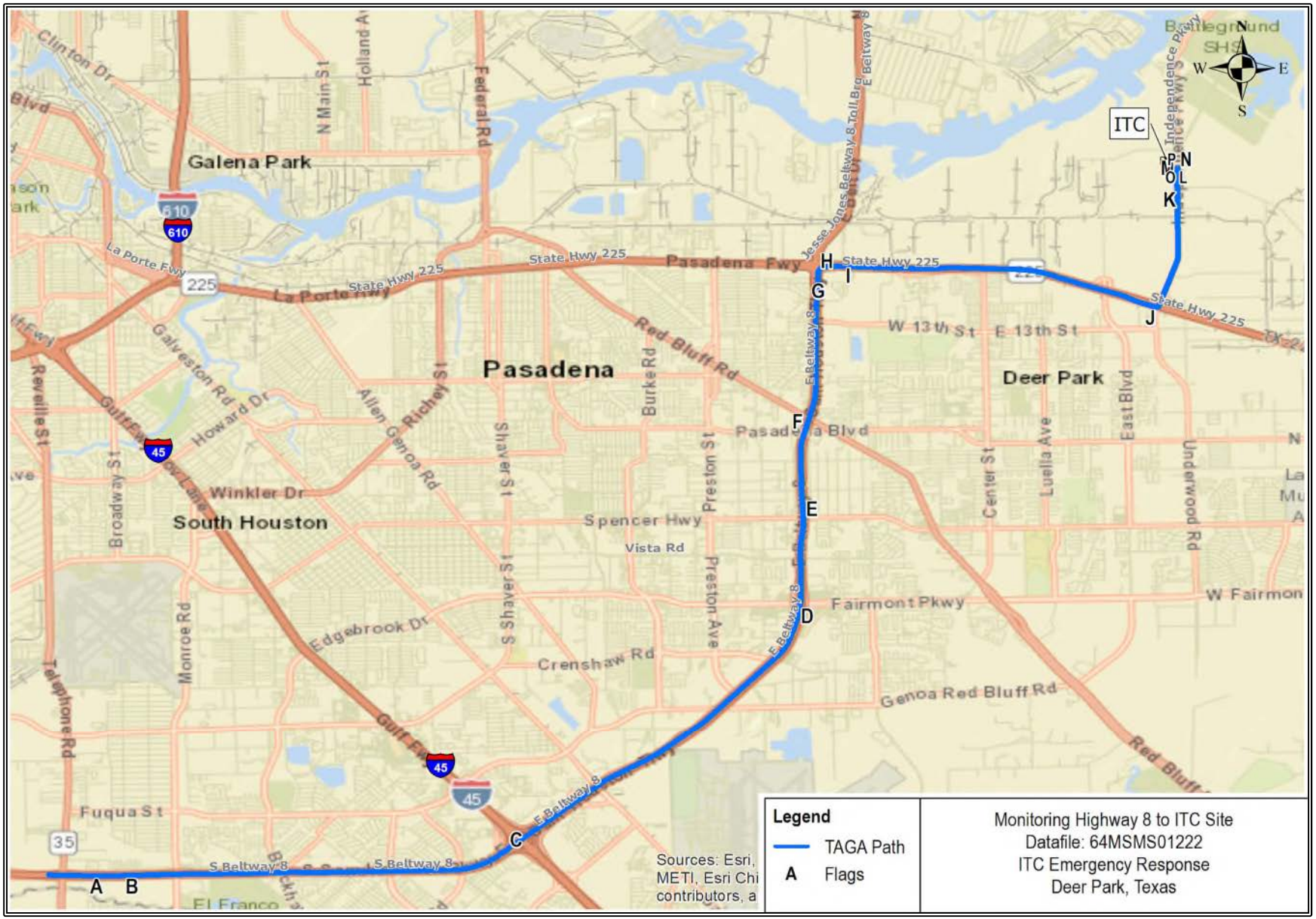


Figure 304a Monitoring Highway 8 to ITC Site Path, 64MSMS01222

Figure 304b

TAGA File Event Summary
File: 64MSMS01222 Acquired on 19 May 2019 at 08:08:45
Title: Monitoring Highway 8 to ITC Site

Flag	Time	Sequence	Description
A	0.8	80	Start mobile monitoring on Highway 8 North
B	1.1	104	Continuing onto Highway 8 North
C	4.5	428	Cross Highway 45
D	8.1	775	Cross Fairmont Parkway
E	9.1	867	Cross Spencer Highway
F	10.2	974	Cross Pasadena Boulevard
G	11.9	1132	Exit onto Highway 8 Service Road
H	12.4	1181	Right turn onto Pasadena Freeway Frontage Road
I	12.8	1221	Merge onto Highway 225 East
J	17.0	1620	Left turn onto Independence Parkway
K	19.7	1878	Cross Miller Cut-Off Road
L	20.4	1942	End mobile monitoring at ITC Site
M	20.9	1991	Start ambient
N	22.1	2100	End ambient
O	23.9	2270	Start 30 mL/min spike
P	24.9	2365	End 30 mL/min spike

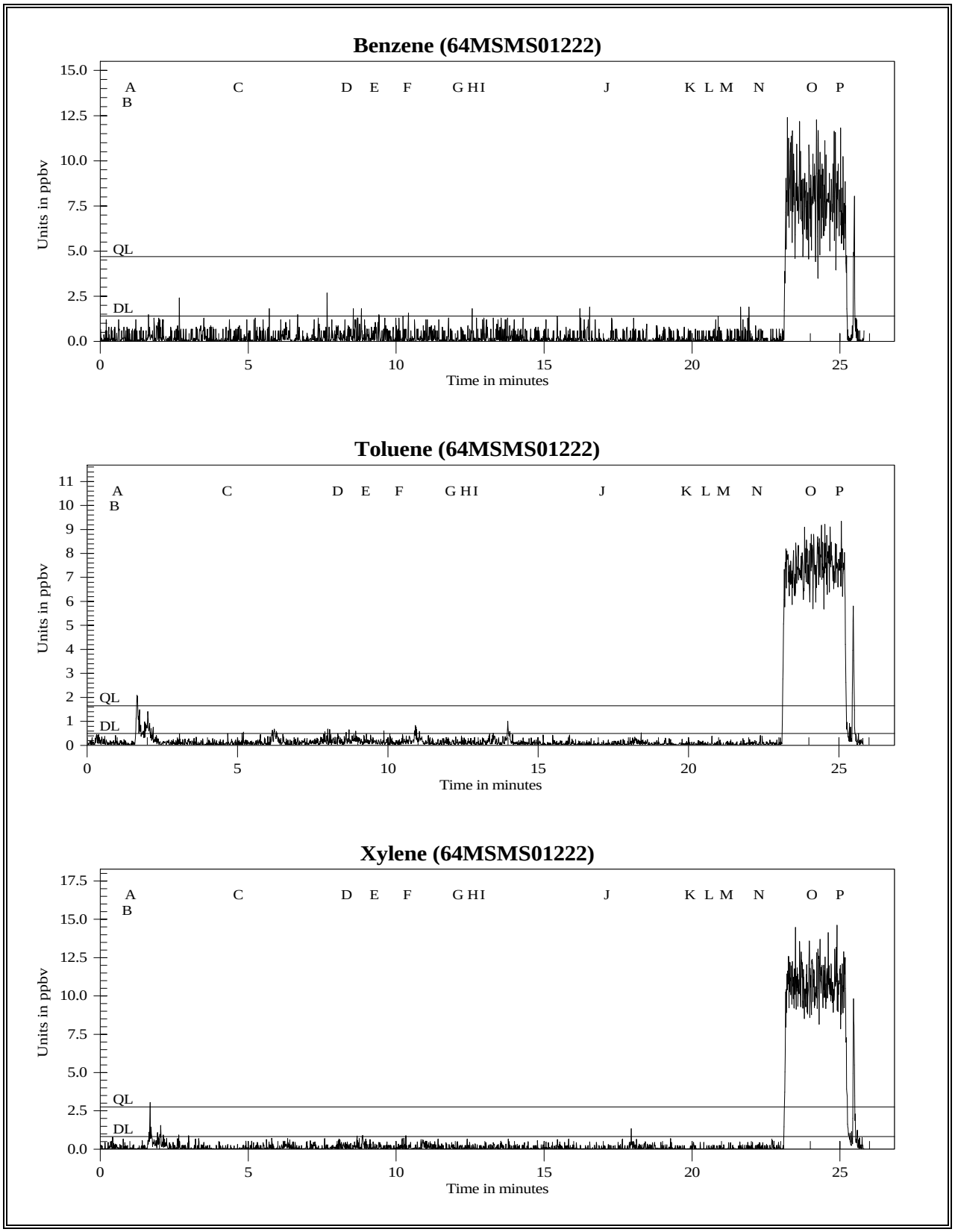


Figure 304c Monitoring Highway 8 to ITC Site in ppbv for Benzene, Toluene, and Xylenes

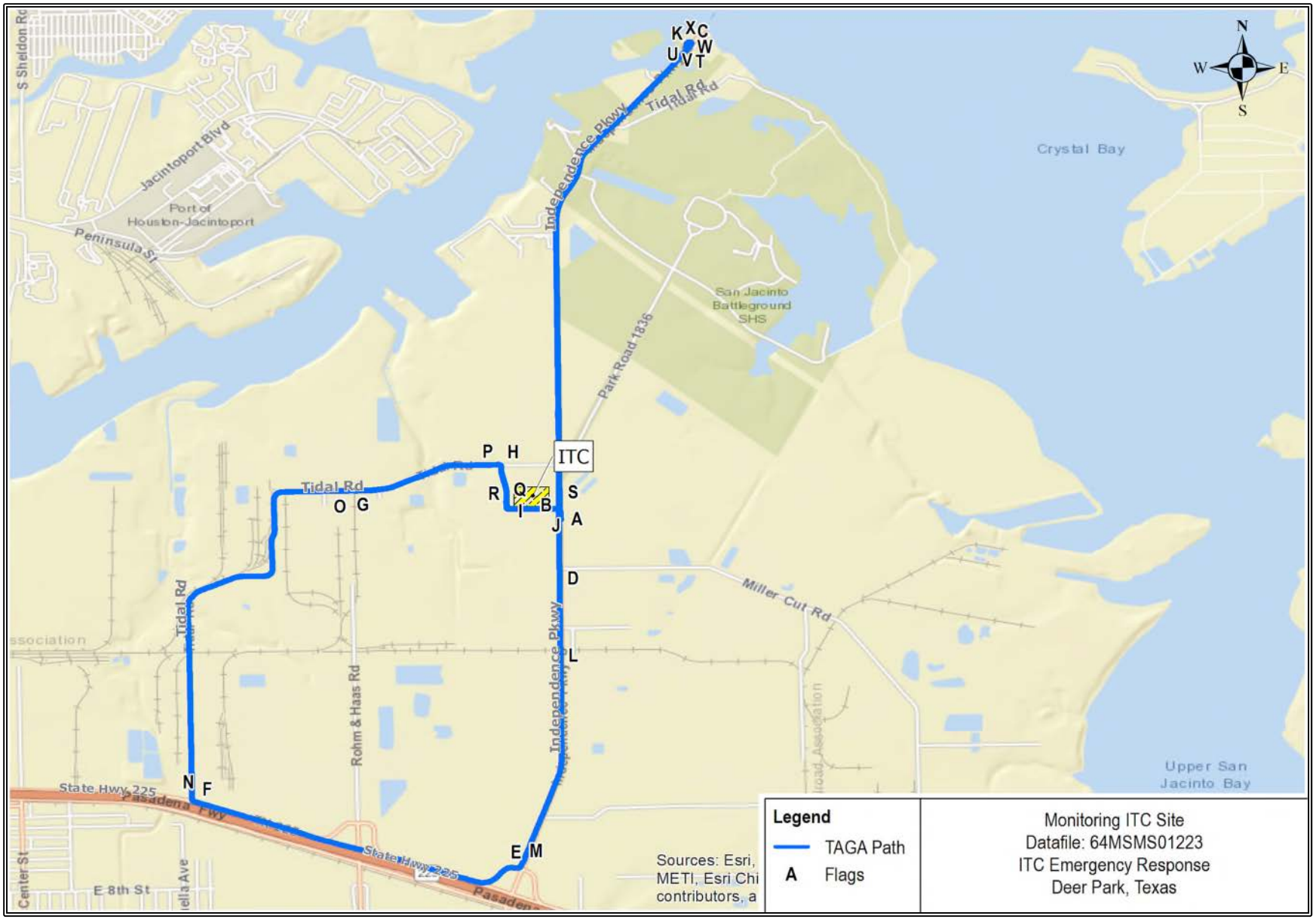


Figure 305a Monitoring ITC Site Path, 64MSMS01223

Figure 305b

TAGA File Event Summary
File: 64MSMS01223 Acquired on 19 May 2019 at 08:38:07
Title: Monitoring ITC Site

Flag	Time	Sequence	Description
A	1.0	96	Start mobile monitoring on Independence Parkway at ITC Site
B	1.2	116	Continuing onto Independence Parkway
C	1.6	154	U-turn on Independence Parkway at Juan Seguin Park
D	2.7	259	Cross Miller Cut-Off Road
E	5.5	525	Right turn onto Pasadena Freeway Frontage Road
F	8.1	768	Right turn onto Tidal Road
G	13.9	1327	Cross Rohm and Haas Road
H	16.5	1571	Right turn; Monitoring through ITC facility
I	18.7	1775	Left turn; Monitoring through ITC facility
J	19.8	1882	Left turn onto Independence Parkway
K	27.0	2564	U-turn on Independence Parkway at Juan Seguin Park
L	37.8	3591	Cross Miller Cut-Off Road
M	40.2	3826	Right turn onto Pasadena Freeway Frontage Road
N	45.3	4303	Right turn onto Tidal Road
O	48.8	4639	Cross Rohm and Haas Road
P	51.7	4917	Right turn; Monitoring through ITC facility
Q	66.0	6279	Stationary at railroad crossing in ITC facility
R	79.6	7573	Resume mobile monitoring in ITC facility
S	81.2	7722	Left turn onto Independence Parkway
T	89.2	8484	End mobile monitoring on Independence Parkway at Juan Seguin Park
U	89.5	8514	Start ambient
V	90.5	8608	End ambient
W	91.8	8733	Start 30 mL/min spike
X	92.9	8830	End 30 mL/min spike

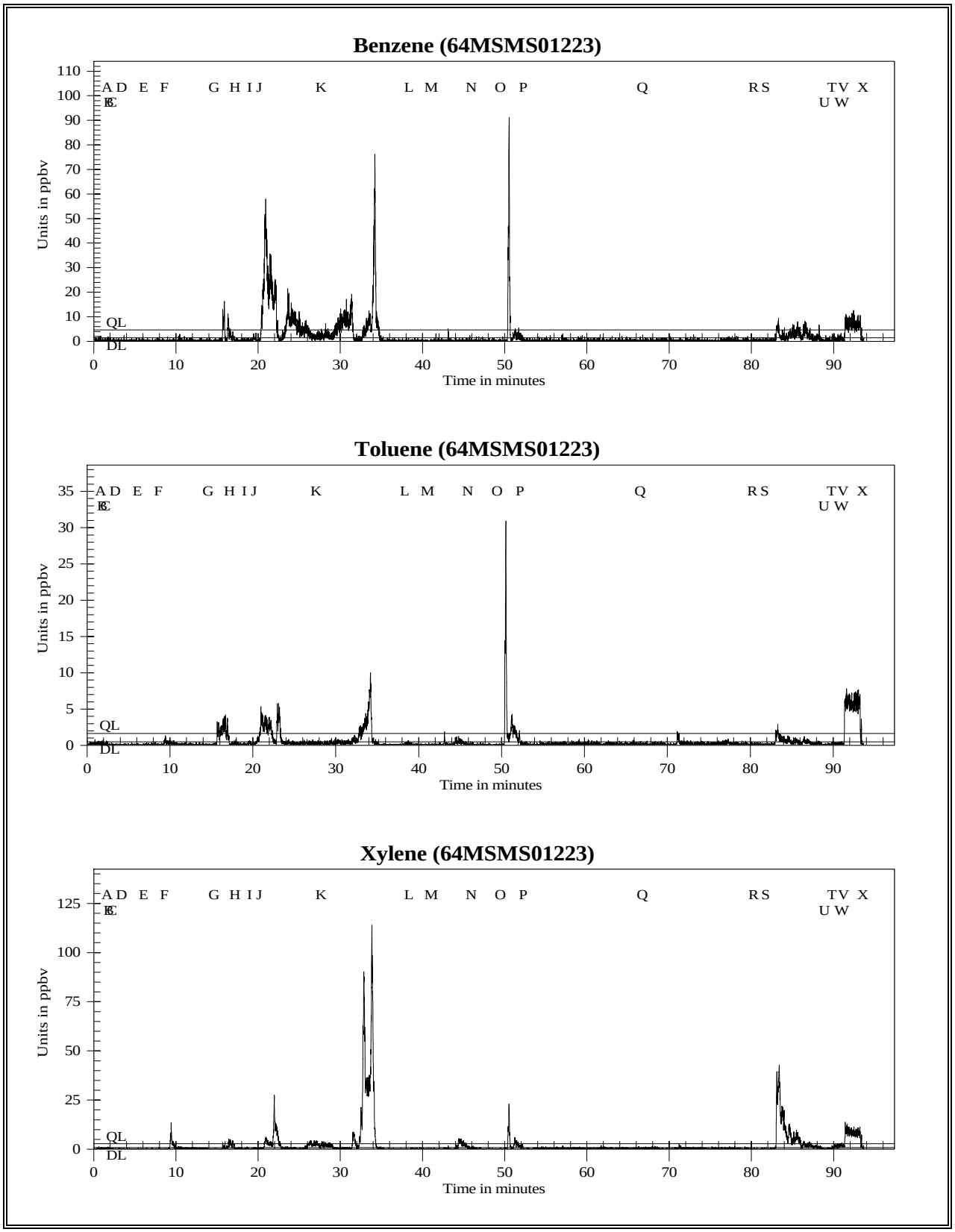


Figure 305c Monitoring ITC Site in ppbv for Benzene, Toluene, and Xylenes

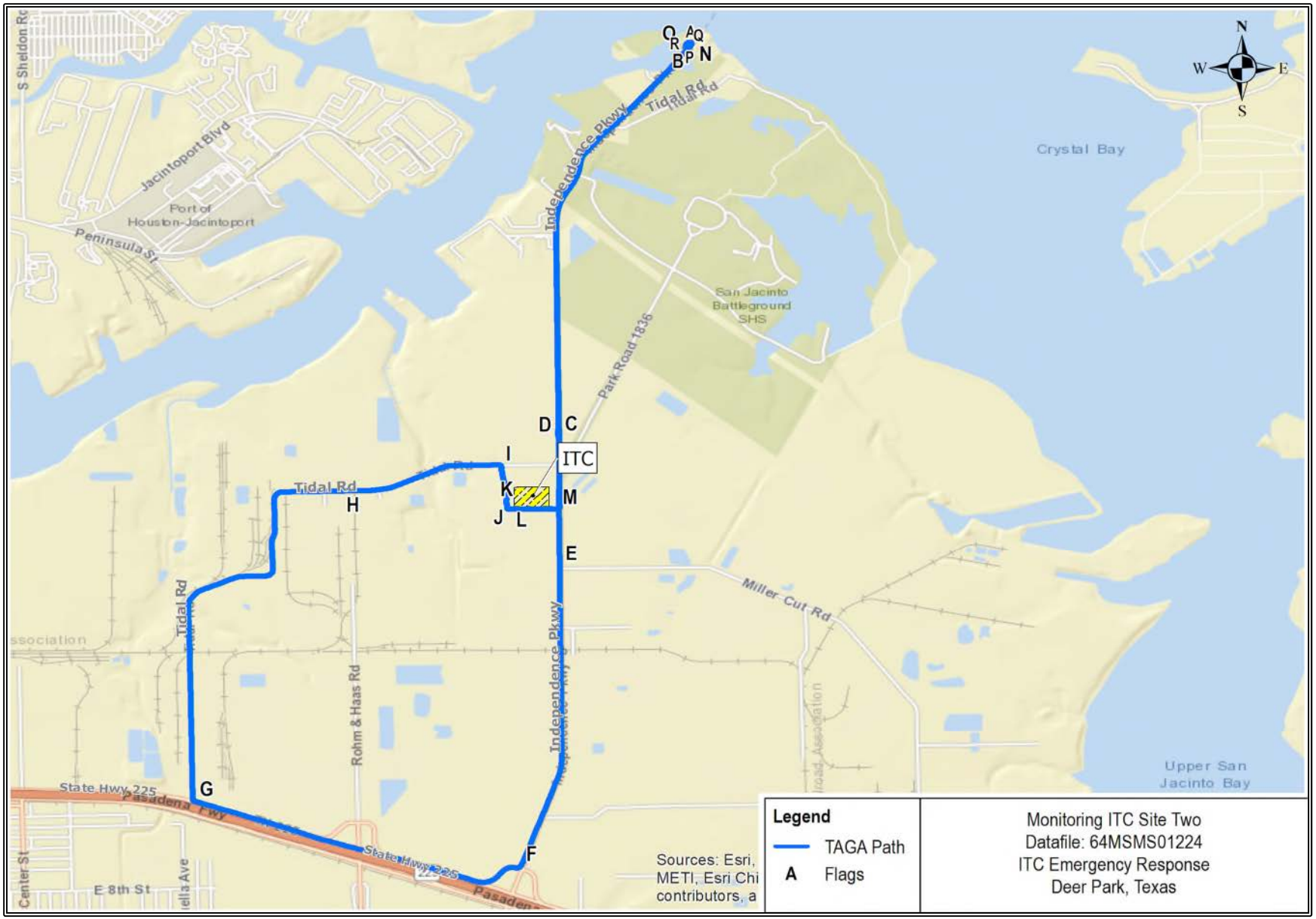


Figure 306a Monitoring ITC Site Two Path, 64MSMS01224

Figure 306b

TAGA File Event Summary
File: 64MSMS01224 Acquired on 19 May 2019 at 10:15:13
Title: Monitoring ITC Site Two

Flag	Time	Sequence	Description
A	0.8	77	Start mobile monitoring at Juan Seguin Park
B	1.2	116	Continuing onto Independence Parkway
C	8.2	782	Stationary on Independence Parkway
D	18.0	1714	Resume mobile monitoring on Independence Parkway
E	20.4	1939	Cross Miller Cut-Off Road
F	24.6	2344	Right turn onto Pasadena Freeway Frontage Road
G	27.6	2625	Right turn onto Tidal Road
H	34.9	3320	Cross Rohm and Haas Road
I	37.8	3597	Right turn; Monitoring through ITC facility
J	39.6	3770	Stationary at railroad crossing in ITC facility
K	43.3	4114	Resume mobile monitoring in ITC facility
L	44.1	4189	Left turn; Monitoring through ITC facility
M	45.5	4330	Left turn onto Independence Parkway
N	53.7	5103	End mobile monitoring on Independence Parkway at Juan Seguin Park
O	54.6	5192	Start ambient
P	55.6	5290	End ambient
Q	57.1	5428	Start 30 mL/min spike
R	58.1	5523	End 30 mL/min spike

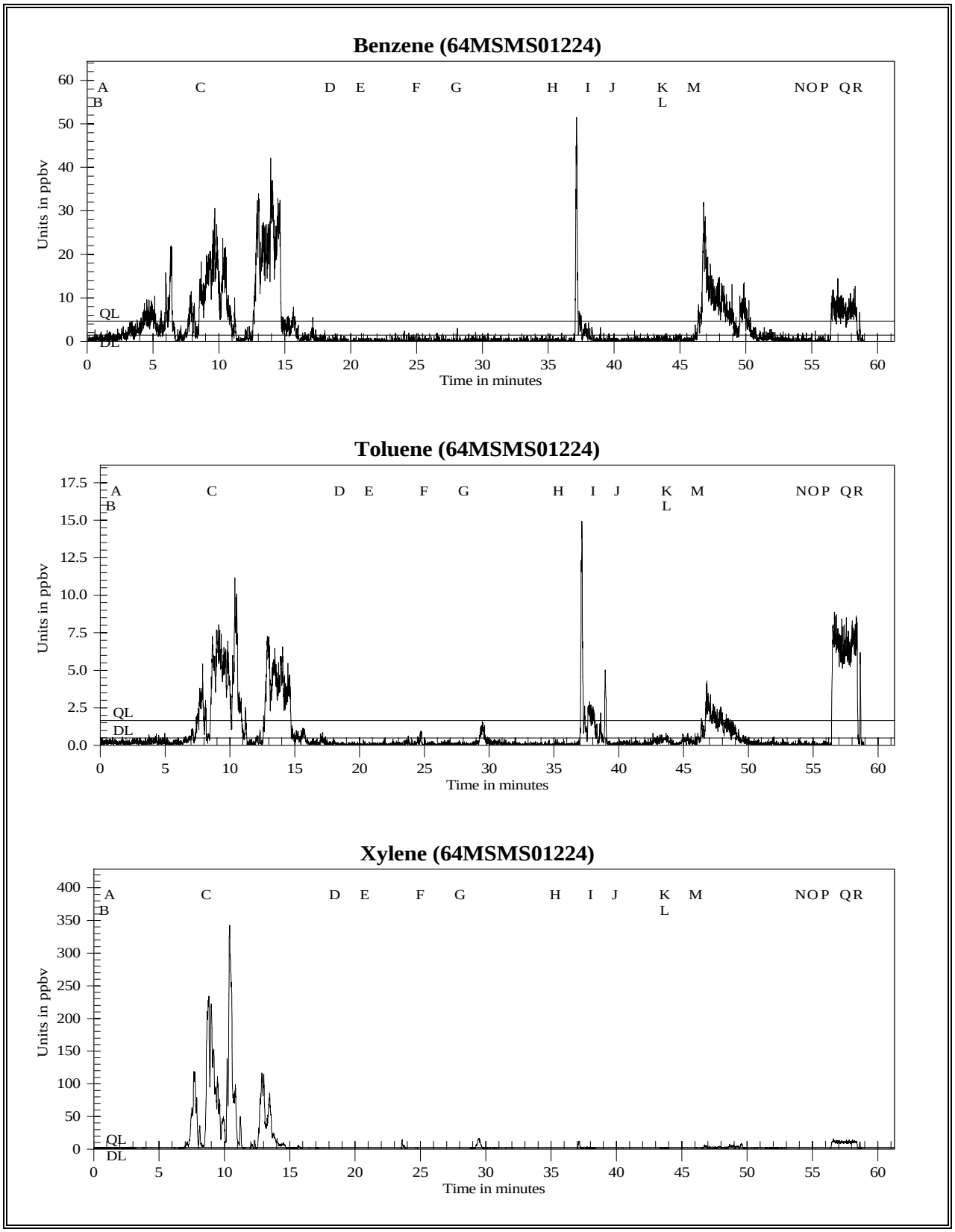


Figure 306c Monitoring ITC Site Two in ppbv for Benzene, Toluene, and Xylenes

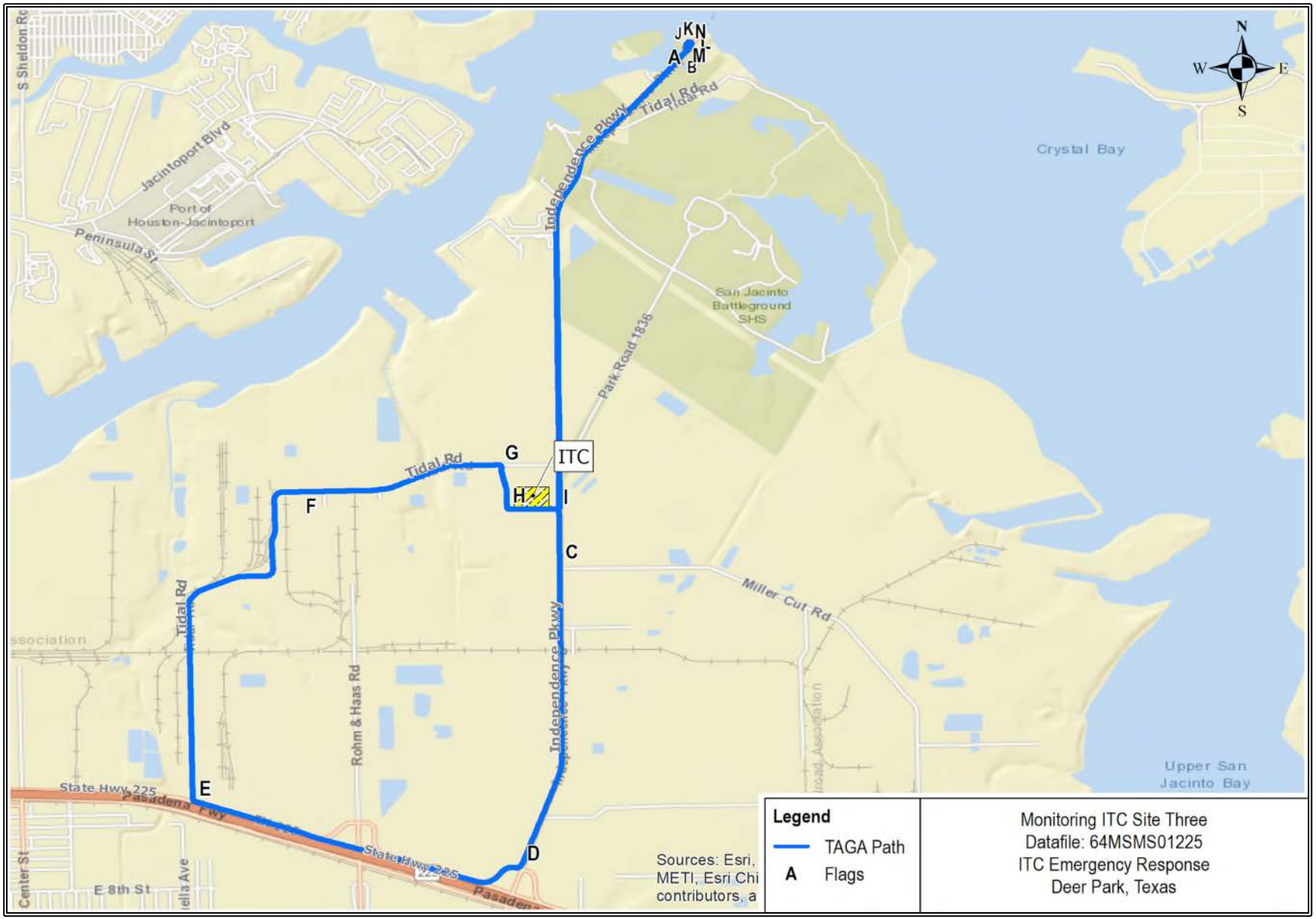


Figure 307a Monitoring ITC Site Three Path, 64MSMS01225

Figure 307b

TAGA File Event Summary
File: 64MSMS01225 Acquired on 19 May 2019 at 11:20:15
Title: Monitoring ITC Site Three

Flag	Time	Sequence	Description
A	0.6	61	Start mobile monitoring at Juan Seguin Park
B	1.3	121	Continuing onto Independence Parkway
C	10.2	970	Cross Miller Cut-Off Road
D	14.7	1397	Right turn onto Pasadena Freeway Frontage Road
E	18.0	1712	Right turn onto Tidal Road
F	24.6	2339	Right turn onto Rohm and Haas Road
G	28.2	2682	Right turn; Monitoring through ITC facility
H	30.5	2904	Left turn; Monitoring through ITC facility
I	32.5	3086	Left turn onto Independence Parkway
J	40.8	3876	End mobile monitoring on Independence Parkway at Juan Seguin Park
K	41.4	3940	Start ambient
L	42.5	4040	End ambient
M	43.7	4157	Start 30 mL/min spike
N	44.7	4254	End 30 mL/min spike

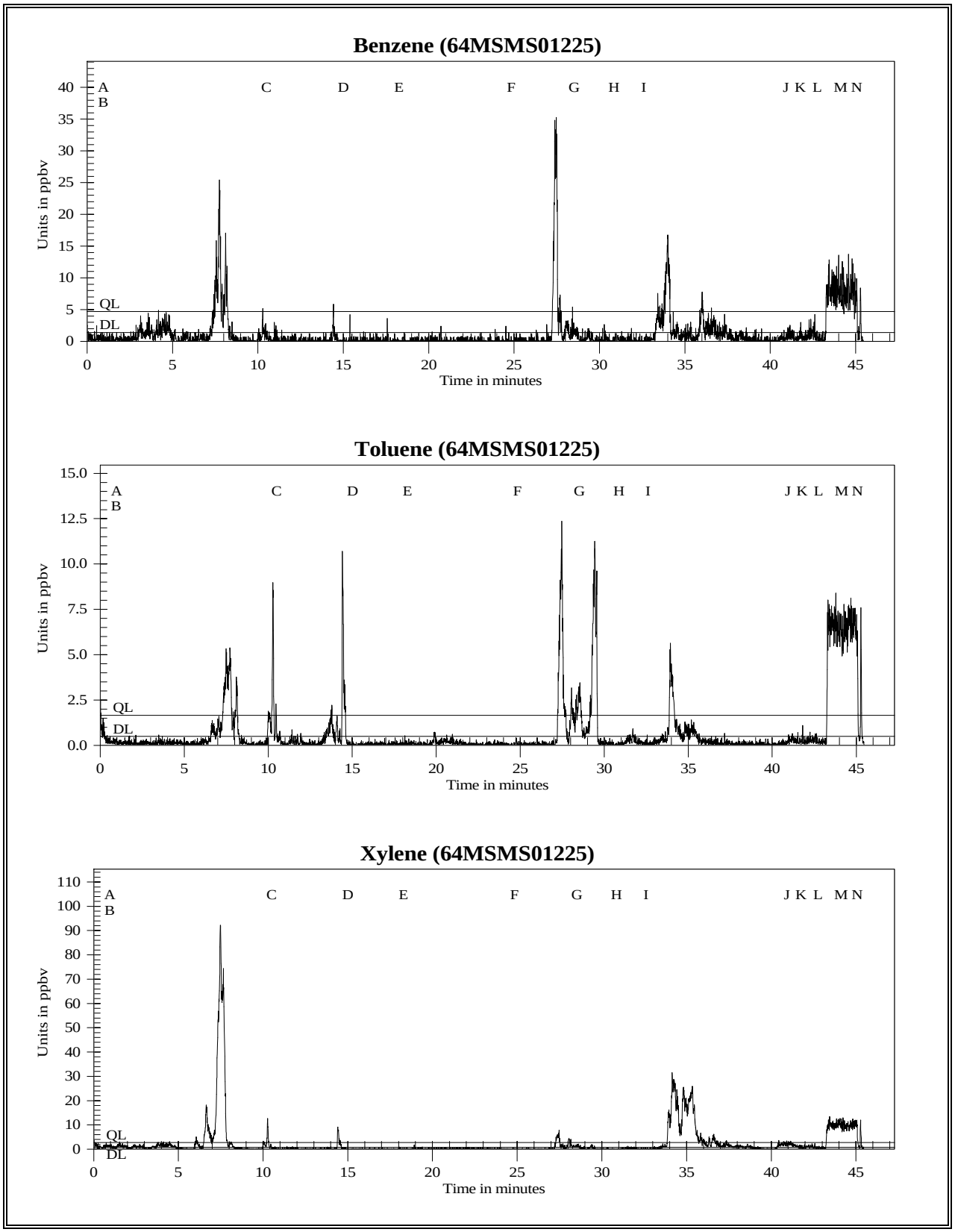


Figure 307c Monitoring ITC Site Three in ppbv for Benzene, Toluene, and Xylenes

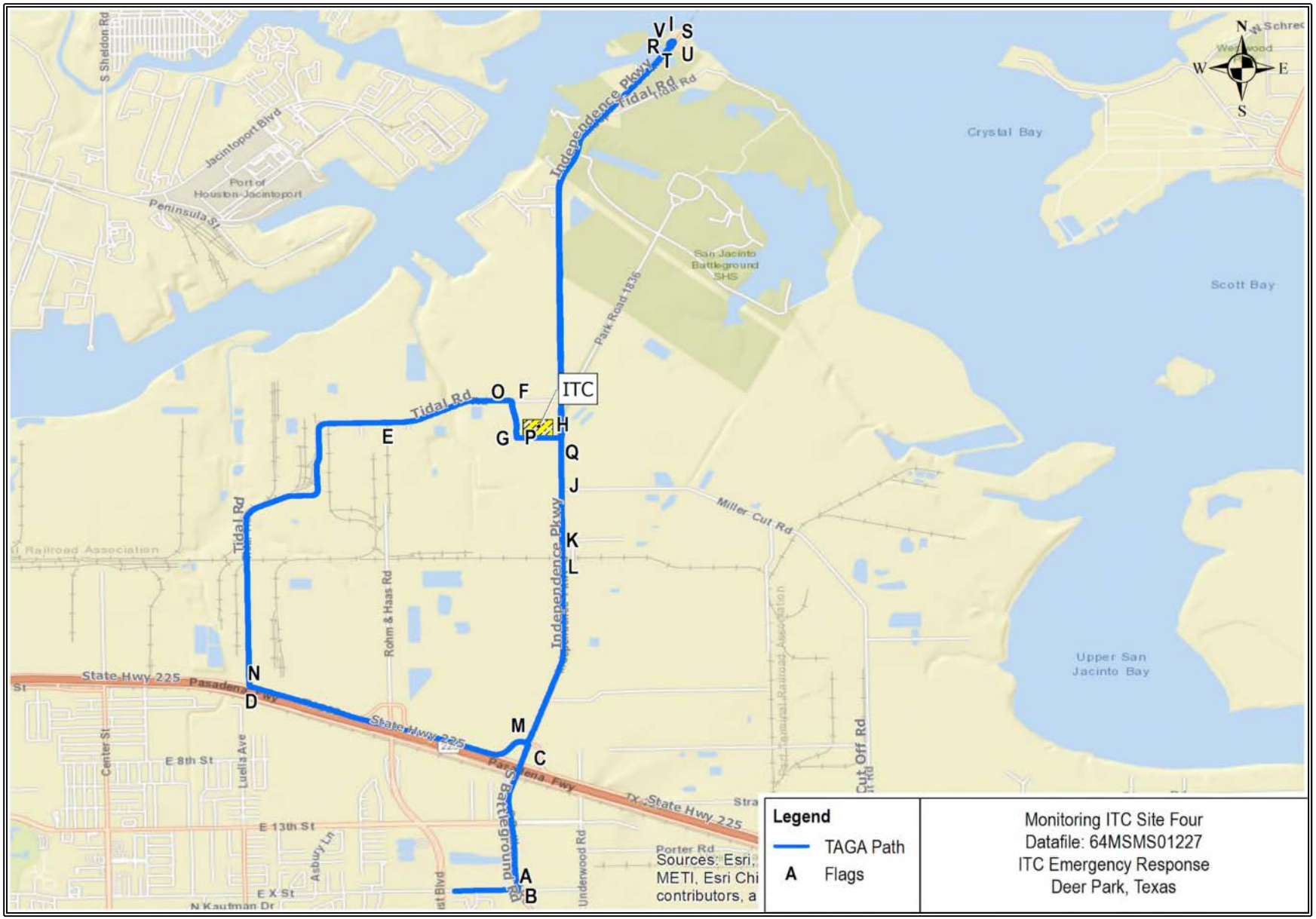


Figure 308a Monitoring ITC Site Four Path, 64MSMS01227

Figure 308b

TAGA File Event Summary
File: 64MSMS01227 Acquired on 19 May 2019 at 13:32:18
Title: Monitoring ITC Site Four

Flag	Time	Sequence	Description
A	0.8	81	Start mobile monitoring at East X Street and Battleground Road
B	1.0	97	Left turn onto Battleground Road
C	2.9	275	Left turn onto Pasadena Freeway Frontage Road
D	5.6	538	Right turn onto Tidal Road
E	12.2	1159	Cross Rohm and Haas Road
F	15.0	1428	Right turn; Monitoring through ITC facility
G	17.0	1614	Left turn; Monitoring through ITC facility
H	18.5	1764	Left turn onto Independence Parkway
I	25.9	2466	U-turn on Independence Parkway at Juan Seguin Park
J	35.1	3342	Cross Miller Cut-Off Road
K	36.7	3488	Stationary at railroad crossing on Independence Parkway
L	37.2	3534	Resume mobile monitoring on Independence Parkway
M	40.2	3824	Right turn onto Pasadena Freeway Frontage Road
N	43.3	4116	Right turn onto Tidal Road
O	53.4	5079	Right turn; Monitoring through ITC facility
P	55.5	5279	Left turn; Monitoring through ITC facility
Q	57.0	5424	Left turn onto Independence Parkway
R	64.5	6130	End mobile monitoring on Independence Parkway at Juan Seguin Park
S	65.1	6191	Start ambient
T	66.1	6286	End ambient
U	67.6	6427	Start 30 mL/min spike
V	68.6	6524	End 30 mL/min spike

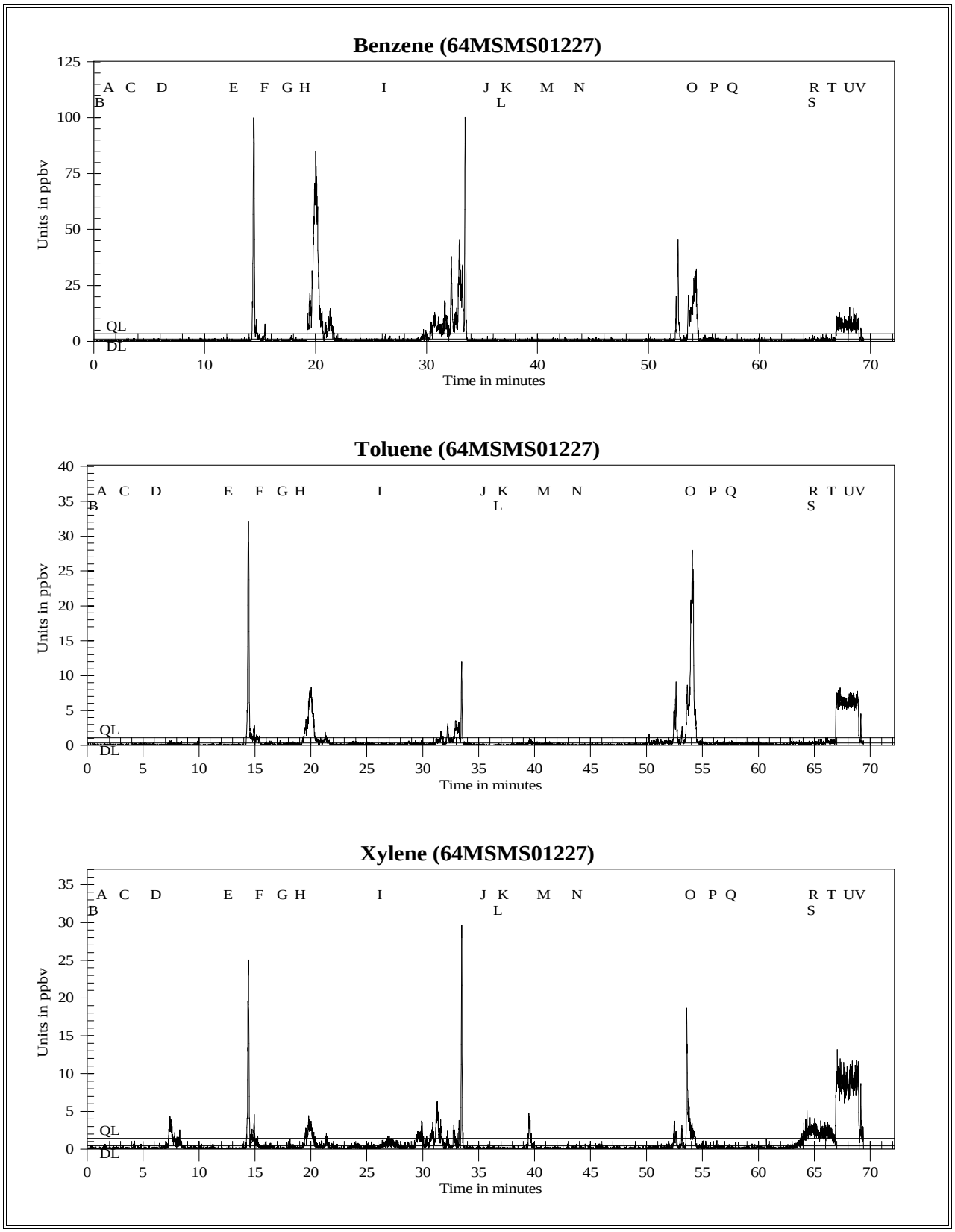


Figure 308c Monitoring ITC Site Four in ppbv for Benzene, Toluene, and Xylenes

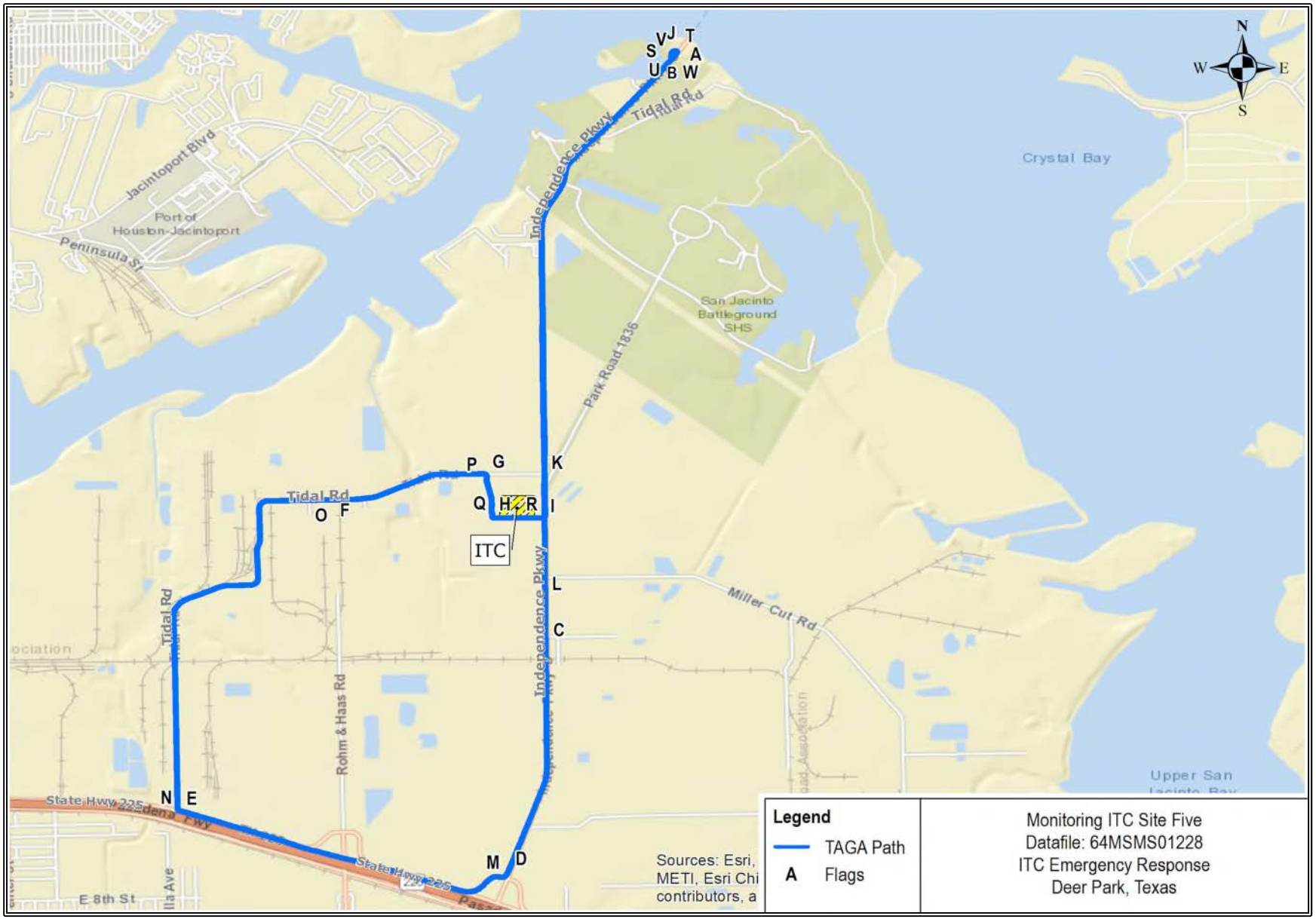


Figure 309a Monitoring ITC Site Five Path, 64MSMS01228

Figure 309b

TAGA File Event Summary
File: 64MSMS01228 Acquired on 19 May 2019 at 14:47:12
Title: Monitoring ITC Site Five

Flag	Time	Sequence	Description
A	0.7	66	Start mobile monitoring at Juan Seguin Park
B	1.2	118	Continuing onto Independence Parkway
C	10.4	993	Cross Miller Cut-Off Road
D	14.0	1333	Right turn onto Pasadena Freeway Frontage Road
E	17.3	1645	Right turn onto Tidal Road
F	23.8	2267	Cross Rohm and Haas Road
G	26.9	2561	Right turn; Monitoring through ITC facility
H	29.4	2794	Left turn; Monitoring through ITC facility
I	31.0	2945	Left turn onto Independence Parkway
J	37.6	3571	U-turn on Independence Parkway at Juan Seguin Park
K	44.0	4185	Cross Tidal Road
L	45.7	4341	Cross Miller Cut-Off Road
M	49.0	4664	Right turn onto Pasadena Freeway Frontage Road
N	52.2	4960	Right turn onto Tidal Road
O	58.9	5597	Cross Rohm and Haas Road
P	61.5	5849	Right turn; Monitoring through ITC facility
Q	63.4	6030	Left turn; Monitoring through ITC facility
R	64.9	6171	Left turn onto Independence Parkway
S	72.4	6881	End mobile monitoring on Independence Parkway at Juan Seguin Park
T	72.5	6893	Start ambient
U	73.5	6988	End ambient
V	74.5	7087	Start 30 mL/min spike
W	75.5	7180	End 30 mL/min spike

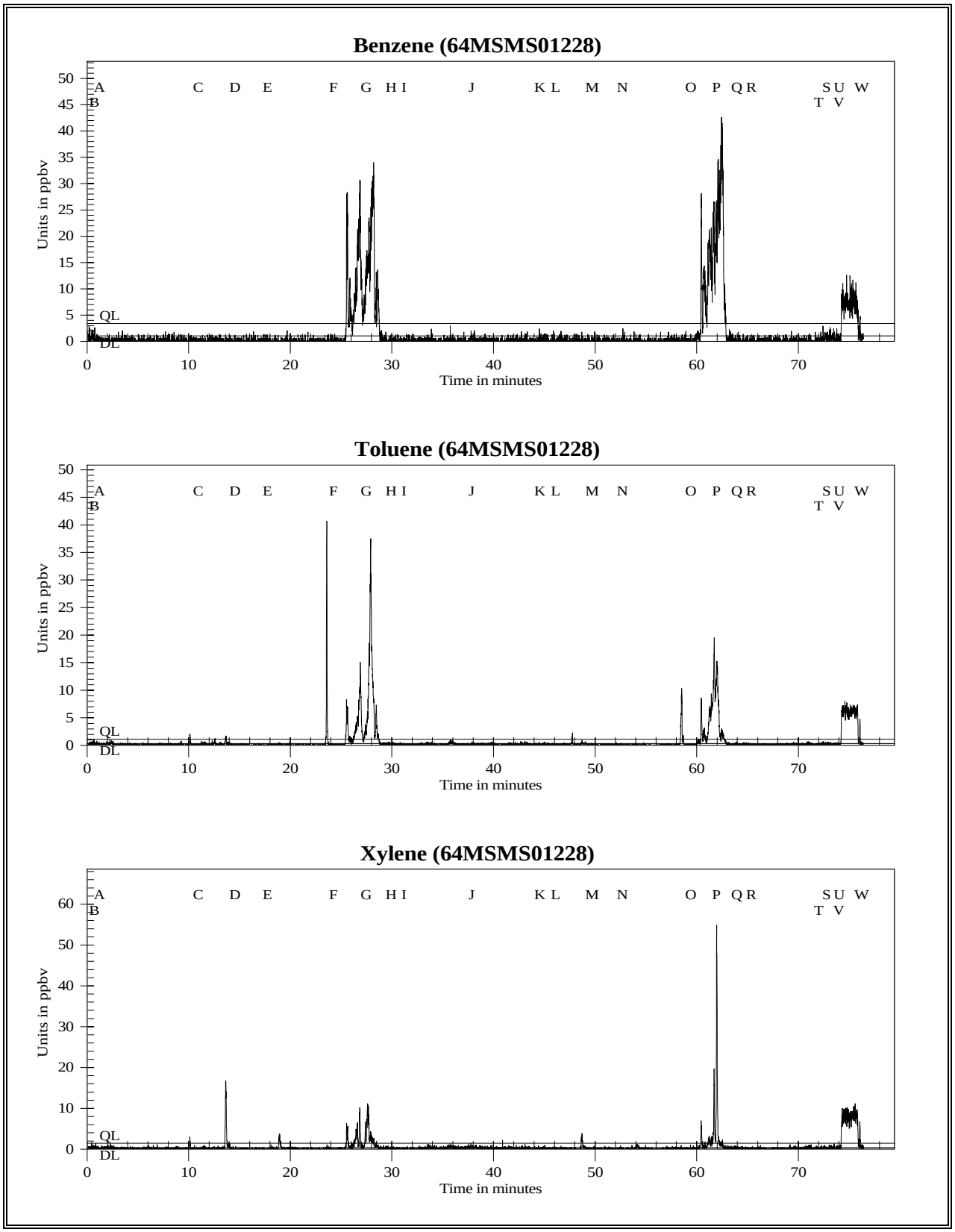


Figure 309c Monitoring ITC Site Five in ppbv for Benzene, Toluene, and Xylenes

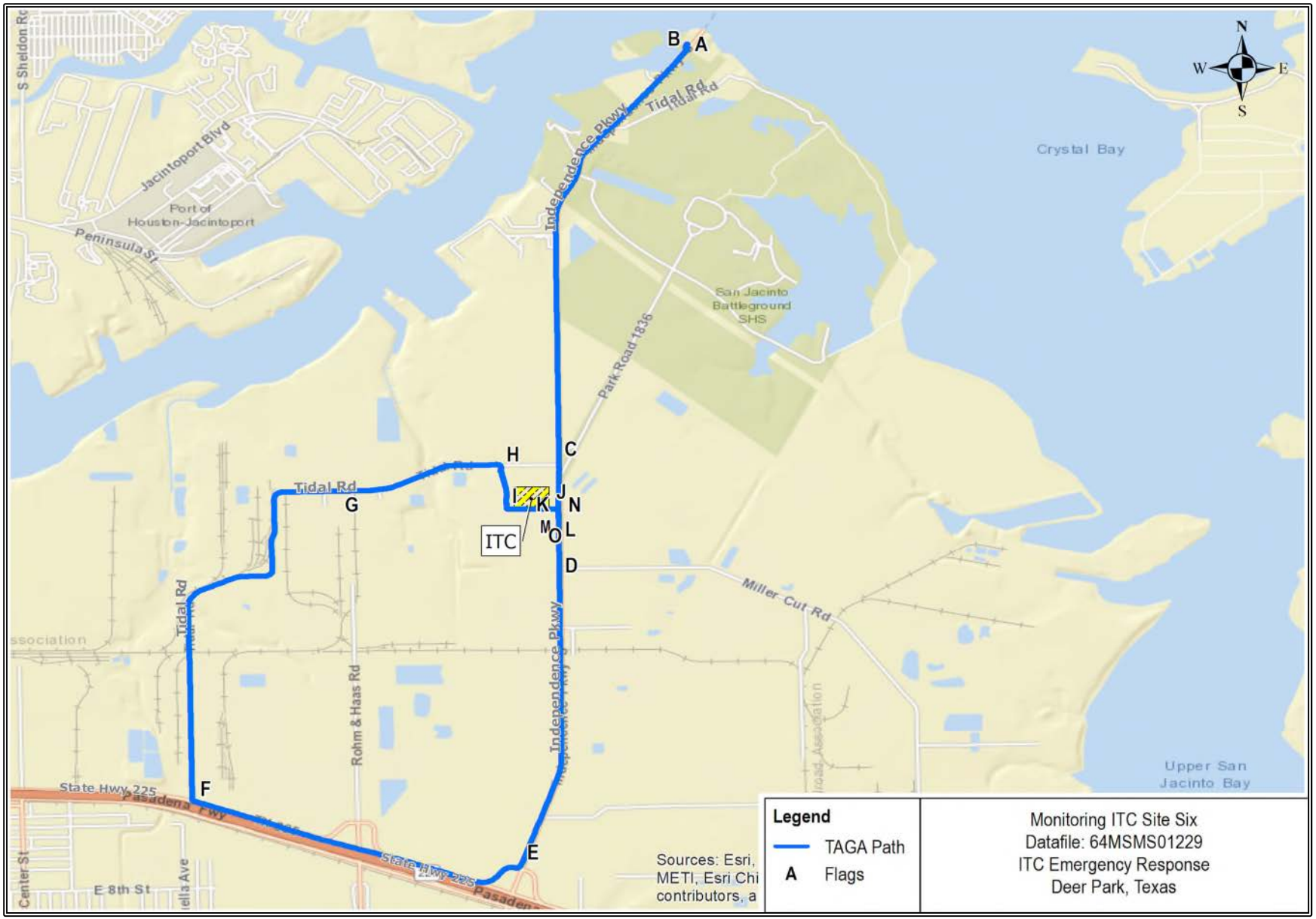


Figure 310a Monitoring ITC Site Six Path, 64MSMS01229

Figure 310b

TAGA File Event Summary
File: 64MSMS01229 Acquired on 19 May 2019 at 16:06:26
Title: Monitoring ITC Site Six

Flag	Time	Sequence	Description
A	0.8	74	Sart mobile monitoring at Juan Seguin Park
B	1.3	121	Continuing onto Independence Parkway
C	7.2	688	Cross Tidal Road
D	11.3	1077	Cross Miller Cut-Off Road
E	15.5	1474	Right turn onto Pasadena Freeway Frontage Road
F	18.7	1774	Right turn onto Tidal Road
G	25.0	2381	Cross Rohm and Haas Road
H	28.5	2709	Right turn; Monitoring through ITC facility
I	31.5	2992	Left turn; Monitoring through ITC facility
J	33.3	3170	Right turn onto Independence Parkway
K	33.7	3208	End mobile monitoring on Independence Parkway
L	33.9	3224	Start ambient
M	34.9	3319	End ambient
N	36.0	3428	Start 30 mL/min spike
O	37.0	3523	End 30 mL/min spike

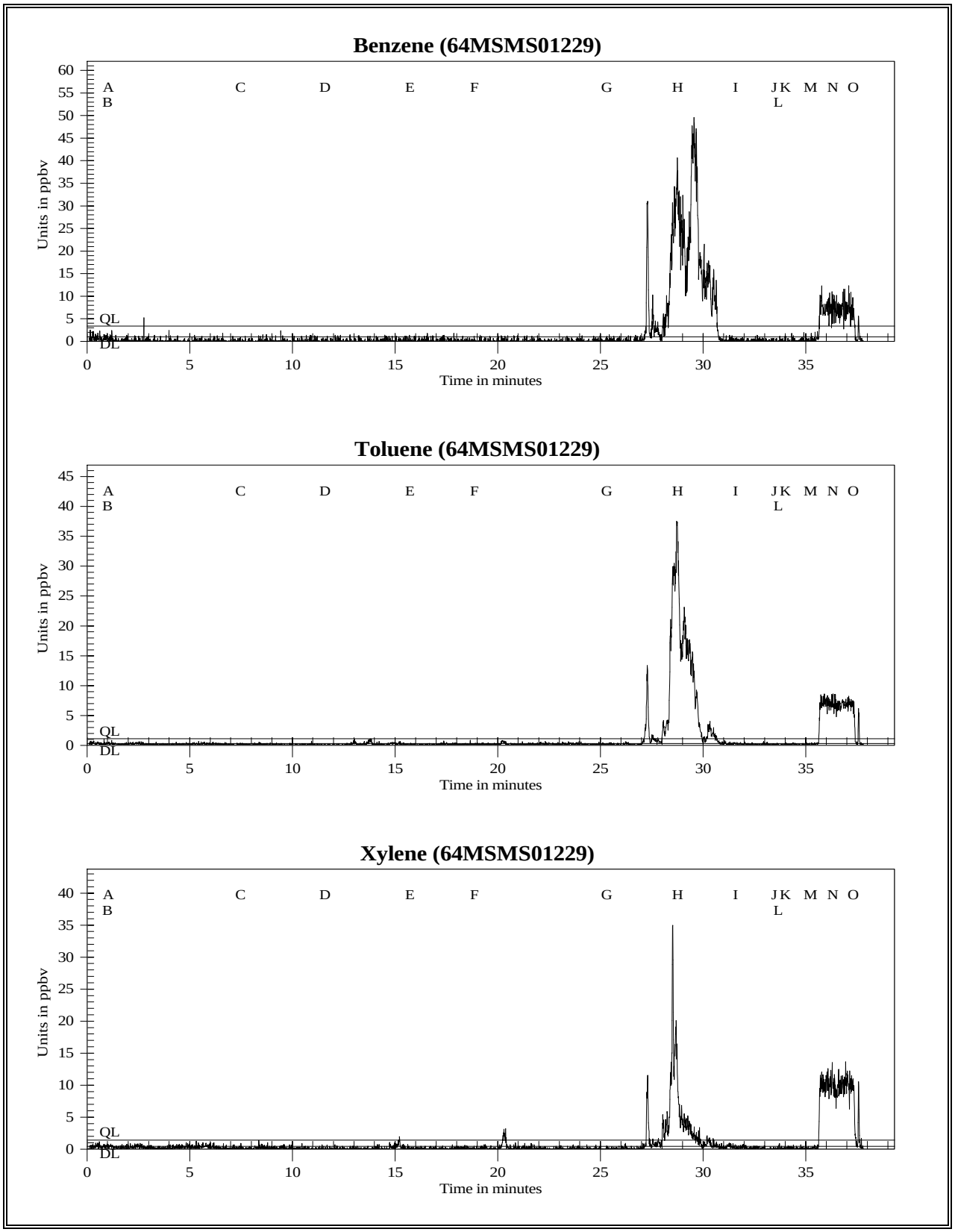


Figure 310c Monitoring ITC Site Six in ppbv for Benzene, Toluene, and Xylenes

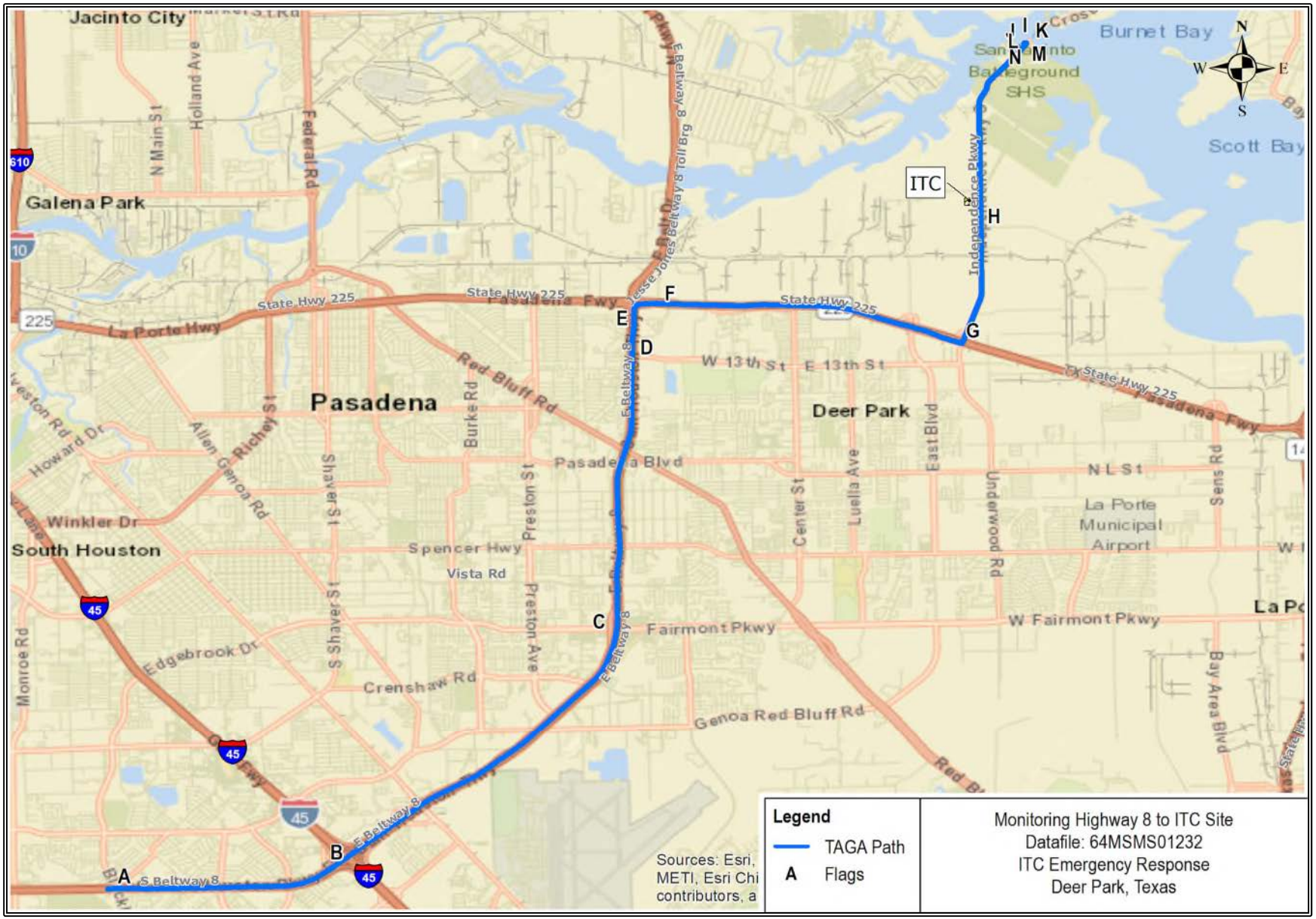


Figure 311a Monitoring Highway 8 to ITC Site Path, 64MSMS01232

Figure 311b

TAGA File Event Summary
File: 64MSMS01232 Acquired on 20 May 2019 at 08:50:58
Title: Monitoring Highway 8 to ITC Site

Flag	Time	Sequence	Description
A	5.2	492	Start mobile monitoring on Highway 8 North
B	5.4	511	Cross Highway 45
C	9.7	924	Cross Fairmont Parkway
D	13.7	1303	Exit onto Highway 8 Service Road
E	14.3	1363	Right turn onto Pasadena Freeway Frontage Road
F	14.7	1395	Merge onto Highway 225 East
G	19.0	1807	Left turn onto Independence Parkway
H	21.9	2081	Cross Miller Cut-Off Road
I	22.7	2162	U-turn on Independence Parkway at Juan Seguin Park
J	23.5	2238	End mobile monitoring on Independence Parkway
K	24.0	2278	Start ambient
L	25.0	2373	End ambient
M	26.3	2503	Start 30 mL/min spike
N	27.3	2599	End 30 mL/min spike

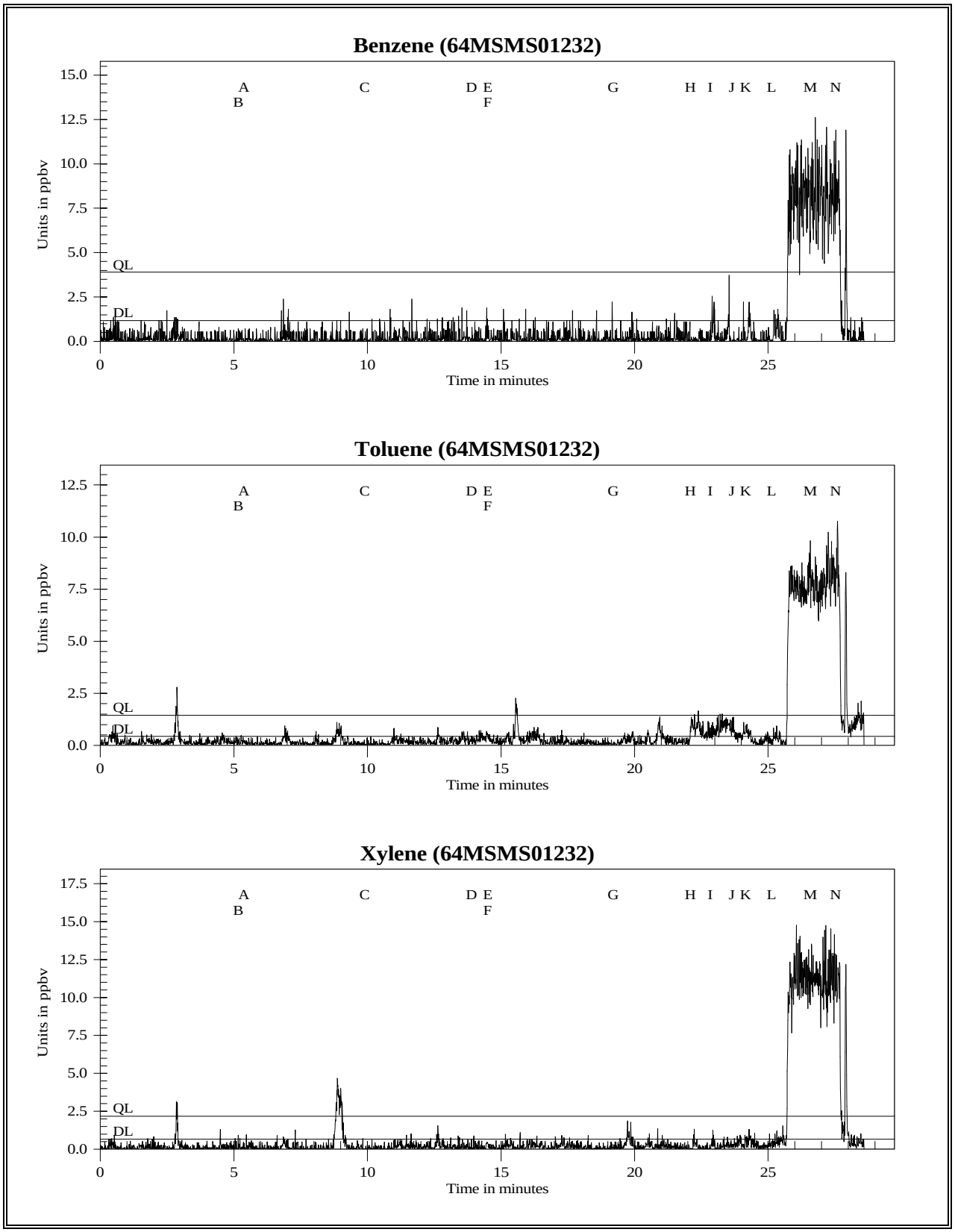


Figure 311c Monitoring Highway 8 to ITC Site in ppbv for Benzene, Toluene, and Xylenes

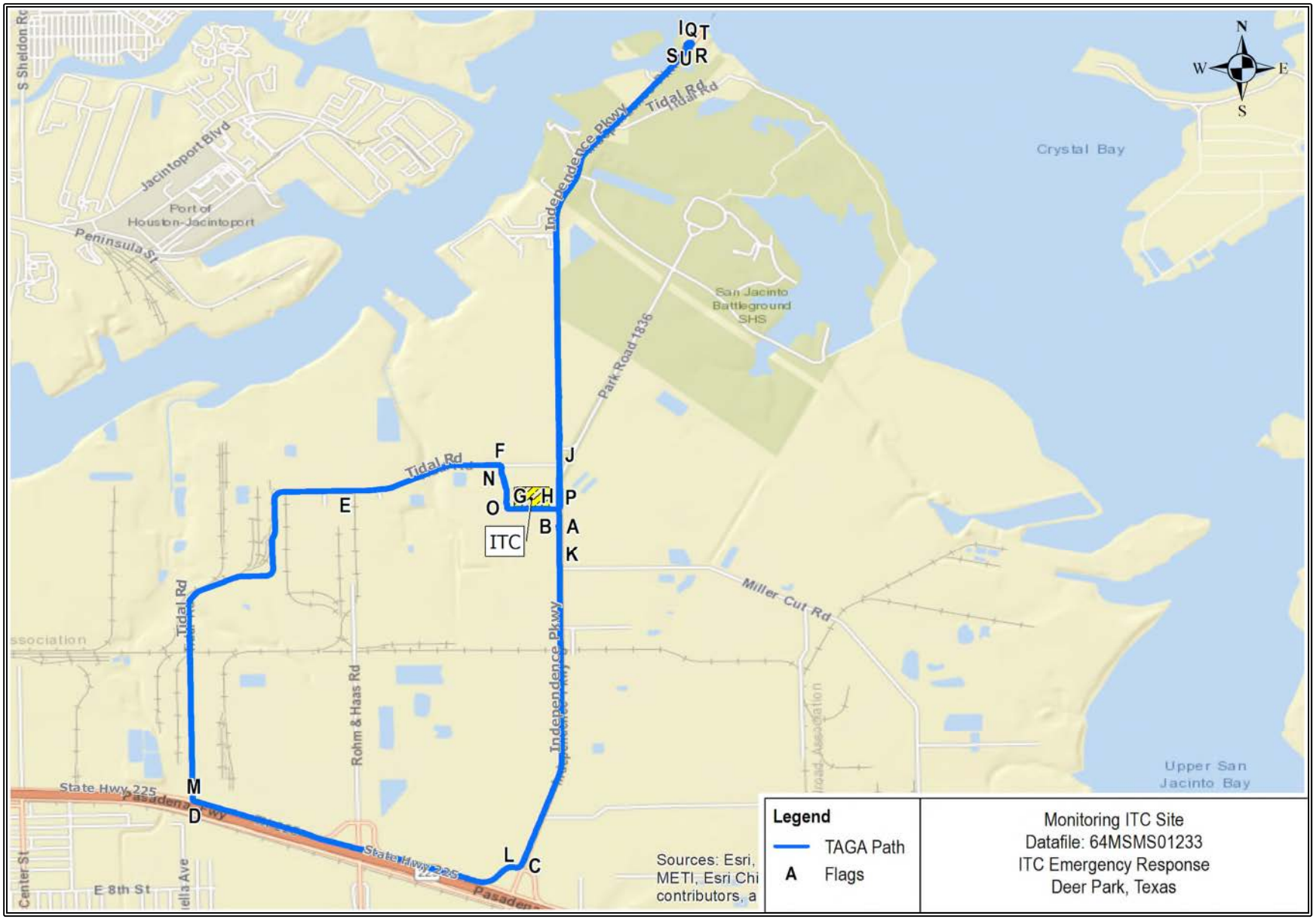


Figure 312a Monitoring ITC Site Path, 64MSMS01233

Figure 312b

TAGA File Event Summary
File: 64MSMS01233 Acquired on 20 May 2019 at 09:41:44
Title: Monitoring ITC Site

Flag	Time	Sequence	Description
A	1.0	93	Start mobile monitoring on Independence Parkway
B	1.5	140	Continuing onto Independence Parkway
C	5.2	497	Right turn onto Pasadena Freeway Frontage Road
D	8.1	769	Right turn onto Tidal Road
E	13.9	1327	Cross Rohm and Haas Road
F	16.5	1565	Right turn; Monitoring through ITC facility
G	18.8	1788	Left turn; Monitoring through ITC facility
H	20.6	1956	Left turn onto Independence Parkway
I	27.7	2634	U-turn on Independence Parkway at Juan Seguin Park
J	33.8	3219	Cross Tidal Road
K	35.2	3346	Cross Miller Cut-Off Road
L	39.3	3734	Right turn onto Pasadena Freeway Frontage Road
M	42.5	4041	Right turn onto Tidal Road
N	52.8	5017	Right turn; Monitoring through ITC facility
O	55.2	5249	Left turn; Monitoring through ITC facility
P	56.5	5369	Left turn onto Independence Parkway
Q	63.9	6076	End mobile monitoring on Independence Parkway at Juan Seguin Park
R	64.2	6107	Start ambient
S	65.2	6202	End ambient
T	66.6	6329	Start 30 mL/min spike
U	67.8	6450	End 30 mL/min spike

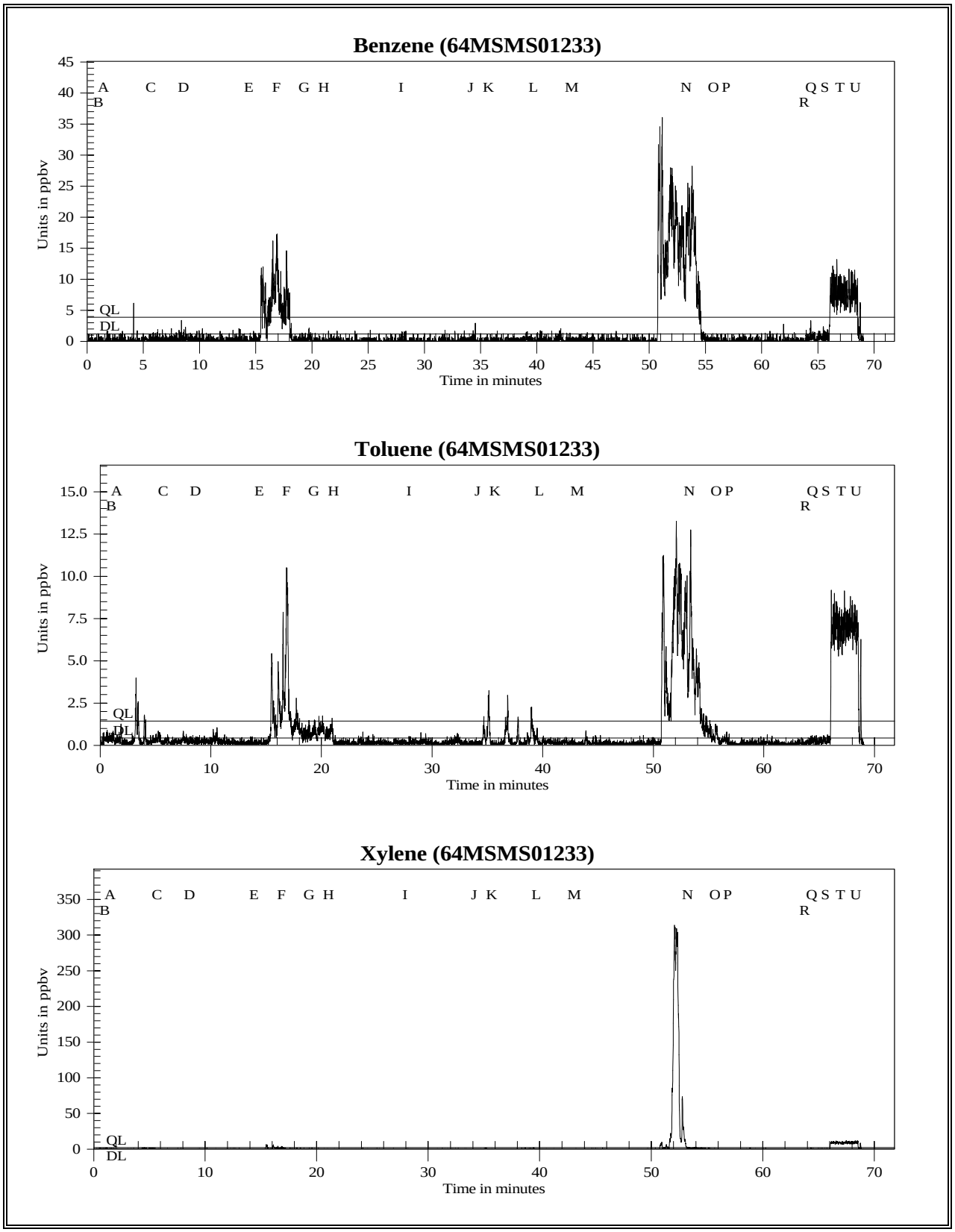


Figure 312c Monitoring ITC Site in ppbv for Benzene, Toluene, and Xylenes

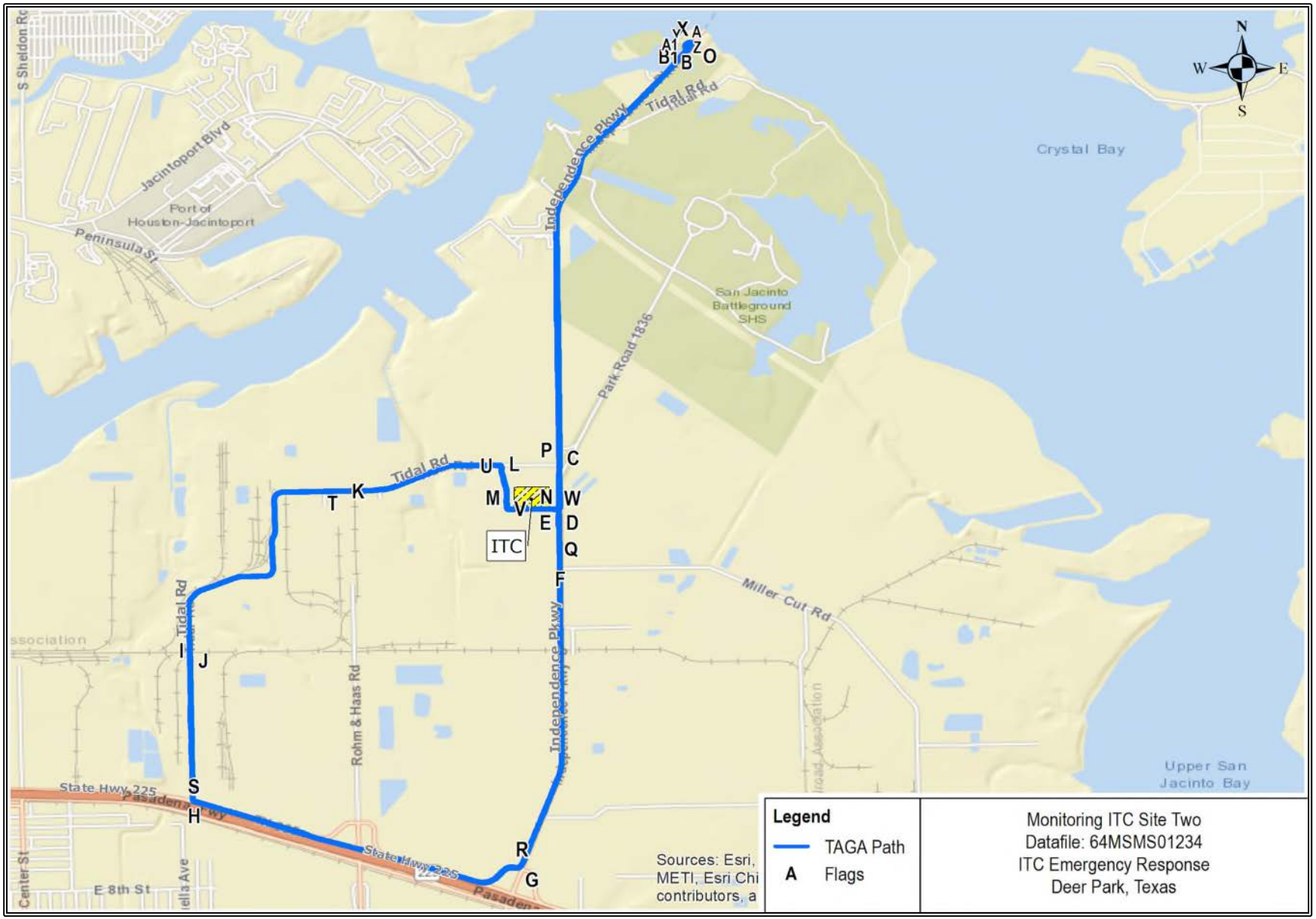


Figure 313a Monitoring ITC Site Two Path, 64MSMS01234

Figure 313b

TAGA File Event Summary
File: 64MSMS01234 Acquired on 20 May 2019 at 11:02:45
Title: Monitoring ITC Site Two

Flag	Time	Sequence	Description
A	0.7	72	Start mobile monitoring at Juan Seguin Park
B	3.1	294	Continuing onto Independence Parkway
C	9.2	880	Cross Tidal Road
D	13.8	1317	Stationary on Independence Parkway at ITC Site
E	15.2	1450	Resume mobile monitoring on Independence Parkway
F	16.0	1520	Cross Miller Cut-Off Road
G	19.8	1886	Right turn onto Pasadena Freeway Frontage Road
H	22.9	2178	Right turn onto Tidal Road
I	25.7	2447	Stationary at railroad crossing on Tidal Road
J	27.5	2613	Resume mobile monitoring on Tidal Road
K	30.7	2916	Cross Rohm and Haas Road
L	33.5	3186	Right turn; Monitoring through ITC facility
M	35.7	3396	Left turn; Monitoring through ITC facility
N	38.3	3645	Left turn onto Independence Parkway
O	45.3	4312	U-turn on Independence Parkway at Juan Seguin Park
P	52.2	4968	Cross Tidal Road
Q	53.6	5096	Cross Miller Cut-Off Road
R	57.3	5448	Right turn onto Pasadena Freeway Frontage Road
S	61.3	5833	Right turn onto Tidal Road
T	68.1	6472	Cross Rohm and Haas Road
U	70.9	6741	Right turn; Monitoring through ITC facility
V	72.9	6935	Left turn; Monitoring through ITC facility
W	74.3	7061	Left turn onto Independence Parkway
X	81.6	7754	End mobile monitoring on Independence Parkway at Juan Seguin Park
Y	81.9	7785	Start ambient
Z	82.9	7881	End ambient
A1	84.1	7993	Start 30 mL/min spike
B1	85.2	8102	End 30 mL/min spike

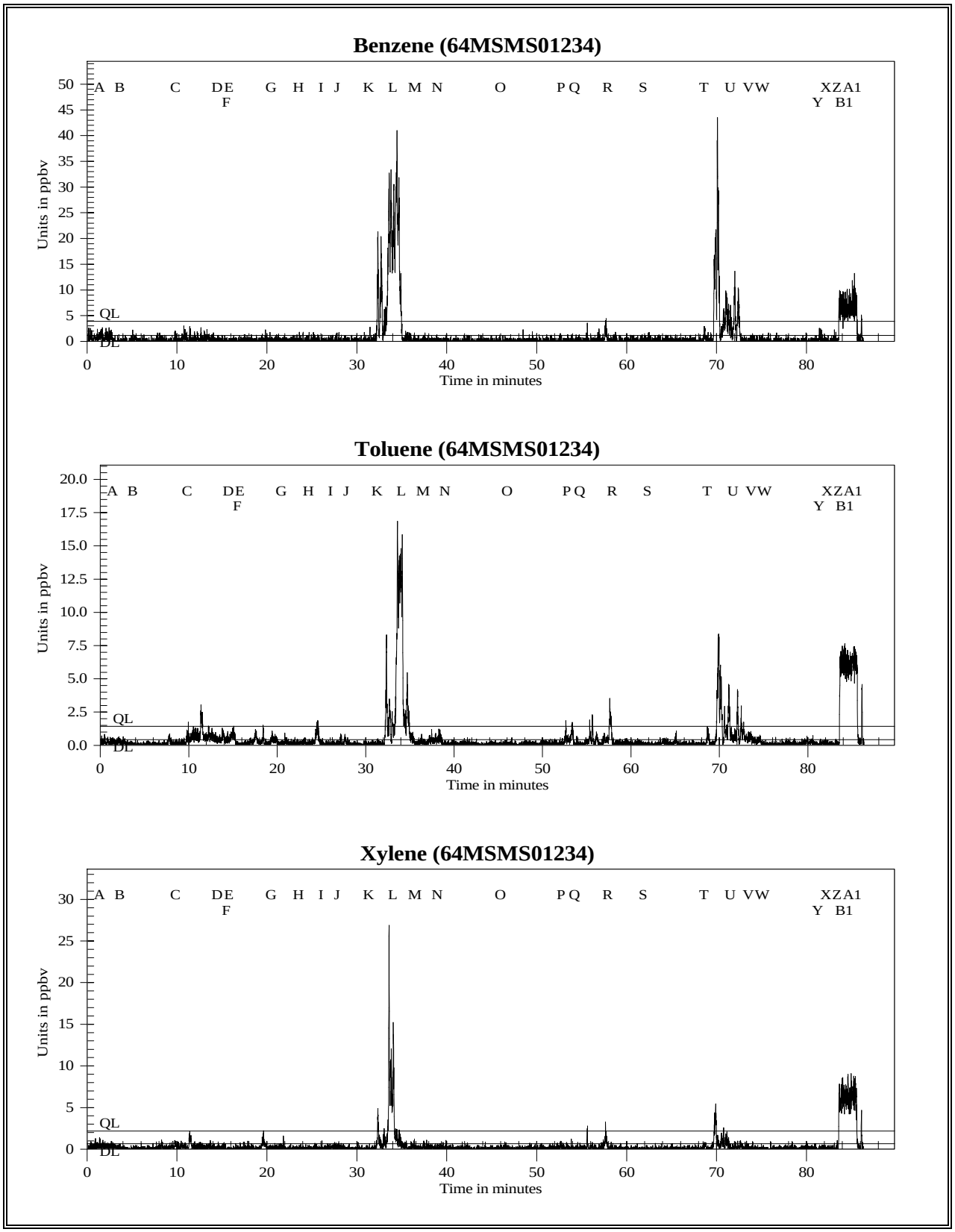


Figure 313c Monitoring ITC Site Two in ppbv for Benzene, Toluene, and Xylenes

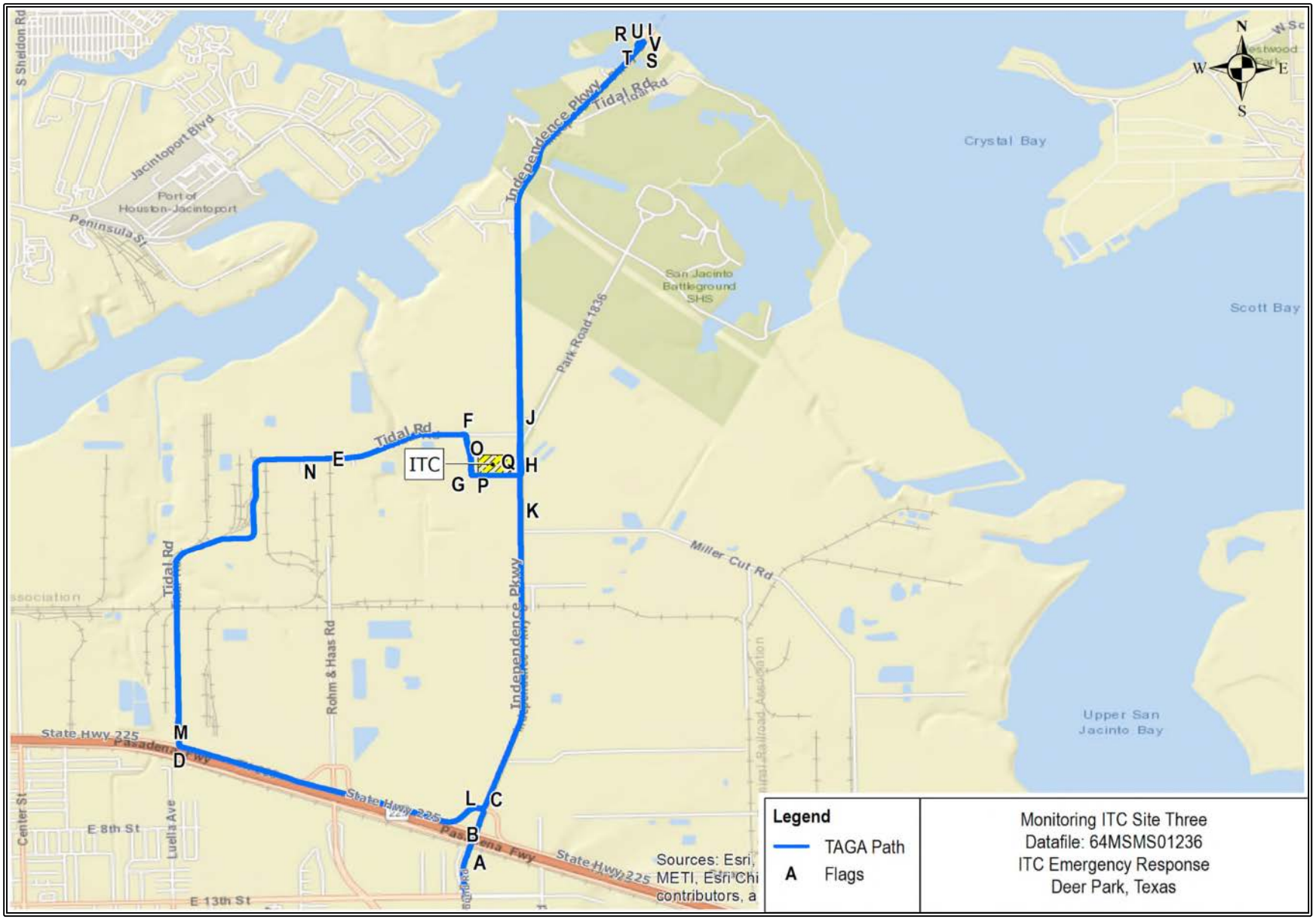


Figure 314a Monitoring ITC Site Three Path, 64MSMS01236

Figure 314b

TAGA File Event Summary
File: 64MSMS01236 Acquired on 20 May 2019 at 14:08:23
Title: Monitoring ITC Site Three

Flag	Time	Sequence	Description
A	0.9	86	Start mobile monitoring on Battleground Road
B	1.1	102	Continuing onto Independence Parkway
C	2.0	191	Left turn onto Pasadena Freeway Frontage Road
D	5.0	478	Right turn onto Tidal Road
E	10.4	994	Cross Rohm and Haas Road
F	13.2	1259	Right turn; Monitoring through ITC facility
G	15.0	1427	Left turn; Monitoring through ITC facility
H	16.2	1539	Left turn onto Independence Parkway
I	22.5	2144	U-turn on Independence Parkway at Juan Seguin Park
J	28.1	2674	Cross Tidal Road
K	29.4	2800	Cross Miller Cut-Off Road
L	33.5	3189	Right turn onto Pasadena Freeway Frontage Road
M	36.8	3502	Right turn onto Tidal Road
N	42.9	4076	Cross Rohm and Haas Road
O	45.3	4309	Right turn; Monitoring through ITC facility
P	47.1	4479	Left turn; Monitoring through ITC facility
Q	49.0	4659	Left turn onto Independence Parkway
R	55.5	5277	End mobile monitoring on Independence Parkway at Juan Seguin Park
S	55.8	5307	Start ambient
T	56.8	5401	End ambient
U	58.2	5532	Start 30 mL/min spike
V	59.2	5627	End 30 mL/min spike

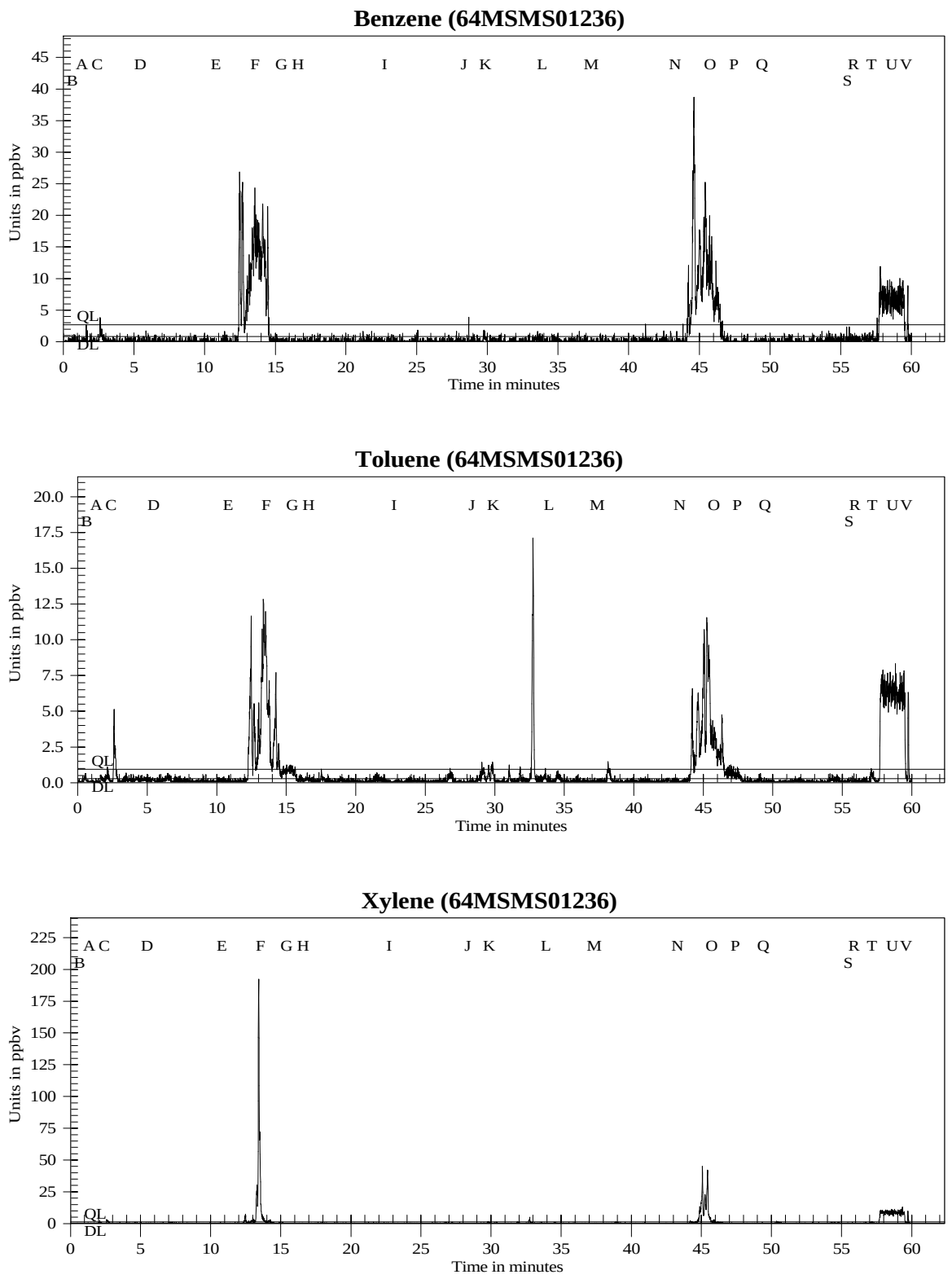


Figure 314c Monitoring ITC Site Three in ppbv for Benzene, Toluene, and Xylenes

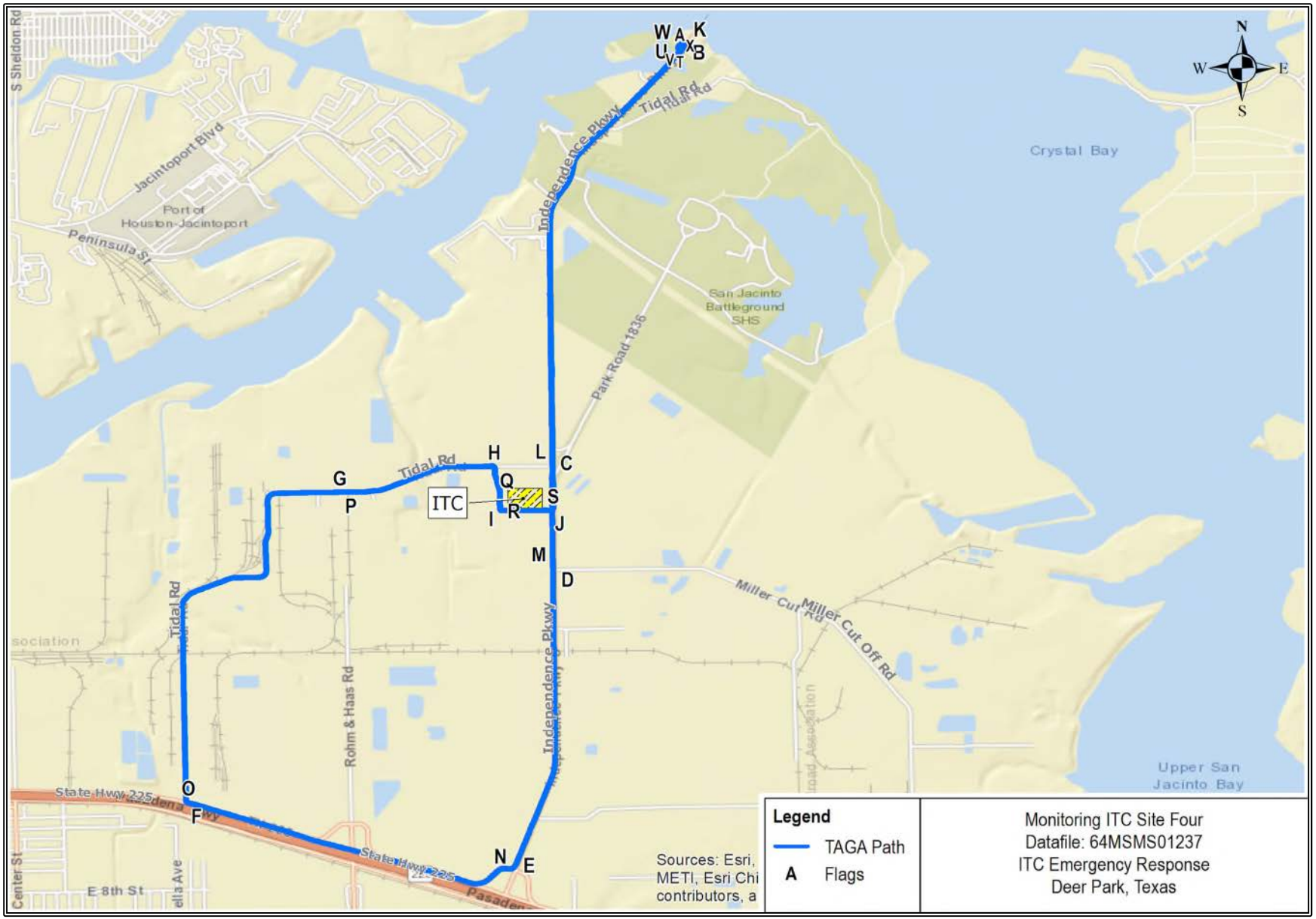


Figure 315a Monitoring ITC Site Four Path, 64MSMS01237

Figure 315b

TAGA File Event Summary
File: 64MSMS01237 Acquired on 20 May 2019 at 15:14:17
Title: Monitoring ITC Site Four

Flag	Time	Sequence	Description
A	0.6	62	Start mobile monitoring at Juan Seguin Park
B	1.4	132	Continuing onto Independence Parkway
C	6.0	573	Cross Tidal Road
D	7.4	704	Cross Miller Cut-Off Road
E	10.6	1008	Right turn onto Pasadena Freeway Frontage Road
F	13.5	1286	Right turn onto Tidal Road
G	19.3	1832	Cross Rohm and Haas Road
H	22.1	2105	Right turn; Monitoring through ITC facility
I	24.9	2365	Left turn; Monitoring through ITC facility
J	26.1	2482	Left turn onto Independence Parkway
K	32.4	3079	U-turn on Independence Parkway at Juan Seguin Park
L	37.6	3579	Cross Tidal Road
M	38.9	3697	Cross Miller Cut-Off Road
N	42.3	4027	Right turn onto Pasadena Freeway Frontage Road
O	45.4	4315	Right turn onto Tidal Road
P	51.1	4857	Cross Rohm and Haas Road
Q	53.6	5093	Right turn; Monitoring through ITC facility
R	55.4	5266	Left turn; Monitoring through ITC facility
S	56.5	5375	Left turn onto Independence Parkway
T	63.5	6039	End mobile monitoring on Independence Parkway at Juan Seguin Park
U	63.9	6080	Start ambient
V	64.9	6175	End ambient
W	66.0	6271	Start 30 mL/min spike
X	67.0	6369	End 30 mL/min spike

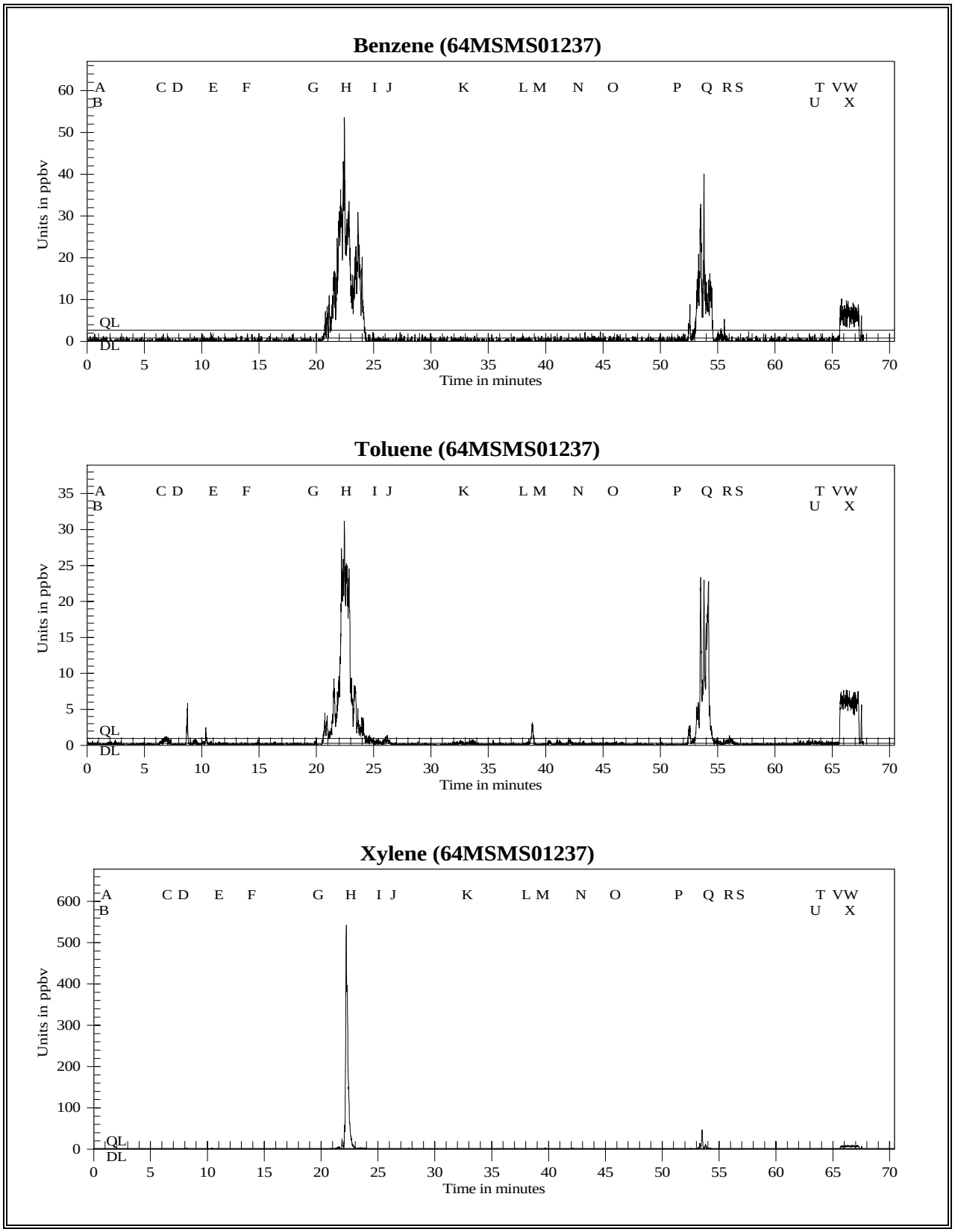


Figure 315c Monitoring ITC Site Four in ppbv for Benzene, Toluene, and Xylenes

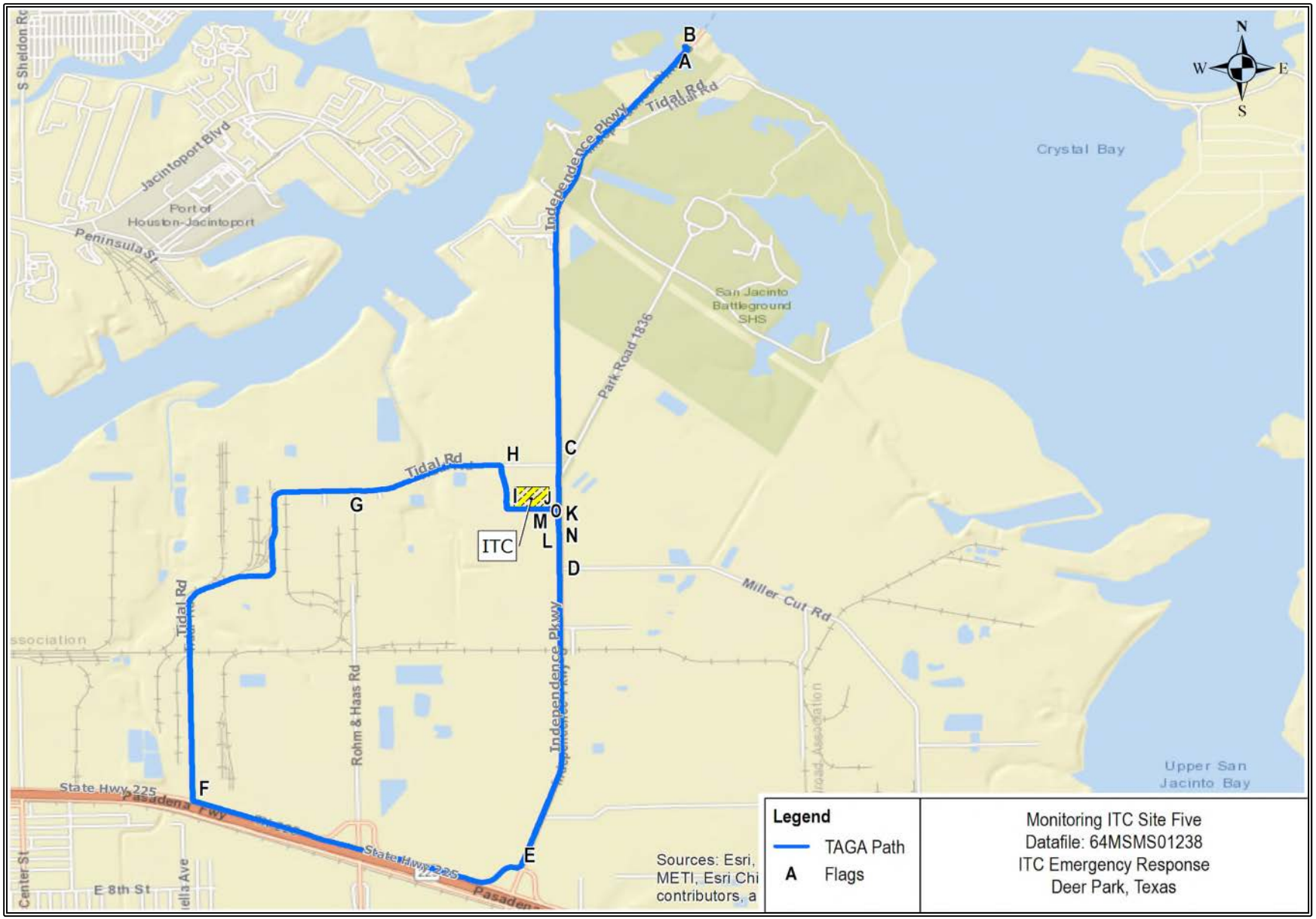


Figure 316a Monitoring ITC Site Five Path, 64MSMS01238

Figure 316b

TAGA File Event Summary
File: 64MSMS01238 Acquired on 20 May 2019 at 16:25:30
Title: Monitoring ITC Site Five

Flag	Time	Sequence	Description
A	1.9	178	Start mobile monitoring at Juan Seguin Park
B	3.1	294	Continuing onto Independence Parkway
C	7.8	741	Cross Tidal Road
D	8.9	845	Cross Miller Cut-Off Road
E	15.4	1463	Right turn onto Pasadena Freeway Frontage Road
F	17.8	1693	Right turn onto Tidal Road
G	23.4	2228	Cross Rohm and Haas Road
H	25.8	2449	Right turn; Monitoring through ITC facility
I	27.7	2631	Left turn; Monitoring through ITC facility
J	28.9	2745	Right turn onto Independence Parkway
K	29.3	2783	End mobile monitoring on Independence Parkway at Juan Seguin Park
L	29.4	2794	Start ambient
M	30.4	2889	End ambient
N	31.5	2992	Start 30 mL/min spike
O	32.5	3089	End 30 mL/min spike

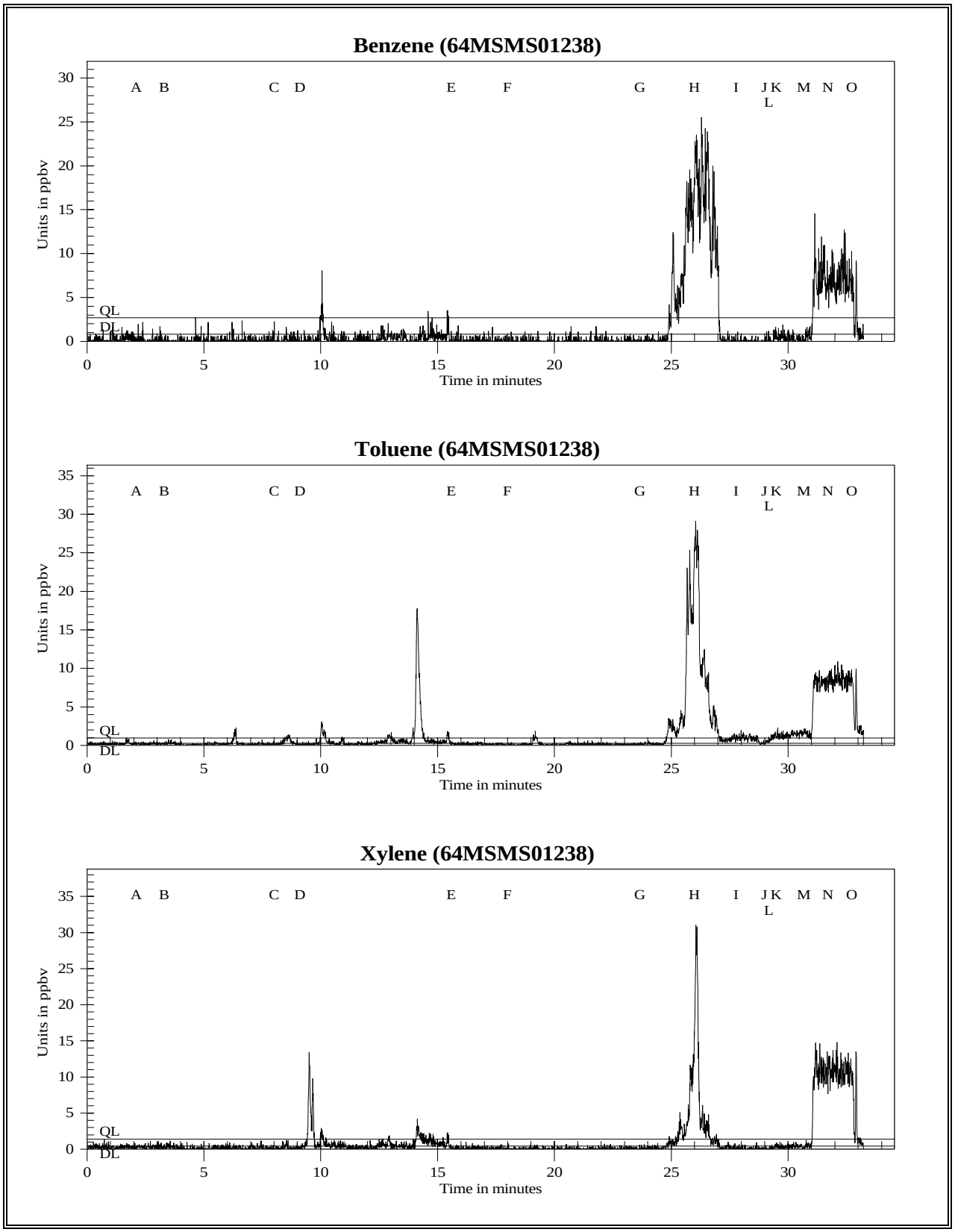


Figure 316c Monitoring ITC Site Five in ppbv for Benzene, Toluene, and Xylenes

APPENDIX A

Standard Gas Cylinder Certification

Intercontinental Terminals Company Emergency Response

Final Analytical TAGA Report

August 2019

ISO 9001:2008 Linde **SPECTRA** Environmental Gases, 80 Industrial Drive, Alpha, NJ 08865

THE LINDE GROUP

SHIPPED TO: Leidos Innovations Corporation
109 TW Alexander Dr
Durham, NC 27709-0002

PAGE: 1 of 1

CERTIFICATE OF ANALYSIS

Sales#:	116981059	**Cylinder Size:**	152 (8" X 47.5")
Production#:	1476496	**Cylinder # :**	CC-128272
Certification Date:	Dec-10-2018	**Cylinder Pressure:**	1100 psig
P.O.# :	CC-Danielle McCall	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	CERTIFIED	**Cylinder Volume:**	29.5 Liter
Material#:	24086389	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	2200 Liters
Expiration Date:	Dec-10-2019	**Blend Tolerance:**	5% Relative
Do NOT use under:	150 psig	**Analytical Accuracy:**	2% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	CERTIFIED CONC
Vinyl Chloride	75-01-4	20.0 ppm	20.7 ppm
1,1-Dichloroethene	75-35-4	20.0 ppm	20.7 ppm
Benzene	71-43-2	20.0 ppm	20.8 ppm
Trichloroethylene	79-01-6	20.0 ppm	20.8 ppm
Toluene	108-88-3	20.0 ppm	20.8 ppm
Tetrachloroethylene	127-18-4	20.0 ppm	20.8 ppm
P-Xylene	106-42-3	10.0 ppm	10.4 ppm
M-Xylene	108-38-3	10.0 ppm	10.4 ppm
O-Xylene	95-47-6	10.0 ppm	10.5 ppm
Nitrogen	7727-37-9	Balance	Balance

ANALYST: Justin Kutz

DATE: Dec-11-2018

Received 12/20/18 ~1050 psi

Linde Gas North America LLC

(908) 329-9700 Main (908) 329-9740 Fax
www.Lindeus.com

APPENDIX B

Calibration Data

Intercontinental Terminals Company Emergency Response

Final Analytical TAGA Report

August 2019

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 03/20/18

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3350.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
2026	1500sccs	~190SCFH	N/A	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date: EXP 05/02/19	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span 110.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
2020	90sccm	88.93	90.3	-1.37	-1.47
2018	40sccm	40.31	40.3	0.01	0.024
2016	10sccm	10.79	10.3	0.49	4.54
Gilibrator Flow Cell	S/N # 0411037-2			Calibration Date: EXP 04/13/19	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 03/21/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3350.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
0646	1500 sccs	~190 SCFH	N/A	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0148		Calibration Date: EXP 05/02/19	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Wed, Mar 20, 2019, 19:15:17
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR21 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Wed, Mar 20, 2019, 19:05:02
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Wed, Mar 20, 2019, 19:11:26

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-13.500
ST	-12.500
RO1	-7.500
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.071
75.000	0.073
100.000	0.081
120.000	0.088
160.000	0.102

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.049
70.000	0.044
100.000	0.043
130.000	0.052
170.000	0.045

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Wed, Mar 20, 2019, 19:15:43
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	4285	45.000	00:45:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR21 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Wed, Mar 20, 2019, 19:05:02
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Wed, Mar 20, 2019, 19:11:26

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-13.500
ST	-12.500
RO1	-7.500
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.071
75.000	0.073
100.000	0.081
120.000	0.088
160.000	0.102

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.049
70.000	0.044
100.000	0.043
130.000	0.052
170.000	0.045

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

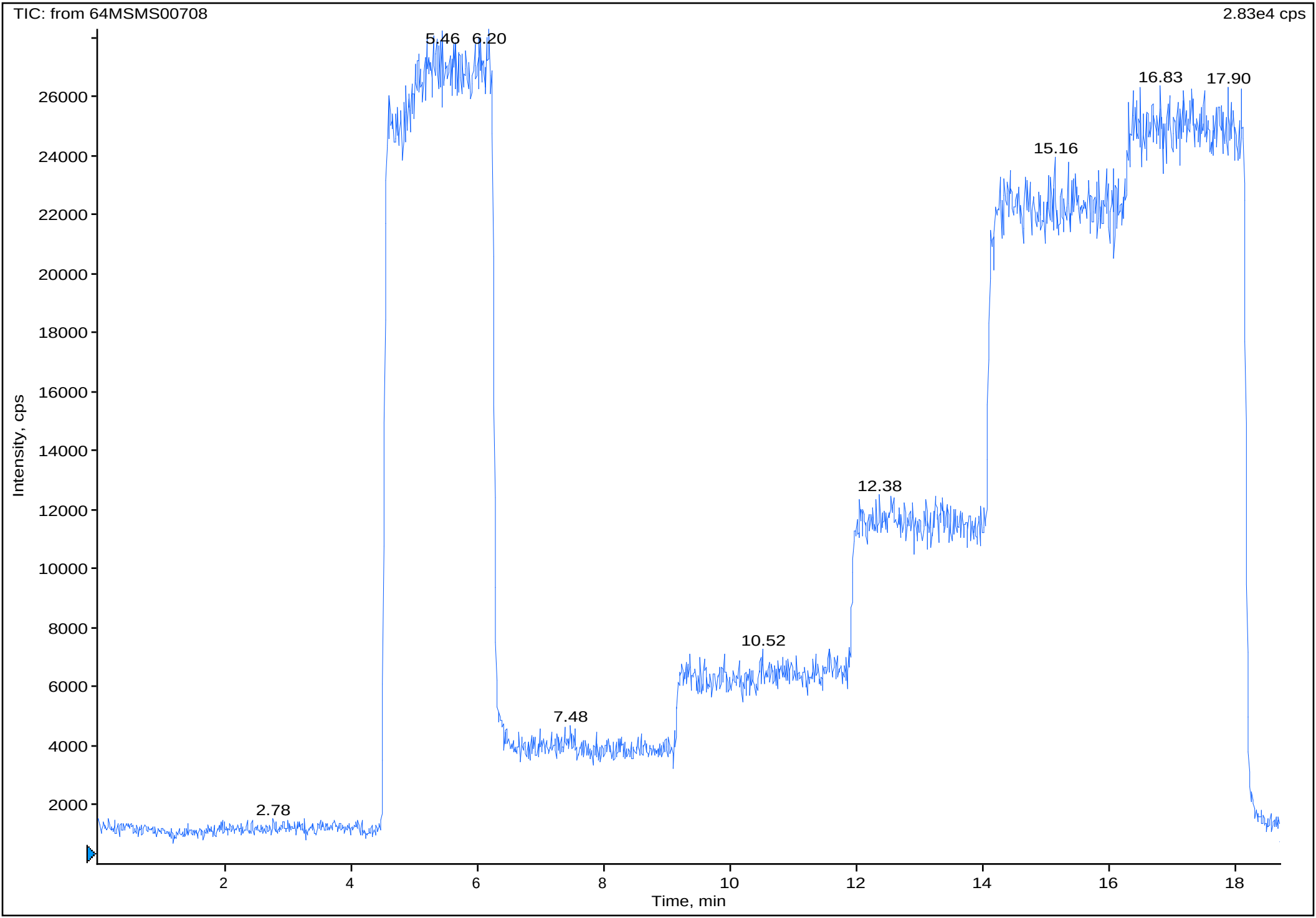
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

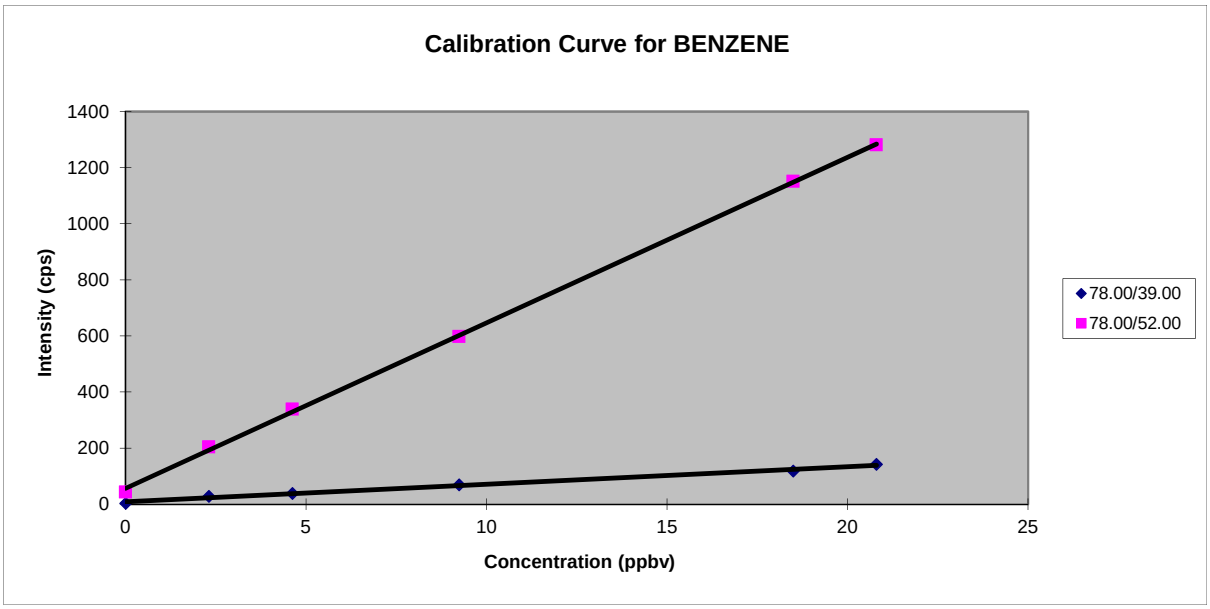
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

3/20/19.19.35.25
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, Mar 20, 2019 at 19:35:24; Exp. Comment: BTX

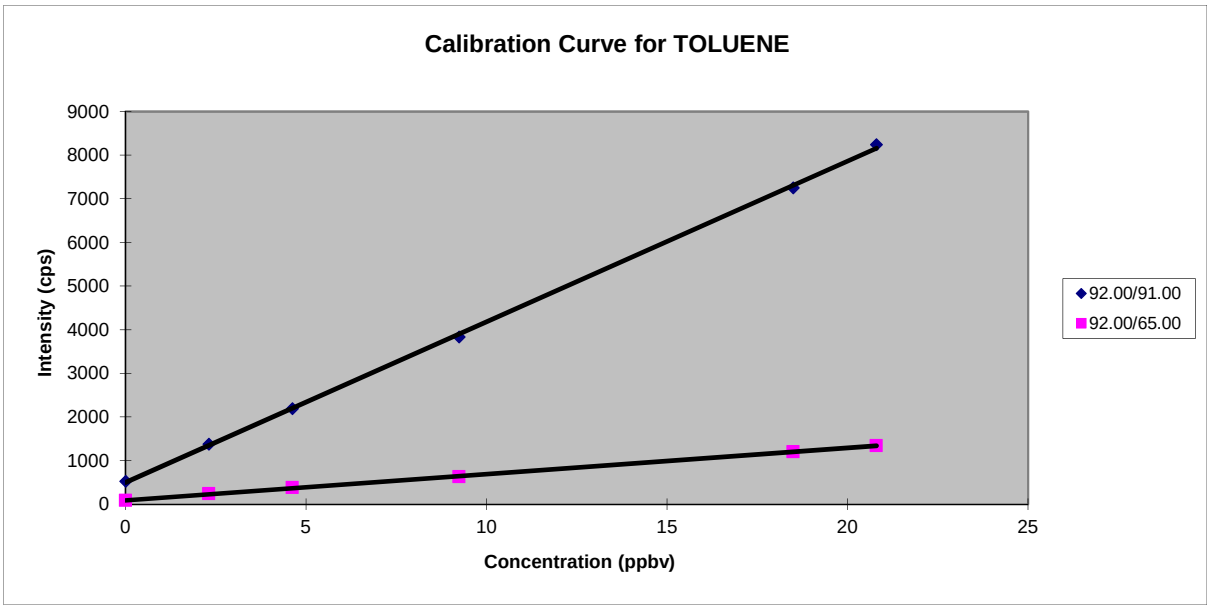




Filename:	64MSMS00708 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, March 20, 2019 20:13:01					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.87	10.50	13.00	15.28	17.25

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	6.2528935	58.9897652
Intercept:	9.0085136	57.1026278
Correlation:	0.99656467	0.99983024

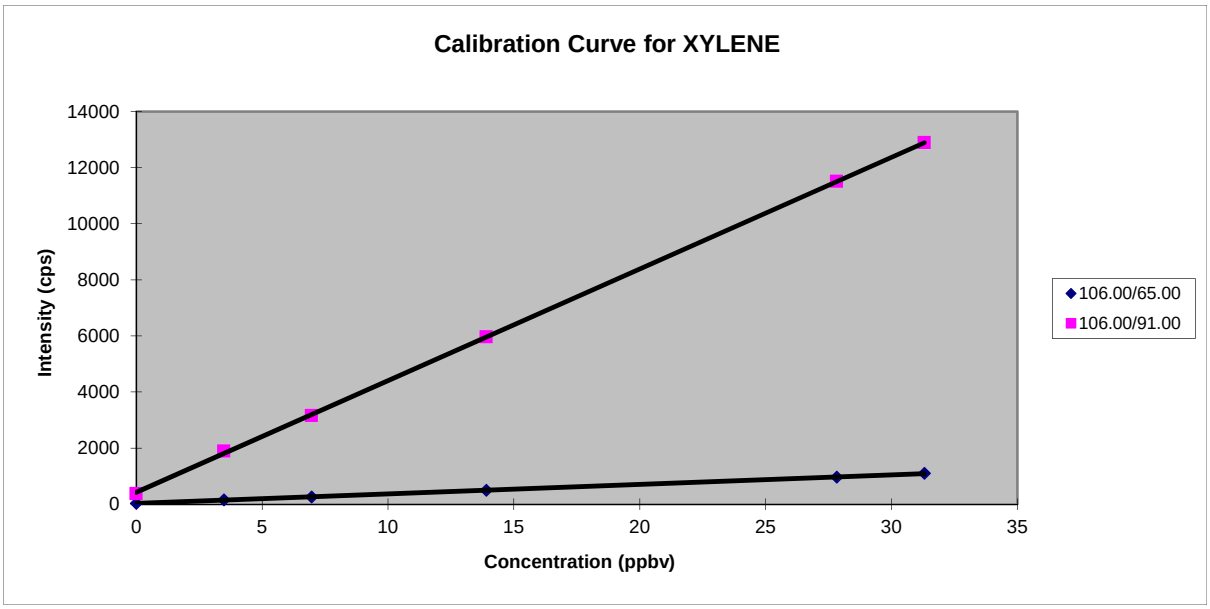
Concentratior	78.00/39.00	78.00/52.00
0	3.75	42.7083333
2.31	27.8125	203.958333
4.62	38.4375	338.645833
9.24	69.6907216	597.938144
18.49	118.75	1150.72917
20.8	142.395833	1280.20833



Filename:	64MSMS00708 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, March 20, 2019 20:13:38					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.87	10.50	13.00	15.28	17.25

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	368.283441	60.0818696
Intercept:	499.508226	90.8966527
Correlation:	0.99983897	0.99978354

Concentratior	92.00/91.00	92.00/65.00
0	524.583333	84.1666667
2.31	1379.79167	238.229167
4.62	2192.70833	379.895833
9.24	3833.29897	628.041237
18.49	7250.72917	1204.16667
20.8	8240.9375	1343.02083



Filename:	64MSMS00708 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, March 20, 2019 20:14:10					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.87	10.50	13.00	15.28	17.25

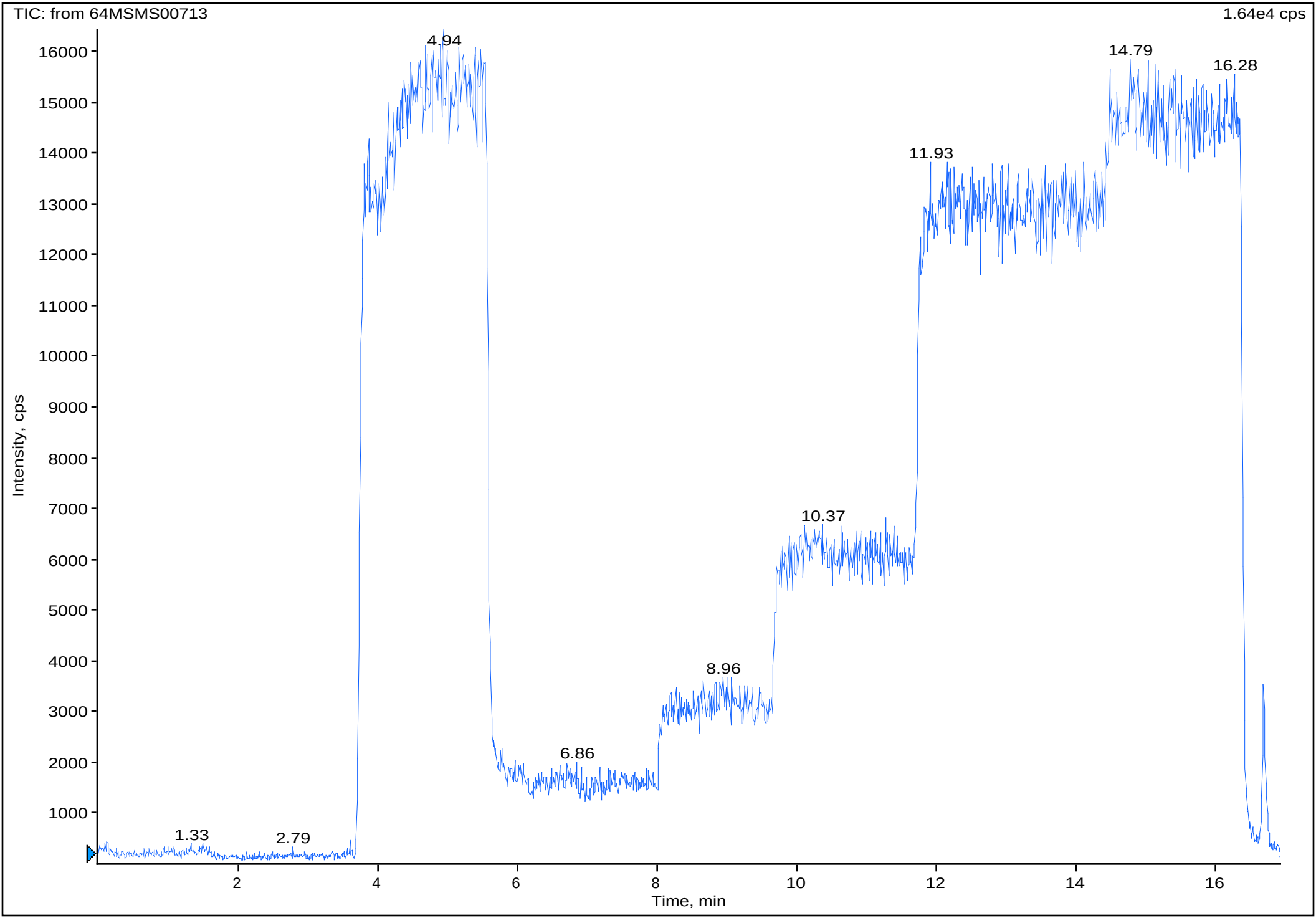
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	33.9853228	398.235723
Intercept:	31.1298763	423.706123
Correlation:	0.99985147	0.99995851

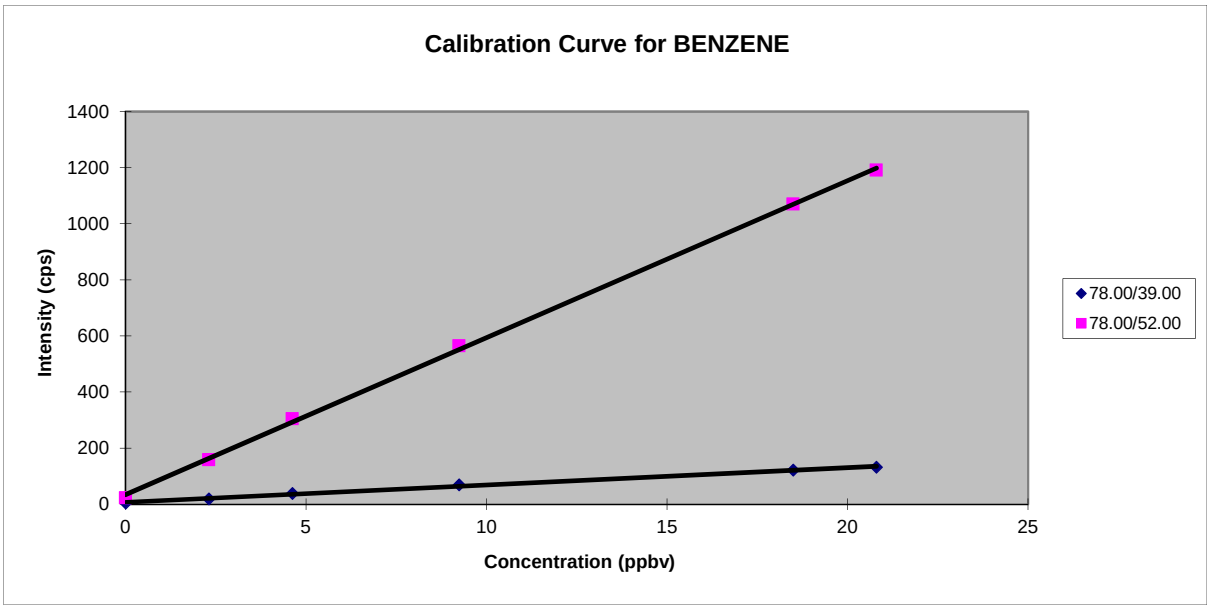
Concentratior	106.00/65.00	106.00/91.00
0	31.5625	379.6875
3.48	159.895833	1895.3125
6.96	258.125	3152.60417
13.91	500.721649	5964.63918
27.82	971.25	1.15E+04
31.3	1101.97917	1.29E+04

Report	File Name	64MSMS00708 et al.			
	Sample Name	BOD Calibration - BTX 20190321			
	Date	Wednesday, March 20, 2019 20:15:02			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	6.25	58.99	368.28	60.08	33.99	398.24
Intercept	9.01	57.10	499.51	90.90	31.13	423.71
Intensity	3.75	42.71	524.58	84.17	31.56	379.69
Int SD	7.15	21.45	88.28	33.71	20.02	80.74
Concentration	-0.84	-0.24	0.07	-0.11	0.01	-0.11
Conc SD	1.14	0.36	0.24	0.56	0.59	0.20
Compound Con	-0.54		-0.02		-0.05	
Compound SD	0.53		0.28		0.28	
Det. Limit	3.43	1.09	0.72	1.68	1.77	0.61
Compound DL	2.26		1.20		1.19	

3/20/19.13.38.24
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Mar 21, 2019 at 1:38:50; Exp. Comment: BTX

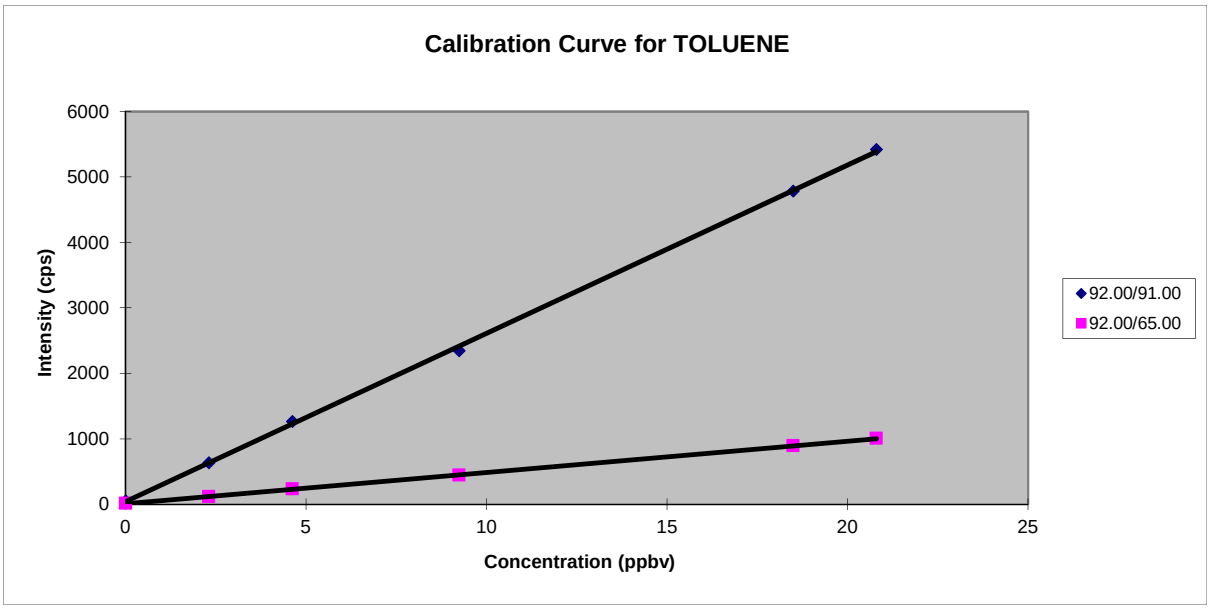




Filename:	64MSMS00713 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, March 20, 2019 13:56:05					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	7.25	8.86	10.72	12.98	15.35

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	6.16983532	55.968693
Intercept:	7.25834993	34.2599369
Correlation:	0.99781403	0.99977173

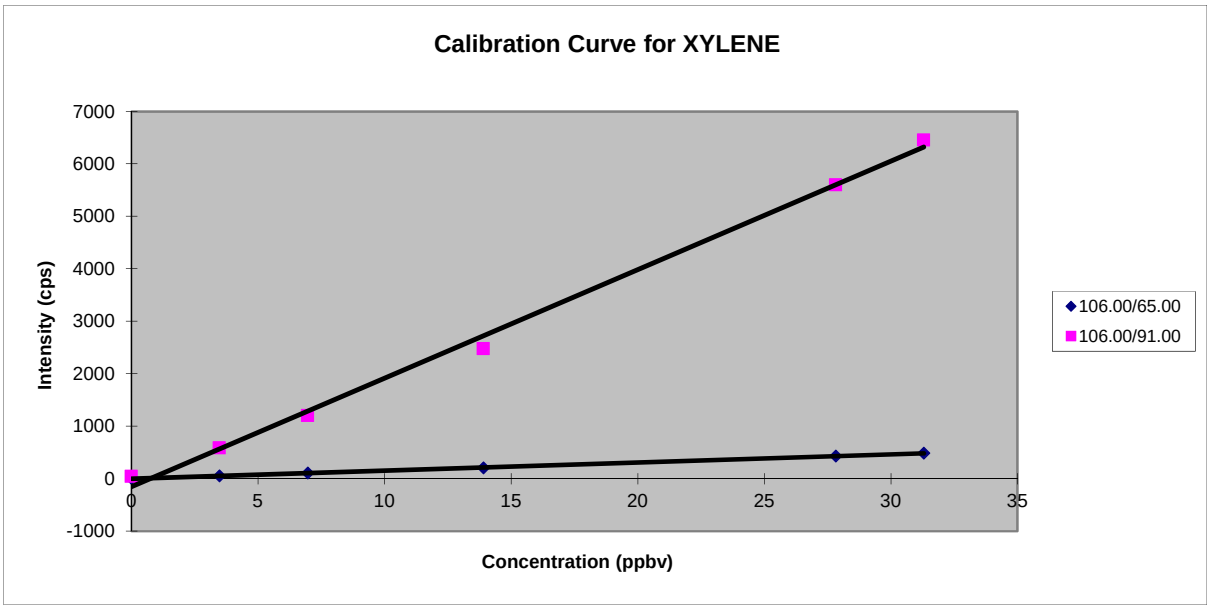
Concentratior	78.00/39.00	78.00/52.00
0	4.27083333	22.2916667
2.31	18.8541667	158.75
4.62	38.8541667	304.375
9.24	69.4791667	564.375
18.49	121.770833	1069.58333
20.8	132.5	1190.20833



Filename:	64MSMS00713 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, March 20, 2019 13:56:37					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	7.25	8.86	10.72	12.98	15.35

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	257.052572	47.7722301
Intercept:	41.6857283	9.24132554
Correlation:	0.99984732	0.99995186

Concentratior	92.00/91.00	92.00/65.00
0	53.3333333	11.6666667
2.31	636.5625	115.9375
4.62	1265.20833	235
9.24	2345.52083	445.3125
18.49	4786.25	891.354167
20.8	5419.375	1005.625



Filename:	64MSMS00713 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, March 20, 2019 13:57:05					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	7.25	8.86	10.72	12.98	15.35

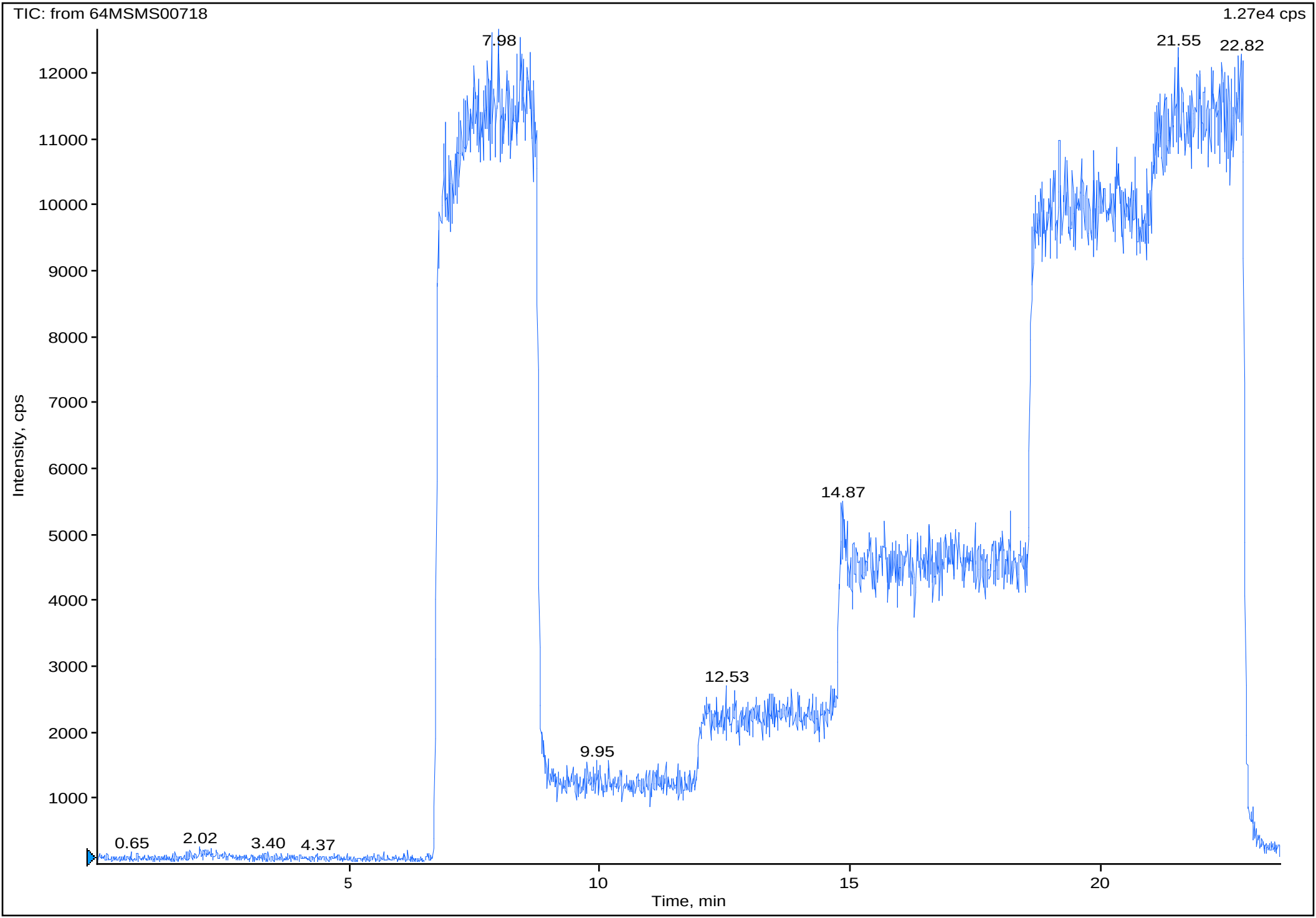
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	15.4564061	206.834223
Intercept:	0.91313114	-150.67265
Correlation:	0.99978355	0.99829999

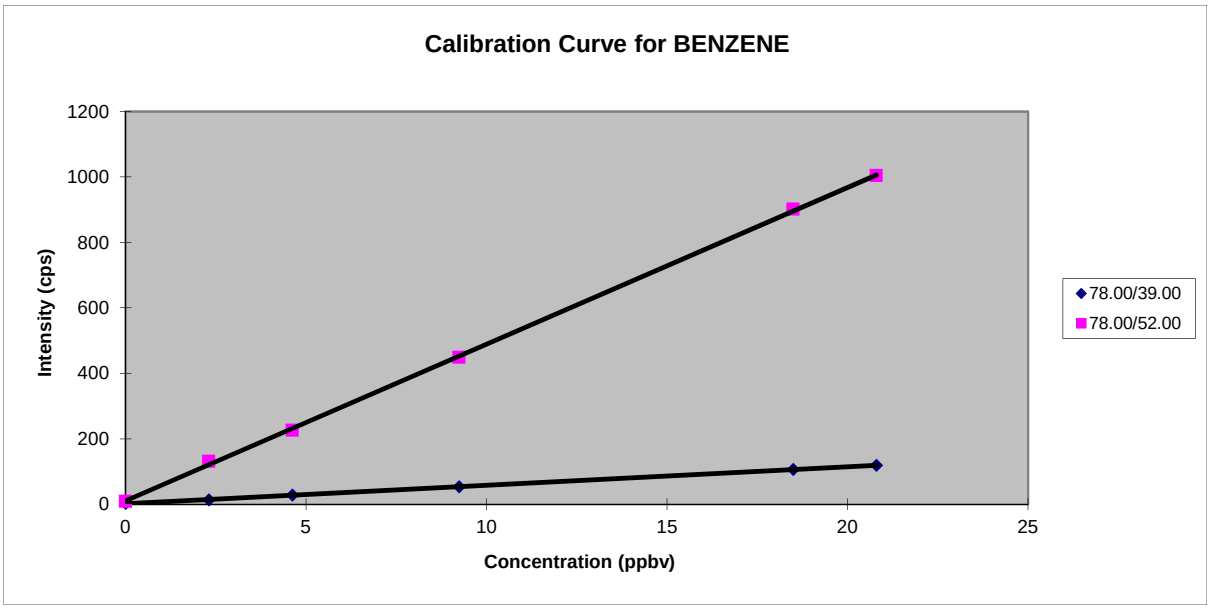
Concentratior	106.00/65.00	106.00/91.00
0	4.79166667	40.2083333
3.48	55.1041667	586.25
6.96	108.645833	1201.97917
13.91	207.916667	2478.02083
27.82	431.666667	5598.64583
31.3	487.5	6455.3125

Report	File Name	64MSMS00713 et al.			
	Sample Name	MOD Calibration - BTX 20190321			
	Date	Wednesday, March 20, 2019 13:57:39			
	Time Range	2.00	to	3.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	6.17	55.97	257.05	47.77	15.46	206.83
Intercept	7.26	34.26	41.69	9.24	0.91	-150.67
Intensity	4.27	22.29	53.33	11.67	4.79	40.21
Int SD	8.43	15.73	26.98	12.95	7.94	24.49
Concentration	-0.48	-0.21	0.05	0.05	0.25	0.92
Conc SD	1.37	0.28	0.10	0.27	0.51	0.12
Compound Con	-0.35		0.05		0.59	
Compound SD	0.58		0.13		0.22	
Det. Limit	4.10	0.84	0.31	0.81	1.54	0.36
Compound DL	2.47		0.56		0.95	

3/20/19.19.27.32
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Mar 21, 2019 at 7:27:58; Exp. Comment: BTX

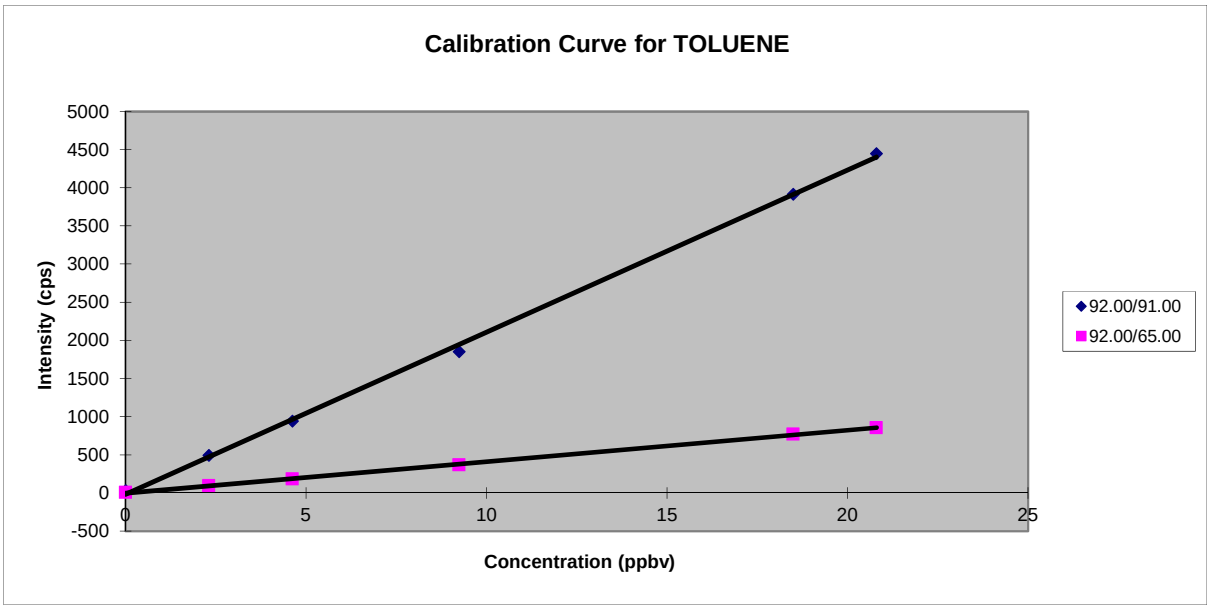




Filename:	64MSMS00718 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, March 20, 2019 19:53:37					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.00	10.54	13.38	16.45	19.85	22.09

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	5.61556737	47.8894392
Intercept:	1.96496669	10.4322283
Correlation:	0.99986603	0.99989936

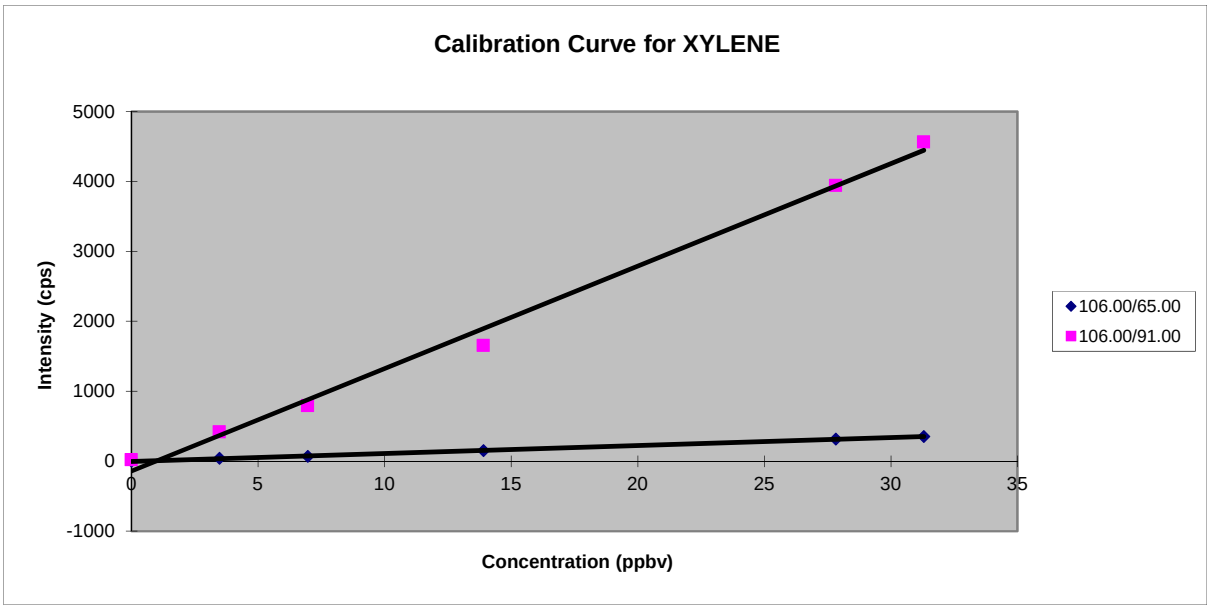
Concentratior	78.00/39.00	78.00/52.00
0	3.125	8.4375
2.31	13.6458333	130.416667
4.62	27.9166667	225.833333
9.24	53.75	448.75
18.49	106.145833	900.833333
20.8	118.645833	1004.27083



Filename:	64MSMS00718 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, March 20, 2019 19:54:19					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.00	10.54	13.38	16.45	19.85	22.09

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	212.582559	41.1569558
Intercept:	-17.054791	-0.4101003
Correlation:	0.99958588	0.99970173

Concentratior	92.00/91.00	92.00/65.00
0	33.4375	8.54166667
2.31	494.6875	96.875
4.62	942.916667	183.333333
9.24	1854.16667	367.291667
18.49	3914.27083	770.104167
20.8	4448.02083	853.958333



Filename:	64MSMS00718 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, March 20, 2019 19:54:44					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.00	10.54	13.38	16.45	19.85	22.09

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	11.366638	146.554795
Intercept:	-1.6011007	-141.18257
Correlation:	0.99928995	0.99701175

Concentratior	106.00/65.00	106.00/91.00
0	3.22916667	19.6875
3.48	42.2916667	415.729167
6.96	69.8958333	792.1875
13.91	150.625	1652.8125
27.82	319.166667	3942.39583
31.3	353.958333	4563.02083

Report	File Name	64MSMS00718 et al.			
	Sample Name	EOD Calibration - BTX 20190321			
	Date	Wednesday, March 20, 2019 19:55:41			
	Time Range	3.50	to	4.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	5.62	47.89	212.58	41.16	11.37	146.55
Intercept	1.96	10.43	-17.05	-0.41	-1.60	-141.18
Intensity	3.13	8.44	33.44	8.54	3.23	19.69
Int SD	6.54	10.99	22.89	11.14	6.73	14.76
Concentration	0.21	-0.04	0.24	0.22	0.42	1.10
Conc SD	1.16	0.23	0.11	0.27	0.59	0.10
Compound Con	0.08		0.23		0.76	
Compound SD	0.49		0.13		0.24	
Det. Limit	3.49	0.69	0.32	0.81	1.78	0.30
Compound DL	2.09		0.57		1.04	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 03/22/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3350	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
0643	1500SCCS	~191SCFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	180WY15-0168		Calibration Date:	EXP 05/02/19

Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Wed, Mar 20, 2019, 19:15:17
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR21 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Wed, Mar 20, 2019, 19:05:02
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Wed, Mar 20, 2019, 19:11:26

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-13.500
ST	-12.500
RO1	-7.500
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.071
75.000	0.073
100.000	0.081
120.000	0.088
160.000	0.102

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.049
70.000	0.044
100.000	0.043
130.000	0.052
170.000	0.045

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Wed, Mar 20, 2019, 21:40:30
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR21 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Wed, Mar 20, 2019, 19:05:02
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Wed, Mar 20, 2019, 19:11:26

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-13.500
ST	-12.500
RO1	-7.500
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.071
75.000	0.073
100.000	0.081
120.000	0.088
160.000	0.102

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.049
70.000	0.044
100.000	0.043
130.000	0.052
170.000	0.045

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

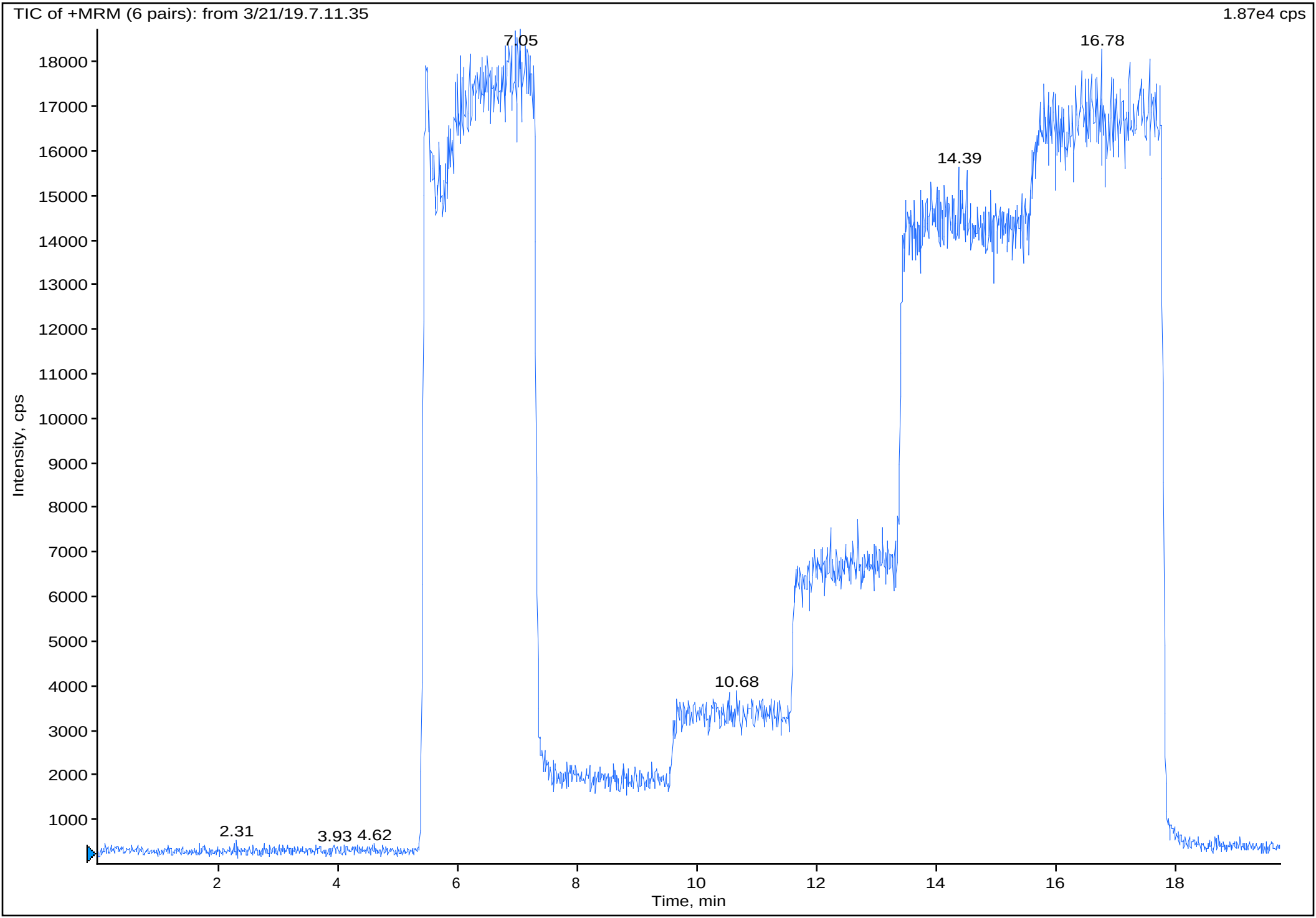
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

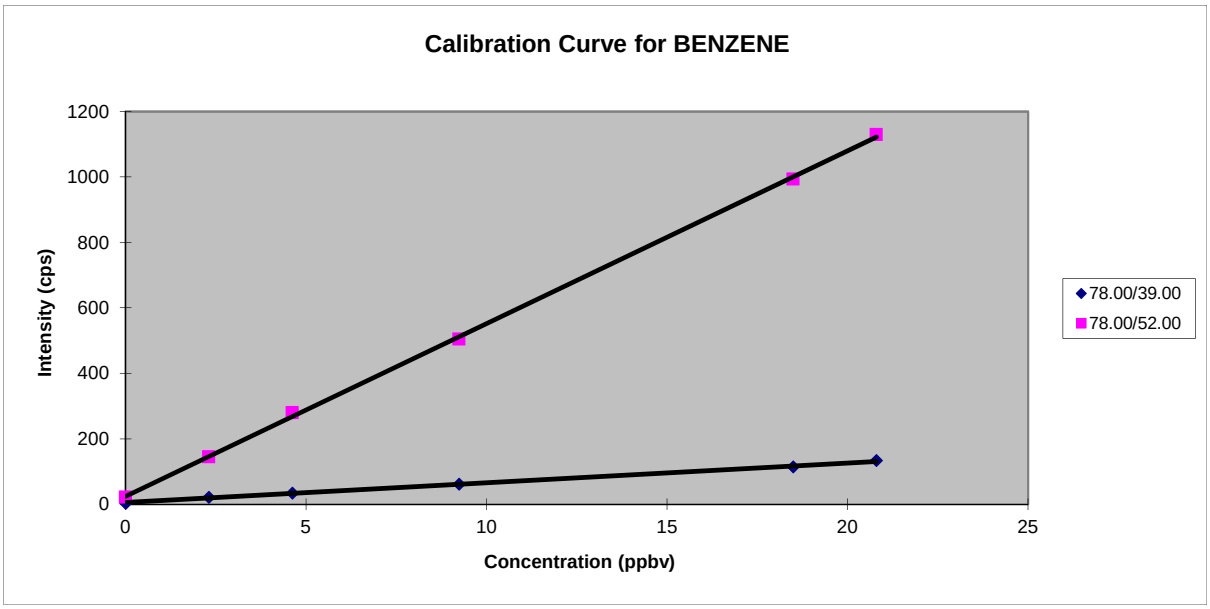
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

3/21/19.7.11.35
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Mar 21, 2019 at 7:11:34; Exp. Comment: BTX

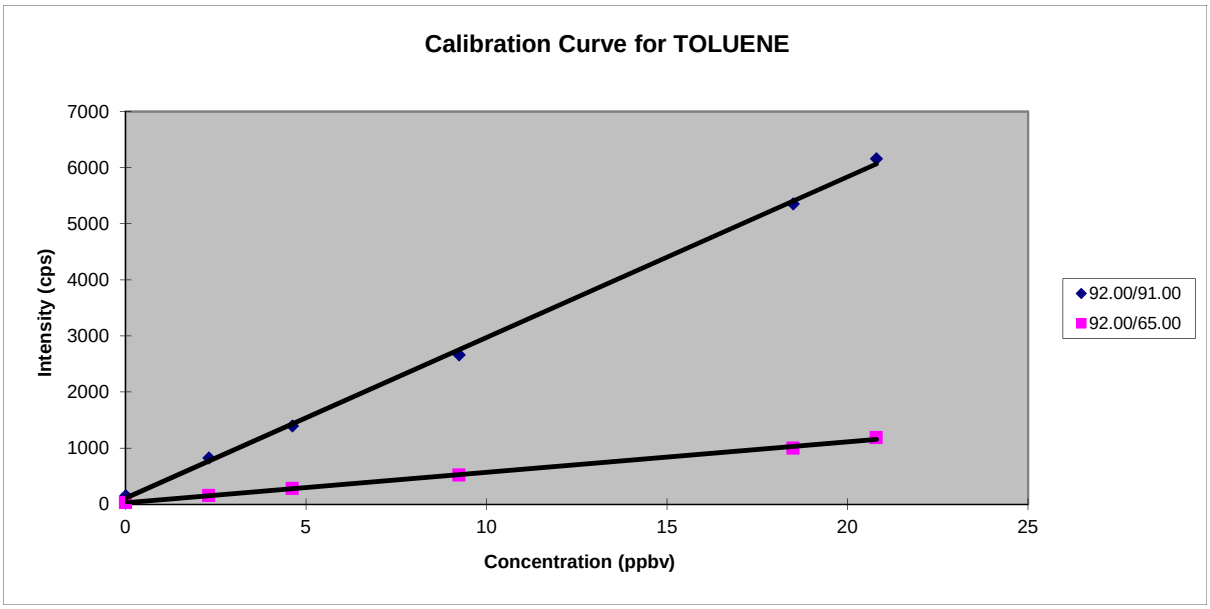




Filename:	3/21/19.7.11.35					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, March 21, 2019 7:37:06					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.00	8.44	10.66	12.61	14.53	16.80

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	6.04980447	52.7853761
Intercept:	5.37886033	24.2145359
Correlation:	0.99895356	0.99985557

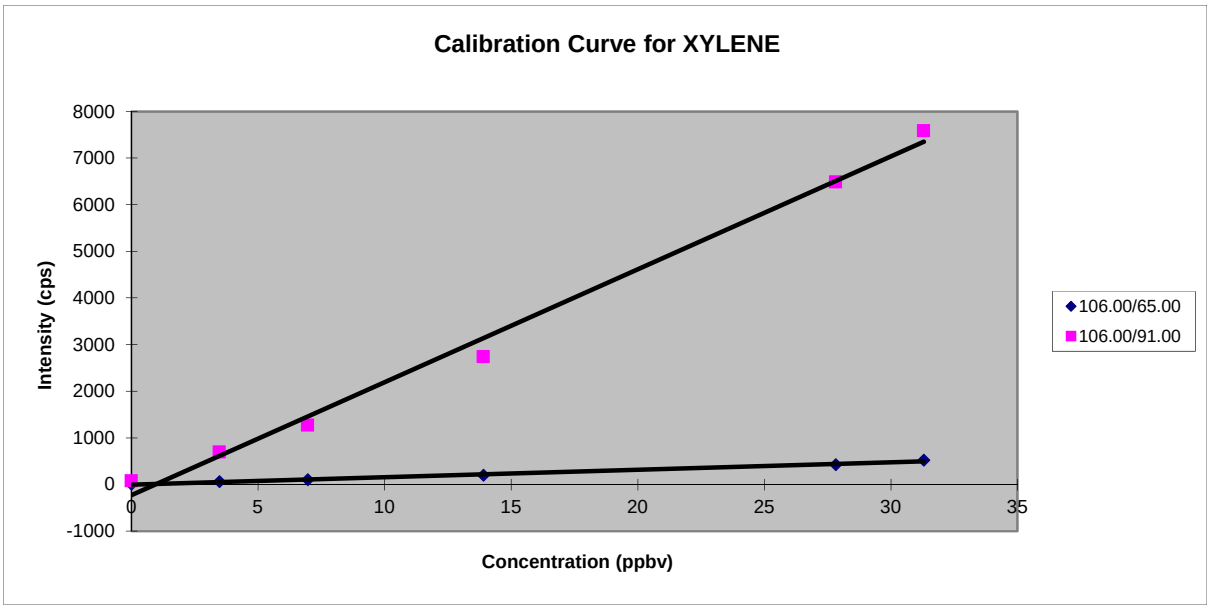
Concentratior	78.00/39.00	78.00/52.00
0	2.8125	21.5625
2.31	21.6494845	144.639175
4.62	34.4791667	279.6875
9.24	61.25	504.270833
18.49	114.0625	993.333333
20.8	133.541667	1129.27083



Filename:	3/21/19.7.11.35					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, March 21, 2019 7:37:47					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.00	8.44	10.66	12.61	14.53	16.80

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	286.280196	54.2697842
Intercept:	111.188394	26.0513604
Correlation:	0.99958	0.99916694

Concentratior	92.00/91.00	92.00/65.00
0	153.229167	28.4375
2.31	823.917526	153.402062
4.62	1396.97917	280.625
9.24	2660.20833	520.729167
18.49	5353.75	999.0625
20.8	6156.14583	1183.85417



Filename:	3/21/19.7.11.35					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, March 21, 2019 7:38:12					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.00	8.44	10.66	12.61	14.53	16.80

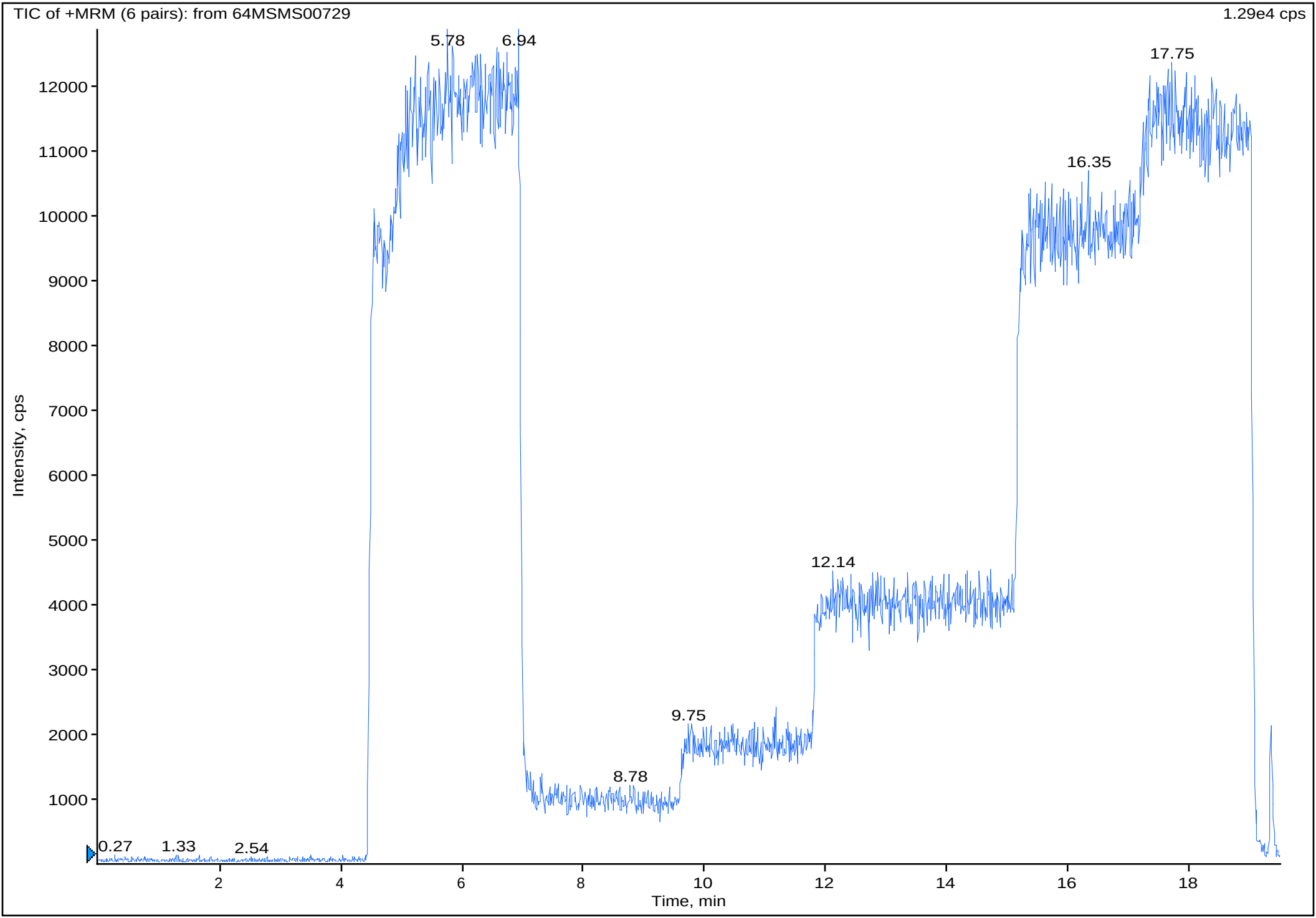
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	15.9971265	242.094943
Intercept:	-2.254238	-227.23628
Correlation:	0.99672603	0.99649258

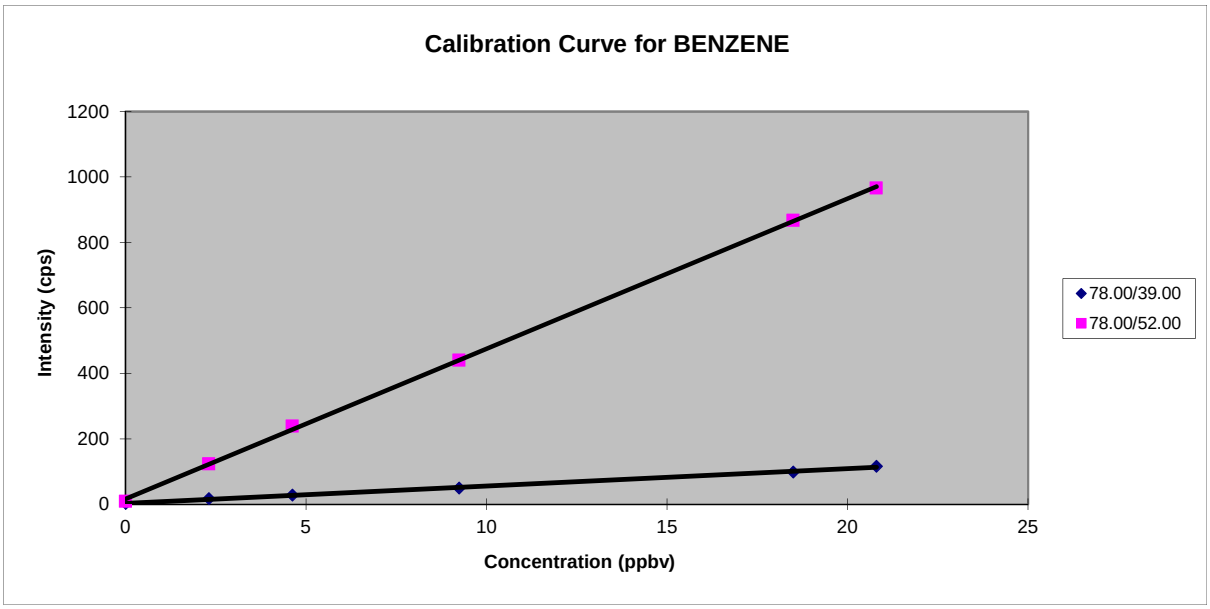
Concentratior	106.00/65.00	106.00/91.00
0	8.4375	76.875
3.48	61.5463918	692.268041
6.96	103.020833	1268.4375
13.91	199.583333	2739.58333
27.82	427.395833	6483.4375
31.3	521.770833	7583.64583

Report	File Name	3/21/19.7.11.35			
	Sample Name	BOD Calibration - BTX 20190322			
	Date	Thursday, March 21, 2019 7:38:44			
	Time Range	3.50	to	4.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	6.05	52.79	286.28	54.27	16.00	242.09
Intercept	5.38	24.21	111.19	26.05	-2.25	-227.24
Intensity	2.81	21.56	153.23	28.44	8.44	76.88
Int SD	5.93	18.60	44.24	17.85	10.60	32.23
Concentration	-0.42	-0.05	0.15	0.04	0.67	1.26
Conc SD	0.98	0.35	0.15	0.33	0.66	0.13
Compound Con	-0.24		0.10		0.96	
Compound SD	0.47		0.17		0.28	
Det. Limit	2.94	1.06	0.46	0.99	1.99	0.40
Compound DL	2.00		0.73		1.19	

64MSMS00729
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Mar 21, 2019 at 19:33:54; Exp. Comment: BTX

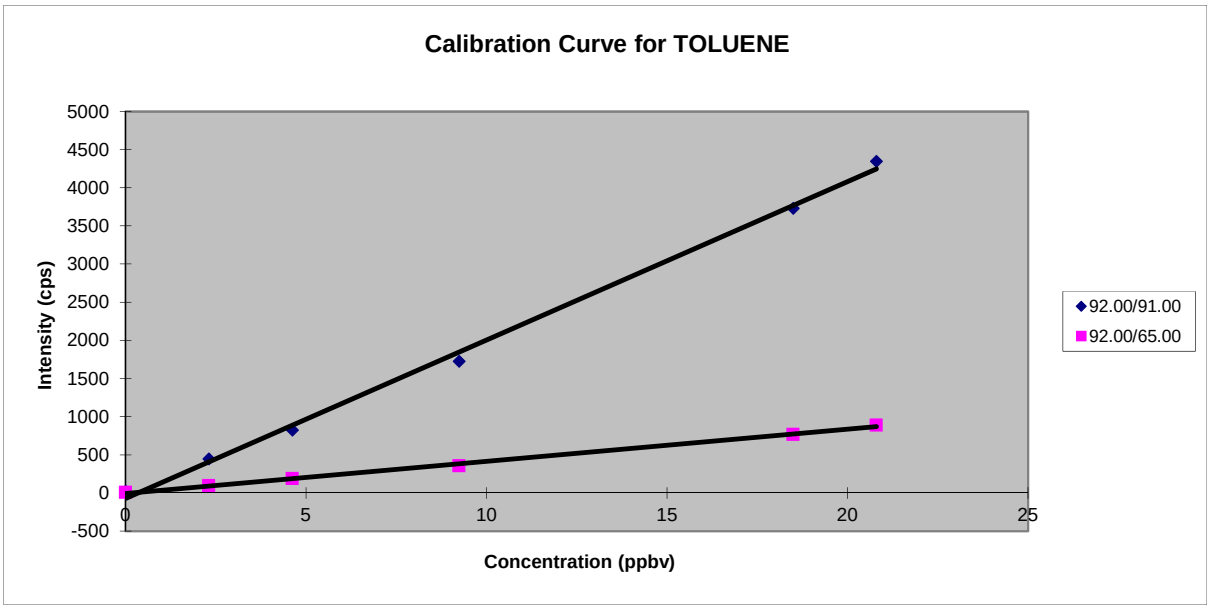




Filename:	64MSMS00729					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, March 21, 2019 19:56:55					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.00	8.50	10.68	13.38	16.22	18.02

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	5.30846466	45.867667
Intercept:	3.0501472	16.5333372
Correlation:	0.99864006	0.99988607

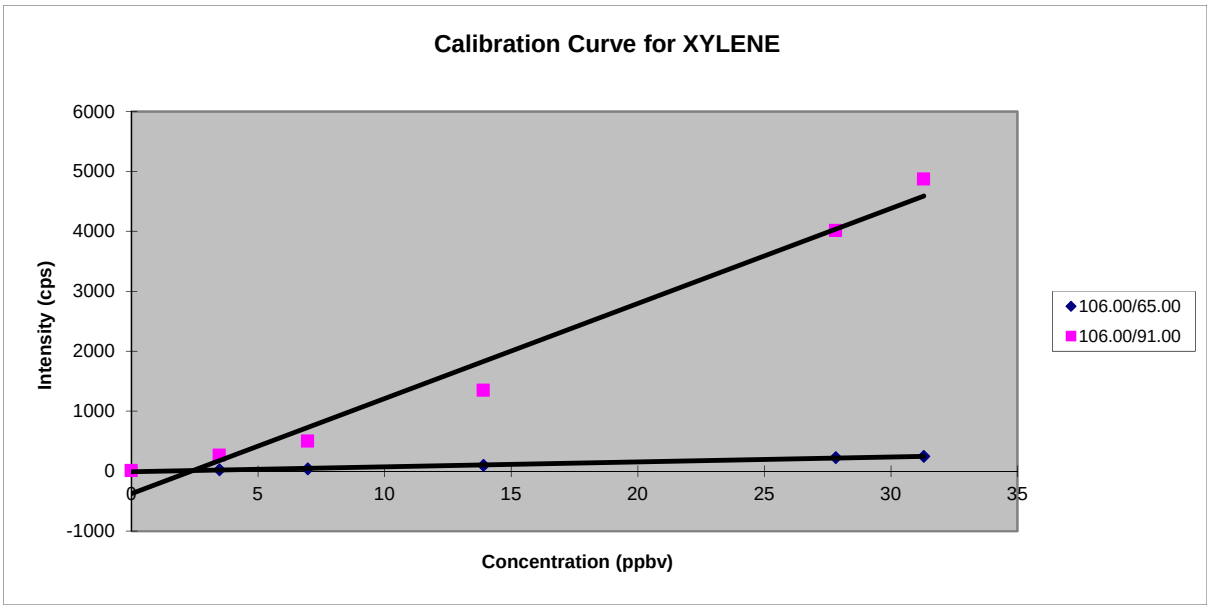
Concentratior	78.00/39.00	78.00/52.00
0	2.5	8.54166667
2.31	17.0833333	123.020833
4.62	28.6458333	237.916667
9.24	49.2708333	440.104167
18.49	98.6458333	867.1875
20.8	116.5625	966.25



Filename:	64MSMS00729					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, March 21, 2019 19:57:40					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.00	8.50	10.68	13.38	16.22	18.02

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	207.682757	42.079004
Intercept:	-69.802477	-5.9988712
Correlation:	0.99875951	0.99912065

Concentratior	92.00/91.00	92.00/65.00
0	21.6666667	5.20833333
2.31	445.729167	96.1458333
4.62	824.375	188.020833
9.24	1726.25	356.5625
18.49	3732.91667	765.625
20.8	4348.33333	886.145833



Filename:	64MSMS00729					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, March 21, 2019 19:58:09					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.00	8.50	10.68	13.38	16.22	18.02

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	8.15201131	158.545972
Intercept:	-6.0295917	-371.50676
Correlation:	0.99752764	0.98795845

Concentratior	106.00/65.00	106.00/91.00
0	1.45833333	8.125
3.48	25.1041667	264.479167
6.96	42.0833333	498.333333
13.91	99.7916667	1348.02083
27.82	229.479167	4013.22917
31.3	246.354167	4872.60417

Report	File Name	64MSMS00729			
	Sample Name	EOD Calibration - BTX 20190322			
	Date	Thursday, March 21, 2019 19:59:00			
	Time Range	2.50	to	3.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	5.31	45.87	207.68	42.08	8.15	158.55
Intercept	3.05	16.53	-69.80	-6.00	-6.03	-371.51
Intensity	2.50	8.54	21.67	5.21	1.46	8.13
Int SD	5.43	10.46	18.16	7.40	4.81	11.08
Concentration	-0.10	-0.17	0.44	0.27	0.92	2.39
Conc SD	1.02	0.23	0.09	0.18	0.59	0.07
Compound Con	-0.14		0.35		1.66	
Compound SD	0.44		0.09		0.23	
Det. Limit	3.07	0.68	0.26	0.53	1.77	0.21
Compound DL	1.88		0.39		0.99	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 03/23/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3350.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
0656	1500SCCS	~1915CFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date: EXP 05/02/19	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Fri, Mar 22, 2019, 7:53:56
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR23 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Fri, Mar 22, 2019, 7:35:49
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Fri, Mar 22, 2019, 7:51:31

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-14.500
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.075
100.000	0.081
120.000	0.088
160.000	0.098

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.039
100.000	0.037
130.000	0.040
170.000	0.045

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Fri, Mar 22, 2019, 7:54:36
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR23 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Fri, Mar 22, 2019, 7:35:49
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Fri, Mar 22, 2019, 7:51:31

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-14.500
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.075
100.000	0.081
120.000	0.088
160.000	0.098

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.039
100.000	0.037
130.000	0.040
170.000	0.045

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

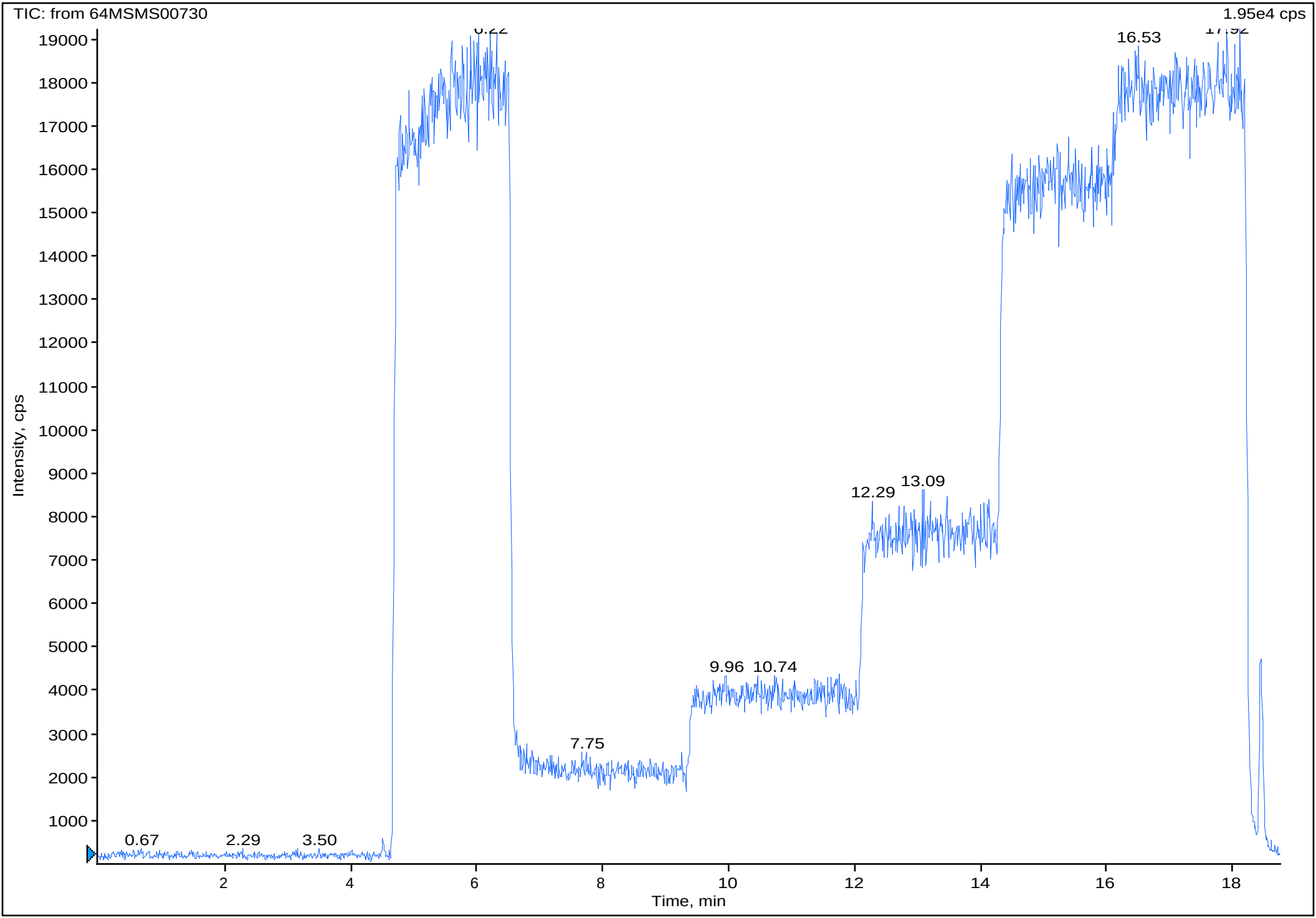
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

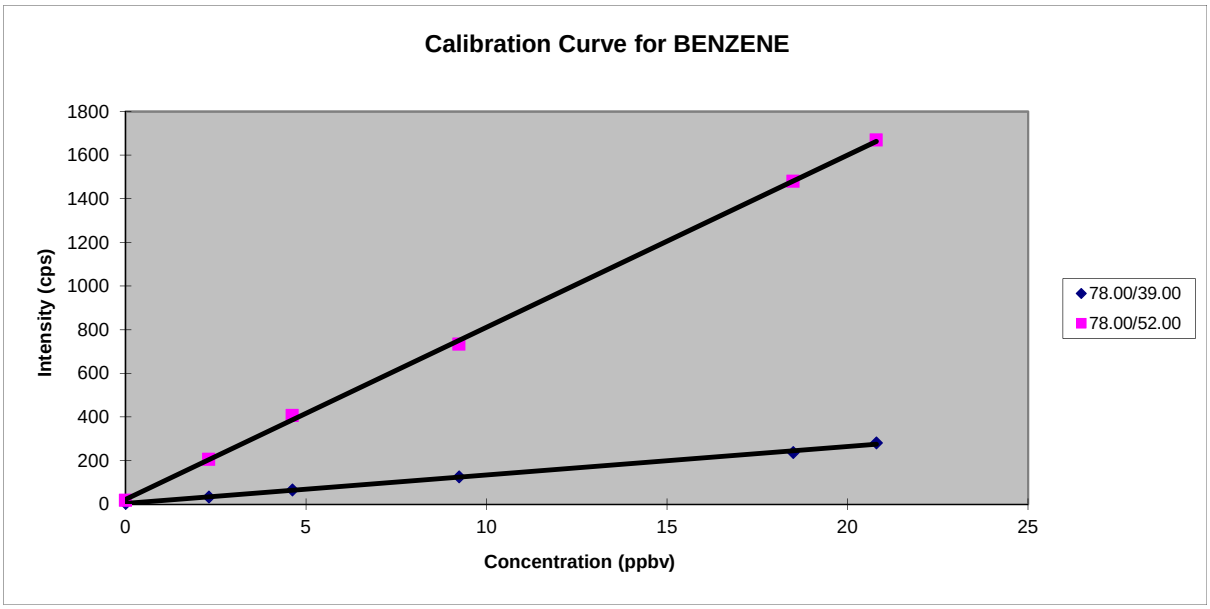
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

3/22/19.7.55.37
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, Mar 22, 2019 at 7:55:36; Exp. Comment: BTX

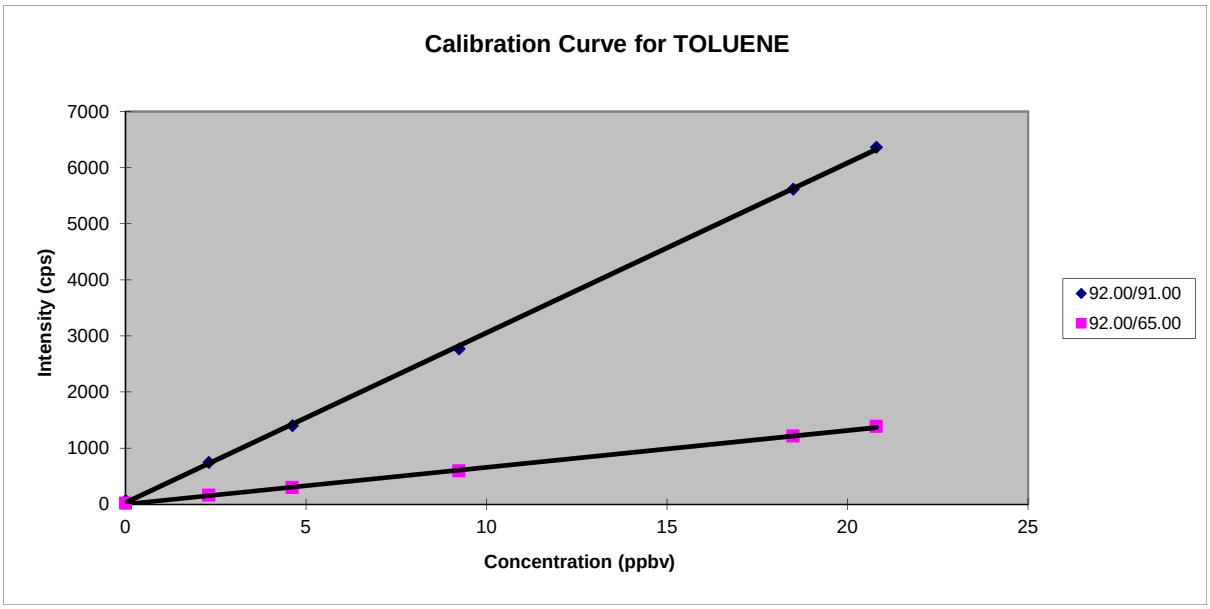




Filename:	64MSMS00730 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, March 22, 2019 8:22:31					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	8.14	10.61	13.01	15.16	17.11

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	13.0440806	78.8771911
Intercept:	3.92037314	22.6905384
Correlation:	0.99908946	0.99984347

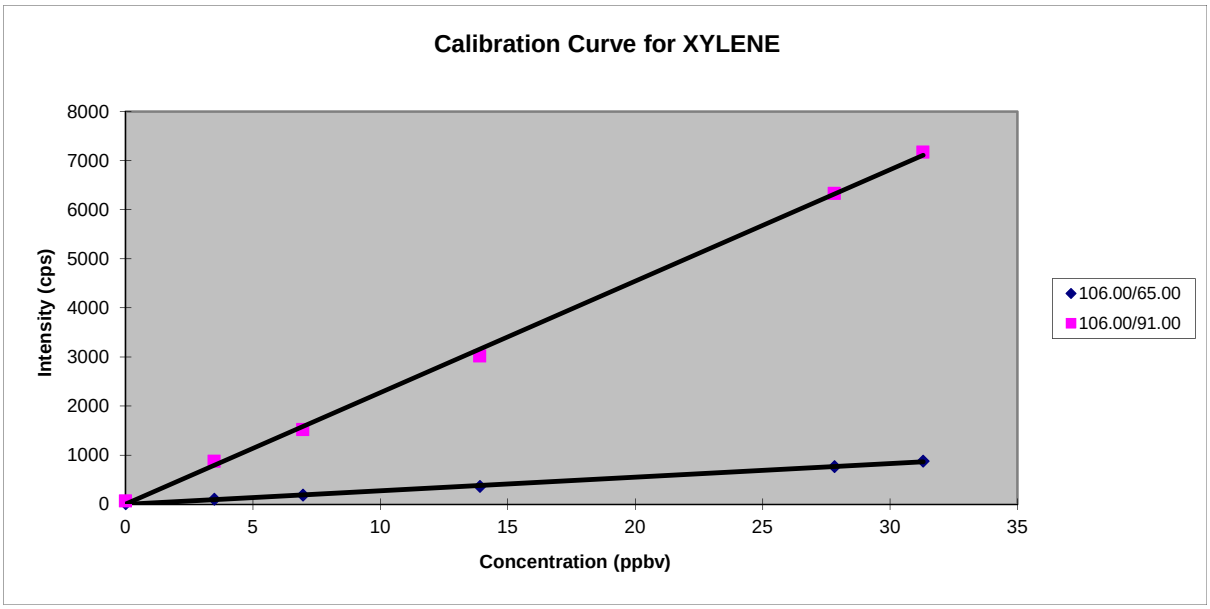
Concentratior	78.00/39.00	78.00/52.00
0	3.64583333	17.8125
2.31	33.0927835	205.463918
4.62	66.0416667	405.833333
9.24	125.520833	733.4375
18.49	236.875	1479.79167
20.8	281.770833	1668.33333



Filename:	64MSMS00730 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, March 22, 2019 8:23:09					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	8.14	10.61	13.01	15.16	17.11

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	302.725649	65.7698614
Intercept:	30.9233611	1.65433982
Correlation:	0.99989885	0.99974877

Concentratior	92.00/91.00	92.00/65.00
0	66.875	15.4166667
2.31	748.350515	157.835052
4.62	1403.85417	295.416667
9.24	2772.5	593.125
18.49	5617.5	1211.77083
20.8	6365.625	1383.95833



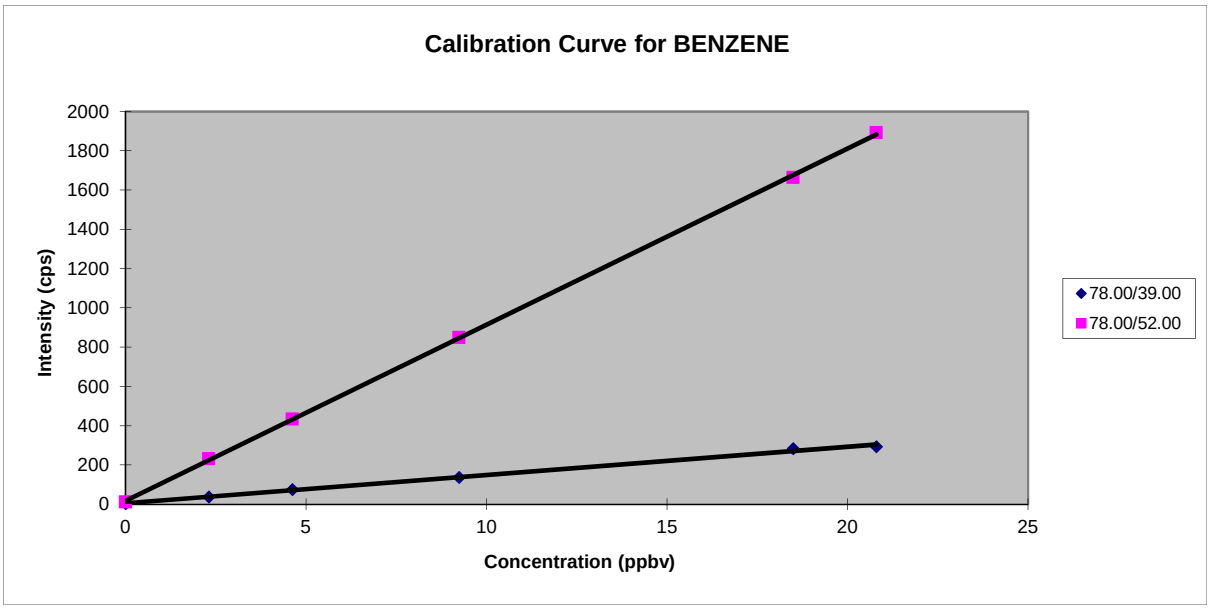
Filename:	64MSMS00730 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, March 22, 2019 8:23:35					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	8.14	10.61	13.01	15.16	17.11

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	27.5646253	226.924417
Intercept:	0.87719947	6.08228572
Correlation:	0.99938604	0.99955733

Concentratior	106.00/65.00	106.00/91.00
0	8.95833333	66.875
3.48	106.082474	874.020619
6.96	187.395833	1518.95833
13.91	362.916667	3018.75
27.82	765	6330.9375
31.3	875.729167	7168.33333

Report	File Name	64MSMS00730 et al.			
	Sample Name	BOD Calibration - BTX 20190322			
	Date	Friday, March 22, 2019 8:24:13			
	Time Range	1.50	to	2.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

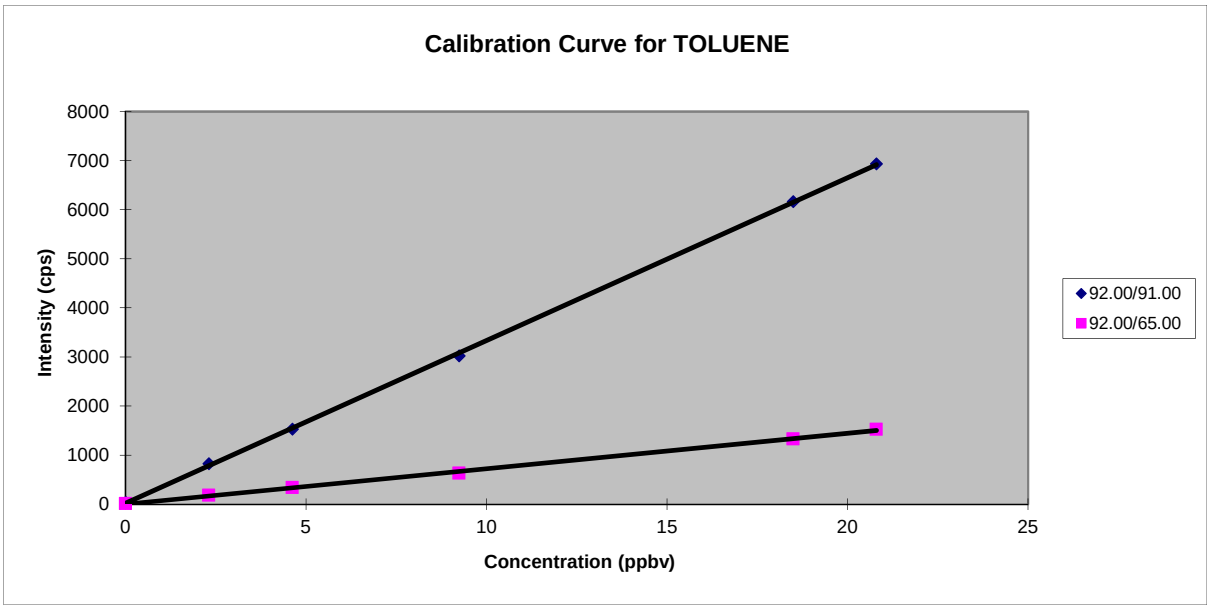
Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	13.04	78.88	302.73	65.77	27.56	226.92
Intercept	3.92	22.69	30.92	1.65	0.88	6.08
Intensity	3.65	18.02	67.19	15.42	8.96	66.56
Int SD	6.18	13.96	32.04	13.91	11.47	26.23
Concentration	-0.02	-0.06	0.12	0.21	0.29	0.27
Conc SD	0.47	0.18	0.11	0.21	0.42	0.12
Compound Con	-0.04		0.16		0.28	
Compound SD	0.23		0.11		0.19	
Det. Limit	1.42	0.53	0.32	0.63	1.25	0.35
Compound DL	0.98		0.48		0.80	



Filename:	64MSMS00736 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, March 22, 2019 17:30:01					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	9.85	11.62	13.32	15.15	16.58

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	14.3557175	89.7033895
Intercept:	5.3087905	17.4736139
Correlation:	0.99827896	0.99994742

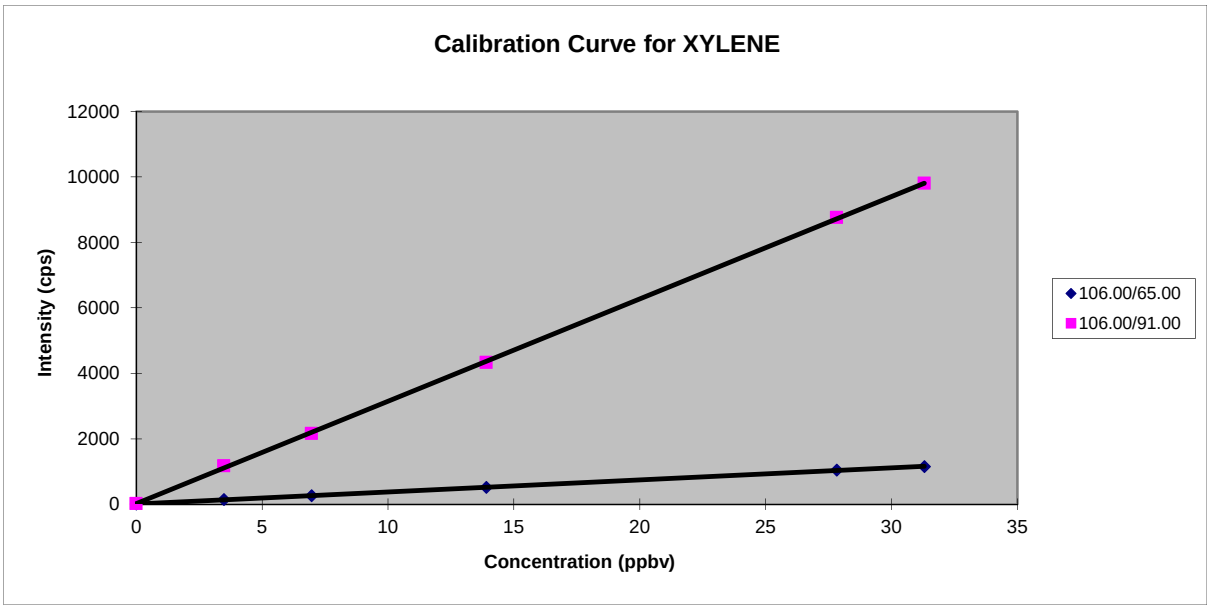
Concentratior	78.00/39.00	78.00/52.00
0	3.54166667	10.8333333
2.31	38.0208333	231.666667
4.62	74.0625	432.8125
9.24	136.041667	848.229167
18.49	282.8125	1664.16667
20.8	293.541667	1892.08333



Filename:	64MSMS00736 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, March 22, 2019 17:30:38					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	9.85	11.62	13.32	15.15	16.58

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	331.54237	72.1089881
Intercept:	21.8322482	2.39619782
Correlation:	0.99991612	0.99952949

Concentratior	92.00/91.00	92.00/65.00
0	40.8333333	8.85416667
2.31	824.270833	182.604167
4.62	1531.5625	337.1875
9.24	3020.3125	634.270833
18.49	6167.39583	1329.0625
20.8	6933.95833	1521.5625



Filename:	64MSMS00736 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, March 22, 2019 17:31:09					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	9.85	11.62	13.32	15.15	16.58

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	36.788687	312.641129
Intercept:	9.89207671	23.2449899
Correlation:	0.99976358	0.99994572

Concentratior	106.00/65.00	106.00/91.00
0	5.20833333	21.5625
3.48	146.979167	1174.0625
6.96	265.520833	2156.875
13.91	513.020833	4327.08333
27.82	1048.95833	8754.89583
31.3	1150.41667	9801.14583

Report	File Name	64MSMS00736 et al.			
	Sample Name	EOD Calibration - BTX 20190323			
	Date	Friday, March 22, 2019 17:31:47			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	14.36	89.70	331.54	72.11	36.79	312.64
Intercept	5.31	17.47	21.83	2.40	9.89	23.24
Intensity	3.54	10.83	40.83	8.85	5.21	21.56
Int SD	7.40	10.43	24.95	11.95	9.06	17.61
Concentration	-0.12	-0.07	0.06	0.09	-0.13	-0.01
Conc SD	0.52	0.12	0.08	0.17	0.25	0.06
Compound Con	-0.10		0.07		-0.07	
Compound SD	0.22		0.09		0.11	
Det. Limit	1.55	0.35	0.23	0.50	0.74	0.17
Compound DL	0.95		0.36		0.45	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 03/24/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3350.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
0651	1500SCCS	~190 SCFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration # 18DWY15-0168			Calibration Date: Exp 05/02/19	

Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Sun, Mar 24, 2019, 7:27:19
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR24 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Fri, Mar 22, 2019, 7:35:49
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sun, Mar 24, 2019, 7:23:21

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.075
100.000	0.081
120.000	0.088
160.000	0.098

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.040
170.000	0.045

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Sun, Mar 24, 2019, 7:28:23
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR24 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Fri, Mar 22, 2019, 7:35:49
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sun, Mar 24, 2019, 7:23:21

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.075
100.000	0.081
120.000	0.088
160.000	0.098

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.040
170.000	0.045

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

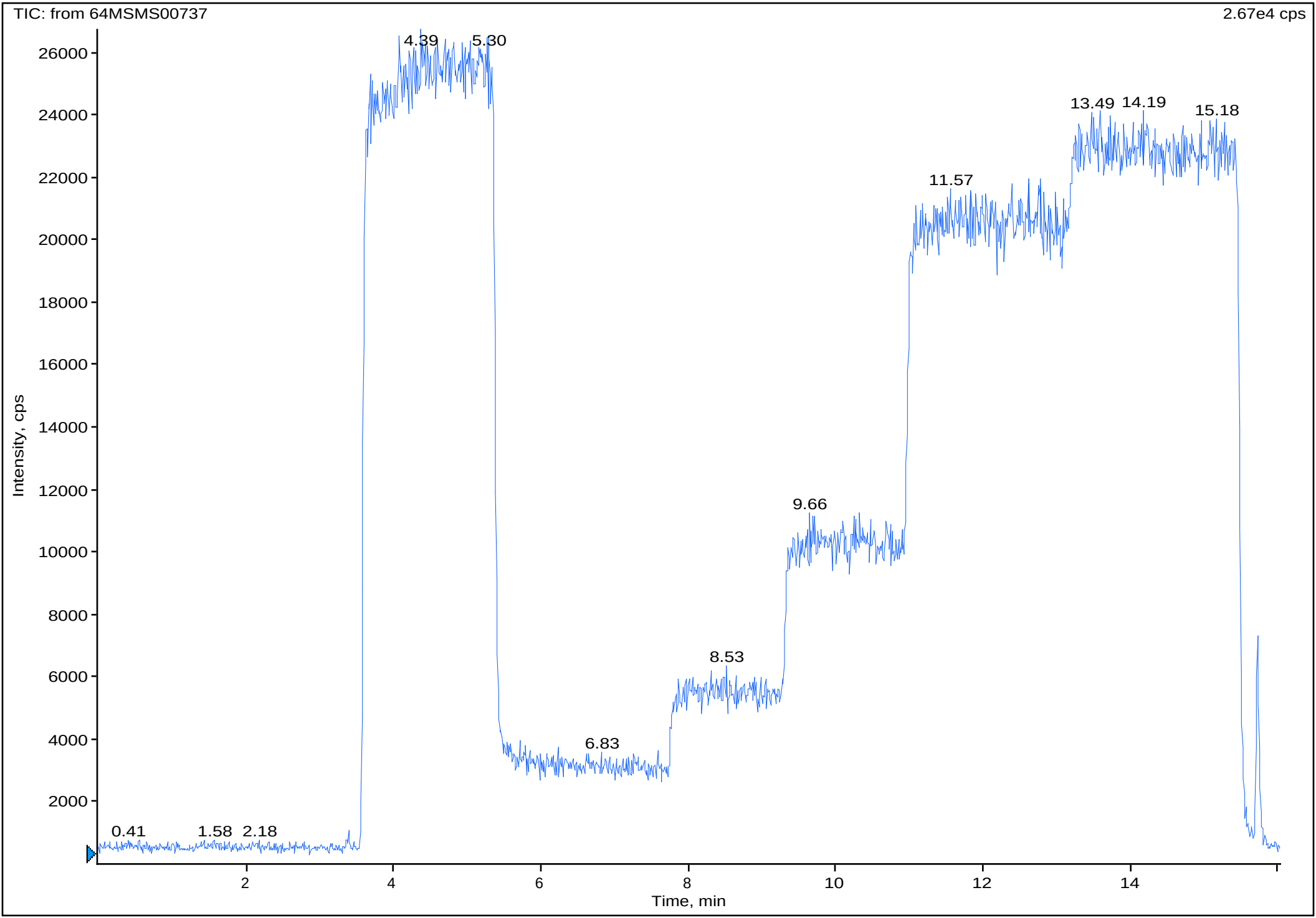
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

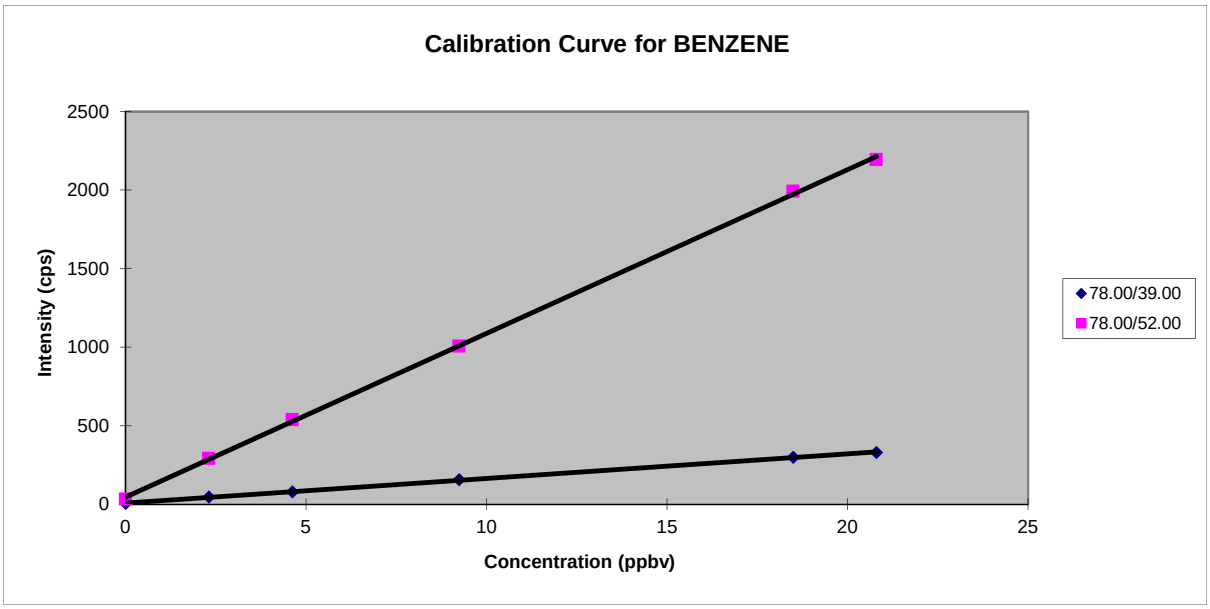
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

3/24/19.7.30.14
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, Mar 24, 2019 at 7:30:12; Exp. Comment: BTX

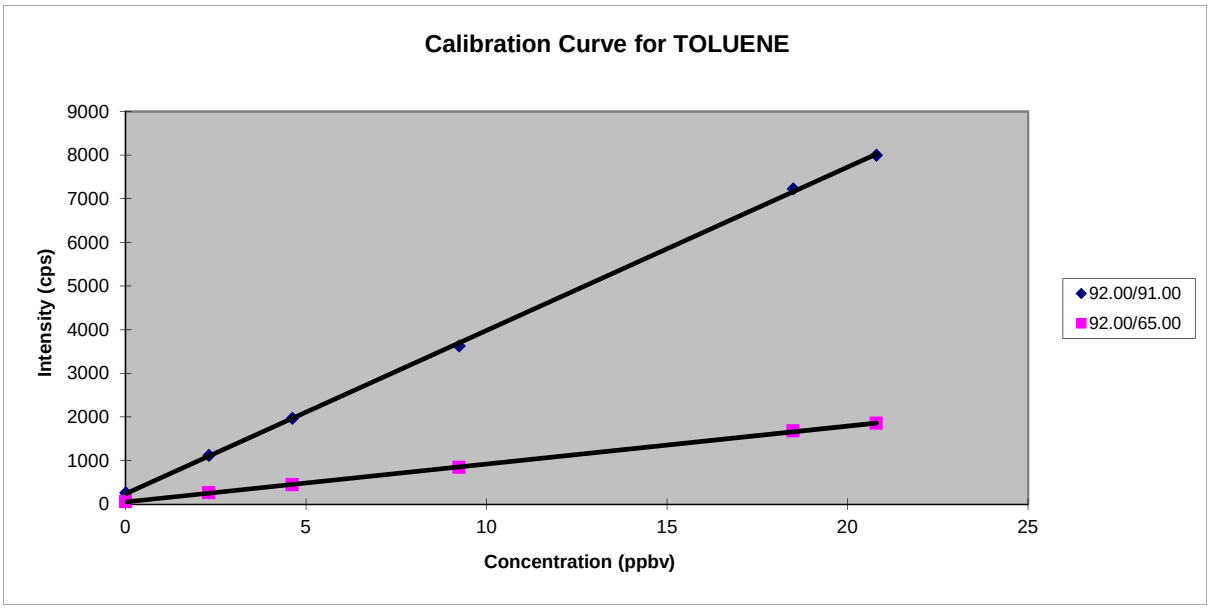




Filename:	64MSMS00737 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, March 24, 2019 7:47:19					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.58	8.41	10.13	12.08	14.09

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	15.6381556	104.232351
Intercept:	8.3332595	45.2435532
Correlation:	0.99968729	0.99986517

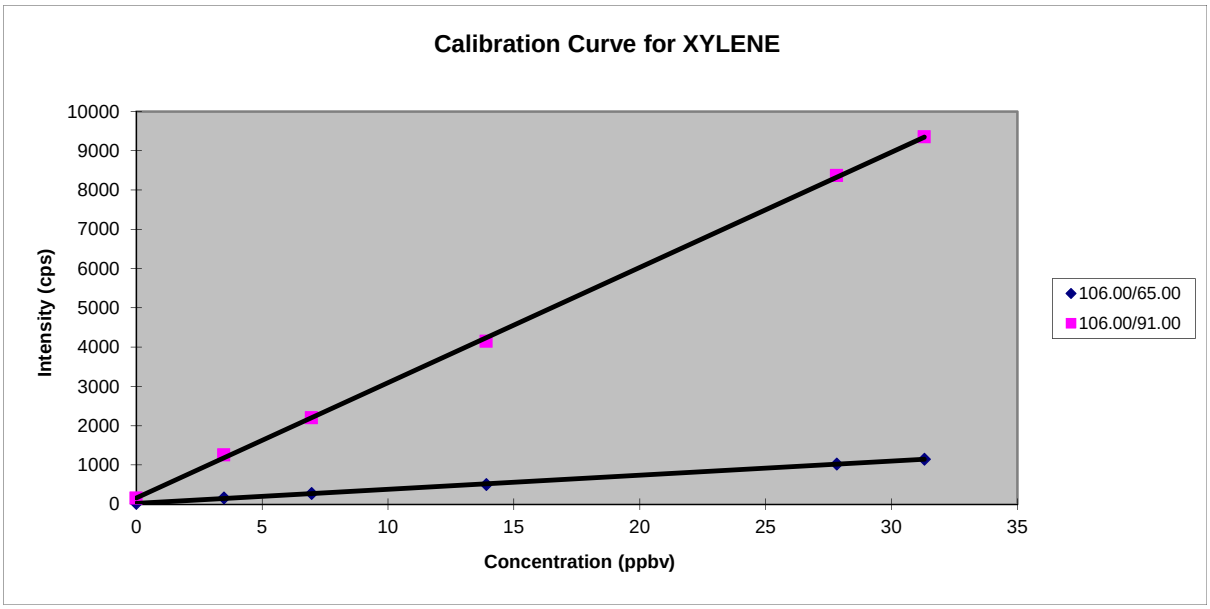
Concentratior	78.00/39.00	78.00/52.00
0	4.89583333	32.0833333
2.31	46.4583333	290.3125
4.62	79.2708333	537.916667
9.24	157.1875	1005.625
18.49	299.791667	1992.39583
20.8	329.6875	2193.85417



Filename:	64MSMS00737 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, March 24, 2019 7:48:02					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.58	8.41	10.13	12.08	14.09

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	374.324372	86.9087898
Intercept:	241.158246	54.1383644
Correlation:	0.99988664	0.99988422

Concentratior	92.00/91.00	92.00/65.00
0	259.895833	58.8541667
2.31	1124.0625	261.979167
4.62	1969.27083	447.604167
9.24	3625.10417	845.208333
18.49	7231.14583	1678.22917
20.8	7997.5	1852.91667



Filename:	64MSMS00737 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, March 24, 2019 7:48:32					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.58	8.41	10.13	12.08	14.09

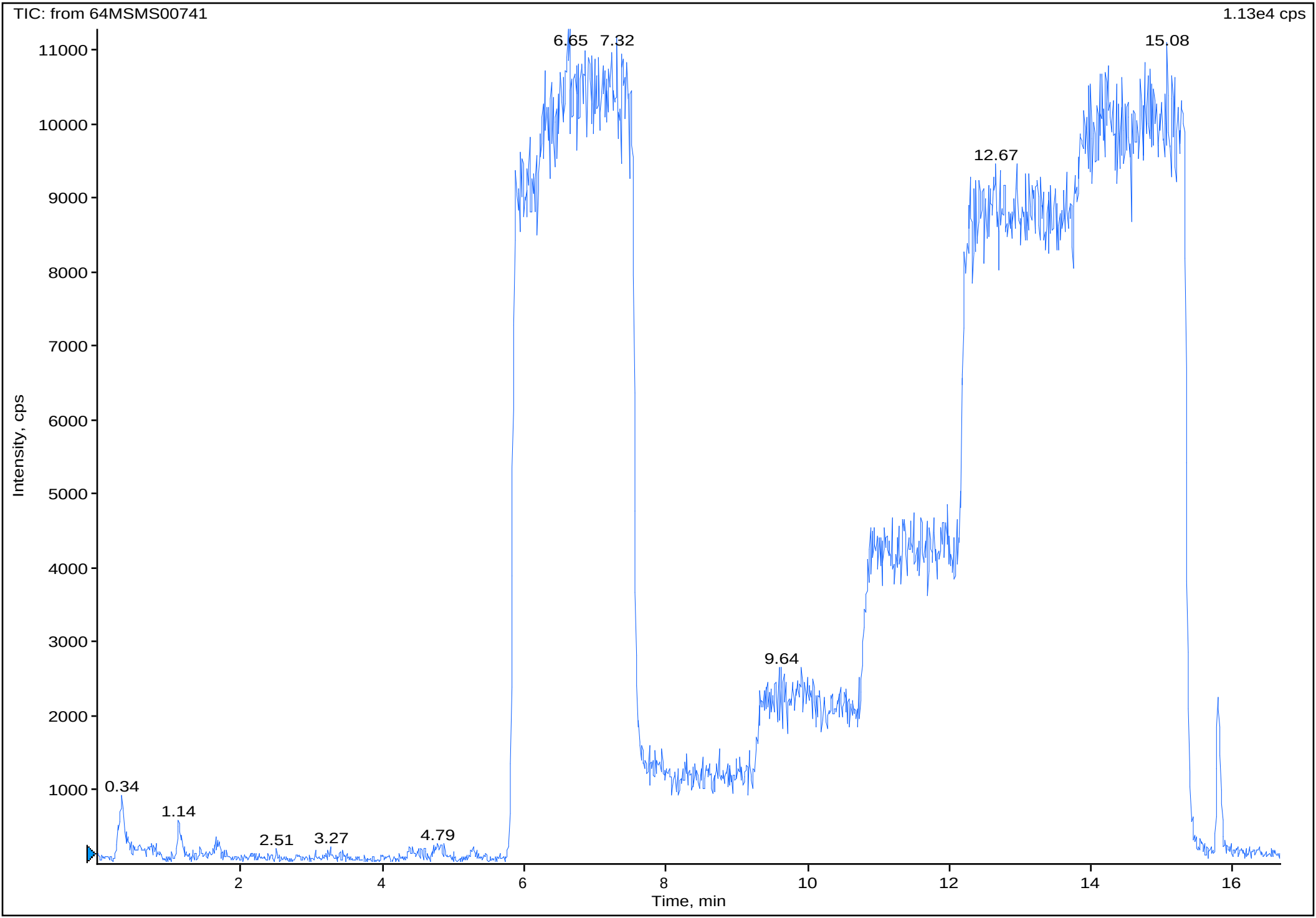
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	35.7428862	293.526609
Intercept:	25.1874369	161.364679
Correlation:	0.99984785	0.99988771

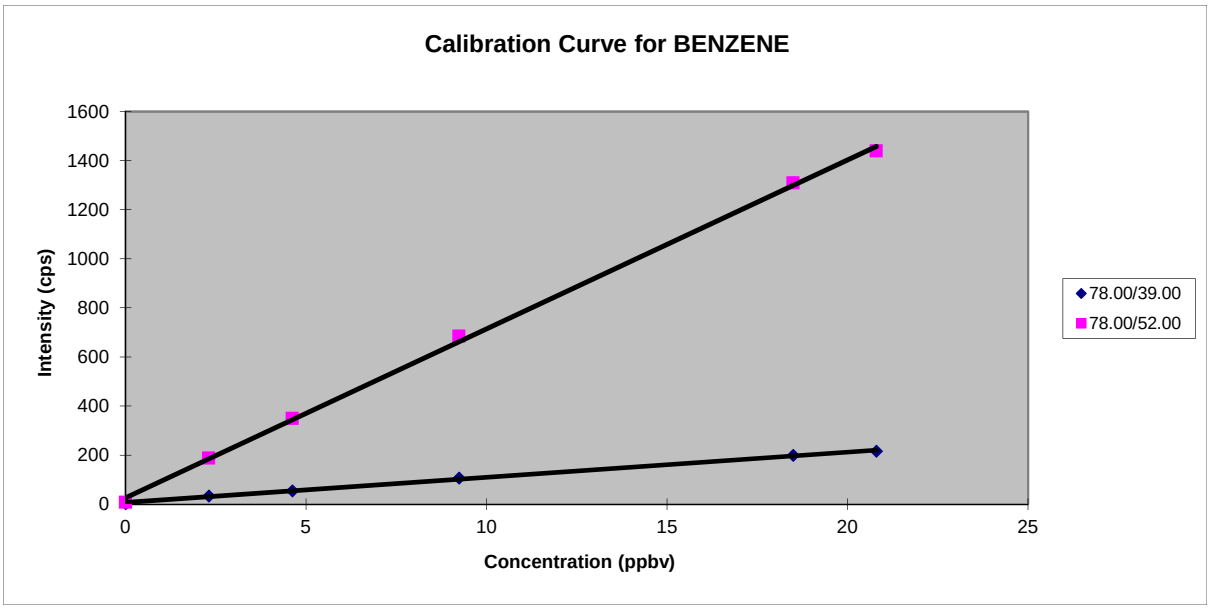
Concentratior	106.00/65.00	106.00/91.00
0	22.8125	151.770833
3.48	158.4375	1256.66667
6.96	277.083333	2194.47917
13.91	507.5	4149.0625
27.82	1022.5	8368.125
31.3	1146.25	9348.75

Report	File Name	64MSMS00737 et al.			
	Sample Name	BOD Calibration - BTX 20190324			
	Date	Sunday, March 24, 2019 7:49:05			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	15.64	104.23	374.32	86.91	35.74	293.53
Intercept	8.33	45.24	241.16	54.14	25.19	161.36
Intensity	4.90	32.08	259.90	58.85	22.81	151.77
Int SD	7.81	18.97	66.36	28.58	15.27	45.56
Concentration	-0.22	-0.13	0.05	0.05	-0.07	-0.03
Conc SD	0.50	0.18	0.18	0.33	0.43	0.16
Compound Con	-0.17		0.05		-0.05	
Compound SD	0.24		0.18		0.21	
Det. Limit	1.50	0.55	0.53	0.99	1.28	0.47
Compound DL	1.02		0.76		0.87	

3/24/19.13.28.30
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, Mar 24, 2019 at 13:28:27; Exp. Comment: BTX



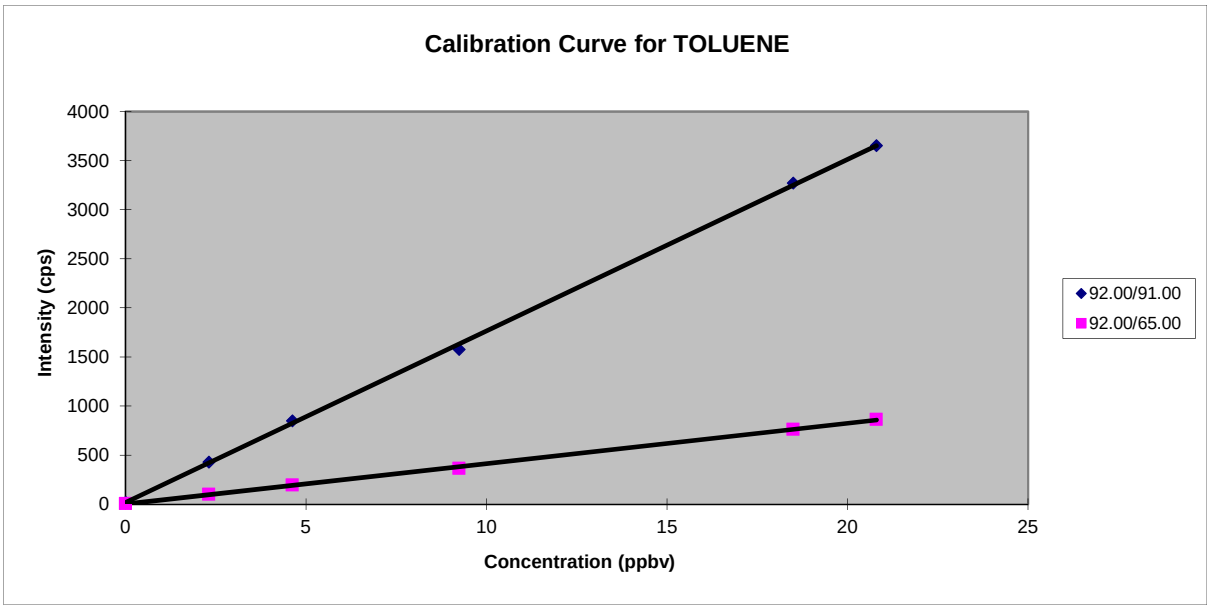


Filename:	64MSMS00741 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Sunday, March 24, 2019 13:46:57
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.59	9.93	11.50	12.92	14.53

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	10.2689473	68.8207704
Intercept:	7.22184152	26.5080735
Correlation:	0.99907097	0.99963349

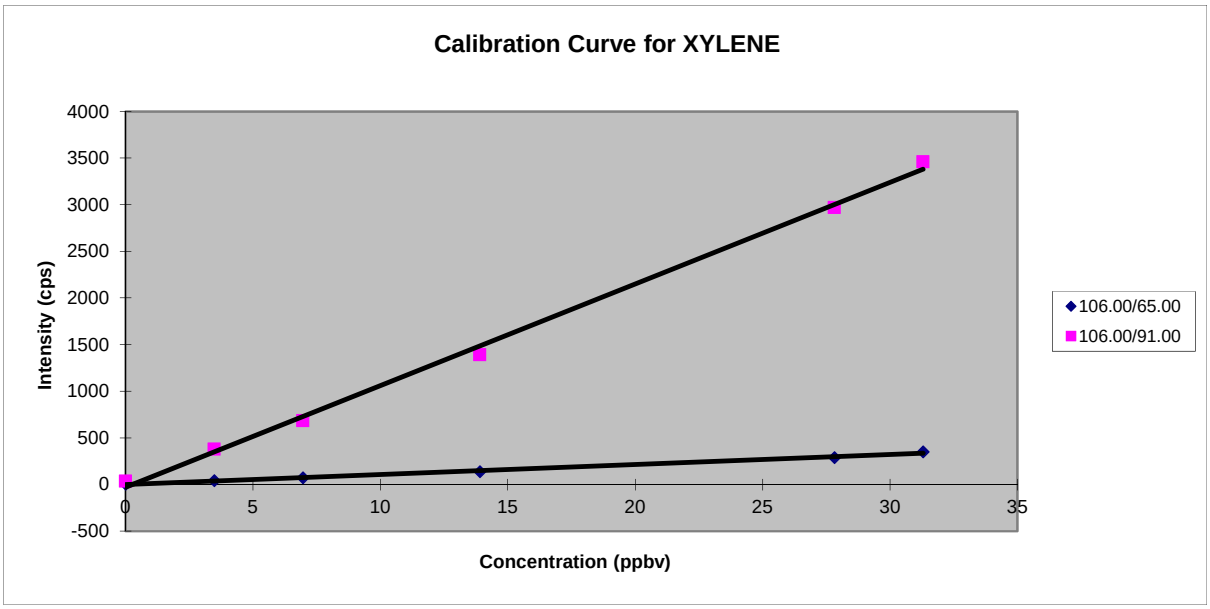
Concentratior	78.00/39.00	78.00/52.00
0	2.08333333	7.8125
2.31	33.5416667	187.604167
4.62	54.8958333	349.583333
9.24	106.458333	683.541667
18.49	199.166667	1308.75
20.8	216.701031	1438.5567



Filename:	64MSMS00741 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, March 24, 2019 13:47:42					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.59	9.93	11.50	12.92	14.53

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	174.696175	41.1167959
Intercept:	18.122355	2.53986222
Correlation:	0.9998136	0.9996928

Concentratior	92.00/91.00	92.00/65.00
0	20.4166667	5.9375
2.31	430.416667	101.770833
4.62	849.166667	195.729167
9.24	1576.35417	365.104167
18.49	3269.89583	762.395833
20.8	3651.13402	864.639175



Filename:	64MSMS00741 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, March 24, 2019 13:48:26					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.59	9.93	11.50	12.92	14.53

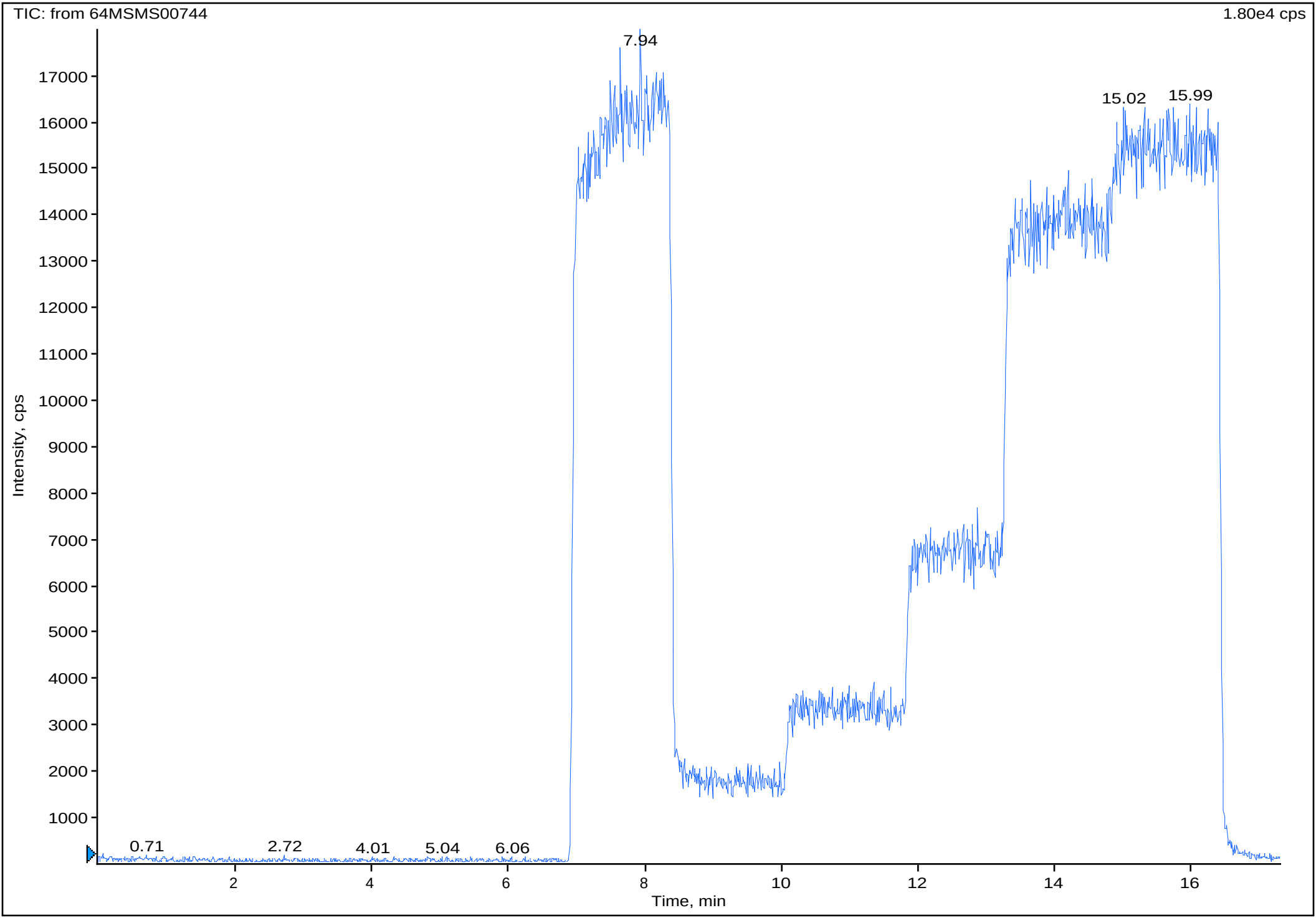
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	10.7670271	108.969877
Intercept:	-0.6218775	-29.872099
Correlation:	0.99743232	0.99886226

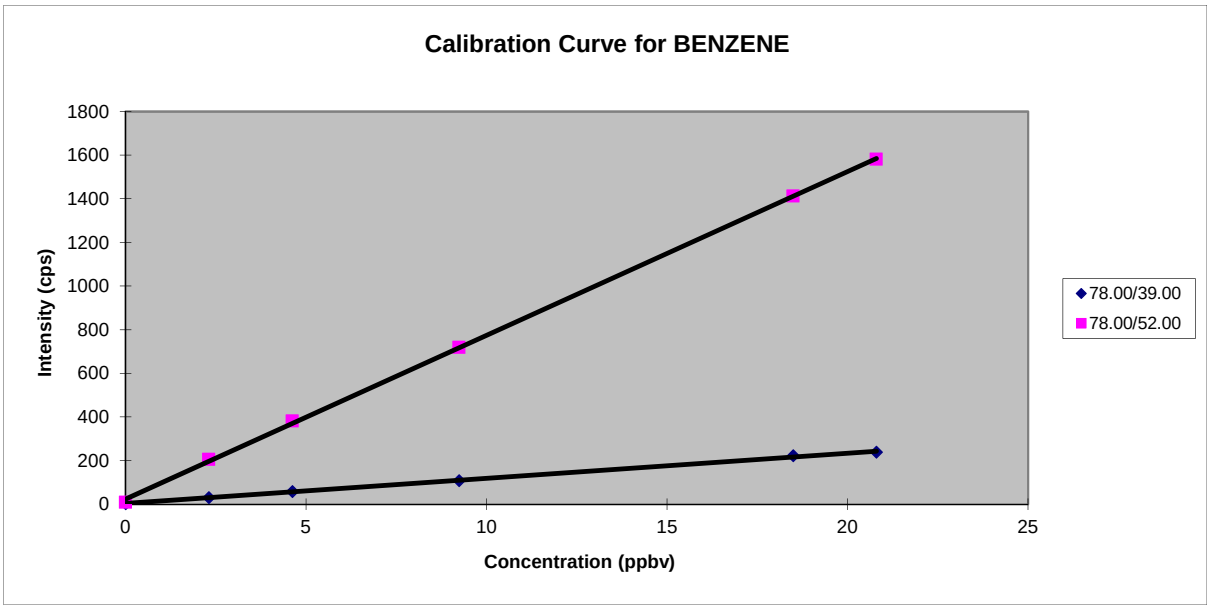
Concentratior	106.00/65.00	106.00/91.00
0	4.6875	34.7916667
3.48	41.875	379.166667
6.96	71.4583333	683.229167
13.91	137.604167	1391.5625
27.82	288.645833	2970.10417
31.3	350.721649	3457.62887

Report	File Name	64MSMS00741 et al.			
	Sample Name	MOD Calibration - BTX 20190324			
	Date	Sunday, March 24, 2019 13:49:31			
	Time Range	2.00	to	3.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	10.27	68.82	174.70	41.12	10.77	108.97
Intercept	7.22	26.51	18.12	2.54	-0.62	-29.87
Intensity	2.08	7.81	20.42	5.94	4.69	34.79
Int SD	5.21	9.54	16.22	9.01	8.33	24.19
Concentration	-0.50	-0.27	0.01	0.08	0.49	0.59
Conc SD	0.51	0.14	0.09	0.22	0.77	0.22
Compound Con	-0.39		0.05		0.54	
Compound SD	0.23		0.11		0.35	
Det. Limit	1.52	0.42	0.28	0.66	2.32	0.67
Compound DL	0.97		0.47		1.49	

3/24/19.18.14.50
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, Mar 24, 2019 at 18:14:50; Exp. Comment: BTX



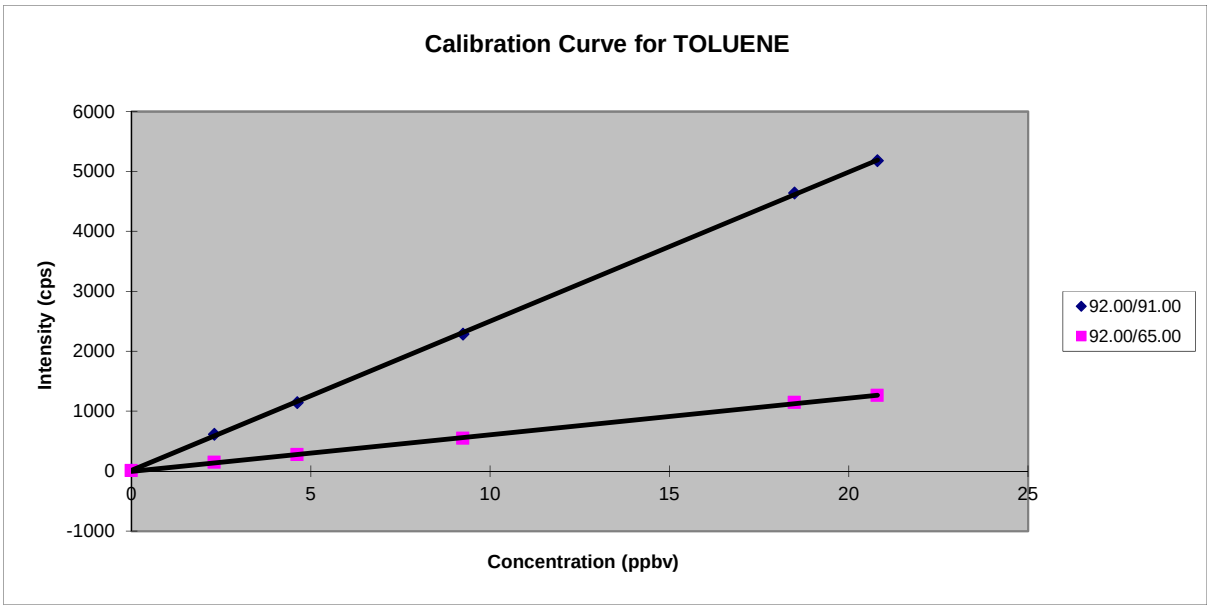


Filename:	64MSMS00744 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Sunday, March 24, 2019 18:32:59
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.50	9.28	10.94	12.55	14.06	15.55

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	11.5376153	75.0212835
Intercept:	3.75328114	24.2268805
Correlation:	0.99936471	0.99990178

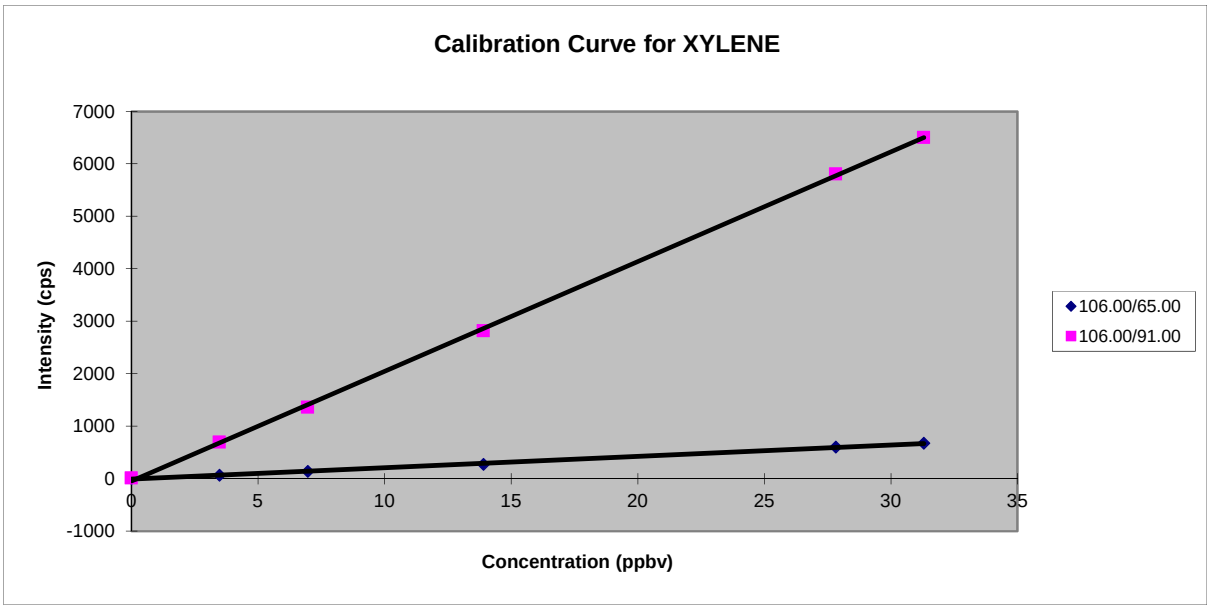
Concentratior	78.00/39.00	78.00/52.00
0	2.1875	8.95833333
2.31	31.25	205.104167
4.62	58.4375	381.145833
9.24	108.75	718.229167
18.49	222.8125	1411.875
20.8	238.958333	1580.72917



Filename:	64MSMS00744 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, March 24, 2019 18:33:34					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.50	9.28	10.94	12.55	14.06	15.55

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	248.768794	61.0123417
Intercept:	15.9464175	-1.5442174
Correlation:	0.99994292	0.99975482

Concentratior	92.00/91.00	92.00/65.00
0	21.7708333	5.52083333
2.31	616.875	145.104167
4.62	1144.58333	273.020833
9.24	2286.04167	547.291667
18.49	4640.52083	1143.125
20.8	5182.60417	1260.41667



Filename:	64MSMS00744 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, March 24, 2019 18:34:01					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.50	9.28	10.94	12.55	14.06	15.55

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	21.6836182	209.124291
Intercept:	-7.6274911	-42.635489
Correlation:	0.99940673	0.99986545

Concentratior	106.00/65.00	106.00/91.00
0	2.91666667	14.2708333
3.48	69.6875	695.416667
6.96	138.958333	1358.4375
13.91	276.875	2816.66667
27.82	601.770833	5809.6875
31.3	673.958333	6505.3125

Report	File Name	64MSMS00744 et al.			
	Sample Name	EOD Calibration - BTX 20190324			
	Date	Sunday, March 24, 2019 18:34:45			
	Time Range	3.00	to	4.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	11.54	75.02	248.77	61.01	21.68	209.12
Intercept	3.75	24.23	15.95	-1.54	-7.63	-42.64
Intensity	2.19	8.96	21.77	5.52	2.92	14.27
Int SD	4.63	10.61	15.96	7.66	5.60	13.59
Concentration	-0.14	-0.20	0.02	0.12	0.49	0.27
Conc SD	0.40	0.14	0.06	0.13	0.26	0.06
Compound Con	-0.17		0.07		0.38	
Compound SD	0.19		0.07		0.11	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 03/25/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3250	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
0636	1500cc	~191 SCFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	180W415-068		Calibration Date:	EXP 05/02/19

Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
			N/A		
Gilibrator Flow Cell	S/N #			Calibration Date:	

Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
			N/A		
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes: Adjusted Span for channel 3. Initial readings were slightly low.

Method Information

Method Name: BTX CALIBRATION
Last Modified: Mon, Mar 25, 2019, 7:46:46
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	1.230	2926	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR25 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 7:37:31
Scan Type: MRM
Scan Time: 00:01.230 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	200.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	200.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	200.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	200.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	200.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	200.000

State File Information

Last Modified: Mon, Mar 25, 2019, 7:45:05

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.075
100.000	0.081
120.000	0.088
160.000	0.098

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.038
170.000	0.045

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Mon, Mar 25, 2019, 7:47:13
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	1.230	8780	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR25 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 7:37:31
Scan Type: MRM
Scan Time: 00:01.230 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	200.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	200.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	200.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	200.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	200.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	200.000

State File Information

Last Modified: Mon, Mar 25, 2019, 7:45:05

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.075
100.000	0.081
120.000	0.088
160.000	0.098

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.038
170.000	0.045

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

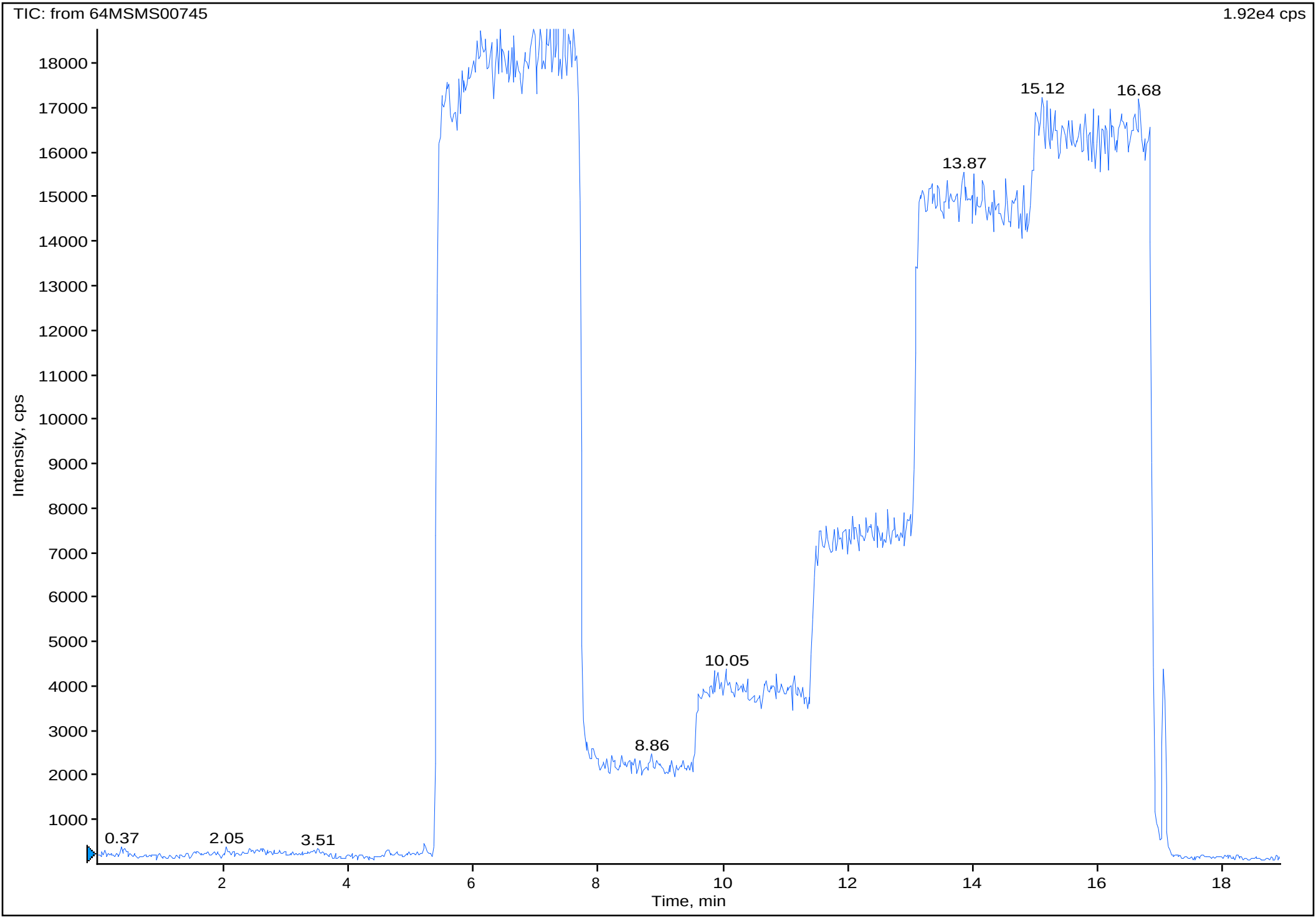
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

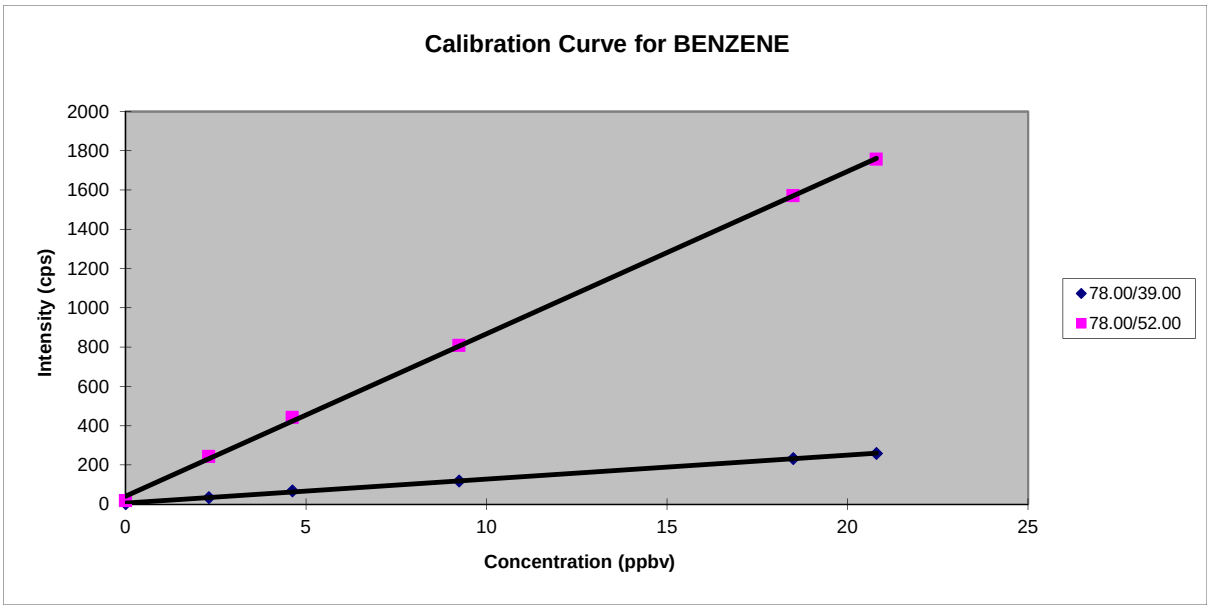
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

3/25/19.7.48.16
Period 1, Expt. 1; Dwell: 200.0 ms; Pause: 5.0 ms
Acq. Time: Mon, Mar 25, 2019 at 7:48:15; Exp. Comment: BTX

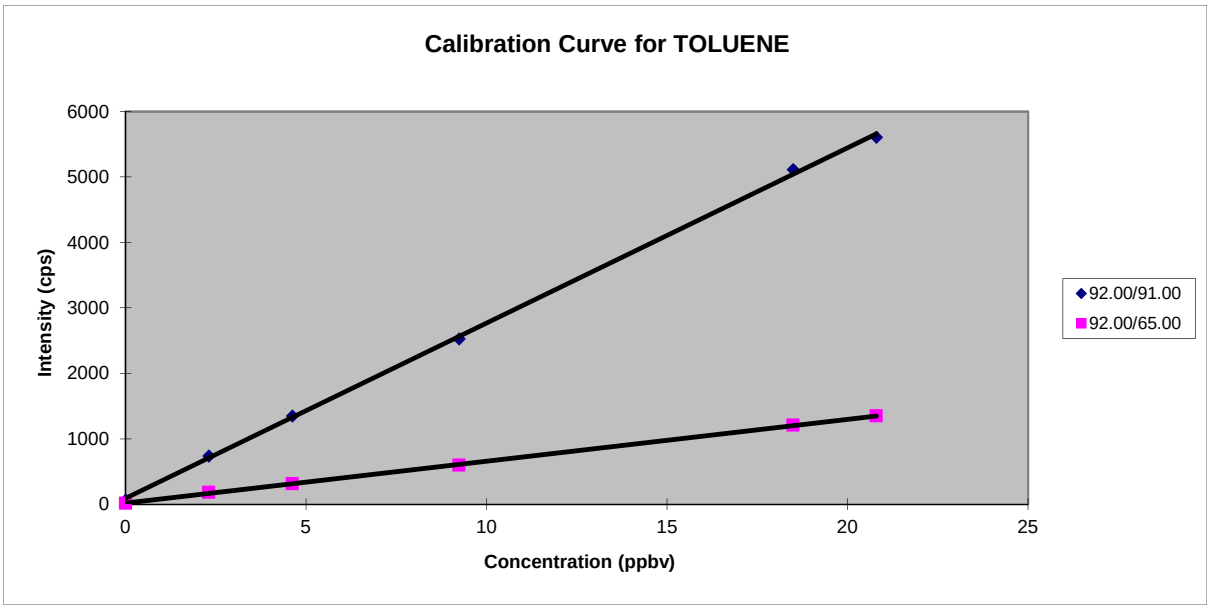




Filename:	64MSMS00745 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, March 25, 2019 8:08:42					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.00	8.76	10.33	12.08	14.03	15.78

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	12.2084647	82.727468
Intercept:	6.62664869	41.3885951
Correlation:	0.99962535	0.99979894

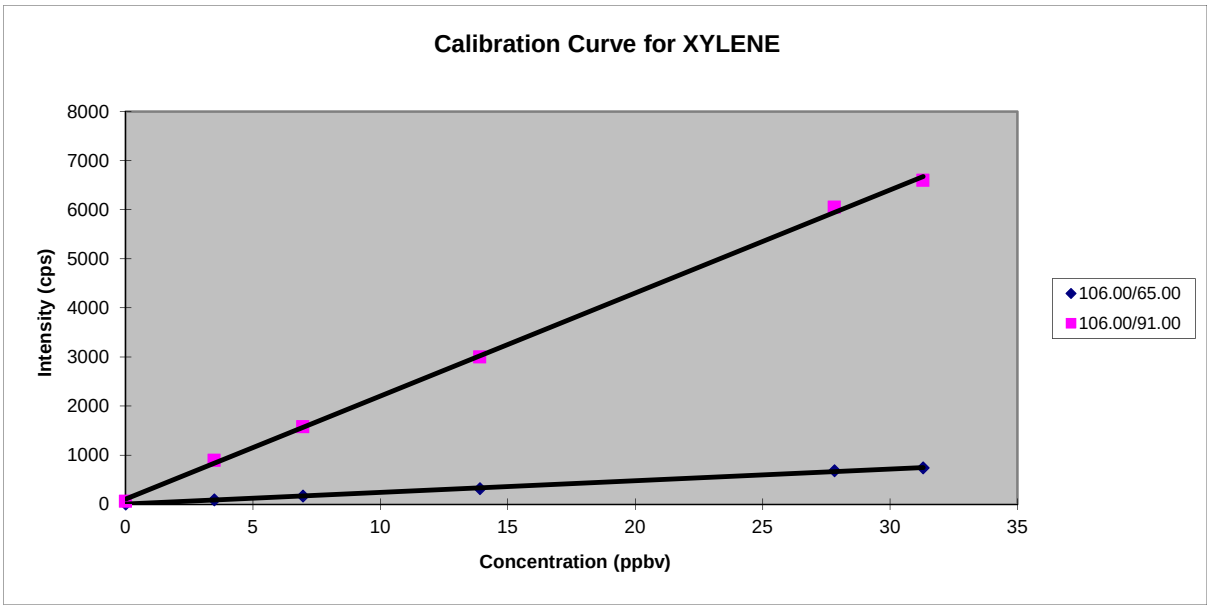
Concentratior	78.00/39.00	78.00/52.00
0	3.16324942	17.5509332
2.31	34.5916673	242.345763
4.62	68.2996533	441.597891
9.24	118.599404	807.696016
18.49	232.698848	1571.09219
20.8	259.48852	1756.11416



Filename:	64MSMS00745 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, March 25, 2019 8:09:17					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.00	8.76	10.33	12.08	14.03	15.78

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	267.736184	63.9512563
Intercept:	91.4253405	18.0083507
Correlation:	0.99978704	0.99984176

Concentratior	92.00/91.00	92.00/65.00
0	63.0609056	15.7142072
2.31	738.567602	179.999083
4.62	1350.49281	310.398477
9.24	2525.48625	593.496992
18.49	5112.07219	1205.59352
20.8	5607.52105	1349.5845



Filename:	64MSMS00745 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, March 25, 2019 8:09:54					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.00	8.76	10.33	12.08	14.03	15.78

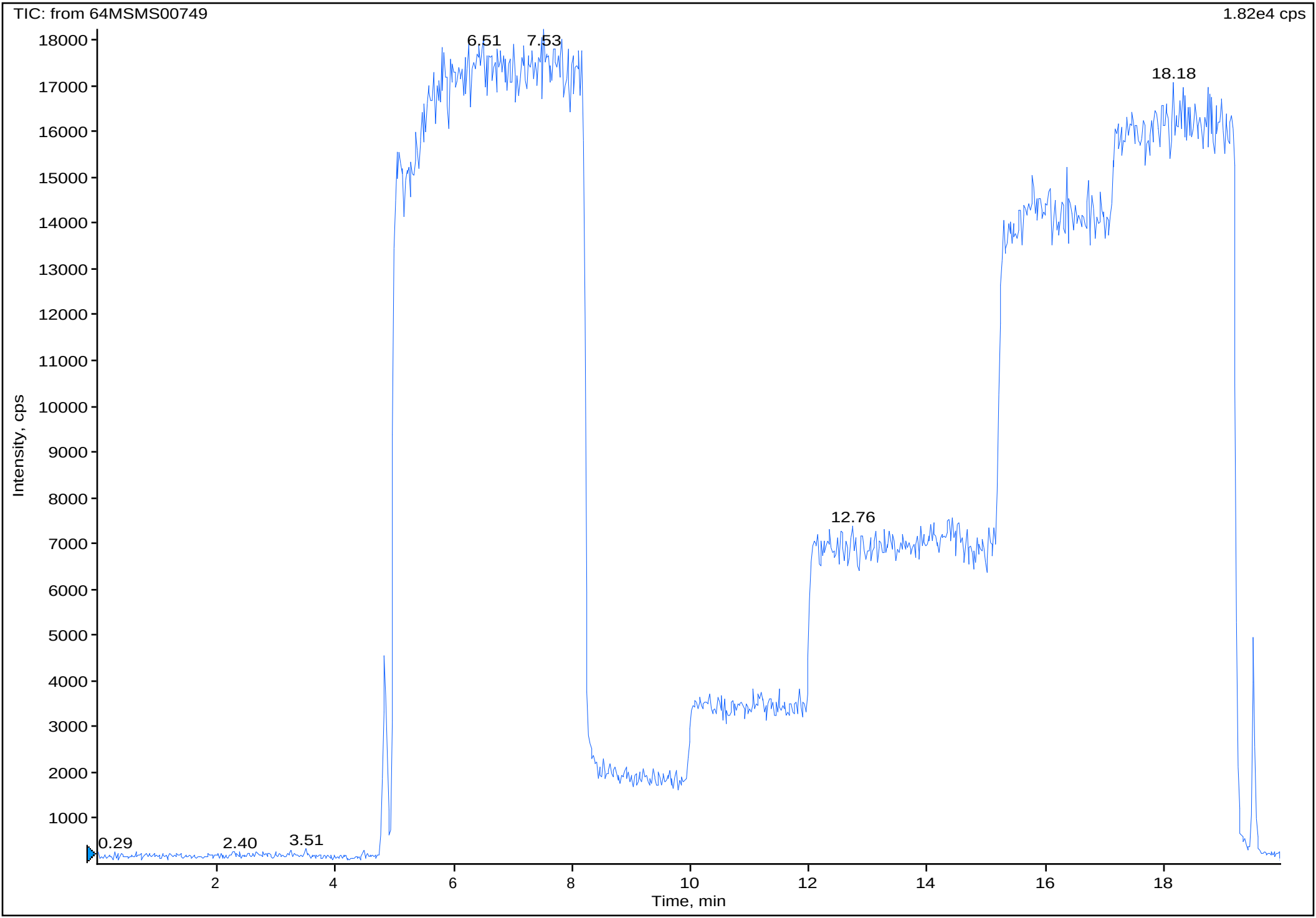
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	23.8453443	209.892112
Intercept:	2.86605108	106.635842
Correlation:	0.9992823	0.9996787

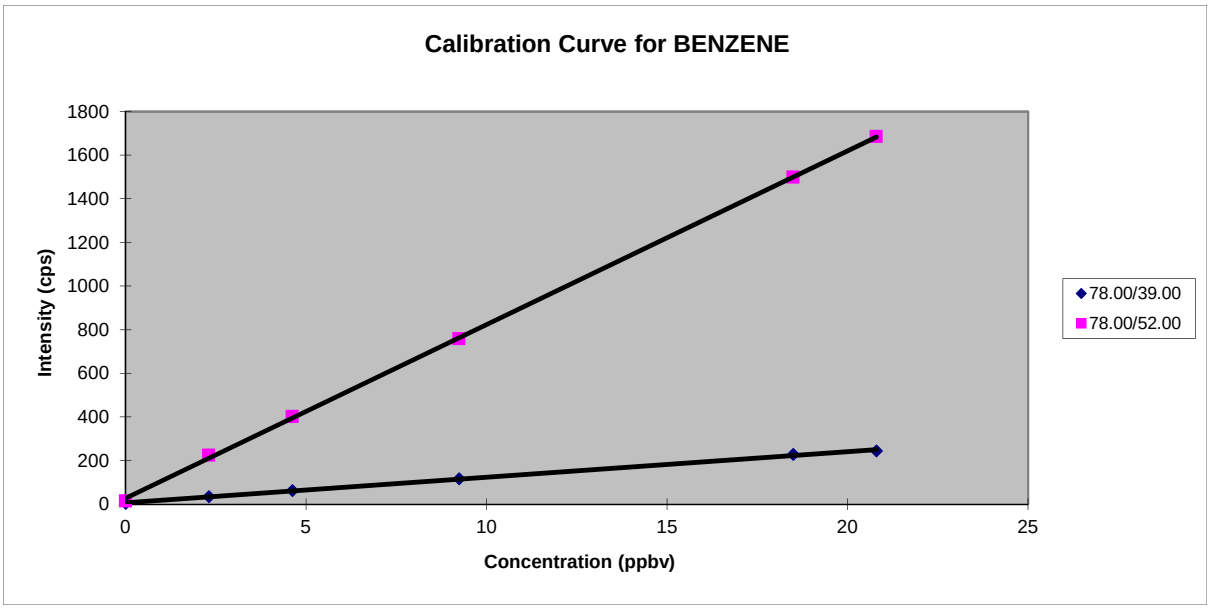
Concentratior	106.00/65.00	106.00/91.00
0	6.93873876	56.5303332
3.48	92.9587253	891.424267
6.96	166.99916	1578.19203
13.91	315.398398	2994.18469
27.82	681.296406	6047.16938
31.3	743.975765	6592.00893

Report	File Name	64MSMS00745 et al.			
	Sample Name	BOD Calibration - BTX 20190325			
	Date	Monday, March 25, 2019 8:10:36			
	Time Range	3.50	to	4.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	12.21	82.73	267.74	63.95	23.85	209.89
Intercept	6.63	41.39	91.43	18.01	2.87	106.64
Intensity	3.16	17.55	63.06	15.71	6.94	56.53
Int SD	4.53	12.63	25.02	9.57	6.68	30.31
Concentration	-0.28	-0.29	-0.11	-0.04	0.17	-0.24
Conc SD	0.37	0.15	0.09	0.15	0.28	0.14
Compound Con	-0.29		-0.07		-0.03	
Compound SD	0.19		0.09		0.15	
Det. Limit	1.11	0.46	0.28	0.45	0.84	0.43
Compound DL	0.79		0.36		0.64	

3/25/19.12.56.19
Period 1, Expt. 1; Dwell: 200.0 ms; Pause: 5.0 ms
Acq. Time: Mon, Mar 25, 2019 at 12:56:18; Exp. Comment: BTX



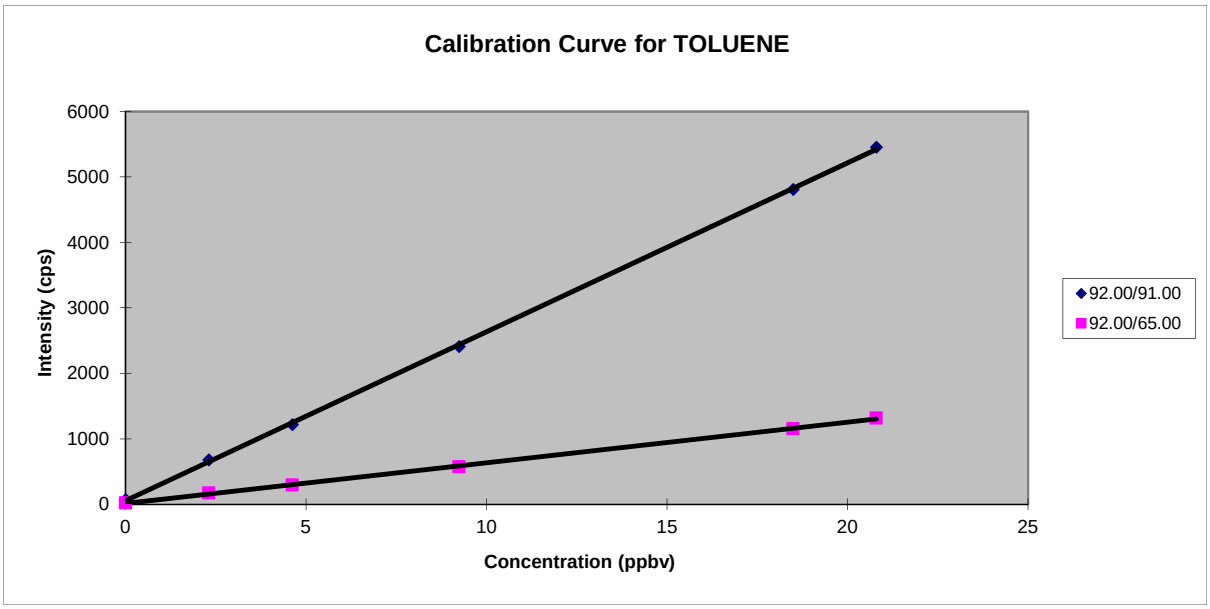


Filename:	64MSMS00749 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Monday, March 25, 2019 13:18:45
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	9.09	11.01	13.62	16.28	18.16

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	11.6717851	79.630903
Intercept:	7.60371532	27.2310577
Correlation:	0.99933789	0.99991242

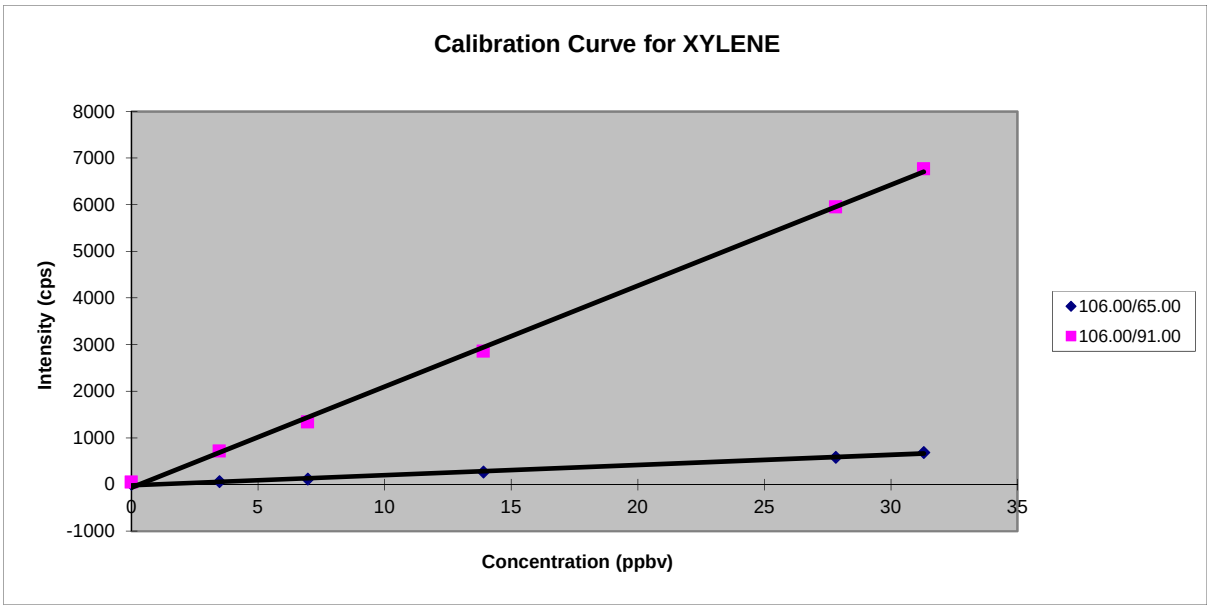
Concentratior	78.00/39.00	78.00/52.00
0	4.69997711	14.0999316
2.31	34.8998291	224.298926
4.62	62.8996875	401.198047
9.24	117.24433	757.445153
18.49	228.298887	1498.19234
20.8	244.896783	1684.48182



Filename:	64MSMS00749 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, March 25, 2019 13:19:11					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	9.09	11.01	13.62	16.28	18.16

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	258.011614	61.9420539
Intercept:	56.1599896	15.1721567
Correlation:	0.99990961	0.99977012

Concentratior	92.00/91.00	92.00/65.00
0	74.1996289	16.999917
2.31	681.096484	172.699102
4.62	1217.59383	293.998555
9.24	2407.53827	572.54827
18.49	4810.375	1154.79422
20.8	5455.48087	1315.29919



Filename:	64MSMS00749 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, March 25, 2019 13:19:40					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	9.09	11.01	13.62	16.28	18.16

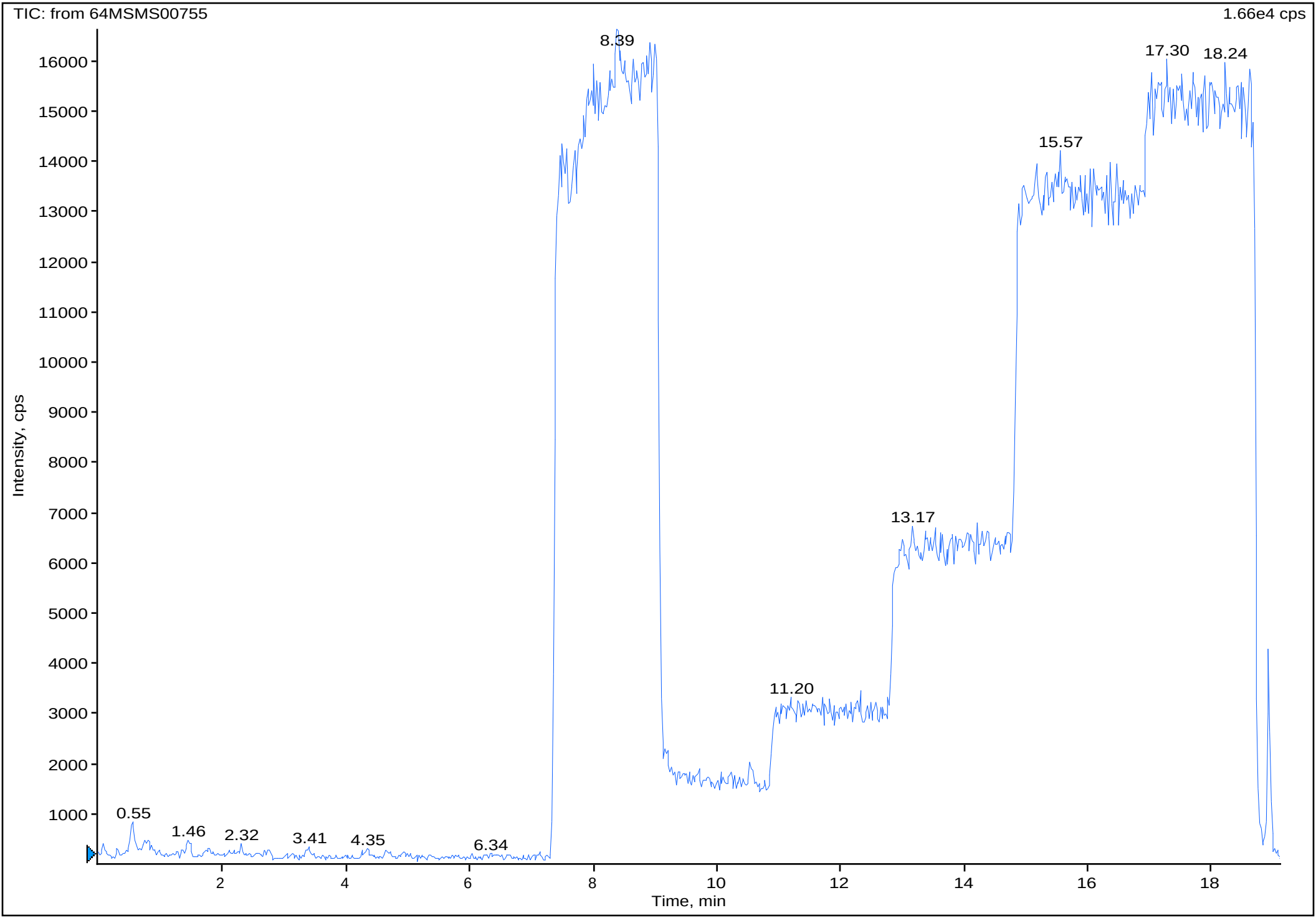
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	21.9049402	216.270061
Intercept:	-16.689419	-62.788715
Correlation:	0.99774348	0.99956359

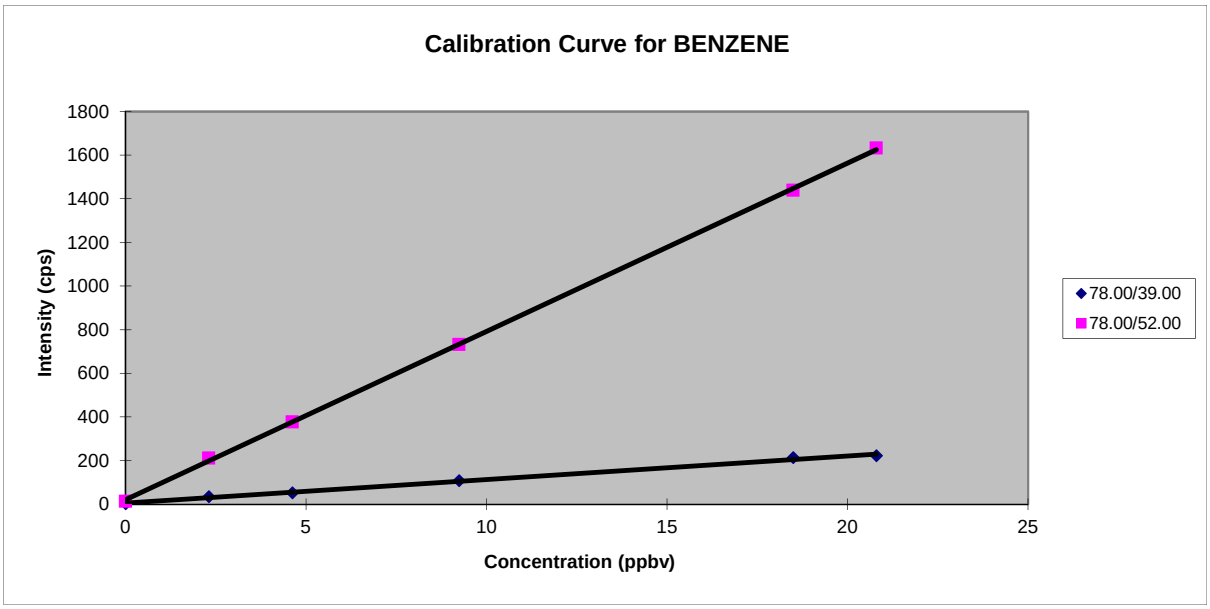
Concentratior	106.00/65.00	106.00/91.00
0	5.89997009	46.7997705
3.48	65.6996826	712.19625
6.96	116.699414	1338.09281
13.91	265.508909	2858.86256
27.82	586.097031	5952.36938
31.3	688.363839	6767.00893

Report	File Name	64MSMS00749 et al.			
	Sample Name	MOD Calibration - BTX 20190325			
	Date	Monday, March 25, 2019 13:20:25			
	Time Range	1.50	to	2.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	11.67	79.63	258.01	61.94	21.90	216.27
Intercept	7.60	27.23	56.16	15.17	-16.69	-62.79
Intensity	4.70	14.10	74.20	17.00	5.90	46.80
Int SD	5.57	10.72	22.80	10.45	6.28	18.56
Concentration	-0.25	-0.16	0.07	0.03	1.03	0.51
Conc SD	0.48	0.13	0.09	0.17	0.29	0.09
Compound Con	-0.21		0.05		0.77	
Compound SD	0.22		0.09		0.13	
Det. Limit	1.43	0.40	0.27	0.51	0.86	0.26
Compound DL	0.92		0.39		0.56	

3/25/19.18.44.08
Period 1, Expt. 1; Dwell: 200.0 ms; Pause: 5.0 ms
Acq. Time: Mon, Mar 25, 2019 at 18:44:07; Exp. Comment: BTX

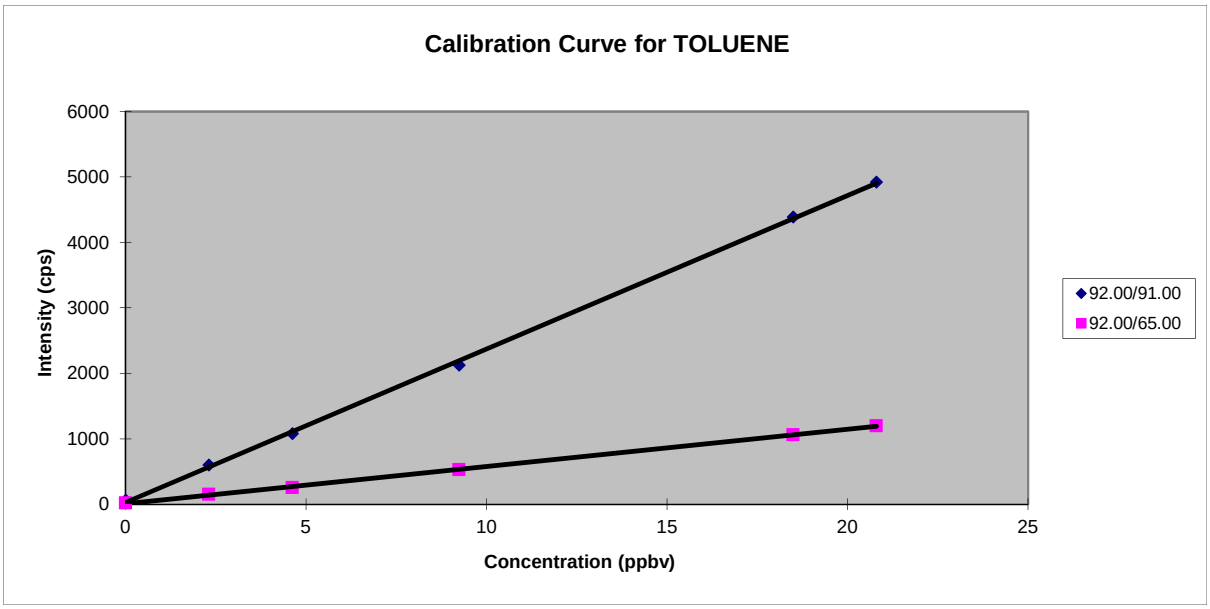




Filename:	64MSMS00755 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, March 25, 2019 19:04:09					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	6.00	9.98	11.76	13.81	15.99	17.90

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	10.7984959	77.1206737
Intercept:	5.74387968	20.950663
Correlation:	0.99795334	0.99993203

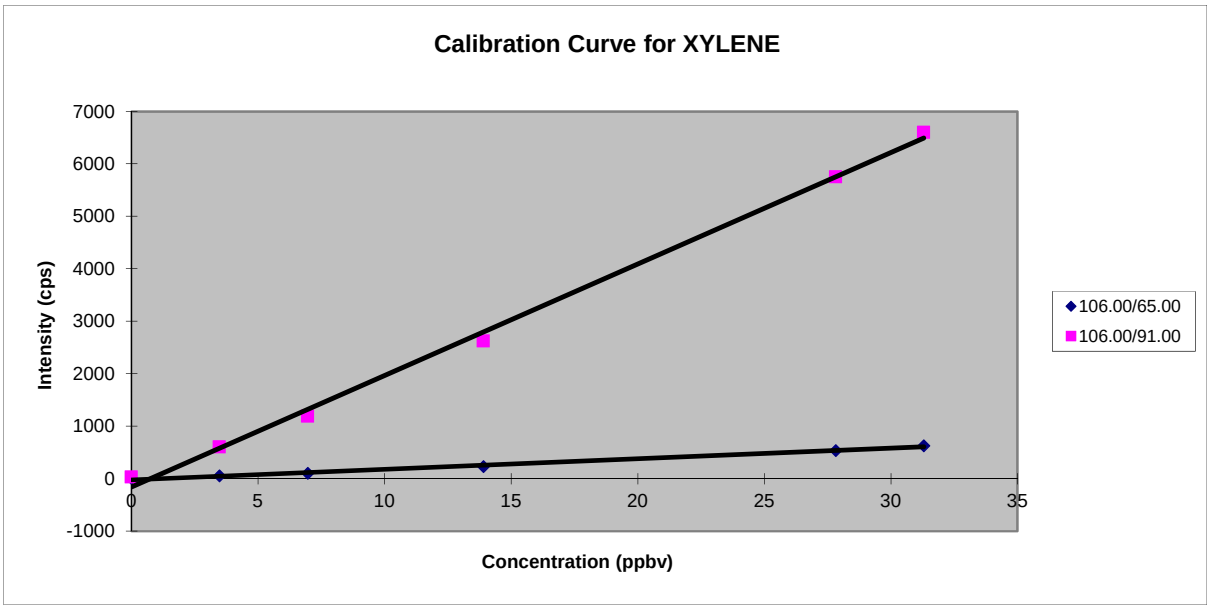
Concentratior	78.00/39.00	78.00/52.00
0	2.19998947	12.9999329
2.31	34.4998291	210.298965
4.62	52.5507563	376.936862
9.24	108.499434	731.99625
18.49	213.498945	1438.7925
20.8	222.098906	1631.79203



Filename:	64MSMS00755 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, March 25, 2019 19:04:44					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	6.00	9.98	11.76	13.81	15.99	17.90

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	234.505404	56.8691793
Intercept:	27.9728639	8.81281115
Correlation:	0.99977726	0.99977241

Concentratior	92.00/91.00	92.00/65.00
0	61.2996973	18.3999097
2.31	602.597109	148.499229
4.62	1078.56649	252.855927
9.24	2123.29016	529.5975
18.49	4388.17969	1061.79492
20.8	4919.57375	1195.69406



Filename:	64MSMS00755 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, March 25, 2019 19:05:08					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	6.00	9.98	11.76	13.81	15.99	17.90

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	20.157517	212.466478
Intercept:	-21.673912	-155.62335
Correlation:	0.99675309	0.99875713

Concentratior	106.00/65.00	106.00/91.00
0	4.09997955	28.4998657
3.48	53.5997363	606.096953
6.96	100.611747	1186.11655
13.91	230.198867	2624.48594
27.82	534.797422	5754.96938
31.3	629.196719	6600.66813

Report	File Name	64MSMS00755 et al.			
	Sample Name	EOD Calibration - BTX 20190325			
	Date	Monday, March 25, 2019 19:05:42			
	Time Range	5.50	to	6.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	10.80	77.12	234.51	56.87	20.16	212.47
Intercept	5.74	20.95	27.97	8.81	-21.67	-155.62
Intensity	2.20	13.00	61.30	18.40	4.10	28.50
Int SD	3.22	8.63	20.50	11.67	5.12	15.39
Concentration	-0.33	-0.10	0.14	0.17	1.28	0.87
Conc SD	0.30	0.11	0.09	0.21	0.25	0.07
Compound Con	-0.22		0.16		1.07	
Compound SD	0.14		0.10		0.12	
Det. Limit	0.89	0.34	0.26	0.62	0.76	0.22
Compound DL	0.62		0.44		0.49	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 03/26/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3250.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
0652	1500sccs	~1915CFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration # 180WY15-0168			EXP 05/02/19 Calibration Date:	

Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
			FAIL		
Gilibrator Flow Cell	S/N #			Calibration Date:	

Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
			FAIL		
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Tue, Mar 26, 2019, 7:28:01
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR25 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Mon, Mar 25, 2019, 7:45:05

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.075
100.000	0.081
120.000	0.088
160.000	0.098

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.038
170.000	0.045

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Tue, Mar 26, 2019, 7:29:36
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR25 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Mon, Mar 25, 2019, 7:45:05

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.075
100.000	0.081
120.000	0.088
160.000	0.098

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.038
170.000	0.045

Calibration File Information

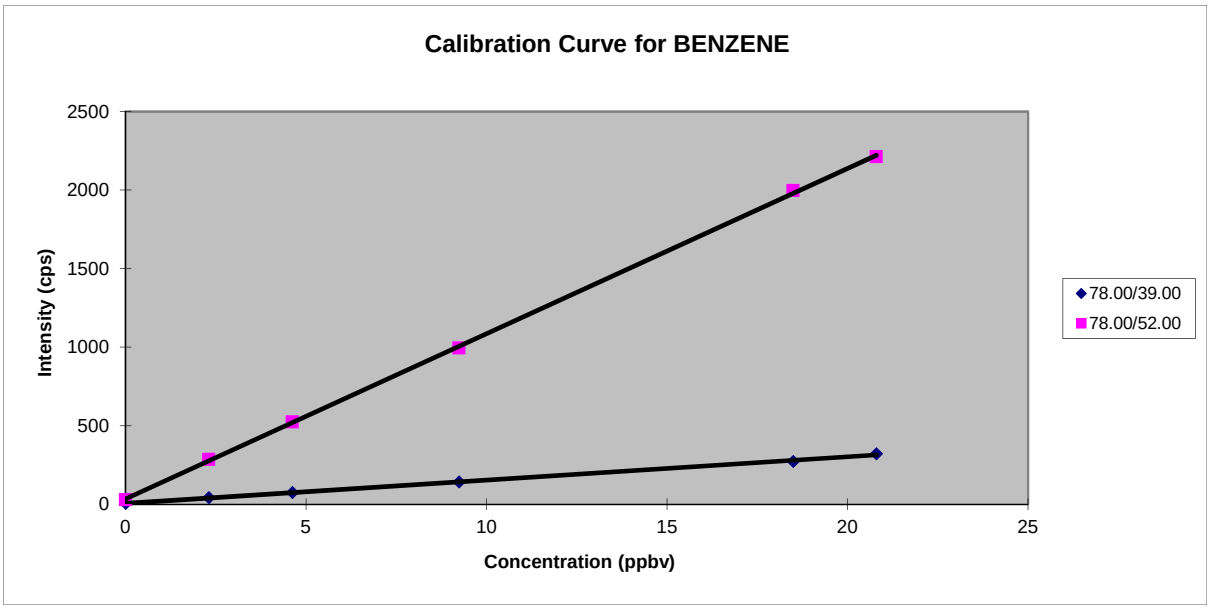
Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

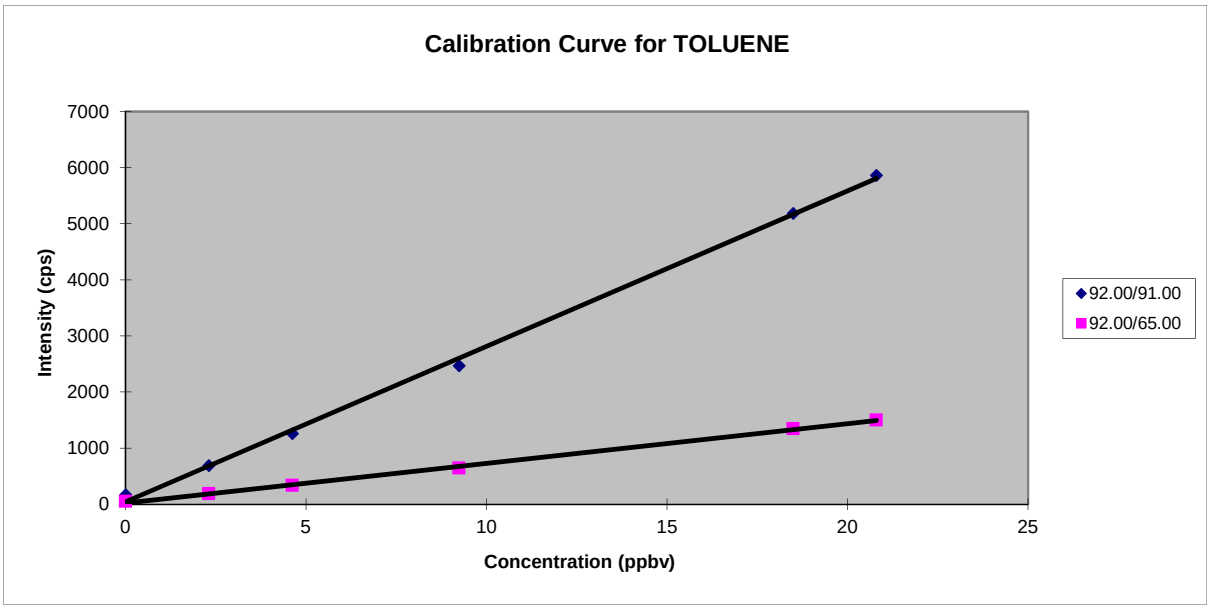


Filename:	64MSMS00756 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Tuesday, March 26, 2019 7:55:09
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	5.00	10.62	12.59	14.75	17.67	19.94

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	14.798628	105.179575
Intercept:	6.40579303	33.7623536
Correlation:	0.99934444	0.99992132

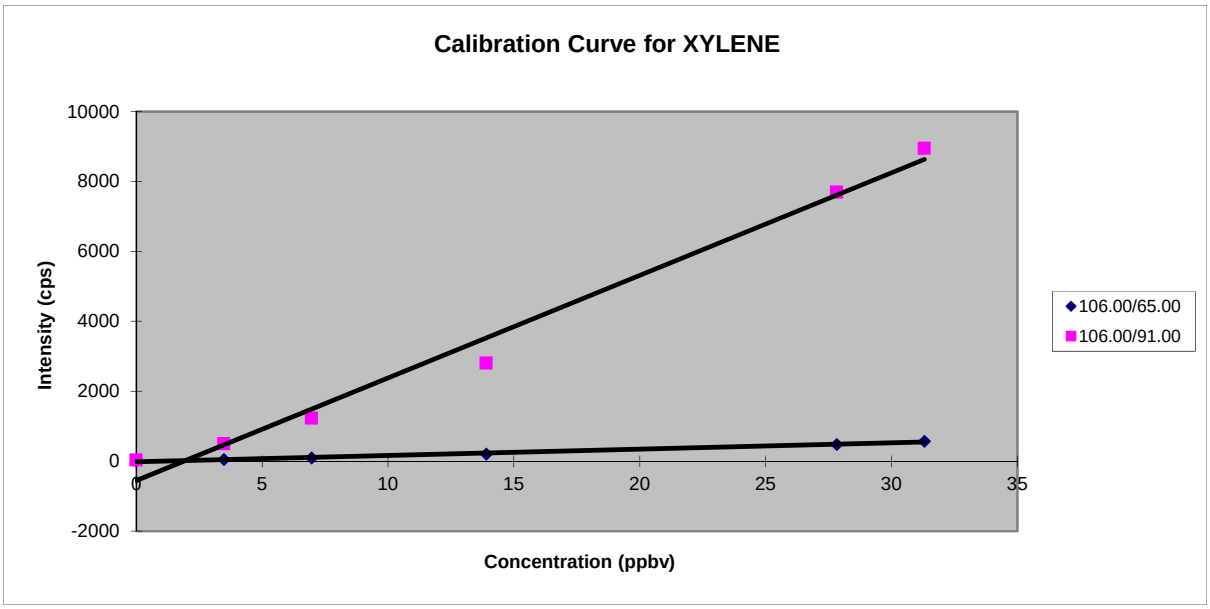
Concentratior	78.00/39.00	78.00/52.00
0	6.77083333	28.4375
2.31	42.1875	285.104167
4.62	74.7916667	523.645833
9.24	141.354167	993.020833
18.49	272.8125	1994.79167
20.8	321.25	2210.83333



Filename:	64MSMS00756 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, March 26, 2019 7:55:51					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	5.00	10.62	12.59	14.75	17.67	19.94

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	276.968585	70.7789974
Intercept:	45.598851	22.6584952
Correlation:	0.99928472	0.99940841

Concentratior	92.00/91.00	92.00/65.00
0	167.604167	48.2291667
2.31	686.5625	187.8125
4.62	1261.35417	337.083333
9.24	2469.0625	642.604167
18.49	5185.20833	1346.35417
20.8	5864.47917	1499.27083



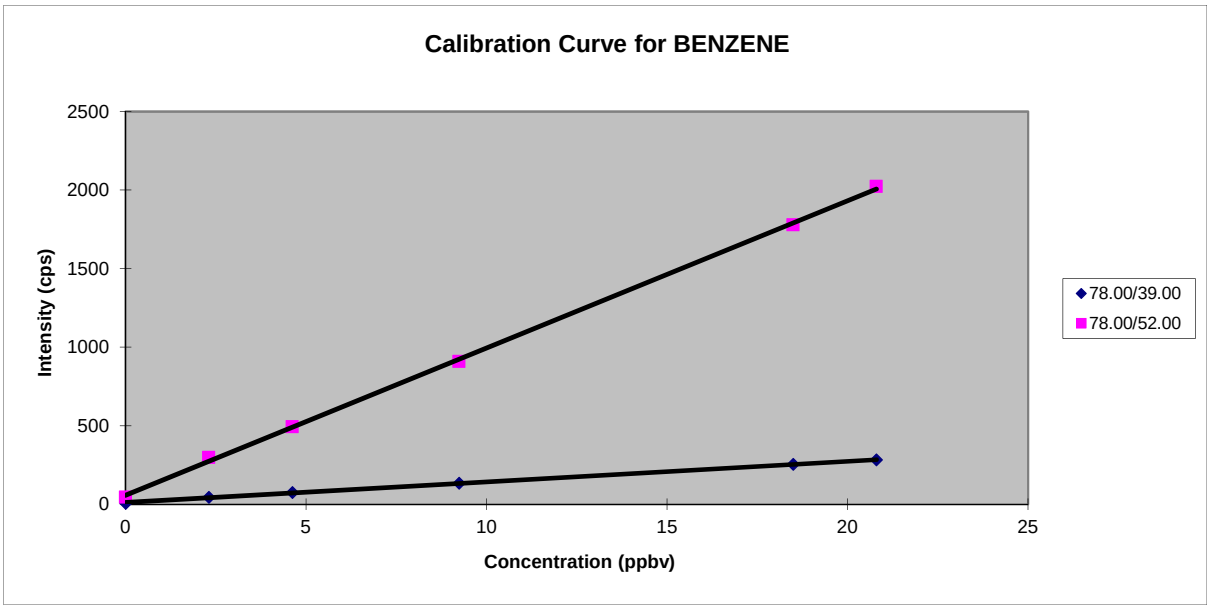
Filename:	64MSMS00756 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, March 26, 2019 7:56:21					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	5.00	10.62	12.59	14.75	17.67	19.94

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	18.0291173	293.286243
Intercept:	-15.919237	-548.22545
Correlation:	0.99638939	0.99289676

Concentratior	106.00/65.00	106.00/91.00
0	5.625	34.375
3.48	52.5	494.375
6.96	98.2291667	1229.0625
13.91	203.75	2802.29167
27.82	481.25	7685.10417
31.3	568.020833	8946.04167

Report	File Name	64MSMS00756 et al.			
	Sample Name	BOD Calibration - BTX 20190326			
	Date	Tuesday, March 26, 2019 7:57:03			
	Time Range	4.50	to	5.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

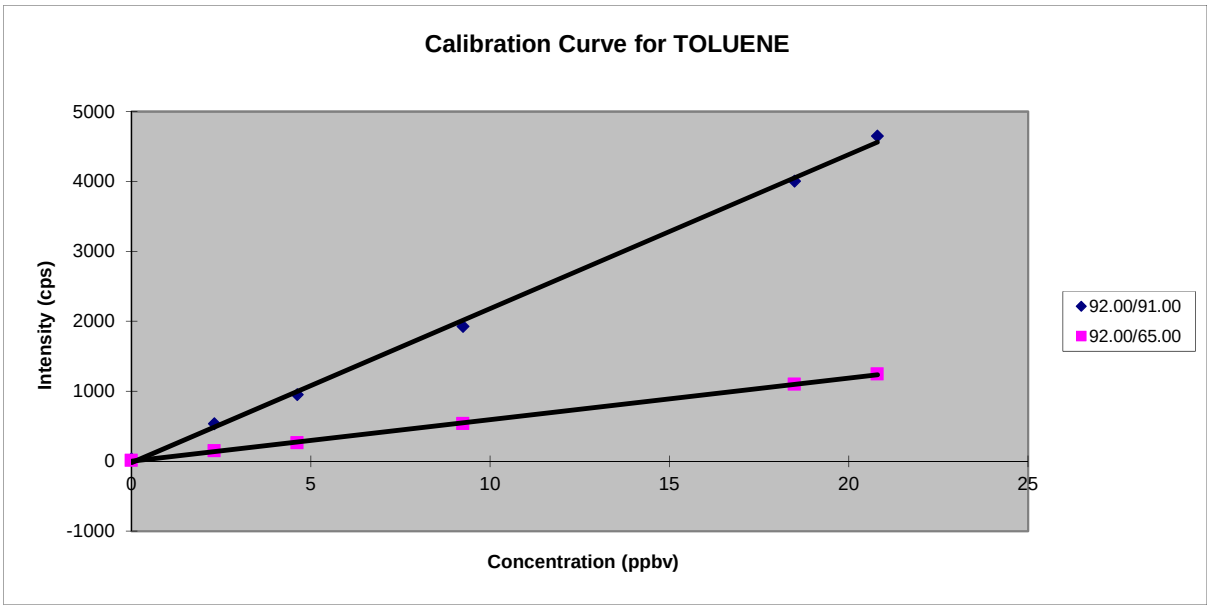
Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	14.80	105.18	276.97	70.78	18.03	293.29
Intercept	6.41	33.76	45.60	22.66	-15.92	-548.23
Intensity	6.77	28.44	167.60	48.23	5.63	34.38
Int SD	9.68	18.37	47.19	23.03	8.68	19.94
Concentration	0.02	-0.05	0.44	0.36	1.19	1.99
Conc SD	0.65	0.17	0.17	0.33	0.48	0.07
Compound Con	-0.01		0.40		1.59	
Compound SD	0.29		0.18		0.19	
Det. Limit	1.96	0.52	0.51	0.98	1.44	0.20
Compound DL	1.24		0.74		0.82	



Filename:	64MSMS00761 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, March 26, 2019 12:59:38					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	11.08	12.74	14.35	16.35	18.39

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	13.0627998	93.7146401
Intercept:	12.2249374	57.2365652
Correlation:	0.99953751	0.99979652

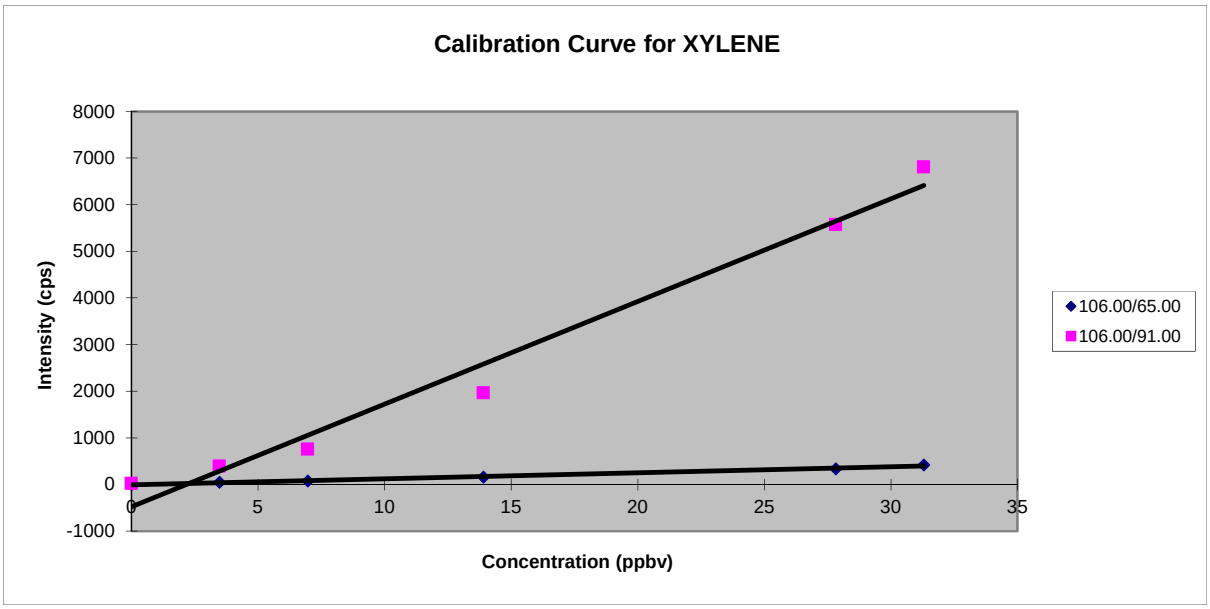
Concentratior	78.00/39.00	78.00/52.00
0	6.35416667	44.0625
2.31	45.3125	297.083333
4.62	75.625	492.8125
9.24	134.479167	908.4375
18.49	254.166667	1776.97917
20.8	281.875	2021.45833



Filename:	64MSMS00761 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, March 26, 2019 13:00:17					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	11.08	12.74	14.35	16.35	18.39

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	220.209363	59.4297659
Intercept:	-18.419932	0.91391981
Correlation:	0.99929406	0.9997676

Concentratior	92.00/91.00	92.00/65.00
0	34.1666667	11.5625
2.31	534.895833	146.354167
4.62	951.666667	262.916667
9.24	1926.45833	535.104167
18.49	4003.33333	1101.35417
20.8	4651.77083	1244.16667



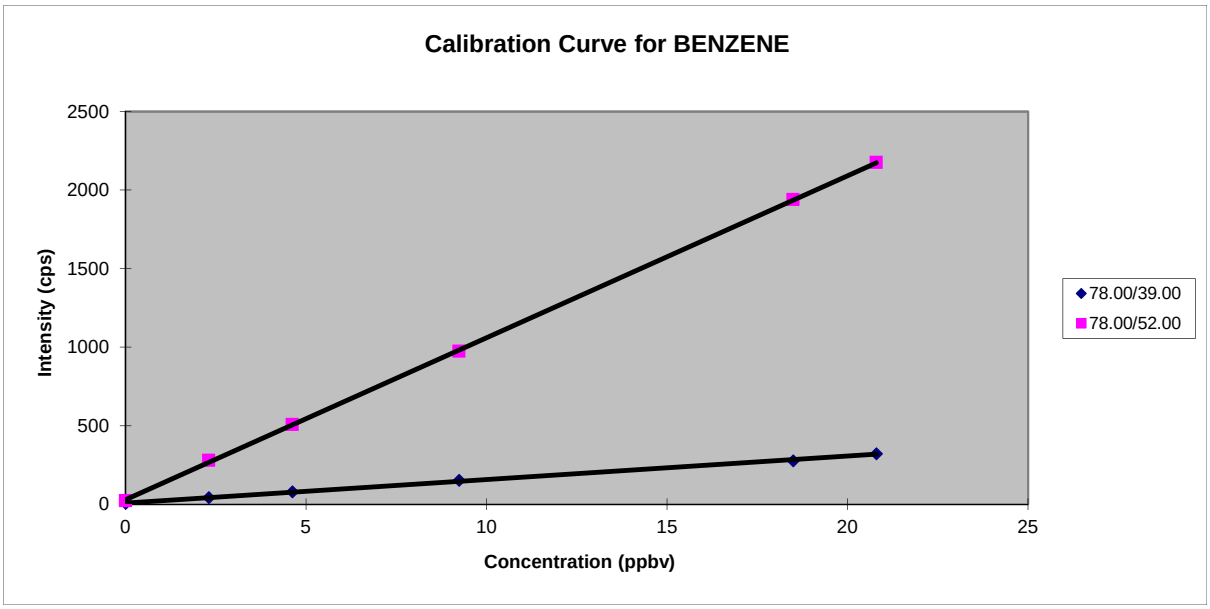
Filename:	64MSMS00761 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, March 26, 2019 13:00:43					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	11.08	12.74	14.35	16.35	18.39

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	12.9432081	220.124231
Intercept:	-5.0095136	-475.81924
Correlation:	0.99662524	0.98922481

Concentratior	106.00/65.00	106.00/91.00
0	3.125	19.0625
3.48	46.4583333	393.854167
6.96	79.2708333	758.4375
13.91	161.25	1961.04167
27.82	340	5574.89583
31.3	420.208333	6811.5625

Report	File Name	64MSMS00761 et al.			
	Sample Name	MOD Calibration - BTX 20190326			
	Date	Tuesday, March 26, 2019 13:01:22			
	Time Range	4.50	to	5.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

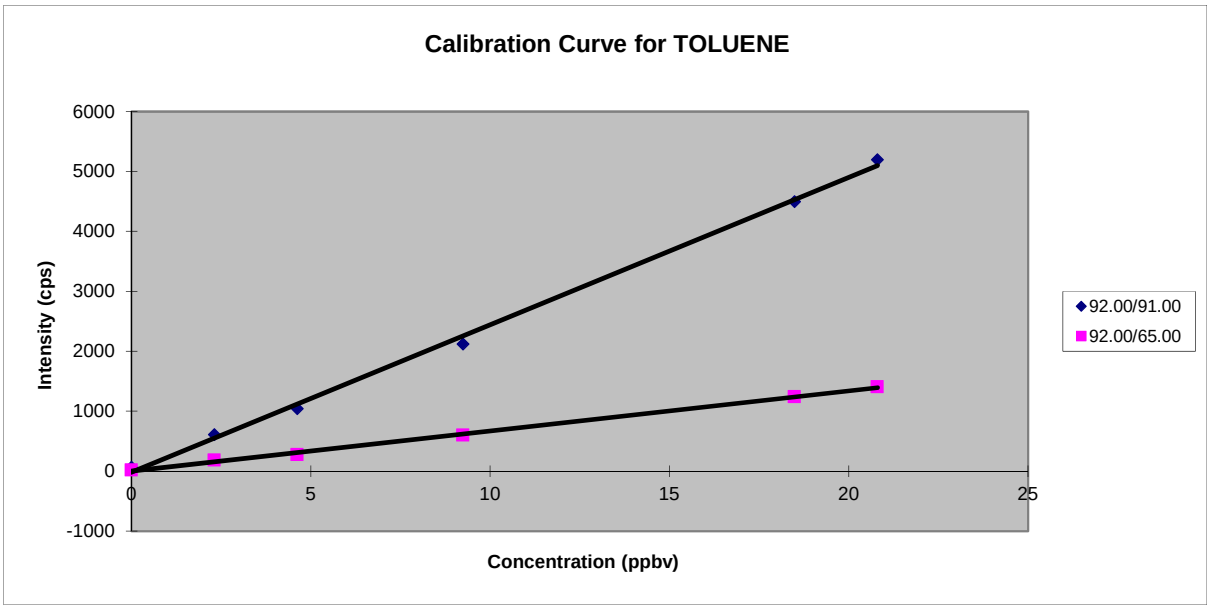
Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	13.06	93.71	220.21	59.43	12.94	220.12
Intercept	12.22	57.24	-18.42	0.91	-5.01	-475.82
Intensity	13.23	73.75	91.15	29.17	5.42	30.73
Int SD	12.01	40.11	35.60	20.76	9.94	24.63
Concentration	0.08	0.18	0.50	0.48	0.81	2.30
Conc SD	0.92	0.43	0.16	0.35	0.77	0.11
Compound Con	0.13		0.49		1.55	
Compound SD	0.48		0.18		0.31	
Det. Limit	2.76	1.28	0.48	1.05	2.30	0.34
Compound DL	2.02		0.77		1.32	



Filename:	64MSMS00766 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, March 26, 2019 19:18:16					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.00	9.46	11.46	13.51	15.39	17.59

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	14.9279922	103.11373
Intercept:	8.39177308	29.5785401
Correlation:	0.999332	0.99996991

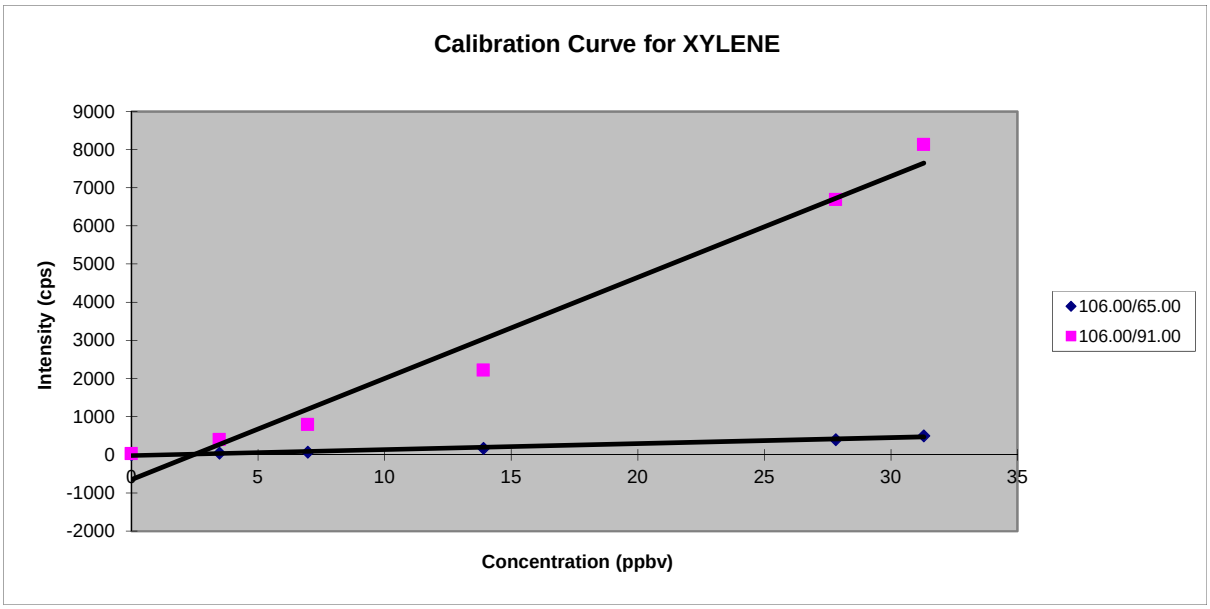
Concentratior	78.00/39.00	78.00/52.00
0	4.79166667	23.0208333
2.31	43.2291667	278.541667
4.62	78.3333333	507.708333
9.24	152.291667	973.958333
18.49	277.319588	1938.76289
20.8	322.291667	2174.16667



Filename:	64MSMS00766 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, March 26, 2019 19:19:00					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.00	9.46	11.46	13.51	15.39	17.59

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	245.919681	66.8574649
Intercept:	-17.328641	2.8143885
Correlation:	0.99899744	0.99916432

Concentratior	92.00/91.00	92.00/65.00
0	67.7083333	19.375
2.31	608.958333	182.5
4.62	1043.54167	275.208333
9.24	2121.04167	601.458333
18.49	4495.56701	1239.07216
20.8	5197.91667	1407.1875



Filename:	64MSMS00766 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, March 26, 2019 19:19:33					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.00	9.46	11.46	13.51	15.39	17.59

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	15.5550254	265.061914
Intercept:	-17.227693	-647.02917
Correlation:	0.9937364	0.98723528

Concentratior	106.00/65.00	106.00/91.00
0	4.79166667	24.7916667
3.48	44.5833333	398.854167
6.96	74.6875	788.125
13.91	173.4375	2214.89583
27.82	398.865979	6685.87629
31.3	498.645833	8130

Report	File Name	64MSMS00766			
	Sample Name	EOD Calibration - BTX 20190326			
	Date	Tuesday, March 26, 2019 19:21:24			
	Time Range	0.50	to	1.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	14.93	103.11	245.92	66.86	15.56	265.06
Intercept	8.39	29.58	-17.33	2.81	-17.23	-647.03
Intensity	4.74	22.99	67.22	19.18	4.74	24.64
Int SD	8.05	18.77	34.09	14.19	8.18	21.27
Concentration	-0.24	-0.06	0.34	0.24	1.41	2.53
Conc SD	0.54	0.18	0.14	0.21	0.53	0.08
Compound Con	-0.15		0.29		1.97	
Compound SD	0.25		0.12		0.21	
Det. Limit	1.62	0.55	0.42	0.64	1.58	0.24
Compound DL	1.08		0.53		0.91	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 03/27/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3250	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
0634	1500sccs	~191SCFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DW15-0148		Calibration Date: EXP 05/02/19	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Wed, Mar 27, 2019, 6:55:53
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR27 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Wed, Mar 27, 2019, 6:54:33

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.075
100.000	0.081
125.000	0.085
160.000	0.098

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.038
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Wed, Mar 27, 2019, 6:56:21
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR27 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Wed, Mar 27, 2019, 6:54:33

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.075
100.000	0.081
125.000	0.085
160.000	0.098

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.038
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

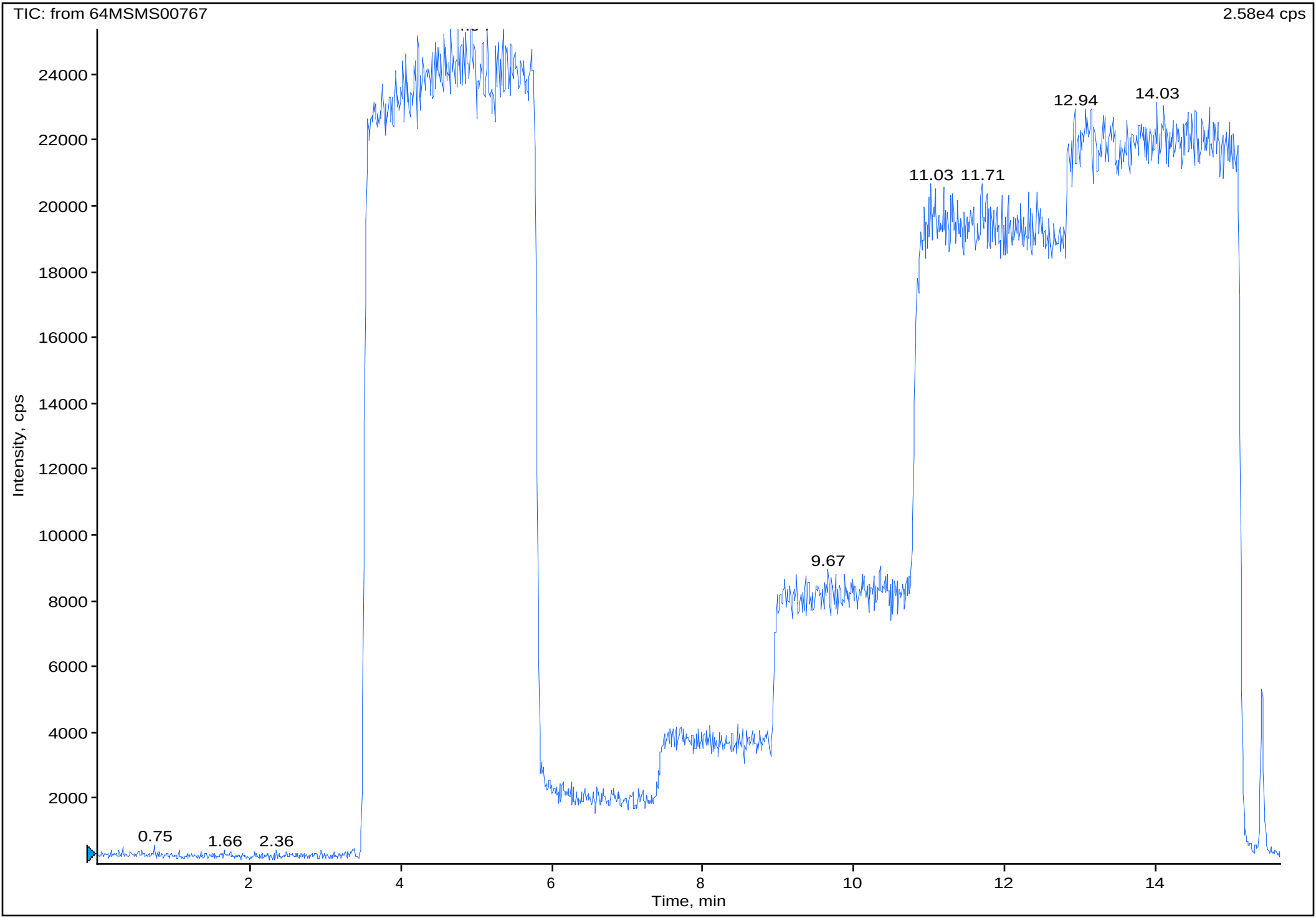
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

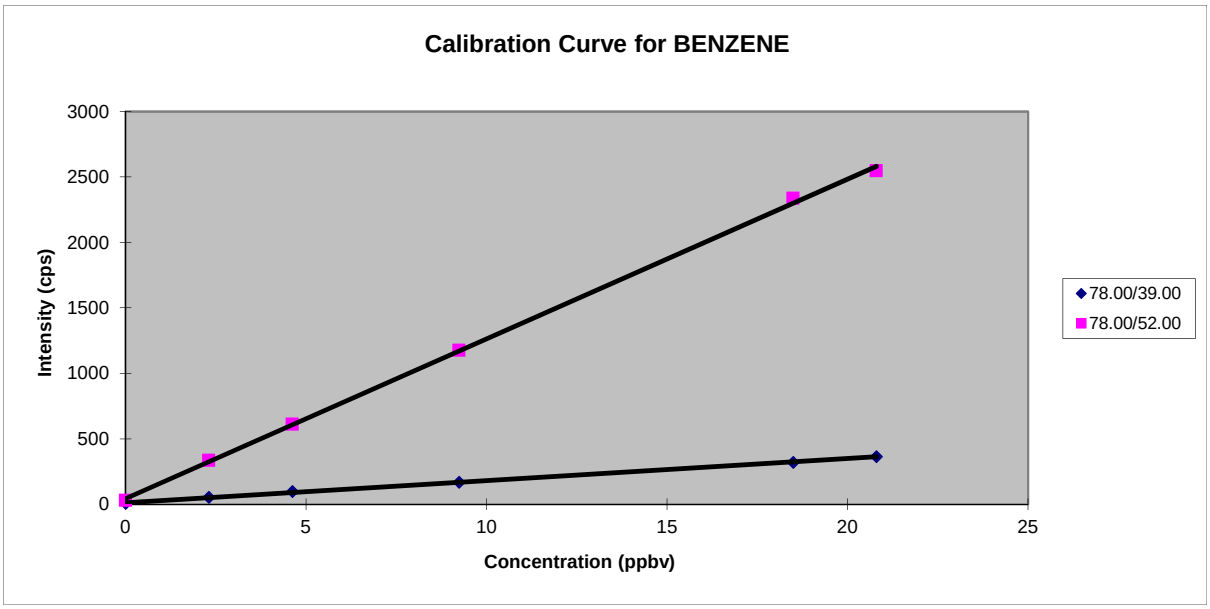
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

3/27/19.6.57.17
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, Mar 27, 2019 at 6:57:15; Exp. Comment: BTX



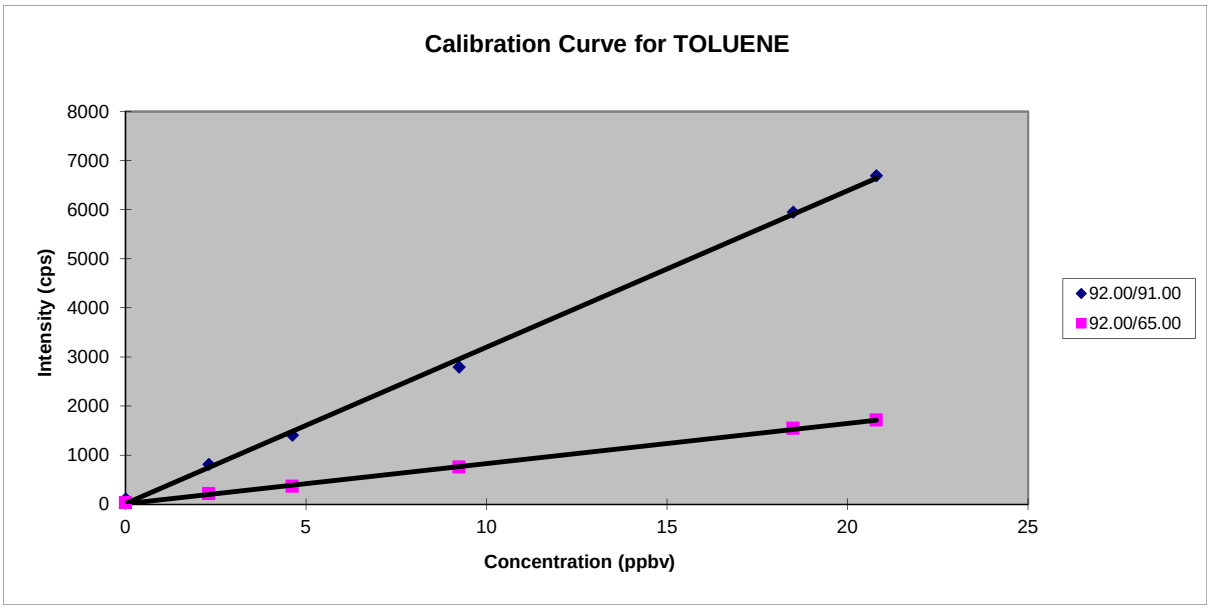


Filename:	64MSMS00767 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Wednesday, March 27, 2019 7:14:34
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	6.68	8.21	9.77	11.83	13.99

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	16.8363321	121.995879
Intercept:	12.6400587	43.8097578
Correlation:	0.99944857	0.99972769

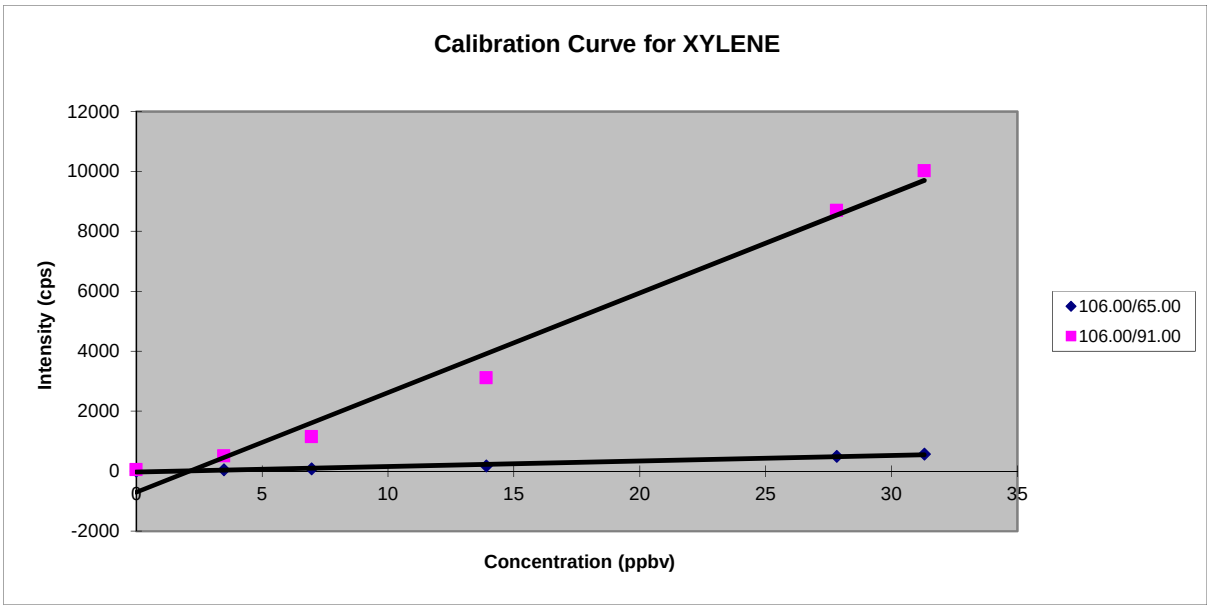
Concentratior	78.00/39.00	78.00/52.00
0	6.14583333	28.125
2.31	53.5416667	334.375
4.62	97.6041667	609.895833
9.24	167.395833	1174.375
18.49	320.104167	2336.77083
20.8	364.791667	2545.20833



Filename:	64MSMS00767 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, March 27, 2019 7:15:09					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	6.68	8.21	9.77	11.83	13.99

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	318.8075	81.8116272
Intercept:	13.9719784	12.1385536
Correlation:	0.99933237	0.99966057

Concentratior	92.00/91.00	92.00/65.00
0	110	29.4791667
2.31	811.145833	212.708333
4.62	1406.45833	360.833333
9.24	2794.16667	756.145833
18.49	5949.79167	1540.72917
20.8	6693.33333	1710.20833



Filename:	64MSMS00767 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, March 27, 2019 7:15:32					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	6.68	8.21	9.77	11.83	13.99

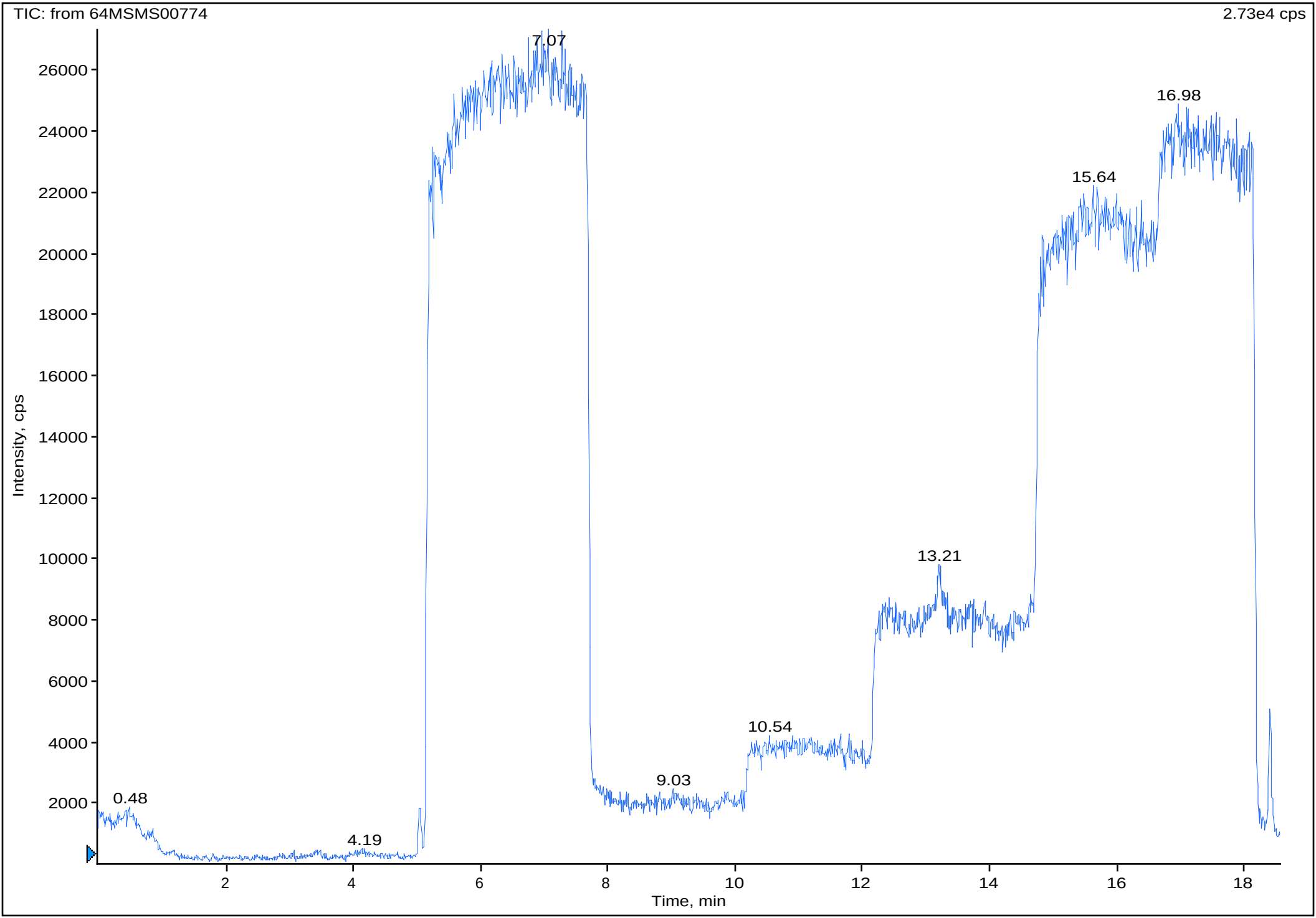
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	18.3551667	332.338486
Intercept:	-24.847488	-700.34404
Correlation:	0.99252033	0.99178387

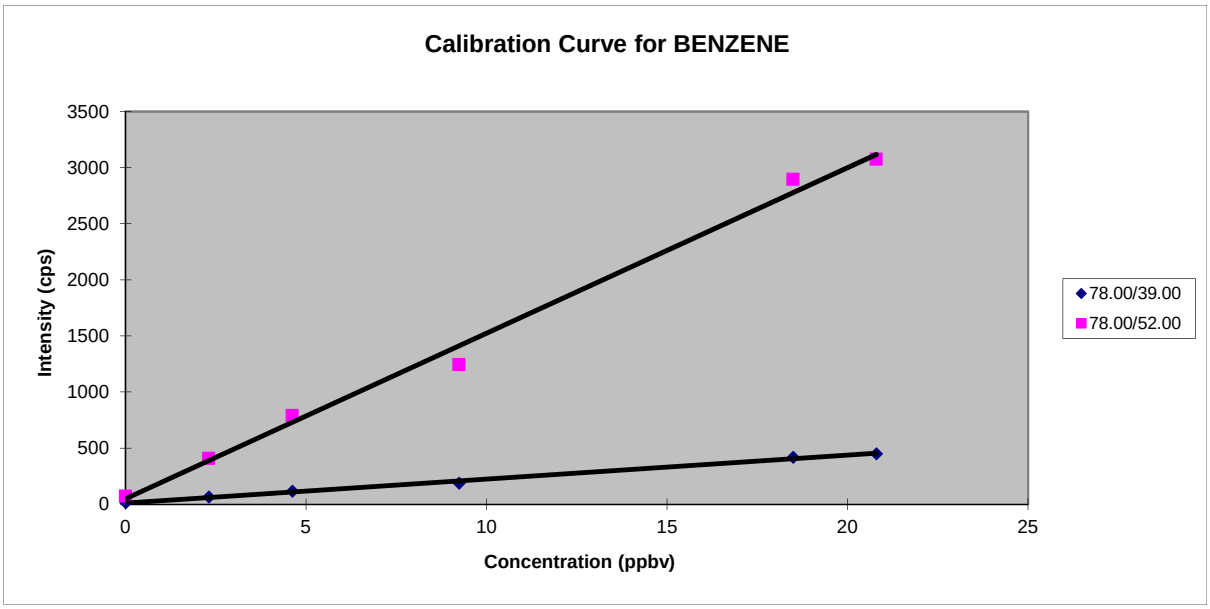
Concentratior	106.00/65.00	106.00/91.00
0	6.77083333	44.4791667
3.48	50	510.9375
6.96	83.9583333	1149.47917
13.91	181.041667	3112.39583
27.82	493.229167	8696.77083
31.3	568.020833	1.00E+04

Report	File Name	64MSMS00767 et al.			
	Sample Name	BOD Calibration - BTX 20190327			
	Date	Wednesday, March 27, 2019 7:16:26			
	Time Range	1.50	to	2.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	16.84	122.00	318.81	81.81	18.36	332.34
Intercept	12.64	43.81	13.97	12.14	-24.85	-700.34
Intensity	6.04	28.65	109.90	29.17	6.88	44.38
Int SD	8.40	20.70	39.62	22.13	10.89	26.03
Concentration	-0.39	-0.12	0.30	0.21	1.73	2.24
Conc SD	0.50	0.17	0.12	0.27	0.59	0.08
Compound Con	-0.26		0.25		1.98	
Compound SD	0.24		0.14		0.24	
Det. Limit	1.50	0.51	0.37	0.81	1.78	0.23
Compound DL	1.00		0.59		1.01	

3/27/19.13.44.37
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, Mar 27, 2019 at 13:44:36; Exp. Comment: BTX

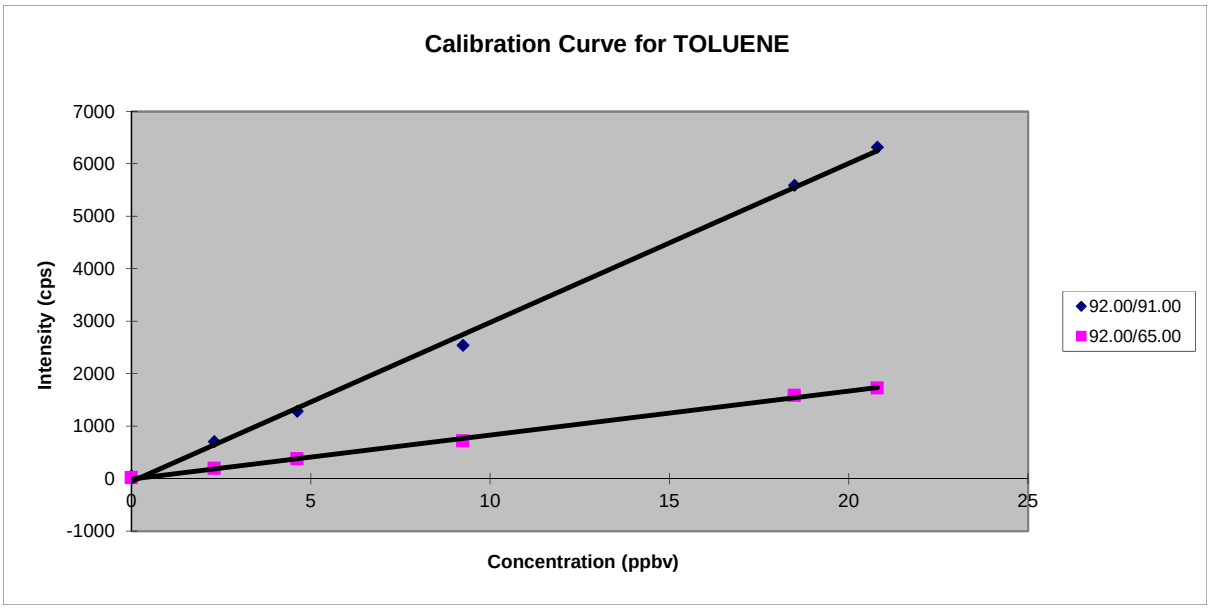




Filename:	64MSMS00774 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, March 27, 2019 14:04:09					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.98	11.07	13.85	15.91	17.34

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	21.2926401	147.504146
Intercept:	11.6746135	49.1915394
Correlation:	0.99779596	0.99698619

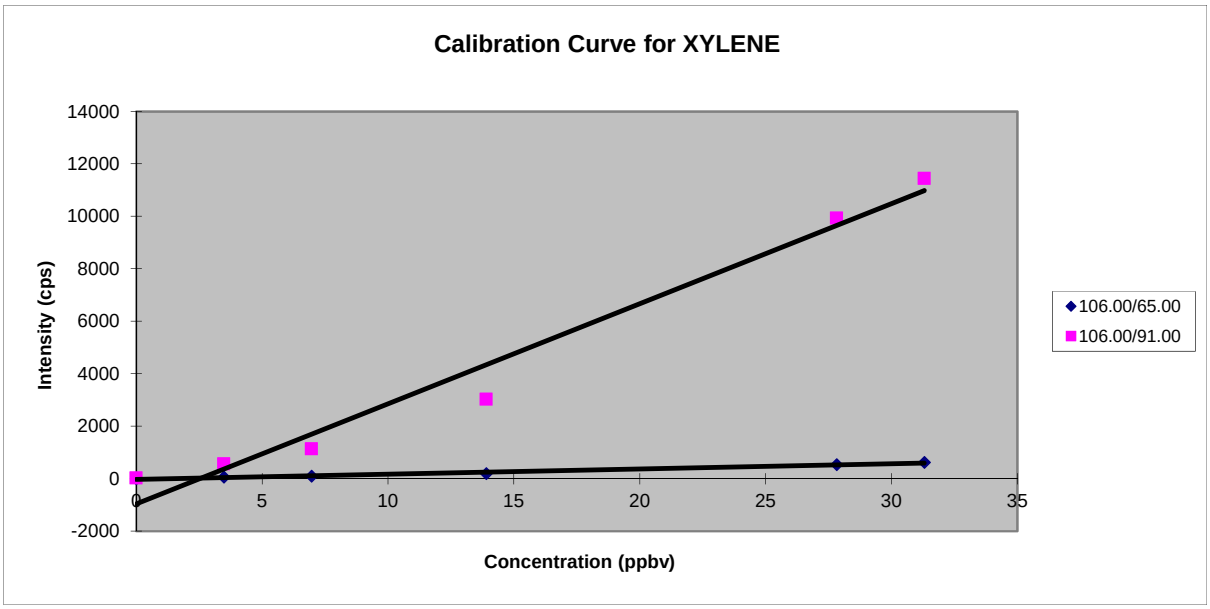
Concentratior	78.00/39.00	78.00/52.00
0	13.125	69.5833333
2.31	66.0416667	408.229167
4.62	115.625	788.541667
9.24	186.875	1241.45833
18.49	419.583333	2895.10417
20.8	449.6875	3072.8125



Filename:	64MSMS00774 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, March 27, 2019 14:04:50					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.98	11.07	13.85	15.91	17.34

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	303.20124	83.9135179
Intercept:	-52.676935	-5.3975612
Correlation:	0.99901747	0.9990794

Concentratior	92.00/91.00	92.00/65.00
0	52.0833333	17.5
2.31	708.958333	192.708333
4.62	1286.77083	378.4375
9.24	2540.41667	719.375
18.49	5593.02083	1585.9375
20.8	6318.22917	1727.5



Filename:	64MSMS00774 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, March 27, 2019 14:05:48					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.98	11.07	13.85	15.91	17.34

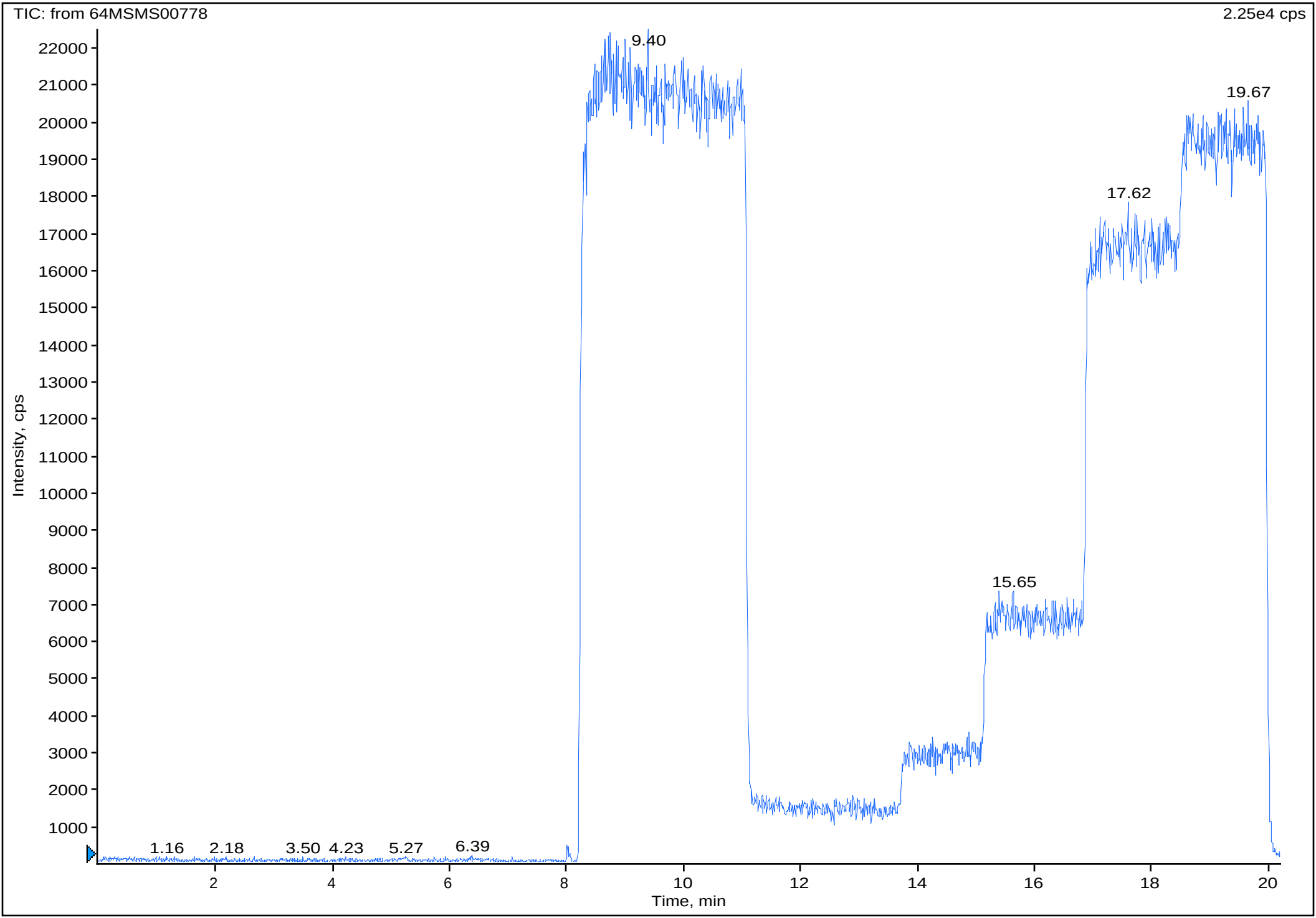
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	19.8803692	381.617753
Intercept:	-26.065598	-956.49106
Correlation:	0.99177079	0.98669558

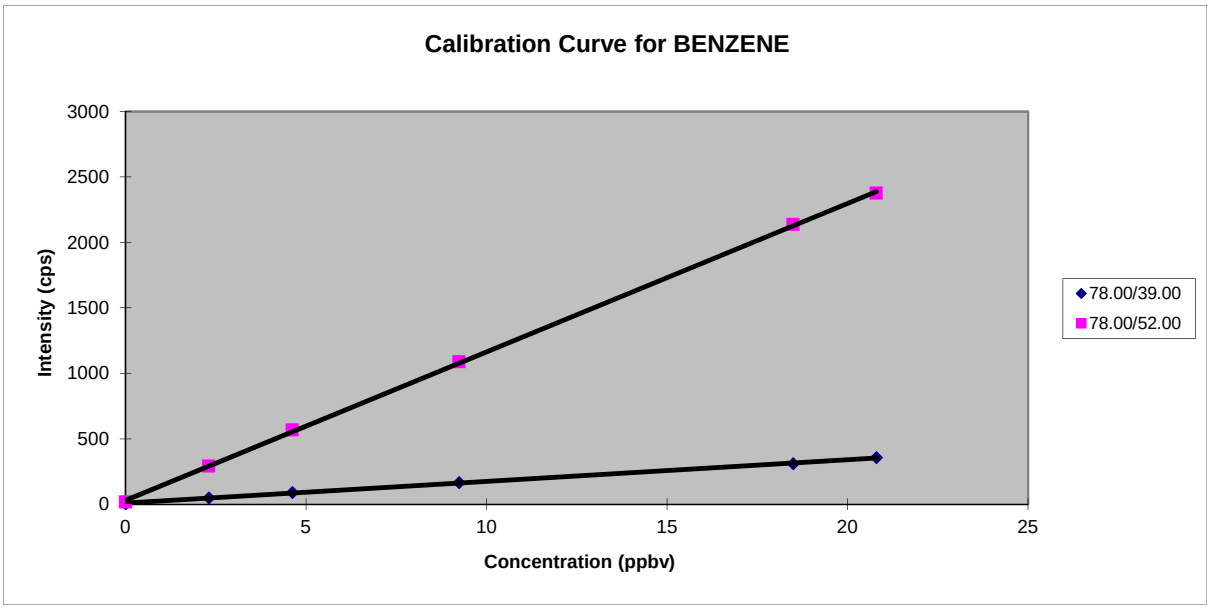
Concentratior	106.00/65.00	106.00/91.00
0	4.58333333	22.9166667
3.48	57.2916667	558.958333
6.96	99.2708333	1132.8125
13.91	189.895833	3027.60417
27.82	531.875	9934.0625
31.3	620.104167	1.14E+04

Report	File Name	64MSMS00774 et al.			
	Sample Name	MOD Calibration - BTX 20190327			
	Date	Wednesday, March 27, 2019 14:06:38			
	Time Range	2.00	to	3.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	21.29	147.50	303.20	83.91	19.88	381.62
Intercept	11.67	49.19	-52.68	-5.40	-26.07	-956.49
Intensity	13.13	69.58	52.08	17.50	4.58	22.92
Int SD	13.08	31.95	25.46	16.29	7.94	18.52
Concentration	0.07	0.14	0.35	0.27	1.54	2.57
Conc SD	0.61	0.22	0.08	0.19	0.40	0.05
Compound Con	0.10		0.31		2.05	
Compound SD	0.29		0.10		0.16	
Det. Limit	1.84	0.65	0.25	0.58	1.20	0.15
Compound DL	1.25		0.42		0.67	

3/27/19.19.08.13
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, Mar 27, 2019 at 19:08:12; Exp. Comment: BTX



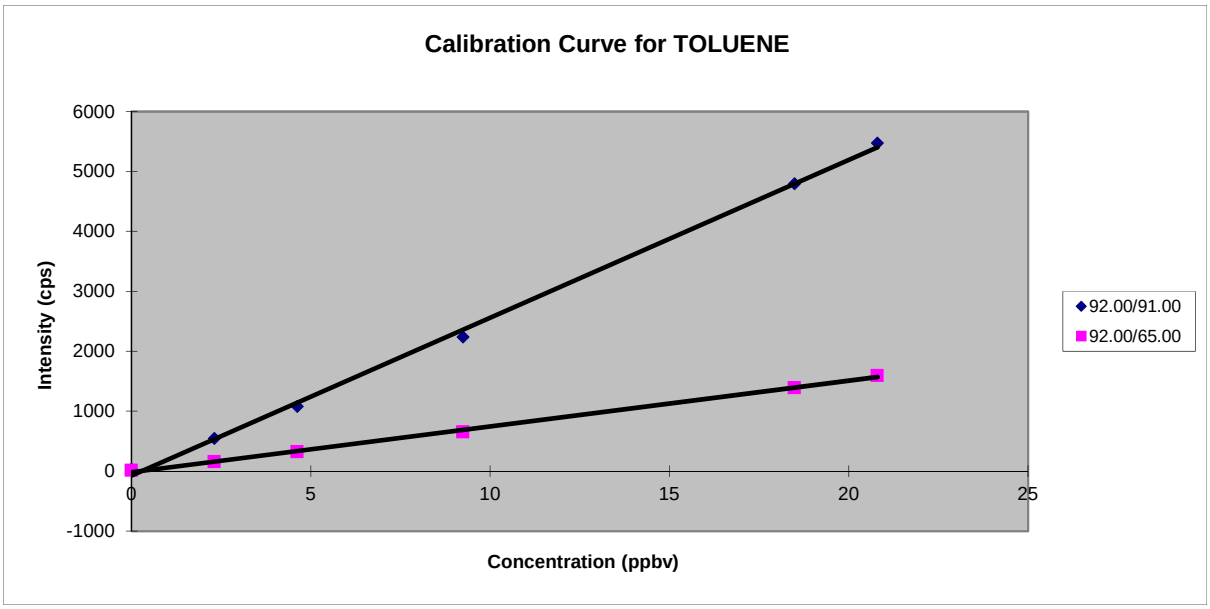


Filename:	64MSMS00778 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Wednesday, March 27, 2019 19:29:00
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	12.46	14.38	16.11	17.68	19.28

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	16.542697	113.392606
Intercept:	9.65978156	30.3891662
Correlation:	0.99951033	0.99992834

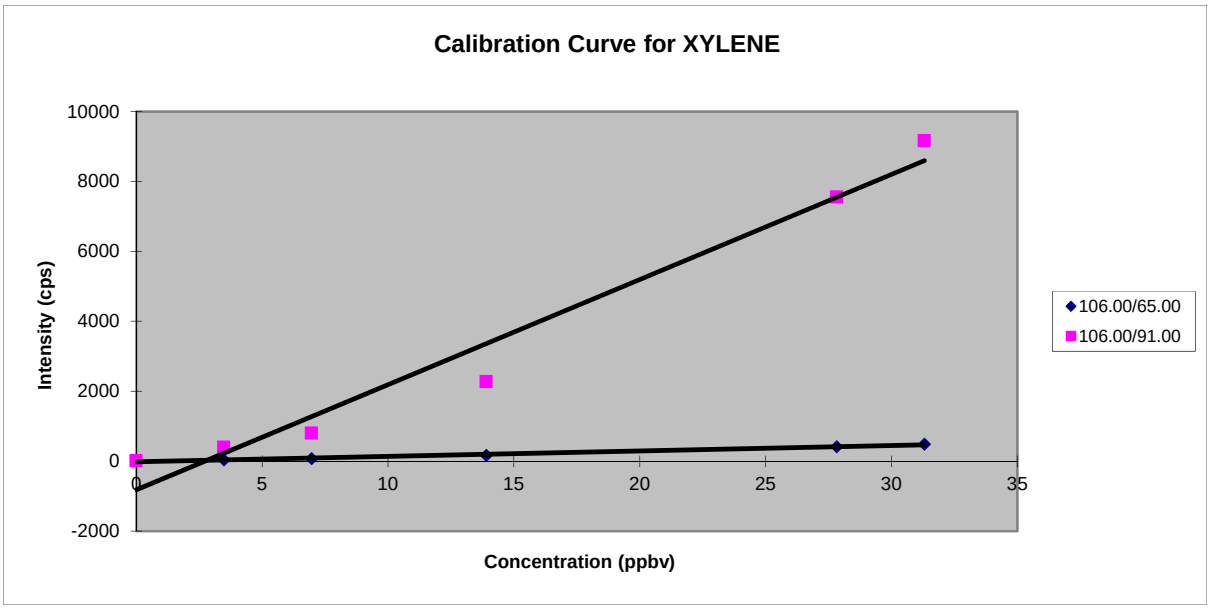
Concentratior	78.00/39.00	78.00/52.00
0	4.375	16.9791667
2.31	48.0208333	289.895833
4.62	90.3125	566.458333
9.24	166.979167	1087.39583
18.49	310	2135.46392
20.8	355.729167	2374.89583



Filename:	64MSMS00778 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, March 27, 2019 19:29:47					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	12.46	14.38	16.11	17.68	19.28

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	263.297496	76.3139457
Intercept:	-72.645608	-15.434793
Correlation:	0.99931413	0.99943195

Concentratior	92.00/91.00	92.00/65.00
0	35.7291667	13.3333333
2.31	546.666667	160
4.62	1079.375	325.208333
9.24	2237.60417	656.5625
18.49	4795.87629	1392.78351
20.8	5471.35417	1591.875



Filename:	64MSMS00778 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, March 27, 2019 19:30:16					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	12.46	14.38	16.11	17.68	19.28

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	15.6731969	300.640916
Intercept:	-18.797021	-814.24431
Correlation:	0.99602259	0.9842769

Concentratior	106.00/65.00	106.00/91.00
0	2.29166667	15.625
3.48	40.2083333	398.020833
6.96	78.5416667	801.979167
13.91	170.833333	2274.27083
27.82	415.876289	7552.98969
31.3	487.708333	9166.14583

Report	File Name	64MSMS00778 et al.			
	Sample Name	EOD Calibration - BTX 20190327			
	Date	Wednesday, March 27, 2019 19:30:57			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	16.54	113.39	263.30	76.31	15.67	300.64
Intercept	9.66	30.39	-72.65	-15.43	-18.80	-814.24
Intensity	4.38	16.98	35.73	13.33	2.29	15.63
Int SD	7.37	15.50	22.04	13.27	6.07	14.42
Concentration	-0.32	-0.12	0.41	0.38	1.35	2.76
Conc SD	0.45	0.14	0.08	0.17	0.39	0.05
Compound Con	-0.22		0.39		2.05	
Compound SD	0.21		0.09		0.15	
Det. Limit	1.34	0.41	0.25	0.52	1.16	0.14
Compound DL	0.87		0.39		0.65	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 3/28/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3250	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
6:45	1800 SCCS	~191	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date: Exp: 5/2/2019	
		Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
Time	Reference Flow Meter	Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
Gilibrator Flow Cell	S/N #	N/A		Calibration Date:	
		Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
Time	Reference Flow Meter	Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Thu, Mar 28, 2019, 7:27:42
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR28 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Thu, Mar 28, 2019, 7:24:30

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.075
100.000	0.075
125.000	0.085
160.000	0.098

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.038
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Thu, Mar 28, 2019, 7:28:20
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR28 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Thu, Mar 28, 2019, 7:24:30

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.075
100.000	0.075
125.000	0.085
160.000	0.098

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.038
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

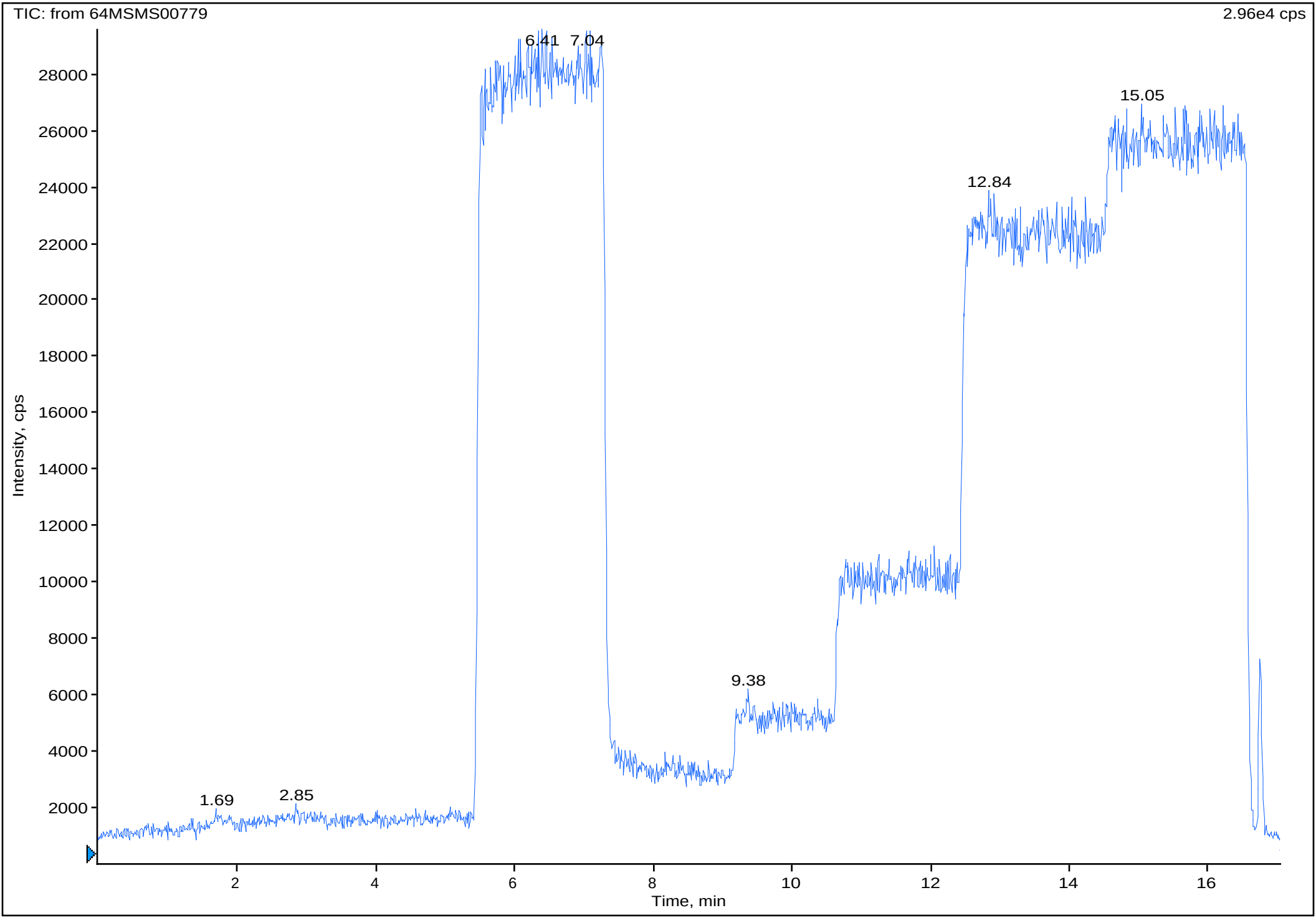
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

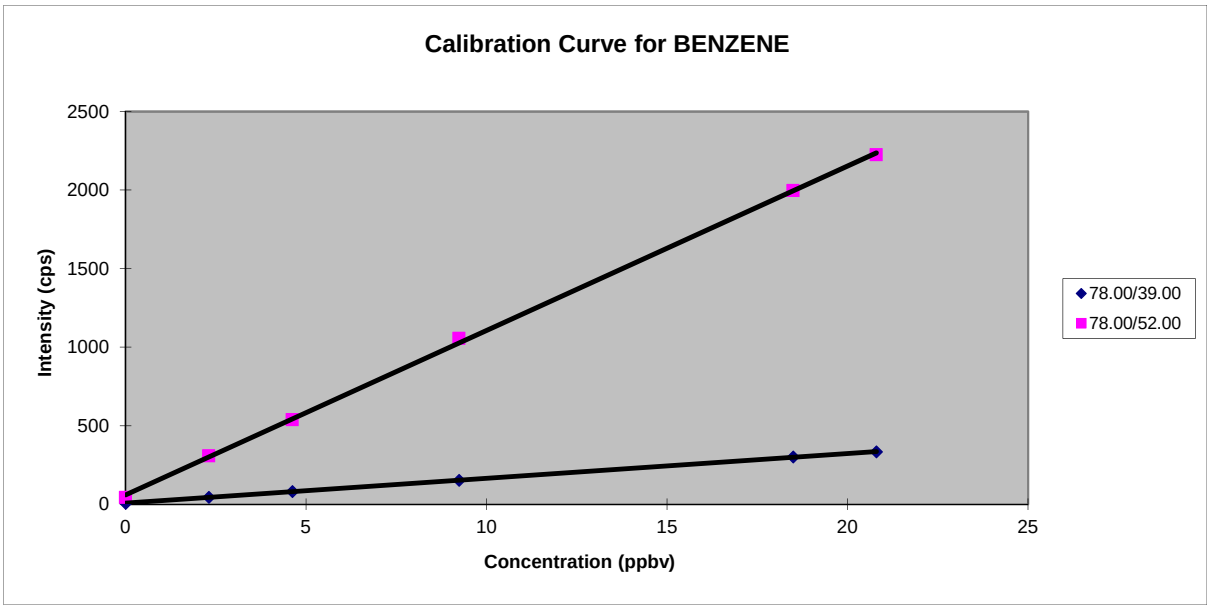
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

3/28/19.7.29.25
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Mar 28, 2019 at 7:29:24; Exp. Comment: BTX

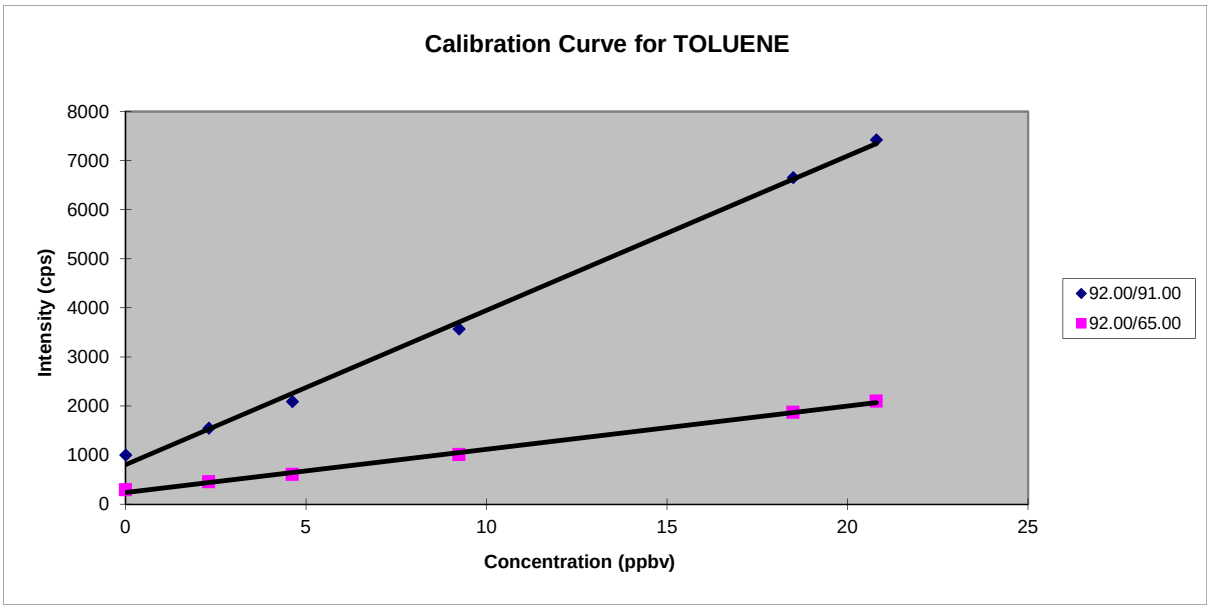




Filename:	64MSMS00779 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, March 28, 2019 8:07:56					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.00	8.28	10.02	11.42	13.40	15.44

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	15.7289746	104.660814
Intercept:	7.77156728	60.0331239
Correlation:	0.99993733	0.99983981

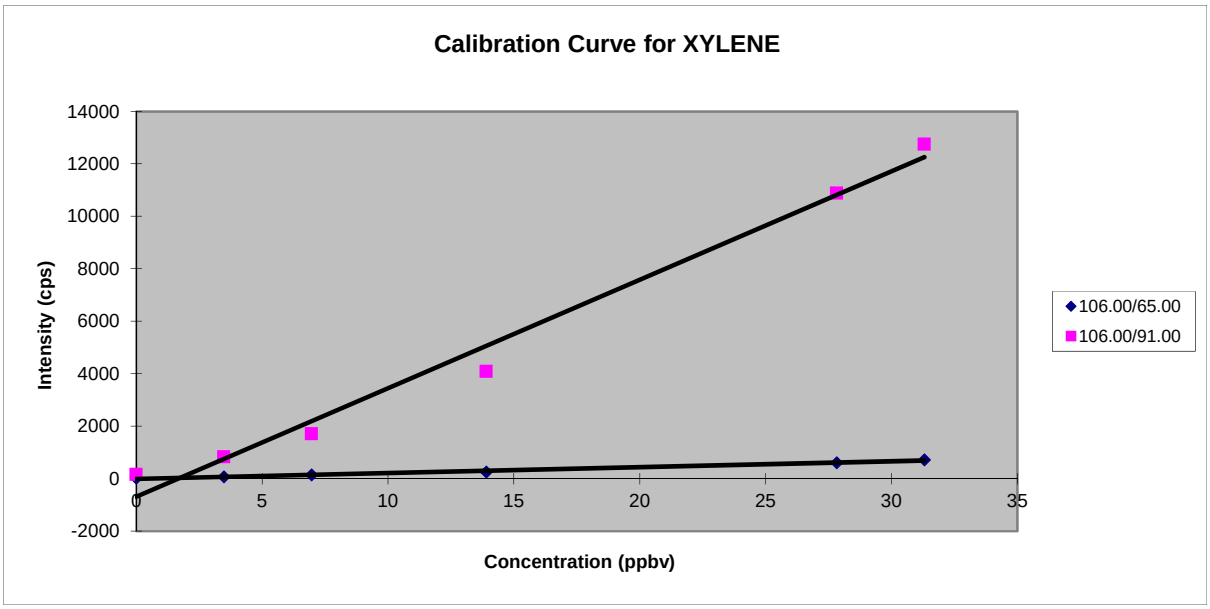
Concentratior	78.00/39.00	78.00/52.00
0	6.5625	42.9166667
2.31	43.8541667	308.020833
4.62	81.7708333	538.229167
9.24	153.4375	1055.3125
18.49	300.520833	1995.72917
20.8	332.8125	2224.47917



Filename:	64MSMS00779 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, March 28, 2019 8:09:36					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.00	8.28	10.02	11.42	13.40	15.44

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	314.466486	87.9652557
Intercept:	808.003672	241.682125
Correlation:	0.99870792	0.99868038

Concentratior	92.00/91.00	92.00/65.00
0	1004.89583	294.6875
2.31	1549.89583	452.8125
4.62	2088.64583	602.291667
9.24	3569.6875	1009.79167
18.49	6652.39583	1871.77083
20.8	7422.8125	2097.29167



Filename:	64MSMS00779 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, March 28, 2019 8:10:29					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.00	8.28	10.02	11.42	13.40	15.44

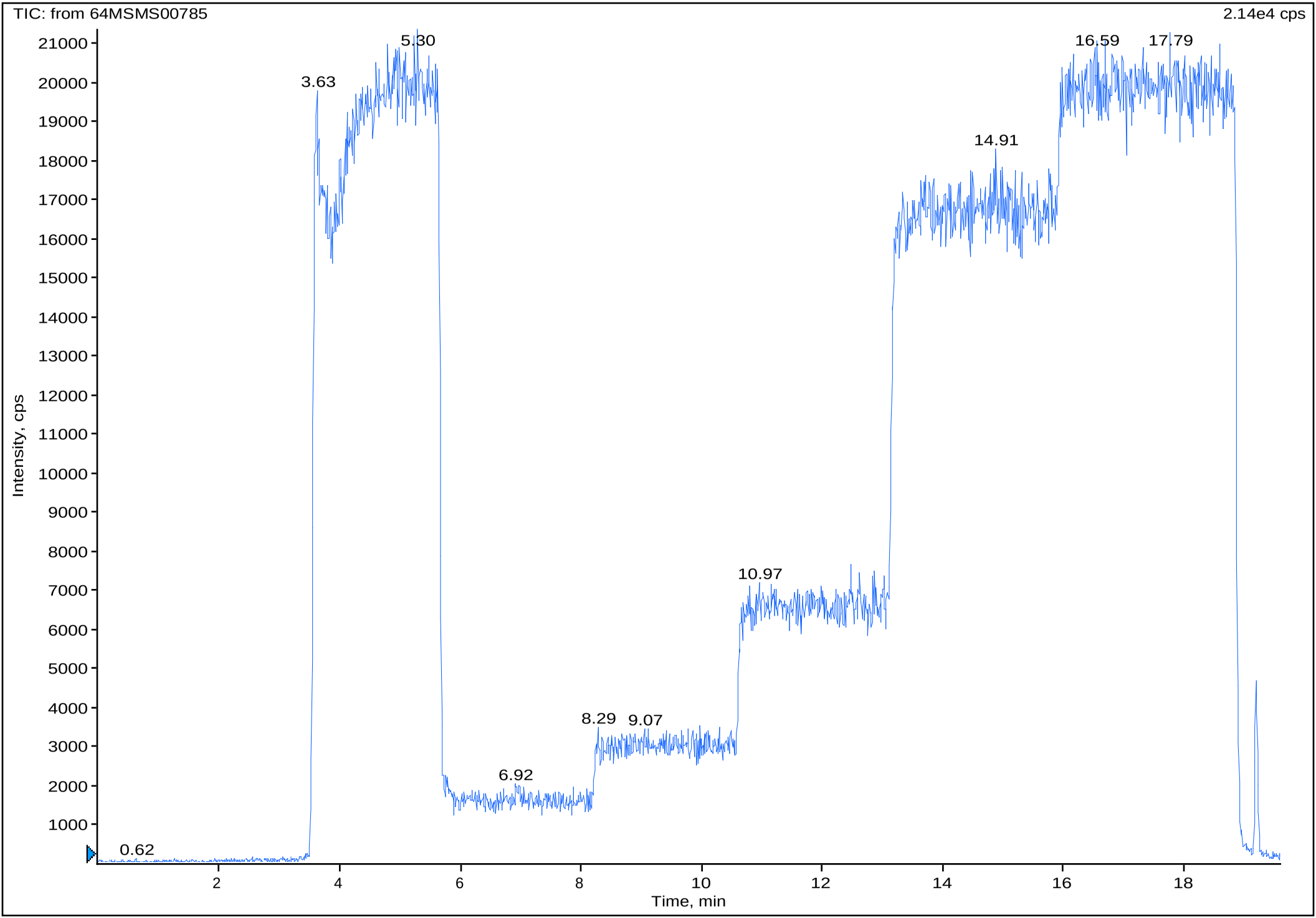
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	22.4000391	413.63099
Intercept:	-7.9586822	-686.2409
Correlation:	0.995566	0.99264641

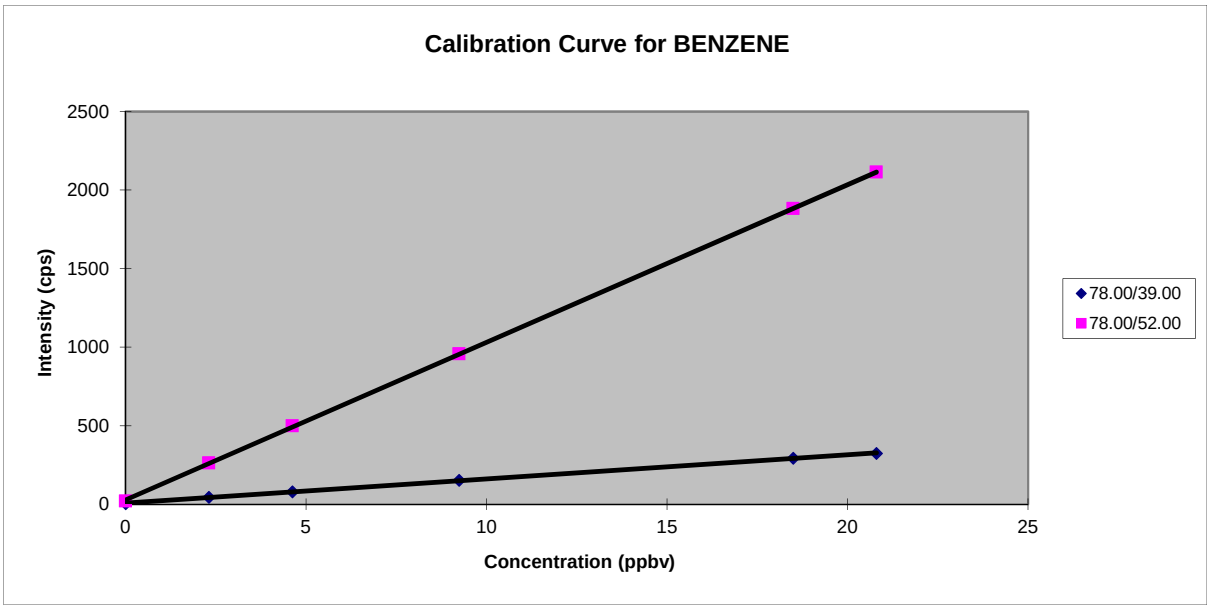
Concentratior	106.00/65.00	106.00/91.00
0	18.125	162.291667
3.48	77.0833333	828.020833
6.96	141.979167	1705.52083
13.91	253.854167	4090.9375
27.82	614.375	1.09E+04
31.3	716.5625	1.27E+04

Report	File Name	64MSMS00779			
	Sample Name	BOD Calibration - BTX 20190328			
	Date	Thursday, March 28, 2019 8:14:02			
	Time Range	3.50	to	4.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	15.73	104.66	314.47	87.97	22.40	413.63
Intercept	7.77	60.03	808.00	241.68	-7.96	-686.24
Intensity	6.56	42.92	1004.90	294.69	18.13	162.29
Int SD	8.19	24.32	108.12	66.55	14.96	44.21
Concentration	-0.08	-0.16	0.63	0.60	1.16	2.05
Conc SD	0.52	0.23	0.34	0.76	0.67	0.11
Compound Con	-0.12		0.61		1.61	
Compound SD	0.27		0.39		0.27	
Det. Limit	1.56	0.70	1.03	2.27	2.00	0.32
Compound DL	1.13		1.65		1.16	

3/28/19.13.14.59
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Mar 28, 2019 at 13:14:58; Exp. Comment: BTX

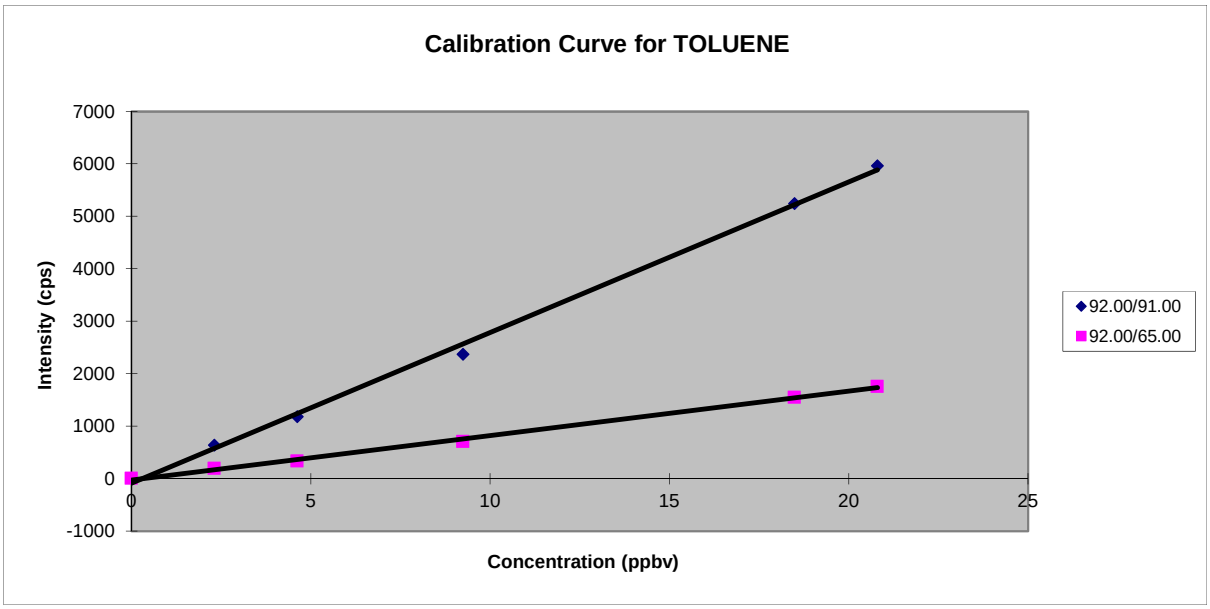




Filename:	64MSMS00785 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, March 28, 2019 13:35:31					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.00	7.03	9.44	11.94	14.58	17.40

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	15.3548682	100.333826
Intercept:	7.93094633	27.9803038
Correlation:	0.99975354	0.99998298

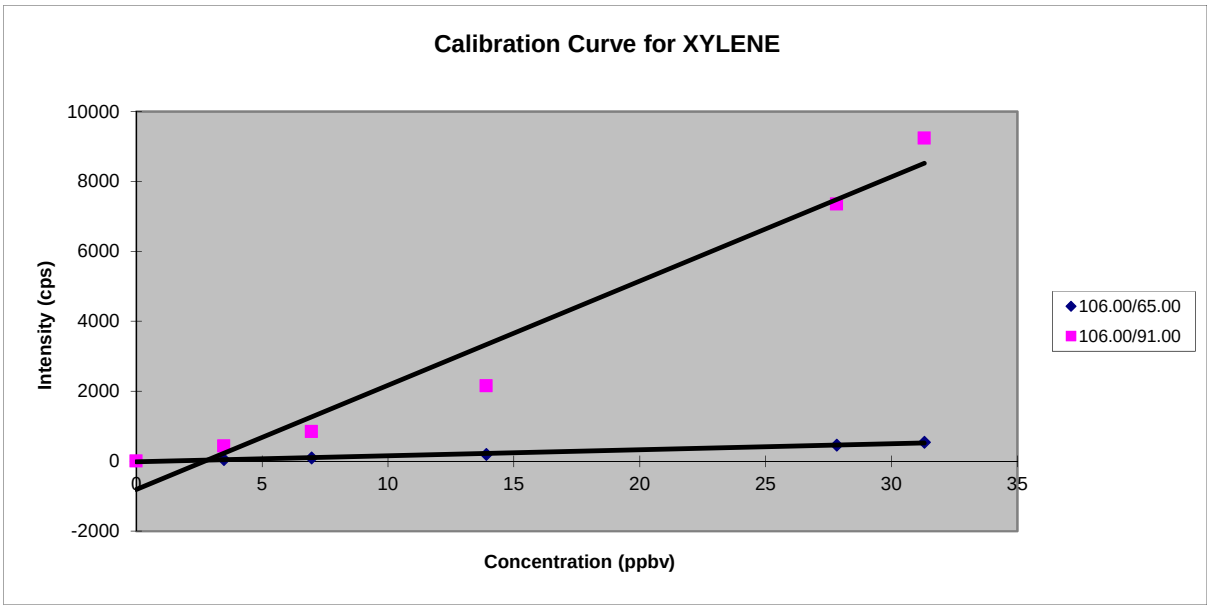
Concentratior	78.00/39.00	78.00/52.00
0	4.0625	19.7916667
2.31	44.7916667	262.083333
4.62	79.6875	498.645833
9.24	153.020833	956.354167
18.49	293.75	1881.875
20.8	323.854167	2113.64583



Filename:	64MSMS00785 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, March 28, 2019 13:36:23					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.00	7.03	9.44	11.94	14.58	17.40

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	287.05482	84.6771018
Intercept:	-83.534361	-24.816733
Correlation:	0.99900976	0.99901799

Concentratior	92.00/91.00	92.00/65.00
0	14.2708333	5.83333333
2.31	640.416667	193.333333
4.62	1184.47917	335.3125
9.24	2373.22917	708.541667
18.49	5242.8125	1547.60417
20.8	5963.64583	1756.66667



Filename:	64MSMS00785 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, March 28, 2019 13:37:03					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.00	7.03	9.44	11.94	14.58	17.40

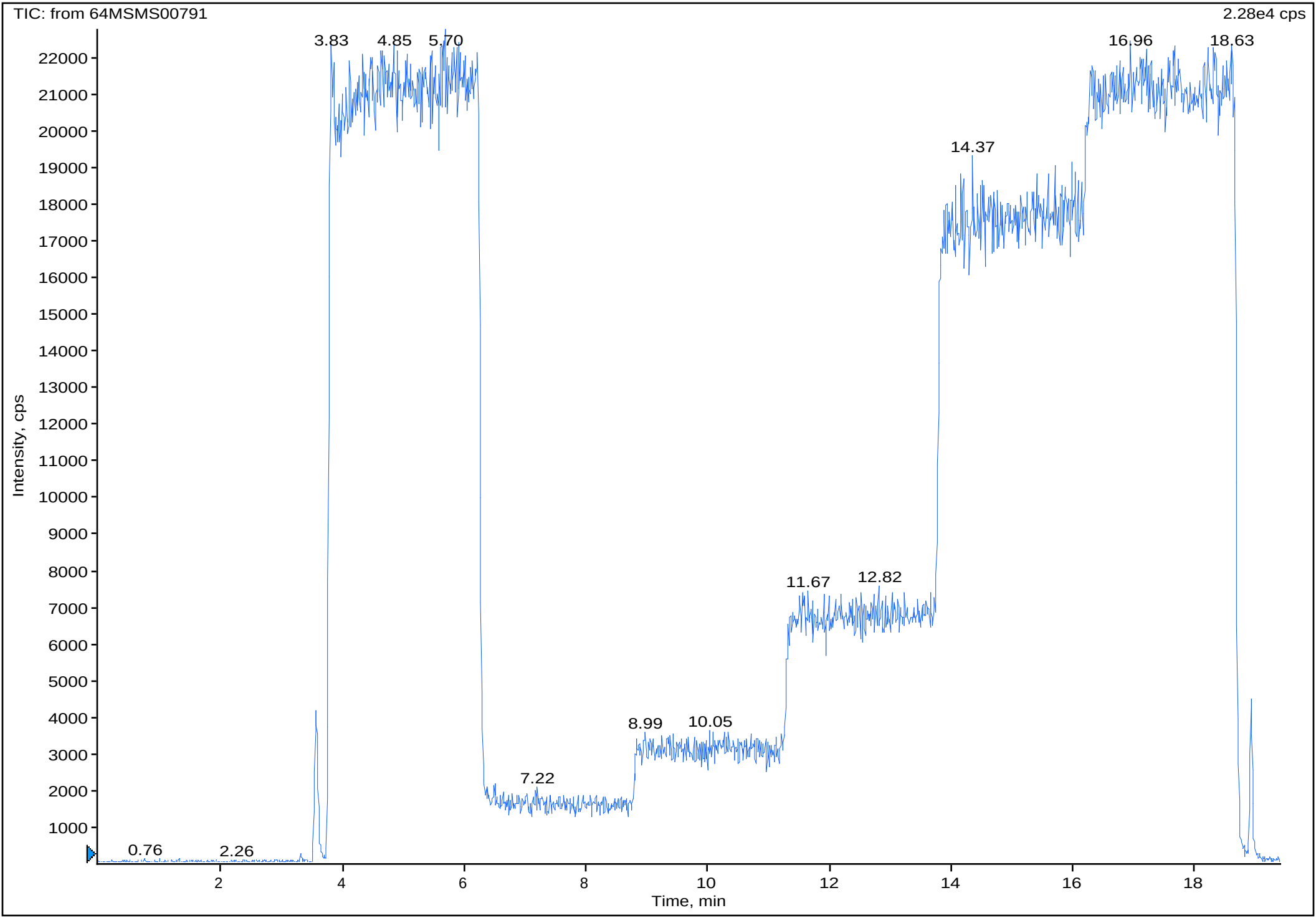
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	17.1360248	298.012249
Intercept:	-15.178859	-807.2186
Correlation:	0.99714908	0.98187329

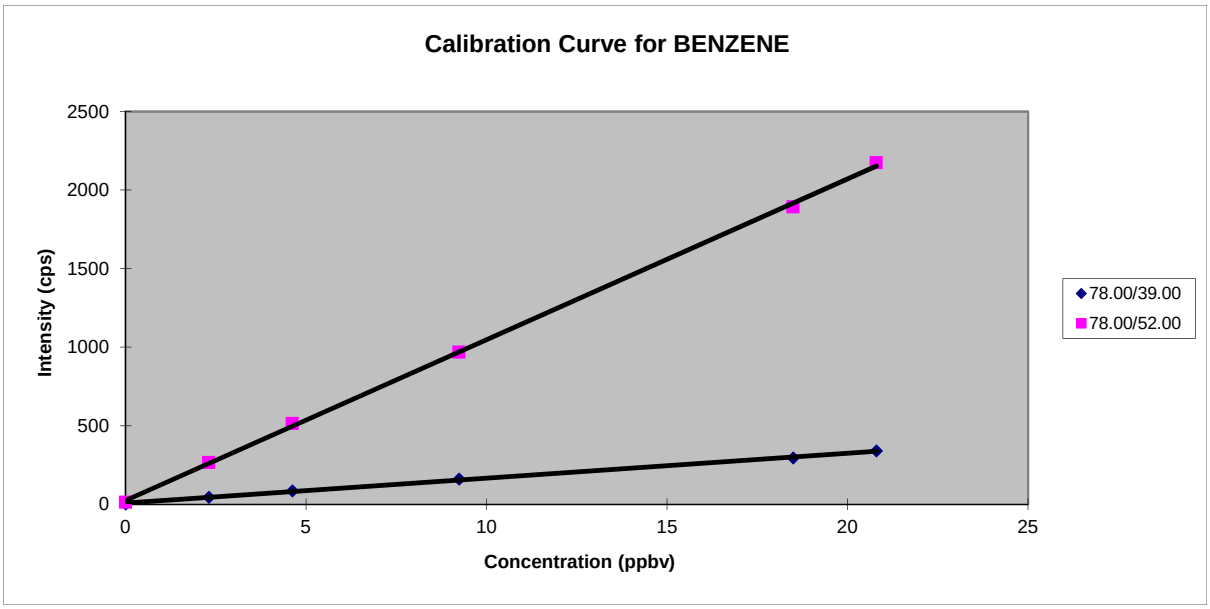
Concentratior	106.00/65.00	106.00/91.00
0	1.25	6.5625
3.48	52.6041667	435.729167
6.96	92.1875	848.125
13.91	198.229167	2156.77083
27.82	456.5625	7351.14583
31.3	538.4375	9233.4375

Report	File Name	64MSMS00785 et al.			
	Sample Name	MOD Calibration - BTX 20190328			
	Date	Thursday, March 28, 2019 13:38:01			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	15.35	100.33	287.05	84.68	17.14	298.01
Intercept	7.93	27.98	-83.53	-24.82	-15.18	-807.22
Intensity	4.90	21.35	16.25	5.00	1.25	5.10
Int SD	7.25	15.33	12.67	7.95	4.41	8.21
Concentration	-0.20	-0.07	0.35	0.35	0.96	2.73
Conc SD	0.47	0.15	0.04	0.09	0.26	0.03
Compound Con	-0.13		0.35		1.84	
Compound SD	0.22		0.05		0.10	
Det. Limit	1.42	0.46	0.13	0.28	0.77	0.08
Compound DL	0.94		0.21		0.43	

3/28/19.18.32.38
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Mar 28, 2019 at 18:32:37; Exp. Comment: BTX

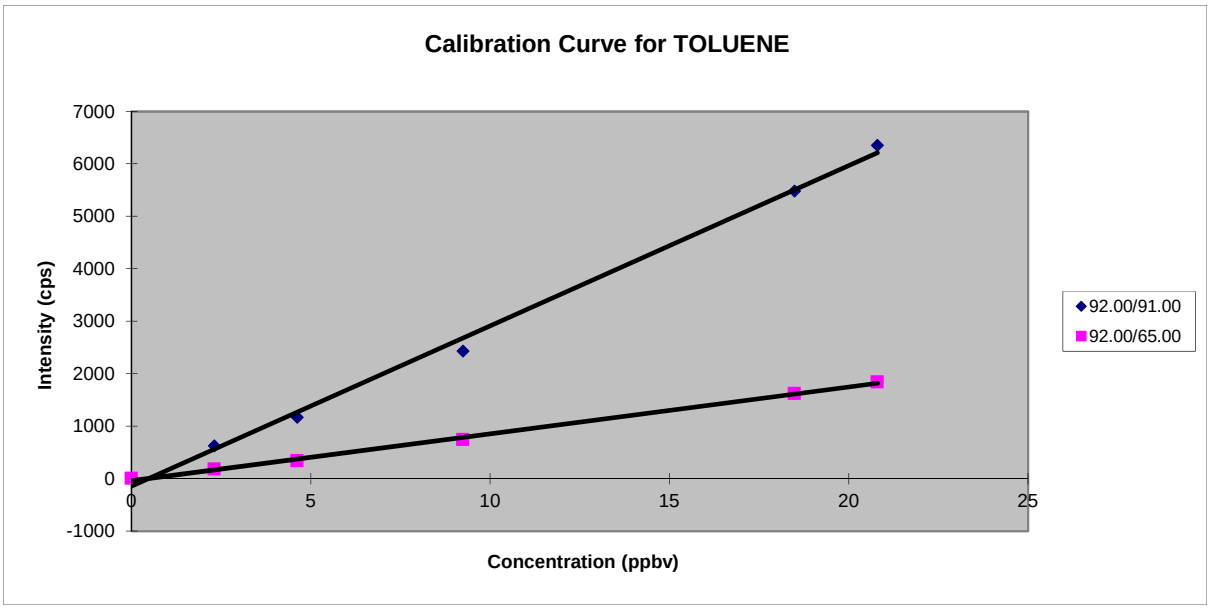




Filename:	64MSMS00791					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, March 28, 2019 18:58:48					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.60	9.96	12.49	15.04	17.44

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	15.82544	102.375364
Intercept:	8.25143285	23.9013532
Correlation:	0.99932001	0.99982297

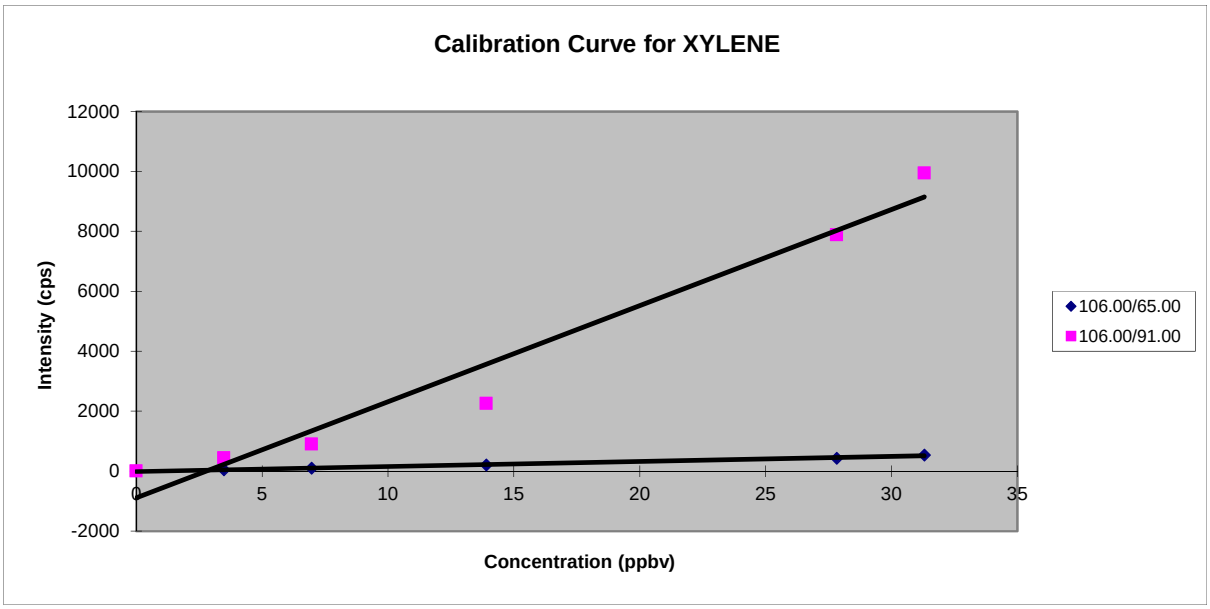
Concentratior	78.00/39.00	78.00/52.00
0	2.1875	12.2916667
2.31	44.8958333	263.958333
4.62	85.4166667	513.541667
9.24	160.729167	966.5625
18.49	295.104167	1892.5
20.8	338.854167	2172.29167



Filename:	64MSMS00791					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, March 28, 2019 18:59:47					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.60	9.96	12.49	15.04	17.44

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	305.607733	89.3366121
Intercept:	-142.17789	-37.174335
Correlation:	0.99828052	0.99899936

Concentratior	92.00/91.00	92.00/65.00
0	17.0833333	5.10416667
2.31	625.520833	182.1875
4.62	1173.64583	338.333333
9.24	2435.41667	741.458333
18.49	5485.41667	1625.10417
20.8	6358.85417	1839.375



Filename:	64MSMS00791					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, March 28, 2019 19:00:26					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.60	9.96	12.49	15.04	17.44

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	16.7624967	320.733353
Intercept:	-10.9026	-887.82091
Correlation:	0.99650634	0.98079405

Concentratior	106.00/65.00	106.00/91.00
0	1.97916667	8.22916667
3.48	51.9791667	448.125
6.96	100.208333	905.833333
13.91	203.541667	2254.0625
27.82	435.625	7880.41667
31.3	540.416667	9948.02083

Report	File Name	64MSMS00791			
	Sample Name	EOD Calibration - BTX 20190328			
	Date	Thursday, March 28, 2019 19:01:04			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	15.83	102.38	305.61	89.34	16.76	320.73
Intercept	8.25	23.90	-142.18	-37.17	-10.90	-887.82
Intensity	2.19	12.29	17.08	5.10	1.98	8.23
Int SD	5.27	11.74	15.69	7.54	4.95	10.76
Concentration	-0.38	-0.11	0.52	0.47	0.77	2.79
Conc SD	0.33	0.11	0.05	0.08	0.30	0.03
Compound Con	-0.25		0.50		1.78	
Compound SD	0.16		0.05		0.12	
Det. Limit	1.00	0.34	0.15	0.25	0.89	0.10
Compound DL	0.67		0.20		0.49	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 3/29/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
7:01	1500SCCS	~190	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date: Exp: 5/2/2019	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Fri, Mar 29, 2019, 7:17:41
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR28 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Thu, Mar 28, 2019, 7:24:30

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.075
100.000	0.075
125.000	0.085
160.000	0.098

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.038
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Fri, Mar 29, 2019, 7:19:04
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR28 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Thu, Mar 28, 2019, 7:24:30

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.075
100.000	0.075
125.000	0.085
160.000	0.098

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.038
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

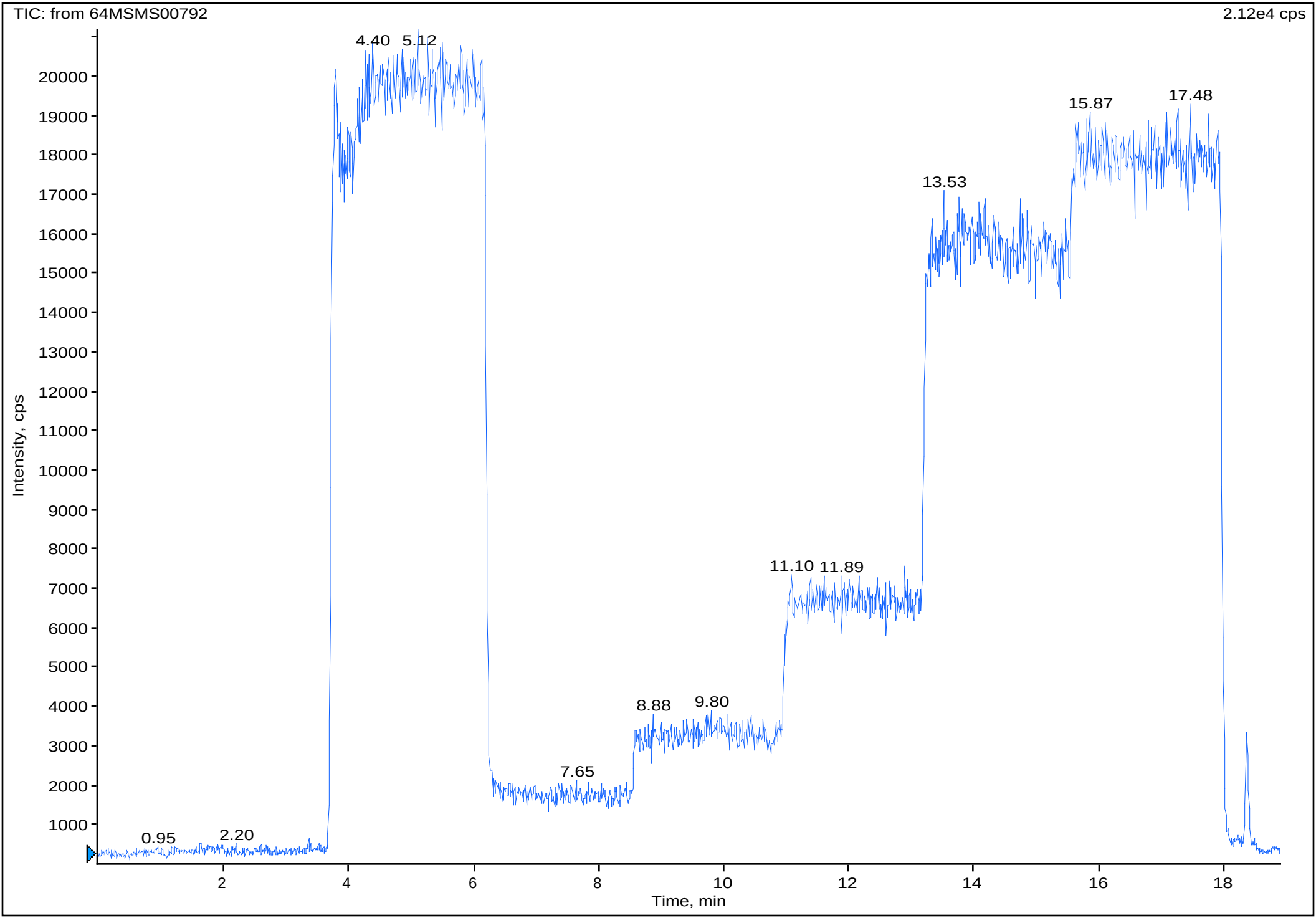
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

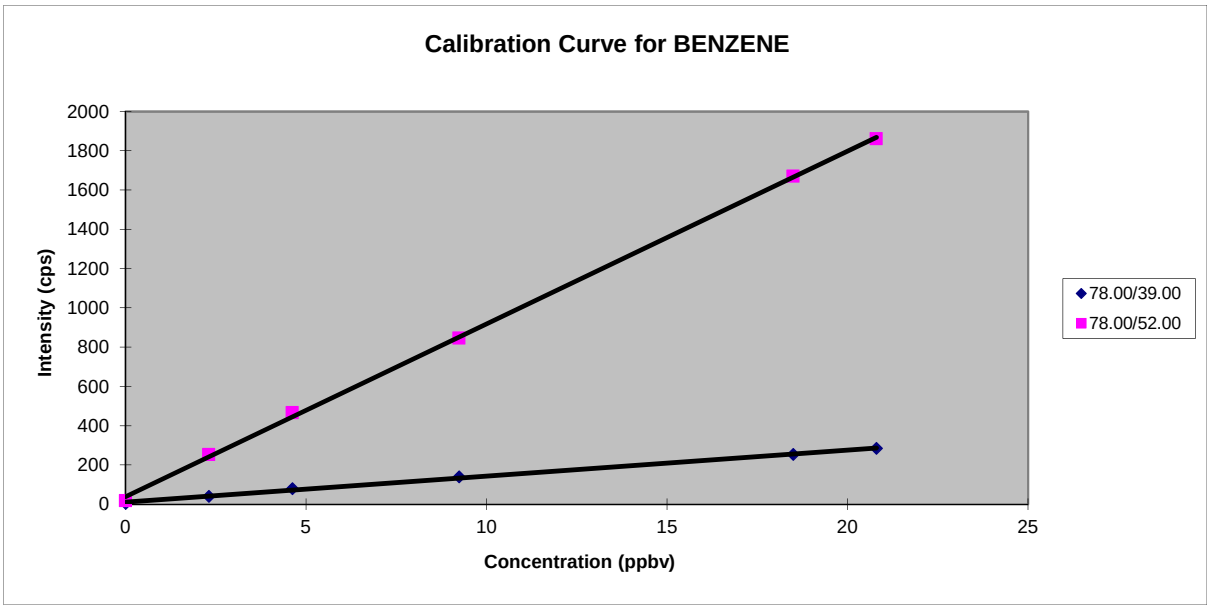
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

3/29/19.7.21.12
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, Mar 29, 2019 at 7:21:11; Exp. Comment: BTX



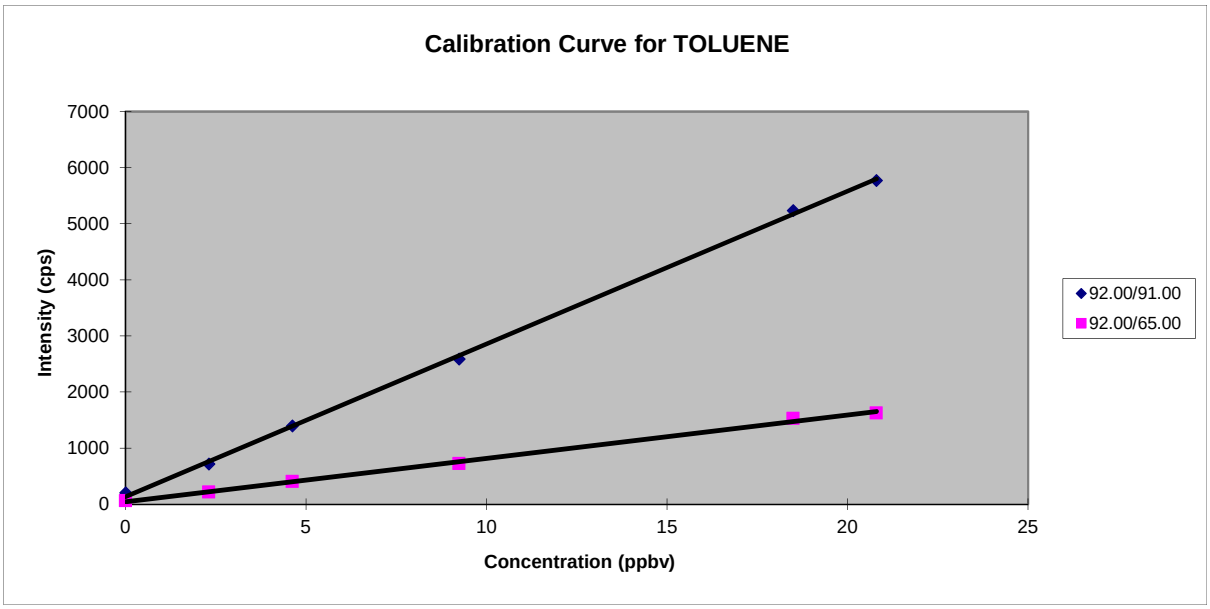


Filename:	64MSMS00792 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Friday, March 29, 2019 7:41:25
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.44	9.71	12.11	14.34	16.79

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	13.2636047	87.9380179
Intercept:	10.9938305	39.2255605
Correlation:	0.9989002	0.99981093

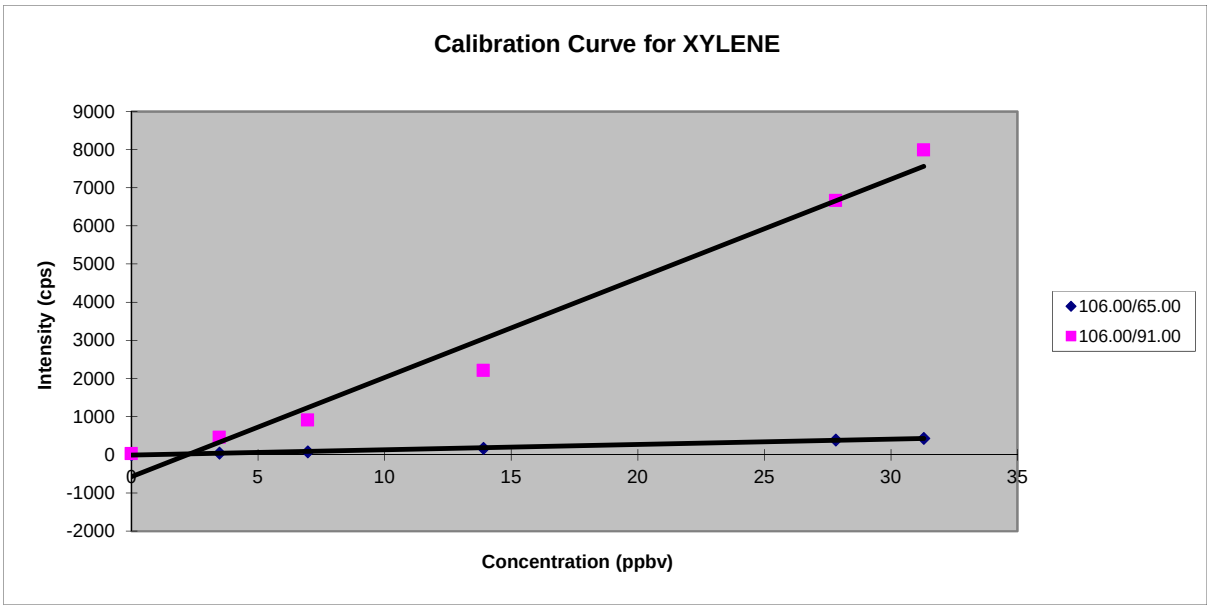
Concentratior	78.00/39.00	78.00/52.00
0	3.95833333	17.7083333
2.31	40.2083333	253.020833
4.62	79.0625	465.208333
9.24	139.583333	844.791667
18.49	253.229167	1670.52083
20.8	285.520833	1861.14583



Filename:	64MSMS00792 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, March 29, 2019 7:42:12					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.44	9.71	12.11	14.34	16.79

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	272.193535	77.4608213
Intercept:	136.420257	43.6565862
Correlation:	0.99972434	0.99888863

Concentratior	92.00/91.00	92.00/65.00
0	202.5	61.1458333
2.31	719.6875	216.666667
4.62	1396.35417	405.208333
9.24	2588.95833	722.291667
18.49	5234.58333	1525.72917
20.8	5772.29167	1626.875



Filename:	64MSMS00792 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, March 29, 2019 7:42:47					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.44	9.71	12.11	14.34	16.79

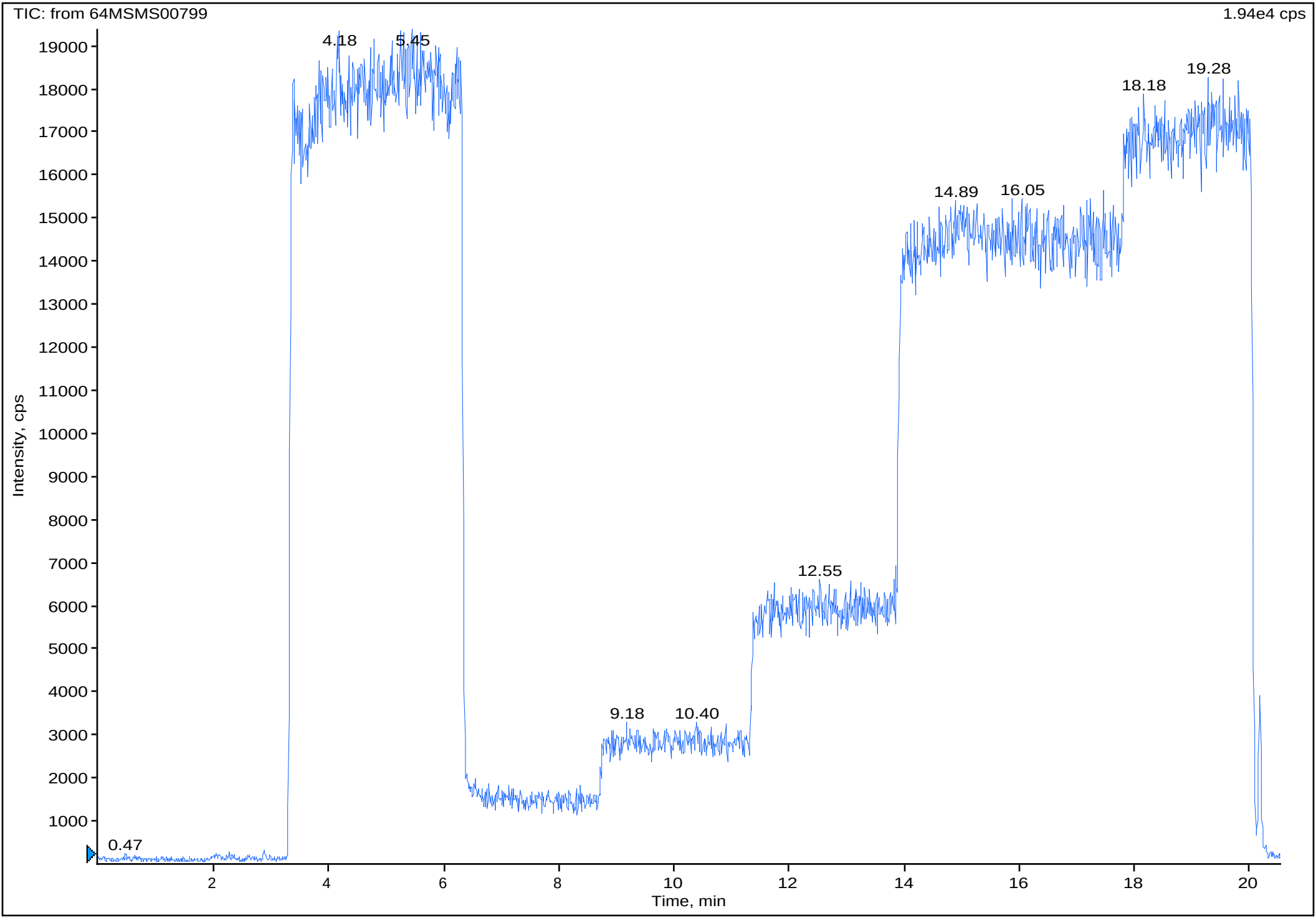
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	14.0031113	259.949463
Intercept:	-7.1503671	-573.96917
Correlation:	0.99808092	0.98833083

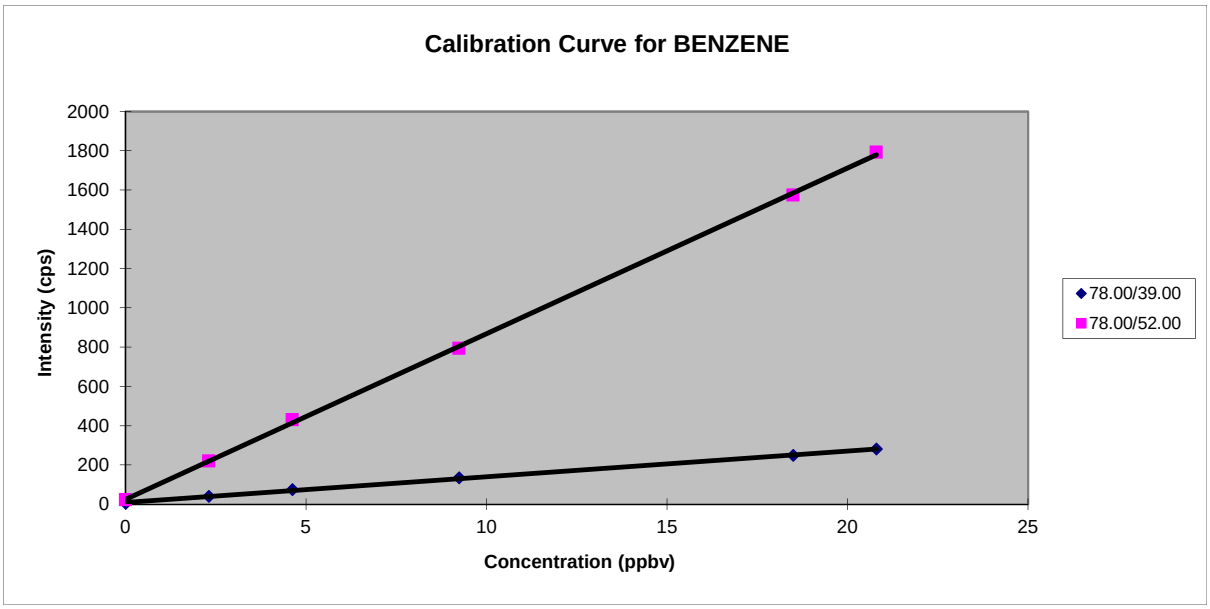
Concentratior	106.00/65.00	106.00/91.00
0	5.3125	32.1875
3.48	45.9375	455.104167
6.96	80.8333333	905.3125
13.91	170	2212.5
27.82	389.895833	6663.64583
31.3	433.958333	7985.41667

Report	File Name	64MSMS00792 et al.			
	Sample Name	BOD Calibration - BTX 20190329			
	Date	Friday, March 29, 2019 7:43:25			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	13.26	87.94	272.19	77.46	14.00	259.95
Intercept	10.99	39.23	136.42	43.66	-7.15	-573.97
Intensity	3.96	17.71	202.50	61.15	5.31	32.19
Int SD	6.72	15.39	59.12	29.52	9.06	19.48
Concentration	-0.53	-0.24	0.24	0.23	0.89	2.33
Conc SD	0.51	0.17	0.22	0.38	0.65	0.07
Compound Con	-0.39		0.23		1.61	
Compound SD	0.24		0.21		0.26	
Det. Limit	1.52	0.52	0.65	1.14	1.94	0.22
Compound DL	1.02		0.90		1.08	

3/29/19.13.22.53
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, Mar 29, 2019 at 13:22:52; Exp. Comment: BTX



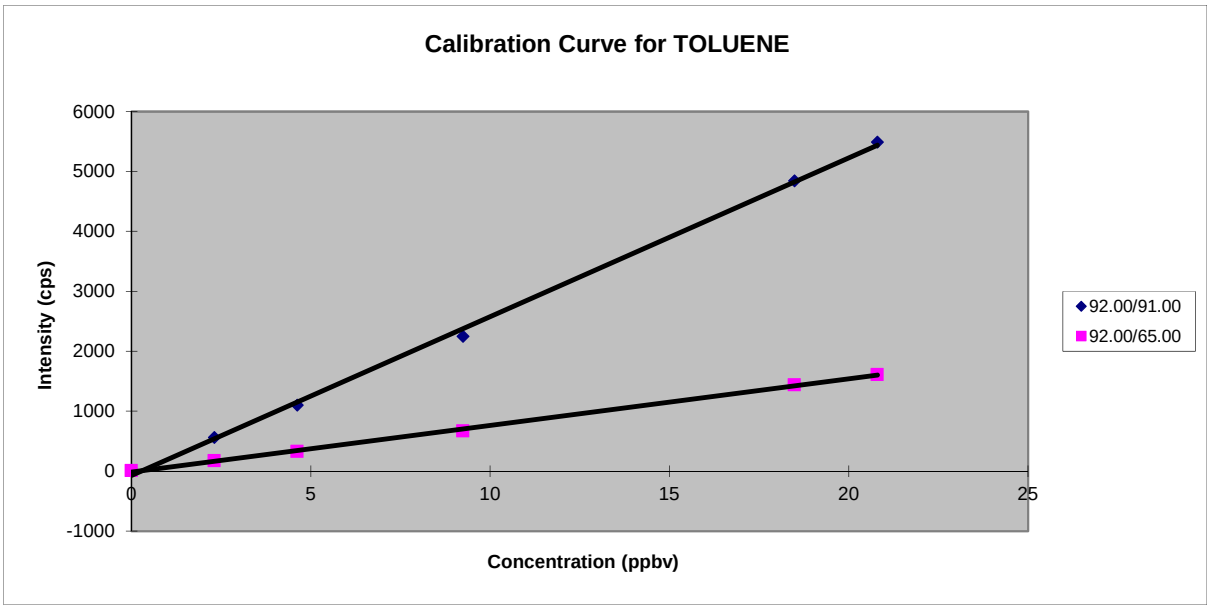


Filename:	64MSMS00799 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Friday, March 29, 2019 13:44:35
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.61	10.12	12.57	15.35	18.84

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	13.0852937	84.3506185
Intercept:	9.82951819	25.2149497
Correlation:	0.99943758	0.99987558

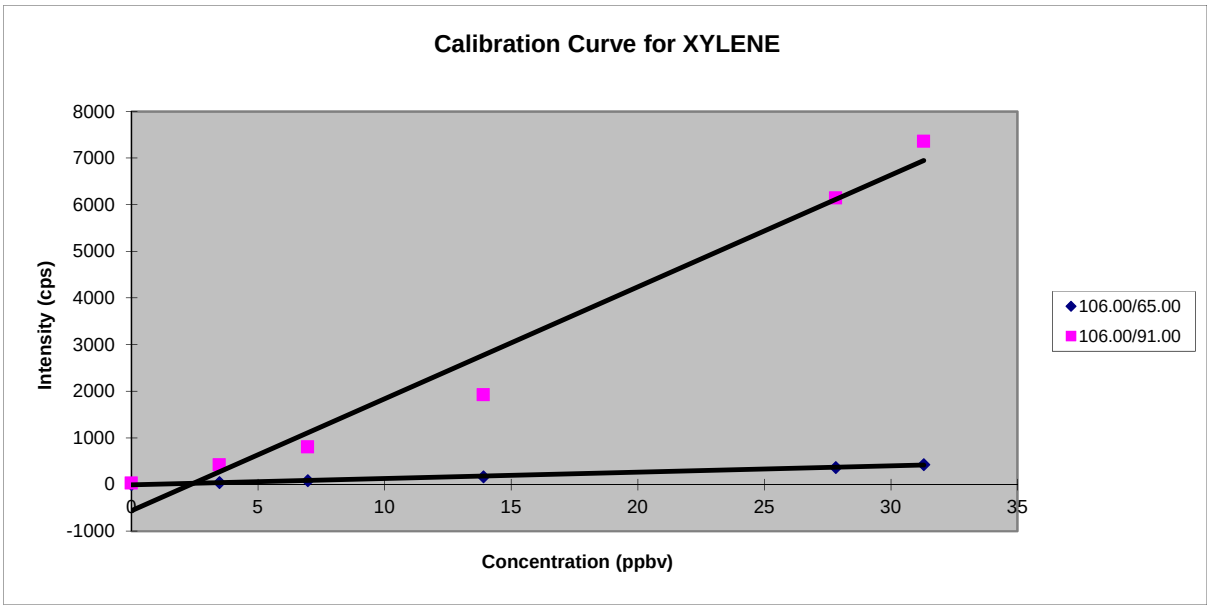
Concentratior	78.00/39.00	78.00/52.00
0	4.58333333	21.9791667
2.31	40.2083333	219.583333
4.62	74.2708333	429.791667
9.24	135	792.708333
18.49	248.541667	1573.22917
20.8	282.083333	1792.08333



Filename:	64MSMS00799 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, March 29, 2019 13:45:20					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.61	10.12	12.57	15.35	18.84

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	264.839075	77.8882753
Intercept:	-69.072242	-15.172986
Correlation:	0.99942592	0.99949528

Concentratior	92.00/91.00	92.00/65.00
0	20.4166667	6.14583333
2.31	563.854167	173.958333
4.62	1104.0625	330.9375
9.24	2250.10417	667.916667
18.49	4846.14583	1438.64583
20.8	5488.95833	1611.04167



Filename:	64MSMS00799 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, March 29, 2019 13:45:54					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.61	10.12	12.57	15.35	18.84

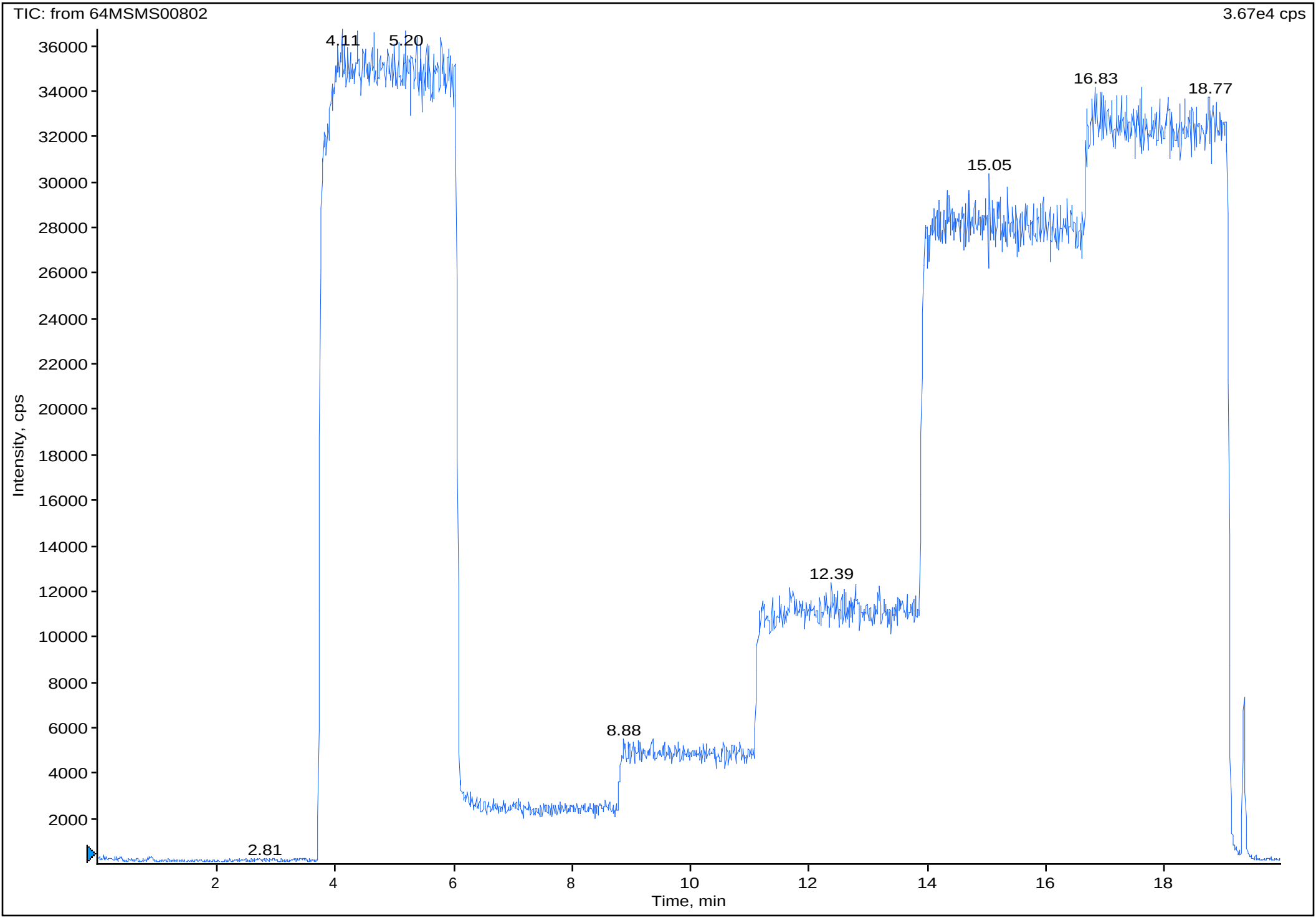
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	13.6068882	239.818081
Intercept:	-8.1486599	-557.3456
Correlation:	0.99832007	0.98632114

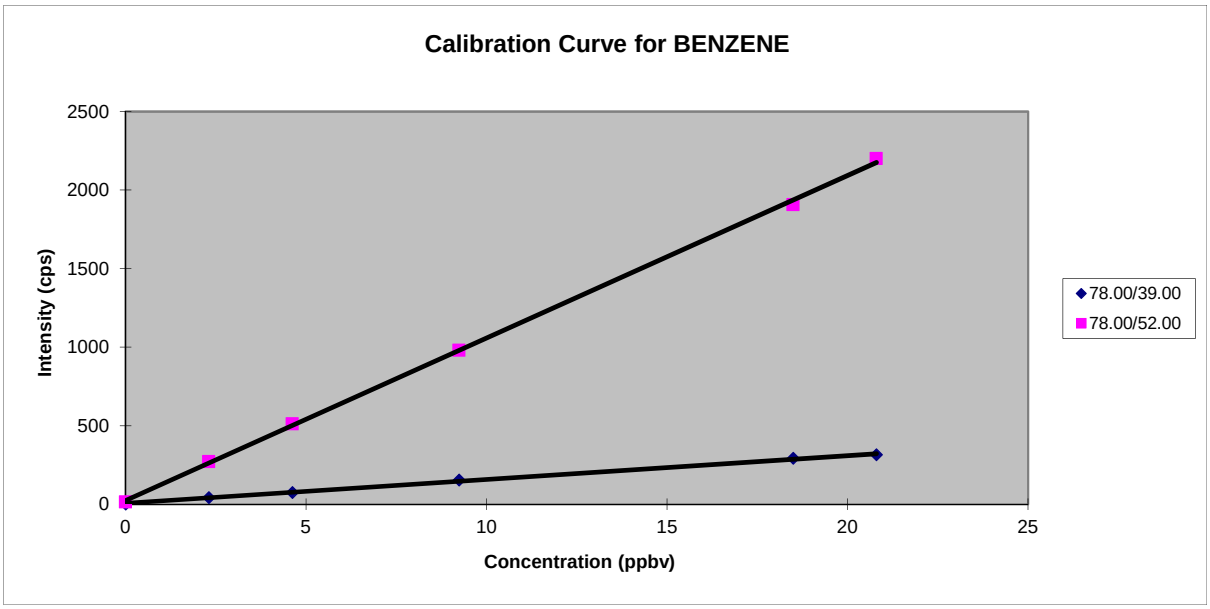
Concentratior	106.00/65.00	106.00/91.00
0	2.8125	26.7708333
3.48	42.1875	421.5625
6.96	80.7291667	804.583333
13.91	165.3125	1920.3125
27.82	367.708333	6144.0625
31.3	428.125	7356.25

Report	File Name	64MSMS00799 et al.			
	Sample Name	MOD Calibration - BTX 20190329			
	Date	Friday, March 29, 2019 13:46:33			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	13.09	84.35	264.84	77.89	13.61	239.82
Intercept	9.83	25.21	-69.07	-15.17	-8.15	-557.35
Intensity	4.58	21.98	20.42	6.15	2.81	26.77
Int SD	7.24	17.69	15.82	10.30	6.44	21.88
Concentration	-0.40	-0.04	0.34	0.27	0.81	2.44
Conc SD	0.55	0.21	0.06	0.13	0.47	0.09
Compound Con	-0.22		0.31		1.62	
Compound SD	0.27		0.07		0.20	
Det. Limit	1.66	0.63	0.18	0.40	1.42	0.27
Compound DL	1.14		0.29		0.85	

3/29/19.17.55.38
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, Mar 29, 2019 at 17:55:37; Exp. Comment: BTX

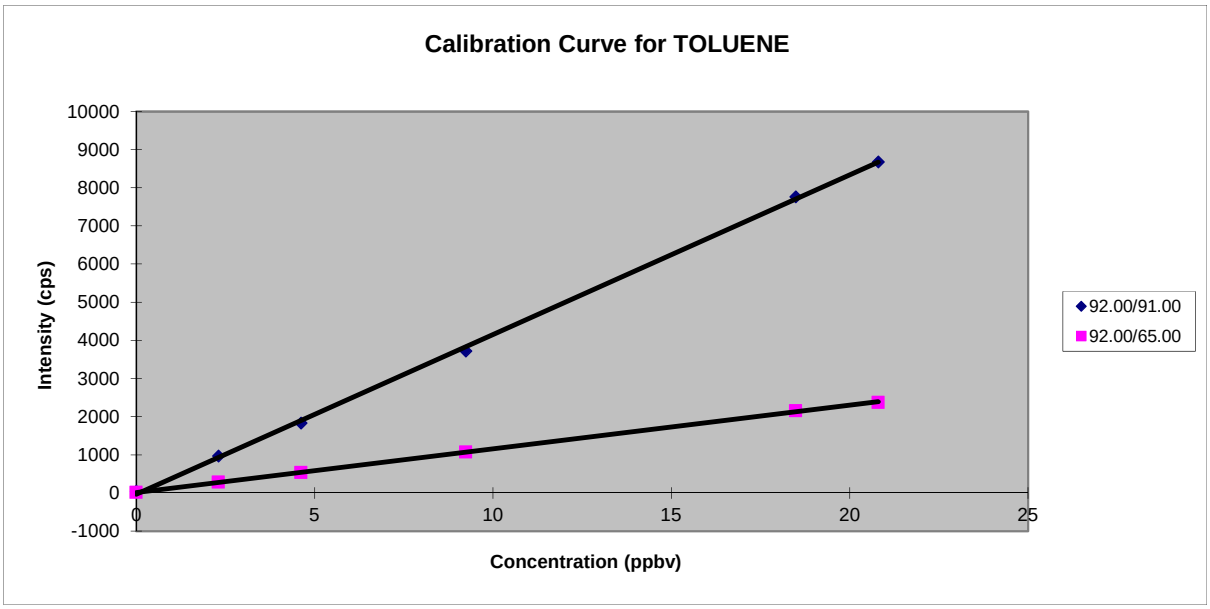




Filename:	64MSMS00802 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, March 29, 2019 18:16:42					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.48	9.95	12.48	15.26	17.80

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	15.1623412	103.45956
Intercept:	6.81123166	23.9839434
Correlation:	0.99905653	0.99977177

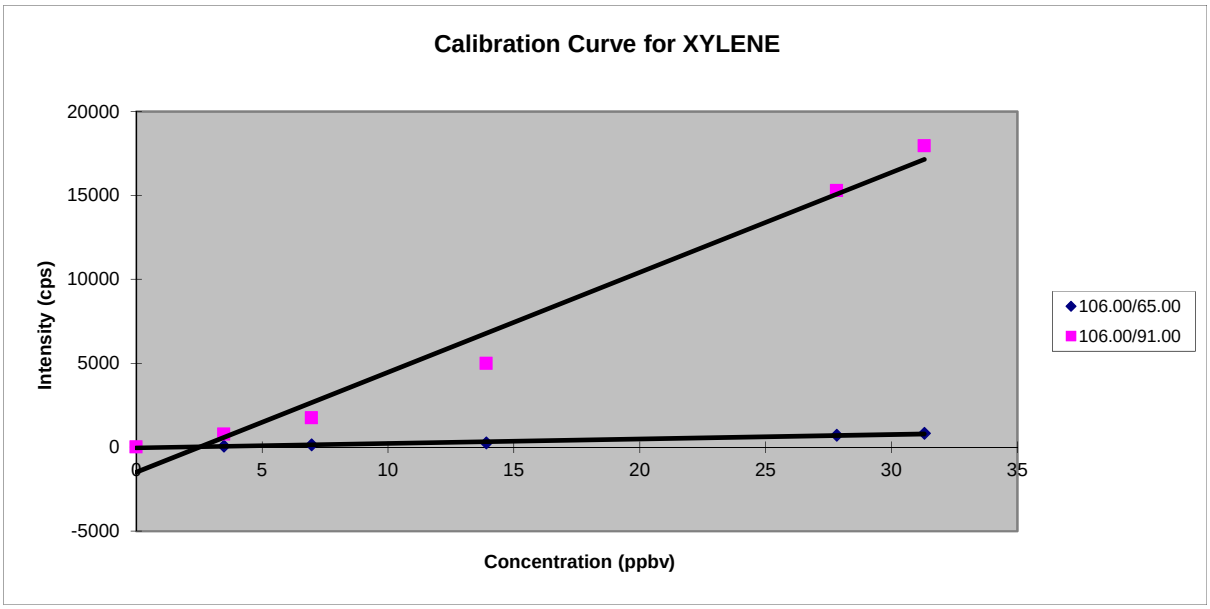
Concentratior	78.00/39.00	78.00/52.00
0	2.29166667	12.9166667
2.31	43.125	271.25
4.62	75.5208333	511.041667
9.24	153.75	980.104167
18.49	292.708333	1906.04167
20.8	314.375	2200.41667



Filename:	64MSMS00802 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, March 29, 2019 18:17:42					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.48	9.95	12.48	15.26	17.80

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	418.497003	114.457934
Intercept:	-32.317714	11.8709175
Correlation:	0.99978124	0.99987555

Concentratior	92.00/91.00	92.00/65.00
0	48.4375	15.2083333
2.31	966.5625	279.583333
4.62	1833.33333	530
9.24	3720.9375	1067.91667
18.49	7764.89583	2154.0625
20.8	8681.77083	2372.29167



Filename:	64MSMS00802 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, March 29, 2019 18:18:23					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.48	9.95	12.48	15.26	17.80

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	26.7233935	595.537167
Intercept:	-37.773887	-1492.0326
Correlation:	0.9942208	0.9884442

Concentratior	106.00/65.00	106.00/91.00
0	1.45833333	20
3.48	63.3333333	770.9375
6.96	135.729167	1747.5
13.91	267.1875	4991.35417
27.82	708.958333	1.53E+04
31.3	827.291667	1.79E+04

Report	File Name	64MSMS00802 et al.			
	Sample Name	EOD Calibration - BTX 20190329			
	Date	Friday, March 29, 2019 18:19:01			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	15.16	103.46	418.50	114.46	26.72	595.54
Intercept	6.81	23.98	-32.32	11.87	-37.77	-1492.03
Intensity	2.29	12.92	48.44	15.21	1.46	20.00
Int SD	4.92	11.87	29.32	13.69	4.35	15.42
Concentration	-0.30	-0.11	0.19	0.03	1.47	2.54
Conc SD	0.32	0.11	0.07	0.12	0.16	0.03
Compound Con	-0.20		0.11		2.00	
Compound SD	0.16		0.07		0.07	
Det. Limit	0.97	0.34	0.21	0.36	0.49	0.08
Compound DL	0.66		0.28		0.28	

BM 04/11/19

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001

Date: ~~3/29/2019~~ 03/30/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:51	1500	~191	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date: Exp: 5/2/2019	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Sat, Mar 30, 2019, 7:12:23
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR30 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sat, Mar 30, 2019, 7:10:49

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.071
100.000	0.075
125.000	0.085
160.000	0.096

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.038
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Sat, Mar 30, 2019, 7:12:32
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR30 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sat, Mar 30, 2019, 7:10:49

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.071
100.000	0.075
125.000	0.085
160.000	0.096

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.038
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

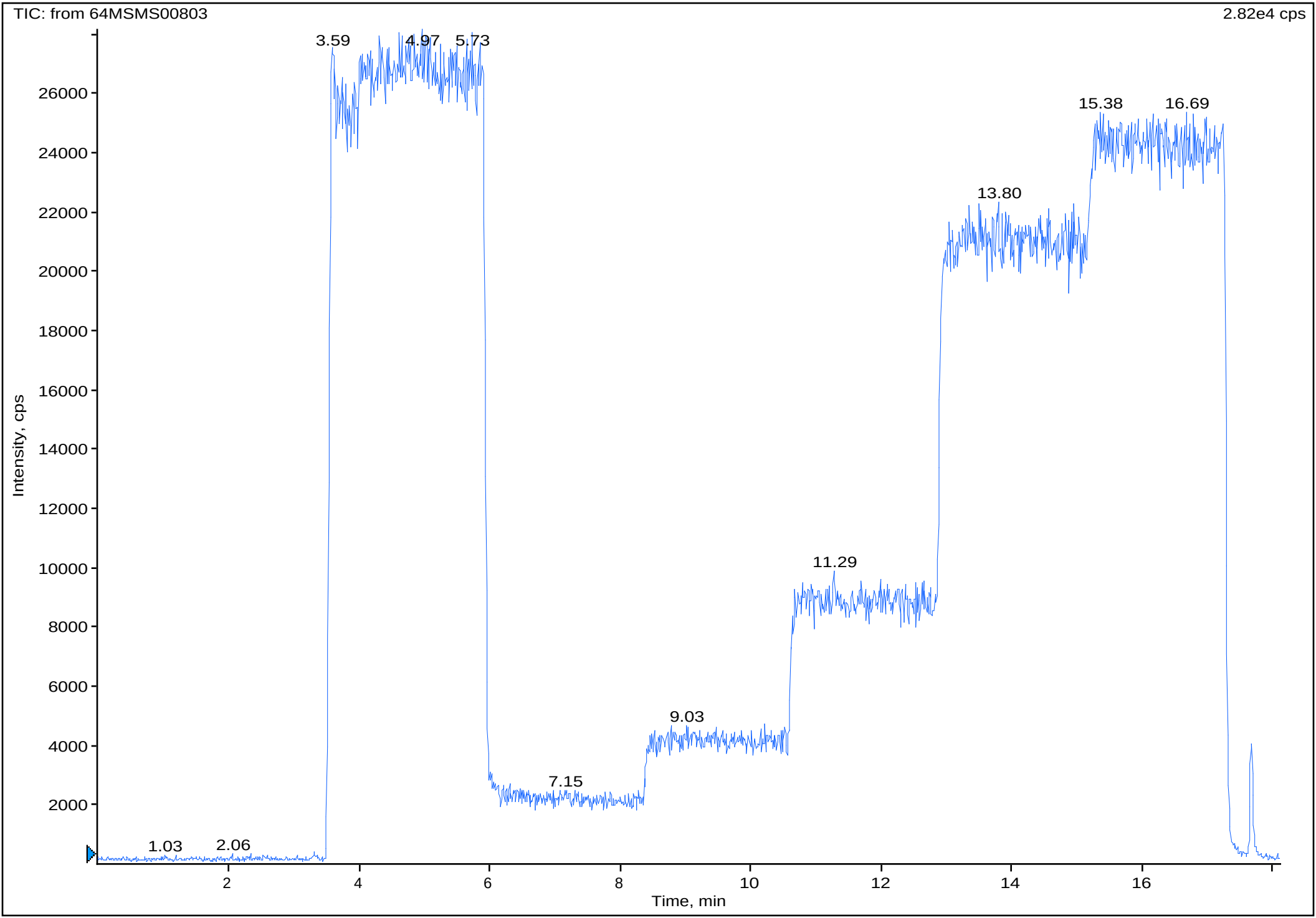
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

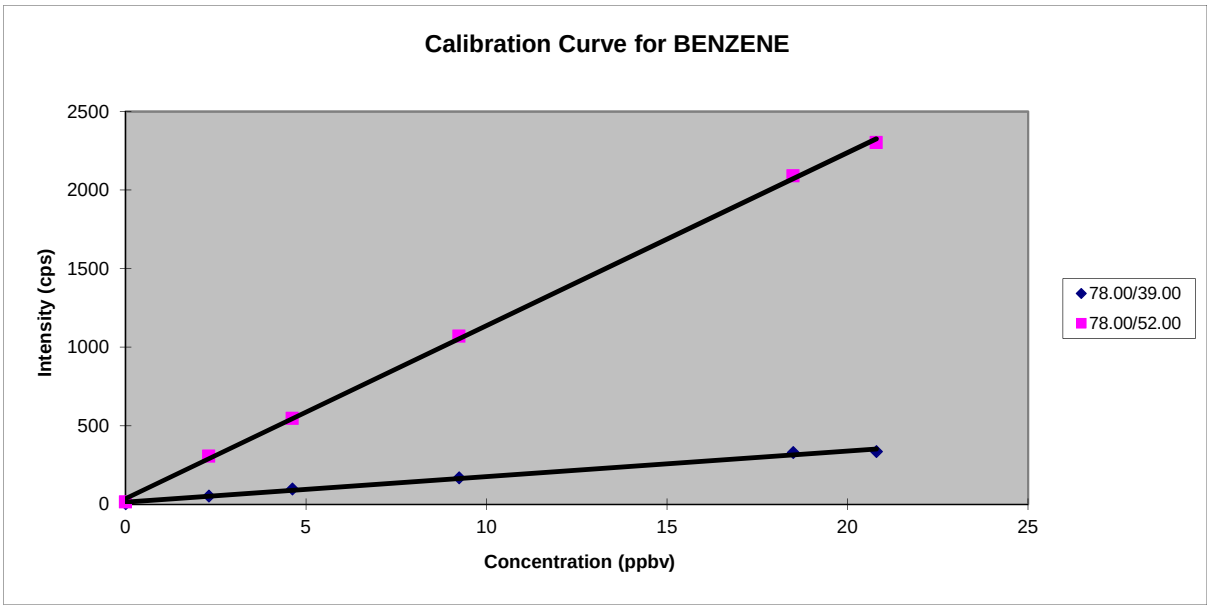
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

3/30/19.7.14.01
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sat, Mar 30, 2019 at 7:14:00; Exp. Comment: BTX

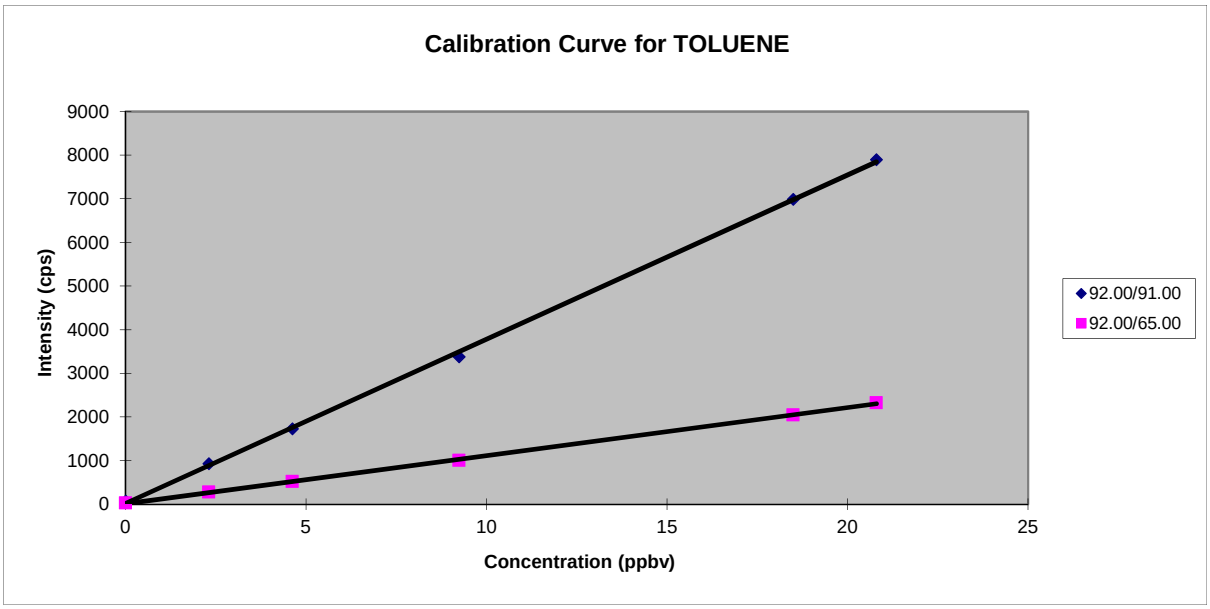




Filename:	64MSMS00803 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, March 30, 2019 7:33:37					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.28	9.51	11.72	14.00	16.20

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	16.2356277	110.077572
Intercept:	14.4425698	36.8392251
Correlation:	0.99651331	0.99979379

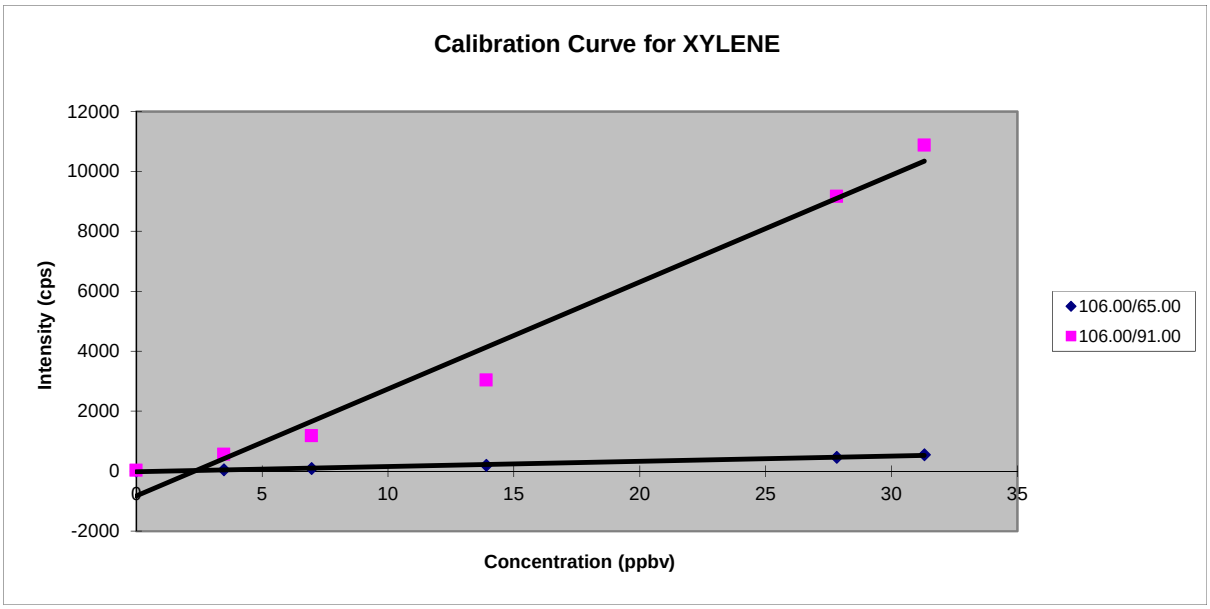
Concentratior	78.00/39.00	78.00/52.00
0	3.64583333	13.6458333
2.31	53.3333333	304.479167
4.62	96.5625	546.25
9.24	168.75	1069.58333
18.49	329.479167	2089.89583
20.8	335.3125	2302.08333



Filename:	64MSMS00803 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, March 30, 2019 7:34:20					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.28	9.51	11.72	14.00	16.20

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	376.20031	110.148237
Intercept:	21.3183259	12.50549
Correlation:	0.99979734	0.99985593

Concentratior	92.00/91.00	92.00/65.00
0	74.8958333	24.5833333
2.31	930.729167	275.520833
4.62	1726.35417	516.145833
9.24	3381.04167	1003.33333
18.49	6985.10417	2043.33333
20.8	7893.85417	2320.9375



Filename:	64MSMS00803 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, March 30, 2019 7:34:55					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.28	9.51	11.72	14.00	16.20

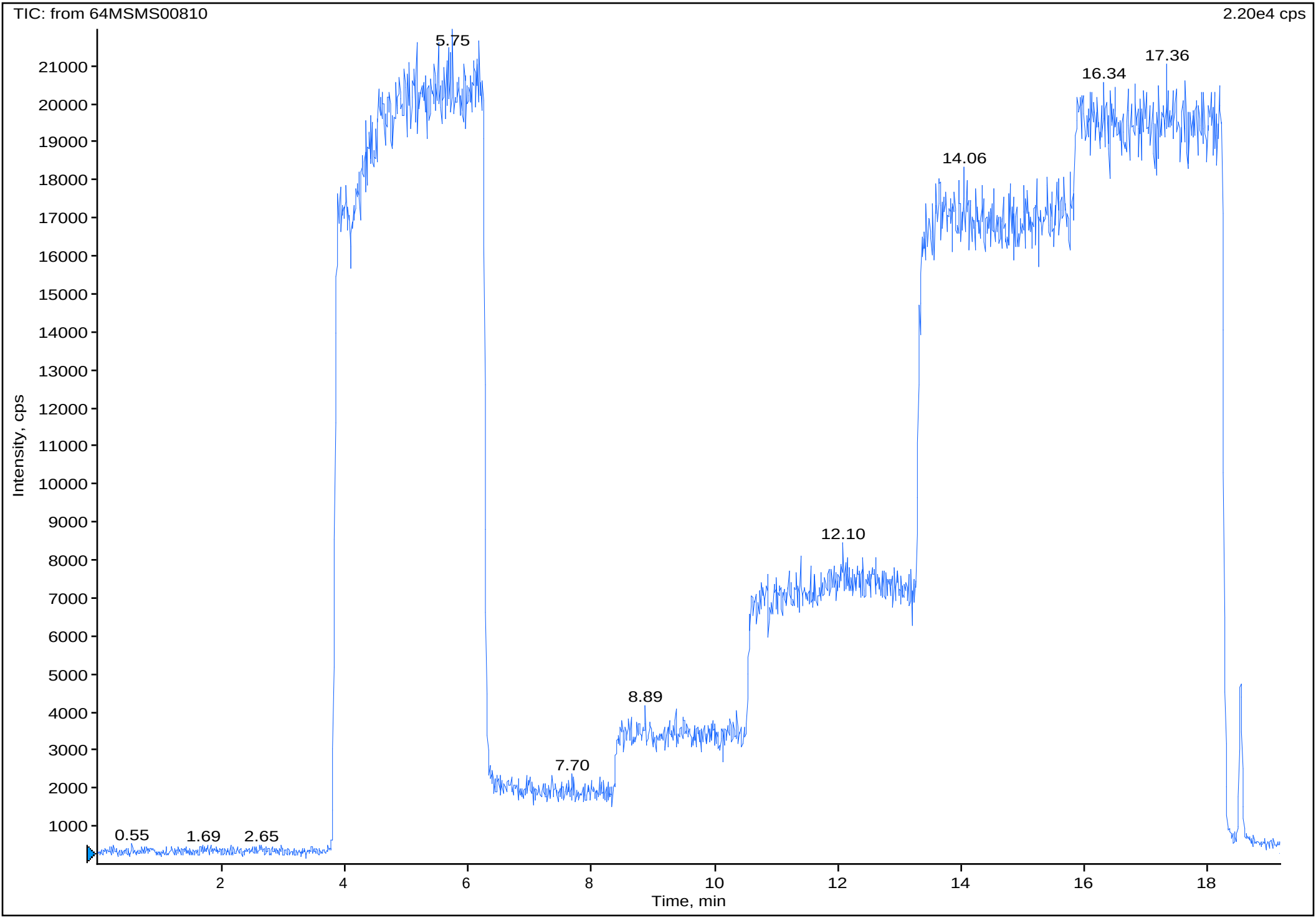
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	17.4894926	356.793307
Intercept:	-15.912158	-822.11386
Correlation:	0.99680933	0.98878064

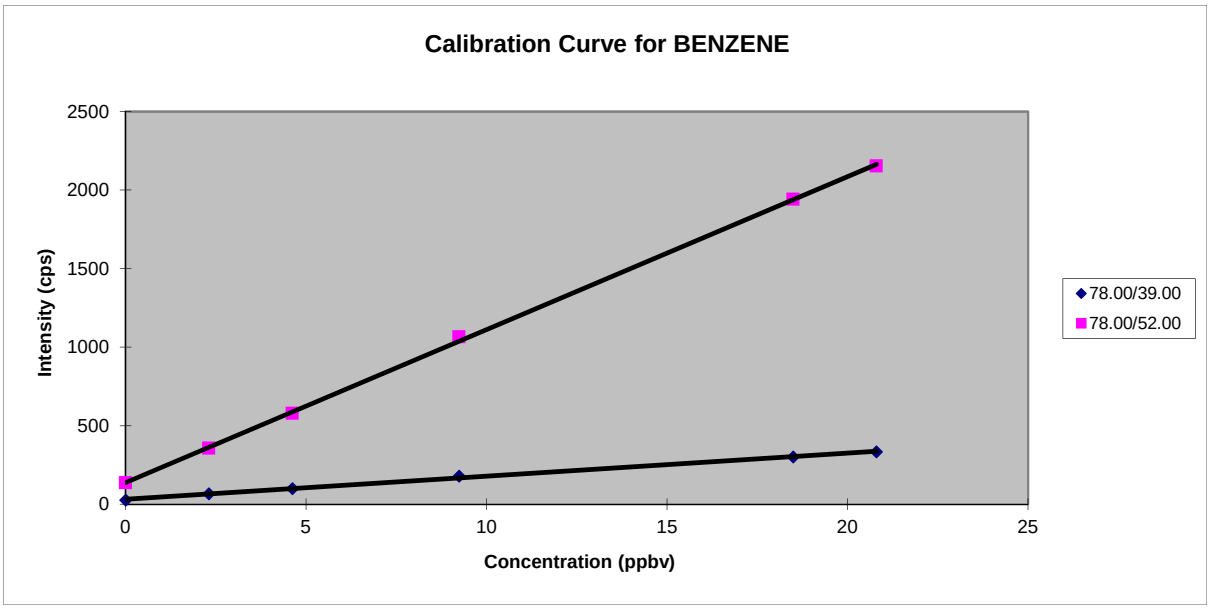
Concentratior	106.00/65.00	106.00/91.00
0	3.02083333	27.1875
3.48	51.9791667	562.291667
6.96	94.6875	1182.5
13.91	197.916667	3042.1875
27.82	469.166667	9161.97917
31.3	547.604167	1.09E+04

Report	File Name	64MSMS00803 et al.			
	Sample Name	BOD Calibration - BTX 20190330			
	Date	Saturday, March 30, 2019 7:35:29			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	16.24	110.08	376.20	110.15	17.49	356.79
Intercept	14.44	36.84	21.32	12.51	-15.91	-822.11
Intensity	3.65	13.65	74.90	24.58	3.02	27.19
Int SD	7.13	11.62	31.49	17.65	6.00	18.79
Concentration	-0.67	-0.21	0.14	0.11	1.08	2.38
Conc SD	0.44	0.11	0.08	0.16	0.34	0.05
Compound Con	-0.44		0.13		1.73	
Compound SD	0.19		0.09		0.14	
Det. Limit	1.32	0.32	0.25	0.48	1.03	0.16
Compound DL	0.82		0.37		0.59	

3/30/19.13.33.10
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sat, Mar 30, 2019 at 13:33:09; Exp. Comment: BTX

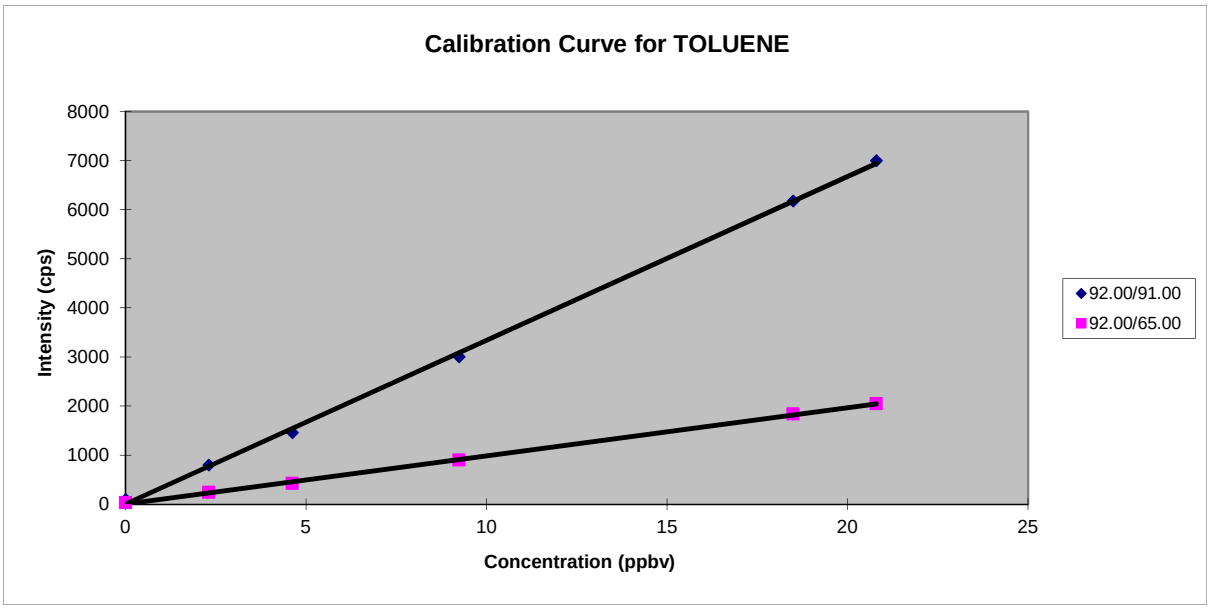




Filename:	64MSMS00810 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, March 30, 2019 13:53:24					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.37	9.49	11.76	14.62	17.02

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	14.6574731	97.3916496
Intercept:	32.398393	137.801469
Correlation:	0.99900195	0.99985043

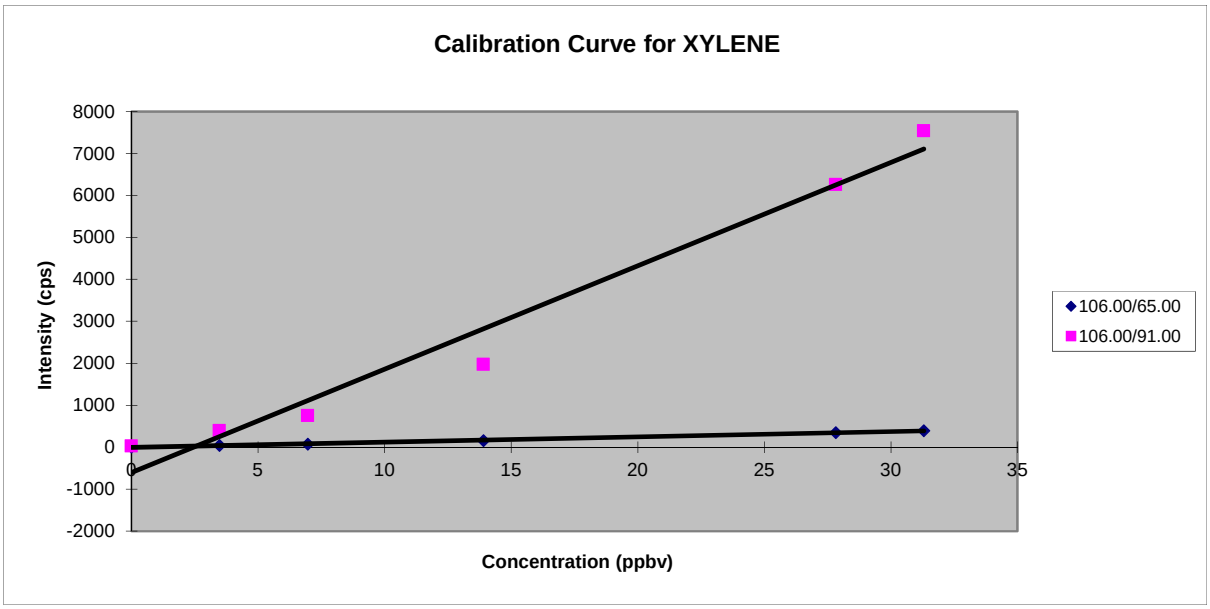
Concentratior	78.00/39.00	78.00/52.00
0	26.4583333	135.520833
2.31	66.875	356.5625
4.62	99.7938144	577.628866
9.24	178.4375	1065.3125
18.49	301.145833	1941.5625
20.8	334.583333	2151.5625



Filename:	64MSMS00810 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, March 30, 2019 13:54:05					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.37	9.49	11.76	14.62	17.02

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	333.564267	98.1014519
Intercept:	5.96105279	6.31444889
Correlation:	0.9996695	0.99966831

Concentratior	92.00/91.00	92.00/65.00
0	99.1666667	34.375
2.31	803.4375	237.1875
4.62	1456.90722	425.051546
9.24	3002.70833	900.625
18.49	6177.1875	1835.83333
20.8	6995.83333	2045.52083



Filename:	64MSMS00810 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, March 30, 2019 13:54:39					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.37	9.49	11.76	14.62	17.02

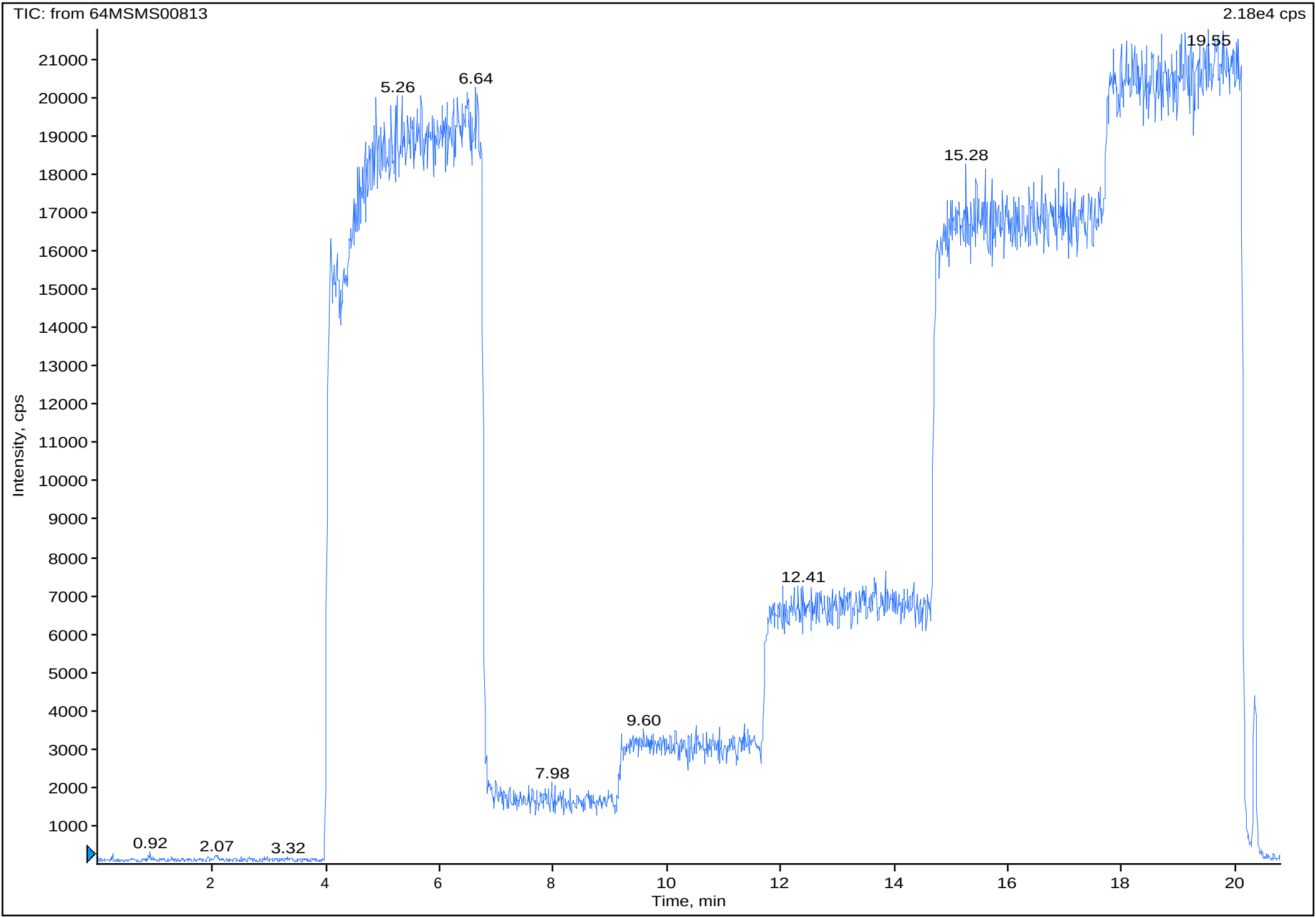
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	12.6201396	246.273079
Intercept:	-5.3864055	-601.71832
Correlation:	0.99907752	0.98615998

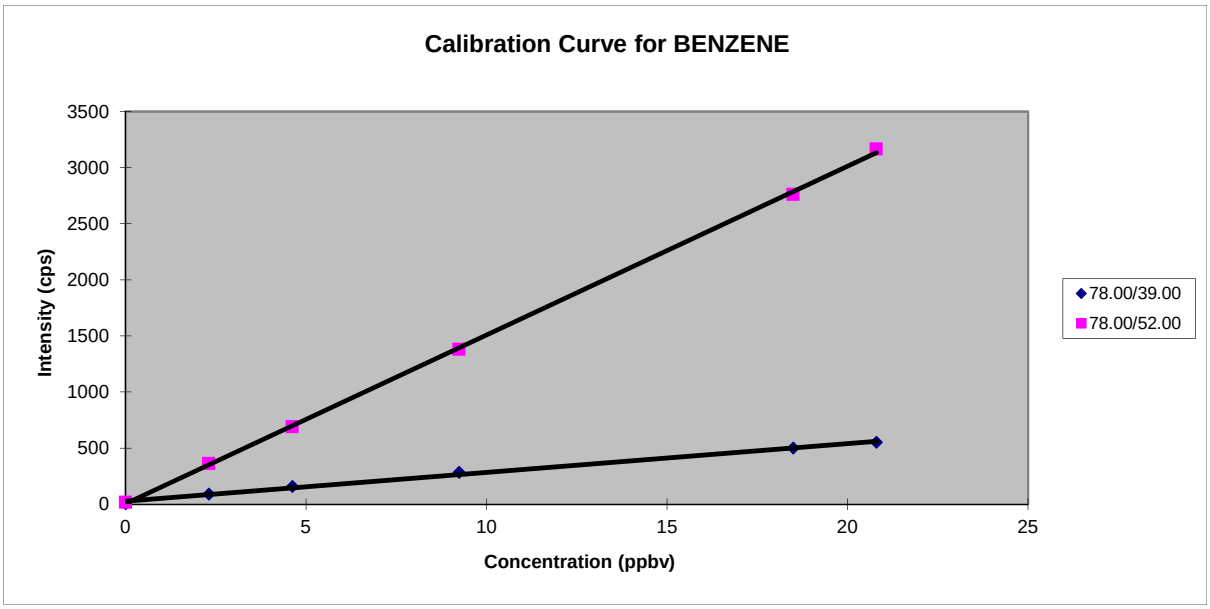
Concentratior	106.00/65.00	106.00/91.00
0	2.8125	24.2708333
3.48	41.1458333	395
6.96	75.8762887	754.020619
13.91	160.625	1973.22917
27.82	344.6875	6259.89583
31.3	395.9375	7539.6875

Report	File Name	64MSMS00810 et al.			
	Sample Name	MOD Calibration - BTX 20190330			
	Date	Saturday, March 30, 2019 13:55:14			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	14.66	97.39	333.56	98.10	12.62	246.27
Intercept	32.40	137.80	5.96	6.31	-5.39	-601.72
Intensity	26.46	135.52	99.17	34.38	2.81	24.27
Int SD	17.41	41.01	38.16	23.39	5.56	18.62
Concentration	-0.41	-0.02	0.28	0.29	0.65	2.54
Conc SD	1.19	0.42	0.11	0.24	0.44	0.08
Compound Con	-0.21		0.28		1.60	
Compound SD	0.57		0.12		0.18	
Det. Limit	3.56	1.26	0.34	0.72	1.32	0.23
Compound DL	2.41		0.53		0.77	

3/30/19.18.49.55
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sat, Mar 30, 2019 at 18:49:54; Exp. Comment: BTX



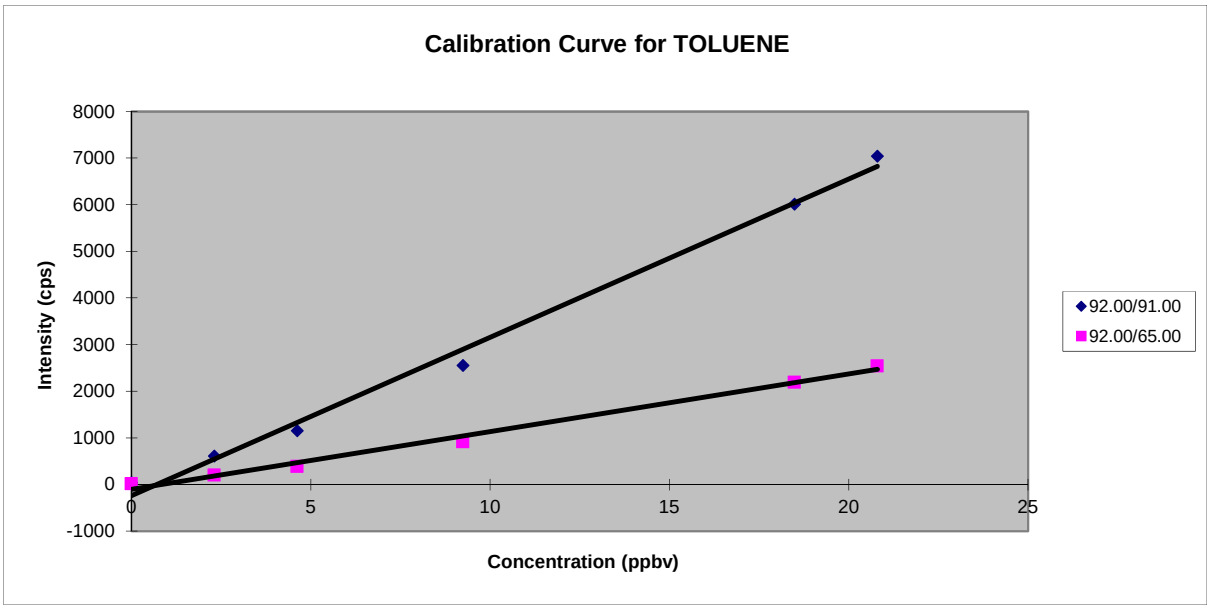


Filename:	64MSMS00813 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Saturday, March 30, 2019 19:11:46
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	8.01	10.46	13.16	16.13	18.81

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	25.719113	150.409895
Intercept:	27.0439711	4.98898111
Correlation:	0.99772045	0.99985954

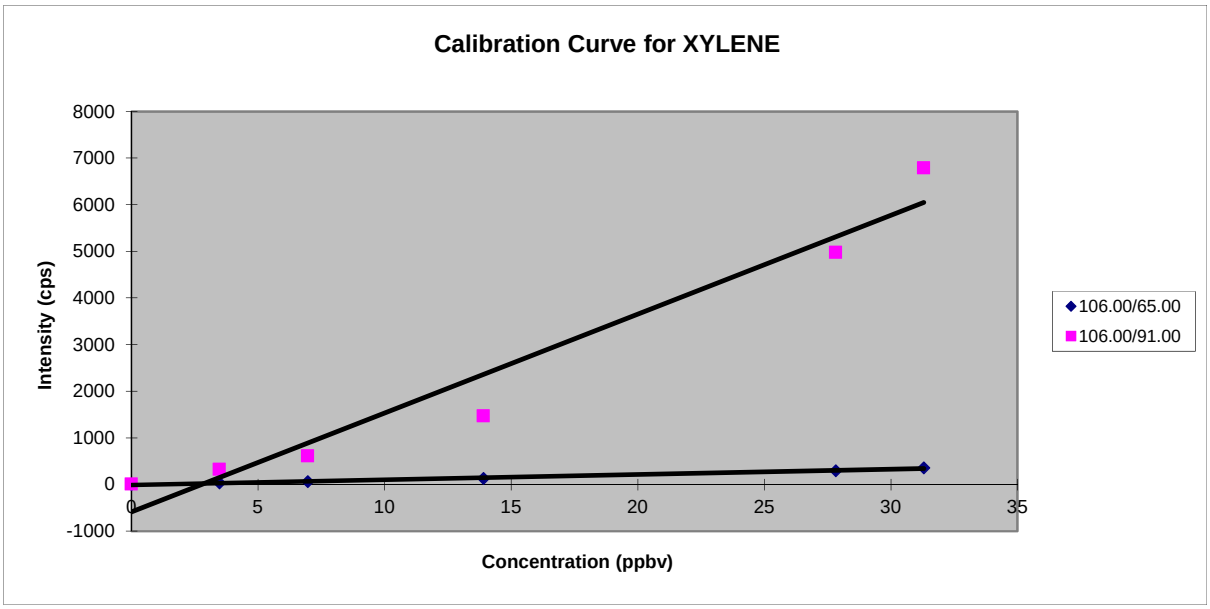
Concentratior	78.00/39.00	78.00/52.00
0	4.0625	16.9791667
2.31	90.4166667	362.708333
4.62	157.8125	688.229167
9.24	283.4375	1378.33333
18.49	500.3125	2759.79167
20.8	552.604167	3165.625



Filename:	64MSMS00813 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, March 30, 2019 19:12:29					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	8.01	10.46	13.16	16.13	18.81

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	339.499149	123.793477
Intercept:	-235.88158	-103.89979
Correlation:	0.99673656	0.99637319

Concentratior	92.00/91.00	92.00/65.00
0	42.5	13.125
2.31	613.645833	200.833333
4.62	1153.85417	387.083333
9.24	2552.1875	911.770833
18.49	6010.3125	2189.47917
20.8	7040.83333	2539.89583



Filename:	64MSMS00813 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, March 30, 2019 19:13:02					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	8.01	10.46	13.16	16.13	18.81

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	11.3114728	212.044527
Intercept:	-9.774633	-587.0282
Correlation:	0.99641532	0.97568643

Concentratior	106.00/65.00	106.00/91.00
0	2.08333333	9.0625
3.48	34.7916667	325.729167
6.96	59.4791667	608.645833
13.91	132.8125	1469.27083
27.82	296.666667	4976.04167
31.3	359.6875	6788.4375

Report	File Name	64MSMS00813 et al.			
	Sample Name	EOD Calibration - BTX 20190330			
	Date	Saturday, March 30, 2019 19:13:34			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	25.72	150.41	339.50	123.79	11.31	212.04
Intercept	27.04	4.99	-235.88	-103.90	-9.77	-587.03
Intensity	4.06	16.98	42.50	13.13	2.08	9.06
Int SD	5.91	14.08	25.38	14.09	5.41	11.70
Concentration	-0.89	0.08	0.82	0.95	1.05	2.81
Conc SD	0.23	0.09	0.07	0.11	0.48	0.06
Compound Con	-0.41		0.88		1.93	
Compound SD	0.11		0.07		0.19	
Det. Limit	0.69	0.28	0.22	0.34	1.44	0.17
Compound DL	0.48		0.28		0.80	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 3/31/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:39	1500 SCCS	~191	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY5-0168		Calibration Date: Exp: 5/2/2019	
		Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
Time	Reference Flow Meter	Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
		Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
Time	Reference Flow Meter	Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Sun, Mar 31, 2019, 6:58:54
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR30 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sat, Mar 30, 2019, 7:10:49

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.071
100.000	0.075
125.000	0.085
160.000	0.096

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.038
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Sun, Mar 31, 2019, 6:59:01
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAR30 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sat, Mar 30, 2019, 7:10:49

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.071
100.000	0.075
125.000	0.085
160.000	0.096

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.038
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

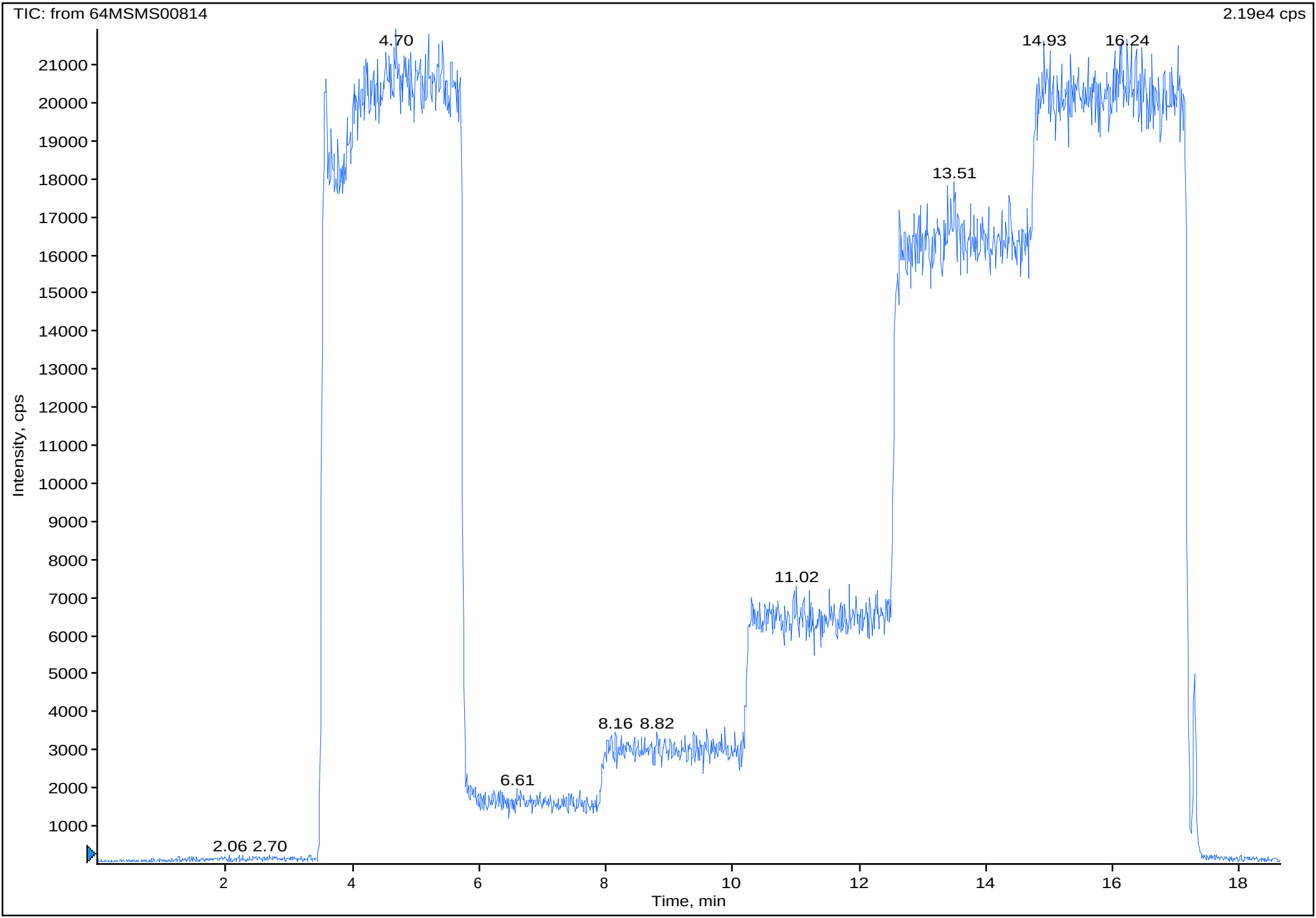
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

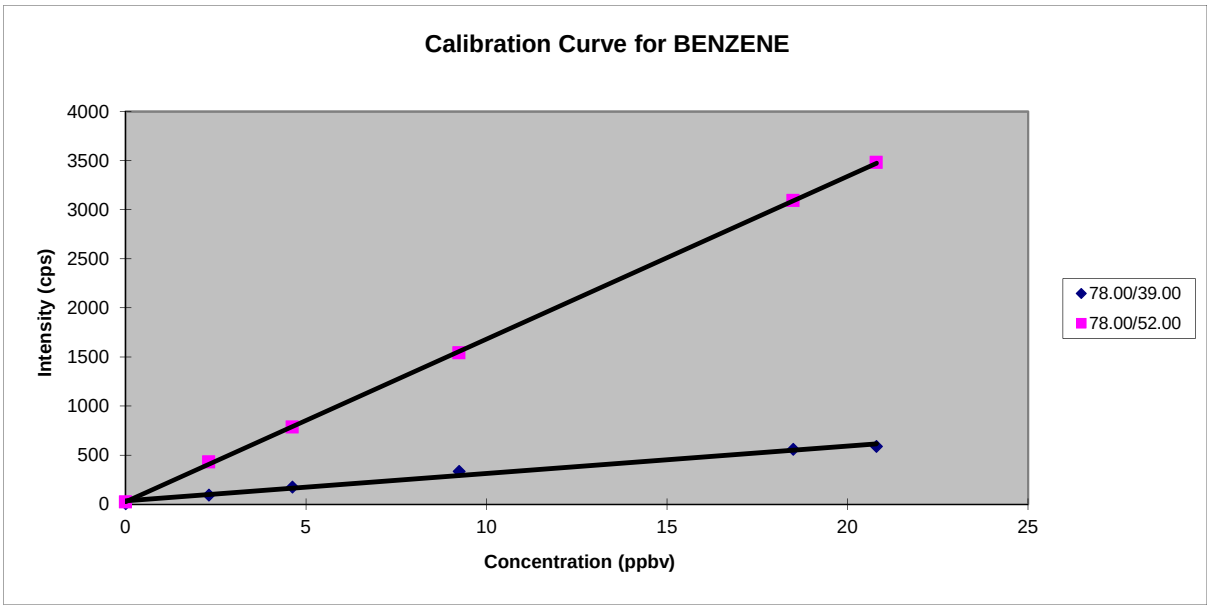
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

3/31/19.7.01.05
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, Mar 31, 2019 at 7:01:05; Exp. Comment: BTX

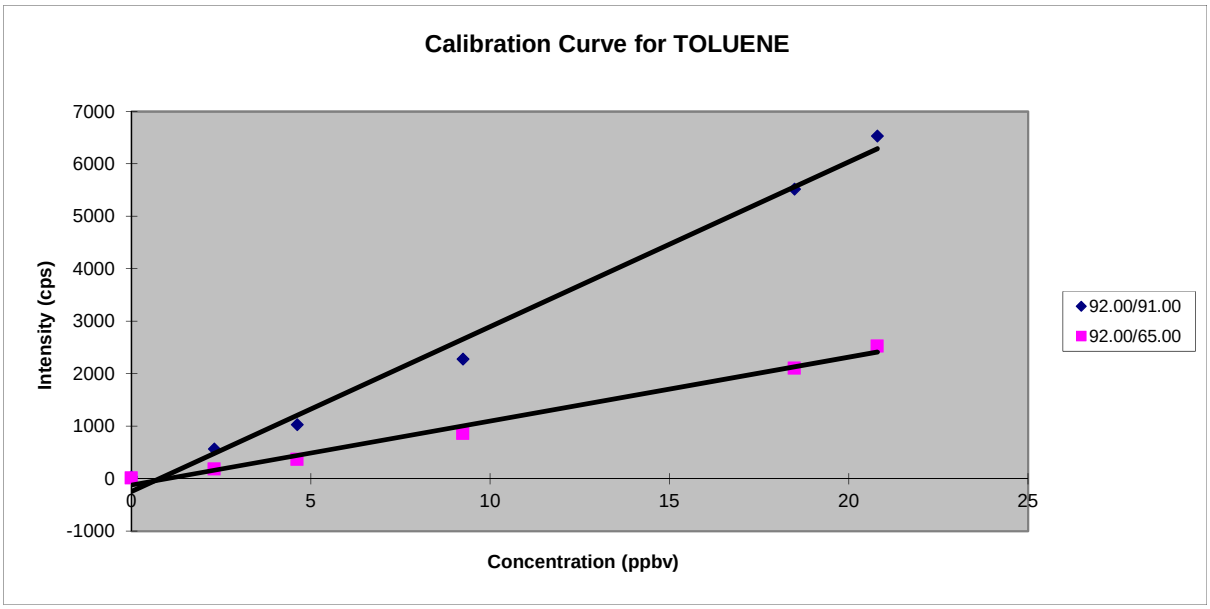




Filename:	64MSMS00814 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Sunday, March 31, 2019 7:22:30					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.92	9.13	11.45	13.66	15.91

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	27.942056	165.778995
Intercept:	35.3680959	25.861295
Correlation:	0.99383516	0.9999585

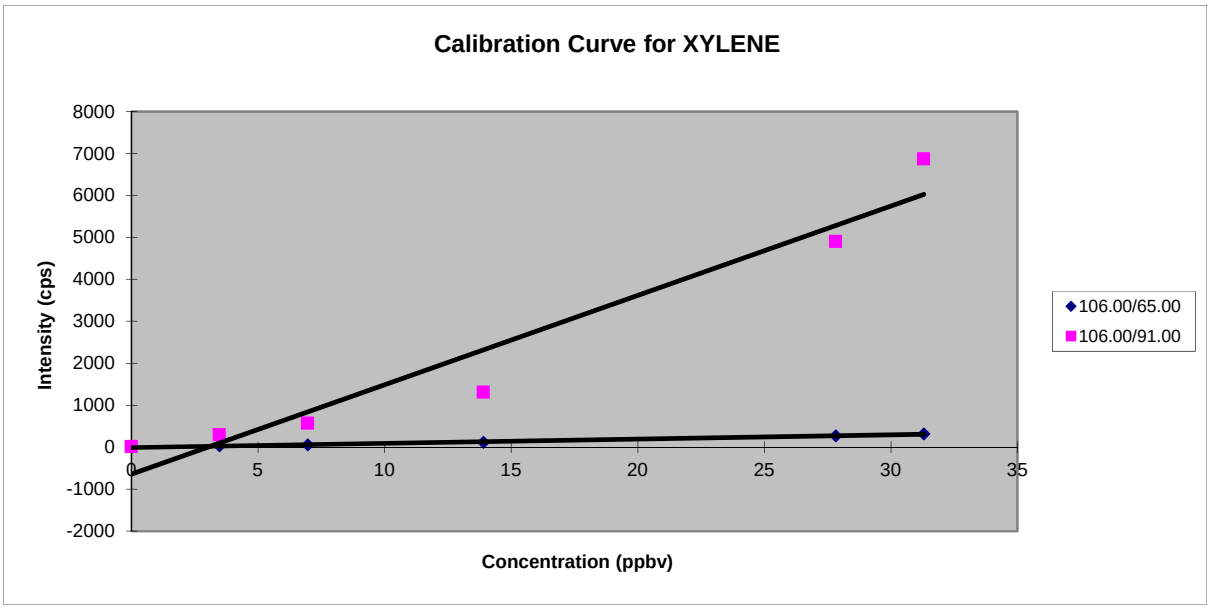
Concentratior	78.00/39.00	78.00/52.00
0	6.25	22.0833333
2.31	95.1041667	429.791667
4.62	175.625	785.104167
9.24	336.666667	1540.3125
18.49	558.75	3090.625
20.8	589.479167	3481.35417



Filename:	64MSMS00814 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Sunday, March 31, 2019 7:23:20					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.92	9.13	11.45	13.66	15.91

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	314.179798	121.804148
Intercept:	-242.17624	-118.75828
Correlation:	0.99566749	0.99470289

Concentratior	92.00/91.00	92.00/65.00
0	38.125	12.7083333
2.31	566.458333	180.9375
4.62	1032.60417	365.3125
9.24	2281.04167	857.291667
18.49	5518.22917	2101.66667
20.8	6534.89583	2524.79167



Filename:	64MSMS00814 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Sunday, March 31, 2019 7:26:04					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.92	9.13	11.45	13.66	15.91

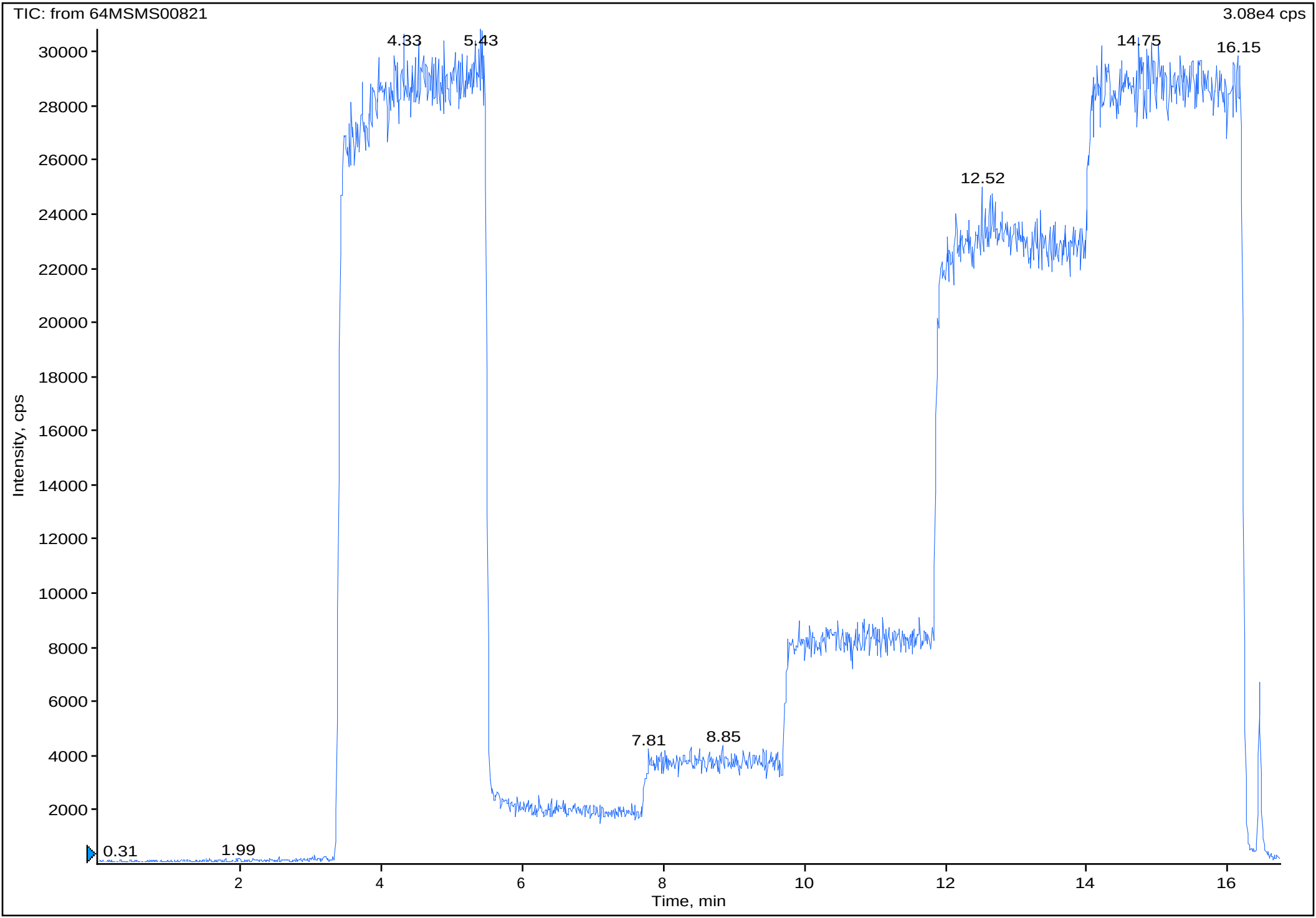
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	10.0499478	213.020577
Intercept:	-7.2073576	-640.0164
Correlation:	0.99675843	0.96983836

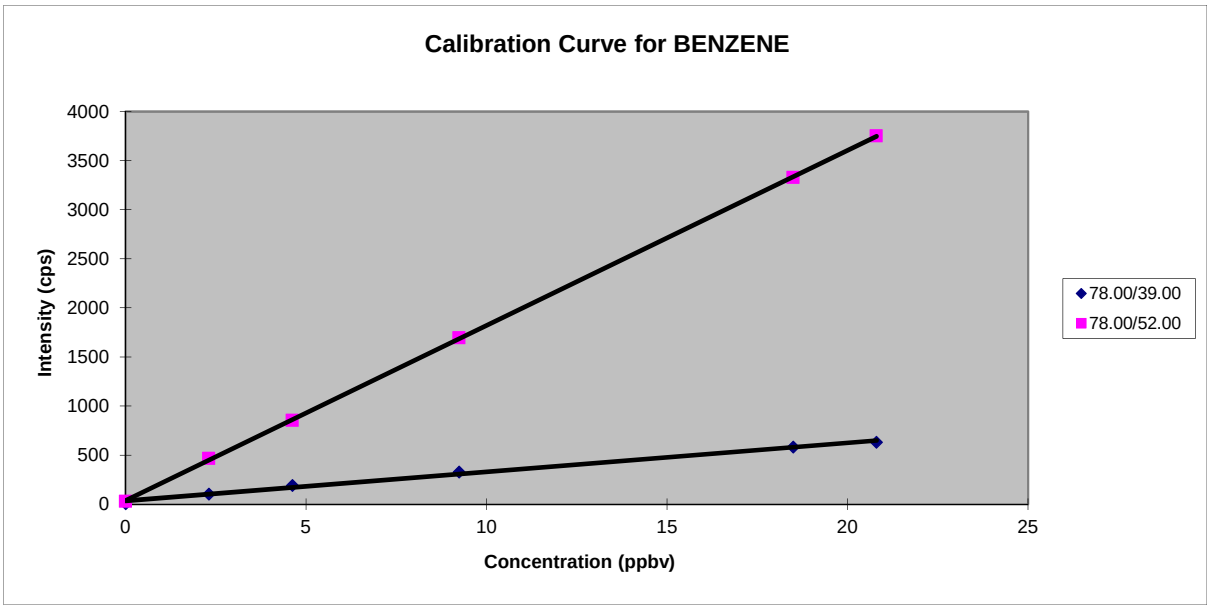
Concentratior	106.00/65.00	106.00/91.00
0	1.45833333	13.5416667
3.48	33.75	290.520833
6.96	56.7708333	568.125
13.91	116.666667	1306.14583
27.82	267.916667	4896.875
31.3	319.0625	6865.52083

Report	File Name	64MSMS00814 et al.			
	Sample Name	BOD Calibration - BTX 20190331			
	Date	Sunday, March 31, 2019 7:26:39			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	27.94	165.78	314.18	121.80	10.05	213.02
Intercept	35.37	25.86	-242.18	-118.76	-7.21	-640.02
Intensity	6.25	22.08	38.13	12.71	1.46	13.54
Int SD	9.43	16.28	25.31	13.73	4.10	14.07
Concentration	-1.04	-0.02	0.89	1.08	0.86	3.07
Conc SD	0.34	0.10	0.08	0.11	0.41	0.07
Compound Con	-0.53		0.99		1.97	
Compound SD	0.15		0.07		0.17	
Det. Limit	1.01	0.29	0.24	0.34	1.22	0.20
Compound DL	0.65		0.29		0.71	

3/31/19.12.22.06
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, Mar 31, 2019 at 12:22:06; Exp. Comment: BTX

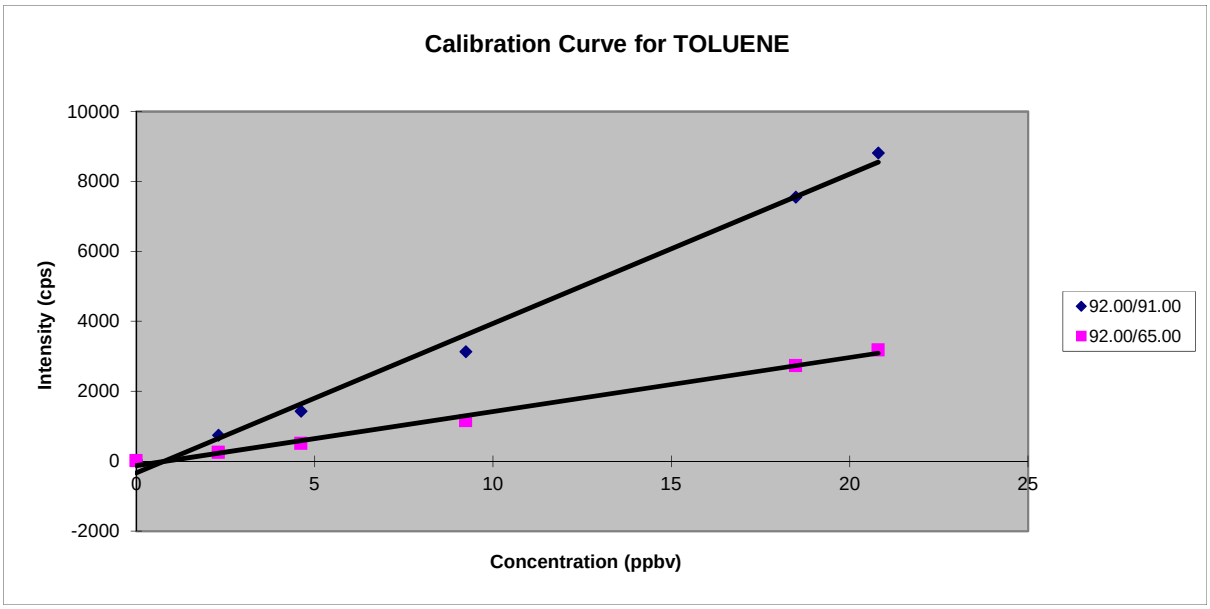




Filename:	64MSMS00821 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Sunday, March 31, 2019 12:39:49					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.68	8.79	10.81	13.02	15.10

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	29.5447422	178.325192
Intercept:	34.7379605	38.4169172
Correlation:	0.99699824	0.99997894

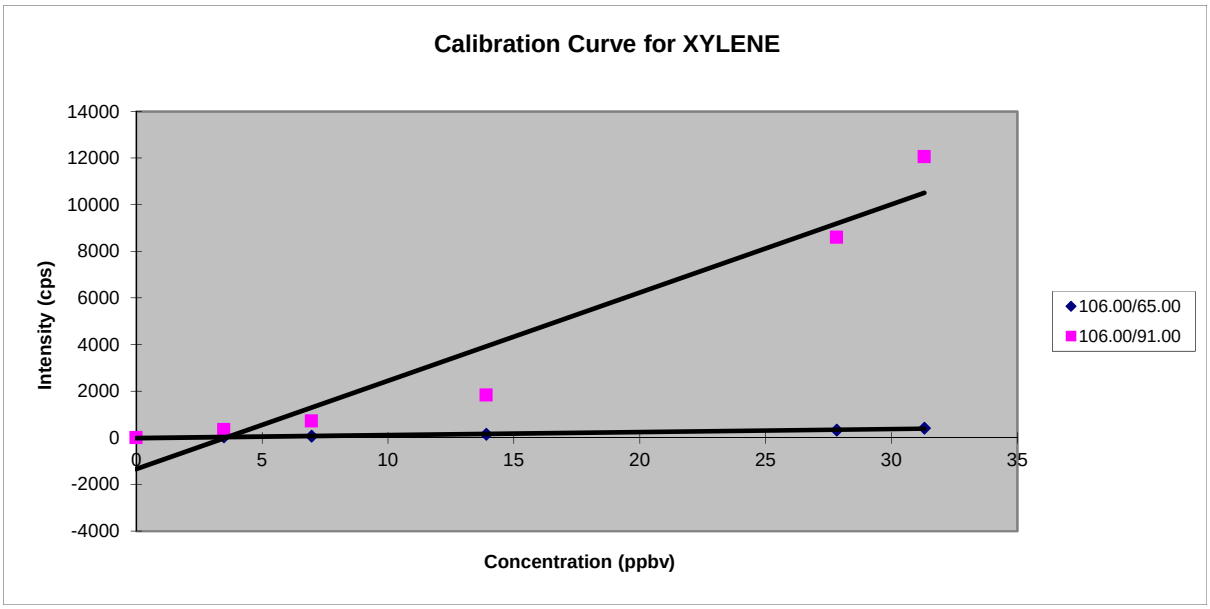
Concentratior	78.00/39.00	78.00/52.00
0	5.83333333	28.9583333
2.31	104.479167	464.6875
4.62	190.729167	853.4375
9.24	329.583333	1694.0625
18.49	583.4375	3328.33333
20.8	632.916667	3750.9375



Filename:	64MSMS00821 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Sunday, March 31, 2019 12:40:25					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.68	8.79	10.81	13.02	15.10

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	427.09009	154.562793
Intercept:	-331.9201	-122.98097
Correlation:	0.99643243	0.99691973

Concentratior	92.00/91.00	92.00/65.00
0	30.5208333	9.89583333
2.31	739.791667	253.125
4.62	1425.83333	506.458333
9.24	3129.6875	1154.6875
18.49	7554.375	2731.77083
20.8	8814.6875	3178.22917



Filename:	64MSMS00821 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Sunday, March 31, 2019 12:40:54					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.68	8.79	10.81	13.02	15.10

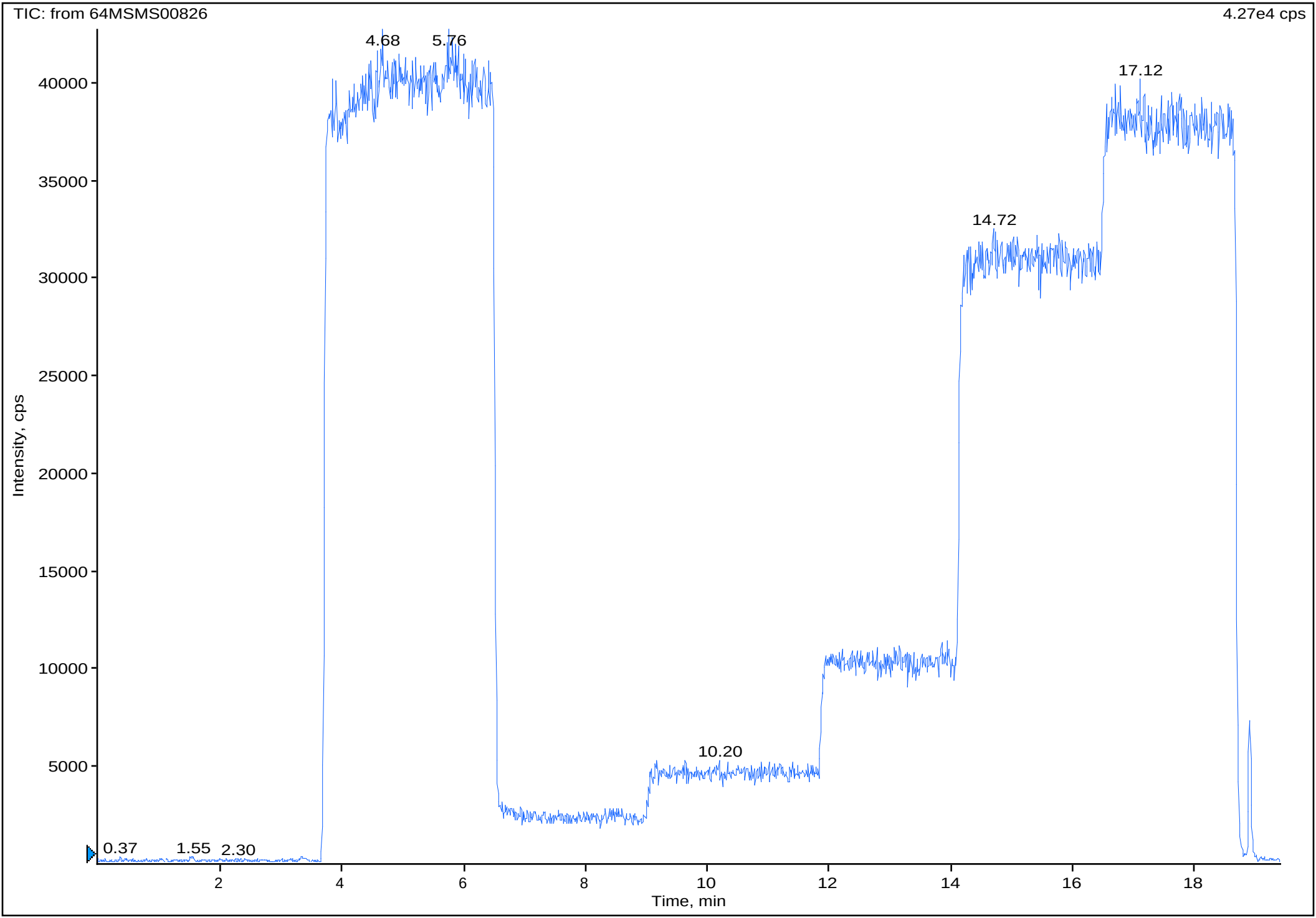
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	12.9940974	378.506548
Intercept:	-10.769552	-1336.4208
Correlation:	0.99629614	0.96327973

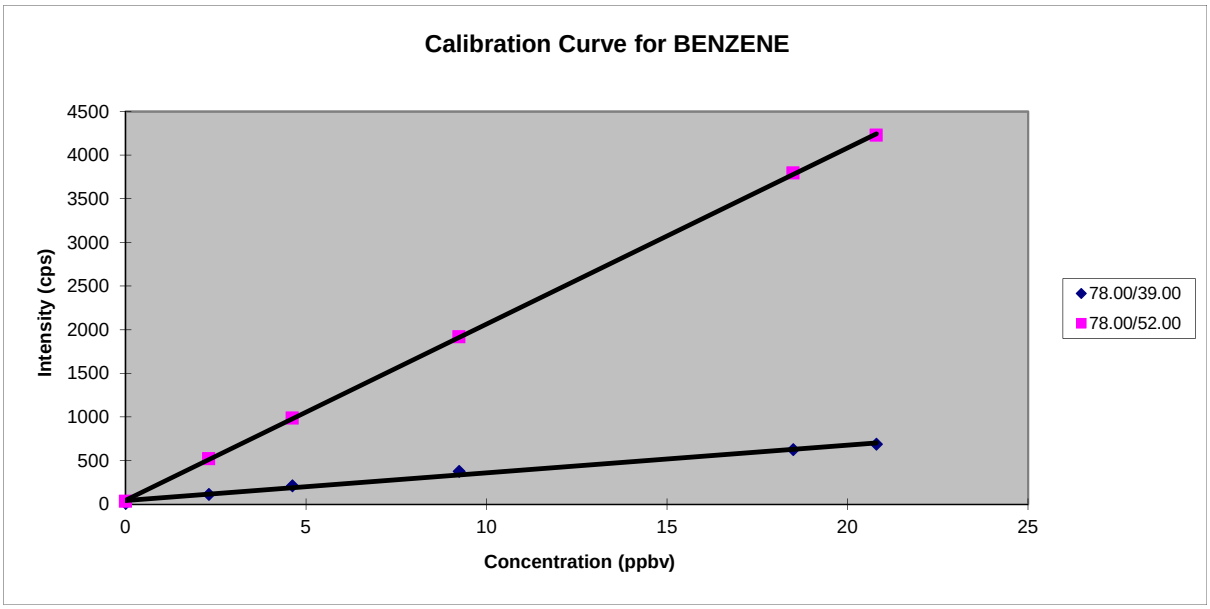
Concentratior	106.00/65.00	106.00/91.00
0	1.97916667	12.6041667
3.48	41.25	355.416667
6.96	68.5416667	716.041667
13.91	153.958333	1834.16667
27.82	339.583333	8601.66667
31.3	414.6875	1.21E+04

Report	File Name	64MSMS00821 et al.			
	Sample Name	MPD Calibration - BTX 20190331			
	Date	Sunday, March 31, 2019 12:41:27			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	29.54	178.33	427.09	154.56	12.99	378.51
Intercept	34.74	38.42	-331.92	-122.98	-10.77	-1336.42
Intensity	5.83	28.96	30.52	9.90	1.98	12.60
Int SD	8.54	20.03	21.24	10.51	4.50	12.92
Concentration	-0.98	-0.05	0.85	0.86	0.98	3.56
Conc SD	0.29	0.11	0.05	0.07	0.35	0.03
Compound Con	-0.52		0.85		2.27	
Compound SD	0.14		0.04		0.13	
Det. Limit	0.87	0.34	0.15	0.20	1.04	0.10
Compound DL	0.60		0.18		0.57	

3/31/19.17.52.21
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, Mar 31, 2019 at 17:52:20; Exp. Comment: BTX

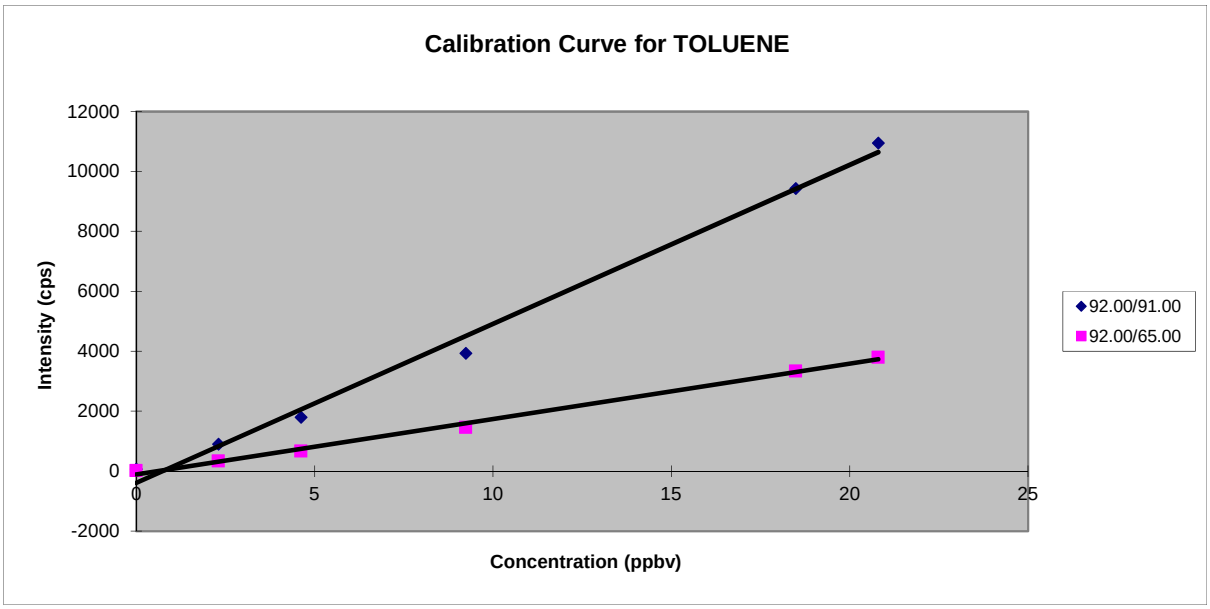




Filename:	64MSMS00826 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Sunday, March 31, 2019 18:12:49					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.76	10.27	12.98	15.34	17.58

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	31.7406301	201.845305
Intercept:	44.3217939	46.541202
Correlation:	0.99508719	0.99997061

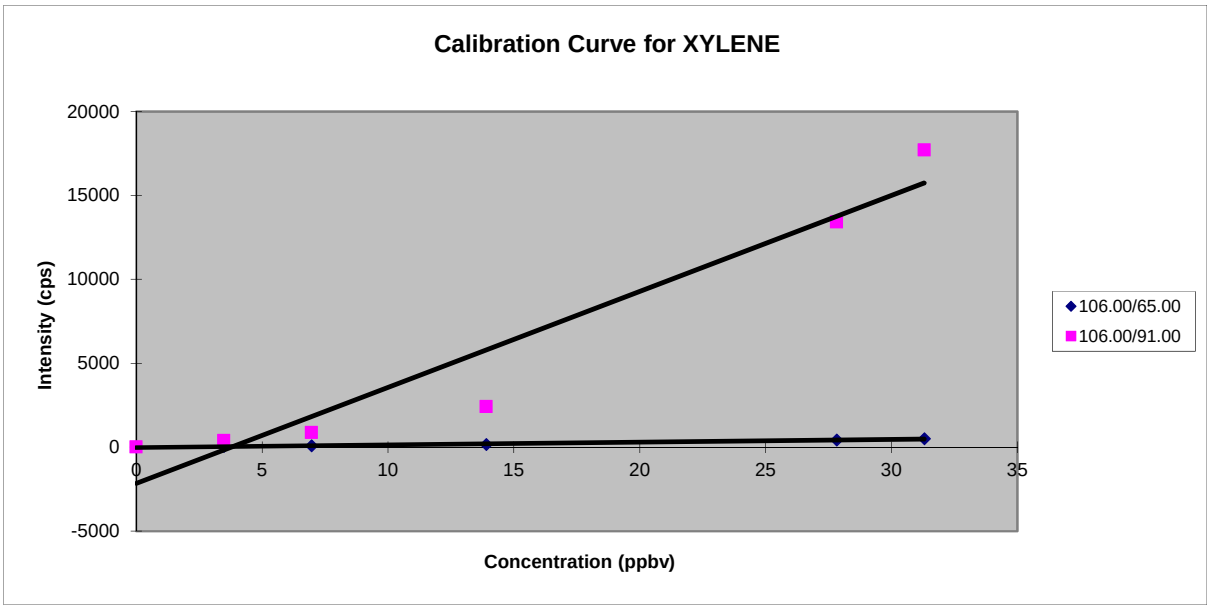
Concentratior	78.00/39.00	78.00/52.00
0	9.6875	31.0416667
2.31	112.291667	519.479167
4.62	213.229167	986.354167
9.24	378.453608	1915.56701
18.49	625.520833	3793.85417
20.8	687.083333	4227.29167



Filename:	64MSMS00826 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Sunday, March 31, 2019 18:13:29					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.76	10.27	12.98	15.34	17.58

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	530.594459	184.791705
Intercept:	-390.99191	-105.9092
Correlation:	0.99664499	0.99813548

Concentratior	92.00/91.00	92.00/65.00
0	68.2291667	18.8541667
2.31	907.5	337.395833
4.62	1799.89583	670.416667
9.24	3931.54639	1453.09278
18.49	9429.47917	3341.14583
20.8	1.09E+04	3792.1875



Filename:	64MSMS00826 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Sunday, March 31, 2019 18:14:01					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.76	10.27	12.98	15.34	17.58

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	16.2348172	571.755733
Intercept:	-19.378386	-2153.286
Correlation:	0.99392105	0.96344561

Concentratior	106.00/65.00	106.00/91.00
0	4.47916667	18.4375
3.48	45.2083333	397.083333
6.96	80.4166667	860.104167
13.91	170.412371	2415.46392
27.82	425.416667	1.34E+04
31.3	512.916667	1.77E+04

Report	File Name	64MSMS00826 et al.			
	Sample Name	EOD Calibration - BTX 20190331			
	Date	Sunday, March 31, 2019 18:14:32			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	31.74	201.85	530.59	184.79	16.23	571.76
Intercept	44.32	46.54	-390.99	-105.91	-19.38	-2153.29
Intensity	9.69	31.04	68.23	18.85	4.48	18.44
Int SD	10.41	18.94	40.34	15.75	10.75	19.75
Concentration	-1.09	-0.08	0.87	0.68	1.47	3.80
Conc SD	0.33	0.09	0.08	0.09	0.66	0.03
Compound Con	-0.58		0.77		2.63	
Compound SD	0.15		0.06		0.25	
Det. Limit	0.98	0.28	0.23	0.26	1.99	0.10
Compound DL	0.63		0.24		1.04	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 4/1/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3250	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:52	15000SCCS	~191	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date:	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Mon, Apr 1, 2019, 7:17:08
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR01 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Mon, Apr 1, 2019, 7:13:27

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.071
100.000	0.063
125.000	0.085
160.000	0.096

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.038
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Mon, Apr 1, 2019, 7:17:19
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR01 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Mon, Apr 1, 2019, 7:13:27

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.071
100.000	0.063
125.000	0.085
160.000	0.096

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.038
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

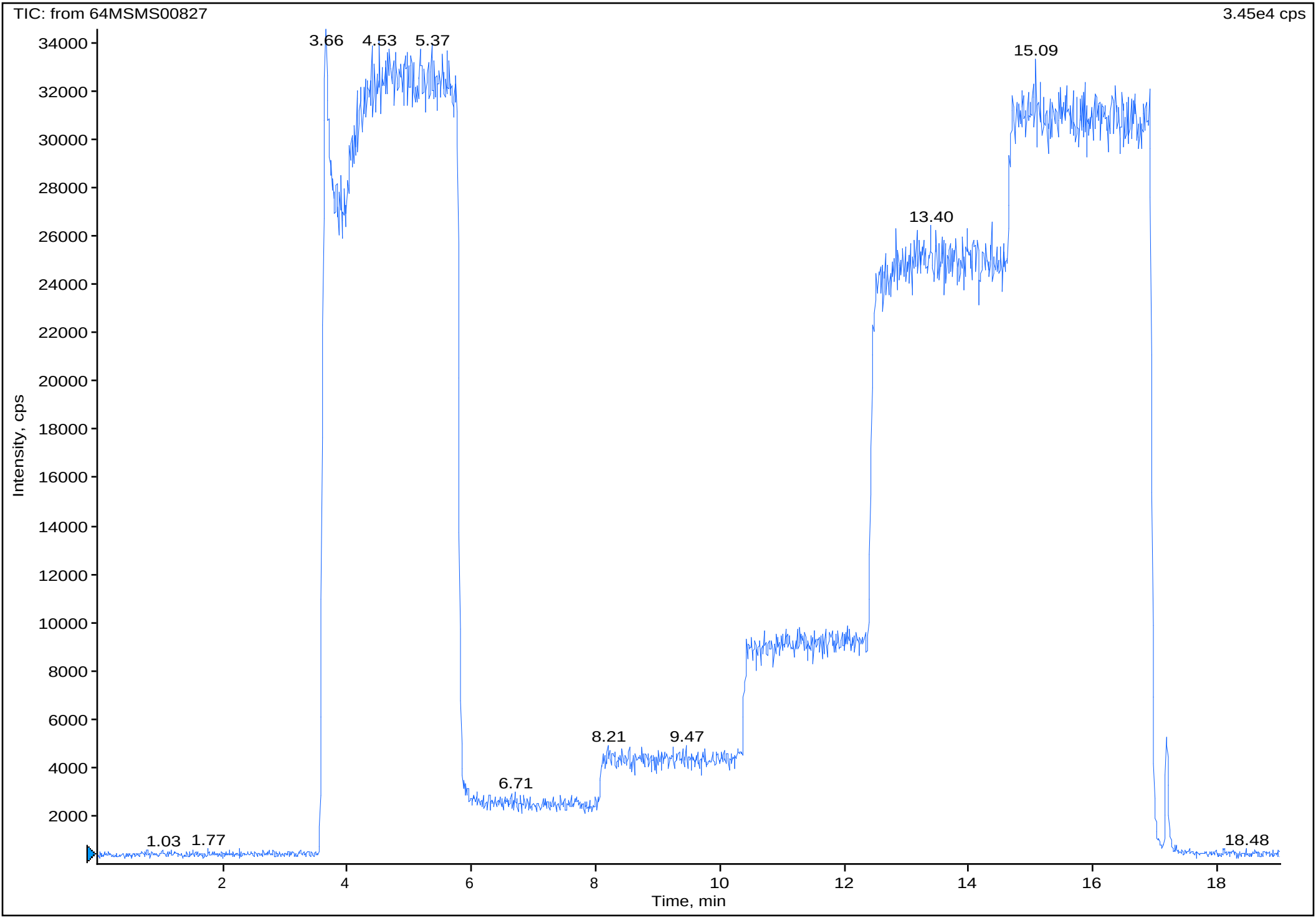
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

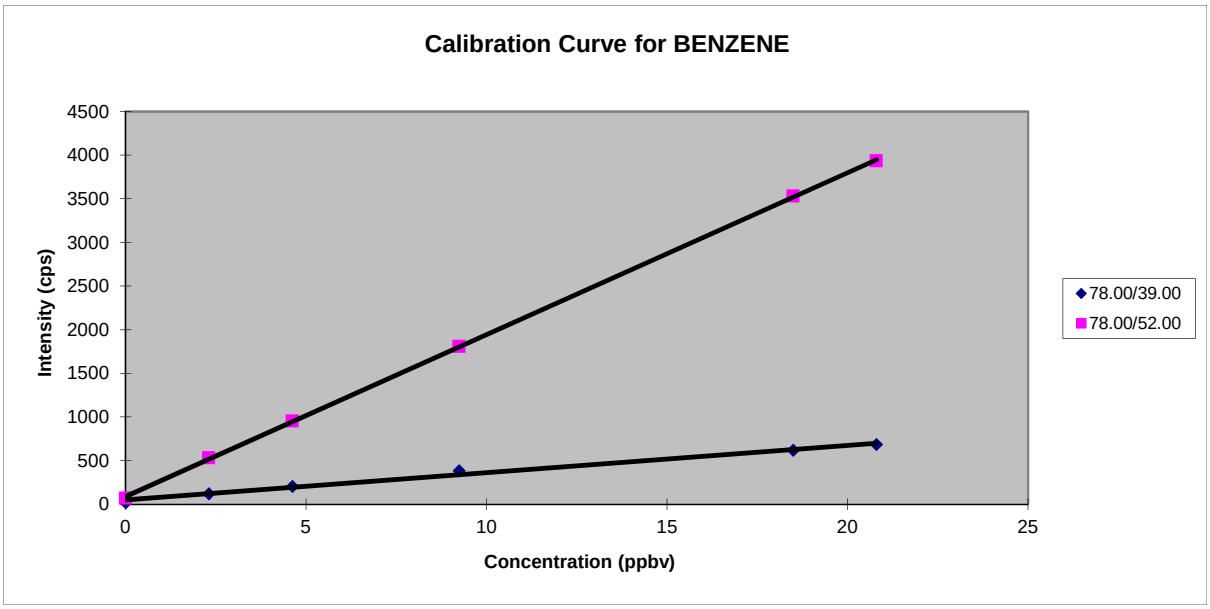
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/1/19.7.19.35
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Mon, Apr 1, 2019 at 7:19:34; Exp. Comment: BTX

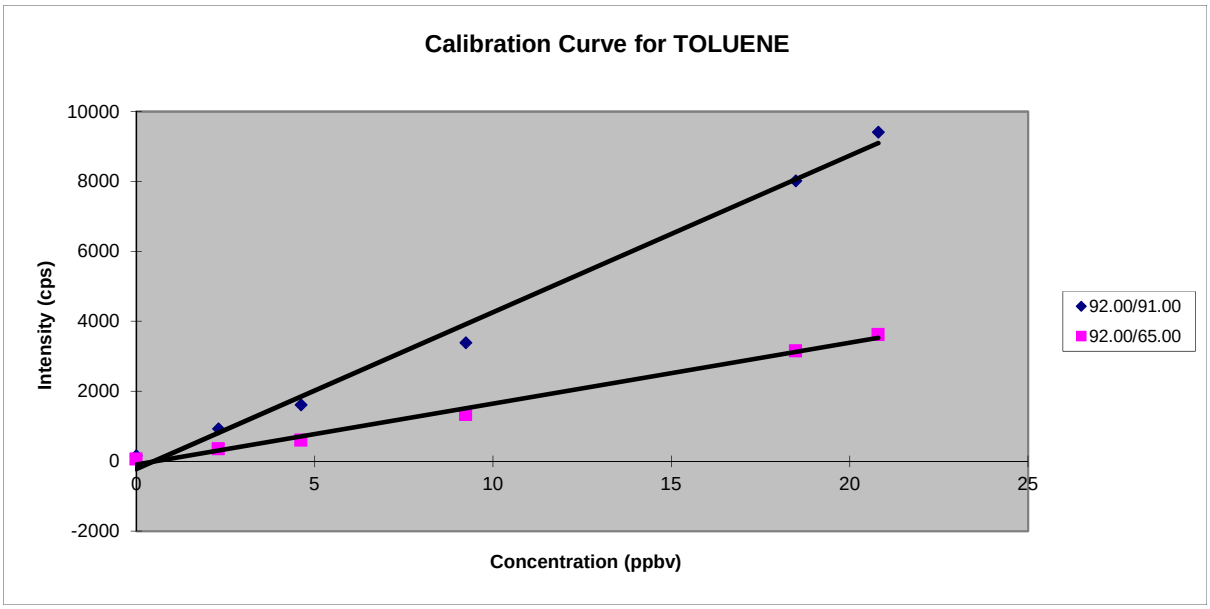




Filename:	64MSMS00827 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Monday, April 1, 2019 7:40:32					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.01	9.19	11.41	13.61	15.71

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	31.2899339	185.531721
Intercept:	50.0128224	89.3392906
Correlation:	0.99521639	0.99996501

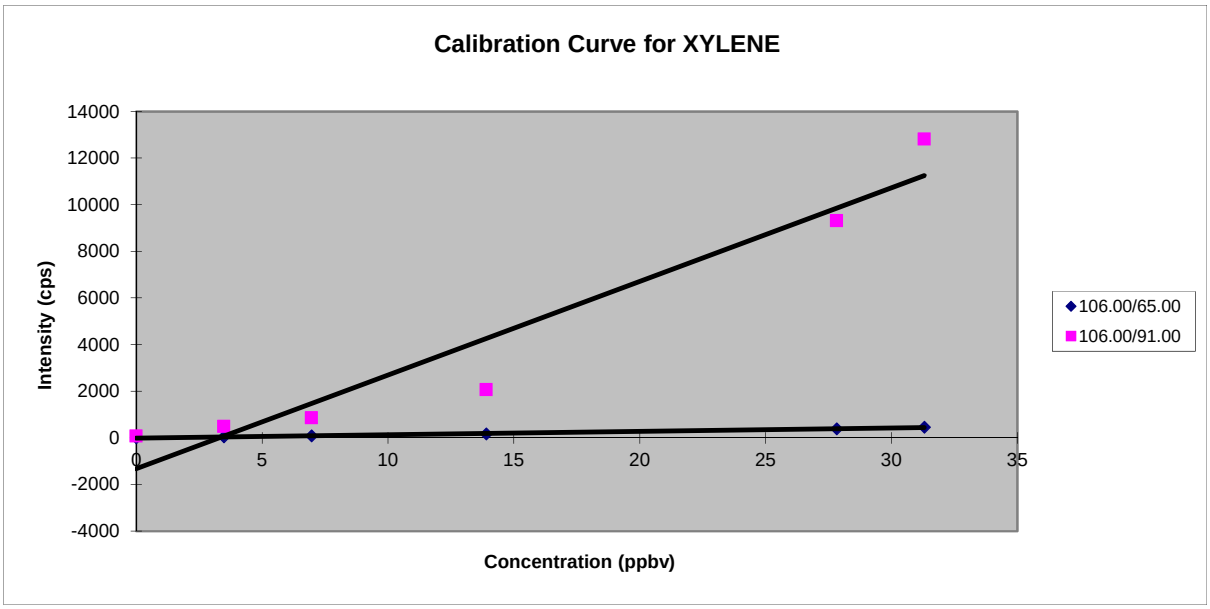
Concentratior	78.00/39.00	78.00/52.00
0	17.2916667	70.625
2.31	121.666667	529.791667
4.62	206.458333	954.166667
9.24	384.0625	1805.20833
18.49	620.104167	3531.77083
20.8	685.833333	3934.0625



Filename:	64MSMS00827 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Monday, April 1, 2019 7:41:11					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.01	9.19	11.41	13.61	15.71

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	448.169176	174.349188
Intercept:	-224.26111	-95.161413
Correlation:	0.99611387	0.9964833

Concentratior	92.00/91.00	92.00/65.00
0	156.145833	58.3333333
2.31	922.8125	347.708333
4.62	1611.66667	597.291667
9.24	3389.89583	1330.10417
18.49	8022.39583	3146.45833
20.8	9406.97917	3618.54167



Filename:	64MSMS00827 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Monday, April 1, 2019 7:41:56					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.01	9.19	11.41	13.61	15.71

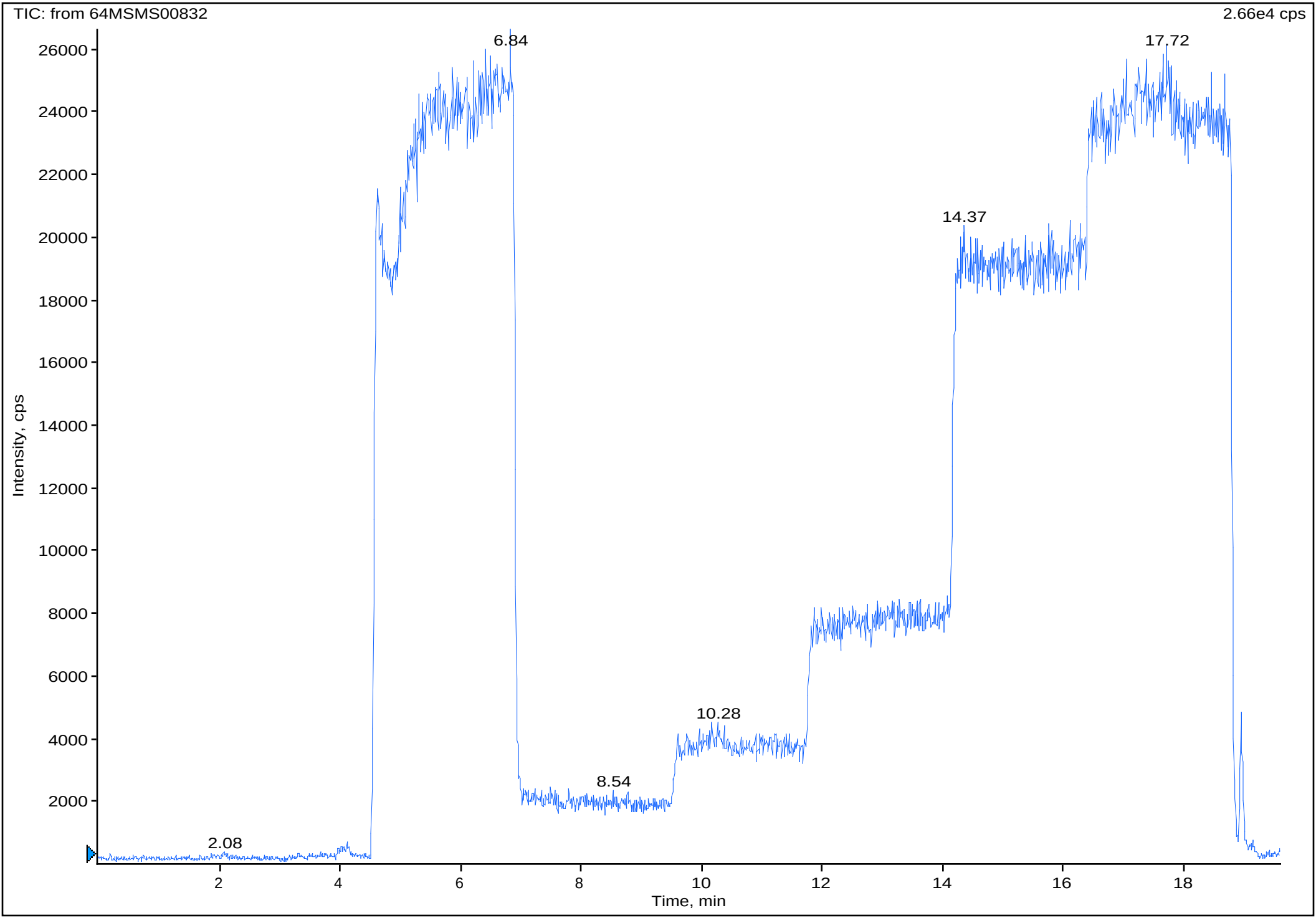
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	14.4259655	401.826993
Intercept:	-7.1301954	-1322.8957
Correlation:	0.99653109	0.96506123

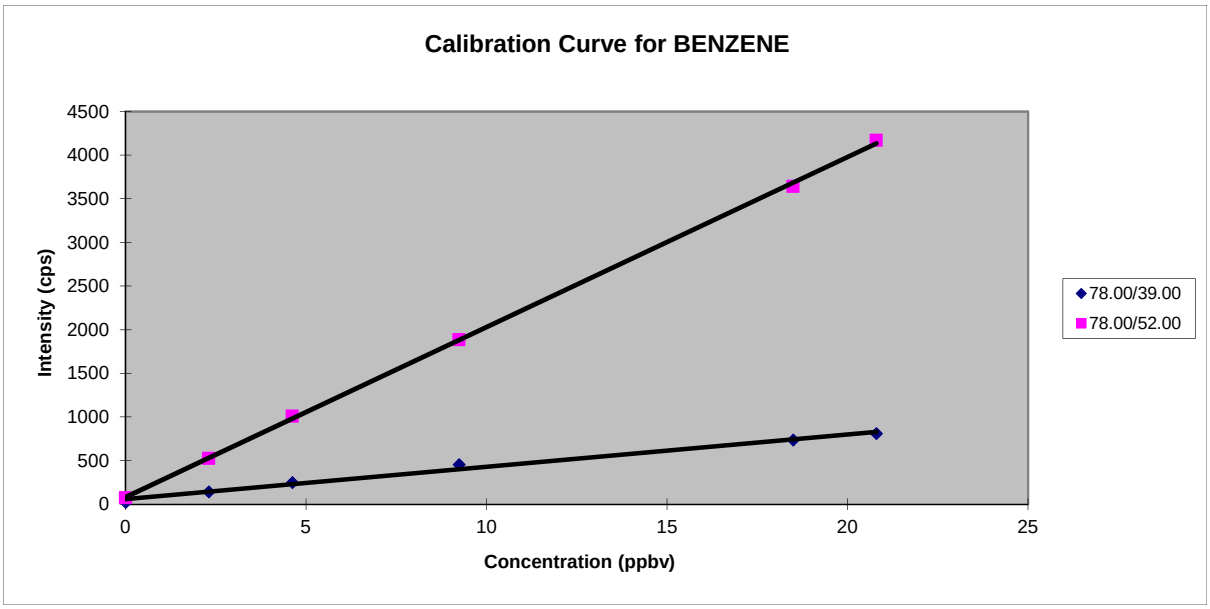
Concentratior	106.00/65.00	106.00/91.00
0	8.22916667	68.75
3.48	47.7083333	492.395833
6.96	87.5	860.833333
13.91	167.1875	2062.91667
27.82	391.041667	9305.10417
31.3	459.6875	1.28E+04

Report	File Name	64MSMS00827 et al.			
	Sample Name	BOD Calibration - BTX 20190401			
	Date	Monday, April 1, 2019 7:42:38			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	31.29	185.53	448.17	174.35	14.43	401.83
Intercept	50.01	89.34	-224.26	-95.16	-7.13	-1322.90
Intensity	17.29	70.63	156.15	58.33	8.23	68.75
Int SD	16.25	25.33	50.12	27.36	10.86	30.79
Concentration	-1.05	-0.10	0.85	0.88	1.06	3.46
Conc SD	0.52	0.14	0.11	0.16	0.75	0.08
Compound Con	-0.57		0.86		2.26	
Compound SD	0.23		0.10		0.29	
Det. Limit	1.56	0.41	0.34	0.47	2.26	0.23
Compound DL	0.98		0.40		1.24	

4/1/19.13.50.11
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Mon, Apr 1, 2019 at 13:50:09; Exp. Comment: BTX

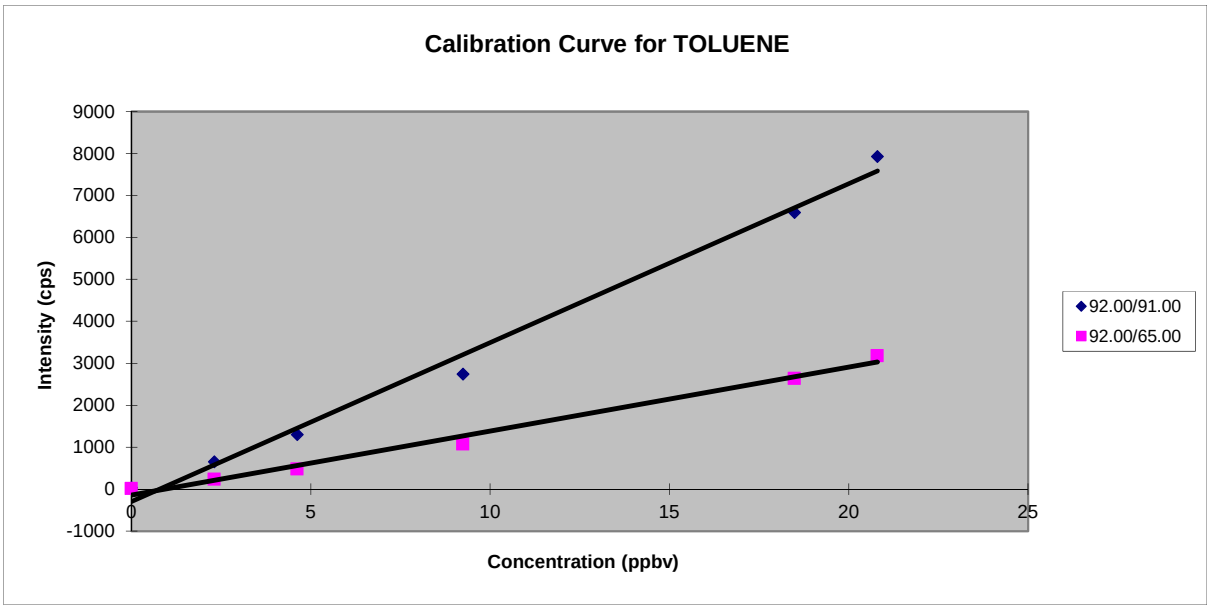




Filename:	64MSMS00832 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Monday, April 1, 2019 14:10:46					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	8.32	10.68	12.95	15.35	17.49

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	37.0187176	194.840788
Intercept:	59.6812925	82.4938726
Correlation:	0.99521093	0.9998655

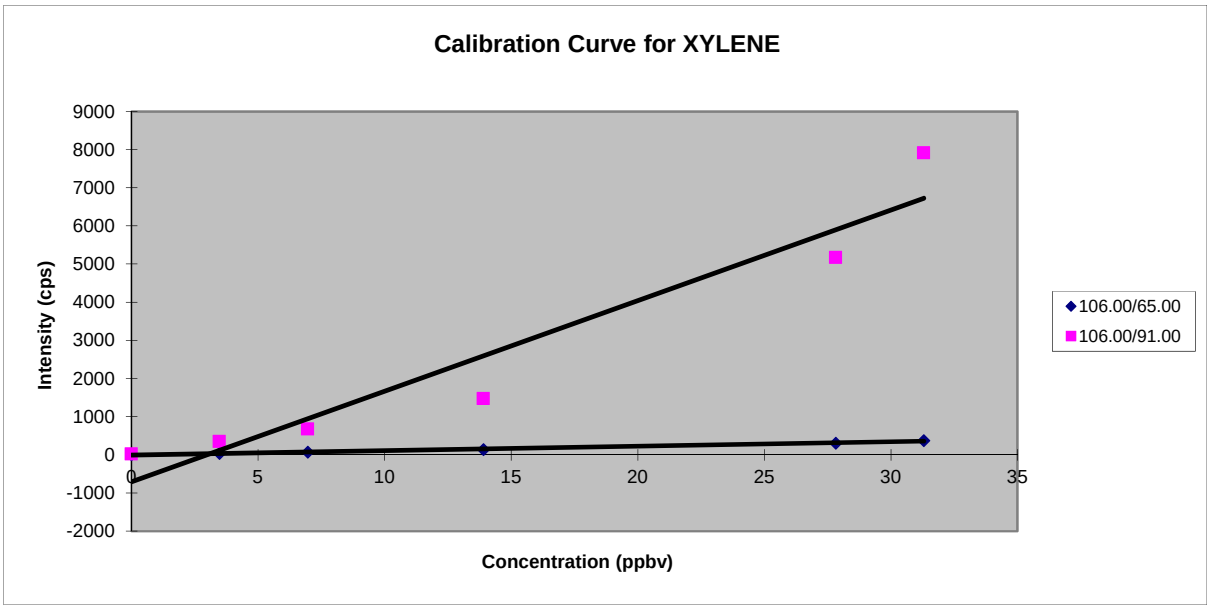
Concentratior	78.00/39.00	78.00/52.00
0	19.7916667	74.375
2.31	144.0625	525
4.62	247.8125	1007.70833
9.24	452.604167	1883.22917
18.49	738.020833	3641.35417
20.8	808.854167	4169.16667



Filename:	64MSMS00832 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Monday, April 1, 2019 14:11:26					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	8.32	10.68	12.95	15.35	17.49

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	378.721453	152.574344
Intercept:	-291.1521	-141.52815
Correlation:	0.99555491	0.99474159

Concentratior	92.00/91.00	92.00/65.00
0	36.3541667	16.6666667
2.31	657.1875	232.395833
4.62	1300.9375	480.208333
9.24	2745.83333	1074.79167
18.49	6592.08333	2633.85417
20.8	7924.58333	3174.6875



Filename:	64MSMS00832 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Monday, April 1, 2019 14:11:59					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	8.32	10.68	12.95	15.35	17.49

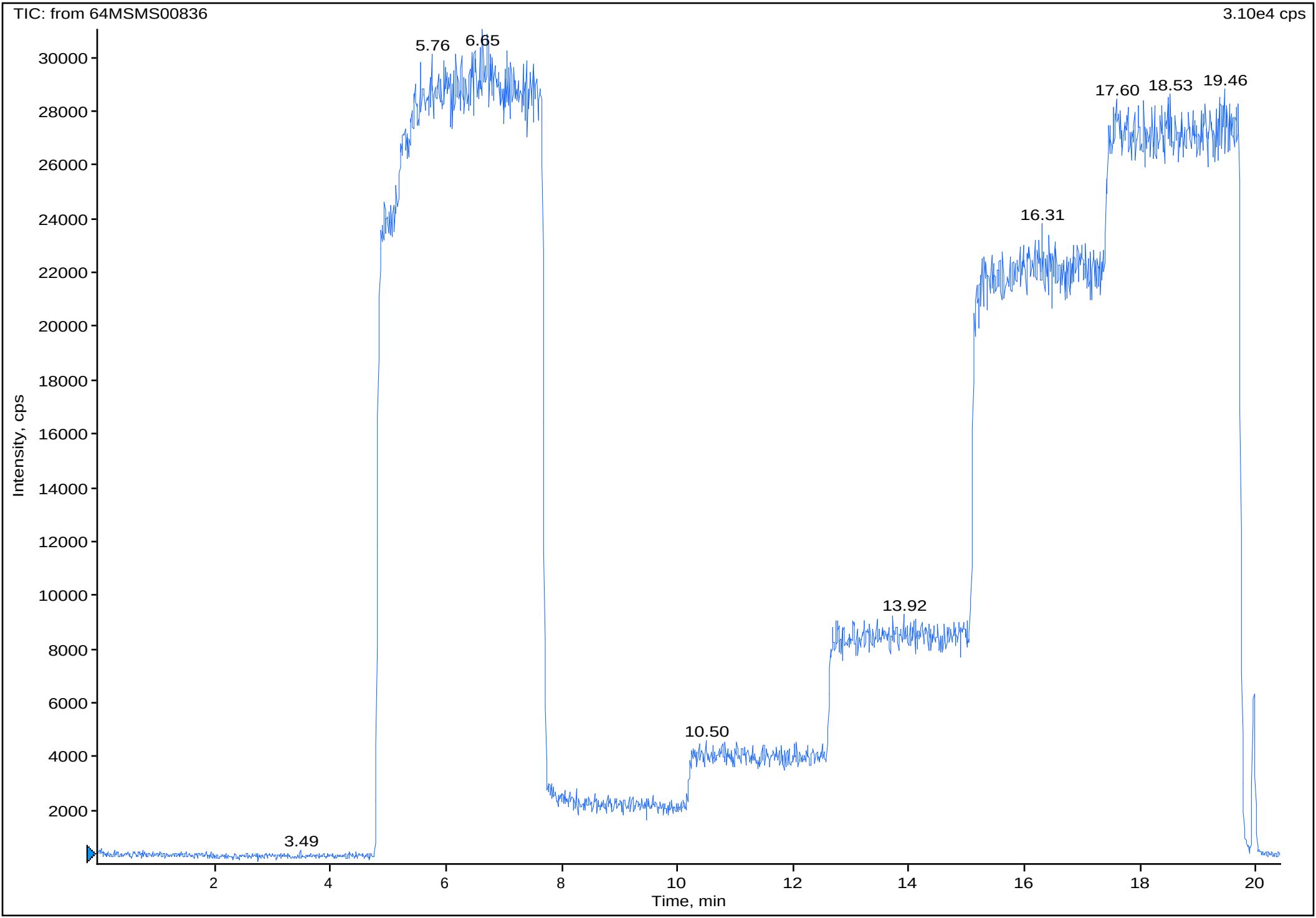
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	11.6795284	237.539928
Intercept:	-5.5372618	-705.65269
Correlation:	0.99691575	0.96193985

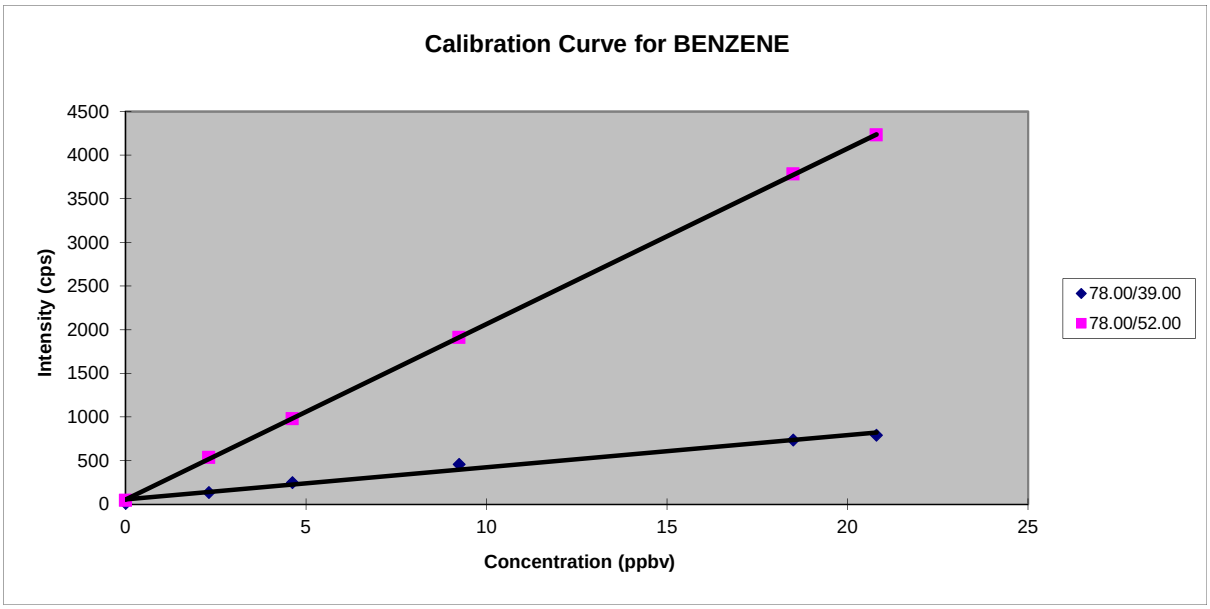
Concentratior	106.00/65.00	106.00/91.00
0	3.125	17.9166667
3.48	38.9583333	343.333333
6.96	72.5	671.5625
13.91	141.875	1472.91667
27.82	308.645833	5172.91667
31.3	376.5625	7914.89583

Report	File Name	64MSMS00832 et al.			
	Sample Name	MOD Calibration - BTX 20190401			
	Date	Monday, April 1, 2019 14:12:45			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	37.02	194.84	378.72	152.57	11.68	237.54
Intercept	59.68	82.49	-291.15	-141.53	-5.54	-705.65
Intensity	19.79	74.38	36.35	16.67	3.13	17.92
Int SD	13.84	33.21	21.23	13.97	6.21	16.79
Concentration	-1.08	-0.04	0.86	1.04	0.74	3.05
Conc SD	0.37	0.17	0.06	0.09	0.53	0.07
Compound Con	-0.56		0.95		1.89	
Compound SD	0.19		0.05		0.21	
Det. Limit	1.12	0.51	0.17	0.27	1.59	0.21
Compound DL	0.82		0.22		0.90	

4/1/19.19.11.43
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Mon, Apr 1, 2019 at 19:11:41; Exp. Comment: BTX

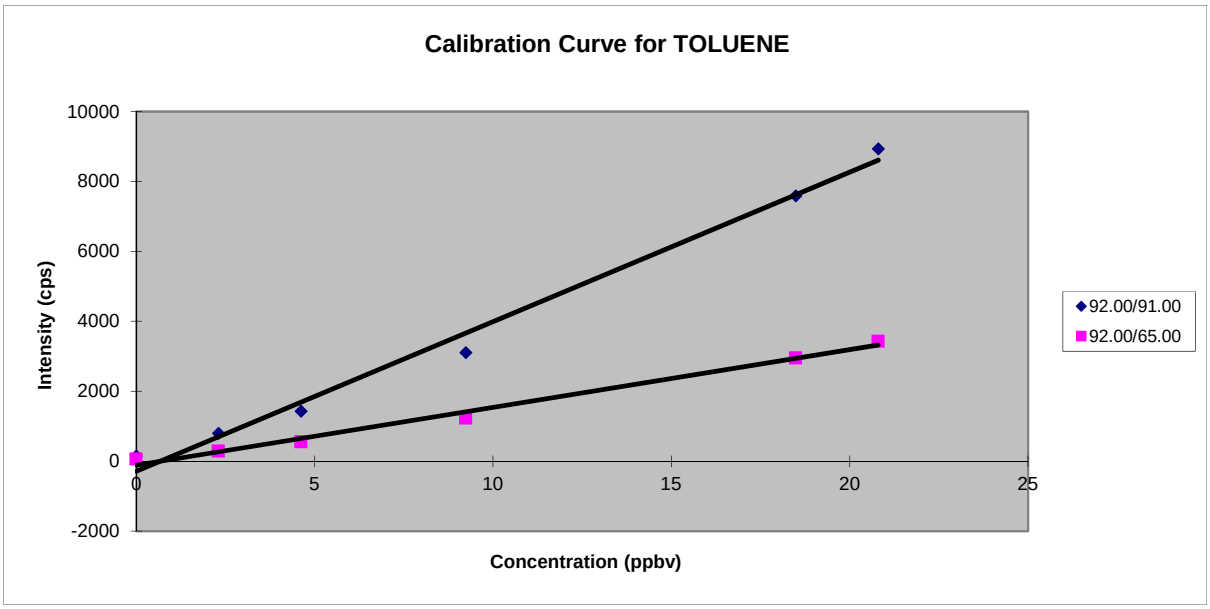




Filename:	64MSMS00836 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Monday, April 1, 2019 19:33:12					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	9.06	11.54	13.85	16.35	18.58

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	36.8479947	201.131408
Intercept:	55.9468413	53.427434
Correlation:	0.99299179	0.99998201

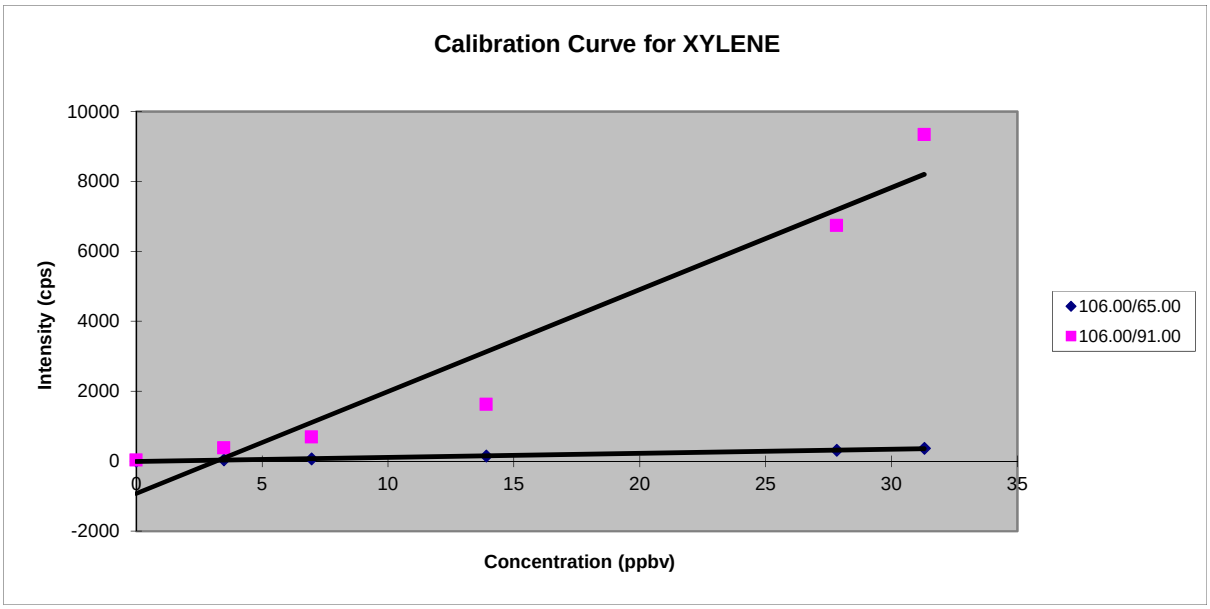
Concentratior	78.00/39.00	78.00/52.00
0	10.8333333	43.9583333
2.31	134.166667	533.854167
4.62	249.166667	977.916667
9.24	456.354167	1908.22917
18.49	737.8125	3782.5
20.8	790.9375	4228.85417



Filename:	64MSMS00836 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Monday, April 1, 2019 19:33:49					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	9.06	11.54	13.85	16.35	18.58

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	427.694451	165.278078
Intercept:	-285.35363	-111.71343
Correlation:	0.99502913	0.99598229

Concentratior	92.00/91.00	92.00/65.00
0	149.791667	56.6666667
2.31	795.208333	284.6875
4.62	1429.89583	548.854167
9.24	3106.45833	1232.8125
18.49	7592.29167	2946.77083
20.8	8934.16667	3426.25



Filename:	64MSMS00836 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Monday, April 1, 2019 19:34:22					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	9.06	11.54	13.85	16.35	18.58

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	11.7111399	291.492523
Intercept:	-5.5603633	-921.41417
Correlation:	0.99741859	0.96735464

Concentratior	106.00/65.00	106.00/91.00
0	4.47916667	34.4791667
3.48	42.7083333	382.291667
6.96	64.1666667	689.791667
13.91	144.583333	1625
27.82	316.041667	6735.10417
31.3	372.1875	9335.72917

Report	File Name	64MSMS00836 et al.			
	Sample Name	EOD Calibration - BTX 20190401			
	Date	Monday, April 1, 2019 19:34:57			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	36.85	201.13	427.69	165.28	11.71	291.49
Intercept	55.95	53.43	-285.35	-111.71	-5.56	-921.41
Intensity	10.83	43.96	149.79	56.67	4.48	34.48
Int SD	12.62	27.55	40.81	28.09	8.06	21.51
Concentration	-1.22	-0.05	1.02	1.02	0.86	3.28
Conc SD	0.34	0.14	0.10	0.17	0.69	0.07
Compound Con	-0.64		1.02		2.07	
Compound SD	0.17		0.09		0.27	
Det. Limit	1.03	0.41	0.29	0.51	2.07	0.22
Compound DL	0.72		0.40		1.14	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 4/2/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span _____.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:52	1500SCCS	~191	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date:	Exp = 5/2/2019
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Tue, Apr 2, 2019, 7:17:50
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR02 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Tue, Apr 2, 2019, 7:15:24

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.069
100.000	0.078
125.000	0.085
160.000	0.096

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.031
70.000	0.032
100.000	0.033
130.000	0.035
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Tue, Apr 2, 2019, 7:17:59
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR02 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Tue, Apr 2, 2019, 7:15:24

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.069
100.000	0.078
125.000	0.085
160.000	0.096

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.031
70.000	0.032
100.000	0.033
130.000	0.035
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

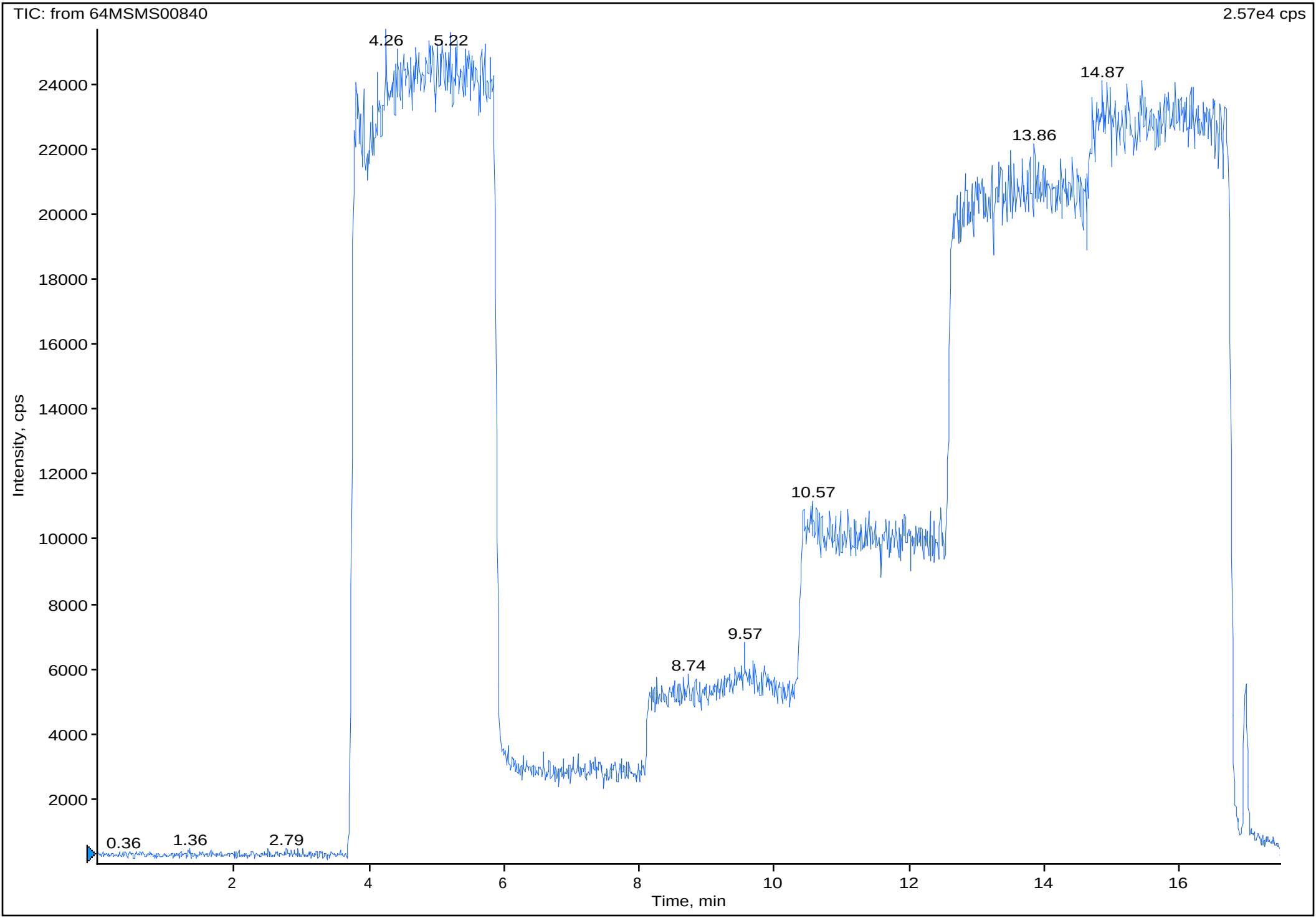
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

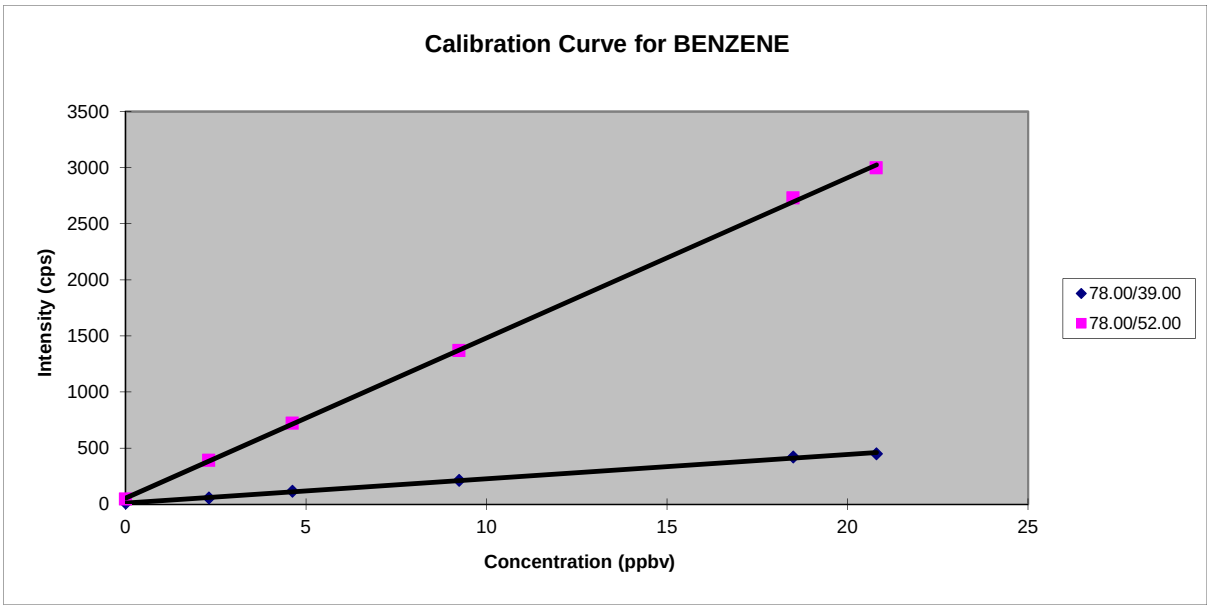
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/2/19.9.05.43
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Tue, Apr 2, 2019 at 9:05:43; Exp. Comment: BTX

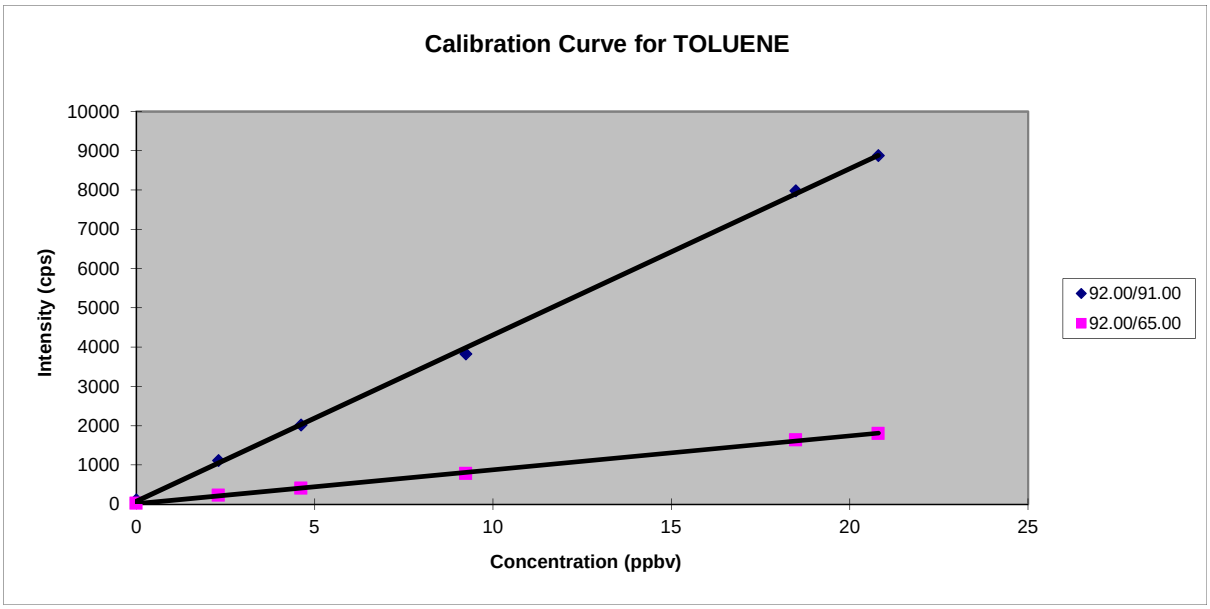




Filename:	64MSMS00840 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Tuesday, April 2, 2019 9:24:23					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.09	8.78	11.65	13.66	15.67

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	21.5519511	142.77821
Intercept:	11.9822902	55.4646101
Correlation:	0.99911553	0.9998619

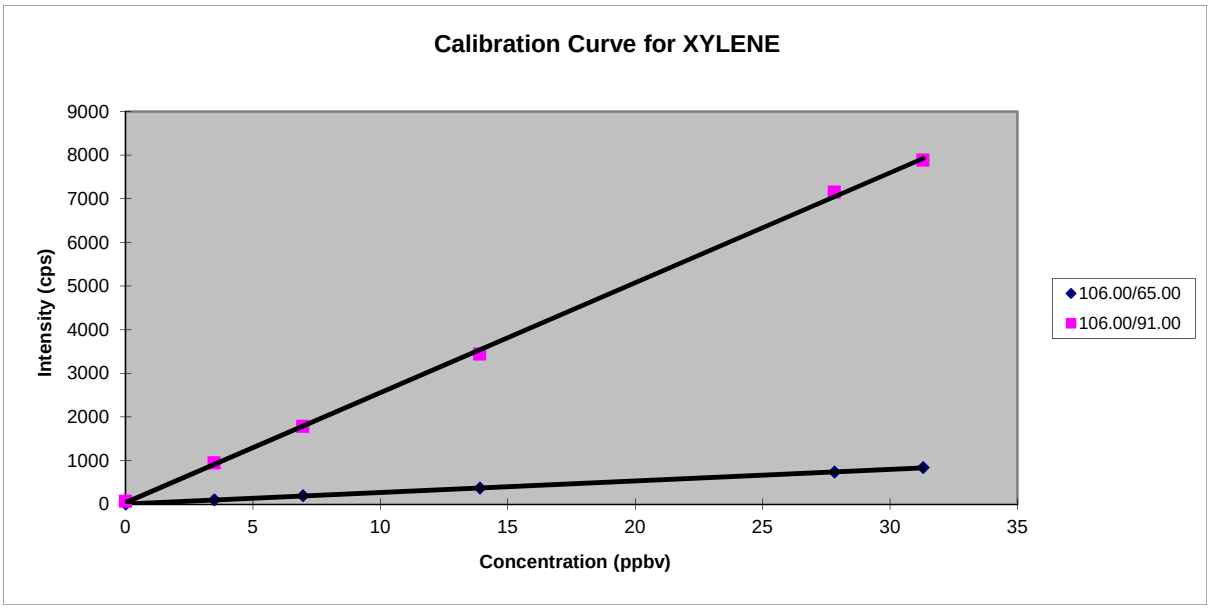
Concentratior	78.00/39.00	78.00/52.00
0	10.2083333	45.5208333
2.31	57.7083333	390.208333
4.62	116.041667	721.458333
9.24	212.1875	1369.27083
18.49	422.164948	2728.35052
20.8	448.854167	2996.45833



Filename:	64MSMS00840 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Tuesday, April 2, 2019 9:25:09					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.09	8.78	11.65	13.66	15.67

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	423.34806	86.2944482
Intercept:	77.2837544	15.3567335
Correlation:	0.99973279	0.99956123

Concentratior	92.00/91.00	92.00/65.00
0	116.458333	26.25
2.31	1112.29167	228.333333
4.62	2019.47917	405
9.24	3831.04167	778.333333
18.49	7981.75258	1639.07216
20.8	8881.5625	1801.04167



Filename:	64MSMS00840 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Tuesday, April 2, 2019 9:26:09					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.09	8.78	11.65	13.66	15.67

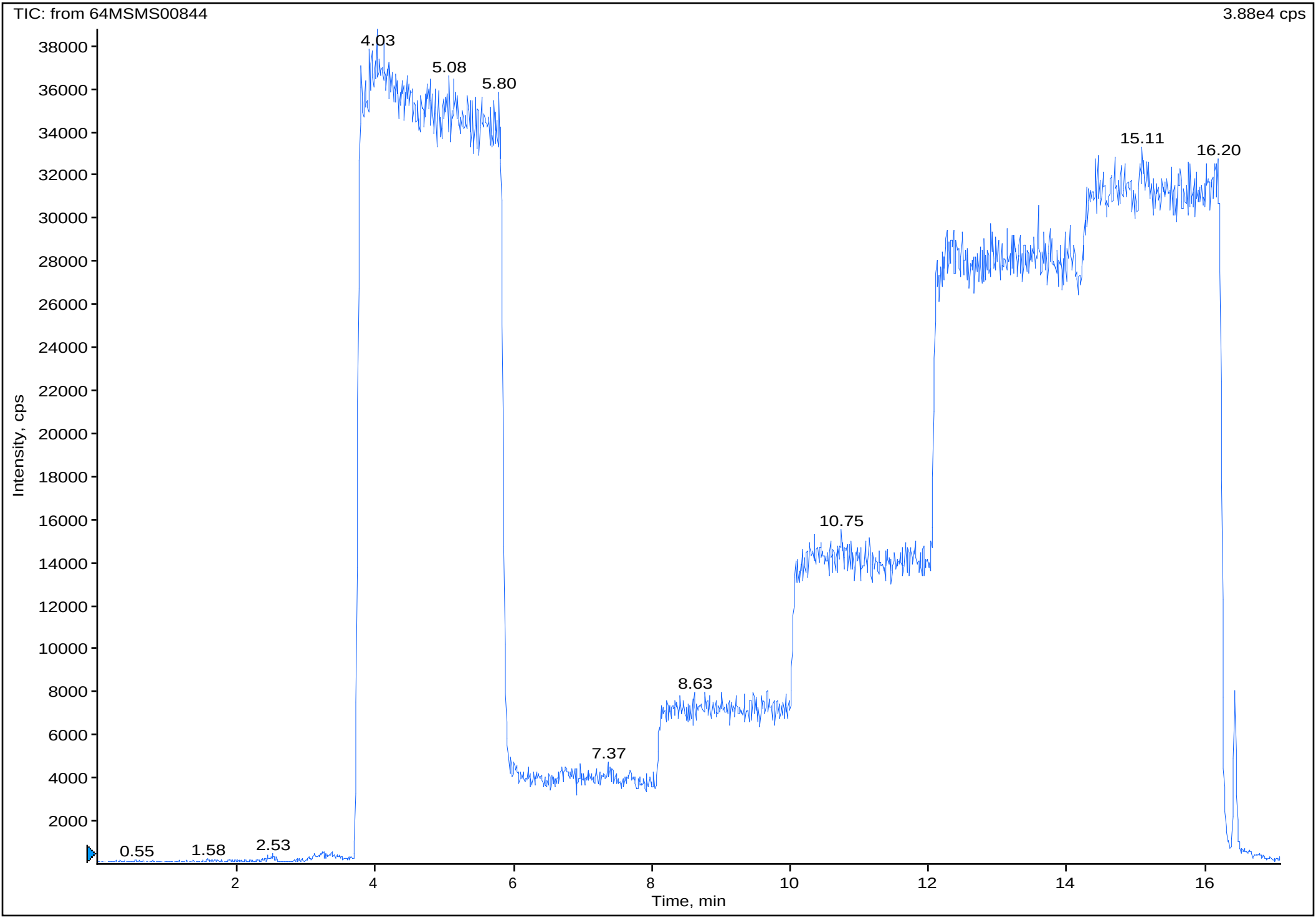
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	26.4189977	252.0024
Intercept:	8.07821262	38.5996486
Correlation:	0.99989826	0.99976554

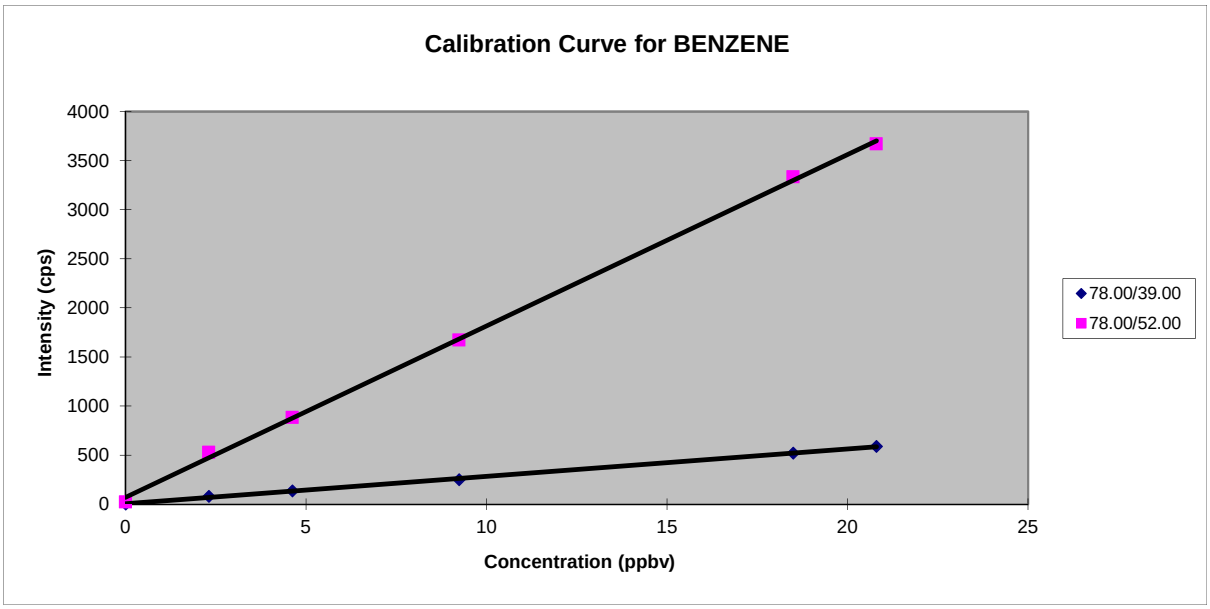
Concentratior	106.00/65.00	106.00/91.00
0	6.875	66.6666667
3.48	103.958333	948.229167
6.96	194.166667	1778.75
13.91	369.270833	3440.10417
27.82	738.350515	7151.13402
31.3	841.041667	7881.35417

Report	File Name	64MSMS00840 et al.			
	Sample Name	BOD Calibration - BTX 20190402			
	Date	Tuesday, April 2, 2019 9:26:47			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	21.55	142.78	423.35	86.29	26.42	252.00
Intercept	11.98	55.46	77.28	15.36	8.08	38.60
Intensity	10.21	45.52	116.46	26.25	6.88	66.67
Int SD	11.33	25.95	38.47	17.90	8.86	29.40
Concentration	-0.08	-0.07	0.09	0.13	-0.05	0.11
Conc SD	0.53	0.18	0.09	0.21	0.34	0.12
Compound Con	-0.08		0.11		0.03	
Compound SD	0.25		0.11		0.16	
Det. Limit	1.58	0.55	0.27	0.62	1.01	0.35
Compound DL	1.06		0.45		0.68	

4/2/19.14.10.00
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Tue, Apr 2, 2019 at 14:09:59; Exp. Comment: BTX

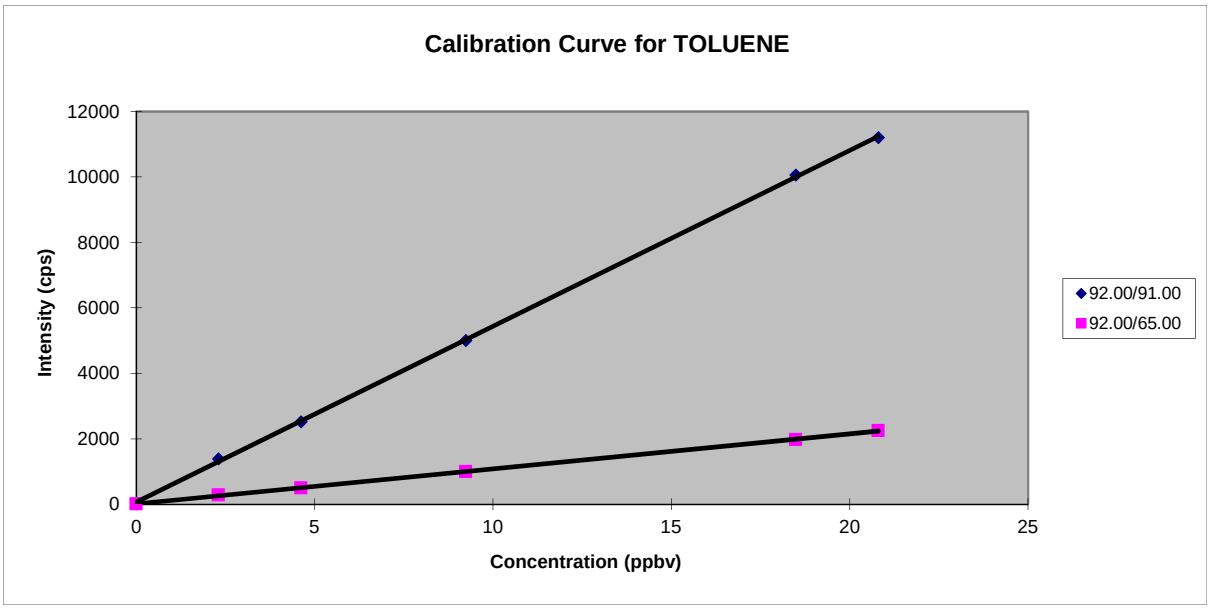




Filename:	64MSMS00844 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Tuesday, April 2, 2019 14:28:47					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.00	7.07	9.14	11.10	13.12	15.27

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	27.8087979	174.556982
Intercept:	6.73873331	70.6262102
Correlation:	0.99949983	0.9996621

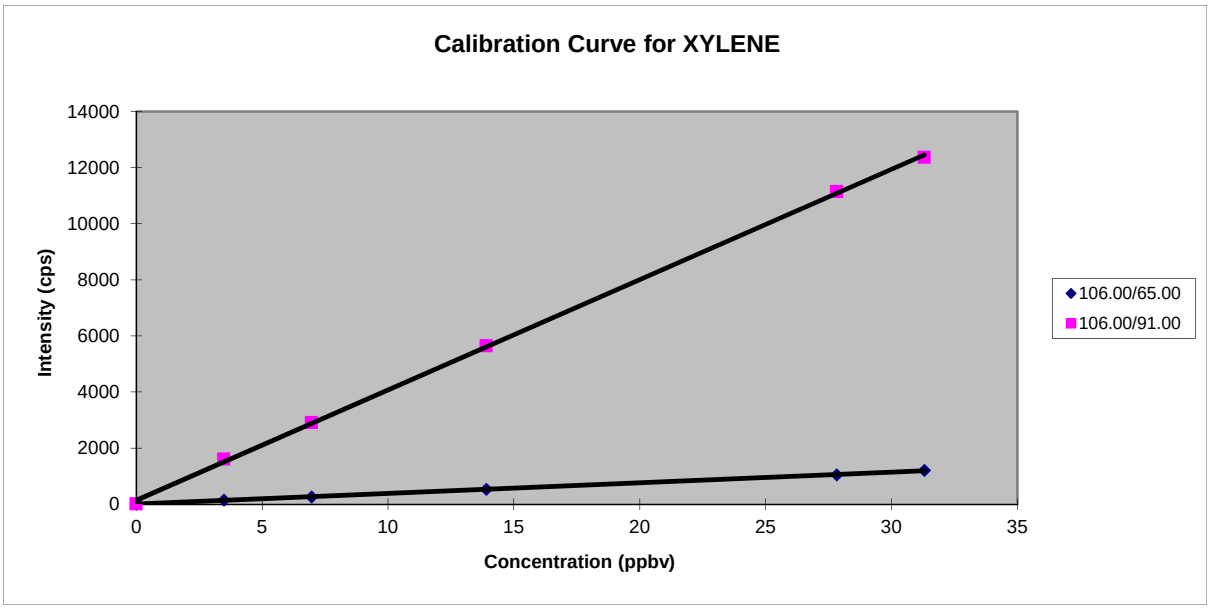
Concentratior	78.00/39.00	78.00/52.00
0	3.4375	22.2916667
2.31	81.875	526.770833
4.62	135.520833	883.333333
9.24	251.458333	1670
18.49	522.5	3333.75
20.8	587.916667	3668.54167



Filename:	64MSMS00844 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Tuesday, April 2, 2019 14:29:23					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.00	7.07	9.14	11.10	13.12	15.27

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	537.487954	106.794813
Intercept:	63.8335656	12.3911955
Correlation:	0.99992774	0.99990199

Concentratior	92.00/91.00	92.00/65.00
0	22.2916667	6.04166667
2.31	1388.54167	277.708333
4.62	2517.5	496.979167
9.24	5001.5625	995.833333
18.49	1.01E+04	1973.54167
20.8	1.12E+04	2247.08333



Filename:	64MSMS00844 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Tuesday, April 2, 2019 14:29:50					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.00	7.07	9.14	11.10	13.12	15.27

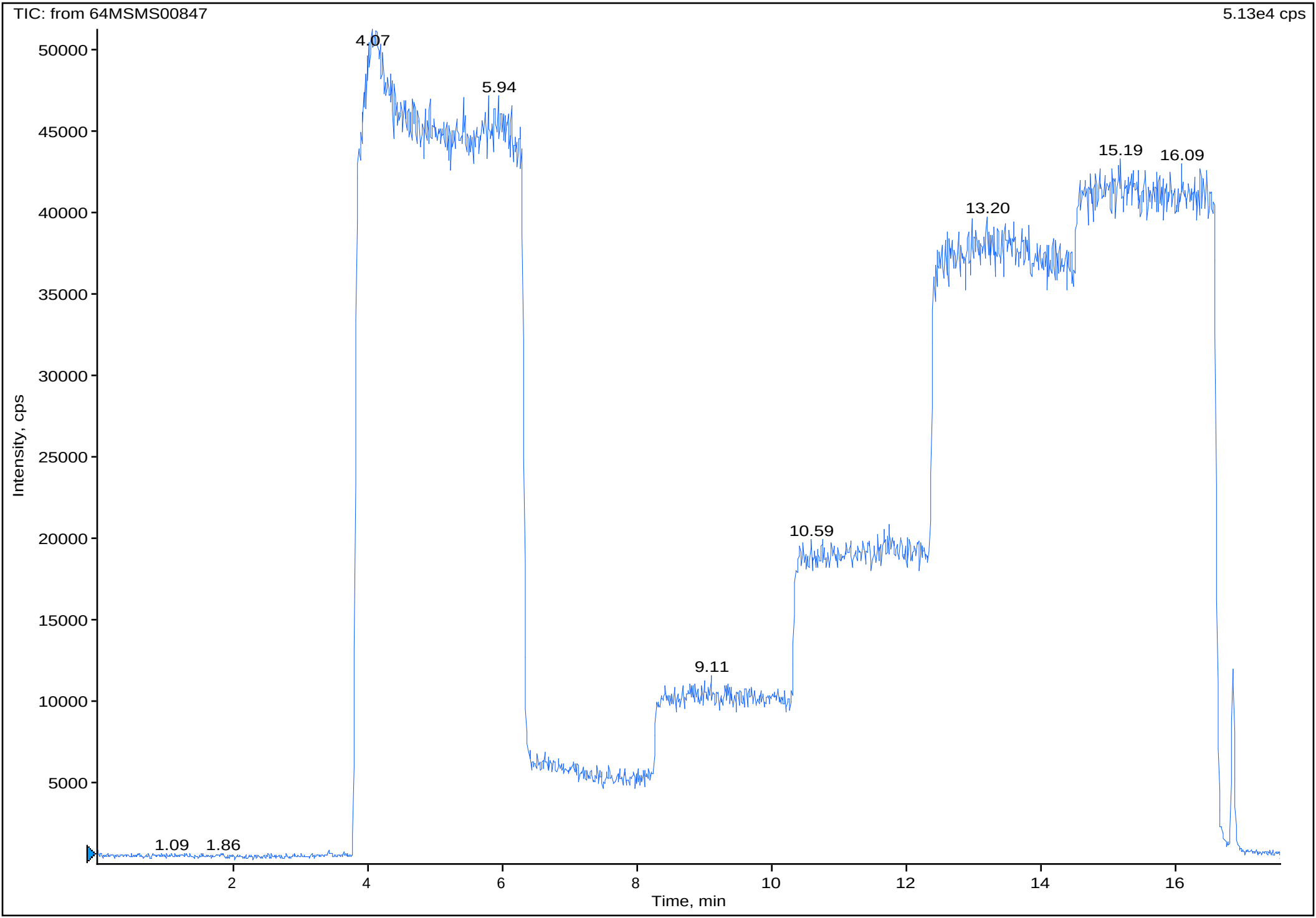
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	38.0126137	393.384031
Intercept:	5.5561896	138.88291
Correlation:	0.99979132	0.9998541

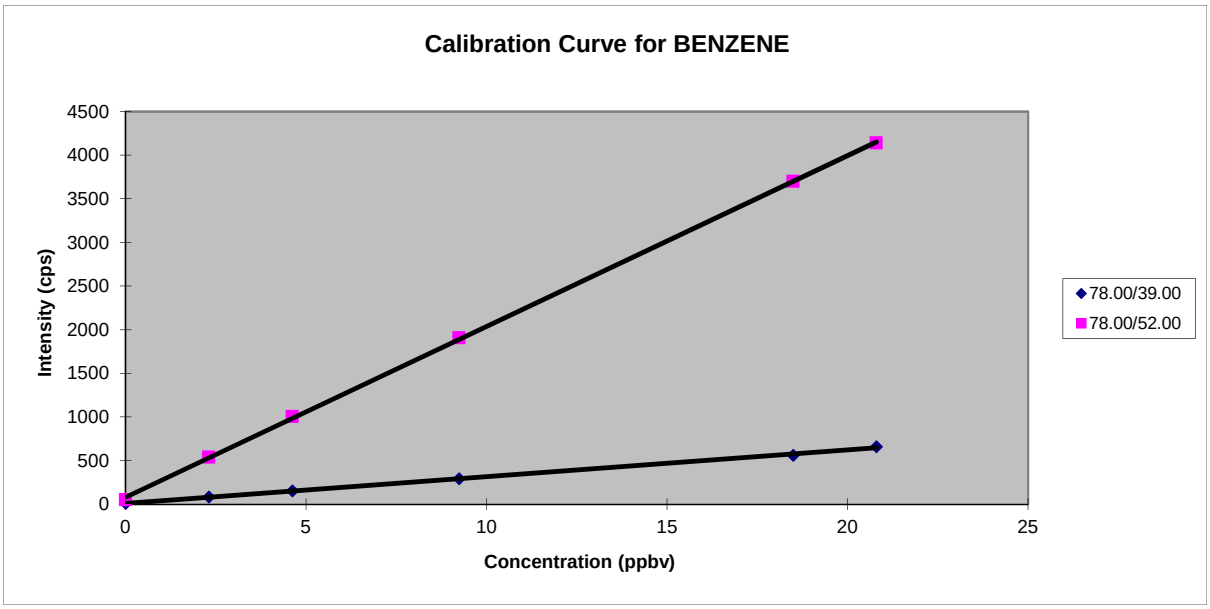
Concentratior	106.00/65.00	106.00/91.00
0	2.08333333	11.3541667
3.48	147.916667	1602.08333
6.96	265.3125	2901.25
13.91	534.0625	5642.8125
27.82	1048.64583	1.11E+04
31.3	1208.22917	1.24E+04

Report	File Name	64MSMS00844 et al.			
	Sample Name	MOD Calibration - BTX 20190402			
	Date	Tuesday, April 2, 2019 14:30:23			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	27.81	174.56	537.49	106.79	38.01	393.38
Intercept	6.74	70.63	63.83	12.39	5.56	138.88
Intensity	4.38	23.02	29.06	6.04	3.23	21.56
Int SD	6.12	15.43	23.80	8.64	7.88	26.21
Concentration	-0.08	-0.27	-0.06	-0.06	-0.06	-0.30
Conc SD	0.22	0.09	0.04	0.08	0.21	0.07
Compound Con	-0.18		-0.06		-0.18	
Compound SD	0.11		0.04		0.10	
Det. Limit	0.66	0.27	0.13	0.24	0.62	0.20
Compound DL	0.46		0.19		0.41	

4/2/19.18.28.52
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Tue, Apr 2, 2019 at 18:28:50; Exp. Comment: BTX

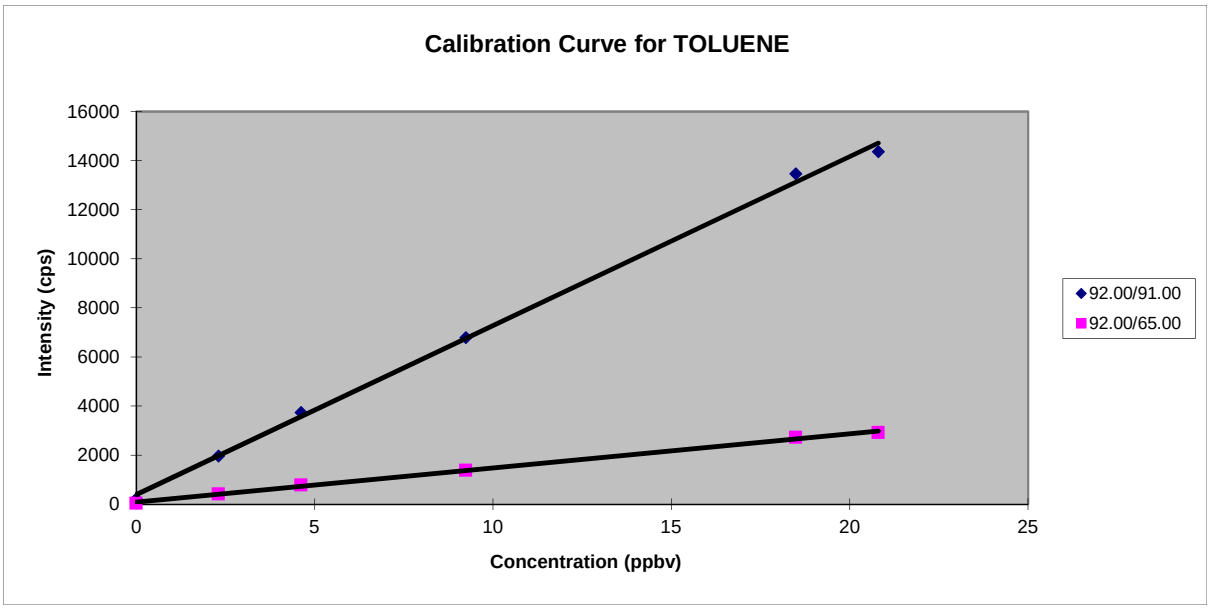




Filename:	64MSMS00847 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Tuesday, April 2, 2019 18:47:28					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.36	9.31	11.40	13.46	15.55

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	30.6305548	195.670631
Intercept:	10.656294	80.6393303
Correlation:	0.99940485	0.99994338

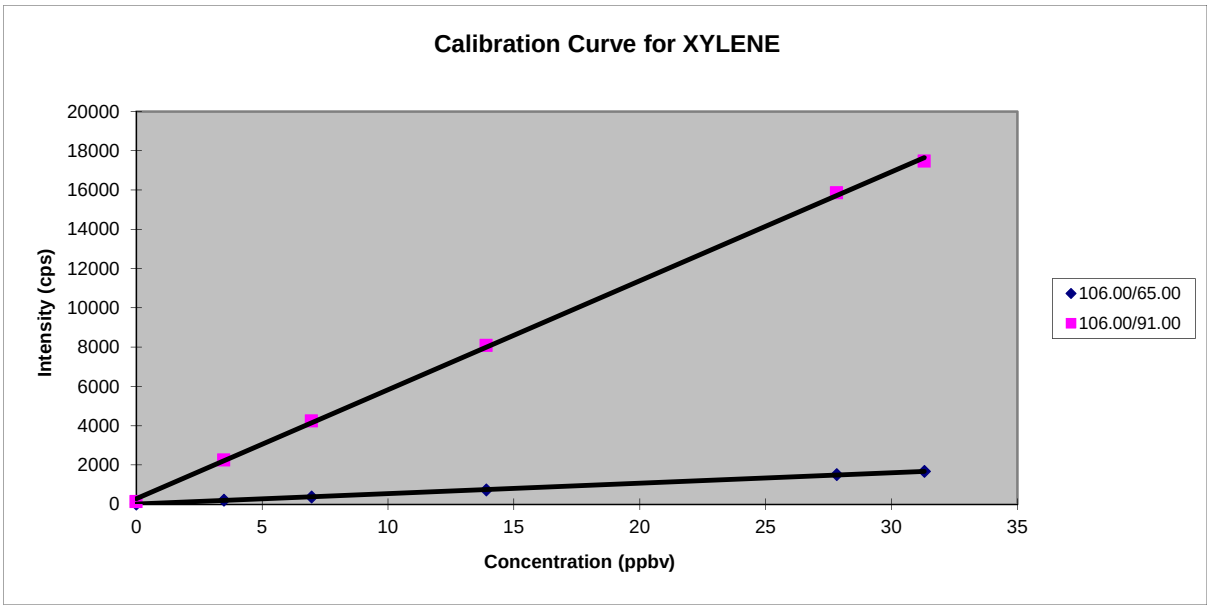
Concentratior	78.00/39.00	78.00/52.00
0	8.85416667	52.0833333
2.31	83.2291667	537.1875
4.62	154.0625	1005.10417
9.24	294.479167	1904.375
18.49	561.458333	3697.1875
20.8	660.625	4139.79167



Filename:	64MSMS00847 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Tuesday, April 2, 2019 18:48:06					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.36	9.31	11.40	13.46	15.55

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	688.46092	139.105743
Intercept:	392.784565	90.4839676
Correlation:	0.99915195	0.99921409

Concentratior	92.00/91.00	92.00/65.00
0	215.729167	42.6041667
2.31	1971.97917	419.375
4.62	3743.33333	777.916667
9.24	6784.89583	1375.83333
18.49	1.35E+04	2719.58333
20.8	1.44E+04	2922.39583



Filename:	64MSMS00847 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Tuesday, April 2, 2019 18:48:38					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.36	9.31	11.40	13.46	15.55

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	53.4009128	554.834148
Intercept:	10.2119407	282.252413
Correlation:	0.99985083	0.99982355

Concentratior	106.00/65.00	106.00/91.00
0	12.3958333	125.625
3.48	209.791667	2243.75
6.96	373.854167	4233.33333
13.91	735.833333	8080
27.82	1508.33333	1.59E+04
31.3	1678.4375	1.75E+04

Report	File Name	64MSMS00847 et al.			
	Sample Name	EOD Calibration - BTX 20190402			
	Date	Tuesday, April 2, 2019 18:49:36			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	30.63	195.67	688.46	139.11	53.40	554.83
Intercept	10.66	80.64	392.78	90.48	10.21	282.25
Intensity	8.85	52.08	215.73	42.60	12.40	125.63
Int SD	10.65	26.99	50.80	23.04	12.96	48.16
Concentration	-0.06	-0.15	-0.26	-0.34	0.04	-0.28
Conc SD	0.35	0.14	0.07	0.17	0.24	0.09
Compound Con	-0.10		-0.30		-0.12	
Compound SD	0.17		0.08		0.12	
Det. Limit	1.04	0.41	0.22	0.50	0.73	0.26
Compound DL	0.73		0.36		0.49	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 4/3/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3200	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:56	1500 SCCS	~191	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18 DWY15-0168		Calibration Date:	EXP: 5/2/2019
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Wed, Apr 3, 2019, 7:21:43
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR03 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Wed, Apr 3, 2019, 7:18:21

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.069
100.000	0.078
125.000	0.083
160.000	0.093

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.038
70.000	0.042
100.000	0.040
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Wed, Apr 3, 2019, 7:22:00
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR03 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Wed, Apr 3, 2019, 7:18:21

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.069
100.000	0.078
125.000	0.083
160.000	0.093

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.038
70.000	0.042
100.000	0.040
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

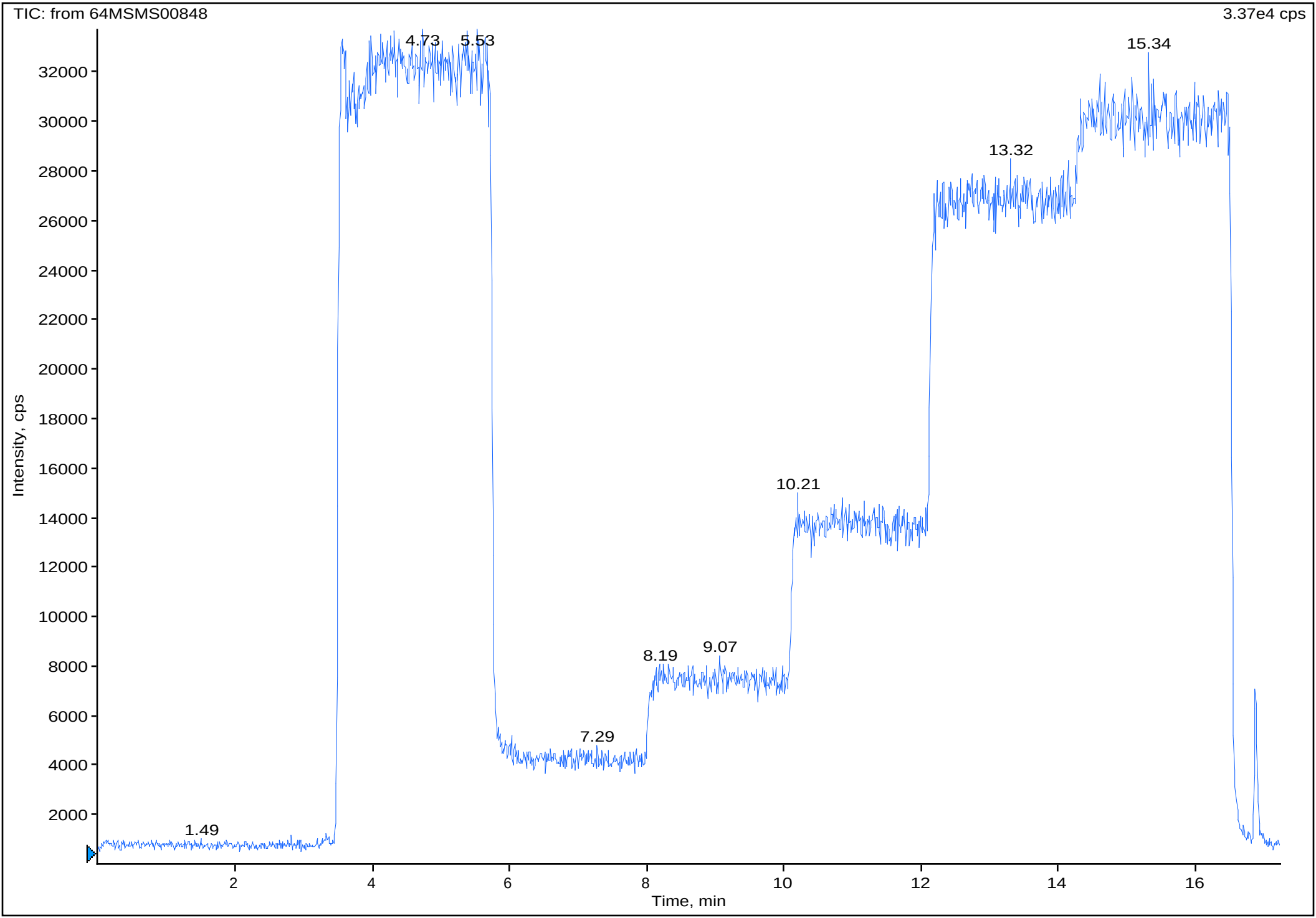
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

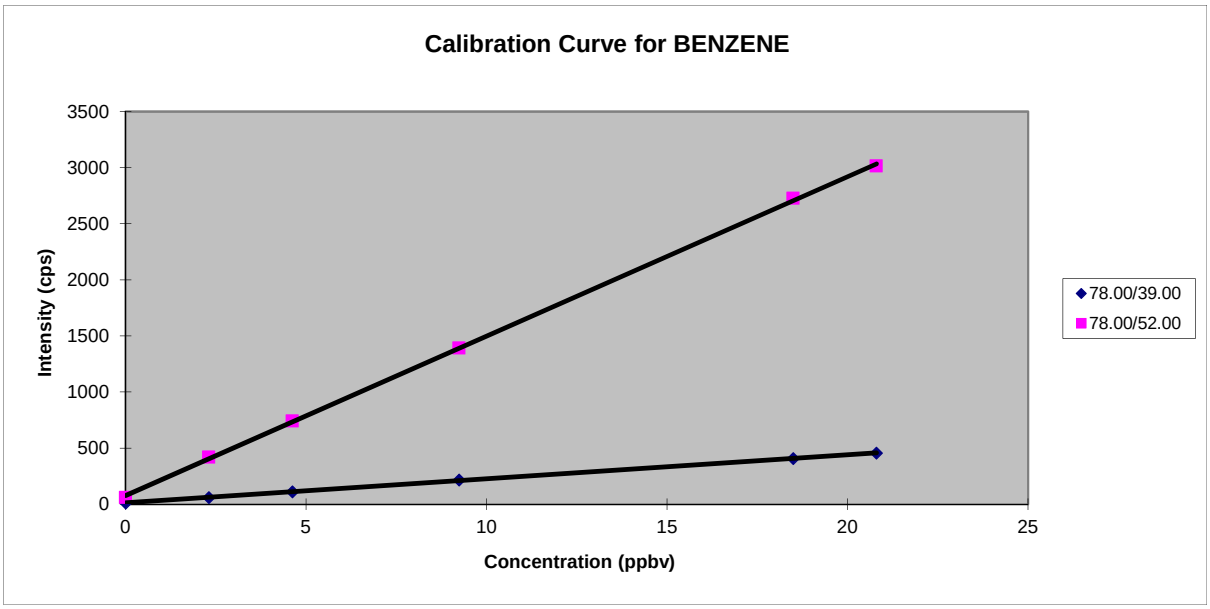
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/3/19.7.23.30
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, Apr 3, 2019 at 7:23:30; Exp. Comment: BTX

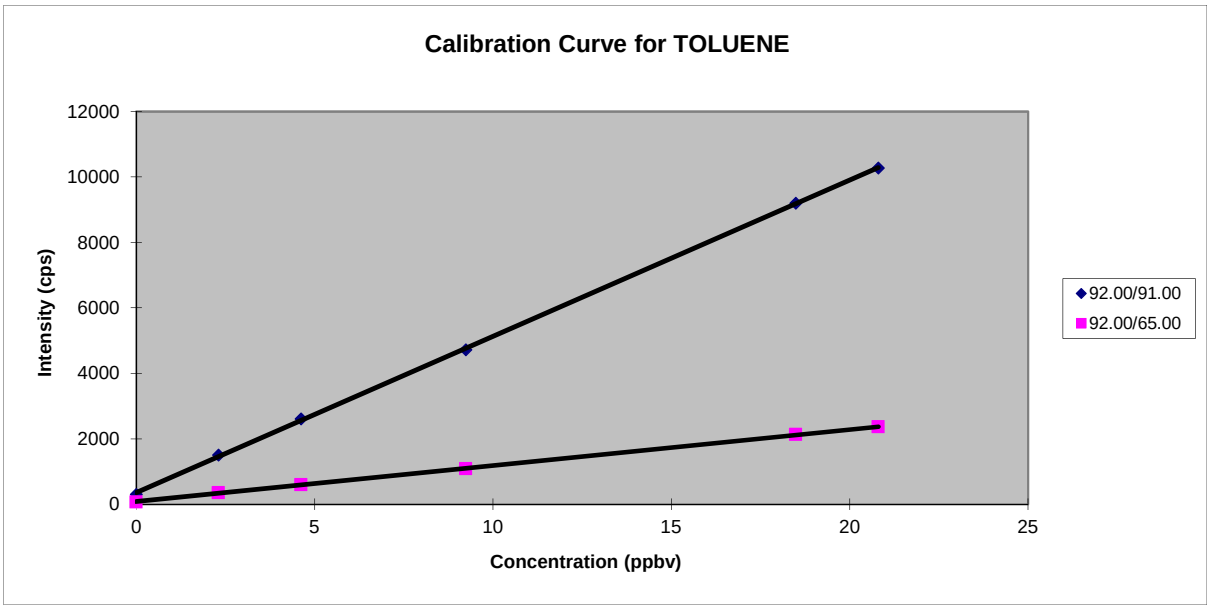




Filename:	64MSMS00848 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Wednesday, April 3, 2019 7:43:24					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.00	9.08	11.10	13.25	15.33

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	21.4288073	142.109368
Intercept:	12.603475	78.1544961
Correlation:	0.99982157	0.9999123

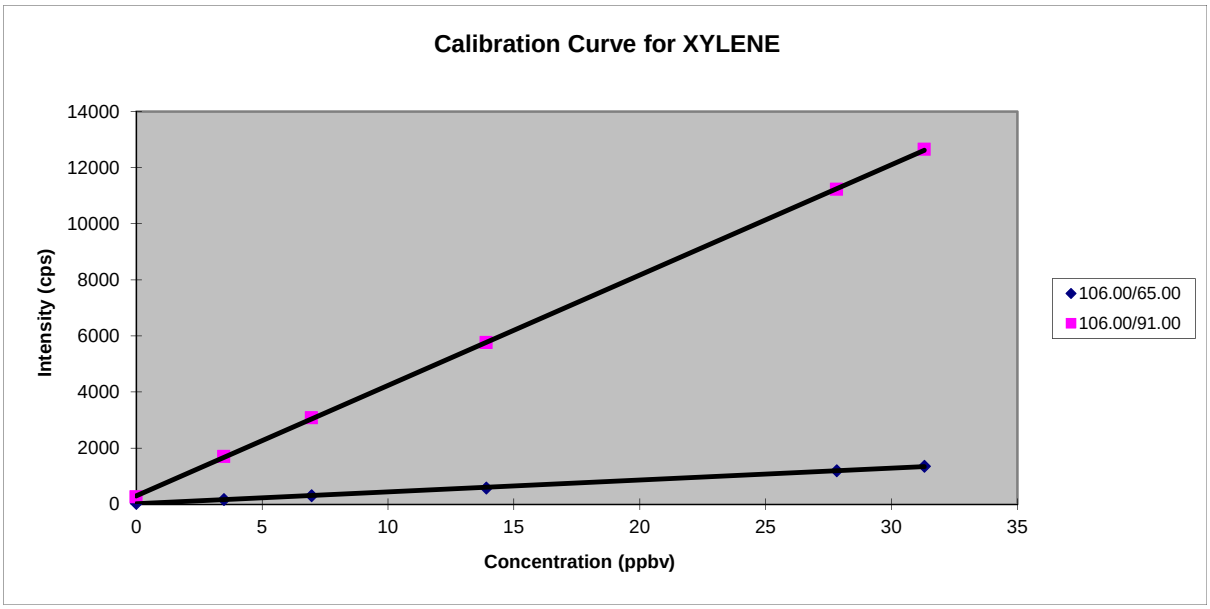
Concentratior	78.00/39.00	78.00/52.00
0	11.5625	60.4166667
2.31	59.4791667	420
4.62	111.145833	739.583333
9.24	217.604167	1390.625
18.49	407.395833	2725.72917
20.8	456.875	3013.95833



Filename:	64MSMS00848 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Wednesday, April 3, 2019 7:44:05					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.00	9.08	11.10	13.25	15.33

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	477.440734	109.943943
Intercept:	355.918649	82.6577401
Correlation:	0.99994379	0.99991918

Concentratior	92.00/91.00	92.00/65.00
0	304.479167	70.8333333
2.31	1500.20833	353.229167
4.62	2611.66667	595
9.24	4720.10417	1085.20833
18.49	9202.60417	2125
20.8	1.03E+04	2364.16667



Filename:	64MSMS00848 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Wednesday, April 3, 2019 7:44:41					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.00	9.08	11.10	13.25	15.33

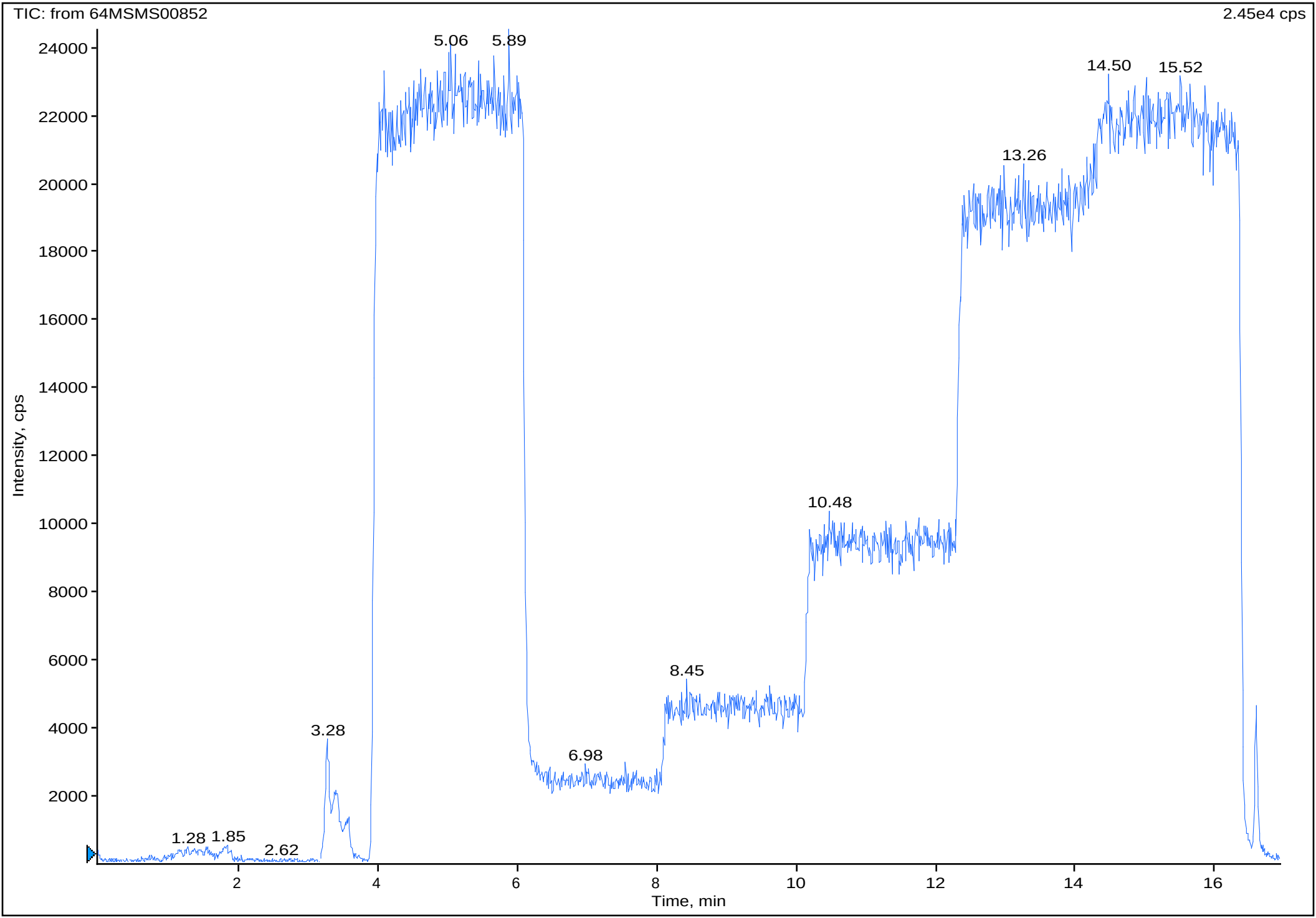
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	42.3089851	393.716751
Intercept:	16.2031688	298.28199
Correlation:	0.99970421	0.99997814

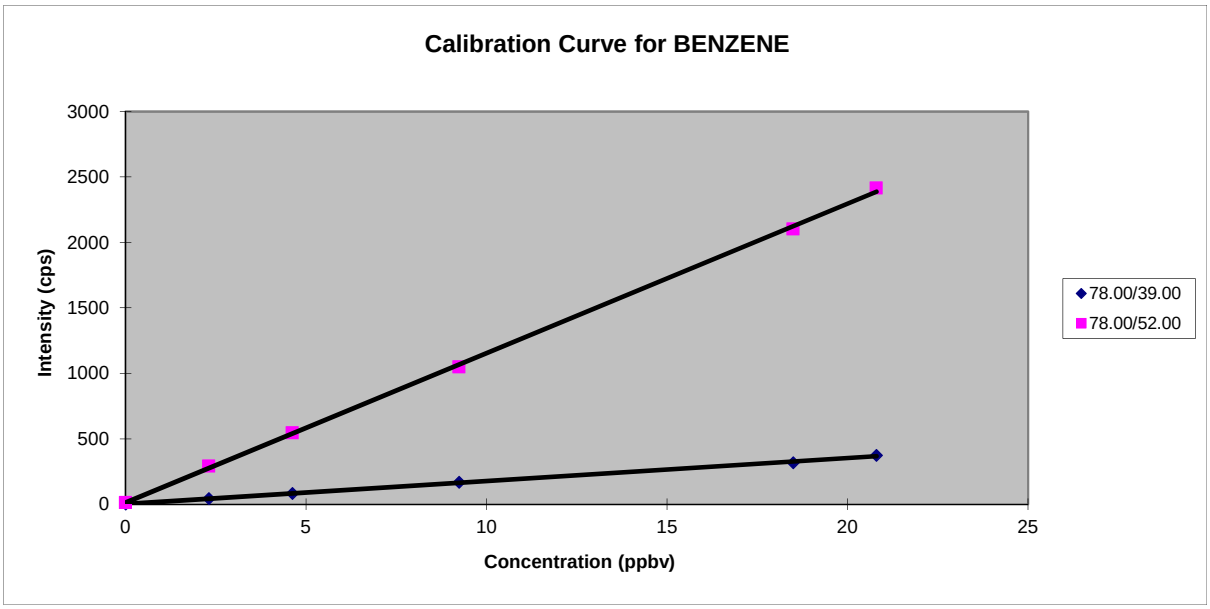
Concentratior	106.00/65.00	106.00/91.00
0	28.75	257.083333
3.48	171.458333	1693.64583
6.96	300.729167	3080.625
13.91	583.125	5755.41667
27.82	1193.75	1.12E+04
31.3	1350.9375	1.26E+04

Report	File Name	64MSMS00848 et al.			
	Sample Name	BOD Calibration - BTX 20190403			
	Date	Wednesday, April 3, 2019 7:45:15			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	21.43	142.11	477.44	109.94	42.31	393.72
Intercept	12.60	78.15	355.92	82.66	16.20	298.28
Intensity	11.56	60.42	304.48	70.83	28.75	257.08
Int SD	10.19	25.42	65.77	26.06	15.91	57.25
Concentration	-0.05	-0.12	-0.11	-0.11	0.30	-0.10
Conc SD	0.48	0.18	0.14	0.24	0.38	0.15
Compound Con	-0.09		-0.11		0.10	
Compound SD	0.23		0.13		0.18	
Det. Limit	1.43	0.54	0.41	0.71	1.13	0.44
Compound DL	0.98		0.56		0.78	

4/3/19.14.45.04
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, Apr 3, 2019 at 14:45:02; Exp. Comment: BTX

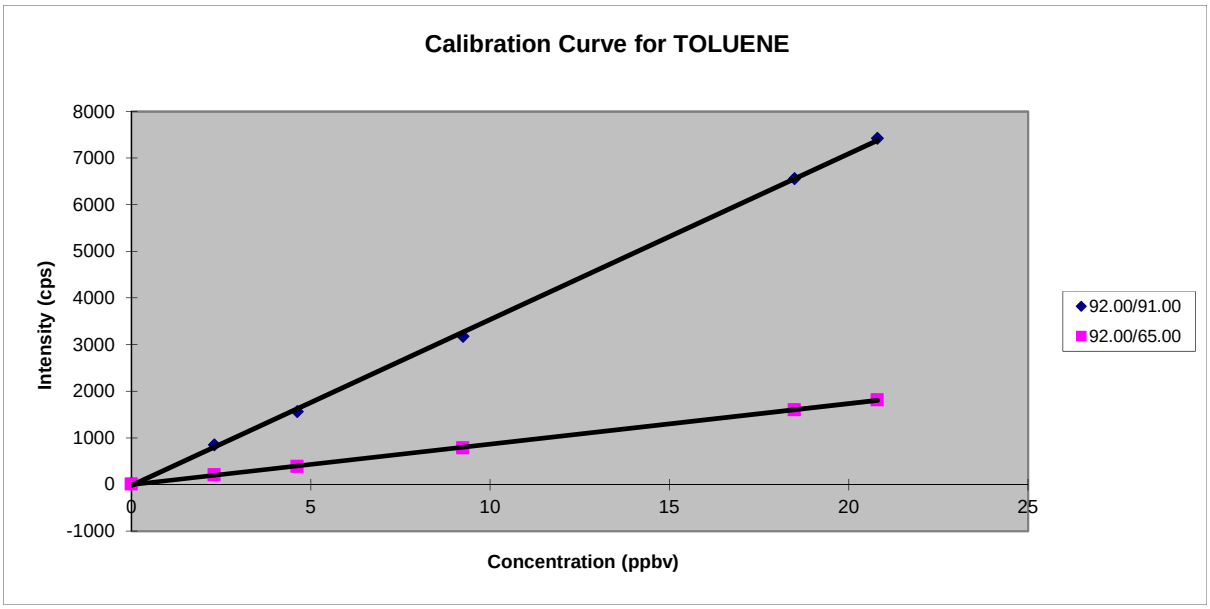




Filename:	64MSMS00852 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Wednesday, April 3, 2019 15:02:55					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	7.13	9.16	11.18	13.24	15.16

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	17.5338221	114.139014
Intercept:	2.52686812	13.3194801
Correlation:	0.99946467	0.99981919

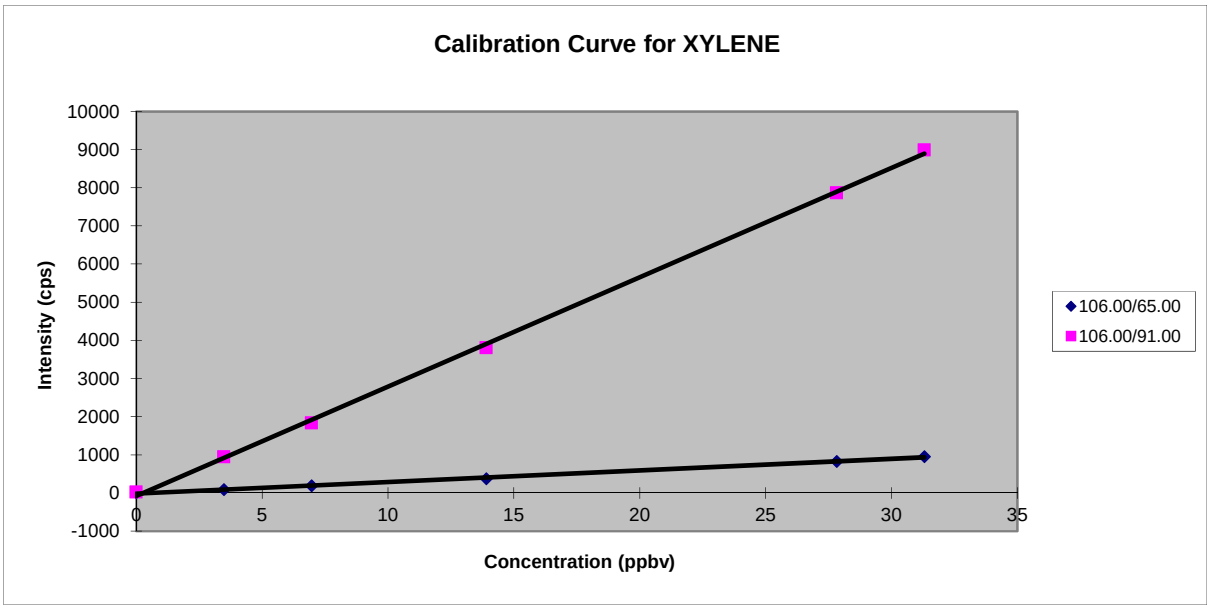
Concentratior	78.00/39.00	78.00/52.00
0	3.125	12.3958333
2.31	43.125	290.416667
4.62	81.6494845	543.608247
9.24	167.604167	1048.4375
18.49	318.4375	2101.45833
20.8	373.645833	2413.75



Filename:	64MSMS00852 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Wednesday, April 3, 2019 15:03:31					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	7.13	9.16	11.18	13.24	15.16

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	355.757821	86.8340252
Intercept:	-17.808944	-2.24423
Correlation:	0.99978886	0.99987676

Concentratior	92.00/91.00	92.00/65.00
0	36.5625	9.27083333
2.31	853.333333	206.666667
4.62	1566.39175	384.43299
9.24	3175.10417	786.770833
18.49	6563.54167	1601.25
20.8	7428.54167	1813.95833



Filename:	64MSMS00852 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Wednesday, April 3, 2019 15:04:03					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	7.13	9.16	11.18	13.24	15.16

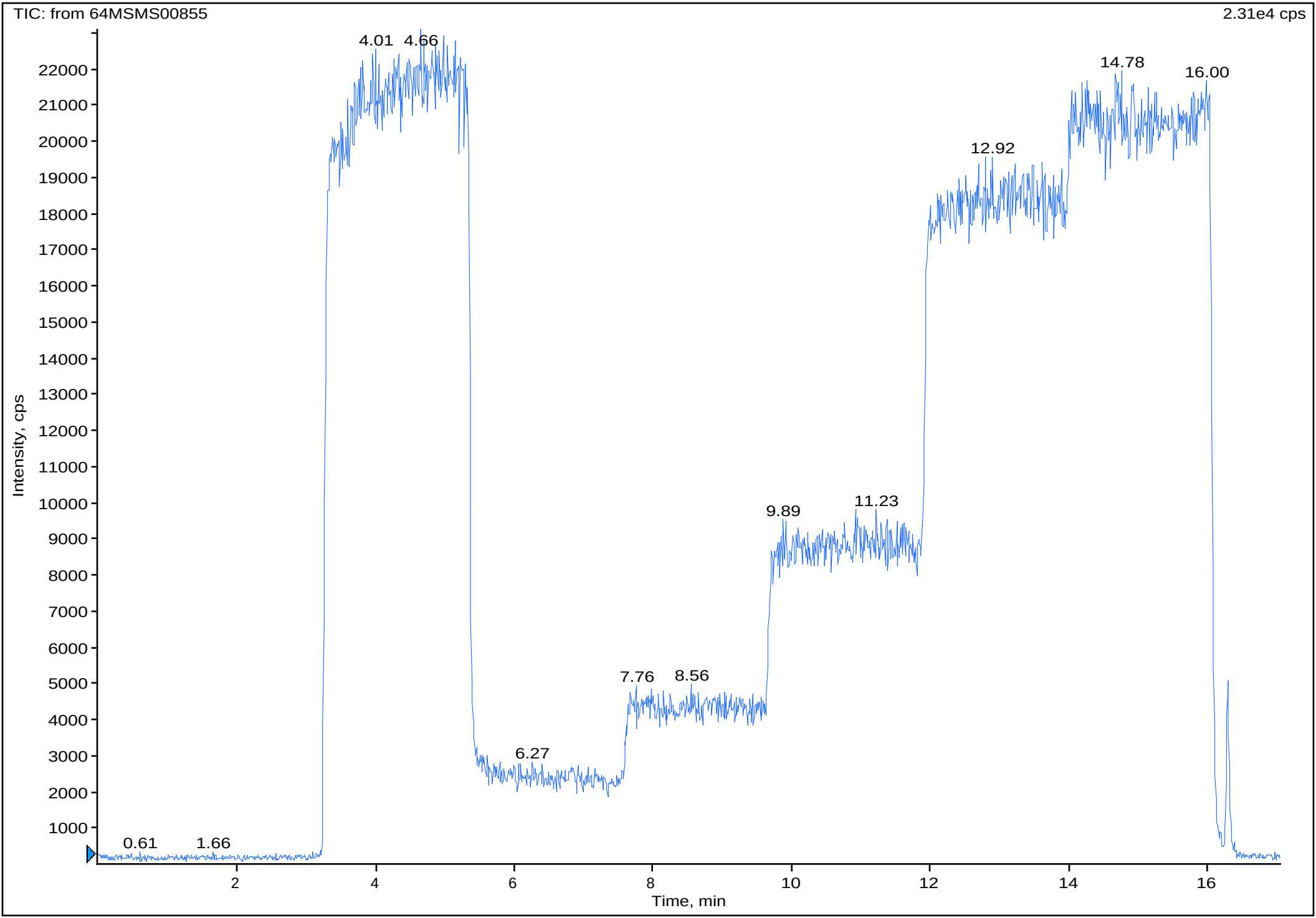
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	30.3278881	286.69682
Intercept:	-15.45421	-77.420249
Correlation:	0.99906602	0.99972893

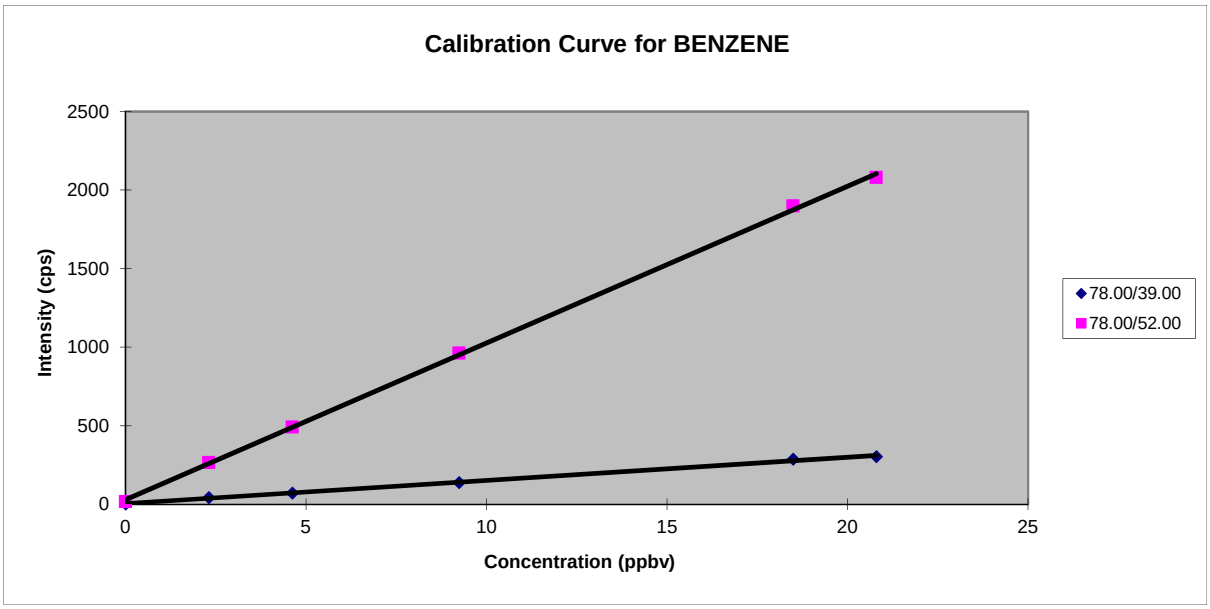
Concentratior	106.00/65.00	106.00/91.00
0	3.125	24.1666667
3.48	91.6666667	946.458333
6.96	190.618557	1838.04124
13.91	378.125	3803.85417
27.82	824.895833	7867.8125
31.3	950.3125	8985.72917

Report	File Name	64MSMS00852 et al.			
	Sample Name	MOD Calibration - BTX 20190403			
	Date	Wednesday, April 3, 2019 15:04:42			
	Time Range	2.00	to	3.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	17.53	114.14	355.76	86.83	30.33	286.70
Intercept	2.53	13.32	-17.81	-2.24	-15.45	-77.42
Intensity	3.13	12.40	36.56	9.27	3.13	24.17
Int SD	6.70	12.79	24.53	10.88	6.54	21.75
Concentration	0.03	-0.01	0.15	0.13	0.61	0.35
Conc SD	0.38	0.11	0.07	0.13	0.22	0.08
Compound Con	0.01		0.14		0.48	
Compound SD	0.17		0.07		0.10	
Det. Limit	1.15	0.34	0.21	0.38	0.65	0.23
Compound DL	0.74		0.29		0.44	

4/3/19.19.55.28
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, Apr 3, 2019 at 19:55:27; Exp. Comment: BTX

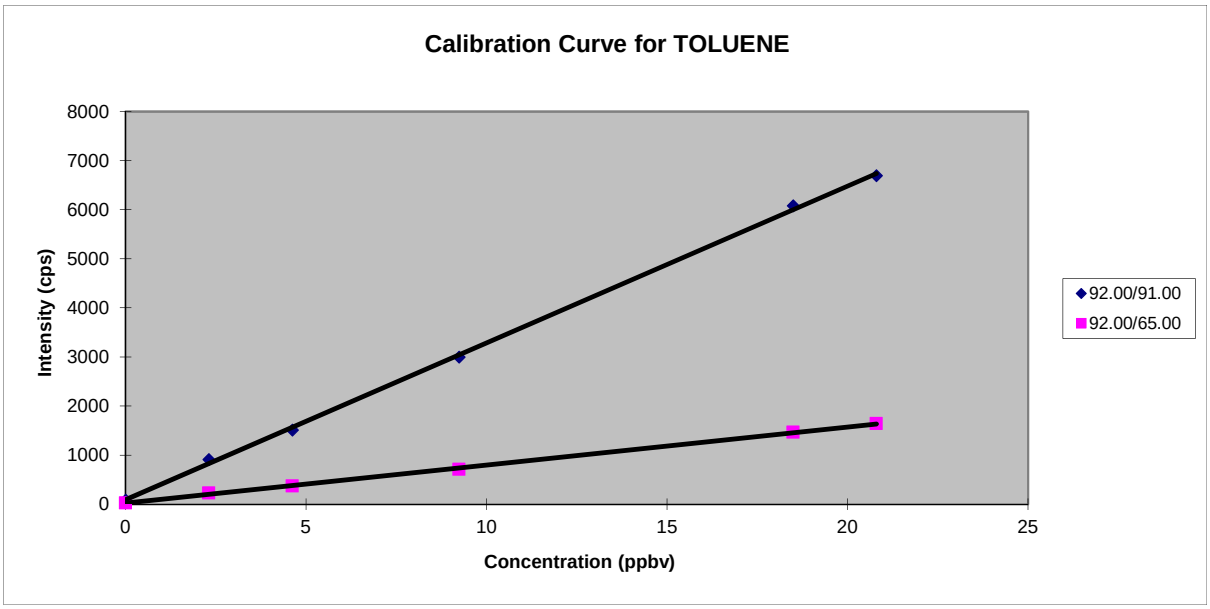




Filename:	64MSMS00855 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Wednesday, April 3, 2019 20:13:56					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.55	8.62	10.80	12.96	15.04

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	14.7267815	99.7666432
Intercept:	4.58457076	29.4029853
Correlation:	0.9987942	0.99979626

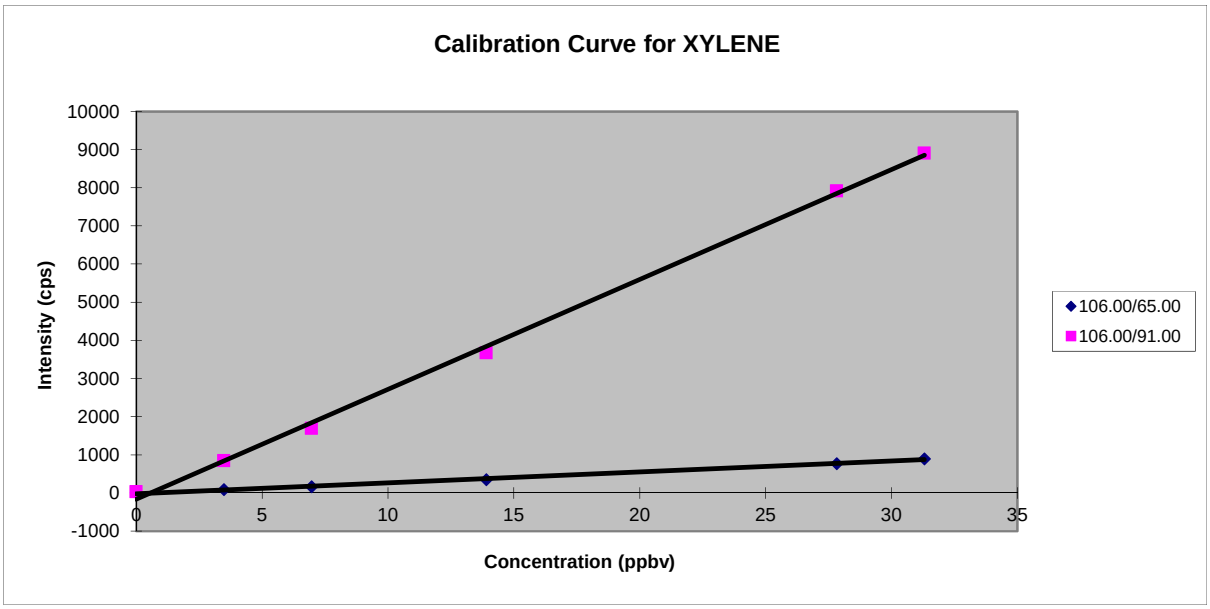
Concentratior	78.00/39.00	78.00/52.00
0	2.70833333	16.7708333
2.31	42.0833333	264.583333
4.62	71.5463918	490.309278
9.24	137.916667	961.770833
18.49	287.1875	1897.5
20.8	302.8125	2078.54167



Filename:	64MSMS00855 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Wednesday, April 3, 2019 20:14:36					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.55	8.62	10.80	12.96	15.04

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	319.488344	77.5369435
Intercept:	92.1684406	22.530748
Correlation:	0.99973634	0.99969221

Concentratior	92.00/91.00	92.00/65.00
0	82.5	22.2916667
2.31	908.75	224.375
4.62	1513.91753	373.195876
9.24	2995.9375	711.979167
18.49	6079.6875	1464.375
20.8	6691.04167	1639.16667



Filename:	64MSMS00855 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Wednesday, April 3, 2019 20:15:06					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.55	8.62	10.80	12.96	15.04

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	28.5575648	288.16897
Intercept:	-18.960549	-164.33663
Correlation:	0.99834593	0.99930949

Concentratior	106.00/65.00	106.00/91.00
0	4.0625	32.9166667
3.48	86.3541667	845
6.96	166.082474	1695.36082
13.91	348.333333	3670.41667
27.82	766.5625	7915.10417
31.3	898.541667	8908.64583

Report	File Name	64MSMS00855 et al.			
	Sample Name	EOD Calibration - BTX 20190403			
	Date	Wednesday, April 3, 2019 20:16:06			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	14.73	99.77	319.49	77.54	28.56	288.17
Intercept	4.58	29.40	92.17	22.53	-18.96	-164.34
Intensity	2.71	16.77	82.50	22.29	4.06	32.92
Int SD	5.13	14.83	31.89	15.79	6.74	18.41
Concentration	-0.13	-0.13	-0.03	0.00	0.81	0.68
Conc SD	0.35	0.15	0.10	0.20	0.24	0.06
Compound Con	-0.13		-0.02		0.75	
Compound SD	0.18		0.11		0.11	
Det. Limit	1.04	0.45	0.30	0.61	0.71	0.19
Compound DL	0.75		0.46		0.45	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 4/4/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3200	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
7:01	1500 SCCS	~191	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date:	Exp: 5/2/2019
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Thu, Apr 4, 2019, 7:29:41
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR03 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Wed, Apr 3, 2019, 7:18:21

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.069
100.000	0.078
125.000	0.083
160.000	0.093

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.038
70.000	0.042
100.000	0.040
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Thu, Apr 4, 2019, 7:29:13
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR03 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Wed, Apr 3, 2019, 7:18:21

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.069
100.000	0.078
125.000	0.083
160.000	0.093

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.038
70.000	0.042
100.000	0.040
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

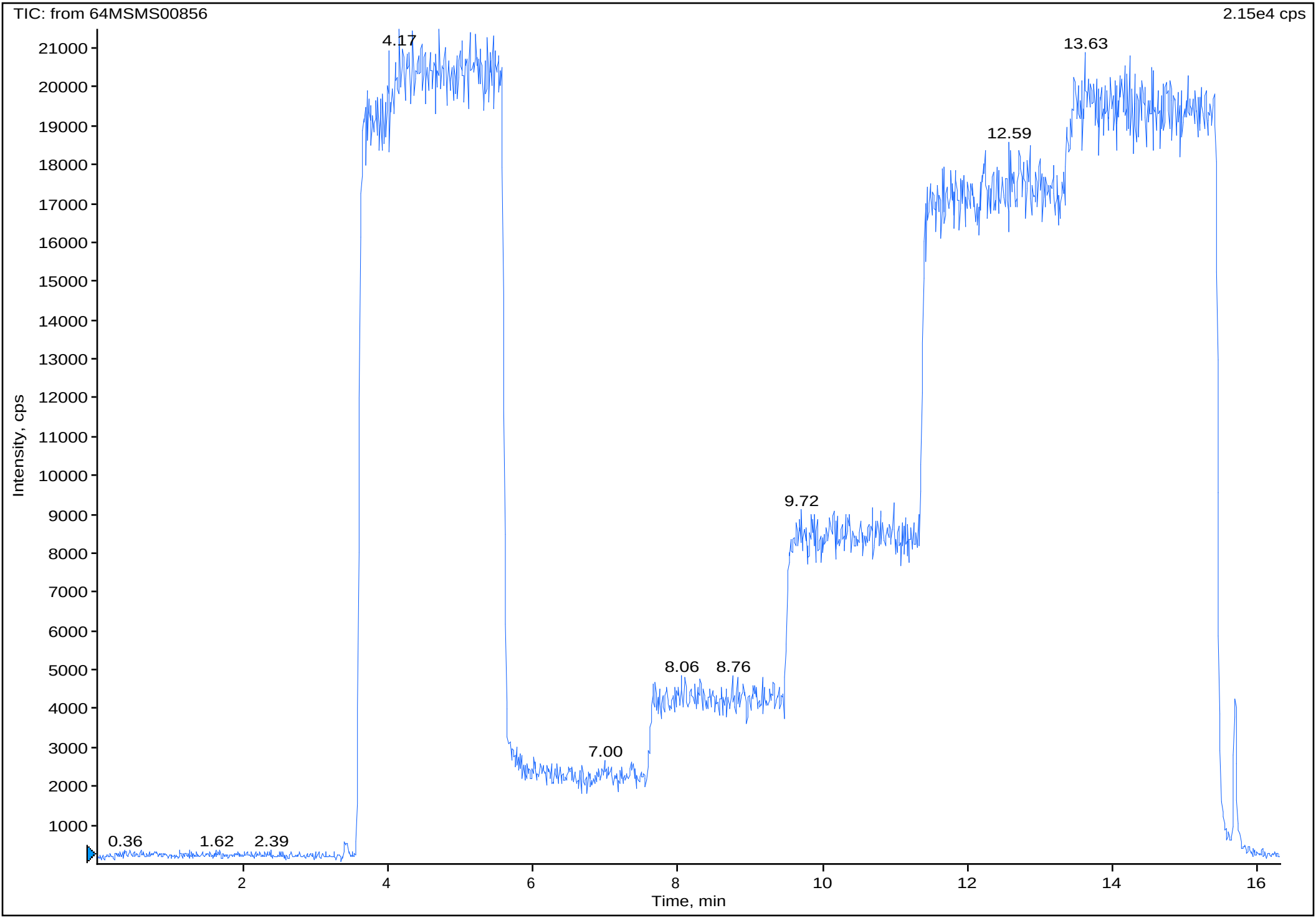
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

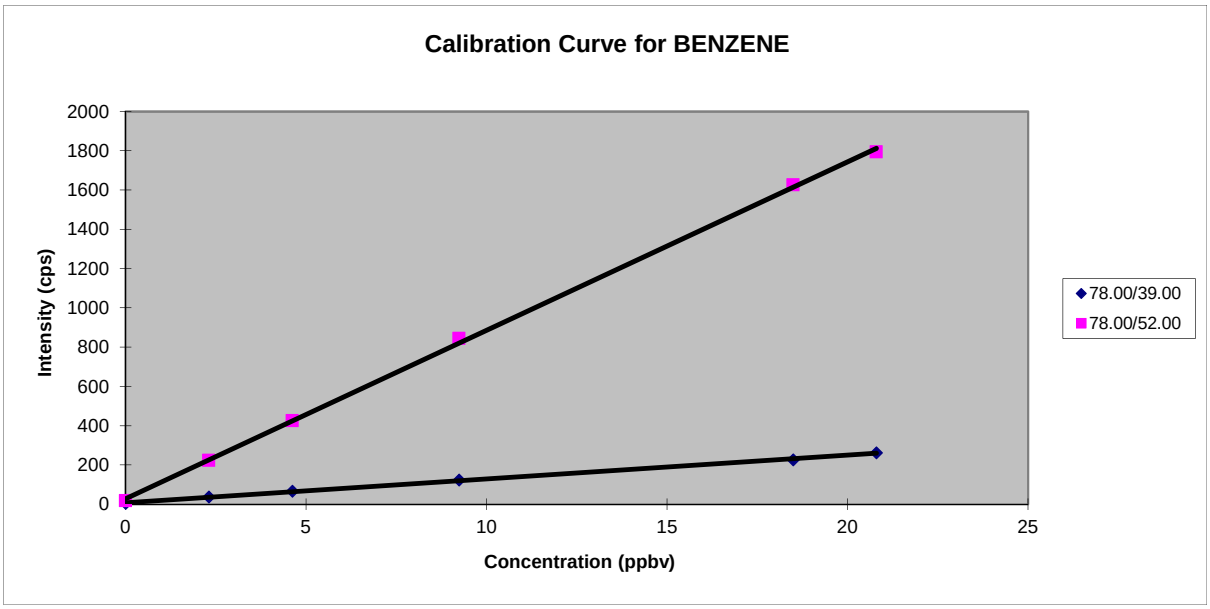
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/4/19.7.31.08
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Apr 4, 2019 at 7:31:08; Exp. Comment: BTX

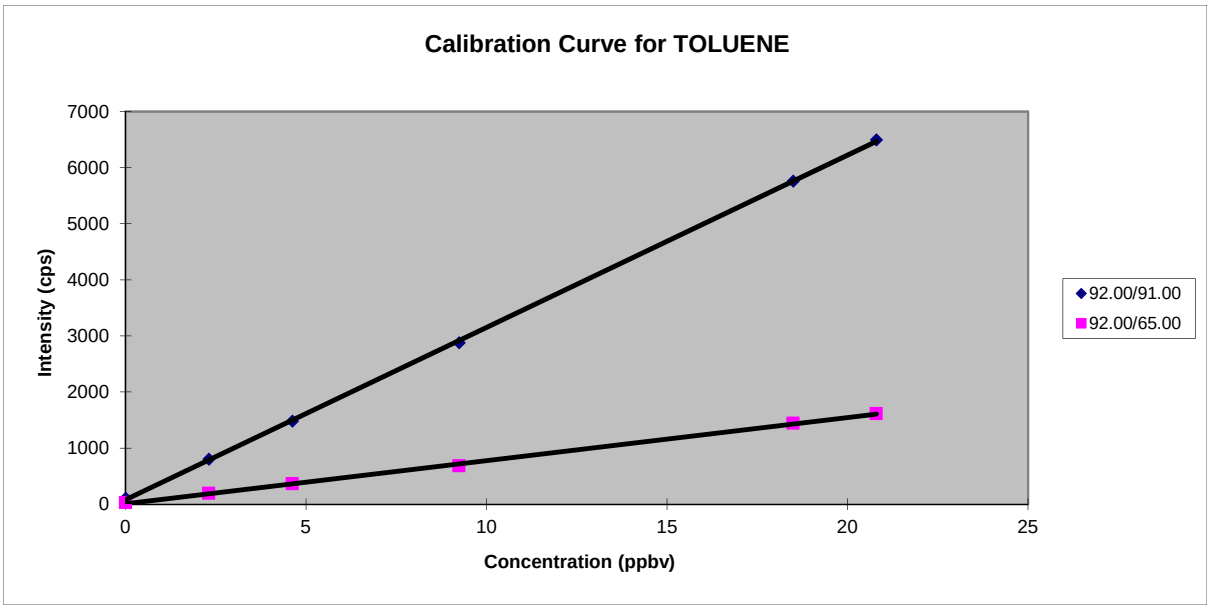




Filename:	64MSMS00856 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Thursday, April 4, 2019 7:49:20					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.65	8.58	10.48	12.42	14.36

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	12.133067	85.7906342
Intercept:	7.86737876	28.3453772
Correlation:	0.99941263	0.99978871

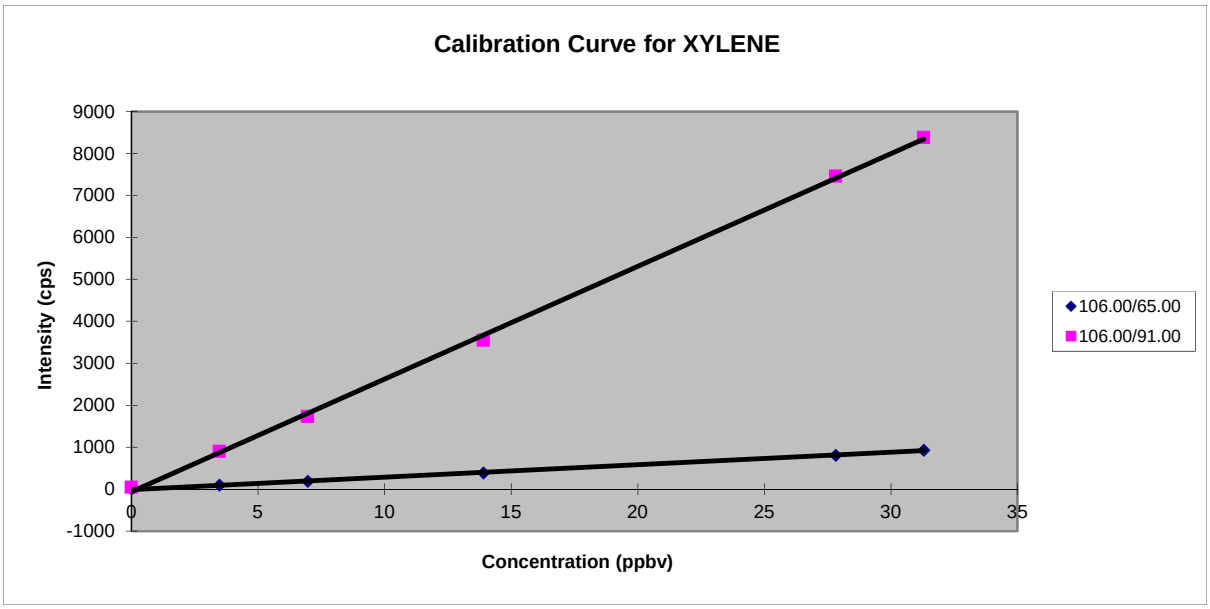
Concentratior	78.00/39.00	78.00/52.00
0	4.27083333	17.0833333
2.31	36.5625	223.333333
4.62	65.8333333	424.895833
9.24	123.75	843.958333
18.49	226.979167	1625.52083
20.8	262.708333	1793.22917



Filename:	64MSMS00856 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Thursday, April 4, 2019 7:50:03					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.65	8.58	10.48	12.42	14.36

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	307.156695	76.8290989
Intercept:	81.0392591	10.9020569
Correlation:	0.99995248	0.9995883

Concentratior	92.00/91.00	92.00/65.00
0	106.354167	27.7083333
2.31	803.645833	192.395833
4.62	1482.60417	364.270833
9.24	2877.5	684.0625
18.49	5758.85417	1442.91667
20.8	6492.1875	1615

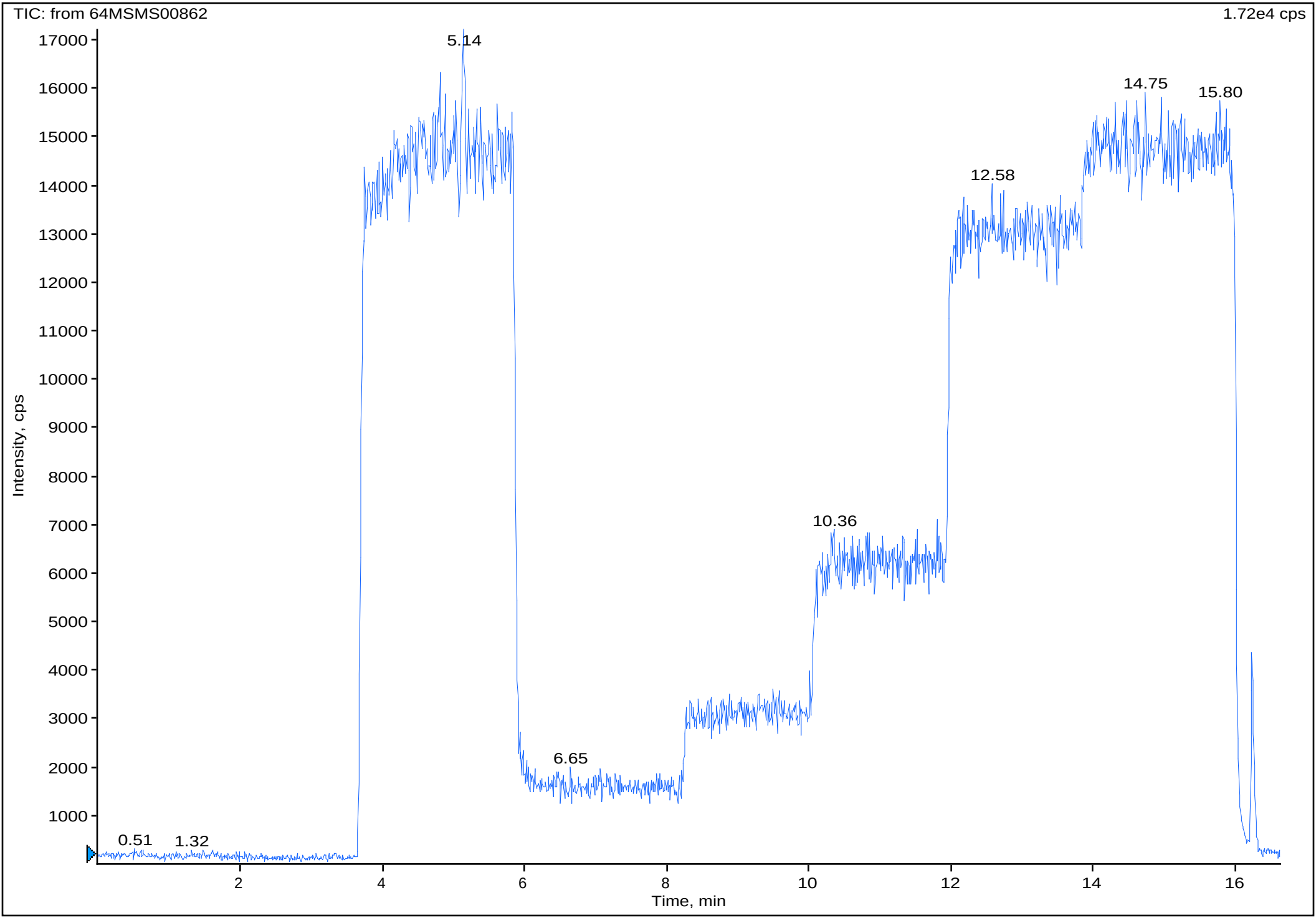


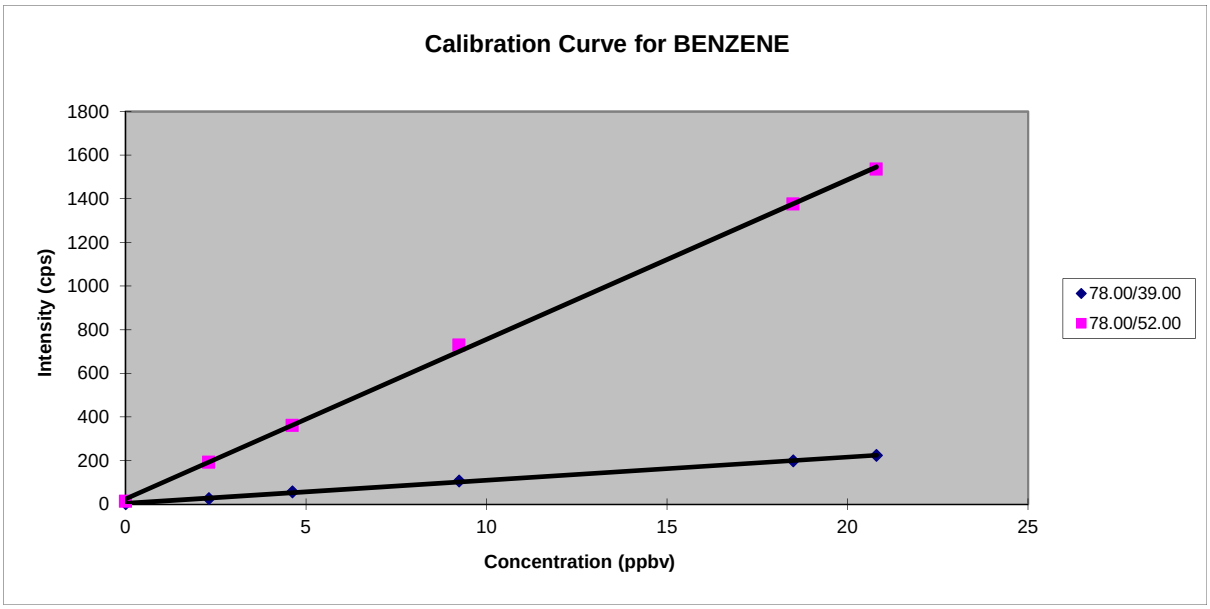
Filename:	64MSMS00856 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Thursday, April 4, 2019 7:50:34					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.65	8.58	10.48	12.42	14.36

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	29.557514	268.513223
Intercept:	-7.3574764	-61.438676
Correlation:	0.99943882	0.99967117

Concentratior	106.00/65.00	106.00/91.00
0	8.4375	47.2916667
3.48	97.8125	899.6875
6.96	186.145833	1725.72917
13.91	390	3540.41667
27.82	808.75	7453.95833
31.3	931.875	8377.08333

4/4/19.14.15.57
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Apr 4, 2019 at 14:15:56; Exp. Comment: BTX

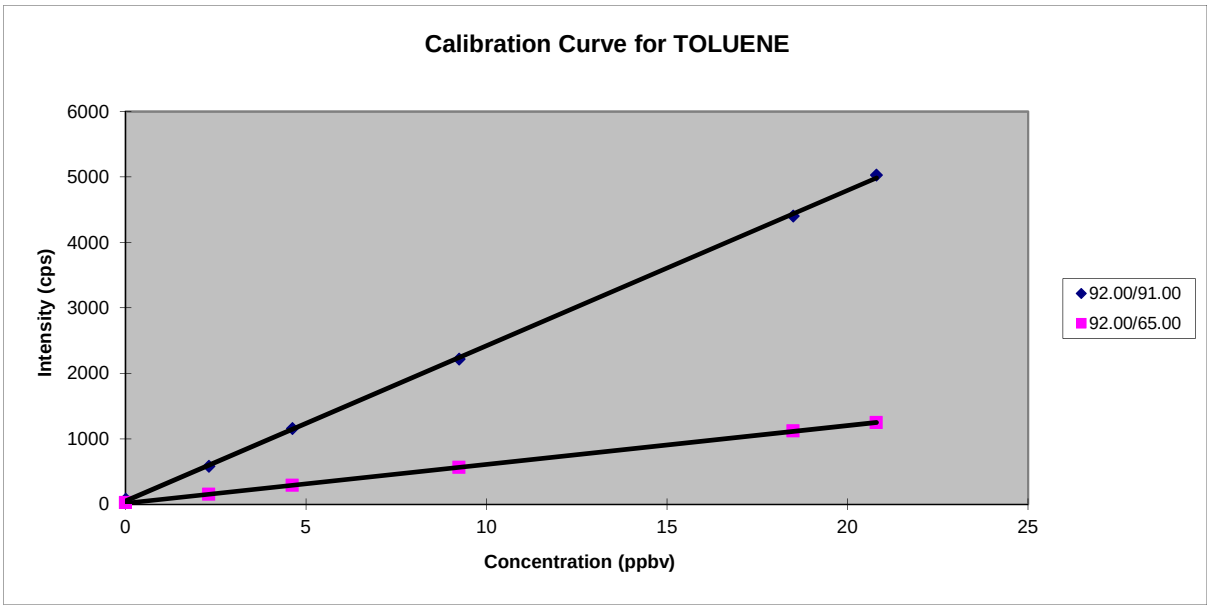




Filename:	64MSMS00862 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Thursday, April 4, 2019 14:33:43					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.08	9.12	11.01	12.94	14.88

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	10.5852966	73.1481275
Intercept:	4.70865808	24.7876141
Correlation:	0.99959459	0.99972956

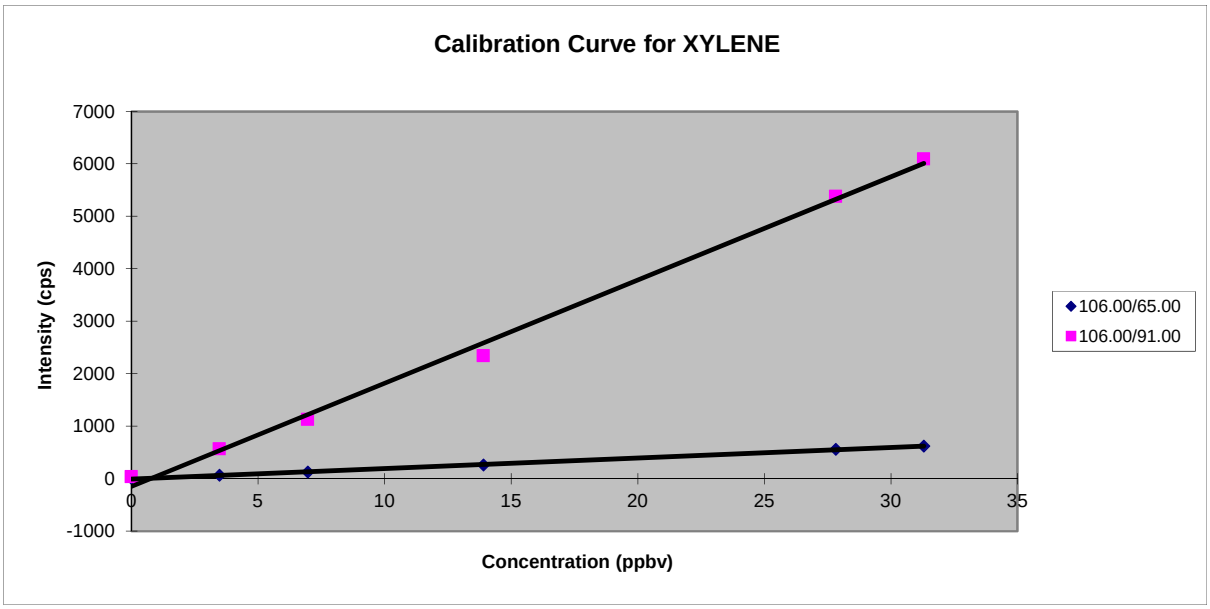
Concentratior	78.00/39.00	78.00/52.00
0	2.8125	12.8125
2.31	26.6666667	191.875
4.62	56.25	360.104167
9.24	106.354167	729.166667
18.49	199.791667	1376.04167
20.8	223.4375	1535.52083



Filename:	64MSMS00862 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Thursday, April 4, 2019 14:34:31					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.08	9.12	11.01	12.94	14.88

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	237.224486	59.2828053
Intercept:	51.7688903	16.2653808
Correlation:	0.99988969	0.99997054

Concentratior	92.00/91.00	92.00/65.00
0	76.9791667	21.875
2.31	582.604167	150.208333
4.62	1157.39583	287.5
9.24	2219.375	561.5625
18.49	4402.60417	1116.875
20.8	5028.125	1247.39583



Filename:	64MSMS00862 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Thursday, April 4, 2019 14:35:02					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.08	9.12	11.01	12.94	14.88

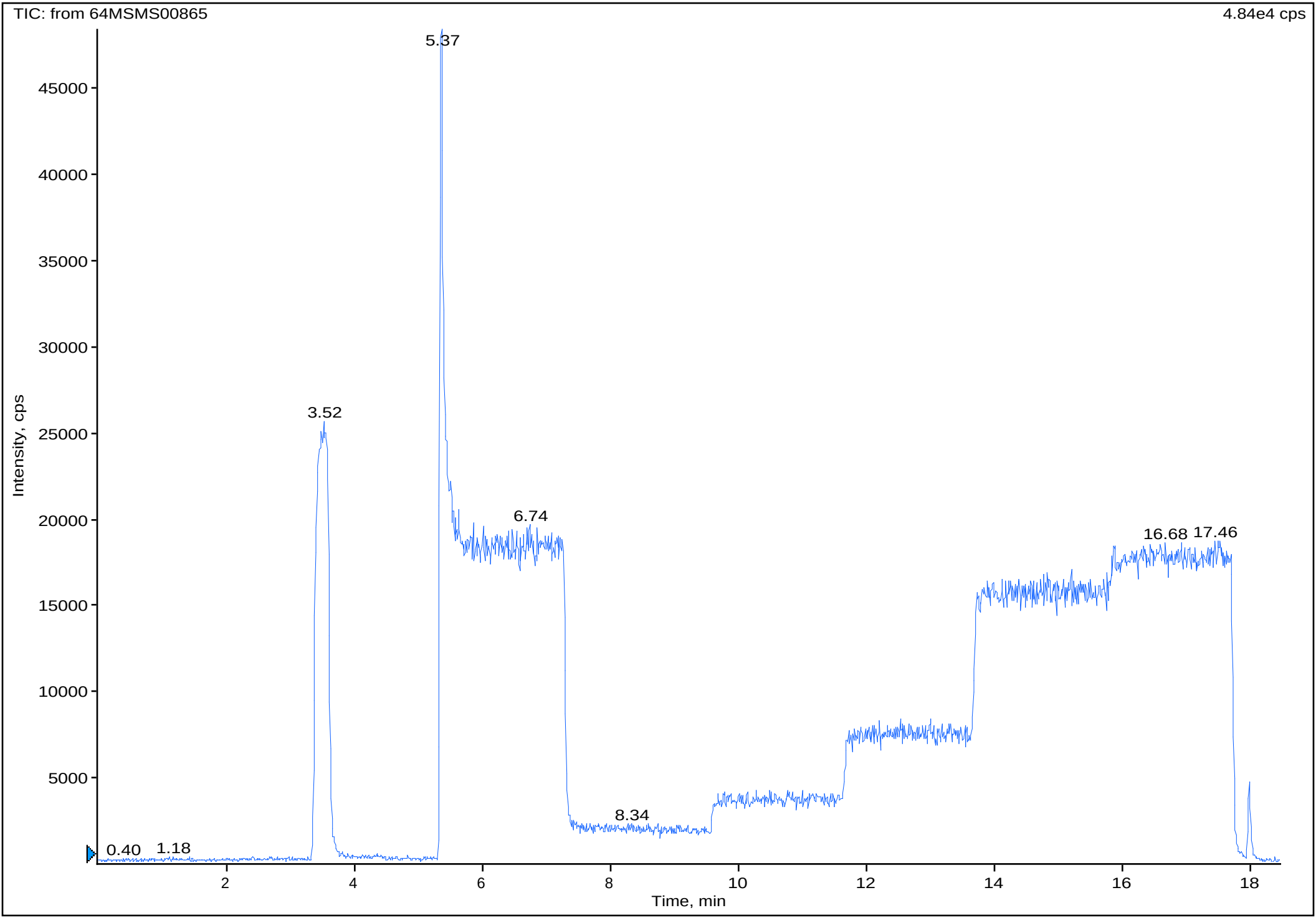
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	20.0724278	196.733618
Intercept:	-5.0916194	-147.17029
Correlation:	0.99936145	0.99830321

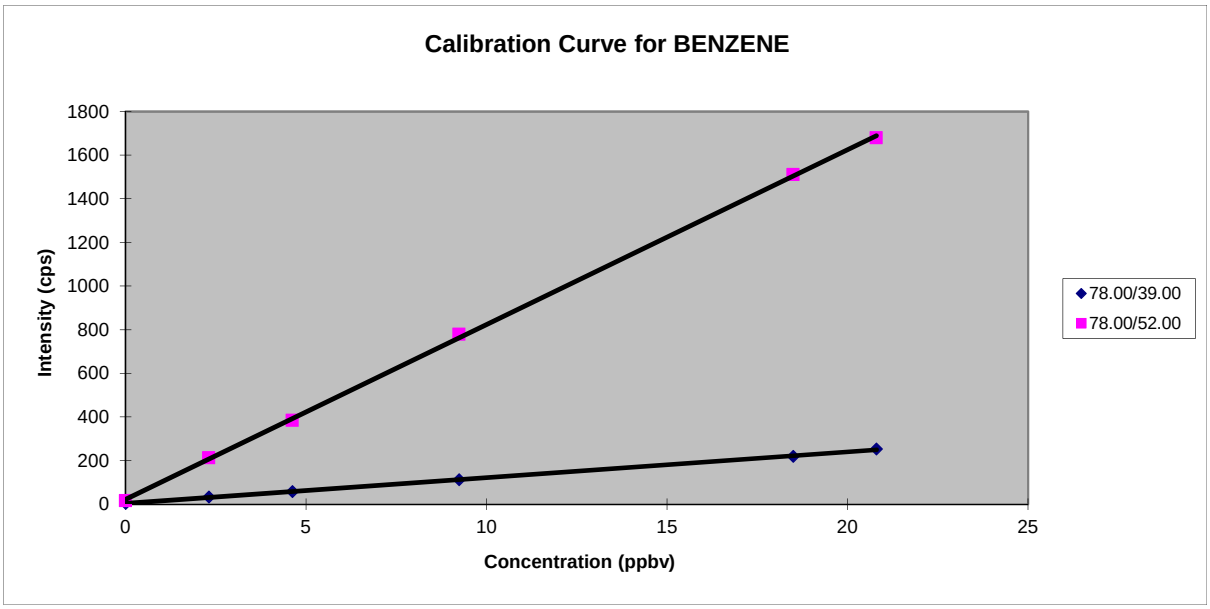
Concentratior	106.00/65.00	106.00/91.00
0	5.83333333	33.3333333
3.48	66.7708333	564.583333
6.96	126.041667	1126.04167
13.91	261.458333	2345
27.82	562.1875	5378.75
31.3	622.604167	6090.625

Report	File Name	64MSMS00862 et al.			
	Sample Name	MOD Calibration - BTX 20190404			
	Date	Thursday, April 4, 2019 14:35:39			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	10.59	73.15	237.22	59.28	20.07	196.73
Intercept	4.71	24.79	51.77	16.27	-5.09	-147.17
Intensity	2.81	12.81	76.98	21.88	5.83	33.33
Int SD	5.56	12.20	37.76	15.72	9.02	23.83
Concentration	-0.18	-0.16	0.11	0.09	0.54	0.92
Conc SD	0.53	0.17	0.16	0.27	0.45	0.12
Compound Con	-0.17		0.10		0.73	
Compound SD	0.24		0.15		0.20	
Det. Limit	1.58	0.50	0.48	0.80	1.35	0.36
Compound DL	1.04		0.64		0.86	

4/4/19.19.22.57
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Apr 4, 2019 at 19:22:55; Exp. Comment: BTX

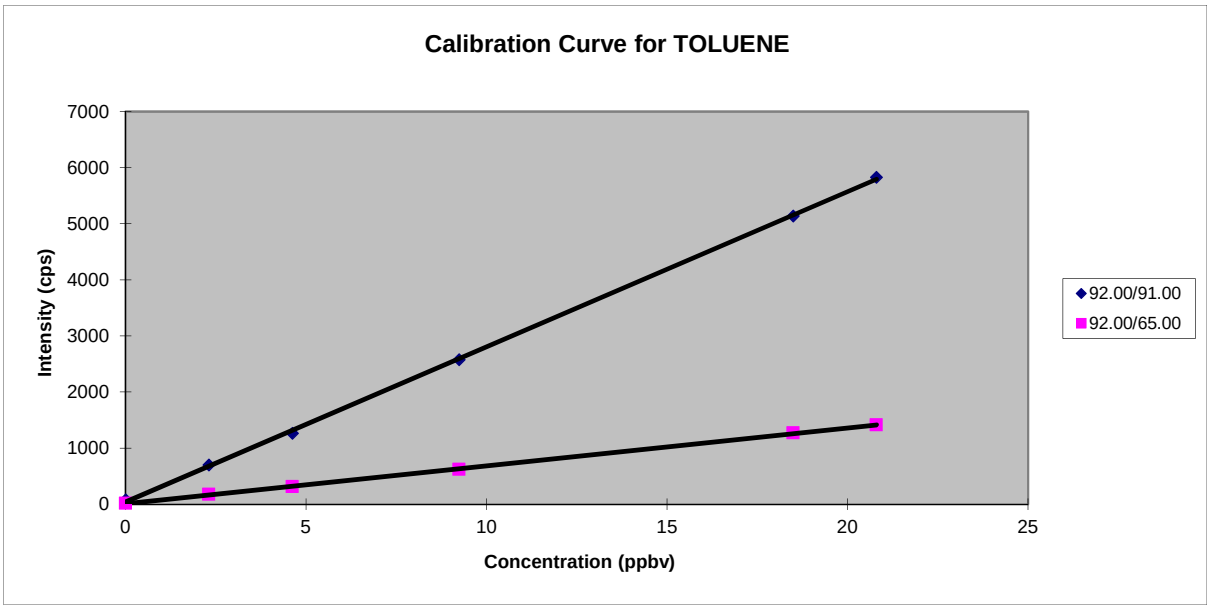




Filename:	64MSMS00865 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Thursday, April 4, 2019 19:43:08					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	8.46	10.61	12.66	14.71	16.71

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	11.7944801	80.1120753
Intercept:	4.41718859	22.6918281
Correlation:	0.99973555	0.99988732

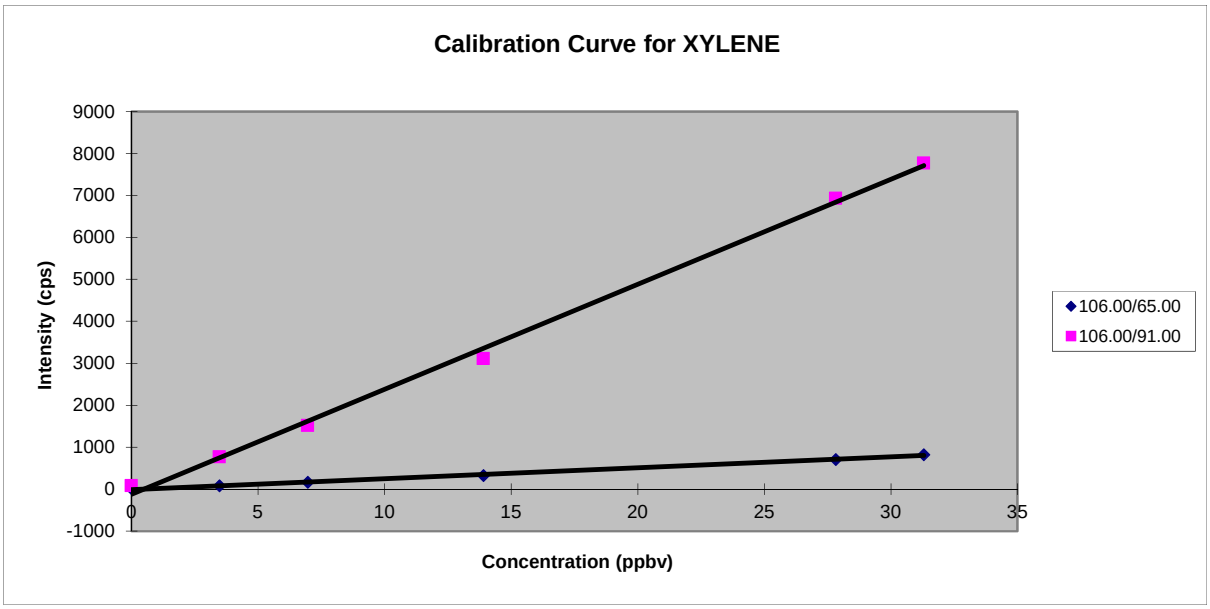
Concentratior	78.00/39.00	78.00/52.00
0	3.54166667	15.3125
2.31	33.8541667	213.020833
4.62	58.8541667	384.375
9.24	112.1875	778.4375
18.49	219.270833	1509.6875
20.8	252.916667	1678.33333



Filename:	64MSMS00865 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Thursday, April 4, 2019 19:43:46					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	8.46	10.61	12.66	14.71	16.71

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	276.525947	67.5337895
Intercept:	42.3812781	10.3980893
Correlation:	0.99989148	0.99980878

Concentratior	92.00/91.00	92.00/65.00
0	78.6458333	18.4375
2.31	700.416667	175.833333
4.62	1267.8125	310.833333
9.24	2577.8125	618.854167
18.49	5138.125	1270.10417
20.8	5827.60417	1413.75



Filename:	64MSMS00865 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Thursday, April 4, 2019 19:44:17					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	8.46	10.61	12.66	14.71	16.71

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	25.9680654	250.155335
Intercept:	-9.1236537	-118.61931
Correlation:	0.99867522	0.99880701

Concentratior	106.00/65.00	106.00/91.00
0	11.4583333	82.3958333
3.48	82.9166667	768.020833
6.96	162.395833	1512.70833
13.91	326.25	3109.79167
27.82	708.4375	6927.1875
31.3	821.354167	7768.64583

Report	File Name	64MSMS00865 et al.			
	Sample Name	EOD Calibration - BTX 20190404			
	Date	Thursday, April 4, 2019 19:44:49			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	11.79	80.11	276.53	67.53	25.97	250.16
Intercept	4.42	22.69	42.38	10.40	-9.12	-118.62
Intensity	3.54	15.31	78.65	18.44	11.46	82.40
Int SD	5.42	14.06	28.64	14.75	14.44	37.52
Concentration	-0.07	-0.09	0.13	0.12	0.79	0.80
Conc SD	0.46	0.18	0.10	0.22	0.56	0.15
Compound Con	-0.08		0.13		0.80	
Compound SD	0.22		0.11		0.25	
Det. Limit	1.38	0.53	0.31	0.66	1.67	0.45
Compound DL	0.95		0.48		1.06	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 4/5/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3200	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:52	15005GCS	~191	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date: Exp: 5/2/2019	

Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Fri, Apr 5, 2019, 7:37:24
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR05 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Fri, Apr 5, 2019, 7:34:57

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.062
75.000	0.069
100.000	0.078
125.000	0.085
160.000	0.093

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.031
70.000	0.031
100.000	0.030
130.000	0.038
170.000	0.032

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Fri, Apr 5, 2019, 7:37:38
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR05 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Fri, Apr 5, 2019, 7:34:57

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.062
75.000	0.069
100.000	0.078
125.000	0.085
160.000	0.093

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.031
70.000	0.031
100.000	0.030
130.000	0.038
170.000	0.032

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

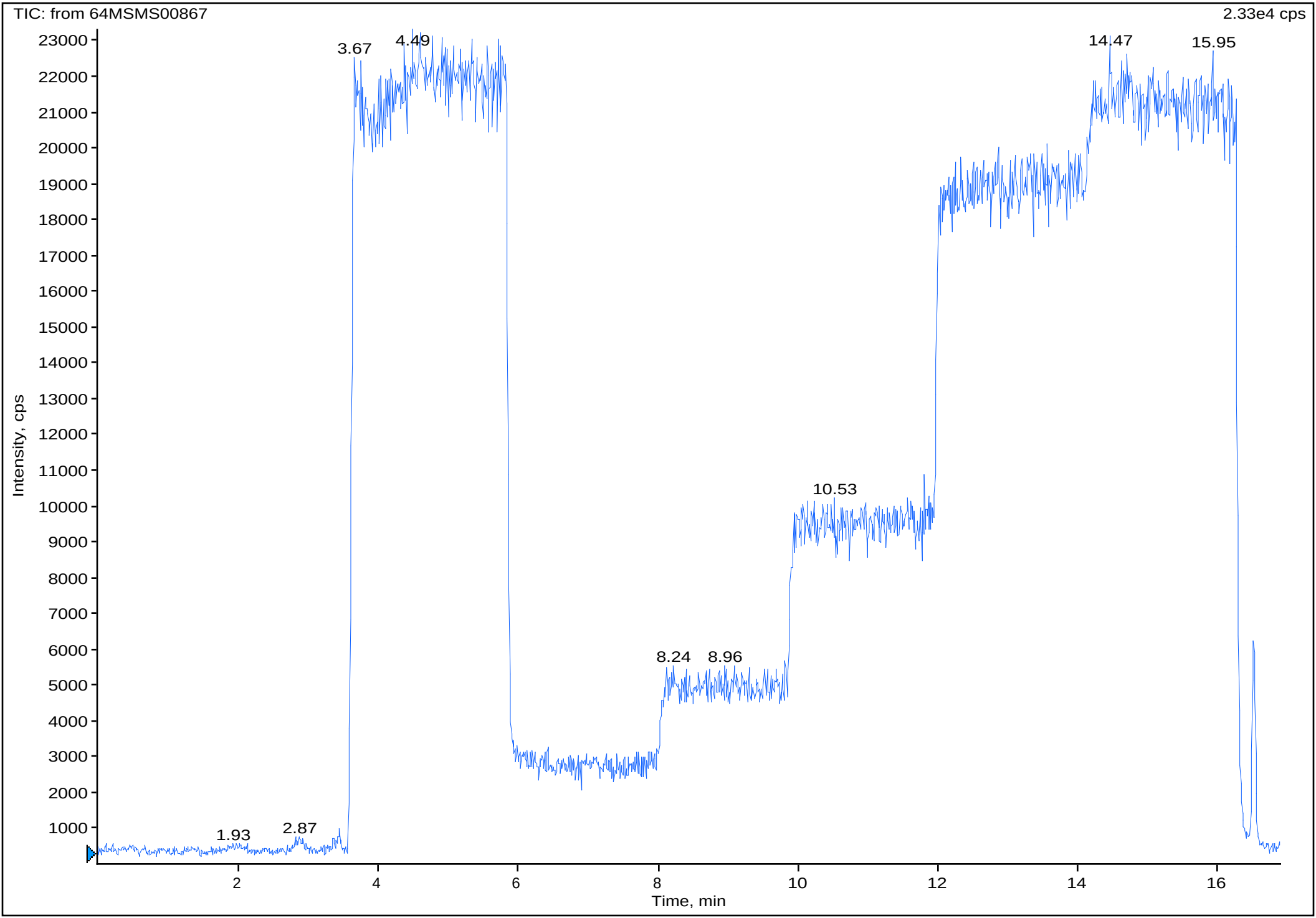
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

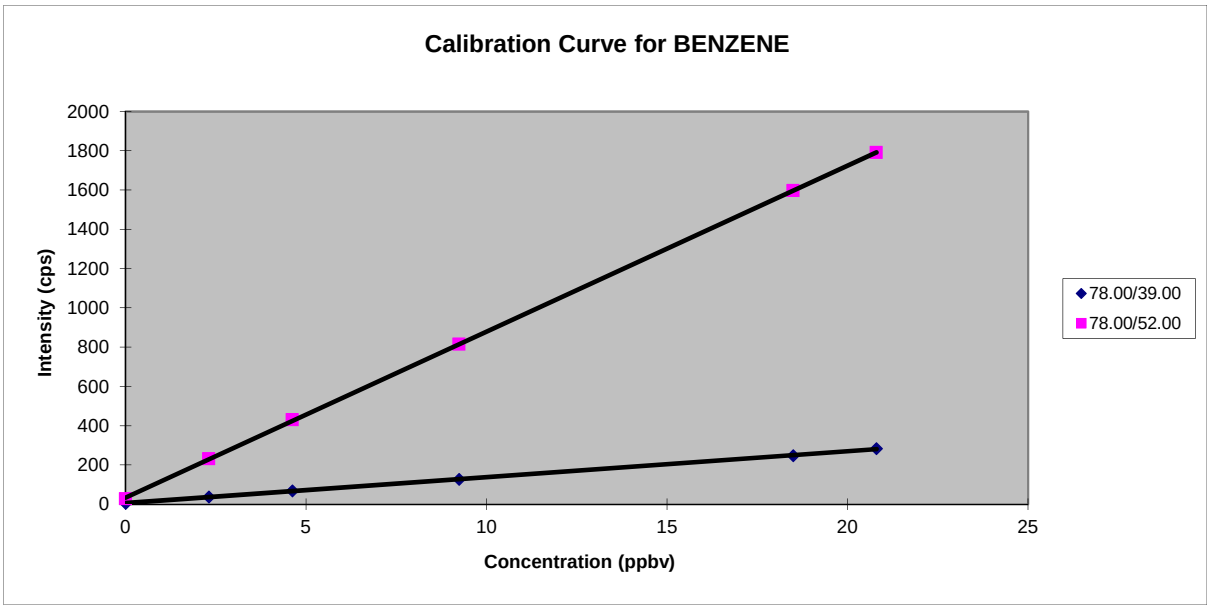
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/5/19.7.43.06
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, Apr 5, 2019 at 7:43:04; Exp. Comment: BTX



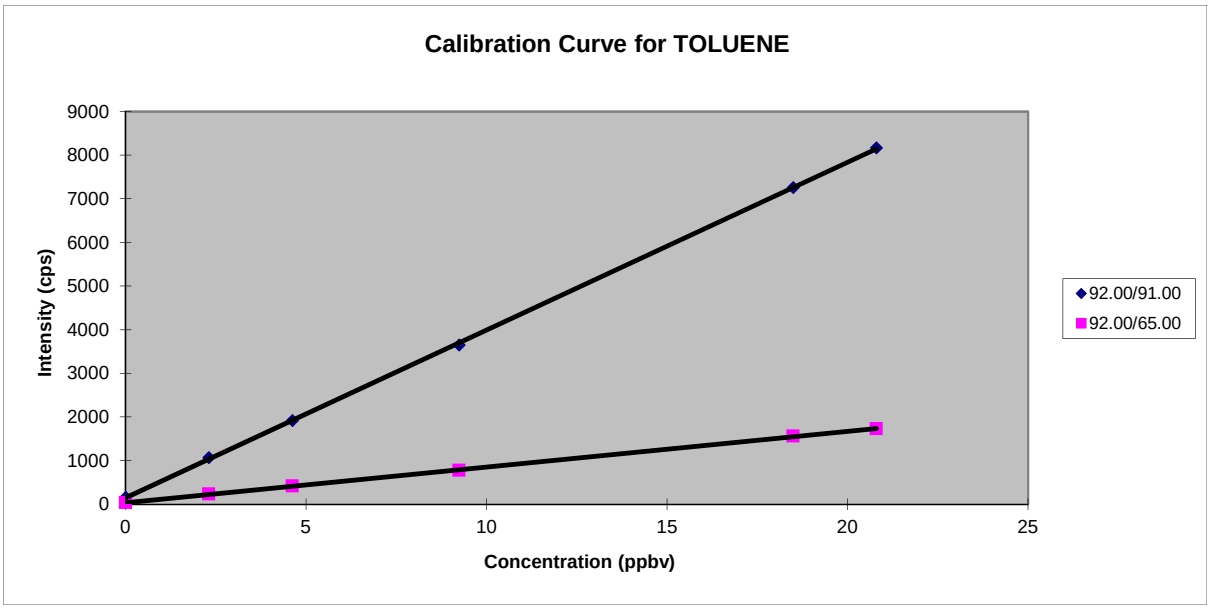


Filename:	64MSMS00867 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	YH
Comment:	
Date:	Friday, April 5, 2019 8:02:46
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.00	6.98	8.95	10.91	13.04	15.19

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	13.1966446	84.5092276
Intercept:	6.42537228	34.0329154
Correlation:	0.99987016	0.99998704

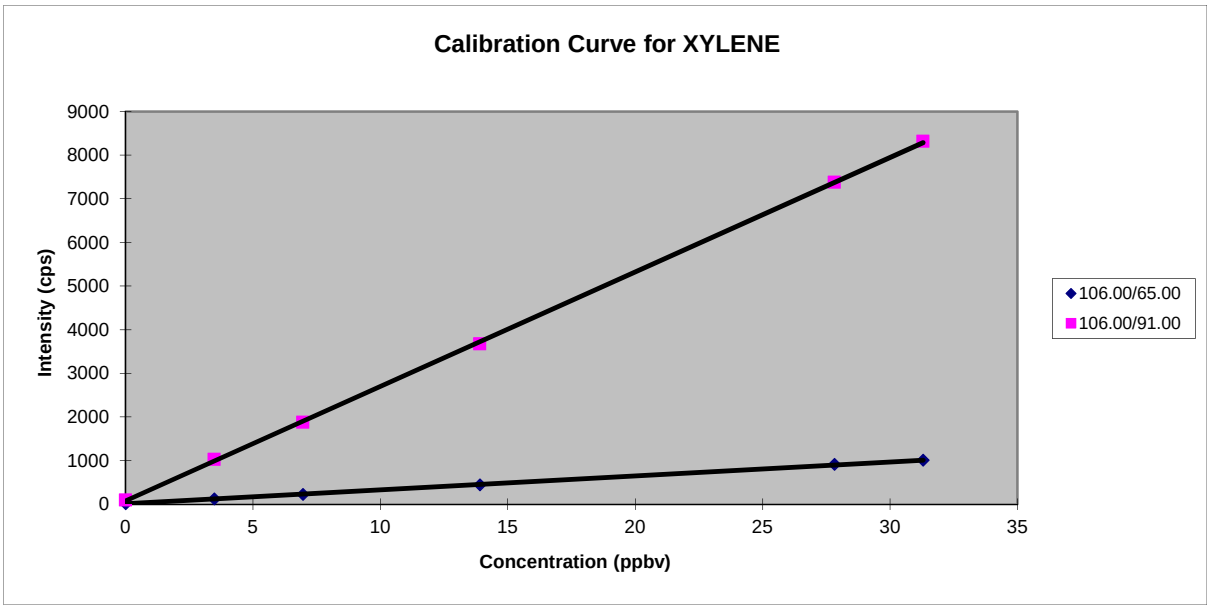
Concentratior	78.00/39.00	78.00/52.00
0	5.41666667	27.9166667
2.31	37.8125	231.666667
4.62	68.8541667	429.375
9.24	127.1875	815.208333
18.49	247.938144	1596.39175
20.8	283.229167	1790.52083



Filename:	64MSMS00867 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Friday, April 5, 2019 8:03:22					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.00	6.98	8.95	10.91	13.04	15.19

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	384.284304	81.6367868
Intercept:	150.246843	37.2599955
Correlation:	0.9999614	0.99988964

Concentratior	92.00/91.00	92.00/65.00
0	158.229167	38.0208333
2.31	1066.5625	231.666667
4.62	1921.14583	416.458333
9.24	3646.97917	775.208333
18.49	7256.70103	1560.92784
20.8	8164.27083	1728.85417



Filename:	64MSMS00867 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Friday, April 5, 2019 8:03:54					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.00	6.98	8.95	10.91	13.04	15.19

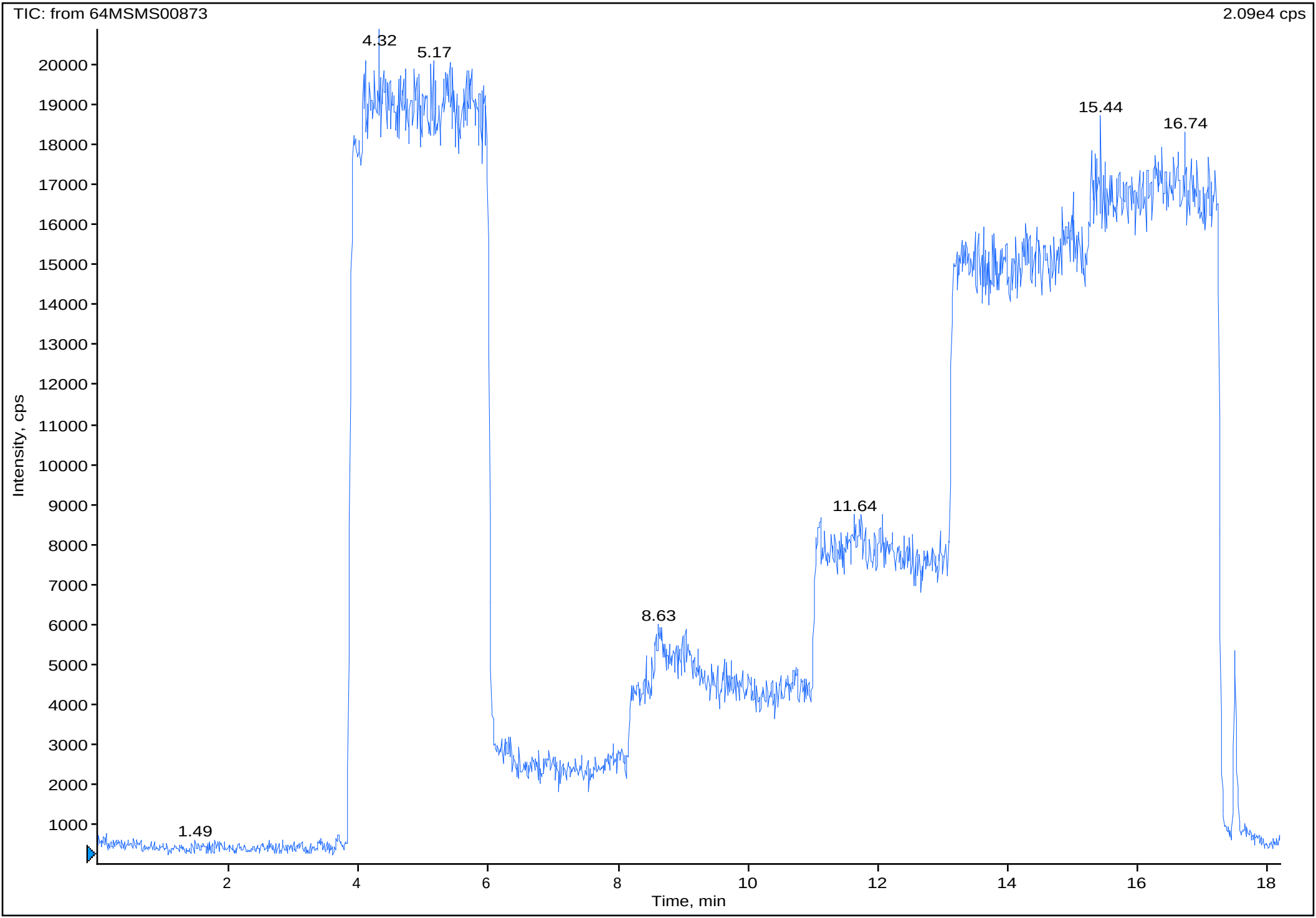
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	31.9813872	262.275741
Intercept:	11.7141459	77.9623426
Correlation:	0.9998577	0.99994571

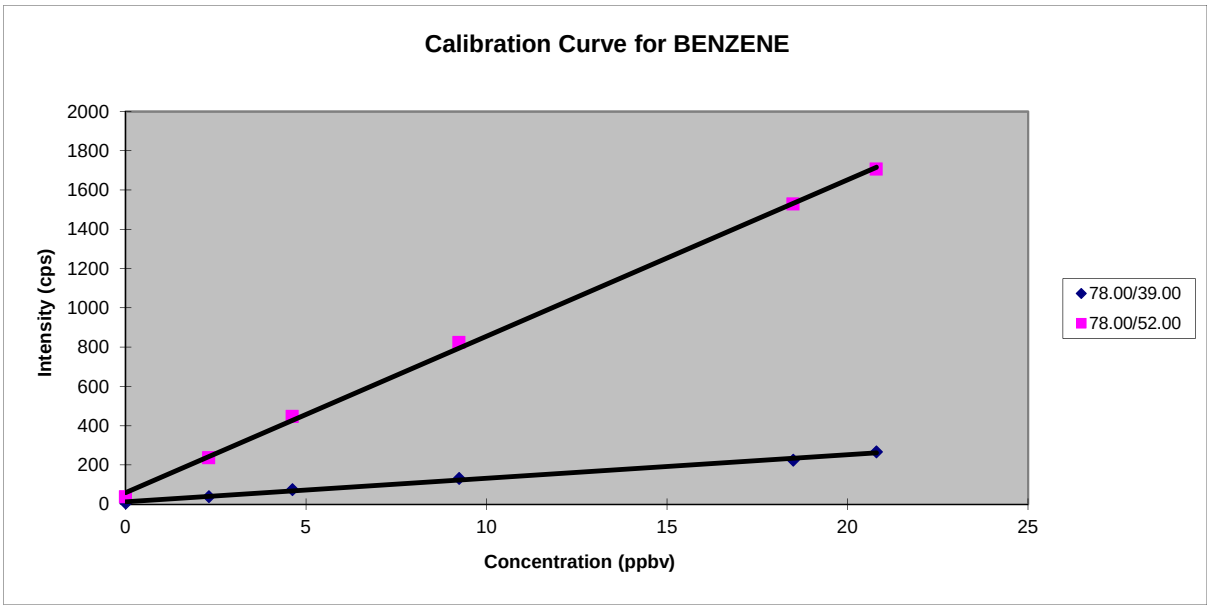
Concentratior	106.00/65.00	106.00/91.00
0	16.7708333	97.5
3.48	124.895833	1028.54167
6.96	229.583333	1873.95833
13.91	448.958333	3671.25
27.82	911.958763	7376.70103
31.3	1007.60417	8311.97917

Report	File Name	64MSMS00867 et al.			
	Sample Name	BOD Calibration - BTX 20190405			
	Date	Friday, April 5, 2019 8:04:27			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	13.20	84.51	384.28	81.64	31.98	262.28
Intercept	6.43	34.03	150.25	37.26	11.71	77.96
Intensity	6.88	31.67	169.06	36.67	16.15	100.94
Int SD	9.87	25.86	48.60	22.32	12.68	40.73
Concentration	0.03	-0.03	0.05	-0.01	0.14	0.09
Conc SD	0.75	0.31	0.13	0.27	0.40	0.16
Compound Con	0.00		0.02		0.11	
Compound SD	0.37		0.14		0.20	
Det. Limit	2.24	0.92	0.38	0.82	1.19	0.47
Compound DL	1.58		0.60		0.83	

4/5/19.14.32.48
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, Apr 5, 2019 at 14:32:46; Exp. Comment: BTX

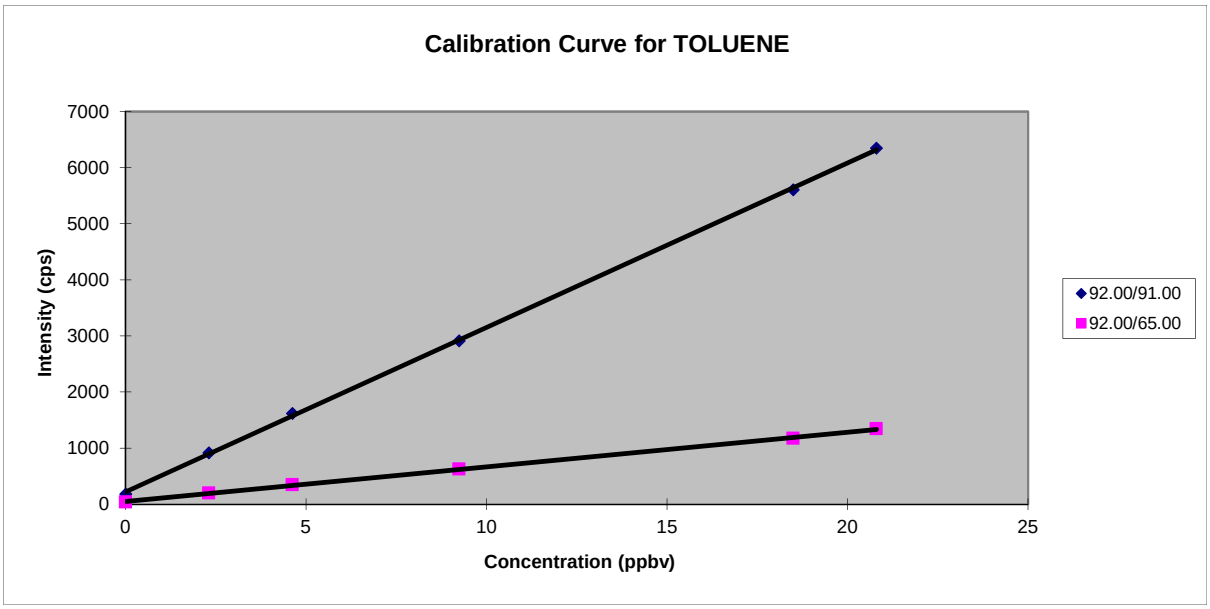




Filename:	64MSMS00873 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Friday, April 5, 2019 14:52:02					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.23	10.17	12.09	14.28	16.28

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	11.9694511	79.6675398
Intercept:	12.90404	59.49179
Correlation:	0.99750287	0.99962873

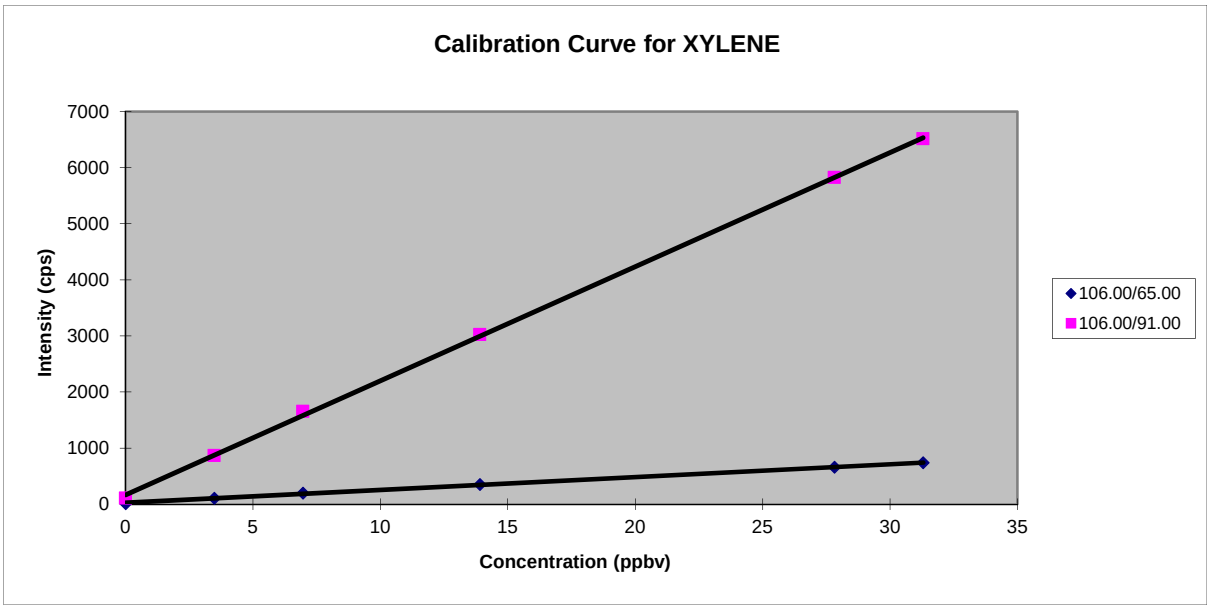
Concentratior	78.00/39.00	78.00/52.00
0	5.9375	37.7083333
2.31	39.4791667	235.416667
4.62	74.375	446.145833
9.24	131.145833	822.604167
18.49	224.0625	1528.33333
20.8	266.25	1705.10417



Filename:	64MSMS00873 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Friday, April 5, 2019 14:52:43					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.23	10.17	12.09	14.28	16.28

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	293.192358	61.6525213
Intercept:	220.758637	52.3821395
Correlation:	0.99990349	0.99979624

Concentratior	92.00/91.00	92.00/65.00
0	182.916667	41.6666667
2.31	919.895833	196.5625
4.62	1617.29167	346.458333
9.24	2911.5625	628.75
18.49	5605.10417	1176.45833
20.8	6348.22917	1343.64583



Filename:	64MSMS00873 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Friday, April 5, 2019 14:53:16					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.23	10.17	12.09	14.28	16.28

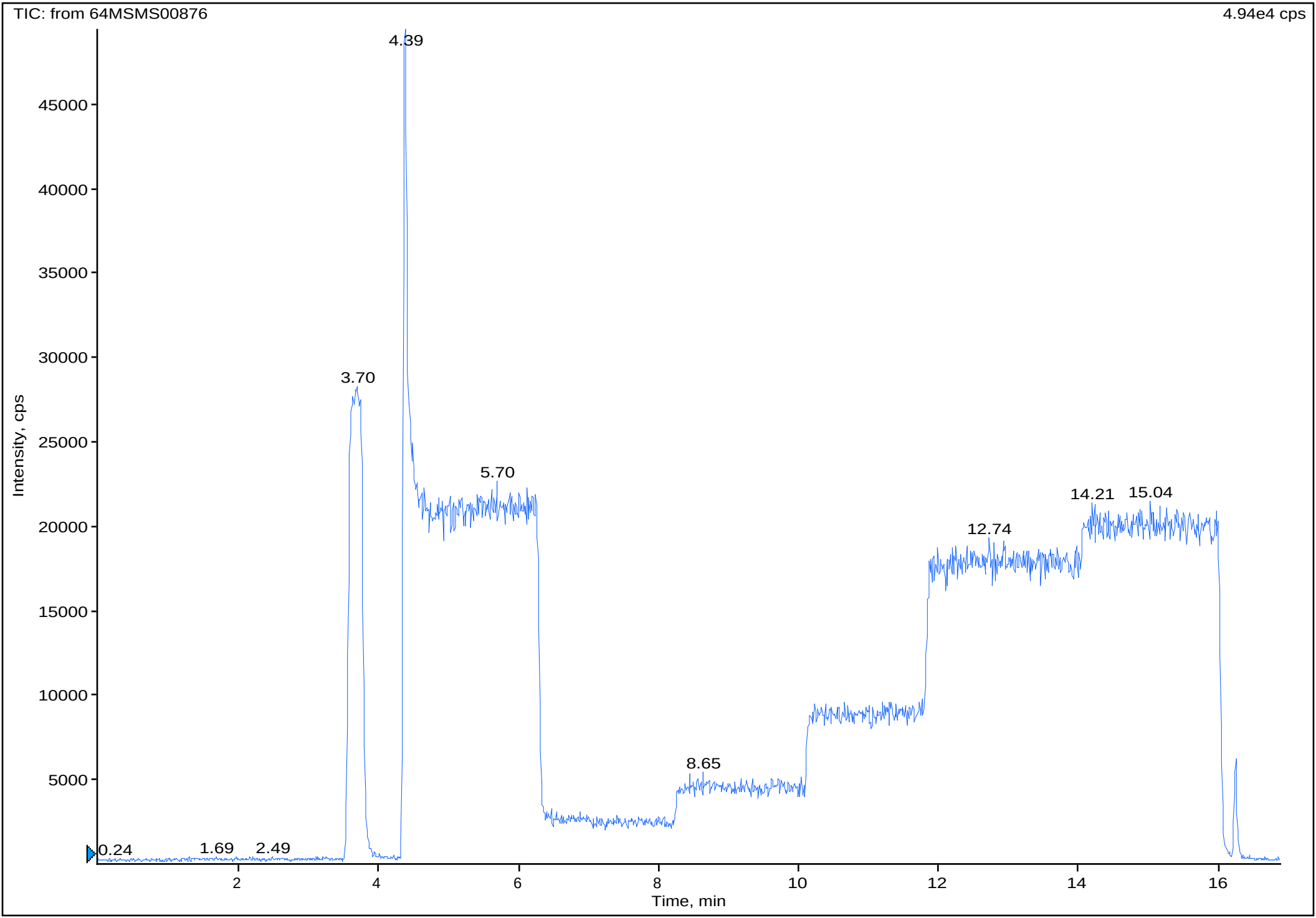
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	22.8934494	203.321308
Intercept:	26.6875736	168.545077
Correlation:	0.9994756	0.99986915

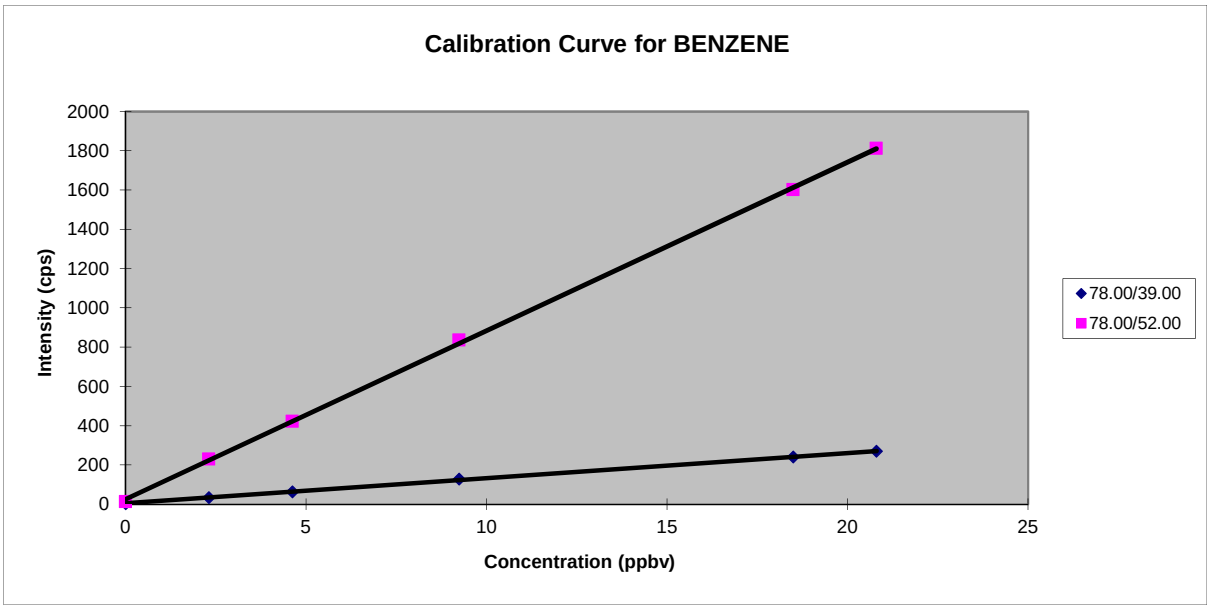
Concentratior	106.00/65.00	106.00/91.00
0	12.8125	110.104167
3.48	105.9375	867.708333
6.96	198.020833	1651.66667
13.91	355	3021.14583
27.82	658.541667	5820.10417
31.3	740.729167	6511.77083

Report	File Name	64MSMS00873 et al.			
	Sample Name	MOD Calibration - BTX 20190405			
	Date	Friday, April 5, 2019 14:53:49			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	11.97	79.67	293.19	61.65	22.89	203.32
Intercept	12.90	59.49	220.76	52.38	26.69	168.55
Intensity	5.94	37.71	182.92	41.67	12.81	110.10
Int SD	8.02	23.55	53.35	19.93	13.27	41.69
Concentration	-0.58	-0.27	-0.13	-0.17	-0.61	-0.29
Conc SD	0.67	0.30	0.18	0.32	0.58	0.21
Compound Con	-0.43		-0.15		-0.45	
Compound SD	0.34		0.18		0.28	
Det. Limit	2.01	0.89	0.55	0.97	1.74	0.62
Compound DL	1.45		0.76		1.18	

4/5/19.19.34.15
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, Apr 5, 2019 at 19:34:13; Exp. Comment: BTX



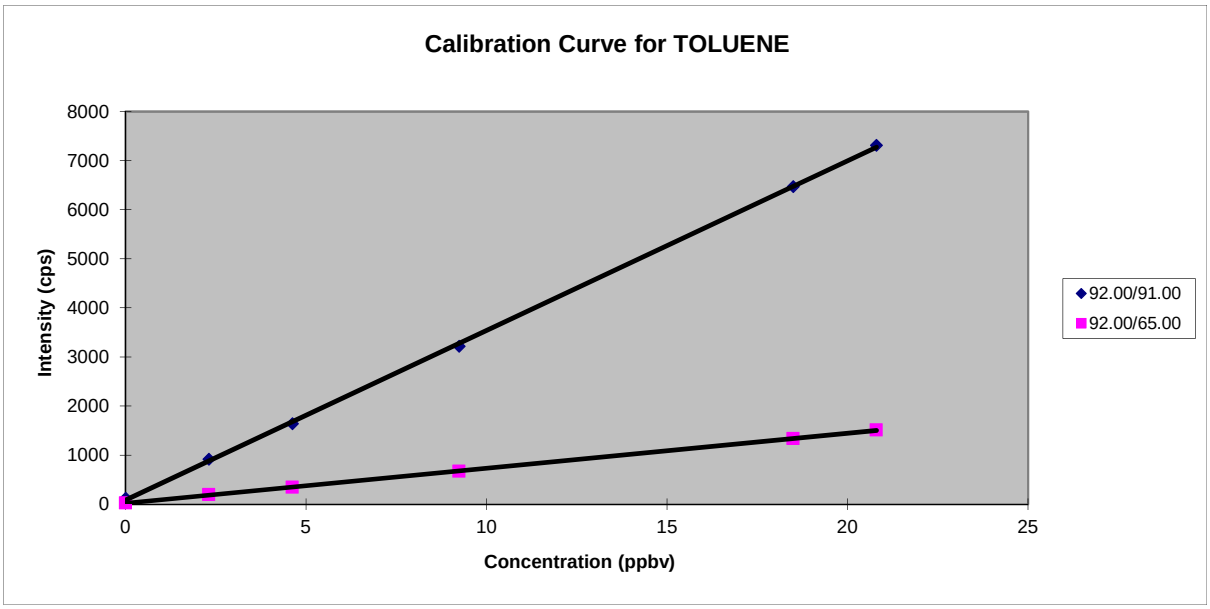


Filename:	64MSMS00876 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	YH
Comment:	
Date:	Friday, April 5, 2019 19:52:56
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.35	9.22	11.00	12.93	14.98

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	12.7820779	85.8144383
Intercept:	5.23640984	25.8163198
Correlation:	0.99978527	0.99989091

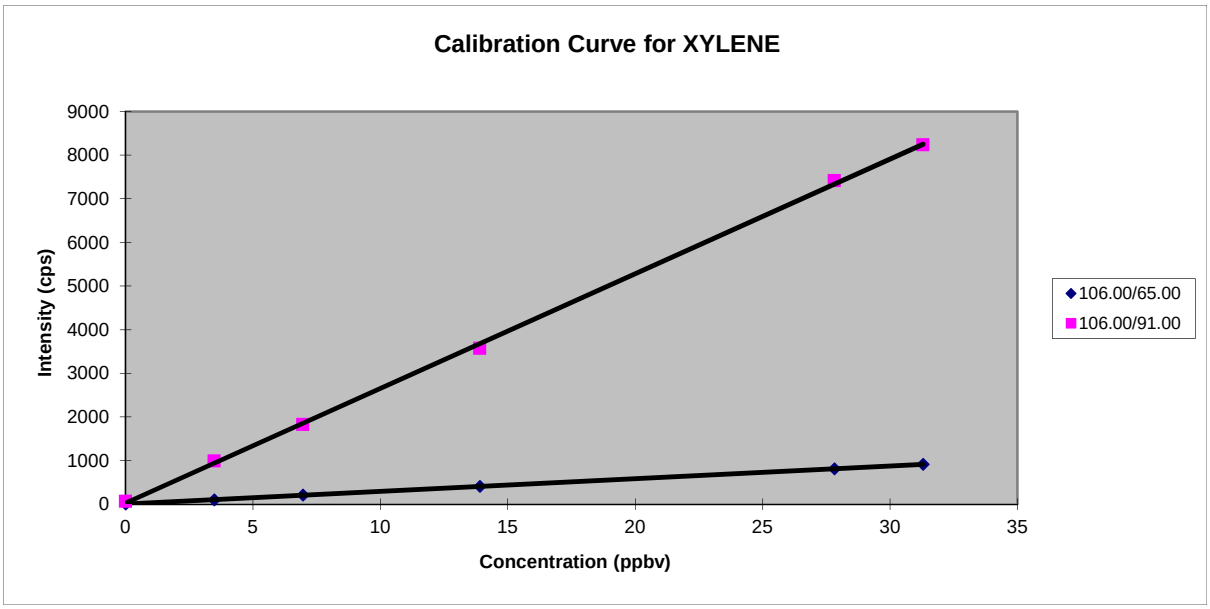
Concentratior	78.00/39.00	78.00/52.00
0	3.54166667	13.4375
2.31	34.375	229.0625
4.62	63.75	421.666667
9.24	127.916667	836.041667
18.49	240.833333	1601.5625
20.8	269.895833	1812.39583



Filename:	64MSMS00876 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Friday, April 5, 2019 19:53:35					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.35	9.22	11.00	12.93	14.98

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	345.567742	71.2241439
Intercept:	86.2535647	21.8771914
Correlation:	0.99990371	0.9998864

Concentratior	92.00/91.00	92.00/65.00
0	119.791667	26.4583333
2.31	918.333333	195.3125
4.62	1644.58333	343.541667
9.24	3219.16667	669.0625
18.49	6471.5625	1332.70833
20.8	7309.27083	1514.27083



Filename:	64MSMS00876 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Friday, April 5, 2019 19:54:06					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.35	9.22	11.00	12.93	14.98

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	29.0191958	262.780438
Intercept:	6.31198251	27.9319698
Correlation:	0.99998063	0.99980072

Concentratior	106.00/65.00	106.00/91.00
0	9.16666667	64.8958333
3.48	104.166667	990.9375
6.96	207.8125	1821.875
13.91	410.9375	3572.70833
27.82	811.458333	7415.10417
31.3	916.5625	8236.35417

Report	File Name	64MSMS00876 et al.			
	Sample Name	EOD Calibration - 20190405			
	Date	Friday, April 5, 2019 19:54:37			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	12.78	85.81	345.57	71.22	29.02	262.78
Intercept	5.24	25.82	86.25	21.88	6.31	27.93
Intensity	3.54	13.44	119.79	26.46	9.17	64.90
Int SD	7.11	13.36	39.47	17.11	11.49	27.72
Concentration	-0.13	-0.14	0.10	0.06	0.10	0.14
Conc SD	0.56	0.16	0.11	0.24	0.40	0.11
Compound Con	-0.14		0.08		0.12	
Compound SD	0.25		0.13		0.18	
Det. Limit	1.67	0.47	0.34	0.72	1.19	0.32
Compound DL	1.07		0.53		0.75	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 4/6/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
7:04	1500SCCS	~191	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date: EXP: 5/2/2019	
		Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
Time	Reference Flow Meter	Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
		Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
Time	Reference Flow Meter	Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Sat, Apr 6, 2019, 7:27:23
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR06 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sat, Apr 6, 2019, 7:24:23

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.065
75.000	0.067
100.000	0.078
125.000	0.083
160.000	0.093

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.036
70.000	0.039
100.000	0.037
130.000	0.046
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Sat, Apr 6, 2019, 7:27:38
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR06 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sat, Apr 6, 2019, 7:24:23

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.065
75.000	0.067
100.000	0.078
125.000	0.083
160.000	0.093

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.036
70.000	0.039
100.000	0.037
130.000	0.046
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

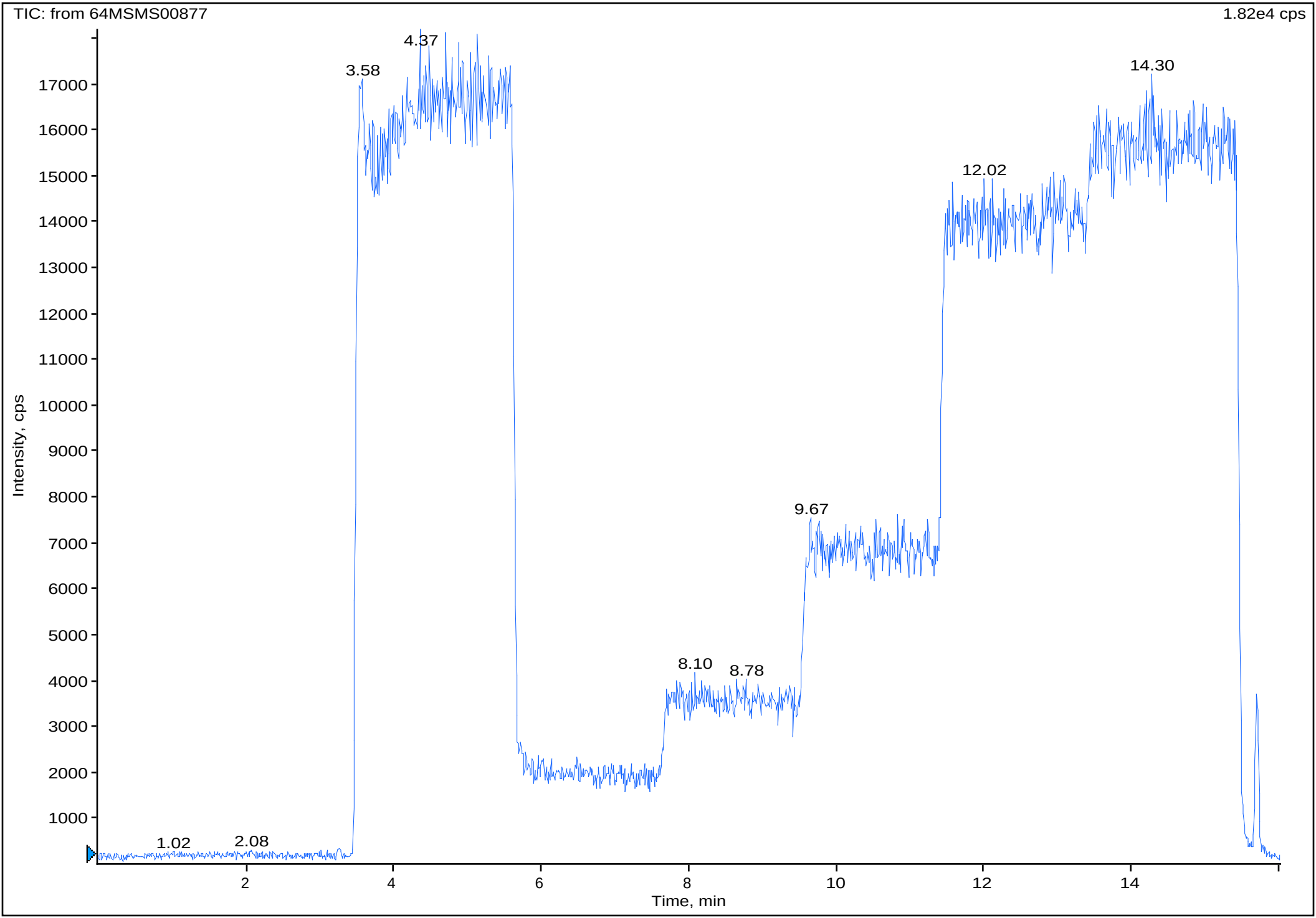
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

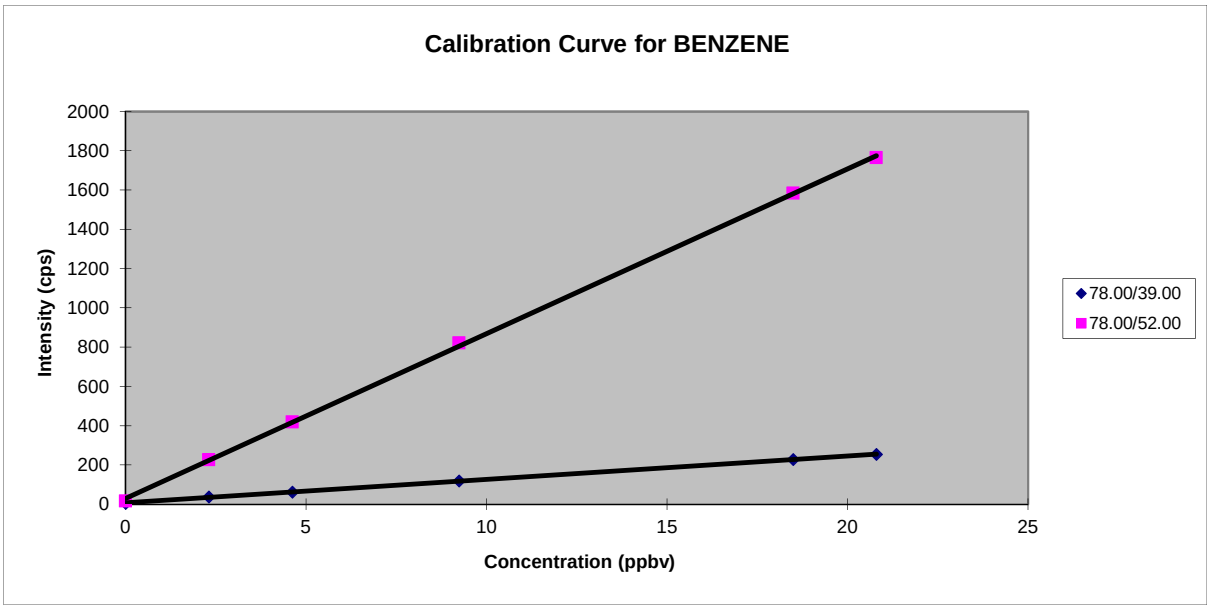
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/6/19.7.29.13
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sat, Apr 6, 2019 at 7:29:12; Exp. Comment: BTX

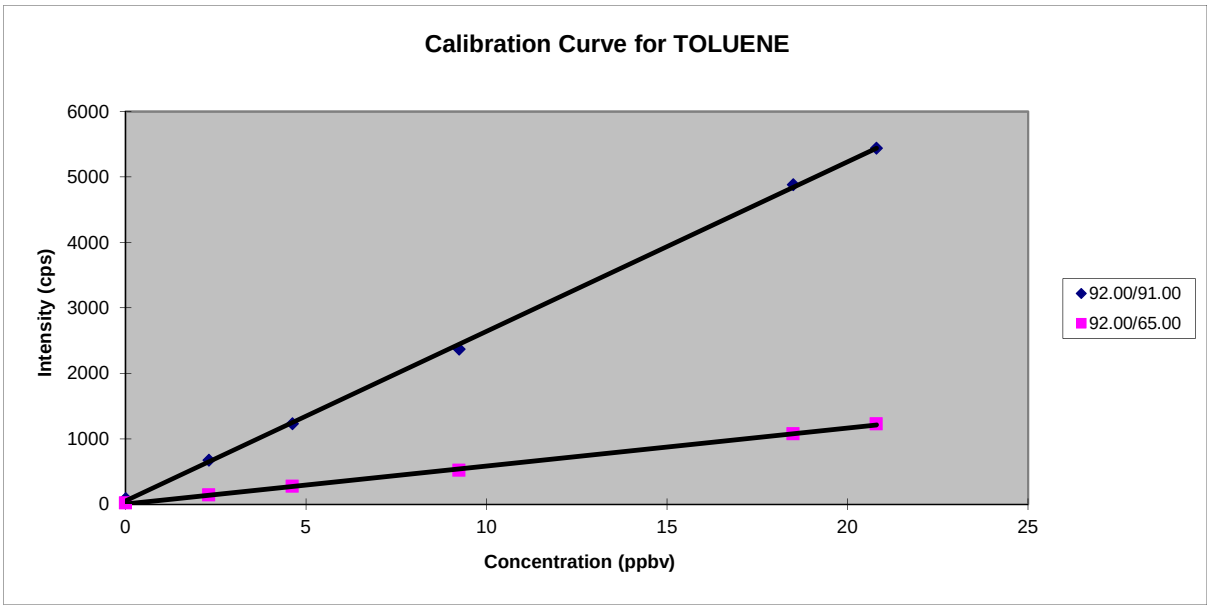




Filename:	64MSMS00877 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Saturday, April 6, 2019 7:47:48					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.70	8.58	10.50	12.43	14.39

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	11.9212885	83.9061489
Intercept:	7.23811203	29.47958
Correlation:	0.99977277	0.99988919

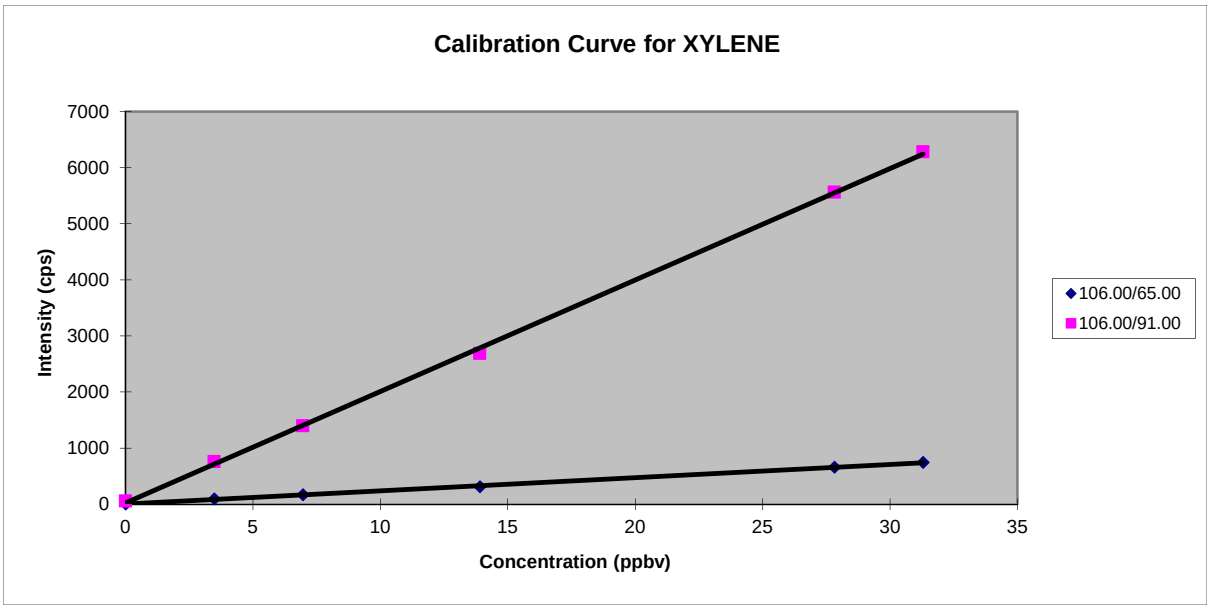
Concentratior	78.00/39.00	78.00/52.00
0	4.0625	15.7291667
2.31	37.6041667	226.979167
4.62	61.6666667	418.75
9.24	119.479167	820.729167
18.49	227.708333	1584.0625
20.8	254.0625	1764.0625



Filename:	64MSMS00877 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Saturday, April 6, 2019 7:48:29					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.70	8.58	10.50	12.43	14.39

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	258.949148	58.0262234
Intercept:	53.2349072	5.50191412
Correlation:	0.99981138	0.99968259

Concentratior	92.00/91.00	92.00/65.00
0	85.7291667	16.3541667
2.31	674.0625	142.083333
4.62	1231.14583	273.4375
9.24	2368.95833	518.75
18.49	4881.5625	1076.04167
20.8	5439.27083	1224.47917



Filename:	64MSMS00877 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Saturday, April 6, 2019 7:49:03					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.70	8.58	10.50	12.43	14.39

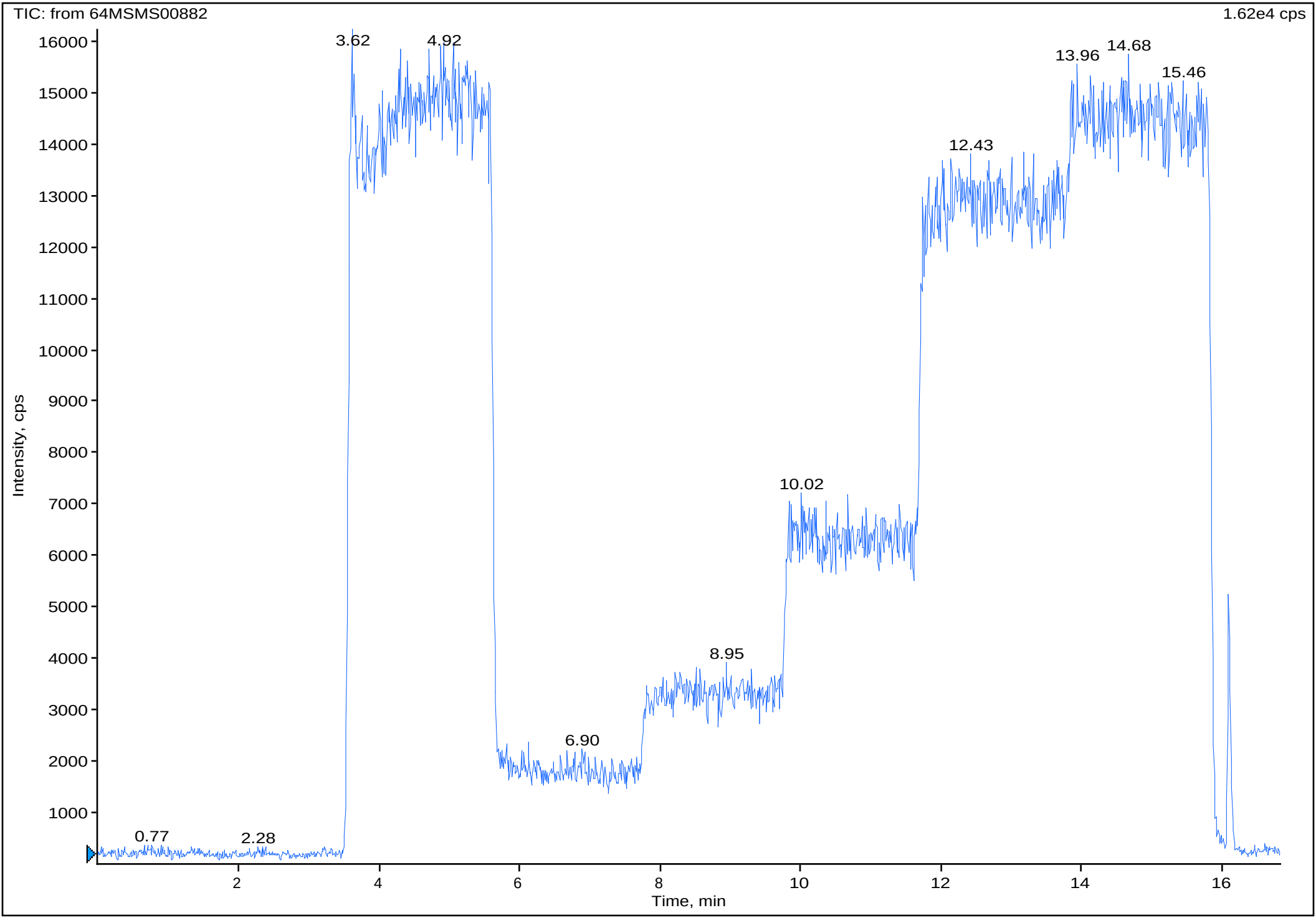
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	23.5267739	198.541173
Intercept:	5.8978082	25.5481857
Correlation:	0.99943552	0.99978053

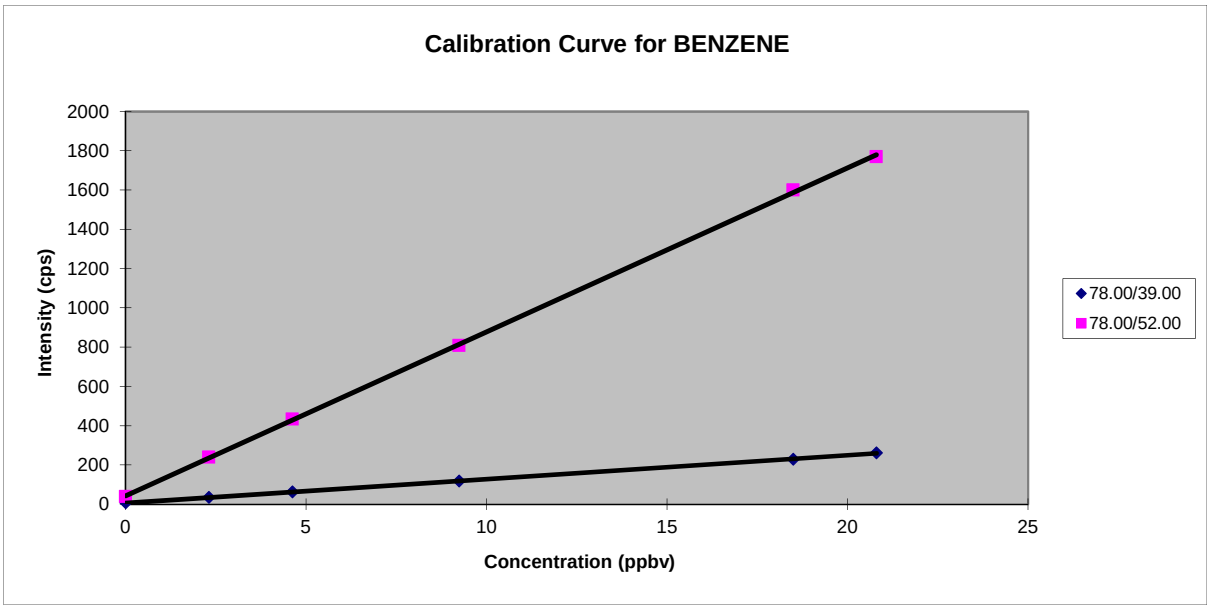
Concentratior	106.00/65.00	106.00/91.00
0	6.97916667	54.7916667
3.48	98.2291667	757.1875
6.96	170	1395.625
13.91	313.645833	2684.16667
27.82	662.083333	5557.91667
31.3	748.229167	6275.83333

Report	File Name	64MSMS00877 et al.			
	Sample Name	BOD Calibration - BTX 20190406			
	Date	Saturday, April 6, 2019 7:49:34			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	11.92	83.91	258.95	58.03	23.53	198.54
Intercept	7.24	29.48	53.23	5.50	5.90	25.55
Intensity	4.06	15.73	85.73	16.35	6.98	54.79
Int SD	7.05	13.20	29.94	14.00	9.53	26.83
Concentration	-0.27	-0.16	0.13	0.19	0.05	0.15
Conc SD	0.59	0.16	0.12	0.24	0.40	0.14
Compound Con	-0.22		0.16		0.10	
Compound SD	0.26		0.13		0.19	
Det. Limit	1.77	0.47	0.35	0.72	1.21	0.41
Compound DL	1.12		0.54		0.81	

4/6/19.13.32.23
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sat, Apr 6, 2019 at 13:32:22; Exp. Comment: BTX



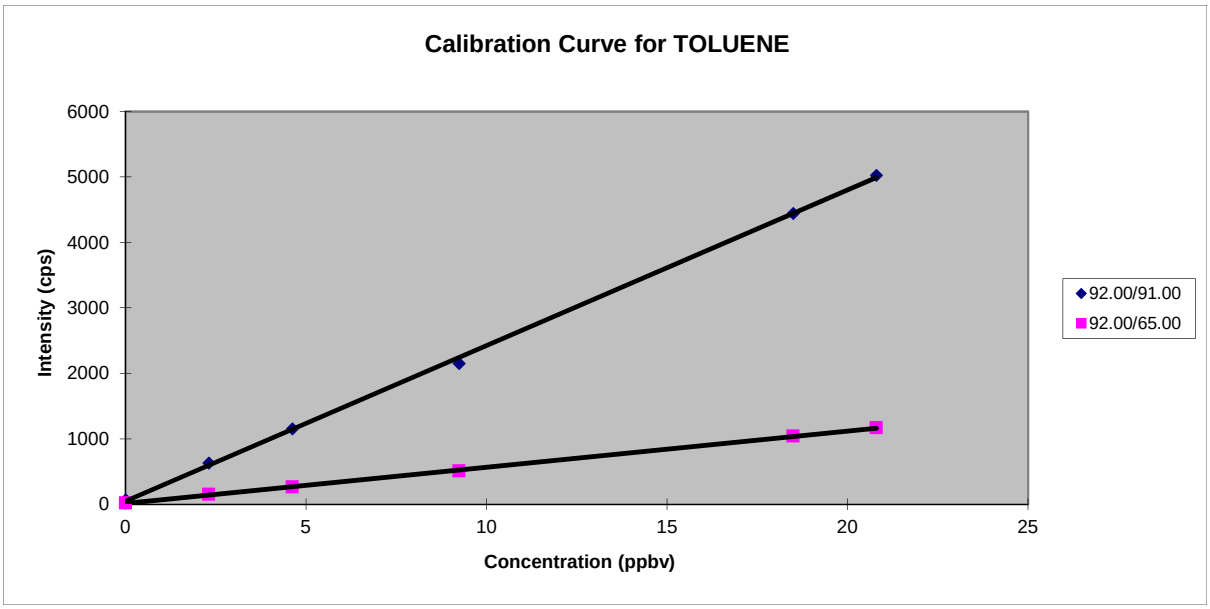


Filename:	64MSMS00882 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	YH
Comment:	
Date:	Saturday, April 6, 2019 13:50:45
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.76	8.84	10.67	12.69	14.79

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	12.1609401	83.5020583
Intercept:	6.68673556	43.0409348
Correlation:	0.99992273	0.99993448

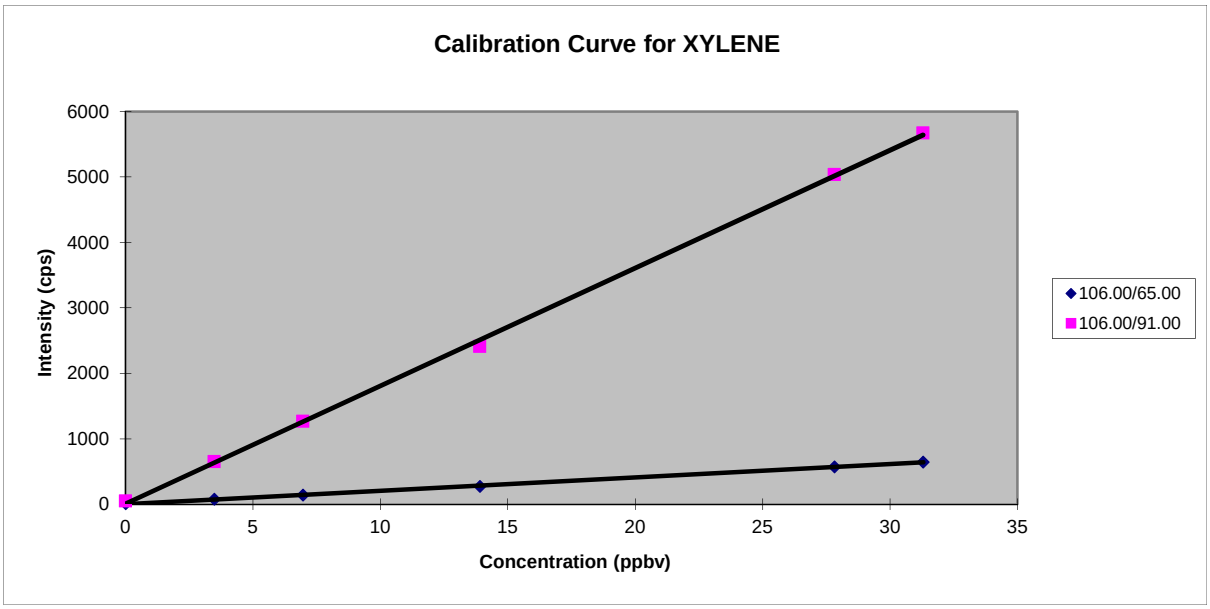
Concentratior	78.00/39.00	78.00/52.00
0	7.1875	38.6458333
2.31	34.8958333	238.854167
4.62	62.8125	433.75
9.24	118.4375	808.4375
18.49	229.583333	1599.47917
20.8	261.649485	1770.10309



Filename:	64MSMS00882 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Saturday, April 6, 2019 13:51:25					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.76	8.84	10.67	12.69	14.79

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	237.689864	55.2369643
Intercept:	47.3199484	13.4084641
Correlation:	0.99973907	0.99981018

Concentratior	92.00/91.00	92.00/65.00
0	65.3125	17.7083333
2.31	628.541667	151.354167
4.62	1151.04167	261.5625
9.24	2151.35417	508.645833
18.49	4445.10417	1038.33333
20.8	5024.84536	1166.28866



Filename:	64MSMS00882 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Saturday, April 6, 2019 13:51:57					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.76	8.84	10.67	12.69	14.79

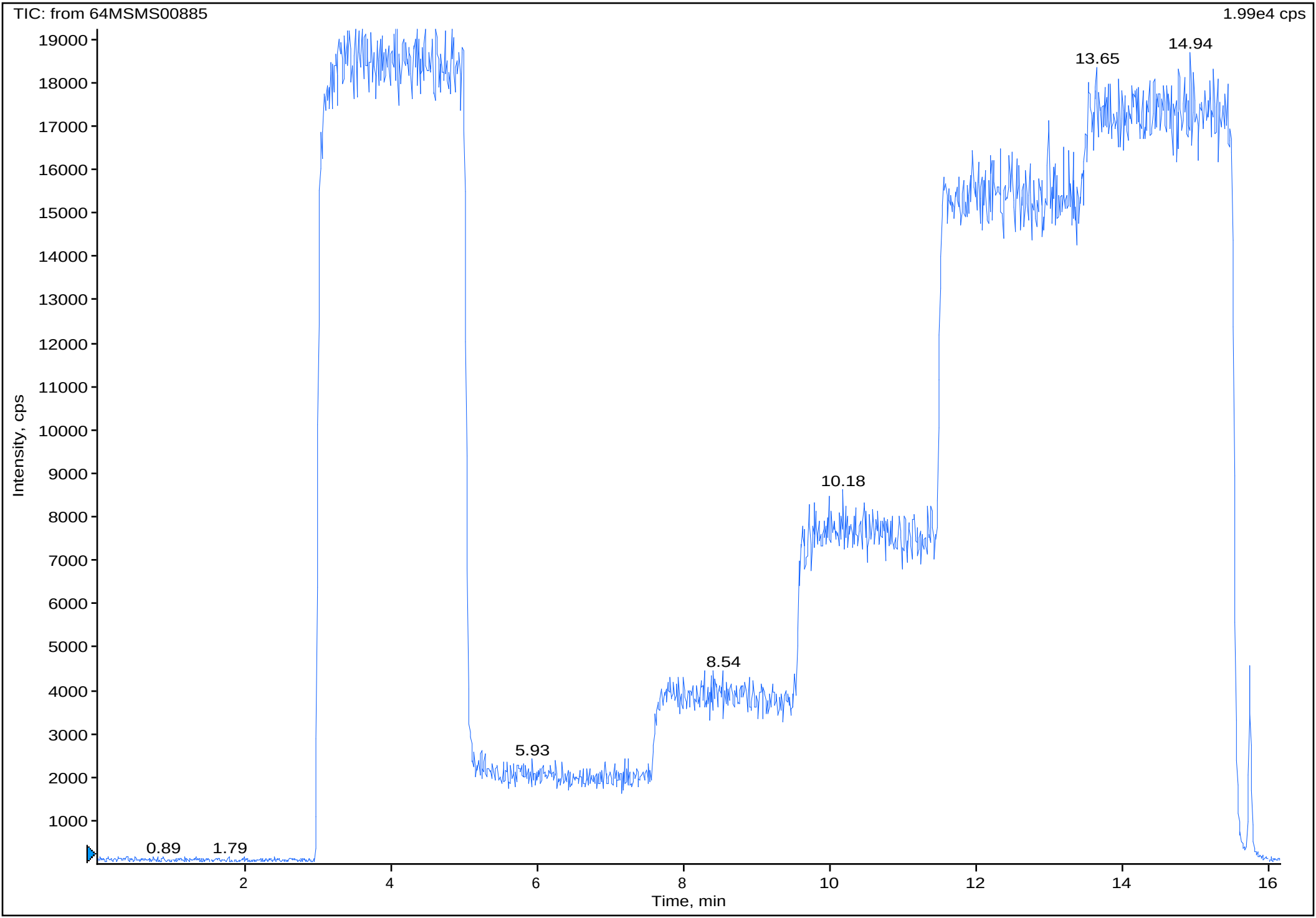
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	20.4598182	180.012959
Intercept:	1.81831828	8.15278251
Correlation:	0.99970241	0.99976596

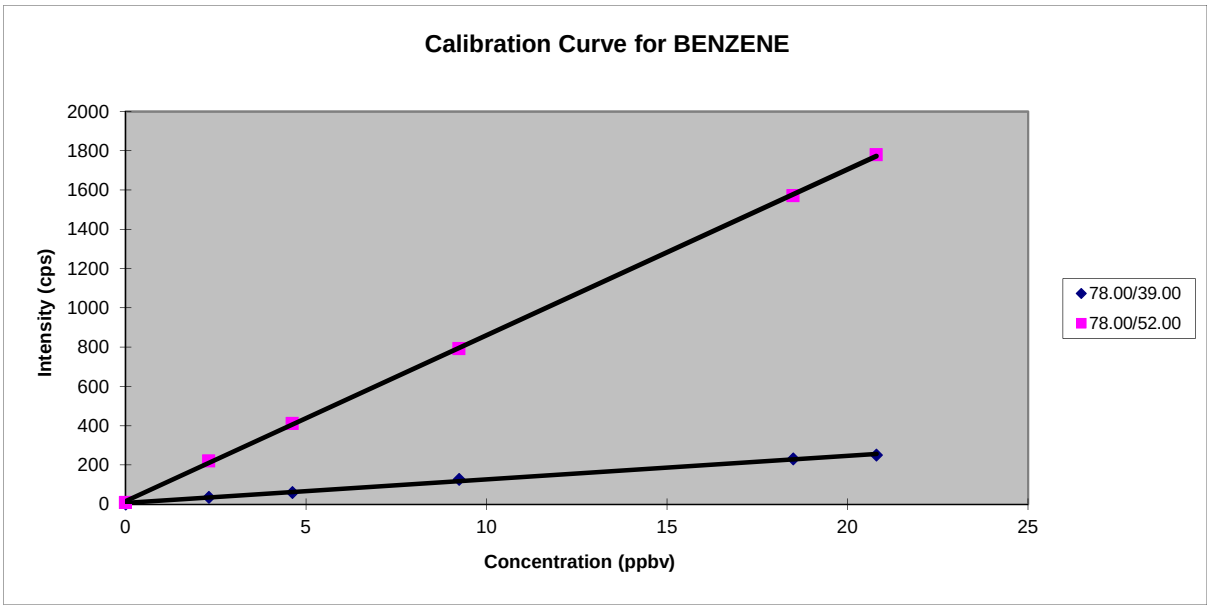
Concentratior	106.00/65.00	106.00/91.00
0	7.70833333	46.875
3.48	76.7708333	648.854167
6.96	140.104167	1264.16667
13.91	275.104167	2411.5625
27.82	573.333333	5034.58333
31.3	645.670103	5668.5567

Report	File Name	64MSMS00882 et al.			
	Sample Name	MOD Calibration - BTX 20190406			
	Date	Saturday, April 6, 2019 13:52:30			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	12.16	83.50	237.69	55.24	20.46	180.01
Intercept	6.69	43.04	47.32	13.41	1.82	8.15
Intensity	7.19	38.65	65.31	17.71	7.71	46.88
Int SD	9.48	22.69	29.05	17.26	10.00	29.60
Concentration	0.04	-0.05	0.08	0.08	0.29	0.22
Conc SD	0.78	0.27	0.12	0.31	0.49	0.16
Compound Con	-0.01		0.08		0.25	
Compound SD	0.37		0.15		0.23	
Det. Limit	2.34	0.82	0.37	0.94	1.47	0.49
Compound DL	1.58		0.65		0.98	

4/6/19.19.00.08
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sat, Apr 6, 2019 at 19:00:07; Exp. Comment: BTX

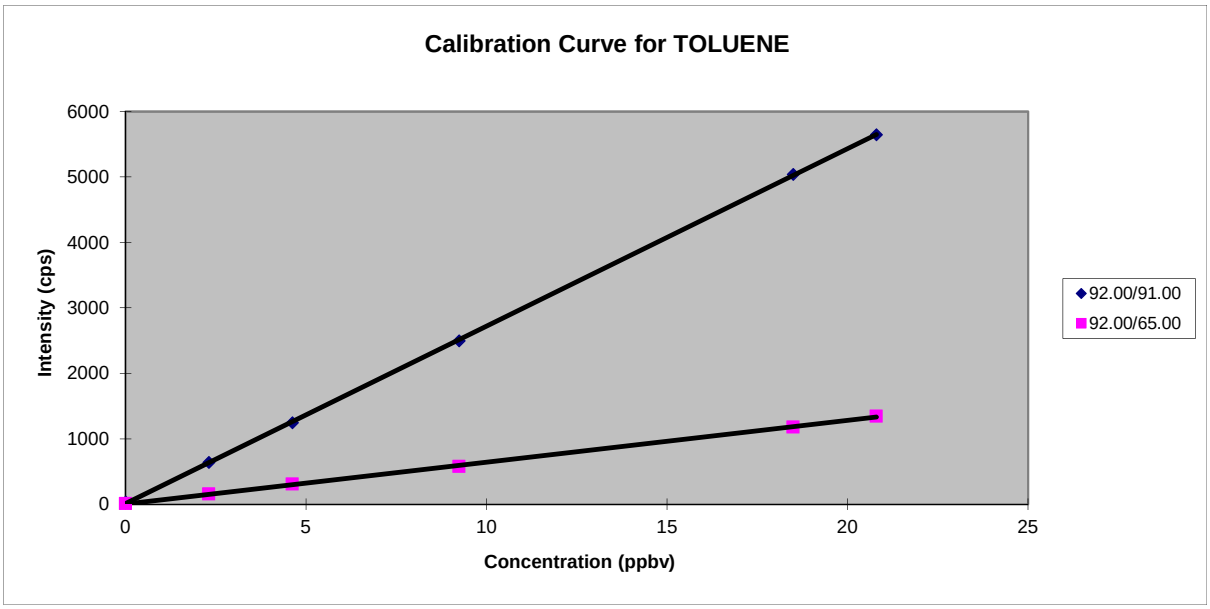




Filename:	64MSMS00885 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Saturday, April 6, 2019 19:17:27					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.31	8.53	10.51	12.49	14.47

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	11.9907593	84.48578
Intercept:	6.90847001	15.7364397
Correlation:	0.99864295	0.99994724

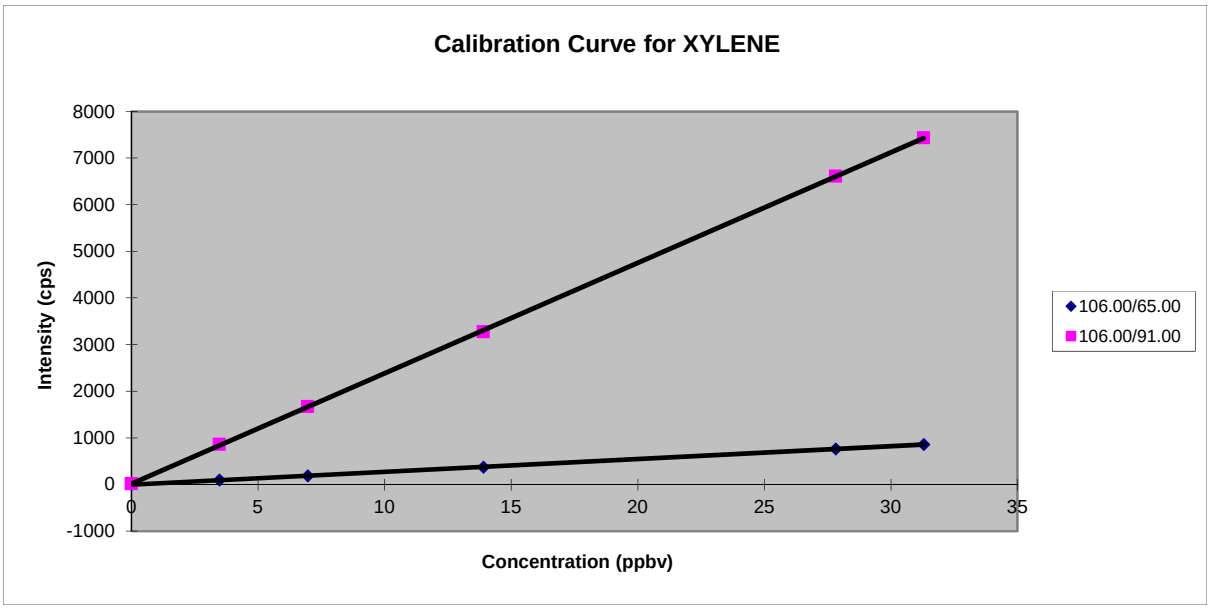
Concentratior	78.00/39.00	78.00/52.00
0	1.875	7.39583333
2.31	35.7291667	219.791667
4.62	60.8333333	410.729167
9.24	126.5625	792.083333
18.49	230.9375	1570.625
20.8	250.520833	1779.375



Filename:	64MSMS00885 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Saturday, April 6, 2019 19:18:03					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.31	8.53	10.51	12.49	14.47

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	271.098968	63.7691414
Intercept:	11.2425648	5.66473632
Correlation:	0.99997363	0.99982542

Concentratior	92.00/91.00	92.00/65.00
0	32.9166667	9.27083333
2.31	638.75	154.583333
4.62	1244.89583	306.770833
9.24	2498.125	578.125
18.49	5040.83333	1177.8125
20.8	5647.08333	1344.0625



Filename:	64MSMS00885 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Saturday, April 6, 2019 19:18:40					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.31	8.53	10.51	12.49	14.47

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	27.451258	236.777908
Intercept:	-2.8823346	16.8059252
Correlation:	0.99989166	0.99998406

Concentratior	106.00/65.00	106.00/91.00
0	3.33333333	17.8125
3.48	94.375	858.020833
6.96	183.75	1666.77083
13.91	371.145833	3276.875
27.82	761.145833	6610.72917
31.3	860.3125	7434.47917

Report	File Name	64MSMS00885 et al.			
	Sample Name	EOD Calibration - BTX 20190406			
	Date	Saturday, April 6, 2019 19:19:12			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	11.99	84.49	271.10	63.77	27.45	236.78
Intercept	6.91	15.74	11.24	5.66	-2.88	16.81
Intensity	1.88	7.40	32.92	9.27	3.33	17.81
Int SD	4.18	9.09	20.97	9.32	5.92	17.18
Concentration	-0.42	-0.10	0.08	0.06	0.23	0.00
Conc SD	0.35	0.11	0.08	0.15	0.22	0.07
Compound Con	-0.26		0.07		0.12	
Compound SD	0.16		0.08		0.10	
Det. Limit	1.05	0.32	0.23	0.44	0.65	0.22
Compound DL	0.68		0.34		0.43	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 4/7/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3200	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:53	1800SCCS	~191	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date:	5/12/2019

Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Sun, Apr 7, 2019, 8:23:28
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR07 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sun, Apr 7, 2019, 8:20:30

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.061
75.000	0.067
100.000	0.076
125.000	0.083
160.000	0.090

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.036
70.000	0.039
100.000	0.037
130.000	0.046
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Sun, Apr 7, 2019, 8:23:48
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR07 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sun, Apr 7, 2019, 8:20:30

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.061
75.000	0.067
100.000	0.076
125.000	0.083
160.000	0.090

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.036
70.000	0.039
100.000	0.037
130.000	0.046
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

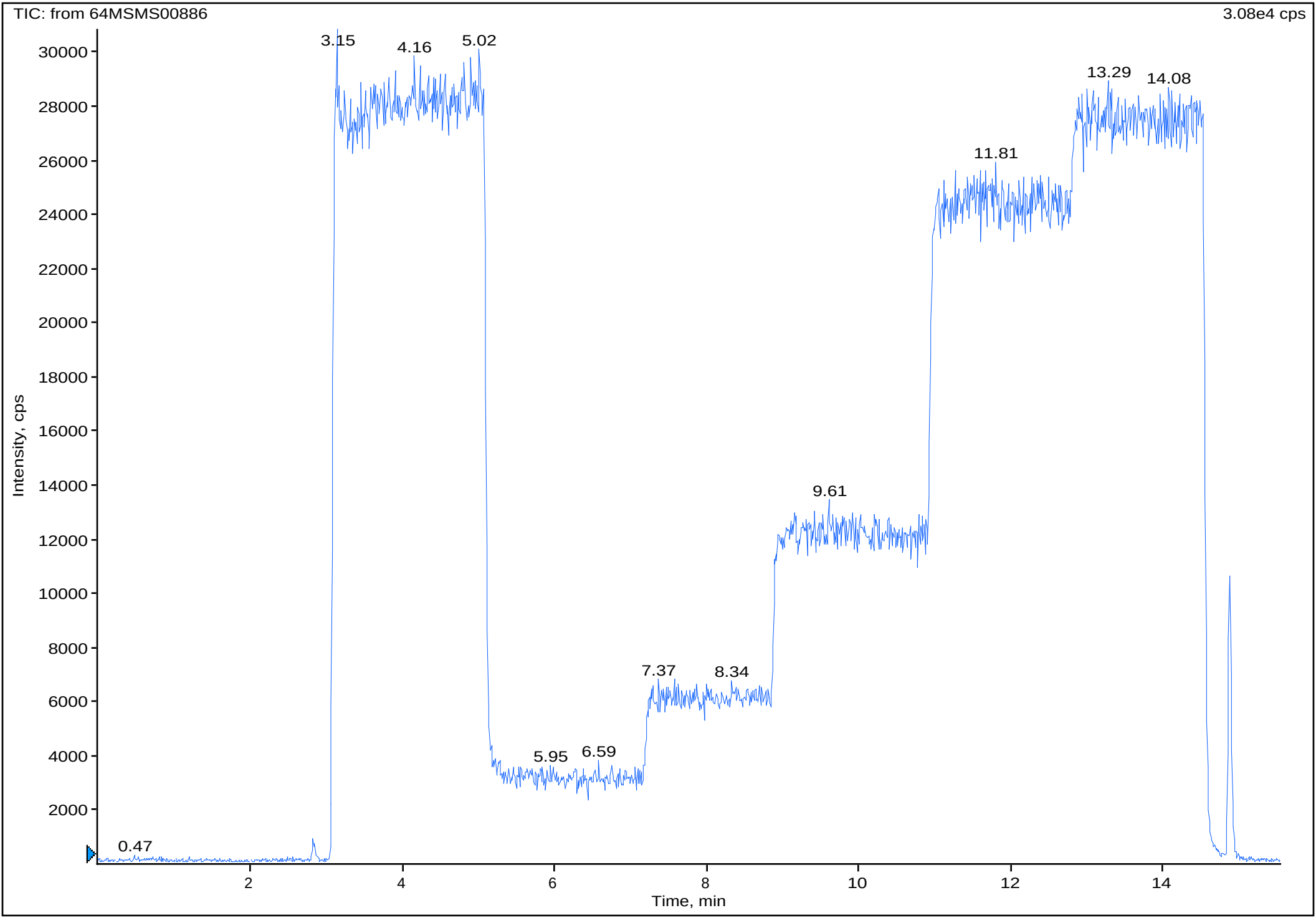
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

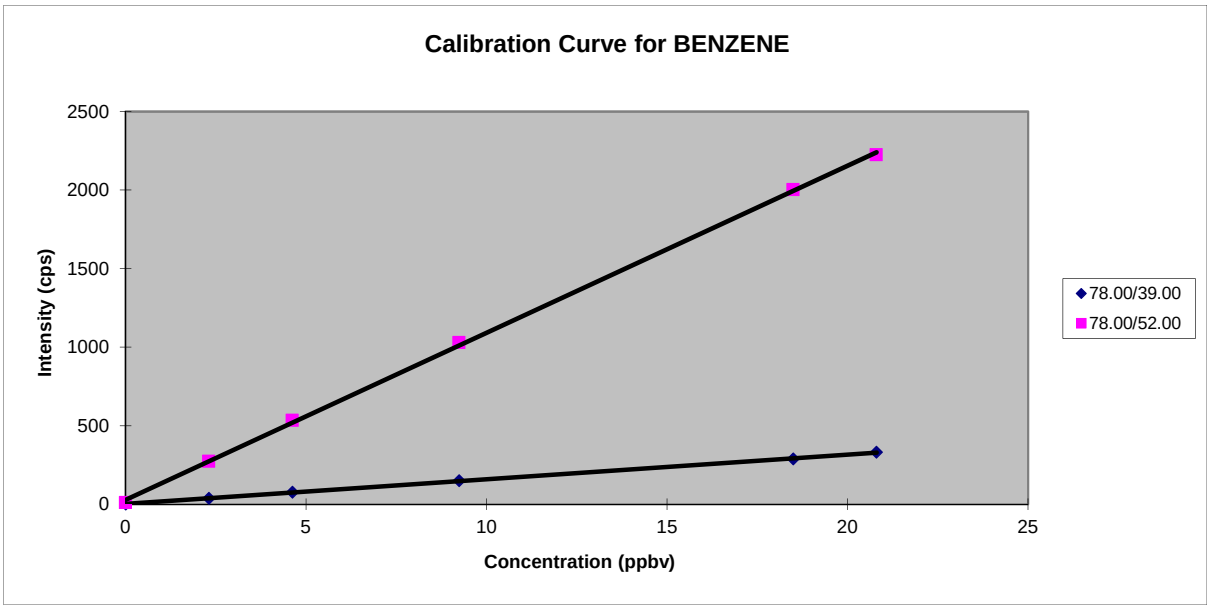
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/7/19.7.27.51
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, Apr 7, 2019 at 8:27:55; Exp. Comment: BTX

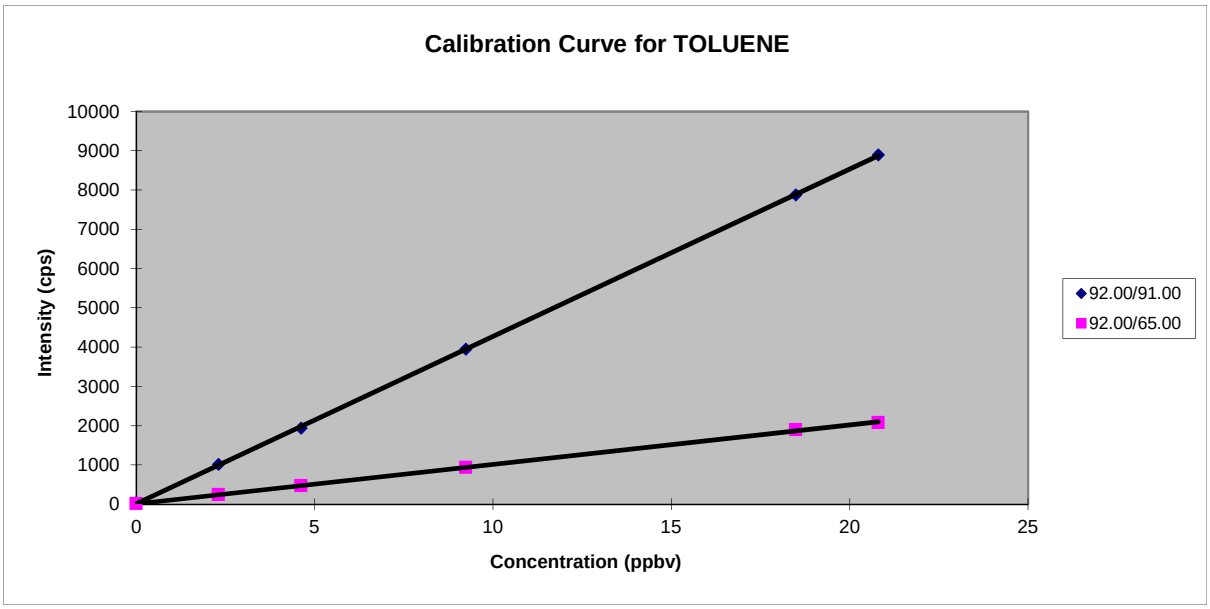




Filename:	64MSMS00886 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Sunday, April 7, 2019 7:45:31					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.20	8.05	9.84	11.87	13.66

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	15.6716324	106.338725
Intercept:	2.72868363	28.5166864
Correlation:	0.99983187	0.99986091

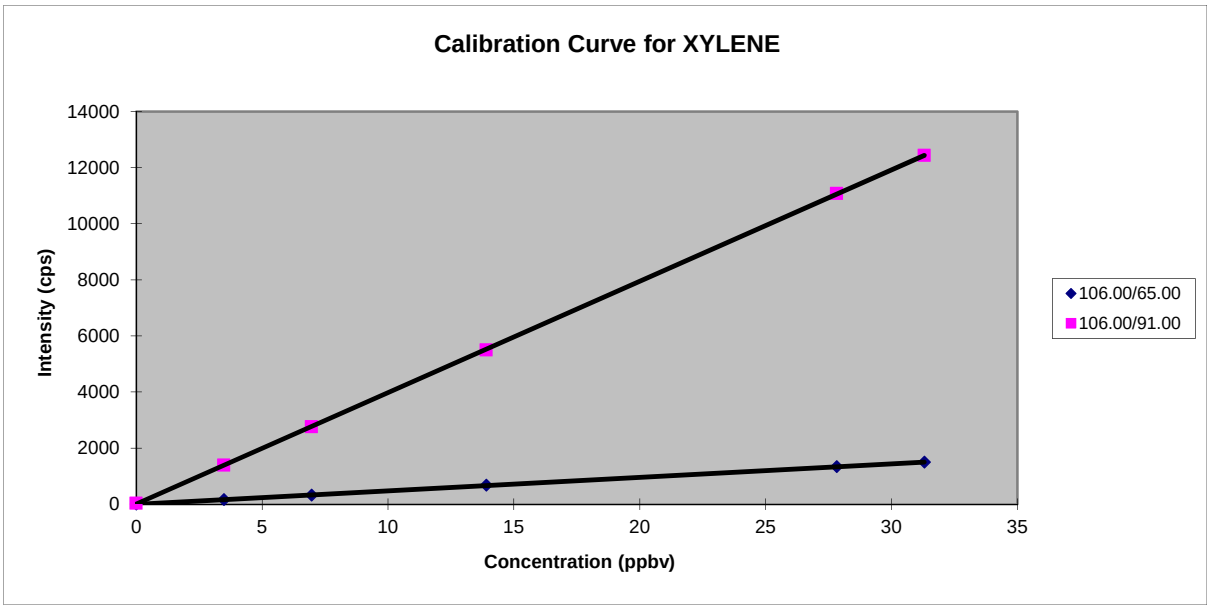
Concentratior	78.00/39.00	78.00/52.00
0	1.97916667	9.16666667
2.31	37.7083333	272.708333
4.62	76.1458333	533.333333
9.24	150.208333	1027.8125
18.49	288.541667	2002.08333
20.8	330.9375	2223.54167



Filename:	64MSMS00886 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Sunday, April 7, 2019 7:46:12					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.20	8.05	9.84	11.87	13.66

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	425.949079	100.466708
Intercept:	16.8210998	10.7798091
Correlation:	0.99997531	0.99978283

Concentratior	92.00/91.00	92.00/65.00
0	40.9375	11.3541667
2.31	1014.27083	245.729167
4.62	1941.35417	470.9375
9.24	3951.25	932.8125
18.49	7877.70833	1899.6875
20.8	8898.54167	2076.04167



Filename:	64MSMS00886 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Sunday, April 7, 2019 7:46:47					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.20	8.05	9.84	11.87	13.66

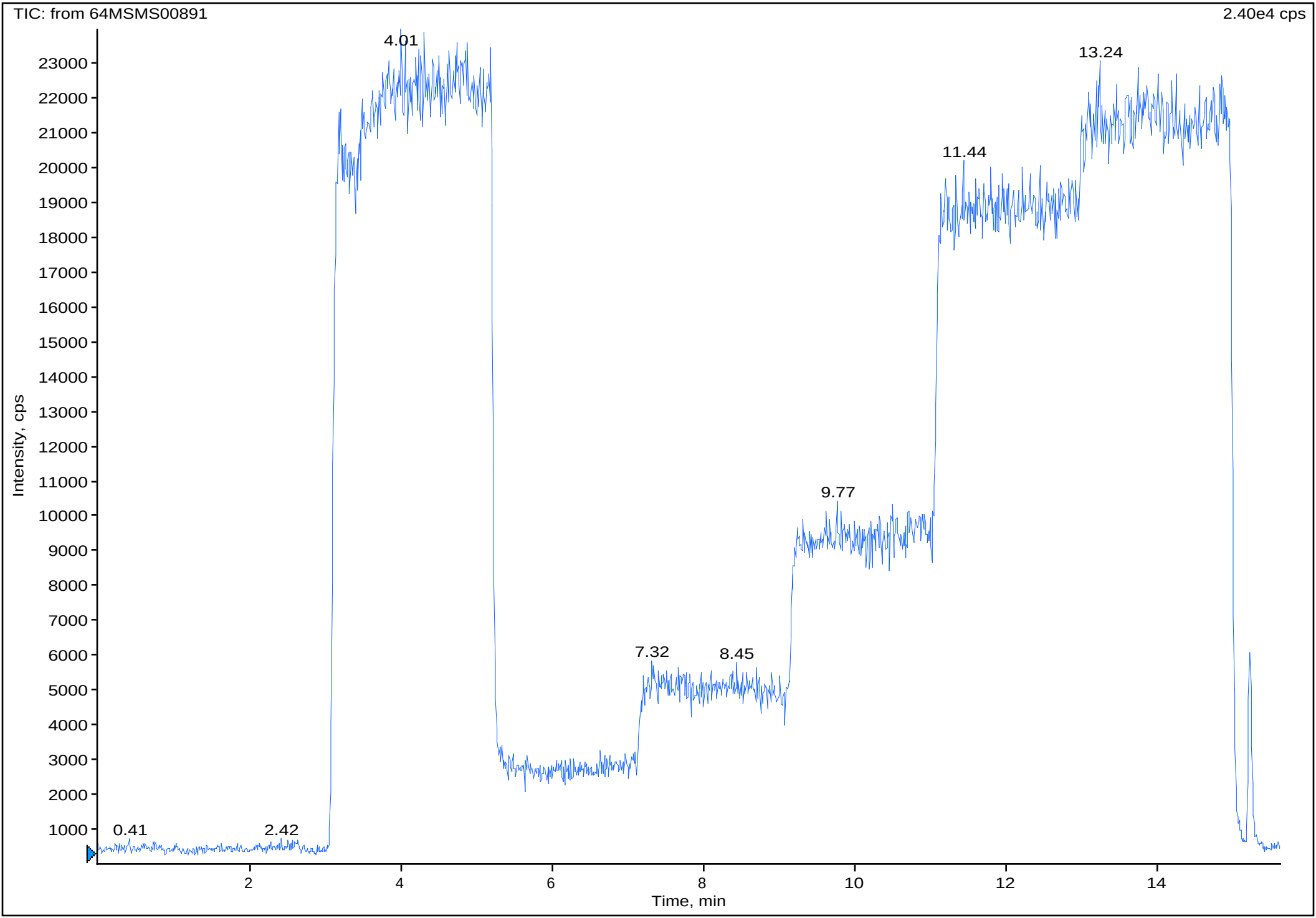
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	48.084707	396.910768
Intercept:	2.22477845	11.1048356
Correlation:	0.99996794	0.99999116

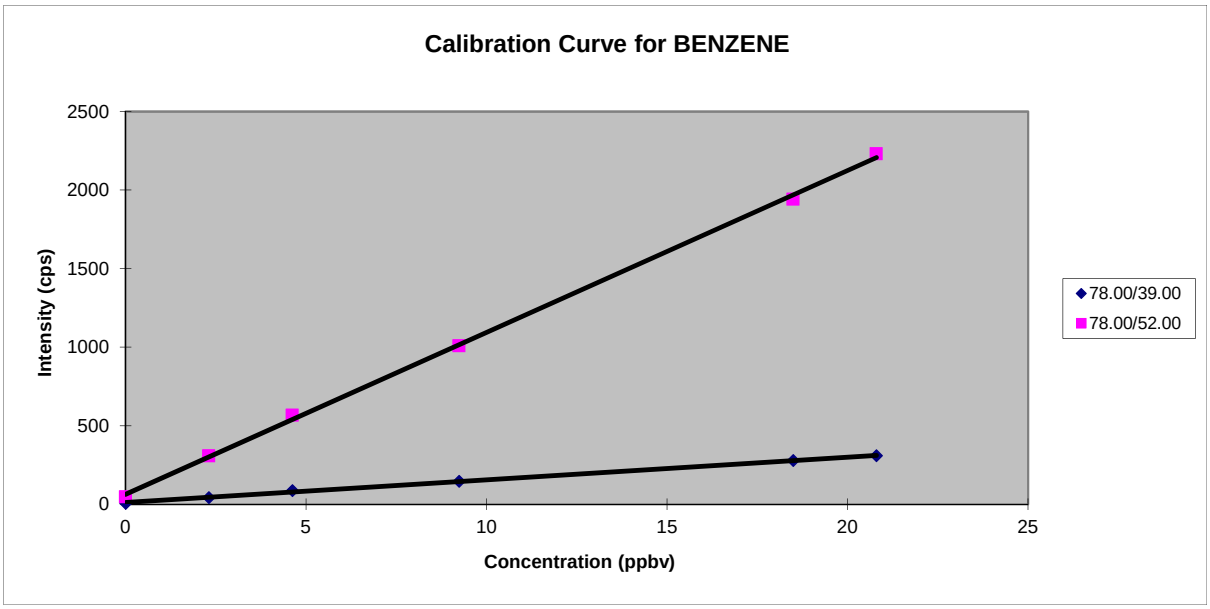
Concentratior	106.00/65.00	106.00/91.00
0	5.10416667	36.25
3.48	169.166667	1394.27083
6.96	328.75	2758.33333
13.91	678.125	5500.72917
27.82	1338.95833	1.11E+04
31.3	1506.875	1.24E+04

Report	File Name	64MSMS00886 et al.			
	Sample Name	BOD Calibration - BTX 20190407			
	Date	Sunday, April 7, 2019 7:47:25			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	15.67	106.34	425.95	100.47	48.08	396.91
Intercept	2.73	28.52	16.82	10.78	2.22	11.10
Intensity	1.98	9.17	40.94	11.35	5.10	36.25
Int SD	4.73	10.53	21.86	11.93	8.46	22.35
Concentration	-0.05	-0.18	0.06	0.01	0.06	0.06
Conc SD	0.30	0.10	0.05	0.12	0.18	0.06
Compound Con	-0.11		0.03		0.06	
Compound SD	0.14		0.06		0.08	
Det. Limit	0.91	0.30	0.15	0.36	0.53	0.17
Compound DL	0.60		0.26		0.35	

4/7/19.14.02.44
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, Apr 7, 2019 at 15:02:47; Exp. Comment: BTX

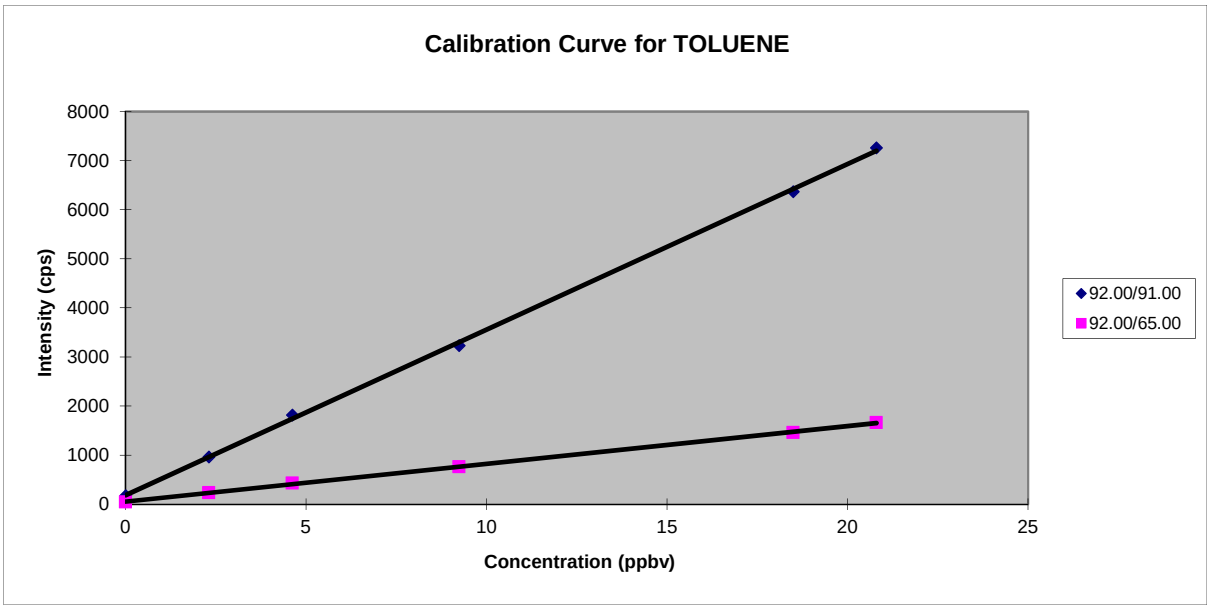




Filename:	64MSMS00891 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Sunday, April 7, 2019 14:19:24					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.24	8.18	10.15	12.07	13.89

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	14.4232114	103.055242
Intercept:	11.4904769	63.6066014
Correlation:	0.99918447	0.99971386

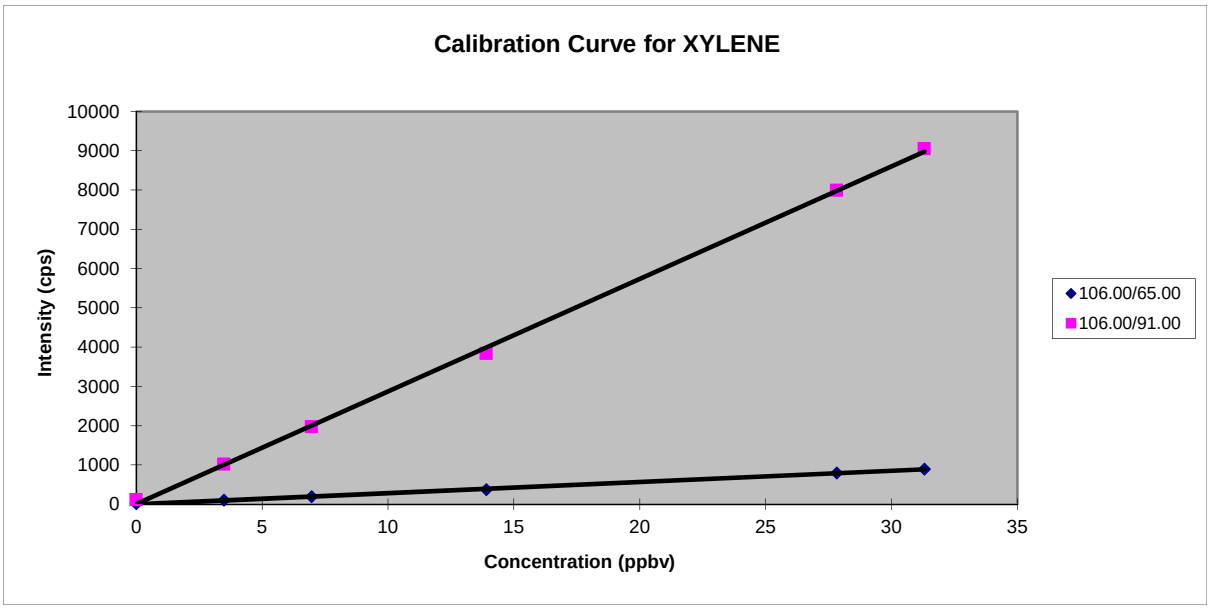
Concentratior	78.00/39.00	78.00/52.00
0	5.52083333	46.4583333
2.31	42.8125	306.875
4.62	86.7708333	565.208333
9.24	146.458333	1008.22917
18.49	278.854167	1941.35417
20.8	308.4375	2228.95833



Filename:	64MSMS00891 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Sunday, April 7, 2019 14:19:58					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.24	8.18	10.15	12.07	13.89

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	337.224247	76.8420214
Intercept:	185.684297	54.1159429
Correlation:	0.99980028	0.99982999

Concentratior	92.00/91.00	92.00/65.00
0	173.020833	44.2708333
2.31	962.708333	230.520833
4.62	1817.70833	426.145833
9.24	3234.89583	762.916667
18.49	6366.04167	1459.27083
20.8	7262.1875	1663.22917



Filename:	64MSMS00891 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Sunday, April 7, 2019 14:20:28					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.24	8.18	10.15	12.07	13.89

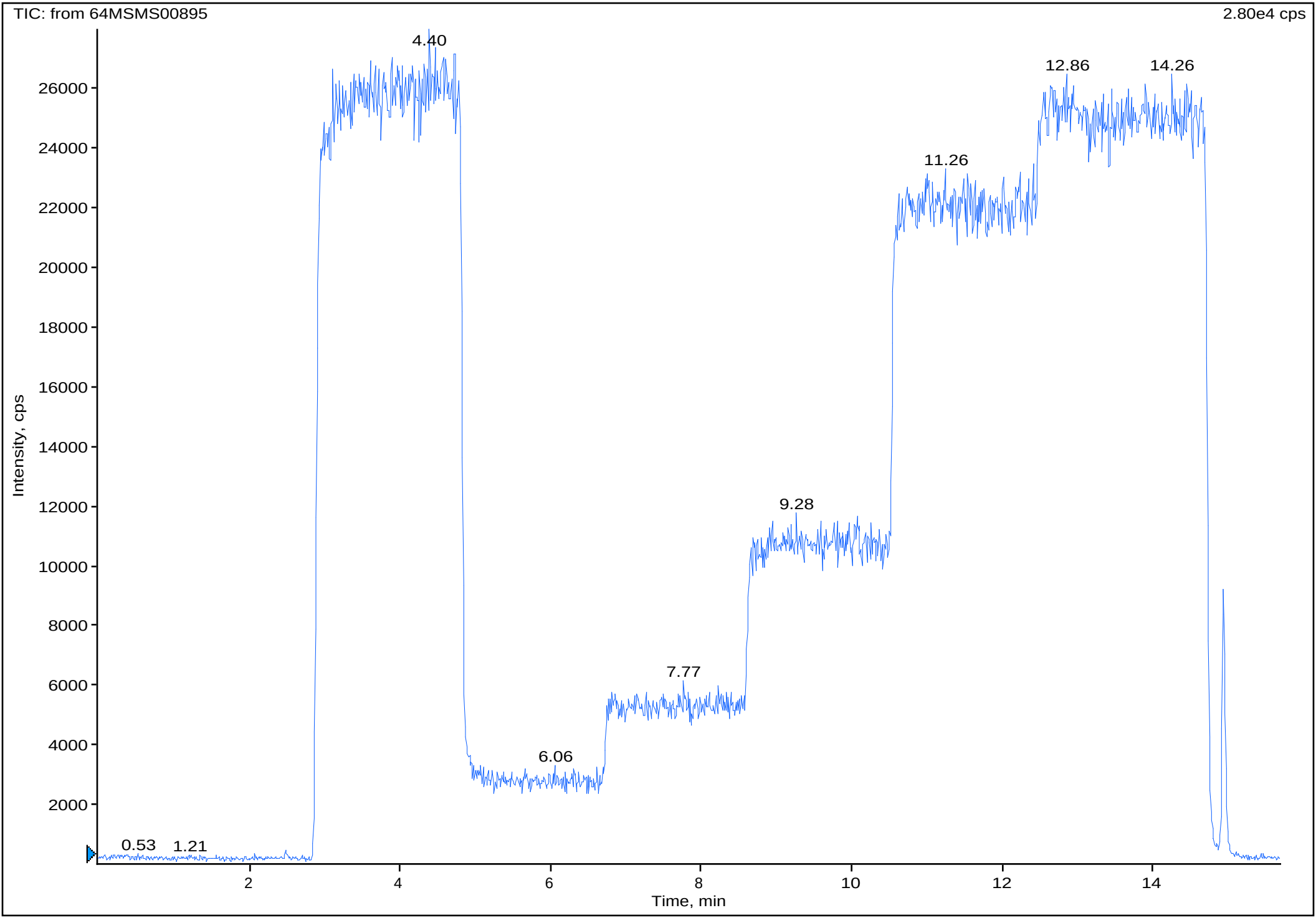
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	28.4265086	286.598731
Intercept:	0.65099943	7.56940218
Correlation:	0.99933002	0.99968317

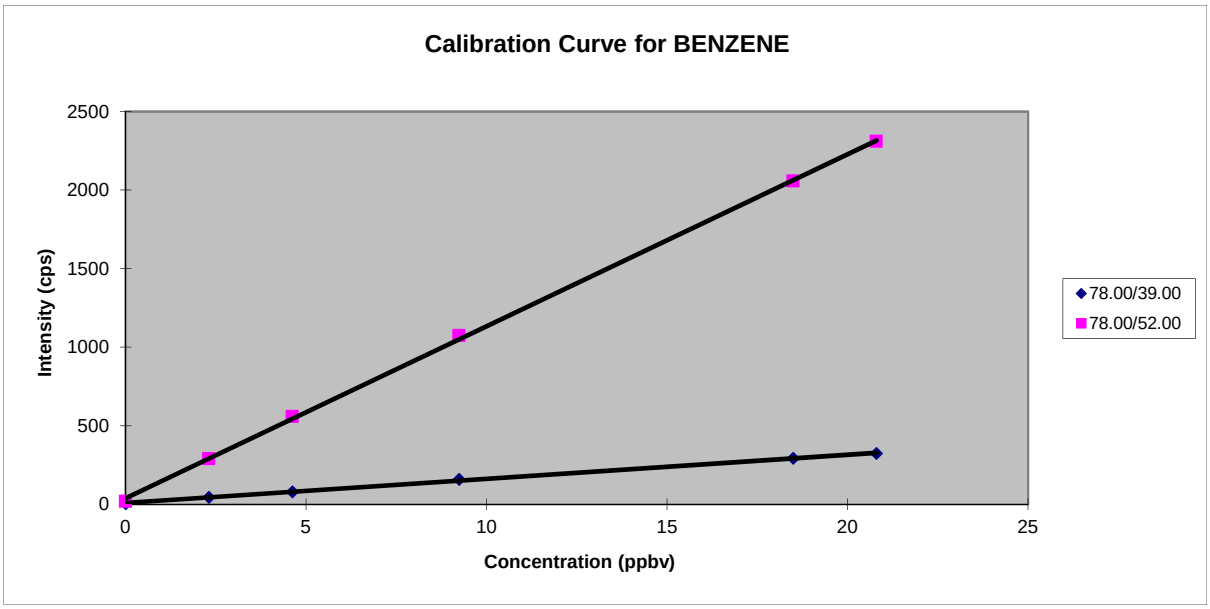
Concentratior	106.00/65.00	106.00/91.00
0	15	114.270833
3.48	103.645833	1015.83333
6.96	191.5625	1966.97917
13.91	372.1875	3832.70833
27.82	797.708333	7987.70833
31.3	896.5625	9050.3125

Report	File Name	64MSMS00891 et al.			
	Sample Name	MOD Calibration - BTX 20190407			
	Date	Sunday, April 7, 2019 14:21:01			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	14.42	103.06	337.22	76.84	28.43	286.60
Intercept	11.49	63.61	185.68	54.12	0.65	7.57
Intensity	5.52	46.46	173.02	44.27	15.00	114.27
Int SD	7.80	24.54	51.24	25.25	12.65	40.80
Concentration	-0.41	-0.17	-0.04	-0.13	0.50	0.37
Conc SD	0.54	0.24	0.15	0.33	0.44	0.14
Compound Con	-0.29		-0.08		0.44	
Compound SD	0.28		0.17		0.21	
Det. Limit	1.62	0.71	0.46	0.99	1.33	0.43
Compound DL	1.17		0.72		0.88	

4/7/19.19.43.39
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, Apr 7, 2019 at 19:43:38; Exp. Comment: BTX

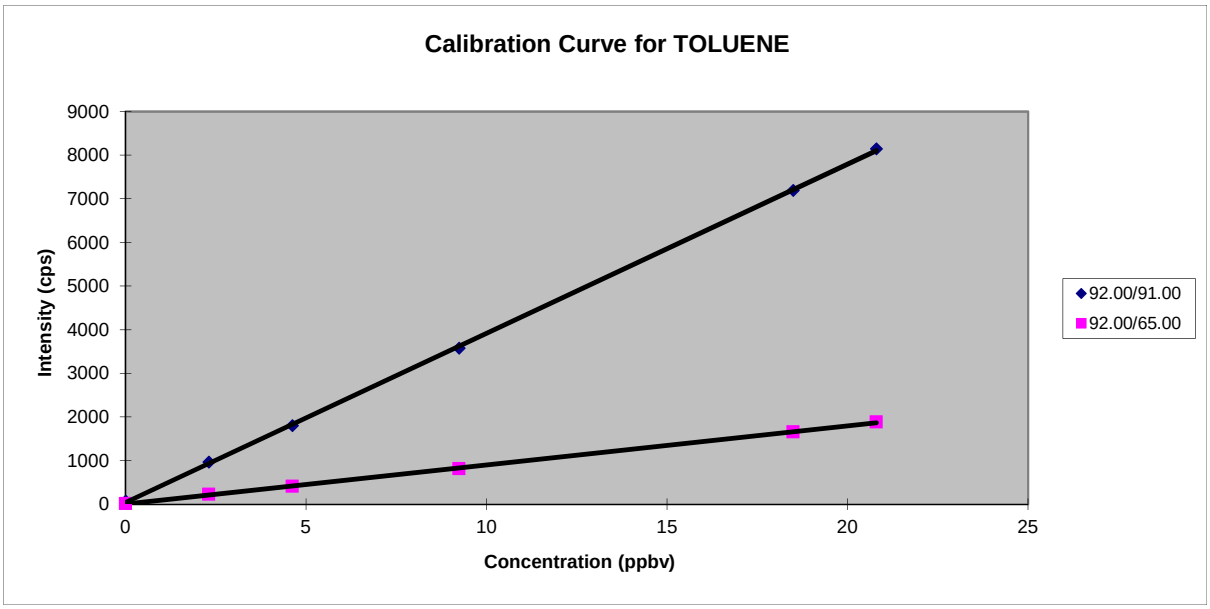




Filename:	64MSMS00895 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Sunday, April 7, 2019 20:01:08					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.83	7.66	9.54	11.52	13.37

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	15.3361422	109.49148
Intercept:	8.79848082	38.4719459
Correlation:	0.99939523	0.9998563

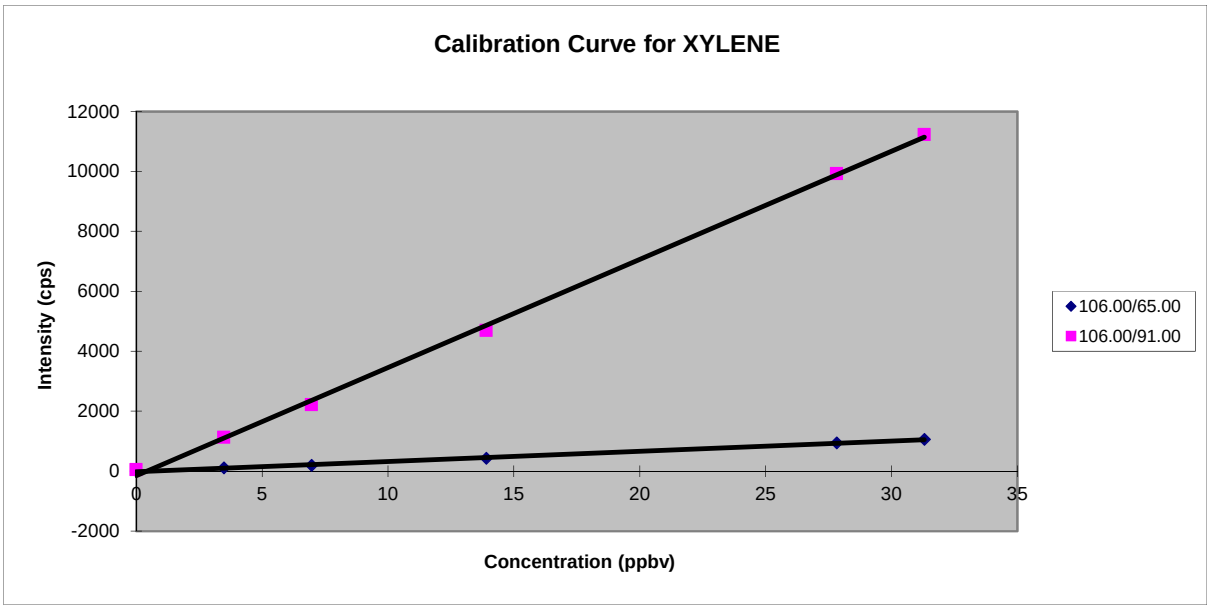
Concentratior	78.00/39.00	78.00/52.00
0	4.47916667	18.125
2.31	44.8958333	288.020833
4.62	78.3333333	558.229167
9.24	159.0625	1074.0625
18.49	292.291667	2056.25
20.8	324.270833	2308.54167



Filename:	64MSMS00895 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Sunday, April 7, 2019 20:01:57					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.83	7.66	9.54	11.52	13.37

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	387.702869	89.4275017
Intercept:	41.3157823	7.92304298
Correlation:	0.99994177	0.99983684

Concentratior	92.00/91.00	92.00/65.00
0	69.5833333	14.2708333
2.31	963.541667	228.4375
4.62	1799.58333	412.395833
9.24	3580.20833	813.854167
18.49	7190.41667	1655.52083
20.8	8146.5625	1882.70833



Filename:	64MSMS00895 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Sunday, April 7, 2019 20:02:36					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.83	7.66	9.54	11.52	13.37

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	34.2634244	360.77073
Intercept:	-17.425228	-146.752
Correlation:	0.99885231	0.99953507

Concentratior	106.00/65.00	106.00/91.00
0	5.3125	51.6666667
3.48	114.0625	1126.45833
6.96	199.0625	2211.14583
13.91	428.333333	4694.16667
27.82	941.25	9920.625
31.3	1067.39583	1.12E+04

Report	File Name	64MSMS00895 et al.			
	Sample Name	EOD Calibration - BTX 20190407			
	Date	Sunday, April 7, 2019 20:03:27			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	15.34	109.49	387.70	89.43	34.26	360.77
Intercept	8.80	38.47	41.32	7.92	-17.43	-146.75
Intensity	4.48	18.13	69.58	14.27	5.31	51.67
Int SD	8.06	14.09	32.73	14.49	7.94	28.86
Concentration	-0.28	-0.19	0.07	0.07	0.66	0.55
Conc SD	0.53	0.13	0.08	0.16	0.23	0.08
Compound Con	-0.23		0.07		0.61	
Compound SD	0.23		0.09		0.11	
Det. Limit	1.58	0.39	0.25	0.49	0.70	0.24
Compound DL	0.98		0.37		0.47	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 4/8/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3200	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
7:02	1500 SCCS	491	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date:	Exp: 5/12/2019
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Mon, Apr 8, 2019, 7:30:10
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR08 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Mon, Apr 8, 2019, 7:27:18

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.062
75.000	0.067
100.000	0.077
125.000	0.083
160.000	0.090

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.037
70.000	0.041
100.000	0.041
130.000	0.046
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Mon, Apr 8, 2019, 7:30:19
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR08 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Mon, Apr 8, 2019, 7:27:18

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.062
75.000	0.067
100.000	0.077
125.000	0.083
160.000	0.090

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.037
70.000	0.041
100.000	0.041
130.000	0.046
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

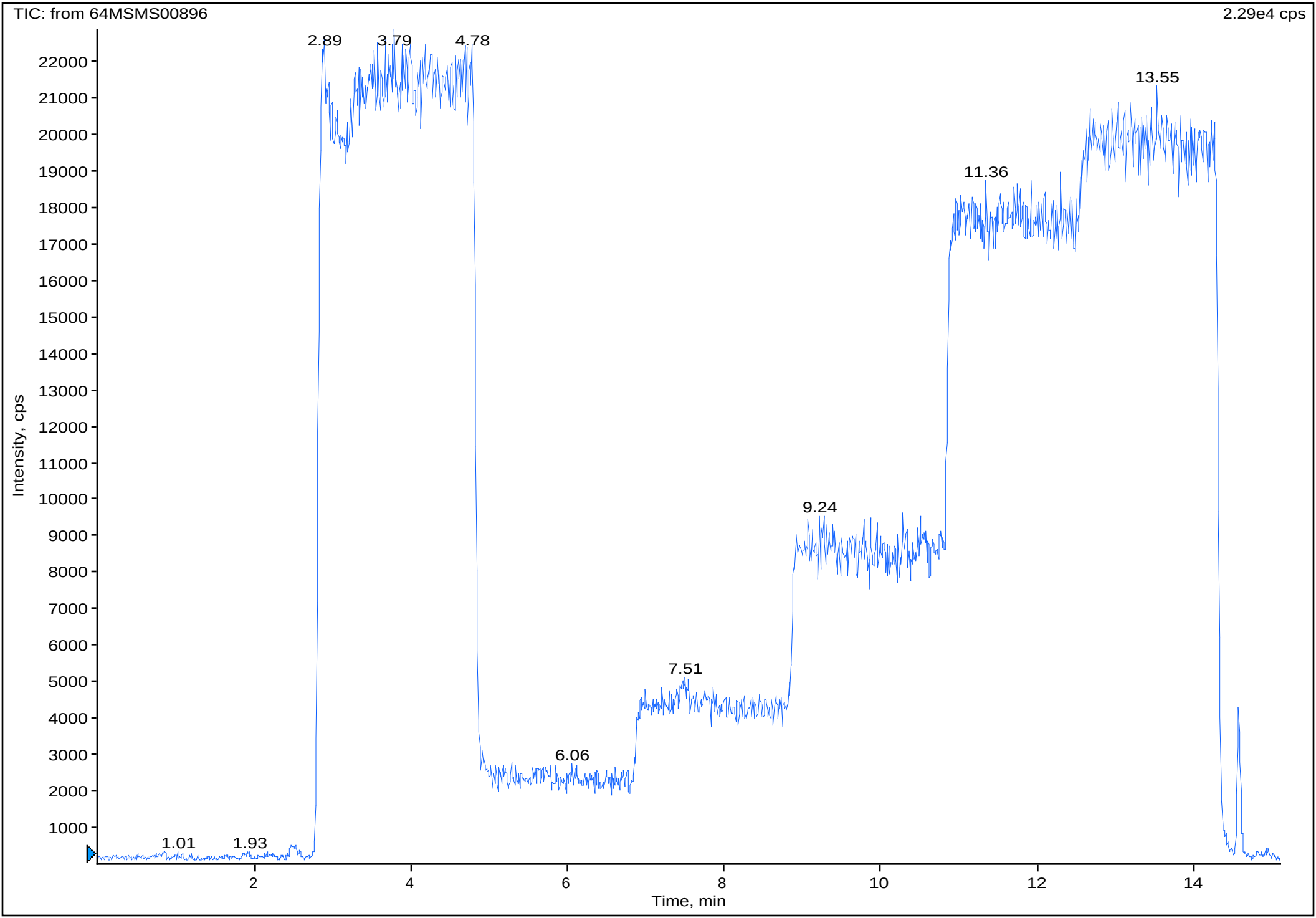
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

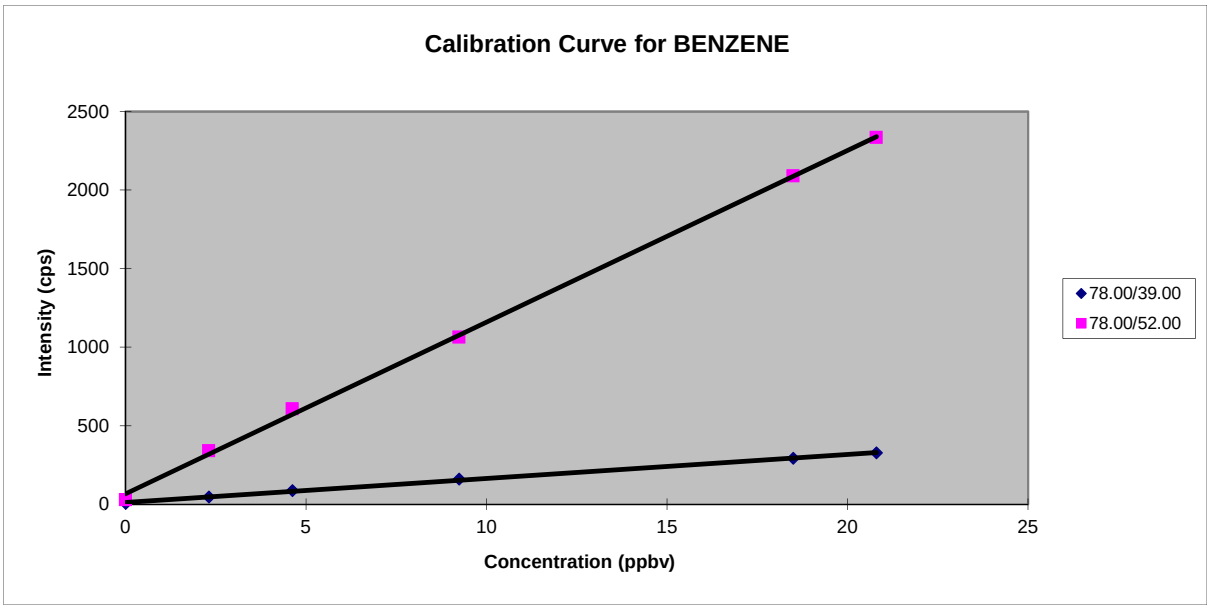
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/8/19.7.32.12
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Mon, Apr 8, 2019 at 7:32:12; Exp. Comment: BTX

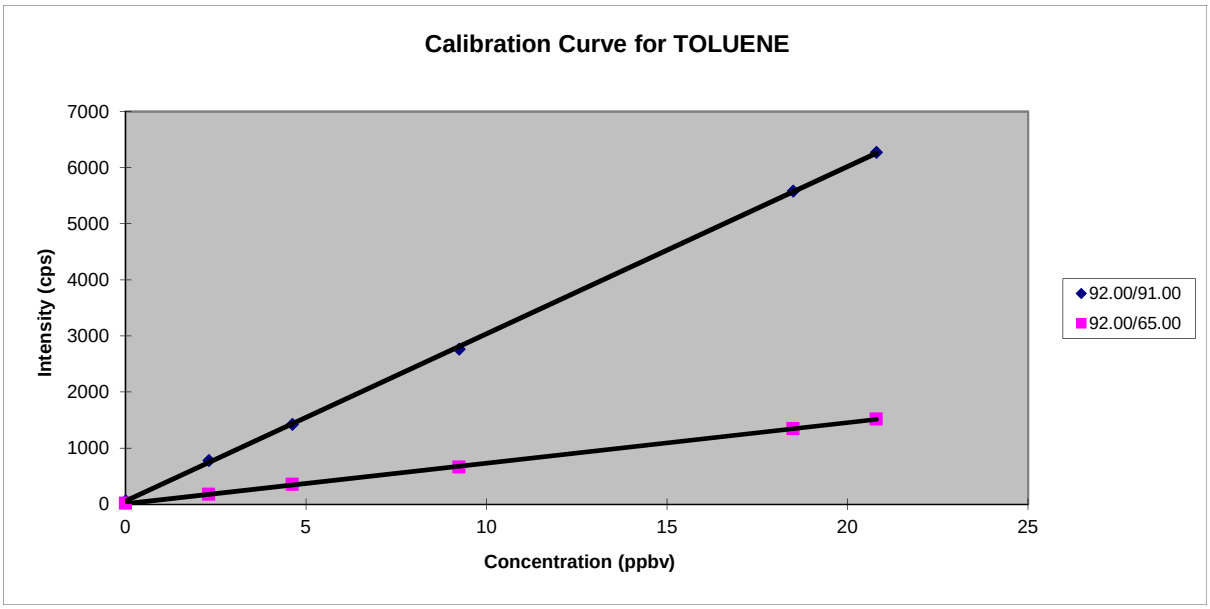




Filename:	64MSMS00896 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Monday, April 8, 2019 7:49:17					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.89	7.85	9.85	11.72	13.42

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	15.3045755	109.323067
Intercept:	11.7465129	66.4869824
Correlation:	0.99930132	0.99963174

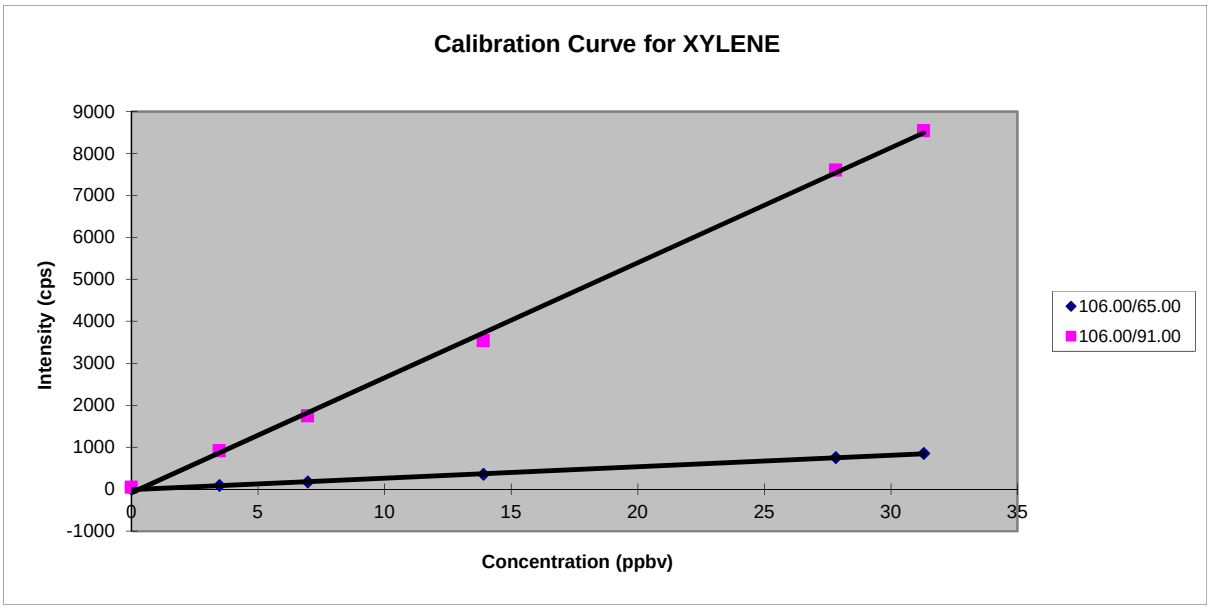
Concentratior	78.00/39.00	78.00/52.00
0	5.72916667	28.2291667
2.31	45.625	339.895833
4.62	86.7708333	605.9375
9.24	160.625	1063.54167
18.49	293.125	2090
20.8	327.395833	2334.375



Filename:	64MSMS00896 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Monday, April 8, 2019 7:49:56					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.89	7.85	9.85	11.72	13.42

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	298.085041	72.1622456
Intercept:	58.0860166	11.6087818
Correlation:	0.99994043	0.99989406

Concentratior	92.00/91.00	92.00/65.00
0	63.8541667	14.2708333
2.31	779.375	177.916667
4.62	1424.6875	354.166667
9.24	2762.39583	661.041667
18.49	5580	1347.60417
20.8	6270	1516.77083



Filename:	64MSMS00896 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Monday, April 8, 2019 7:50:30					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.89	7.85	9.85	11.72	13.42

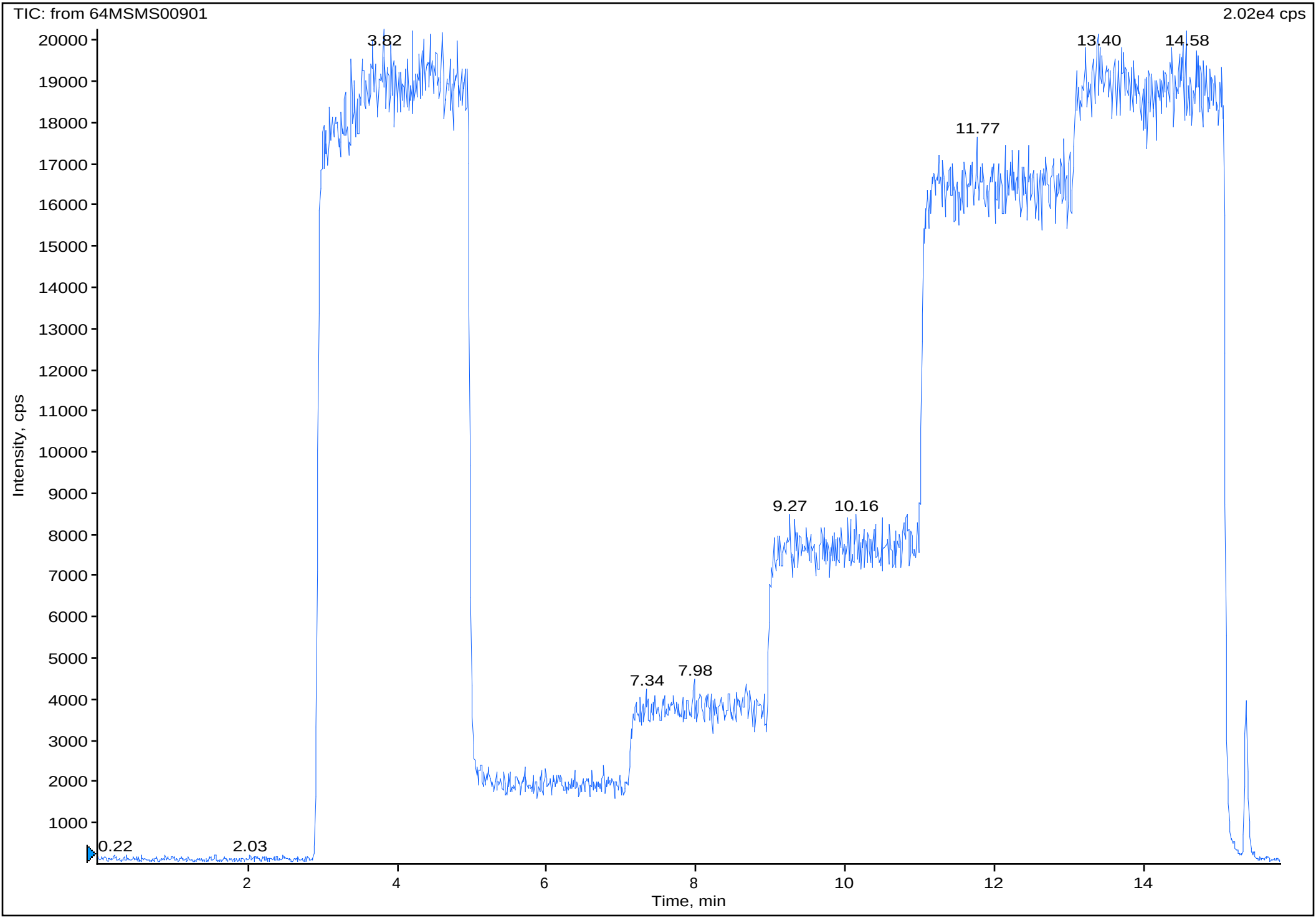
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	27.2856361	273.996811
Intercept:	-8.0608959	-83.123828
Correlation:	0.99963762	0.9994788

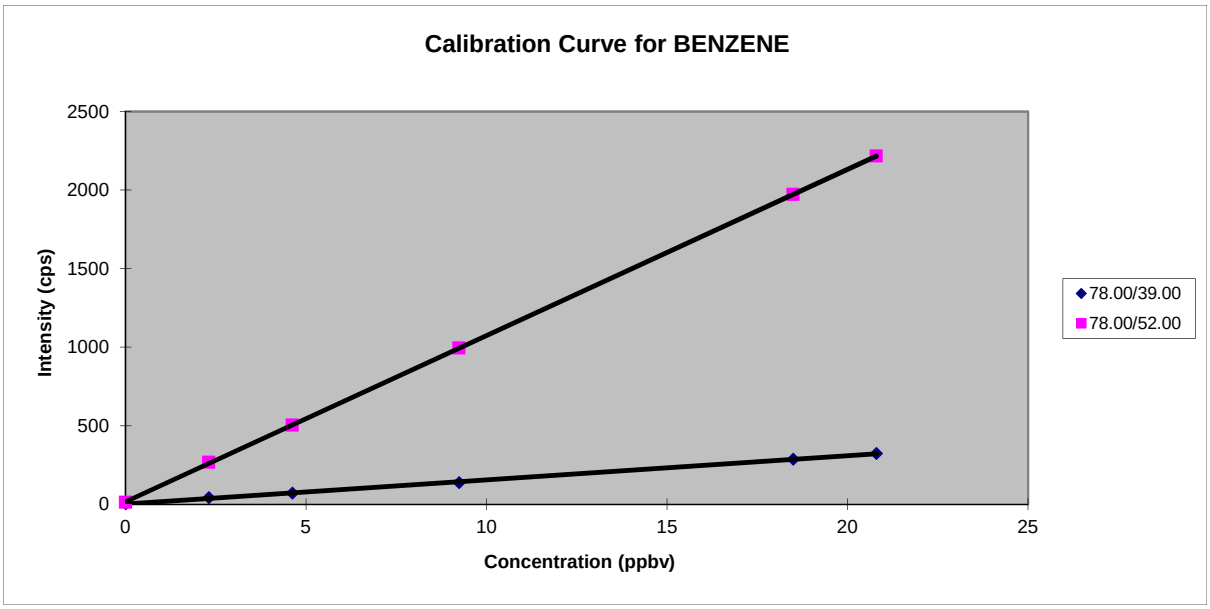
Concentratior	106.00/65.00	106.00/91.00
0	5.41666667	42.2916667
3.48	85.7291667	912.083333
6.96	175.520833	1744.0625
13.91	357.604167	3536.04167
27.82	752.708333	7596.5625
31.3	852.1875	8540.72917

Report	File Name	64MSMS00896 et al.			
	Sample Name	BOD Calibration - BTX 20190408			
	Date	Monday, April 8, 2019 7:51:02			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	15.30	109.32	298.09	72.16	27.29	274.00
Intercept	11.75	66.49	58.09	11.61	-8.06	-83.12
Intensity	5.73	28.23	63.85	14.27	5.42	42.29
Int SD	8.67	22.52	32.20	14.20	7.39	24.21
Concentration	-0.39	-0.35	0.02	0.04	0.49	0.46
Conc SD	0.57	0.21	0.11	0.20	0.27	0.09
Compound Con	-0.37		0.03		0.48	
Compound SD	0.27		0.11		0.13	
Det. Limit	1.70	0.62	0.32	0.59	0.81	0.27
Compound DL	1.16		0.46		0.54	

4/8/19.12.43.33
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Mon, Apr 8, 2019 at 12:43:33; Exp. Comment: BTX

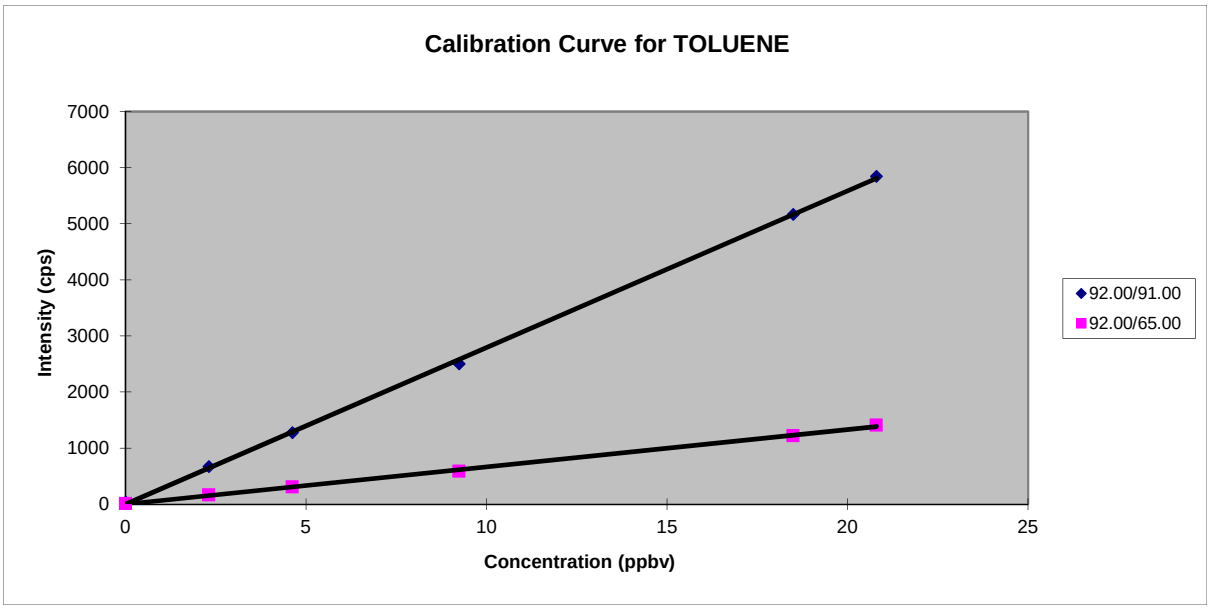




Filename:	64MSMS00901 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Monday, April 8, 2019 13:00:22					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.06	8.03	10.02	12.08	14.07

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	15.3646411	105.769161
Intercept:	1.98991754	16.2466413
Correlation:	0.99961424	0.9999926

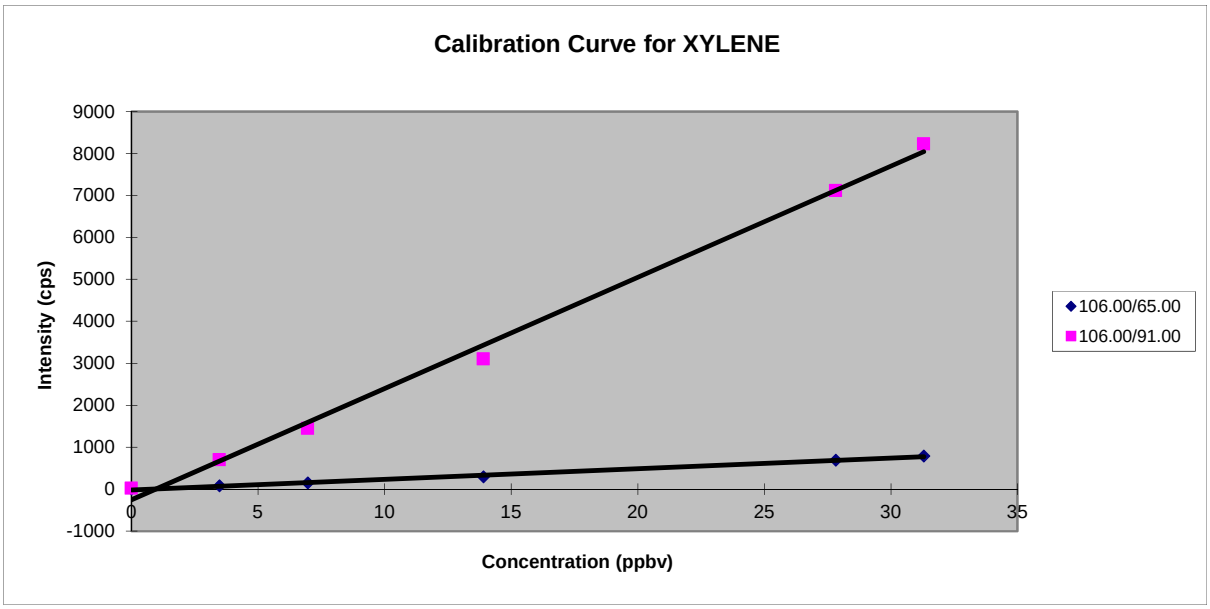
Concentratior	78.00/39.00	78.00/52.00
0	3.02083333	11.5625
2.31	41.4583333	266.666667
4.62	71.7708333	503.541667
9.24	137.395833	994.270833
18.49	286.25	1971.25
20.8	324.166667	2216.14583



Filename:	64MSMS00901 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Monday, April 8, 2019 13:00:57					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.06	8.03	10.02	12.08	14.07

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	279.132126	66.5674108
Intercept:	3.44773998	1.96953868
Correlation:	0.99982582	0.9995146

Concentratior	92.00/91.00	92.00/65.00
0	41.7708333	11.0416667
2.31	670	165.729167
4.62	1276.875	308.4375
9.24	2501.35417	588.541667
18.49	5165.3125	1221.35417
20.8	5846.04167	1408.54167



Filename:	64MSMS00901 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Monday, April 8, 2019 13:01:27					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.06	8.03	10.02	12.08	14.07

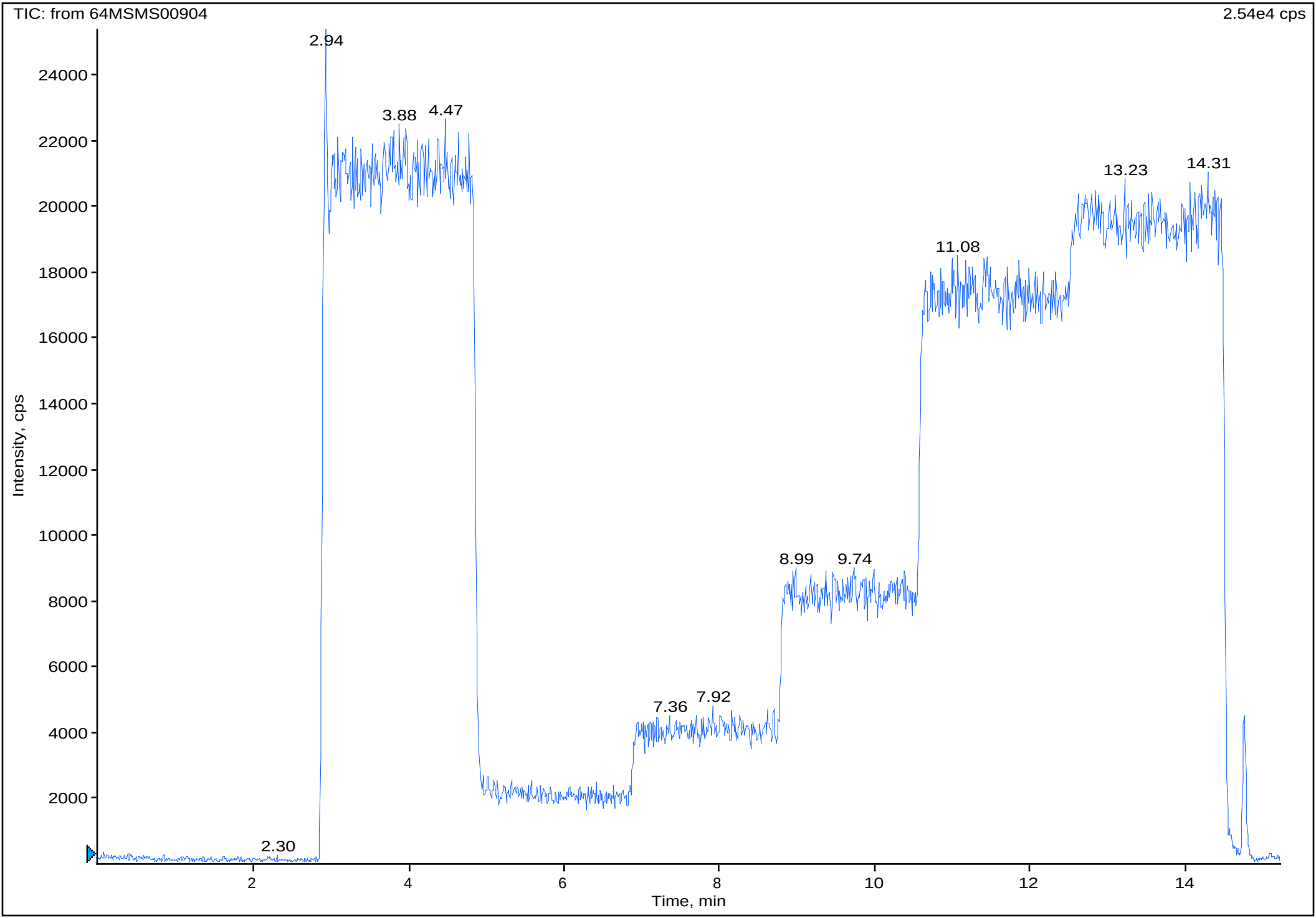
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	25.2538785	264.948225
Intercept:	-16.254096	-250.80194
Correlation:	0.99776178	0.99795745

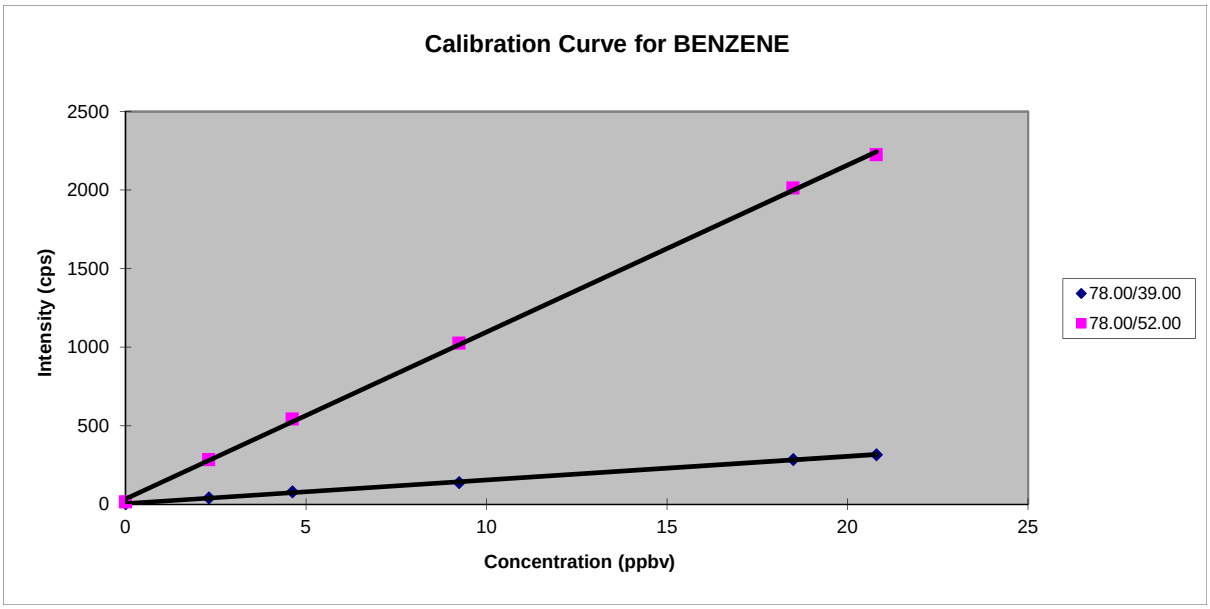
Concentratior	106.00/65.00	106.00/91.00
0	3.54166667	22.6041667
3.48	79.5833333	700.729167
6.96	153.75	1448.85417
13.91	293.645833	3099.0625
27.82	691.770833	7111.77083
31.3	788.125	8227.39583

Report	File Name	64MSMS00901 et al.			
	Sample Name	MOD Calibration - BTX 20190408			
	Date	Monday, April 8, 2019 13:02:16			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	15.36	105.77	279.13	66.57	25.25	264.95
Intercept	1.99	16.25	3.45	1.97	-16.25	-250.80
Intensity	3.02	11.56	41.77	11.04	3.54	22.60
Int SD	6.51	11.99	24.67	11.19	6.80	18.88
Concentration	0.07	-0.04	0.14	0.14	0.78	1.03
Conc SD	0.42	0.11	0.09	0.17	0.27	0.07
Compound Con	0.01		0.14		0.91	
Compound SD	0.19		0.09		0.12	
Det. Limit	1.27	0.34	0.27	0.50	0.81	0.21
Compound DL	0.81		0.38		0.51	

4/8/19.17.46.52
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Mon, Apr 8, 2019 at 17:46:52; Exp. Comment: BTX

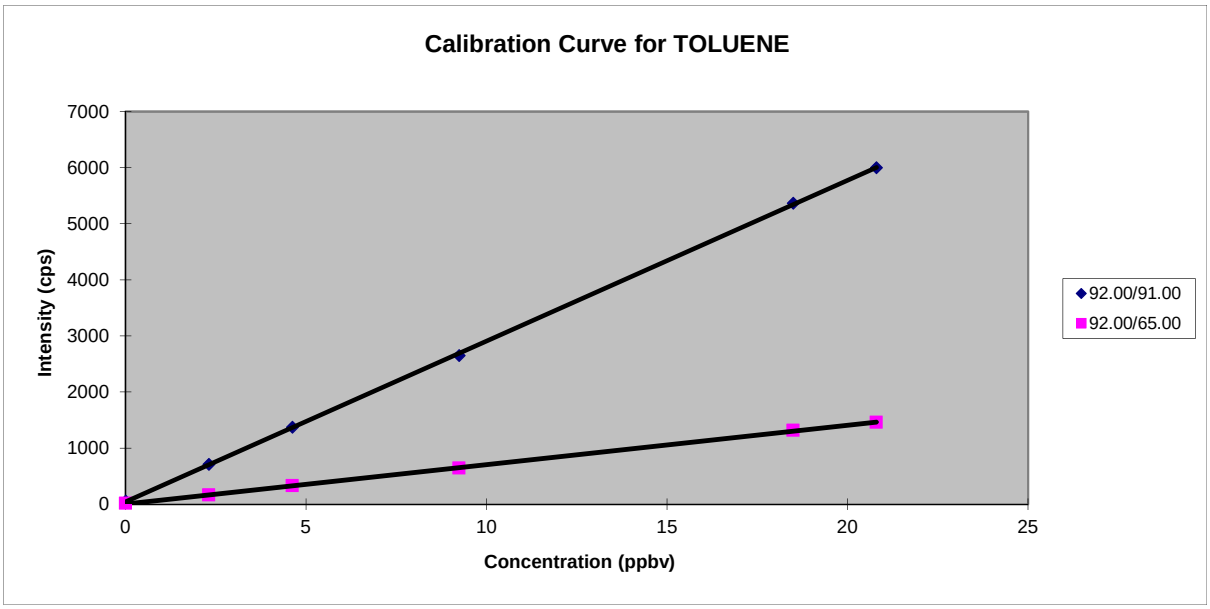




Filename:	64MSMS00904 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Monday, April 8, 2019 18:03:07					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.93	7.83	9.66	11.52	13.48

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	15.0330313	106.267346
Intercept:	4.69051372	34.0896692
Correlation:	0.99967586	0.99984282

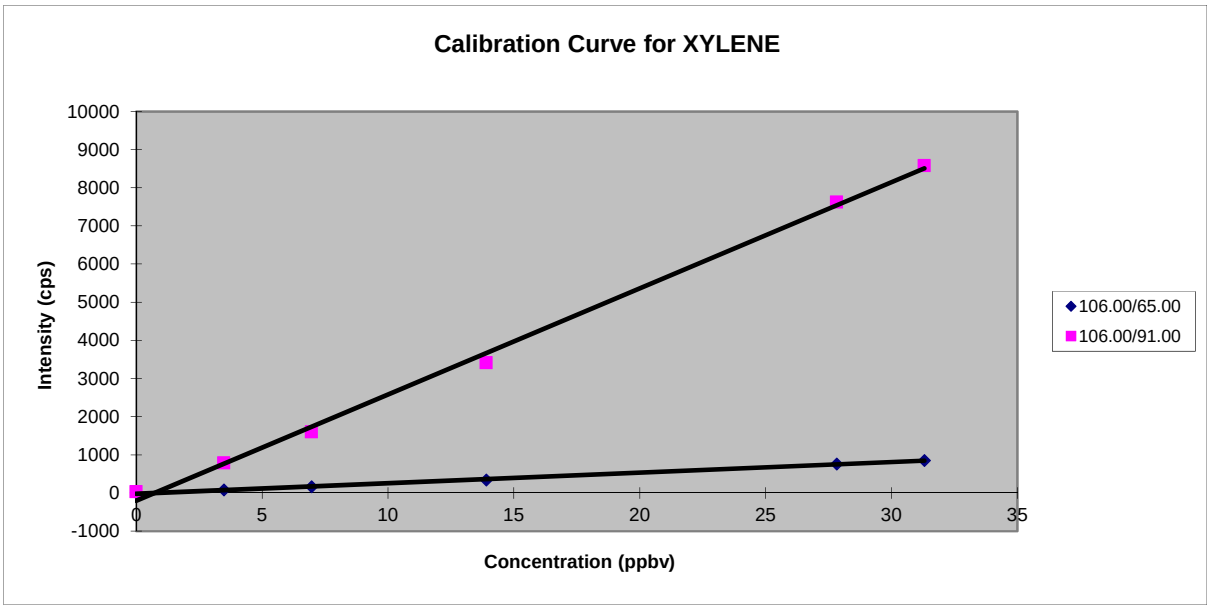
Concentratior	78.00/39.00	78.00/52.00
0	3.02083333	13.4375
2.31	40.625	281.875
4.62	78.125	540.520833
9.24	138.541667	1025.10417
18.49	285.416667	2012.5
20.8	316.145833	2224.6875



Filename:	64MSMS00904 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Monday, April 8, 2019 18:03:46					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.93	7.83	9.66	11.52	13.48

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	286.450116	70.0917175
Intercept:	45.7530414	6.6848638
Correlation:	0.99996349	0.99986031

Concentratior	92.00/91.00	92.00/65.00
0	53.8541667	14.8958333
2.31	714.166667	166.666667
4.62	1375.72917	329.791667
9.24	2653.4375	640.729167
18.49	5365.20833	1317.29167
20.8	5998.64583	1458.02083



Filename:	64MSMS00904 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	YH					
Comment:						
Date:	Monday, April 8, 2019 18:04:16					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.93	7.83	9.66	11.52	13.48

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	27.6489443	278.327956
Intercept:	-17.004008	-201.48492
Correlation:	0.99894303	0.99885713

Concentratior	106.00/65.00	106.00/91.00
0	3.95833333	27.2916667
3.48	78.4375	781.666667
6.96	167.916667	1597.39583
13.91	340	3411.875
27.82	760.3125	7624.79167
31.3	855.208333	8580.10417

Report	File Name	64MSMS00904 et al.			
	Sample Name	EOD Calibration - BTX 20190408			
	Date	Monday, April 8, 2019 18:04:53			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	15.03	106.27	286.45	70.09	27.65	278.33
Intercept	4.69	34.09	45.75	6.68	-17.00	-201.48
Intensity	3.02	13.44	53.85	14.90	3.96	27.29
Int SD	5.83	13.28	26.65	14.58	5.89	22.12
Concentration	-0.11	-0.19	0.03	0.12	0.76	0.82
Conc SD	0.39	0.13	0.09	0.21	0.21	0.08
Compound Con	-0.15		0.07		0.79	
Compound SD	0.18		0.11		0.10	
Det. Limit	1.16	0.38	0.28	0.62	0.64	0.24
Compound DL	0.77		0.45		0.44	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date:

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3275	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
0643	1500	~19/SCFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date: EXP 05/02/19	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Tue, Apr 9, 2019, 7:13:35
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR09 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Tue, Apr 9, 2019, 7:10:40

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.070
100.000	0.077
125.000	0.085
160.000	0.095

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.037
70.000	0.041
100.000	0.045
130.000	0.050
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Tue, Apr 9, 2019, 7:15:11
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR09 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Tue, Apr 9, 2019, 7:10:40

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.070
100.000	0.077
125.000	0.085
160.000	0.095

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.037
70.000	0.041
100.000	0.045
130.000	0.050
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

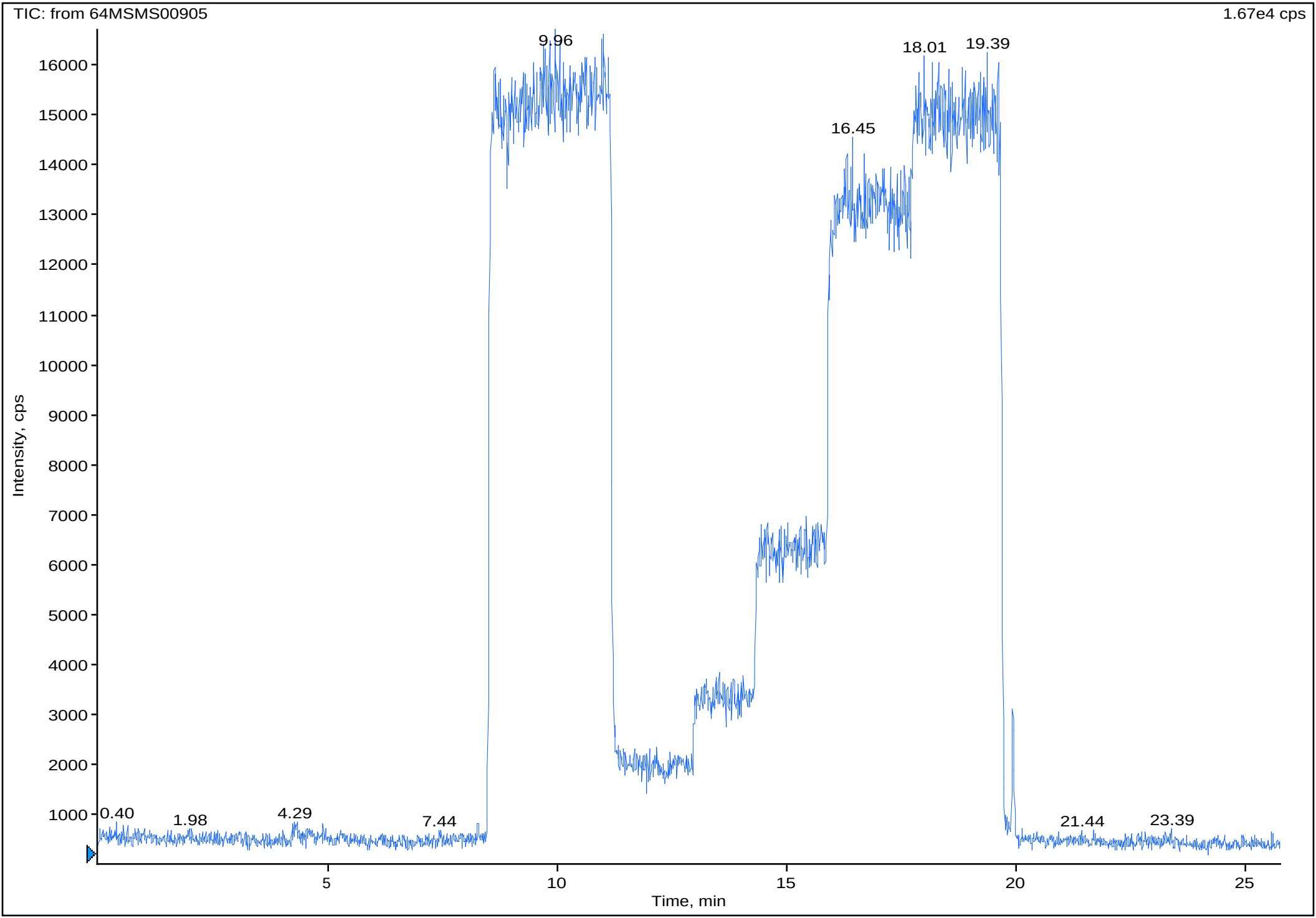
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

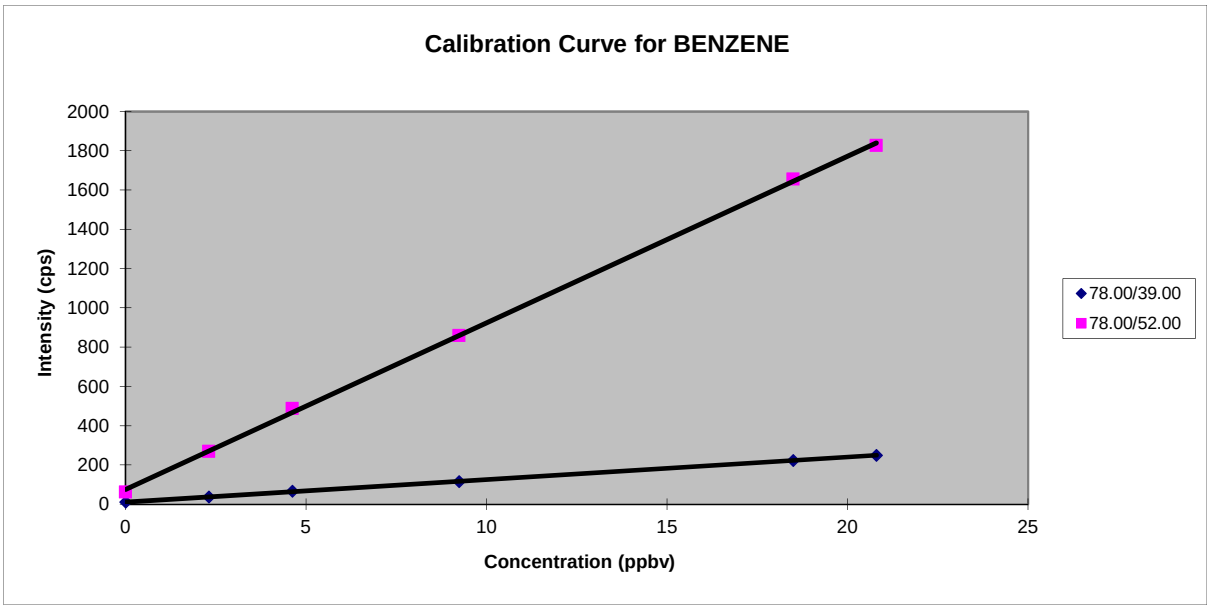
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/9/19.7.16.06
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Tue, Apr 9, 2019 at 7:16:06; Exp. Comment: BTX

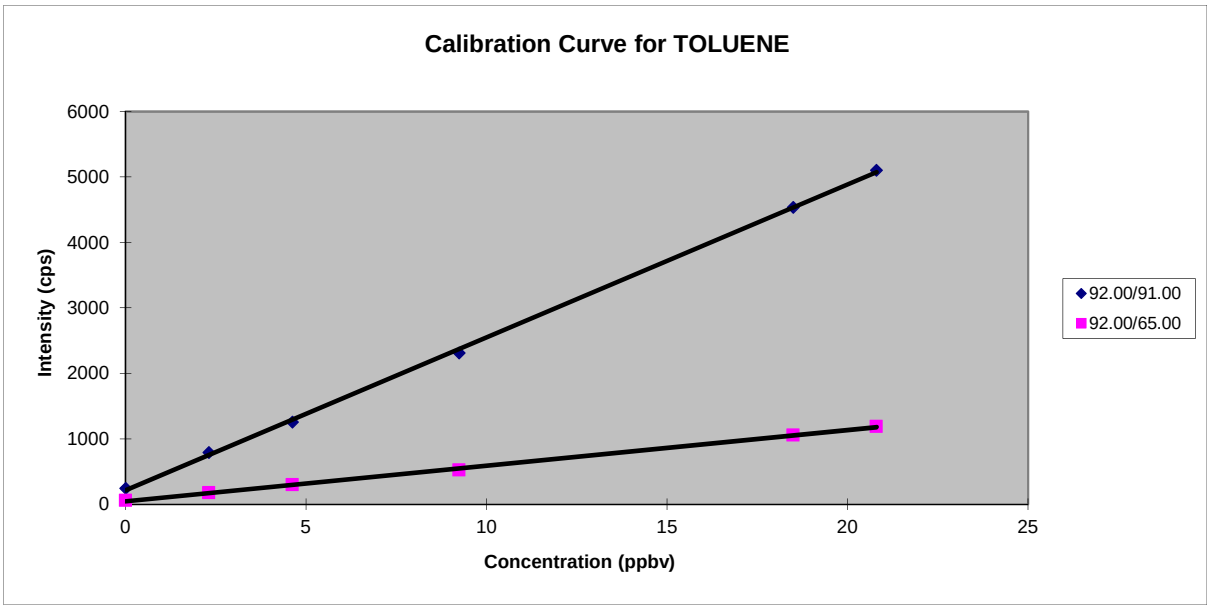




Filename:	64MSMS00905 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 9, 2019 7:43:34					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.00	12.05	13.61	15.18	16.91	18.80

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	11.4777234	84.8269668
Intercept:	10.9909104	75.6556535
Correlation:	0.99992535	0.99982958

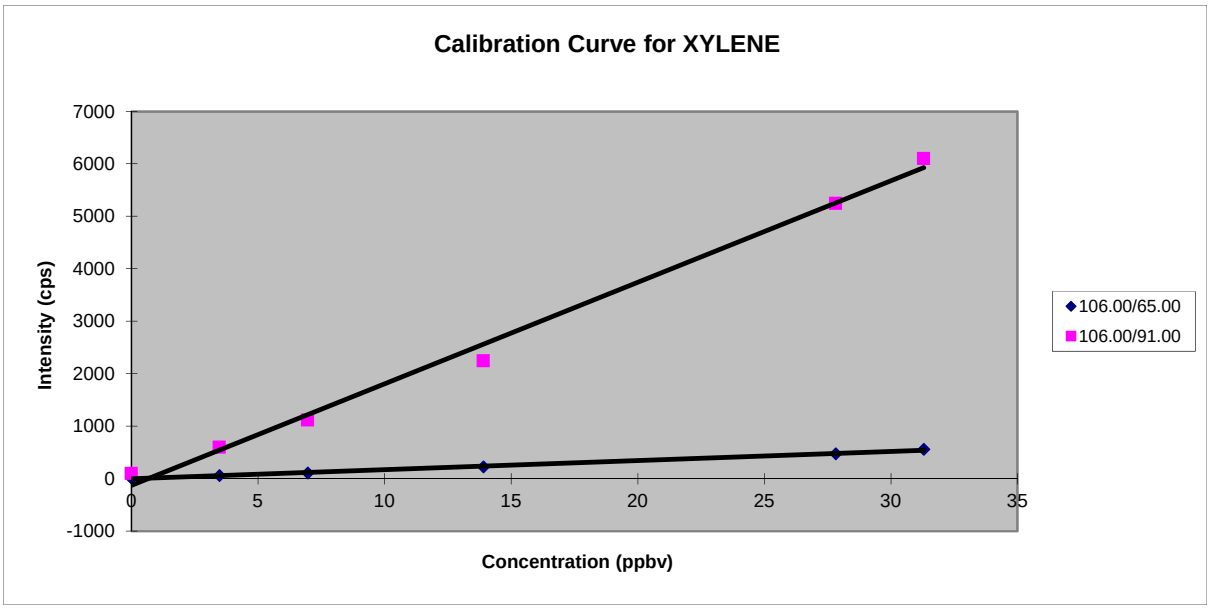
Concentratior	78.00/39.00	78.00/52.00
0	10.8333333	61.4583333
2.31	36.875	269.166667
4.62	66.0416667	487.1875
9.24	115.416667	859.166667
18.49	223.645833	1655.41667
20.8	249.6875	1826.04167



Filename:	64MSMS00905 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 9, 2019 7:44:19					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.00	12.05	13.61	15.18	16.91	18.80

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	233.663418	54.464527
Intercept:	213.469749	45.6808052
Correlation:	0.99980657	0.99963137

Concentratior	92.00/91.00	92.00/65.00
0	242.083333	55.625
2.31	790.833333	175.729167
4.62	1254.6875	297.083333
9.24	2313.75	524.583333
18.49	4537.70833	1052.70833
20.8	5100.72917	1188.95833



Filename:	64MSMS00905 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 9, 2019 7:44:43					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.00	12.05	13.61	15.18	16.91	18.80

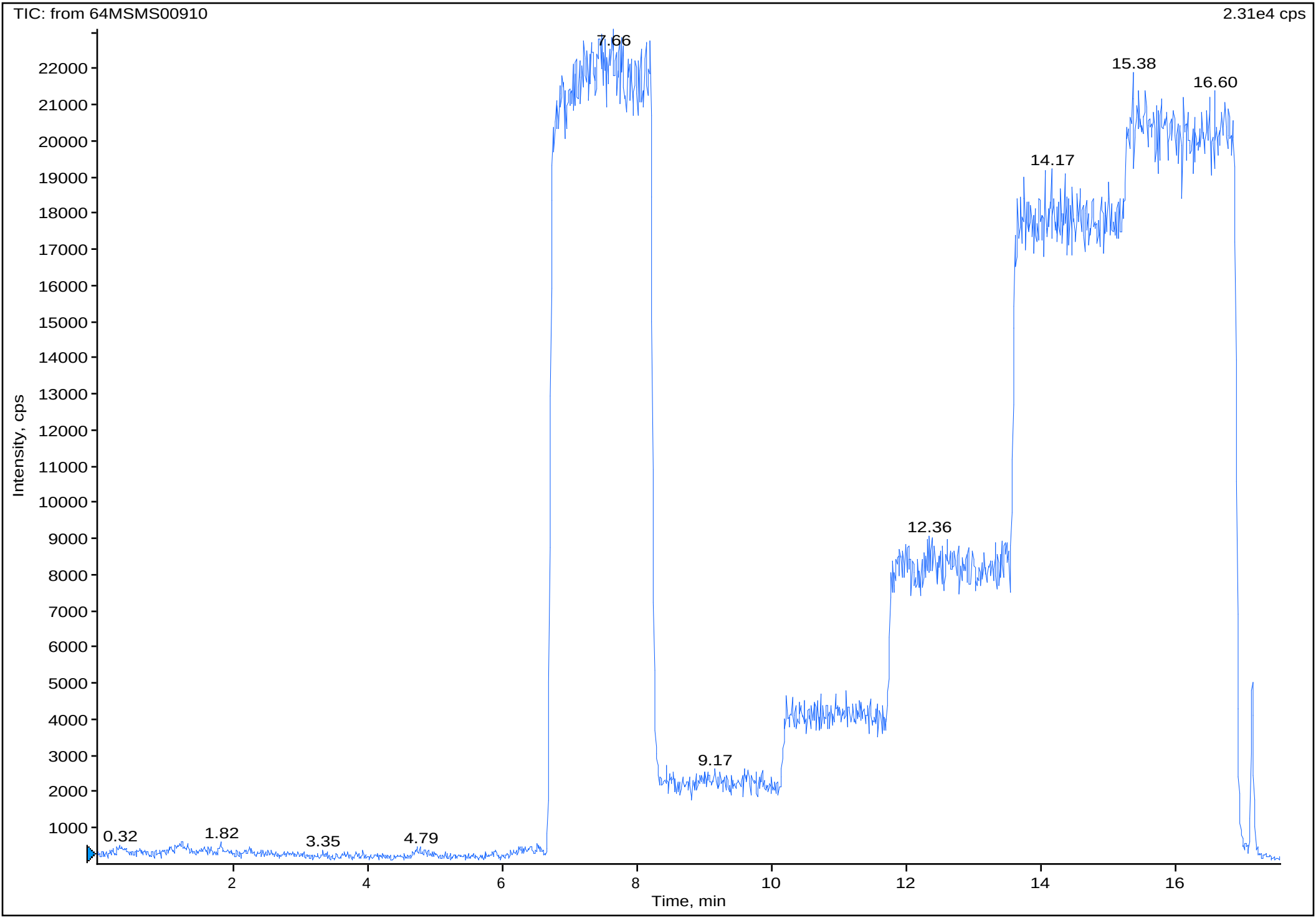
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	17.417168	193.464064
Intercept:	-1.242808	-125.57424
Correlation:	0.99842787	0.99693798

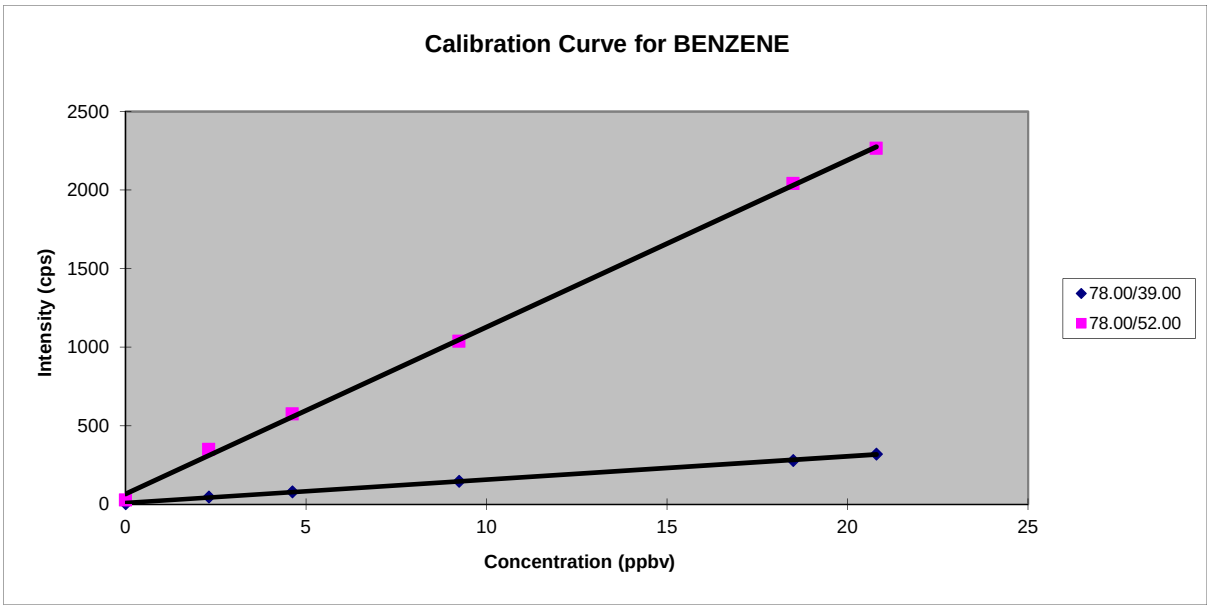
Concentratior	106.00/65.00	106.00/91.00
0	13.0208333	95.5208333
3.48	61.9791667	595
6.96	110.9375	1113.54167
13.91	225.208333	2244.0625
27.82	476.458333	5247.1875
31.3	558.75	6099.6875

Report	File Name	64MSMS00905 et al.			
	Sample Name	BOD Calibration - BTX 20190409			
	Date	Tuesday, April 9, 2019 7:45:19			
	Time Range	2.50	to	3.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	11.48	84.83	233.66	54.46	17.42	193.46
Intercept	10.99	75.66	213.47	45.68	-1.24	-125.57
Intensity	10.94	60.94	242.08	56.15	12.81	94.90
Int SD	13.23	29.09	61.56	23.81	11.94	36.56
Concentration	0.00	-0.17	0.12	0.19	0.81	1.14
Conc SD	1.15	0.34	0.26	0.44	0.69	0.19
Compound Con	-0.09		0.16		0.97	
Compound SD	0.53		0.25		0.31	
Det. Limit	3.46	1.03	0.79	1.31	2.06	0.57
Compound DL	2.24		1.05		1.31	

4/9/19.13.04.55
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Tue, Apr 9, 2019 at 13:04:55; Exp. Comment: BTX

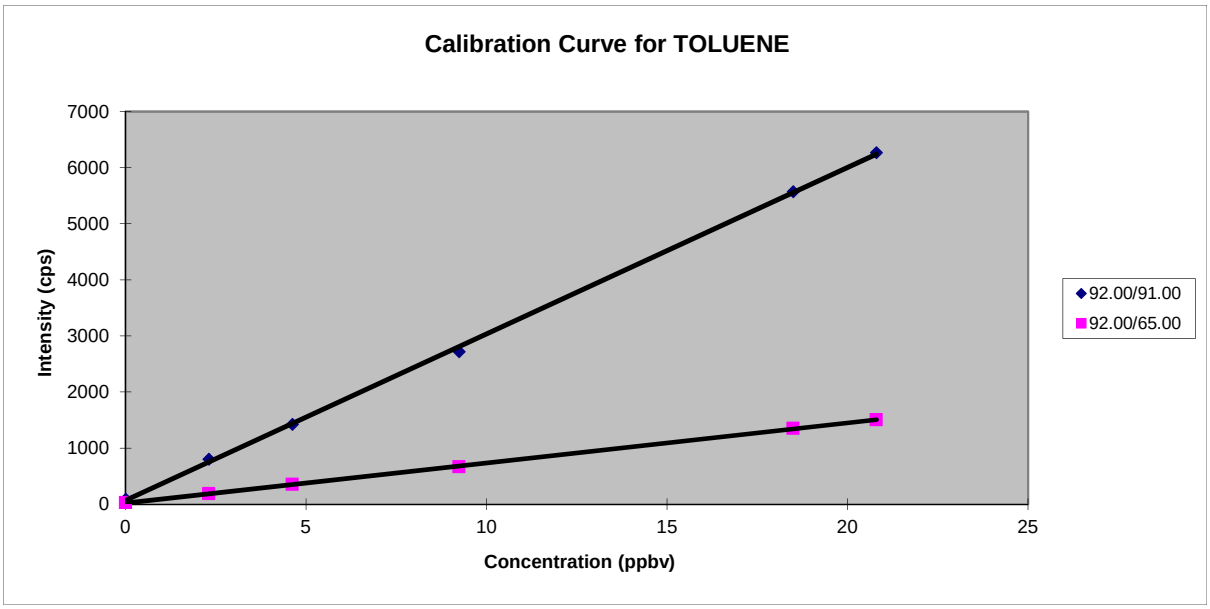




Filename:	64MSMS00910 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 9, 2019 13:23:15					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	5.50	9.28	10.84	12.64	14.41	15.93

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	14.8398061	106.206309
Intercept:	8.76822557	66.2337144
Correlation:	0.99967906	0.99956609

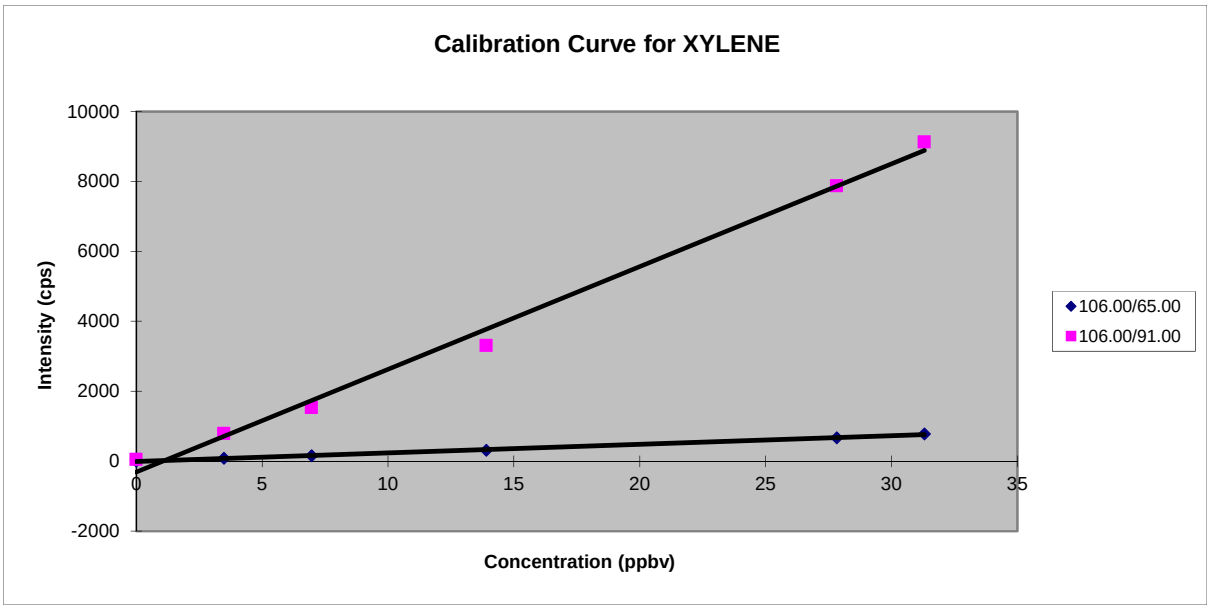
Concentratior	78.00/39.00	78.00/52.00
0	4.6875	25.7291667
2.31	46.5625	348.333333
4.62	79.0625	574.166667
9.24	145.9375	1035.52083
18.49	279.375	2039.89583
20.8	320	2263.95833



Filename:	64MSMS00910 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 9, 2019 13:23:54					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	5.50	9.28	10.84	12.64	14.41	15.93

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	296.774689	71.4598527
Intercept:	69.2084537	21.4172057
Correlation:	0.99981553	0.99991084

Concentratior	92.00/91.00	92.00/65.00
0	90	25.2083333
2.31	801.25	190
4.62	1423.75	352.604167
9.24	2719.79167	666.145833
18.49	5571.66667	1351.04167
20.8	6267.91667	1506.66667



Filename:	64MSMS00910 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 9, 2019 13:24:20					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	5.50	9.28	10.84	12.64	14.41	15.93

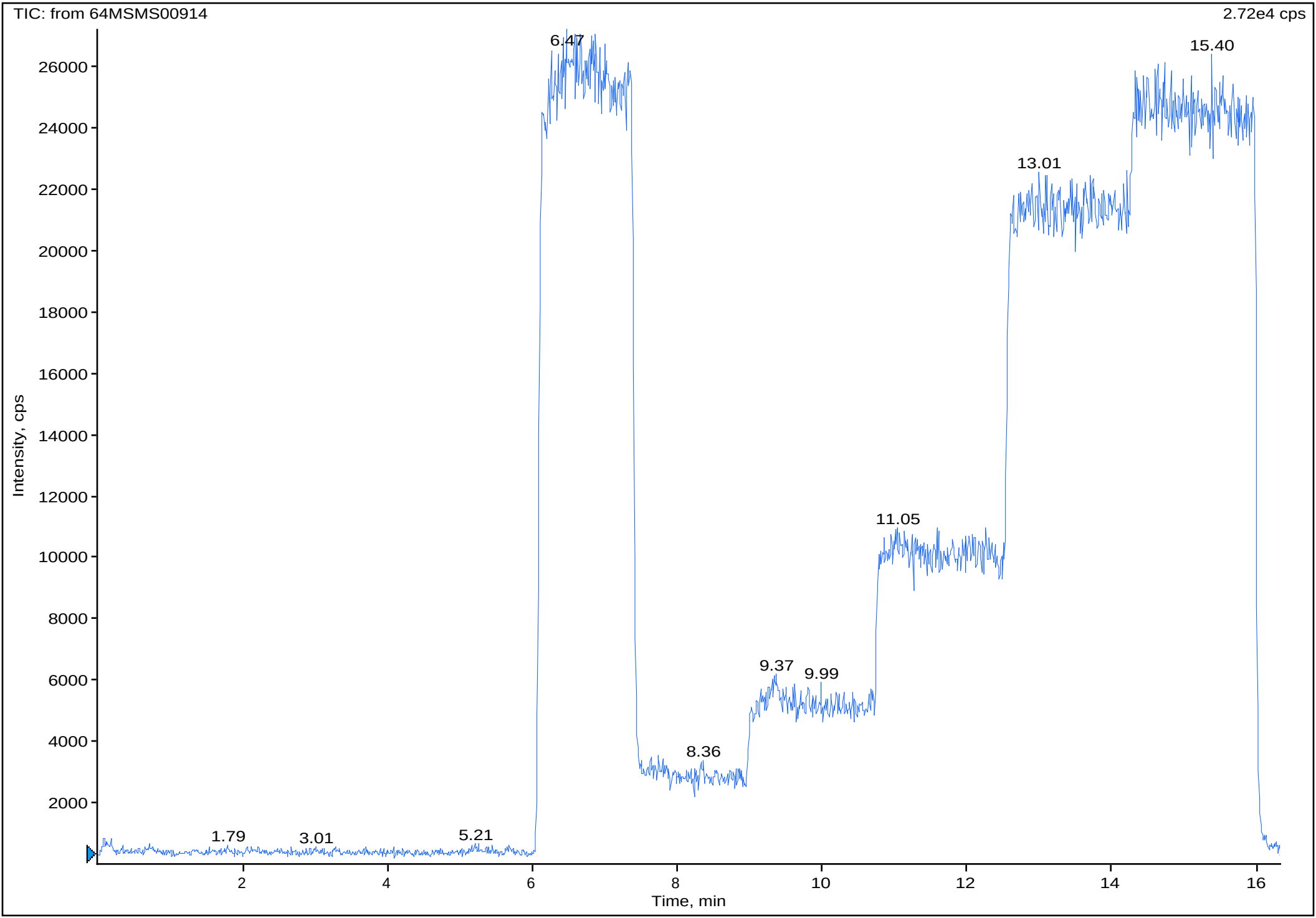
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	24.6192484	293.801323
Intercept:	-7.4253333	-307.57858
Correlation:	0.9991042	0.9968551

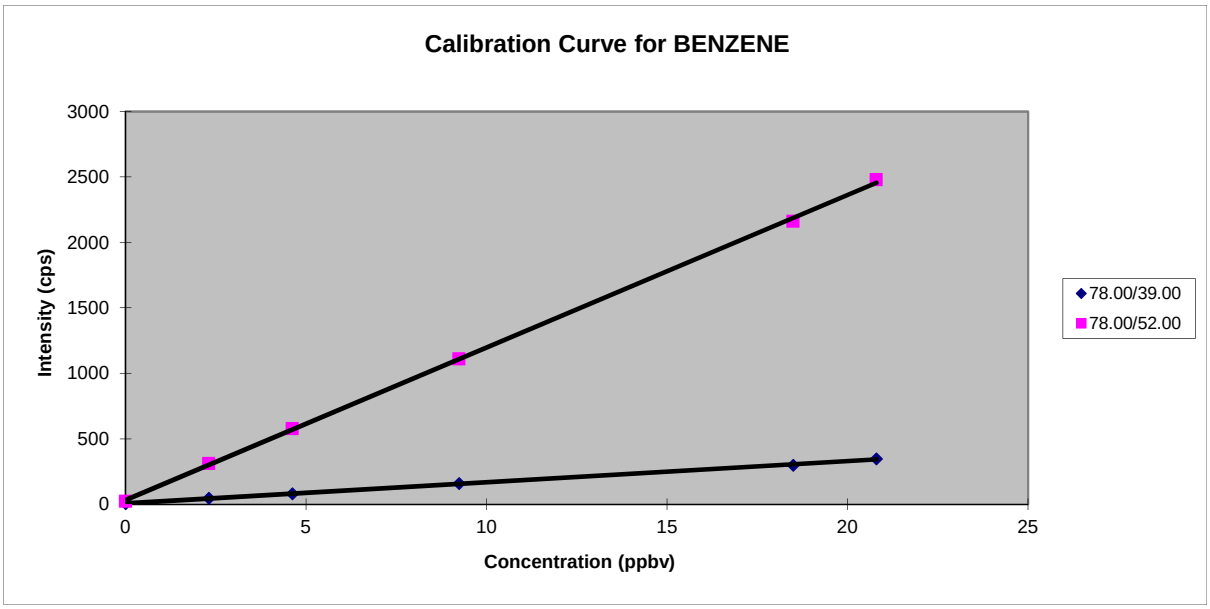
Concentratior	106.00/65.00	106.00/91.00
0	6.25	48.8541667
3.48	81.4583333	792.1875
6.96	158.020833	1530.10417
13.91	314.791667	3301.875
27.82	671.25	7876.14583
31.3	778.645833	9128.95833

Report	File Name	64MSMS00910 et al.			
	Sample Name	MOD Calibration - BTX 20190409			
	Date	Tuesday, April 9, 2019 13:24:57			
	Time Range	5.00	to	6.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	14.84	106.21	296.77	71.46	24.62	293.80
Intercept	8.77	66.23	69.21	21.42	-7.43	-307.58
Intensity	4.69	25.73	90.00	25.21	6.25	48.85
Int SD	7.67	17.09	36.07	18.06	8.11	26.79
Concentration	-0.27	-0.38	0.07	0.05	0.56	1.21
Conc SD	0.52	0.16	0.12	0.25	0.33	0.09
Compound Con	-0.33		0.06		0.88	
Compound SD	0.24		0.13		0.15	
Det. Limit	1.55	0.48	0.36	0.76	0.99	0.27
Compound DL	1.02		0.56		0.63	

4/9/19.19.43.11
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Tue, Apr 9, 2019 at 19:43:10; Exp. Comment: BTX

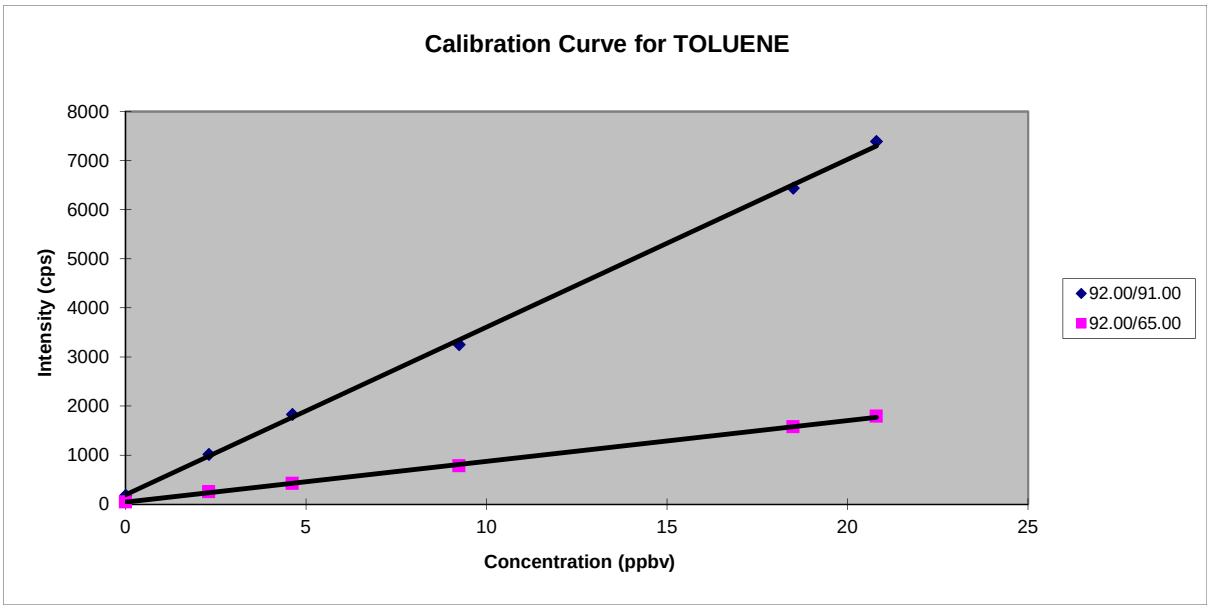




Filename:	64MSMS00914 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 9, 2019 20:00:11					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	8.19	9.86	11.62	13.45	15.05

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	16.1673686	116.558481
Intercept:	6.48047745	31.7609538
Correlation:	0.99952459	0.99986371

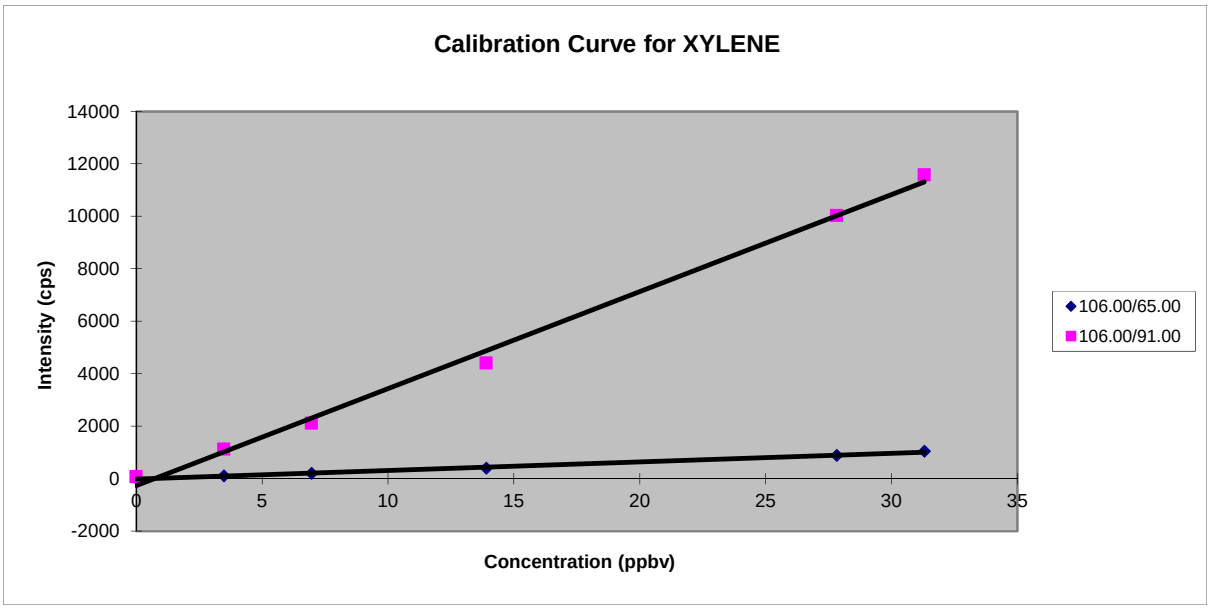
Concentratior	78.00/39.00	78.00/52.00
0	4.375	21.3541667
2.31	45.4166667	311.041667
4.62	80.4166667	575.3125
9.24	159.587629	1109.69072
18.49	298.333333	2160.3125
20.8	347.395833	2477.1875



Filename:	64MSMS00914 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 9, 2019 20:00:43					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	8.19	9.86	11.62	13.45	15.05

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	341.612338	83.0934952
Intercept:	193.352513	43.3278356
Correlation:	0.99967609	0.99968835

Concentratior	92.00/91.00	92.00/65.00
0	180.833333	47.2916667
2.31	1018.4375	252.8125
4.62	1828.125	425
9.24	3250.20619	780.103093
18.49	6437.39583	1574.375
20.8	7390.9375	1788.75



Filename:	64MSMS00914 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 9, 2019 20:01:13					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	8.19	9.86	11.62	13.45	15.05

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	32.795328	370.018719
Intercept:	-10.588688	-262.81513
Correlation:	0.99796986	0.99803198

Concentratior	106.00/65.00	106.00/91.00
0	13.125	77.6041667
3.48	110.9375	1118.85417
6.96	209.375	2109.0625
13.91	406.185567	4407.1134
27.82	884.270833	1.00E+04
31.3	1050	1.16E+04

Report	File Name	64MSMS00914 et al.			
	Sample Name	EOD Calibration - BTX 20190409			
	Date	Tuesday, April 9, 2019 20:01:44			
	Time Range	4.00	to	5.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	16.17	116.56	341.61	83.09	32.80	370.02
Intercept	6.48	31.76	193.35	43.33	-10.59	-262.82
Intensity	4.38	21.35	180.83	47.29	13.13	77.60
Int SD	7.51	15.60	44.74	23.91	14.02	38.74
Concentration	-0.13	-0.09	-0.04	0.05	0.72	0.92
Conc SD	0.46	0.13	0.13	0.29	0.43	0.10
Compound Con	-0.11		0.01		0.82	
Compound SD	0.21		0.15		0.19	
Det. Limit	1.39	0.40	0.39	0.86	1.28	0.31
Compound DL	0.90		0.63		0.80	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 04/10/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3275	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
0628	1500	~191 SCFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration # 18DWY15-0168			Calibration Date: EXP 05/02/19	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
			BW		
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
			BW		
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Tue, Apr 9, 2019, 7:13:35
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR09 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Tue, Apr 9, 2019, 7:10:40

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.070
100.000	0.077
125.000	0.085
160.000	0.095

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.037
70.000	0.041
100.000	0.045
130.000	0.050
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Tue, Apr 9, 2019, 7:15:11
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR09 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Tue, Apr 9, 2019, 7:10:40

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.070
100.000	0.077
125.000	0.085
160.000	0.095

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.037
70.000	0.041
100.000	0.045
130.000	0.050
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

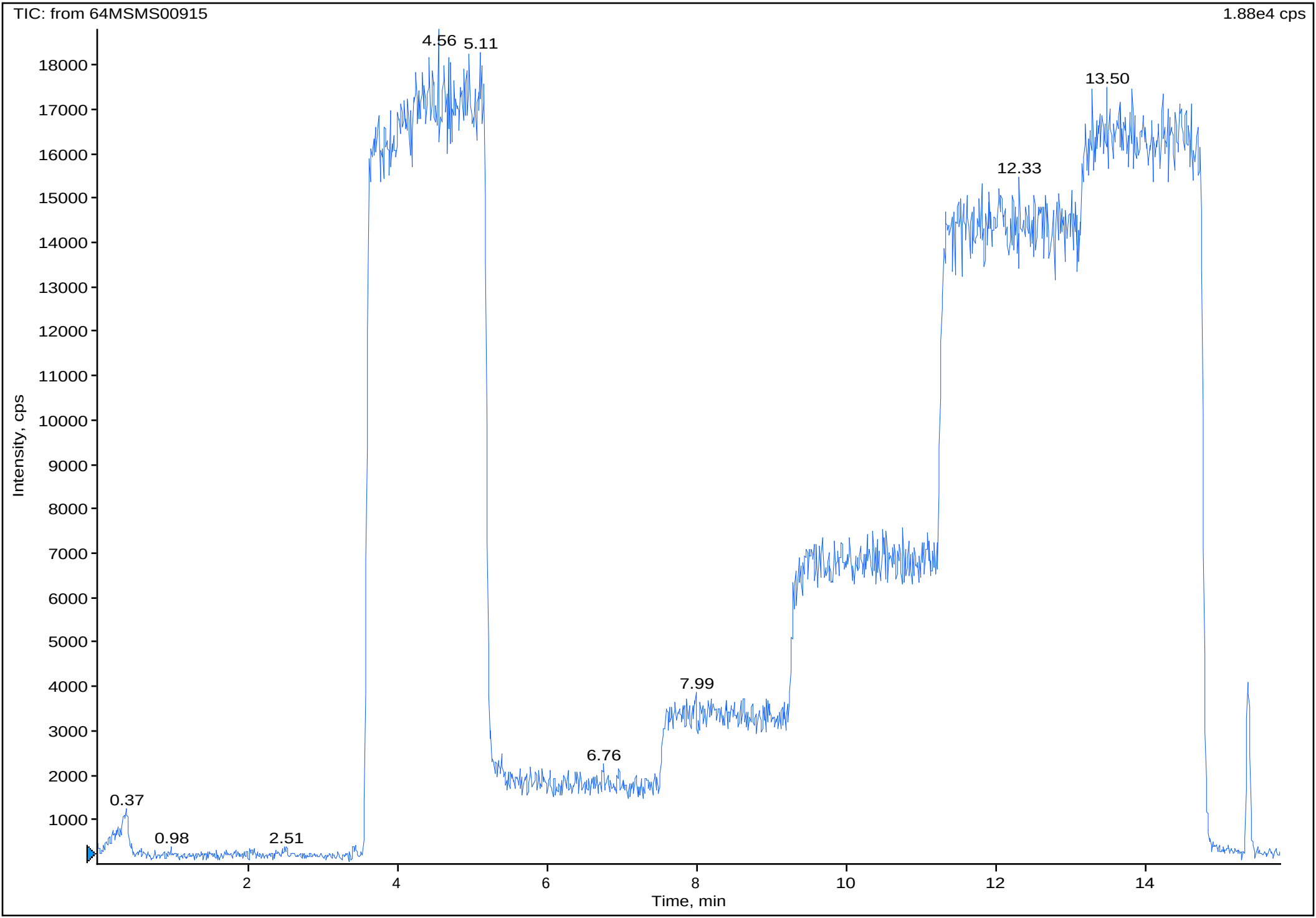
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

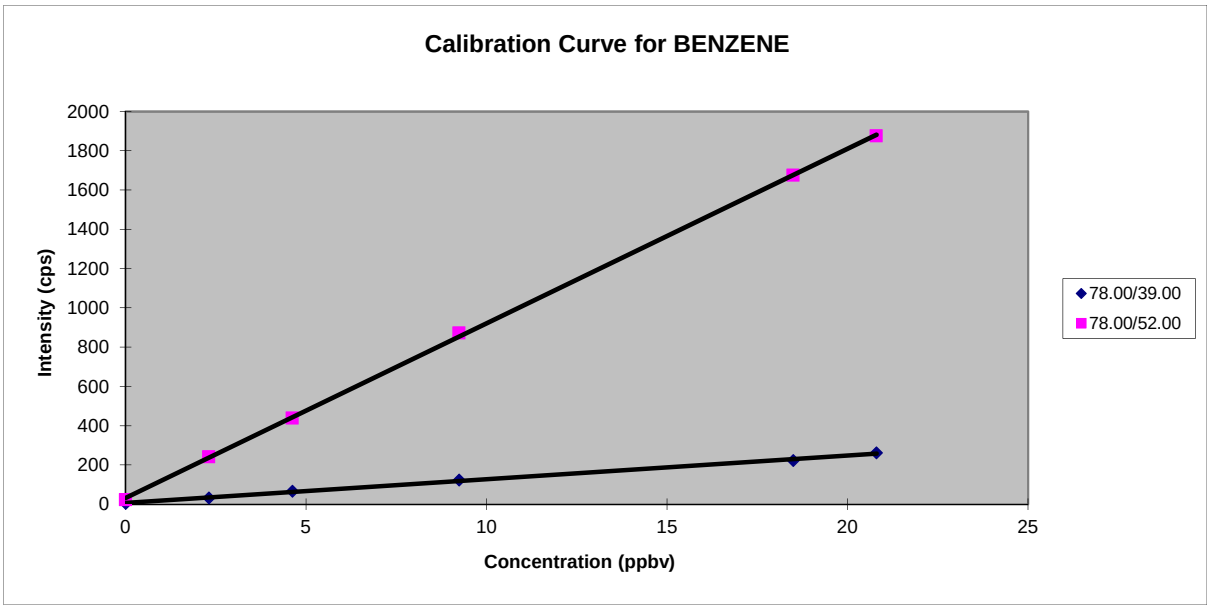
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/10/19.6.48.21
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, Apr 10, 2019 at 6:48:20; Exp. Comment: BTX

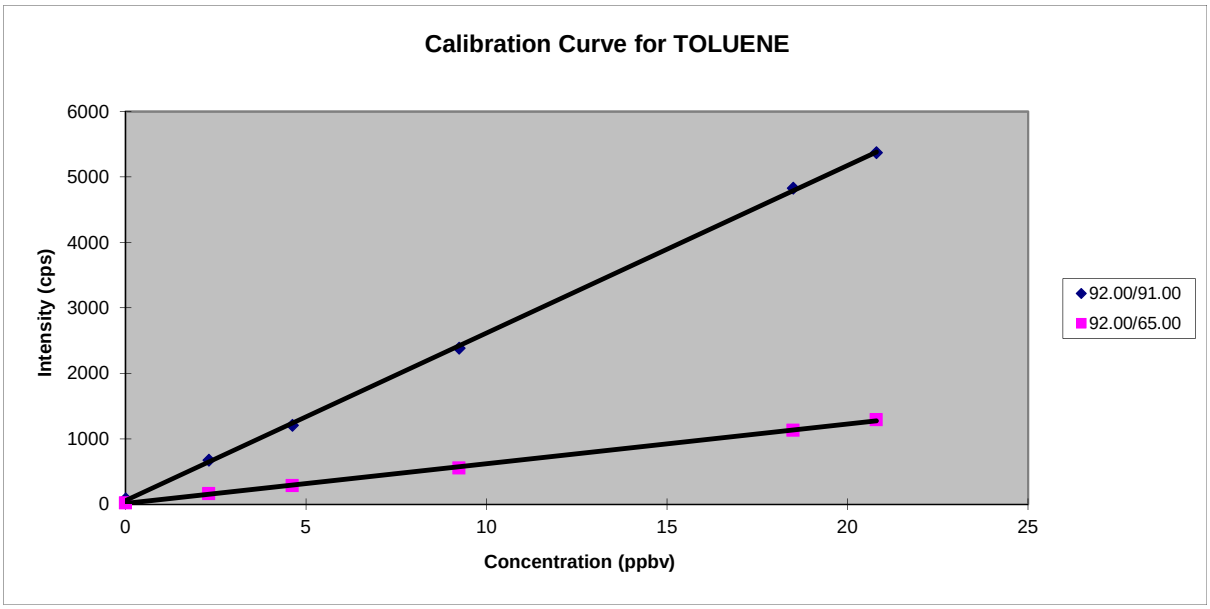




Filename:	64MSMS00915 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 10, 2019 7:05:12					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.44	8.32	10.26	12.25	13.94

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	12.0718871	88.9055637
Intercept:	6.95719019	32.2787392
Correlation:	0.99884115	0.99992433

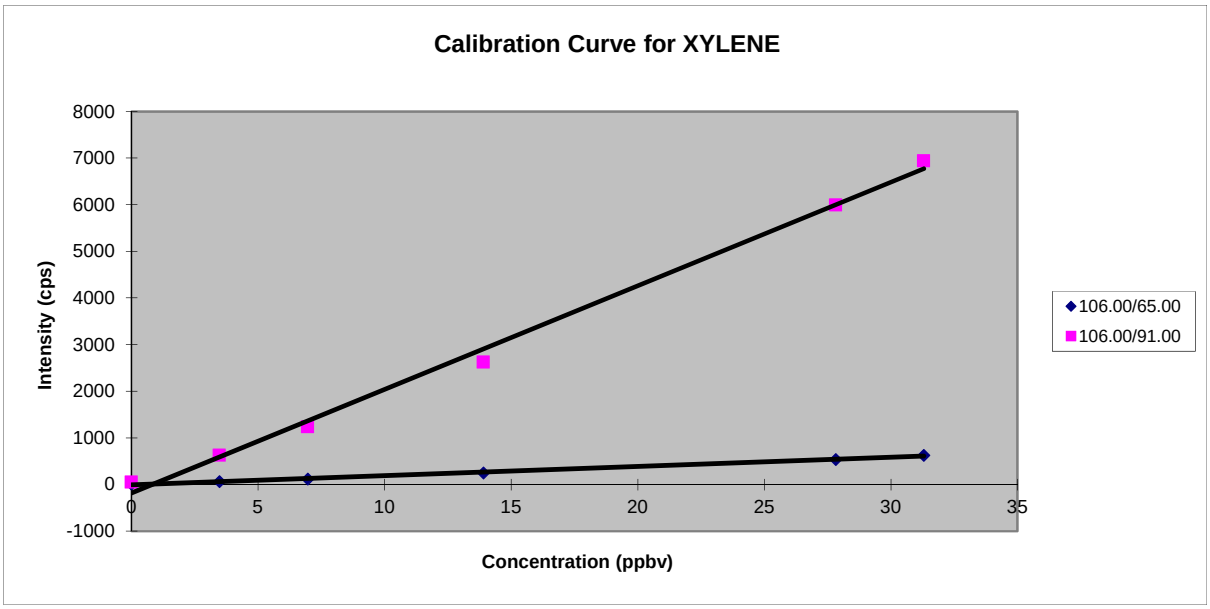
Concentratior	78.00/39.00	78.00/52.00
0	5.3125	23.0208333
2.31	31.6666667	241.25
4.62	66.3541667	438.75
9.24	123.020833	870.9375
18.49	222.395833	1674.6875
20.8	262.5	1875.72917



Filename:	64MSMS00915 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 10, 2019 7:05:54					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.44	8.32	10.26	12.25	13.94

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	255.967137	60.6601322
Intercept:	58.2812628	11.971789
Correlation:	0.99989804	0.99969655

Concentratior	92.00/91.00	92.00/65.00
0	81.25	20.625
2.31	671.666667	161.354167
4.62	1207.29167	285.104167
9.24	2386.35417	553.333333
18.49	4827.91667	1127.1875
20.8	5371.14583	1288.4375



Filename:	64MSMS00915 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 10, 2019 7:07:47					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.44	8.32	10.26	12.25	13.94

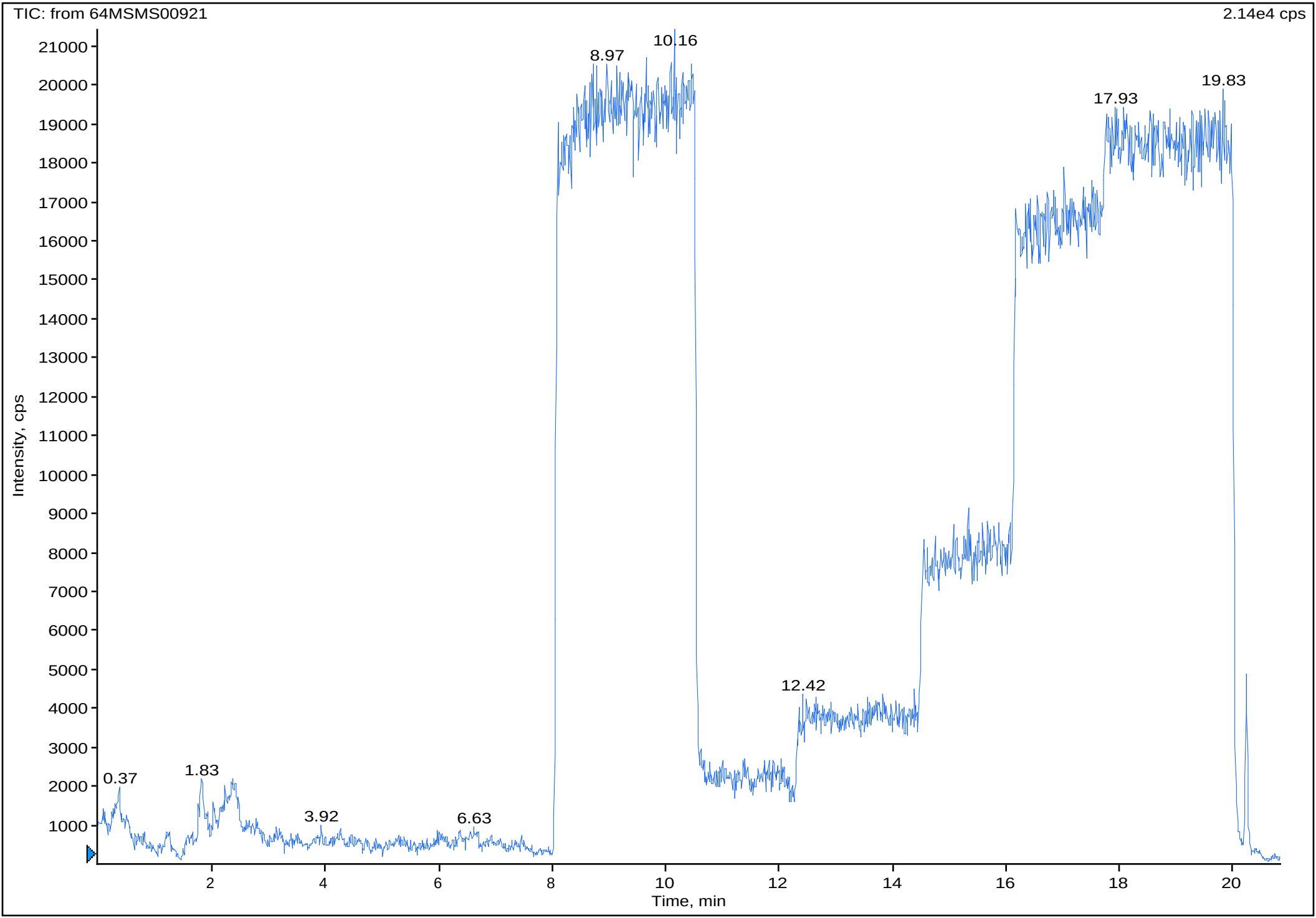
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	19.7917504	222.213049
Intercept:	-7.5237339	-180.39901
Correlation:	0.99870347	0.99786441

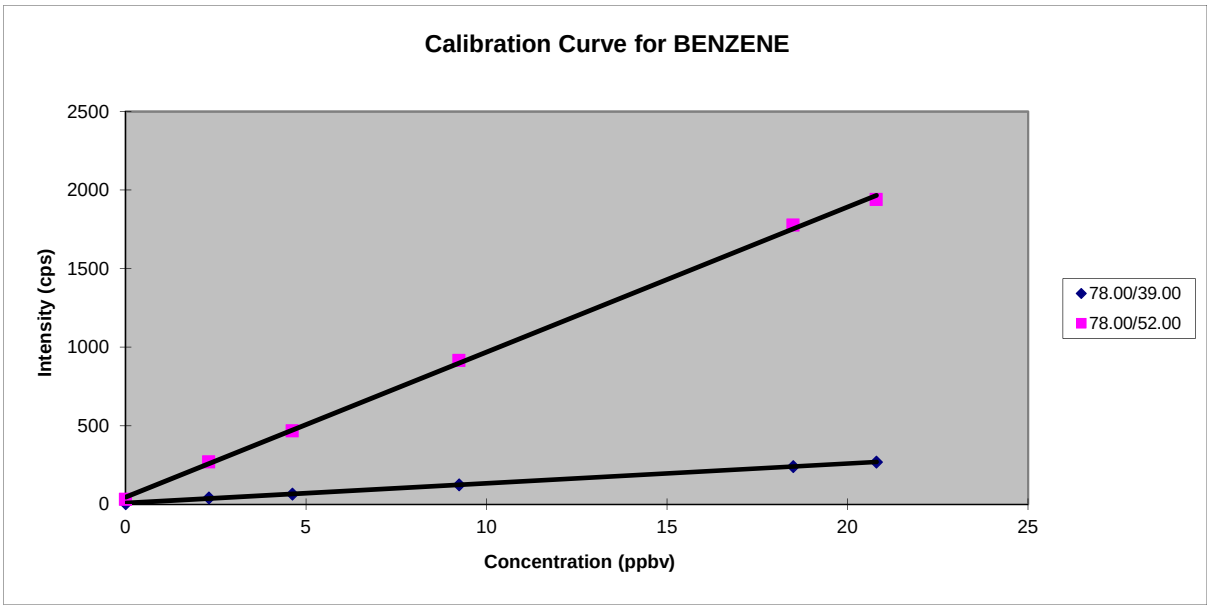
Concentratior	106.00/65.00	106.00/91.00
0	7.08333333	49.6875
3.48	64.375	627.8125
6.96	120.833333	1236.35417
13.91	251.145833	2624.47917
27.82	536.354167	5990.9375
31.3	627.083333	6936.45833

Report	File Name	64MSMS00915 et al.			
	Sample Name	BOD Calibration - BTX 20190410			
	Date	Wednesday, April 10, 2019 7:08:17			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	12.07	88.91	255.97	60.66	19.79	222.21
Intercept	6.96	32.28	58.28	11.97	-7.52	-180.40
Intensity	5.31	23.02	81.25	20.63	7.08	49.69
Int SD	8.20	15.50	33.51	15.48	10.95	24.51
Concentration	-0.14	-0.10	0.09	0.14	0.74	1.04
Conc SD	0.68	0.17	0.13	0.26	0.55	0.11
Compound Con	-0.12		0.12		0.89	
Compound SD	0.30		0.14		0.23	
Det. Limit	2.04	0.52	0.39	0.77	1.66	0.33
Compound DL	1.28		0.58		1.00	

4/10/19.13.26.09
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, Apr 10, 2019 at 13:26:08; Exp. Comment: BTX

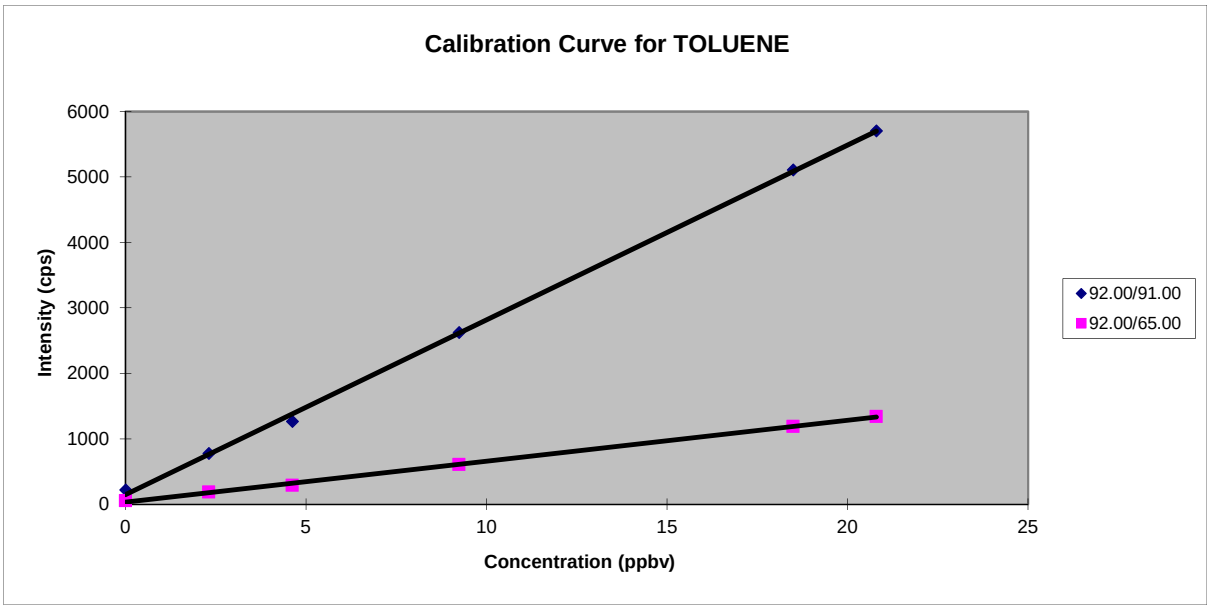




Filename:	64MSMS00921 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 10, 2019 13:47:41					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	5.00	11.47	13.39	15.30	16.95	18.90

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	12.6095611	92.3141312
Intercept:	7.24770729	45.9111027
Correlation:	0.99980919	0.99969055

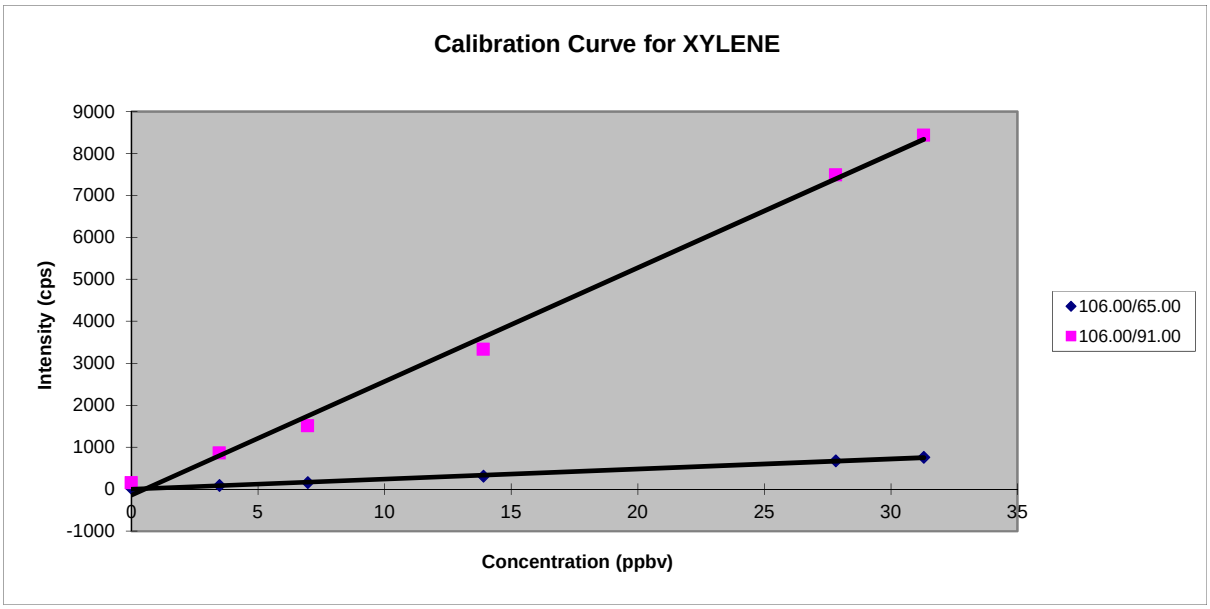
Concentratior	78.00/39.00	78.00/52.00
0	4.0625	30.4166667
2.31	39.6875	268.958333
4.62	65.1041667	466.5625
9.24	124.791667	914.479167
18.49	240.208333	1776.77083
20.8	268.958333	1938.02083



Filename:	64MSMS00921 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 10, 2019 13:48:19					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	5.00	11.47	13.39	15.30	16.95	18.90

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	267.021772	62.4673831
Intercept:	147.853064	33.1139893
Correlation:	0.99962867	0.99944321

Concentratior	92.00/91.00	92.00/65.00
0	218.958333	54.7916667
2.31	778.854167	183.4375
4.62	1263.4375	289.166667
9.24	2625.20833	606.979167
18.49	5107.8125	1189.375
20.8	5701.875	1339.375



Filename:	64MSMS00921 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 10, 2019 13:48:46					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	5.00	11.47	13.39	15.30	16.95	18.90

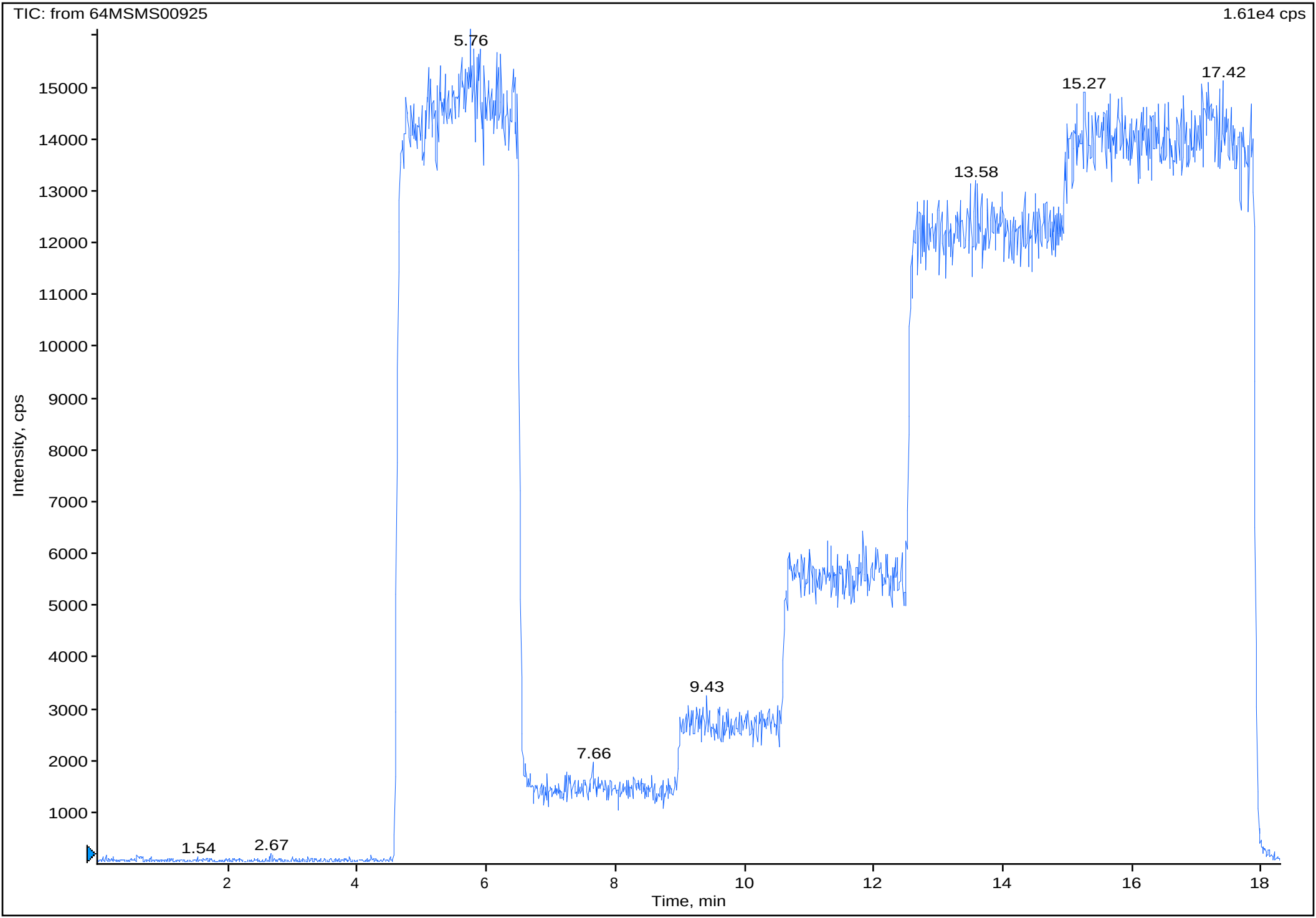
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	23.9486426	270.816986
Intercept:	2.06016202	-139.68578
Correlation:	0.99883952	0.99798075

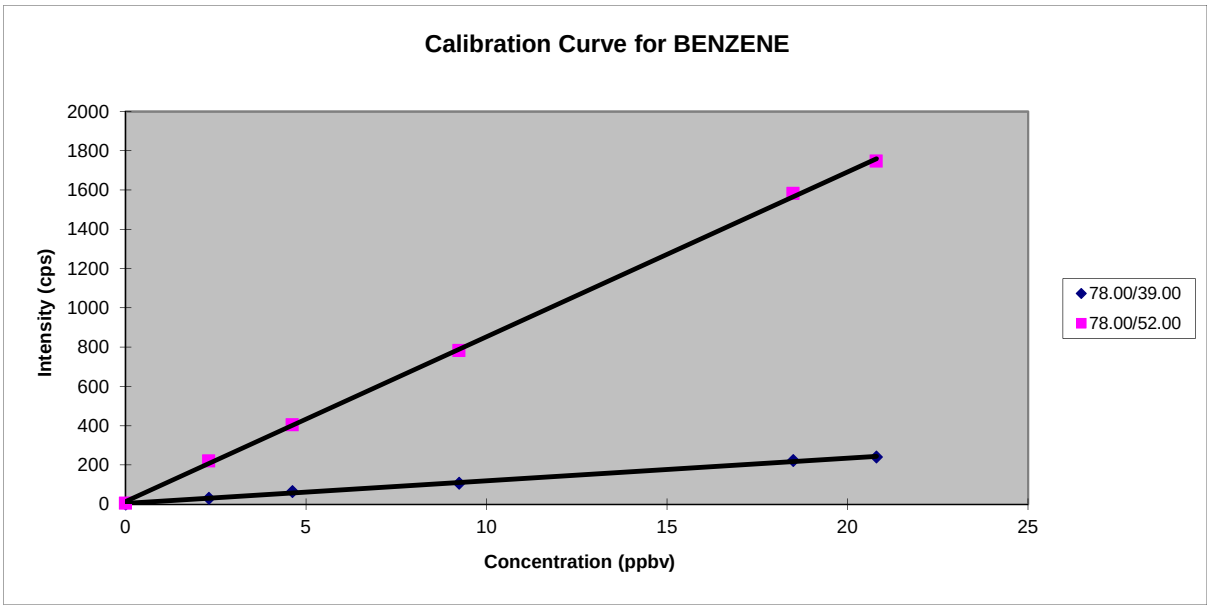
Concentratior	106.00/65.00	106.00/91.00
0	17.9166667	152.1875
3.48	91.875	855.9375
6.96	158.125	1510.52083
13.91	310.104167	3326.875
27.82	673.541667	7487.1875
31.3	759.791667	8434.27083

Report	File Name	64MSMS00921 et al.			
	Sample Name	MOD Calibration - BTX 20190410			
	Date	Wednesday, April 10, 2019 13:49:20			
	Time Range	4.50	to	5.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	12.61	92.31	267.02	62.47	23.95	270.82
Intercept	7.25	45.91	147.85	33.11	2.06	-139.69
Intensity	4.06	30.42	218.96	54.79	17.92	152.19
Int SD	6.74	20.82	79.47	32.48	16.79	81.11
Concentration	-0.25	-0.17	0.27	0.35	0.66	1.08
Conc SD	0.53	0.23	0.30	0.52	0.70	0.30
Compound Con	-0.21		0.31		0.87	
Compound SD	0.27		0.29		0.35	
Det. Limit	1.60	0.68	0.89	1.56	2.10	0.90
Compound DL	1.14		1.23		1.50	

4/10/19.19.36.52
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, Apr 10, 2019 at 19:36:58; Exp. Comment: BTX

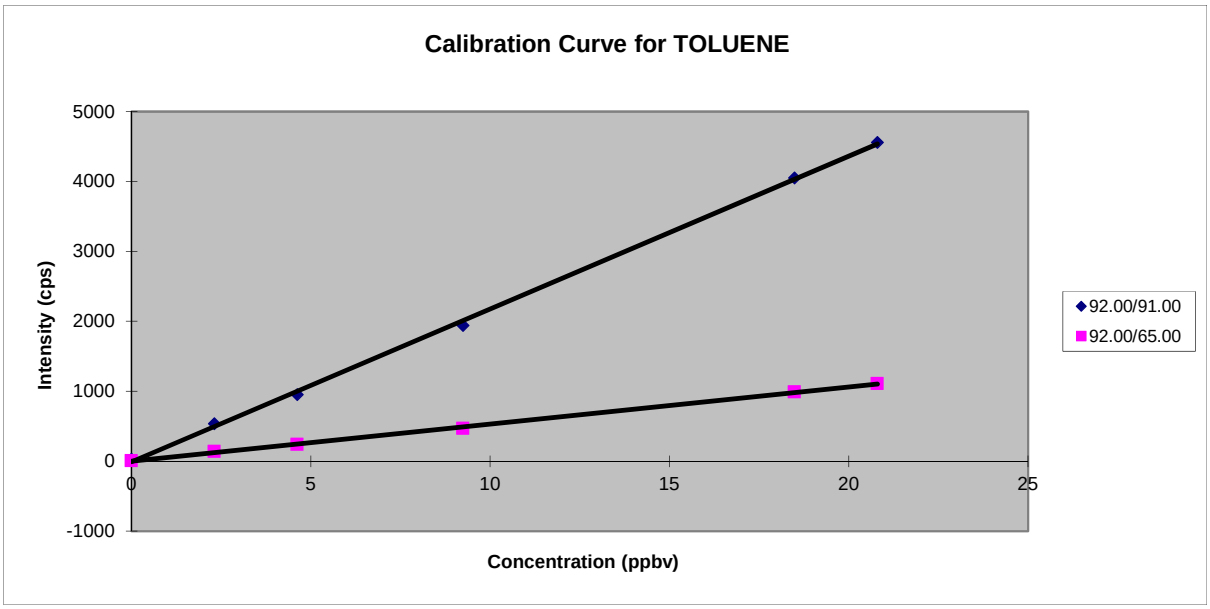




Filename:	64MSMS00925 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 10, 2019 19:56:38					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.51	7.67	9.81	11.59	13.65	16.48

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	11.5414846	83.9180315
Intercept:	4.5508498	14.2829399
Correlation:	0.99883065	0.99986729

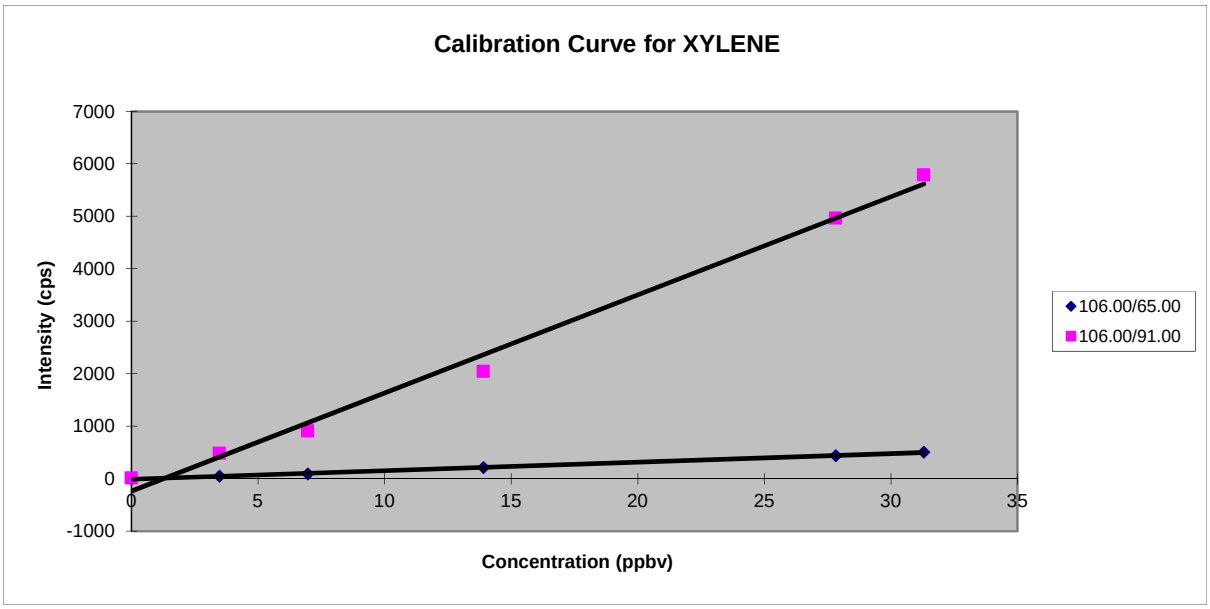
Concentratior	78.00/39.00	78.00/52.00
0	2.08333333	5.10416667
2.31	30.2083333	219.791667
4.62	64.6875	403.4375
9.24	106.666667	782.291667
18.49	223.125	1582.08333
20.8	240.625	1747.08333



Filename:	64MSMS00925 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 10, 2019 19:57:28					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.51	7.67	9.81	11.59	13.65	16.48

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	218.548896	52.9701832
Intercept:	-8.7487683	1.17755083
Correlation:	0.99968374	0.9996141

Concentratior	92.00/91.00	92.00/65.00
0	29.6875	6.45833333
2.31	537.395833	137.291667
4.62	951.354167	237.916667
9.24	1940.83333	468.958333
18.49	4052.29167	987.291667
20.8	4556.66667	1106.875



Filename:	64MSMS00925 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 10, 2019 19:58:11					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.51	7.67	9.81	11.59	13.65	16.48

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	16.2248937	186.947748
Intercept:	-9.8646179	-233.30683
Correlation:	0.9990142	0.99628292

Concentratior	106.00/65.00	106.00/91.00
0	1.875	9.27083333
3.48	47.2916667	483.020833
6.96	88.125	911.25
13.91	215.416667	2044.79167
27.82	436.875	4966.25
31.3	505.520833	5790.10417

Report	File Name	64MSMS00925 et al.			
	Sample Name	EOD Calibration - BTX 20190410			
	Date	Wednesday, April 10, 2019 19:58:44			
	Time Range	3.00	to	4.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	11.54	83.92	218.55	52.97	16.22	186.95
Intercept	4.55	14.28	-8.75	1.18	-9.86	-233.31
Intensity	2.08	5.21	29.38	6.46	1.88	9.17
Int SD	5.21	7.54	20.20	9.17	4.18	11.76
Concentration	-0.21	-0.11	0.17	0.10	0.72	1.30
Conc SD	0.45	0.09	0.09	0.17	0.26	0.06
Compound Con	-0.16		0.14		1.01	
Compound SD	0.19		0.09		0.11	
Det. Limit	1.36	0.27	0.28	0.52	0.77	0.19
Compound DL	0.81		0.40		0.48	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 04/11/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3275	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
0638	1500	~1915CFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration # 18DWY15-0168			Calibration Date: EXP 05/02/19	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
			PM		
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
			PM		
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Thu, Apr 11, 2019, 7:01:53
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR11 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Thu, Apr 11, 2019, 6:59:56

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.072
100.000	0.079
120.000	0.085
160.000	0.098

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.038
170.000	0.045

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Thu, Apr 11, 2019, 7:03:26
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR11 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Thu, Apr 11, 2019, 6:59:56

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.072
100.000	0.079
120.000	0.085
160.000	0.098

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.038
170.000	0.045

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

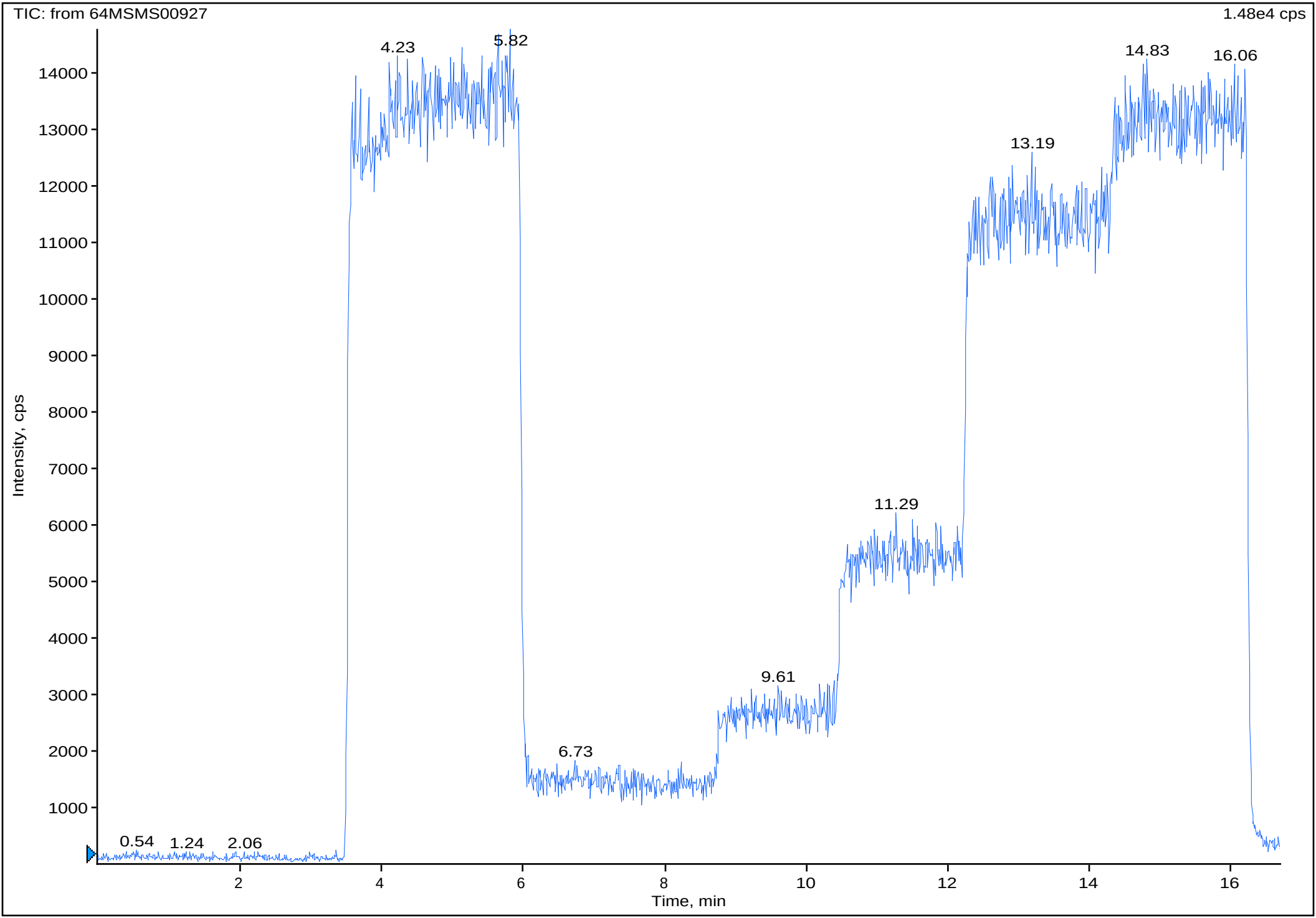
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

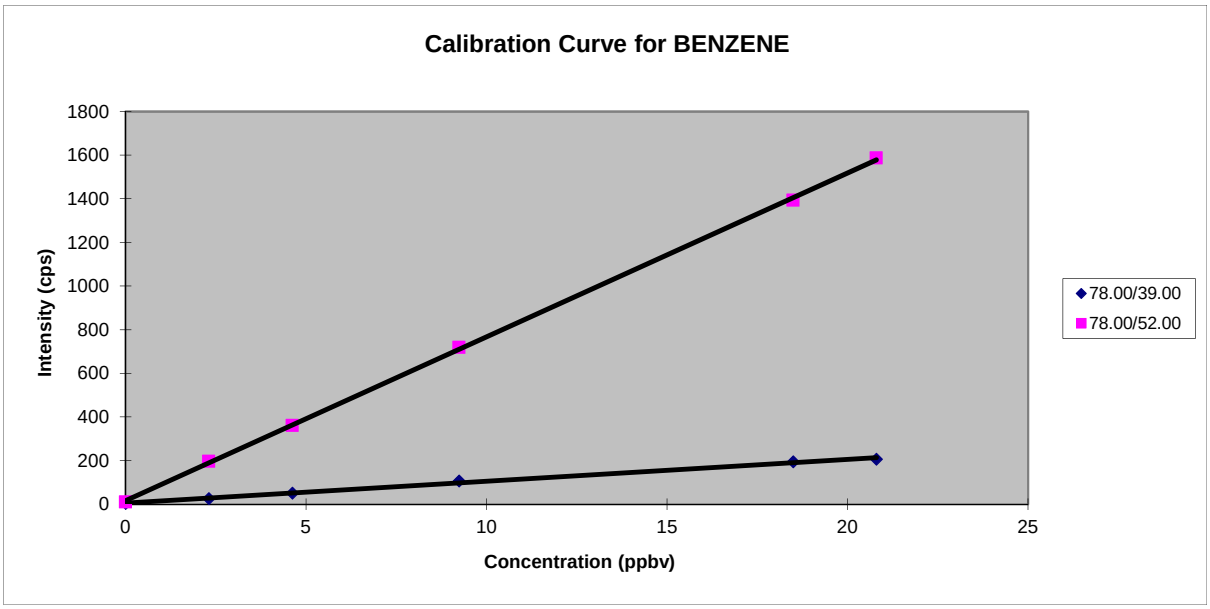
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/11/19.7.20.38
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Apr 11, 2019 at 7:20:37; Exp. Comment: BTX

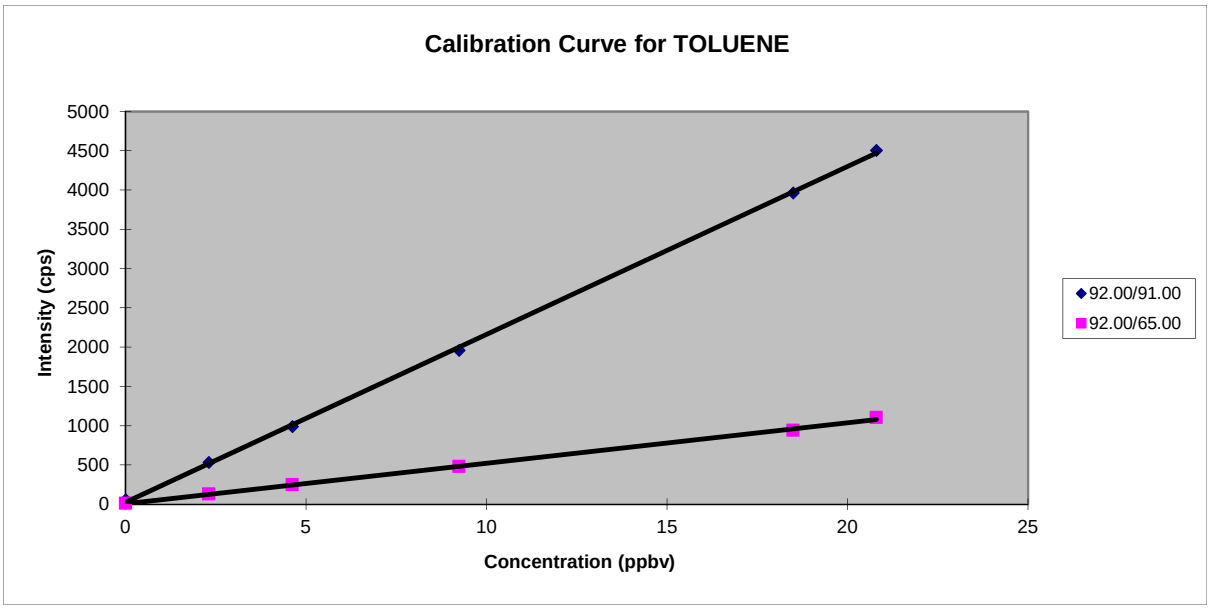




Filename:	64MSMS00927 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 11, 2019 7:50:08					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.39	9.50	11.29	13.25	15.42

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	9.96355616	75.0925558
Intercept:	6.14289777	16.8092456
Correlation:	0.99812834	0.99991574

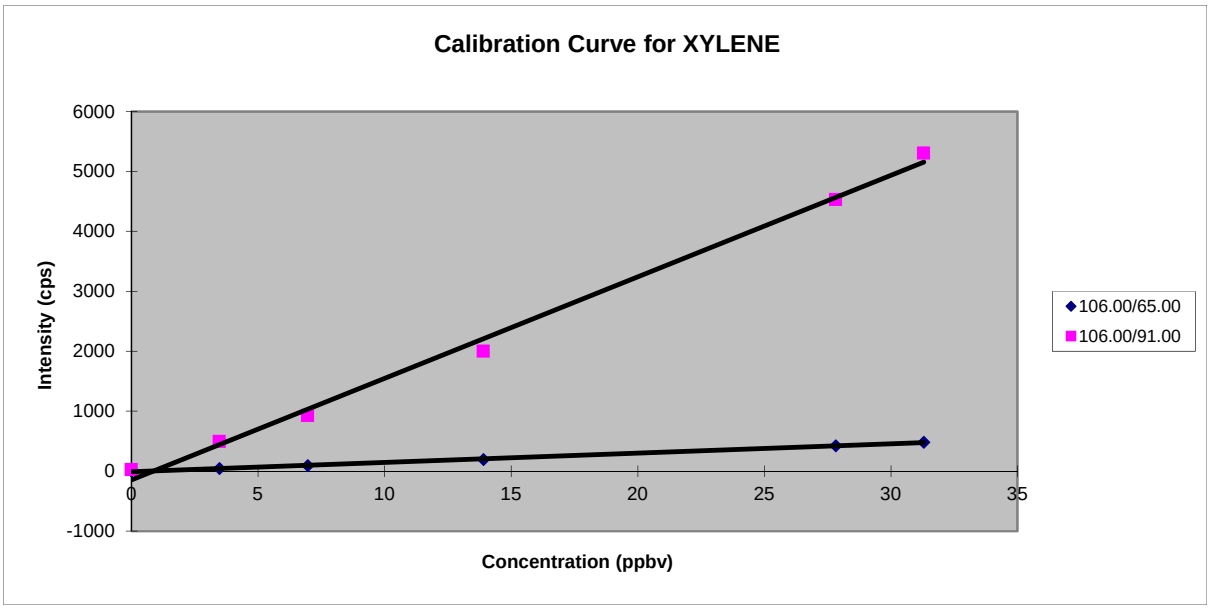
Concentratior	78.00/39.00	78.00/52.00
0	4.27083333	10
2.31	26.7708333	196.770833
4.62	50.7291667	361.25
9.24	106.666667	718.4375
18.49	194.123711	1393.09278
20.8	206.875	1585.9375



Filename:	64MSMS00927 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 11, 2019 7:50:42					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.39	9.50	11.29	13.25	15.42

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	213.737576	51.497797
Intercept:	25.3025486	8.6092574
Correlation:	0.99985883	0.99949382

Concentratior	92.00/91.00	92.00/65.00
0	54.4791667	12.9166667
2.31	533.75	128.4375
4.62	991.145833	246.354167
9.24	1957.39583	480
18.49	3962.68041	938.556701
20.8	4506.25	1101.45833



Filename:	64MSMS00927 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 11, 2019 7:51:42					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.39	9.50	11.29	13.25	15.42

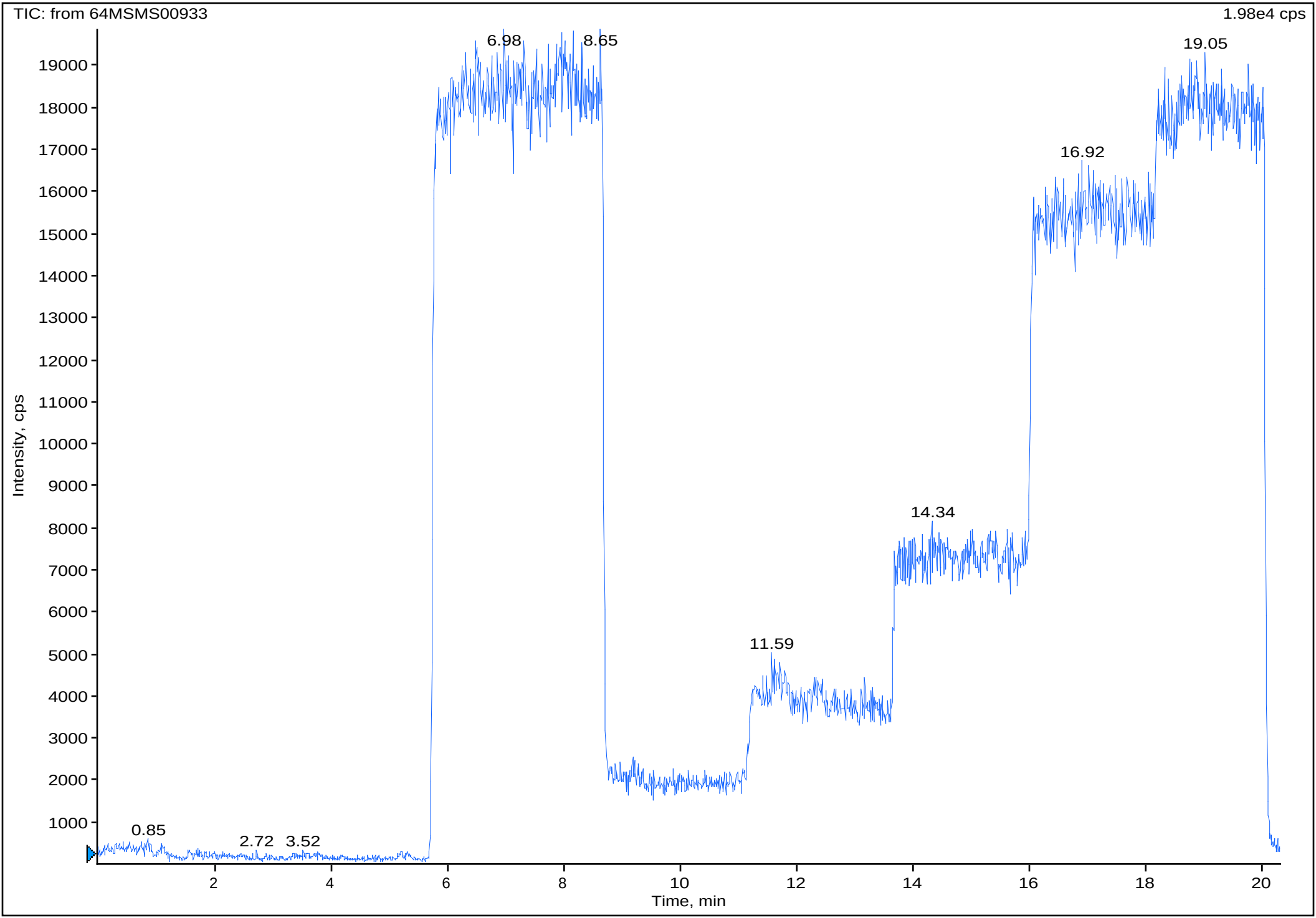
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	15.4830388	169.318748
Intercept:	-8.4187513	-143.74964
Correlation:	0.99872077	0.99770533

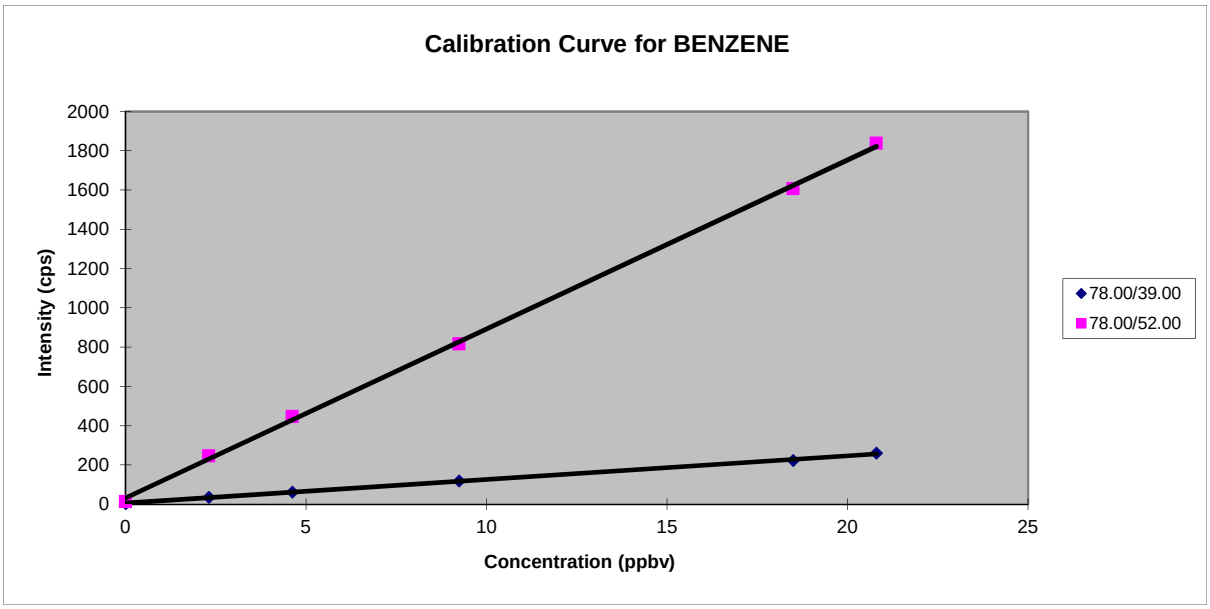
Concentratior	106.00/65.00	106.00/91.00
0	4.47916667	24.5833333
3.48	47.0833333	491.354167
6.96	91.4583333	923.645833
13.91	192.291667	1998.22917
27.82	421.752577	4528.35052
31.3	484.791667	5304.375

Report	File Name	64MSMS00927 et al.			
	Sample Name	BOD Calibration - BTX 20190411			
	Date	Thursday, April 11, 2019 7:52:19			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	9.96	75.09	213.74	51.50	15.48	169.32
Intercept	6.14	16.81	25.30	8.61	-8.42	-143.75
Intensity	4.27	10.00	54.48	12.92	4.48	24.58
Int SD	6.92	12.31	29.48	11.78	7.52	18.75
Concentration	-0.19	-0.09	0.14	0.08	0.83	0.99
Conc SD	0.69	0.16	0.14	0.23	0.49	0.11
Compound Con	-0.14		0.11		0.91	
Compound SD	0.30		0.13		0.21	
Det. Limit	2.08	0.49	0.41	0.69	1.46	0.33
Compound DL	1.29		0.55		0.89	

4/11/19.13.26.21
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Apr 11, 2019 at 13:26:18; Exp. Comment: BTX

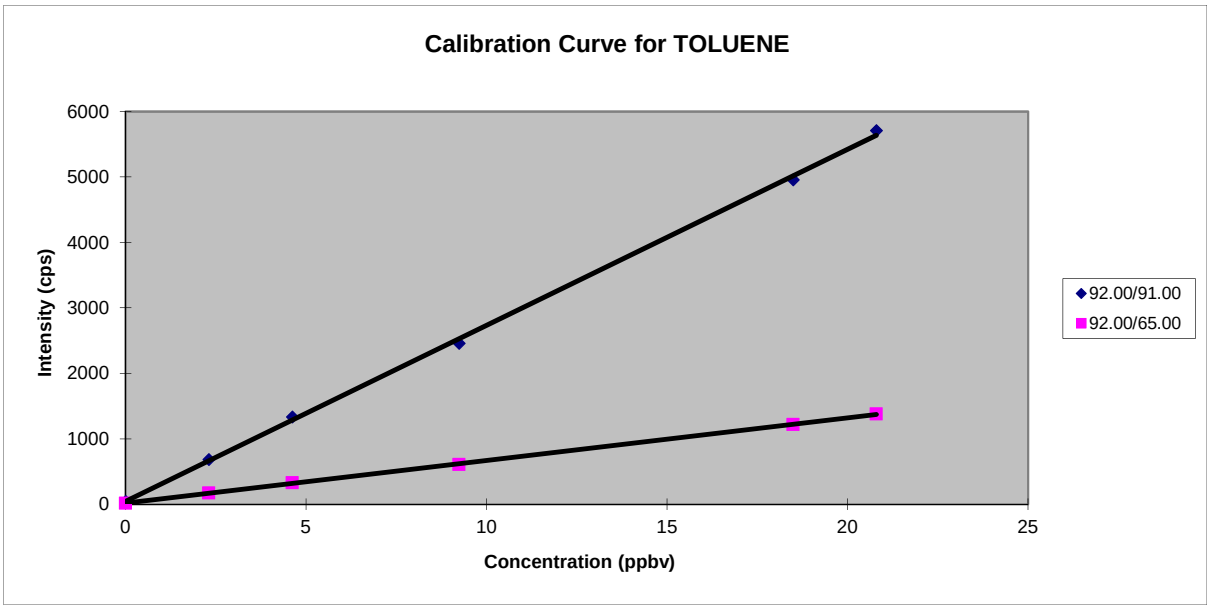




Filename:	64MSMS00933 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 11, 2019 13:47:09					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	10.15	12.60	14.72	16.95	19.17

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	12.0445479	86.067267
Intercept:	5.7474458	31.9741134
Correlation:	0.99930632	0.99972287

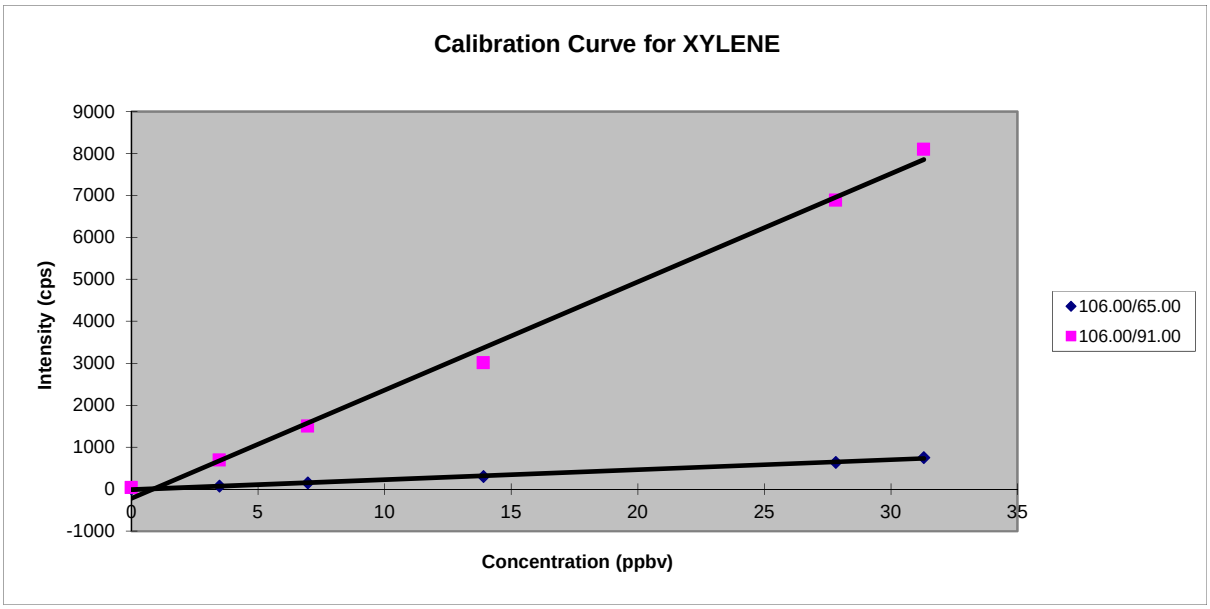
Concentratior	78.00/39.00	78.00/52.00
0	2.5	13.2291667
2.31	36.25	245.9375
4.62	62.371134	447.010309
9.24	118.4375	815.833333
18.49	222.395833	1606.04167
20.8	260.520833	1837.08333



Filename:	64MSMS00933 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 11, 2019 13:47:43					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	10.15	12.60	14.72	16.95	19.17

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	268.869627	65.1557321
Intercept:	44.883191	17.1208182
Correlation:	0.99969615	0.99987986

Concentratior	92.00/91.00	92.00/65.00
0	41.3541667	11.7708333
2.31	681.979167	172.1875
4.62	1332.37113	328.865979
9.24	2458.75	607.604167
18.49	4955.3125	1216.25
20.8	5711.04167	1379.58333



Filename:	64MSMS00933 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 11, 2019 13:48:13					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	10.15	12.60	14.72	16.95	19.17

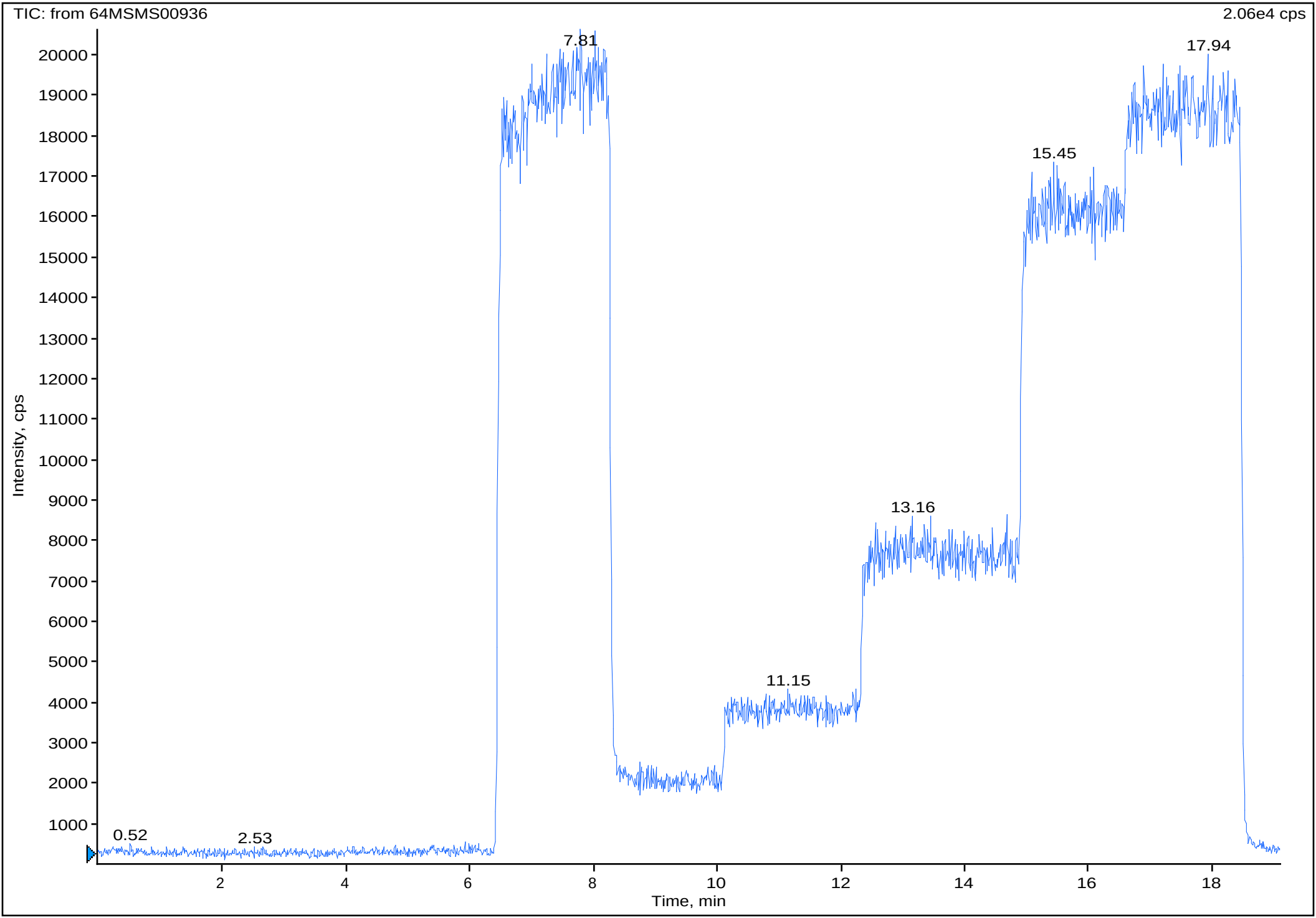
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	23.7477701	257.871977
Intercept:	-9.6456532	-216.75834
Correlation:	0.99853631	0.99766194

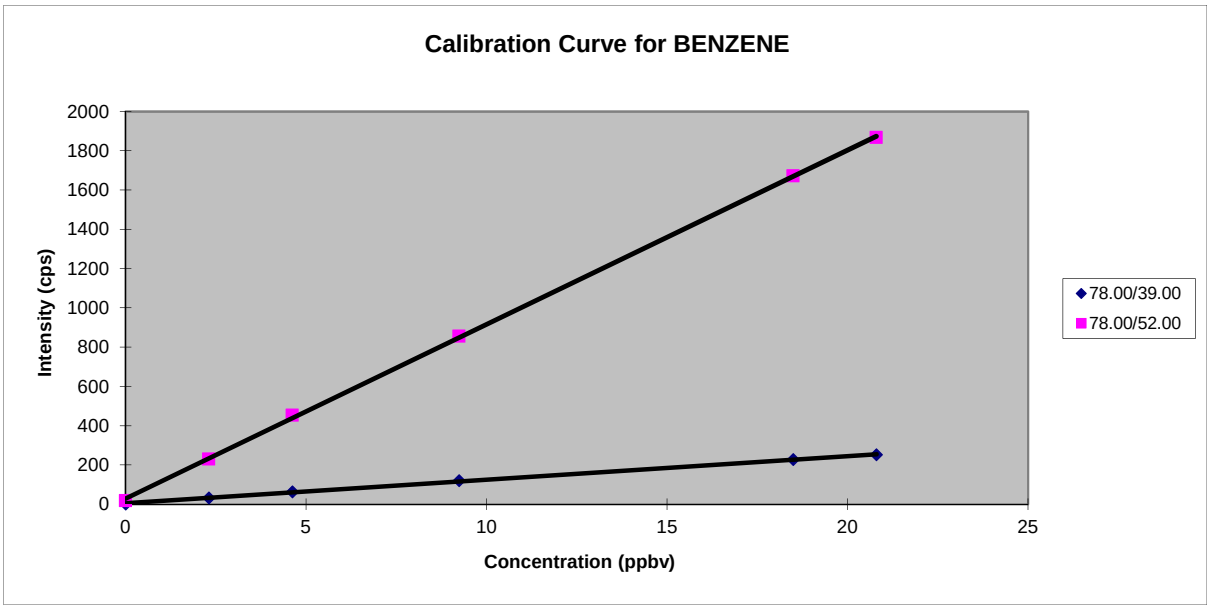
Concentratior	106.00/65.00	106.00/91.00
0	5.41666667	36.6666667
3.48	74.2708333	695.3125
6.96	152.164948	1503.71134
13.91	299.166667	3009.6875
27.82	637.1875	6882.08333
31.3	756.145833	8096.5625

Report	File Name	64MSMS00933 et al.			
	Sample Name	MOD Calibration - BTX 20190411			
	Date	Thursday, April 11, 2019 13:48:47			
	Time Range	4.00	to	5.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	12.04	86.07	268.87	65.16	23.75	257.87
Intercept	5.75	31.97	44.88	17.12	-9.65	-216.76
Intensity	2.50	13.23	41.35	11.77	5.42	36.67
Int SD	5.03	12.44	23.82	12.40	8.93	26.18
Concentration	-0.27	-0.22	-0.01	-0.08	0.63	0.98
Conc SD	0.42	0.14	0.09	0.19	0.38	0.10
Compound Con	-0.24		-0.05		0.81	
Compound SD	0.20		0.10		0.17	
Det. Limit	1.25	0.43	0.27	0.57	1.13	0.30
Compound DL	0.84		0.42		0.72	

4/11/19.19.31.58
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Apr 11, 2019 at 19:31:56; Exp. Comment: BTX



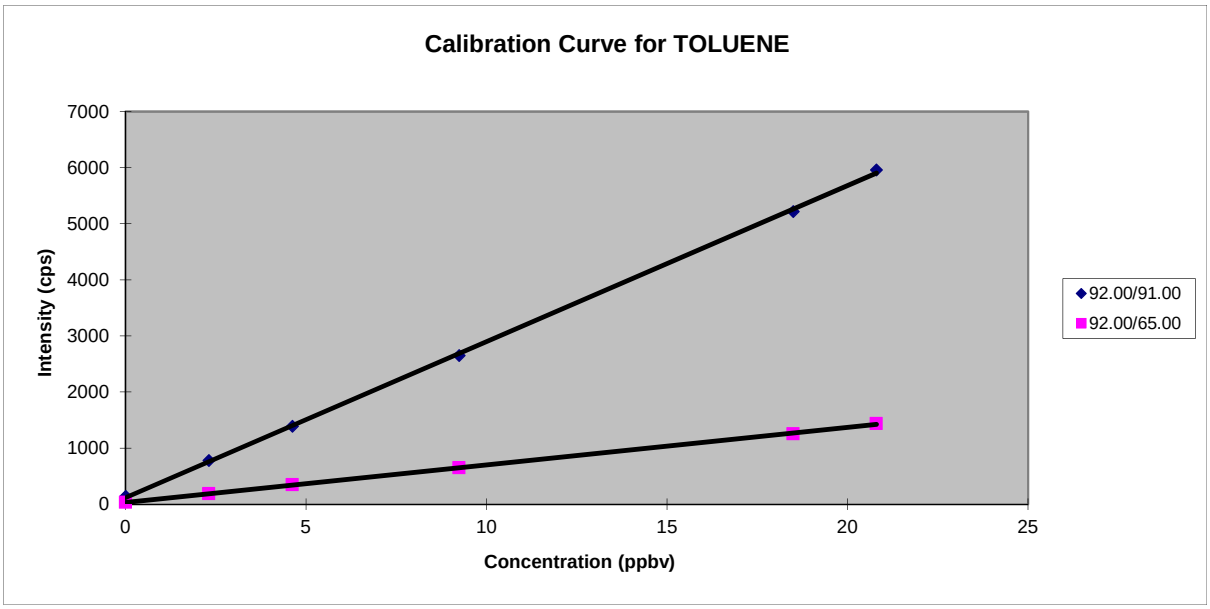


Filename:	64MSMS00936 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Thursday, April 11, 2019 19:51:36
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	9.39	11.09	13.46	15.76	17.53

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	11.9732919	88.723207
Intercept:	5.55342513	28.9544793
Correlation:	0.99952043	0.99992715

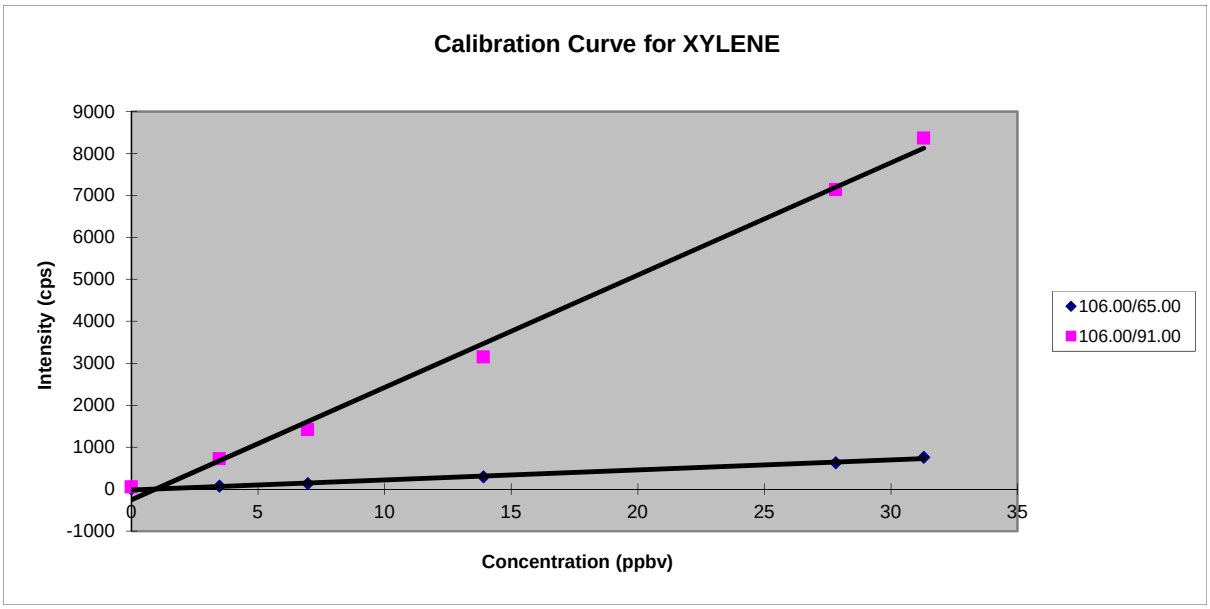
Concentratior	78.00/39.00	78.00/52.00
0	1.75257732	18.3505155
2.31	32.0833333	229.270833
4.62	63.9583333	453.125
9.24	120.416667	854.895833
18.49	227.395833	1671.35417
20.8	251.752577	1867.31959



Filename:	64MSMS00936 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 11, 2019 19:52:06					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	9.39	11.09	13.46	15.76	17.53

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	278.135639	66.7368667
Intercept:	119.183693	34.8113123
Correlation:	0.99986502	0.99984625

Concentratior	92.00/91.00	92.00/65.00
0	140	33.5051546
2.31	781.770833	189.895833
4.62	1389.79167	348.854167
9.24	2648.22917	647.5
18.49	5219.16667	1252.91667
20.8	5961.54639	1437.42268



Filename:	64MSMS00936 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 11, 2019 19:52:51					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	9.39	11.09	13.46	15.76	17.53

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	23.7836554	267.613612
Intercept:	-14.903791	-250.61602
Correlation:	0.99760862	0.99755277

Concentratior	106.00/65.00	106.00/91.00
0	5.56701031	54.742268
3.48	73.8541667	718.541667
6.96	136.875	1418.33333
13.91	292.1875	3143.95833
27.82	629.583333	7138.33333
31.3	757.731959	8360.10309

Report	File Name	64MSMS00936 et al.			
	Sample Name	EOD Calibration - BTX 20190411			
	Date	Thursday, April 11, 2019 19:53:31			
	Time Range	2.00	to	3.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	11.97	88.72	278.14	66.74	23.78	267.61
Intercept	5.55	28.95	119.18	34.81	-14.90	-250.62
Intensity	2.50	15.00	140.83	35.10	6.15	53.65
Int SD	5.03	15.42	48.70	21.23	8.51	29.28
Concentration	-0.26	-0.16	0.08	0.00	0.89	1.14
Conc SD	0.42	0.17	0.18	0.32	0.36	0.11
Compound Con	-0.21		0.04		1.01	
Compound SD	0.21		0.17		0.17	
Det. Limit	1.26	0.52	0.53	0.95	1.07	0.33
Compound DL	0.89		0.74		0.70	

TAGA FLOW CALIBRATION LOG

Work Assignment: 99001 Date: 04/12/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3275	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
0751	1500	~190 SCFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #			Calibration Date:	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Fri, Apr 12, 2019, 8:55:56
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR12 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Fri, Apr 12, 2019, 8:43:19

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.072
100.000	0.081
120.000	0.085
160.000	0.096

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.045
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Fri, Apr 12, 2019, 8:56:57
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR12 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Fri, Apr 12, 2019, 8:43:19

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.072
100.000	0.081
120.000	0.085
160.000	0.096

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.045
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

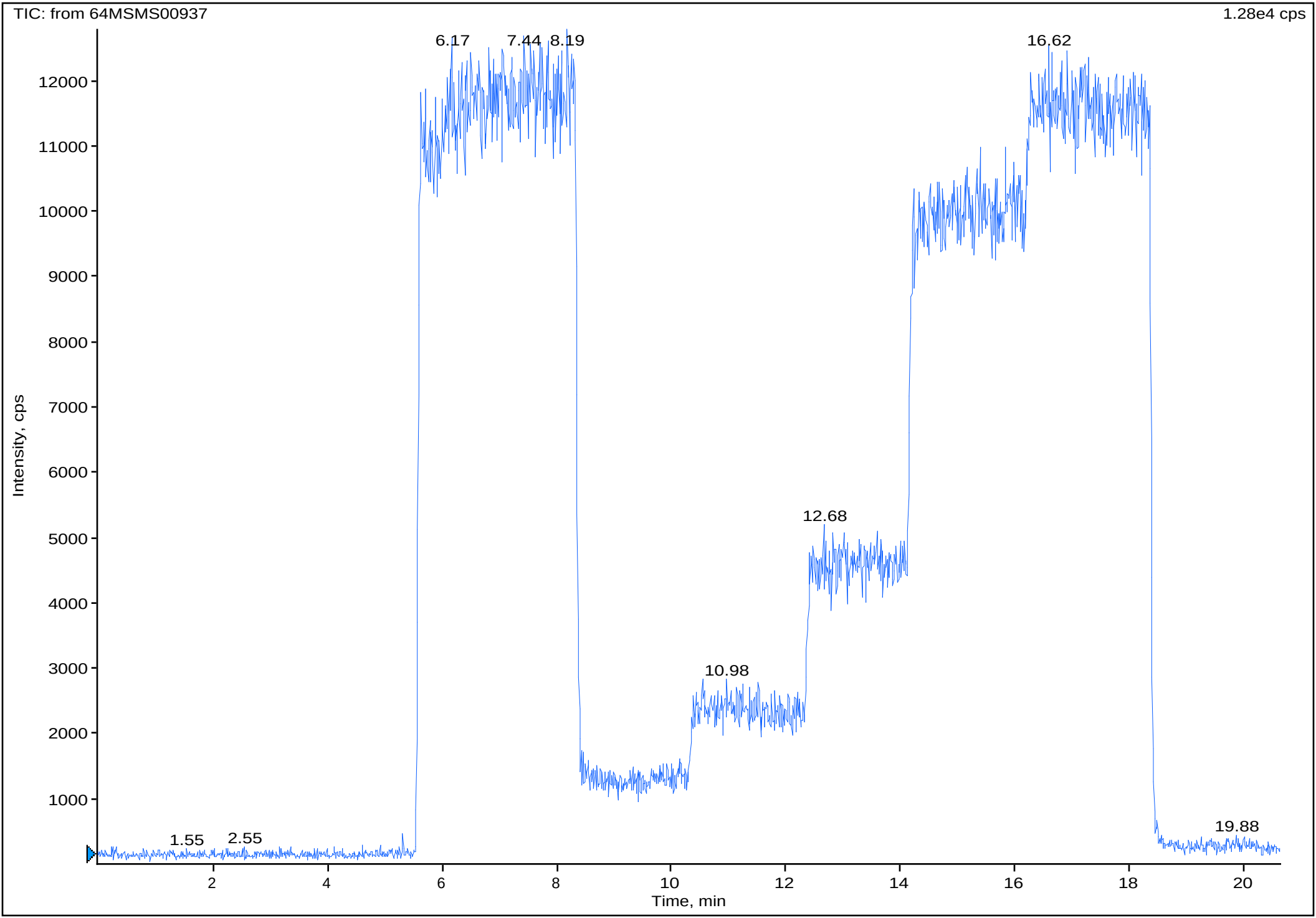
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

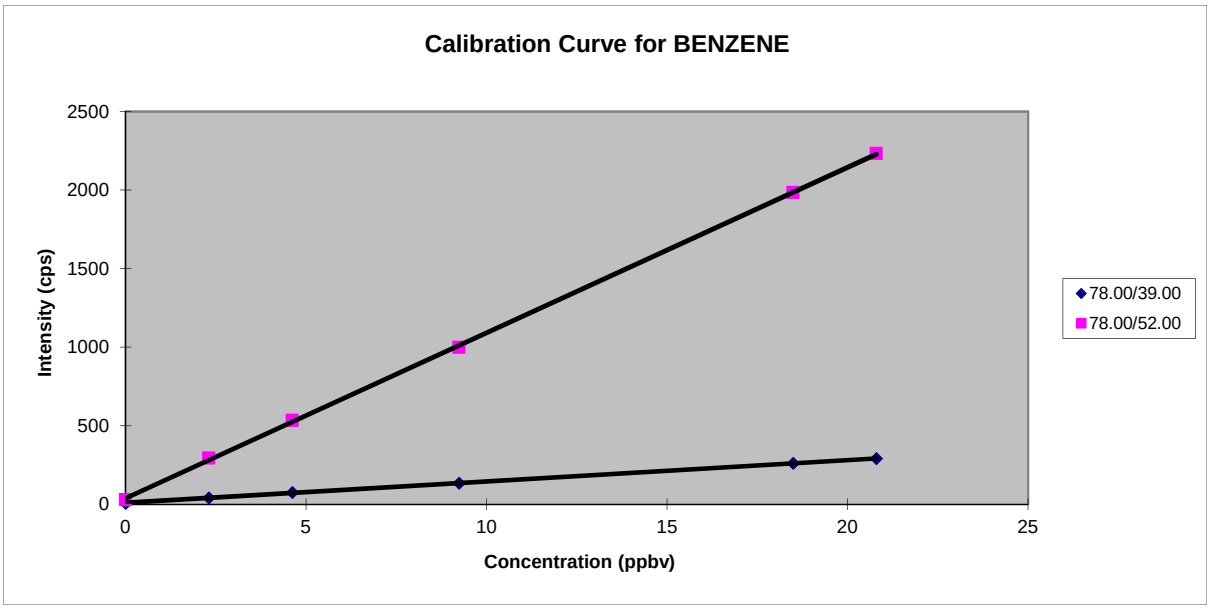
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/12/19.8.58.06
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, Apr 12, 2019 at 8:58:05; Exp. Comment: BTX

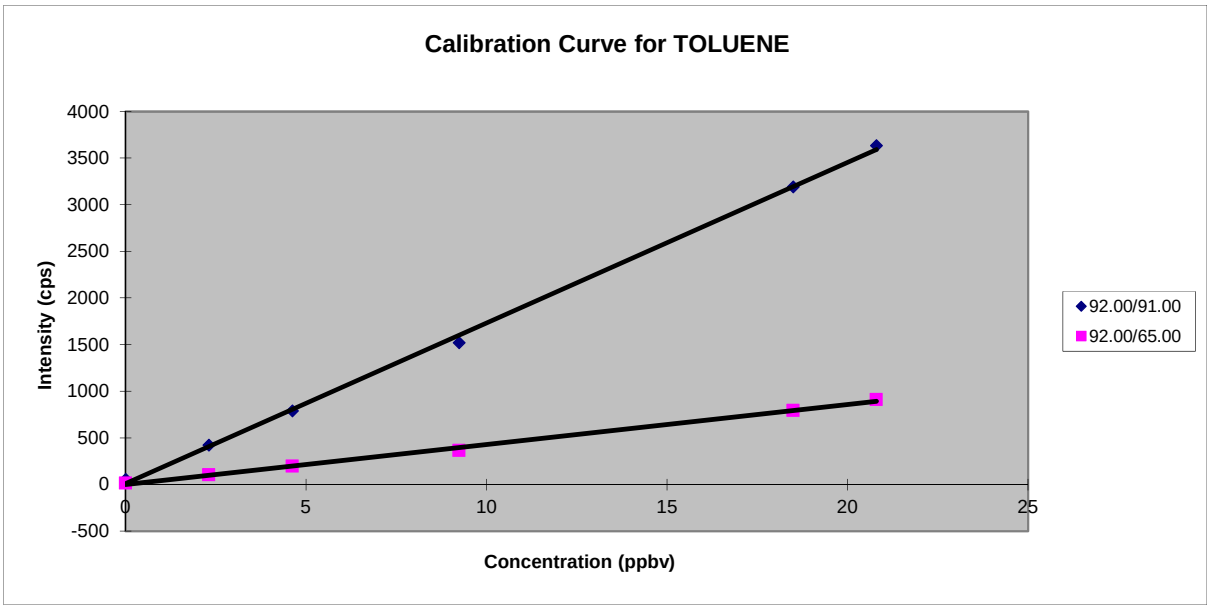




Filename:	64MSMS00937 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 12, 2019 9:23:46					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	9.34	11.29	13.26	15.27	17.38

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	13.6042919	105.305681
Intercept:	9.00793964	38.1001824
Correlation:	0.99987815	0.99993756

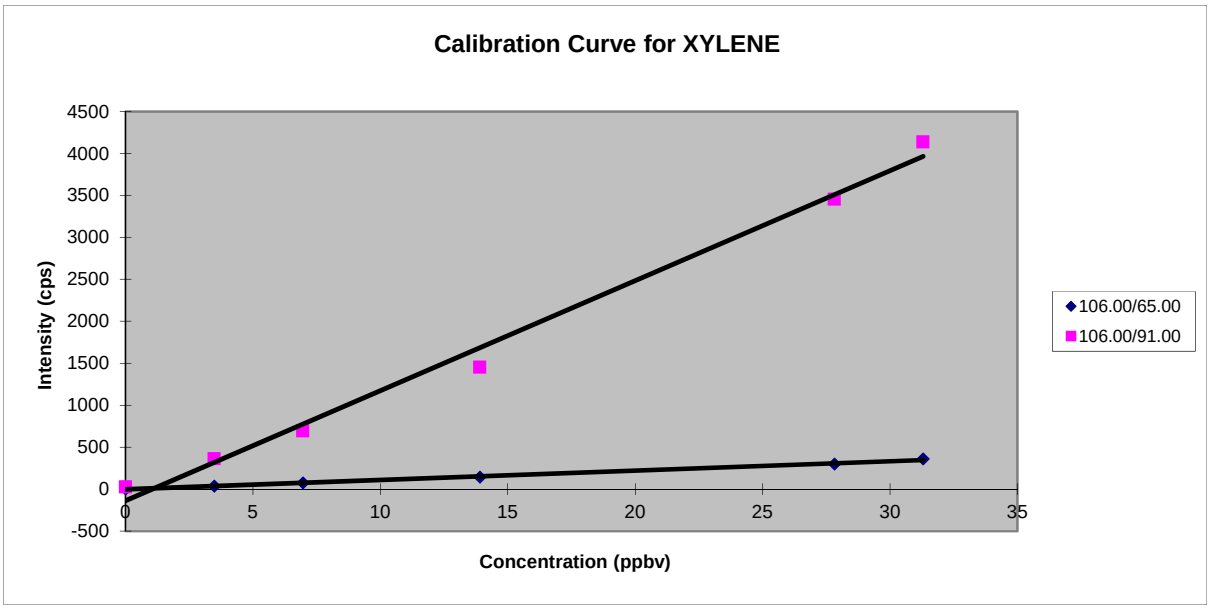
Concentratior	78.00/39.00	78.00/52.00
0	6.25	28.2291667
2.31	41.0416667	292.708333
4.62	74.7916667	534.166667
9.24	134.6875	997.708333
18.49	260.104167	1983.4375
20.8	291.666667	2232.60417



Filename:	64MSMS00937 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 12, 2019 9:24:28					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	9.34	11.29	13.26	15.27	17.38

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	172.224022	42.9444129
Intercept:	10.4891529	-0.1439675
Correlation:	0.99950739	0.99890703

Concentratior	92.00/91.00	92.00/65.00
0	56.3541667	14.7916667
2.31	421.875	103.4375
4.62	790.9375	197.1875
9.24	1519.27083	364.583333
18.49	3193.33333	792.395833
20.8	3632.70833	908.4375



Filename:	64MSMS00937 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 12, 2019 9:24:54					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	9.34	11.29	13.26	15.27	17.38

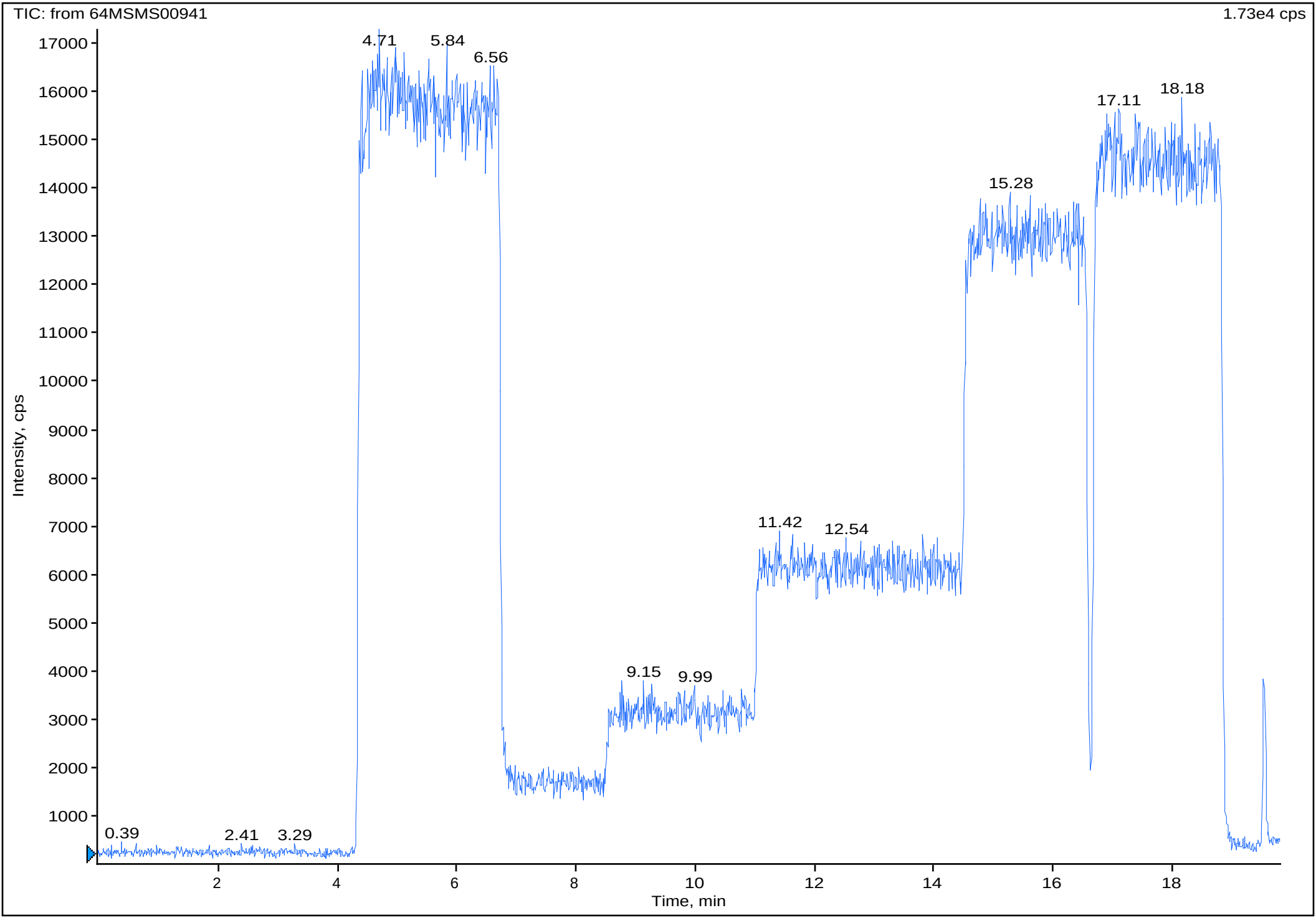
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	11.1771415	131.072024
Intercept:	-2.5065554	-137.37128
Correlation:	0.99811235	0.99581682

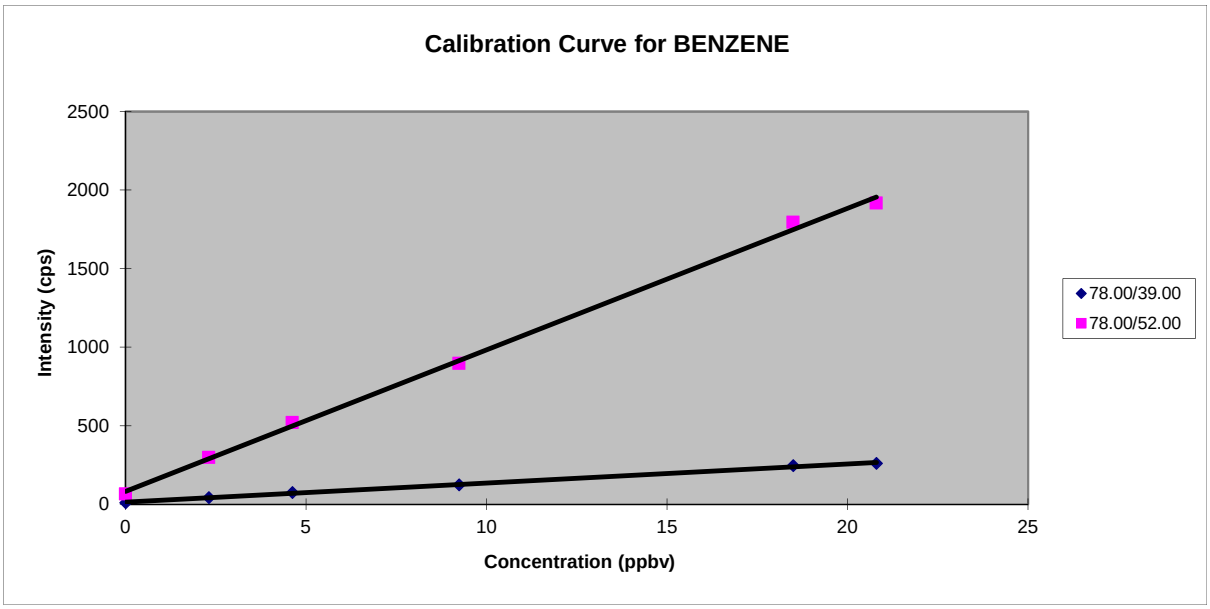
Concentratior	106.00/65.00	106.00/91.00
0	3.125	27.1875
3.48	36.9791667	360.208333
6.96	75.8333333	691.458333
13.91	143.125	1451.5625
27.82	298.4375	3451.875
31.3	360.416667	4134.0625

Report	File Name	64MSMS00937 et al.			
	Sample Name	BOD Calibration - BTX 20190412			
	Date	Friday, April 12, 2019 9:25:20			
	Time Range	2.00	to	3.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	13.60	105.31	172.22	42.94	11.18	131.07
Intercept	9.01	38.10	10.49	-0.14	-2.51	-137.37
Intensity	6.25	28.23	56.35	14.79	3.13	27.19
Int SD	8.49	17.11	27.80	12.56	5.68	18.68
Concentration	-0.20	-0.09	0.27	0.35	0.50	1.26
Conc SD	0.62	0.16	0.16	0.29	0.51	0.14
Compound Con	-0.15		0.31		0.88	
Compound SD	0.28		0.16		0.23	
Det. Limit	1.87	0.49	0.48	0.88	1.52	0.43
Compound DL	1.18		0.68		0.98	

4/12/19.13.36.34
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, Apr 12, 2019 at 13:36:33; Exp. Comment: BTX

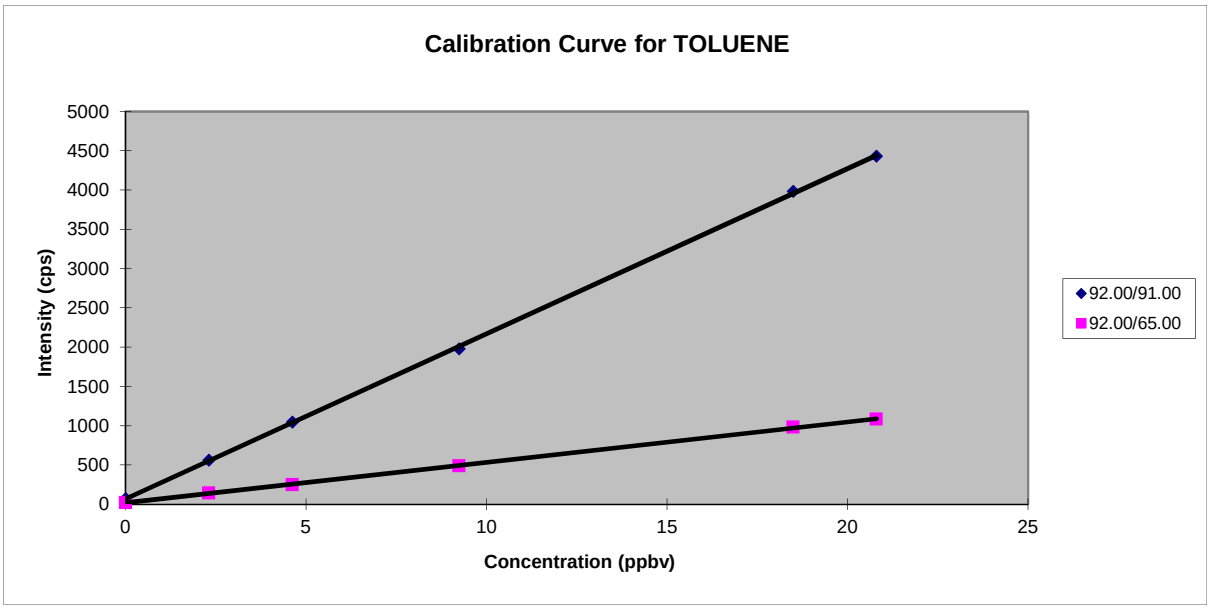




Filename:	64MSMS00941 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 12, 2019 13:57:01					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	7.75	9.73	12.57	15.54	17.88

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	12.1331561	90.0571497
Intercept:	13.9603048	82.0335519
Correlation:	0.99861927	0.99917739

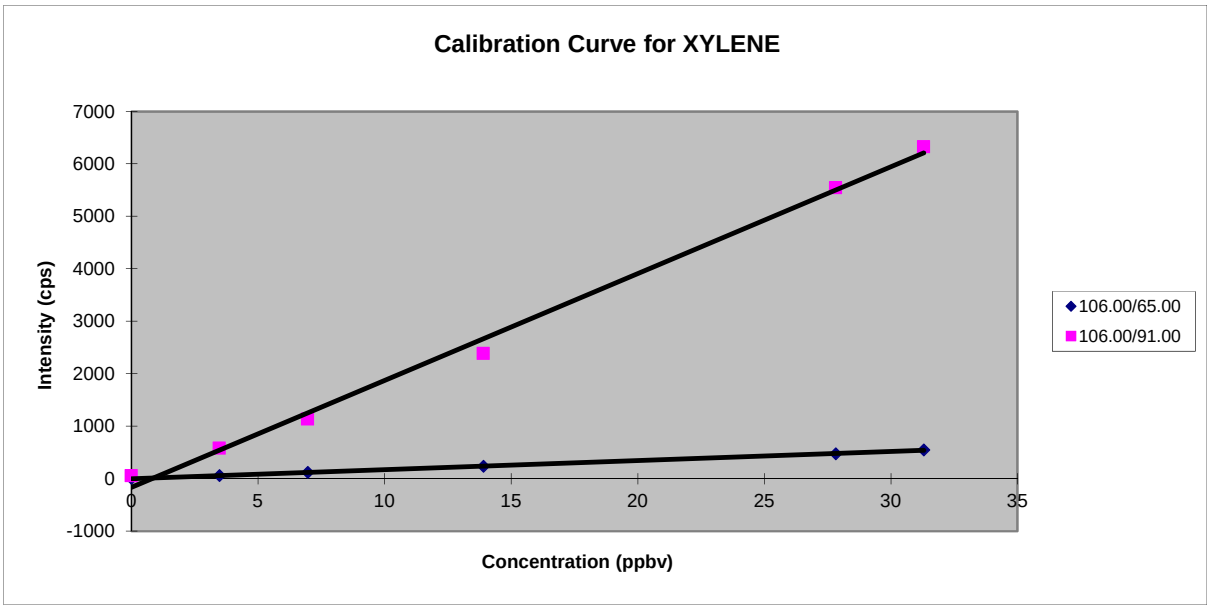
Concentratior	78.00/39.00	78.00/52.00
0	9.6875	64.5833333
2.31	42.6041667	296.041667
4.62	75.4166667	519.6875
9.24	123.75	896.25
18.49	245.625	1794.89583
20.8	259.583333	1915.3125



Filename:	64MSMS00941 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 12, 2019 13:57:45					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	7.75	9.73	12.57	15.54	17.88

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	210.220853	51.4801683
Intercept:	68.5078874	18.4051167
Correlation:	0.99993679	0.99987576

Concentratior	92.00/91.00	92.00/65.00
0	73.8541667	19.7916667
2.31	561.25	143.541667
4.62	1044.89583	249.583333
9.24	1977.29167	488.958333
18.49	3982.5	980.3125
20.8	4430.10417	1083.33333



Filename:	64MSMS00941 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 12, 2019 13:58:32					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	7.75	9.73	12.57	15.54	17.88

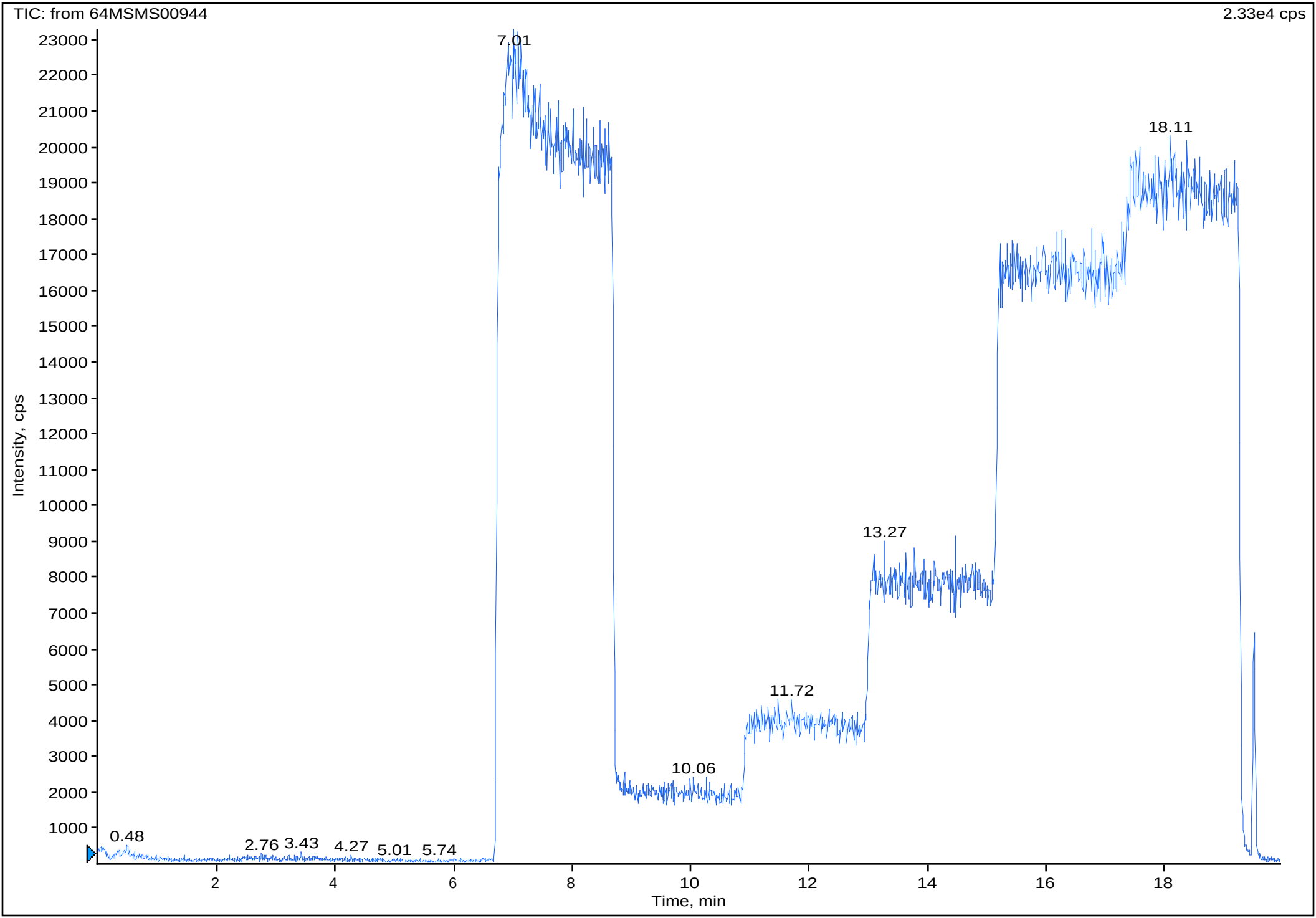
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	17.3089077	203.575773
Intercept:	0.69730174	-161.52274
Correlation:	0.99968883	0.99773439

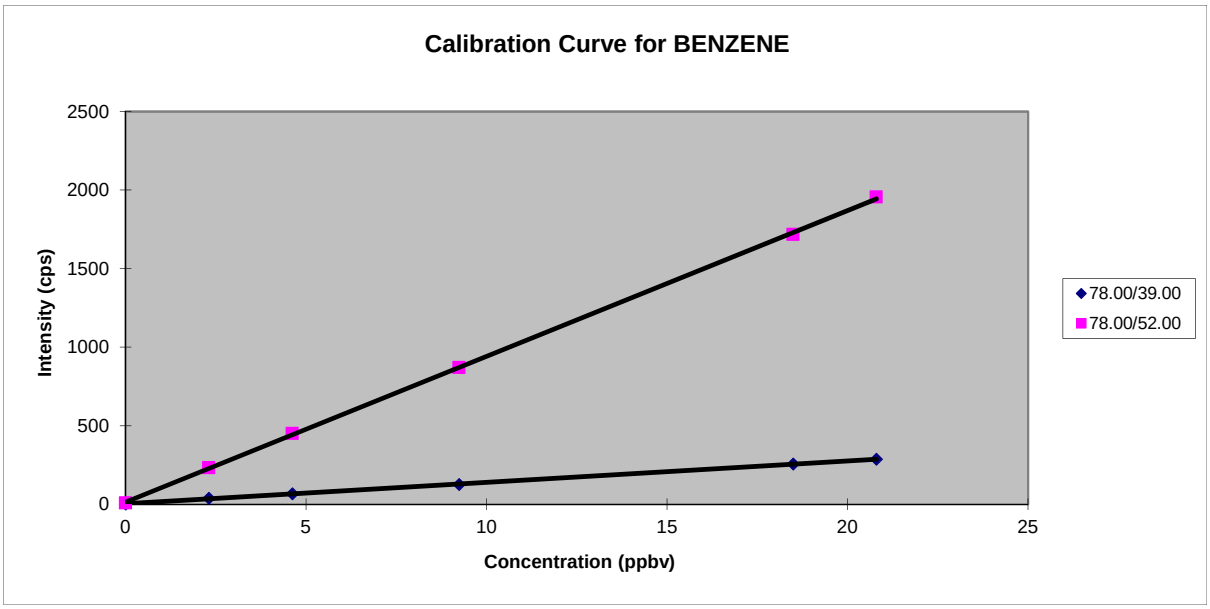
Concentratior	106.00/65.00	106.00/91.00
0	6.875	54.8958333
3.48	58.5416667	582.083333
6.96	119.166667	1136.35417
13.91	238.229167	2382.60417
27.82	475.9375	5543.95833
31.3	550.208333	6323.4375

Report	File Name	64MSMS00941 et al.			
	Sample Name	MOD Calibration - BTX 20190412			
	Date	Friday, April 12, 2019 13:59:16			
	Time Range	2.00	to	3.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	12.13	90.06	210.22	51.48	17.31	203.58
Intercept	13.96	82.03	68.51	18.41	0.70	-161.52
Intensity	9.69	64.58	73.85	19.79	6.88	54.90
Int SD	10.90	31.62	32.88	15.83	9.44	31.66
Concentration	-0.35	-0.19	0.03	0.03	0.36	1.06
Conc SD	0.90	0.35	0.16	0.31	0.55	0.16
Compound Con	-0.27		0.03		0.71	
Compound SD	0.44		0.16		0.25	
Det. Limit	2.70	1.05	0.47	0.92	1.64	0.47
Compound DL	1.87		0.70		1.05	

4/12/19.18.32.13
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, Apr 12, 2019 at 18:32:13; Exp. Comment: BTX

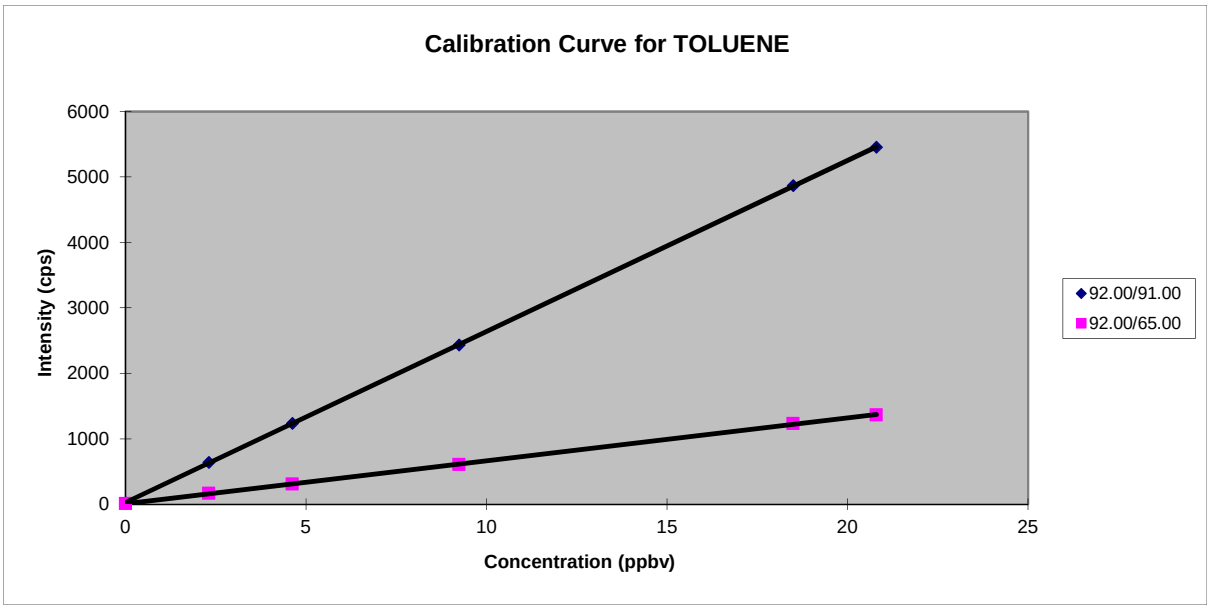




Filename:	64MSMS00944 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 12, 2019 18:54:34					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	5.50	9.91	11.85	14.02	16.30	18.24

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	13.6545707	92.8015617
Intercept:	3.10916848	13.9924259
Correlation:	0.99983784	0.99993347

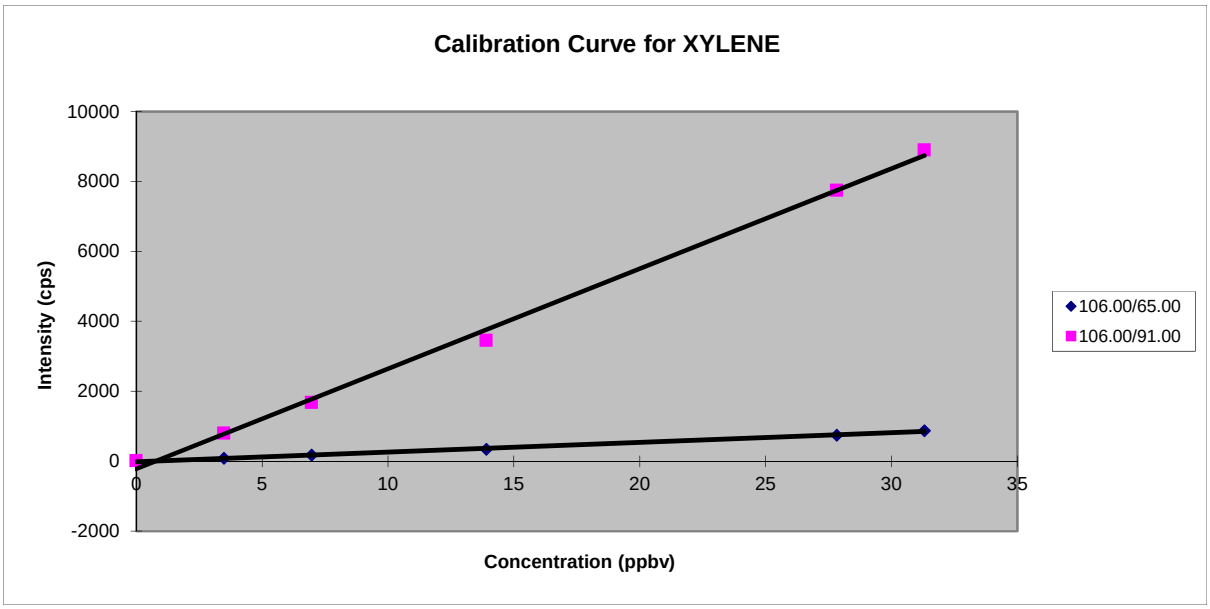
Concentratior	78.00/39.00	78.00/52.00
0	2.60416667	7.91666667
2.31	37.3958333	232.291667
4.62	66.1458333	449.895833
9.24	125.625	868.854167
18.49	256.770833	1716.14583
20.8	287.395833	1955.625



Filename:	64MSMS00944 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 12, 2019 18:56:21					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	5.50	9.91	11.85	14.02	16.30	18.24

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	261.214499	65.5789448
Intercept:	28.4587035	7.85973128
Correlation:	0.99999414	0.9999161

Concentratior	92.00/91.00	92.00/65.00
0	25.9375	7.60416667
2.31	639.895833	163.4375
4.62	1233.75	309.270833
9.24	2433.75	607.5
18.49	4869.0625	1232.5
20.8	5455.3125	1363.85417



Filename:	64MSMS00944 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 12, 2019 18:57:50					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	5.50	9.91	11.85	14.02	16.30	18.24

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	27.6554617	286.177135
Intercept:	-13.153704	-216.84327
Correlation:	0.9986237	0.99867361

Concentratior	106.00/65.00	106.00/91.00
0	2.29166667	12.9166667
3.48	86.9791667	800.3125
6.96	178.958333	1677.39583
13.91	339.6875	3452.8125
27.82	747.916667	7744.89583
31.3	873.645833	8897.8125

Report	File Name	64MSMS00944 et al.			
	Sample Name	EOD Calibration - BTX 20190412			
	Date	Friday, April 12, 2019 18:59:02			
	Time Range	5.00	to	6.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	13.65	92.80	261.21	65.58	27.66	286.18
Intercept	3.11	13.99	28.46	7.86	-13.15	-216.84
Intensity	2.60	7.92	25.94	7.60	2.29	12.92
Int SD	5.85	9.94	19.77	10.54	4.92	13.53
Concentration	-0.04	-0.07	-0.01	0.00	0.56	0.80
Conc SD	0.43	0.11	0.08	0.16	0.18	0.05
Compound Con	-0.05		-0.01		0.68	
Compound SD	0.19		0.08		0.08	
Det. Limit	1.28	0.32	0.23	0.48	0.53	0.14
Compound DL	0.80		0.35		0.34	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 04/13/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3275.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
0632	1500	~1915CFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DW415-0168		Calibration Date:	Exp 05/02/19
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Fri, Apr 12, 2019, 8:55:56
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR12 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Fri, Apr 12, 2019, 8:43:19

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.072
100.000	0.081
120.000	0.085
160.000	0.096

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.045
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Fri, Apr 12, 2019, 8:56:57
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR12 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Fri, Apr 12, 2019, 8:43:19

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.072
100.000	0.081
120.000	0.085
160.000	0.096

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.045
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

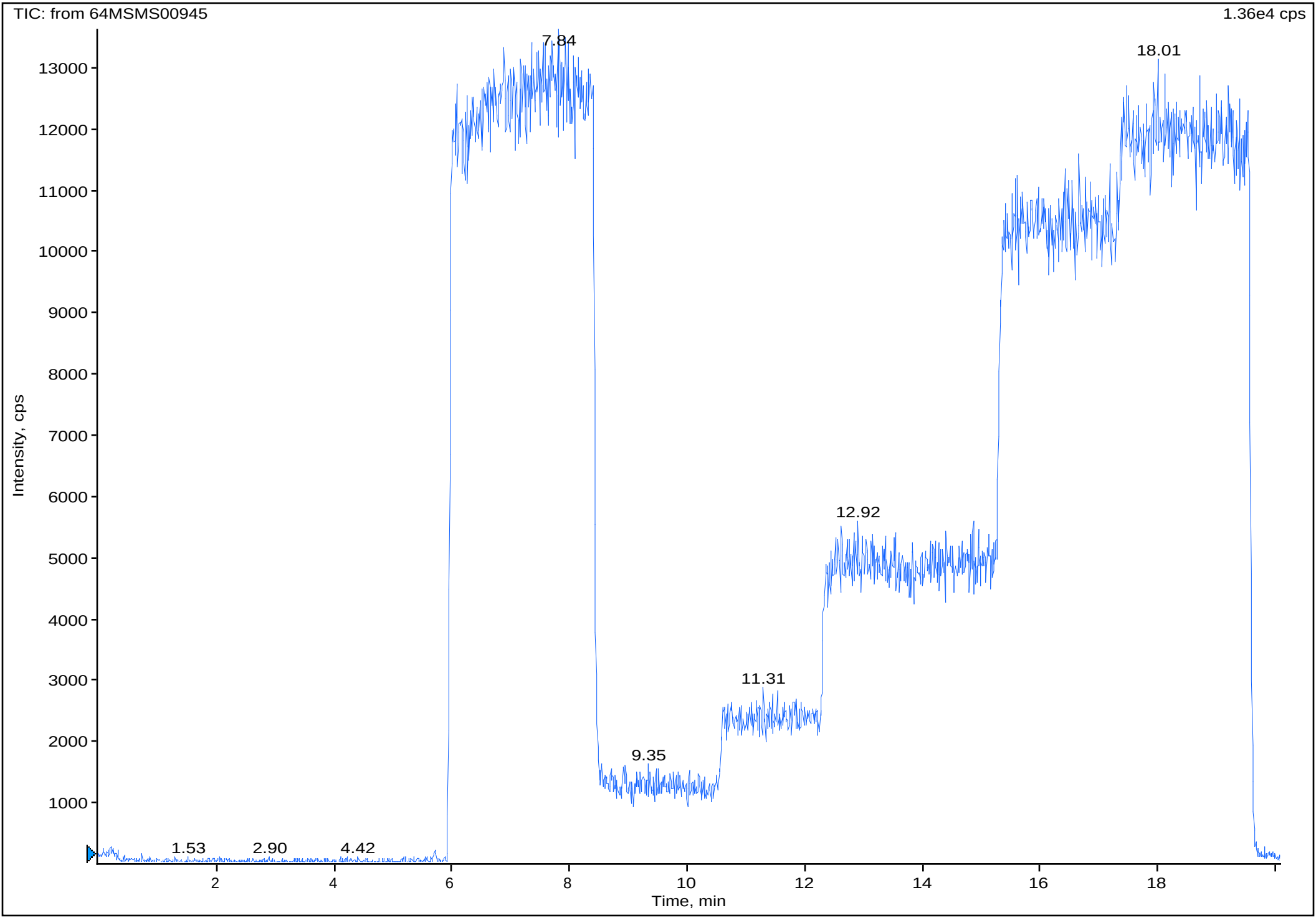
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

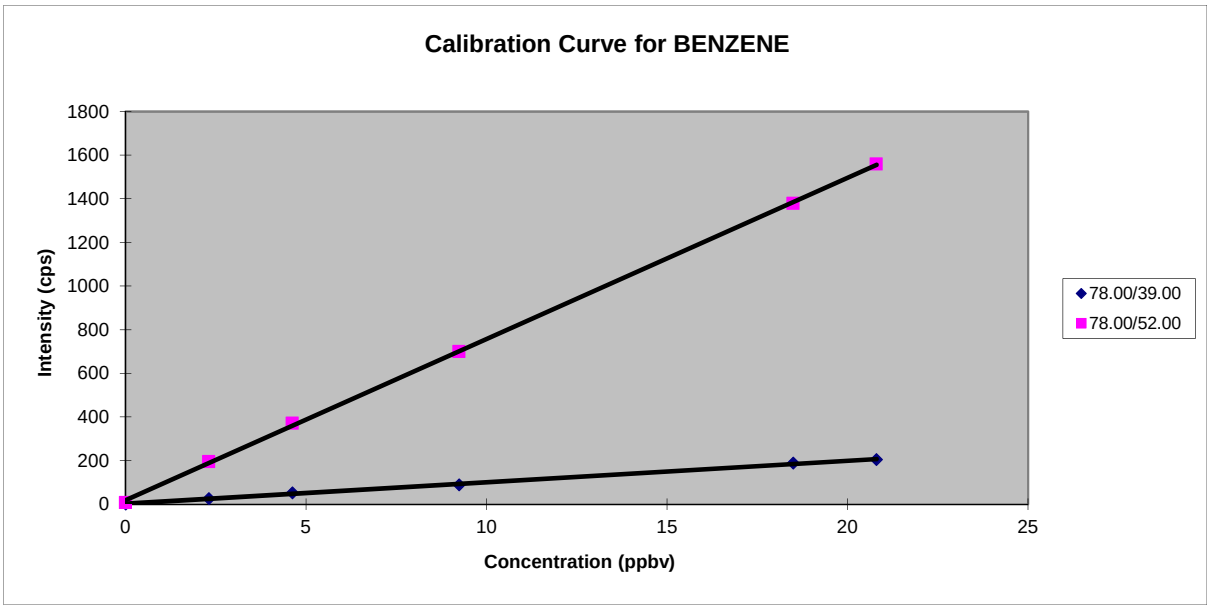
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/13/19.7.00.03
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sat, Apr 13, 2019 at 7:00:02; Exp. Comment: BTX

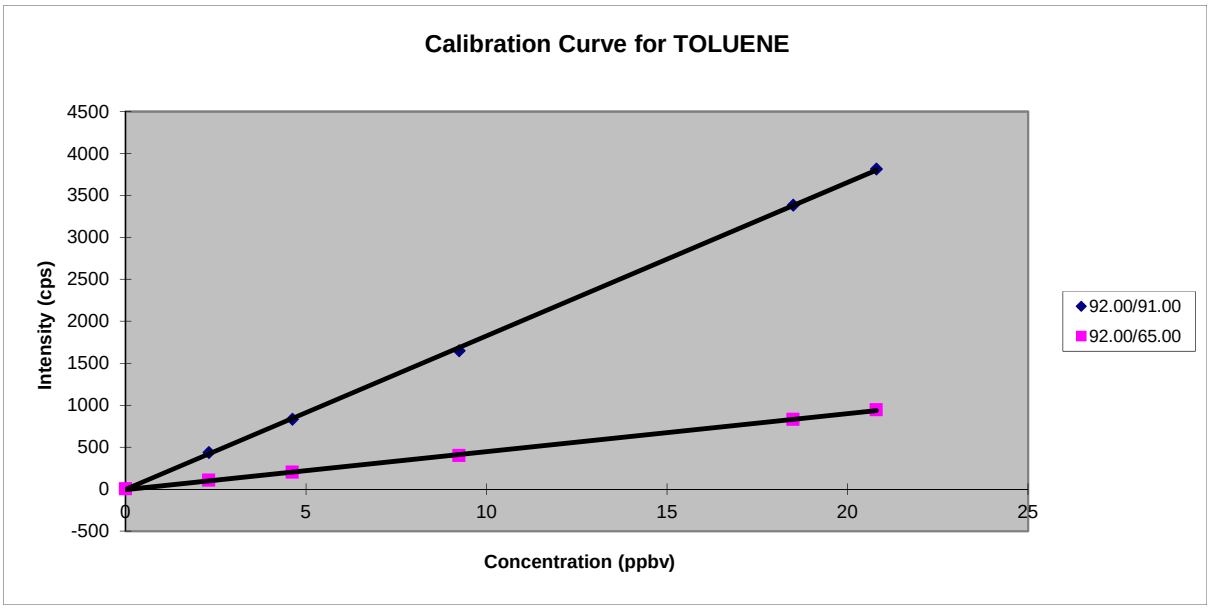




Filename:	64MSMS00945 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 13, 2019 7:21:57					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.50	9.54	11.47	14.09	16.32	18.32

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	9.82490521	73.905103
Intercept:	2.87248301	18.5294687
Correlation:	0.99909124	0.99991823

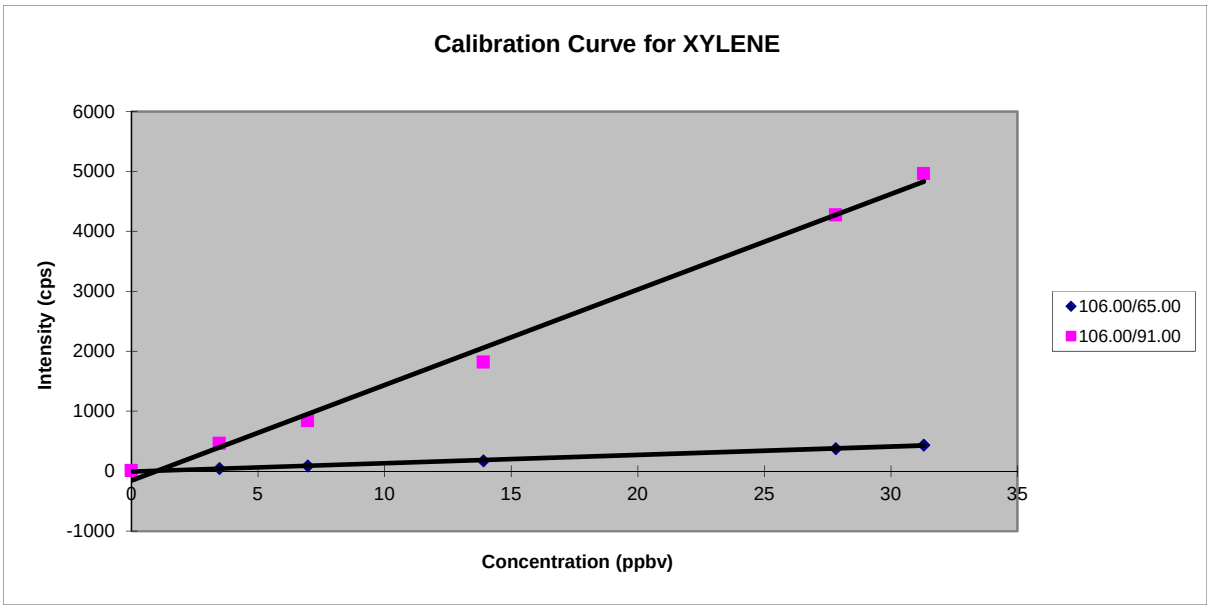
Concentratior	78.00/39.00	78.00/52.00
0	1.14583333	7.39583333
2.31	26.0824742	194.43299
4.62	52.6041667	371.145833
9.24	89.0625	698.75
18.49	188.541667	1378.85417
20.8	204.6875	1559.375



Filename:	64MSMS00945 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 13, 2019 7:22:35					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.50	9.54	11.47	14.09	16.32	18.32

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	182.797933	45.2335455
Intercept:	-0.7855071	-3.986996
Correlation:	0.99991489	0.99974427

Concentratior	92.00/91.00	92.00/65.00
0	12.6041667	3.4375
2.31	437.010309	105.876289
4.62	835.3125	199.166667
9.24	1650.41667	400.833333
18.49	3382.70833	829.0625
20.8	3815.20833	946.354167



Filename:	64MSMS00945 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 13, 2019 7:23:05					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.50	9.54	11.47	14.09	16.32	18.32

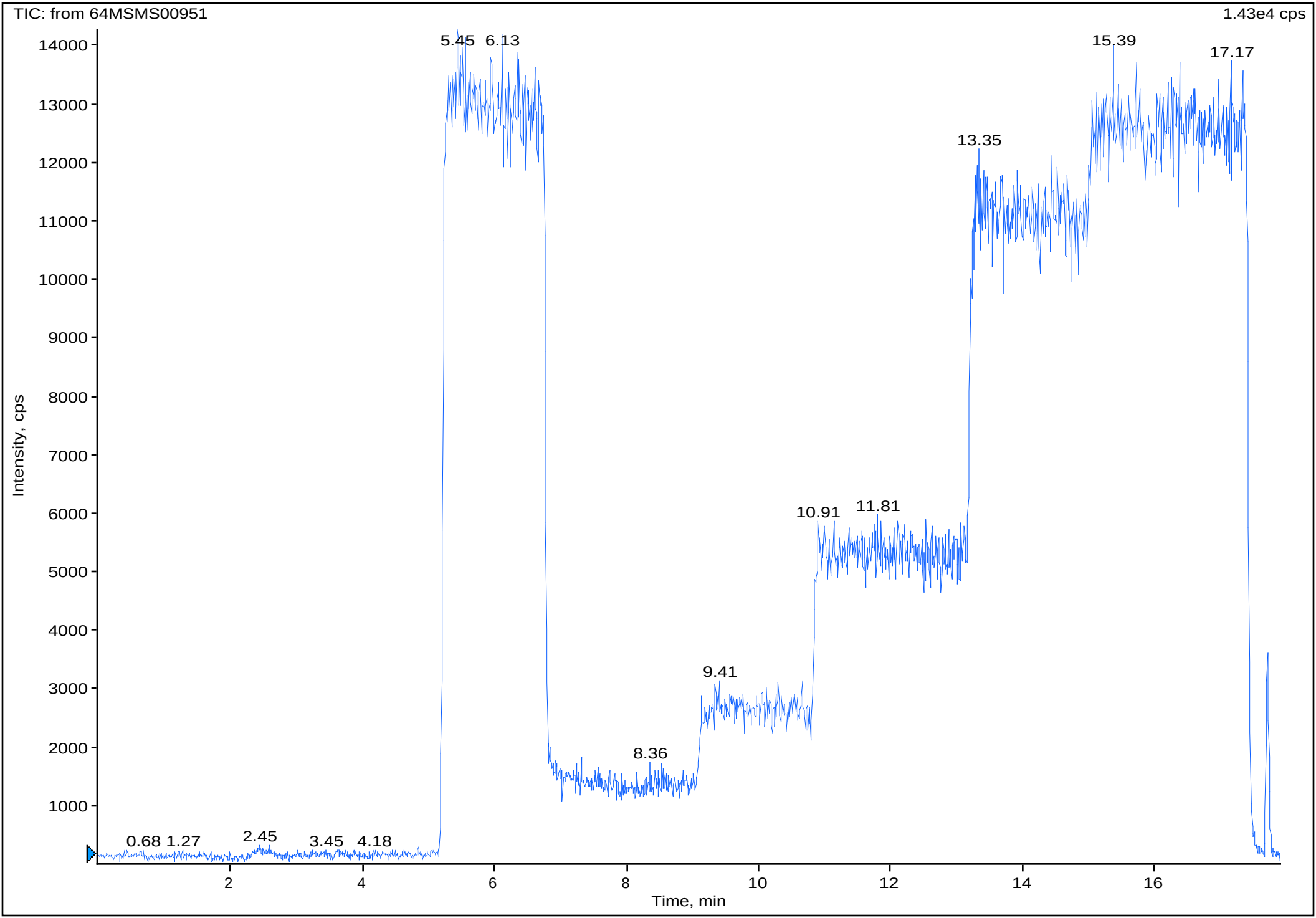
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	13.8867149	159.412339
Intercept:	-5.1600725	-156.91061
Correlation:	0.99911271	0.99721939

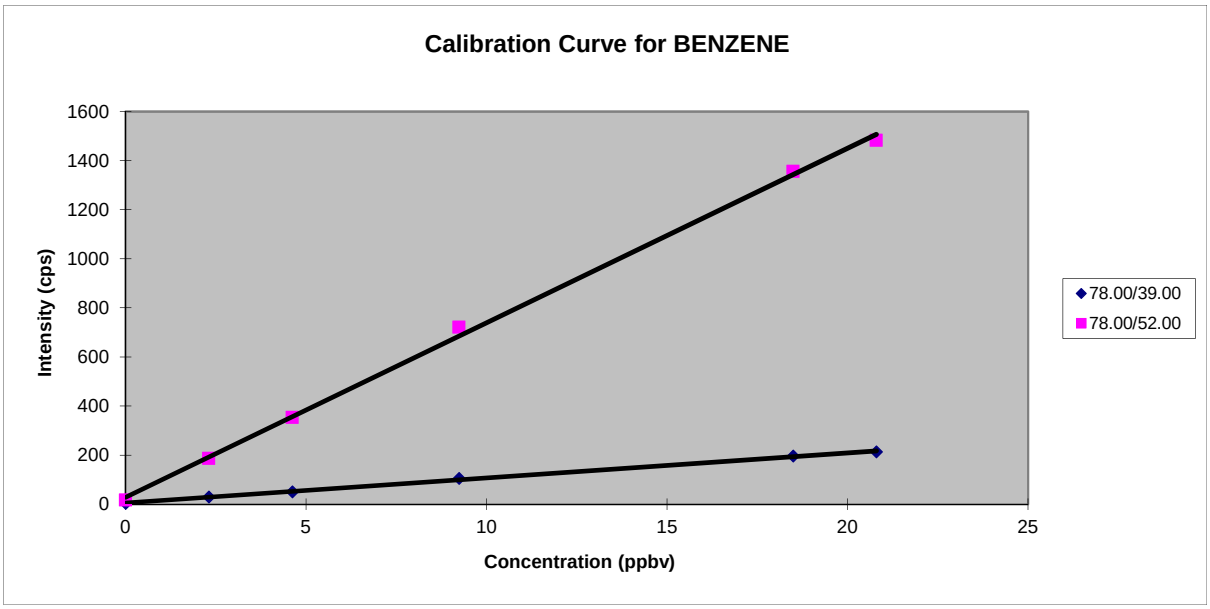
Concentratior	106.00/65.00	106.00/91.00
0	1.66666667	10.625
3.48	46.2886598	460.309278
6.96	88.2291667	838.854167
13.91	175.833333	1819.375
27.82	378.4375	4272.29167
31.3	437.708333	4963.22917

Report	File Name	64MSMS00945 et al.			
	Sample Name	BOD Calibration - BTX 20190413			
	Date	Saturday, April 13, 2019 7:23:41			
	Time Range	3.00	to	4.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	9.82	73.91	182.80	45.23	13.89	159.41
Intercept	2.87	18.53	-0.79	-3.99	-5.16	-156.91
Intensity	1.15	7.40	12.60	3.44	1.67	10.63
Int SD	3.52	9.43	13.08	6.13	4.27	10.14
Concentration	-0.18	-0.15	0.07	0.16	0.49	1.05
Conc SD	0.36	0.13	0.07	0.14	0.31	0.06
Compound Con	-0.16		0.12		0.77	
Compound SD	0.17		0.07		0.13	
Det. Limit	1.07	0.38	0.21	0.41	0.92	0.19
Compound DL	0.73		0.31		0.56	

4/13/19.13.29.24
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sat, Apr 13, 2019 at 13:29:24; Exp. Comment: BTX

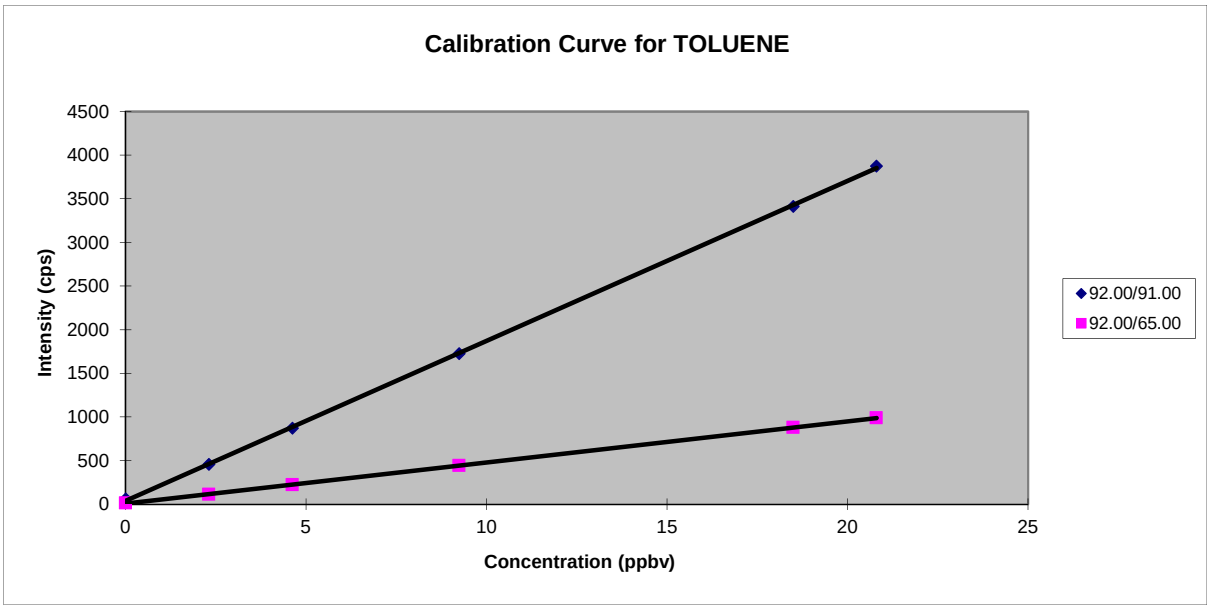




Filename:	64MSMS00951 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 13, 2019 13:47:54					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.50	8.07	9.97	12.02	14.07	16.31

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	10.2086627	71.0743057
Intercept:	5.58584404	28.7656672
Correlation:	0.99926718	0.99938937

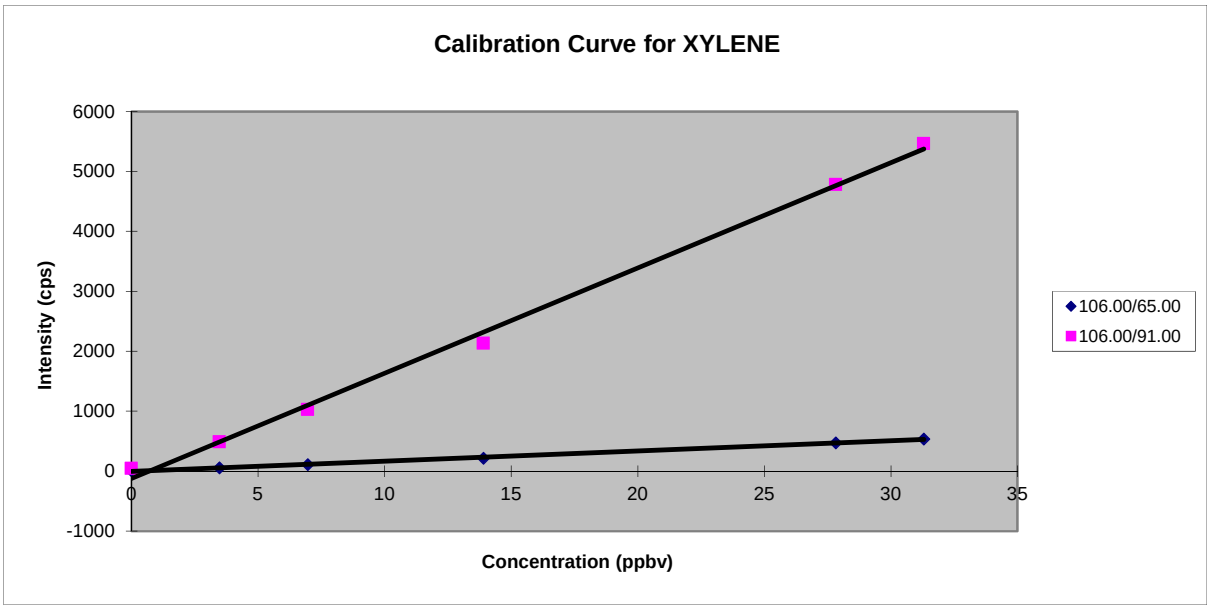
Concentratior	78.00/39.00	78.00/52.00
0	3.4375	17.1875
2.31	30.2083333	186.041667
4.62	50.3125	352.5
9.24	105.104167	721.25
18.49	196.458333	1355.9375
20.8	214.166667	1481.45833



Filename:	64MSMS00951 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 13, 2019 13:48:35					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.50	8.07	9.97	12.02	14.07	16.31

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	183.295883	47.0846112
Intercept:	40.0579753	8.0451324
Correlation:	0.99993612	0.99993849

Concentratior	92.00/91.00	92.00/65.00
0	62.5	15.625
2.31	458.854167	112.083333
4.62	871.25	221.979167
9.24	1725.9375	442.291667
18.49	3412.5	877.5
20.8	3874.89583	990.104167



Filename:	64MSMS00951 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 13, 2019 13:48:59					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.50	8.07	9.97	12.02	14.07	16.31

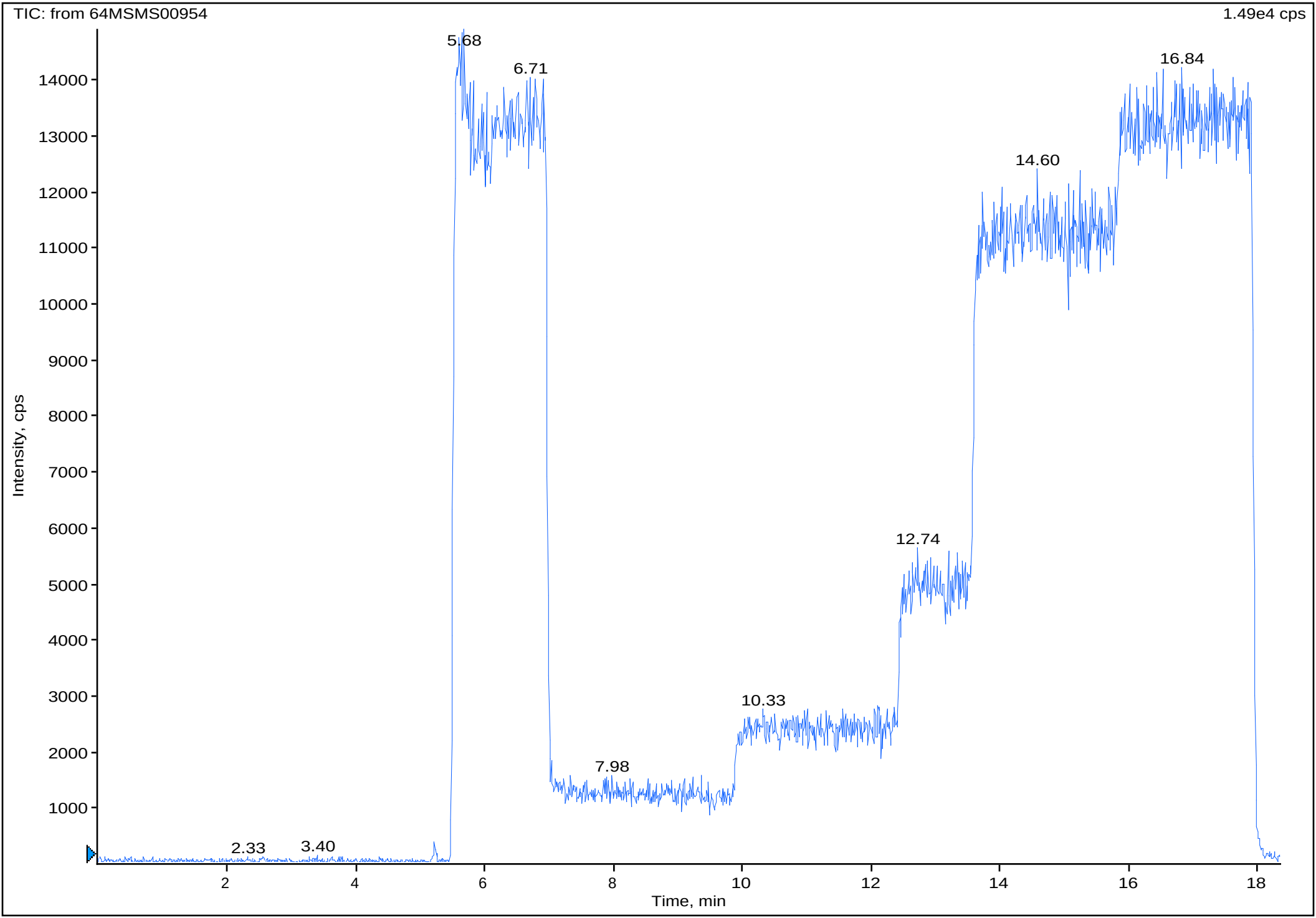
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	17.0773969	175.545181
Intercept:	-4.5715811	-119.8691
Correlation:	0.99885365	0.99851952

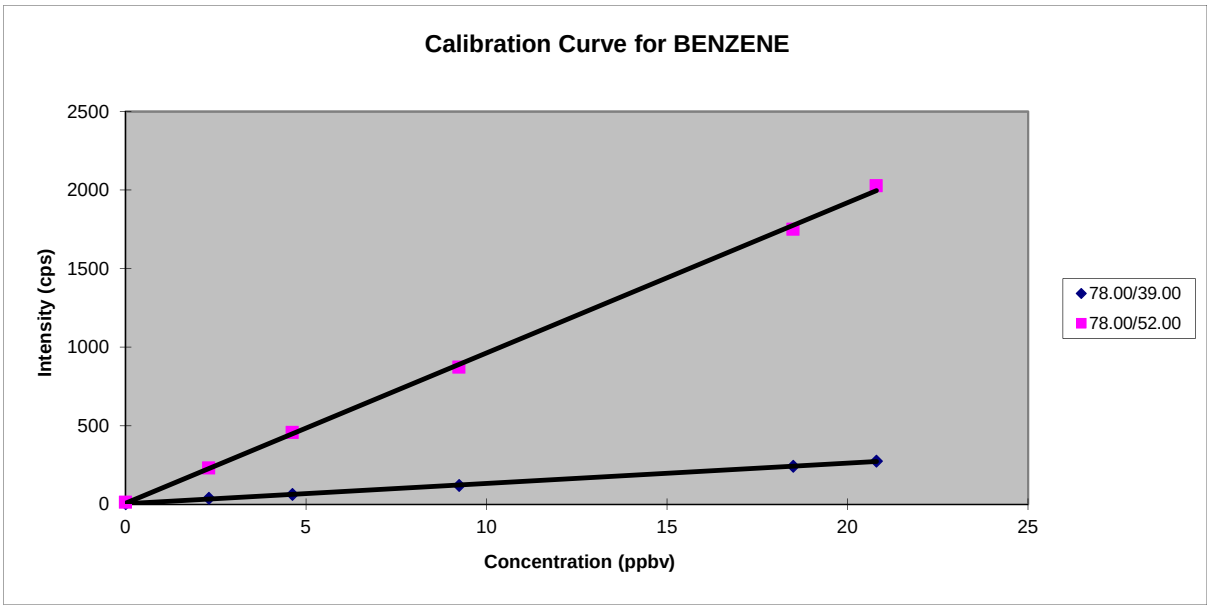
Concentratior	106.00/65.00	106.00/91.00
0	7.8125	44.375
3.48	54.5833333	488.125
6.96	111.770833	1029.375
13.91	214.0625	2129.79167
27.82	473.4375	4777.5
31.3	536.354167	5464.375

Report	File Name	64MSMS00951 et al.			
	Sample Name	MOD Calibration - BTX 20190413			
	Date	Saturday, April 13, 2019 13:49:30			
	Time Range	3.00	to	4.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	10.21	71.07	183.30	47.08	17.08	175.55
Intercept	5.59	28.77	40.06	8.05	-4.57	-119.87
Intensity	3.44	17.19	62.50	15.63	7.81	44.38
Int SD	5.95	14.12	29.20	13.90	9.86	23.48
Concentration	-0.21	-0.16	0.12	0.16	0.73	0.94
Conc SD	0.58	0.20	0.16	0.30	0.58	0.13
Compound Con	-0.19		0.14		0.83	
Compound SD	0.28		0.16		0.25	
Det. Limit	1.75	0.60	0.48	0.89	1.73	0.40
Compound DL	1.17		0.68		1.07	

4/13/19.19.04.37
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sat, Apr 13, 2019 at 19:04:36; Exp. Comment: BTX



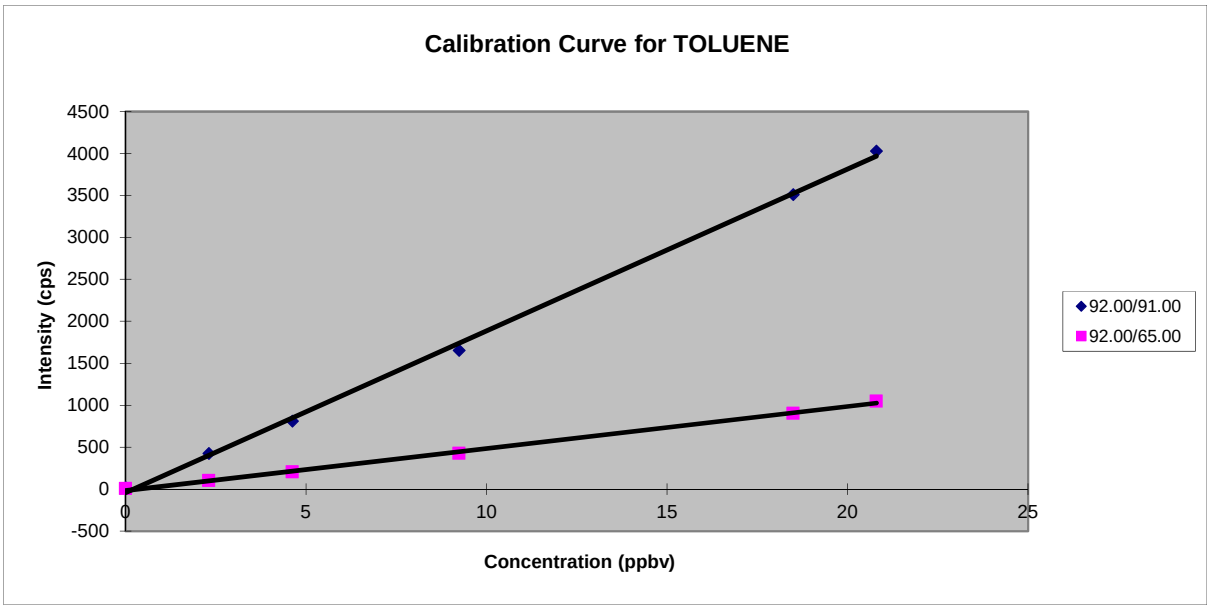


Filename:	64MSMS00954 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Saturday, April 13, 2019 19:24:16
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.59	11.20	13.05	14.74	16.97

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	12.8748607	95.691911
Intercept:	4.34406493	6.45999171
Correlation:	0.99980092	0.99970804

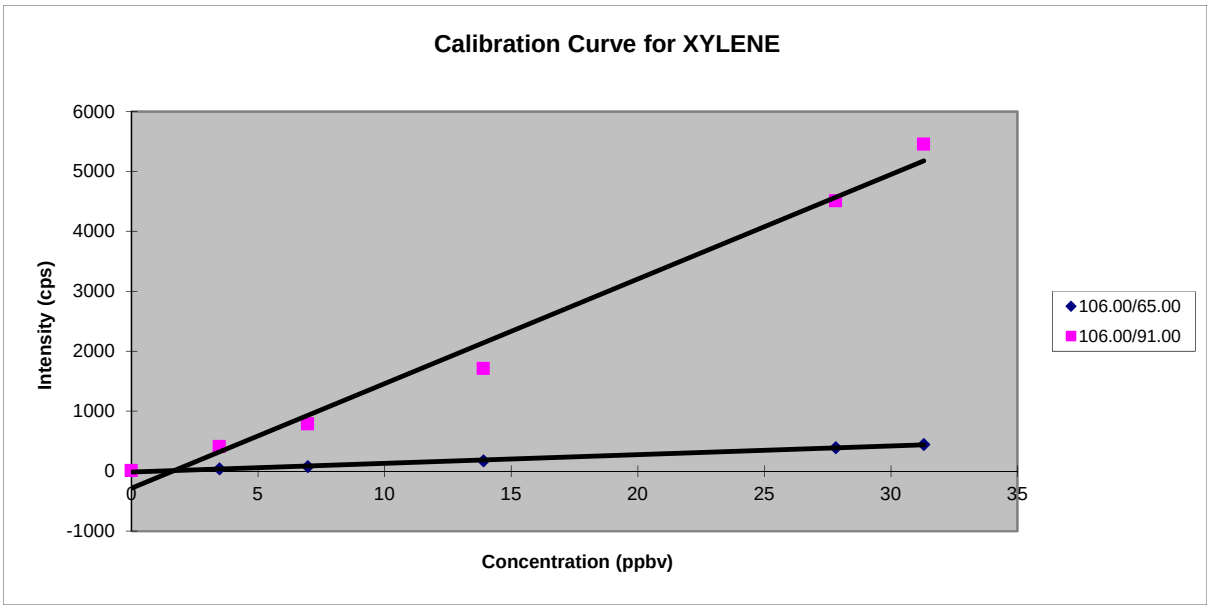
Concentratior	78.00/39.00	78.00/52.00
0	3.125	12.1875
2.31	37.5	228.958333
4.62	63.4375	456.666667
9.24	120.833333	871.875
18.49	241.145833	1749.79167
20.8	274.0625	2026.35417



Filename:	64MSMS00954 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 13, 2019 19:25:51					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.59	11.20	13.05	14.74	16.97

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	192.863708	50.0838731
Intercept:	-41.453544	-15.650267
Correlation:	0.99939212	0.99915807

Concentratior	92.00/91.00	92.00/65.00
0	19.5833333	6.66666667
2.31	425.520833	100.416667
4.62	811.875	203.125
9.24	1651.875	425.729167
18.49	3511.35417	901.875
20.8	4027.29167	1045.9375



Filename:	64MSMS00954 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 13, 2019 19:26:22					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.59	11.20	13.05	14.74	16.97

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	14.3702824	174.421366
Intercept:	-11.355551	-281.52663
Correlation:	0.99836776	0.99274026

Concentratior	106.00/65.00	106.00/91.00
0	2.08333333	7.8125
3.48	41.3541667	406.458333
6.96	79.0625	786.5625
13.91	173.125	1711.35417
27.82	390.104167	4506.66667
31.3	445.625	5450.9375

Report	File Name	64MSMS00954 et al.			
	Sample Name	EOD Calibration - BTX 20190413			
	Date	Saturday, April 13, 2019 19:27:27			
	Time Range	2.00	to	3.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	12.87	95.69	192.86	50.08	14.37	174.42
Intercept	4.34	6.46	-41.45	-15.65	-11.36	-281.53
Intensity	3.13	12.19	19.58	6.67	2.08	7.81
Int SD	6.38	11.07	16.15	9.02	4.33	11.07
Concentration	-0.09	0.06	0.32	0.45	0.94	1.66
Conc SD	0.50	0.12	0.08	0.18	0.30	0.06
Compound Con	-0.02		0.38		1.30	
Compound SD	0.22		0.09		0.13	
Det. Limit	1.49	0.35	0.25	0.54	0.90	0.19
Compound DL	0.92		0.40		0.55	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 04/14/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3275	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
0624	1500	~190SCFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration # 18DWY15-0168			Calibration Date: EXP 05/02/19	

Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
			RA		
Gilibrator Flow Cell	S/N #			Calibration Date:	

Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
			RA		
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX monitoring
Last Modified: Sun, Apr 14, 2019, 6:45:45
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR14 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sun, Apr 14, 2019, 6:43:17

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.072
100.000	0.081
120.000	0.085
160.000	0.096

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.048
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX CALIBRATION
Last Modified: Sun, Apr 14, 2019, 6:44:38
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR14 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sun, Apr 14, 2019, 6:43:17

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.072
100.000	0.081
120.000	0.085
160.000	0.096

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.048
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

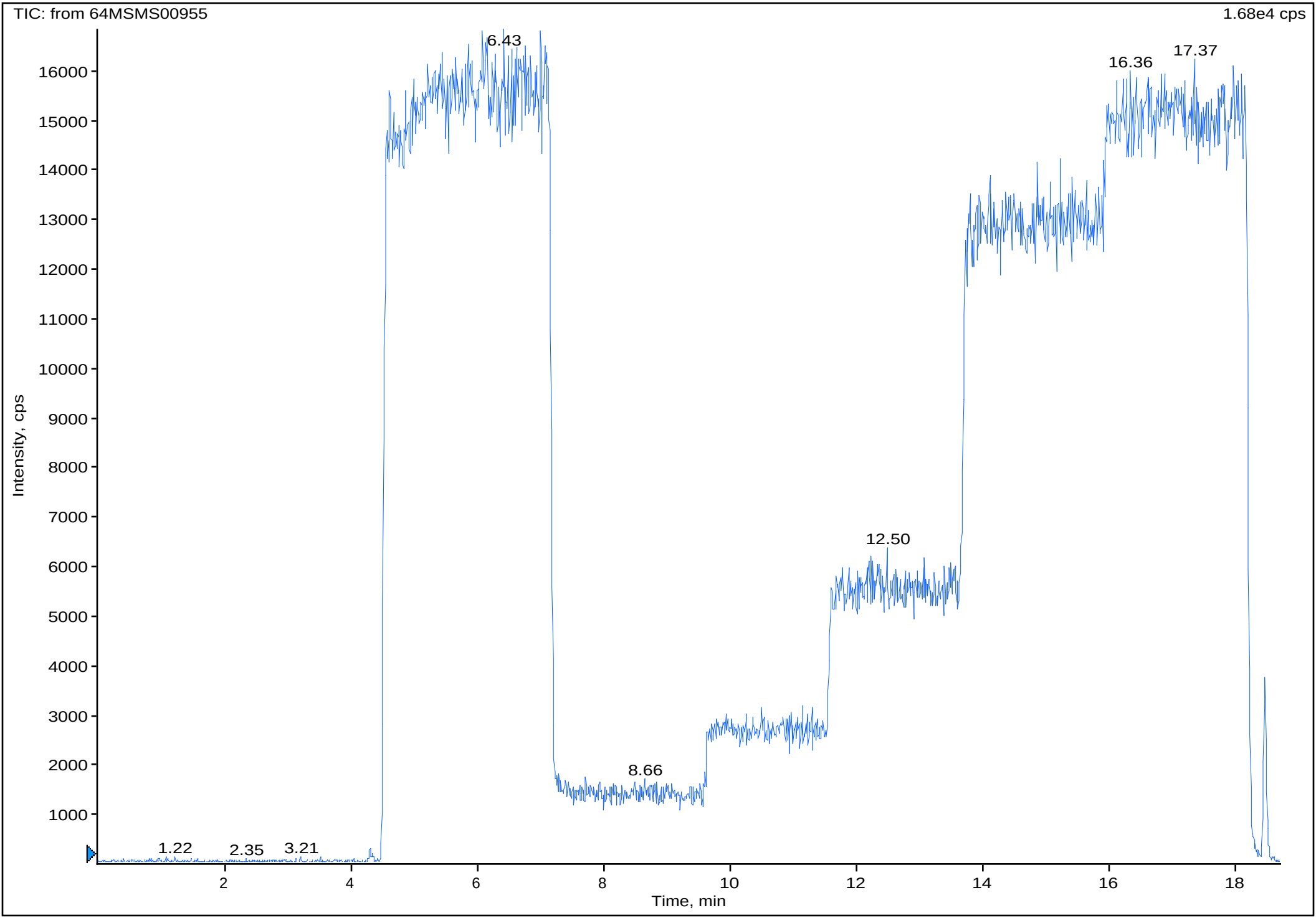
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

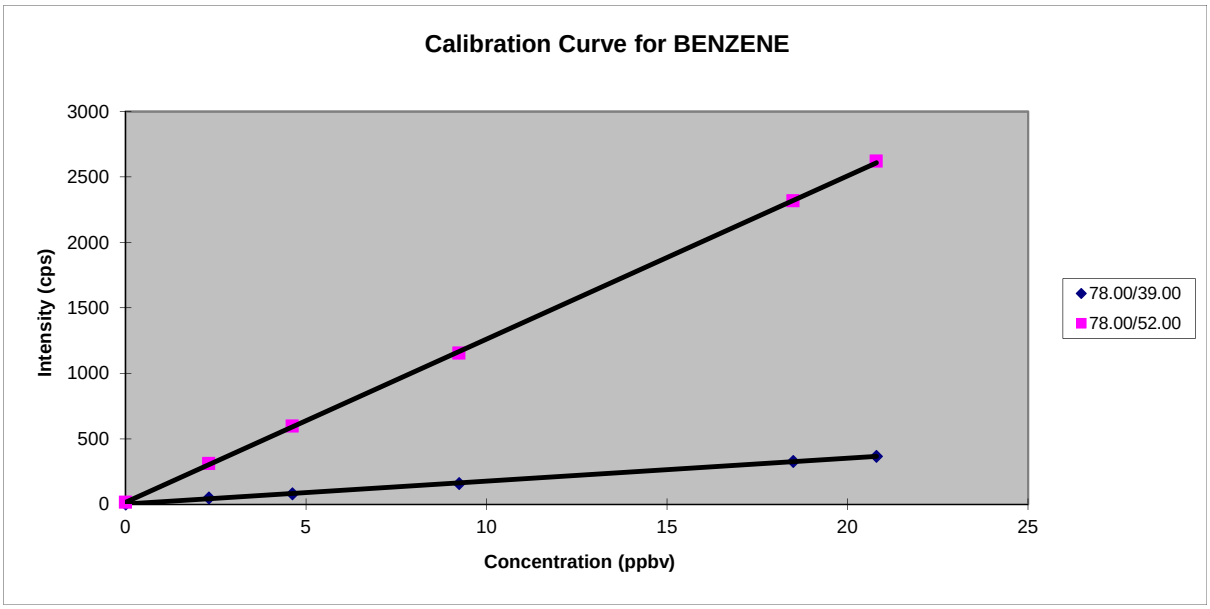
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/14/19.6.46.38
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, Apr 14, 2019 at 6:46:37; Exp. Comment: BTX

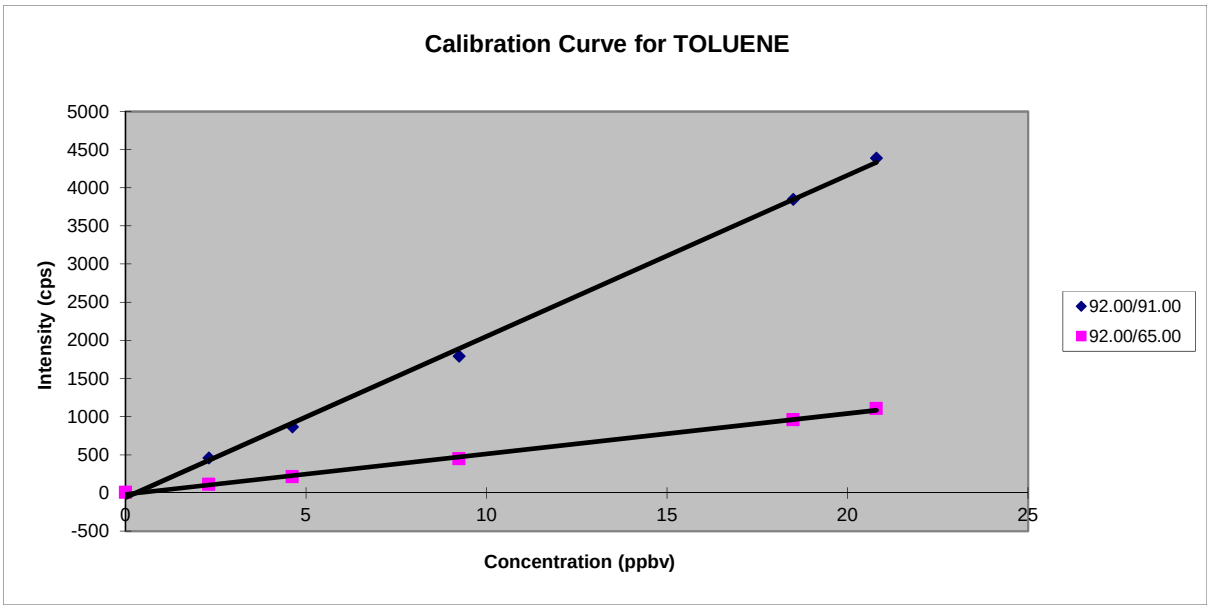




Filename:	64MSMS00955 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 14, 2019 7:06:02					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.49	10.54	12.55	14.94	17.04

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	17.4545331	124.725192
Intercept:	2.55082131	14.9880584
Correlation:	0.99975615	0.99996433

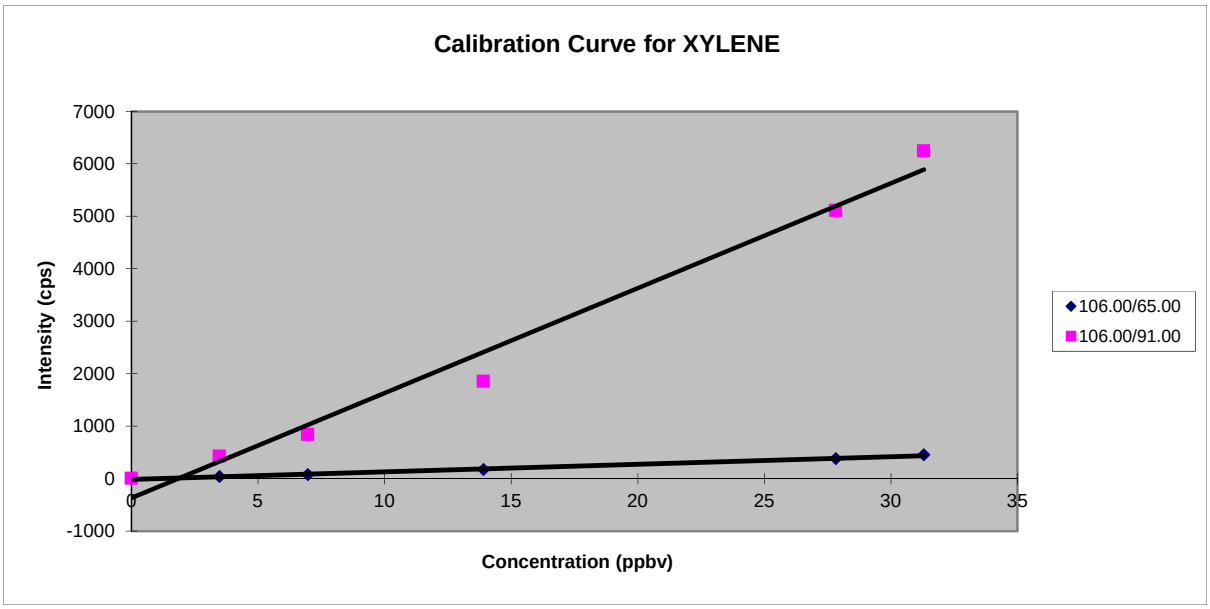
Concentratior	78.00/39.00	78.00/52.00
0	3.125	14.0625
2.31	47.2916667	309.895833
4.62	80.2083333	596.041667
9.24	159.375	1152.60417
18.49	327.916667	2315.625
20.8	365.416667	2618.95833



Filename:	64MSMS00955 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 14, 2019 7:06:44					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.49	10.54	12.55	14.94	17.04

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	211.206911	52.967042
Intercept:	-57.811439	-16.727441
Correlation:	0.99936379	0.99915429

Concentratior	92.00/91.00	92.00/65.00
0	11.25	4.89583333
2.31	459.479167	110.625
4.62	868.125	213.958333
9.24	1792.29167	446.5625
18.49	3846.97917	956.875
20.8	4388.54167	1104.27083



Filename:	64MSMS00955 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 14, 2019 7:07:18					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.49	10.54	12.55	14.94	17.04

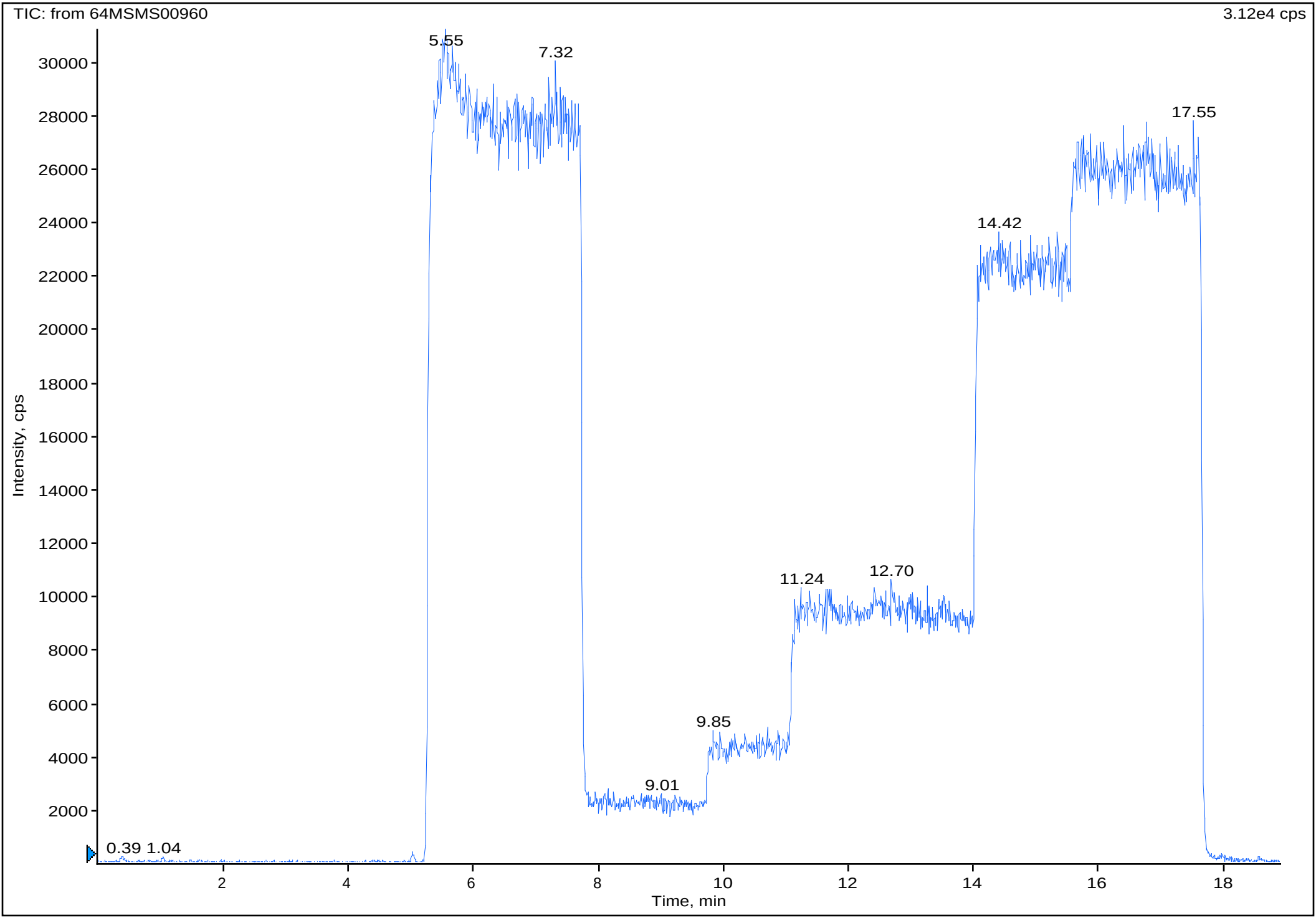
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	14.4409141	199.944027
Intercept:	-11.661072	-366.65883
Correlation:	0.9980259	0.99081494

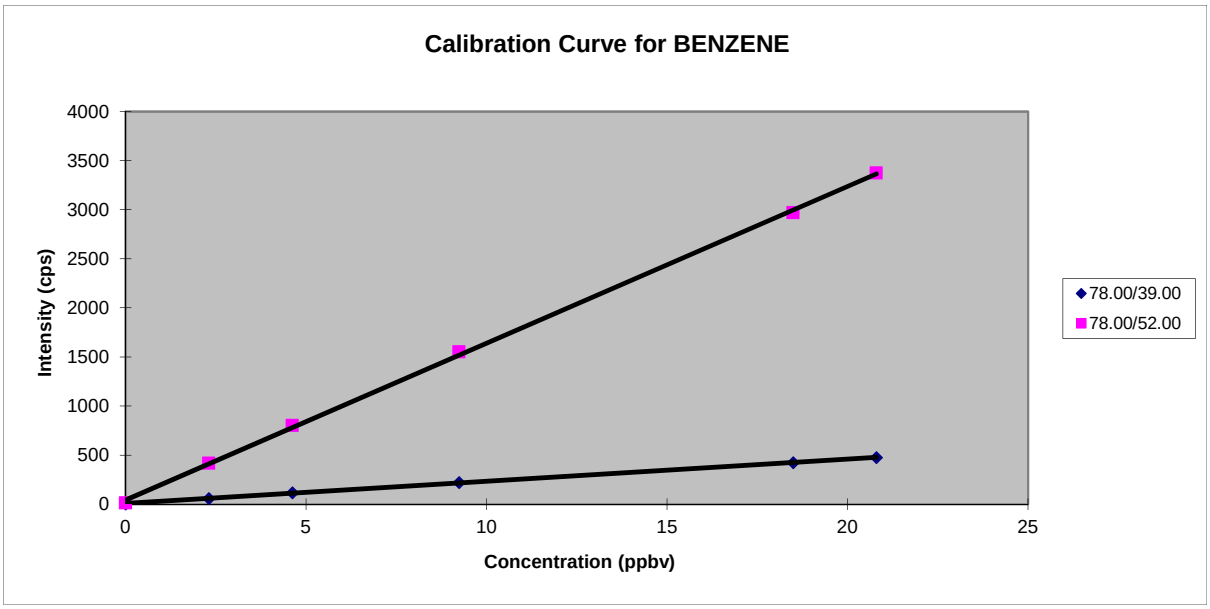
Concentratior	106.00/65.00	106.00/91.00
0	1.5625	8.125
3.48	41.3541667	428.541667
6.96	79.8958333	842.291667
13.91	174.791667	1853.33333
27.82	383.75	5112.39583
31.3	454.0625	6244.6875

Report	File Name	64MSMS00955 et al.			
	Sample Name	BOD Calibration - BTX 20190414			
	Date	Sunday, April 14, 2019 7:07:54			
	Time Range	2.00	to	3.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	17.45	124.73	211.21	52.97	14.44	199.94
Intercept	2.55	14.99	-57.81	-16.73	-11.66	-366.66
Intensity	3.13	14.06	11.25	4.90	1.56	8.13
Int SD	6.21	13.96	12.83	7.54	3.93	9.44
Concentration	0.03	-0.01	0.33	0.41	0.92	1.87
Conc SD	0.36	0.11	0.06	0.14	0.27	0.05
Compound Con	0.01		0.37		1.40	
Compound SD	0.17		0.07		0.11	
Det. Limit	1.07	0.34	0.18	0.43	0.82	0.14
Compound DL	0.70		0.30		0.48	

4/14/19.18.00.05
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, Apr 14, 2019 at 18:00:04; Exp. Comment: BTX



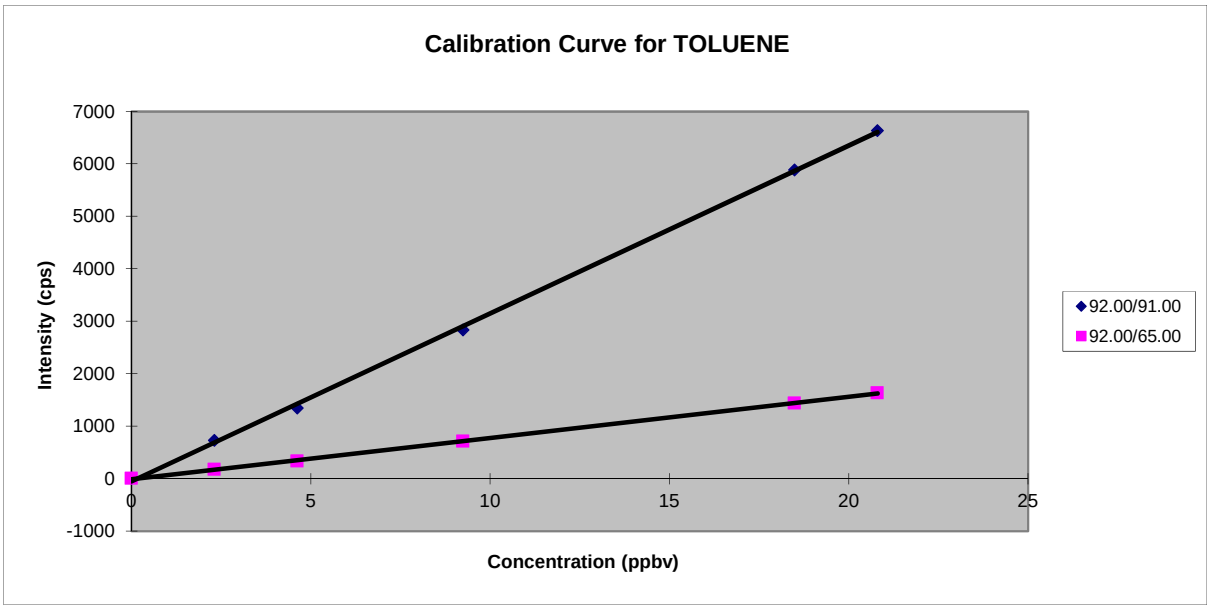


Filename:	64MSMS00960 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Sunday, April 14, 2019 18:19:48
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.65	10.37	12.15	14.79	16.73

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	22.5843372	159.679482
Intercept:	8.26076431	44.1247205
Correlation:	0.99979835	0.99982819

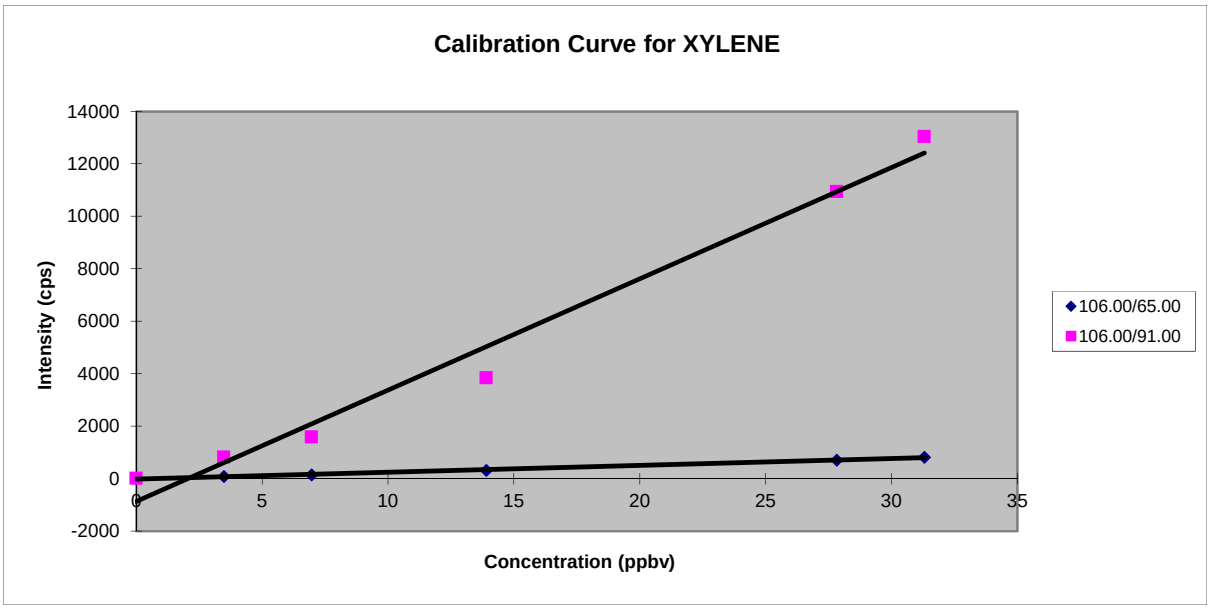
Concentratior	78.00/39.00	78.00/52.00
0	3.125	12.3958333
2.31	59.1752577	415.051546
4.62	118.020833	802.604167
9.24	220.833333	1550.10417
18.49	424.6875	2967.5
20.8	476.25	3372.91667



Filename:	64MSMS00960 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 14, 2019 18:20:25					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.65	10.37	12.15	14.79	16.73

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	320.148586	78.5288288
Intercept:	-50.314693	-9.0192722
Correlation:	0.99975473	0.99985987

Concentratior	92.00/91.00	92.00/65.00
0	15.3125	5.20833333
2.31	728.969072	175.051546
4.62	1348.02083	335.625
9.24	2835.83333	712.916667
18.49	5886.25	1439.0625
20.8	6639.16667	1633.22917



Filename:	64MSMS00960 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 14, 2019 18:20:52					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.65	10.37	12.15	14.79	16.73

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	26.1676336	424.491128
Intercept:	-16.960117	-869.11601
Correlation:	0.99848626	0.99067997

Concentratior	106.00/65.00	106.00/91.00
0	1.5625	7.39583333
3.48	84.6391753	812.474227
6.96	149.270833	1579.6875
13.91	319.6875	3838.33333
27.82	708.020833	1.09E+04
31.3	819.270833	1.30E+04

Report	File Name	64MSMS00960 et al.			
	Sample Name	EOD Calibration - BTX 20190414			
	Date	Sunday, April 14, 2019 18:21:35			
	Time Range	2.00	to	3.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	22.58	159.68	320.15	78.53	26.17	424.49
Intercept	8.26	44.12	-50.31	-9.02	-16.96	-869.12
Intensity	3.13	12.40	15.31	5.21	1.56	7.40
Int SD	5.68	13.67	15.08	7.11	4.19	10.98
Concentration	-0.23	-0.20	0.20	0.18	0.71	2.06
Conc SD	0.25	0.09	0.05	0.09	0.16	0.03
Compound Con	-0.21		0.19		1.39	
Compound SD	0.12		0.05		0.07	
Det. Limit	0.75	0.26	0.14	0.27	0.48	0.08
Compound DL	0.51		0.21		0.28	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 04/15/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3275	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
0627	1500	~190SCFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DW415-0168		Calibration Date: Exp 05/02/19	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
		PA			
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
			PA		
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Sun, Apr 14, 2019, 6:44:38
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR14 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sun, Apr 14, 2019, 6:43:17

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.072
100.000	0.081
120.000	0.085
160.000	0.096

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.048
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Sun, Apr 14, 2019, 6:45:45
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR14 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sun, Apr 14, 2019, 6:43:17

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.072
100.000	0.081
120.000	0.085
160.000	0.096

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.048
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

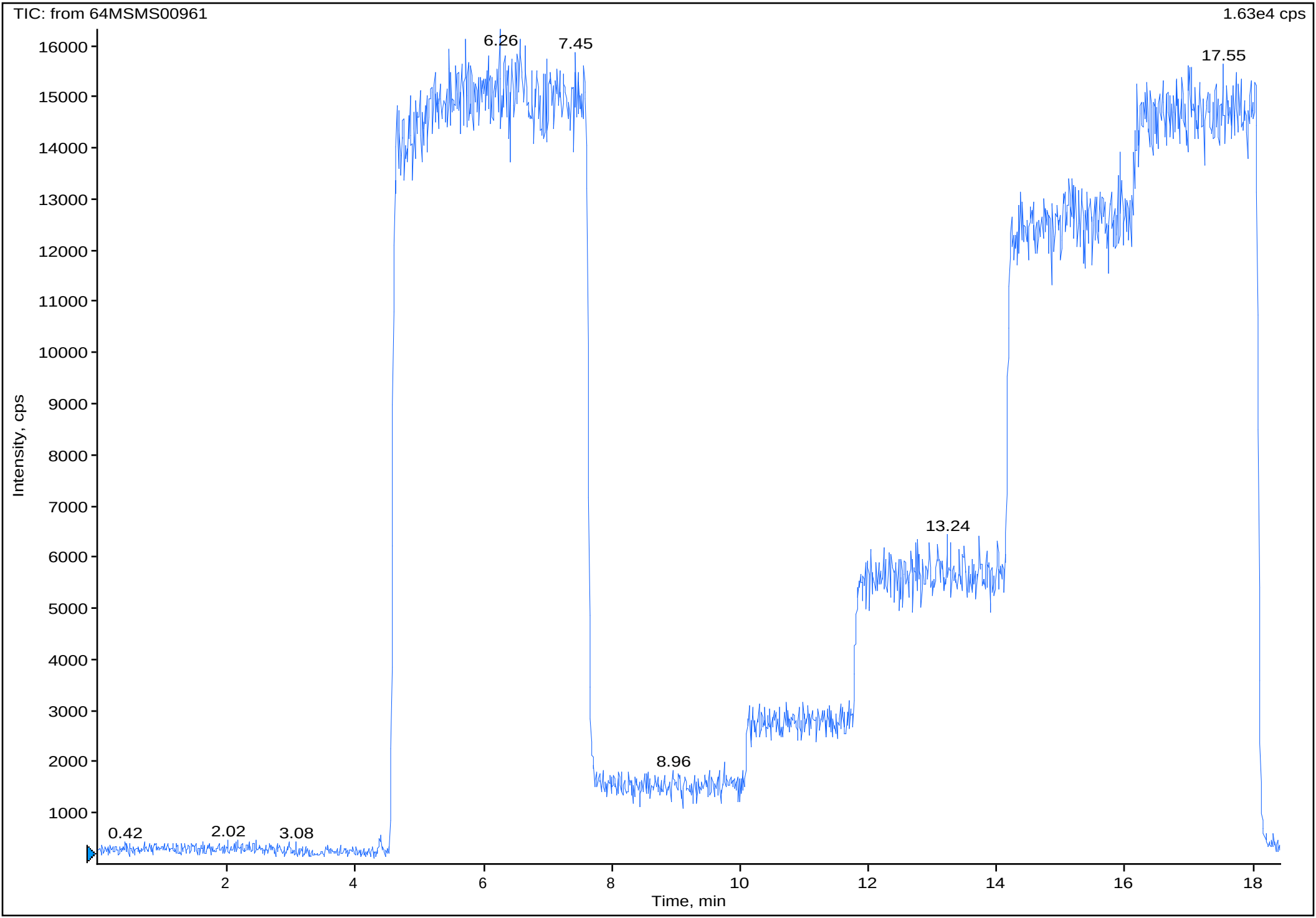
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

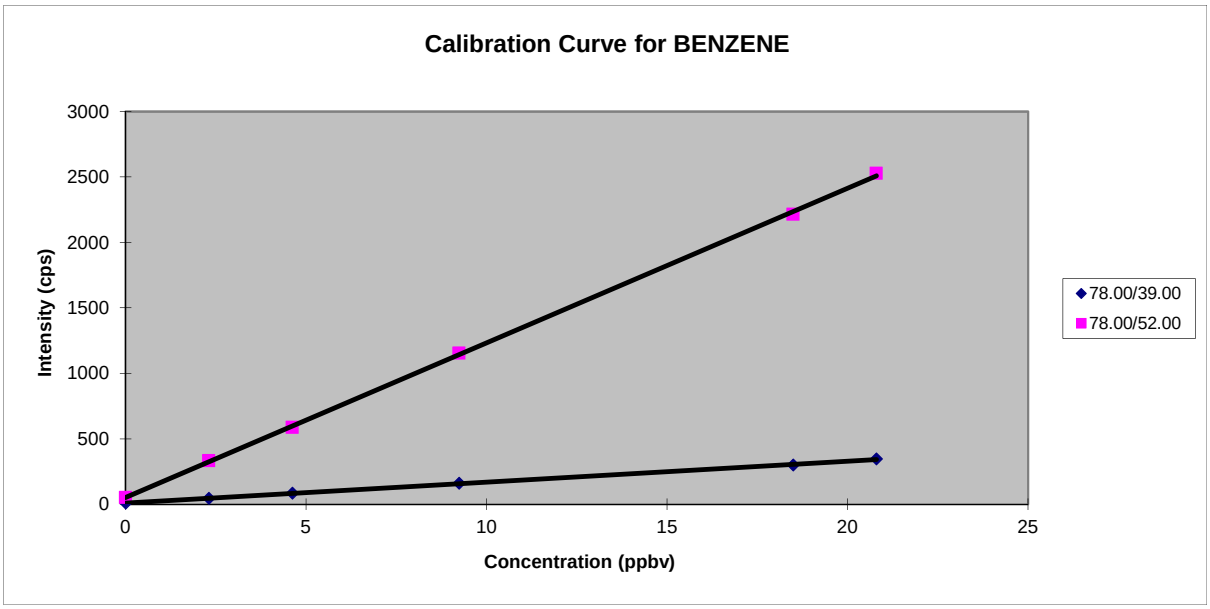
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/15/19.6.49.22
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Mon, Apr 15, 2019 at 6:49:21; Exp. Comment: BTX



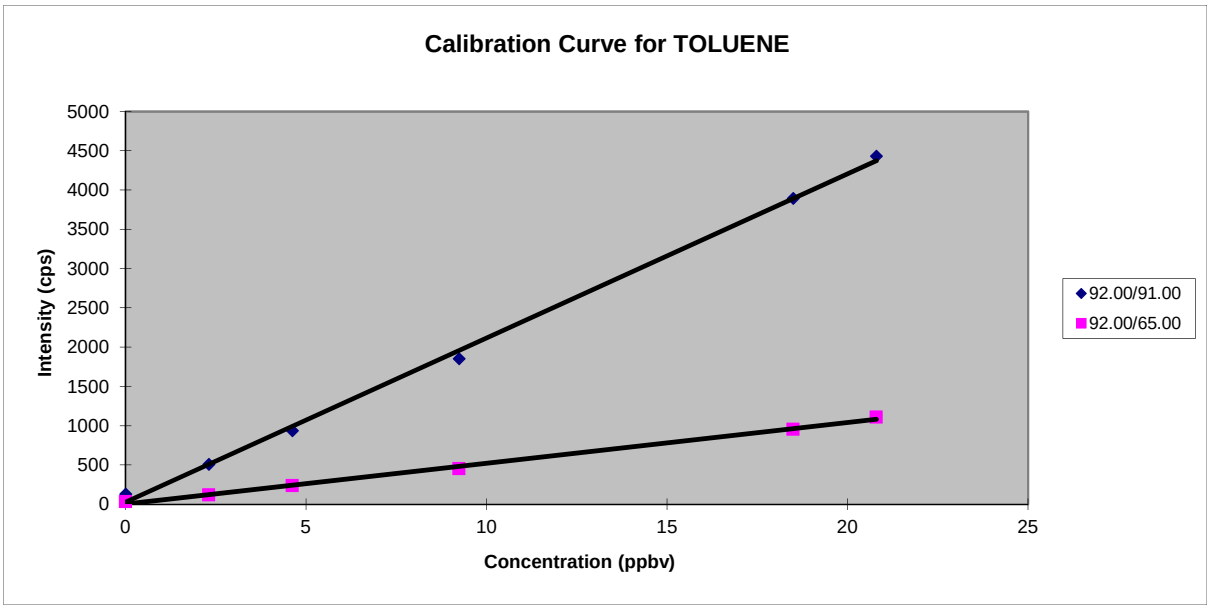


Filename:	64MSMS00961 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Monday, April 15, 2019 7:08:22
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.92	10.89	12.96	15.17	17.06

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	15.9661017	118.14604
Intercept:	10.2514721	51.5945953
Correlation:	0.99964315	0.99988892

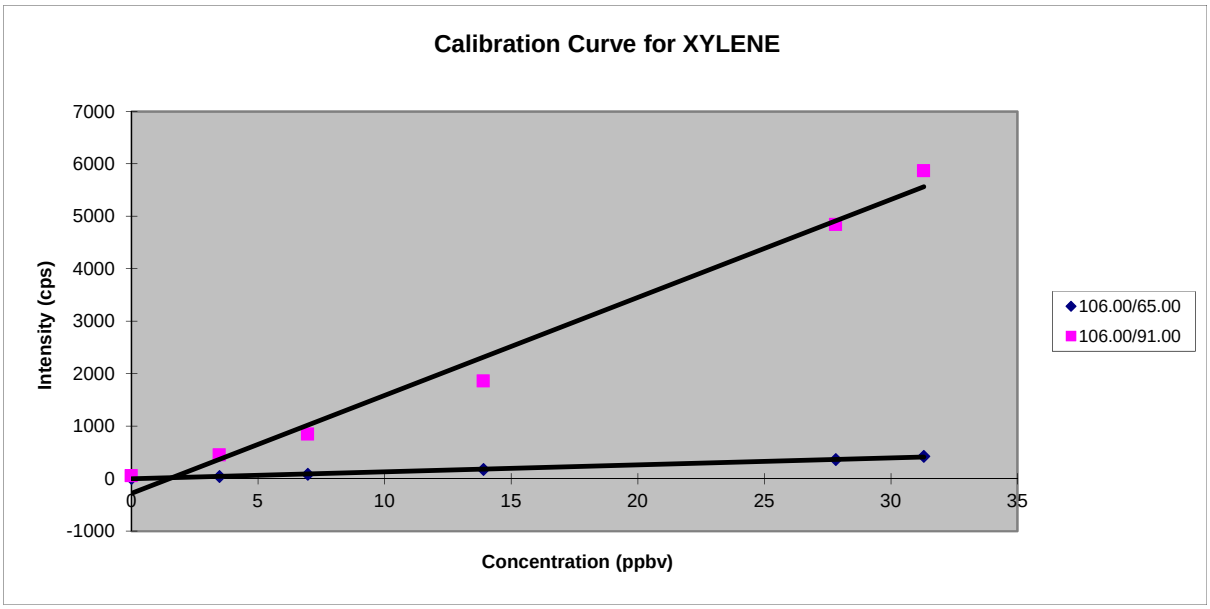
Concentratior	78.00/39.00	78.00/52.00
0	9.27083333	51.7708333
2.31	47.0833333	331.25
4.62	84.5833333	585
9.24	160.104167	1154.16667
18.49	299.072165	2213.09278
20.8	346.875	2526.66667



Filename:	64MSMS00961 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, April 15, 2019 7:09:03					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.92	10.89	12.96	15.17	17.06

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	208.973283	51.8254888
Intercept:	27.2031142	3.88892732
Correlation:	0.99913378	0.99869747

Concentratior	92.00/91.00	92.00/65.00
0	131.041667	32.9166667
2.31	508.333333	118.229167
4.62	935.625	236.145833
9.24	1853.125	451.041667
18.49	3893.81443	952.783505
20.8	4430.9375	1106.45833



Filename:	64MSMS00961 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, April 15, 2019 7:09:40					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.92	10.89	12.96	15.17	17.06

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	13.3505378	186.635565
Intercept:	-2.6120023	-275.73558
Correlation:	0.99893894	0.99239006

Concentratior	106.00/65.00	106.00/91.00
0	8.33333333	56.0416667
3.48	41.6666667	451.458333
6.96	85.9375	845.625
13.91	173.75	1862.70833
27.82	365.051546	4840.51546
31.3	423.958333	5867.70833

Report	File Name	64MSMS00961 et al.			
	Sample Name	BOD Calibration - BTX 20190415			
	Date	Monday, April 15, 2019 7:10:08			
	Time Range	2.00	to	3.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	15.97	118.15	208.97	51.83	13.35	186.64
Intercept	10.25	51.59	27.20	3.89	-2.61	-275.74
Intensity	9.27	51.77	131.04	32.92	8.33	56.04
Int SD	11.99	26.87	45.69	20.72	9.25	26.34
Concentration	-0.06	0.00	0.50	0.56	0.82	1.78
Conc SD	0.75	0.23	0.22	0.40	0.69	0.14
Compound Con	-0.03		0.53		1.30	
Compound SD	0.35		0.22		0.29	
Det. Limit	2.25	0.68	0.66	1.20	2.08	0.42
Compound DL	1.47		0.93		1.25	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 04/17/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3250	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
0638	1500	1491 SCFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration # 18DWY15-0168			EXP 05/02/19 Calibration Date:	

Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
			N/A		
Gilibrator Flow Cell	S/N #			Calibration Date:	

Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
			N/A		
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes: Reset MKS channel #3 span

Method Information

Method Name: BTX CALIBRATION
Last Modified: Wed, Apr 17, 2019, 7:02:53
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR17 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Wed, Apr 17, 2019, 7:01:22

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.072
100.000	0.081
120.000	0.085
160.000	0.096

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.050
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Wed, Apr 17, 2019, 7:03:32
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR17 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Wed, Apr 17, 2019, 7:01:22

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.072
100.000	0.081
120.000	0.085
160.000	0.096

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.043
130.000	0.050
170.000	0.050

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

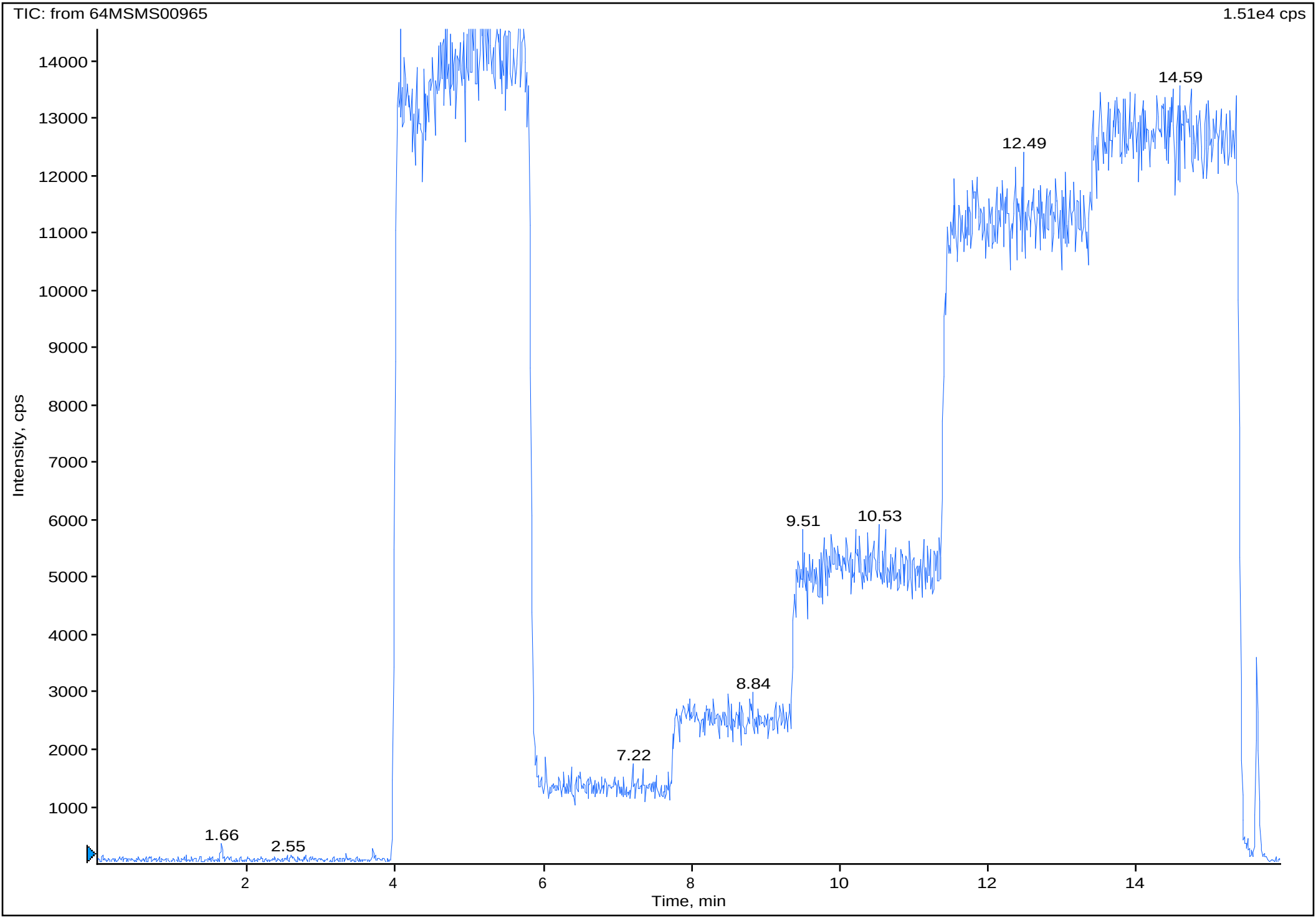
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

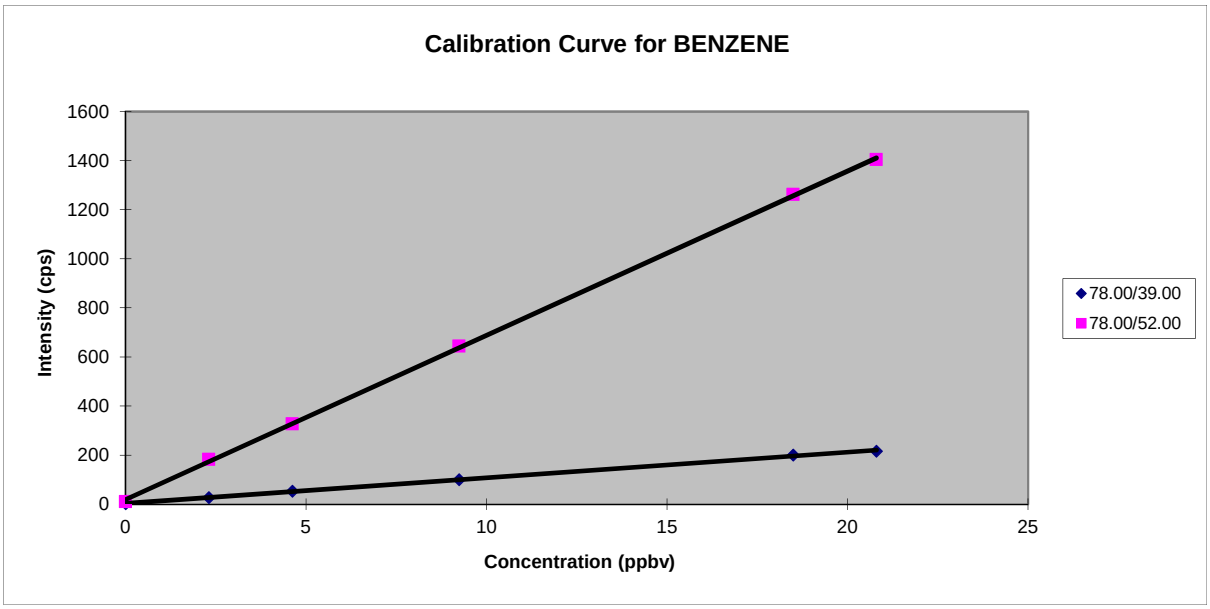
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/17/19.7.04.28
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, Apr 17, 2019 at 7:04:27; Exp. Comment: BTX



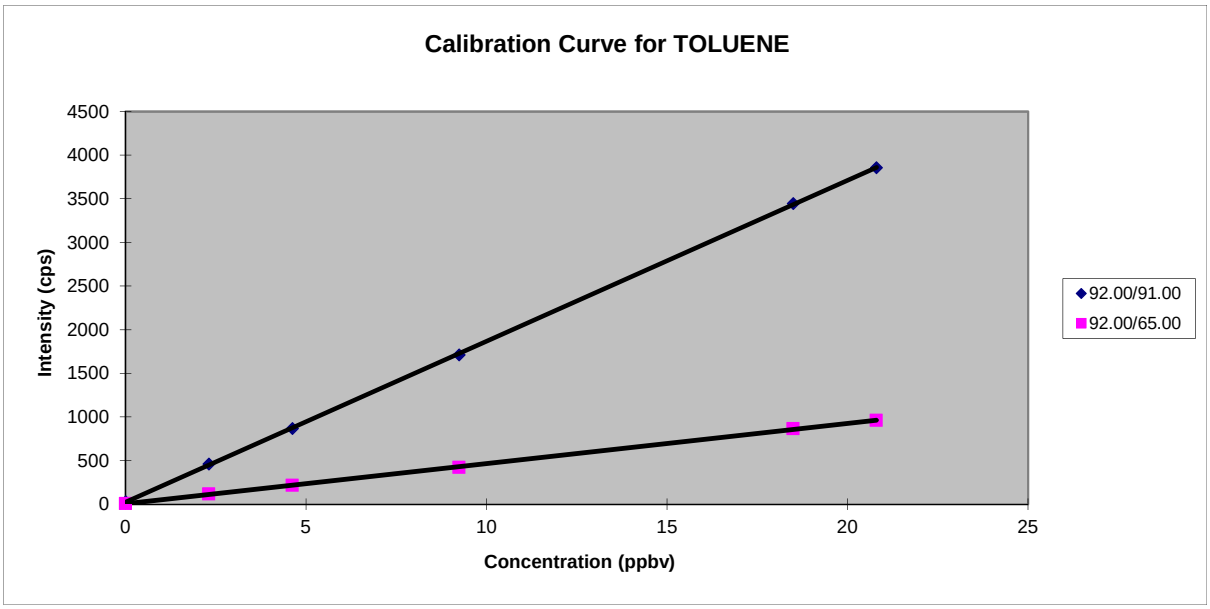


Filename:	64MSMS00965 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Wednesday, April 17, 2019 7:21:27
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	6.74	8.47	10.41	12.40	14.21

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	10.4356892	66.8950689
Intercept:	3.69372739	19.5982812
Correlation:	0.99943957	0.99991086

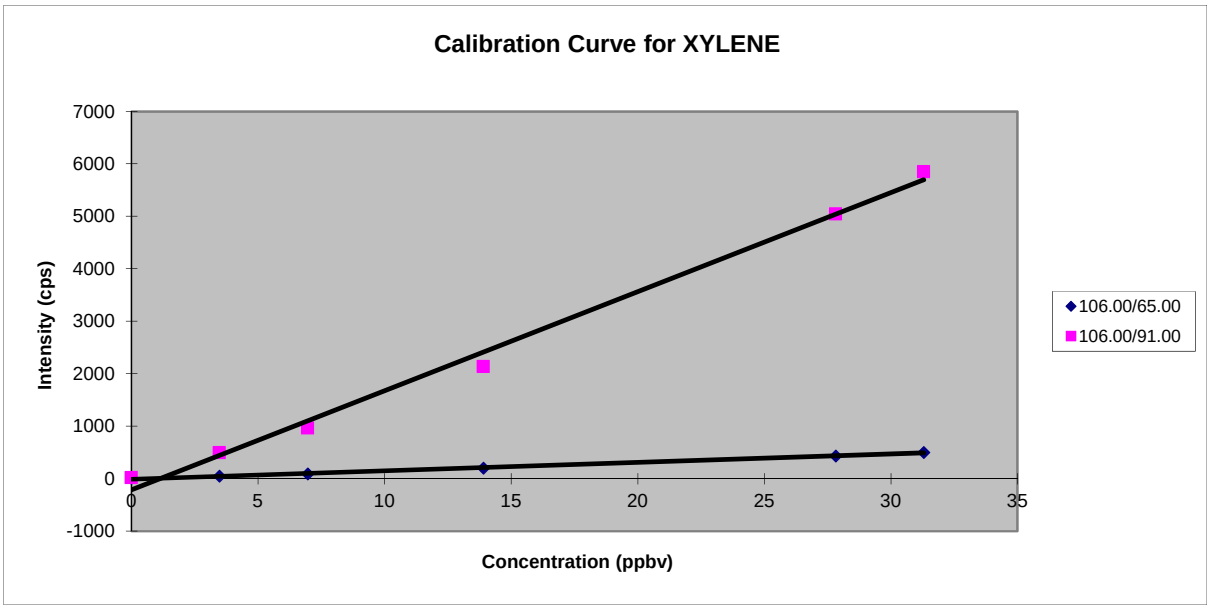
Concentratior	78.00/39.00	78.00/52.00
0	1.97916667	9.58333333
2.31	27.6041667	182.708333
4.62	53.3333333	326.5625
9.24	100.625	643.958333
18.49	201.134021	1261.34021
20.8	216.25	1403.4375



Filename:	64MSMS00965 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 17, 2019 7:22:00					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	6.74	8.47	10.41	12.40	14.21

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	184.398873	46.0496309
Intercept:	24.4894882	5.90325252
Correlation:	0.99997815	0.99989966

Concentratior	92.00/91.00	92.00/65.00
0	28.4375	8.02083333
2.31	461.145833	116.25
4.62	868.645833	217.083333
9.24	1712.8125	422.083333
18.49	3444.94845	864.123711
20.8	3857.70833	961.770833



Filename:	64MSMS00965 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 17, 2019 7:23:26					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	6.74	8.47	10.41	12.40	14.21

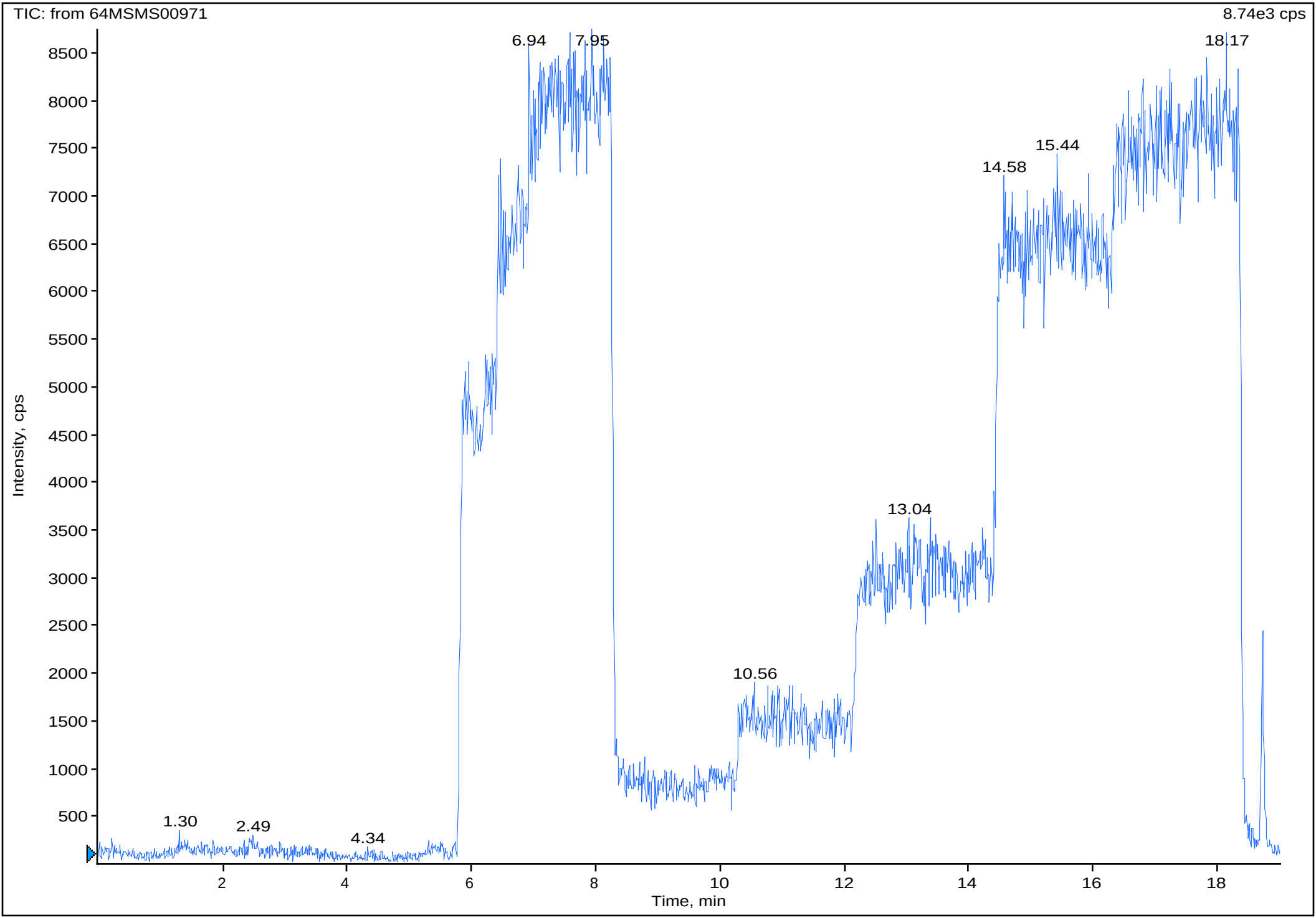
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	16.0155986	188.738687
Intercept:	-9.5796931	-209.37532
Correlation:	0.9985718	0.9970608

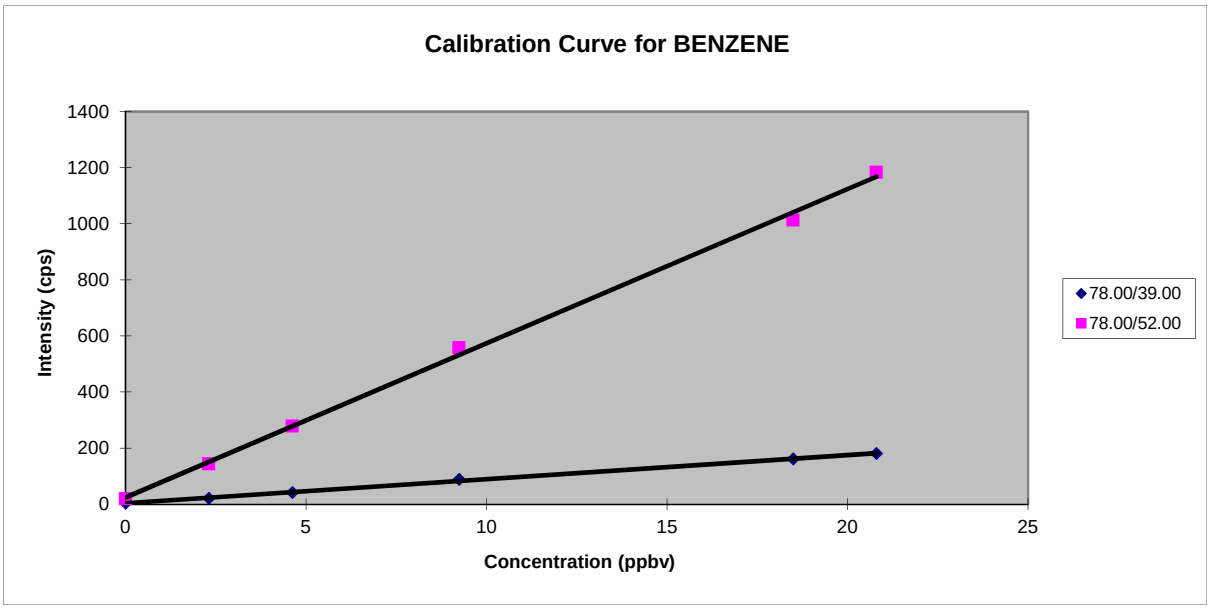
Concentratior	106.00/65.00	106.00/91.00
0	3.33333333	18.125
3.48	50	494.583333
6.96	91.5625	960.416667
13.91	198.854167	2131.77083
27.82	432.989691	5044.43299
31.3	502.604167	5848.4375

Report	File Name	64MSMS00965 et al.			
	Sample Name	BOD Calibration - BTX 20190417			
	Date	Wednesday, April 17, 2019 7:24:00			
	Time Range	2.00	to	3.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	10.44	66.90	184.40	46.05	16.02	188.74
Intercept	3.69	19.60	24.49	5.90	-9.58	-209.38
Intensity	1.98	9.58	28.44	8.02	3.33	18.13
Int SD	4.73	12.47	19.38	8.29	6.91	14.31
Concentration	-0.16	-0.15	0.02	0.05	0.81	1.21
Conc SD	0.45	0.19	0.11	0.18	0.43	0.08
Compound Con	-0.16		0.03		1.01	
Compound SD	0.23		0.10		0.18	
Det. Limit	1.36	0.56	0.32	0.54	1.29	0.23
Compound DL	0.96		0.43		0.76	

4/17/19.12.57.30
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, Apr 17, 2019 at 12:57:29; Exp. Comment: BTX

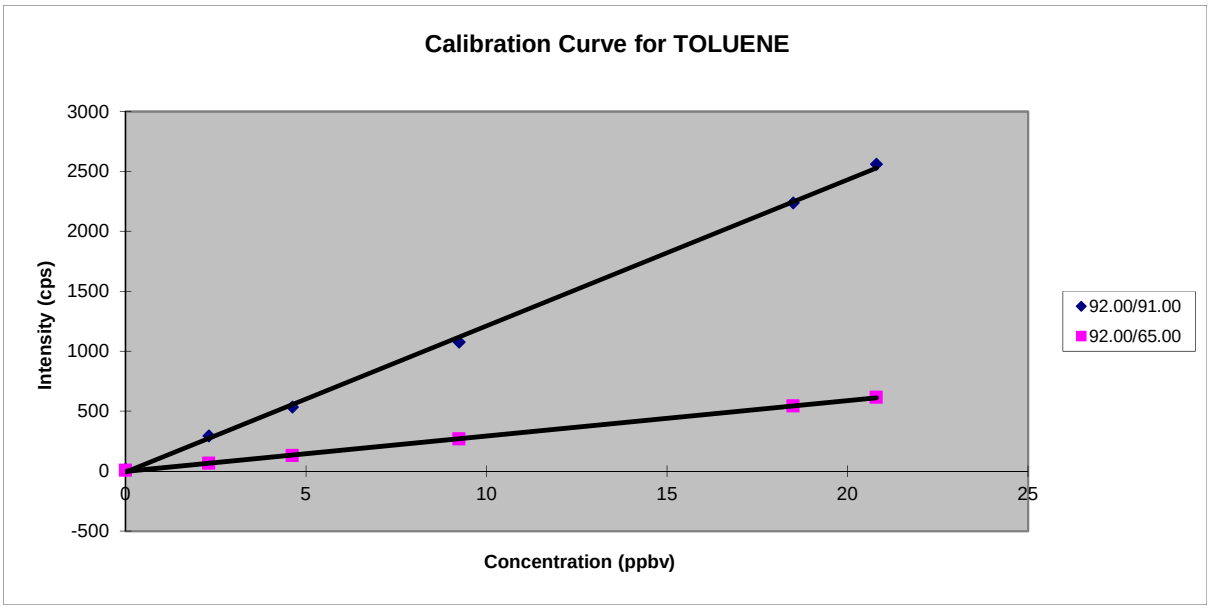




Filename:	64MSMS00971 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 17, 2019 13:17:13					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	9.35	11.19	13.29	15.45	17.40

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	8.57651661	54.9899043
Intercept:	3.86675927	24.1231792
Correlation:	0.99915544	0.99924887

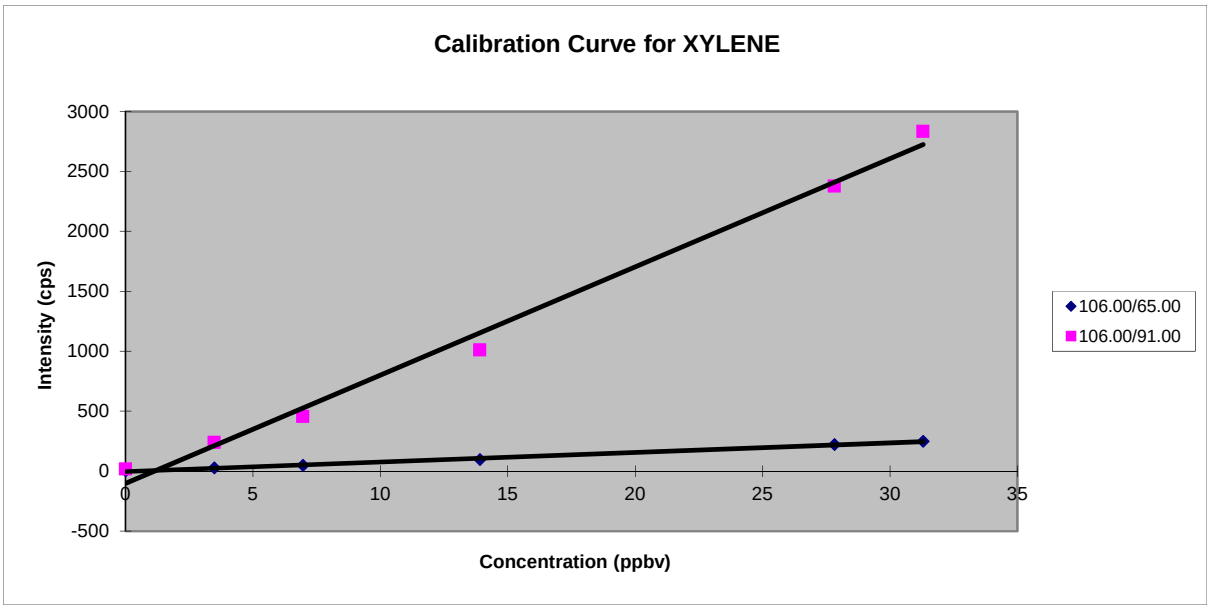
Concentratior	78.00/39.00	78.00/52.00
0	3.85416667	19.6875
2.31	20.9375	144.0625
4.62	42.5	277.916667
9.24	89.0625	557.5
18.49	161.666667	1012.91667
20.8	180.833333	1182.39583



Filename:	64MSMS00971 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 17, 2019 13:17:46					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	9.35	11.19	13.29	15.45	17.40

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	121.903046	29.5071901
Intercept:	-6.6516005	-0.8177102
Correlation:	0.9996008	0.9998691

Concentratior	92.00/91.00	92.00/65.00
0	17.6041667	5.625
2.31	295.208333	66.3541667
4.62	534.6875	130.104167
9.24	1076.35417	269.479167
18.49	2236.875	544.270833
20.8	2560.10417	615.729167



Filename:	64MSMS00971 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 17, 2019 13:18:12					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	9.35	11.19	13.29	15.45	17.40

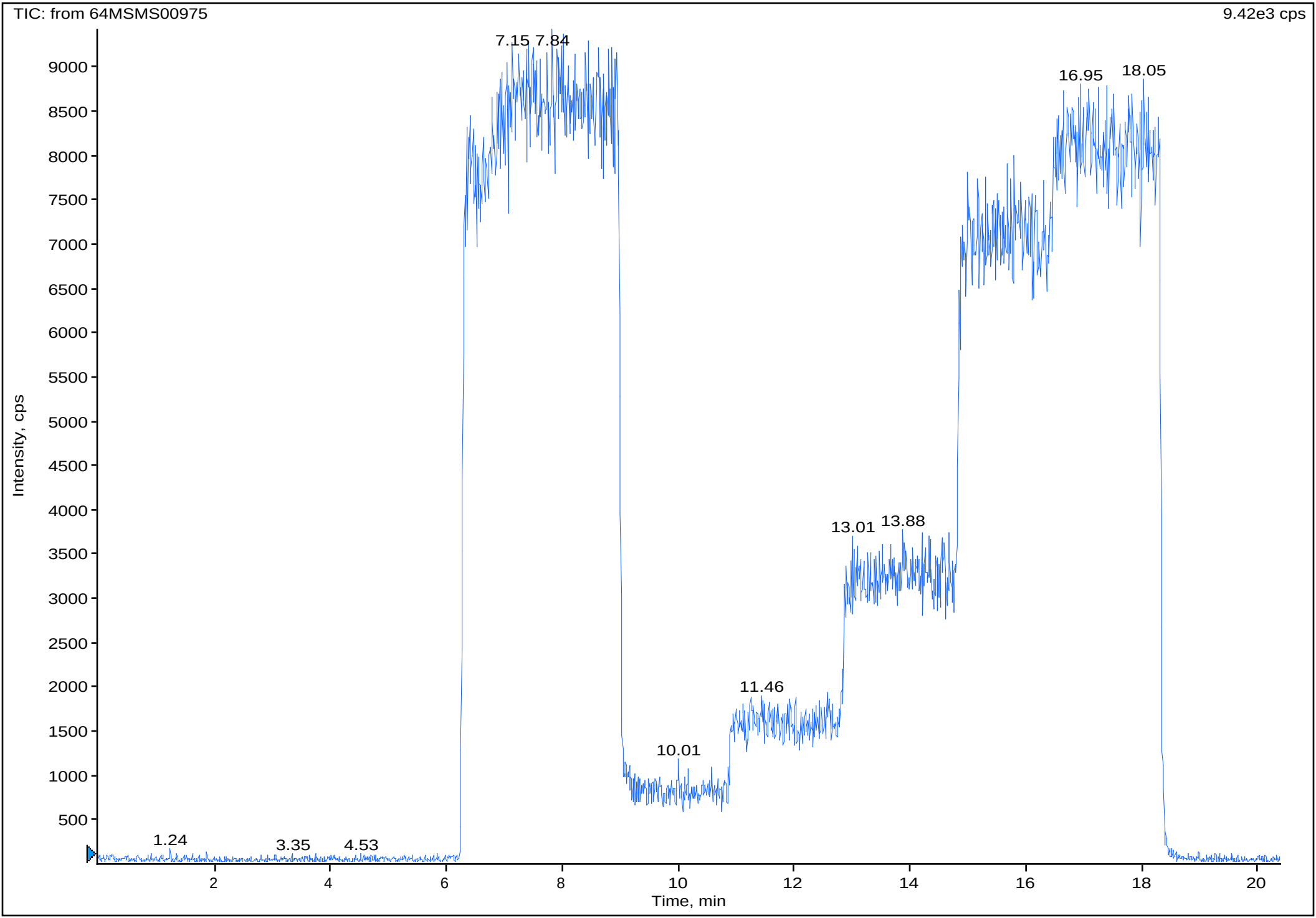
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	7.98559951	90.2773195
Intercept:	-2.5686929	-100.75173
Correlation:	0.99830011	0.99612163

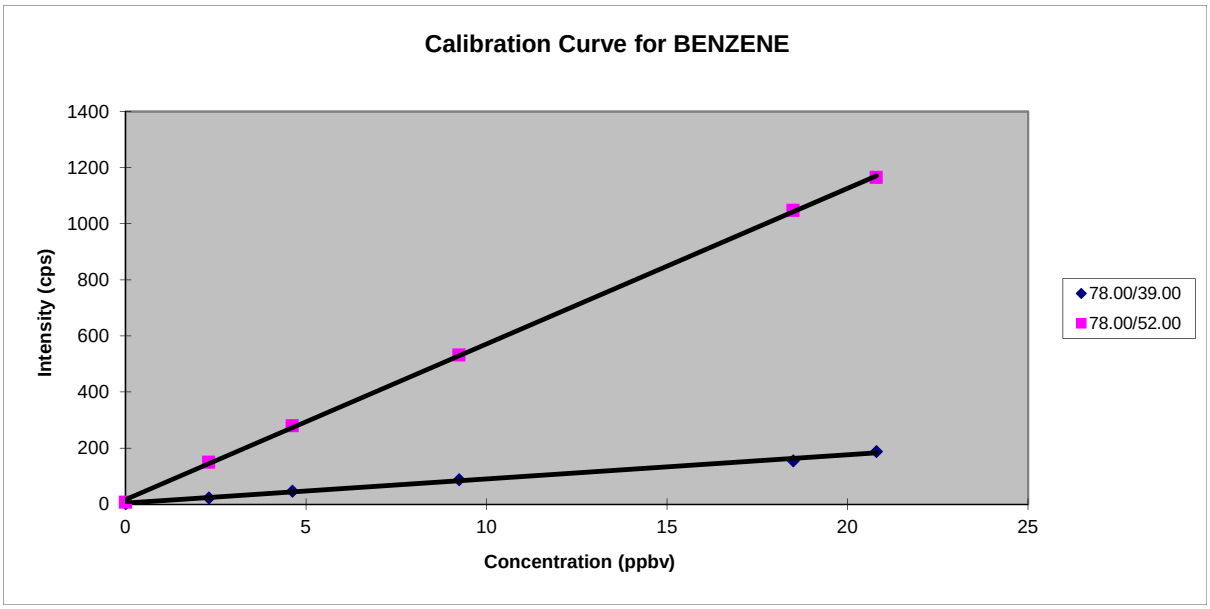
Concentratior	106.00/65.00	106.00/91.00
0	3.02083333	17.8125
3.48	28.0208333	237.708333
6.96	50.2083333	456.041667
13.91	97.5	1009.79167
27.82	221.5625	2376.14583
31.3	250.833333	2833.4375

Report	File Name	64MSMS00971 et al.			
	Sample Name	MOD Calibration - BTX 20190417			
	Date	Wednesday, April 17, 2019 13:18:45			
	Time Range	4.00	to	5.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	8.58	54.99	121.90	29.51	7.99	90.28
Intercept	3.87	24.12	-6.65	-0.82	-2.57	-100.75
Intensity	3.85	19.69	17.60	5.63	3.02	17.81
Int SD	6.86	18.83	15.61	9.04	6.18	16.75
Concentration	0.00	-0.08	0.20	0.22	0.70	1.31
Conc SD	0.80	0.34	0.13	0.31	0.77	0.19
Compound Con	-0.04		0.21		1.01	
Compound SD	0.40		0.15		0.34	
Det. Limit	2.40	1.03	0.38	0.92	2.32	0.56
Compound DL	1.71		0.65		1.44	

4/17/19.19.38.50
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, Apr 17, 2019 at 19:38:48; Exp. Comment: BTX

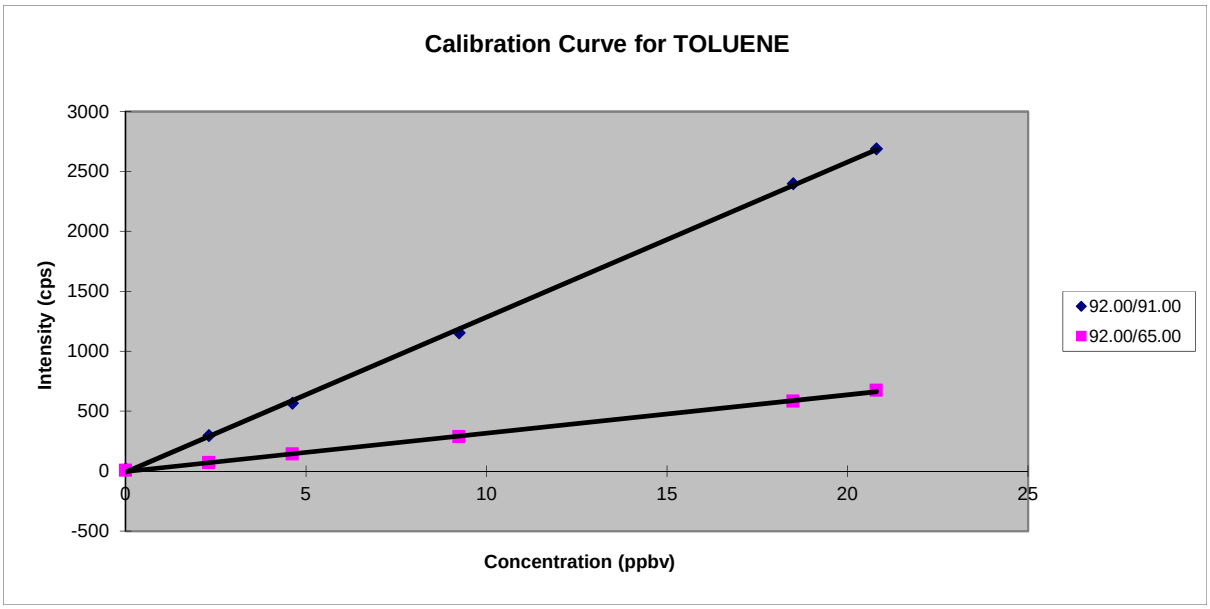




Filename:	64MSMS00975					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 17, 2019 21:04:57					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	10.04	11.81	13.72	15.72	17.42

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	8.60730702	55.4565778
Intercept:	4.30201292	16.9335218
Correlation:	0.99788174	0.99990633

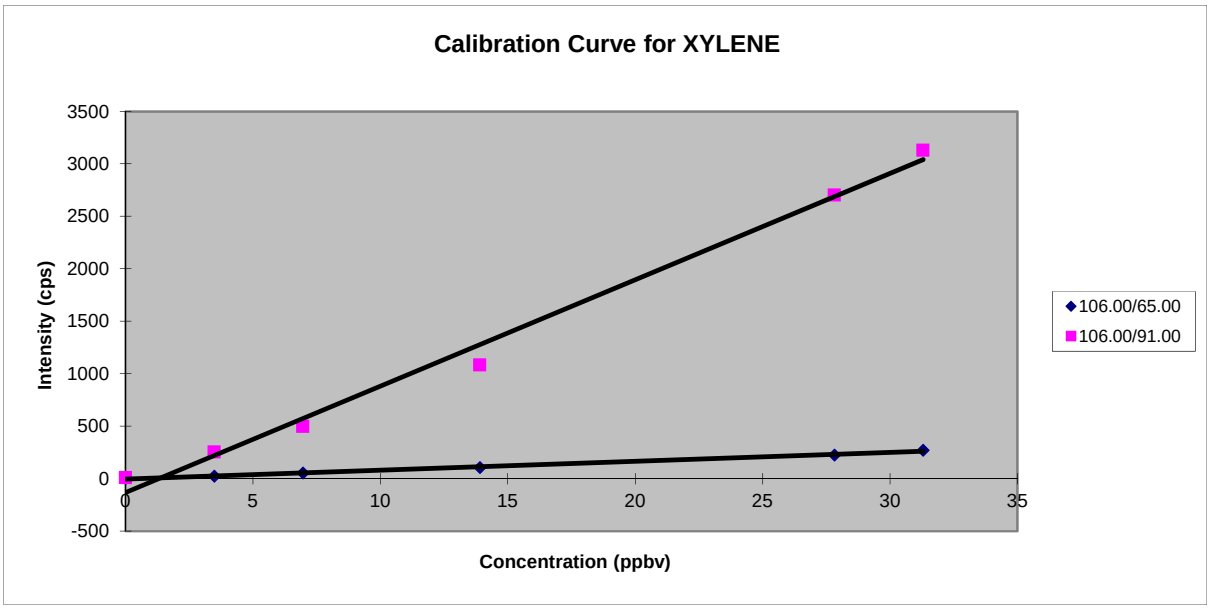
Concentratior	78.00/39.00	78.00/52.00
0	2.08333333	7.08333333
2.31	23.125	148.854167
4.62	46.6666667	279.479167
9.24	87.5	531.25
18.49	155.360825	1046.59794
20.8	188.4375	1163.95833



Filename:	64MSMS00975					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 17, 2019 21:05:38					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	10.04	11.81	13.72	15.72	17.42

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	129.314808	32.04654
Intercept:	-7.6747689	-2.5404124
Correlation:	0.99978003	0.99961183

Concentratior	92.00/91.00	92.00/65.00
0	21.1458333	6.04166667
2.31	297.291667	69.6875
4.62	567.604167	142.1875
9.24	1153.4375	287.1875
18.49	2397.93814	582.371134
20.8	2688.33333	674.583333



Filename:	64MSMS00975					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 17, 2019 21:06:01					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	10.04	11.81	13.72	15.72	17.42

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	8.47089978	101.405028
Intercept:	-4.2591752	-131.88152
Correlation:	0.99824887	0.99587416

Concentratior	106.00/65.00	106.00/91.00
0	1.77083333	7.70833333
3.48	24.0625	251.5625
6.96	54.2708333	496.666667
13.91	106.458333	1083.85417
27.82	224.948454	2703.09278
31.3	270	3130.10417

Report	File Name	64MSMS00975			
	Sample Name	EOD Calibration - BTX 20190417			
	Date	Wednesday, April 17, 2019 21:06:47			
	Time Range	4.00	to	5.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	8.61	55.46	129.31	32.05	8.47	101.41
Intercept	4.30	16.93	-7.67	-2.54	-4.26	-131.88
Intensity	2.08	7.08	21.15	6.04	1.77	7.71
Int SD	5.41	9.51	20.15	9.78	4.59	10.81
Concentration	-0.26	-0.18	0.22	0.27	0.71	1.38
Conc SD	0.63	0.17	0.16	0.31	0.54	0.11
Compound Con	-0.22		0.25		1.04	
Compound SD	0.28		0.16		0.23	
Det. Limit	1.89	0.51	0.47	0.92	1.62	0.32
Compound DL	1.20		0.69		0.97	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 04/18/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3250	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
0643	1500	~1915cfm	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration # 18DWY15-0168			EXP 05/02/19 Calibration Date:	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Thu, Apr 18, 2019, 7:21:35
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR18 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Thu, Apr 18, 2019, 7:19:25

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.064
75.000	0.067
100.000	0.077
120.000	0.085
160.000	0.091

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.037
100.000	0.035
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Thu, Apr 18, 2019, 7:22:06
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR18 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Thu, Apr 18, 2019, 7:19:25

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.064
75.000	0.067
100.000	0.077
120.000	0.085
160.000	0.091

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.037
100.000	0.035
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

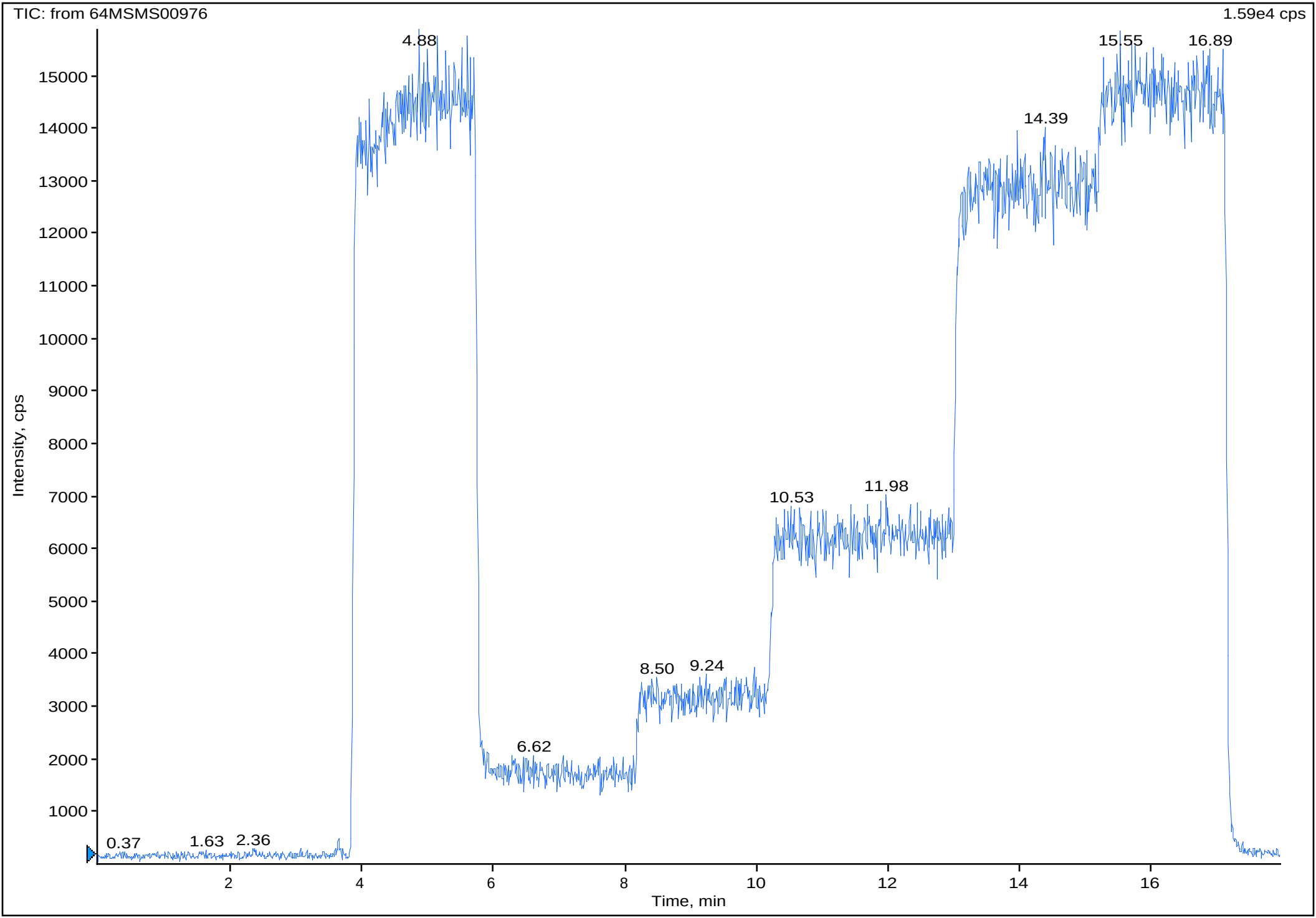
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

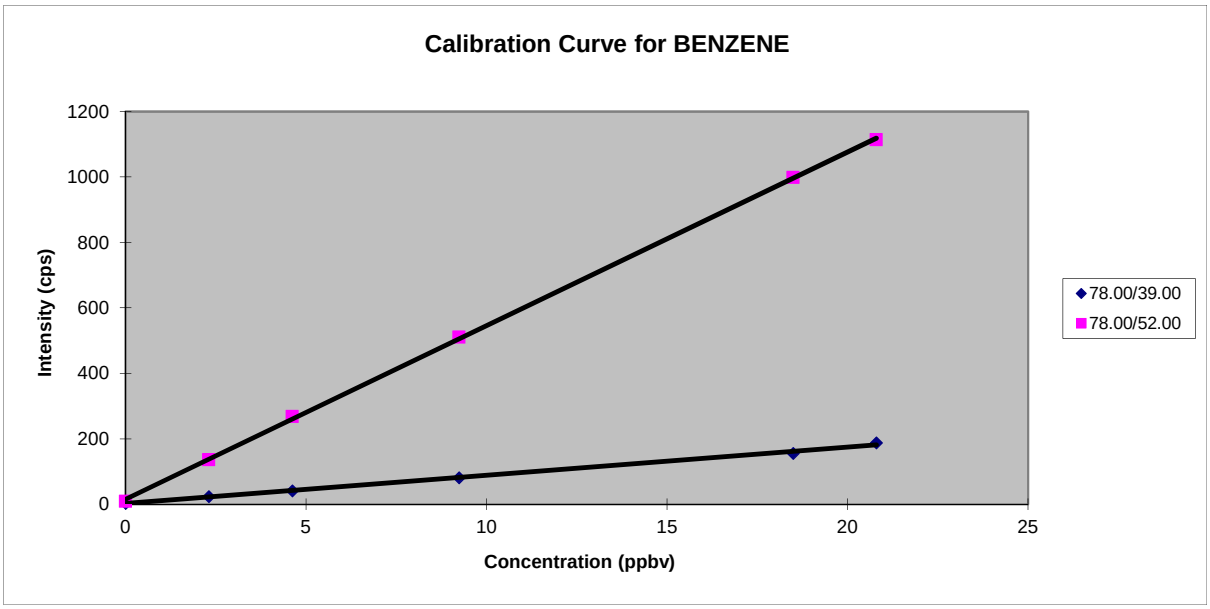
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/18/19.7.23.20
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Apr 18, 2019 at 7:23:19; Exp. Comment: BTX

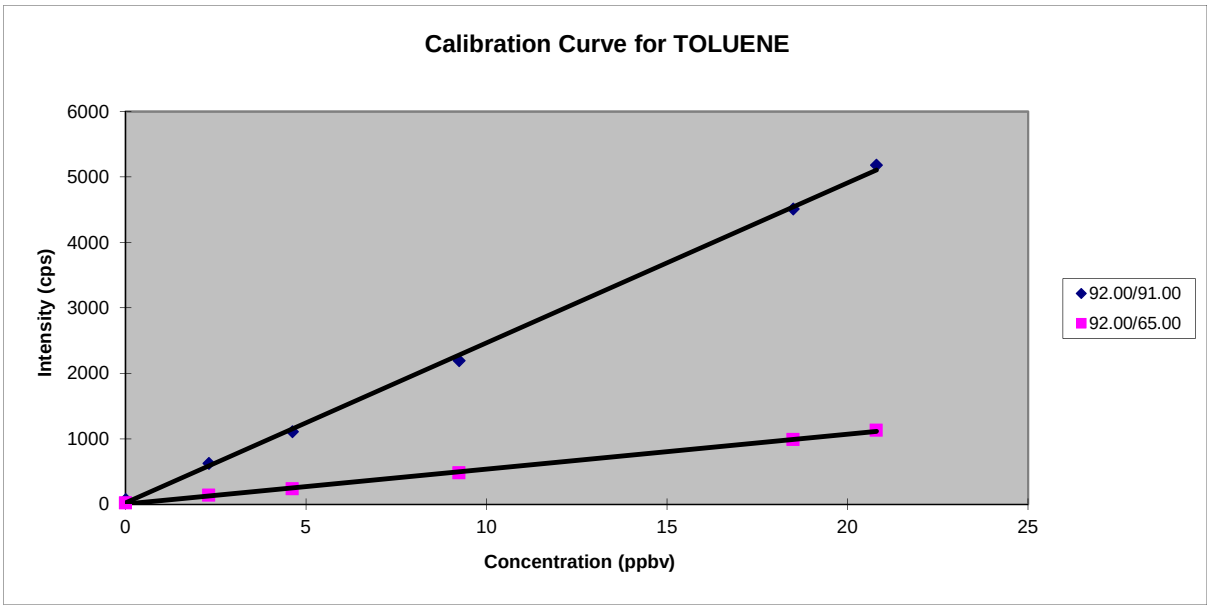




Filename:	64MSMS00976 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 18, 2019 7:43:00					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.07	9.15	11.61	14.21	16.20

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	8.60554009	53.0380588
Intercept:	2.45265225	15.5848764
Correlation:	0.99872169	0.9999285

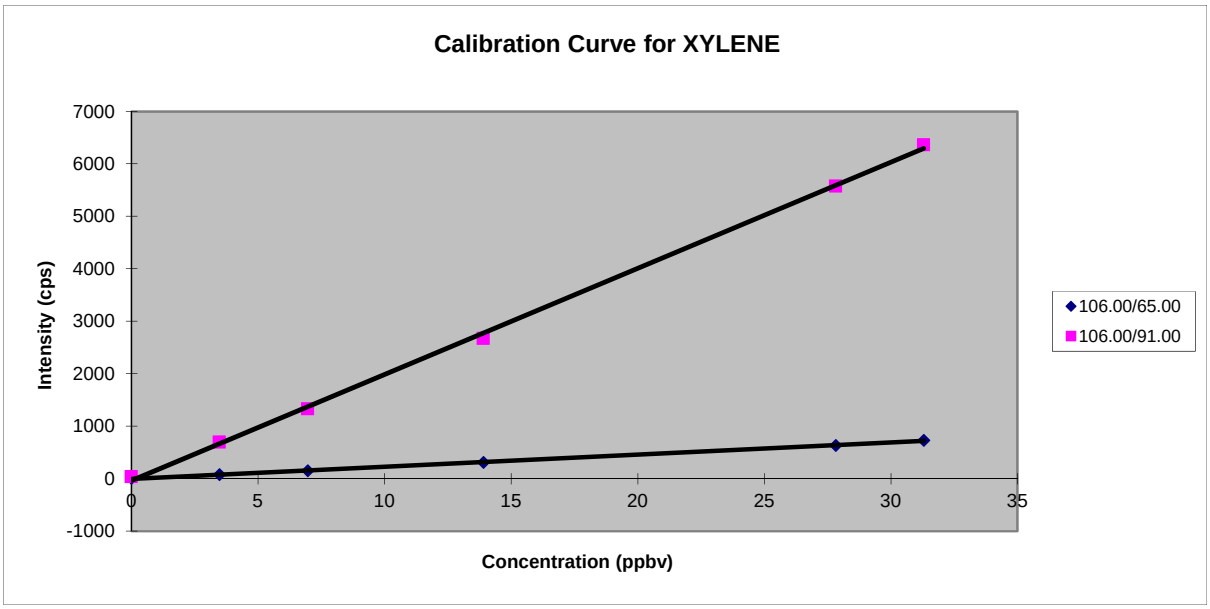
Concentratior	78.00/39.00	78.00/52.00
0	3.02083333	8.95833333
2.31	23.75	136.145833
4.62	41.1458333	267.708333
9.24	81.3541667	510.416667
18.49	155.625	998.125
20.8	187.083333	1113.64583



Filename:	64MSMS00976 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 18, 2019 7:43:39					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.07	9.15	11.61	14.21	16.20

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	244.420926	53.45822
Intercept:	22.6629885	2.76021391
Correlation:	0.99955759	0.99948445

Concentratior	92.00/91.00	92.00/65.00
0	73.2291667	18.2291667
2.31	625.3125	134.791667
4.62	1110.72917	234.270833
9.24	2193.4375	477.291667
18.49	4509.27083	989.0625
20.8	5179.58333	1127.70833



Filename:	64MSMS00976 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 18, 2019 7:44:24					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.07	9.15	11.61	14.21	16.20

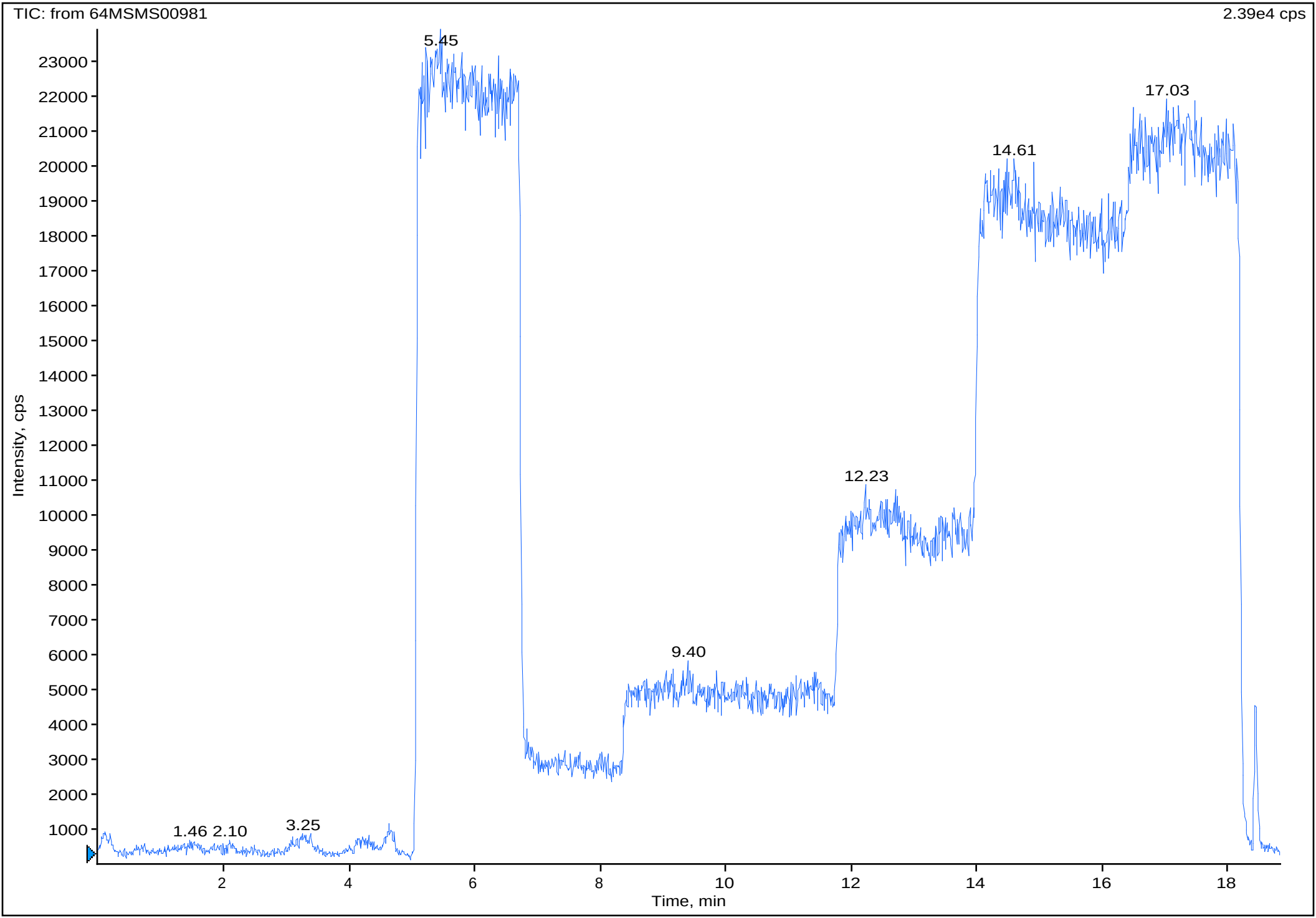
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	23.1869427	202.240488
Intercept:	-3.1766566	-33.67586
Correlation:	0.99964891	0.99965547

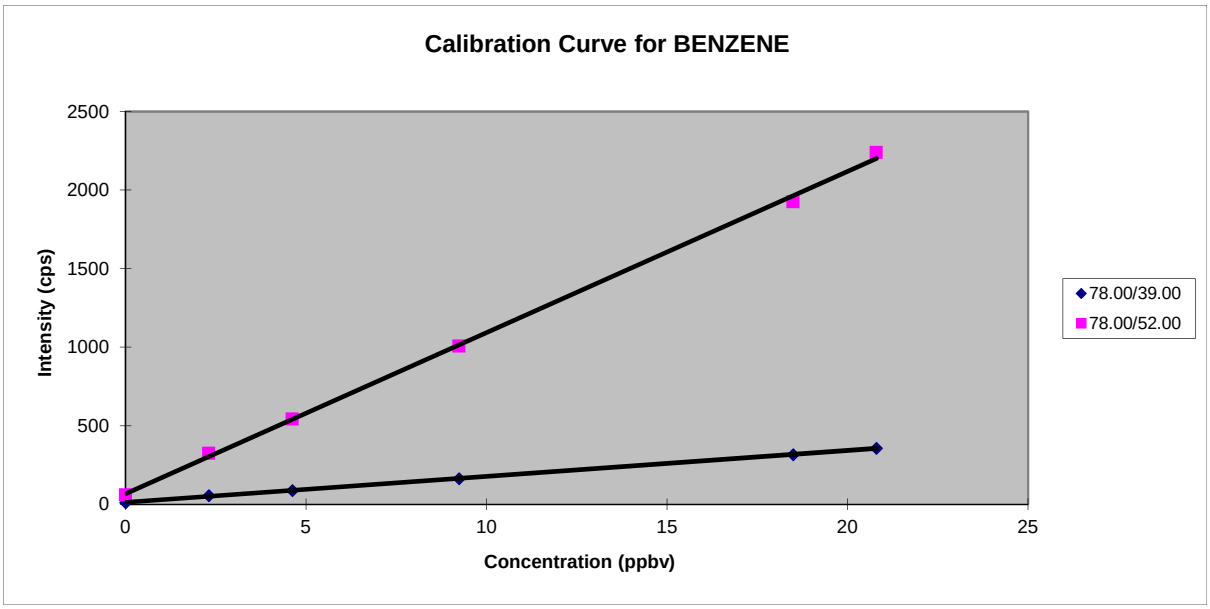
Concentratior	106.00/65.00	106.00/91.00
0	4.89583333	38.5416667
3.48	80.625	695.208333
6.96	151.041667	1330.83333
13.91	310.9375	2672.60417
27.82	636.5625	5578.02083
31.3	732.291667	6363.75

Report	File Name	64MSMS00976 et al.			
	Sample Name	BOD Calibration - BTX 20190418			
	Date	Thursday, April 18, 2019 7:45:00			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	8.61	53.04	244.42	53.46	23.19	202.24
Intercept	2.45	15.58	22.66	2.76	-3.18	-33.68
Intensity	3.02	8.96	73.23	18.23	4.90	38.54
Int SD	6.82	9.68	27.13	13.92	7.81	23.30
Concentration	0.07	-0.12	0.21	0.29	0.35	0.36
Conc SD	0.79	0.18	0.11	0.26	0.34	0.12
Compound Con	-0.03		0.25		0.35	
Compound SD	0.34		0.13		0.16	
Det. Limit	2.38	0.55	0.33	0.78	1.01	0.35
Compound DL	1.46		0.56		0.68	

4/18/19.13.27.33
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Apr 18, 2019 at 13:27:32; Exp. Comment: BTX

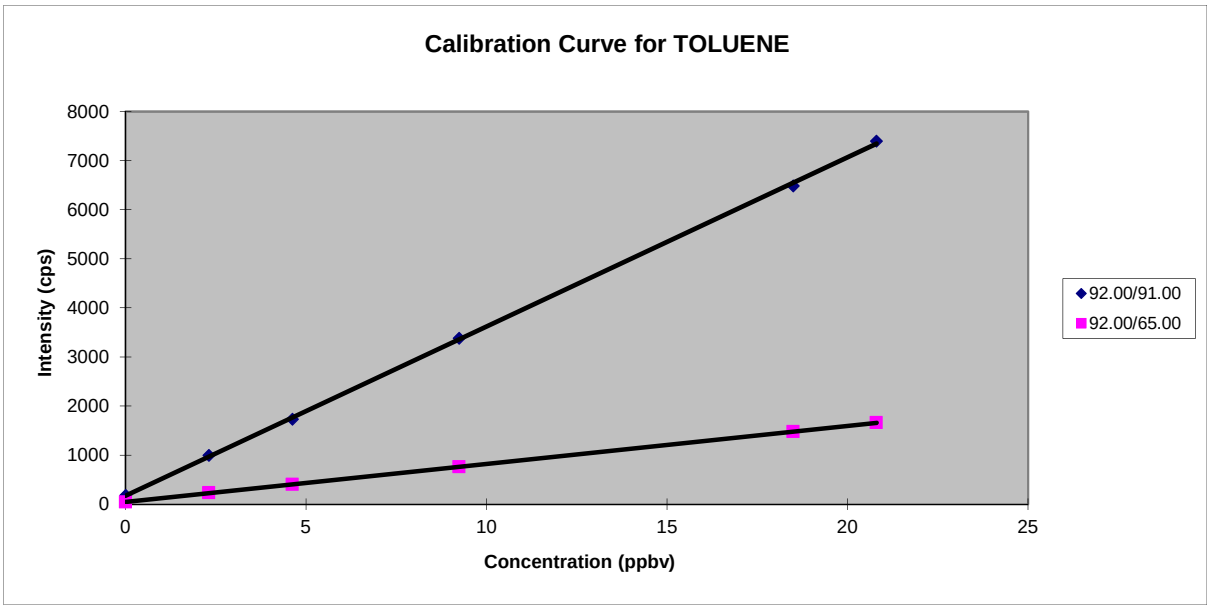




Filename:	64MSMS00981 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 18, 2019 13:46:51					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.53	9.79	12.98	15.64	17.11

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	16.4719773	102.640048
Intercept:	12.6745786	66.5936876
Correlation:	0.99984946	0.9995523

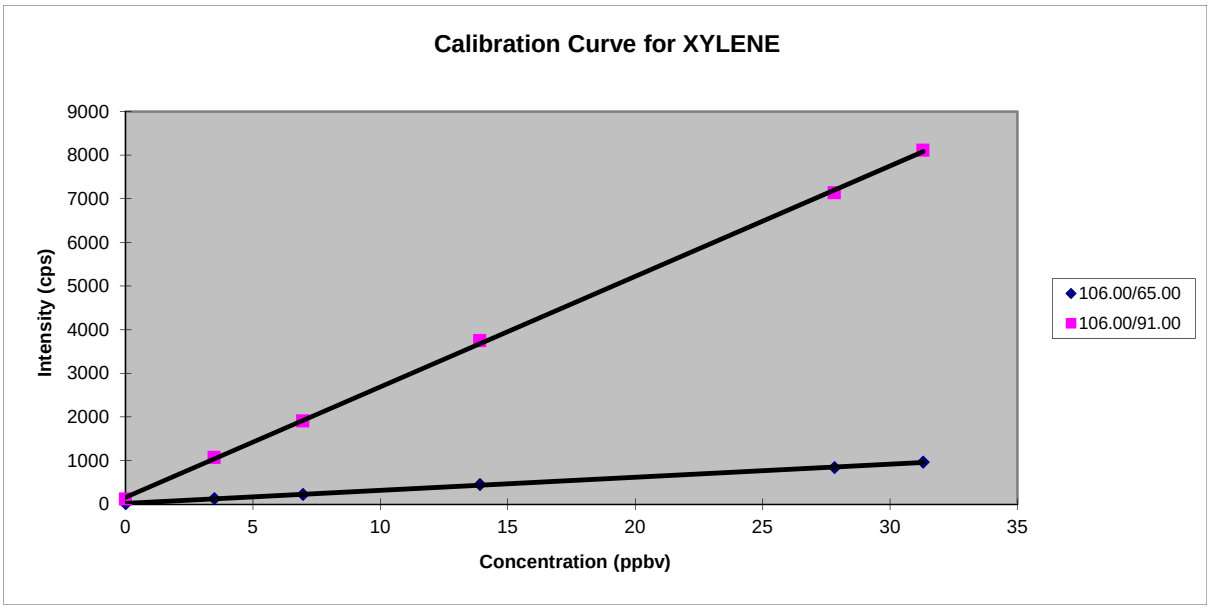
Concentratior	78.00/39.00	78.00/52.00
0	10.4166667	57.8125
2.31	55.2083333	323.541667
4.62	87.7083333	541.354167
9.24	163.4375	1006.25
18.49	316.354167	1924.375
20.8	356.458333	2238.64583



Filename:	64MSMS00981 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 18, 2019 13:47:26					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.53	9.79	12.98	15.64	17.11

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	344.765054	77.4151862
Intercept:	174.923074	46.9603513
Correlation:	0.99989618	0.99997793

Concentratior	92.00/91.00	92.00/65.00
0	178.541667	43.2291667
2.31	995.416667	233.4375
4.62	1729.79167	403.4375
9.24	3381.25	758.854167
18.49	6486.45833	1476.14583
20.8	7398.75	1660.10417



Filename:	64MSMS00981 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 18, 2019 13:47:53					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.53	9.79	12.98	15.64	17.11

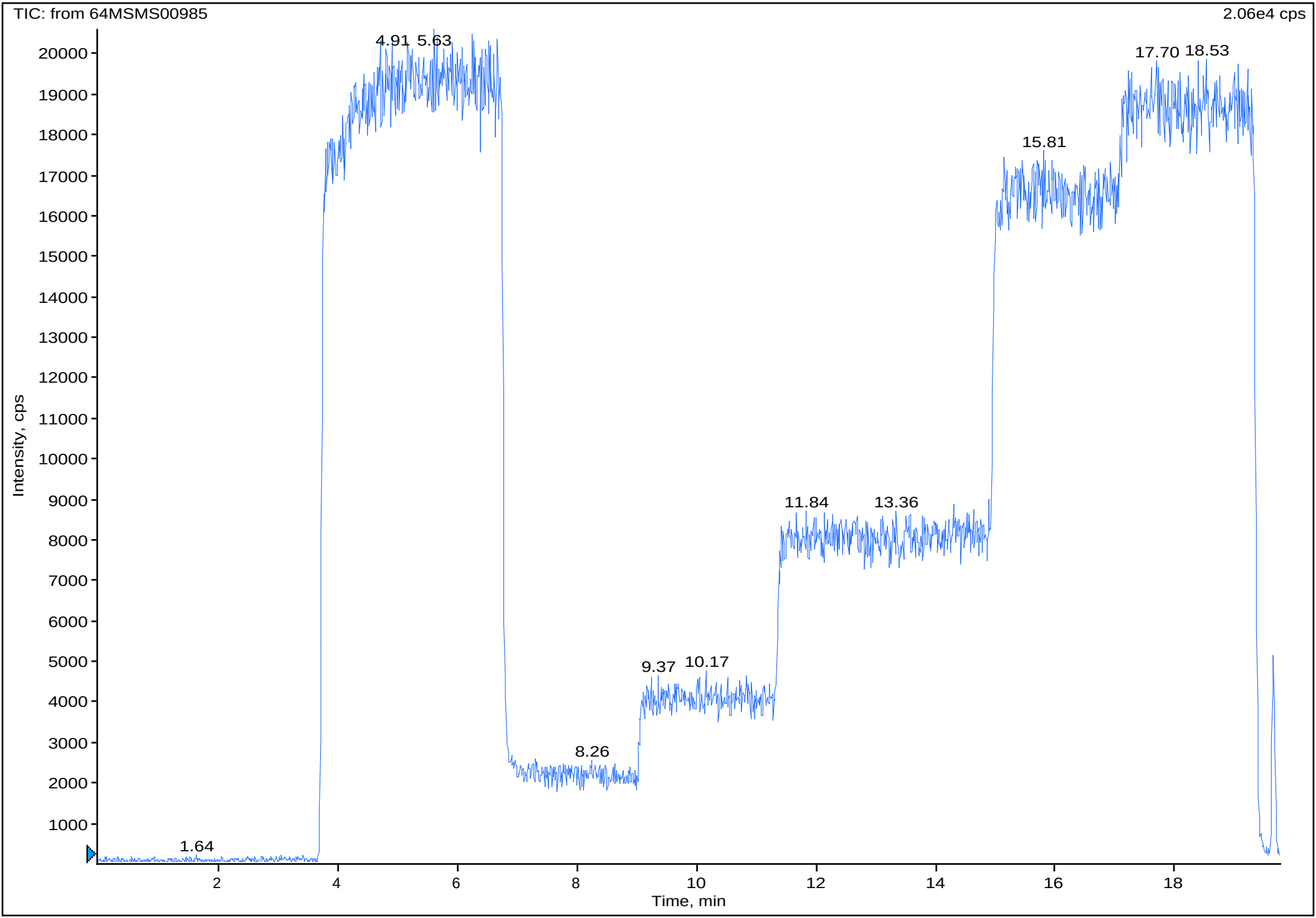
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	29.865656	253.12309
Intercept:	21.8626991	158.566507
Correlation:	0.99967167	0.99988934

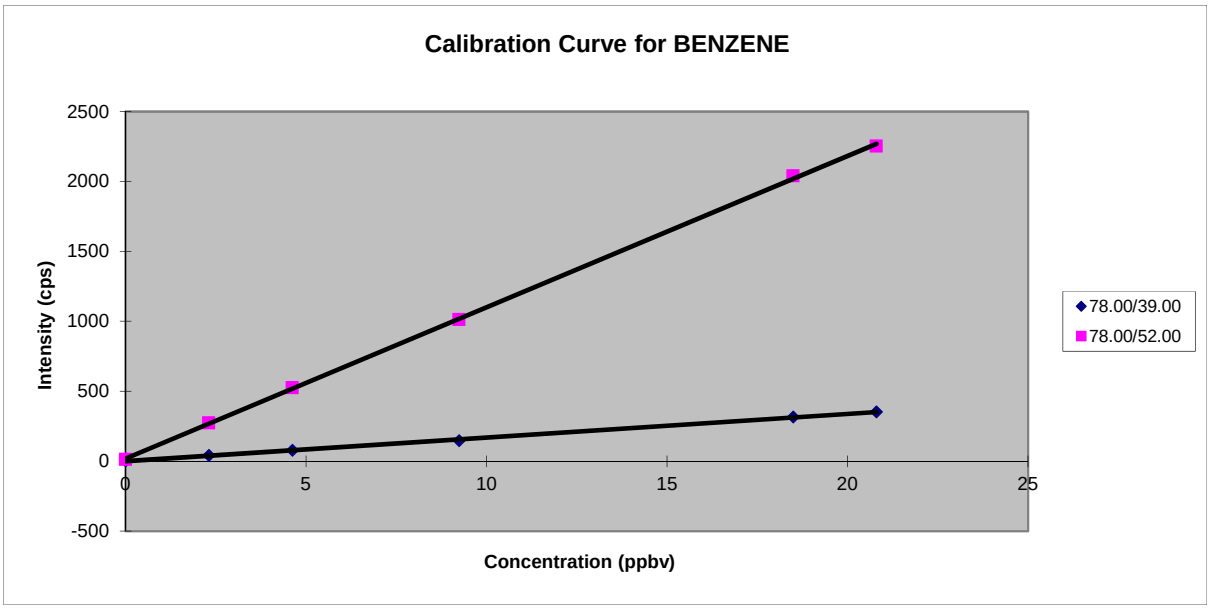
Concentratior	106.00/65.00	106.00/91.00
0	15.625	118.75
3.48	129.895833	1065.72917
6.96	225.625	1902.8125
13.91	450.520833	3746.45833
27.82	838.645833	7136.14583
31.3	963.75	8109.6875

Report	File Name	64MSMS00981 et al.			
	Sample Name	MOD Calibration - BTX 20190418			
	Date	Thursday, April 18, 2019 13:48:26			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	16.47	102.64	344.77	77.42	29.87	253.12
Intercept	12.67	66.59	174.92	46.96	21.86	158.57
Intensity	10.42	57.81	178.54	43.23	15.63	118.75
Int SD	11.04	28.81	56.72	23.86	13.52	45.01
Concentration	-0.14	-0.09	0.01	-0.05	-0.21	-0.16
Conc SD	0.67	0.28	0.16	0.31	0.45	0.18
Compound Con	-0.11		-0.02		-0.18	
Compound SD	0.34		0.17		0.22	
Det. Limit	2.01	0.84	0.49	0.92	1.36	0.53
Compound DL	1.43		0.71		0.95	

4/18/19.18.38.21
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Apr 18, 2019 at 18:38:20; Exp. Comment: BTX

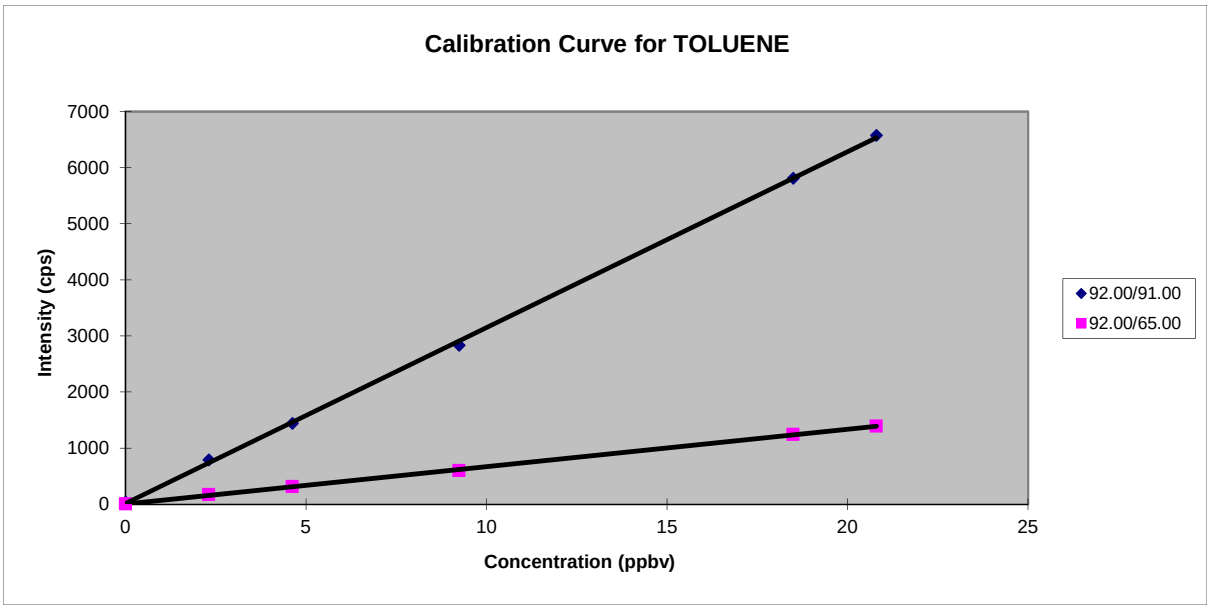




Filename:	64MSMS00985 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 18, 2019 18:58:54					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.87	9.99	12.83	16.07	18.39

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	16.9156864	108.154061
Intercept:	-0.0205223	19.0459615
Correlation:	0.99949929	0.9999044

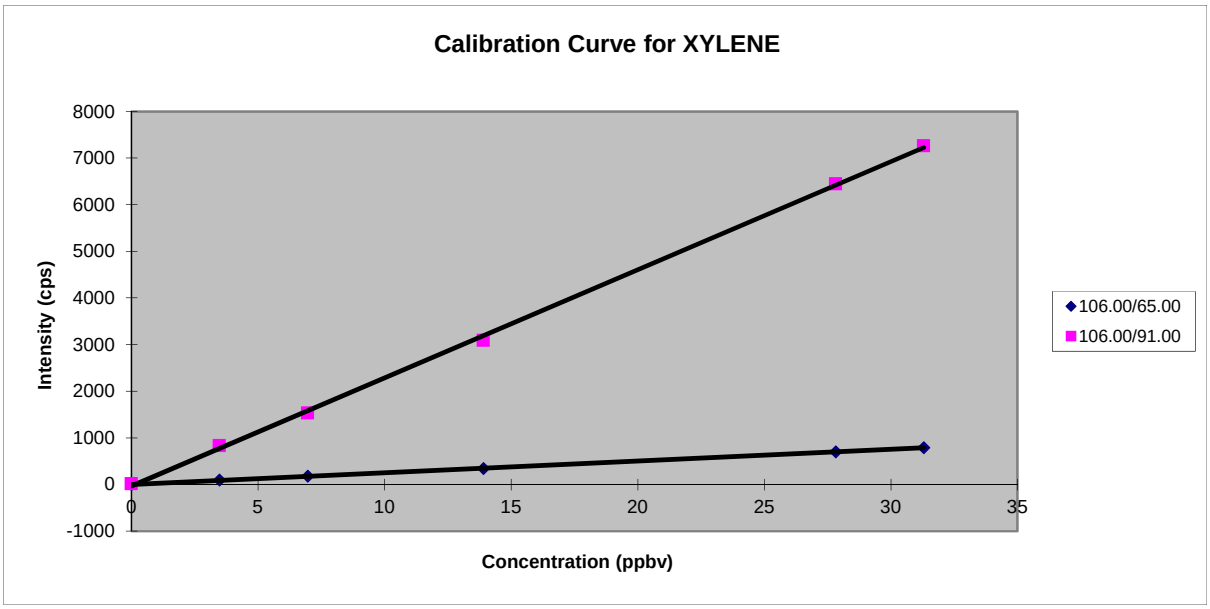
Concentratior	78.00/39.00	78.00/52.00
0	2.70833333	12.7083333
2.31	40.9375	272.5
4.62	78.3333333	525.3125
9.24	147.291667	1010.72917
18.49	316.666667	2039.0625
20.8	352.083333	2252.1875



Filename:	64MSMS00985 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 18, 2019 18:59:29					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.87	9.99	12.83	16.07	18.39

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	313.363669	66.611823
Intercept:	17.7807102	4.82291054
Correlation:	0.99984875	0.99978027

Concentratior	92.00/91.00	92.00/65.00
0	37.3958333	7.39583333
2.31	790.729167	168.645833
4.62	1441.14583	313.4375
9.24	2834.375	596.875
18.49	5807.91667	1244.89583
20.8	6574.27083	1391.97917



Filename:	64MSMS00985 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 18, 2019 18:59:54					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.87	9.99	12.83	16.07	18.39

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	25.1408923	231.884405
Intercept:	3.18231434	-30.447157
Correlation:	0.99994411	0.99977252

Concentratior	106.00/65.00	106.00/91.00
0	2.91666667	16.6666667
3.48	95.1041667	831.354167
6.96	177.5	1533.02083
13.91	347.395833	3088.33333
27.82	701.666667	6444.58333
31.3	793.020833	7258.75

Report	File Name	64MSMS00985 et al.			
	Sample Name	EOD Calibration - BTX 20190418			
	Date	Thursday, April 18, 2019 19:00:25			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	16.92	108.15	313.36	66.61	25.14	231.88
Intercept	-0.02	19.05	17.78	4.82	3.18	-30.45
Intensity	2.71	12.71	37.40	7.40	2.92	16.67
Int SD	5.33	13.10	21.82	9.09	5.97	14.99
Concentration	0.16	-0.06	0.06	0.04	-0.01	0.20
Conc SD	0.31	0.12	0.07	0.14	0.24	0.06
Compound Con	0.05		0.05		0.10	
Compound SD	0.15		0.07		0.11	
Det. Limit	0.94	0.36	0.21	0.41	0.71	0.19
Compound DL	0.65		0.31		0.45	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 04/19/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3250	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
0639	1500	~1915CFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date:	EXP 05/02/19
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
			PA		
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
			PA		
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Fri, Apr 19, 2019, 6:56:59
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR19 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Fri, Apr 19, 2019, 6:55:08

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.060
75.000	0.070
100.000	0.077
120.000	0.085
160.000	0.095

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.037
100.000	0.037
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Fri, Apr 19, 2019, 6:56:17
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR19 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Fri, Apr 19, 2019, 6:55:08

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.060
75.000	0.070
100.000	0.077
120.000	0.085
160.000	0.095

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.037
100.000	0.037
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

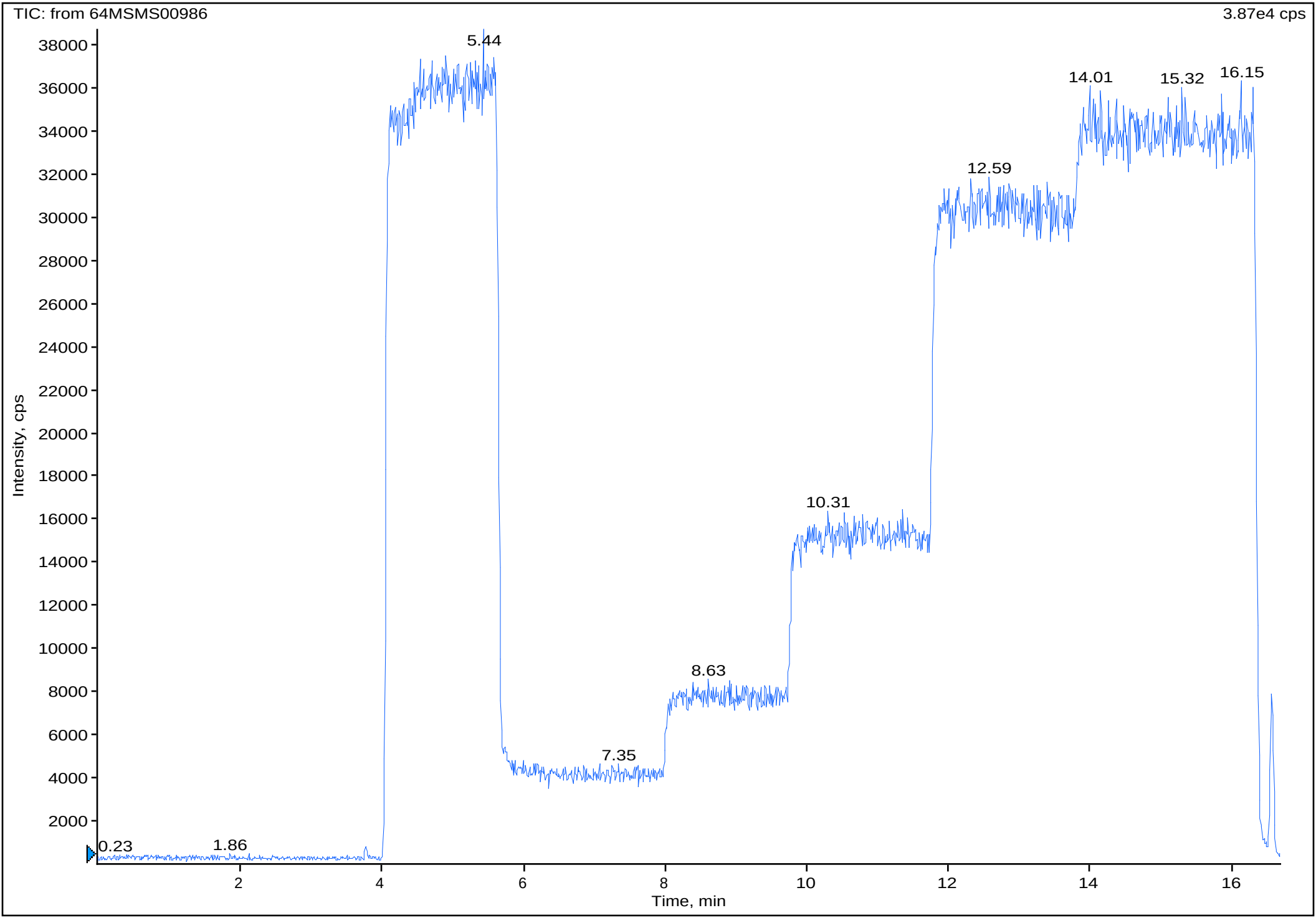
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

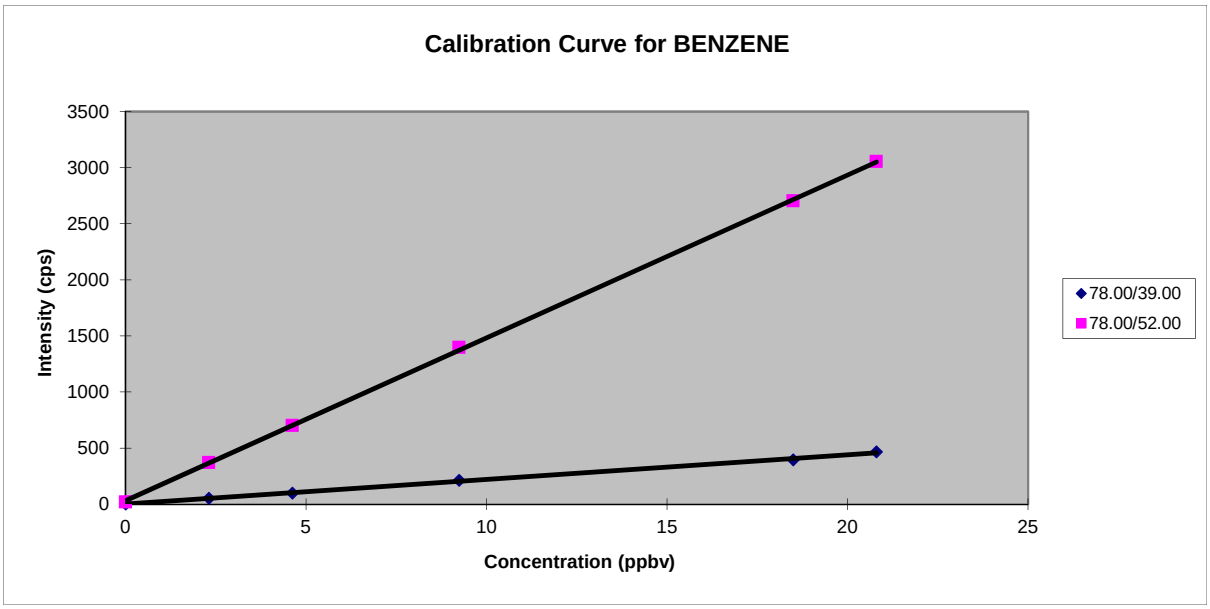
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/19/19.6.58.01
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, Apr 19, 2019 at 6:58:00; Exp. Comment: BTX

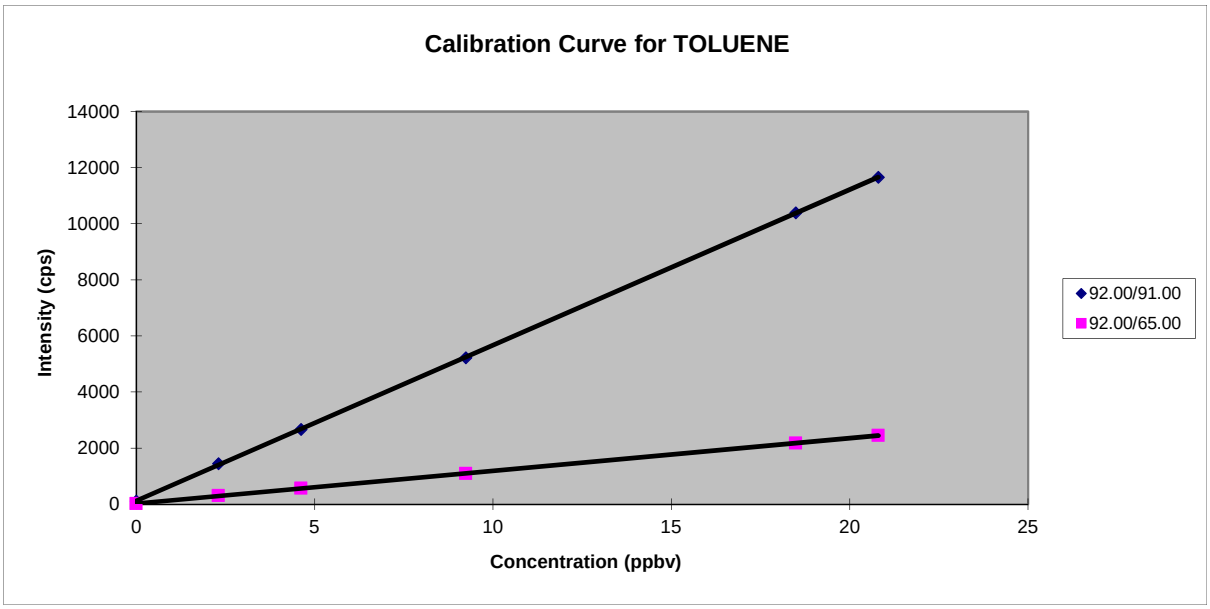




Filename:	64MSMS00986 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 19, 2019 7:15:39					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	6.94	8.86	10.84	12.89	15.23

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	21.9554278	145.111276
Intercept:	2.63157881	32.5075523
Correlation:	0.99912796	0.99994286

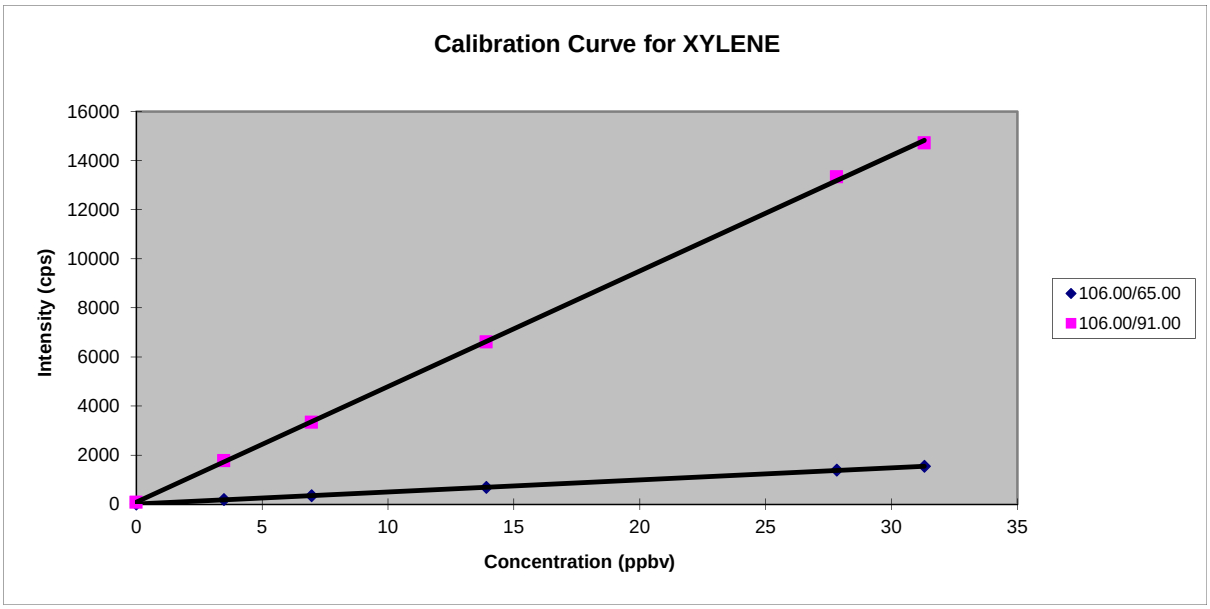
Concentratior	78.00/39.00	78.00/52.00
0	2.70833333	18.8541667
2.31	52.5	371.5625
4.62	100.625	701.666667
9.24	214.0625	1396.14583
18.49	395.9375	2702.39583
20.8	467.604167	3052.29167



Filename:	64MSMS00986 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 19, 2019 7:16:18					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	6.94	8.86	10.84	12.89	15.23

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	554.658956	116.414429
Intercept:	121.12322	25.7134597
Correlation:	0.99998878	0.99998058

Concentratior	92.00/91.00	92.00/65.00
0	109.166667	21.4583333
2.31	1441.14583	302.5
4.62	2666.875	565
9.24	5226.14583	1095.625
18.49	1.04E+04	2172.1875
20.8	1.17E+04	2453.85417



Filename:	64MSMS00986 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 19, 2019 7:16:46					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	6.94	8.86	10.84	12.89	15.23

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	49.258566	470.941481
Intercept:	11.0680552	87.2385435
Correlation:	0.99987902	0.99989381

Concentratior	106.00/65.00	106.00/91.00
0	10.4166667	74.2708333
3.48	189.583333	1764.79167
6.96	353.854167	3340.72917
13.91	683.229167	6603.33333
27.82	1396.04167	1.33E+04
31.3	1544.89583	1.47E+04

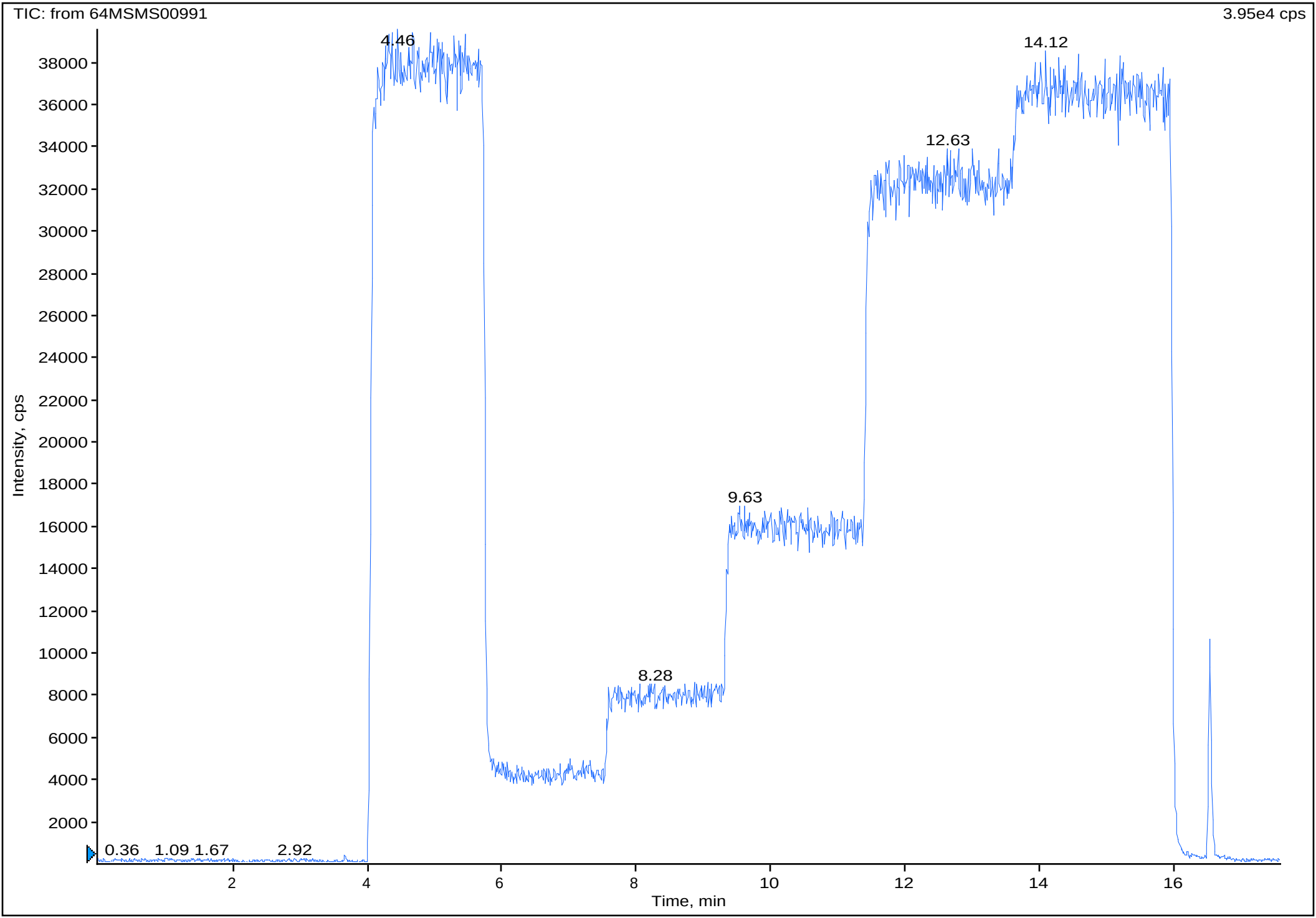
Report	File Name	64MSMS00986 et al.			
	Sample Name	BOD Calibration - BTX 20190419			
	Date	Friday, April 19, 2019 7:17:24			
	Time Range	2.00	to	3.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

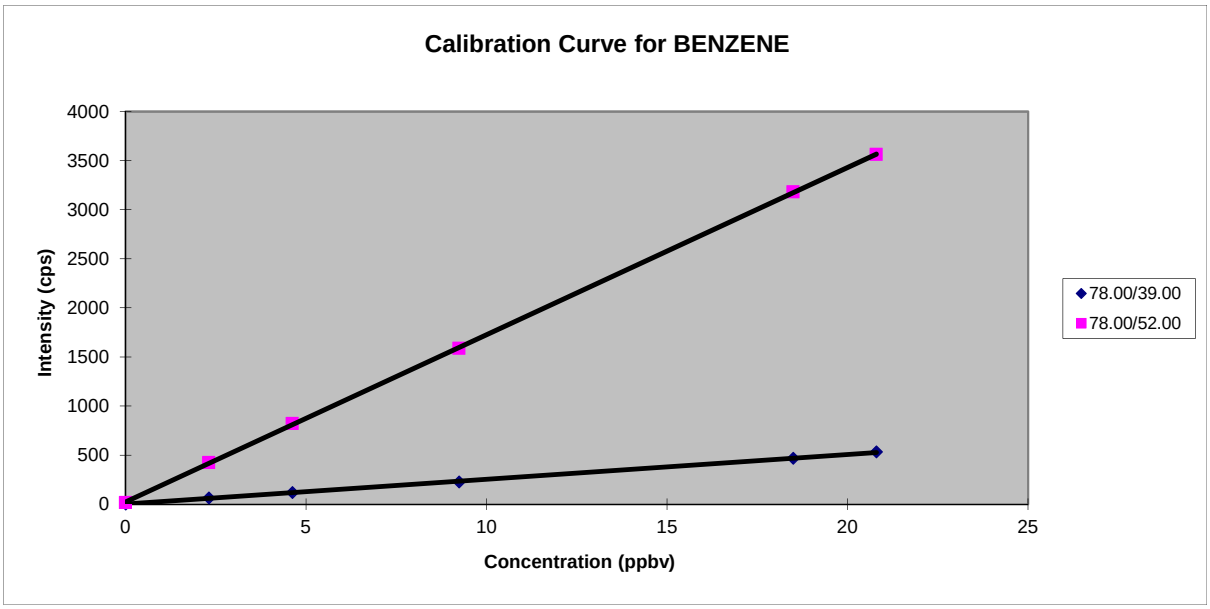
Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	21.96	145.11	554.66	116.41	49.26	470.94
Intercept	2.63	32.51	121.12	25.71	11.07	87.24
Intensity	2.71	18.85	109.17	21.46	10.42	74.27
Int SD	5.52	15.41	34.66	17.29	12.13	30.43
Concentration	0.00	-0.09	-0.02	-0.04	-0.01	-0.03
Conc SD	0.25	0.11	0.06	0.15	0.25	0.06
Compound Con	-0.05		-0.03		-0.02	
Compound SD	0.13		0.07		0.11	
Det. Limit	0.75	0.32	0.19	0.45	0.74	0.19
Compound DL	0.54		0.32		0.47	

4/19/19.12.54.43

Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms

Acq. Time: Fri, Apr 19, 2019 at 12:54:43; Exp. Comment: BTX

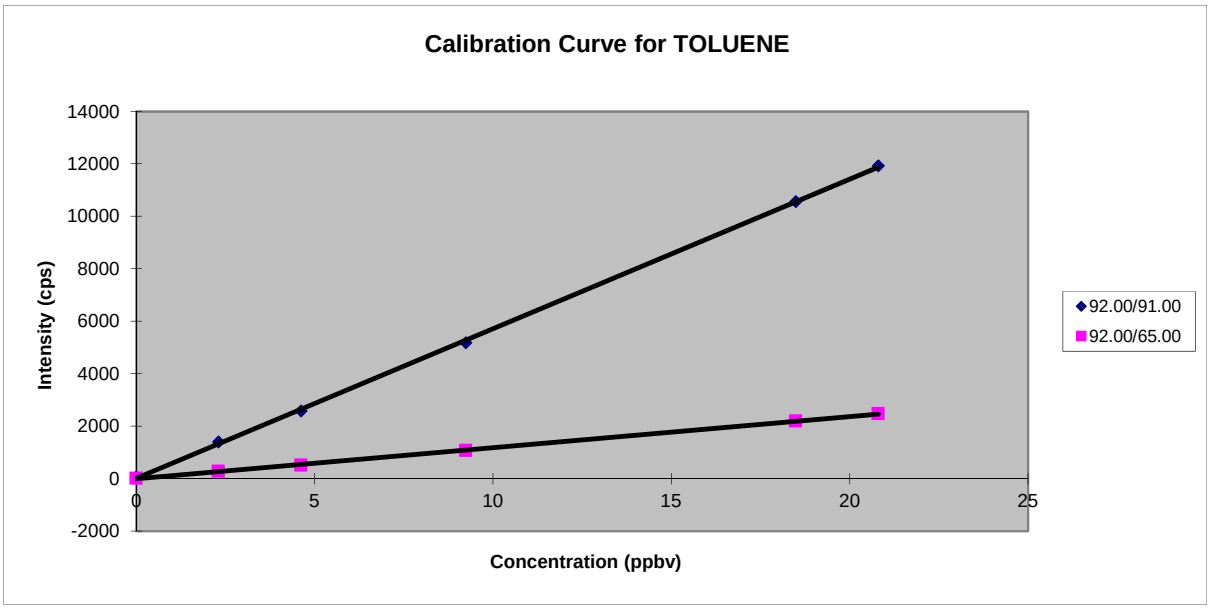




Filename:	64MSMS00991 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 19, 2019 13:12:47					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.68	8.49	10.38	12.55	14.82

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	25.2495078	170.323753
Intercept:	2.65204986	23.6963301
Correlation:	0.99970262	0.99997821

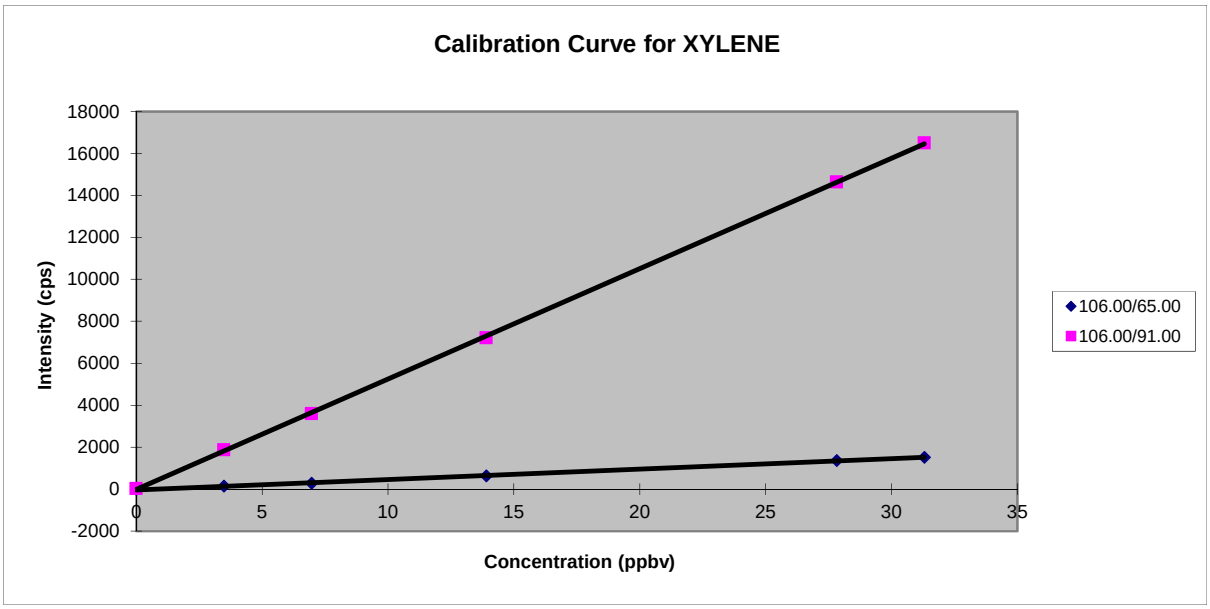
Concentratior	78.00/39.00	78.00/52.00
0	3.75	15
2.31	63.9583333	424.0625
4.62	121.666667	821.25
9.24	226.354167	1585.52083
18.49	467.291667	3181.14583
20.8	533.229167	3561.35417



Filename:	64MSMS00991 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 19, 2019 13:13:18					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.68	8.49	10.38	12.55	14.82

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	570.170272	118.433245
Intercept:	20.1254226	-3.415877
Correlation:	0.99988753	0.99980858

Concentratior	92.00/91.00	92.00/65.00
0	76.0416667	17.2916667
2.31	1404.79167	284.270833
4.62	2581.04167	516.354167
9.24	5181.875	1068.54167
18.49	1.06E+04	2190.83333
20.8	1.19E+04	2470.52083



Filename:	64MSMS00991 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 19, 2019 13:13:47					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.68	8.49	10.38	12.55	14.82

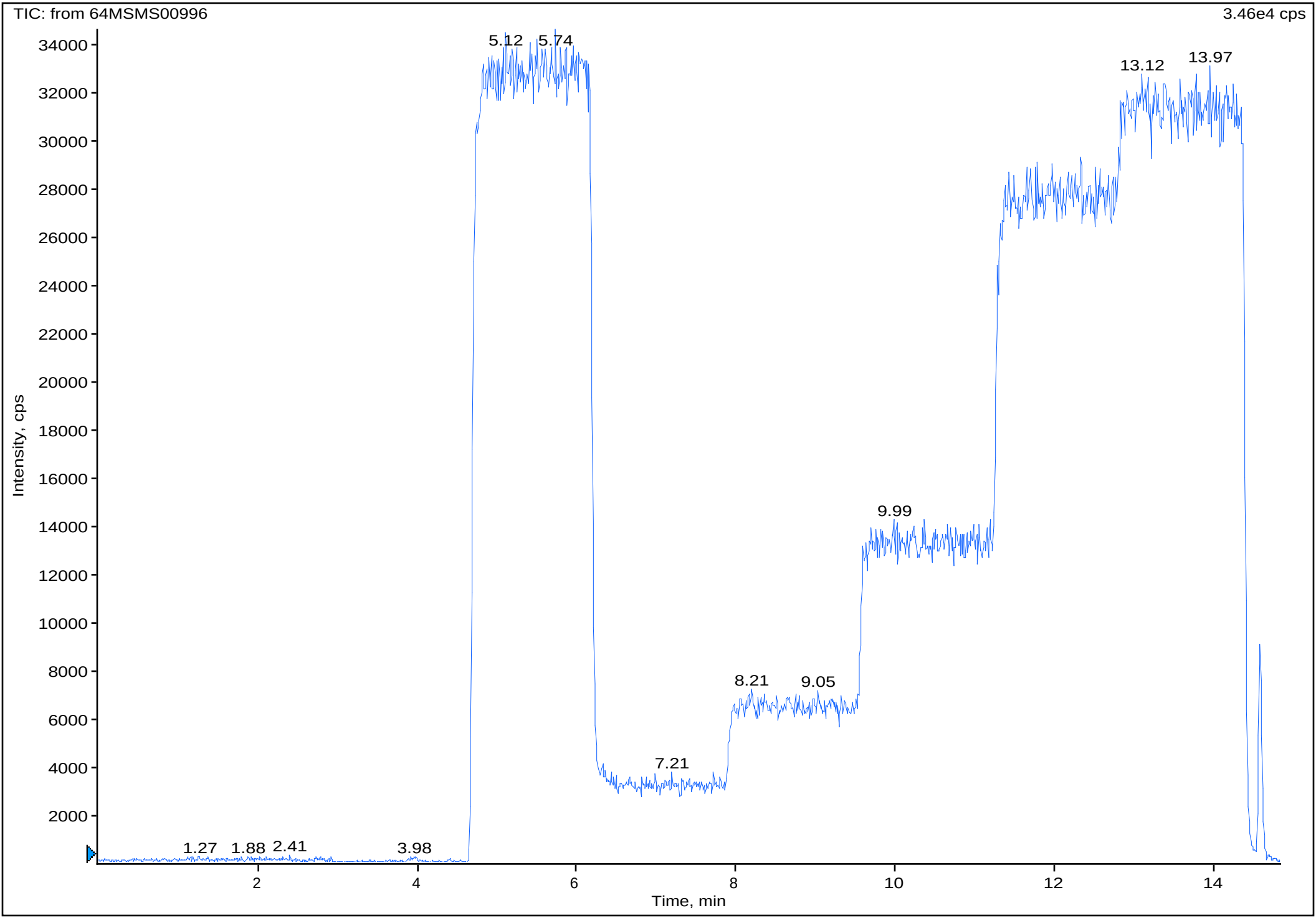
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	49.5336106	526.353163
Intercept:	-30.136746	-14.13378
Correlation:	0.99933943	0.99995918

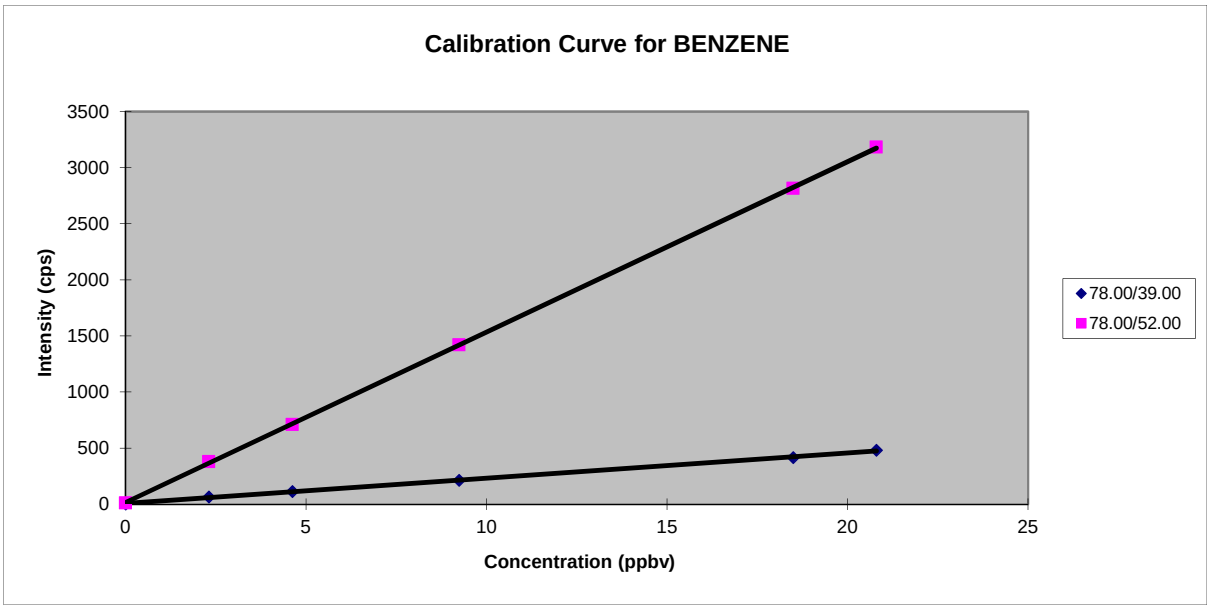
Concentratior	106.00/65.00	106.00/91.00
0	2.91666667	32.6041667
3.48	141.666667	1870.625
6.96	292.291667	3597.60417
13.91	628.645833	7208.125
27.82	1362.39583	1.46E+04
31.3	1525.83333	1.65E+04

Report	File Name	64MSMS00991 et al.			
	Sample Name	MOD Calibration - BTX 20190419			
	Date	Friday, April 19, 2019 13:14:25			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	25.25	170.32	570.17	118.43	49.53	526.35
Intercept	2.65	23.70	20.13	-3.42	-30.14	-14.13
Intensity	3.75	15.00	76.04	17.29	2.92	32.60
Int SD	7.29	13.38	31.90	16.38	6.48	20.12
Concentration	0.04	-0.05	0.10	0.17	0.67	0.09
Conc SD	0.29	0.08	0.06	0.14	0.13	0.04
Compound Con	0.00		0.14		0.38	
Compound SD	0.13		0.07		0.06	
Det. Limit	0.87	0.24	0.17	0.41	0.39	0.11
Compound DL	0.55		0.29		0.25	

4/19/19.18.16.53
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, Apr 19, 2019 at 18:16:51; Exp. Comment: BTX

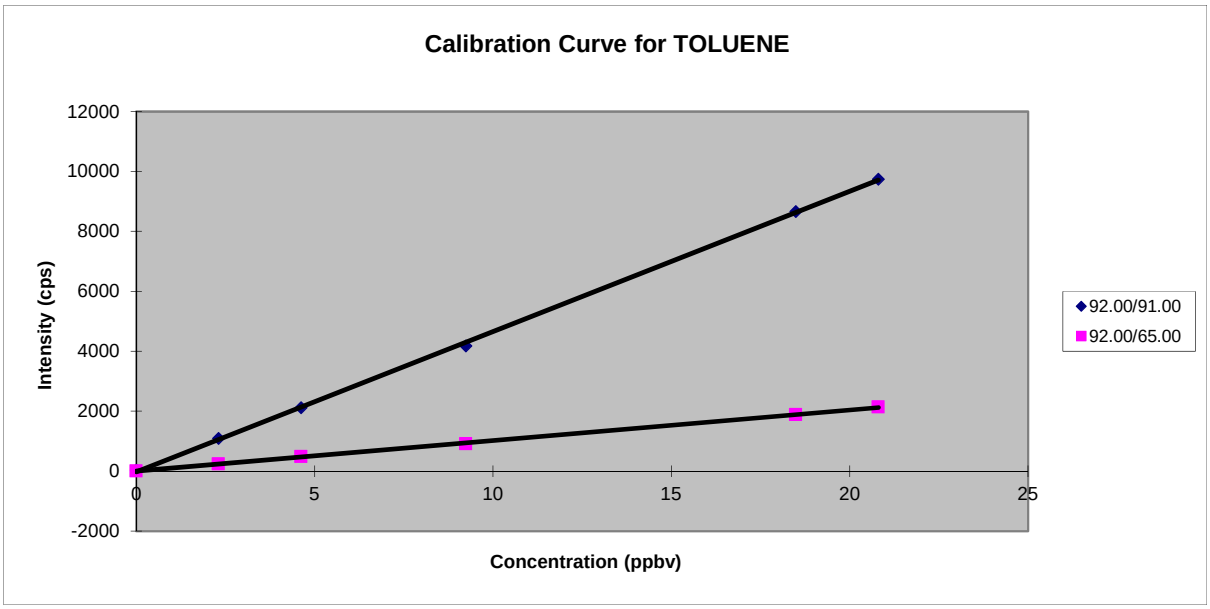




Filename:	64MSMS00996 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 19, 2019 18:32:16					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.50	7.00	8.71	10.35	12.06	13.65

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	22.4403141	151.865438
Intercept:	7.94128011	15.8404697
Correlation:	0.99965268	0.99997766

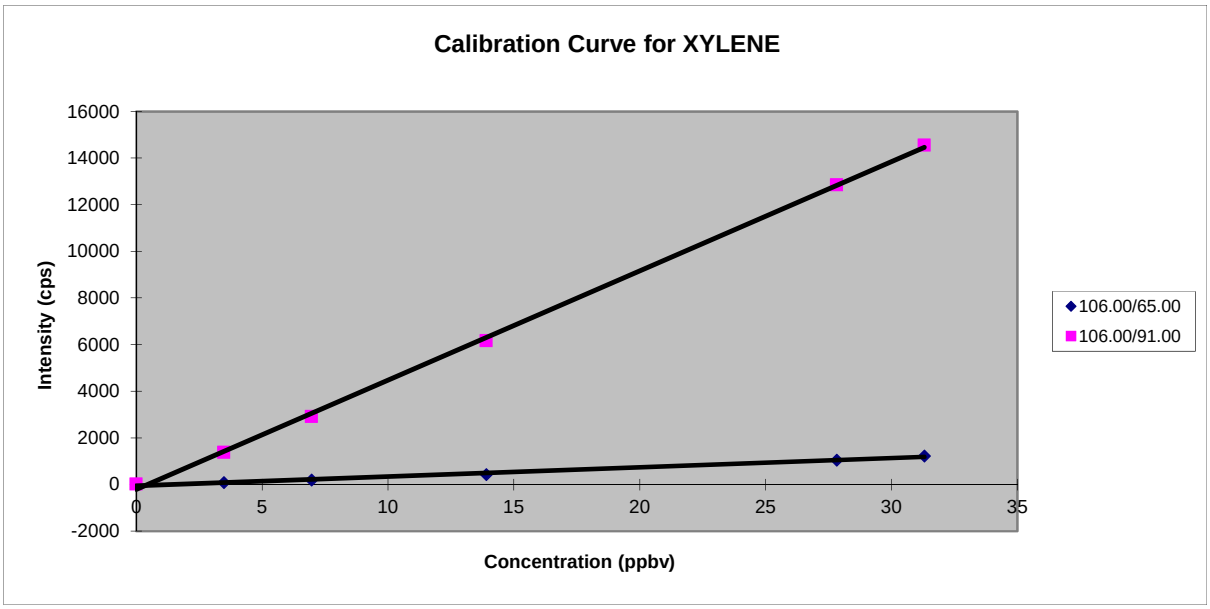
Concentratior	78.00/39.00	78.00/52.00
0	3.54166667	11.5625
2.31	64.0625	379.375
4.62	113.854167	709.375
9.24	214.6875	1419.47917
18.49	415.520833	2815.10417
20.8	480.520833	3182.60417



Filename:	64MSMS00996 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 19, 2019 18:32:46					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.50	7.00	8.71	10.35	12.06	13.65

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	467.981647	101.96827
Intercept:	-20.067997	3.02884904
Correlation:	0.99985559	0.99980976

Concentratior	92.00/91.00	92.00/65.00
0	40.9375	10.5208333
2.31	1090.72917	244.270833
4.62	2116.77083	481.875
9.24	4175.83333	912.604167
18.49	8663.95833	1884.27083
20.8	9745.625	2139.79167



Filename:	64MSMS00996 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 19, 2019 18:33:13					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.50	7.00	8.71	10.35	12.06	13.65

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	39.8089572	468.788197
Intercept:	-56.89922	-208.98624
Correlation:	0.99604239	0.99972054

Concentratior	106.00/65.00	106.00/91.00
0	2.91666667	21.5625
3.48	84.8958333	1376.875
6.96	188.333333	2907.60417
13.91	428.75	6171.04167
27.82	1049.47917	1.28E+04
31.3	1227.08333	1.45E+04

Report	File Name	64MSMS00996 et al.			
	Sample Name	EOD Calibration - BTX 20190419			
	Date	Friday, April 19, 2019 18:33:50			
	Time Range	3.00	to	4.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	22.44	151.87	467.98	101.97	39.81	468.79
Intercept	7.94	15.84	-20.07	3.03	-56.90	-208.99
Intensity	3.54	11.56	40.94	10.52	2.92	21.56
Int SD	6.49	11.46	27.19	12.51	6.31	23.05
Concentration	-0.20	-0.03	0.13	0.07	1.50	0.49
Conc SD	0.29	0.08	0.06	0.12	0.16	0.05
Compound Con	-0.11		0.10		1.00	
Compound SD	0.13		0.06		0.07	
Det. Limit	0.87	0.23	0.17	0.37	0.48	0.15
Compound DL	0.55		0.27		0.31	

TAGA FLOW CALIBRATION LOG

Work Assignment: 372

Date: 4/4/20/2019 (YH)

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3232	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:50	1000SCCS	191	1500 SCCS	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DW415-0168		Calibration Date: Exp: 5/2/2019	
		Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
Time	Reference Flow Meter	Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
		Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
Time	Reference Flow Meter	Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Sat, Apr 20, 2019, 7:25:13
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR20 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sat, Apr 20, 2019, 7:21:56

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.068
100.000	0.077
120.000	0.083
160.000	0.083

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.039
100.000	0.042
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Sat, Apr 20, 2019, 7:25:28
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR20 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sat, Apr 20, 2019, 7:21:56

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.068
100.000	0.077
120.000	0.083
160.000	0.083

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.039
100.000	0.042
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

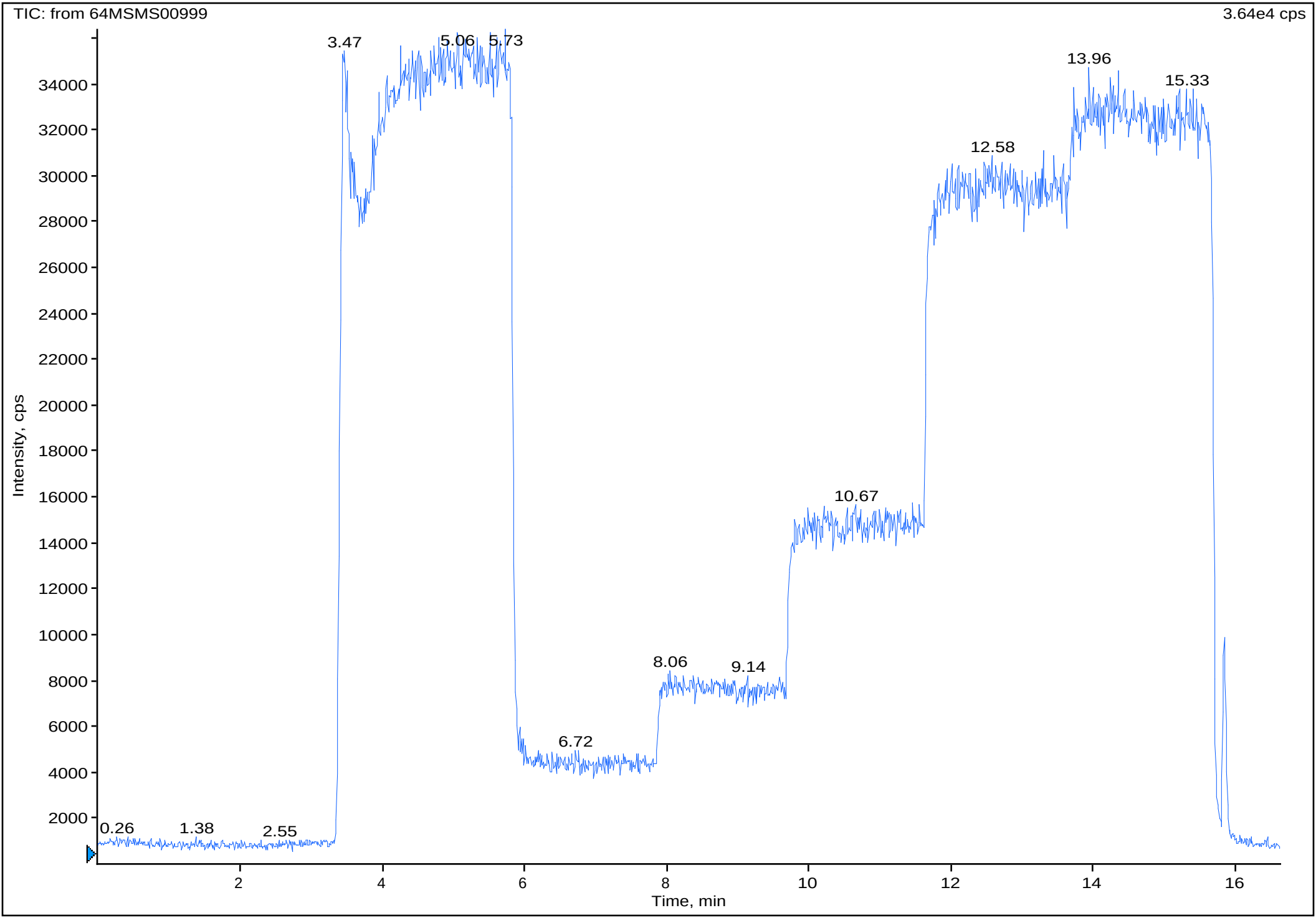
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

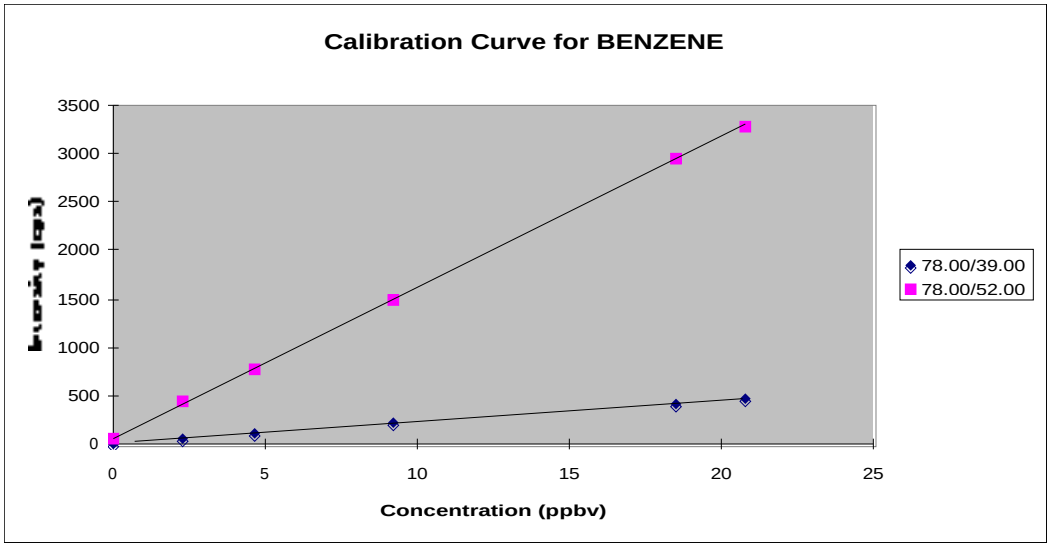
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/20/19.8.55.05
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sat, Apr 20, 2019 at 8:55:04; Exp. Comment: BTX

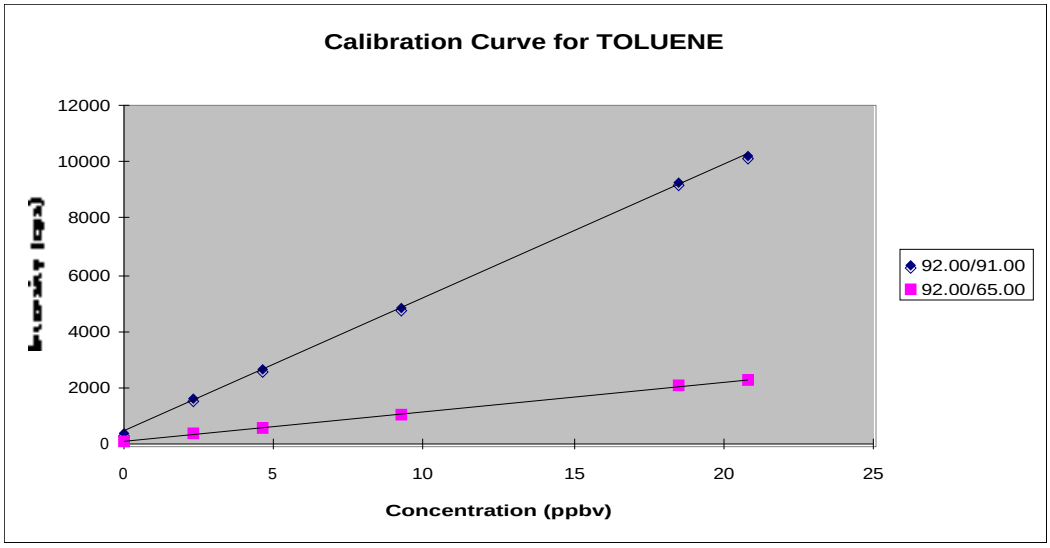




Filename:	64MSMS00999 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 20, 2019 9:12:51					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.92	8.79	10.71	12.63	14.63

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	22.3514952	155.749185
Intercept:	9.21365156	57.927815
Correlation:	0.99974904	0.9999595

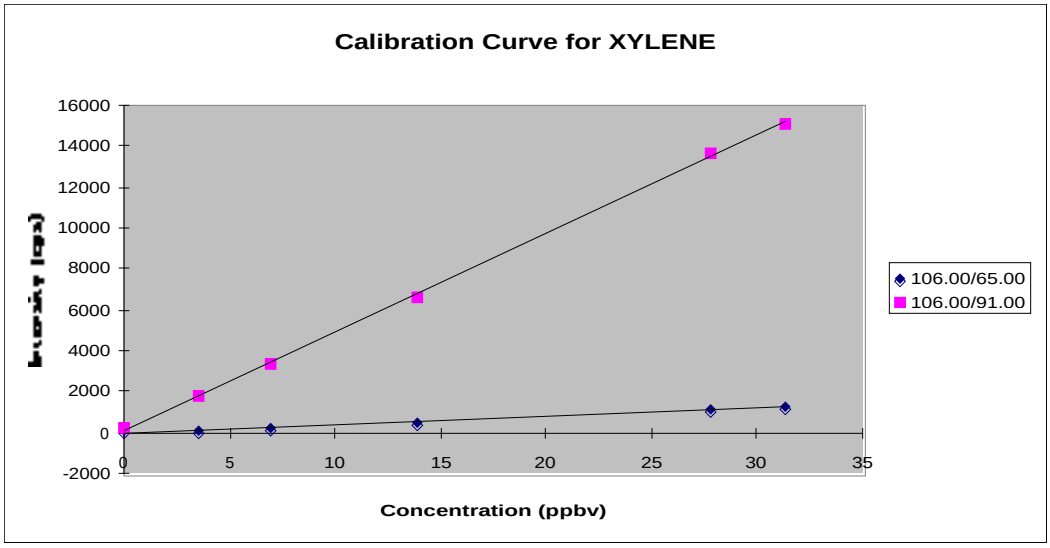
Concentration	78.00/39.00	78.00/52.00
0	5.3125	49.5833333
2.31	66.4583333	428.958333
4.62	109.0625	777.083333
9.24	217.8125	1491.14583
18.49	426.25	2955.20833
20.8	470	3283.4375



Filename:	64MSMS00999 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 20, 2019 9:13:55					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.92	8.79	10.71	12.63	14.63

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	474.215051	104.577639
Intercept:	436.377069	89.4824955
Correlation:	0.99986468	0.99980035

Concentration	92.00/91.00	92.00/65.00
0	376.5625	85.8333333
2.31	1603.64583	337.395833
4.62	2610.20833	574.270833
9.24	4817.60417	1043.85417
18.49	9290.20833	2053.4375
20.8	1.02E+04	2241.97917



Filename:	64MSMS00999 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 20, 2019 9:14:29					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.92	8.79	10.71	12.63	14.63

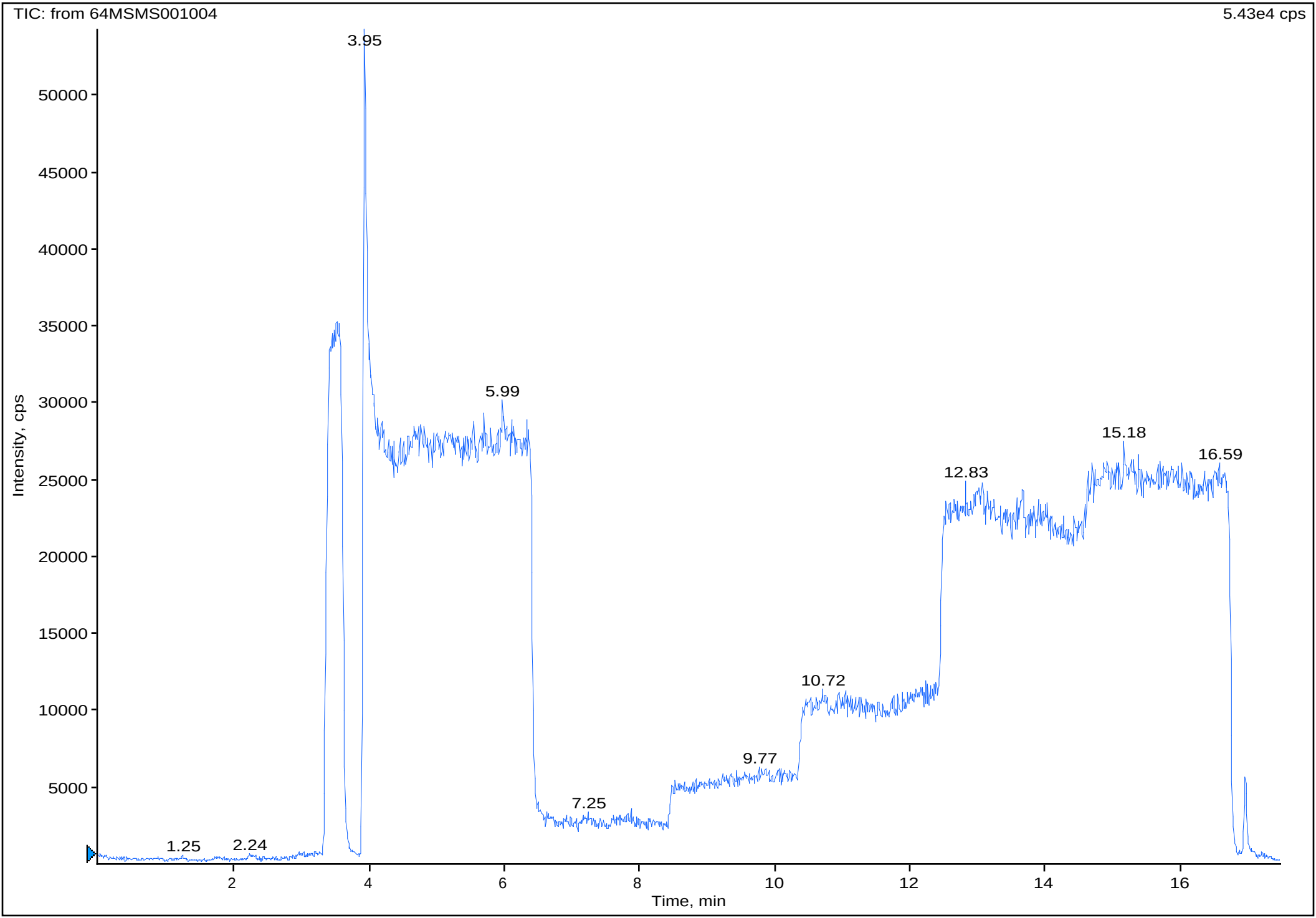
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	40.1161717	481.229944
Intercept:	-17.596698	98.5185933
Correlation:	0.99862906	0.99975808

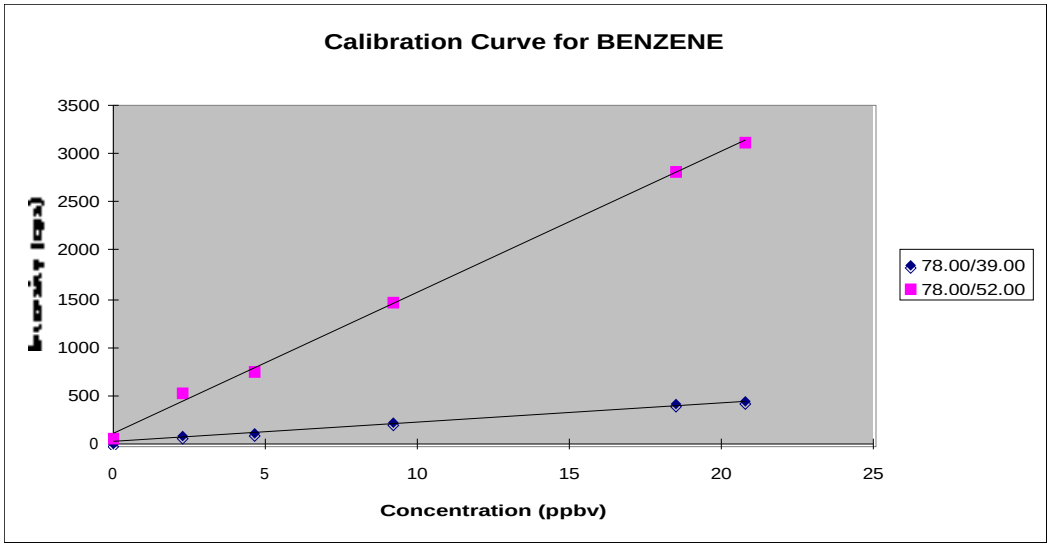
Concentration	106.00/65.0(	106.00/91.00
0	22.0833333	261.979167
3.48	121.041667	1776.45833
6.96	233.4375	3297.1875
13.91	510.416667	6670.9375
27.82	1096.25	1.37E+04
31.3	1259.6875	1.51E+04

Report	File Name	64MSMS00999 et al.			
	Sample Name	BOD Calibration - BTX 20190420			
	Date	Saturday, April 20, 2019 9:15:08			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	22.35	155.75	474.22	104.58	40.12	481.23
Intercept	9.21	57.93	436.38	89.48	-17.60	98.52
Intensity	5.31	49.58	376.56	85.83	22.08	261.98
Int SD	7.39	25.25	70.51	33.14	18.00	61.52
Concentration	-0.17	-0.05	-0.13	-0.03	0.99	0.34
Conc SD	0.33	0.16	0.15	0.32	0.45	0.13
Compound Con	-0.11		-0.08		0.66	
Compound SD	0.17		0.16		0.20	
Det. Limit	0.99	0.49	0.45	0.95	1.35	0.38
Compound DL	0.74		0.70		0.86	

4/20/19.13.58.06
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sat, Apr 20, 2019 at 13:58:05; Exp. Comment: BTX

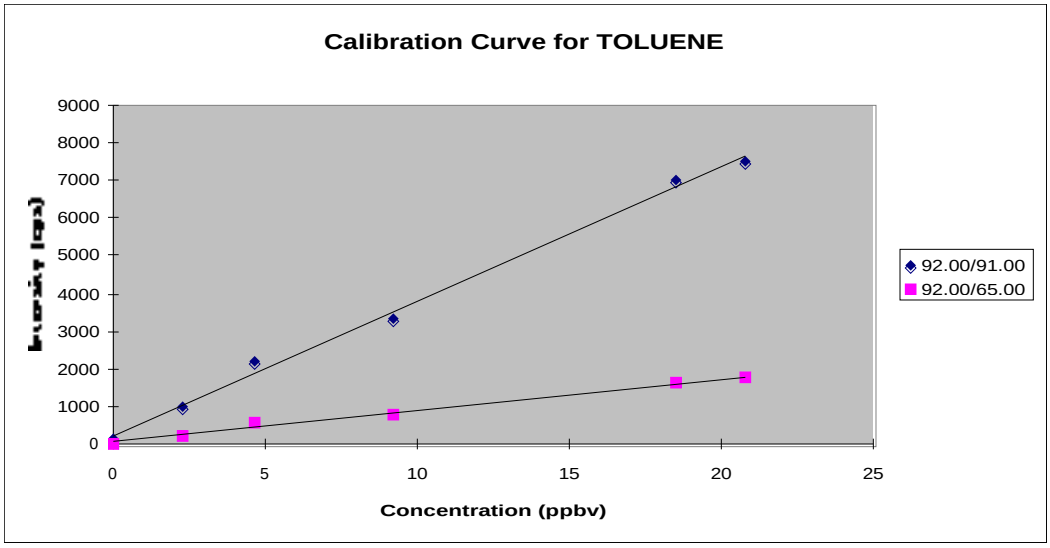




Filename:	64MSMS001004 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 20, 2019 14:16:51					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.49	9.32	11.36	13.27	15.60

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	20.7476817	146.34695
Intercept:	19.3160121	97.7177509
Correlation:	0.99830113	0.99939023

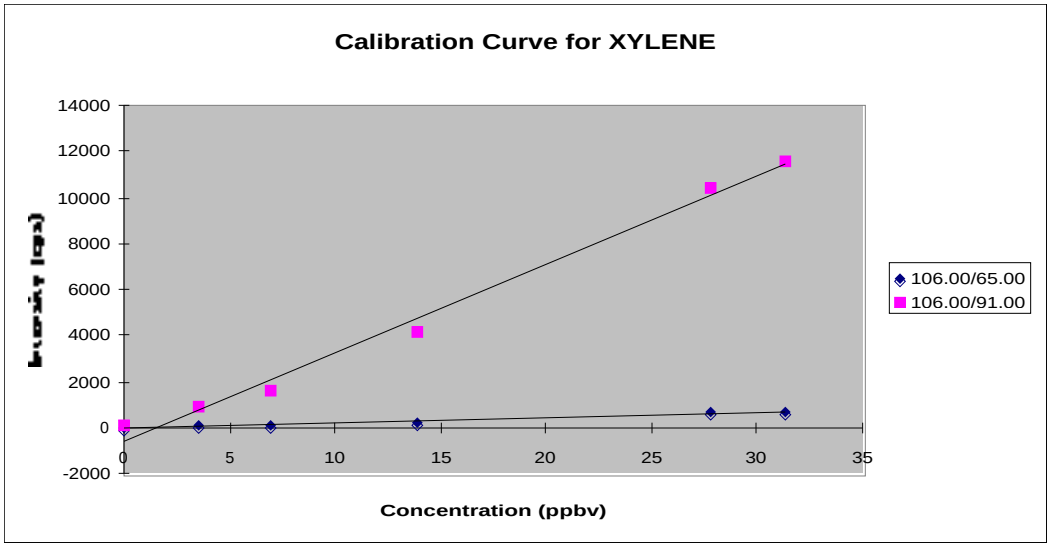
Concentration	78.00/39.00	78.00/52.00
0	7.91666667	46.25
2.31	73.9583333	510.833333
4.62	119.479167	743.333333
9.24	212.1875	1463.125
18.49	415.833333	2814.16667
20.8	437.1875	3125



Filename:	64MSMS001004 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 20, 2019 14:17:33					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.49	9.32	11.36	13.27	15.60

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	357.315075	82.8570417
Intercept:	229.43988	66.3122449
Correlation:	0.99744052	0.99739246

Concentration	92.00/91.00	92.00/65.00
0	120.9375	33.5416667
2.31	984.895833	239.6875
4.62	2228.22917	534.375
9.24	3311.97917	791.875
18.49	7031.77083	1640.83333
20.8	7515.52083	1752.8125



Filename:	64MSMS001004 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 20, 2019 14:18:10					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.49	9.32	11.36	13.27	15.60

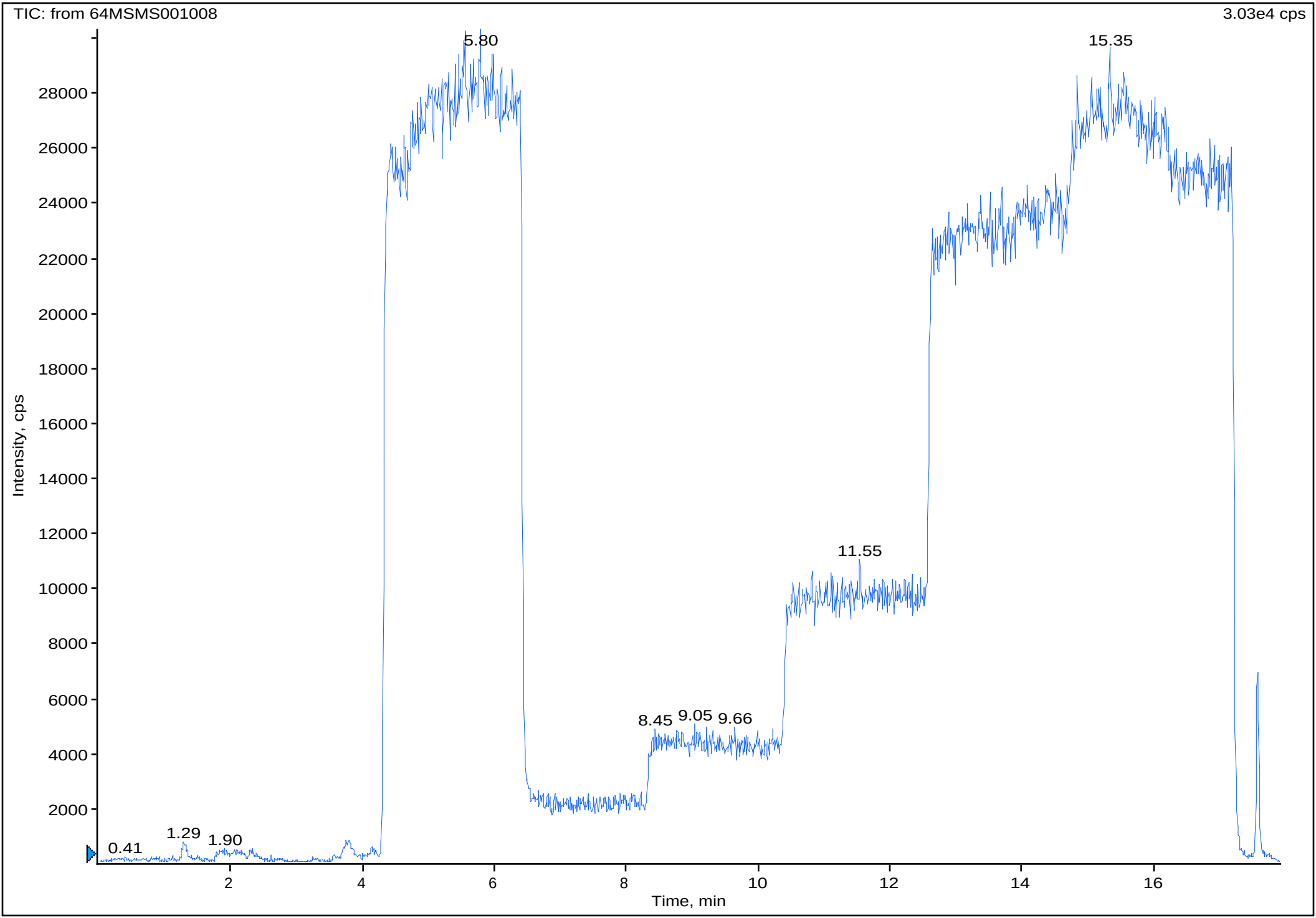
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	22.6725121	384.553081
Intercept:	-22.704098	-568.66316
Correlation:	0.99609876	0.99565373

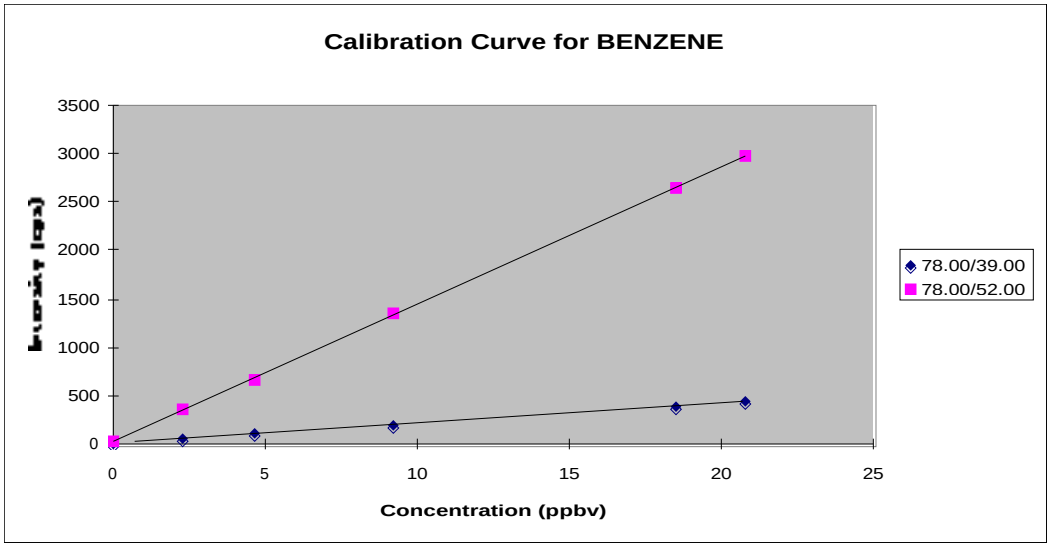
Concentration	106.00/65.0(	106.00/91.00
0	5.41666667	47.8125
3.48	66.7708333	844.6875
6.96	114.895833	1639.47917
13.91	250.3125	4150.72917
27.82	623.541667	1.04E+04
31.3	695.3125	1.16E+04

Report	File Name	64MSMS001004 et al.			
	Sample Name	MOD Calibration - BTX 20190420			
	Date	Saturday, April 20, 2019 14:19:03			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	20.75	146.35	357.32	82.86	22.67	384.55
Intercept	19.32	97.72	229.44	66.31	-22.70	-568.66
Intensity	7.92	46.25	120.94	33.54	5.42	47.81
Int SD	9.94	25.10	46.73	18.92	8.82	30.68
Concentration	-0.55	-0.35	-0.30	-0.40	1.24	1.60
Conc SD	0.48	0.17	0.13	0.23	0.39	0.08
Compound Con	-0.45		-0.35		1.42	
Compound SD	0.23		0.13		0.17	
Det. Limit	1.44	0.51	0.39	0.68	1.17	0.24
Compound DL	0.98		0.54		0.70	

4/20/19.18.28.34
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sat, Apr 20, 2019 at 18:28:32; Exp. Comment: BTX

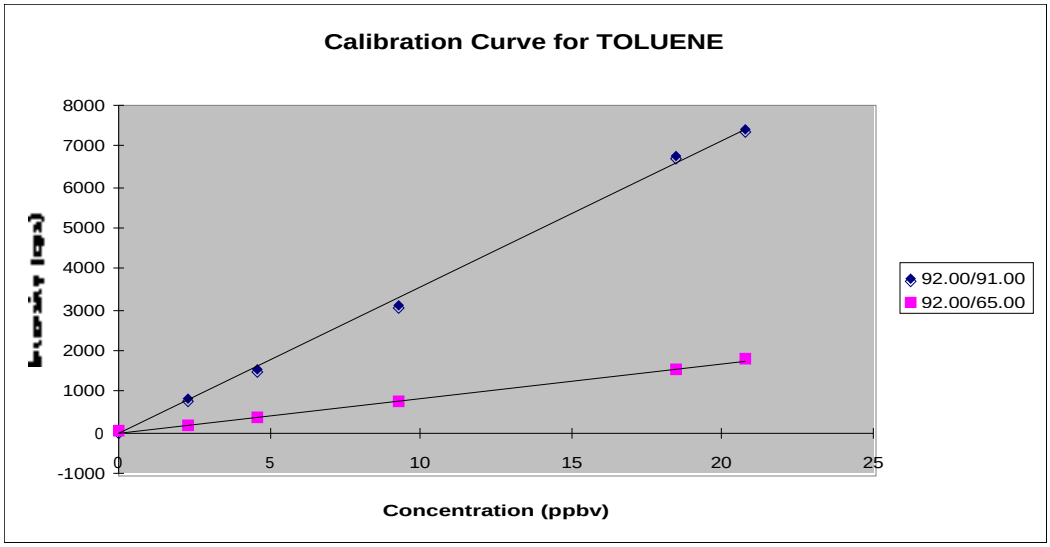




Filename:	64MSMS001008 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 20, 2019 18:48:30					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.00	7.44	9.35	11.44	13.46	16.40

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	20.4206478	142.107941
Intercept:	4.85625648	21.7614293
Correlation:	0.99982669	0.99997153

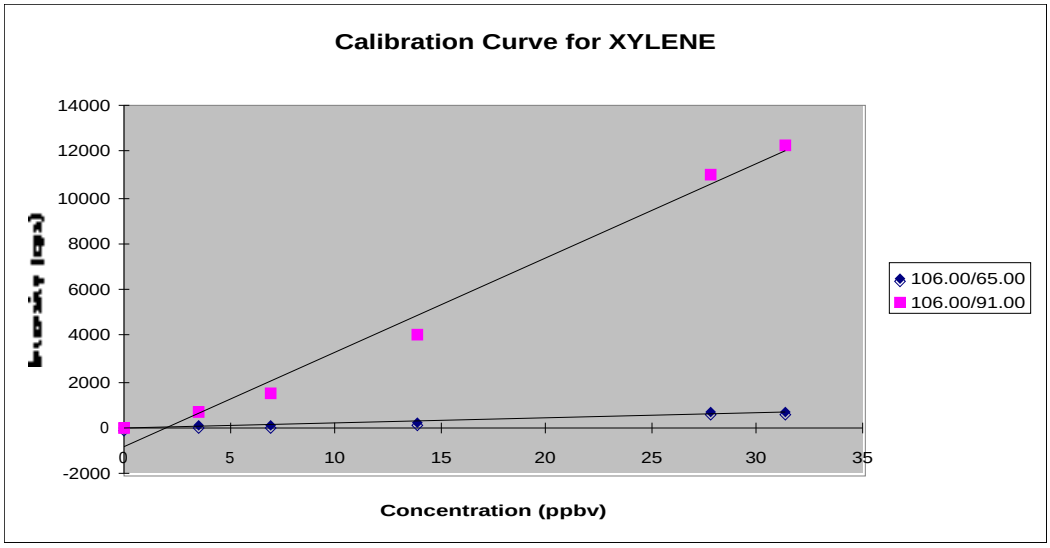
Concentration	78.00/39.00	78.00/52.00
0	3.75	15.2083333
2.31	56.9791667	357.395833
4.62	96.7708333	673.645833
9.24	191.5625	1343.95833
18.49	379.6875	2636.35417
20.8	432.916667	2985.3125



Filename:	64MSMS001008 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 20, 2019 18:49:11					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.00	7.44	9.35	11.44	13.46	16.40

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	360.137456	84.6992642
Intercept:	-49.98166	-0.2299213
Correlation:	0.99943334	0.99976819

Concentration	92.00/91.00	92.00/65.00
0	48.4375	13.2291667
2.31	801.875	202.708333
4.62	1543.4375	385.833333
9.24	3139.89583	753.854167
18.49	6745.9375	1565.9375
20.8	7393.75	1774.47917



Filename:	64MSMS001008 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 20, 2019 18:49:55					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.00	7.44	9.35	11.44	13.46	16.40

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	23.0948443	411.095852
Intercept:	-28.909304	-797.32707
Correlation:	0.99574337	0.99355977

Concentration	106.00/65.0(	106.00/91.00
0	4.16666667	22.8125
3.48	59.5833333	667.8125
6.96	107.395833	1526.97917
13.91	250.520833	4065.9375
27.82	631.041667	1.10E+04
31.3	701.5625	1.22E+04

Report	File Name	64MSMS001008 et al.			
	Sample Name	EOD Calibration - BTX 20190420			
	Date	Saturday, April 20, 2019 18:50:41			
	Time Range	2.50	to	3.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	20.42	142.11	360.14	84.70	23.09	411.10
Intercept	4.86	21.76	-49.98	-0.23	-28.91	-797.33
Intensity	3.75	15.21	48.44	13.23	4.17	22.81
Int SD	6.84	14.58	30.82	13.57	6.91	18.05
Concentration	-0.05	-0.05	0.27	0.16	1.43	2.00
Conc SD	0.34	0.10	0.09	0.16	0.30	0.04
Compound Con	-0.05		0.22		1.71	
Compound SD	0.15		0.09		0.12	
Det. Limit	1.01	0.31	0.26	0.48	0.90	0.13
Compound DL	0.66		0.37		0.51	

TAGA FLOW CALIBRATION LOG

Work Assignment: 372 Date: 4/21/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:31	1500SCCS	191	1500SCCS	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date:	Exp: 5/2/2019
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Sun, Apr 21, 2019, 7:28:37
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR21 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sun, Apr 21, 2019, 7:26:22

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.069
100.000	0.074
120.000	0.083
160.000	0.094

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.039
100.000	0.042
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Sun, Apr 21, 2019, 7:28:46
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR21 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sun, Apr 21, 2019, 7:26:22

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.068
75.000	0.069
100.000	0.074
120.000	0.083
160.000	0.094

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.039
100.000	0.042
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

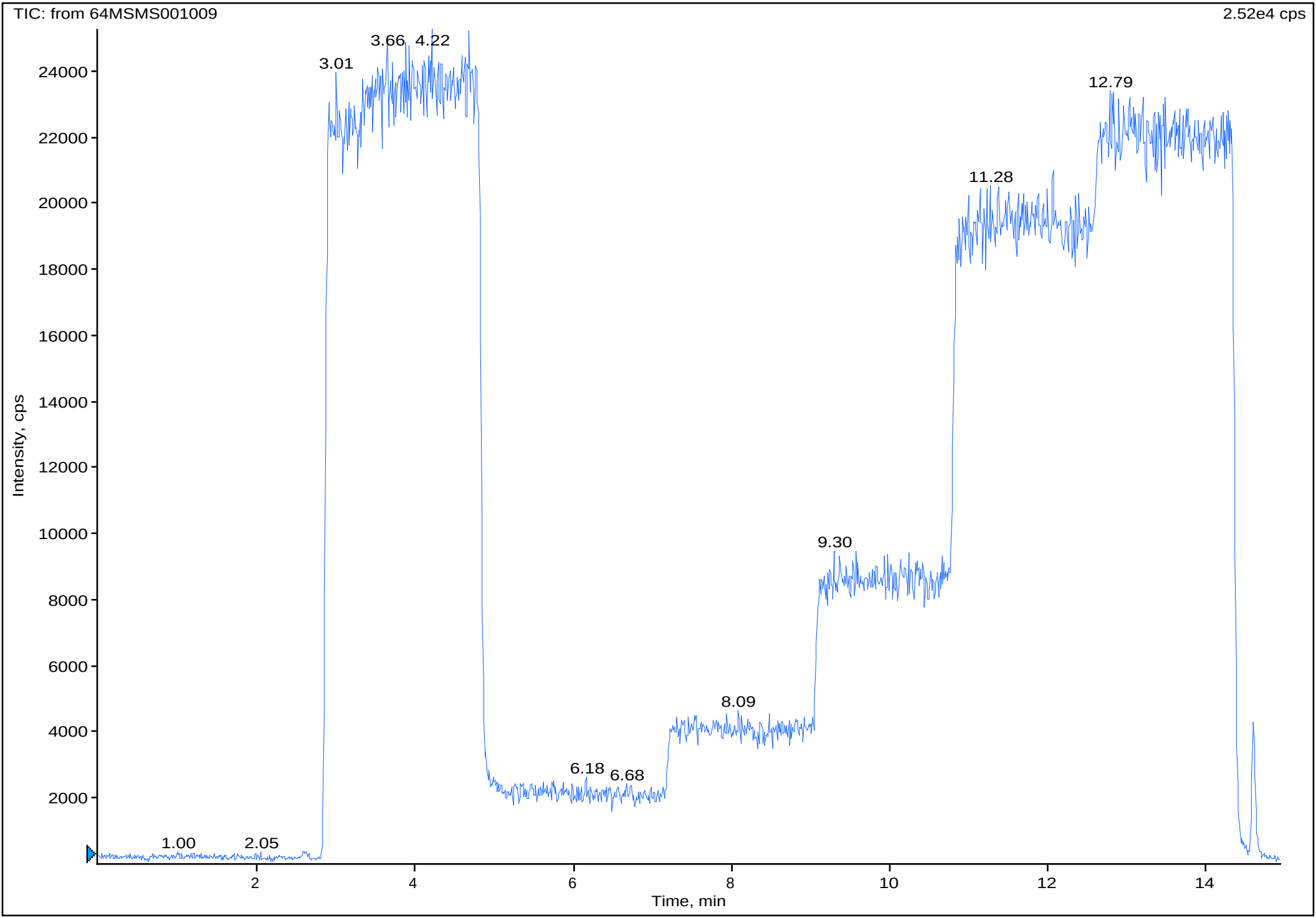
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

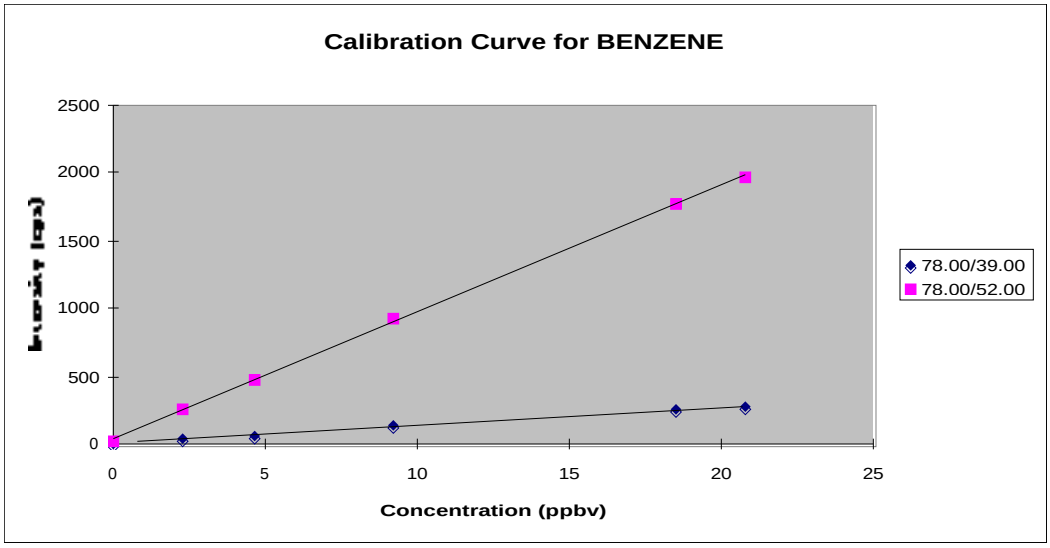
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/21/19.7.31.49
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, Apr 21, 2019 at 7:31:48; Exp. Comment: BTX

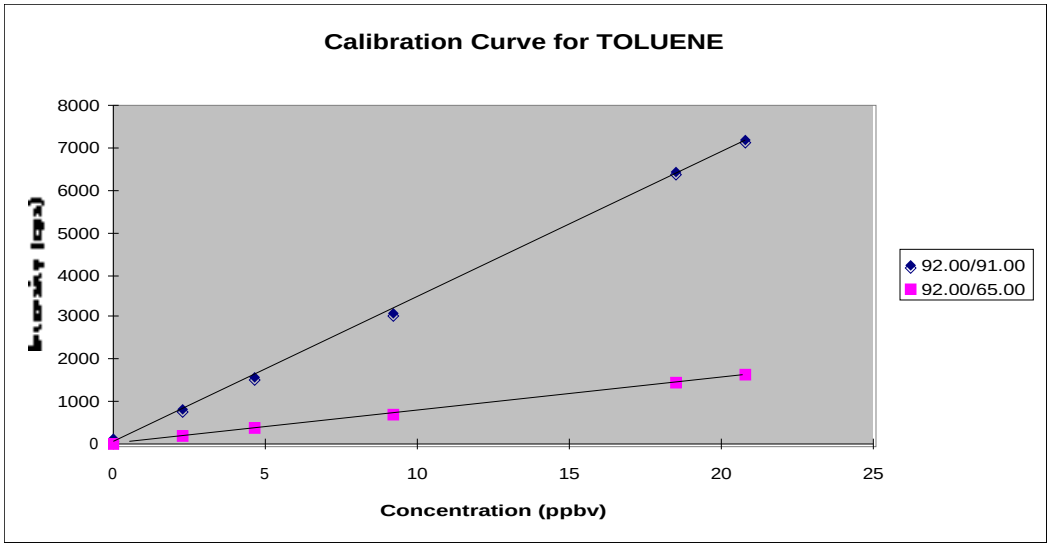




Filename:	64MSMS001009 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 21, 2019 7:48:45					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.12	8.14	9.89	11.63	13.46

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	13.2823483	93.9660823
Intercept:	5.26502183	32.2040686
Correlation:	0.99969786	0.99988097

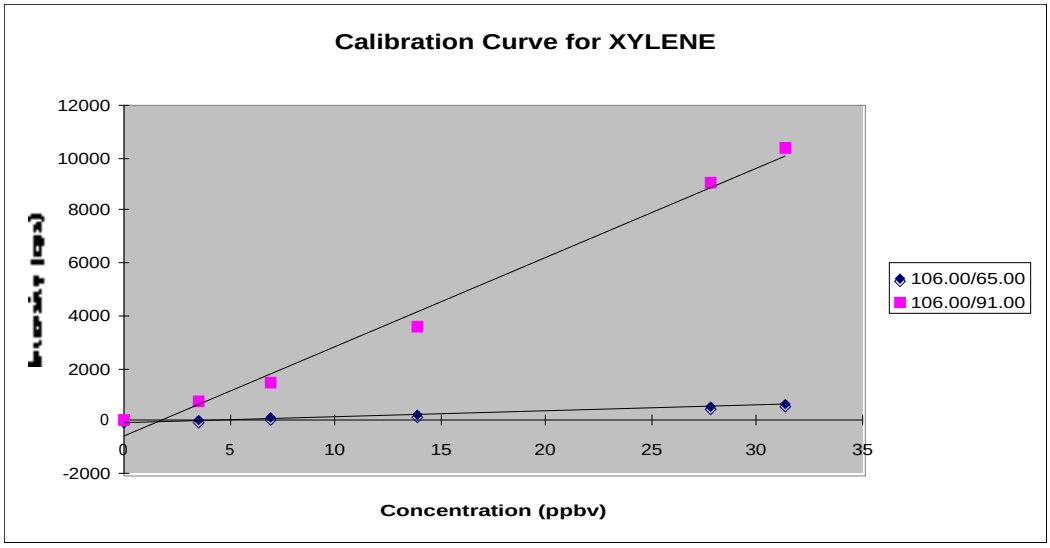
Concentration	78.00/39.00	78.00/52.00
0	3.33333333	15.8333333
2.31	34.2708333	255.104167
4.62	67.9166667	466.666667
9.24	131.979167	919.895833
18.49	252.708333	1770.625
20.8	278.020833	1976.45833



Filename:	64MSMS001009 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 21, 2019 7:49:39					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.12	8.14	9.89	11.63	13.46

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	343.63974	77.4547245
Intercept:	34.8559744	13.9039133
Correlation:	0.99971809	0.99983255

Concentration	92.00/91.00	92.00/65.00
0	99.5833333	23.9583333
2.31	848.229167	202.604167
4.62	1601.5625	358.958333
9.24	3080.625	711.979167
18.49	6443.64583	1454.89583
20.8	7193.75	1626.66667



Filename:	64MSMS001009 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 21, 2019 7:50:12					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.12	8.14	9.89	11.63	13.46

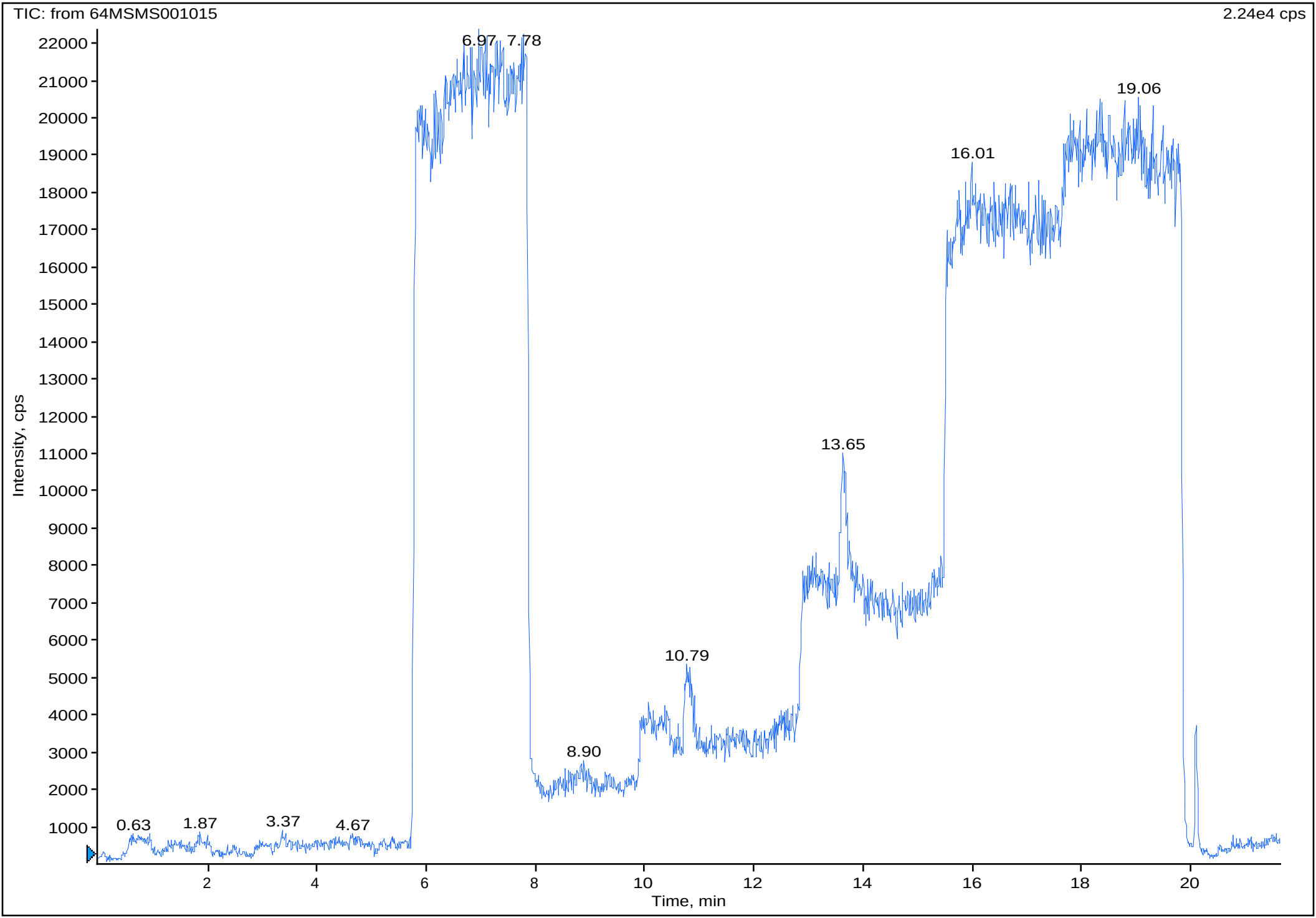
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	20.3211334	339.779192
Intercept:	-24.002918	-533.5268
Correlation:	0.99458454	0.99497311

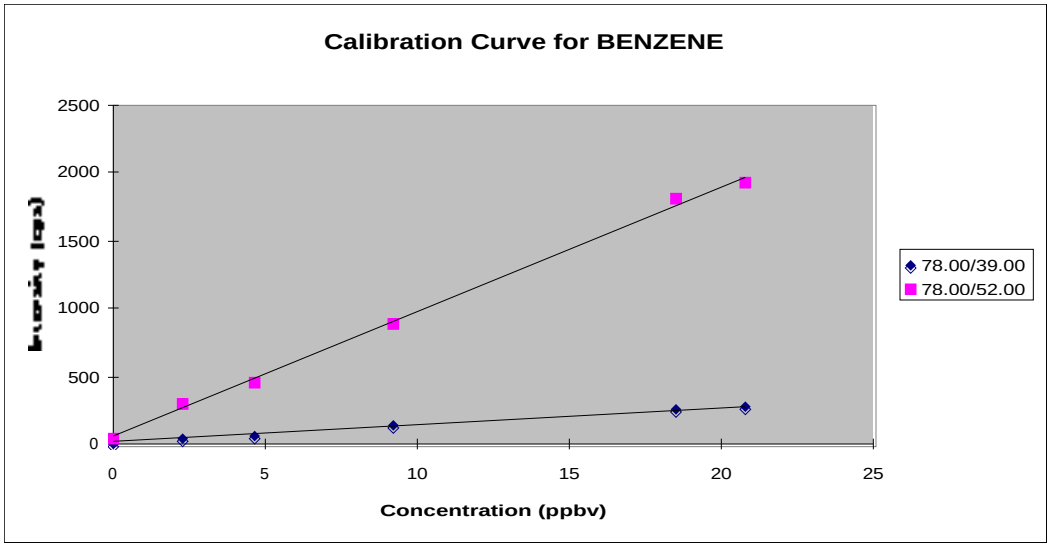
Concentration	106.00/65.0(	106.00/91.00
0	5.10416667	48.4375
3.48	52.3958333	726.25
6.96	107.395833	1433.4375
13.91	211.875	3557.1875
27.82	538.125	9025.72917
31.3	637.291667	1.04E+04

Report	File Name	64MSMS001009 et al.			
	Sample Name	BOD Calibration - BTX 20190421			
	Date	Sunday, April 21, 2019 7:50:51			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	13.28	93.97	343.64	77.45	20.32	339.78
Intercept	5.27	32.20	34.86	13.90	-24.00	-533.53
Intensity	3.33	15.83	99.58	23.96	5.10	48.44
Int SD	6.10	14.63	32.44	18.72	8.58	29.53
Concentration	-0.15	-0.17	0.19	0.13	1.43	1.71
Conc SD	0.46	0.16	0.09	0.24	0.42	0.09
Compound Con	-0.16		0.16		1.57	
Compound SD	0.22		0.12		0.18	
Det. Limit	1.38	0.47	0.28	0.73	1.27	0.26
Compound DL	0.92		0.50		0.76	

4/21/19.14.11.27
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, Apr 21, 2019 at 14:11:26; Exp. Comment: BTX

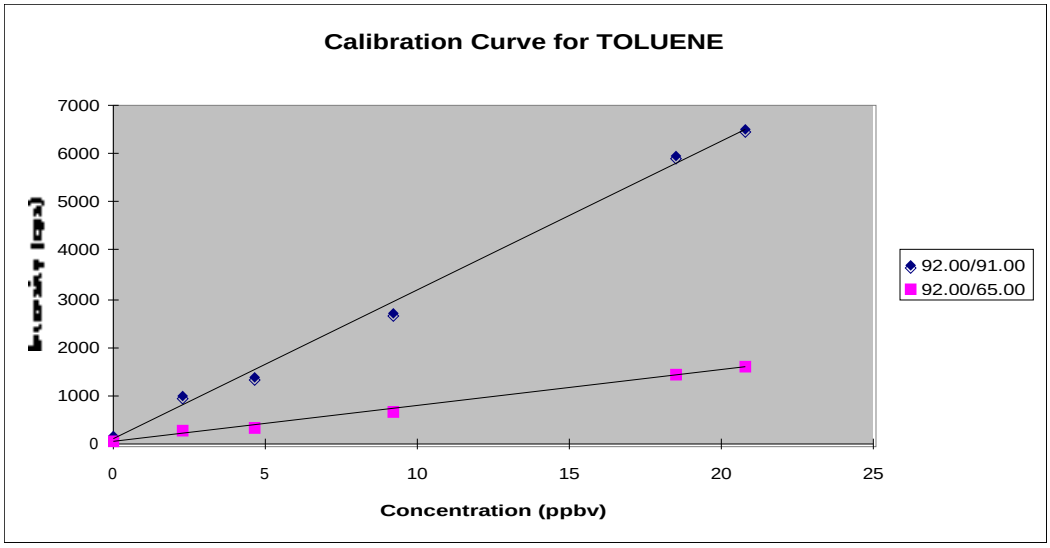




Filename:	64MSMS001015 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 21, 2019 14:35:00					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.40	8.92	11.83	14.65	16.43	18.57

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	13.0583613	91.8794791
Intercept:	9.93957445	49.8592922
Correlation:	0.99955514	0.99901684

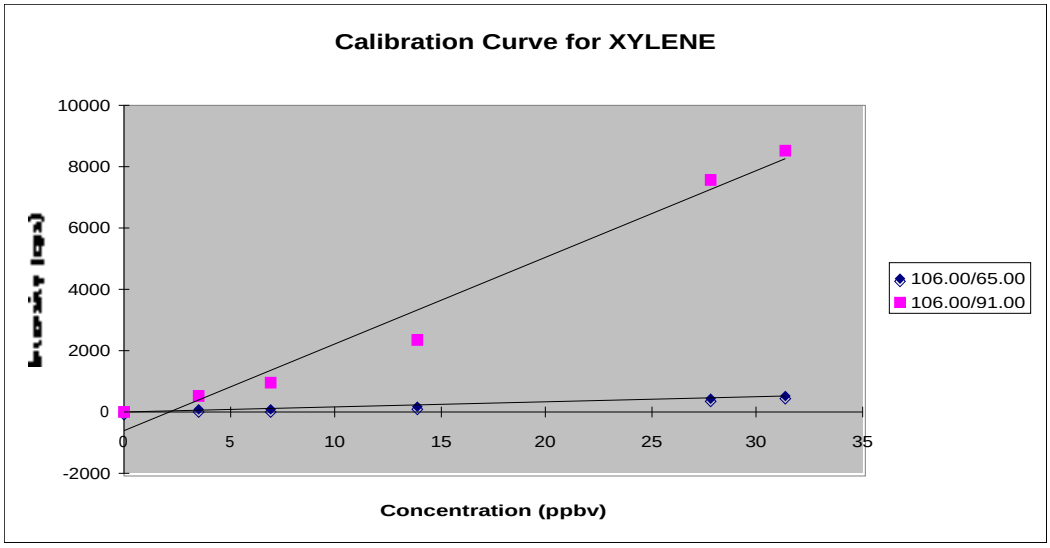
Concentration	78.00/39.00	78.00/52.00
0	9.16666667	47.7083333
2.31	45.5208333	293.645833
4.62	65.3125	449.0625
9.24	130	876.979167
18.49	252.708333	1801.97917
20.8	281.145833	1925.41667



Filename:	64MSMS001015 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 21, 2019 14:35:41					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.40	8.92	11.83	14.65	16.43	18.57

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	307.443663	74.7680066
Intercept:	107.900605	29.311059
Correlation:	0.99814775	0.99778277

Concentration	92.00/91.00	92.00/65.00
0	184.0625	44.1666667
2.31	986.5625	248.854167
4.62	1387.39583	343.75
9.24	2710.72917	654.0625
18.49	5935.9375	1451.04167
20.8	6493.54167	1580.625



Filename:	64MSMS001015 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 21, 2019 14:36:17					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.40	8.92	11.83	14.65	16.43	18.57

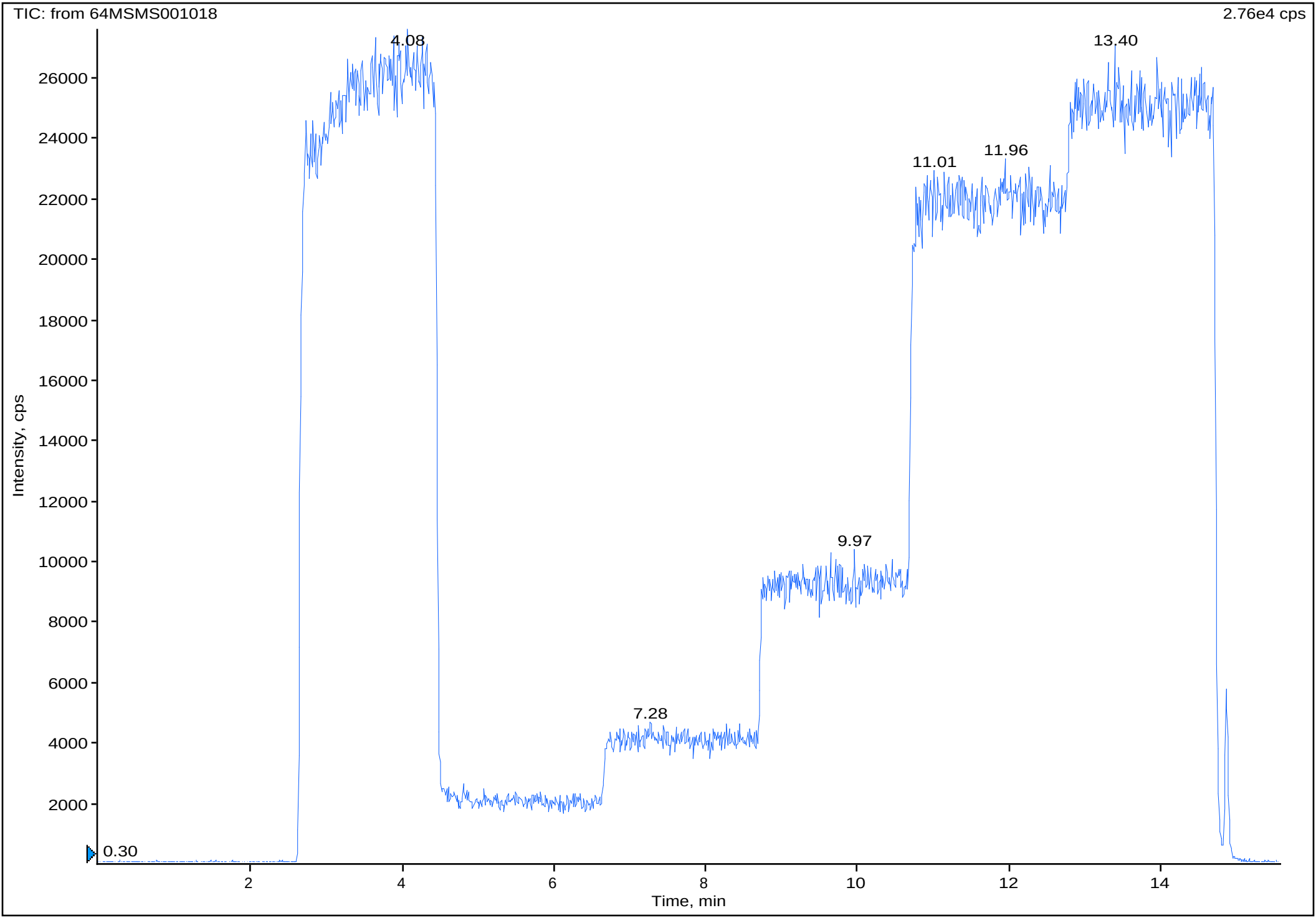
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	16.0083818	282.86726
Intercept:	-10.064382	-608.19323
Correlation:	0.99616264	0.98808442

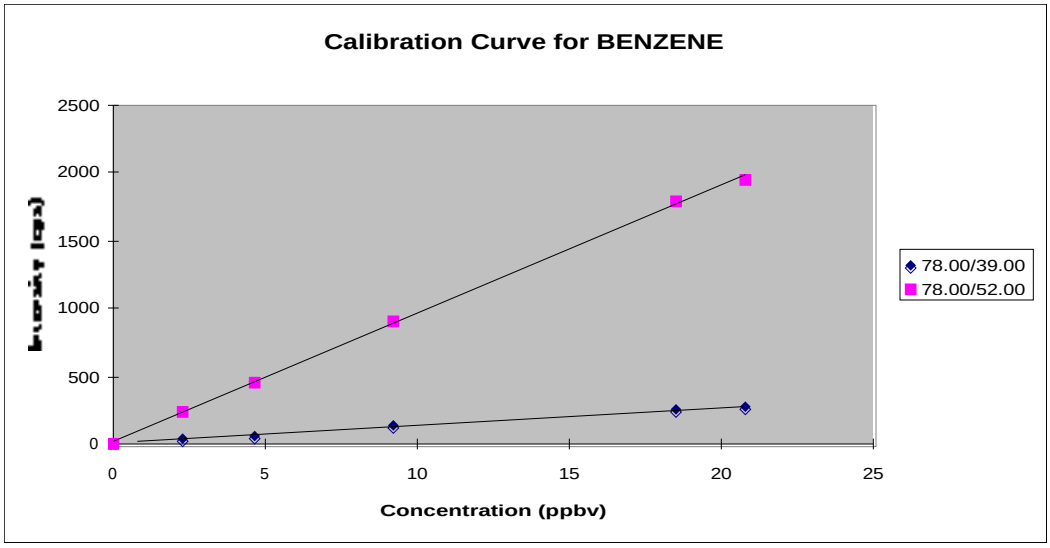
Concentration	106.00/65.0(	106.00/91.00
0	5.41666667	39.1666667
3.48	60.1041667	564.6875
6.96	83.5416667	944.375
13.91	184.6875	2388.02083
27.82	444.583333	7532.29167
31.3	497.5	8493.22917

Report	File Name	64MSMS001015 et al.			
	Sample Name	MOD Calibration - BTX 20190421			
	Date	Sunday, April 21, 2019 14:36:52			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	13.06	91.88	307.44	74.77	16.01	282.87
Intercept	9.94	49.86	107.90	29.31	-10.06	-608.19
Intensity	8.96	55.42	261.56	61.56	7.08	46.88
Int SD	10.90	41.50	79.45	32.26	9.72	30.79
Concentration	-0.08	0.06	0.50	0.43	1.07	2.32
Conc SD	0.84	0.45	0.26	0.43	0.61	0.11
Compound Con	-0.01		0.47		1.69	
Compound SD	0.45		0.24		0.25	
Det. Limit	2.51	1.35	0.78	1.29	1.82	0.33
Compound DL	1.93		1.03		1.07	

4/21/19.18.19.45
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, Apr 21, 2019 at 18:19:45; Exp. Comment: BTX

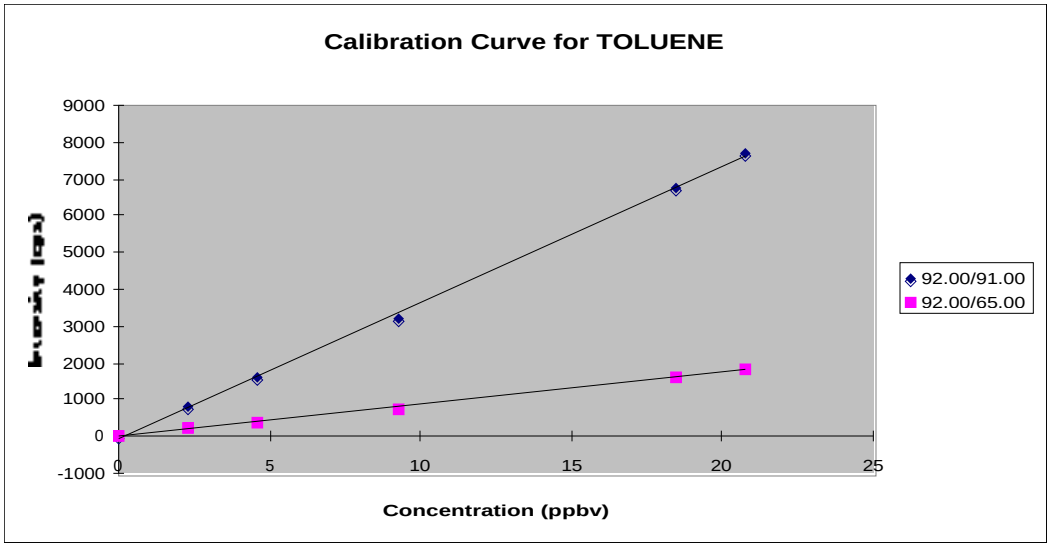




Filename:	64MSMS001018 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 21, 2019 18:37:08					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.61	7.73	9.63	11.73	13.68

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	13.1387778	94.214046
Intercept:	6.67889685	20.8842789
Correlation:	0.99956448	0.99972045

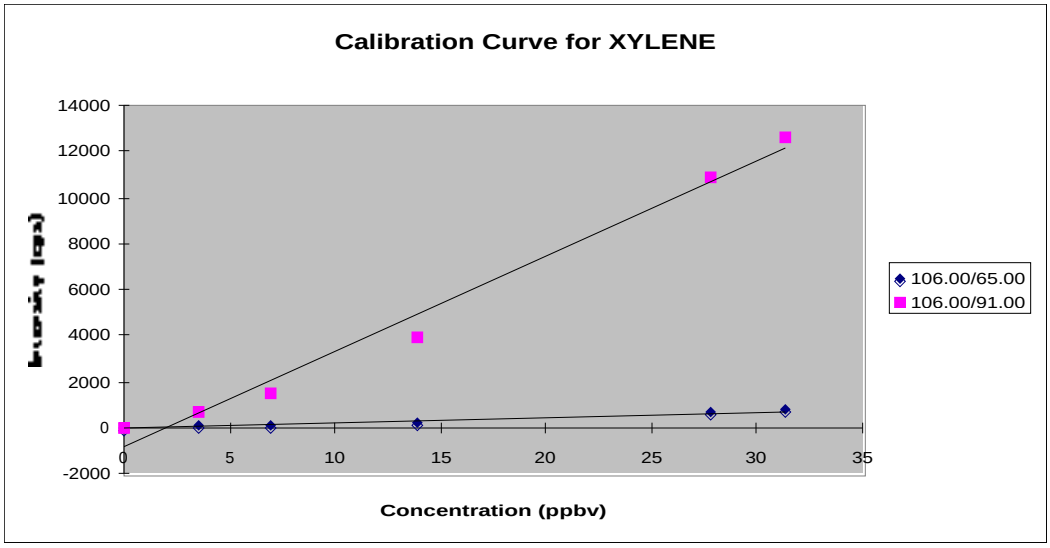
Concentration	78.00/39.00	78.00/52.00
0	2.1875	6.45833333
2.31	40.1041667	244.583333
4.62	67.0833333	450.3125
9.24	131.25	911.666667
18.49	251.666667	1783.85417
20.8	276.458333	1953.54167



Filename:	64MSMS001018 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 21, 2019 18:37:48					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.61	7.73	9.63	11.73	13.68

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	369.819341	87.7319639
Intercept:	-64.561358	-14.321203
Correlation:	0.99971605	0.99950656

Concentration	92.00/91.00	92.00/65.00
0	15.5208333	4.6875
2.31	826.458333	202.1875
4.62	1581.35417	381.145833
9.24	3238.64583	752.083333
18.49	6767.1875	1616.25
20.8	7693.64583	1823.33333



Filename:	64MSMS001018 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 21, 2019 18:38:21					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.61	7.73	9.63	11.73	13.68

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	23.7064601	416.980802
Intercept:	-29.206093	-858.62362
Correlation:	0.99562263	0.99261611

Concentration	106.00/65.0(	106.00/91.00
0	1.875	5.625
3.48	62.3958333	680.416667
6.96	117.708333	1513.64583
13.91	256.875	3955
27.82	622.708333	1.09E+04
31.3	741.979167	1.26E+04

Report	File Name	64MSMS001018 et al.			
	Sample Name	EOD Calibration - BTX 20190421			
	Date	Sunday, April 21, 2019 18:38:52			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	13.14	94.21	369.82	87.73	23.71	416.98
Intercept	6.68	20.88	-64.56	-14.32	-29.21	-858.62
Intensity	2.19	6.46	15.52	4.69	1.88	5.63
Int SD	4.86	8.33	14.79	8.07	4.18	7.51
Concentration	-0.34	-0.15	0.22	0.22	1.31	2.07
Conc SD	0.37	0.09	0.04	0.09	0.18	0.02
Compound Con	-0.25		0.22		1.69	
Compound SD	0.16		0.05		0.07	
Det. Limit	1.11	0.27	0.12	0.28	0.53	0.05
Compound DL	0.69		0.20		0.29	

TAGA FLOW CALIBRATION LOG

Work Assignment: 372 Date: 4/22/2019

Time	Reference Flow Meter	Sample Air Flow (SAF) Reference Meter Reading	Sample Air Flow (SAF) MKS Meter Reading	MKS Channel 3 Span _____ Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:37	191	191	1500SCCS	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15 -0168		Calibration Date:	5/2/2019

Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration: Reference Meter Reading	Channel 1 Standard Gas Flow Calibration: MKS Meter Reading	MKS Channel 1 Span _____ Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration: Reference Meter Reading	Channel 2 Standard Gas Flow Calibration: MKS Meter Reading	MKS Channel 2 Span _____ Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Mon, Apr 22, 2019, 7:00:27
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR22 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Mon, Apr 22, 2019, 6:56:49

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.065
75.000	0.068
100.000	0.074
120.000	0.083
160.000	0.093

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.040
100.000	0.042
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Mon, Apr 22, 2019, 7:00:37
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR22 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Mon, Apr 22, 2019, 6:56:49

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.065
75.000	0.068
100.000	0.074
120.000	0.083
160.000	0.093

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.040
100.000	0.042
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

TAGA FLOW CALIBRATION LOG

Work Assignment: 372 Date: 4/23/2019

Time	Reference Flow Meter	Sample Air Flow (SAF) Reference Meter Reading	Sample Air Flow (SAF) MKS Meter Reading	MKS Channel 3 Span _____ Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:37	191	191	191	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18 DWY15 - 0168		Calibration Date: Exp: 5/2/2019	

Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration Reference Meter Reading	Channel 1 Standard Gas Flow Calibration MKS Meter Reading	MKS Channel 1 Span _____ Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration Reference Meter Reading	Channel 2 Standard Gas Flow Calibration MKS Meter Reading	MKS Channel 2 Span _____ Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Tue, Apr 23, 2019, 6:56:50
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR23 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Tue, Apr 23, 2019, 6:54:13

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.074
120.000	0.083
160.000	0.092

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.042
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Tue, Apr 23, 2019, 6:57:00
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR23 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Tue, Apr 23, 2019, 6:54:13

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.074
120.000	0.083
160.000	0.092

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.042
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

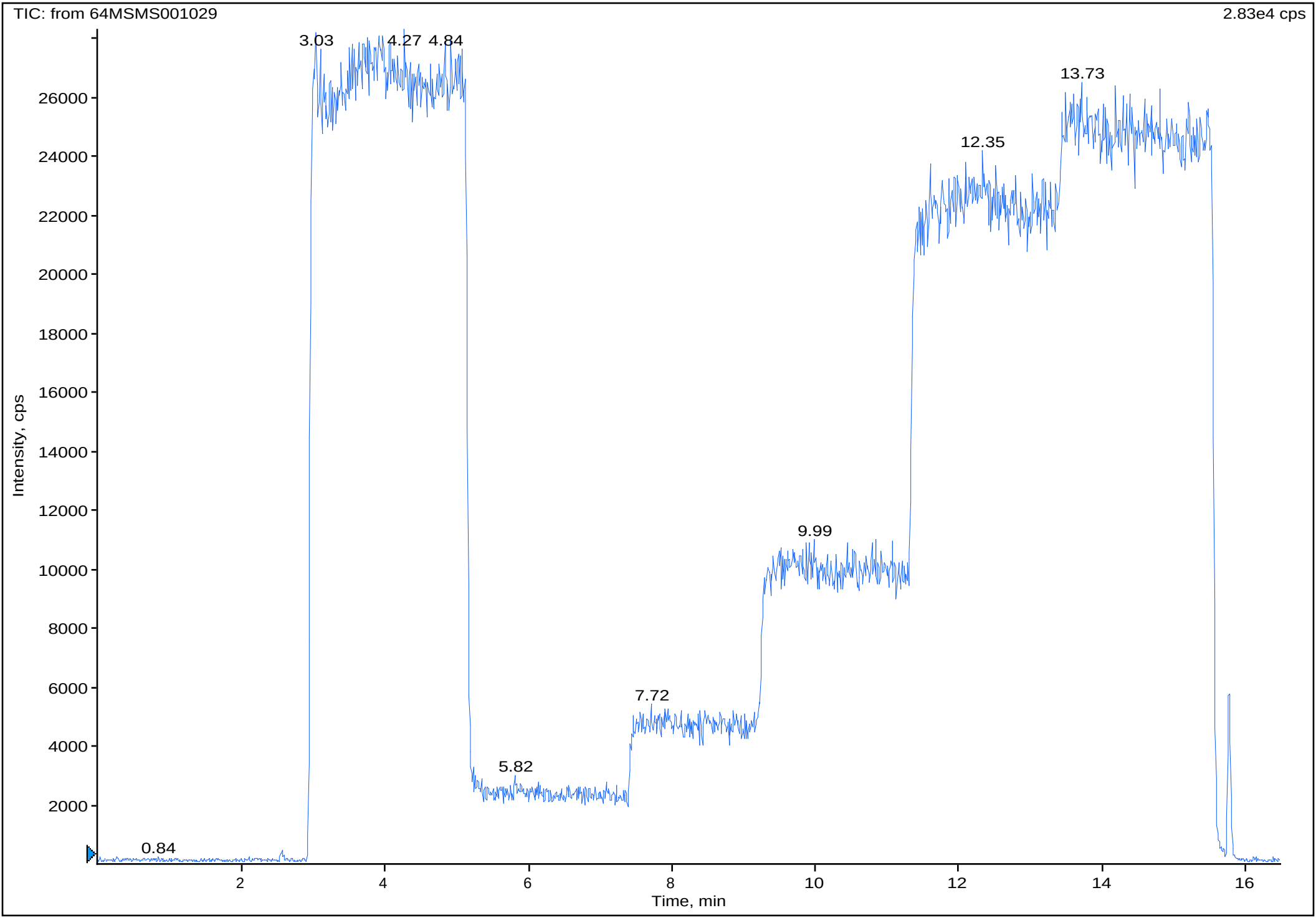
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

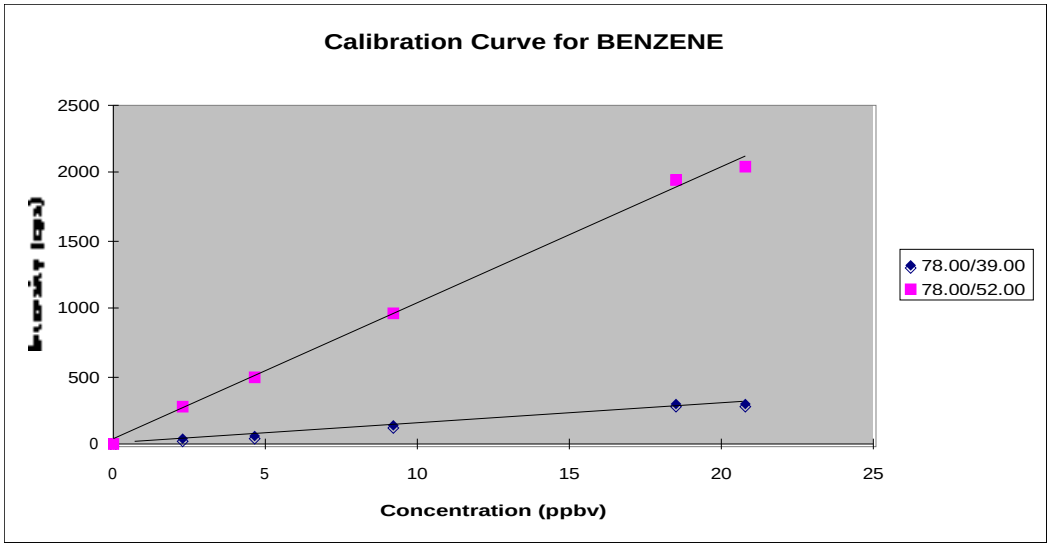
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/23/19.6.58.57
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Tue, Apr 23, 2019 at 6:58:56; Exp. Comment: BTX

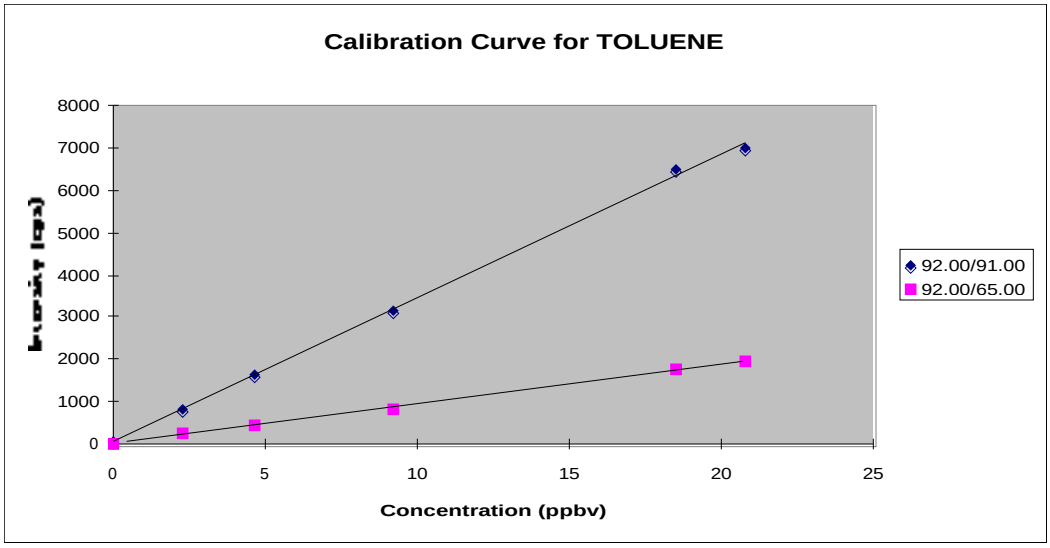




Filename:	64MSMS001029 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 23, 2019 7:17:29					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.35	8.32	10.26	12.31	14.47

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	14.4407358	100.265696
Intercept:	5.3389097	33.5926911
Correlation:	0.99624604	0.99875736

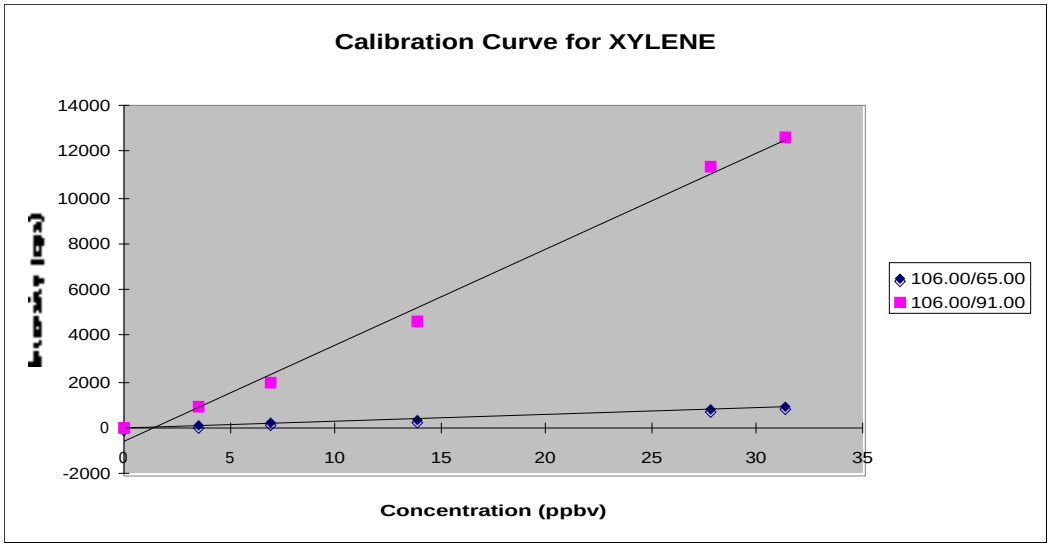
Concentration	78.00/39.00	78.00/52.00
0	2.60416667	7.70833333
2.31	43.5416667	278.020833
4.62	68.5416667	500.9375
9.24	137.291667	967.1875
18.49	290.208333	1953.4375
20.8	290.729167	2055



Filename:	64MSMS001029 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 23, 2019 7:18:22					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.35	8.32	10.26	12.31	14.47

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	339.121142	92.9558484
Intercept:	45.372885	7.47949641
Correlation:	0.99958928	0.99975757

Concentration	92.00/91.00	92.00/65.00
0	51.6666667	16.0416667
2.31	828.645833	232.916667
4.62	1619.375	423.020833
9.24	3128.54167	848.125
18.49	6460.72917	1752.29167
20.8	6990.9375	1927.8125



Filename:	64MSMS001029 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 23, 2019 7:19:07					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.35	8.32	10.26	12.31	14.47

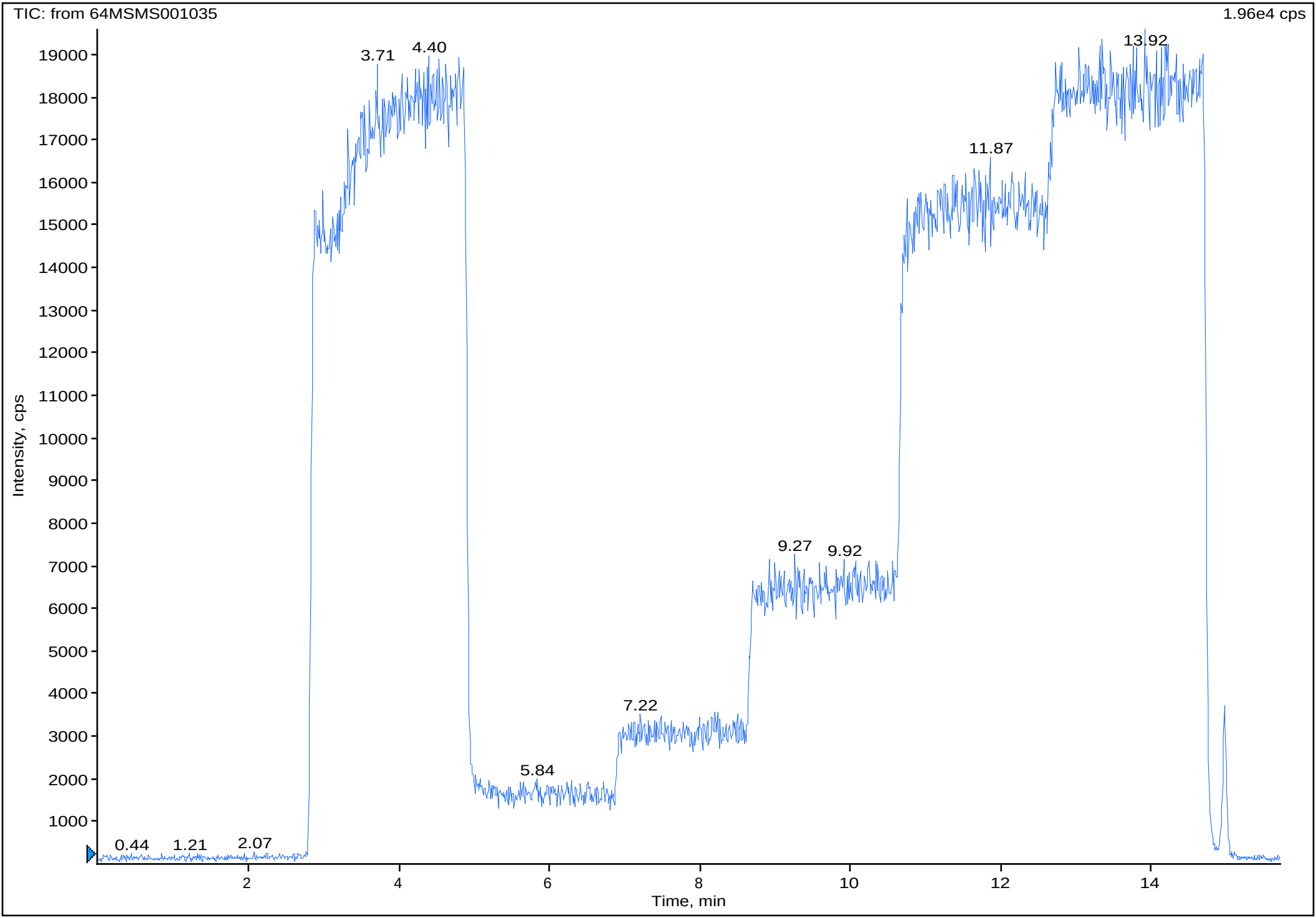
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	27.8385513	417.803153
Intercept:	-26.603563	-579.3
Correlation:	0.99720113	0.99649774

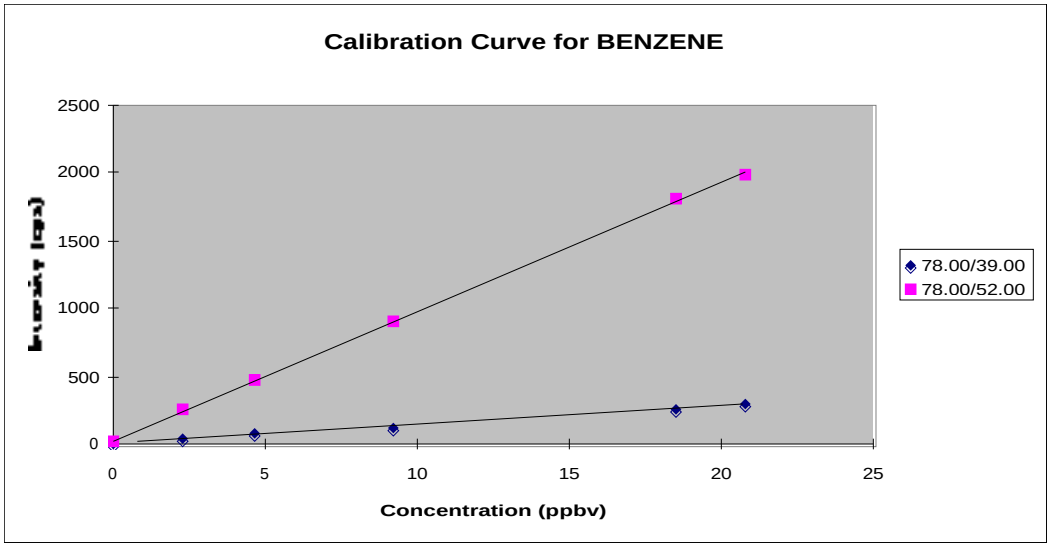
Concentration	106.00/65.0(	106.00/91.00
0	3.95833333	22.9166667
3.48	72.7083333	903.75
6.96	158.645833	1950.83333
13.91	312.291667	4572.1875
27.82	754.583333	1.13E+04
31.3	861.875	1.26E+04

Report	File Name	64MSMS001029 et al.			
	Sample Name	BOD Calibration - BTX 20190423			
	Date	Tuesday, April 23, 2019 7:19:48			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	14.44	100.27	339.12	92.96	27.84	417.80
Intercept	5.34	33.59	45.37	7.48	-26.60	-579.30
Intensity	2.60	7.71	51.67	16.04	3.96	22.92
Int SD	5.85	8.14	25.86	14.18	6.72	16.41
Concentration	-0.19	-0.26	0.02	0.09	1.10	1.44
Conc SD	0.40	0.08	0.08	0.15	0.24	0.04
Compound Con	-0.22		0.06		1.27	
Compound SD	0.17		0.08		0.10	
Det. Limit	1.21	0.24	0.23	0.46	0.72	0.12
Compound DL	0.73		0.34		0.42	

4/23/19.12.53.28
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Tue, Apr 23, 2019 at 12:53:27; Exp. Comment: BTX

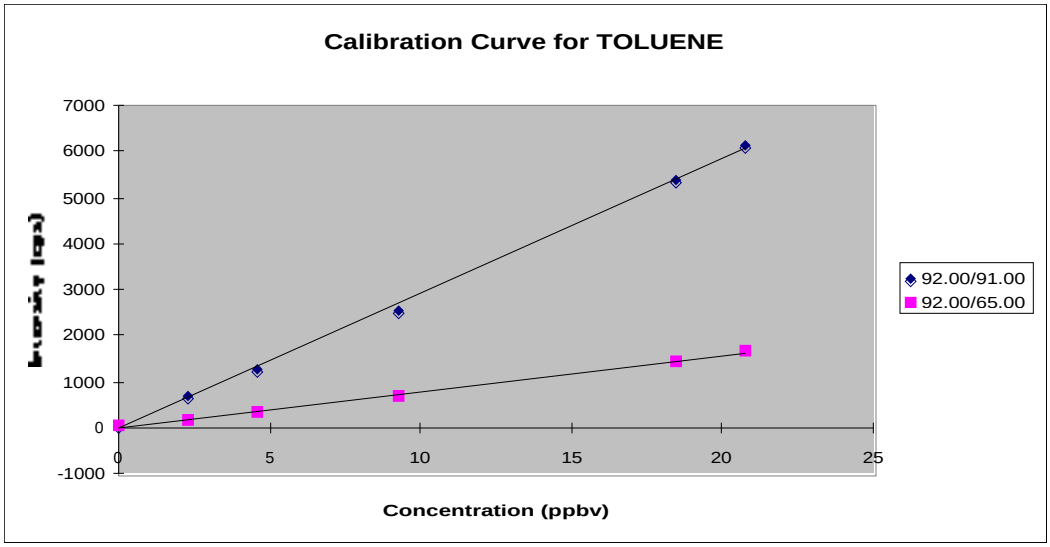




Filename:	64MSMS001035 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 23, 2019 13:11:01					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.89	7.75	9.63	11.66	13.61

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	13.5321942	95.3359158
Intercept:	5.1431125	26.833907
Correlation:	0.99960034	0.99986233

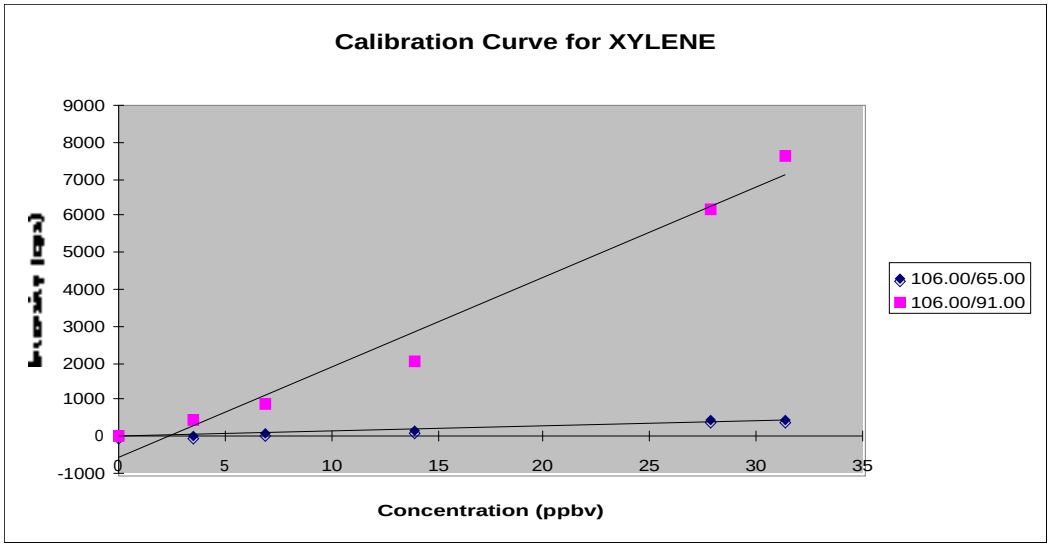
Concentration	78.00/39.00	78.00/52.00
0	3.85416667	18.9583333
2.31	36.1458333	256.5625
4.62	71.875	471.875
9.24	127.8125	896.25
18.49	251.354167	1809.79167
20.8	290.3125	1994.89583



Filename:	64MSMS001035 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 23, 2019 13:11:42					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.89	7.75	9.63	11.66	13.61

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	292.499748	78.2003819
Intercept:	-39.783785	-8.5092803
Correlation:	0.99938218	0.99938947

Concentration	92.00/91.00	92.00/65.00
0	53.75	15.7291667
2.31	671.354167	181.041667
4.62	1252.1875	333.020833
9.24	2522.8125	686.666667
18.49	5359.47917	1423.33333
20.8	6123.75	1646.14583



Filename:	64MSMS001035 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 23, 2019 13:12:10					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.89	7.75	9.63	11.66	13.61

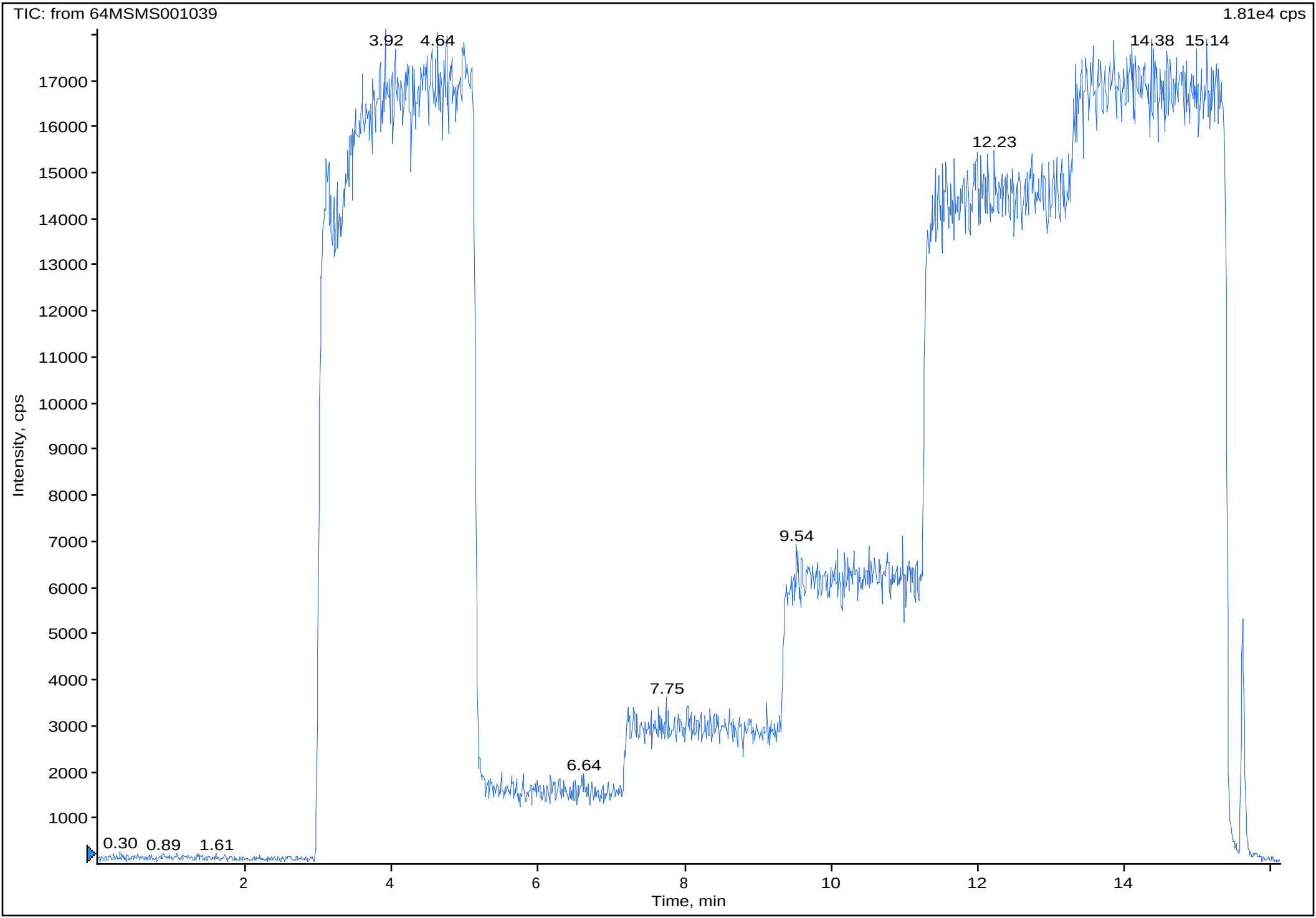
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	15.4897637	246.048993
Intercept:	-15.592596	-549.51408
Correlation:	0.99704739	0.98689892

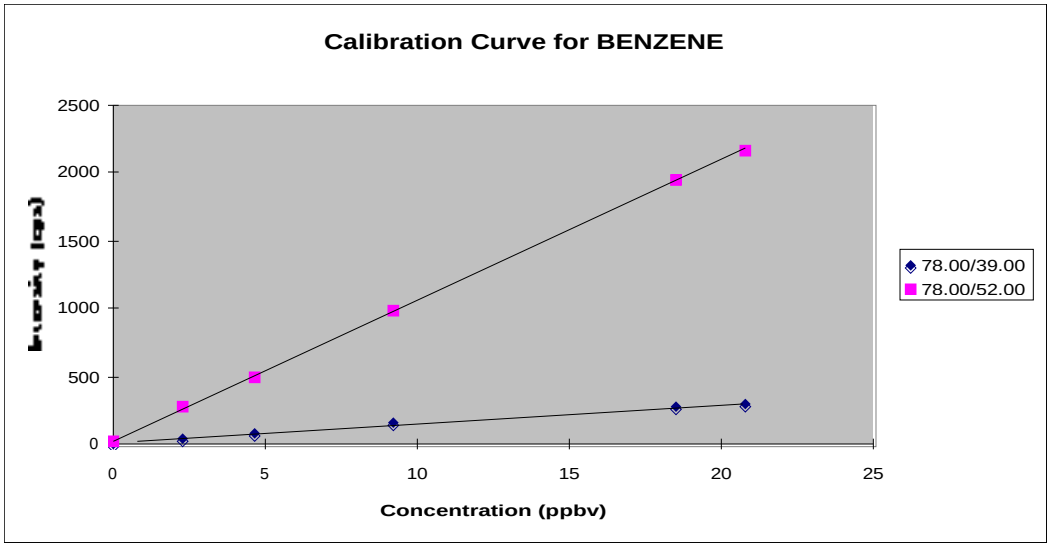
Concentration	106.00/65.0(	106.00/91.00
0	3.02083333	30
3.48	41.0416667	443.541667
6.96	82.5	858.541667
13.91	175.729167	2055.10417
27.82	414.6875	6206.25
31.3	482.395833	7647.1875

Report	File Name	64MSMS001035 et al.			
	Sample Name	MOD Calibration - BTX 20190423			
	Date	Tuesday, April 23, 2019 13:12:41			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	13.53	95.34	292.50	78.20	15.49	246.05
Intercept	5.14	26.83	-39.78	-8.51	-15.59	-549.51
Intensity	3.85	18.96	53.75	15.73	3.02	30.00
Int SD	6.55	14.47	27.46	13.12	7.27	24.45
Concentration	-0.10	-0.08	0.32	0.31	1.20	2.36
Conc SD	0.48	0.15	0.09	0.17	0.47	0.10
Compound Con	-0.09		0.31		1.78	
Compound SD	0.22		0.09		0.20	
Det. Limit	1.45	0.46	0.28	0.50	1.41	0.30
Compound DL	0.95		0.39		0.85	

4/23/19.18.38.31
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Tue, Apr 23, 2019 at 18:38:30; Exp. Comment: BTX

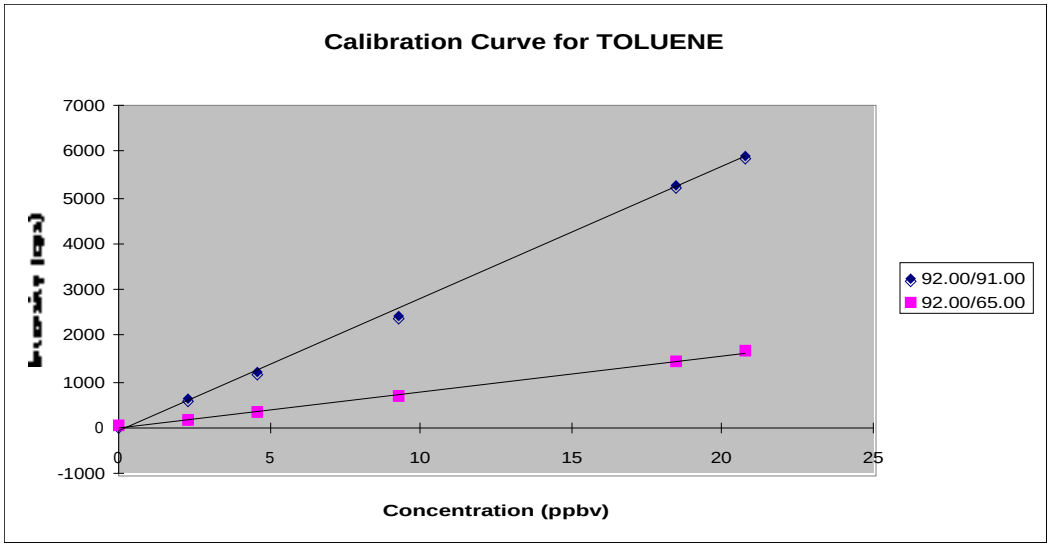




Filename:	64MSMS001039 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 23, 2019 18:55:29					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.23	8.22	10.29	12.30	14.30

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	13.9595749	103.613544
Intercept:	9.09199628	22.7168675
Correlation:	0.99772995	0.99988029

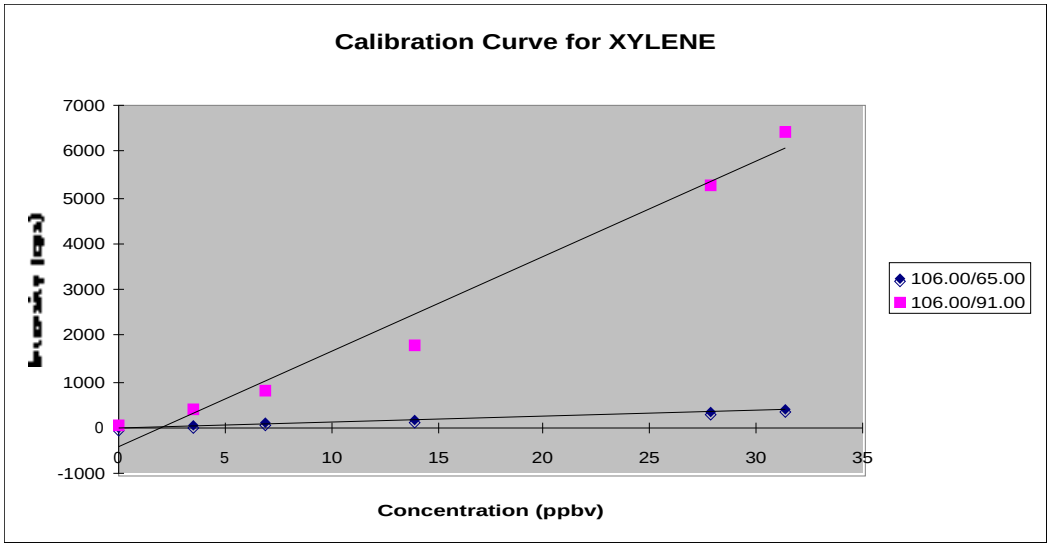
Concentration	78.00/39.00	78.00/52.00
0	3.85416667	16.9791667
2.31	38.0208333	265.9375
4.62	73.9583333	492.5
9.24	151.354167	993.333333
18.49	271.875	1955.41667
20.8	289.6875	2158.54167



Filename:	64MSMS001039 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 23, 2019 18:56:16					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.23	8.22	10.29	12.30	14.30

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	285.086986	78.7266097
Intercept:	-56.629737	-13.008796
Correlation:	0.9992659	0.99925555

Concentration	92.00/91.00	92.00/65.00
0	57.2916667	17.1875
2.31	624.270833	176.5625
4.62	1187.8125	332.708333
9.24	2428.64583	672.604167
18.49	5264.16667	1444.375
20.8	5908.95833	1644.6875



Filename:	64MSMS001039 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 23, 2019 18:56:48					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.23	8.22	10.29	12.30	14.30

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	13.2563923	206.854156
Intercept:	-9.0192051	-420.55065
Correlation:	0.99825864	0.98864256

Concentration	106.00/65.0(	106.00/91.00
0	4.0625	20.7291667
3.48	38.3333333	412.291667
6.96	75.4166667	798.541667
13.91	161.041667	1804.375
27.82	358.75	5265.10417
31.3	414.791667	6441.77083

Report	File Name	64MSMS001039 et al.			
	Sample Name	EOD Calibration - BTX 20190423			
	Date	Tuesday, April 23, 2019 18:57:38			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	13.96	103.61	285.09	78.73	13.26	206.85
Intercept	9.09	22.72	-56.63	-13.01	-9.02	-420.55
Intensity	3.85	16.98	57.29	17.19	4.06	20.73
Int SD	7.01	15.64	25.69	15.40	7.05	17.67
Concentration	-0.38	-0.06	0.40	0.38	0.99	2.13
Conc SD	0.50	0.15	0.09	0.20	0.53	0.09
Compound Con	-0.22		0.39		1.56	
Compound SD	0.23		0.10		0.22	
Det. Limit	1.51	0.45	0.27	0.59	1.59	0.26
Compound DL	0.98		0.43		0.93	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 4/24/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3250	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:59	1500 SCCS	191	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date:	Exp: 5/2/2019

Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Wed, Apr 24, 2019, 7:27:34
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR24 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Wed, Apr 24, 2019, 7:23:46

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.074
120.000	0.083
160.000	0.094

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.042
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Wed, Apr 24, 2019, 7:27:45
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR24 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Wed, Apr 24, 2019, 7:23:46

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.074
120.000	0.083
160.000	0.094

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.042
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

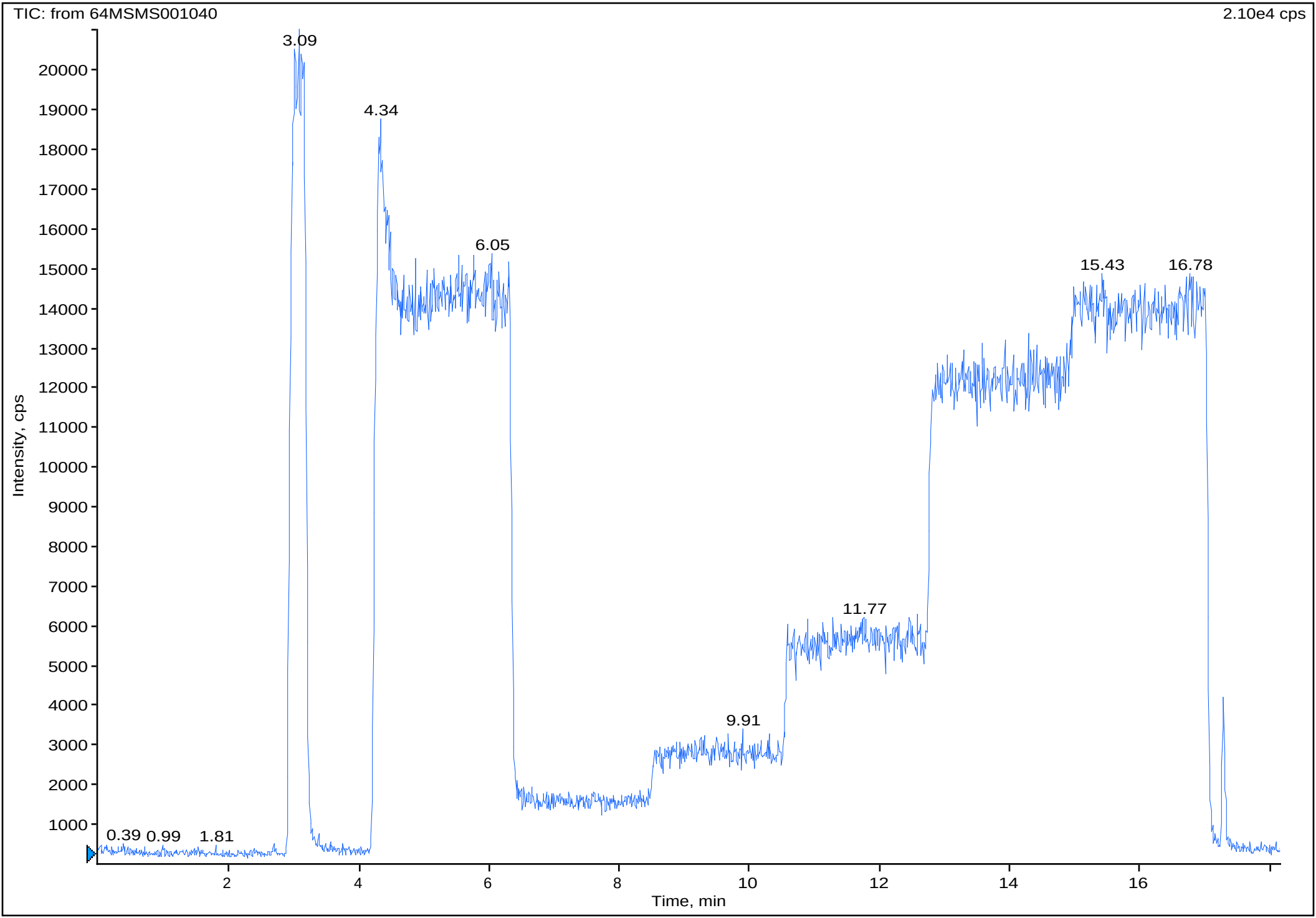
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

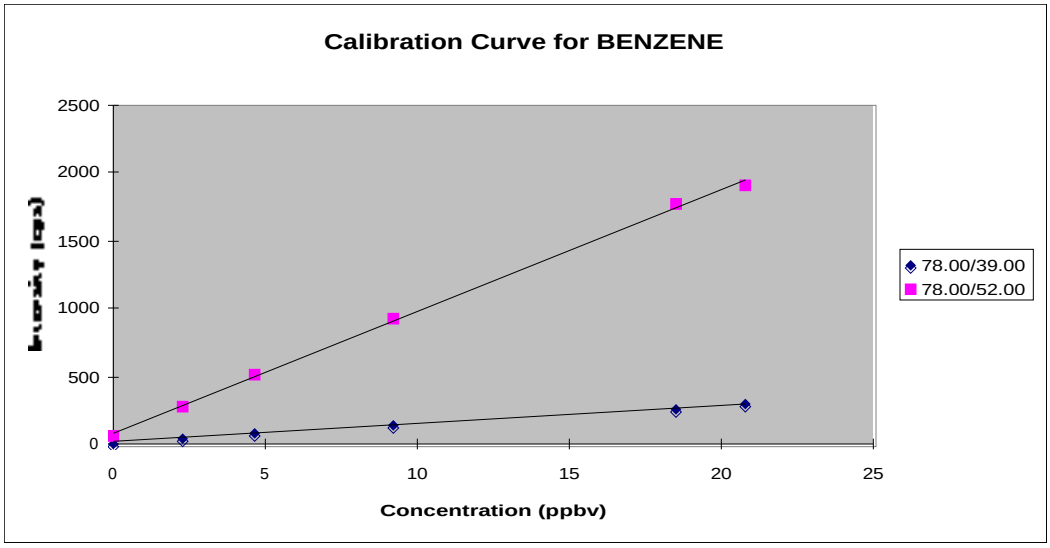
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/24/19.7.30.10
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, Apr 24, 2019 at 7:30:10; Exp. Comment: BTX

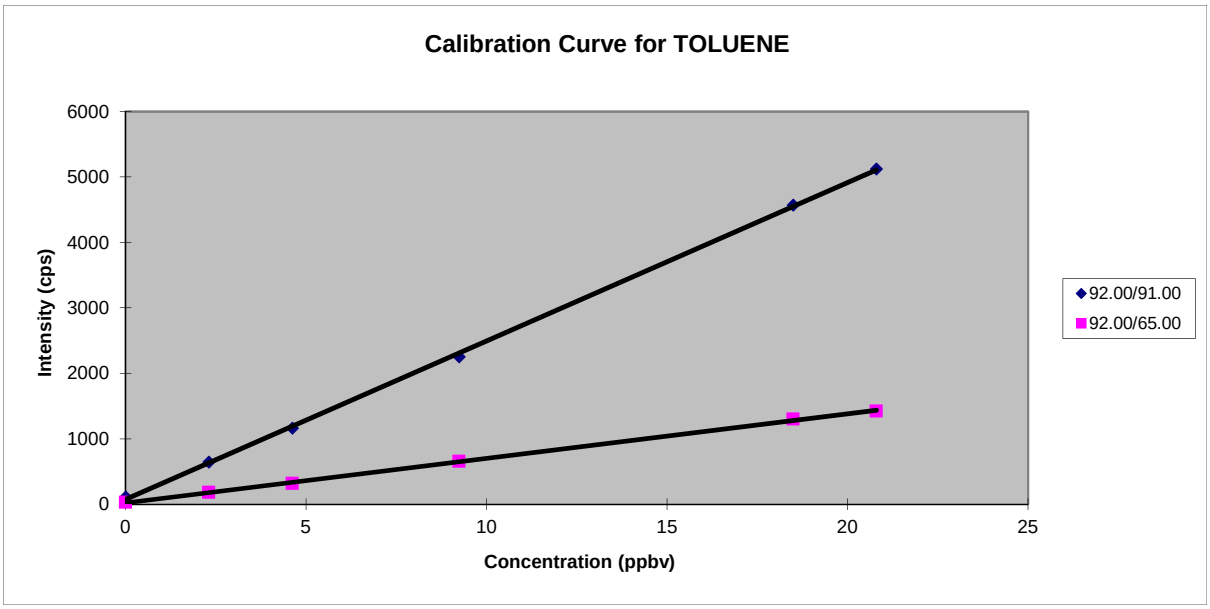




Filename:	64MSMS001040 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 24, 2019 7:50:12					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.42	9.50	11.53	13.80	15.86

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	13.3521039	90.3979111
Intercept:	14.1010251	74.1164551
Correlation:	0.9989449	0.99941764

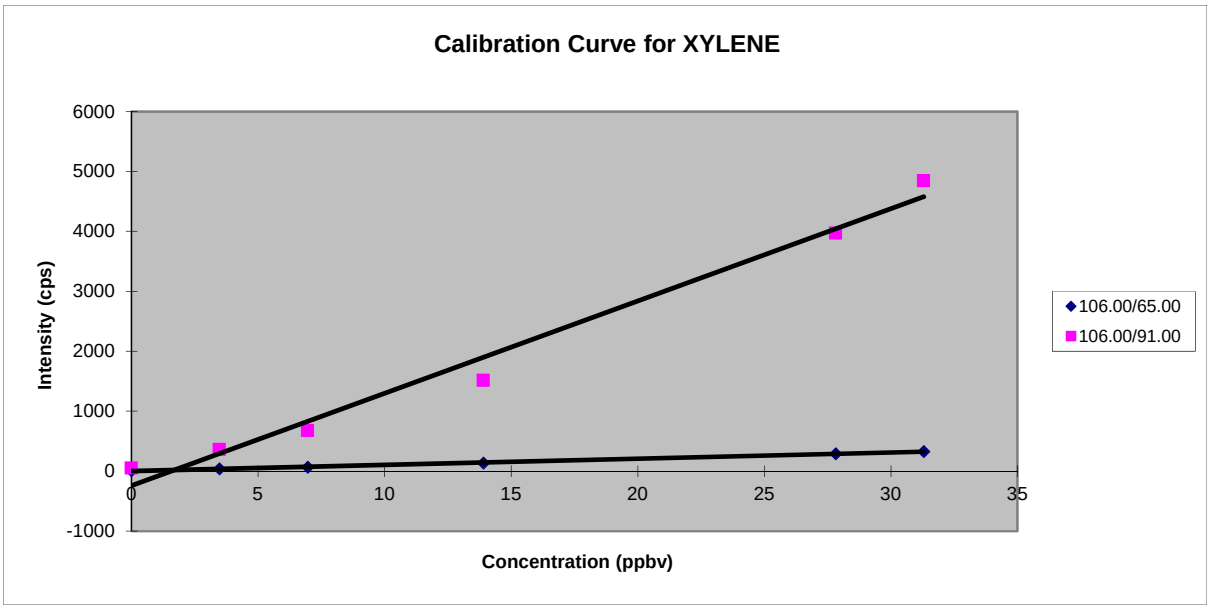
Concentration	78.00/39.00	78.00/52.00
0	7.29166667	51.7708333
2.31	46.3541667	278.541667
4.62	76.7708333	503.541667
9.24	146.458333	934.479167
18.49	259.166667	1773.85417
20.8	289.072165	1915.97938



Filename:	64MSMS001040 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 24, 2019 7:51:03					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.42	9.50	11.53	13.80	15.86

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	242.103974	68.1129862
Intercept:	73.5538678	21.2380021
Correlation:	0.99985198	0.99966489

Concentratior	92.00/91.00	92.00/65.00
0	113.958333	30.1041667
2.31	645.625	182.1875
4.62	1164.16667	316.458333
9.24	2252.60417	651.875
18.49	4569.375	1301.875
20.8	5122.68041	1422.47423



Filename:	64MSMS001040 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 24, 2019 7:51:35					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.42	9.50	11.53	13.80	15.86

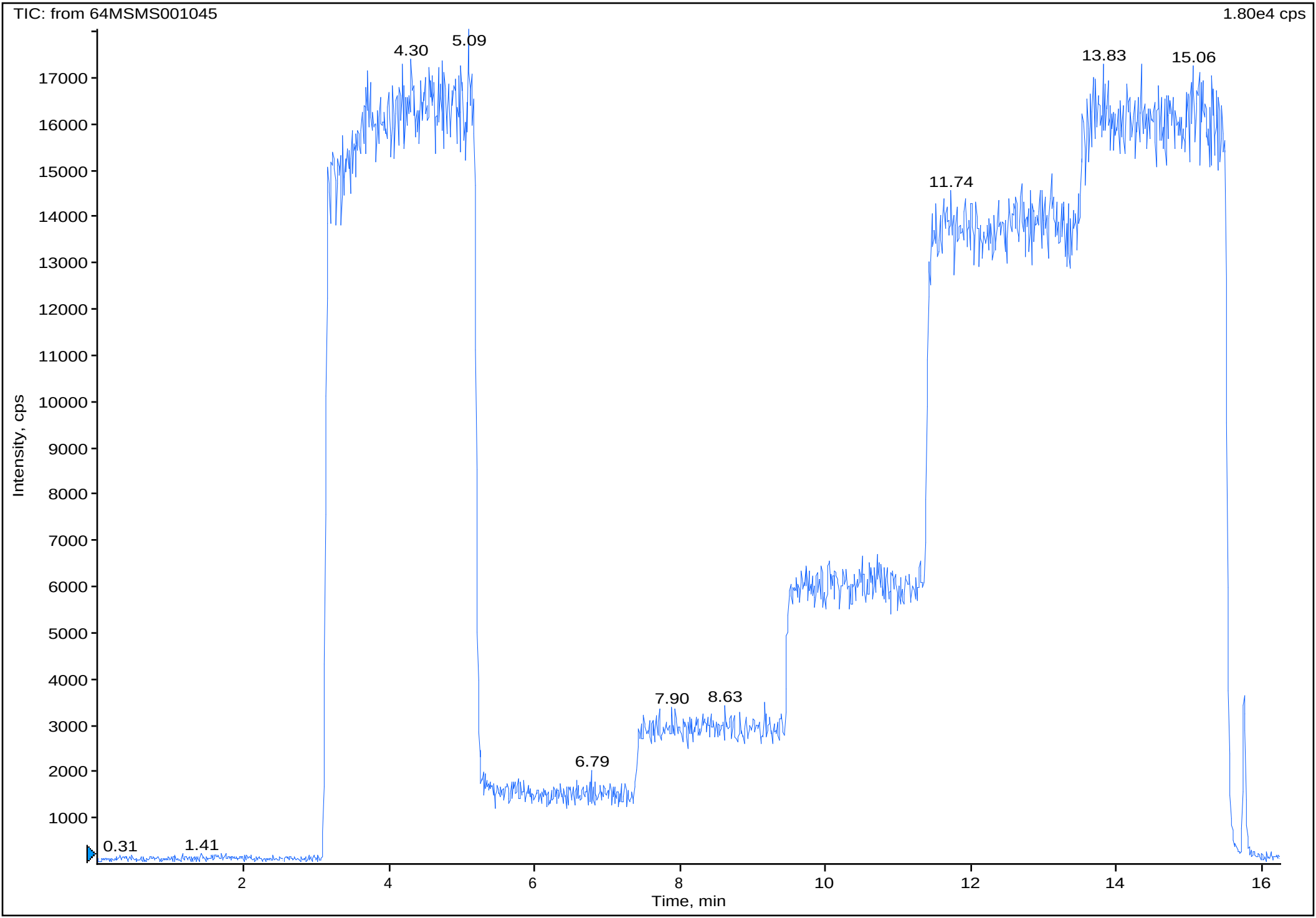
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	10.339546	153.896851
Intercept:	1.78396663	-238.80211
Correlation:	0.99897124	0.99163531

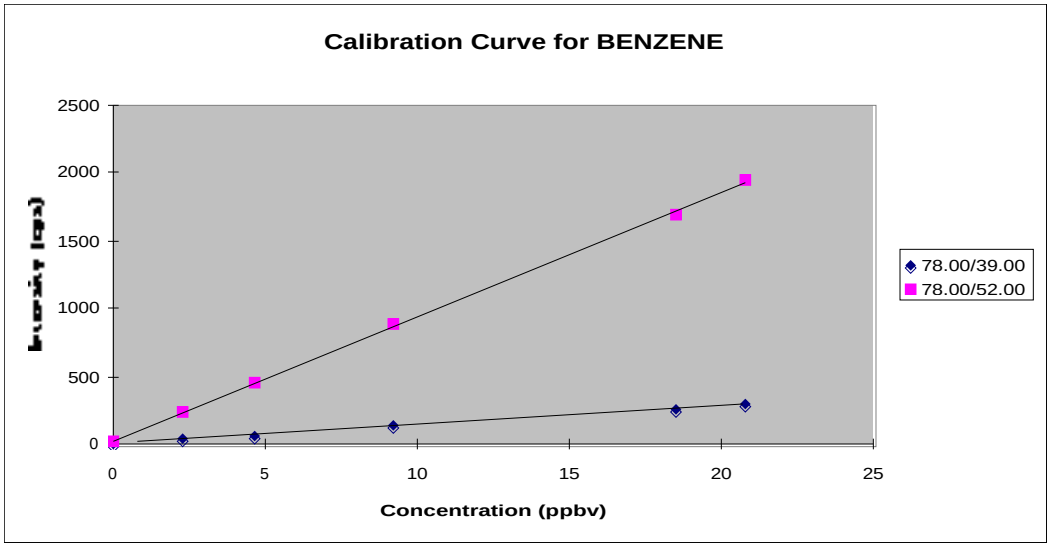
Concentratior	106.00/65.00	106.00/91.00
0	7.70833333	49.8958333
3.48	41.4583333	360.729167
6.96	68.5416667	675.625
13.91	136.354167	1514.58333
27.82	289.270833	3966.04167
31.3	330.412371	4846.08247

Report	File Name	64MSMS001040 et al.			
	Sample Name	BOD Calibration - BTX 20190424			
	Date	Wednesday, April 24, 2019 7:52:12			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	13.35	90.40	242.10	68.11	10.34	153.90
Intercept	14.10	74.12	73.55	21.24	1.78	-238.80
Intensity	7.29	51.77	113.96	30.10	7.71	49.90
Int SD	9.23	25.67	41.71	17.62	9.23	26.06
Concentration	-0.51	-0.25	0.17	0.13	0.57	1.88
Conc SD	0.69	0.28	0.17	0.26	0.89	0.17
Compound Con	-0.38		0.15		1.22	
Compound SD	0.34		0.15		0.38	
Det. Limit	2.07	0.85	0.52	0.78	2.68	0.51
Compound DL	1.46		0.65		1.59	

4/24/19.13.06.28
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, Apr 24, 2019 at 13:06:26; Exp. Comment: BTX

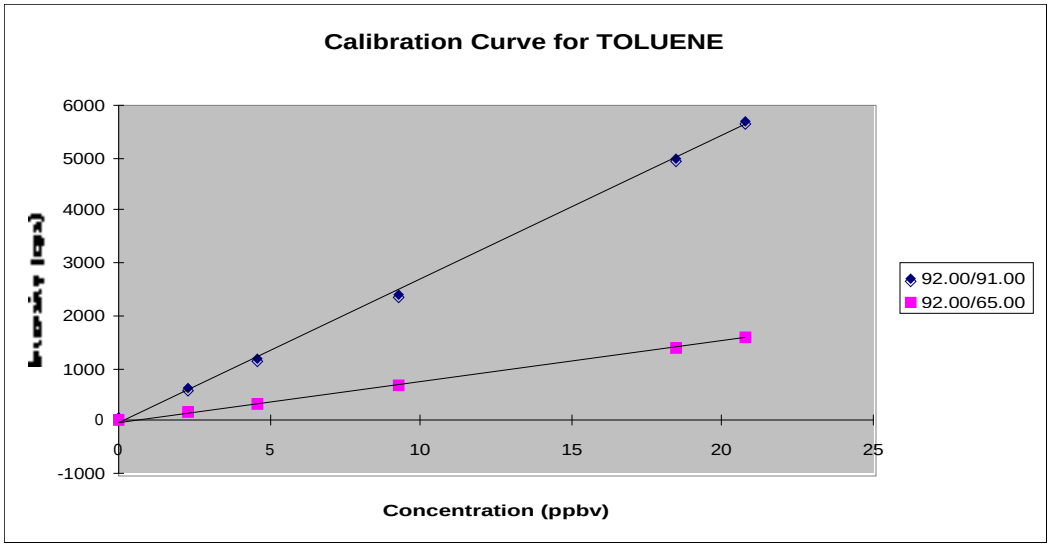




Filename:	64MSMS001045 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 24, 2019 13:23:52					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.29	8.40	10.37	12.38	14.48

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	13.5798378	91.6334152
Intercept:	6.24786609	25.3281881
Correlation:	0.99987283	0.99983142

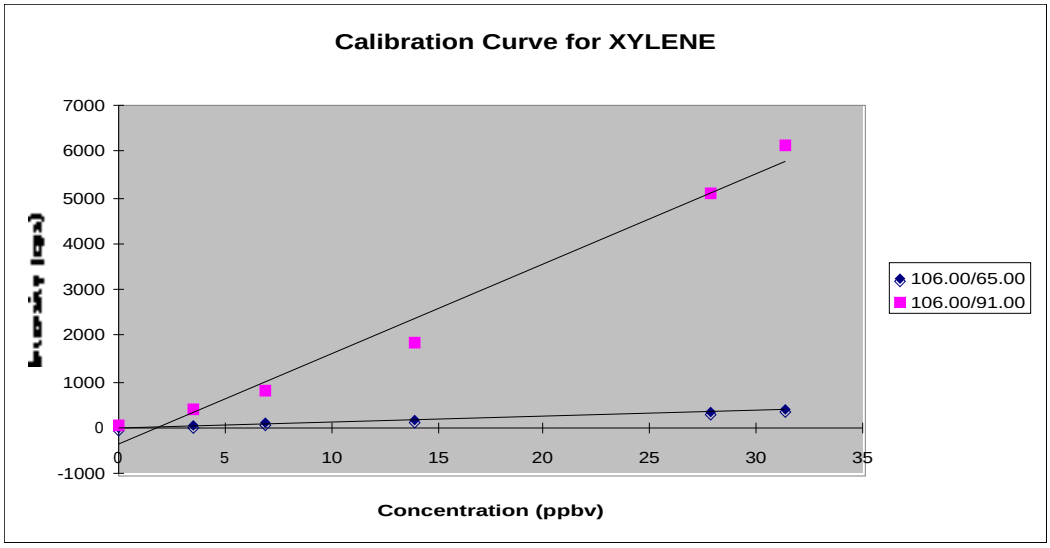
Concentration	78.00/39.00	78.00/52.00
0	3.85416667	17.8125
2.31	40.1041667	228.645833
4.62	68.5416667	460.104167
9.24	132.395833	887.1875
18.49	258.75	1698.22917
20.8	286.979167	1941.97917



Filename:	64MSMS001045 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 24, 2019 13:24:30					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.29	8.40	10.37	12.38	14.48

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	272.250322	75.9631895
Intercept:	-25.024782	-13.455165
Correlation:	0.99961985	0.99935492

Concentration	92.00/91.00	92.00/65.00
0	45.5208333	12.9166667
2.31	622.1875	168.541667
4.62	1188.85417	323.645833
9.24	2401.25	649.895833
18.49	4981.66667	1391.35417
20.8	5709.375	1585.83333



Filename:	64MSMS001045 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 24, 2019 13:25:03					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.29	8.40	10.37	12.38	14.48

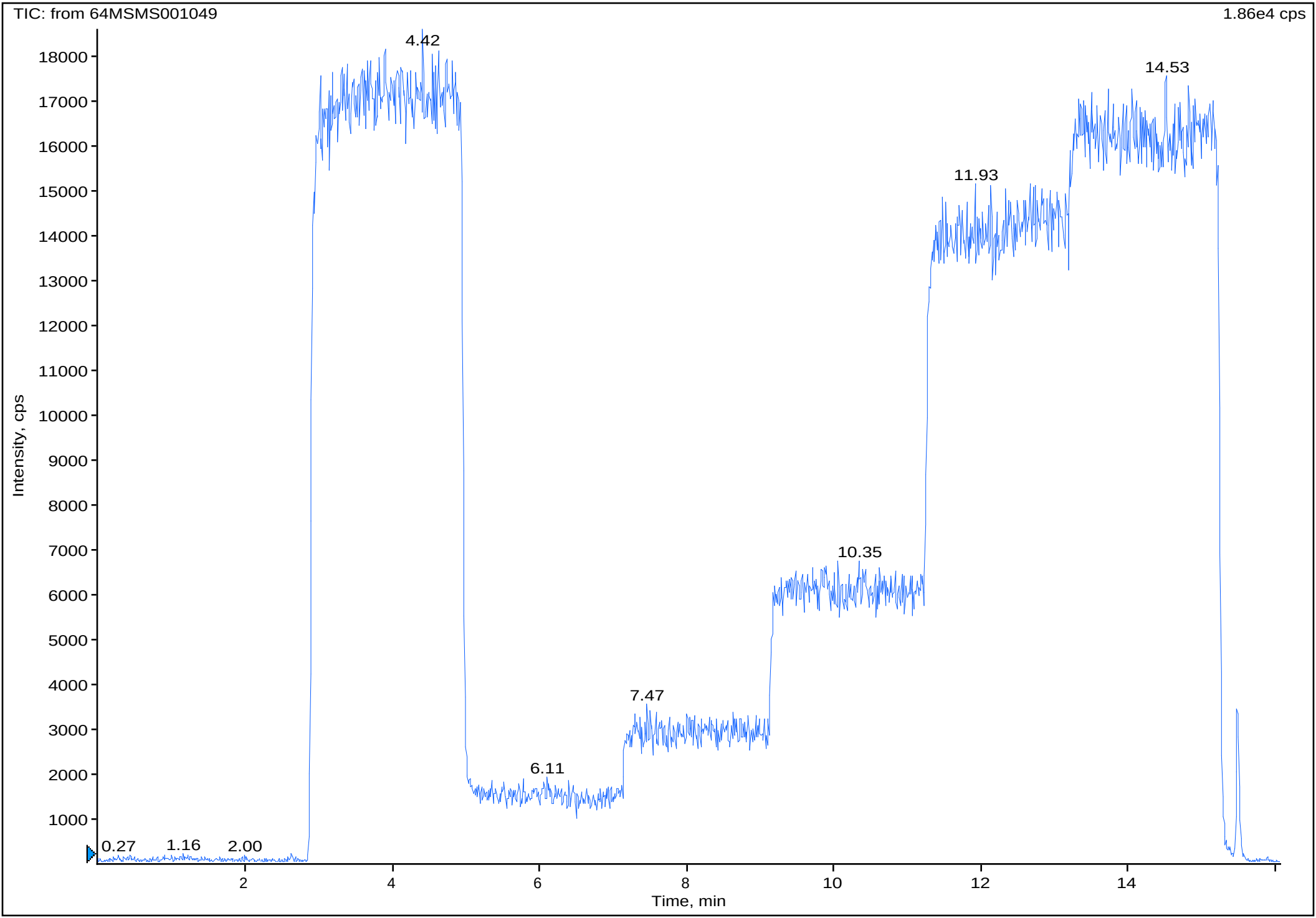
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	12.9448573	196.58537
Intercept:	-3.2789845	-365.21208
Correlation:	0.99909989	0.99075122

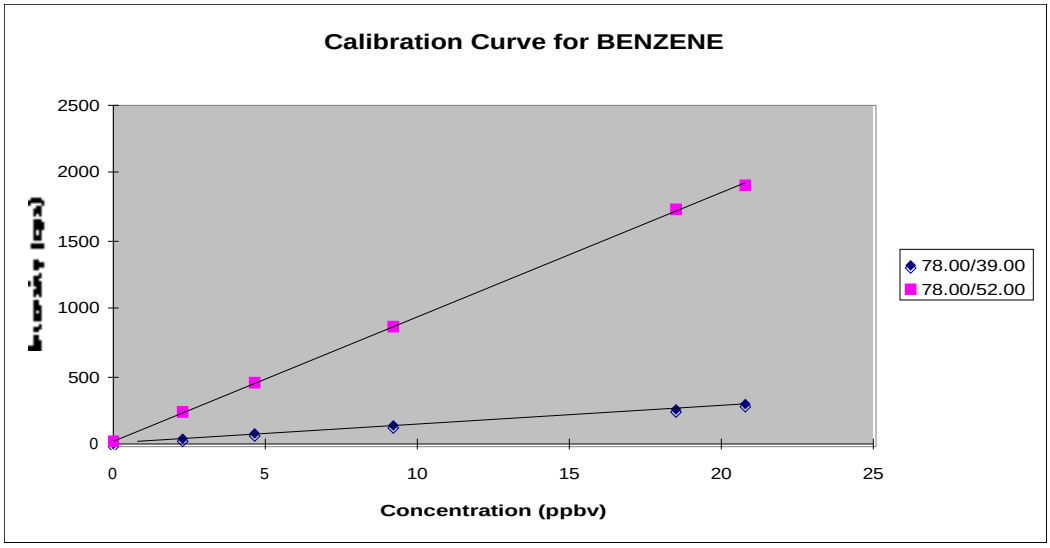
Concentration	106.00/65.0(	106.00/91.00
0	5.9375	31.7708333
3.48	43.0208333	398.4375
6.96	80.8333333	804.270833
13.91	166.25	1813.125
27.82	358.4375	5066.77083
31.3	406.354167	6103.33333

Report	File Name	64MSMS001045 et al.			
	Sample Name	MOD Calibration - BTX 20190424			
	Date	Wednesday, April 24, 2019 13:25:37			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	13.58	91.63	272.25	75.96	12.94	196.59
Intercept	6.25	25.33	-25.02	-13.46	-3.28	-365.21
Intensity	3.85	17.81	45.52	12.92	5.94	31.77
Int SD	7.59	16.49	25.29	14.06	8.65	23.89
Concentration	-0.18	-0.08	0.26	0.35	0.71	2.02
Conc SD	0.56	0.18	0.09	0.19	0.67	0.12
Compound Con	-0.13		0.30		1.37	
Compound SD	0.26		0.10		0.28	
Det. Limit	1.68	0.54	0.28	0.56	2.01	0.36
Compound DL	1.11		0.42		1.19	

4/24/19.18.32.38
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, Apr 24, 2019 at 18:32:37; Exp. Comment: BTX

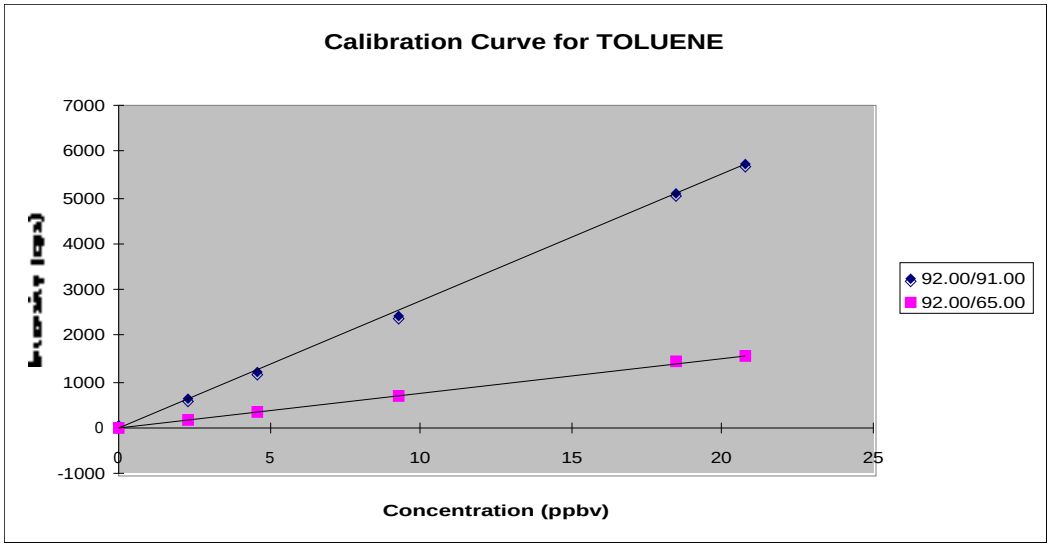




Filename:	64MSMS001049 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 24, 2019 18:52:00					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.05	8.18	10.18	12.26	14.19

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	13.714939	91.4830728
Intercept:	7.01296955	21.8046578
Correlation:	0.99921577	0.9998902

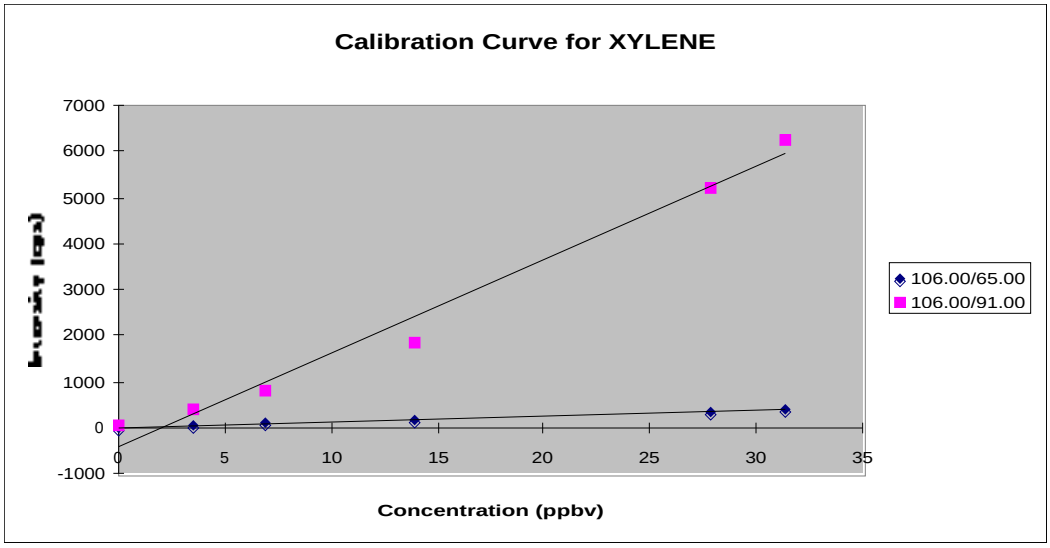
Concentration	78.00/39.00	78.00/52.00
0	2.39583333	11.4583333
2.31	39.2708333	237.916667
4.62	70.4166667	452.708333
9.24	141.979167	863.333333
18.49	256.041667	1729.27083
20.8	292.604167	1909.79167



Filename:	64MSMS001049 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 24, 2019 18:52:43					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.05	8.18	10.18	12.26	14.19

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	276.079447	76.1246149
Intercept:	-20.748524	-7.5167184
Correlation:	0.99970122	0.9996685

Concentration	92.00/91.00	92.00/65.00
0	49.0625	11.7708333
2.31	631.041667	172.916667
4.62	1212.08333	321.979167
9.24	2436.5625	681.354167
18.49	5110.41667	1417.8125
20.8	5747.70833	1570.9375



Filename:	64MSMS001049 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, April 24, 2019 18:53:13					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.05	8.18	10.18	12.26	14.19

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	12.931168	203.01797
Intercept:	-8.4878489	-401.71416
Correlation:	0.99829255	0.9903528

Concentration	106.00/65.0(	106.00/91.00
0	2.5	14.7916667
3.48	36.7708333	397.395833
6.96	78.2291667	796.666667
13.91	154.270833	1829.27083
27.82	358.854167	5224.16667
31.3	397.8125	6273.33333

Report	File Name	64MSMS001049 et al.			
	Sample Name	EOD Calibration - BTX 20190424			
	Date	Wednesday, April 24, 2019 18:53:42			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	13.71	91.48	276.08	76.12	12.93	203.02
Intercept	7.01	21.80	-20.75	-7.52	-8.49	-401.71
Intensity	2.40	11.46	49.06	11.77	2.50	14.79
Int SD	5.94	10.95	27.26	12.81	5.80	15.22
Concentration	-0.34	-0.11	0.25	0.25	0.85	2.05
Conc SD	0.43	0.12	0.10	0.17	0.45	0.07
Compound Con	-0.22		0.25		1.45	
Compound SD	0.20		0.09		0.19	
Det. Limit	1.30	0.36	0.30	0.50	1.35	0.22
Compound DL	0.83		0.40		0.79	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 4/25/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:42	1500SCCS	199	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date: Exp: 5/2/2019	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Thu, Apr 25, 2019, 7:05:10
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR24 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Wed, Apr 24, 2019, 7:23:46

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.074
120.000	0.083
160.000	0.094

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.042
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Thu, Apr 25, 2019, 7:05:39
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR24 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Wed, Apr 24, 2019, 7:23:46

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.074
120.000	0.083
160.000	0.094

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.042
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

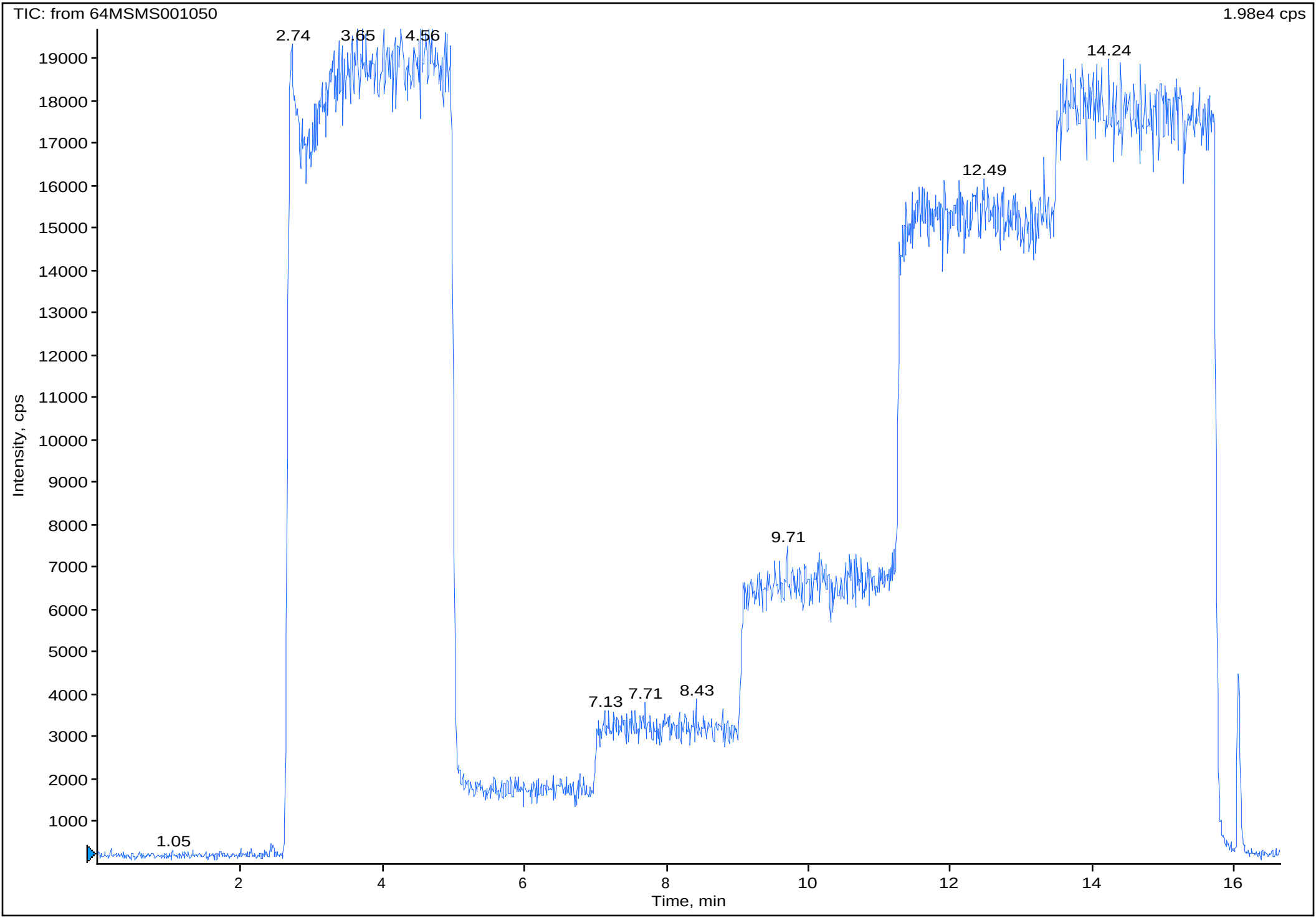
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

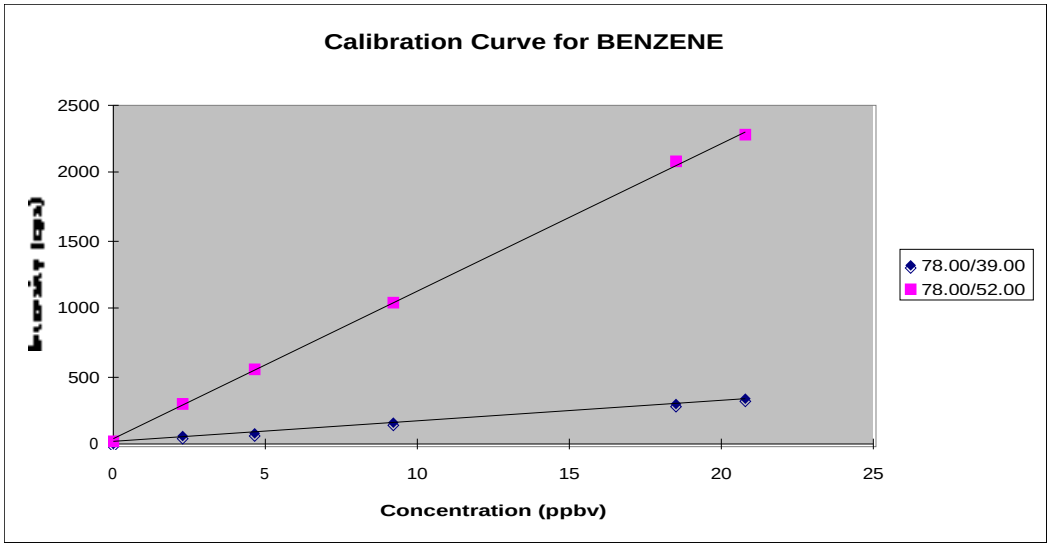
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/25/19.7.07.37
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Apr 25, 2019 at 7:07:37; Exp. Comment: BTX

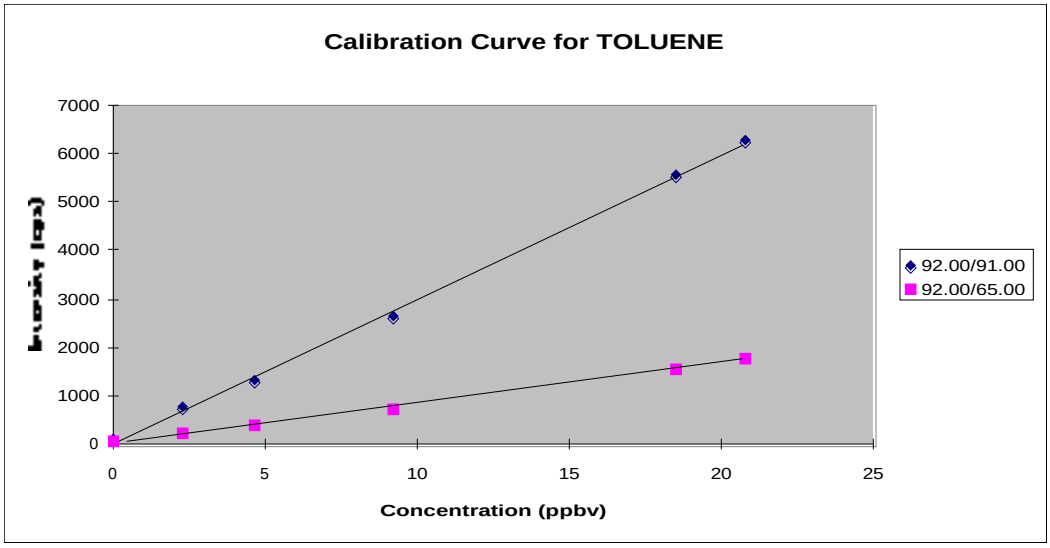




Filename:	64MSMS001050 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 25, 2019 7:26:15					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.06	8.00	10.06	12.31	14.55

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	15.3084317	109.166137
Intercept:	12.1101739	39.3090609
Correlation:	0.9991307	0.99980468

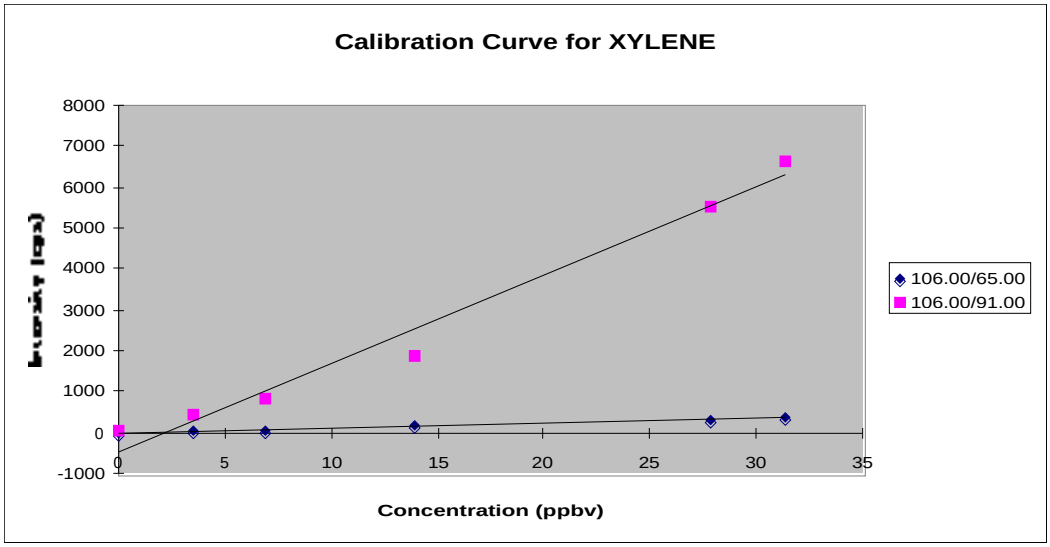
Concentration	78.00/39.00	78.00/52.00
0	4.0625	21.6666667
2.31	49.375	301.041667
4.62	85.4166667	558.541667
9.24	161.666667	1038.85417
18.49	293.75	2081.66667
20.8	327.395833	2288.4375



Filename:	64MSMS001050 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 25, 2019 7:26:54					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.06	8.00	10.06	12.31	14.55

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	298.298748	84.0717788
Intercept:	16.6141321	0.46596921
Correlation:	0.99952874	0.99932487

Concentration	92.00/91.00	92.00/65.00
0	96.875	27.6041667
2.31	746.354167	210.208333
4.62	1335.41667	364.895833
9.24	2642.91667	735.9375
18.49	5550	1561.14583
20.8	6271.77083	1765.625



Filename:	64MSMS001050 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 25, 2019 7:28:20					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.06	8.00	10.06	12.31	14.55

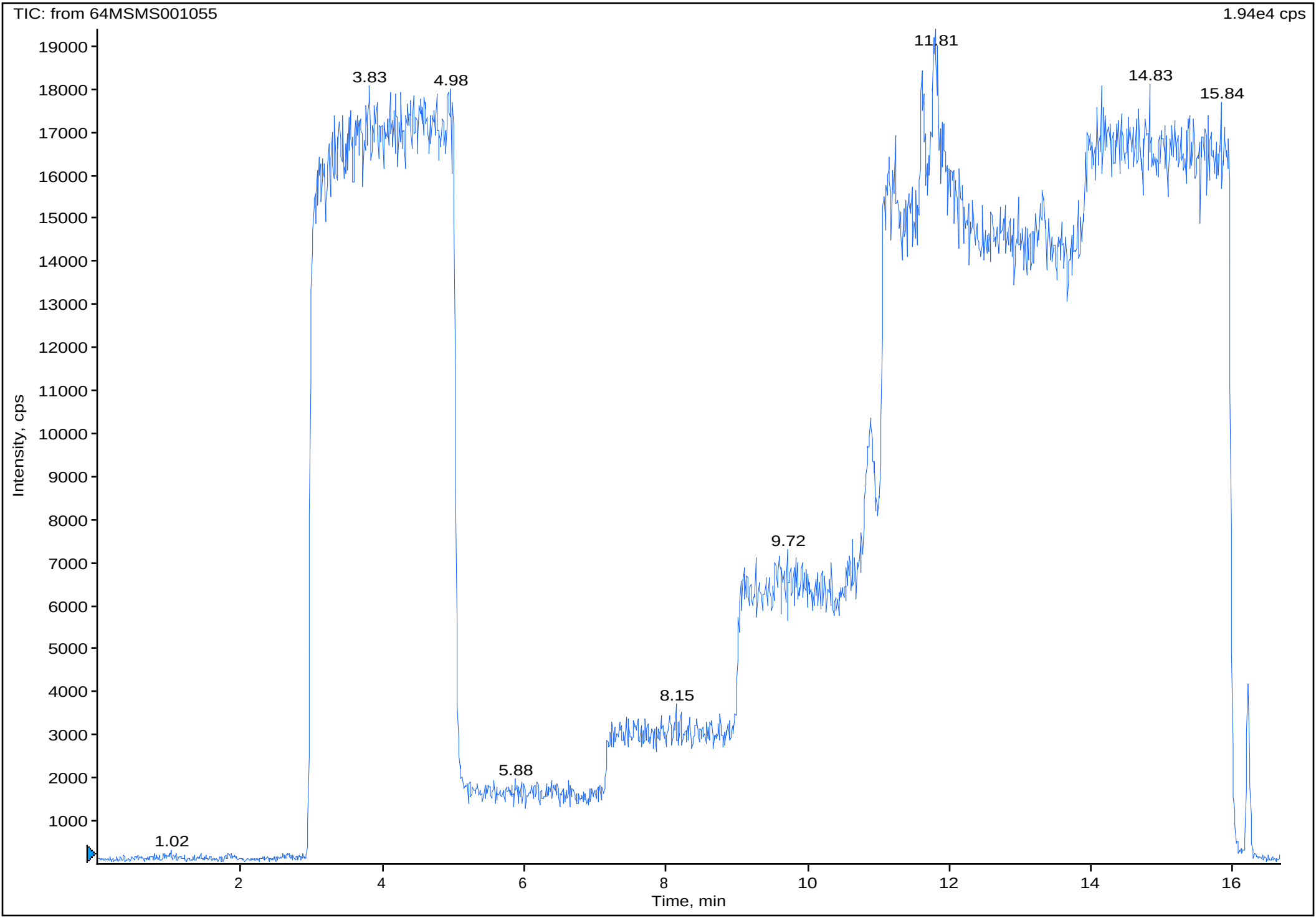
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	12.0748731	215.109605
Intercept:	-7.1482763	-451.07479
Correlation:	0.99819819	0.98833153

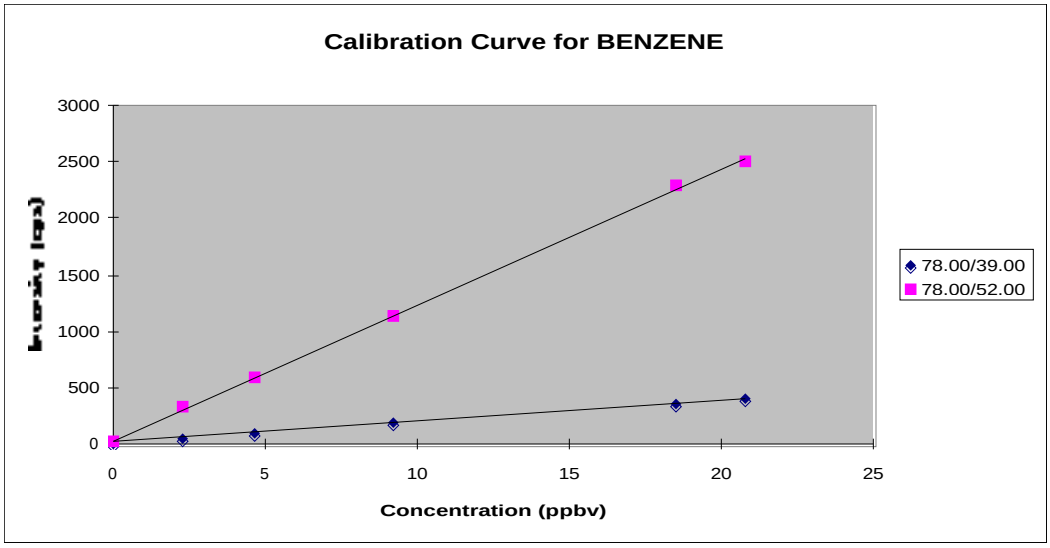
Concentration	106.00/65.0(	106.00/91.00
0	3.4375	30
3.48	39.375	408.125
6.96	66.875	801.458333
13.91	148.854167	1847.29167
27.82	327.395833	5500.10417
31.3	379.0625	6661.77083

Report	File Name	64MSMS001050 et al.			
	Sample Name	BOD Calibration - BTX 20190424			
	Date	Thursday, April 25, 2019 7:29:00			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	15.31	109.17	298.30	84.07	12.07	215.11
Intercept	12.11	39.31	16.61	0.47	-7.15	-451.07
Intensity	4.06	21.67	96.88	27.60	3.44	30.00
Int SD	7.34	15.40	38.67	18.45	6.13	21.03
Concentration	-0.53	-0.16	0.27	0.32	0.88	2.24
Conc SD	0.48	0.14	0.13	0.22	0.51	0.10
Compound Con	-0.34		0.30		1.56	
Compound SD	0.22		0.12		0.21	
Det. Limit	1.44	0.42	0.39	0.66	1.52	0.29
Compound DL	0.93		0.52		0.91	

4/25/19.13.31.35
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Apr 25, 2019 at 13:31:34; Exp. Comment: BTX

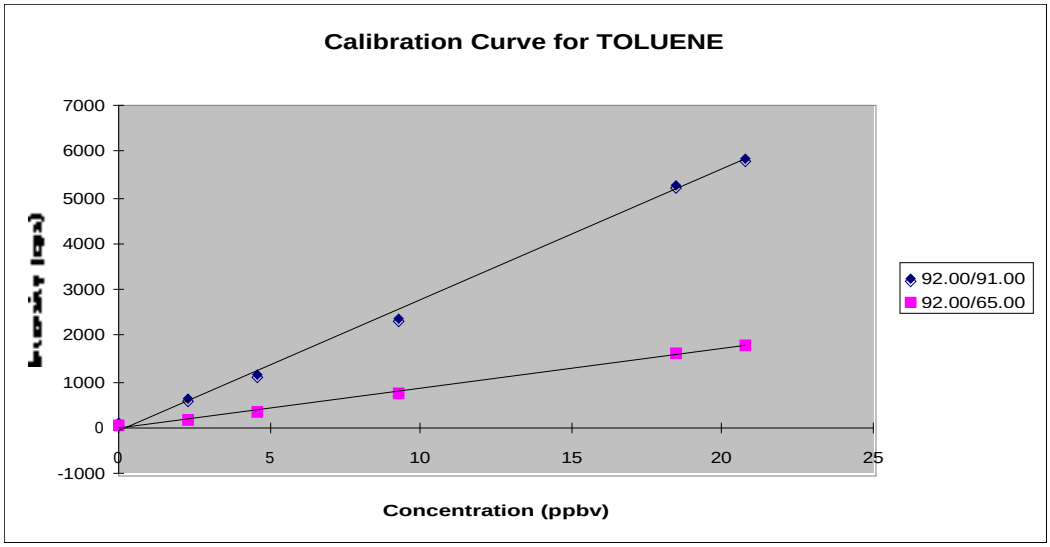




Filename:	64MSMS001055 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 25, 2019 13:49:14					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.17	8.07	9.79	12.82	14.94

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	18.6982603	120.376641
Intercept:	12.842831	30.3220575
Correlation:	0.9989282	0.9997444

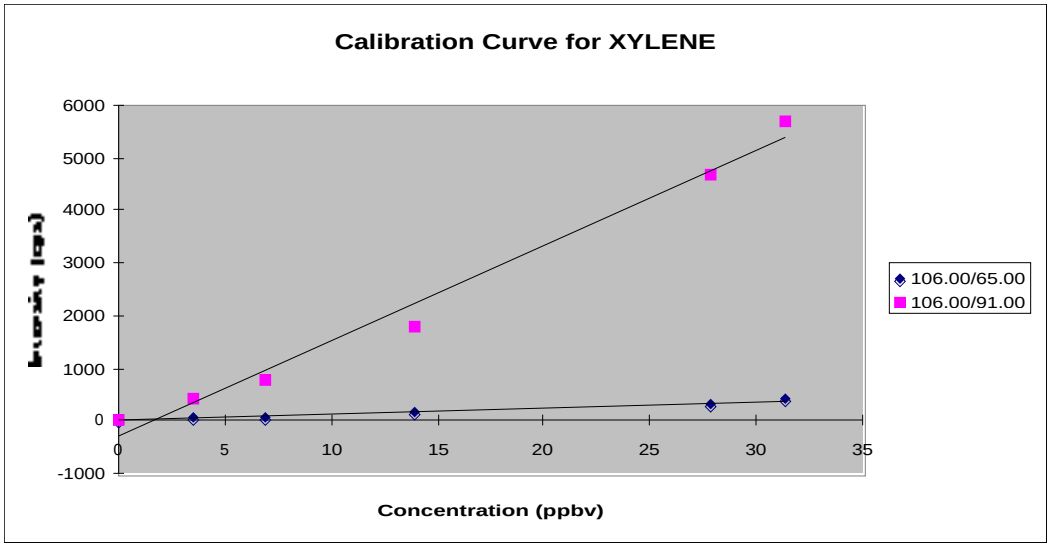
Concentration	78.00/39.00	78.00/52.00
0	2.60416667	12.8125
2.31	57.6041667	326.666667
4.62	105.3125	581.770833
9.24	192.083333	1144.79167
18.49	363.229167	2289.375
20.8	393.229167	2502.60417



Filename:	64MSMS001055 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 25, 2019 13:49:57					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.17	8.07	9.79	12.82	14.94

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	282.629219	87.3190583
Intercept:	-61.047195	-33.108745
Correlation:	0.99895776	0.99835845

Concentration	92.00/91.00	92.00/65.00
0	75	23.125
2.31	615	176.770833
4.62	1147.08333	326.041667
9.24	2388.22917	715.9375
18.49	5249.79167	1608.85417
20.8	5833.22917	1793.33333



Filename:	64MSMS001055 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 25, 2019 13:50:28					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.17	8.07	9.79	12.82	14.94

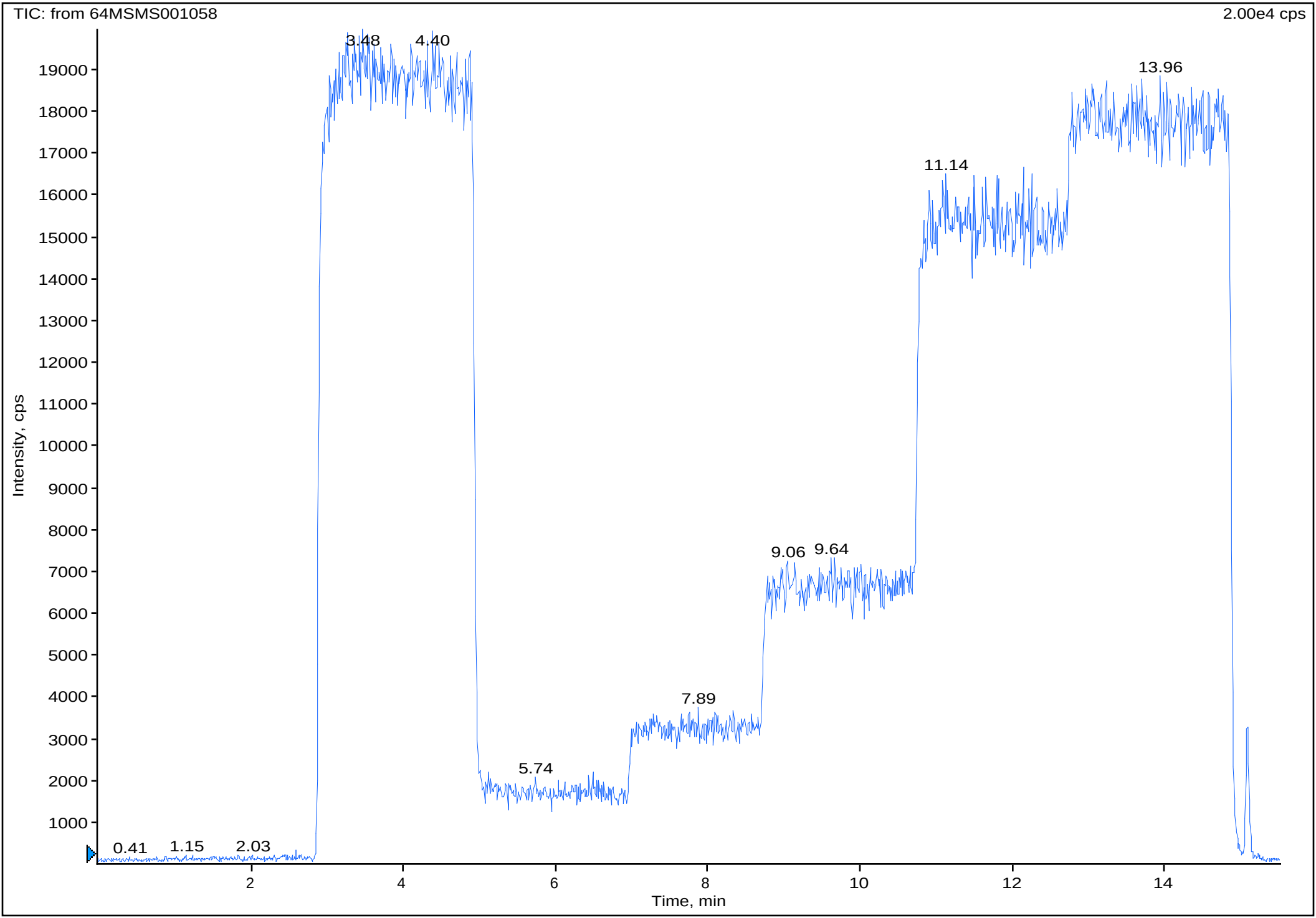
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	12.6611532	182.204848
Intercept:	-6.4502434	-295.57173
Correlation:	0.99860004	0.99296233

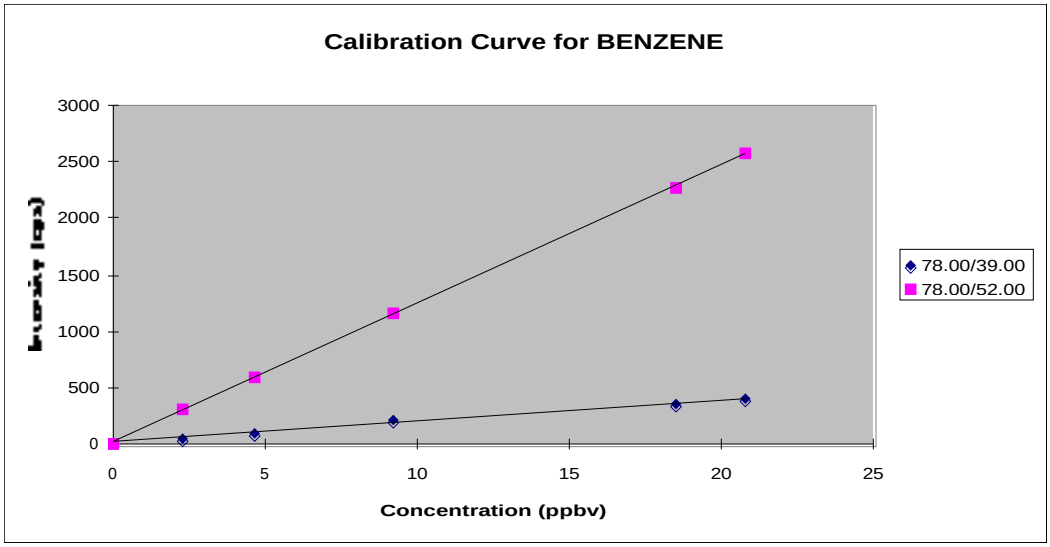
Concentration	106.00/65.0(	106.00/91.00
0	1.875	10.5208333
3.48	41.7708333	423.541667
6.96	73.4375	795.9375
13.91	160.729167	1814.27083
27.82	339.895833	4697.8125
31.3	400.416667	5693.125

Report	File Name	64MSMS001055 et al.			
	Sample Name	MOD Calibration - BTX 20190425			
	Date	Thursday, April 25, 2019 13:51:08			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	18.70	120.38	282.63	87.32	12.66	182.20
Intercept	12.84	30.32	-61.05	-33.11	-6.45	-295.57
Intensity	2.60	12.81	75.00	23.13	1.88	10.52
Int SD	5.28	13.20	38.58	17.91	5.09	12.76
Concentration	-0.55	-0.15	0.48	0.64	0.66	1.68
Conc SD	0.28	0.11	0.14	0.21	0.40	0.07
Compound Con	-0.35		0.56		1.17	
Compound SD	0.14		0.12		0.17	
Det. Limit	0.85	0.33	0.41	0.62	1.21	0.21
Compound DL	0.59		0.51		0.71	

4/25/19.18.39.12
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, Apr 25, 2019 at 18:39:10; Exp. Comment: BTX

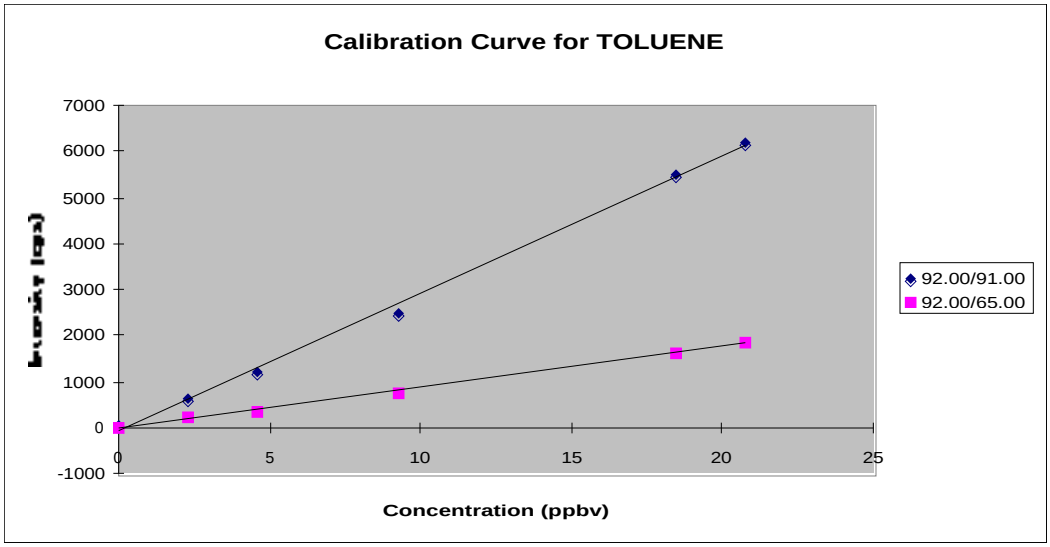




Filename:	64MSMS001058 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 25, 2019 18:56:14					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.95	7.86	9.69	11.77	13.78

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	18.7844087	122.347162
Intercept:	12.723616	23.4620393
Correlation:	0.99832284	0.99995252

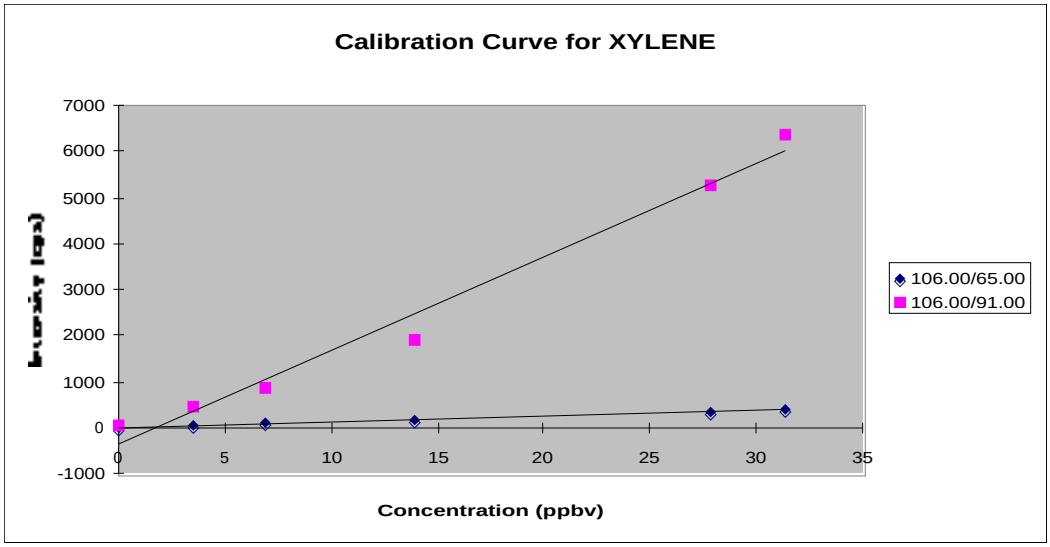
Concentration	78.00/39.00	78.00/52.00
0	3.125	11.3541667
2.31	56.3541667	306.041667
4.62	101.875	598.4375
9.24	201.875	1164.6875
18.49	350	2273.125
20.8	404.895833	2572.5



Filename:	64MSMS001058 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 25, 2019 18:56:53					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.95	7.86	9.69	11.77	13.78

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	297.604976	88.640265
Intercept:	-76.625886	-29.053738
Correlation:	0.99902919	0.99846312

Concentration	92.00/91.00	92.00/65.00
0	52.2916667	13.9583333
2.31	644.791667	191.666667
4.62	1219.47917	355.9375
9.24	2486.04167	716.041667
18.49	5482.5	1636.66667
20.8	6160.3125	1827.39583



Filename:	64MSMS001058 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, April 25, 2019 18:57:25					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.95	7.86	9.69	11.77	13.78

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	13.0330168	203.882245
Intercept:	-5.0089015	-367.08836
Correlation:	0.99894769	0.99068783

Concentration	106.00/65.0(	106.00/91.00
0	2.91666667	21.0416667
3.48	43.8541667	441.666667
6.96	80.3125	867.291667
13.91	163.125	1883.54167
27.82	361.666667	5237.1875
31.3	405.9375	6364.79167

Report	File Name	64MSMS001058 et al.			
	Sample Name	EOD Calibration - BTX 20190425			
	Date	Thursday, April 25, 2019 18:57:58			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	18.78	122.35	297.60	88.64	13.03	203.88
Intercept	12.72	23.46	-76.63	-29.05	-5.01	-367.09
Intensity	3.13	11.35	52.29	13.96	2.92	21.04
Int SD	5.68	12.36	29.25	13.57	5.79	17.20
Concentration	-0.51	-0.10	0.43	0.49	0.61	1.90
Conc SD	0.30	0.10	0.10	0.15	0.44	0.08
Compound Con	-0.30		0.46		1.26	
Compound SD	0.14		0.09		0.19	
Det. Limit	0.91	0.30	0.29	0.46	1.33	0.25
Compound DL	0.60		0.38		0.79	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Date: 4/26/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:43	1500 SCCS	191	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date: Exp: 5/2/2019	
		Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
Time	Reference Flow Meter	Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
		Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
Time	Reference Flow Meter	Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Fri, Apr 26, 2019, 7:07:25
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR26 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Fri, Apr 26, 2019, 7:04:00

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.072
120.000	0.083
160.000	0.094

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.042
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Fri, Apr 26, 2019, 7:07:35
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR26 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Fri, Apr 26, 2019, 7:04:00

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.072
120.000	0.083
160.000	0.094

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.042
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

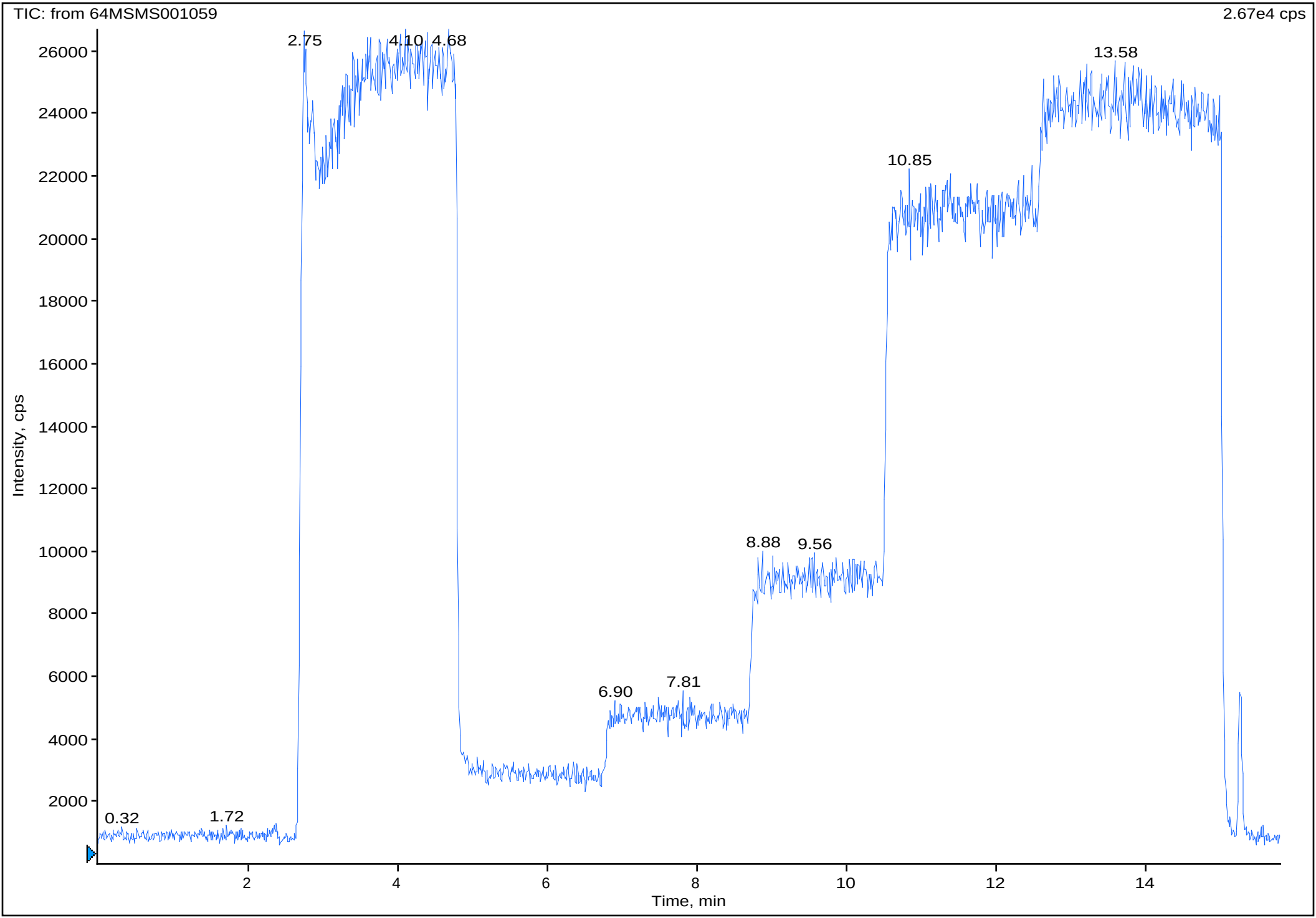
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

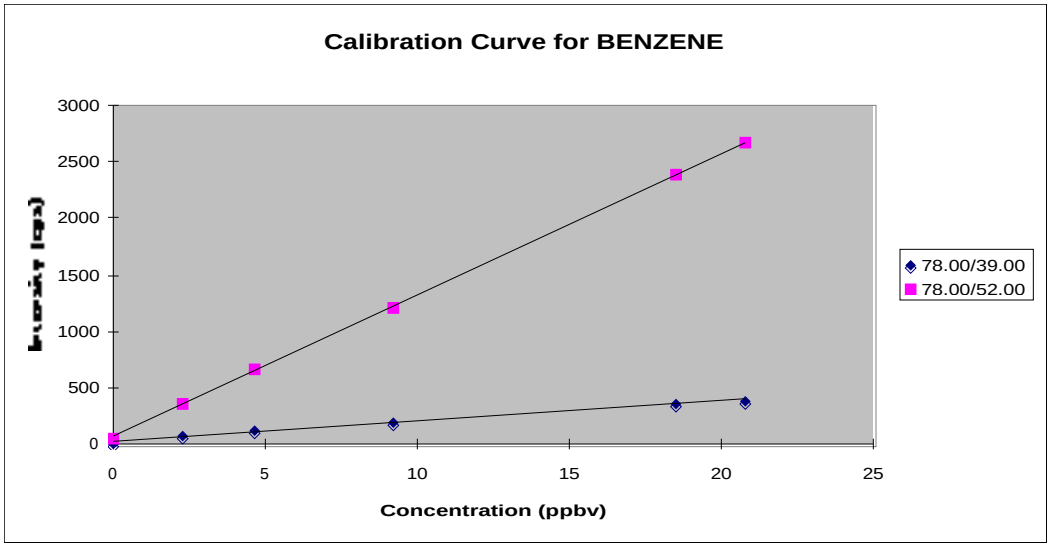
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/26/19.7.09.02
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, Apr 26, 2019 at 7:09:00; Exp. Comment: BTX

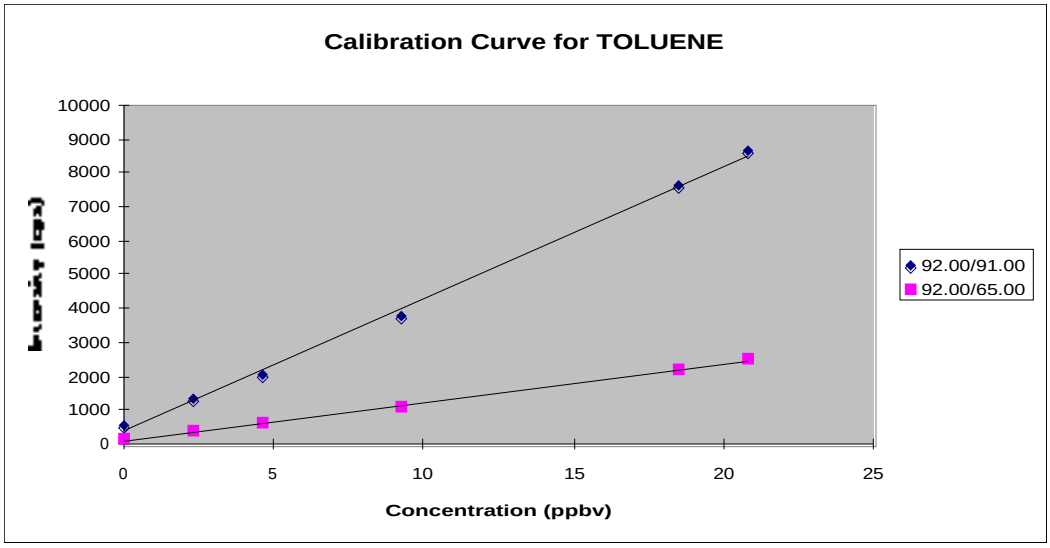




Filename:	64MSMS001059 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 26, 2019 7:26:17					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.81	7.72	9.57	11.55	13.69

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	18.0782867	125.542225
Intercept:	17.4970641	66.6199804
Correlation:	0.99936859	0.99992965

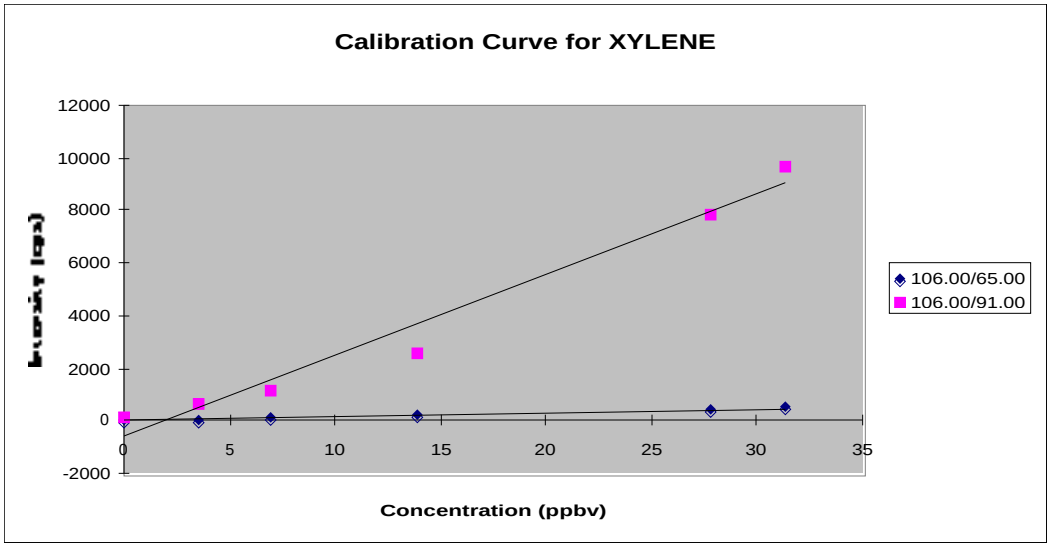
Concentration	78.00/39.00	78.00/52.00
0	9.16666667	56.875
2.31	61.4583333	361.979167
4.62	107.1875	663.854167
9.24	186.770833	1209.58333
18.49	354.791667	2397.39583
20.8	388.229167	2672.60417



Filename:	64MSMS001059 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 26, 2019 7:27:12					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.81	7.72	9.57	11.55	13.69

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	391.860514	113.249955
Intercept:	378.979036	117.689441
Correlation:	0.99914806	0.99947229

Concentration	92.00/91.00	92.00/65.00
0	542.1875	153.645833
2.31	1335.10417	388.75
4.62	2062.5	618.75
9.24	3804.6875	1116.35417
18.49	7612.1875	2206.45833
20.8	8649.79167	2503.02083



Filename:	64MSMS001059 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 26, 2019 7:27:45					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.81	7.72	9.57	11.55	13.69

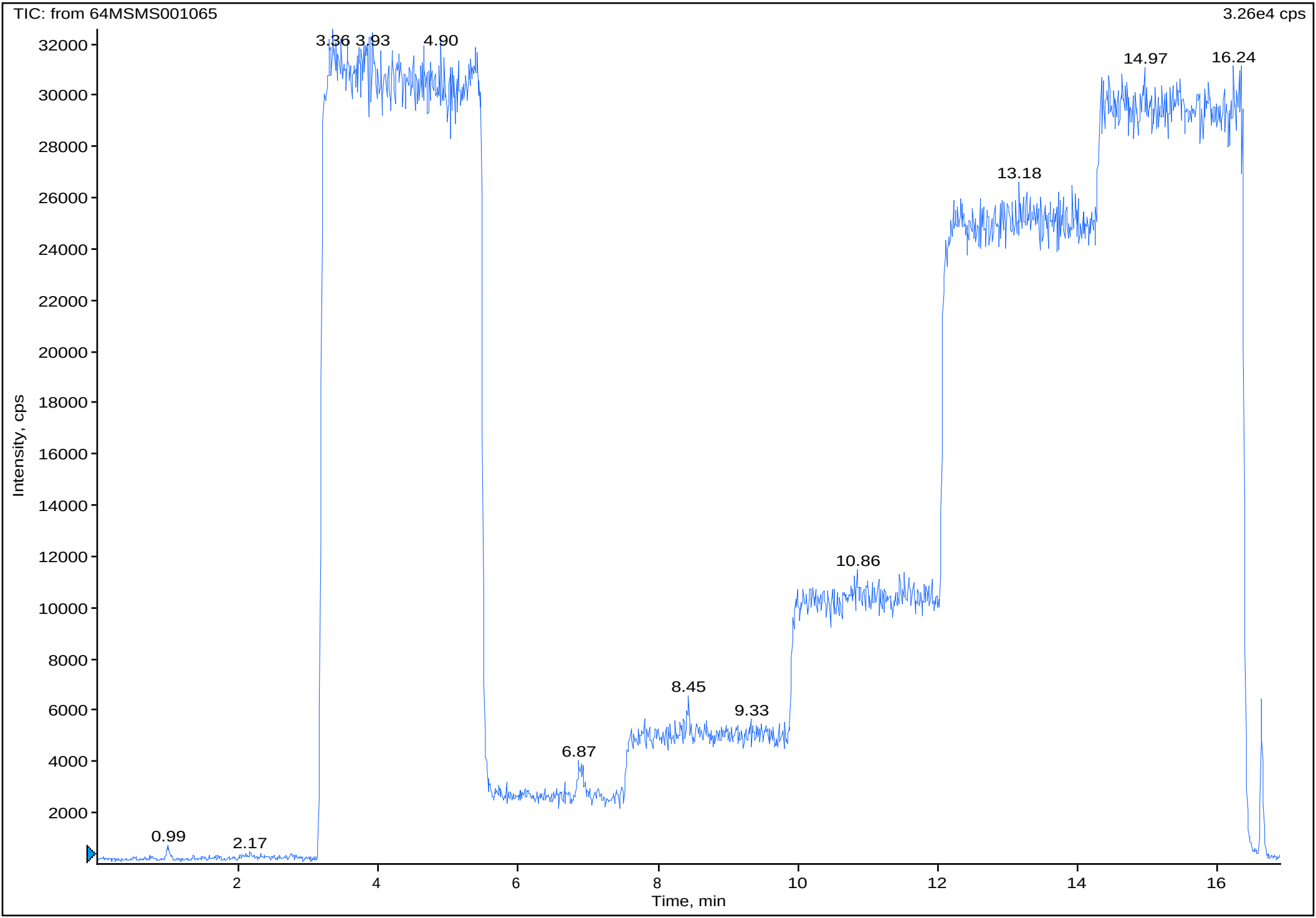
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	15.2411801	307.935044
Intercept:	3.71631016	-605.13969
Correlation:	0.99808957	0.98633233

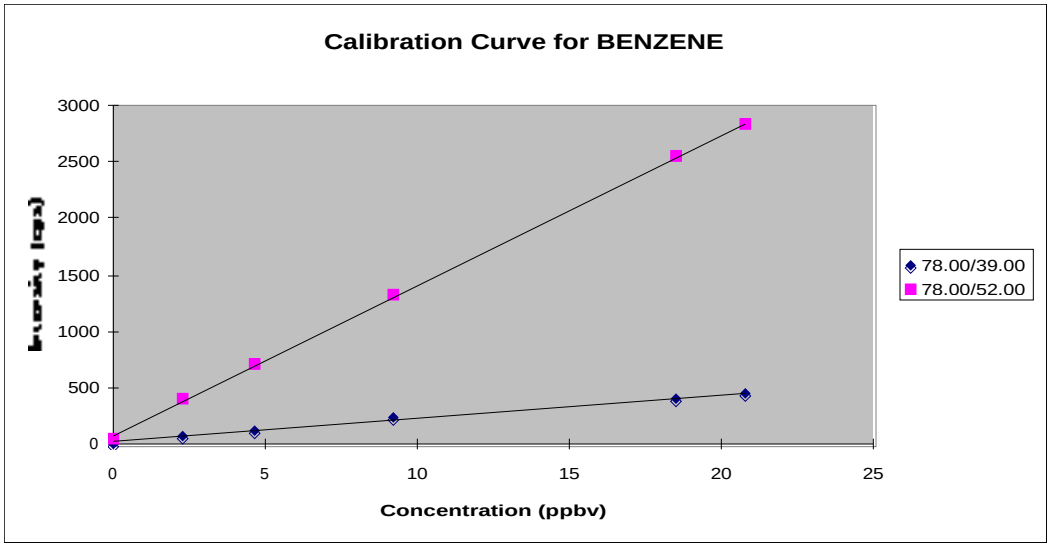
Concentration	106.00/65.0(	106.00/91.00
0	14.1666667	123.958333
3.48	60.9375	647.916667
6.96	106.041667	1175
13.91	196.770833	2600.20833
27.82	421.25	7880
31.3	495.3125	9645.41667

Report	File Name	64MSMS001059 et al.			
	Sample Name	BOD Calibration - BTX 20190426			
	Date	Friday, April 26, 2019 7:28:18			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	18.08	125.54	391.86	113.25	15.24	307.94
Intercept	17.50	66.62	378.98	117.69	3.72	-605.14
Intensity	9.17	56.88	542.19	153.65	14.17	123.96
Int SD	10.43	26.41	82.59	45.24	14.12	46.37
Concentration	-0.46	-0.08	0.42	0.32	0.69	2.37
Conc SD	0.58	0.21	0.21	0.40	0.93	0.15
Compound Con	-0.27		0.37		1.53	
Compound SD	0.28		0.22		0.38	
Det. Limit	1.73	0.63	0.63	1.20	2.78	0.45
Compound DL	1.18		0.92		1.62	

4/26/19.13.36.14
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, Apr 26, 2019 at 13:36:12; Exp. Comment: BTX

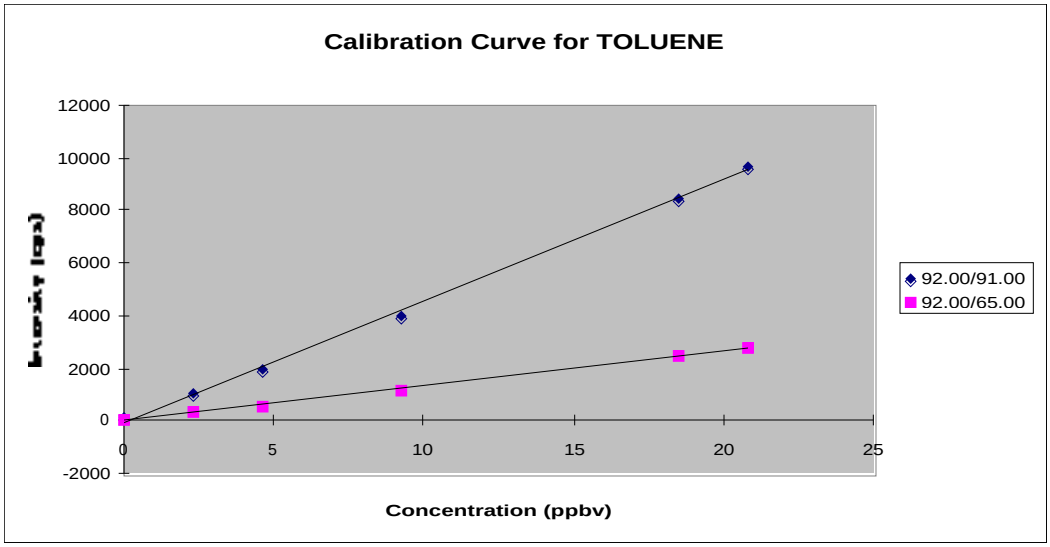




Filename:	64MSMS001065 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 26, 2019 13:55:50					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	6.20	9.12	10.96	13.13	15.33

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	20.7850906	132.992994
Intercept:	21.9622466	80.0289912
Correlation:	0.99863583	0.99984725

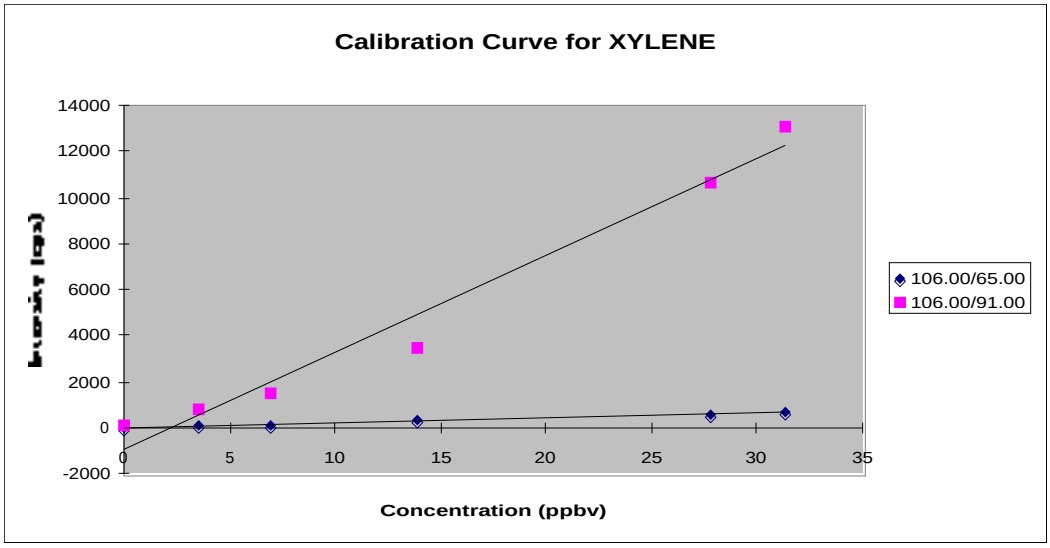
Concentration	78.00/39.00	78.00/52.00
0	7.91666667	49.8958333
2.31	72.8125	399.375
4.62	124.166667	703.4375
9.24	226.041667	1329.47917
18.49	406.597938	2547.31959
20.8	446.979167	2826.45833



Filename:	64MSMS001065 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 26, 2019 13:56:27					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	6.20	9.12	10.96	13.13	15.33

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	460.939129	133.589117
Intercept:	-72.700396	-14.765422
Correlation:	0.99931427	0.99943581

Concentration	92.00/91.00	92.00/65.00
0	87.9166667	27.3958333
2.31	1032.08333	304.6875
4.62	1979.6875	577.1875
9.24	3943.02083	1155.72917
18.49	8441.75258	2485.05155
20.8	9643.02083	2770.20833



Filename:	64MSMS001065 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 26, 2019 13:56:58					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	6.20	9.12	10.96	13.13	15.33

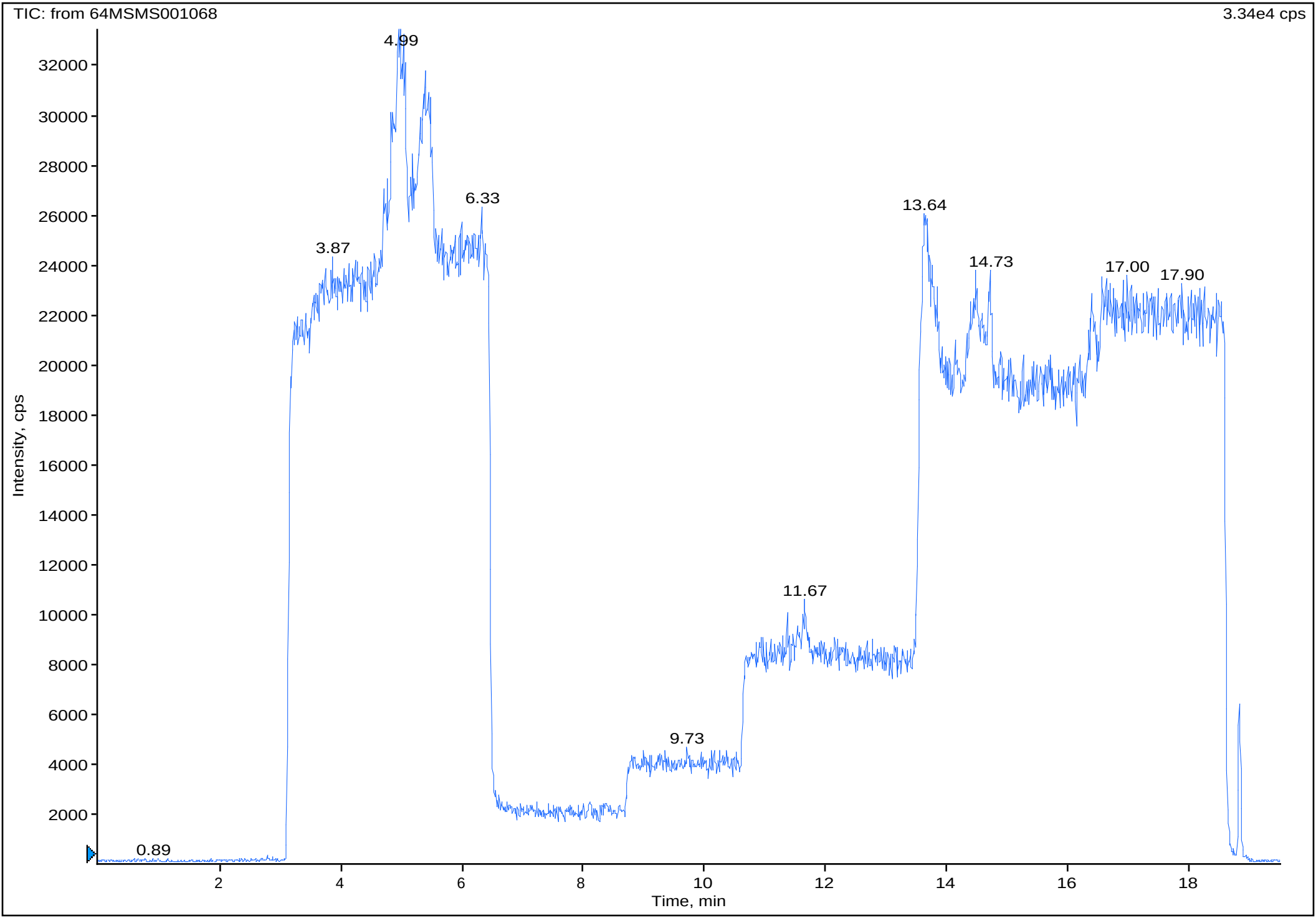
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	21.4491658	421.661585
Intercept:	-6.180551	-942.42436
Correlation:	0.99799587	0.98632056

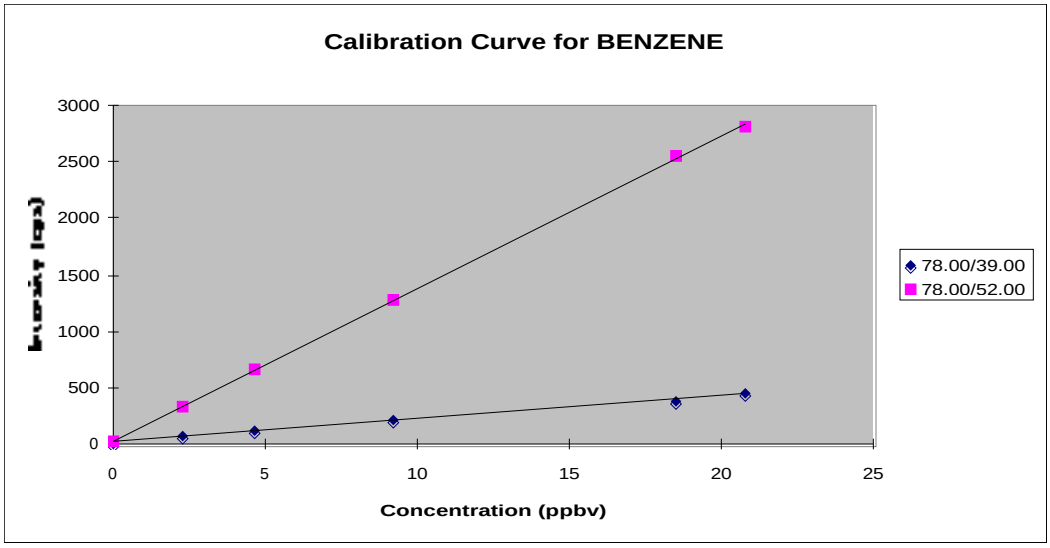
Concentration	106.00/65.0(	106.00/91.00
0	5.3125	51.7708333
3.48	72.3958333	766.354167
6.96	143.645833	1515.72917
13.91	267.5	3437.70833
27.82	575.257732	1.07E+04
31.3	689.166667	1.31E+04

Report	File Name	64MSMS001065 et al.			
	Sample Name	MOD Calibration - BTX 20190426			
	Date	Friday, April 26, 2019 13:57:40			
	Time Range	1.50	to	2.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	20.79	132.99	460.94	133.59	21.45	421.66
Intercept	21.96	80.03	-72.70	-14.77	-6.18	-942.42
Intensity	7.92	49.90	87.92	27.40	5.31	51.77
Int SD	9.28	27.40	41.04	19.04	8.58	29.31
Concentration	-0.68	-0.23	0.35	0.32	0.54	2.36
Conc SD	0.45	0.21	0.09	0.14	0.40	0.07
Compound Con	-0.45		0.33		1.45	
Compound SD	0.23		0.08		0.17	
Det. Limit	1.34	0.62	0.27	0.43	1.20	0.21
Compound DL	0.98		0.35		0.70	

4/26/19.18.22.30
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, Apr 26, 2019 at 18:22:29; Exp. Comment: BTX

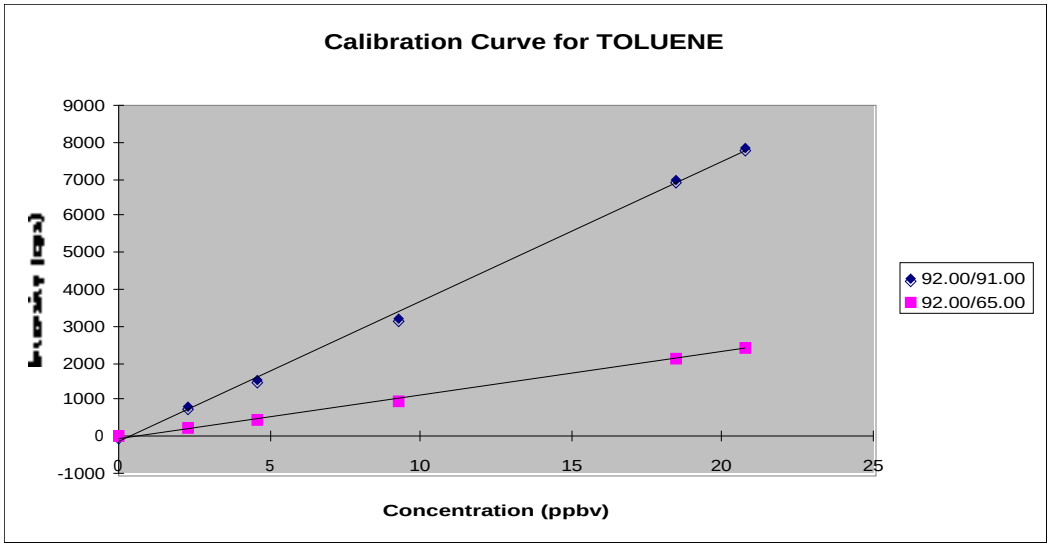




Filename:	64MSMS001068 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 26, 2019 18:43:38					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.66	9.68	12.52	15.45	17.50

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	20.4616718	135.094146
Intercept:	14.5291415	24.5436621
Correlation:	0.99891764	0.99992881

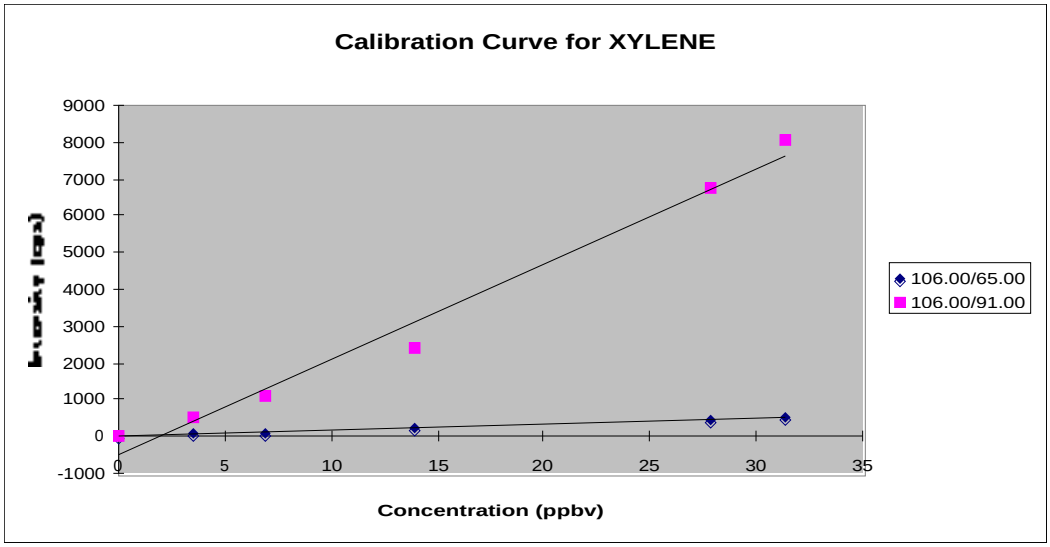
Concentration	78.00/39.00	78.00/52.00
0	3.85416667	12.9166667
2.31	66.4583333	340.416667
4.62	112.916667	660.9375
9.24	211.979167	1266.77083
18.49	382.708333	2541.04167
20.8	444.0625	2817.5



Filename:	64MSMS001068 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 26, 2019 18:44:16					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.66	9.68	12.52	15.45	17.50

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	378.261167	116.499719
Intercept:	-94.970441	-43.026288
Correlation:	0.99936857	0.99908631

Concentration	92.00/91.00	92.00/65.00
0	40.9375	14.0625
2.31	822.1875	228.4375
4.62	1548.95833	464.270833
9.24	3223.64583	968.854167
18.49	6937.39583	2118.02083
20.8	7835.41667	2409.27083



Filename:	64MSMS001068 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, April 26, 2019 18:44:48					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.66	9.68	12.52	15.45	17.50

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	16.5625906	259.507464
Intercept:	-8.3299064	-467.05634
Correlation:	0.99868344	0.99146383

Concentration	106.00/65.0(	106.00/91.00
0	2.91666667	12.5
3.48	52.5	557.708333
6.96	102.395833	1113.4375
13.91	201.979167	2404.16667
27.82	457.916667	6735.41667
31.3	514.791667	8035.52083

Report	File Name	64MSMS001068 et al.			
	Sample Name	EOD Calibration - BTX 20190426			
	Date	Friday, April 26, 2019 18:45:23			
	Time Range	1.50	to	2.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	20.46	135.09	378.26	116.50	16.56	259.51
Intercept	14.53	24.54	-94.97	-43.03	-8.33	-467.06
Intensity	4.79	12.08	51.46	15.31	2.29	16.46
Int SD	7.54	12.97	26.08	14.58	6.07	15.56
Concentration	-0.48	-0.09	0.39	0.50	0.64	1.86
Conc SD	0.37	0.10	0.07	0.13	0.37	0.06
Compound Con	-0.28		0.44		1.25	
Compound SD	0.16		0.07		0.15	
Det. Limit	1.10	0.29	0.21	0.38	1.10	0.18
Compound DL	0.70		0.29		0.64	

TAGA FLOW CALIBRATION LOG

Work Assignment: 372 Date: 4/27/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:37	1500 SCCS	~191	1500 SCCS	N/A	N/A
Dwyer Rotameter	Certificate of Calibration # 18 DWY15 -0168			Calibration Date: Exp: 5/2/2019	
		Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
Time	Reference Flow Meter	Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
		Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
Time	Reference Flow Meter	Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Sat, Apr 27, 2019, 7:01:18
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR27 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sat, Apr 27, 2019, 6:59:27

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.072
120.000	0.083
160.000	0.094

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.041
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Sat, Apr 27, 2019, 7:01:26
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR27 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sat, Apr 27, 2019, 6:59:27

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.072
120.000	0.083
160.000	0.094

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.041
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

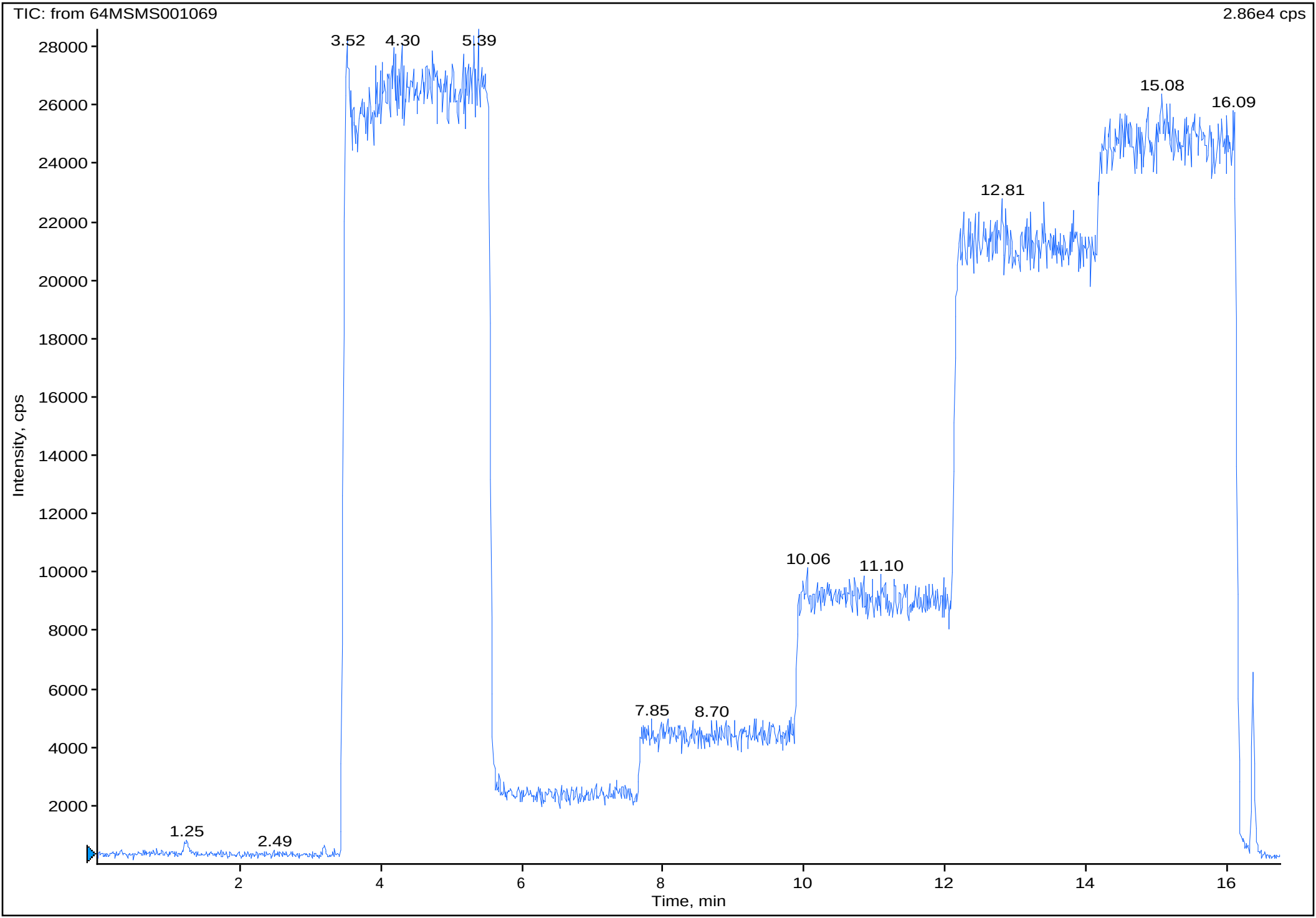
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

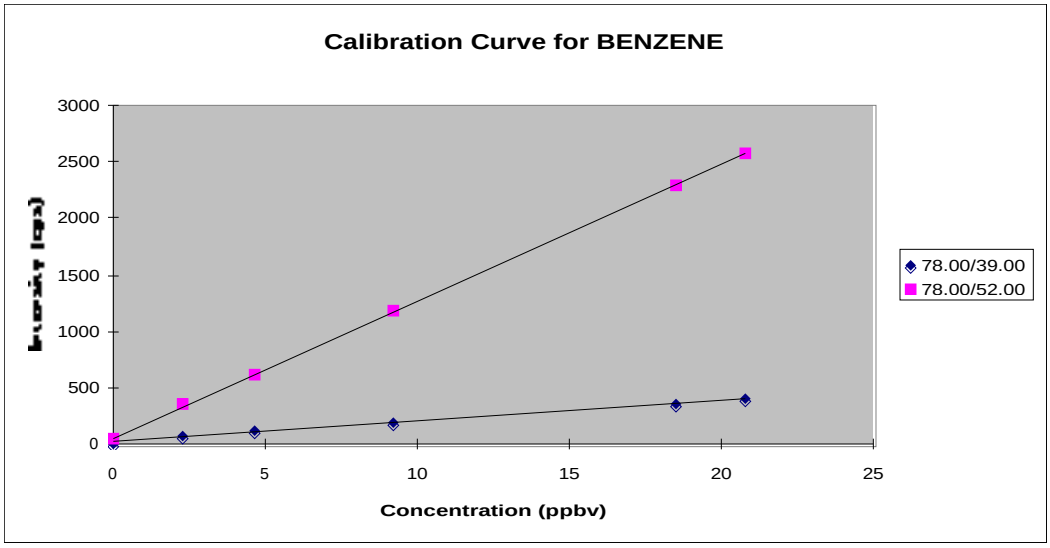
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/27/19.7.04.58
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sat, Apr 27, 2019 at 7:04:57; Exp. Comment: BTX

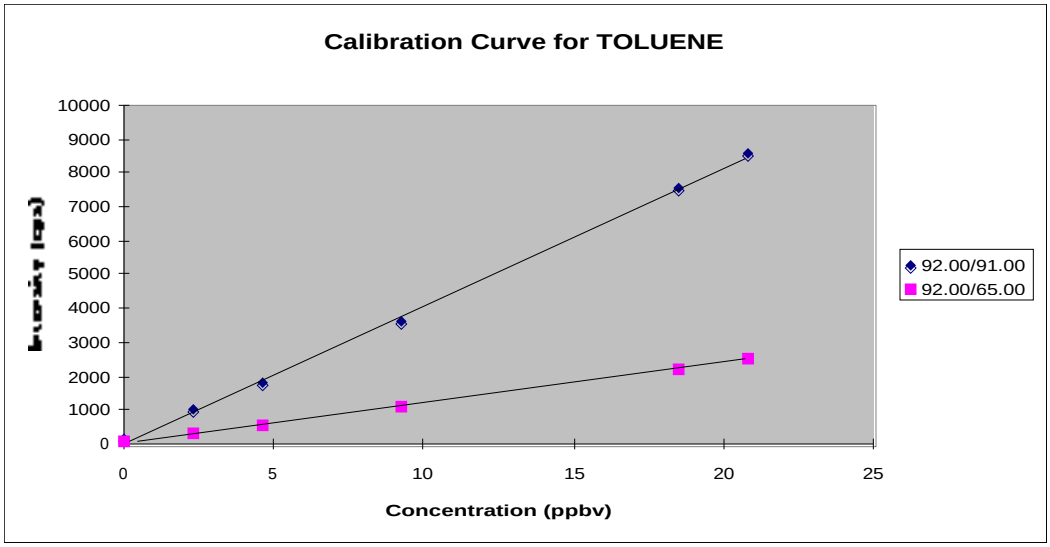




Filename:	64MSMS001069 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 27, 2019 7:23:12					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	6.67	8.69	10.90	13.17	15.12

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	18.3763491	121.441982
Intercept:	17.2432273	53.8132733
Correlation:	0.99917475	0.99995954

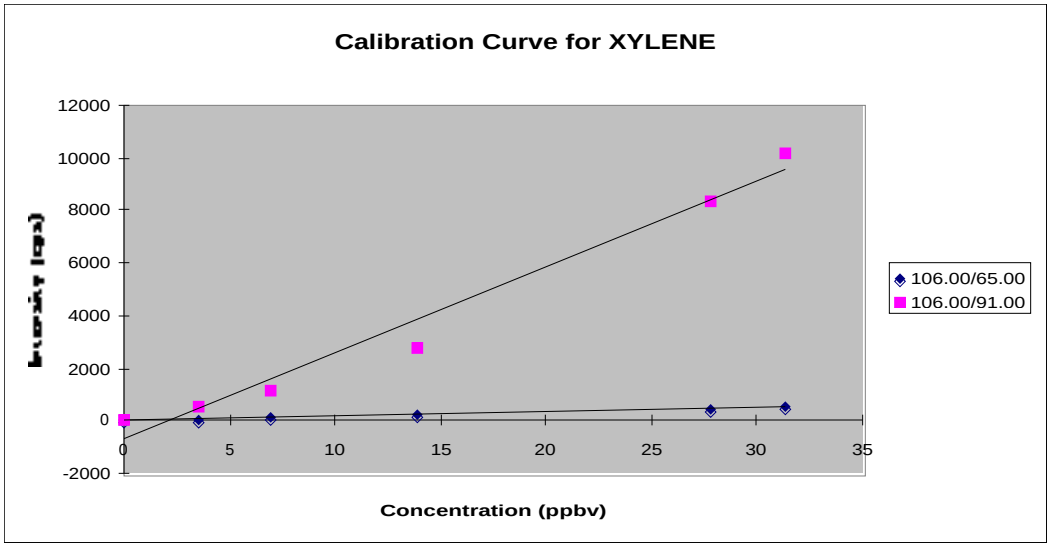
Concentration	78.00/39.00	78.00/52.00
0	8.125	41.25
2.31	64.5833333	345
4.62	107.708333	611.875
9.24	189.278351	1187.01031
18.49	349.791667	2292.70833
20.8	403.125	2580.20833



Filename:	64MSMS001069 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 27, 2019 7:23:56					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	6.67	8.69	10.90	13.17	15.12

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	407.112151	119.788715
Intercept:	36.4924807	14.014073
Correlation:	0.99958524	0.99972279

Concentration	92.00/91.00	92.00/65.00
0	159.270833	44.1666667
2.31	998.645833	295.416667
4.62	1836.875	547.8125
9.24	3660.10309	1083.60825
18.49	7539.375	2243.75
20.8	8603.125	2512.8125



Filename:	64MSMS001069 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 27, 2019 7:24:33					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	6.67	8.69	10.90	13.17	15.12

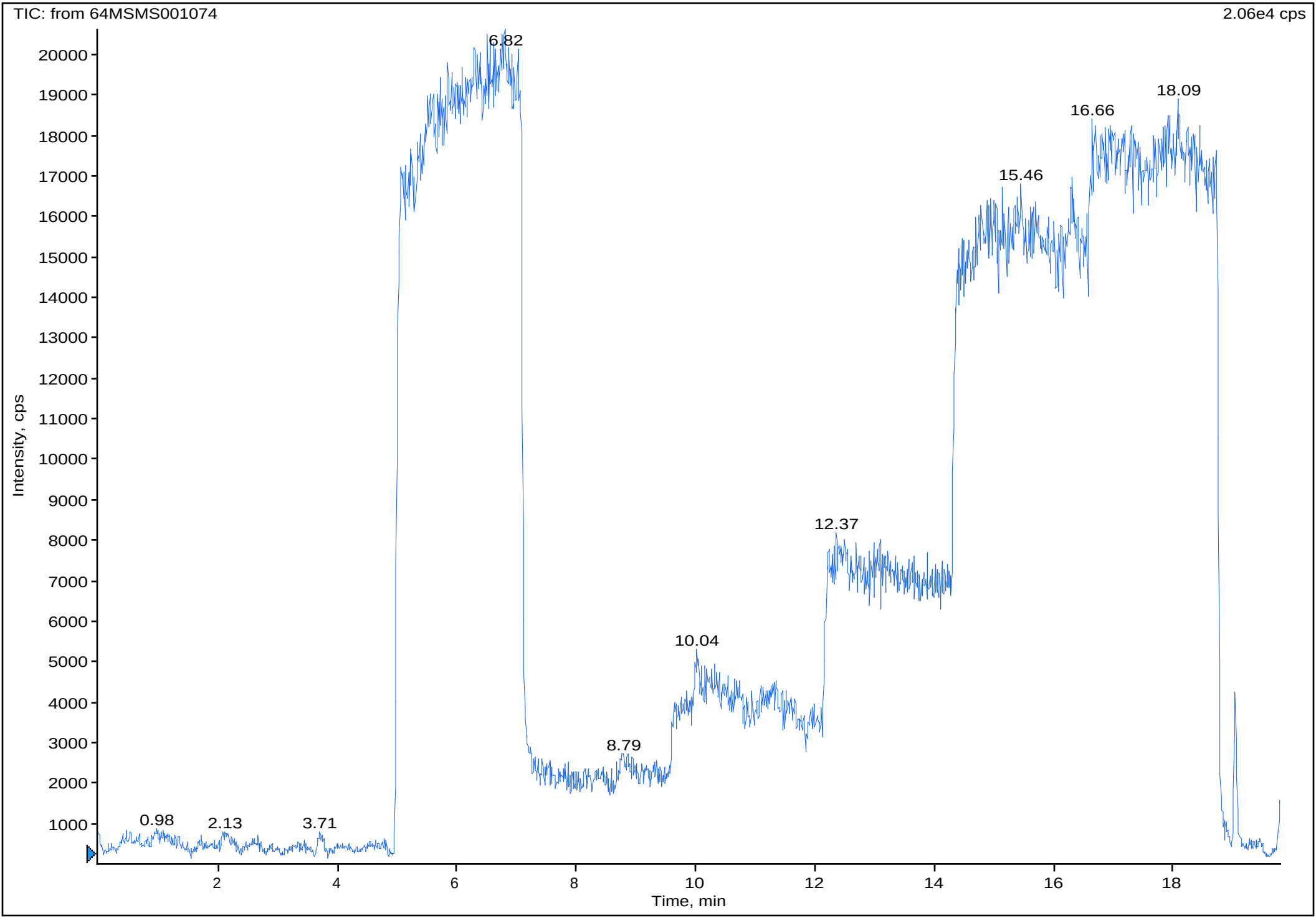
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	17.0808405	328.689962
Intercept:	-7.8812282	-727.28853
Correlation:	0.99858243	0.98722276

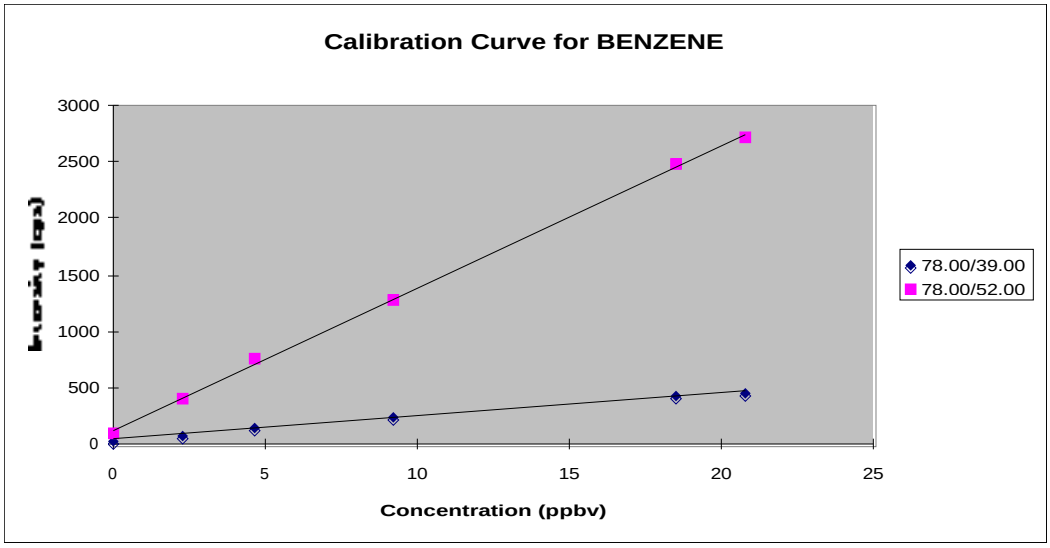
Concentration	106.00/65.0(	106.00/91.00
0	5.10416667	43.2291667
3.48	50.2083333	583.4375
6.96	110.833333	1171.35417
13.91	208.762887	2756.08247
27.82	467.1875	8313.95833
31.3	536.354167	1.02E+04

Report	File Name	64MSMS001069 et al.			
	Sample Name	BOD Calibration - BTX 20190426			
	Date	Saturday, April 27, 2019 7:25:06			
	Time Range	1.50	to	2.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	18.38	121.44	407.11	119.79	17.08	328.69
Intercept	17.24	53.81	36.49	14.01	-7.88	-727.29
Intensity	8.13	41.25	159.27	44.17	5.10	43.23
Int SD	9.87	19.59	47.13	21.36	8.58	23.51
Concentration	-0.50	-0.10	0.30	0.25	0.76	2.34
Conc SD	0.54	0.16	0.12	0.18	0.50	0.07
Compound Con	-0.30		0.28		1.55	
Compound SD	0.25		0.10		0.20	
Det. Limit	1.61	0.48	0.35	0.53	1.51	0.21
Compound DL	1.05		0.44		0.86	

4/27/19.12.41.26
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sat, Apr 27, 2019 at 12:41:25; Exp. Comment: BTX

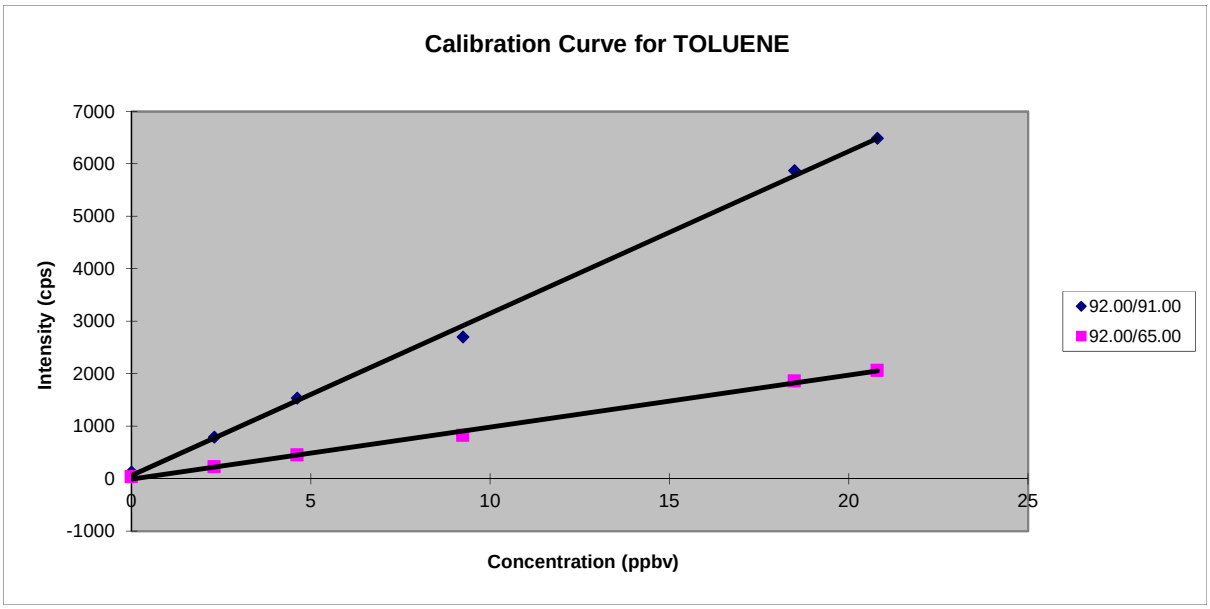




Filename:	64MSMS001074 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 27, 2019 13:02:14					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.00	8.26	11.14	13.36	15.34	17.66

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	20.8363102	125.715938
Intercept:	37.6981779	127.9136
Correlation:	0.9970676	0.99956955

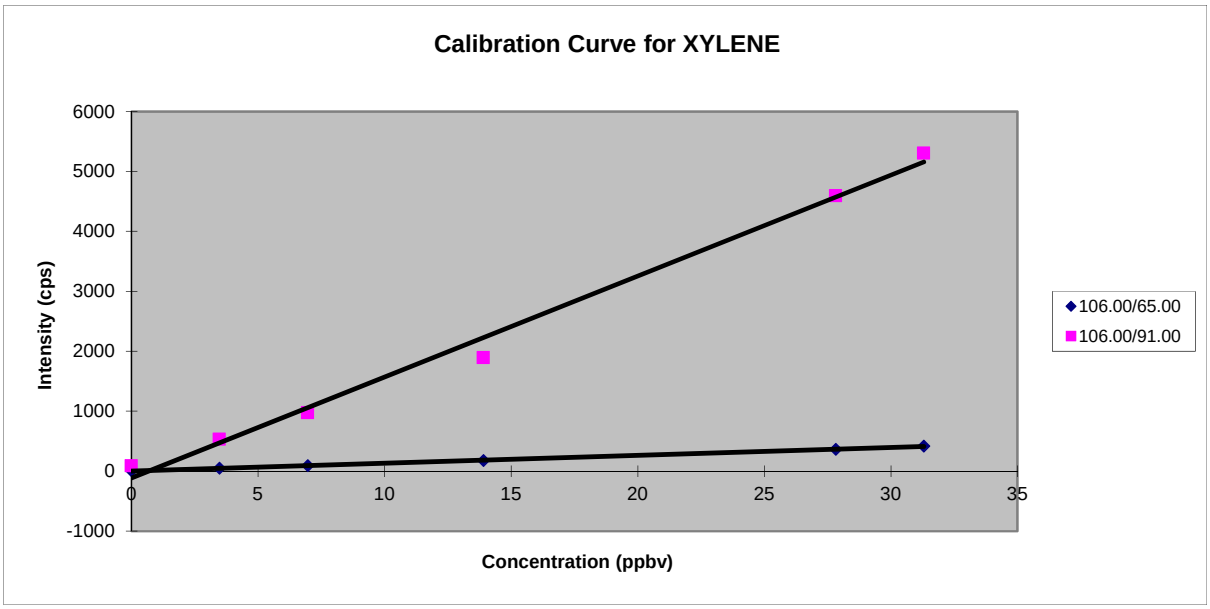
Concentration	78.00/39.00	78.00/52.00
0	22.2916667	104.583333
2.31	80.1041667	405.833333
4.62	148.125	758.4375
9.24	246.25	1276.04167
18.49	428.125	2481.66667
20.8	456.875	2713.125



Filename:	64MSMS001074 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 27, 2019 13:04:26					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.00	8.26	11.14	13.36	15.34	17.66

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	308.965334	99.081461
Intercept:	63.9221002	-5.4089431
Correlation:	0.99911033	0.99857745

Concentratior	92.00/91.00	92.00/65.00
0	126.666667	34.6875
2.31	793.125	227.916667
4.62	1535.83333	453.229167
9.24	2699.47917	822.8125
18.49	5873.4375	1860.625
20.8	6490.20833	2063.33333



Filename:	64MSMS001074 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 27, 2019 13:04:55					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.00	8.26	11.14	13.36	15.34	17.66

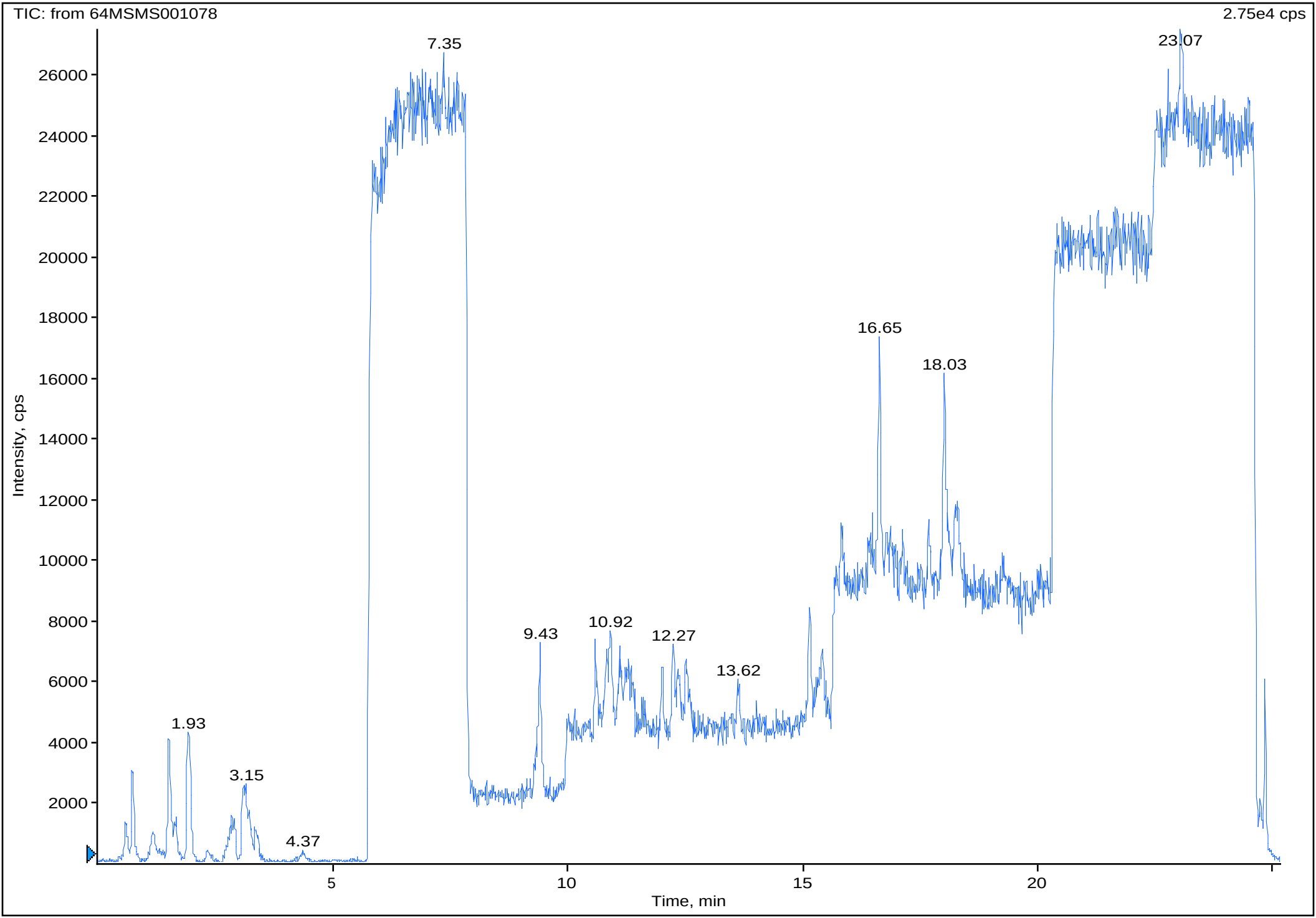
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	13.1605521	168.432842
Intercept:	2.9738139	-112.99059
Correlation:	0.9994698	0.99614398

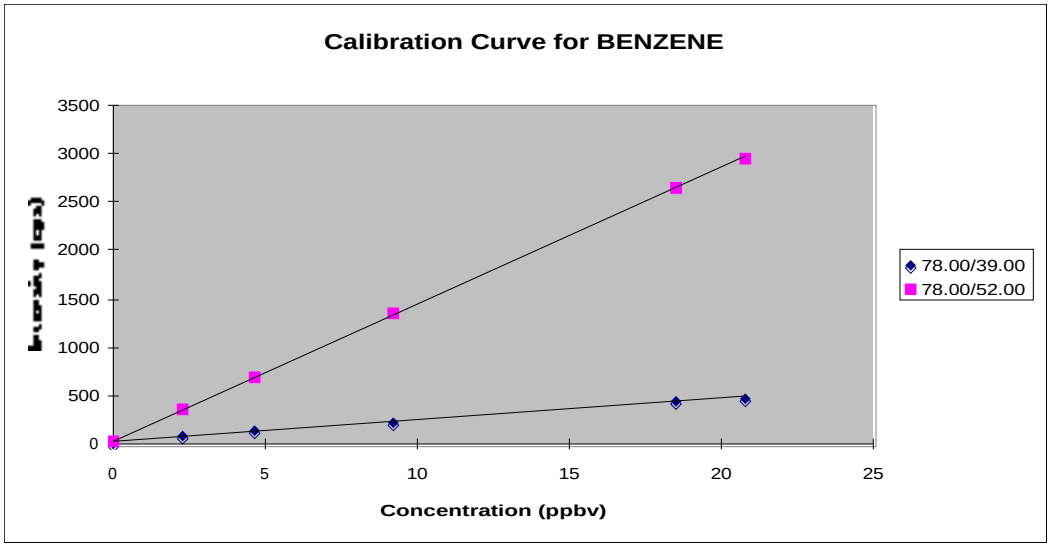
Concentratior	106.00/65.00	106.00/91.00
0	9.0625	85.5208333
3.48	50.5208333	532.5
6.96	90.8333333	975.520833
13.91	177.8125	1891.04167
27.82	367.604167	4592.29167
31.3	420.520833	5304.27083

Report	File Name	64MSMS001074 et al.			
	Sample Name	MOD Calibration - BTX 20190427			
	Date	Saturday, April 27, 2019 13:05:41			
	Time Range	2.50	to	3.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	20.84	125.72	308.97	99.08	13.16	168.43
Intercept	37.70	127.91	63.92	-5.41	2.97	-112.99
Intensity	22.29	104.58	126.67	34.69	9.06	85.52
Int SD	18.38	41.95	55.62	22.80	10.27	36.44
Concentration	-0.74	-0.19	0.20	0.40	0.46	1.18
Conc SD	0.88	0.33	0.18	0.23	0.78	0.22
Compound Con	-0.46		0.30		0.82	
Compound SD	0.43		0.15		0.35	
Det. Limit	2.65	1.00	0.54	0.69	2.34	0.65
Compound DL	1.82		0.62		1.49	

4/27/19.17.55.35
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sat, Apr 27, 2019 at 17:55:34; Exp. Comment: BTX

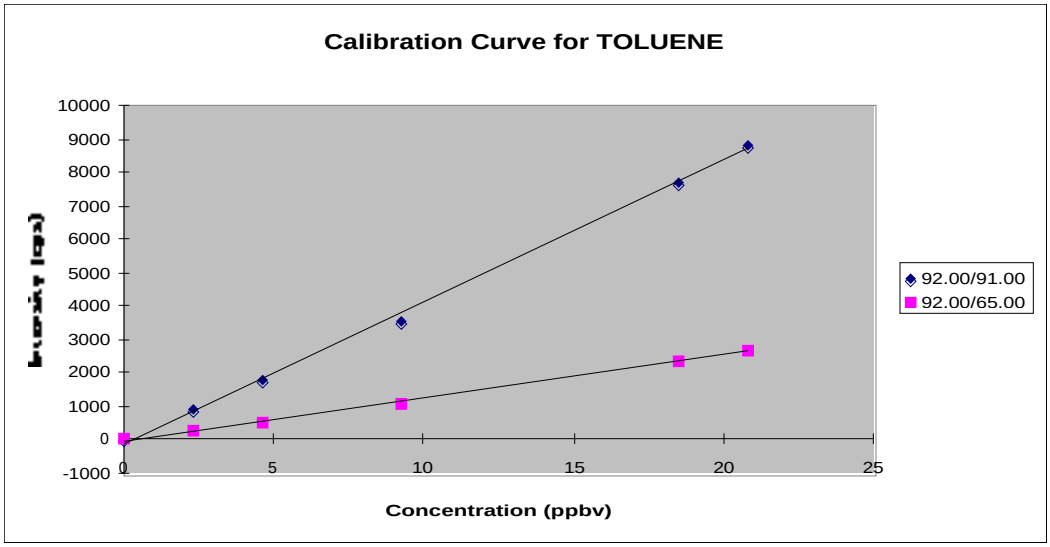




Filename:	64MSMS001078 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 27, 2019 18:21:58					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	5.00	8.55	14.36	19.33	21.48	23.79

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	22.5045897	141.35529
Intercept:	18.1804924	32.8677411
Correlation:	0.99903669	0.99995333

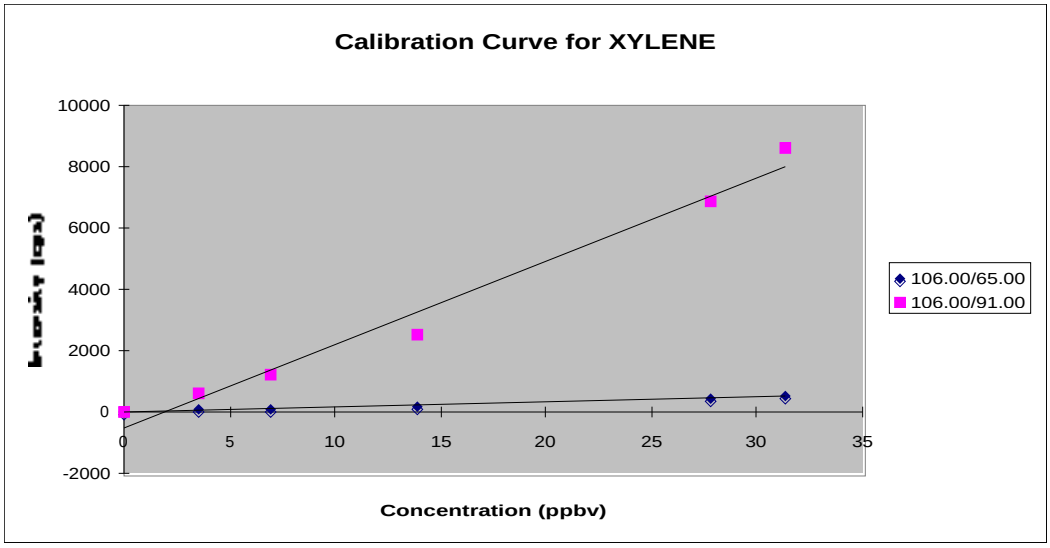
Concentration	78.00/39.00	78.00/52.00
0	4.16666667	14.5833333
2.31	73.6458333	365.729167
4.62	131.354167	696.458333
9.24	233.020833	1345.83333
18.49	433.645833	2652.5
20.8	481.354167	2961.66667



Filename:	64MSMS001078 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 27, 2019 18:22:37					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	5.00	8.55	14.36	19.33	21.48	23.79

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	422.548853	128.43055
Intercept:	-98.589761	-36.379854
Correlation:	0.99931321	0.99932591

Concentration	92.00/91.00	92.00/65.00
0	35.2083333	11.0416667
2.31	895.833333	263.020833
4.62	1827.91667	539.6875
9.24	3580.20833	1086.77083
18.49	7671.35417	2328.54167
20.8	8832.5	2675.41667



Filename:	64MSMS001078 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, April 27, 2019 18:23:09					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	5.00	8.55	14.36	19.33	21.48	23.79

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	16.5609545	272.370414
Intercept:	-4.8175626	-489.56044
Correlation:	0.99847778	0.98986133

Concentration	106.00/65.0(	106.00/91.00
0	1.97916667	14.375
3.48	52.0833333	591.875
6.96	114.6875	1193.22917
13.91	211.041667	2518.75
27.82	443.4375	6876.04167
31.3	530.208333	8603.125

Report	File Name	64MSMS001078 et al.			
	Sample Name	EOD Calibration - BTX 20190427			
	Date	Saturday, April 27, 2019 18:23:50			
	Time Range	4.50	to	5.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	22.50	141.36	422.55	128.43	16.56	272.37
Intercept	18.18	32.87	-98.59	-36.38	-4.82	-489.56
Intensity	4.17	14.58	35.21	11.04	1.98	14.38
Int SD	7.63	13.83	20.31	12.52	4.95	13.44
Concentration	-0.62	-0.13	0.32	0.37	0.41	1.85
Conc SD	0.34	0.10	0.05	0.10	0.30	0.05
Compound Con	-0.38		0.34		1.13	
Compound SD	0.15		0.05		0.12	
Det. Limit	1.02	0.29	0.14	0.29	0.90	0.15
Compound DL	0.66		0.22		0.52	

TAGA FLOW CALIBRATION LOG

Work Assignment: 372 Date: 4/28/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3250	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:41	1500 SCCS	191	1500 SCCS	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15 - 0168		Calibration Date: Exp: 5/2/2019	
		Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
Time	Reference Flow Meter	Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
		Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
Time	Reference Flow Meter	Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Sun, Apr 28, 2019, 7:03:43
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR28 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sun, Apr 28, 2019, 7:01:00

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.072
120.000	0.083
160.000	0.094

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.040
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Sun, Apr 28, 2019, 7:03:58
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR28 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sun, Apr 28, 2019, 7:01:00

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.072
120.000	0.083
160.000	0.094

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.040
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

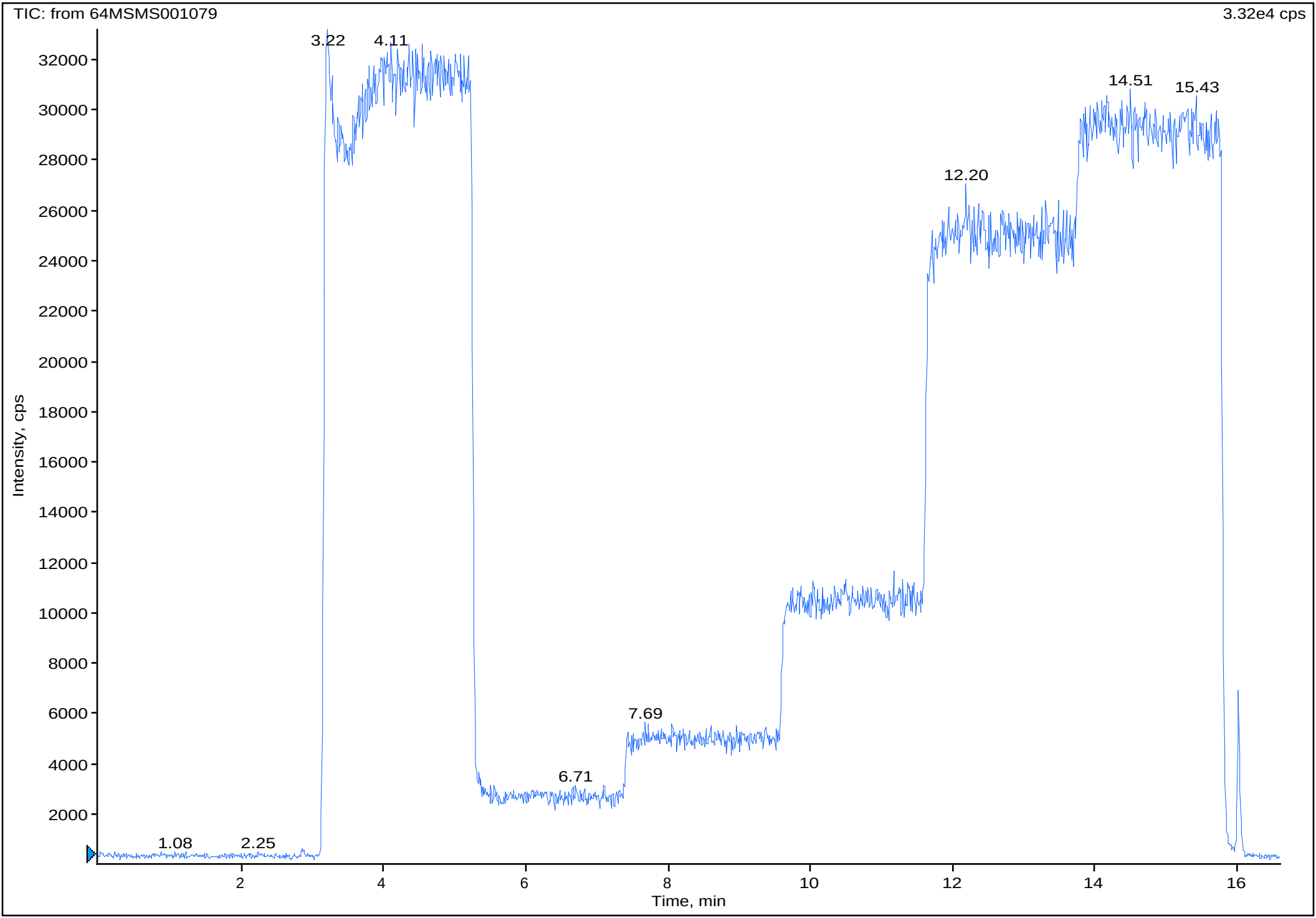
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

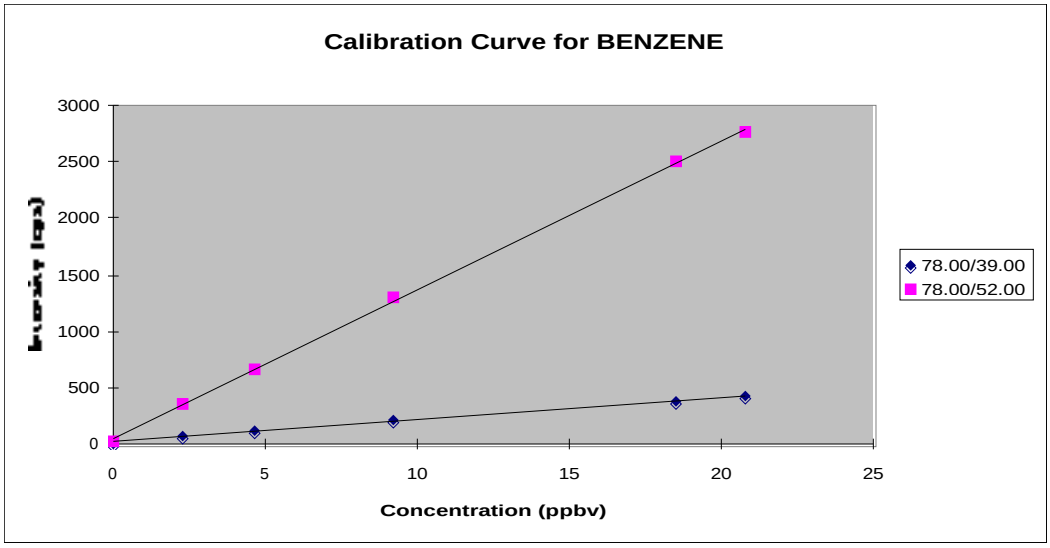
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/28/19.7.07.07
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, Apr 28, 2019 at 7:07:06; Exp. Comment: BTX



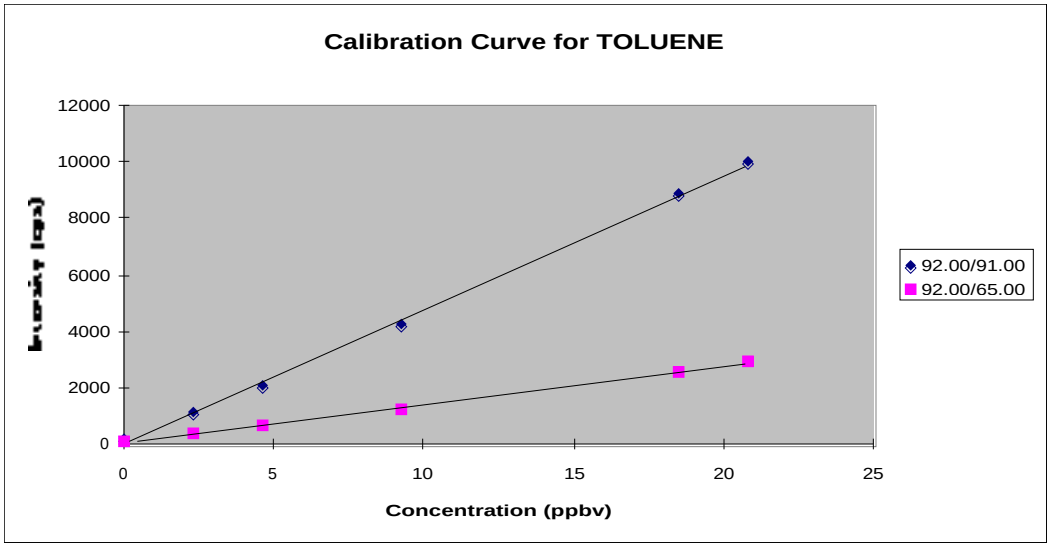


Filename:	64MSMS001079 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Sunday, April 28, 2019 7:25:50
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.40	8.46	10.58	12.65	14.67

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	19.619573	131.78065
Intercept:	16.5837743	50.3971112
Correlation:	0.99920127	0.99980722

Concentration	78.00/39.00	78.00/52.00
0	7.29166667	31.3541667
2.31	63.8541667	363.125
4.62	110.208333	651.041667
9.24	206.875	1296.66667
18.49	381.458333	2506.04167
20.8	417.916667	2762.70833

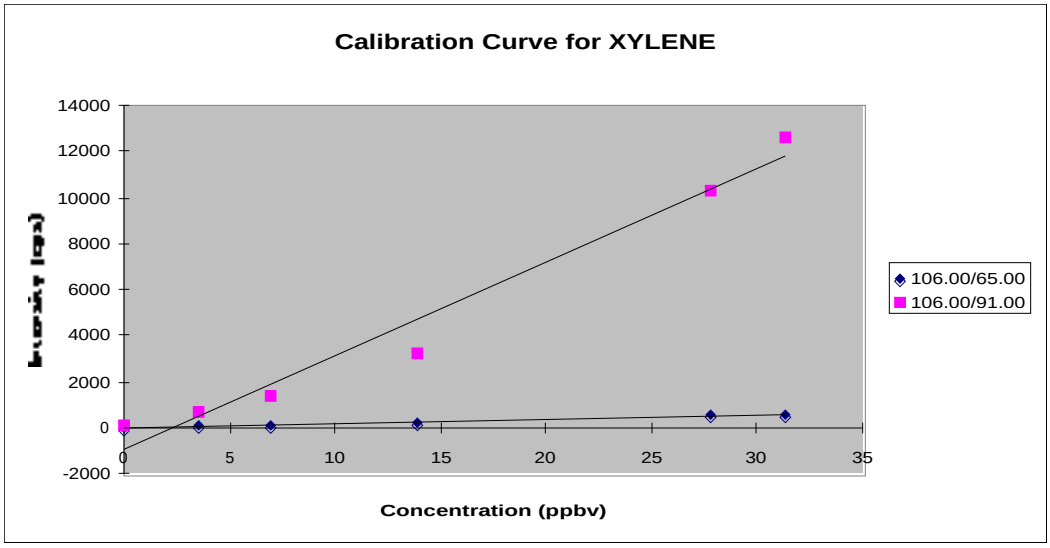


Filename:	64MSMS001079 et al.
Compound na	TOLUENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Sunday, April 28, 2019 7:26:28
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.40	8.46	10.58	12.65	14.67

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	478.350793	136.105324
Intercept:	10.5448666	22.1414586
Correlation:	0.99951022	0.99971213

Concentration	92.00/91.00	92.00/65.00
0	158.020833	48.2291667
2.31	1167.29167	350.9375
4.62	2101.66667	623.854167
9.24	4234.6875	1251.66667
18.49	8925.52083	2518.95833
20.8	1.00E+04	2887.60417



Filename:	64MSMS001079 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 28, 2019 7:26:59					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.40	8.46	10.58	12.65	14.67

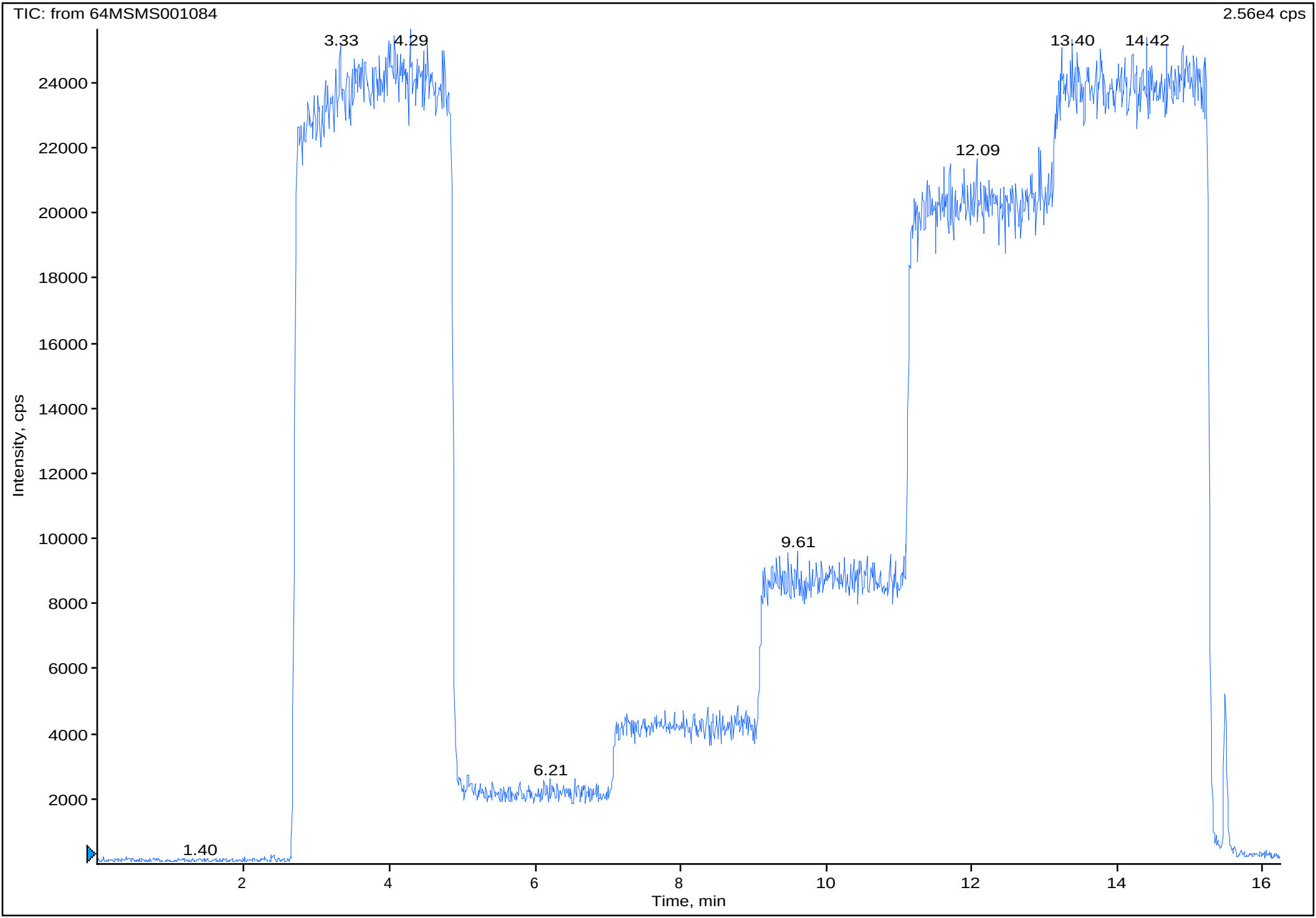
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	18.885035	406.70015
Intercept:	-14.180645	-969.30053
Correlation:	0.99621093	0.98576322

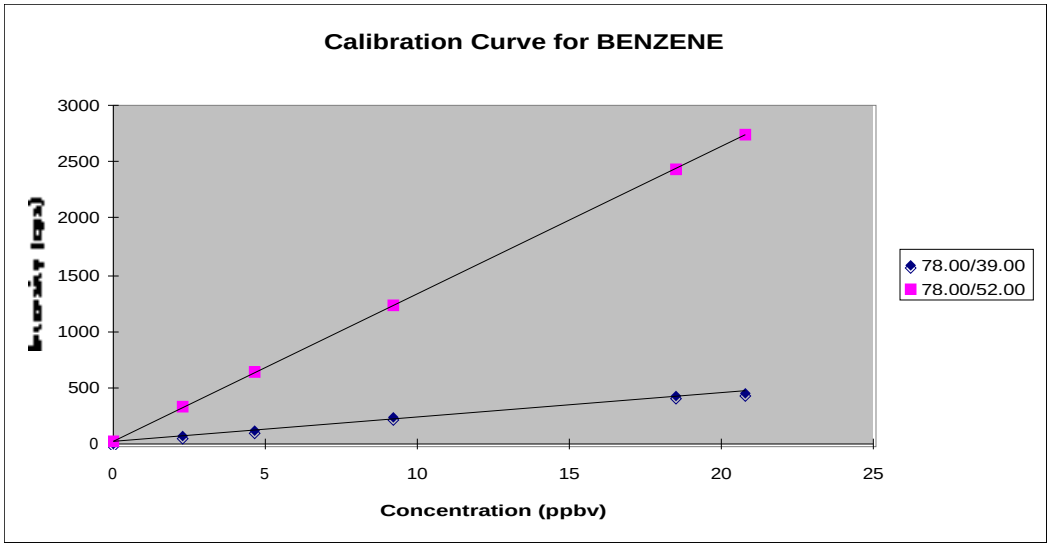
Concentration	106.00/65.0(	106.00/91.00
0	4.375	50.1041667
3.48	56.9791667	658.333333
6.96	113.333333	1349.16667
13.91	213.958333	3246.04167
27.82	500.9375	1.03E+04
31.3	601.666667	1.26E+04

Report	File Name	64MSMS001079 et al.			
	Sample Name	BOD Calibration - BTX 20190428			
	Date	Sunday, April 28, 2019 7:27:39			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	19.62	131.78	478.35	136.11	18.89	406.70
Intercept	16.58	50.40	10.54	22.14	-14.18	-969.30
Intensity	7.29	31.35	158.02	48.23	4.38	50.10
Int SD	9.12	18.22	48.66	23.66	7.37	28.00
Concentration	-0.47	-0.14	0.31	0.19	0.98	2.51
Conc SD	0.46	0.14	0.10	0.17	0.39	0.07
Compound Con	-0.31		0.25		1.74	
Compound SD	0.21		0.10		0.16	
Det. Limit	1.39	0.41	0.31	0.52	1.17	0.21
Compound DL	0.90		0.41		0.69	

4/28/19.13.08.06
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, Apr 28, 2019 at 13:08:05; Exp. Comment: BTX

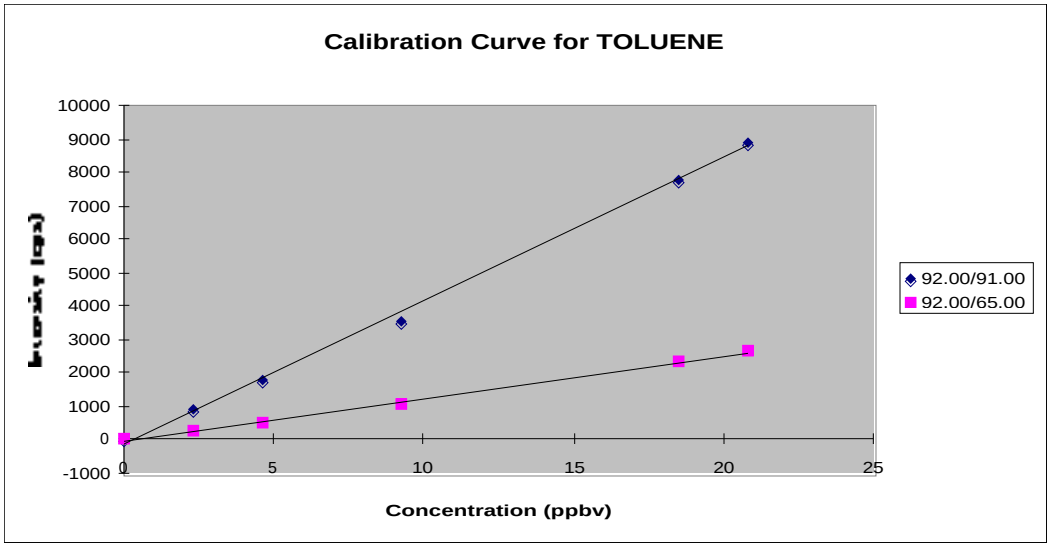




Filename:	64MSMS001084 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 28, 2019 13:25:23					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.00	8.06	10.11	12.08	14.19

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	21.6946251	130.494543
Intercept:	12.5596267	23.1357197
Correlation:	0.99919878	0.999957

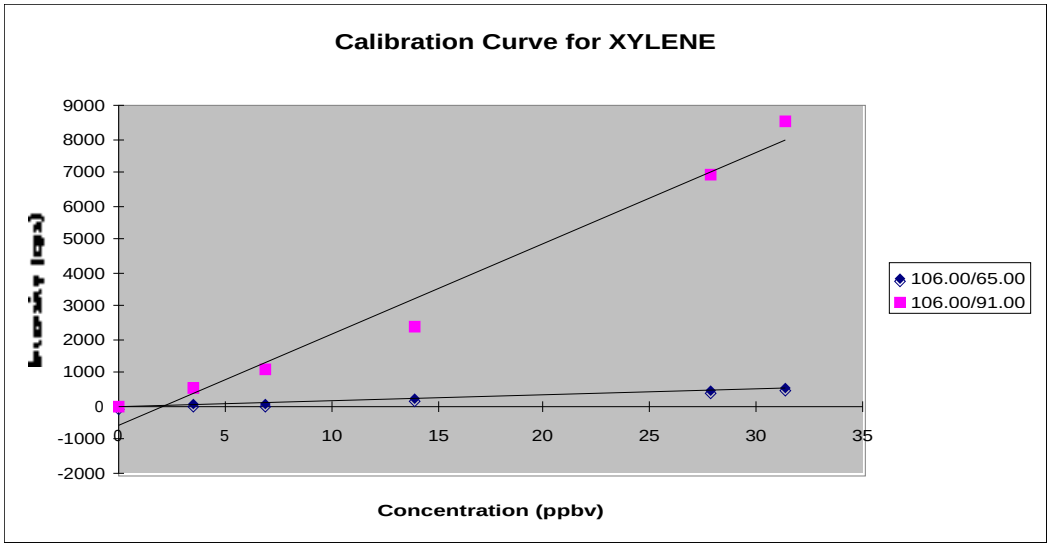
Concentration	78.00/39.00	78.00/52.00
0	3.54166667	14.8958333
2.31	61.9791667	336.25
4.62	116.458333	631.979167
9.24	225.208333	1218.64583
18.49	413.75	2426.35417
20.8	457.604167	2747.91667



Filename:	64MSMS001084 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 28, 2019 13:25:59					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.00	8.06	10.11	12.08	14.19

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	427.889996	127.15639
Intercept:	-133.60209	-38.265562
Correlation:	0.99910842	0.99941145

Concentration	92.00/91.00	92.00/65.00
0	33.125	10.9375
2.31	896.770833	258.854167
4.62	1761.25	521.458333
9.24	3575.625	1081.25
18.49	7738.85417	2314.27083
20.8	8923.54167	2635.72917



Filename:	64MSMS001084 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 28, 2019 13:26:30					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.00	8.06	10.11	12.08	14.19

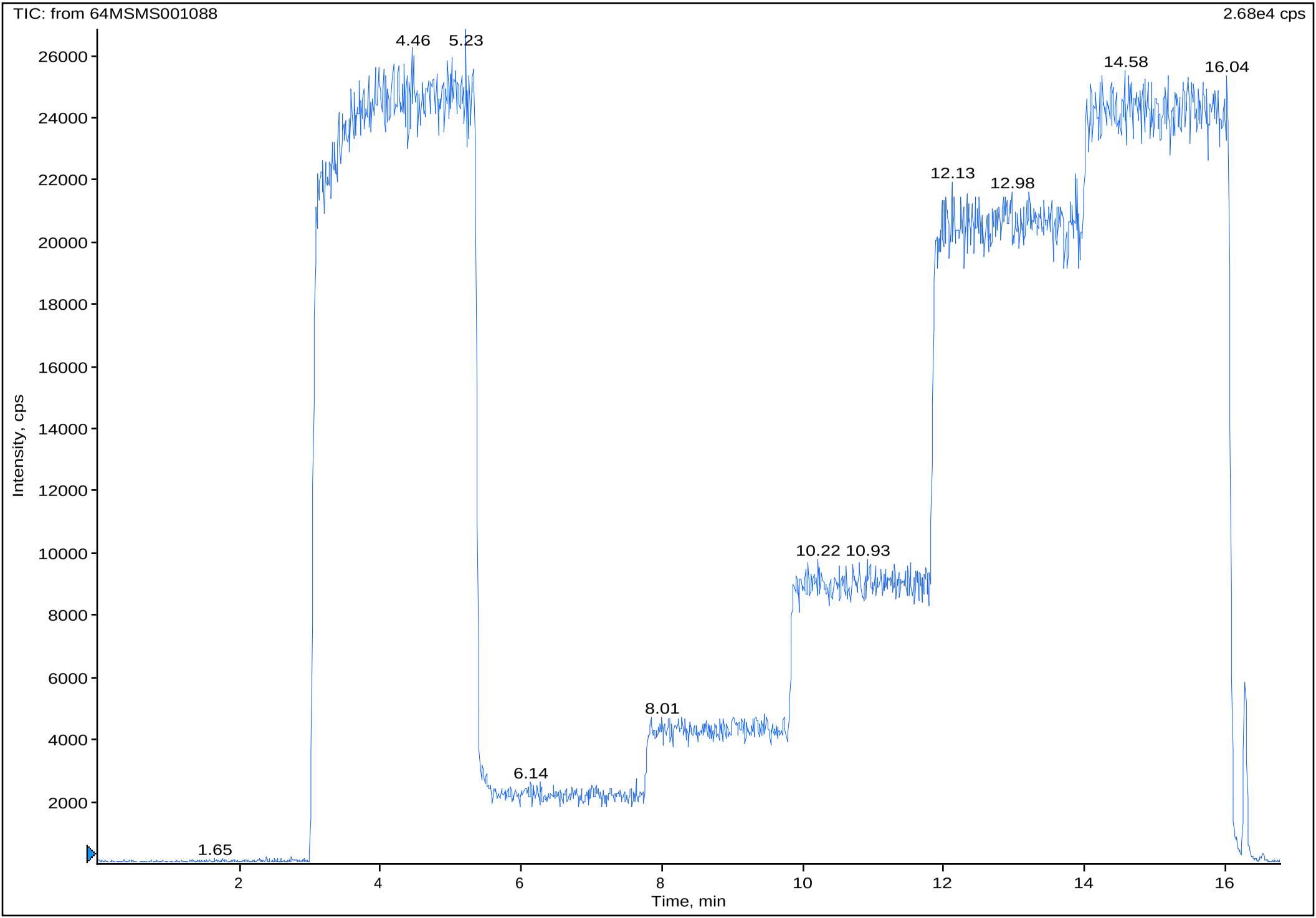
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	17.5095851	272.590001
Intercept:	-12.597928	-549.28193
Correlation:	0.9980745	0.98867962

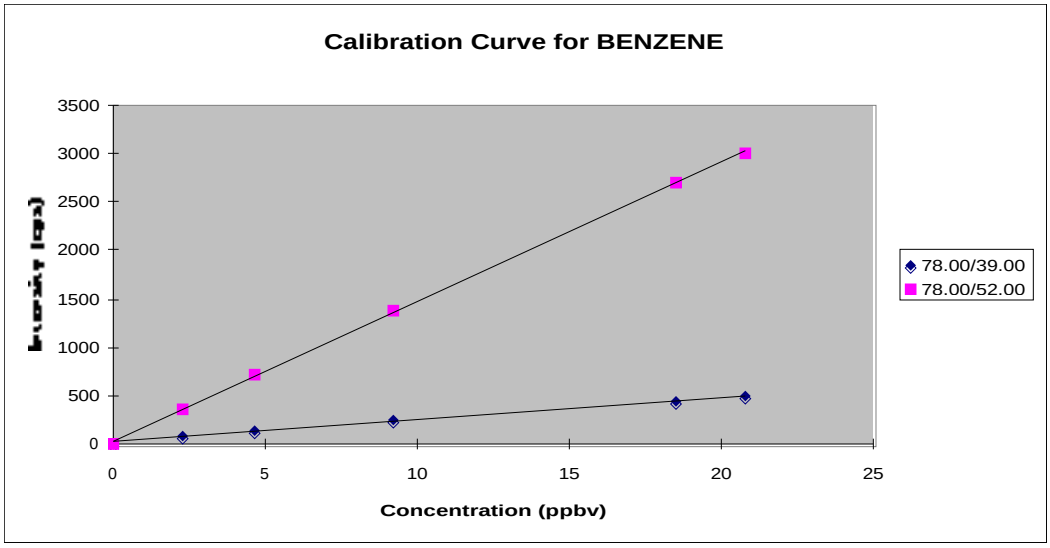
Concentration	106.00/65.0(	106.00/91.00
0	3.22916667	23.5416667
3.48	53.6458333	532.291667
6.96	96.3541667	1083.4375
13.91	213.020833	2397.5
27.82	469.6875	6891.45833
31.3	550	8529.16667

Report	File Name	64MSMS001084 et al.			
	Sample Name	MOD Calibration - BTX 20190428			
	Date	Sunday, April 28, 2019 13:27:03			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	21.69	130.49	427.89	127.16	17.51	272.59
Intercept	12.56	23.14	-133.60	-38.27	-12.60	-549.28
Intensity	3.54	14.90	33.13	10.94	3.23	23.54
Int SD	5.42	11.88	20.84	12.98	7.18	17.65
Concentration	-0.42	-0.06	0.39	0.39	0.90	2.10
Conc SD	0.25	0.09	0.05	0.10	0.41	0.06
Compound Con	-0.24		0.39		1.50	
Compound SD	0.12		0.05		0.17	
Det. Limit	0.75	0.27	0.15	0.31	1.23	0.19
Compound DL	0.51		0.23		0.71	

4/28/19.18.04.07
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, Apr 28, 2019 at 18:04:06; Exp. Comment: BTX

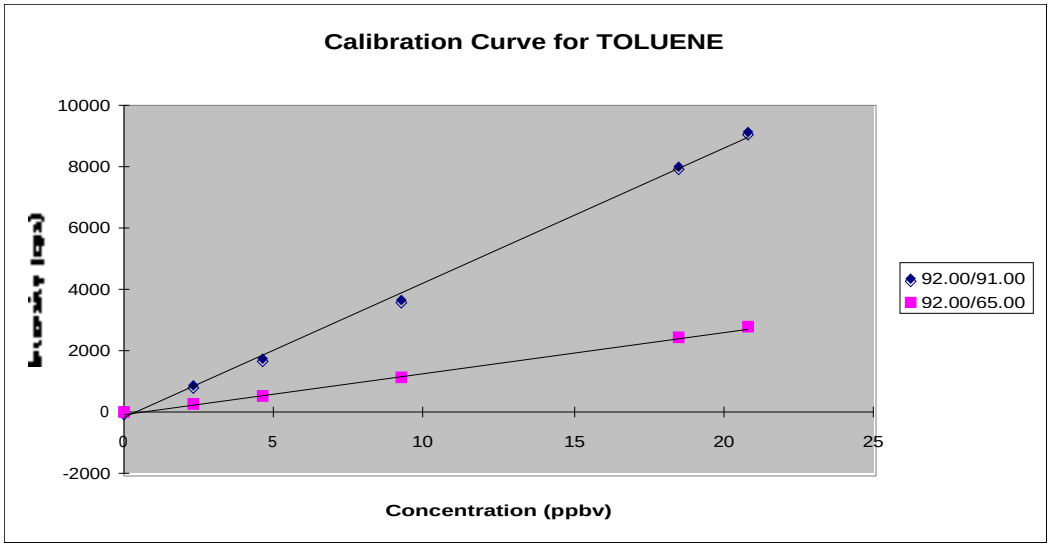




Filename:	64MSMS001088 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 28, 2019 18:22:22					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.67	8.81	10.85	12.89	14.98

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	23.1831113	143.729915
Intercept:	21.4356457	30.1989673
Correlation:	0.99784468	0.99989632

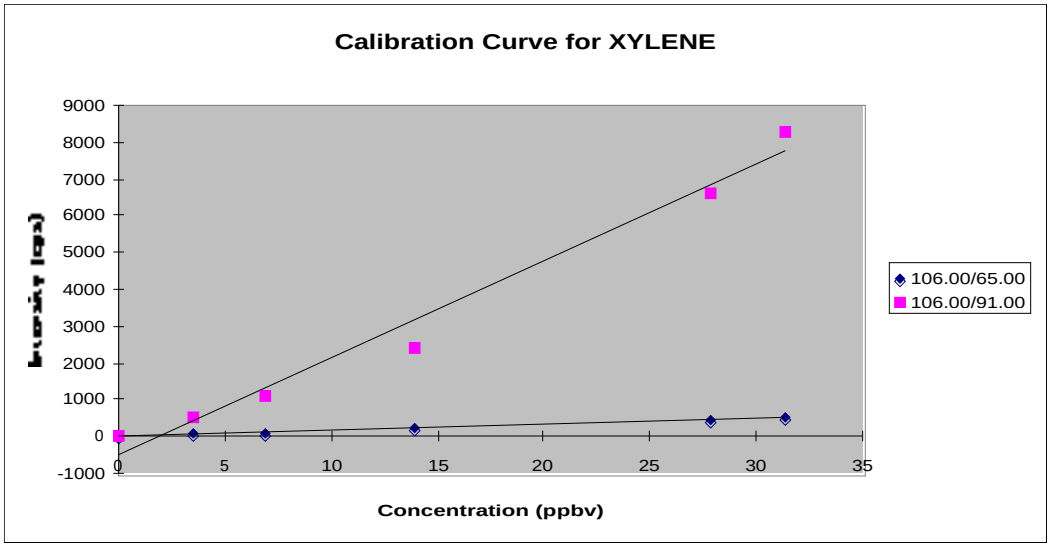
Concentration	78.00/39.00	78.00/52.00
0	3.02083333	8.54166667
2.31	74.2708333	365.104167
4.62	142.8125	709.0625
9.24	249.479167	1368.54167
18.49	452.474227	2704.3299
20.8	492.291667	2996.875



Filename:	64MSMS001088 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 28, 2019 18:23:04					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.67	8.81	10.85	12.89	14.98

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	440.64735	133.541699
Intercept:	-169.89706	-51.974066
Correlation:	0.99890341	0.99892125

Concentration	92.00/91.00	92.00/65.00
0	34.8958333	11.1458333
2.31	899.791667	272.5
4.62	1740.72917	521.25
9.24	3628.33333	1105.52083
18.49	7963.71134	2409.69072
20.8	9151.45833	2774.27083



Filename:	64MSMS001088 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, April 28, 2019 18:23:35					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.67	8.81	10.85	12.89	14.98

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	16.6754948	263.147433
Intercept:	-8.564502	-502.93188
Correlation:	0.99842167	0.99005414

Concentration	106.00/65.0(	106.00/91.00
0	3.4375	11.6666667
3.48	55.5208333	525.729167
6.96	97.5	1082.29167
13.91	207.083333	2433.54167
27.82	450.412371	6626.80412
31.3	526.5625	8267.29167

Report	File Name	64MSMS001088 et al.			
	Sample Name	EOD Calibration - BTX 20190428			
	Date	Sunday, April 28, 2019 18:24:07			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	23.18	143.73	440.65	133.54	16.68	263.15
Intercept	21.44	30.20	-169.90	-51.97	-8.56	-502.93
Intensity	3.02	8.54	34.90	11.15	3.44	11.67
Int SD	6.18	11.61	19.63	11.95	7.08	11.58
Concentration	-0.79	-0.15	0.46	0.47	0.72	1.96
Conc SD	0.27	0.08	0.04	0.09	0.42	0.04
Compound Con	-0.47		0.47		1.34	
Compound SD	0.12		0.05		0.17	
Det. Limit	0.80	0.24	0.13	0.27	1.27	0.13
Compound DL	0.52		0.20		0.70	

TAGA FLOW CALIBRATION LOG

Work Assignment: 372 Date: 4/29/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3250	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:45	1500SCCS	191	1500SCCS	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #18DWY15-0168			Calibration Date: Exp: 5/2/2019	
		Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
Time	Reference Flow Meter	Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
		Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
Time	Reference Flow Meter	Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Mon, Apr 29, 2019, 7:12:56
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR28 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sun, Apr 28, 2019, 7:01:00

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.072
120.000	0.083
160.000	0.094

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.040
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Mon, Apr 29, 2019, 7:13:48
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR28 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sun, Apr 28, 2019, 7:01:00

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.072
120.000	0.083
160.000	0.094

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.040
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

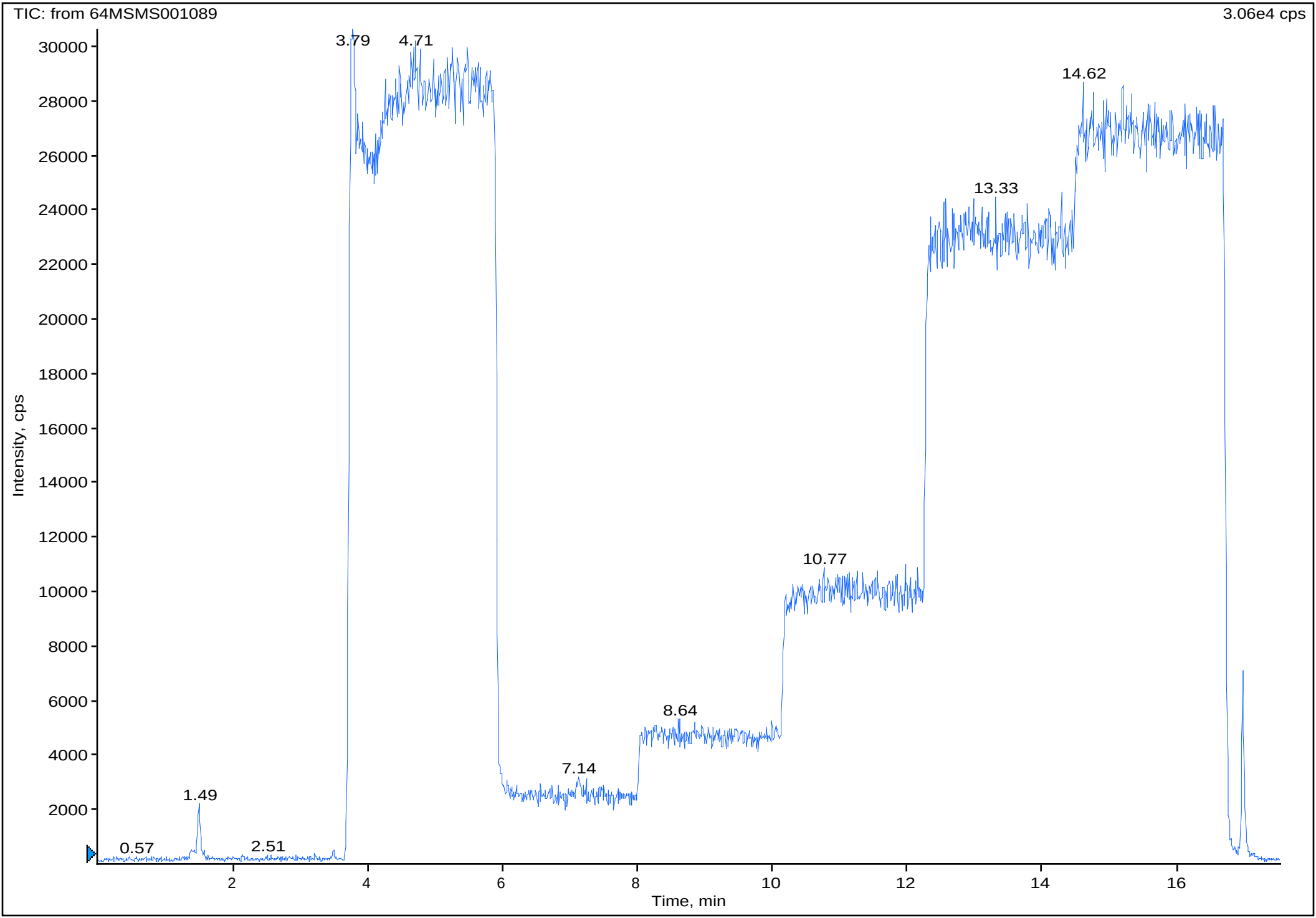
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

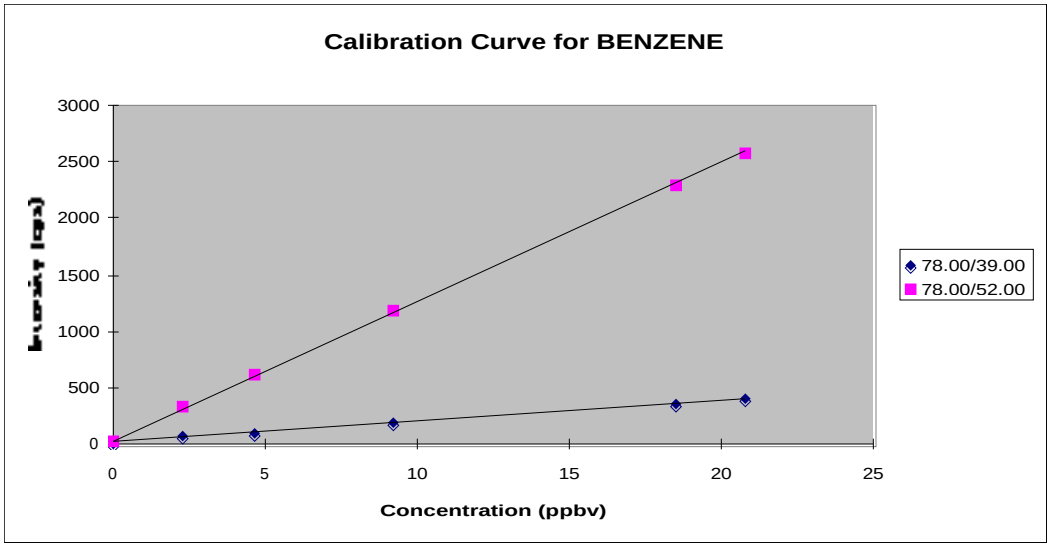
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/29/19.7.16.11
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Mon, Apr 29, 2019 at 7:16:10; Exp. Comment: BTX

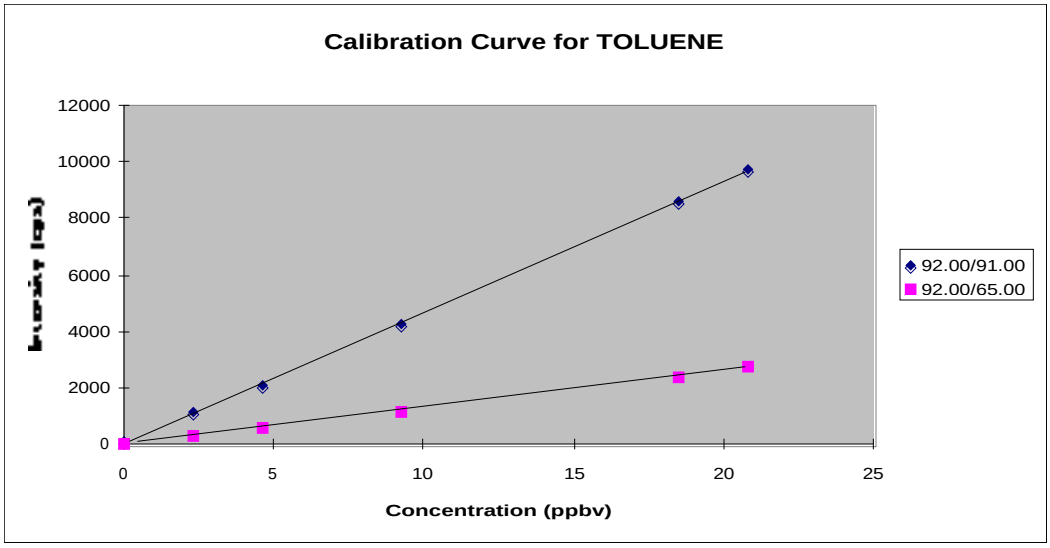




Filename:	64MSMS001089 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, April 29, 2019 7:36:12					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	6.98	9.07	11.16	13.35	15.57

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	18.7407838	122.74305
Intercept:	12.7449103	35.271463
Correlation:	0.99918366	0.99991572

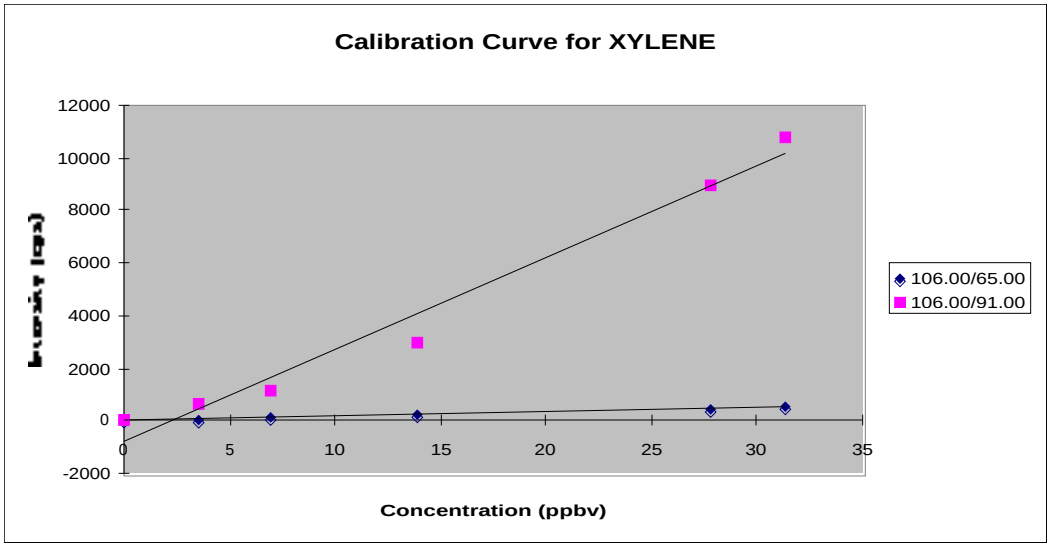
Concentration	78.00/39.00	78.00/52.00
0	3.02083333	14.1666667
2.31	59.0625	324.895833
4.62	105.3125	609.791667
9.24	189.375	1188.02083
18.49	363.333333	2300.83333
20.8	395.729167	2581.25



Filename:	64MSMS001089 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, April 29, 2019 7:36:54					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	6.98	9.07	11.16	13.35	15.57

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	465.581122	129.371353
Intercept:	32.5375229	8.6566297
Correlation:	0.99982084	0.99981383

Concentration	92.00/91.00	92.00/65.00
0	101.770833	30.1041667
2.31	1170.83333	315.9375
4.62	2082.91667	588.75
9.24	4251.35417	1179.375
18.49	8635.83333	2386.875
20.8	9773.64583	2725.83333



Filename:	64MSMS001089 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, April 29, 2019 7:37:27					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	6.98	9.07	11.16	13.35	15.57

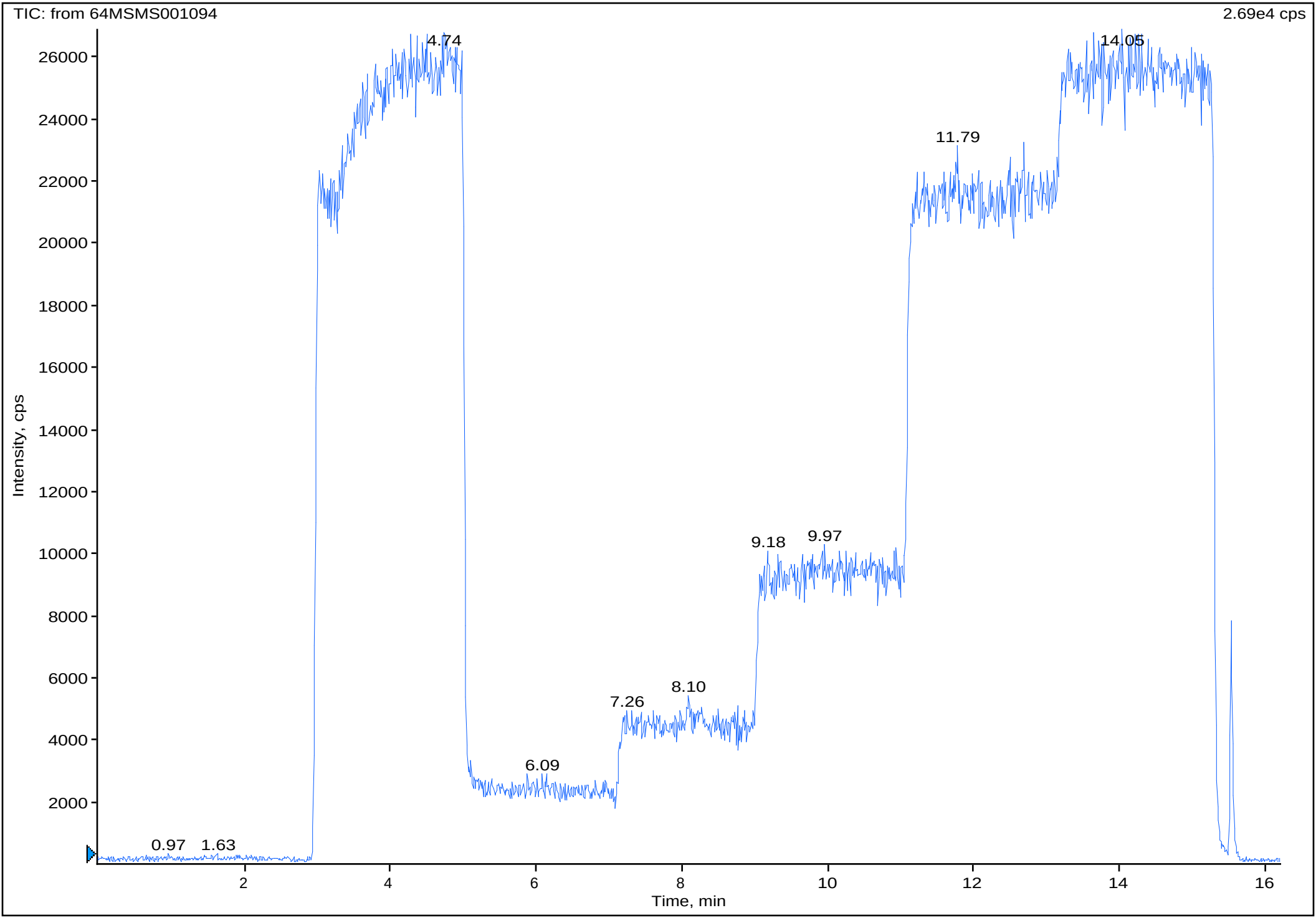
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	17.219018	350.832332
Intercept:	-9.5278777	-792.17288
Correlation:	0.99899979	0.98802434

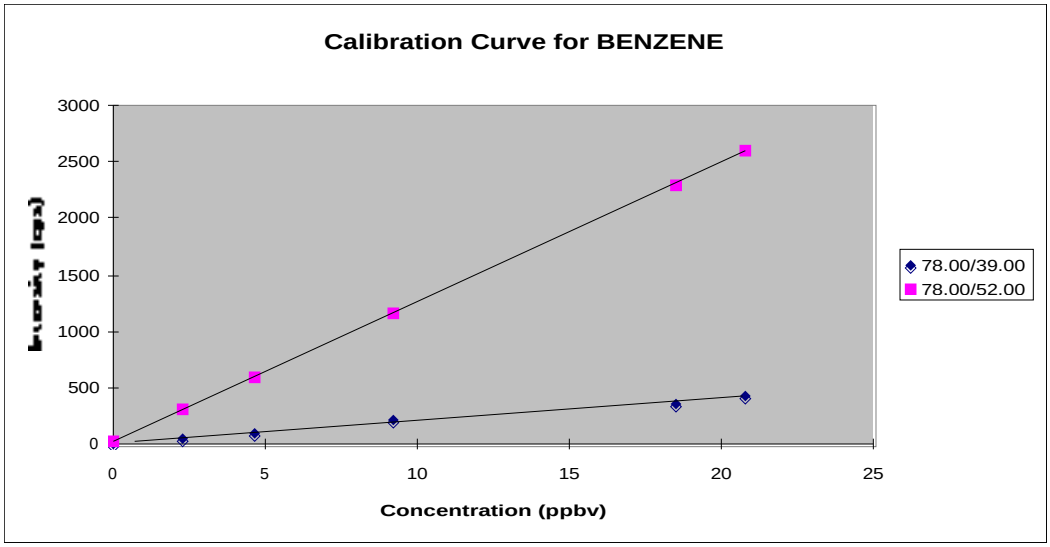
Concentration	106.00/65.0(	106.00/91.00
0	2.60416667	25.8333333
3.48	52.3958333	612.5
6.96	103.4375	1188.22917
13.91	213.75	2978.85417
27.82	473.645833	8910.625
31.3	534.270833	1.08E+04

Report	File Name	64MSMS001089 et al.			
	Sample Name	BOD Calibration - BTX 20190429			
	Date	Monday, April 29, 2019 7:38:06			
	Time Range	2.00	to	3.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	18.74	122.74	465.58	129.37	17.22	350.83
Intercept	12.74	35.27	32.54	8.66	-9.53	-792.17
Intensity	3.02	14.17	101.77	30.10	2.60	25.83
Int SD	5.83	14.77	38.47	17.38	5.85	18.51
Concentration	-0.52	-0.17	0.15	0.17	0.70	2.33
Conc SD	0.31	0.12	0.08	0.13	0.34	0.05
Compound Con	-0.35		0.16		1.52	
Compound SD	0.15		0.08		0.14	
Det. Limit	0.93	0.36	0.25	0.40	1.02	0.16
Compound DL	0.65		0.33		0.59	

4/29/19.12.52.40
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Mon, Apr 29, 2019 at 12:52:40; Exp. Comment: BTX

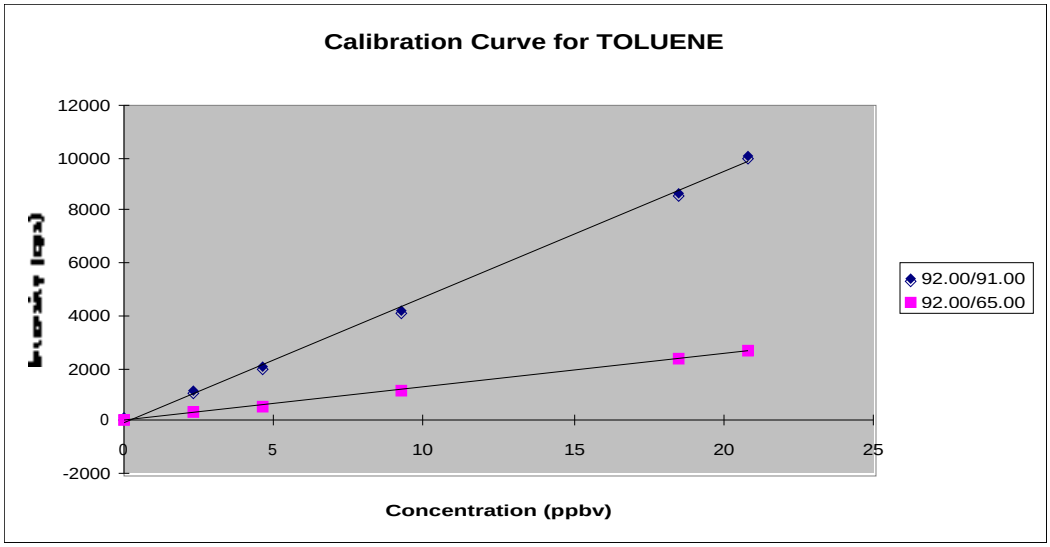




Filename:	64MSMS001094 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, April 29, 2019 13:10:23					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.12	8.04	10.08	12.12	14.14

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	19.6864402	123.549924
Intercept:	11.0004208	23.9243731
Correlation:	0.9983697	0.99992121

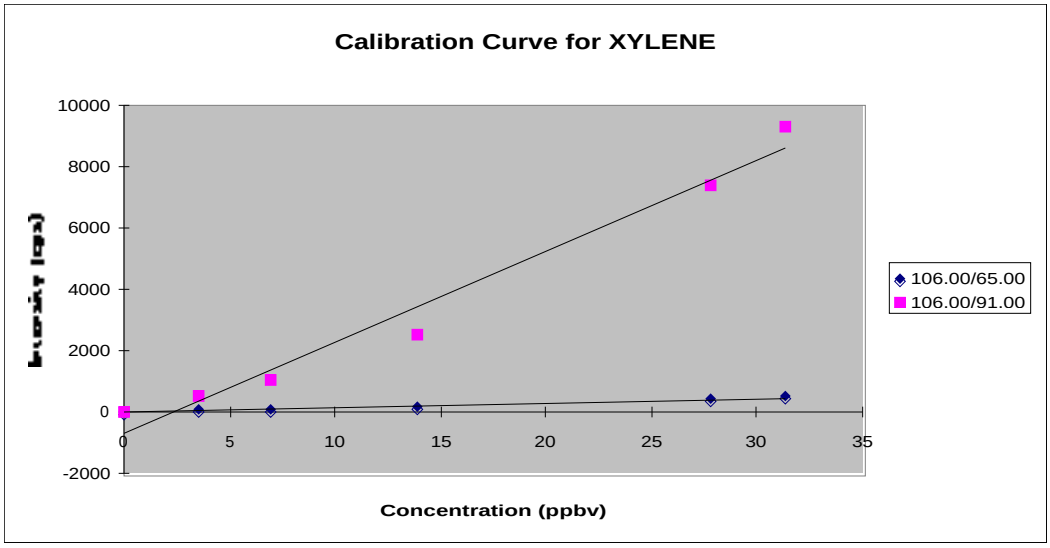
Concentration	78.00/39.00	78.00/52.00
0	4.375	15.5208333
2.31	56.7708333	315.416667
4.62	101.041667	599.270833
9.24	208.229167	1168.95833
18.49	361.979167	2286.25
20.8	425.416667	2610.20833



Filename:	64MSMS001094 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, April 29, 2019 13:11:05					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.12	8.04	10.08	12.12	14.14

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	476.336561	128.255143
Intercept:	-30.975809	-8.230736
Correlation:	0.99940353	0.99960198

Concentration	92.00/91.00	92.00/65.00
0	90	22.3958333
2.31	1127.5	294.6875
4.62	2092.39583	572.1875
9.24	4188.54167	1131.5625
18.49	8673.22917	2345.72917
20.8	1.01E+04	2697.08333



Filename:	64MSMS001094 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, April 29, 2019 13:11:37					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.12	8.04	10.08	12.12	14.14

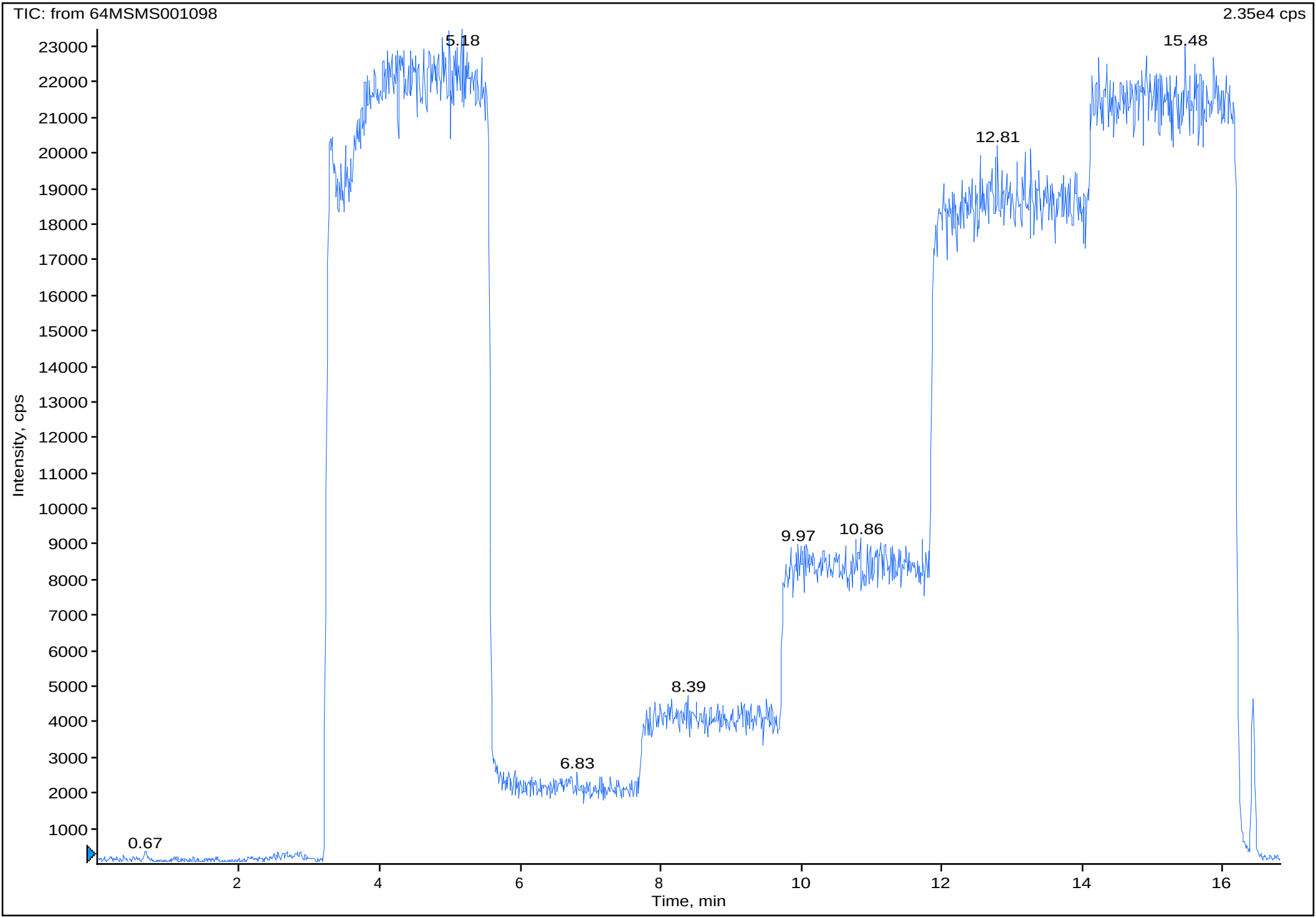
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	15.5274779	296.519729
Intercept:	-10.717958	-657.72251
Correlation:	0.99628986	0.98687946

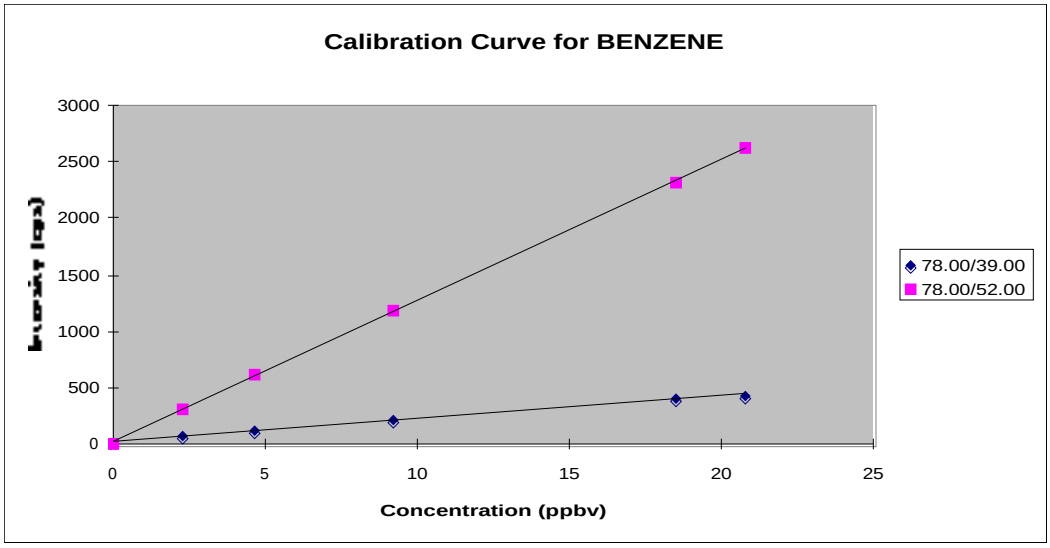
Concentration	106.00/65.0(	106.00/91.00
0	3.64583333	28.4375
3.48	46.875	525.104167
6.96	91.0416667	1056.66667
13.91	185.9375	2520.10417
27.82	404.375	7388.125
31.3	499.895833	9285.72917

Report	File Name	64MSMS001094 et al.			
	Sample Name	MOD Calibration - BTX 20190429			
	Date	Monday, April 29, 2019 13:12:32			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	19.69	123.55	476.34	128.26	15.53	296.52
Intercept	11.00	23.92	-30.98	-8.23	-10.72	-657.72
Intensity	4.38	15.52	90.00	22.40	3.65	28.44
Int SD	7.51	12.55	38.00	15.88	6.67	18.60
Concentration	-0.34	-0.07	0.25	0.24	0.93	2.31
Conc SD	0.38	0.10	0.08	0.12	0.43	0.06
Compound Con	-0.20		0.25		1.62	
Compound SD	0.17		0.07		0.17	
Det. Limit	1.14	0.30	0.24	0.37	1.29	0.19
Compound DL	0.72		0.31		0.74	

4/29/19.18.02.20
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Mon, Apr 29, 2019 at 18:02:19; Exp. Comment: BTX



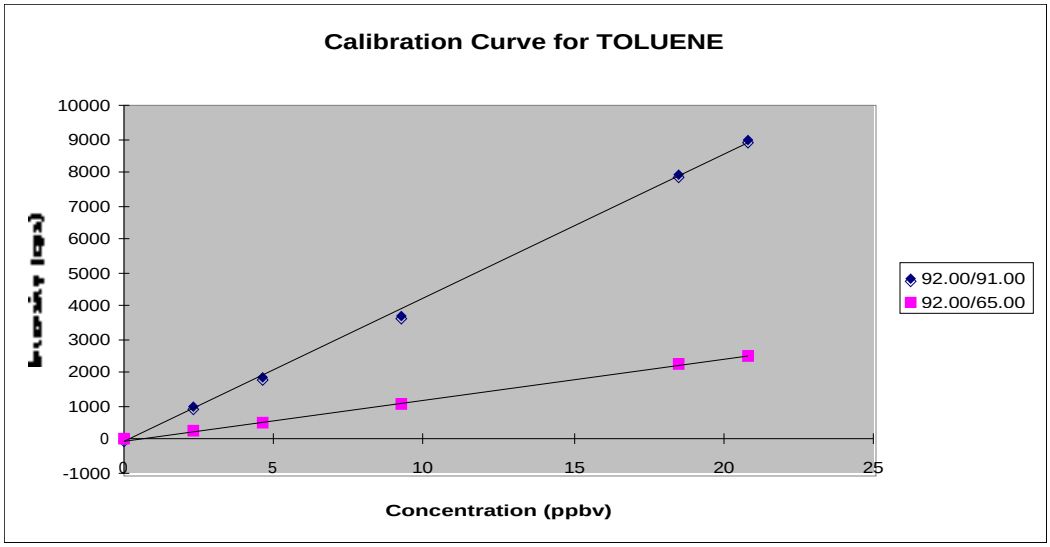


Filename:	64MSMS001098 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Monday, April 29, 2019 18:22:40
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.73	8.70	10.80	12.99	15.09

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	20.3129312	124.898047
Intercept:	15.8866391	25.0916923
Correlation:	0.99855326	0.99992858

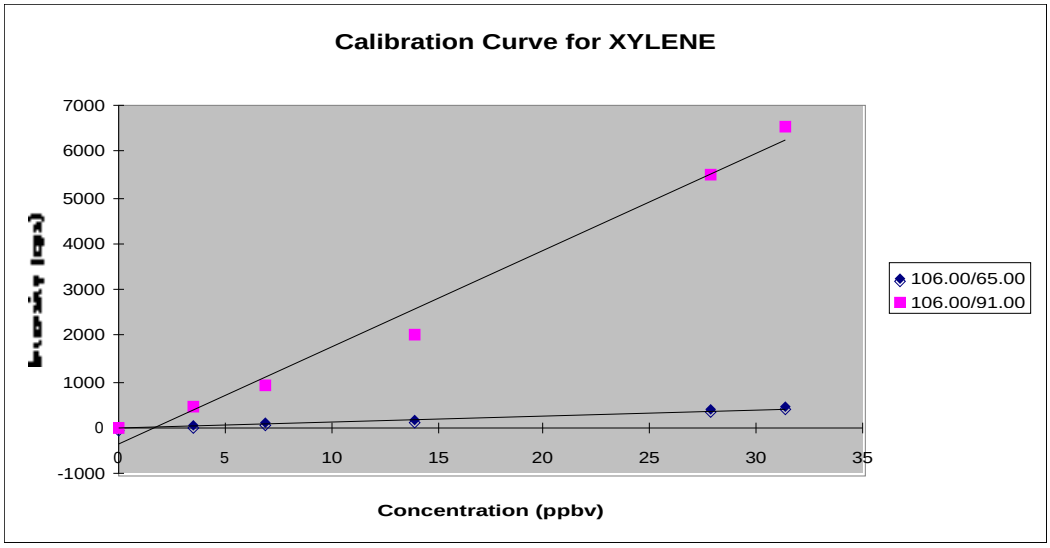
Concentration	78.00/39.00	78.00/52.00
0	2.8125	10.1041667
2.31	61.5625	316.145833
4.62	120.625	615.625
9.24	213.75	1186.5625
18.49	391.979167	2317.39583
20.8	431.145833	2631.5625



Filename:	64MSMS001098 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, April 29, 2019 18:23:18					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.73	8.70	10.80	12.99	15.09

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	430.020684	121.047402
Intercept:	-75.657852	-12.926622
Correlation:	0.99953144	0.99973632

Concentration	92.00/91.00	92.00/65.00
0	48.4375	15.8333333
2.31	959.895833	273.541667
4.62	1833.02083	522.8125
9.24	3707.29167	1072.08333
18.49	7919.6875	2243.54167
20.8	8926.66667	2507.91667



Filename:	64MSMS001098 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, April 29, 2019 18:23:47					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.73	8.70	10.80	12.99	15.09

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	13.4665176	211.143168
Intercept:	-5.8312873	-361.65893
Correlation:	0.99883956	0.99244018

Concentration	106.00/65.0(	106.00/91.00
0	1.875	11.4583333
3.48	46.4583333	466.875
6.96	80	913.541667
13.91	170.625	2034.375
27.82	365.625	5469.58333
31.3	424.479167	6558.33333

Report	File Name	64MSMS001098 et al.			
	Sample Name	EOD Calibration - BTX 20190429			
	Date	Monday, April 29, 2019 18:24:17			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	20.31	124.90	430.02	121.05	13.47	211.14
Intercept	15.89	25.09	-75.66	-12.93	-5.83	-361.66
Intensity	2.81	10.10	48.44	15.83	1.88	11.46
Int SD	5.75	11.29	27.39	14.63	4.66	10.46
Concentration	-0.64	-0.12	0.29	0.24	0.57	1.77
Conc SD	0.28	0.09	0.06	0.12	0.35	0.05
Compound Con	-0.38		0.26		1.17	
Compound SD	0.13		0.07		0.14	
Det. Limit	0.85	0.27	0.19	0.36	1.04	0.15
Compound DL	0.56		0.28		0.59	

TAGA FLOW CALIBRATION LOG

Work Assignment: 372 Date: 4/30/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3250	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:58	1500SCCS	191	1500SCCS	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date:	Exp: 5/2/2019
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

TAGA FLOW CALIBRATION LOG

Work Assignment: 372 Date: 4/30/2019

Time	Reference Flow Meter	Sample Air Flow (SAF) Reference Meter Reading	MKS Meter Reading	MKS Channel 3 Span ____ Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Dwyer Rotameter	Certificate of Calibration #			Calibration Date:	

Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration Reference Meter Reading	MKS Meter Reading	MKS Channel 1 Span 112 Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
7:00pm	10	10.54	10.29	0.25	2.37
7:09pm	30	30.44	30.32	0.12	0.39
7:11pm	90	88.73	90.25	-1.52	-1.71
Gilibrator Flow Cell	S/N # 0411037 -L			Calibration Date: Exp: 4/13/2019	

Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration Reference Meter Reading	MKS Meter Reading	MKS Channel 2 Span ____ Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Tue, Apr 30, 2019, 7:25:21
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR30 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Tue, Apr 30, 2019, 7:23:15

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.069
100.000	0.073
120.000	0.083
160.000	0.092

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.040
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Tue, Apr 30, 2019, 7:25:38
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019APR30 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Tue, Apr 30, 2019, 7:23:15

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.069
100.000	0.073
120.000	0.083
160.000	0.092

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.040
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

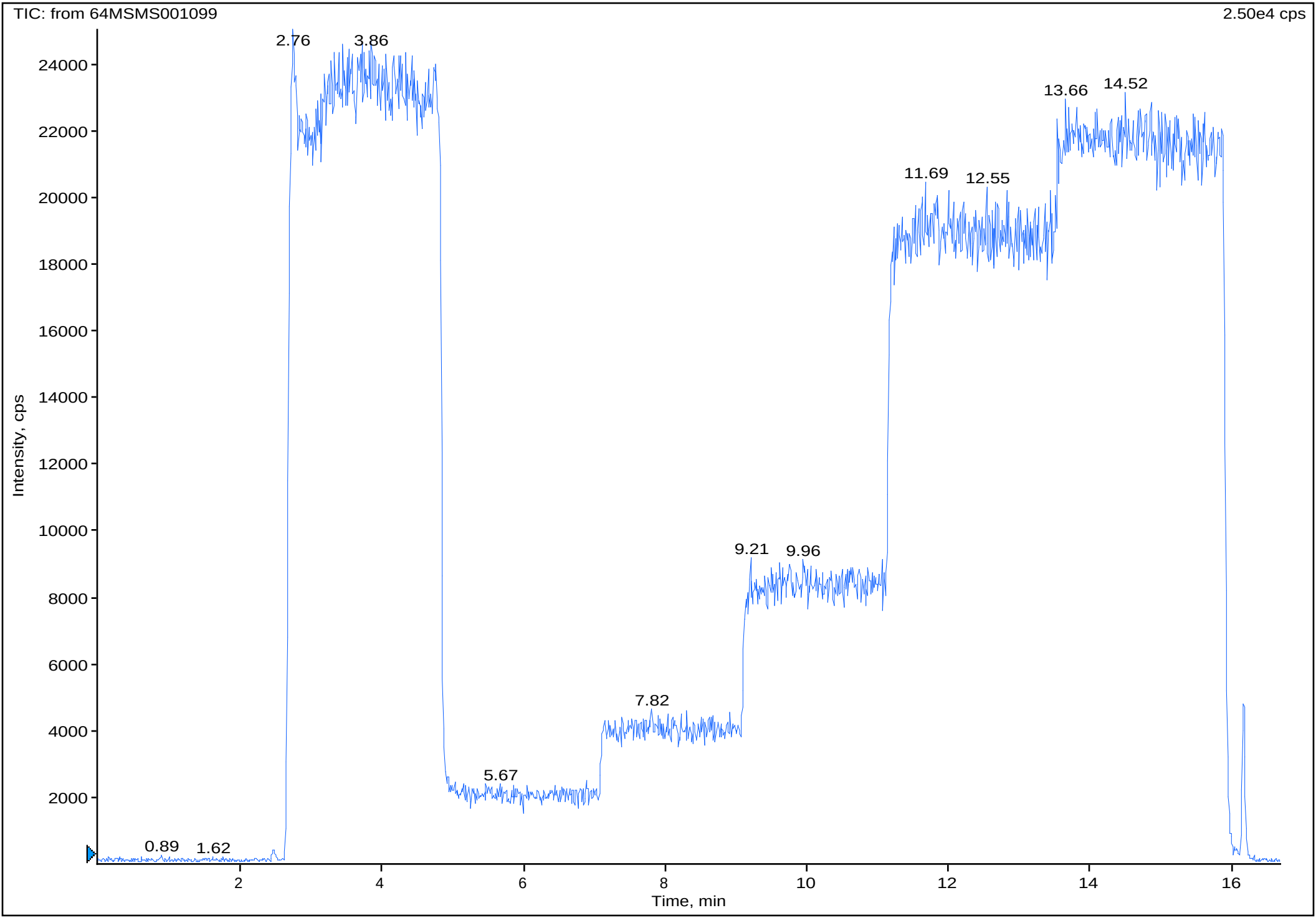
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

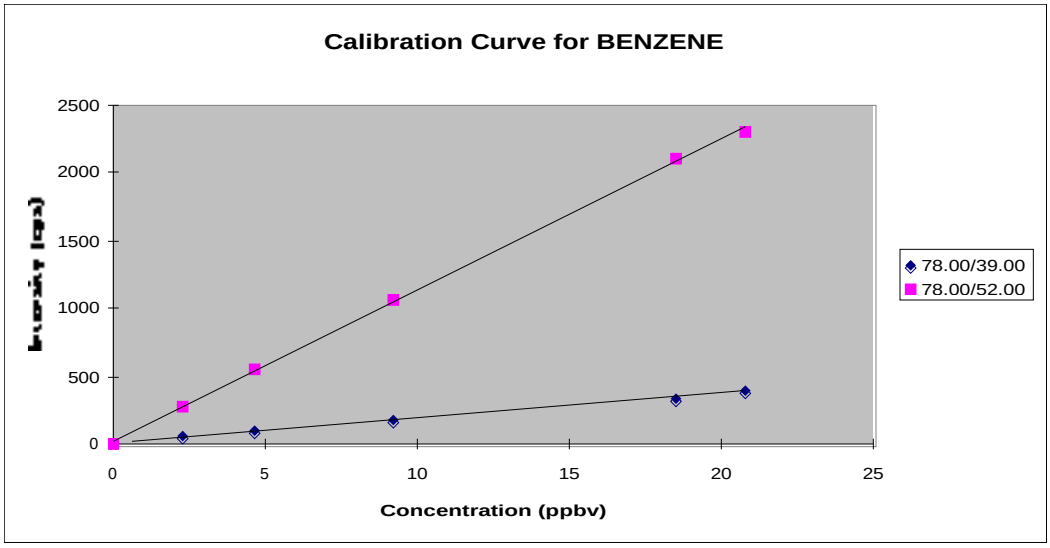
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

4/30/19.7.29.01
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Tue, Apr 30, 2019 at 7:29:01; Exp. Comment: BTX

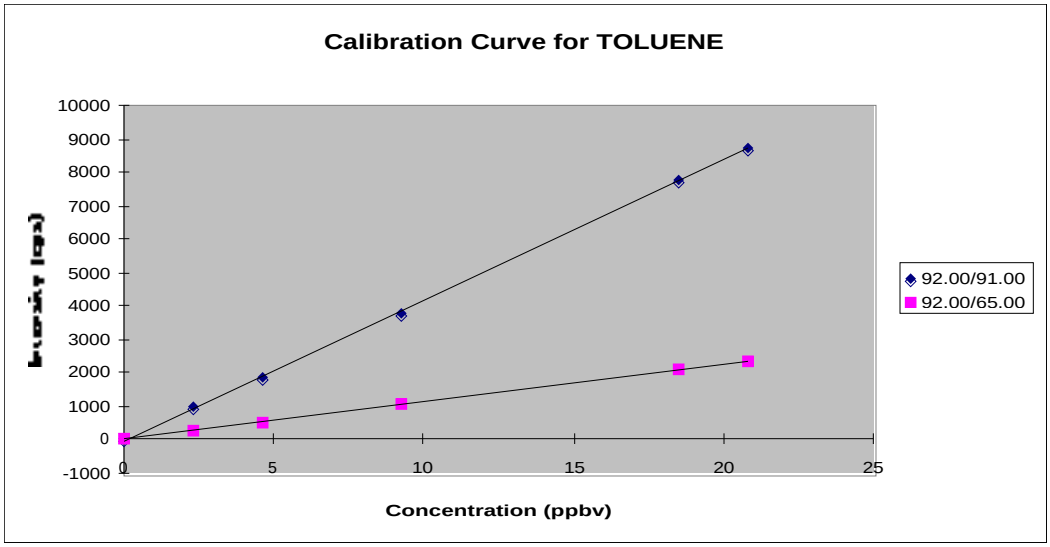




Filename:	64MSMS001099 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 30, 2019 7:48:09					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.06	8.12	10.12	12.34	14.68

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	18.0524816	110.949486
Intercept:	8.70781191	25.3770531
Correlation:	0.9995178	0.9997032

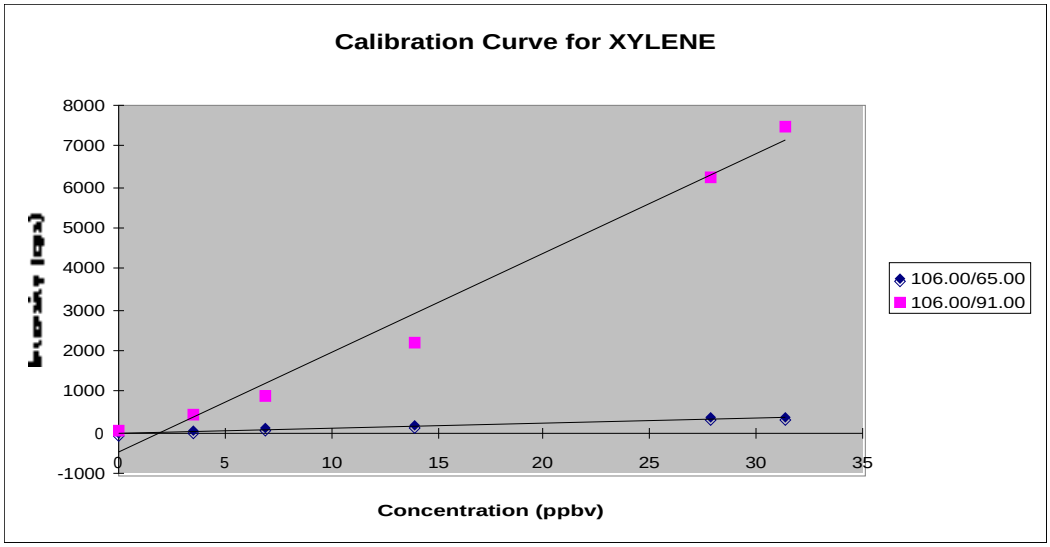
Concentration	78.00/39.00	78.00/52.00
0	3.22916667	9.79166667
2.31	49.7916667	283.229167
4.62	96.25	547.8125
9.24	181.666667	1055.52083
18.49	336.979167	2110.83333
20.8	385.520833	2298.33333



Filename:	64MSMS001099 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 30, 2019 7:48:52					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.06	8.12	10.12	12.34	14.68

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	419.600653	114.024762
Intercept:	-17.571201	-2.2848518
Correlation:	0.99985304	0.99991402

Concentration	92.00/91.00	92.00/65.00
0	51.0416667	16.6666667
2.31	977.708333	258.958333
4.62	1869.0625	511.041667
9.24	3768.22917	1037.5
18.49	7735.52083	2116.04167
20.8	8764.0625	2369.89583



Filename:	64MSMS001099 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 30, 2019 7:49:43					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.06	8.12	10.12	12.34	14.68

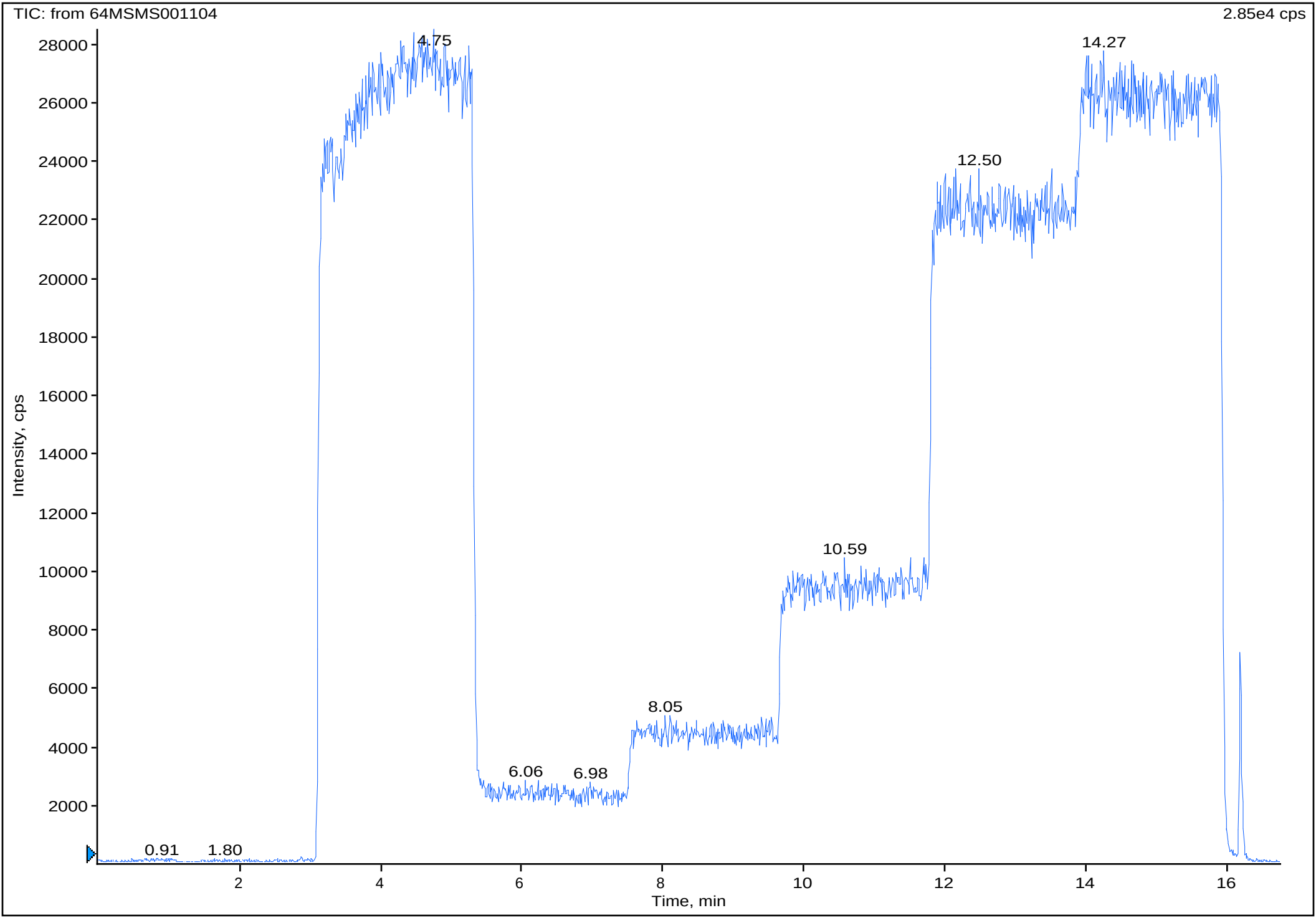
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	12.7608558	244.00963
Intercept:	-6.8997728	-510.22299
Correlation:	0.99915892	0.99011186

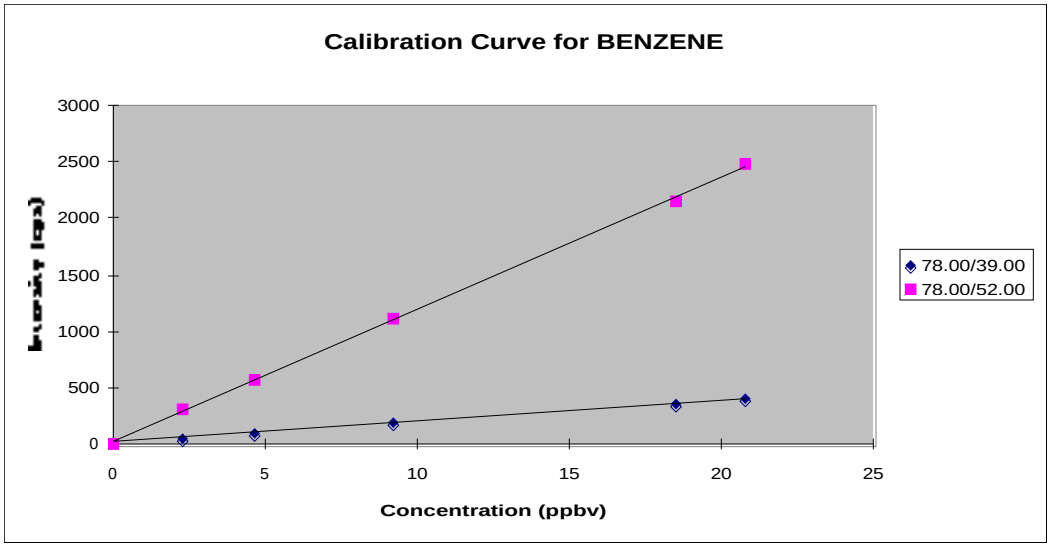
Concentration	106.00/65.0(	106.00/91.00
0	1.97916667	16.0416667
3.48	34.6875	432.083333
6.96	80.9375	915.729167
13.91	159.583333	2172.08333
27.82	352.708333	6262.29167
31.3	393.854167	7507.91667

Report	File Name	64MSMS001099 et al.			
	Sample Name	BOD Calibration - BTX 20190430			
	Date	Tuesday, April 30, 2019 7:50:18			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	18.05	110.95	419.60	114.02	12.76	244.01
Intercept	8.71	25.38	-17.57	-2.28	-6.90	-510.22
Intensity	3.23	9.79	51.04	16.67	1.98	16.04
Int SD	6.73	10.76	26.77	13.82	4.50	11.92
Concentration	-0.30	-0.14	0.16	0.17	0.70	2.16
Conc SD	0.37	0.10	0.06	0.12	0.35	0.05
Compound Con	-0.22		0.16		1.43	
Compound SD	0.17		0.07		0.14	
Det. Limit	1.12	0.29	0.19	0.36	1.06	0.15
Compound DL	0.70		0.28		0.60	

4/30/19.13.56.25
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Tue, Apr 30, 2019 at 13:56:24; Exp. Comment: BTX

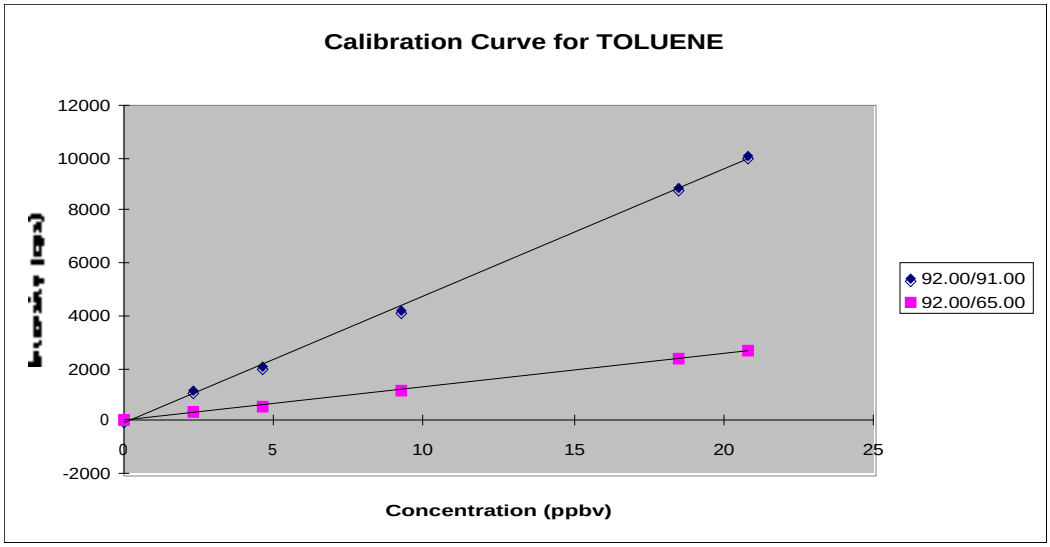




Filename:	64MSMS001104 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 30, 2019 14:14:25					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.49	8.61	10.72	12.83	14.88

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	18.2809871	117.029781
Intercept:	13.7248111	19.8501527
Correlation:	0.99889386	0.99987664

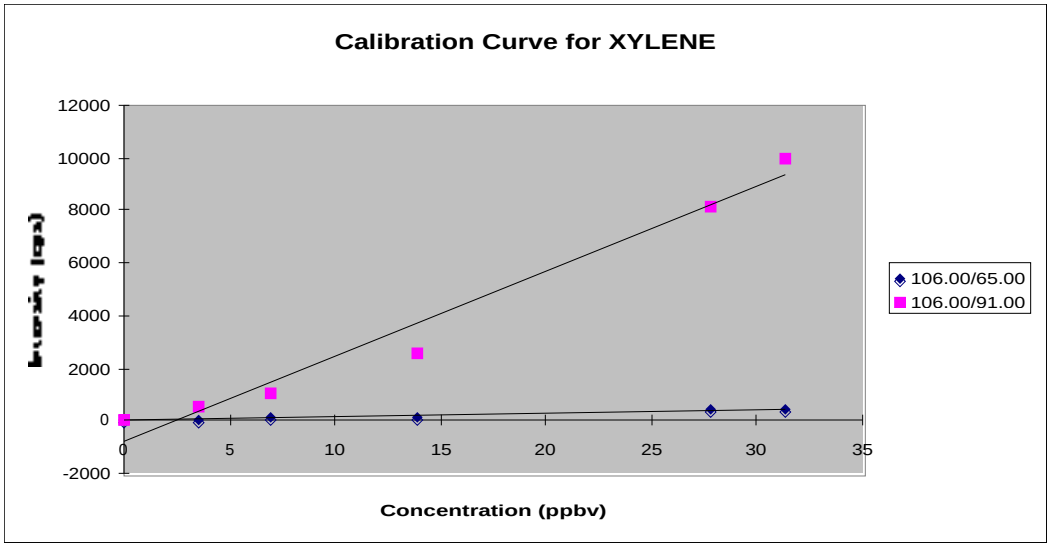
Concentration	78.00/39.00	78.00/52.00
0	3.02083333	10.625
2.31	57.7083333	297.5
4.62	102.5	567.8125
9.24	193.608247	1101.03093
18.49	348.958333	2158.125
20.8	390.416667	2474.47917



Filename:	64MSMS001104 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 30, 2019 14:15:10					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.49	8.61	10.72	12.83	14.88

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	484.431926	128.821467
Intercept:	-89.98101	-13.869412
Correlation:	0.99957011	0.99974605

Concentration	92.00/91.00	92.00/65.00
0	27.6041667	7.70833333
2.31	1105.9375	291.5625
4.62	2039.58333	565
9.24	4205.97938	1152.68041
18.49	8854.79167	2343.85417
20.8	1.01E+04	2700.41667



Filename:	64MSMS001104 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 30, 2019 14:15:44					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.49	8.61	10.72	12.83	14.88

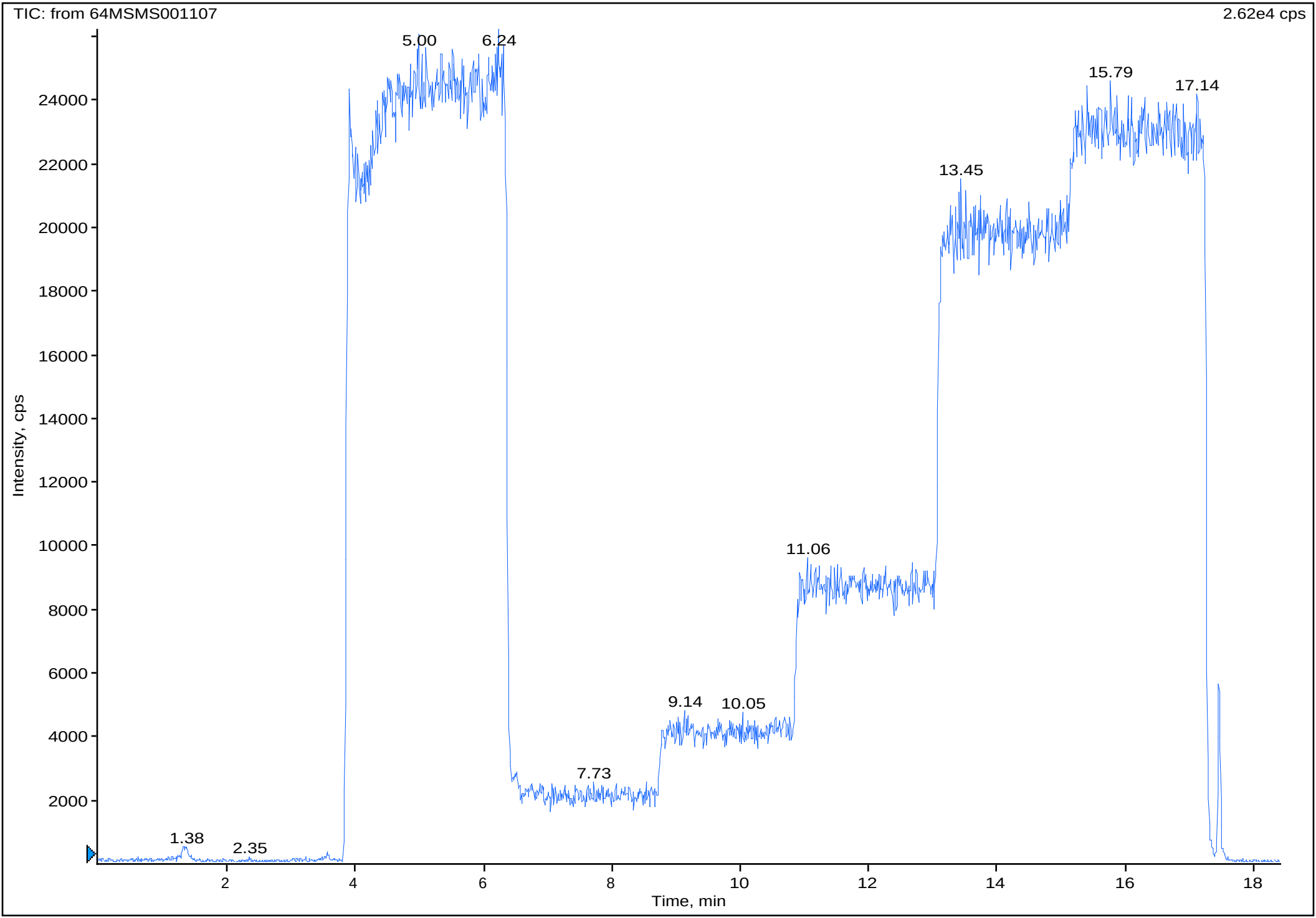
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	15.5415163	322.19264
Intercept:	-9.9600053	-753.62263
Correlation:	0.99712941	0.98594824

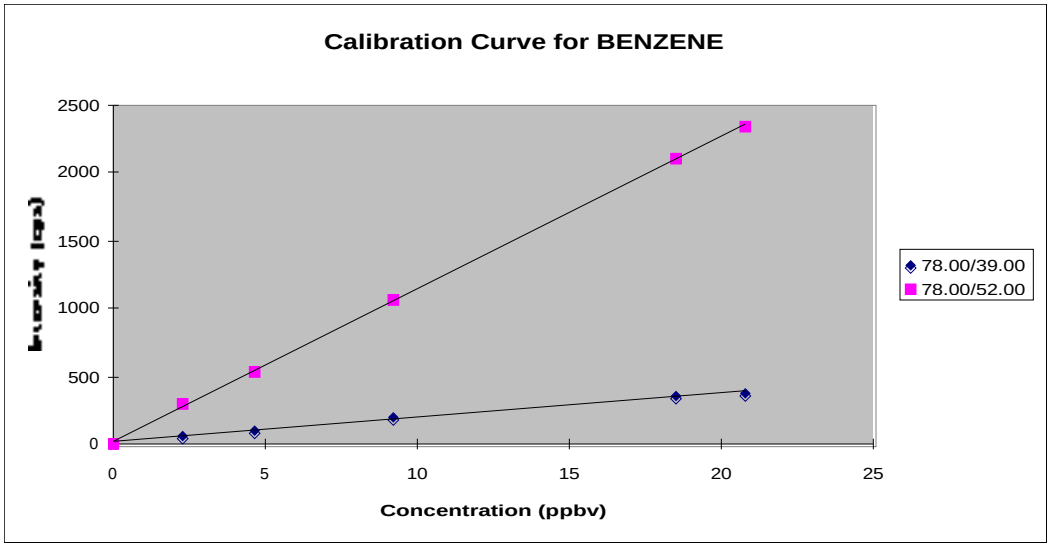
Concentration	106.00/65.0(	106.00/91.00
0	4.375	23.4375
3.48	51.1458333	578.645833
6.96	87.9166667	1066.875
13.91	180.927835	2598.35052
27.82	435.729167	8130.3125
31.3	477.395833	9974.0625

Report	File Name	64MSMS001104 et al.			
	Sample Name	MOD Calibration - BTX 20190430			
	Date	Tuesday, April 30, 2019 14:16:16			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	18.28	117.03	484.43	128.82	15.54	322.19
Intercept	13.72	19.85	-89.98	-13.87	-9.96	-753.62
Intensity	3.02	10.63	27.60	7.71	4.38	23.44
Int SD	6.18	12.30	20.35	10.00	7.37	21.71
Concentration	-0.59	-0.08	0.24	0.17	0.92	2.41
Conc SD	0.34	0.11	0.04	0.08	0.47	0.07
Compound Con	-0.33		0.21		1.67	
Compound SD	0.16		0.04		0.19	
Det. Limit	1.01	0.32	0.13	0.23	1.42	0.20
Compound DL	0.66		0.18		0.81	

4/30/19.18.13.55
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Tue, Apr 30, 2019 at 18:13:54; Exp. Comment: BTX

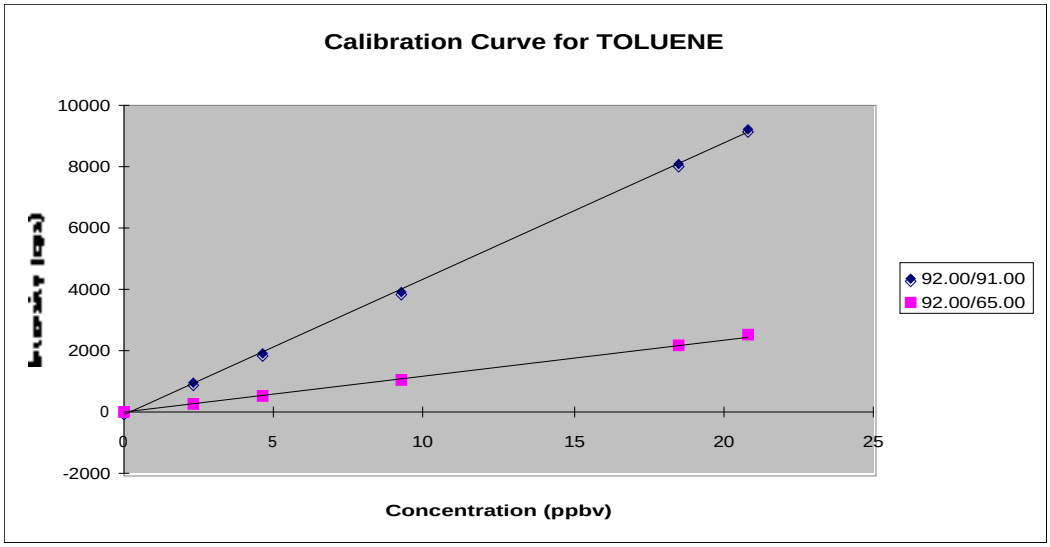




Filename:	64MSMS001107 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 30, 2019 18:33:55					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	7.59	9.82	11.91	14.10	16.17

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	18.1902047	112.193715
Intercept:	13.8496322	21.8129463
Correlation:	0.99815496	0.9999212

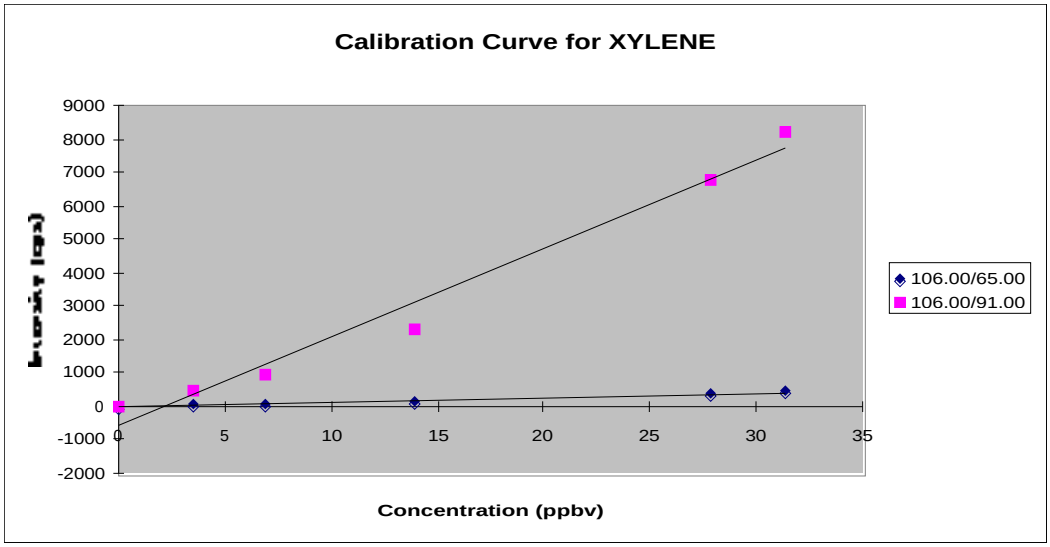
Concentration	78.00/39.00	78.00/52.00
0	3.02083333	7.91666667
2.31	53.0208333	290.520833
4.62	106.666667	539.375
9.24	192.708333	1066.875
18.49	355.051546	2108.45361
20.8	381.458333	2340



Filename:	64MSMS001107 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 30, 2019 18:34:41					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	7.59	9.82	11.91	14.10	16.17

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	441.660193	118.99002
Intercept:	-54.976994	-13.663103
Correlation:	0.99978068	0.99975056

Concentration	92.00/91.00	92.00/65.00
0	41.4583333	12.8125
2.31	998.333333	270.104167
4.62	1891.45833	510.833333
9.24	3931.97917	1060.9375
18.49	8107.21649	2178.04124
20.8	9194.16667	2484.47917



Filename:	64MSMS001107 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, April 30, 2019 18:35:11					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	7.59	9.82	11.91	14.10	16.17

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	13.7646525	264.989632
Intercept:	-8.656712	-574.49349
Correlation:	0.99787382	0.98890721

Concentration	106.00/65.0(	106.00/91.00
0	2.1875	7.8125
3.48	42.3958333	469.583333
6.96	83.2291667	977.395833
13.91	164.895833	2290.3125
27.82	368.453608	6734.53608
31.3	435.833333	8192.08333

Report	File Name	64MSMS001107 et al.			
	Sample Name	EOD Calibration - BTX 20190430			
	Date	Tuesday, April 30, 2019 18:37:56			
	Time Range	2.00	to	3.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	18.19	112.19	441.66	118.99	13.76	264.99
Intercept	13.85	21.81	-54.98	-13.66	-8.66	-574.49
Intensity	3.02	7.92	41.46	12.81	2.19	7.81
Int SD	5.45	10.55	21.86	13.03	6.68	9.31
Concentration	-0.60	-0.12	0.22	0.22	0.79	2.20
Conc SD	0.30	0.09	0.05	0.11	0.49	0.04
Compound Con	-0.36		0.22		1.49	
Compound SD	0.14		0.06		0.18	
Det. Limit	0.90	0.28	0.15	0.33	1.46	0.11
Compound DL	0.59		0.24		0.78	

TAGA FLOW CALIBRATION LOG

Work Assignment: 372 Date: 5/1/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3250	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:44	1500SCCS	191	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY15-0168		Calibration Date: Exp: 5/2/2015	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Wed, May 1, 2019, 7:10:31
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY01 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Wed, May 1, 2019, 7:06:49

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.072
120.000	0.081
160.000	0.091

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.040
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Wed, May 1, 2019, 7:10:45
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY01 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000
78.000	52.000	100.000
92.000	91.000	100.000
92.000	65.000	100.000
106.000	65.000	100.000
106.000	91.000	100.000

State File Information

Last Modified: Wed, May 1, 2019, 7:06:49

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.072
120.000	0.081
160.000	0.091

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.040
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

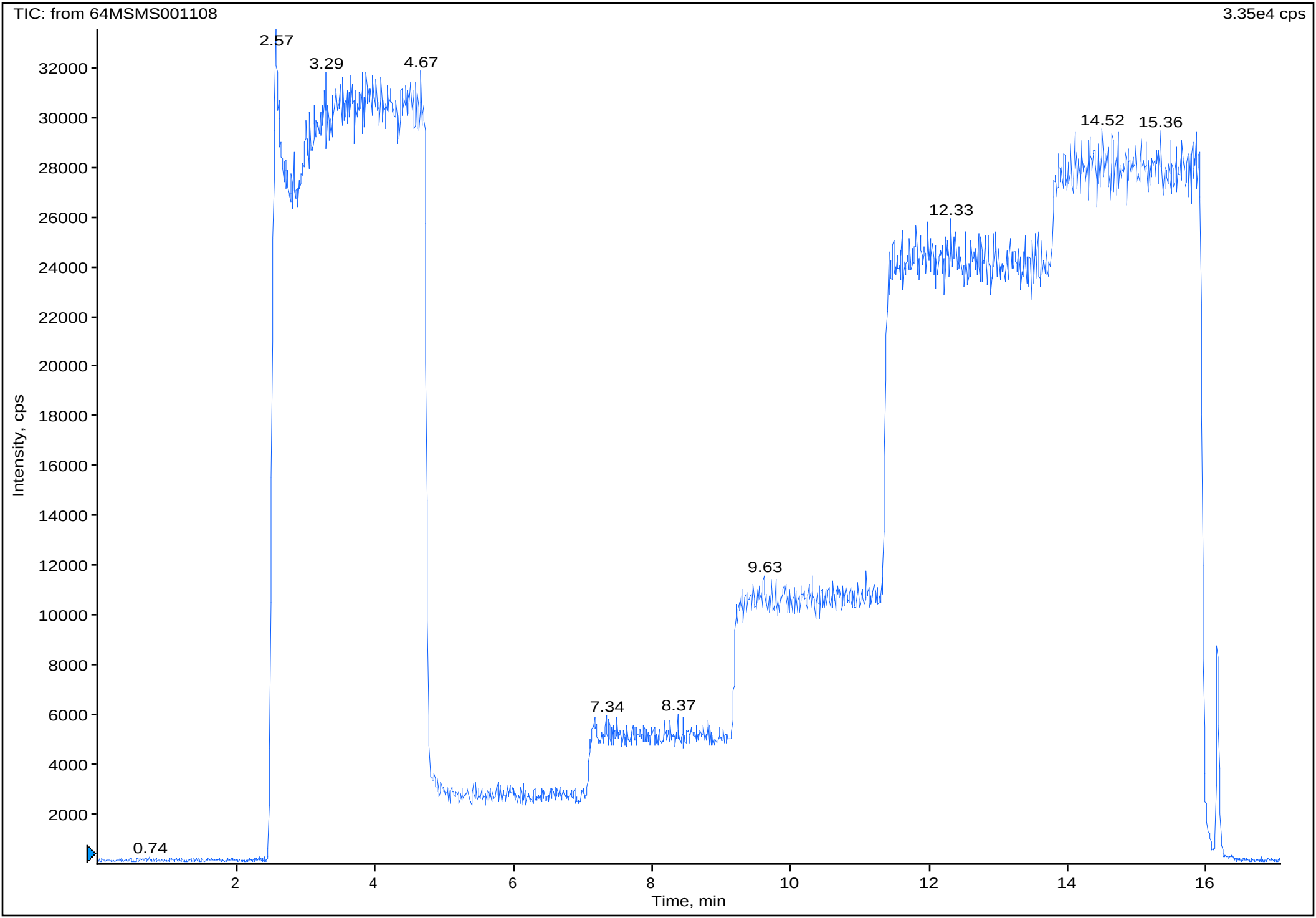
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

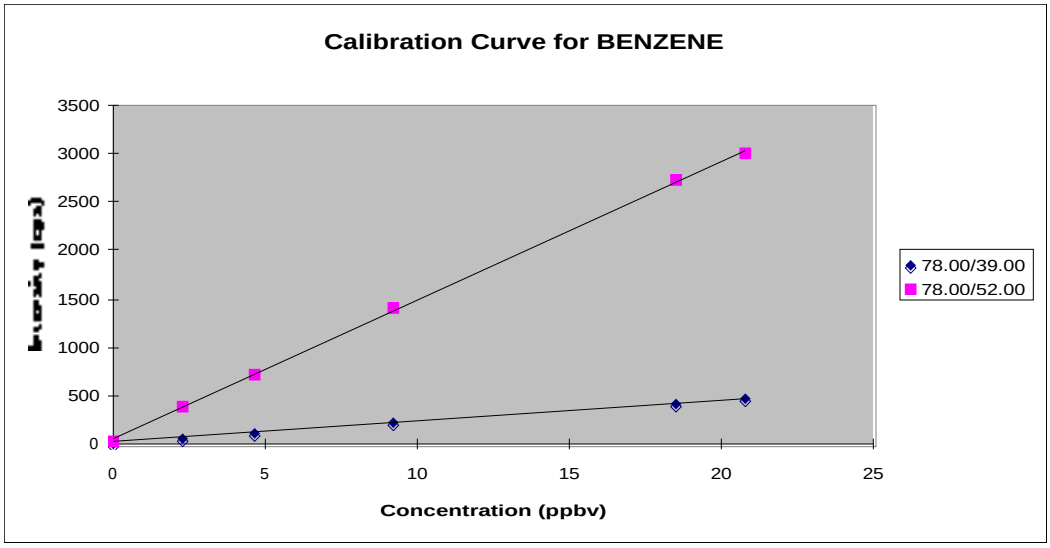
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

5/1/19.7.12.39
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, May 1, 2019 at 7:12:37; Exp. Comment: BTX

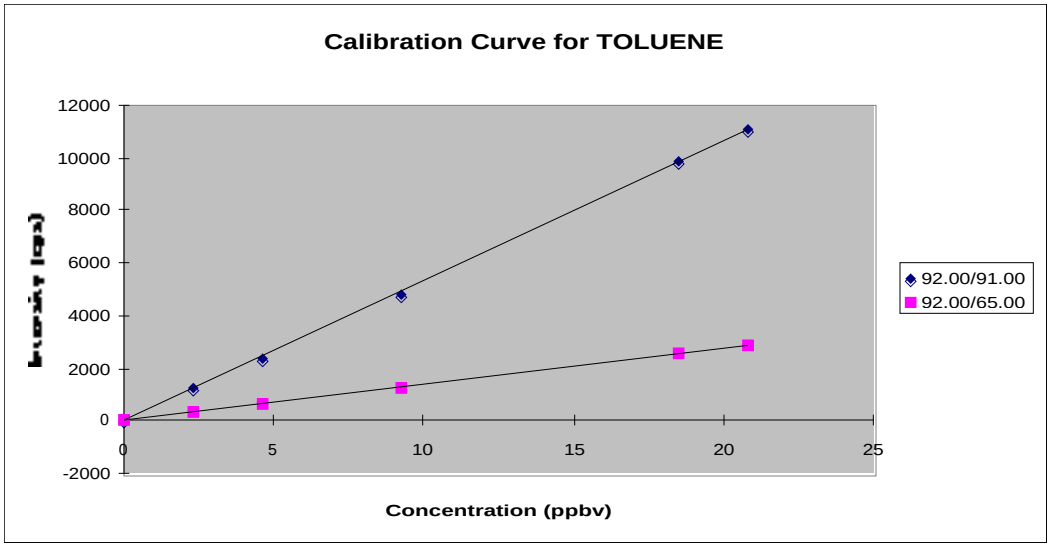




Filename:	64MSMS001108 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, May 1, 2019 7:31:51					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.96	8.09	10.24	12.49	14.83

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	21.7921793	144.051215
Intercept:	15.4818199	42.4492296
Correlation:	0.99917928	0.99988222

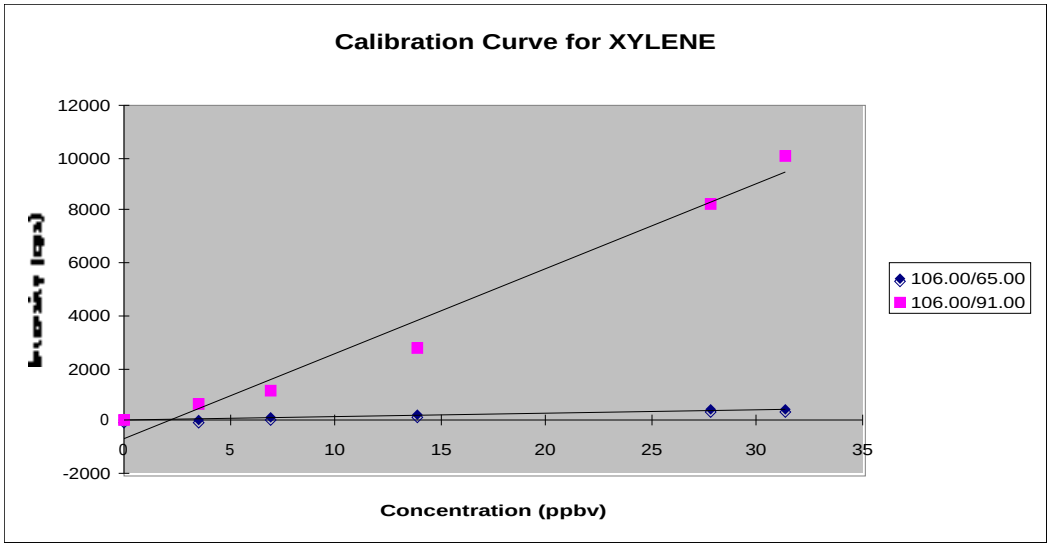
Concentration	78.00/39.00	78.00/52.00
0	7.29166667	16.6666667
2.31	66.0416667	381.145833
4.62	117.42268	717.525773
9.24	228.854167	1394.89583
18.49	421.458333	2716.45833
20.8	460.416667	3017.08333



Filename:	64MSMS001108 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, May 1, 2019 7:33:02					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.96	8.09	10.24	12.49	14.83

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	533.520779	138.550224
Intercept:	-9.4408466	2.95236844
Correlation:	0.9998059	0.99980062

Concentration	92.00/91.00	92.00/65.00
0	62.9166667	20.2083333
2.31	1286.97917	345.833333
4.62	2397.93814	615.876289
9.24	4760.83333	1250.625
18.49	9892.29167	2579.79167
20.8	1.11E+04	2889.375



Filename:	64MSMS001108 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, May 1, 2019 7:33:35					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.96	8.09	10.24	12.49	14.83

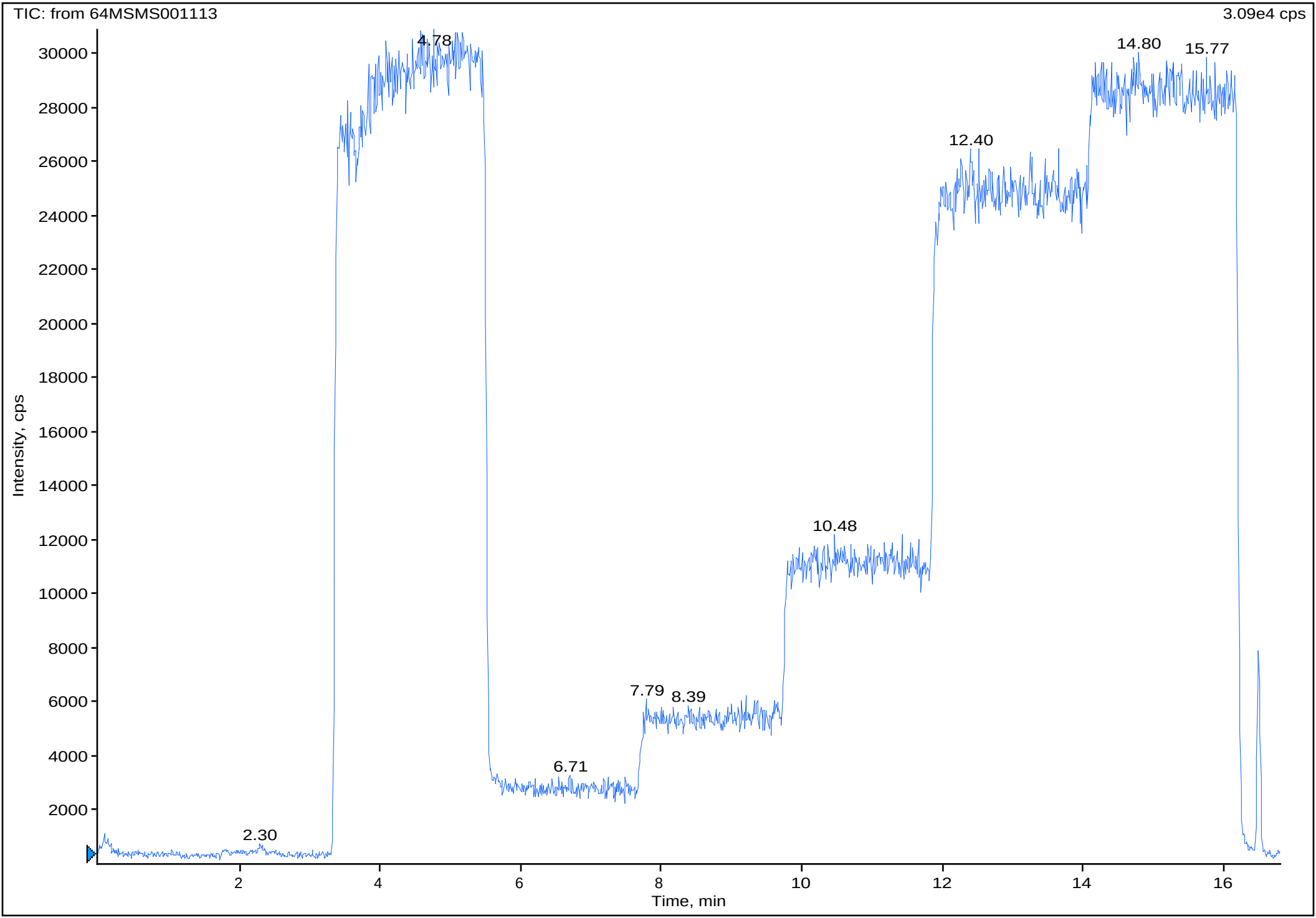
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	15.5334992	324.301554
Intercept:	-9.6924027	-690.55225
Correlation:	0.99862817	0.98866187

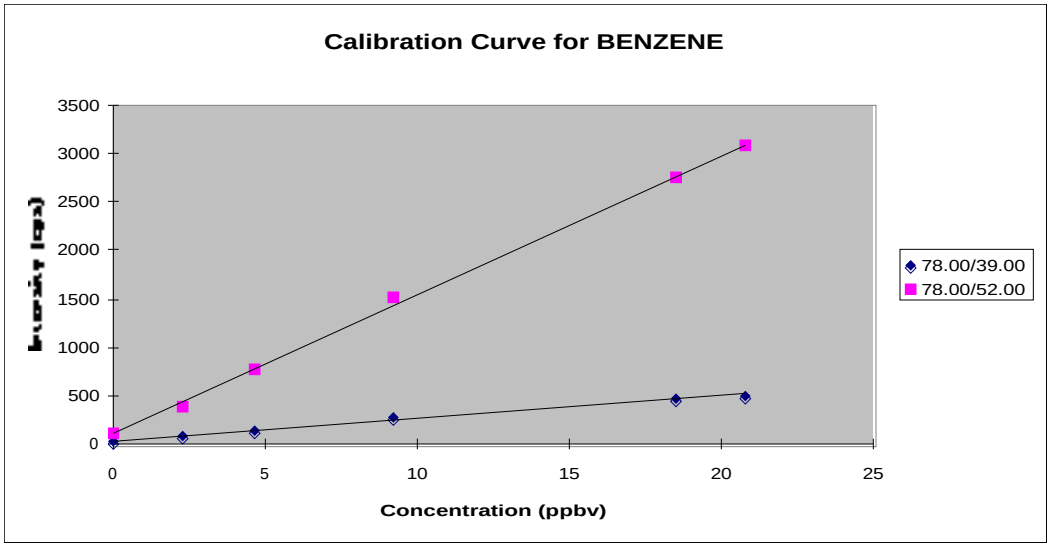
Concentration	106.00/65.0(	106.00/91.00
0	2.39583333	22.1875
3.48	47.7083333	605.520833
6.96	91.0309278	1190.82474
13.91	189.270833	2814.58333
27.82	424.166667	8236.66667
31.3	483.854167	1.01E+04

Report	File Name	64MSMS001108 et al.			
	Sample Name	BOD Calibration - BTX 20190501			
	Date	Wednesday, May 1, 2019 7:34:39			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	21.79	144.05	533.52	138.55	15.53	324.30
Intercept	15.48	42.45	-9.44	2.95	-9.69	-690.55
Intensity	7.29	16.67	62.92	20.21	2.40	22.19
Int SD	9.12	14.19	27.64	18.18	4.97	16.56
Concentration	-0.38	-0.18	0.14	0.12	0.78	2.20
Conc SD	0.42	0.10	0.05	0.13	0.32	0.05
Compound Con	-0.28		0.13		1.49	
Compound SD	0.18		0.06		0.13	
Det. Limit	1.26	0.30	0.16	0.39	0.96	0.15
Compound DL	0.78		0.27		0.56	

5/1/19.13.40.10
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, May 1, 2019 at 13:40:08; Exp. Comment: BTX

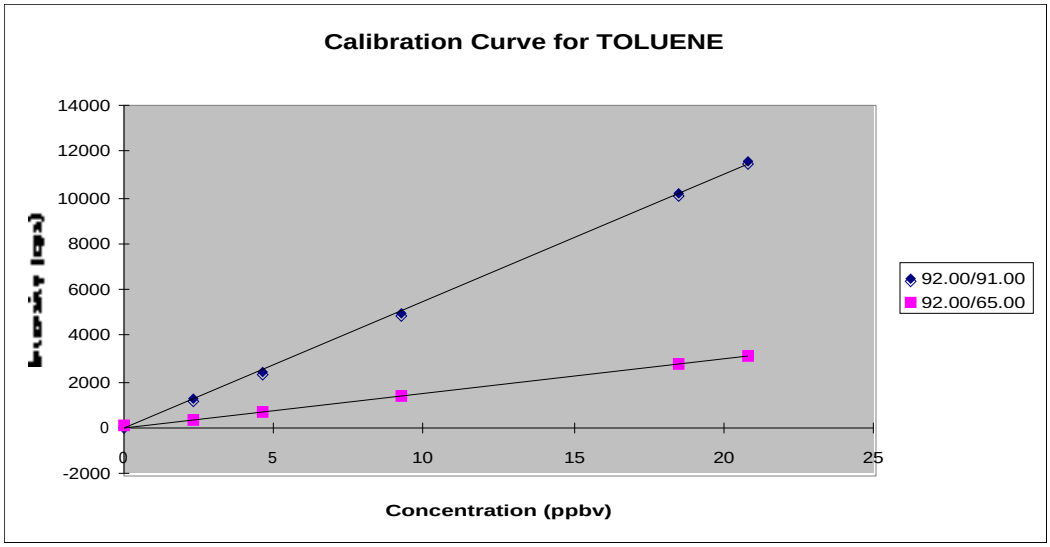




Filename:	64MSMS001113 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, May 1, 2019 13:57:53					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.71	8.75	10.77	12.96	15.13

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	22.9016822	143.829623
Intercept:	35.0655897	105.465406
Correlation:	0.99645763	0.99950037

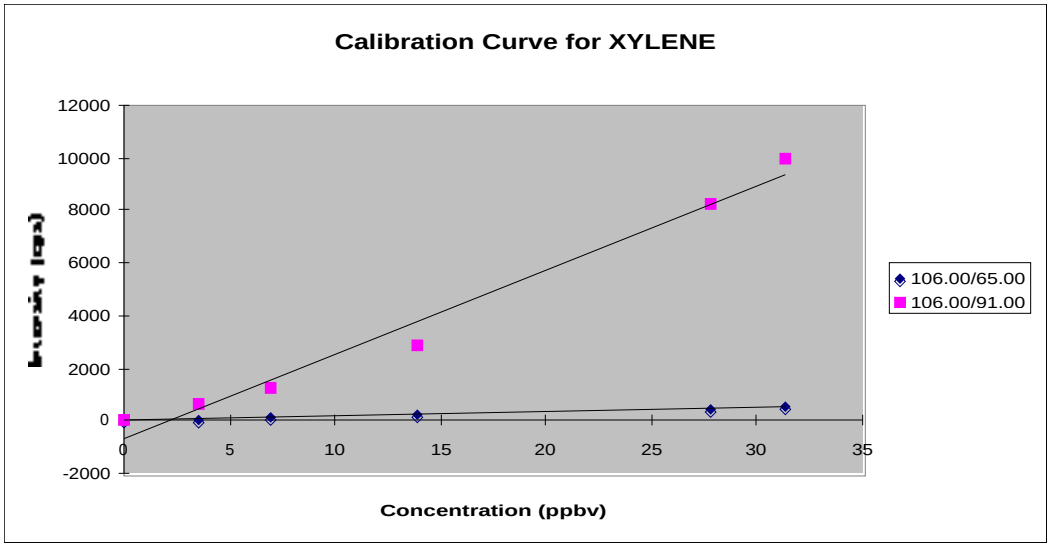
Concentration	78.00/39.00	78.00/52.00
0	21.0416667	108.645833
2.31	82.3958333	394.6875
4.62	144.895833	763.645833
9.24	273.645833	1507.8125
18.49	466.25	2757.70833
20.8	492.291667	3077.08333



Filename:	64MSMS001113 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, May 1, 2019 13:58:32					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.71	8.75	10.77	12.96	15.13

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	550.764536	147.624162
Intercept:	-14.441863	8.55094076
Correlation:	0.99972943	0.99988142

Concentration	92.00/91.00	92.00/65.00
0	126.145833	35.5208333
2.31	1278.02083	353.229167
4.62	2439.6875	659.6875
9.24	4916.04167	1361.14583
18.49	1.02E+04	2739.58333
20.8	1.15E+04	3089.375



Filename:	64MSMS001113 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, May 1, 2019 13:59:03					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.71	8.75	10.77	12.96	15.13

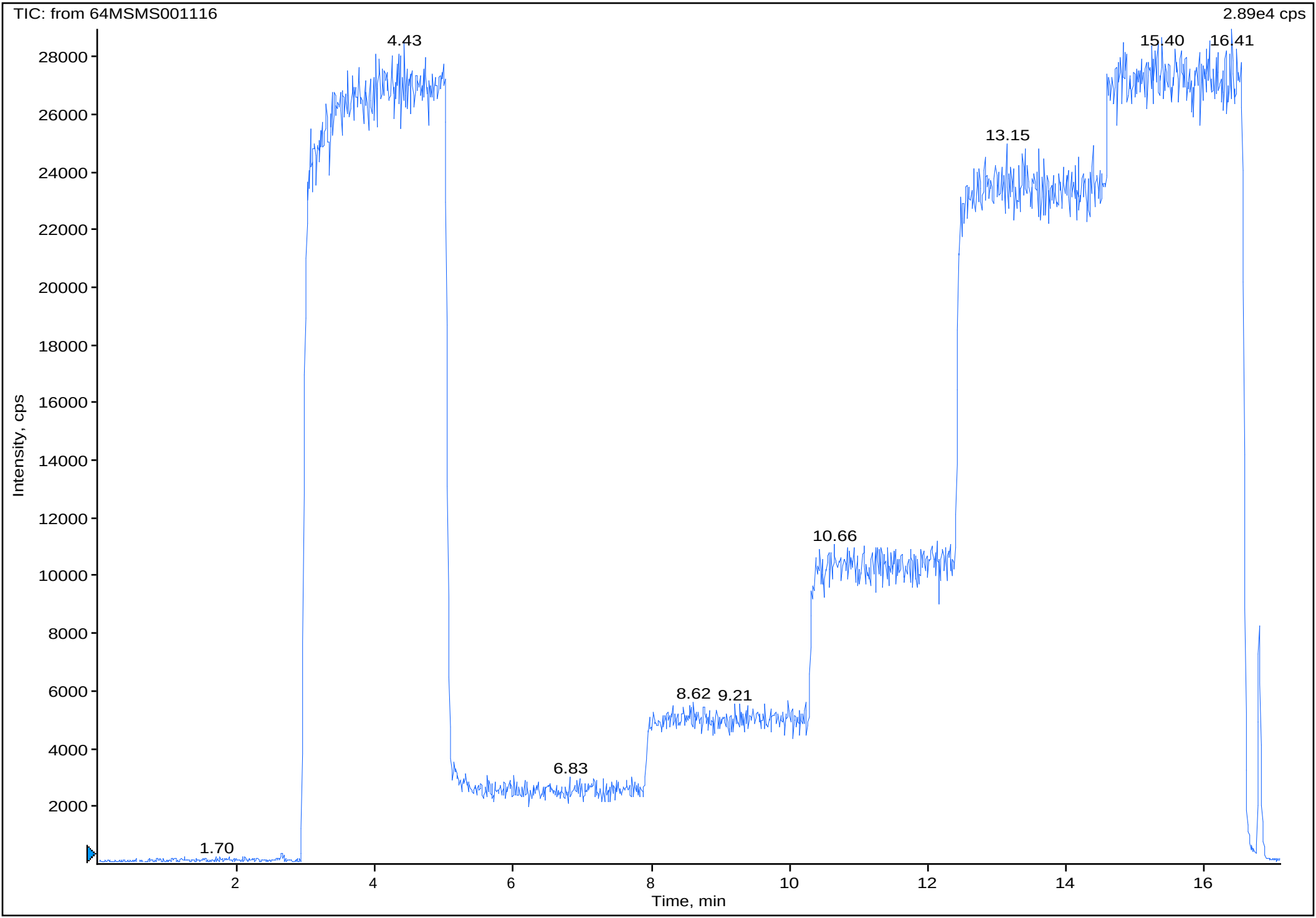
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	17.8587908	321.04266
Intercept:	-10.928183	-646.15167
Correlation:	0.9981216	0.99004714

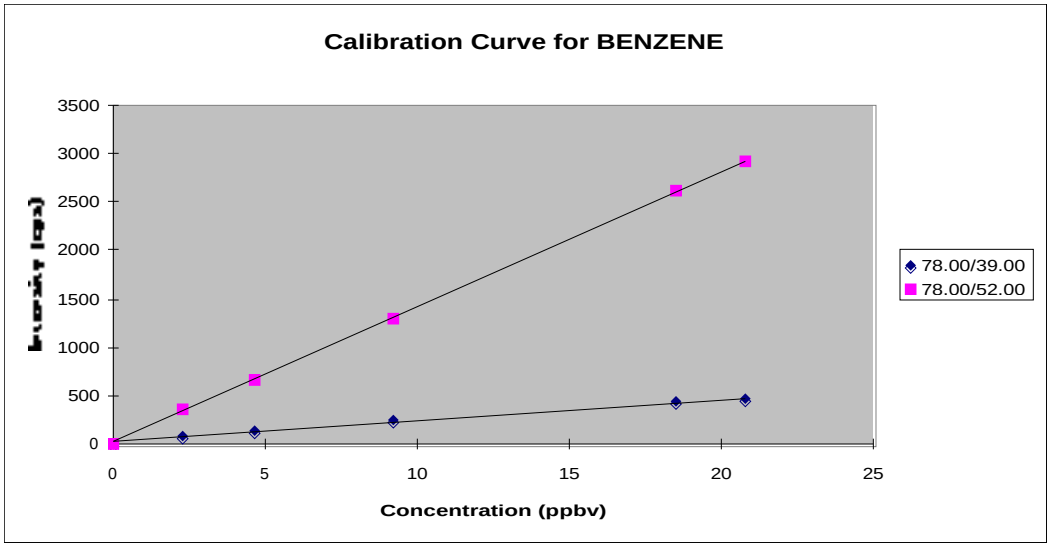
Concentration	106.00/65.0(	106.00/91.00
0	4.27083333	31.3541667
3.48	56.25	608.125
6.96	102.604167	1239.79167
13.91	218.333333	2878.85417
27.82	480	8234.375
31.3	563.645833	9928.02083

Report	File Name	64MSMS001113 et al.			
	Sample Name	MOD Calibration - BTX 20190501			
	Date	Wednesday, May 1, 2019 13:59:33			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	22.90	143.83	550.76	147.62	17.86	321.04
Intercept	35.07	105.47	-14.44	8.55	-10.93	-646.15
Intensity	21.04	108.65	126.15	35.52	4.27	31.35
Int SD	17.38	39.27	50.25	20.77	7.36	24.61
Concentration	-0.61	0.02	0.26	0.18	0.85	2.11
Conc SD	0.76	0.27	0.09	0.14	0.41	0.08
Compound Con	-0.30		0.22		1.48	
Compound SD	0.36		0.08		0.17	
Det. Limit	2.28	0.82	0.27	0.42	1.24	0.23
Compound DL	1.55		0.35		0.73	

5/1/19.18.57.30
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, May 1, 2019 at 18:57:29; Exp. Comment: BTX

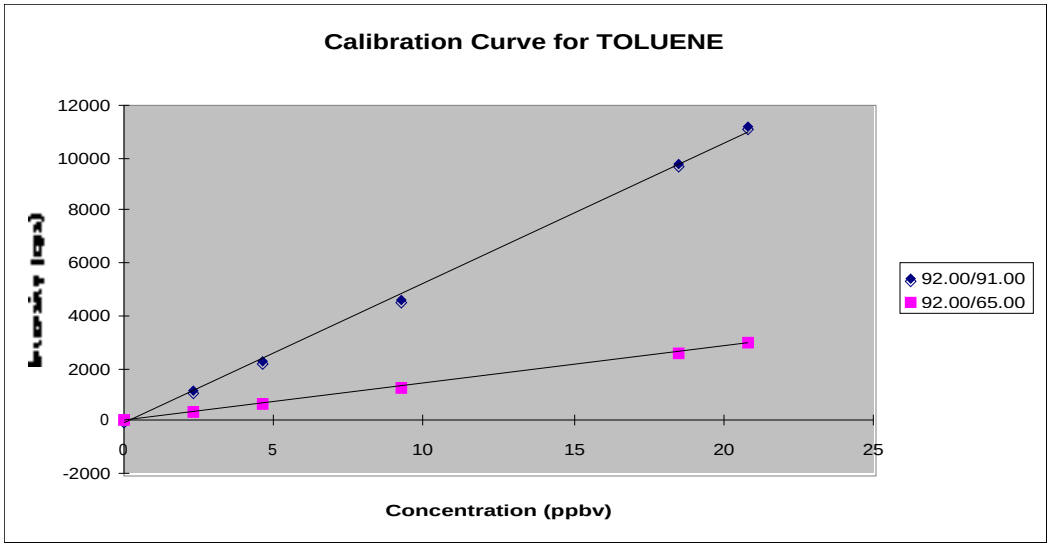




Filename:	64MSMS001116 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, May 1, 2019 19:15:59					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.61	9.12	11.36	13.53	15.56

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	22.2167826	139.384013
Intercept:	19.1961371	17.9667798
Correlation:	0.99852285	0.99993831

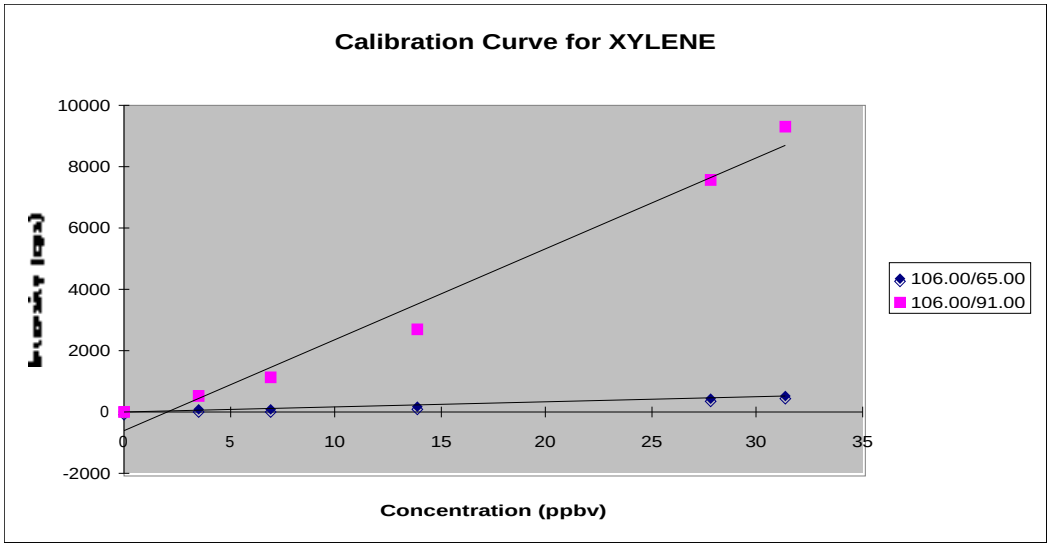
Concentration	78.00/39.00	78.00/52.00
0	3.64583333	13.0208333
2.31	70.625	353.645833
4.62	134.791667	666.25
9.24	234.6875	1284.16667
18.49	427.319588	2608.35052
20.8	476.25	2912.60417



Filename:	64MSMS001116 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, May 1, 2019 19:17:04					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.61	9.12	11.36	13.53	15.56

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	534.580929	141.892748
Intercept:	-90.553888	-10.533184
Correlation:	0.99957163	0.99982469

Concentration	92.00/91.00	92.00/65.00
0	66.25	18.2291667
2.31	1167.8125	314.270833
4.62	2305	630.729167
9.24	4636.97917	1276.66667
18.49	9774.63918	2597.42268
20.8	1.12E+04	2968.85417



Filename:	64MSMS001116 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, May 1, 2019 19:17:41					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.61	9.12	11.36	13.53	15.56

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	16.1954138	298.009068
Intercept:	-8.1525993	-609.94031
Correlation:	0.99912194	0.98971806

Concentration	106.00/65.0(	106.00/91.00
0	2.5	15.2083333
3.48	48.6458333	550
6.96	100.104167	1155.83333
13.91	203.958333	2670.72917
27.82	440.103093	7553.19588
31.3	507.604167	9270.20833

Report	File Name	64MSMS001116 et al.			
	Sample Name	EOD Calibration - BTX 20190501			
	Date	Wednesday, May 1, 2019 19:18:21			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	22.22	139.38	534.58	141.89	16.20	298.01
Intercept	19.20	17.97	-90.55	-10.53	-8.15	-609.94
Intensity	3.65	13.02	66.25	18.23	2.50	15.21
Int SD	6.18	11.80	31.40	16.86	6.32	14.72
Concentration	-0.70	-0.04	0.29	0.20	0.66	2.10
Conc SD	0.28	0.08	0.06	0.12	0.39	0.05
Compound Con	-0.37		0.25		1.38	
Compound SD	0.13		0.06		0.16	
Det. Limit	0.83	0.25	0.18	0.36	1.17	0.15
Compound DL	0.54		0.27		0.66	

TAGA FLOW CALIBRATION LOG

Work Assignment: 372 Date: 5/2/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:53	1500SCCS	~191	1500SCCS	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY00 - 0925		Calibration Date:	Exp: 9/4/19

Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Thu, May 2, 2019, 7:15:51
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY02 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Thu, May 2, 2019, 7:13:31

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.072
120.000	0.080
160.000	0.090

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.041
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Thu, May 2, 2019, 7:15:58
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY02 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Thu, May 2, 2019, 7:13:31

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.072
120.000	0.080
160.000	0.090

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.041
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

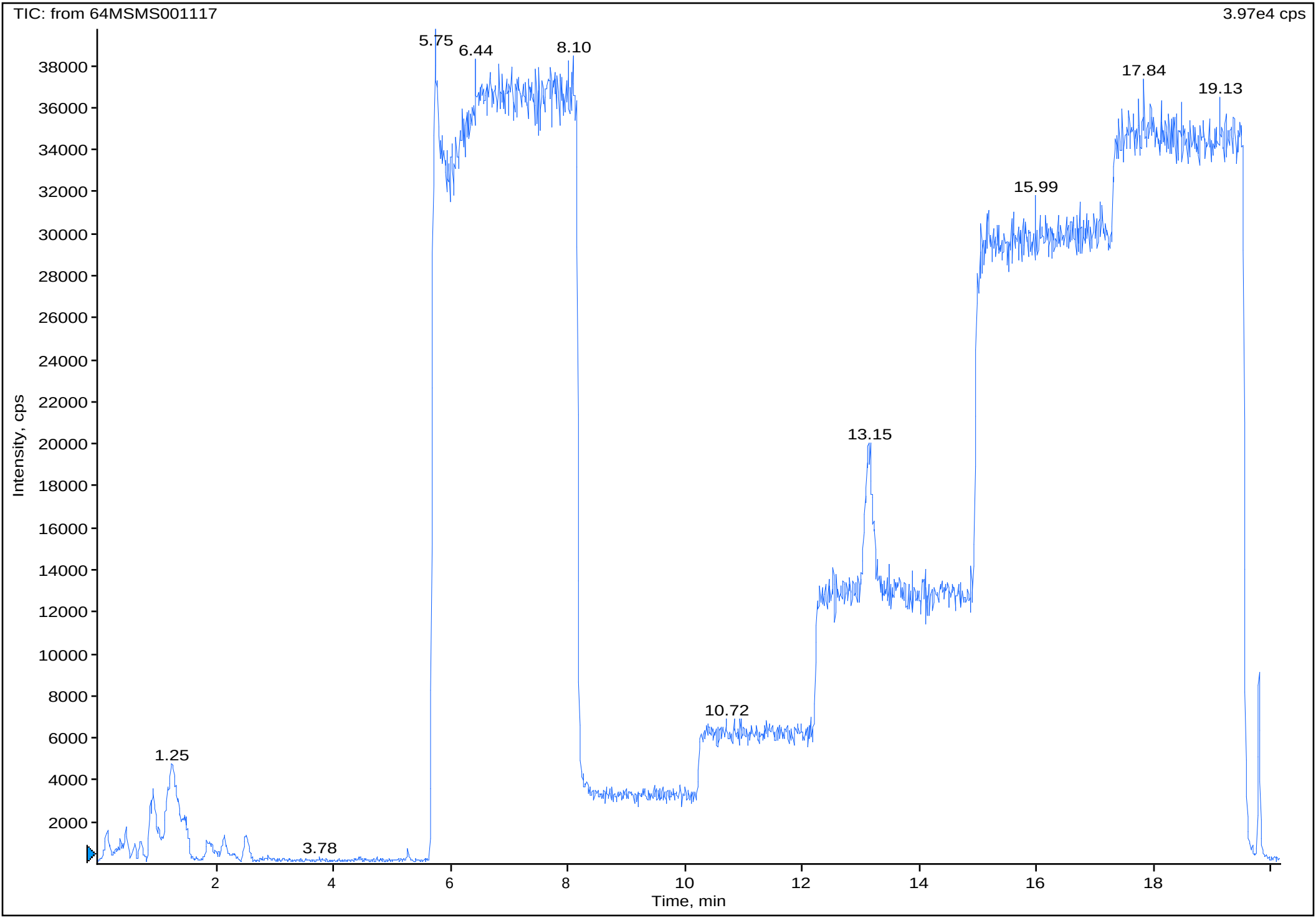
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

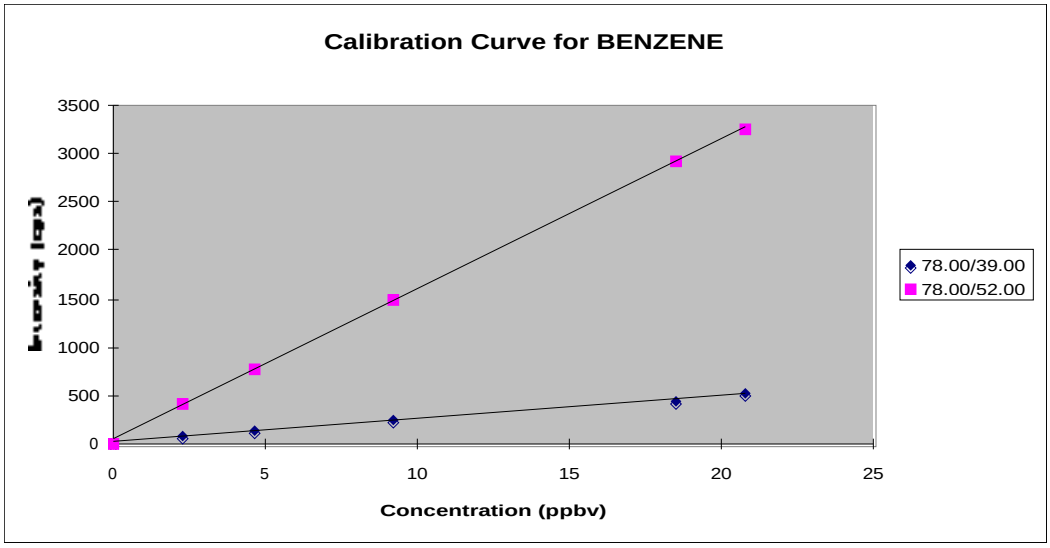
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

5/2/19.7.17.29
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, May 2, 2019 at 7:17:27; Exp. Comment: BTX

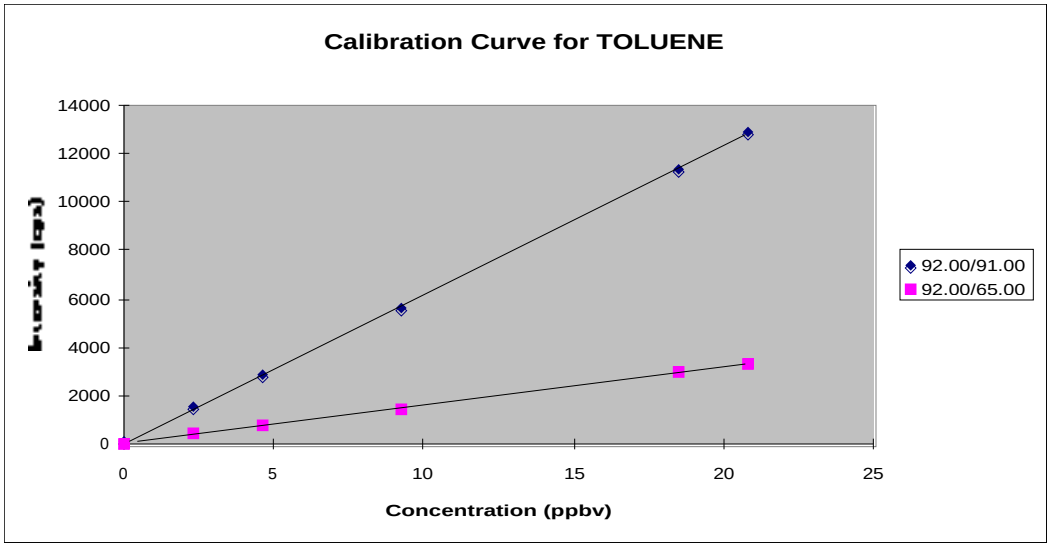




Filename:	64MSMS001117 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 2, 2019 7:39:10					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.00	9.30	11.24	14.13	16.12	18.41

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	23.7285208	155.479503
Intercept:	16.5640967	41.7666872
Correlation:	0.99926424	0.99989564

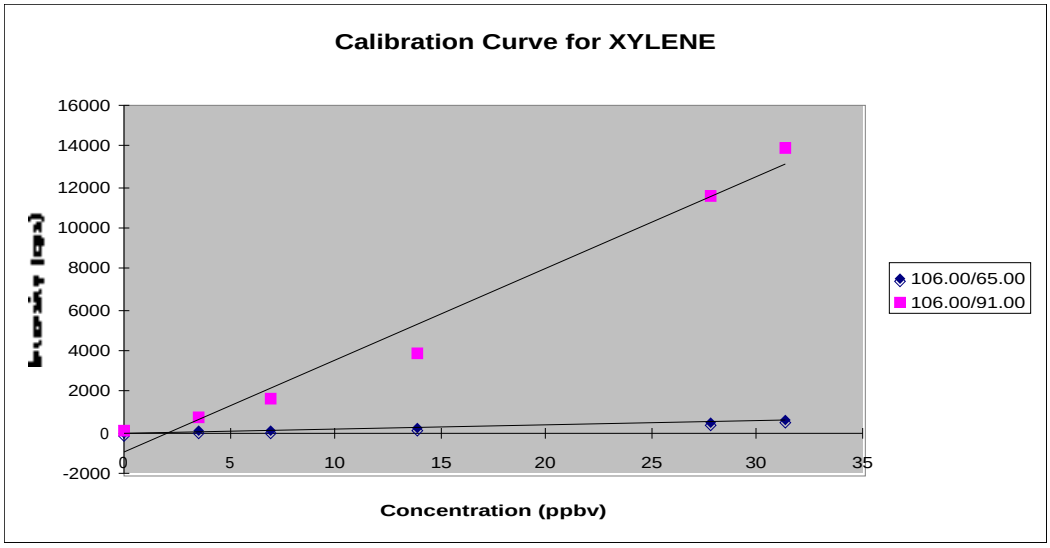
Concentration	78.00/39.00	78.00/52.00
0	3.33333333	13.125
2.31	77.9166667	414.895833
4.62	134.639175	769.896907
9.24	238.125	1491.25
18.49	451.354167	2929.58333
20.8	510	3254.74227



Filename:	64MSMS001117 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 2, 2019 7:39:51					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.00	9.30	11.24	14.13	16.12	18.41

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	616.325952	158.358472
Intercept:	33.5507174	15.0405113
Correlation:	0.99991125	0.9999408

Concentration	92.00/91.00	92.00/65.00
0	75.3125	26.0416667
2.31	1513.125	395
4.62	2848.5567	731.134021
9.24	5614.58333	1457.5
18.49	1.14E+04	2943.4375
20.8	1.29E+04	3319.69072



Filename:	64MSMS001117 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 2, 2019 7:40:24					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.00	9.30	11.24	14.13	16.12	18.41

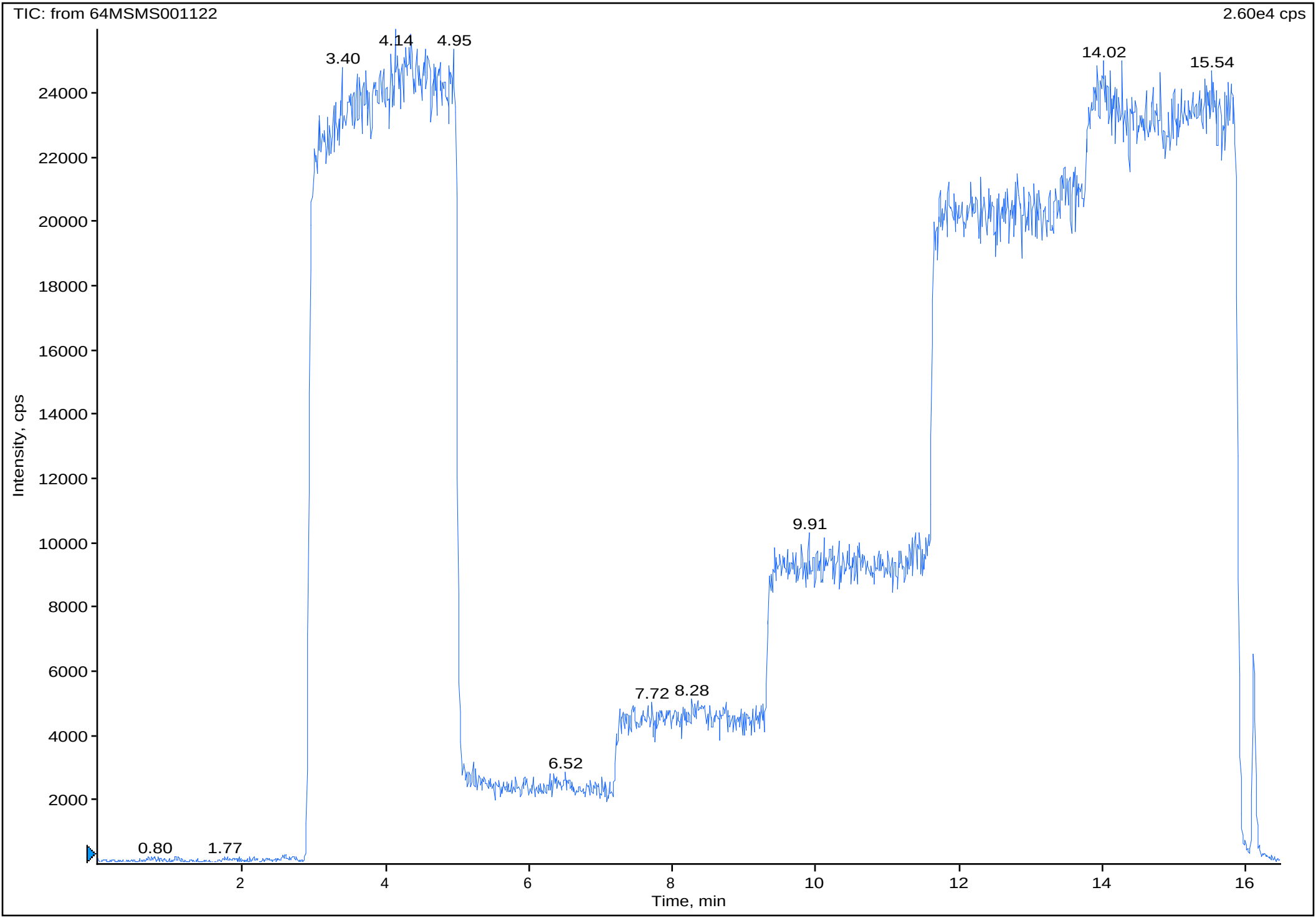
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	19.413305	453.30055
Intercept:	-15.875945	-1018.0571
Correlation:	0.99747515	0.98802548

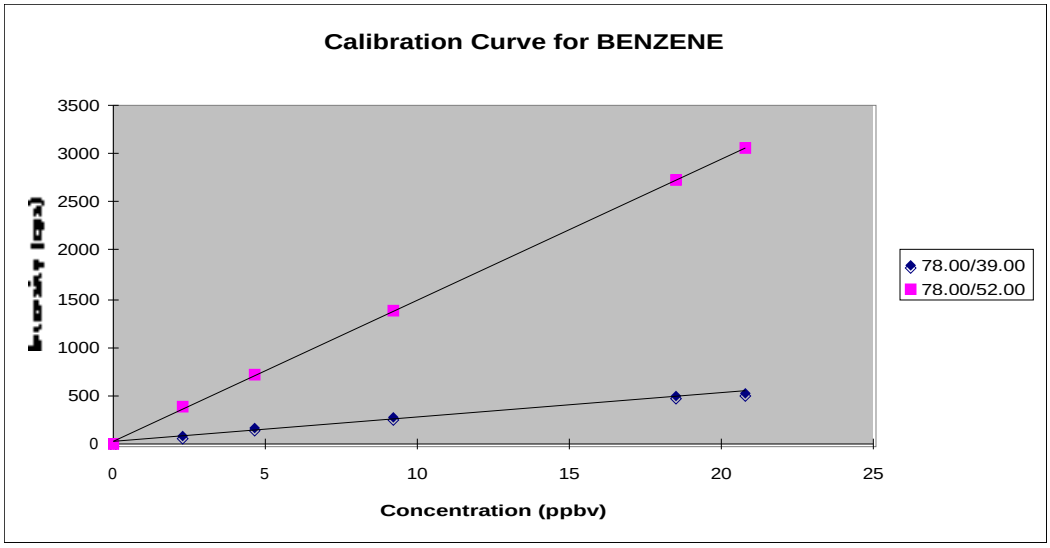
Concentration	106.00/65.0(	106.00/91.00
0	2.29166667	23.0208333
3.48	59.8958333	784.479167
6.96	107.628866	1601.54639
13.91	224.375	3816.25
27.82	525.208333	1.15E+04
31.3	605.773196	1.40E+04

Report	File Name	64MSMS001117 et al.			
	Sample Name	BOD Calibration - BTX 20190502			
	Date	Thursday, May 2, 2019 7:41:02			
	Time Range	4.00	to	5.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	23.73	155.48	616.33	158.36	19.41	453.30
Intercept	16.56	41.77	33.55	15.04	-15.88	-1018.06
Intensity	3.85	12.29	80.52	24.38	3.23	23.13
Int SD	7.16	13.02	41.02	15.48	7.18	17.43
Concentration	-0.54	-0.19	0.08	0.06	0.98	2.30
Conc SD	0.30	0.08	0.07	0.10	0.37	0.04
Compound Con	-0.36		0.07		1.64	
Compound SD	0.14		0.06		0.14	
Det. Limit	0.91	0.25	0.20	0.29	1.11	0.12
Compound DL	0.58		0.25		0.61	

5/2/19.13.19.35
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, May 2, 2019 at 13:19:34; Exp. Comment: BTX

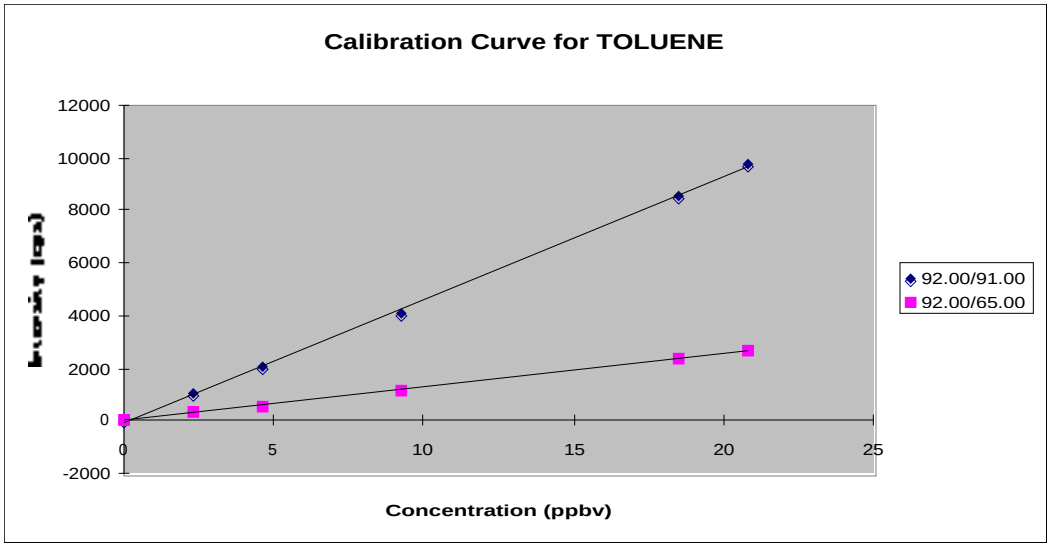




Filename:	64MSMS001122 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 2, 2019 13:37:02					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.10	8.28	10.37	12.75	14.87

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	24.966866	145.07958
Intercept:	27.9129769	39.2327328
Correlation:	0.99666083	0.99991307

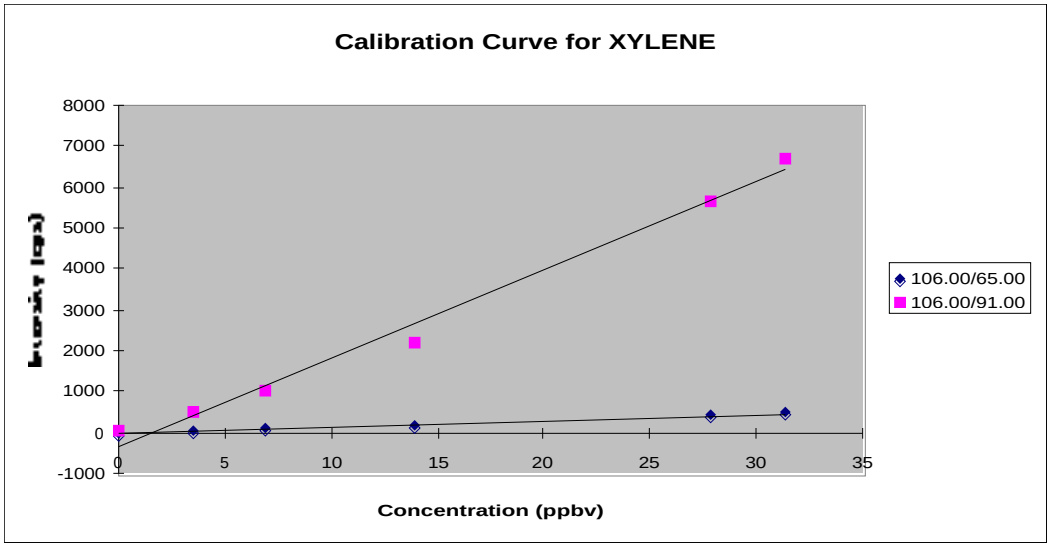
Concentration	78.00/39.00	78.00/52.00
0	3.85416667	12.6041667
2.31	84.8958333	389.895833
4.62	157.395833	729.270833
9.24	283.541667	1375.72917
18.49	487.916667	2718.95833
20.8	534.536082	3055.05155



Filename:	64MSMS001122 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 2, 2019 13:37:39					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.10	8.28	10.37	12.75	14.87

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	467.338907	127.903162
Intercept:	-63.380948	-4.5024244
Correlation:	0.99969986	0.99989293

Concentration	92.00/91.00	92.00/65.00
0	41.7708333	14.375
2.31	1058.4375	289.895833
4.62	2025.625	564.479167
9.24	4094.0625	1171.97917
18.49	8588.125	2379.27083
20.8	9730.30928	2646.49485



Filename:	64MSMS001122 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 2, 2019 13:38:08					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.10	8.28	10.37	12.75	14.87

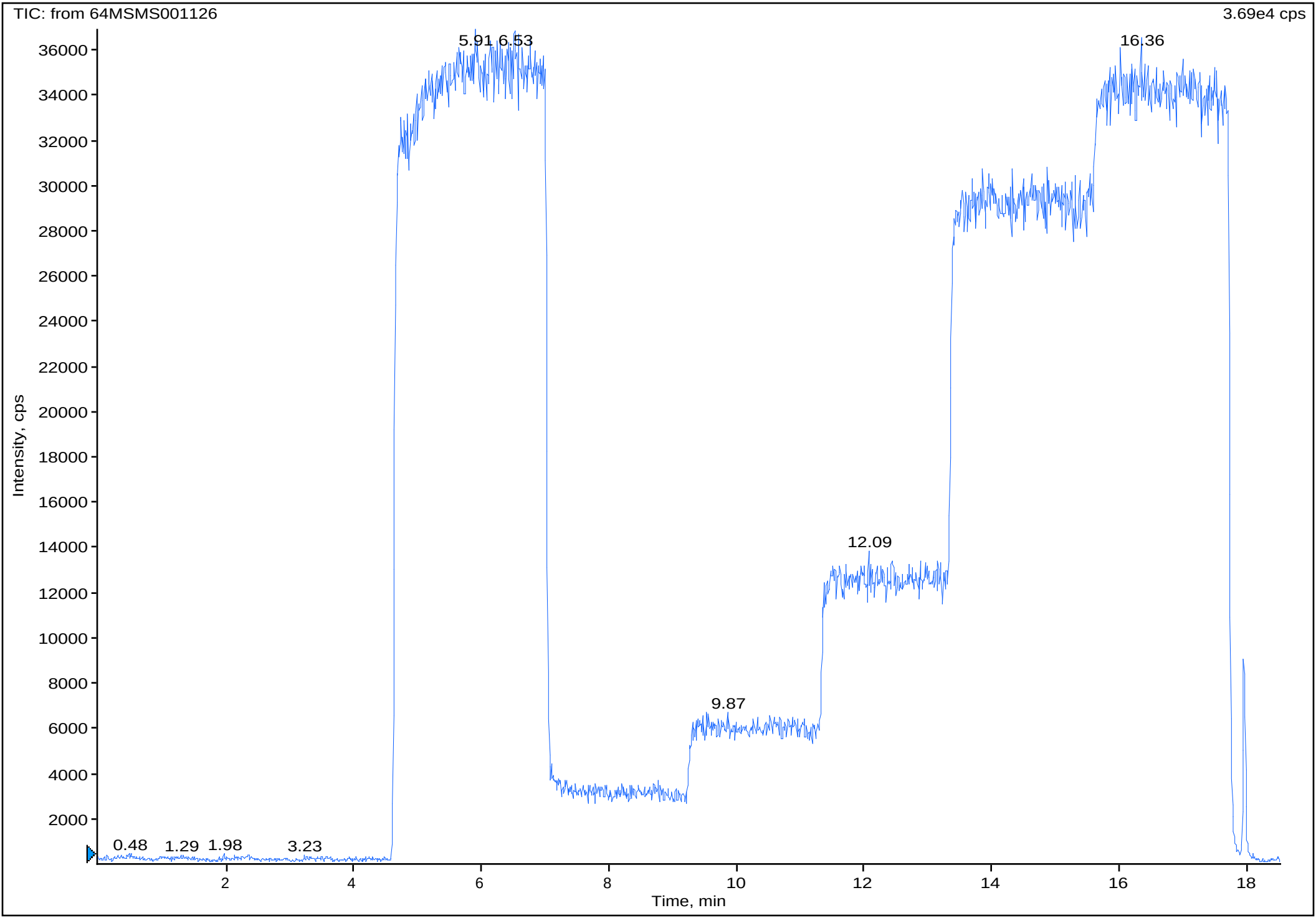
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	14.9869838	215.941071
Intercept:	-5.9592009	-321.99361
Correlation:	0.9991823	0.99377051

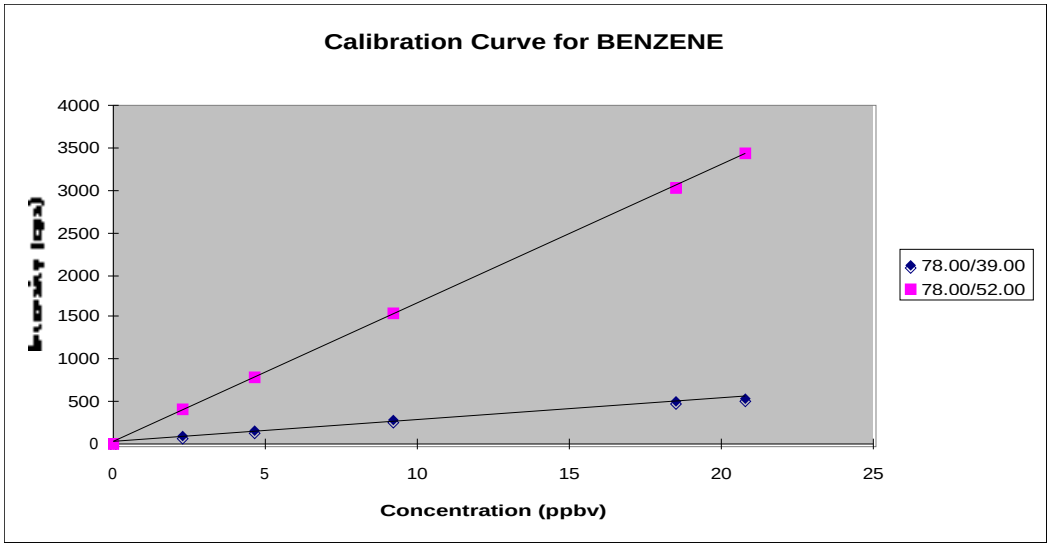
Concentration	106.00/65.0(	106.00/91.00
0	1.77083333	11.9791667
3.48	44.7916667	528.020833
6.96	100.208333	1008.95833
13.91	188.4375	2171.77083
27.82	410	5645.3125
31.3	470	6726.59794

Report	File Name	64MSMS001122 et al.			
	Sample Name	Mod Calibration - BTX 20190502			
	Date	Thursday, May 2, 2019 13:38:46			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	24.97	145.08	467.34	127.90	14.99	215.94
Intercept	27.91	39.23	-63.38	-4.50	-5.96	-321.99
Intensity	3.85	12.60	41.77	14.38	1.77	11.98
Int SD	6.55	13.24	29.56	15.14	5.03	13.89
Concentration	-0.96	-0.18	0.23	0.15	0.52	1.55
Conc SD	0.26	0.09	0.06	0.12	0.34	0.06
Compound Con	-0.57		0.19		1.03	
Compound SD	0.12		0.06		0.14	
Det. Limit	0.79	0.27	0.19	0.36	1.01	0.19
Compound DL	0.53		0.27		0.60	

5/2/19.17.35.08
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, May 2, 2019 at 17:35:06; Exp. Comment: BTX

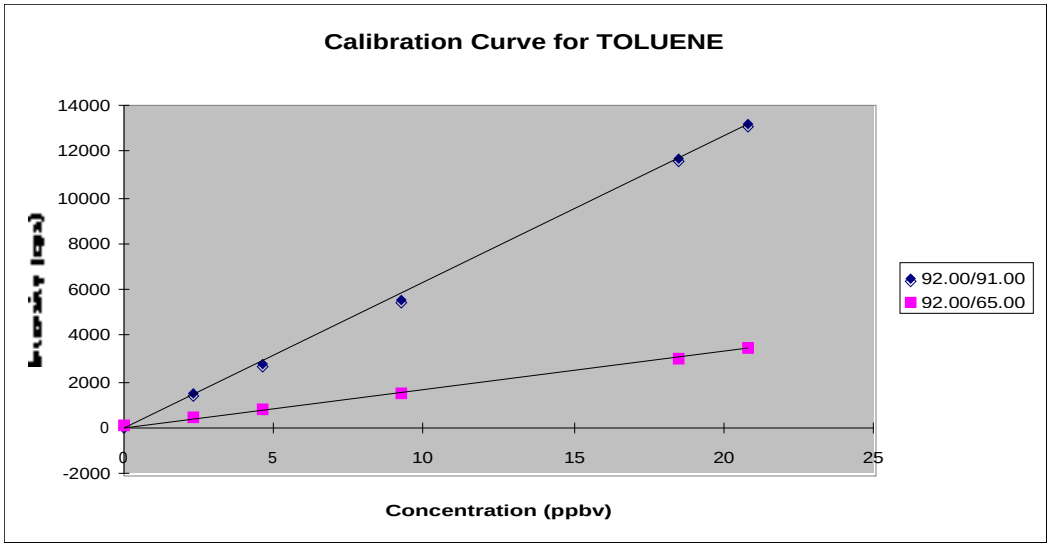




Filename:	64MSMS001126 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 2, 2019 17:54:38					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.00	8.18	10.26	12.34	14.44	16.65

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	25.4886095	163.071881
Intercept:	24.3483816	33.3355526
Correlation:	0.99765129	0.99995228

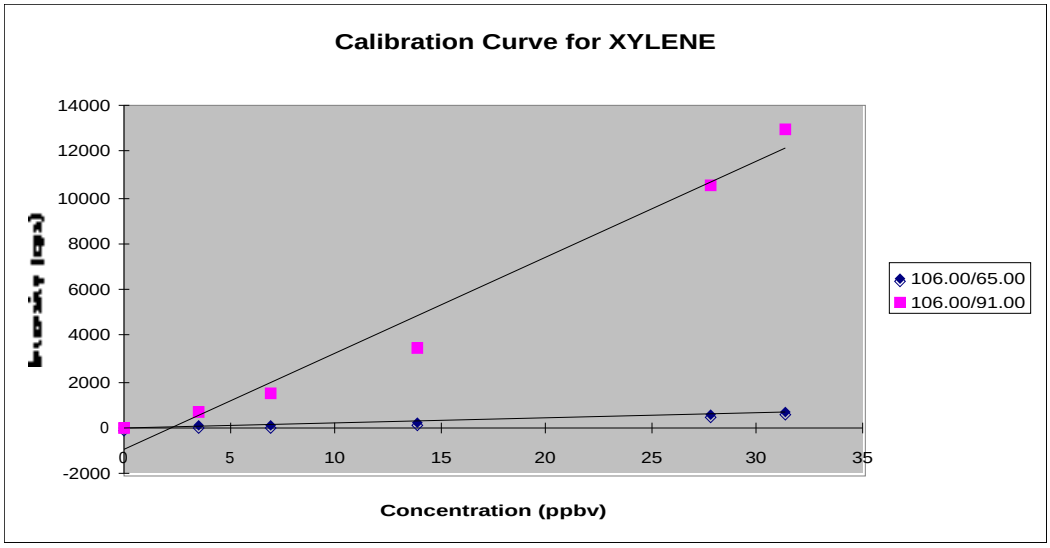
Concentration	78.00/39.00	78.00/52.00
0	3.54166667	10.8333333
2.31	82.0833333	418.541667
4.62	156.041667	801.666667
9.24	279.896907	1547.93814
18.49	494.270833	3039.27083
20.8	543.854167	3425.72917



Filename:	64MSMS001126 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 2, 2019 17:55:15					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.00	8.18	10.26	12.34	14.44	16.65

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	635.255197	163.209224
Intercept:	-68.451644	2.61604401
Correlation:	0.9996328	0.99975898

Concentration	92.00/91.00	92.00/65.00
0	105.729167	30.9375
2.31	1454.16667	393.854167
4.62	2735.20833	740.625
9.24	5577.83505	1461.13402
18.49	1.17E+04	3011.5625
20.8	1.32E+04	3429.16667



Filename:	64MSMS001126 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 2, 2019 17:55:45					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.00	8.18	10.26	12.34	14.44	16.65

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	20.3069409	416.876964
Intercept:	-15.980805	-960.13385
Correlation:	0.99816559	0.98693543

Concentration	106.00/65.0(	106.00/91.00
0	2.91666667	20.625
3.48	60.7291667	712.083333
6.96	110.520833	1440.20833
13.91	242.989691	3451.95876
27.82	551.875	1.05E+04
31.3	630.104167	1.29E+04

Report	File Name	64MSMS001126 et al.			
	Sample Name	EOD Calibration - BTX 20190502			
	Date	Thursday, May 2, 2019 17:56:23			
	Time Range	3.00	to	4.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	25.49	163.07	635.26	163.21	20.31	416.88
Intercept	24.35	33.34	-68.45	2.62	-15.98	-960.13
Intensity	3.65	12.19	112.19	32.08	3.02	20.63
Int SD	7.13	12.50	52.60	23.26	6.00	15.68
Concentration	-0.81	-0.13	0.28	0.18	0.94	2.35
Conc SD	0.28	0.08	0.08	0.14	0.30	0.04
Compound Con	-0.47		0.23		1.64	
Compound SD	0.13		0.08		0.12	
Det. Limit	0.84	0.23	0.25	0.43	0.89	0.11
Compound DL	0.53		0.34		0.50	

TAGA FLOW CALIBRATION LOG

Work Assignment: 372

Date: 5/3/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3200	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
6:43	1500SCCS	~191	1500SCCS	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY00-0925		Calibration Date: Exp: 9/4/2018	

Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Fri, May 3, 2019, 7:09:49
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY03 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Fri, May 3, 2019, 7:06:11

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.072
120.000	0.080
160.000	0.090

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.041
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Fri, May 3, 2019, 7:10:03
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY03 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000
78.000	52.000	100.000
92.000	91.000	100.000
92.000	65.000	100.000
106.000	65.000	100.000
106.000	91.000	100.000

State File Information

Last Modified: Fri, May 3, 2019, 7:06:11

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.072
120.000	0.080
160.000	0.090

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.039
70.000	0.041
100.000	0.041
130.000	0.045
170.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

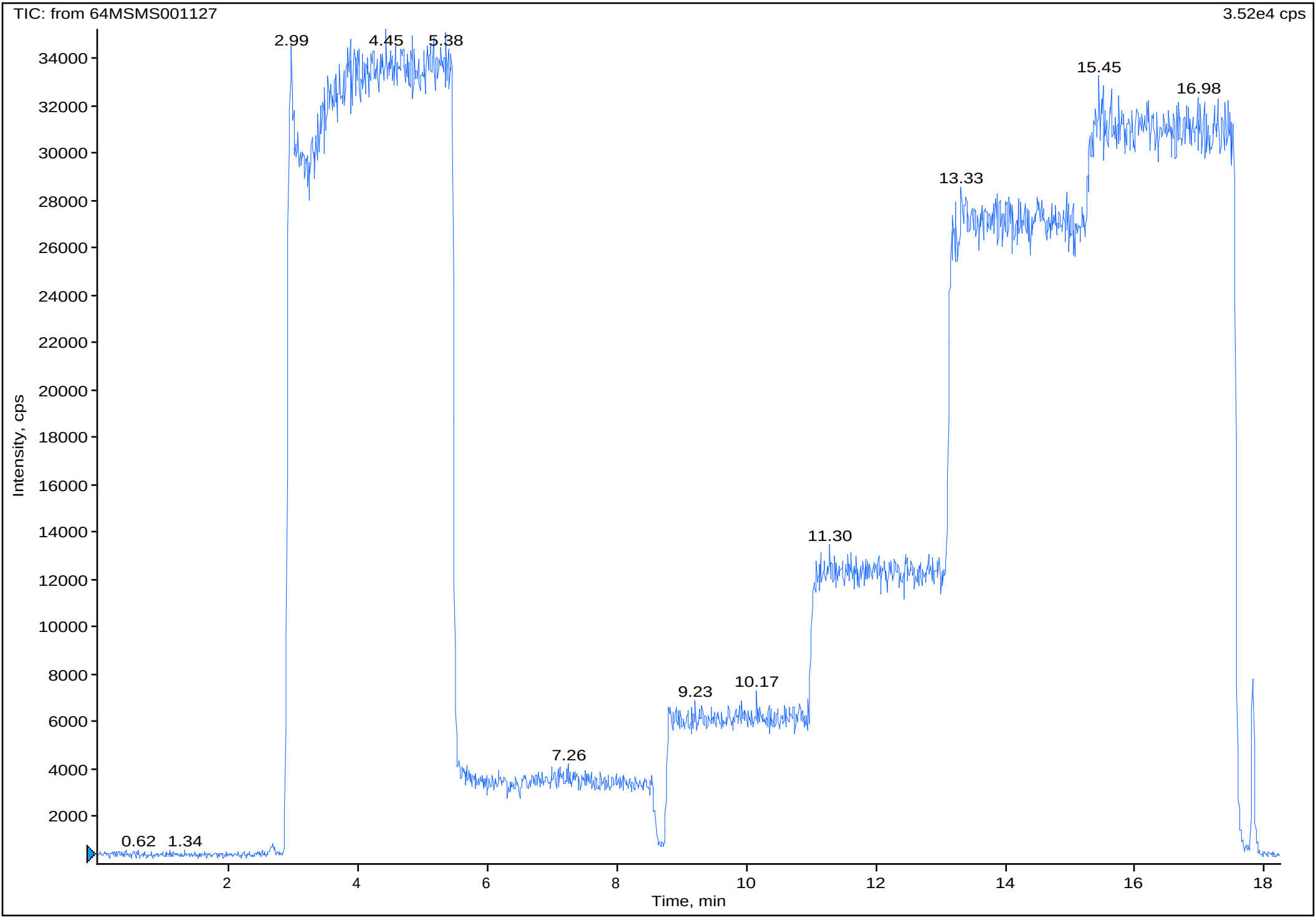
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

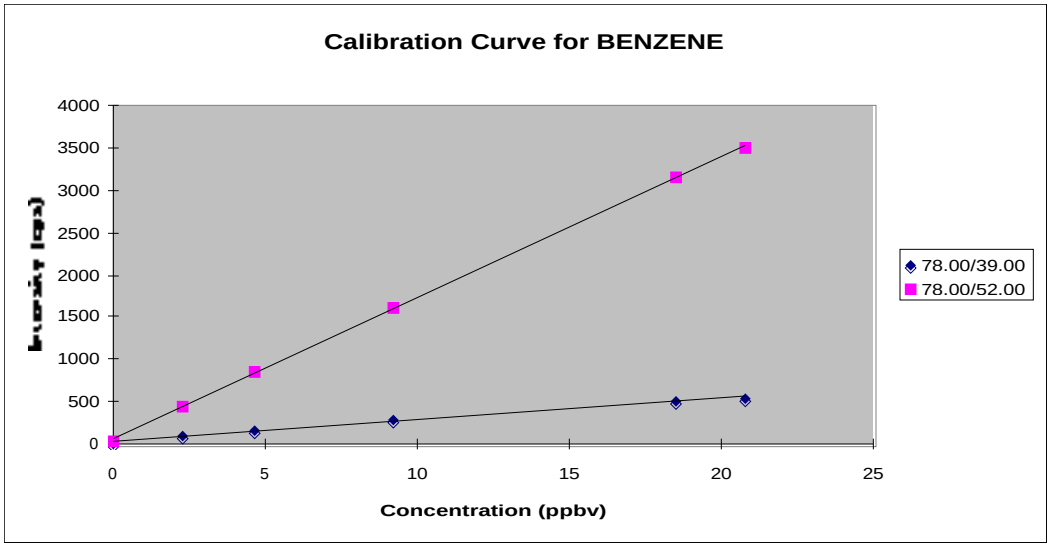
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

5/3/19.7.12.39
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, May 3, 2019 at 7:12:38; Exp. Comment: BTX

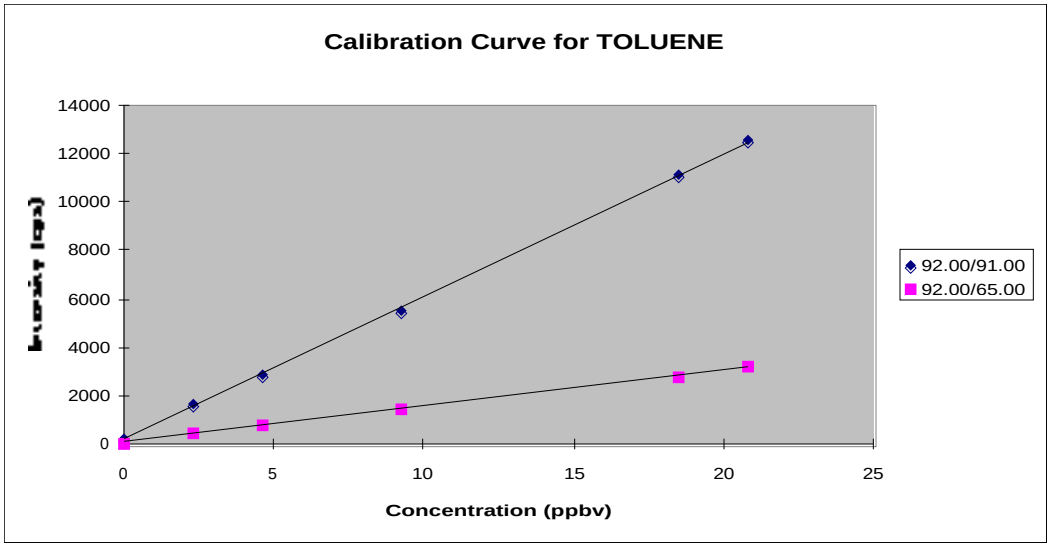




Filename:	64MSMS001127 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, May 3, 2019 7:32:56					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.08	9.89	12.09	14.24	16.37

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	25.3058425	166.545299
Intercept:	25.6556348	64.1079564
Correlation:	0.99834539	0.99989825

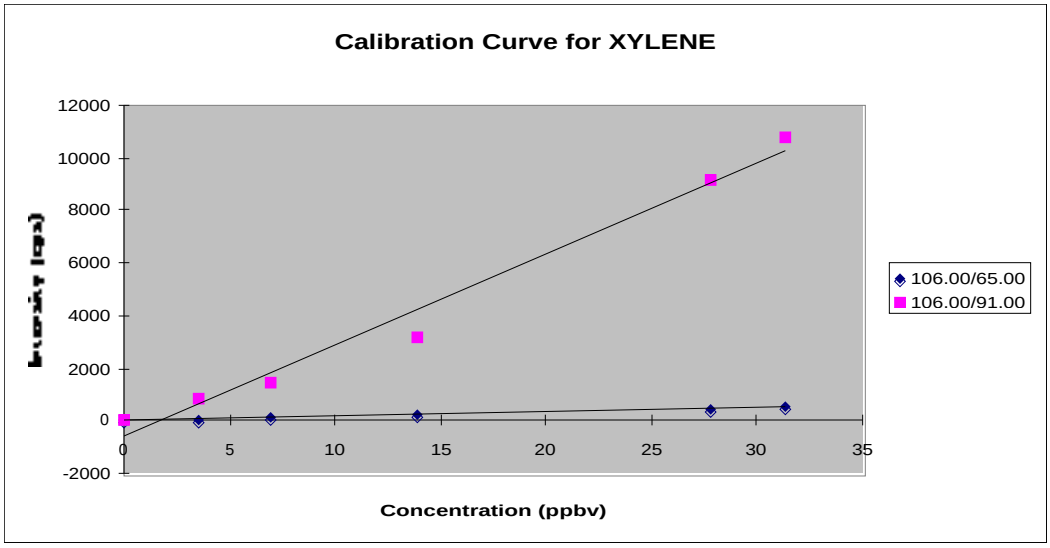
Concentration	78.00/39.00	78.00/52.00
0	6.97916667	32.7083333
2.31	87.5	455.208333
4.62	151.5625	853.020833
9.24	274.6875	1620.72917
18.49	495.520833	3150
20.8	541.145833	3509.58333



Filename:	64MSMS001127 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, May 3, 2019 7:33:40					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.08	9.89	12.09	14.24	16.37

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	590.129756	148.076963
Intercept:	210.598537	69.3134634
Correlation:	0.99986271	0.99988053

Concentration	92.00/91.00	92.00/65.00
0	209.270833	51.6666667
2.31	1696.35417	441.041667
4.62	2886.25	739.791667
9.24	5542.5	1444.6875
18.49	1.11E+04	2788.4375
20.8	1.25E+04	3162.60417



Filename:	64MSMS001127 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, May 3, 2019 7:34:16					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.08	9.89	12.09	14.24	16.37

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	16.9511709	348.105102
Intercept:	-9.5516784	-614.45825
Correlation:	0.99762257	0.99079011

Concentration	106.00/65.0(	106.00/91.00
0	4.6875	59.375
3.48	56.25	821.666667
6.96	99.5833333	1399.89583
13.91	203.229167	3216.35417
27.82	456.354167	9123.33333
31.3	537.5	1.07E+04

Report	File Name	64MSMS001127 et al.			
	Sample Name	BOD Calibration - BTX 20190503			
	Date	Friday, May 3, 2019 7:34:57			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	25.31	166.55	590.13	148.08	16.95	348.11
Intercept	25.66	64.11	210.60	69.31	-9.55	-614.46
Intensity	6.98	32.71	209.27	51.67	4.69	59.38
Int SD	9.30	20.80	52.48	28.46	7.53	29.34
Concentration	-0.74	-0.19	0.00	-0.12	0.84	1.94
Conc SD	0.37	0.12	0.09	0.19	0.44	0.08
Compound Con	-0.46		-0.06		1.39	
Compound SD	0.17		0.10		0.19	
Det. Limit	1.10	0.37	0.27	0.58	1.33	0.25
Compound DL	0.74		0.42		0.79	

TAGA FLOW CALIBRATION LOG

Work Assignment: 372 Date: 05/07/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3200.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
1015	1500	~190SCFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY00-0925		EXP 09/04/19 Calibration Date:	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
			PM		
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____.	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} \times 100$
			PM		
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes: Span adjusted for MKS Channel #3

Method Information

Method Name: BTX CALIBRATION
Last Modified: Tue, May 7, 2019, 12:13:22
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY07 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Tue, May 7, 2019, 12:11:01

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.072
120.000	0.080
160.000	0.090

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.035
70.000	0.036
100.000	0.036
130.000	0.043
160.000	0.038

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Tue, May 7, 2019, 12:15:09
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY07 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000
78.000	52.000	100.000
92.000	91.000	100.000
92.000	65.000	100.000
106.000	65.000	100.000
106.000	91.000	100.000

State File Information

Last Modified: Tue, May 7, 2019, 12:11:01

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.072
120.000	0.080
160.000	0.090

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.035
70.000	0.036
100.000	0.036
130.000	0.043
160.000	0.038

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

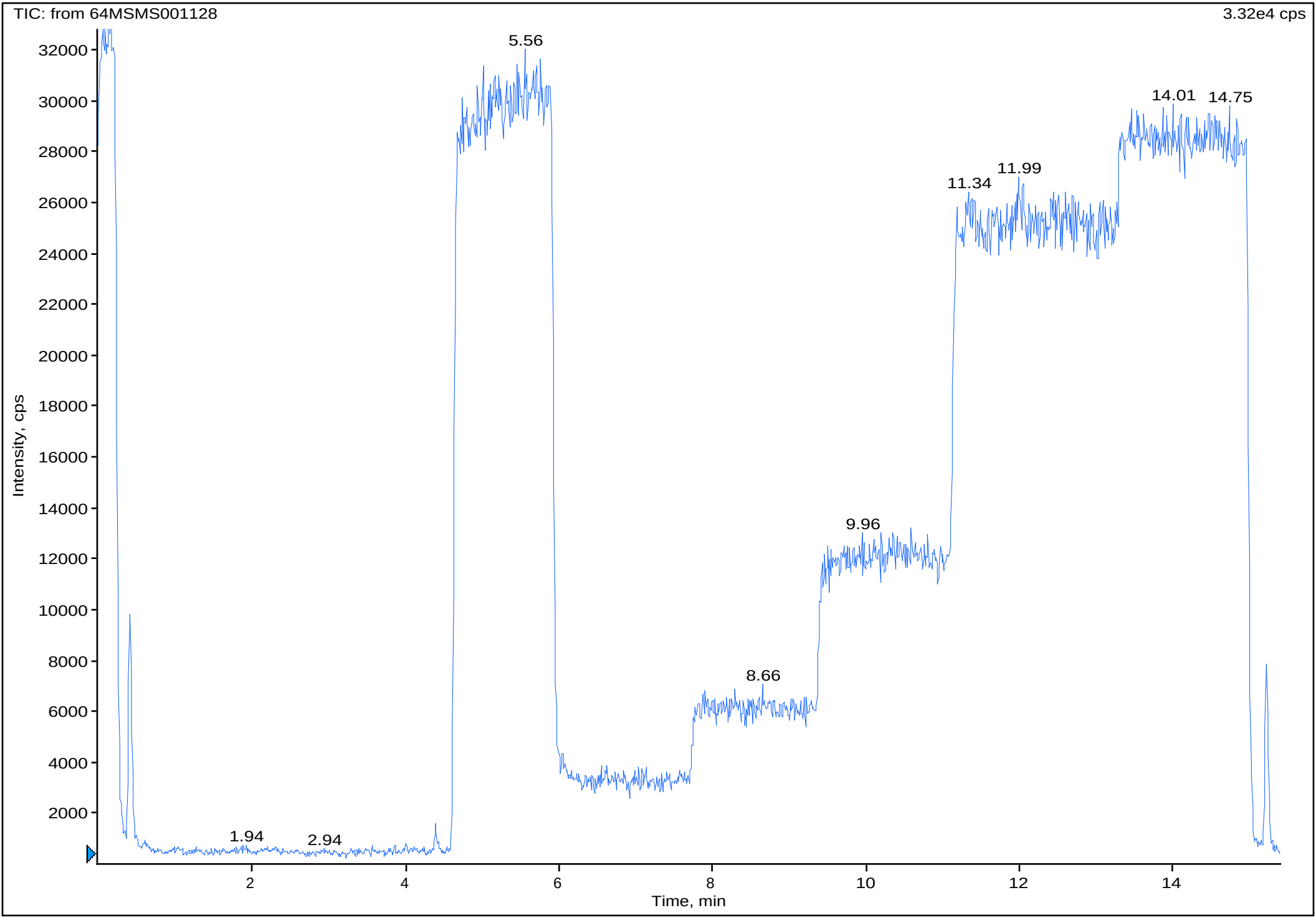
Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

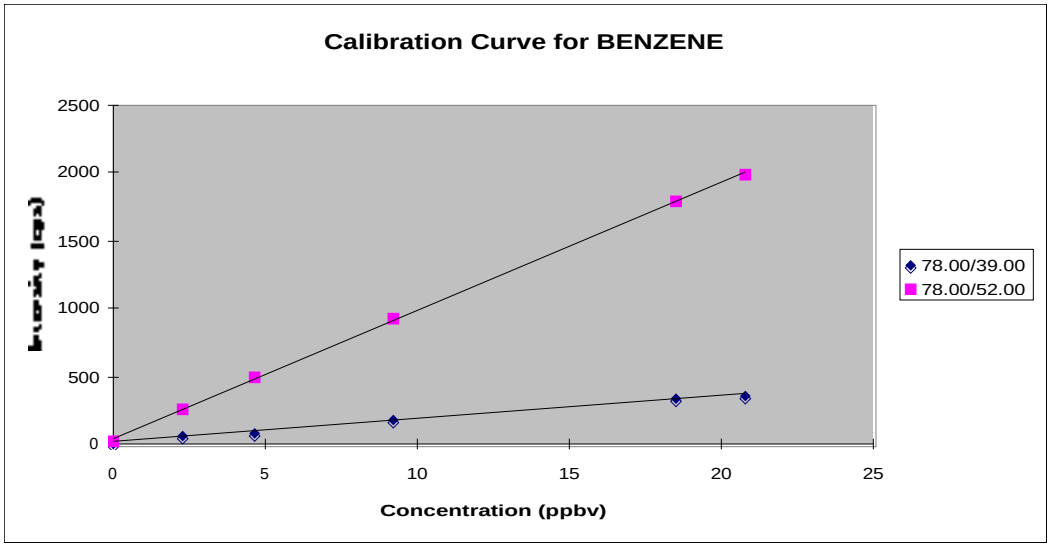
Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

5/7/19.12.16.27

Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms

Acq. Time: Tue, May 7, 2019 at 12:16:26; Exp. Comment: BTX

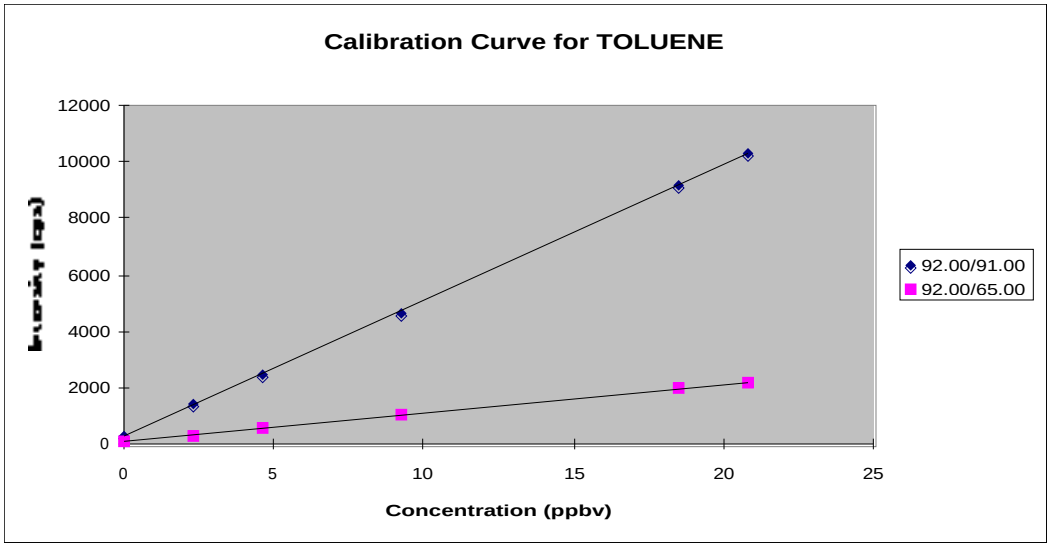




Filename:	64MSMS001128 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, May 7, 2019 12:33:43					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	7.01	8.60	10.24	12.17	14.16

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	17.097719	94.4869254
Intercept:	9.96355665	39.7855749
Correlation:	0.99973102	0.99976635

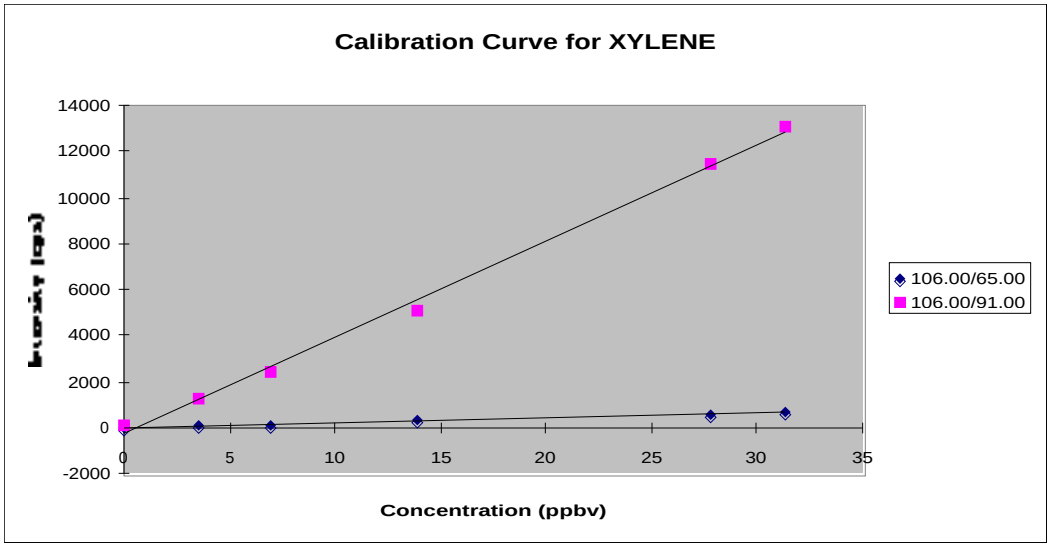
Concentration	78.00/39.00	78.00/52.00
0	6.5625	14.5833333
2.31	52.0833333	257.5
4.62	86.4583333	500.416667
9.24	173.541667	924.583333
18.49	325.208333	1790.625
20.8	364.166667	1991.25



Filename:	64MSMS001128 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, May 7, 2019 12:34:23					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	7.01	8.60	10.24	12.17	14.16

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	481.36459	103.060498
Intercept:	258.433862	68.3670503
Correlation:	0.99998318	0.99995375

Concentration	92.00/91.00	92.00/65.00
0	265.520833	57.9166667
2.31	1385.3125	310
4.62	2490.20833	550.520833
9.24	4657.60417	1023.54167
18.49	9163.85417	1982.91667
20.8	1.03E+04	2201.04167



Filename:	64MSMS001128 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Tuesday, May 7, 2019 12:34:53					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	7.01	8.60	10.24	12.17	14.16

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	21.2839144	419.772994
Intercept:	-7.0669445	-309.81141
Correlation:	0.99900747	0.99835562

Concentration	106.00/65.0(	106.00/91.00
0	10.4166667	104.6875
3.48	64.7916667	1190.20833
6.96	133.75	2348.75
13.91	270.625	5074.16667
27.82	588.4375	1.14E+04
31.3	666.145833	1.30E+04

Report	File Name	64MSMS001128 et al.			
	Sample Name	BOD Calibratio - BTX 20190507			
	Date	Tuesday, May 7, 2019 12:35:32			
	Time Range	2.00	to	3.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	17.10	94.49	481.36	103.06	21.28	419.77
Intercept	9.96	39.79	258.43	68.37	-7.07	-309.81
Intensity	6.56	14.58	265.52	57.92	10.42	104.69
Int SD	9.04	13.29	56.99	26.79	10.65	39.68
Concentration	-0.20	-0.27	0.01	-0.10	0.82	0.99
Conc SD	0.53	0.14	0.12	0.26	0.50	0.09
Compound Con	-0.23		-0.04		0.90	
Compound SD	0.24		0.13		0.21	
Det. Limit	1.59	0.42	0.36	0.78	1.50	0.28
Compound DL	1.00		0.57		0.89	

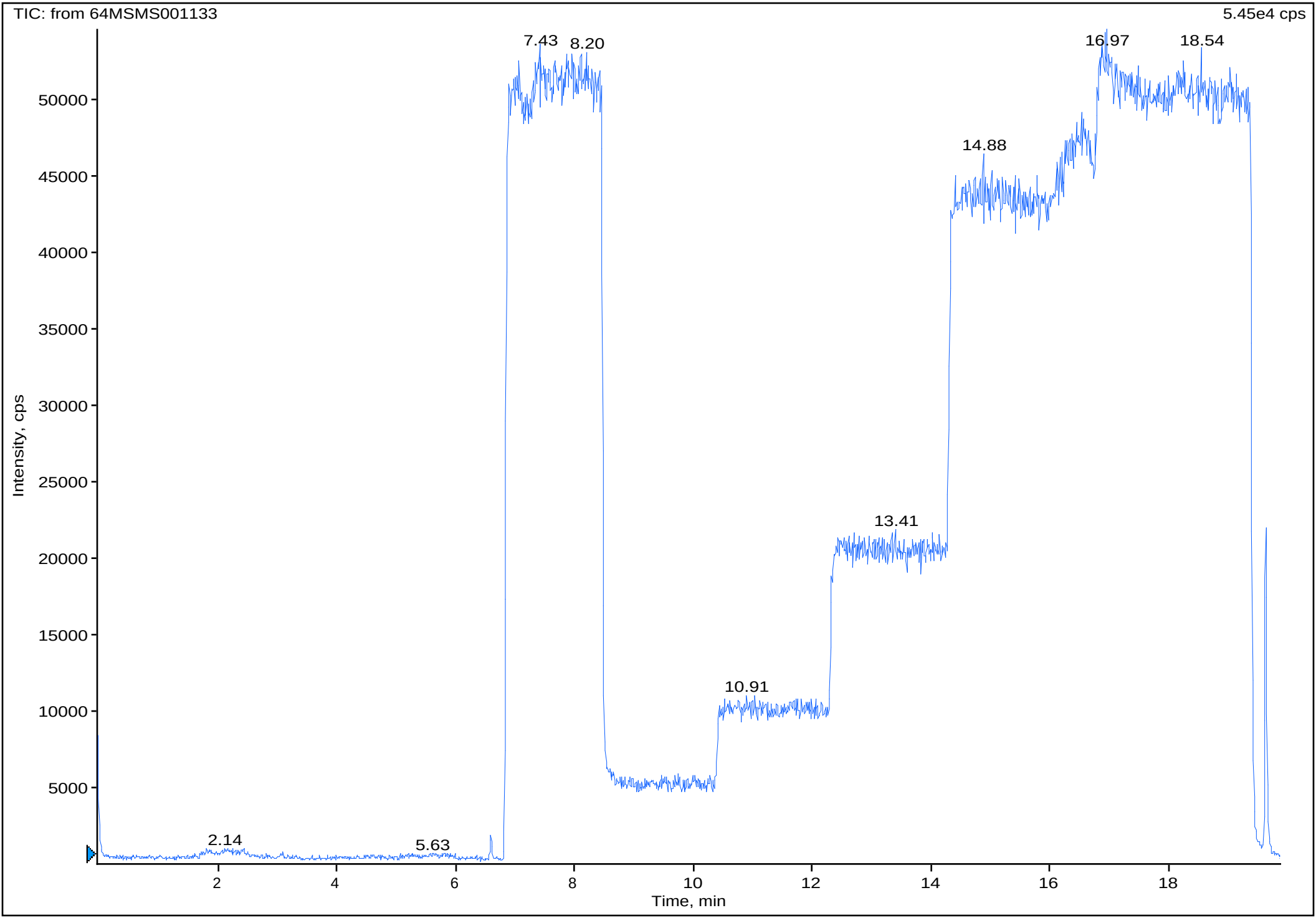
TAGA FLOW CALIBRATION LOG

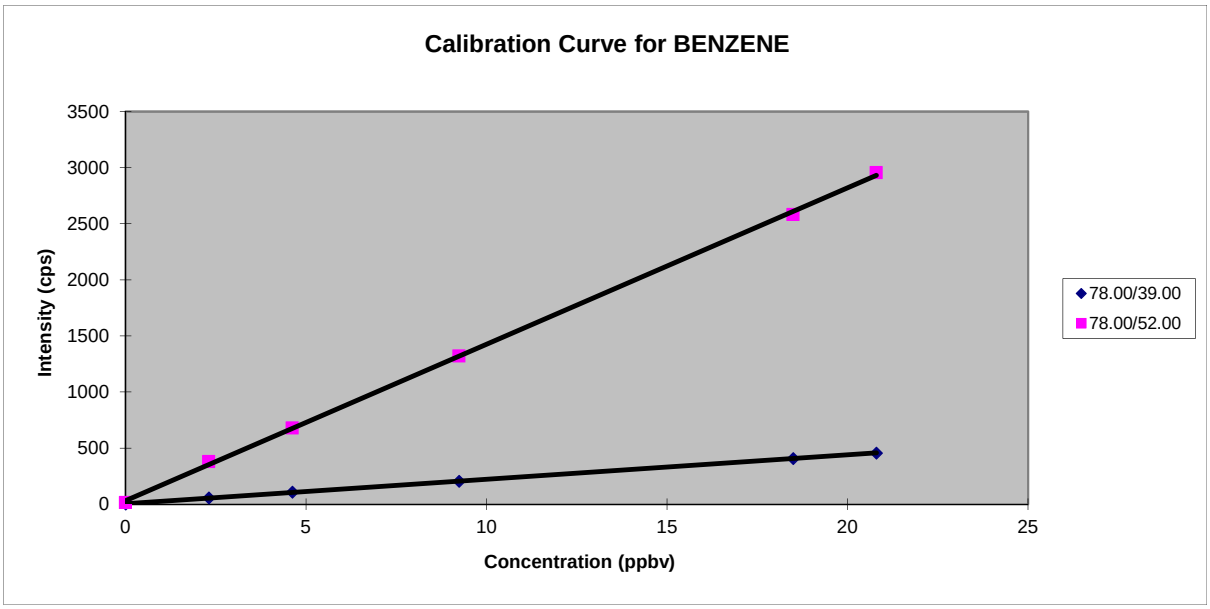
Work Assignment: 372 Date: 05/08/18

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3200	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
0919	1500	~190SCFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration # 18DWY00-0925			Calibration Date: EXP 09/04/19	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
			BM		
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
			BM		
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

5/8/19.10.19.48
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, May 8, 2019 at 10:19:46; Exp. Comment: BTX

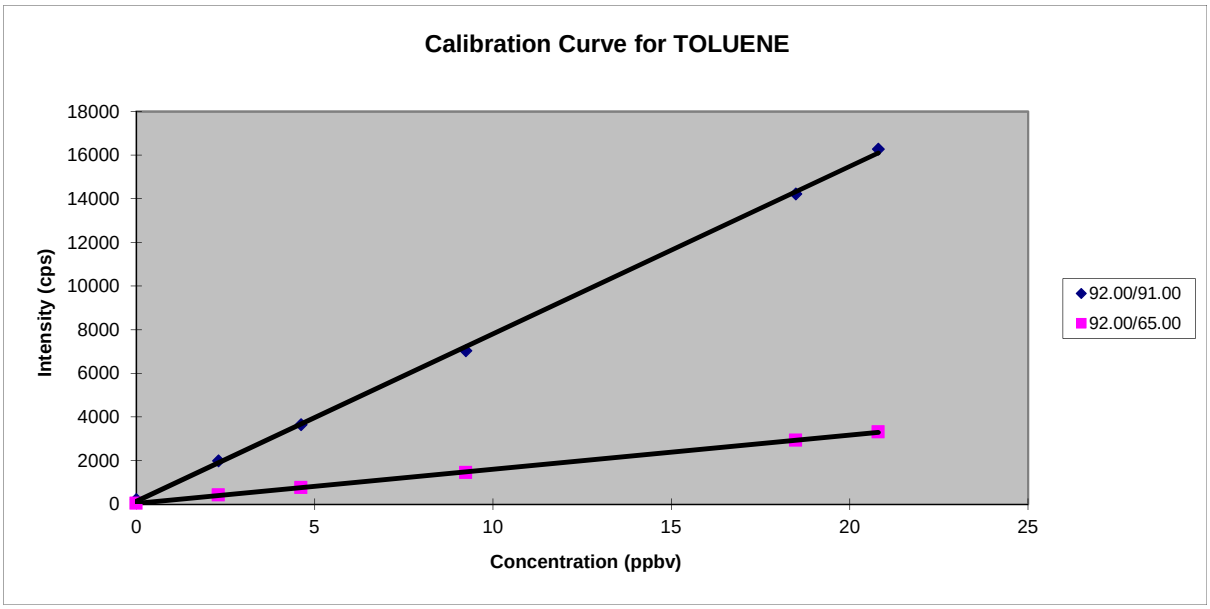




Filename:	64MSMS001133 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, May 8, 2019 11:28:32					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.00	9.60	11.37	13.21	15.32	18.29

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	21.7823408	139.393491
Intercept:	4.47453501	32.1471407
Correlation:	0.99998265	0.99984779

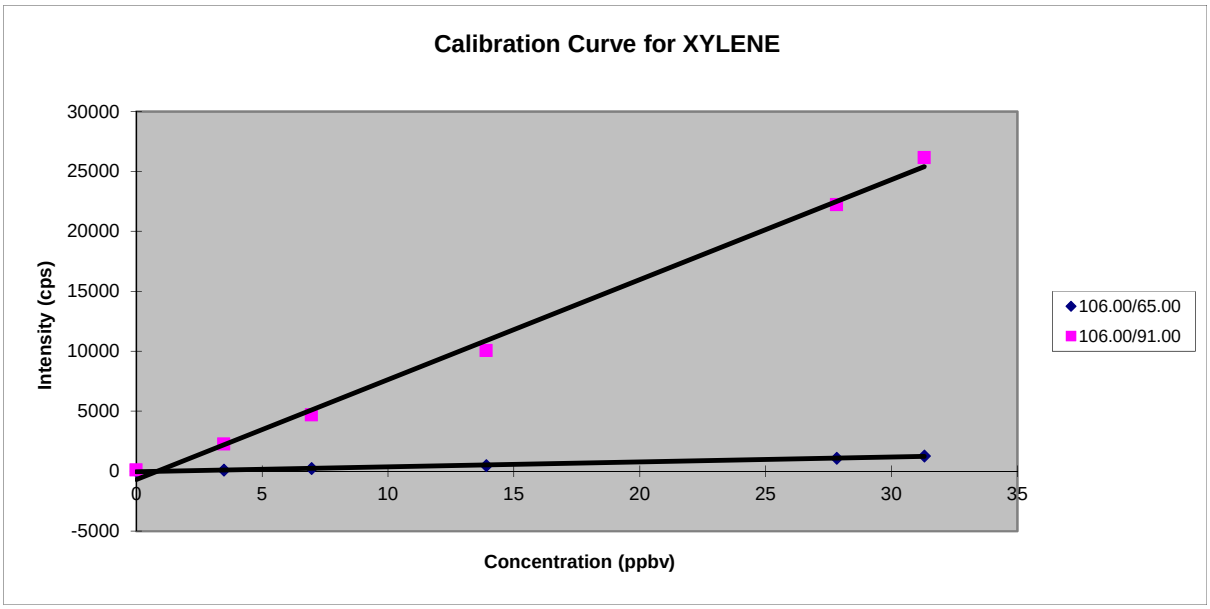
Concentratior	78.00/39.00	78.00/52.00
0	2.70833333	12.7083333
2.31	55.4166667	378.229167
4.62	106.5625	677.1875
9.24	205.833333	1320.72917
18.49	407.5	2581.5625
20.8	456.875	2953.22917



Filename:	64MSMS001133 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, May 8, 2019 11:29:04					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.00	9.60	11.37	13.21	15.32	18.29

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	767.323741	156.448094
Intercept:	137.891718	39.2279828
Correlation:	0.99979112	0.99987517

Concentratior	92.00/91.00	92.00/65.00
0	212.5	47.7083333
2.31	1985.83333	418.541667
4.62	3652.39583	759.270833
9.24	7037.29167	1444.89583
18.49	1.42E+04	2931.14583
20.8	1.63E+04	3310.41667



Filename:	64MSMS001133 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, May 8, 2019 11:29:35					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.00	9.60	11.37	13.21	15.32	18.29

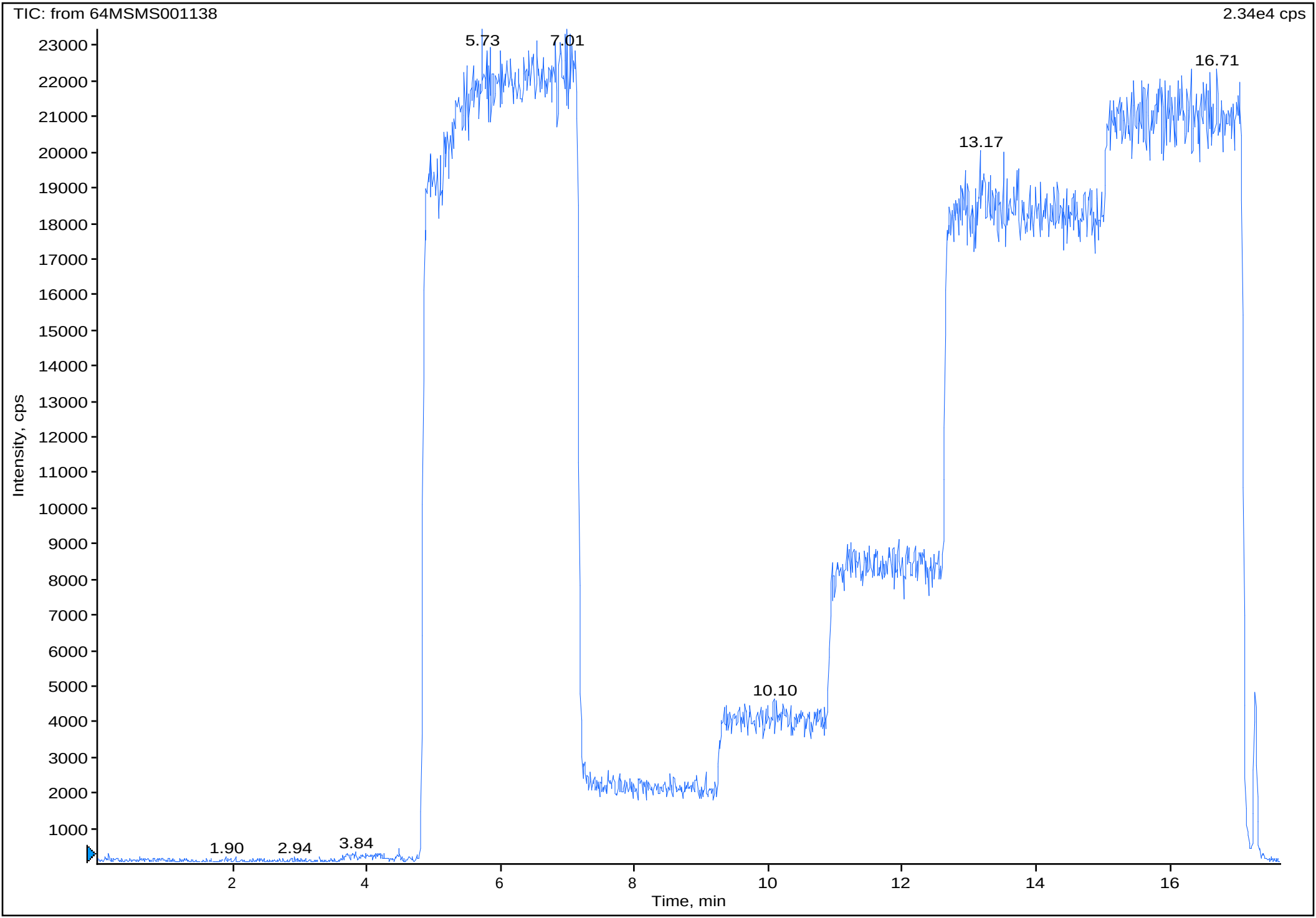
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	40.9563018	833.667772
Intercept:	-44.041252	-689.53108
Correlation:	0.99688312	0.99816497

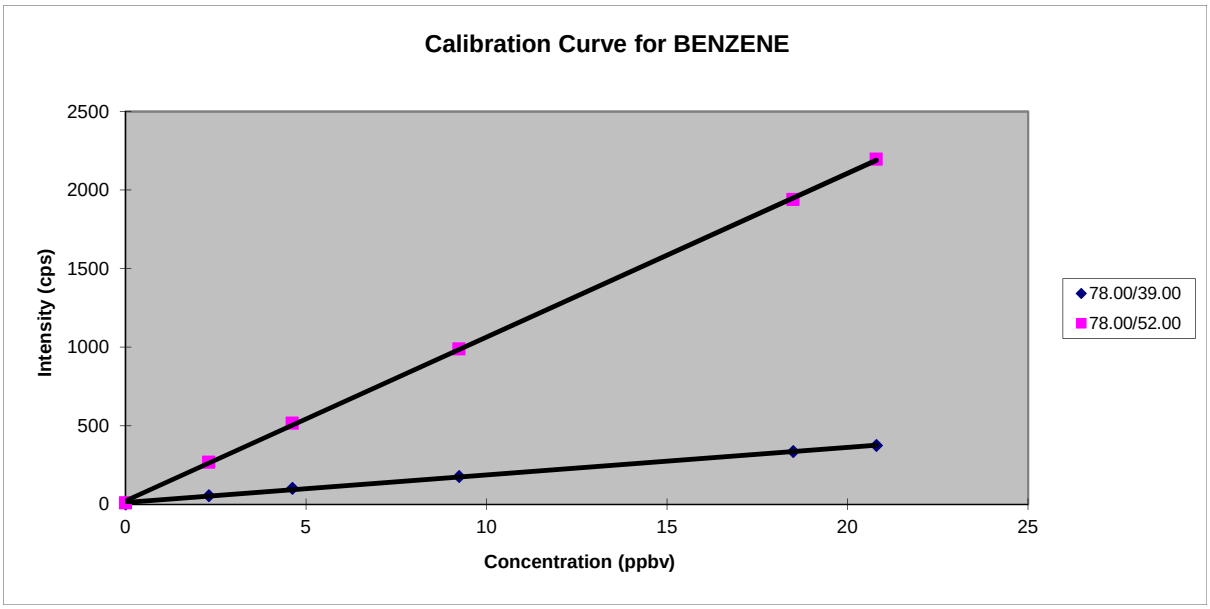
Concentratior	106.00/65.00	106.00/91.00
0	5.3125	105.625
3.48	105	2260.83333
6.96	217.5	4691.04167
13.91	460.833333	1.00E+04
27.82	1087.8125	2.22E+04
31.3	1277.91667	2.61E+04

Report	File Name	64MSMS001133 et al.			
	Sample Name	BOD Calibration - BTX 20190508			
	Date	Wednesday, May 8, 2019 11:32:08			
	Time Range	0.50	to	1.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	21.78	139.39	767.32	156.45	40.96	833.67
Intercept	4.47	32.15	137.89	39.23	-44.04	-689.53
Intensity	2.68	12.68	213.71	48.04	5.26	105.88
Int SD	6.04	12.54	54.40	21.97	7.23	35.61
Concentration	-0.08	-0.14	0.10	0.06	1.20	0.95
Conc SD	0.28	0.09	0.07	0.14	0.18	0.04
Compound Con	-0.11		0.08		1.08	
Compound SD	0.13		0.07		0.08	
Det. Limit	0.83	0.27	0.21	0.42	0.53	0.13
Compound DL	0.55		0.32		0.33	

5/8/19.17.59.35
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Wed, May 8, 2019 at 17:59:34; Exp. Comment: BTX



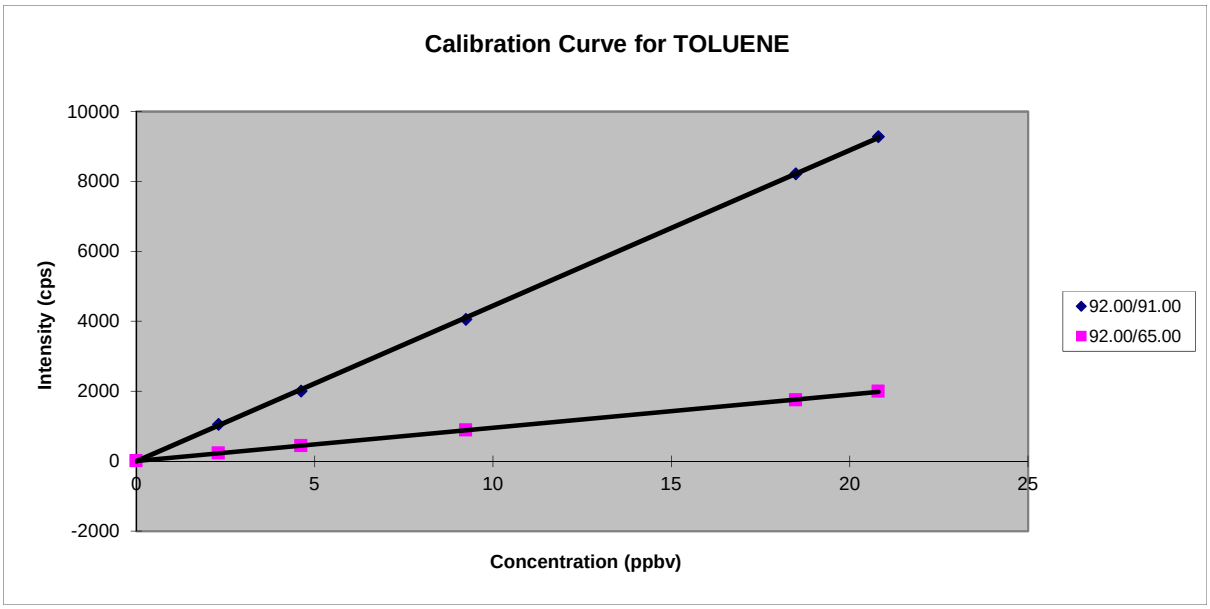


Filename:	64MSMS001138 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Wednesday, May 8, 2019 18:18:01
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	8.35	10.01	11.72	13.81	16.07

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	17.5406573	104.248937
Intercept:	12.1019684	21.7916269
Correlation:	0.99924747	0.9999414

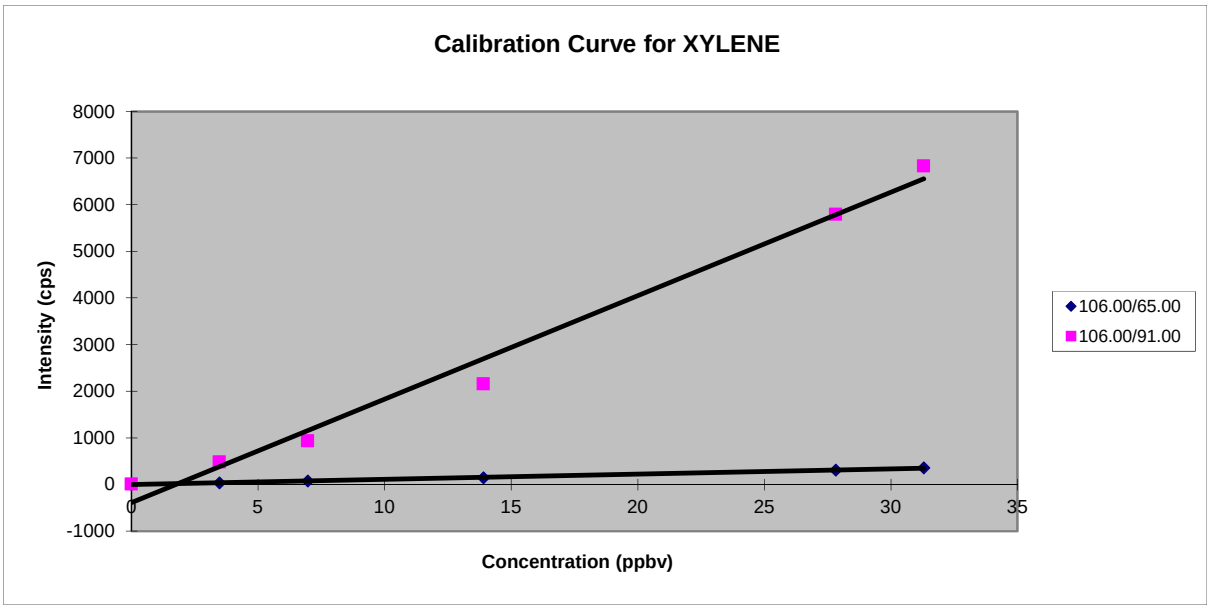
Concentratior	78.00/39.00	78.00/52.00
0	2.60416667	8.22916667
2.31	54.7916667	267.083333
4.62	101.25	515.625
9.24	176.5625	987.1875
18.49	335.833333	1939.47917
20.8	374.375	2194.79167



Filename:	64MSMS001138 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, May 8, 2019 18:18:36					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	8.35	10.01	11.72	13.81	16.07

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	444.613293	94.9751944
Intercept:	-0.4380377	7.80706446
Correlation:	0.99994473	0.99990323

Concentratior	92.00/91.00	92.00/65.00
0	38.4375	9.47916667
2.31	1056.66667	234.6875
4.62	2005.72917	437.395833
9.24	4056.66667	886.5625
18.49	8221.5625	1747.39583
20.8	9276.5625	1998.64583



Filename:	64MSMS001138 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Wednesday, May 8, 2019 18:19:06					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	8.35	10.01	11.72	13.81	16.07

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	11.2404503	221.761512
Intercept:	-1.5990927	-385.29793
Correlation:	0.99956781	0.99298405

Concentratior	106.00/65.00	106.00/91.00
0	2.1875	11.1458333
3.48	36.9791667	478.854167
6.96	77.8125	931.354167
13.91	147.5	2153.4375
27.82	309.375	5794.16667
31.3	354.791667	6829.6875

Report	File Name	64MSMS001138 et al.			
	Sample Name	EOD Calibration - BTX 20190508			
	Date	Wednesday, May 8, 2019 18:19:40			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	17.54	104.25	444.61	94.98	11.24	221.76
Intercept	12.10	21.79	-0.44	7.81	-1.60	-385.30
Intensity	2.60	8.23	38.44	9.48	2.19	11.15
Int SD	5.48	9.29	26.61	11.64	5.47	12.04
Concentration	-0.54	-0.13	0.09	0.02	0.34	1.79
Conc SD	0.31	0.09	0.06	0.12	0.49	0.05
Compound Con	-0.34		0.05		1.06	
Compound SD	0.14		0.06		0.19	
Det. Limit	0.94	0.27	0.18	0.37	1.46	0.16
Compound DL	0.60		0.27		0.81	

TAGA FLOW CALIBRATION LOG

Work Assignment: 372 Date: 05/09/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 5200	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
0631	1500	~19/SCFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY00-0925		Exp 09/04/19 Calibration Date:	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Thu, May 9, 2019, 6:55:32
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY09 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Thu, May 9, 2019, 6:53:51

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.075
120.000	0.084
160.000	0.090

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.045
70.000	0.045
100.000	0.045
130.000	0.041
160.000	0.048

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Thu, May 9, 2019, 6:56:01
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY09 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Thu, May 9, 2019, 6:53:51

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.075
120.000	0.084
160.000	0.090

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.045
70.000	0.045
100.000	0.045
130.000	0.041
160.000	0.048

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

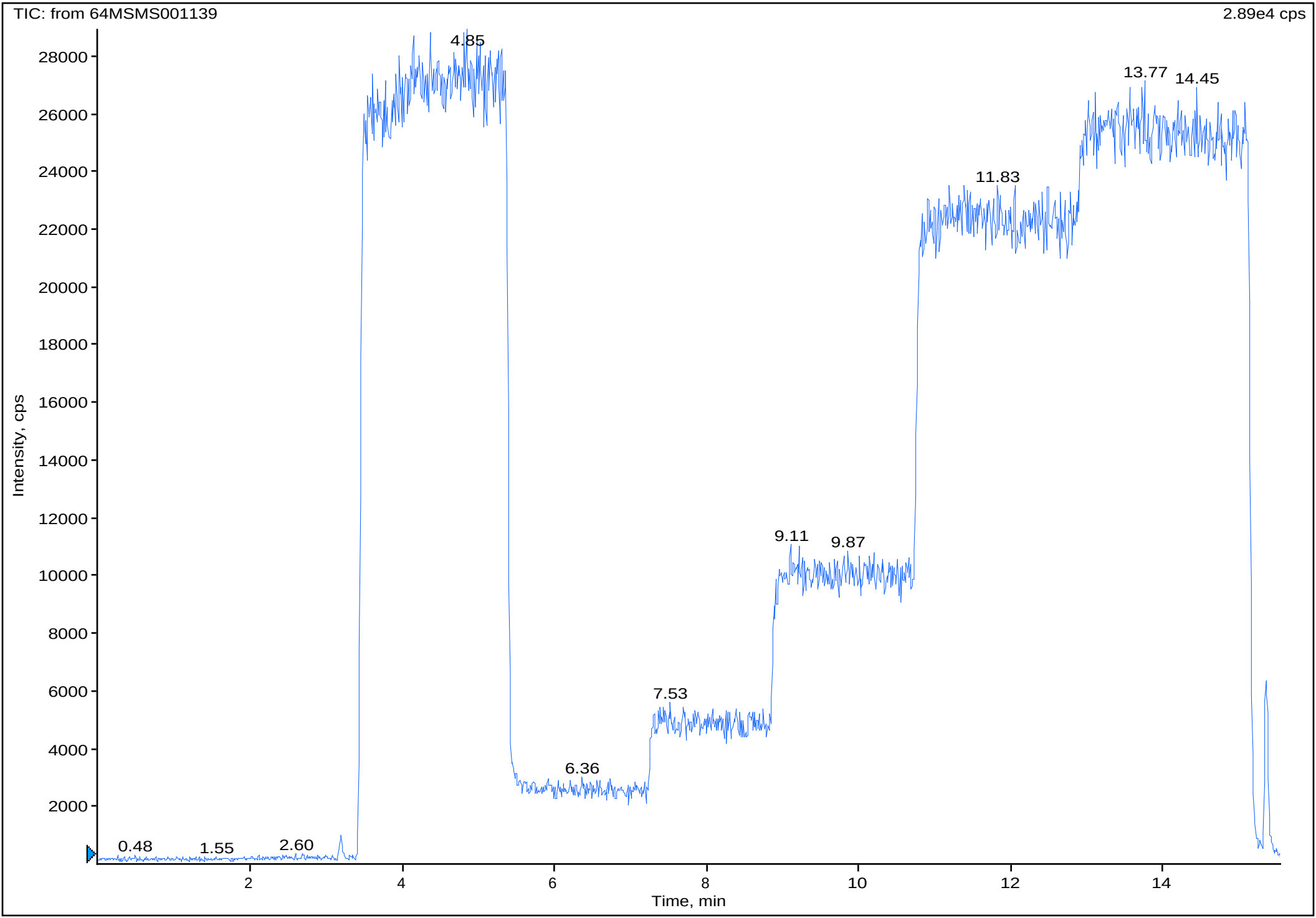
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

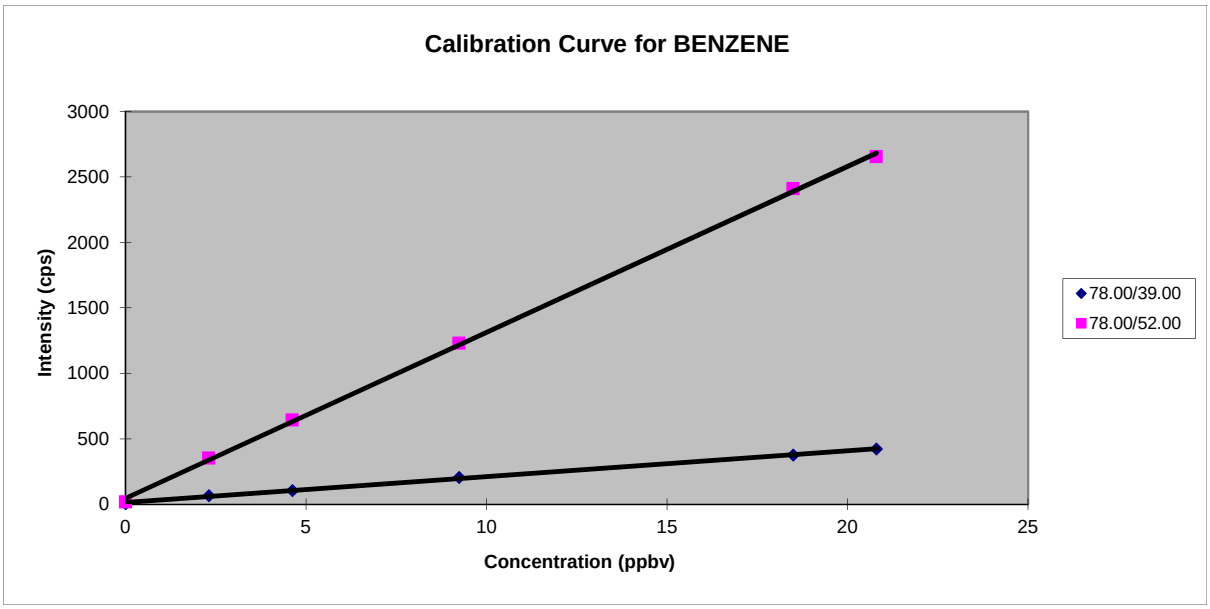
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

5/9/19.6.57.30
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, May 9, 2019 at 6:57:28; Exp. Comment: BTX

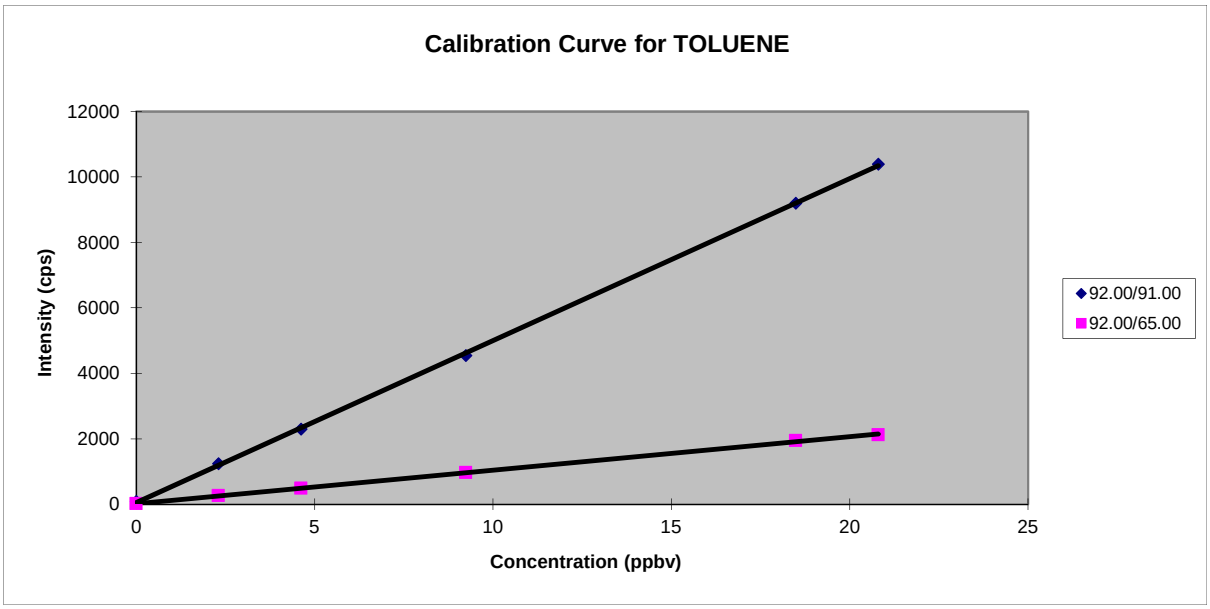




Filename:	64MSMS001139 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 9, 2019 7:16:31					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.38	8.08	9.70	11.89	13.95

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	19.7303028	126.727222
Intercept:	14.5533181	45.7881791
Correlation:	0.99917078	0.99978837

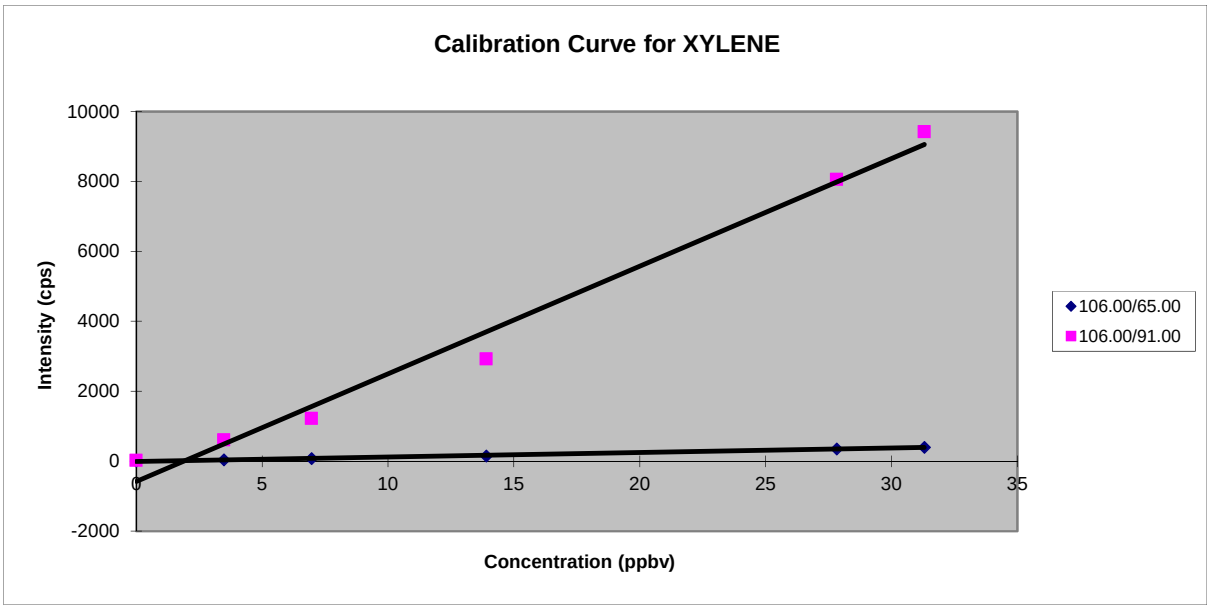
Concentratior	78.00/39.00	78.00/52.00
0	4.16666667	16.0416667
2.31	66.3541667	351.666667
4.62	105.833333	642.395833
9.24	205.9375	1229.58333
18.49	376.770833	2409.47917
20.8	422.5	2653.85417



Filename:	64MSMS001139 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 9, 2019 7:17:14					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.38	8.08	9.70	11.89	13.95

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	494.958463	102.262307
Intercept:	50.5242203	20.3109654
Correlation:	0.99992886	0.99980558

Concentratior	92.00/91.00	92.00/65.00
0	83.3333333	20.5208333
2.31	1240.72917	258.333333
4.62	2299.0625	485.833333
9.24	4544.79167	965.833333
18.49	9195.3125	1940.3125
20.8	1.04E+04	2122.5



Filename:	64MSMS001139 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 9, 2019 7:17:42					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.38	8.08	9.70	11.89	13.95

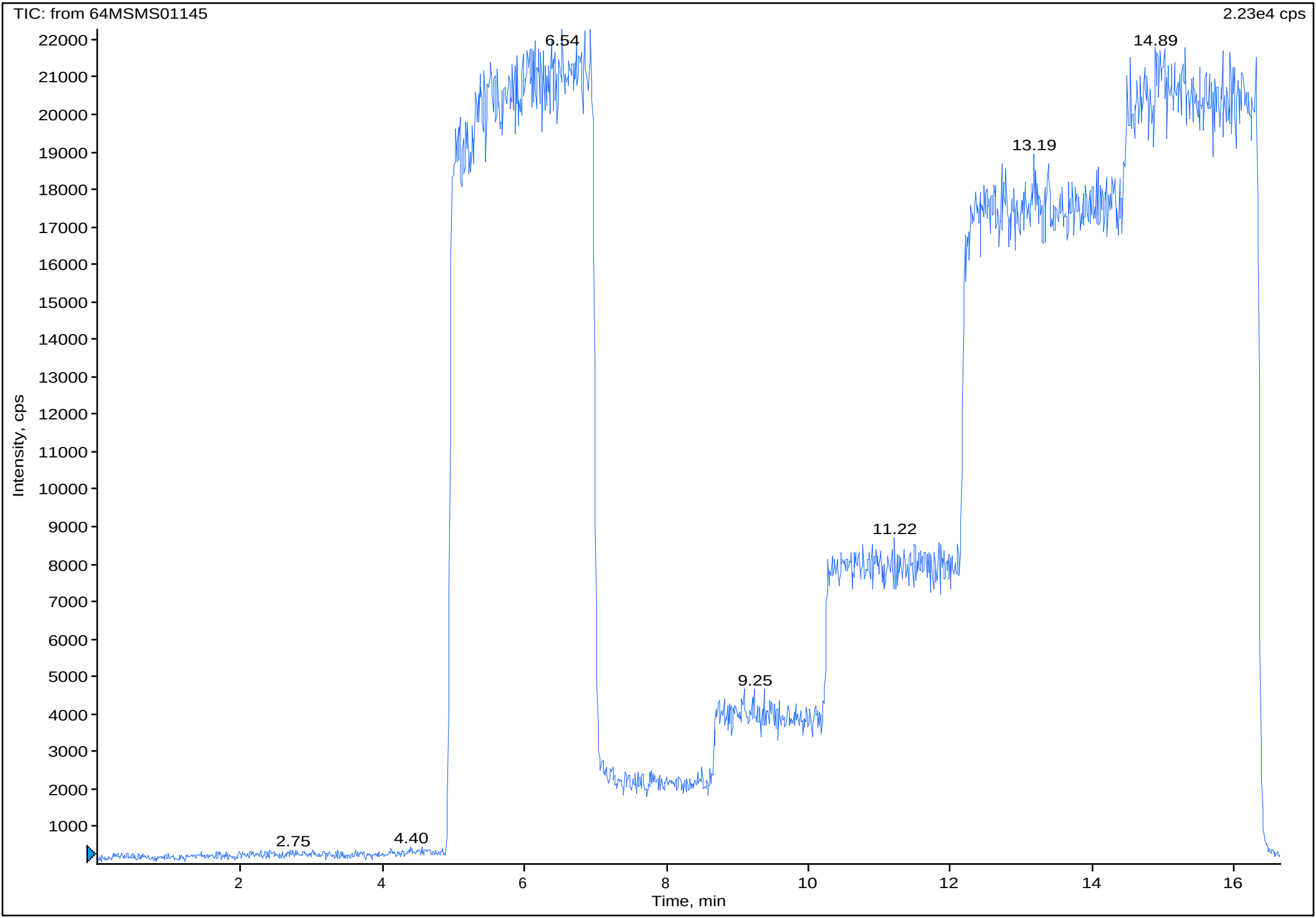
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	12.7724093	307.852865
Intercept:	-7.6334168	-576.34019
Correlation:	0.99818556	0.99240988

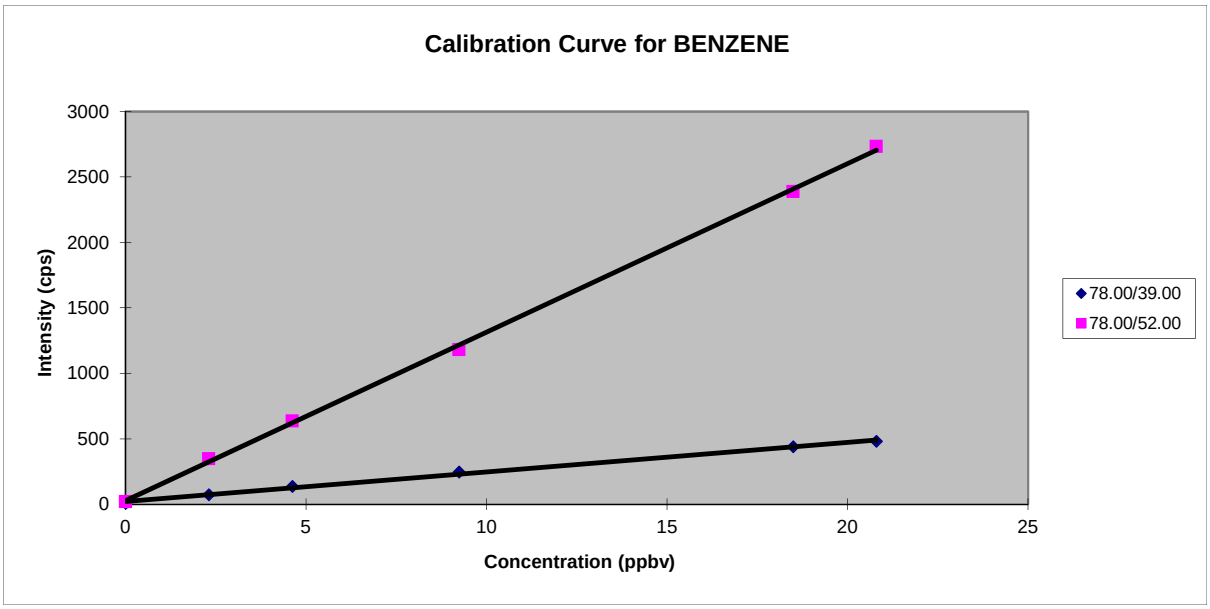
Concentratior	106.00/65.00	106.00/91.00
0	4.0625	21.9791667
3.48	39.0625	605.833333
6.96	75.2083333	1219.58333
13.91	153.333333	2923.95833
27.82	350.3125	8053.125
31.3	398.333333	9413.95833

Report	File Name	64MSMS001139 et al.			
	Sample Name	BOD Calibration - BTX 20190509			
	Date	Thursday, May 9, 2019 7:18:13			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	19.73	126.73	494.96	102.26	12.77	307.85
Intercept	14.55	45.79	50.52	20.31	-7.63	-576.34
Intensity	4.17	16.04	83.33	20.52	4.06	21.98
Int SD	8.04	14.25	32.47	15.17	10.32	18.95
Concentration	-0.53	-0.23	0.07	0.00	0.92	1.94
Conc SD	0.41	0.11	0.07	0.15	0.81	0.06
Compound Con	-0.38		0.03		1.43	
Compound SD	0.18		0.08		0.31	
Det. Limit	1.22	0.34	0.20	0.45	2.42	0.18
Compound DL	0.78		0.32		1.30	

5/9/19.14.43.56
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, May 9, 2019 at 14:43:54; Exp. Comment: BTX



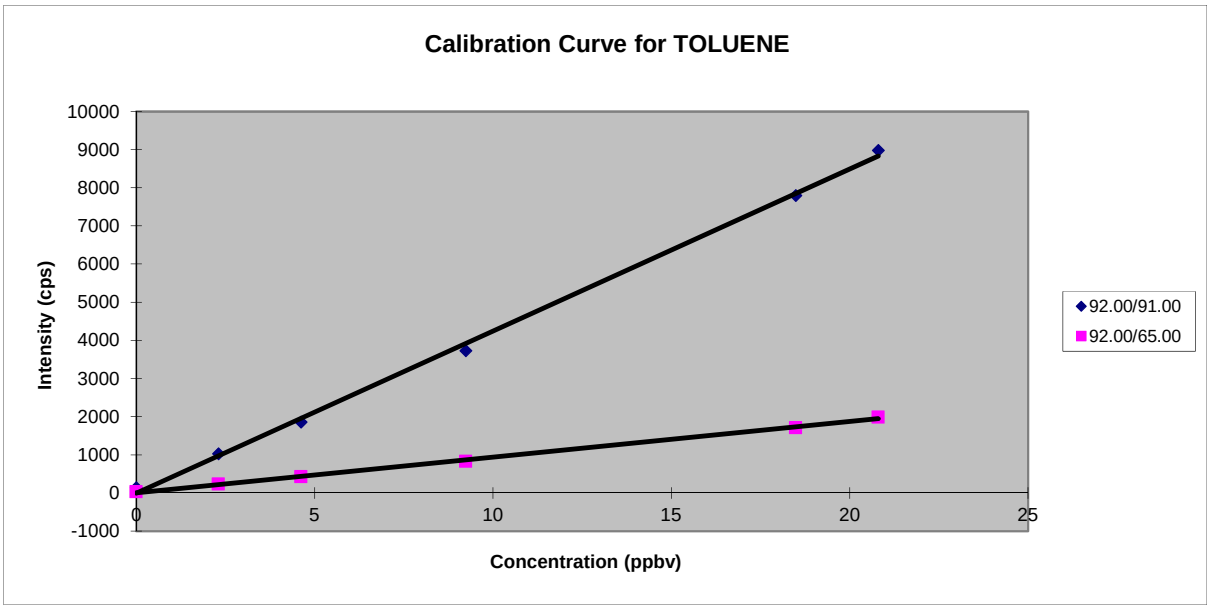


Filename:	64MSMS01145 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Thursday, May 9, 2019 15:01:23
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.01	9.48	11.19	13.23	15.41

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	22.5495535	128.731916
Intercept:	22.2266827	27.136601
Correlation:	0.99808369	0.99974358

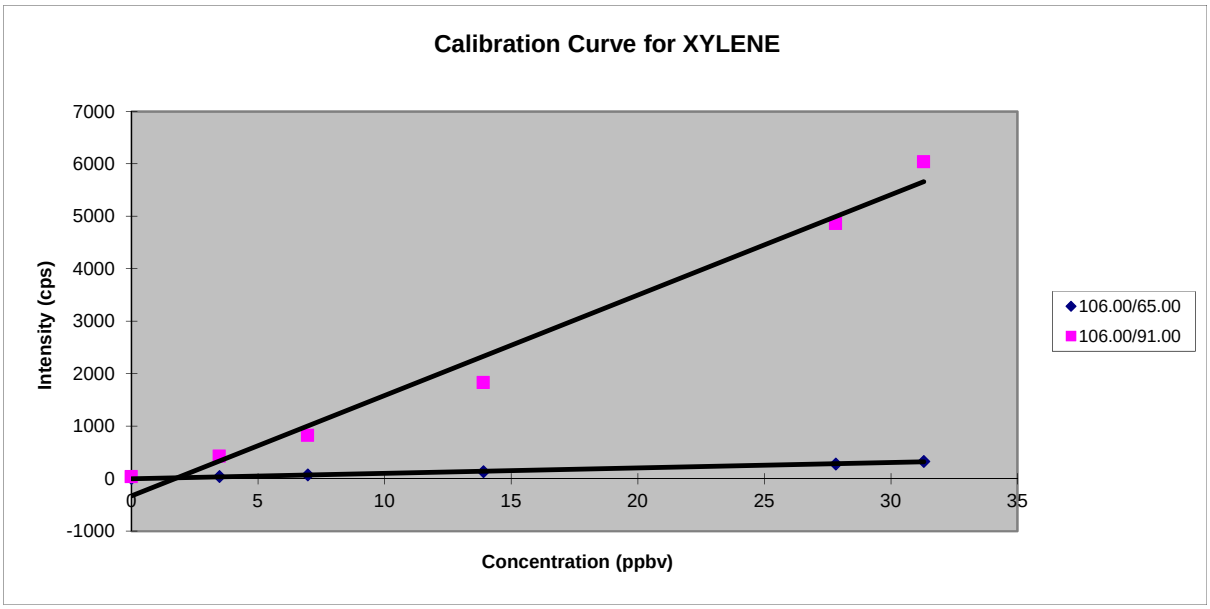
Concentratior	78.00/39.00	78.00/52.00
0	5.83333333	18.6458333
2.31	73.9583333	346.979167
4.62	135.9375	635.729167
9.24	247.291667	1180.3125
18.49	439.270833	2388.64583
20.8	481.666667	2731.97917



Filename:	64MSMS01145 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 9, 2019 15:01:54					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.01	9.48	11.19	13.23	15.41

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	424.831157	93.3062389
Intercept:	-3.2448836	7.88655379
Correlation:	0.99930306	0.99926039

Concentratior	92.00/91.00	92.00/65.00
0	142.1875	34.2708333
2.31	1026.77083	233.020833
4.62	1860.20833	428.125
9.24	3732.1875	826.666667
18.49	7799.0625	1711.66667
20.8	8981.25	1988.33333



Filename:	64MSMS01145 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 9, 2019 15:02:21					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	8.01	9.48	11.19	13.23	15.41

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	10.2647941	191.340113
Intercept:	1.08849479	-326.56474
Correlation:	0.99860776	0.99060112

Concentratior	106.00/65.00	106.00/91.00
0	3.75	34.8958333
3.48	40.625	426.25
6.96	73.4375	823.333333
13.91	132.708333	1827.1875
27.82	281.666667	4859.58333
31.3	331.145833	6040.52083

Report	File Name	64MSMS01145 et al.			
	Sample Name	EOD Calibration - BTX 20190509			
	Date	Thursday, May 9, 2019 15:02:53			
	Time Range	2.00	to	3.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	22.55	128.73	424.83	93.31	10.26	191.34
Intercept	22.23	27.14	-3.24	7.89	1.09	-326.56
Intensity	5.83	18.65	142.19	34.27	3.75	34.90
Int SD	8.67	14.77	41.81	21.94	6.03	18.06
Concentration	-0.73	-0.07	0.34	0.28	0.26	1.89
Conc SD	0.38	0.11	0.10	0.24	0.59	0.09
Compound Con	-0.40		0.31		1.07	
Compound SD	0.18		0.12		0.24	
Det. Limit	1.15	0.34	0.30	0.71	1.76	0.28
Compound DL	0.75		0.50		1.02	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001/372 Date: 05/10/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3200	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
0648	1500	~1915CFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWYOU-0925		Calibration Date: EXP 09/04/19	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
			PDA		
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error $\frac{Difference}{Reference} x\ 100$
			PDA		
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Fri, May 10, 2019, 7:45:12
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY10 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Fri, May 10, 2019, 7:42:27

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.075
120.000	0.084
160.000	0.090

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.043
70.000	0.043
100.000	0.041
130.000	0.041
160.000	0.048

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Fri, May 10, 2019, 7:45:39
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY10 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Fri, May 10, 2019, 7:42:27

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.068
100.000	0.075
120.000	0.084
160.000	0.090

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.043
70.000	0.043
100.000	0.041
130.000	0.041
160.000	0.048

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

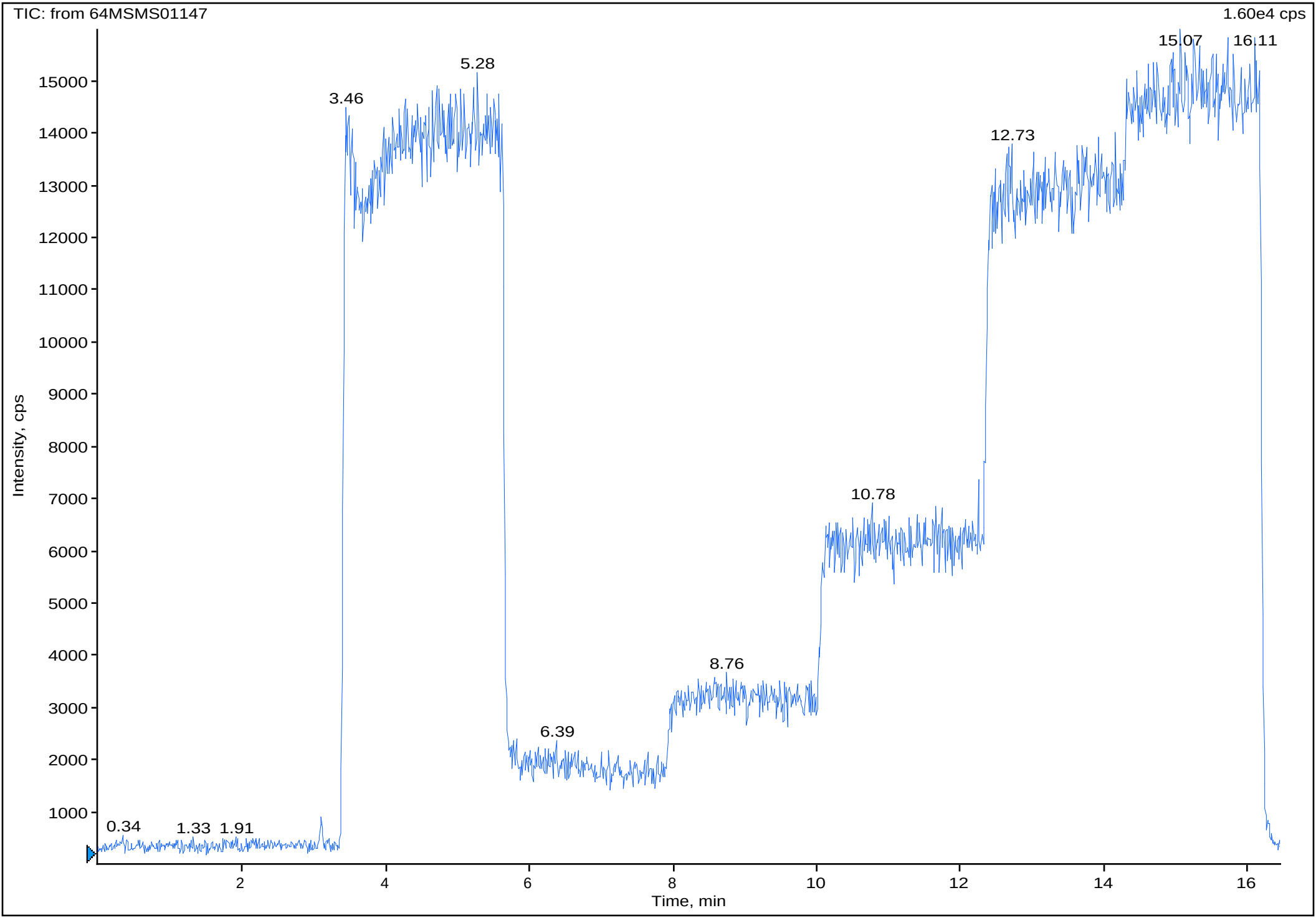
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

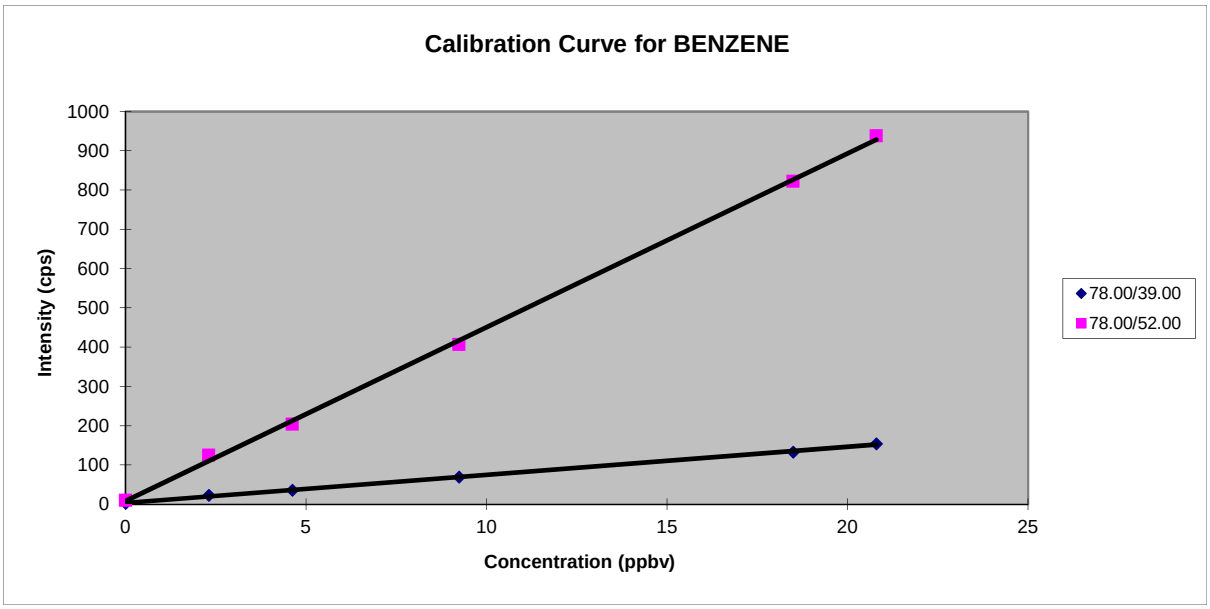
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

5/10/19.8.09.12
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, May 10, 2019 at 8:09:11; Exp. Comment: BTX

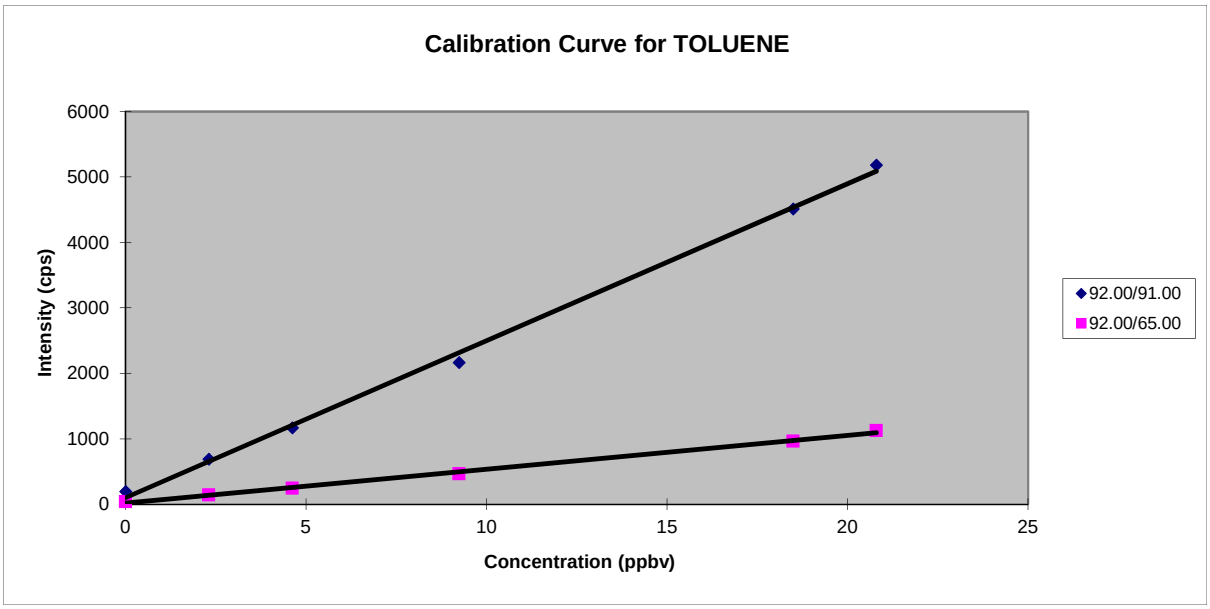




Filename:	64MSMS01147 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, May 10, 2019 8:27:43					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.83	8.93	11.17	13.37	15.33

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	7.13764755	44.234888
Intercept:	3.47666404	8.35550432
Correlation:	0.99949004	0.99966414

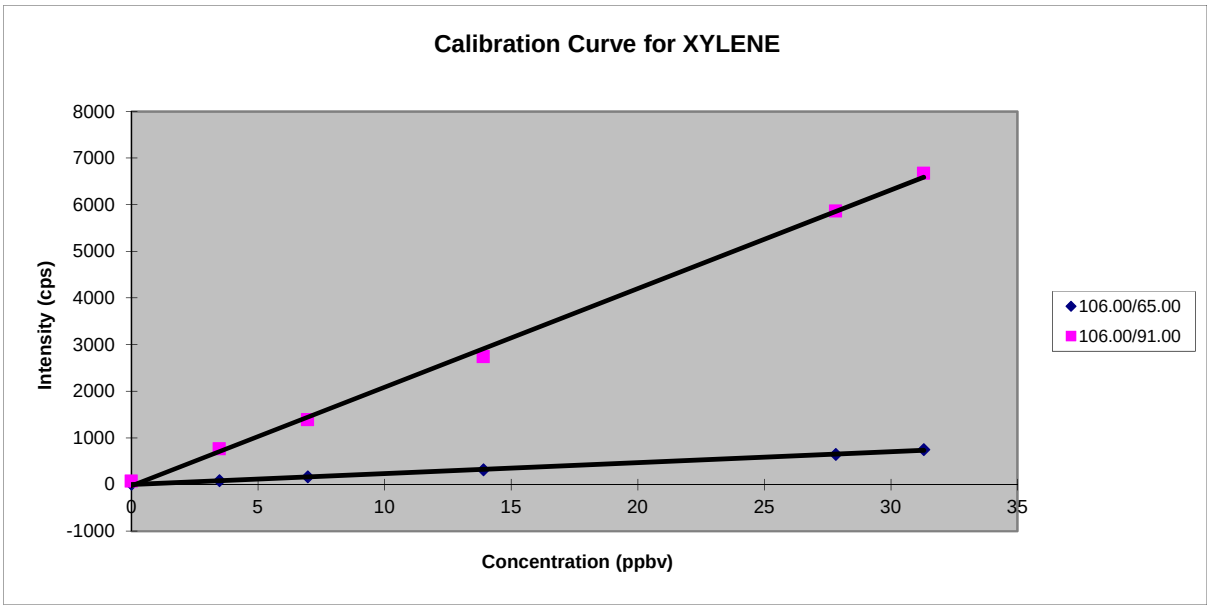
Concentratior	78.00/39.00	78.00/52.00
0	2.39583333	9.6875
2.31	22.3958333	124.270833
4.62	35.4639175	203.608247
9.24	69.375	406.354167
18.49	132.916667	821.875
20.8	154.166667	937.604167



Filename:	64MSMS01147 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, May 10, 2019 8:28:12					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.83	8.93	11.17	13.37	15.33

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	239.737323	51.7571899
Intercept:	102.541933	17.1915213
Correlation:	0.99896863	0.99864765

Concentratior	92.00/91.00	92.00/65.00
0	195.729167	40.3125
2.31	688.541667	143.125
4.62	1165.97938	244.123711
9.24	2164.79167	463.333333
18.49	4512.91667	960.9375
20.8	5183.125	1121.77083



Filename:	64MSMS01147 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, May 10, 2019 8:28:40					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.83	8.93	11.17	13.37	15.33

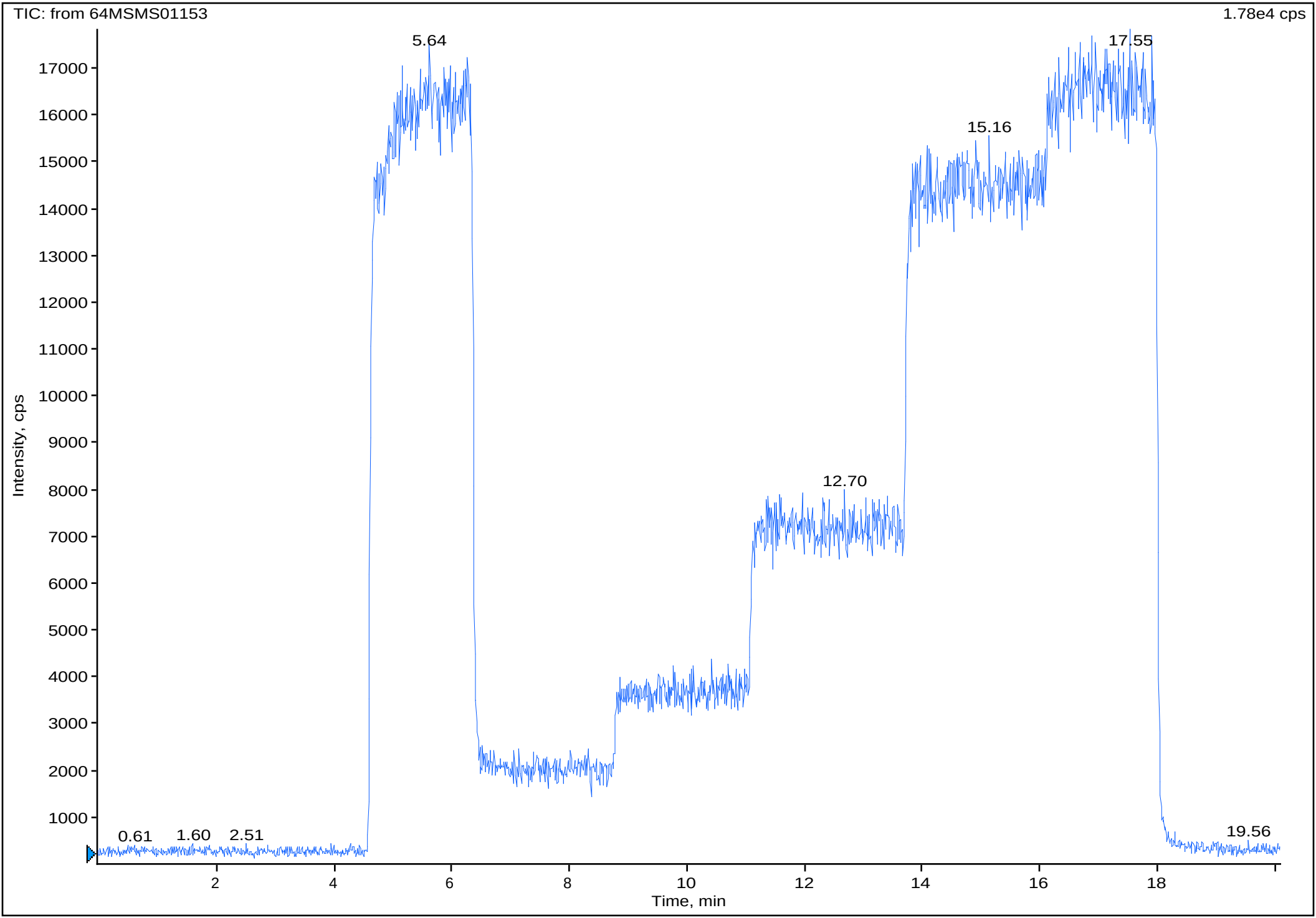
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	23.3387412	211.390941
Intercept:	2.64005243	-26.34745
Correlation:	0.99948171	0.99932069

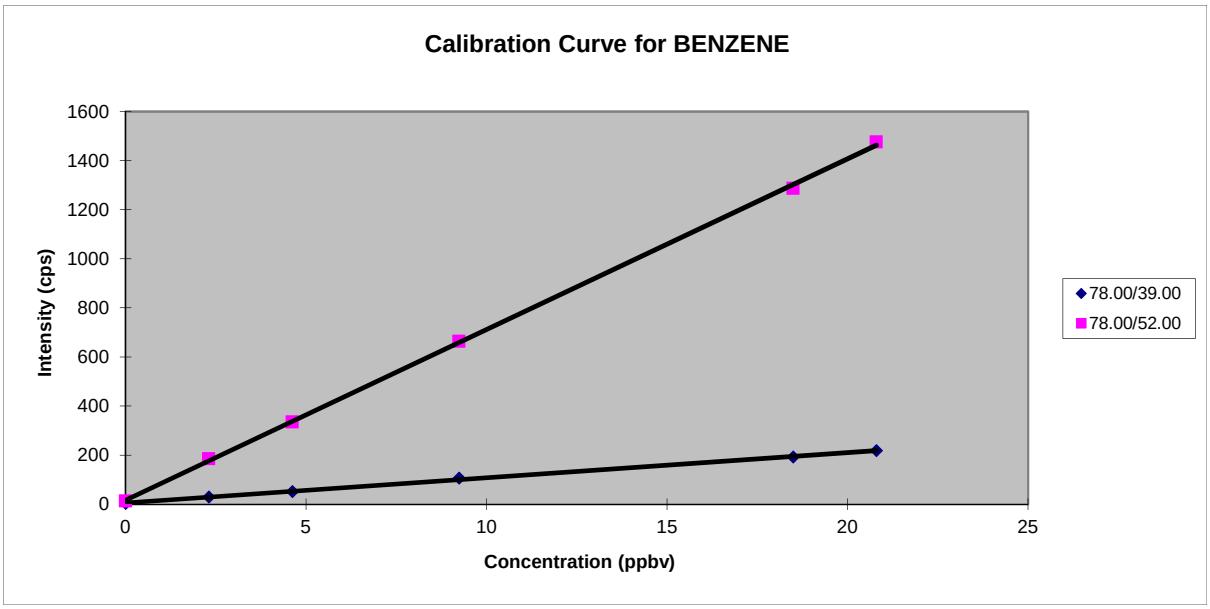
Concentratior	106.00/65.00	106.00/91.00
0	10.5208333	69.2708333
3.48	85.5208333	761.041667
6.96	163.195876	1385.15464
13.91	314.791667	2741.97917
27.82	643.333333	5859.0625
31.3	746.5625	6670.20833

Report	File Name	64MSMS01147 et al.			
	Sample Name	BOD Calibration - BTX 20190510			
	Date	Friday, May 10, 2019 8:29:12			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	7.14	44.23	239.74	51.76	23.34	211.39
Intercept	3.48	8.36	102.54	17.19	2.64	-26.35
Intensity	2.40	9.69	195.73	40.31	10.52	69.27
Int SD	4.76	10.41	59.47	24.86	14.39	31.06
Concentration	-0.15	0.03	0.39	0.45	0.34	0.45
Conc SD	0.67	0.24	0.25	0.48	0.62	0.15
Compound Con	-0.06		0.42		0.39	
Compound SD	0.32		0.26		0.27	
Det. Limit	2.00	0.71	0.74	1.44	1.85	0.44
Compound DL	1.35		1.09		1.15	

5/10/19.15.34.21
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, May 10, 2019 at 15:34:19; Exp. Comment: BTX

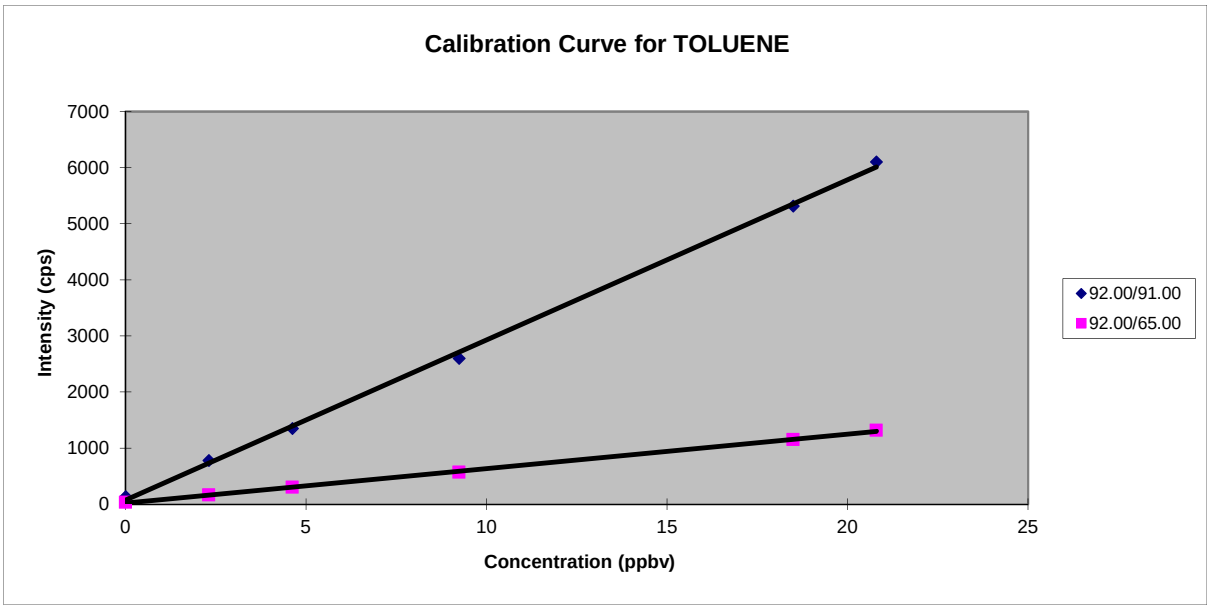




Filename:	64MSMS01153 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, May 10, 2019 15:55:26					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	7.74	9.73	12.26	15.01	17.18

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	10.2588533	69.5267564
Intercept:	5.60802714	16.7333761
Correlation:	0.99934548	0.9998566

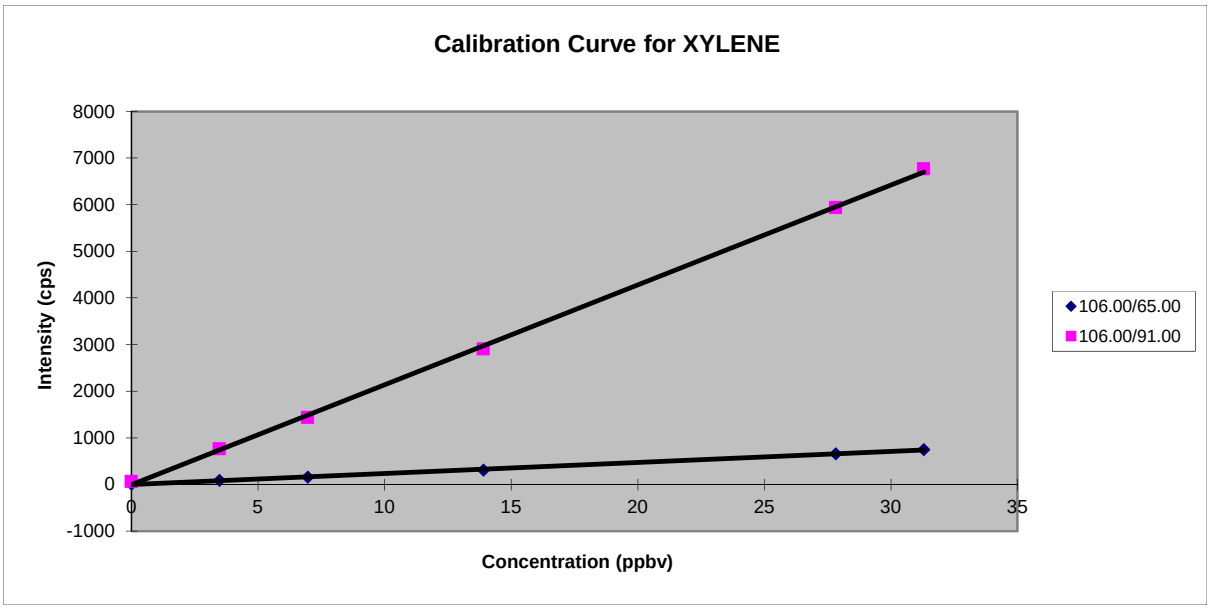
Concentratior	78.00/39.00	78.00/52.00
0	3.125	12.5
2.31	29.8958333	184.270833
4.62	51.6666667	334.895833
9.24	106.354167	663.229167
18.49	192.5	1285.9375
20.8	219.0625	1475.52083



Filename:	64MSMS01153 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, May 10, 2019 15:56:01					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	7.74	9.73	12.26	15.01	17.18

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	285.474293	61.486793
Intercept:	75.1374812	21.9869378
Correlation:	0.99949735	0.99968935

Concentratior	92.00/91.00	92.00/65.00
0	134.791667	34.2708333
2.31	781.979167	164.6875
4.62	1350.52083	303.75
9.24	2598.75	572.1875
18.49	5313.125	1148.85417
20.8	6104.0625	1318.22917



Filename:	64MSMS01153 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, May 10, 2019 15:56:27					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.50	7.74	9.73	12.26	15.01	17.18

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	23.6307366	214.266541
Intercept:	-0.2186253	-3.3220595
Correlation:	0.99944948	0.99977749

Concentratior	106.00/65.00	106.00/91.00
0	7.08333333	59.4791667
3.48	87.7083333	765.833333
6.96	161.979167	1438.22917
13.91	309.270833	2900.72917
27.82	657.916667	5934.47917
31.3	747.1875	6766.14583

Report	File Name	64MSMS01153 et al.			
	Sample Name	EOD Calibration - BTX 20190510			
	Date	Friday, May 10, 2019 15:56:56			
	Time Range	2.00	to	3.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	10.26	69.53	285.47	61.49	23.63	214.27
Intercept	5.61	16.73	75.14	21.99	-0.22	-3.32
Intensity	3.13	12.50	134.79	34.27	7.08	59.48
Int SD	6.04	12.05	45.24	23.43	8.45	26.37
Concentration	-0.24	-0.06	0.21	0.20	0.31	0.29
Conc SD	0.59	0.17	0.16	0.38	0.36	0.12
Compound Con	-0.15		0.20		0.30	
Compound SD	0.27		0.19		0.17	
Det. Limit	1.77	0.52	0.48	1.14	1.07	0.37
Compound DL	1.14		0.81		0.72	

TAGA FLOW CALIBRATION LOG

Work Assignment: 372 Initial: BM Date: 05/13/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3200	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error (± 10%) $\frac{Difference}{Reference} x\ 100$
0643	1500	~1915 ~~8~~17	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration # 18DW100-0925			Calibration Date: EXP 09/04/19	

Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error (± 10%) $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error (± 10%) $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Mon, May 13, 2019, 7:03:33
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY13 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Mon, May 13, 2019, 7:01:54

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.070
100.000	0.078
120.000	0.085
160.000	0.093

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.043
70.000	0.043
100.000	0.041
130.000	0.041
160.000	0.048

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Mon, May 13, 2019, 7:04:10
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY13 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Mon, May 13, 2019, 7:01:54

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.700
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.067
75.000	0.070
100.000	0.078
120.000	0.085
160.000	0.093

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.043
70.000	0.043
100.000	0.041
130.000	0.041
160.000	0.048

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

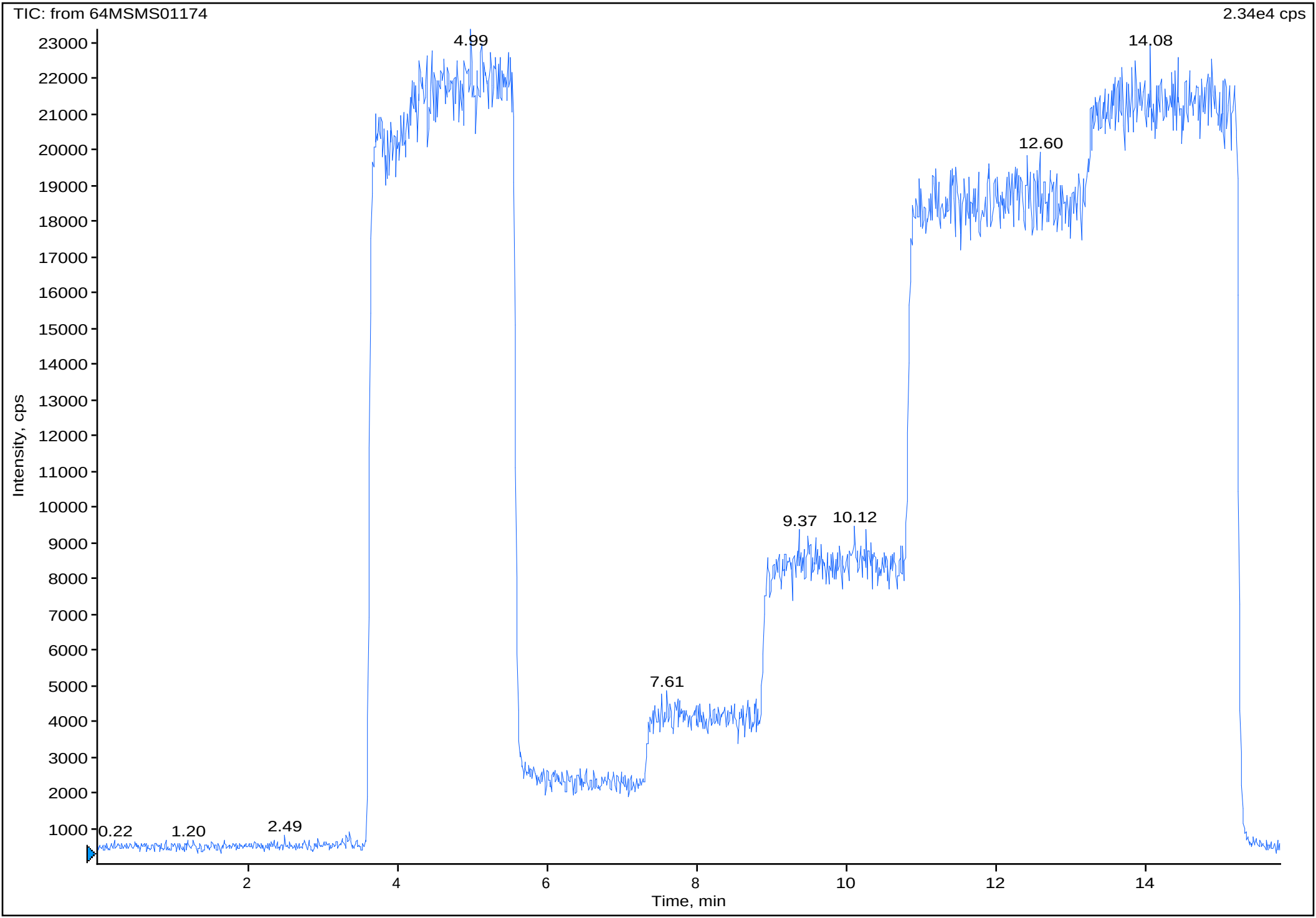
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

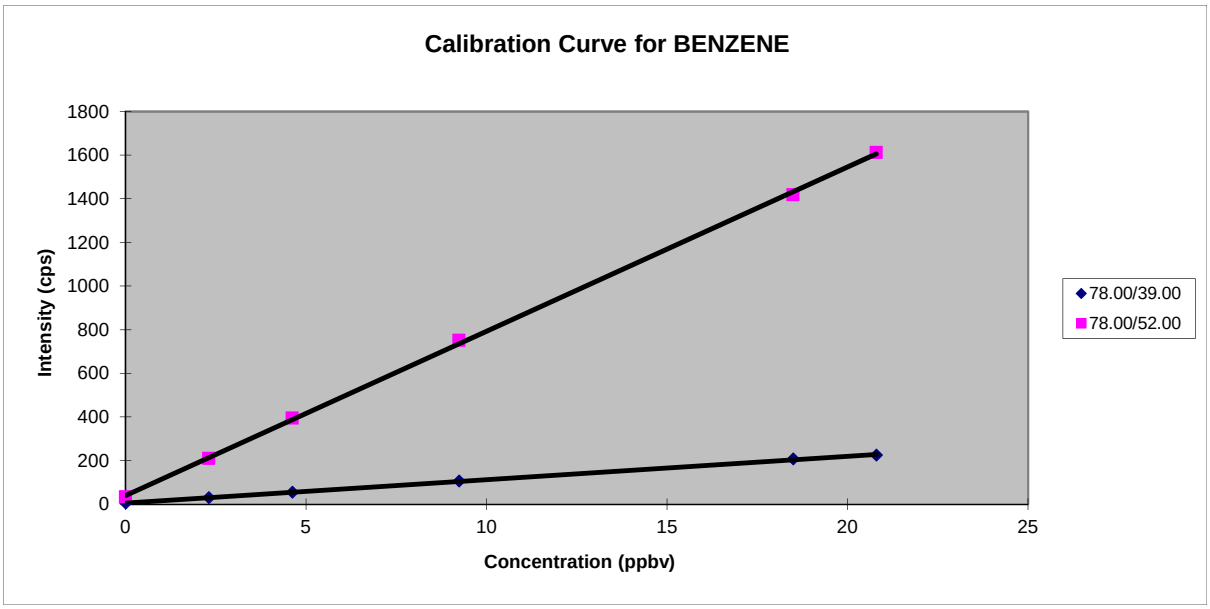
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

5/13/19.7.05.06
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Mon, May 13, 2019 at 7:05:06; Exp. Comment: BTX

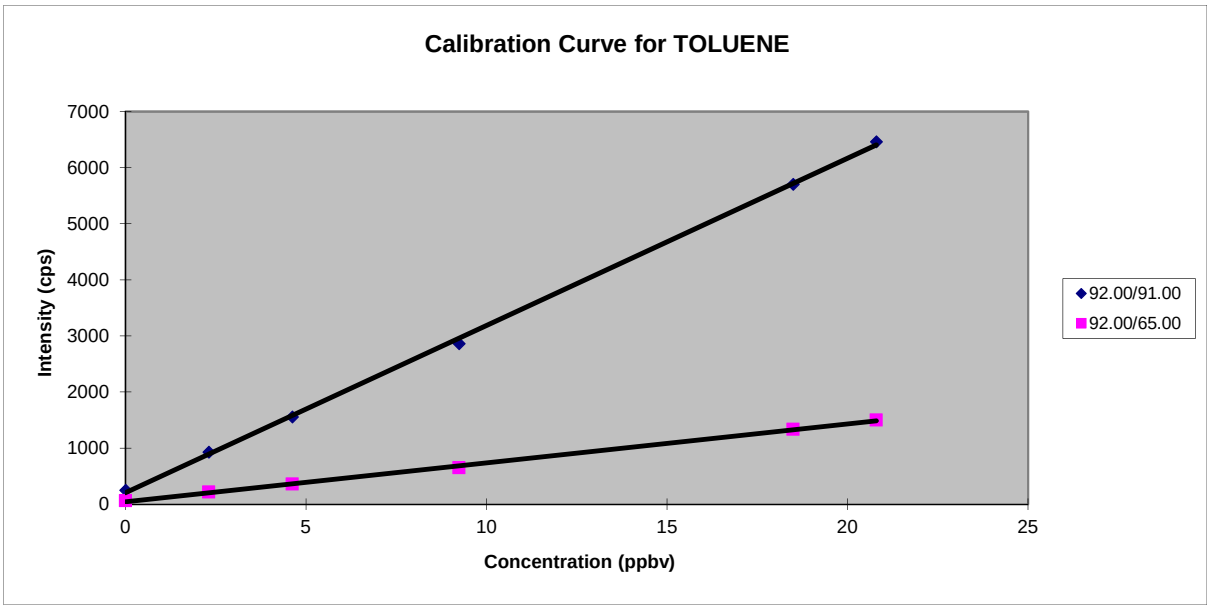




Filename:	64MSMS01174 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, May 13, 2019 7:26:51					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.53	8.08	9.80	12.16	14.20

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	10.7199048	75.2793118
Intercept:	6.0512357	40.2619781
Correlation:	0.99961956	0.99986342

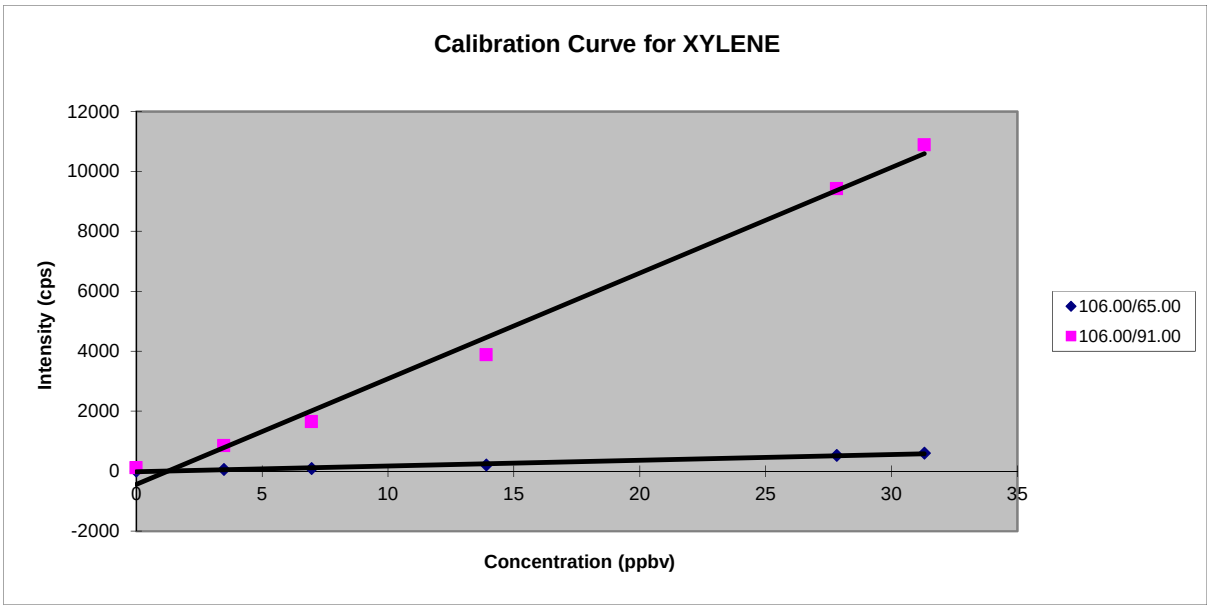
Concentratior	78.00/39.00	78.00/52.00
0	5.20833333	32.8125
2.31	30.1041667	210
4.62	55.625	393.854167
9.24	106.979167	750.729167
18.49	207.8125	1417.39583
20.8	225.104167	1611.77083



Filename:	64MSMS01174 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, May 13, 2019 7:27:35					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.53	8.08	9.80	12.16	14.20

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	298.030867	69.3708716
Intercept:	206.173571	44.7541322
Correlation:	0.99975254	0.99942326

Concentratior	92.00/91.00	92.00/65.00
0	251.041667	60.7291667
2.31	928.333333	217.708333
4.62	1557.08333	356.145833
9.24	2864.6875	648.645833
18.49	5701.875	1331.25
20.8	6462.8125	1501.35417



Filename:	64MSMS01174 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, May 13, 2019 7:28:07					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.53	8.08	9.80	12.16	14.20

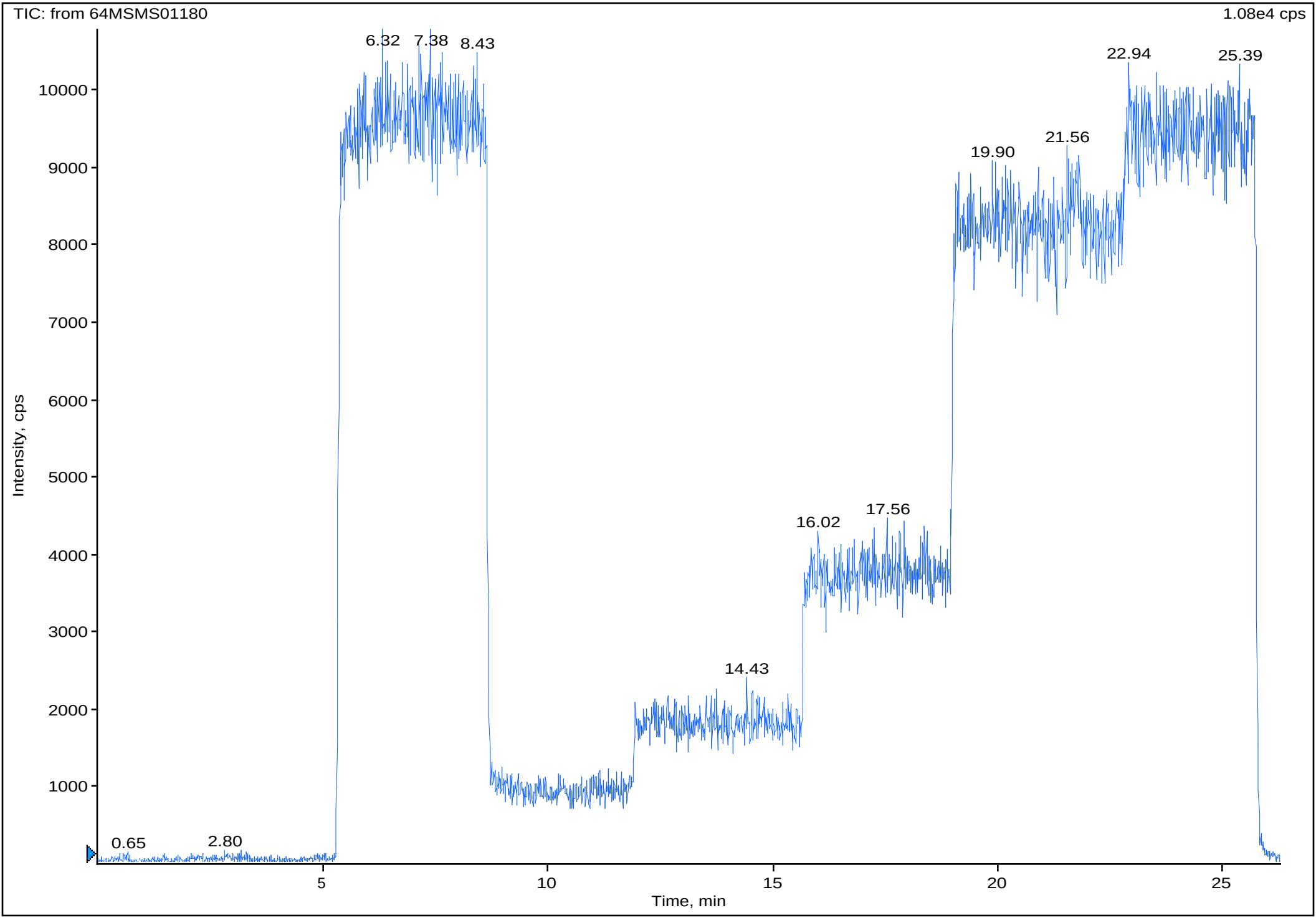
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	19.3376554	352.588626
Intercept:	-20.355821	-440.35586
Correlation:	0.99509169	0.99587899

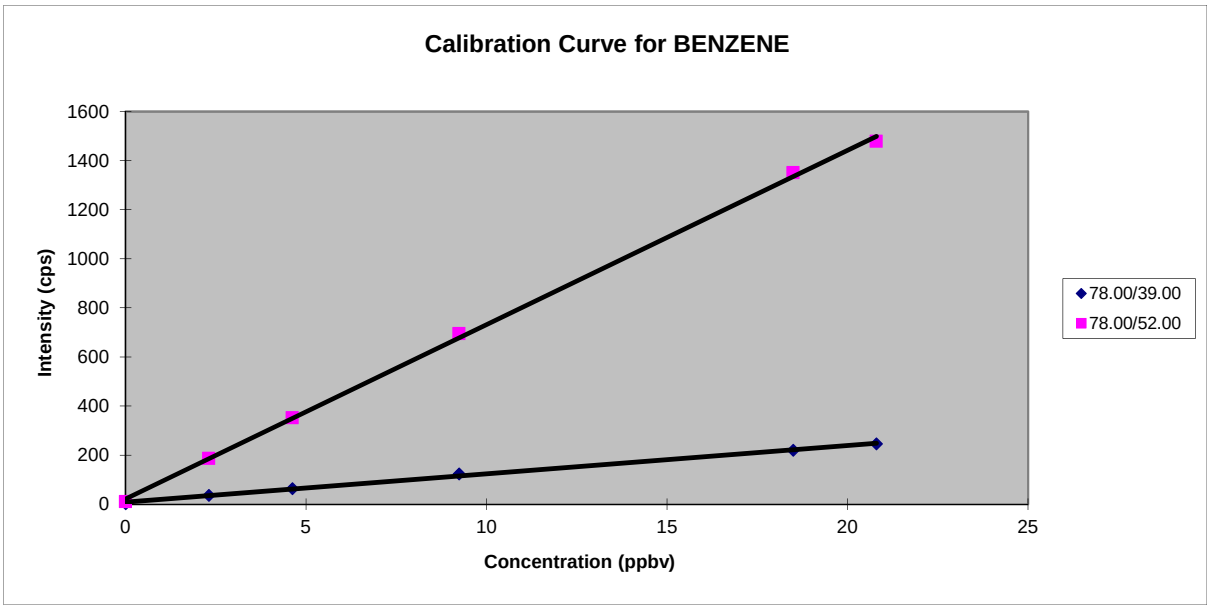
Concentratior	106.00/65.00	106.00/91.00
0	9.375	109.270833
3.48	55.3125	850.104167
6.96	92.5	1646.5625
13.91	210.520833	3877.39583
27.82	525.729167	9417.60417
31.3	598.541667	1.09E+04

Report	File Name	64MSMS01174 et al.			
	Sample Name	BOD Calibration - BTX 20190513			
	Date	Monday, May 13, 2019 7:28:50			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	10.72	75.28	298.03	69.37	19.34	352.59
Intercept	6.05	40.26	206.17	44.75	-20.36	-440.36
Intensity	5.21	32.81	251.04	60.73	9.38	109.27
Int SD	6.96	19.83	53.04	26.84	9.71	38.59
Concentration	-0.08	-0.10	0.15	0.23	1.54	1.56
Conc SD	0.65	0.26	0.18	0.39	0.50	0.11
Compound Con	-0.09		0.19		1.55	
Compound SD	0.32		0.20		0.22	
Det. Limit	1.95	0.79	0.53	1.16	1.51	0.33
Compound DL	1.37		0.85		0.92	

5/13/19.13.18.32
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Mon, May 13, 2019 at 13:18:32; Exp. Comment: BTX

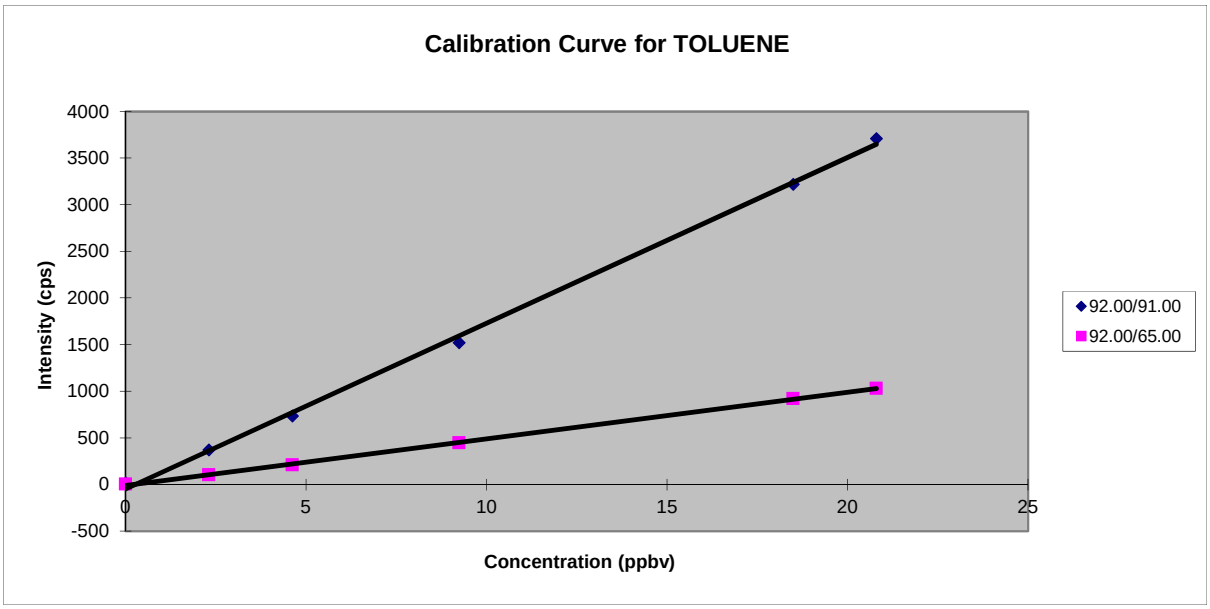




Filename:	64MSMS01180 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, May 13, 2019 13:45:52					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.00	10.60	13.79	17.39	20.75	24.38

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	11.5168661	70.9856345
Intercept:	8.77146207	22.224174
Correlation:	0.99867581	0.99970678

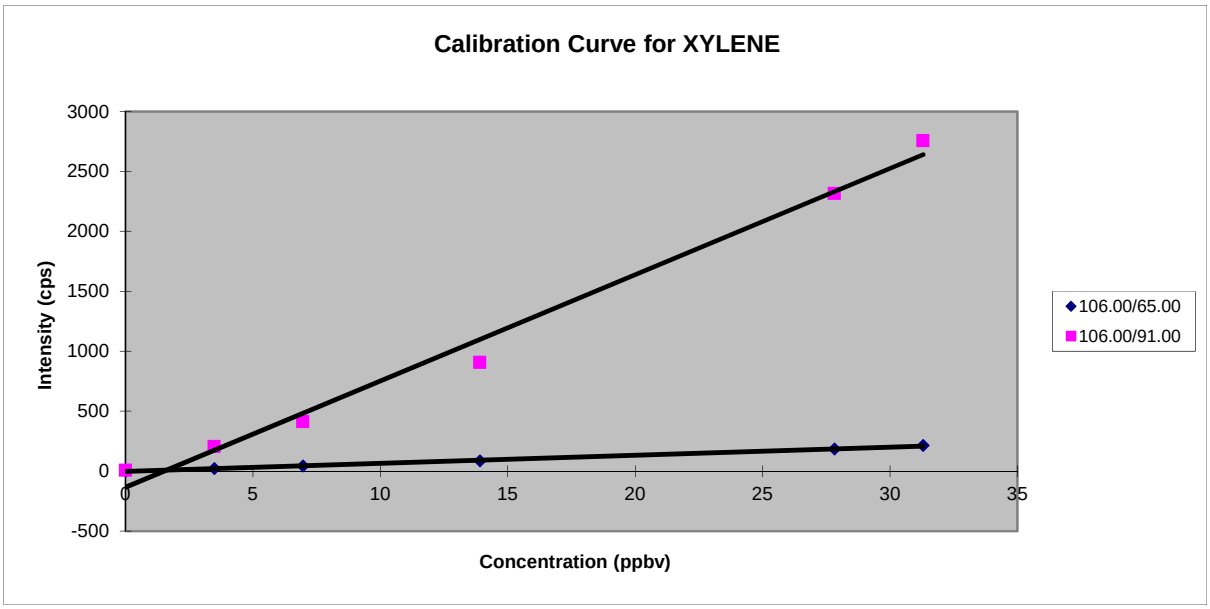
Concentratior	78.00/39.00	78.00/52.00
0	2.29166667	10
2.31	36.4583333	186.458333
4.62	63.125	351.666667
9.24	123.958333	694.583333
18.49	219.479167	1350
20.8	246.041667	1477.5



Filename:	64MSMS01180 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, May 13, 2019 13:46:45					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.00	10.60	13.79	17.39	20.75	24.38

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	177.808037	49.9981193
Intercept:	-48.052847	-9.9965052
Correlation:	0.99935381	0.99974141

Concentratior	92.00/91.00	92.00/65.00
0	17.9166667	5.41666667
2.31	371.145833	102.395833
4.62	735.104167	208.541667
9.24	1520.3125	445.416667
18.49	3219.47917	920.625
20.8	3708.95833	1030.52083



Filename:	64MSMS01180 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, May 13, 2019 13:47:13					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.00	10.60	13.79	17.39	20.75	24.38

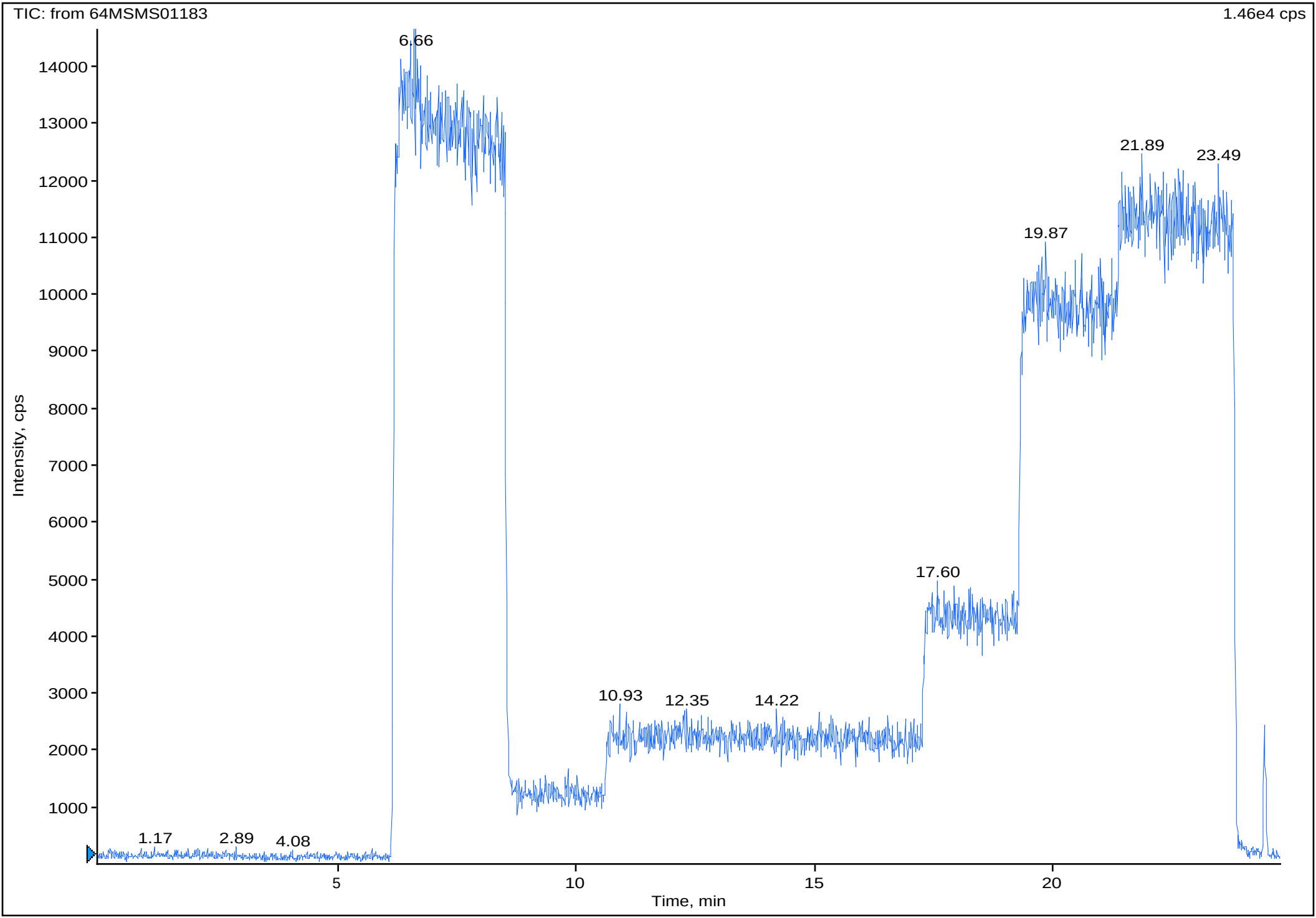
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	6.76728192	88.6529259
Intercept:	-1.7483369	-133.74398
Correlation:	0.99905205	0.99432496

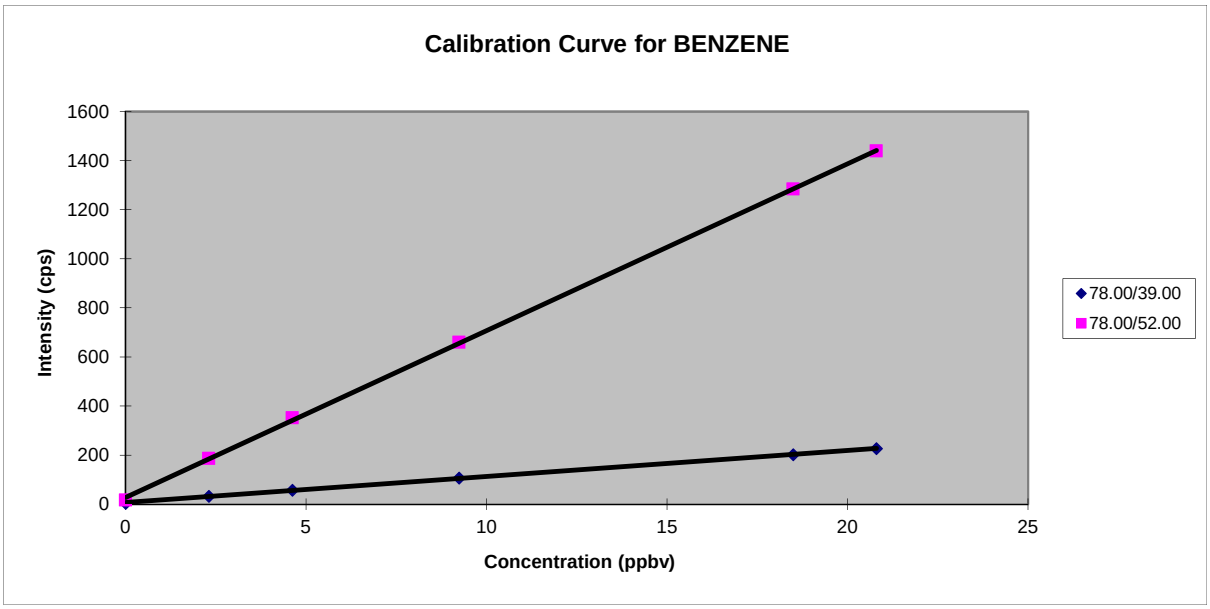
Concentratior	106.00/65.00	106.00/91.00
0	2.39583333	5.625
3.48	23.0208333	204.0625
6.96	43.0208333	411.041667
13.91	86.3541667	906.354167
27.82	185.9375	2314.89583
31.3	213.645833	2755.41667

Report	File Name	64MSMS01180 et al.			
	Sample Name	MOD Calibration - BTX 20190513			
	Date	Monday, May 13, 2019 13:48:11			
	Time Range	3.50	to	4.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	11.52	70.99	177.81	50.00	6.77	88.65
Intercept	8.77	22.22	-48.05	-10.00	-1.75	-133.74
Intensity	2.29	10.00	17.92	5.42	2.40	5.63
Int SD	5.13	11.61	15.07	6.79	5.18	9.04
Concentration	-0.56	-0.17	0.37	0.31	0.61	1.57
Conc SD	0.45	0.16	0.08	0.14	0.77	0.10
Compound Con	-0.37		0.34		1.09	
Compound SD	0.22		0.08		0.31	
Det. Limit	1.34	0.49	0.25	0.41	2.30	0.31
Compound DL	0.91		0.33		1.30	

5/13/19.19.43.45
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Mon, May 13, 2019 at 19:43:44; Exp. Comment: BTX



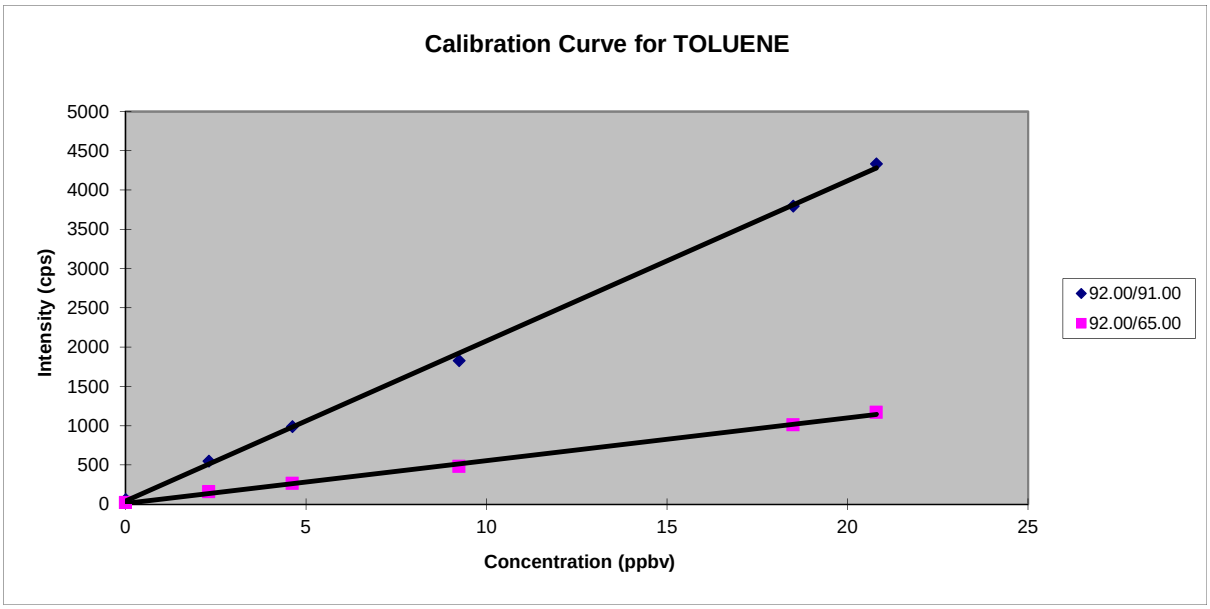


Filename:	64MSMS01183 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Monday, May 13, 2019 20:09:29
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	9.54	13.73	18.32	20.35	22.46

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	10.5917612	67.9673728
Intercept:	7.06209882	27.7445009
Correlation:	0.99979382	0.99993144

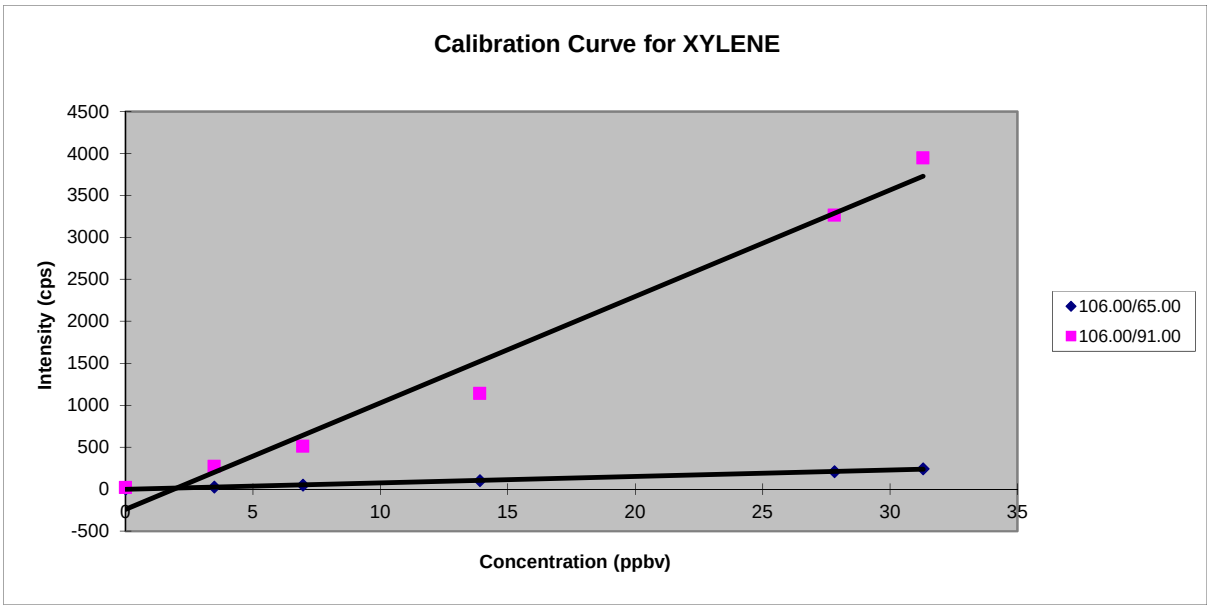
Concentratior	78.00/39.00	78.00/52.00
0	3.85416667	16.9791667
2.31	33.0208333	186.25
4.62	57.7083333	351.666667
9.24	106.041667	659.0625
18.49	202.291667	1283.4375
20.8	226.875	1438.54167



Filename:	64MSMS01183 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, May 13, 2019 20:10:03					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	9.54	13.73	18.32	20.35	22.46

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	203.932362	54.451715
Intercept:	41.7560345	12.1707589
Correlation:	0.99955388	0.99895844

Concentratior	92.00/91.00	92.00/65.00
0	58.5416667	17.7083333
2.31	550.520833	156.25
4.62	990.520833	262.708333
9.24	1829.375	479.6875
18.49	3797.5	1008.125
20.8	4334.16667	1168.4375



Filename:	64MSMS01183 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, May 13, 2019 20:10:47					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	9.54	13.73	18.32	20.35	22.46

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	7.63939301	126.82304
Intercept:	-1.6933557	-240.74347
Correlation:	0.99925809	0.989762

Concentratior	106.00/65.00	106.00/91.00
0	2.39583333	17.1875
3.48	25.8333333	269.0625
6.96	47.0833333	510.104167
13.91	102.5	1139.27083
27.82	207.604167	3261.77083
31.3	242.083333	3944.0625

Report	File Name	64MSMS01183 et al.			
	Sample Name	EOD Calibration - BTX 20190513			
	Date	Monday, May 13, 2019 20:11:50			
	Time Range	4.00	to	5.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	10.59	67.97	203.93	54.45	7.64	126.82
Intercept	7.06	27.74	41.76	12.17	-1.69	-240.74
Intensity	3.85	16.98	58.54	17.71	2.40	17.19
Int SD	5.87	14.66	25.17	14.18	4.97	15.61
Concentration	-0.30	-0.16	0.08	0.10	0.54	2.03
Conc SD	0.55	0.22	0.12	0.26	0.65	0.12
Compound Con	-0.23		0.09		1.28	
Compound SD	0.27		0.14		0.27	
Det. Limit	1.66	0.65	0.37	0.78	1.95	0.37
Compound DL	1.15		0.58		1.16	

TAGA FLOW CALIBRATION LOG

Work Assignment: 372 Initial: BPLL Date: 05/16/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3200	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error (± 10%) $\frac{Difference}{Reference} x\ 100$
0629	1500	~191SCFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration # 18DWY00-0925			Calibration Date: EXP 09/14/18	
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error (± 10%) $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error (± 10%) $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Thu, May 16, 2019, 6:53:59
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY16 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Thu, May 16, 2019, 6:52:27

Analog Parameters

OR	0.000
RNG	0.000
Q0	-4.600
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7
NC	847249408
TEM	1117782016

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.065
100.000	0.075
120.000	0.083
160.000	0.093

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.043
70.000	0.043
100.000	0.041
130.000	0.041
160.000	0.048

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Thu, May 16, 2019, 6:55:26
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY16 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Thu, May 16, 2019, 6:52:27

Analog Parameters

OR	0.000
RNG	0.000
Q0	-4.600
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7
NC	847249408
TEM	1117782016

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.065
100.000	0.075
120.000	0.083
160.000	0.093

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.043
70.000	0.043
100.000	0.041
130.000	0.041
160.000	0.048

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

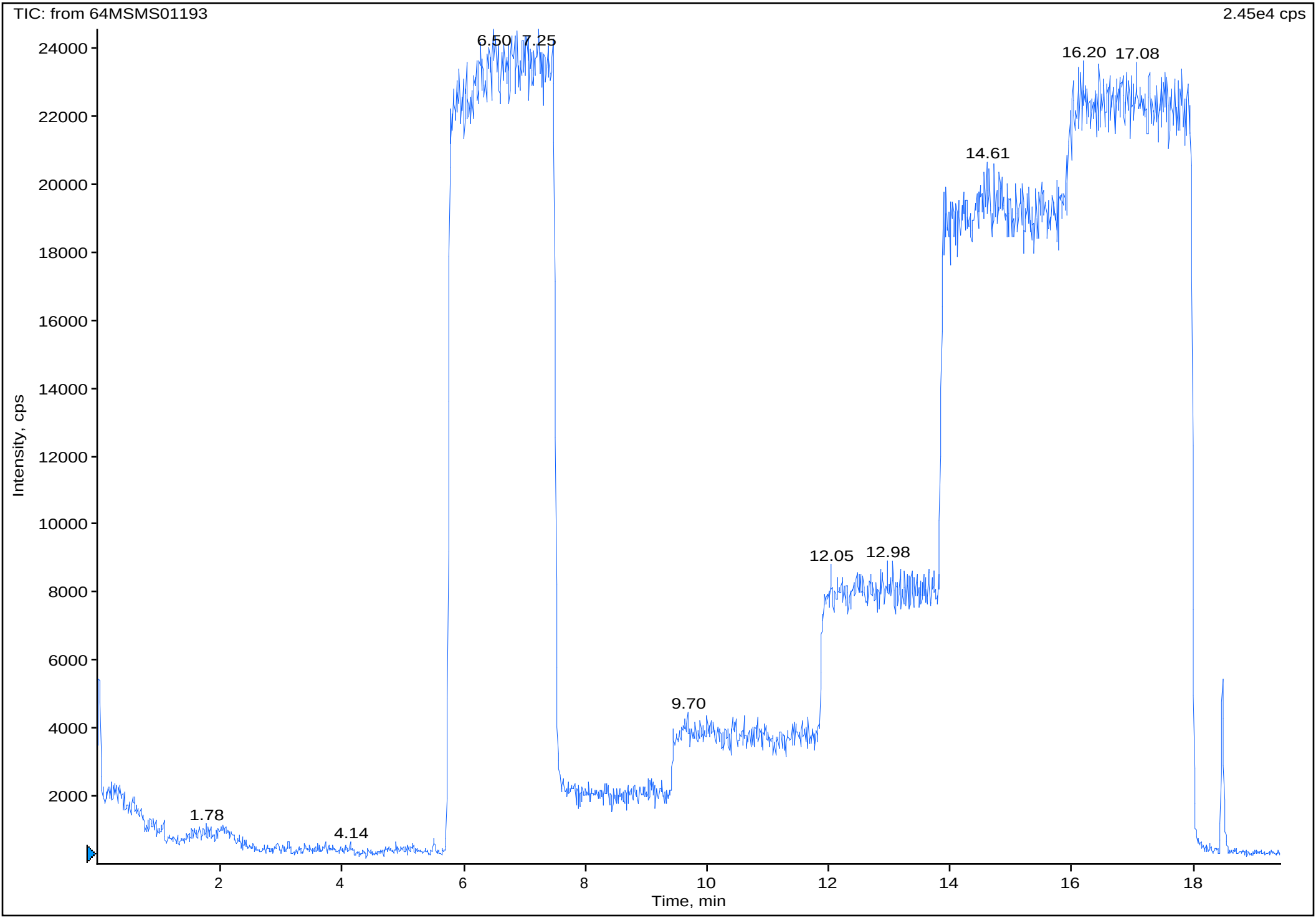
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

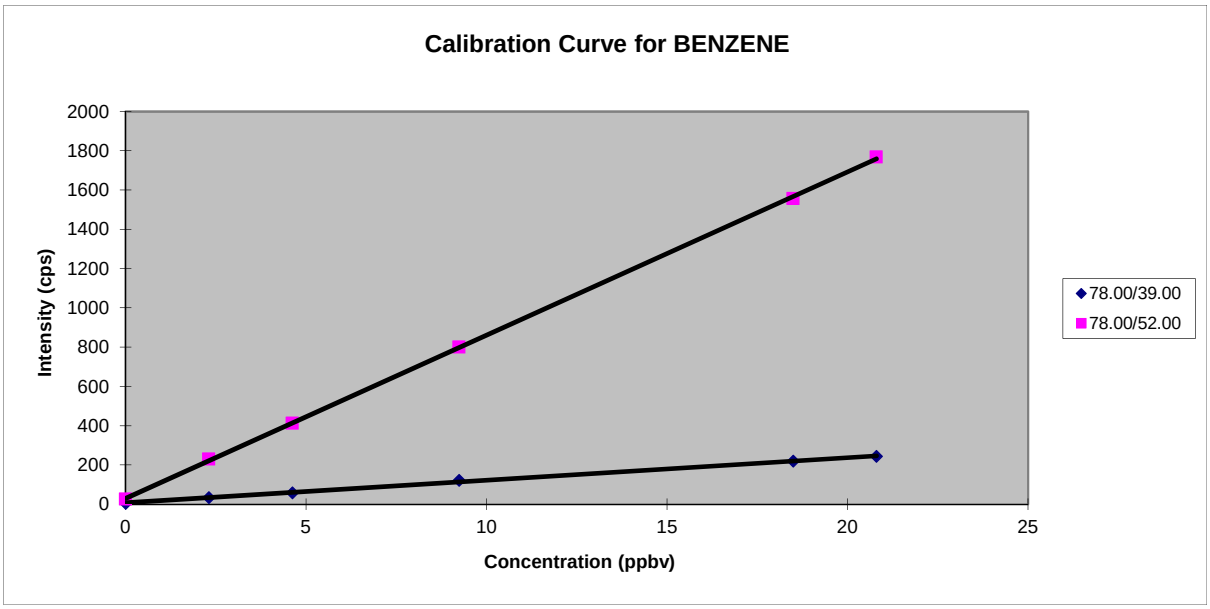
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

5/16/19.6.57.28
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, May 16, 2019 at 6:57:27; Exp. Comment: BTX

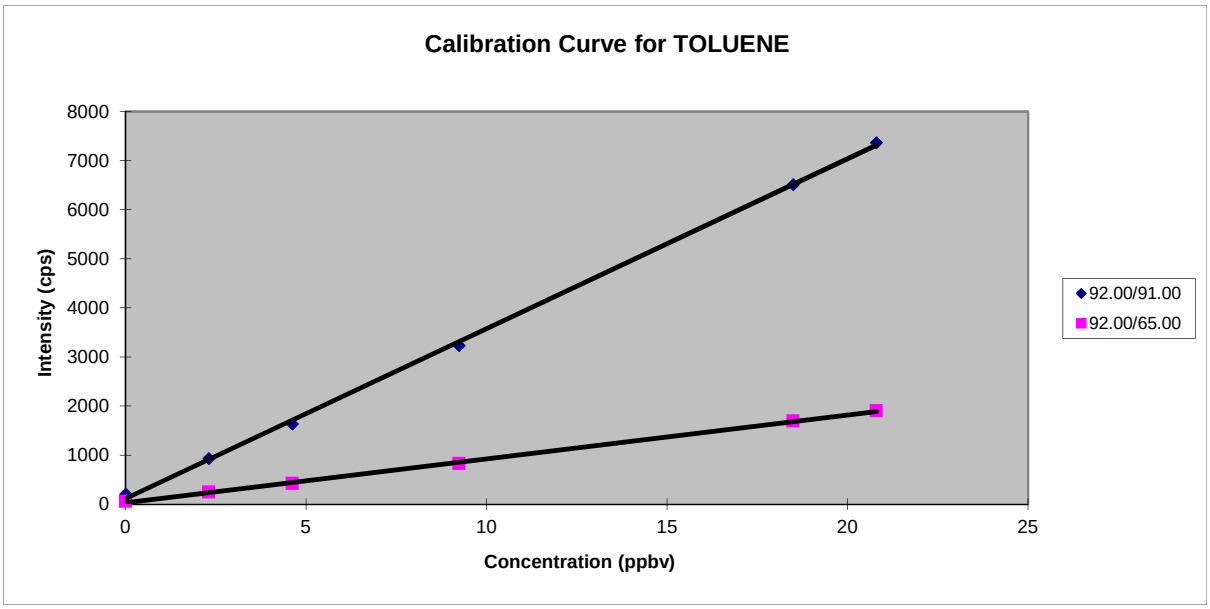




Filename:	64MSMS01193 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 16, 2019 7:20:15					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	8.43	10.74	12.71	14.90	17.05

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	11.4950203	83.1330298
Intercept:	7.37616822	30.0285555
Correlation:	0.99924293	0.99994392

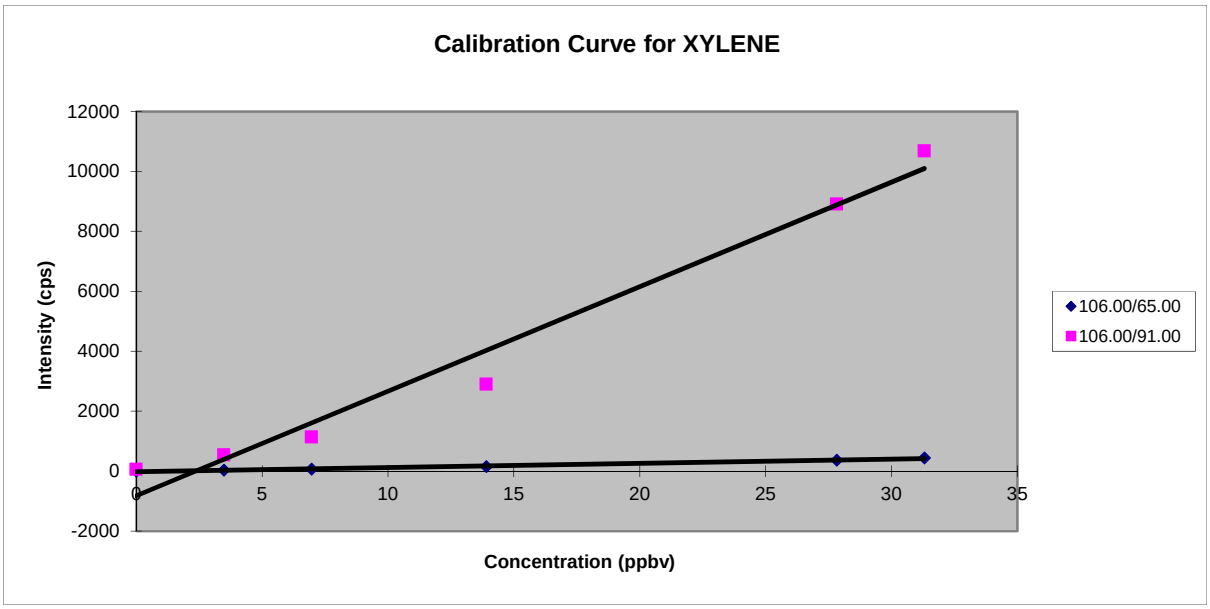
Concentratior	78.00/39.00	78.00/52.00
0	5.20833333	25.1041667
2.31	33.2291667	229.166667
4.62	58.6458333	412.5
9.24	121.145833	800.208333
18.49	220.104167	1555.72917
20.8	243.4375	1768.02083



Filename:	64MSMS01193 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 16, 2019 7:21:02					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	8.43	10.74	12.71	14.90	17.05

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	346.093676	89.4142569
Intercept:	115.211622	30.5281074
Correlation:	0.99972214	0.99959745

Concentratior	92.00/91.00	92.00/65.00
0	208.229167	55.625
2.31	931.770833	246.5625
4.62	1633.125	422.5
9.24	3232.08333	824.166667
18.49	6513.33333	1692.70833
20.8	7367.08333	1900.52083



Filename:	64MSMS01193 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 16, 2019 7:21:32					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	8.43	10.74	12.71	14.90	17.05

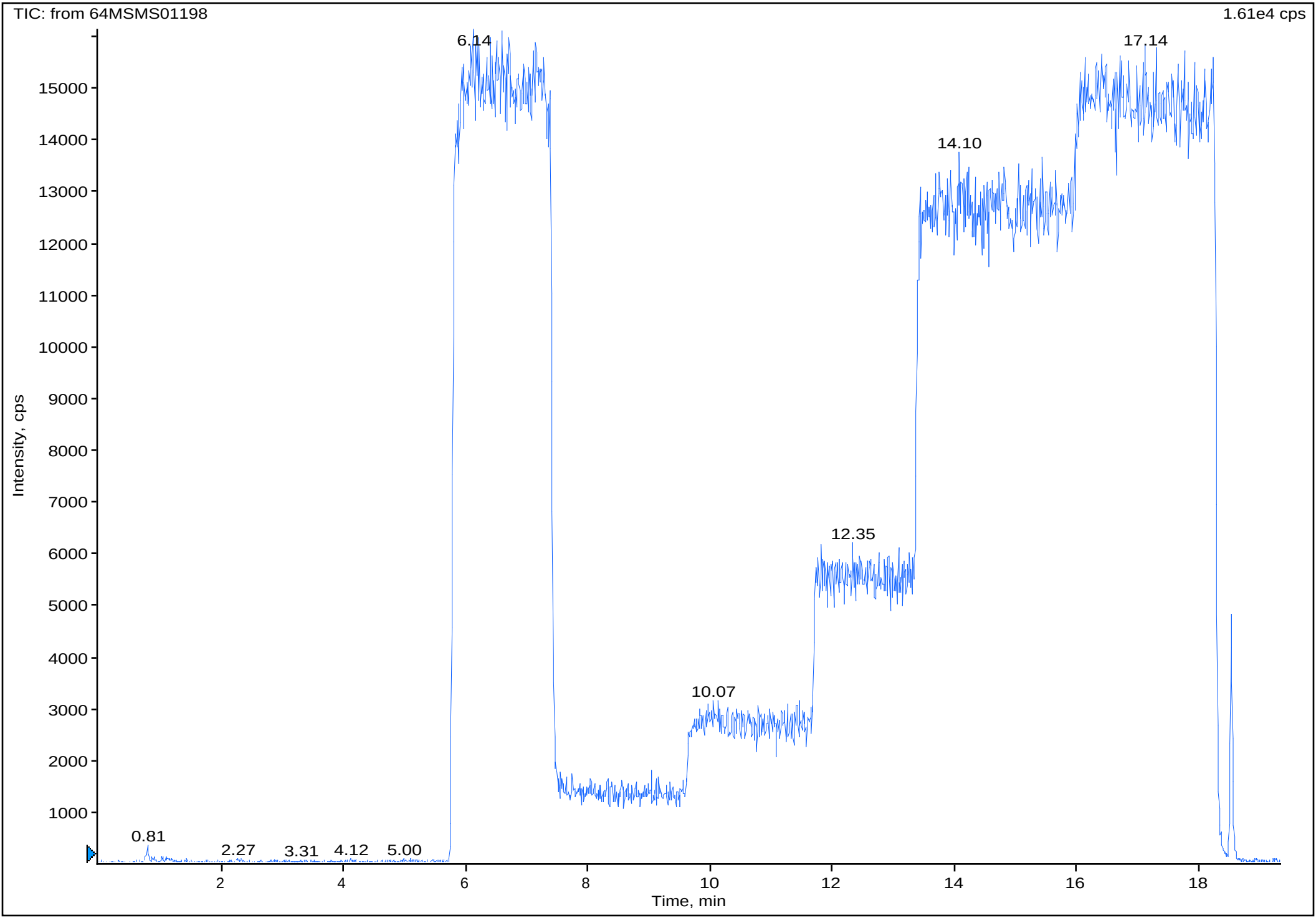
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	14.0395102	348.791619
Intercept:	-14.670625	-816.16163
Correlation:	0.99548082	0.98735716

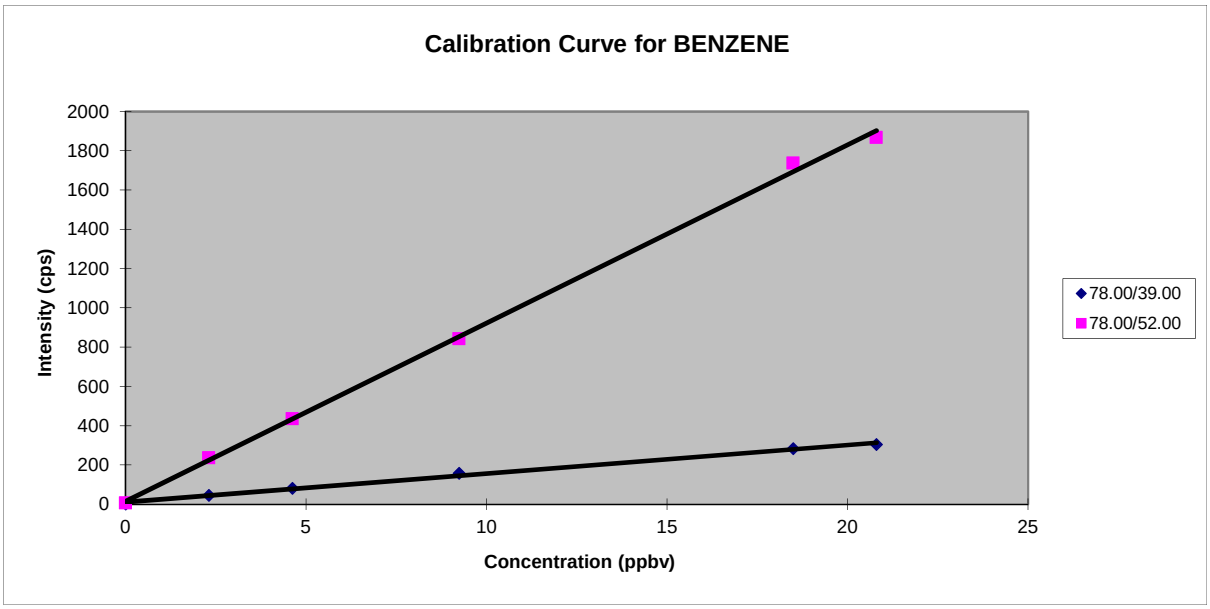
Concentratior	106.00/65.00	106.00/91.00
0	4.89583333	57.8125
3.48	39.1666667	544.0625
6.96	69.375	1132.5
13.91	158.020833	2895.20833
27.82	368.645833	8903.95833
31.3	443.75	1.07E+04

Report	File Name	64MSMS01193 et al.			
	Sample Name	BOD Calibration - BTX 20190516			
	Date	Thursday, May 16, 2019 7:23:03			
	Time Range	4.00	to	5.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	11.50	83.13	346.09	89.41	14.04	348.79
Intercept	7.38	30.03	115.21	30.53	-14.67	-816.16
Intensity	5.21	25.10	208.23	55.63	4.90	57.81
Int SD	8.21	19.89	61.66	25.87	7.68	32.68
Concentration	-0.19	-0.06	0.27	0.28	1.39	2.51
Conc SD	0.71	0.24	0.18	0.29	0.55	0.09
Compound Con	-0.12		0.27		1.95	
Compound SD	0.34		0.17		0.23	
Det. Limit	2.14	0.72	0.53	0.87	1.64	0.28
Compound DL	1.43		0.70		0.96	

5/16/19.12.56.43
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, May 16, 2019 at 12:56:41; Exp. Comment: BTX



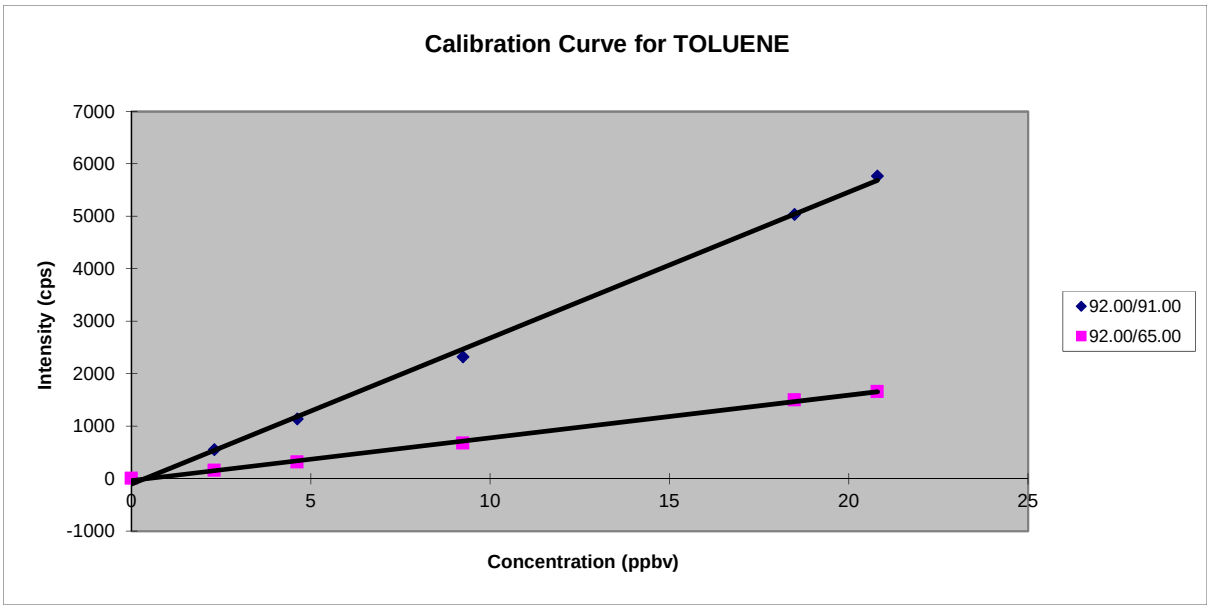


Filename:	64MSMS01198 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Thursday, May 16, 2019 13:16:47
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	8.58	10.54	12.51	14.79	17.01

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	14.5229203	90.748648
Intercept:	11.1938348	14.9299971
Correlation:	0.9978727	0.99945133

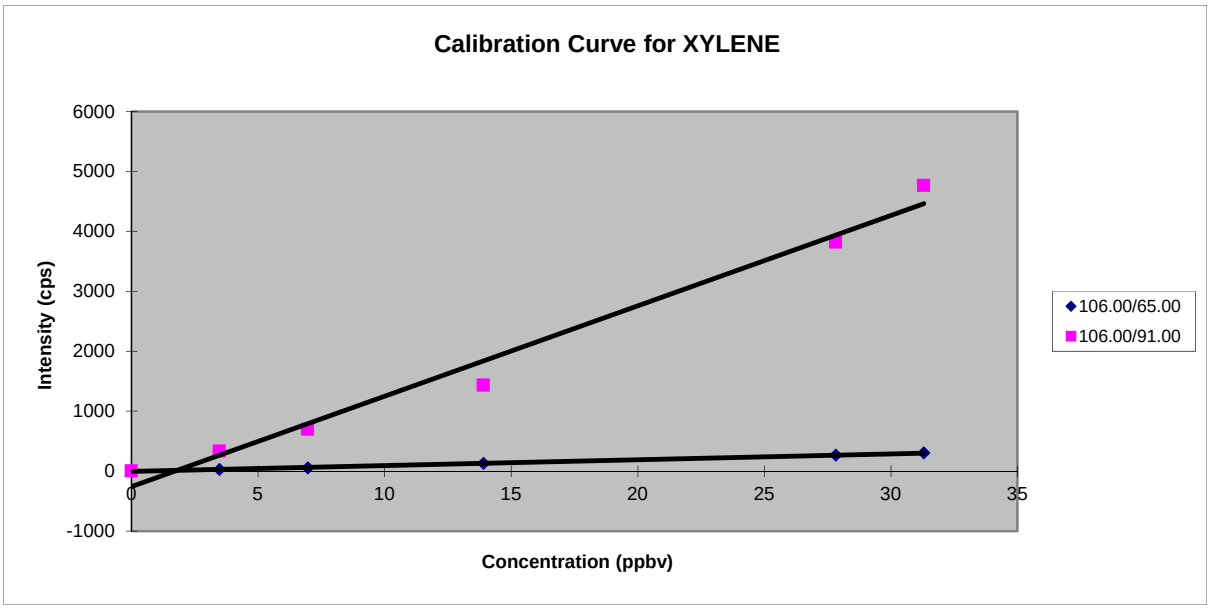
Concentratior	78.00/39.00	78.00/52.00
0	1.66666667	6.14583333
2.31	44.6875	235.833333
4.62	81.6666667	434.270833
9.24	157.1875	842.5
18.49	283.229167	1735.9375
20.8	304.166667	1867.8125



Filename:	64MSMS01198 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 16, 2019 13:17:21					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	8.58	10.54	12.51	14.79	17.01

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	278.309655	81.3993456
Intercept:	-99.991551	-34.36309
Correlation:	0.99923797	0.9989946

Concentratior	92.00/91.00	92.00/65.00
0	9.89583333	4.58333333
2.31	556.145833	156.666667
4.62	1137.8125	314.166667
9.24	2321.77083	675.416667
18.49	5036.35417	1500.83333
20.8	5773.125	1656.5625



Filename:	64MSMS01198 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 16, 2019 13:17:53					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	8.58	10.54	12.51	14.79	17.01

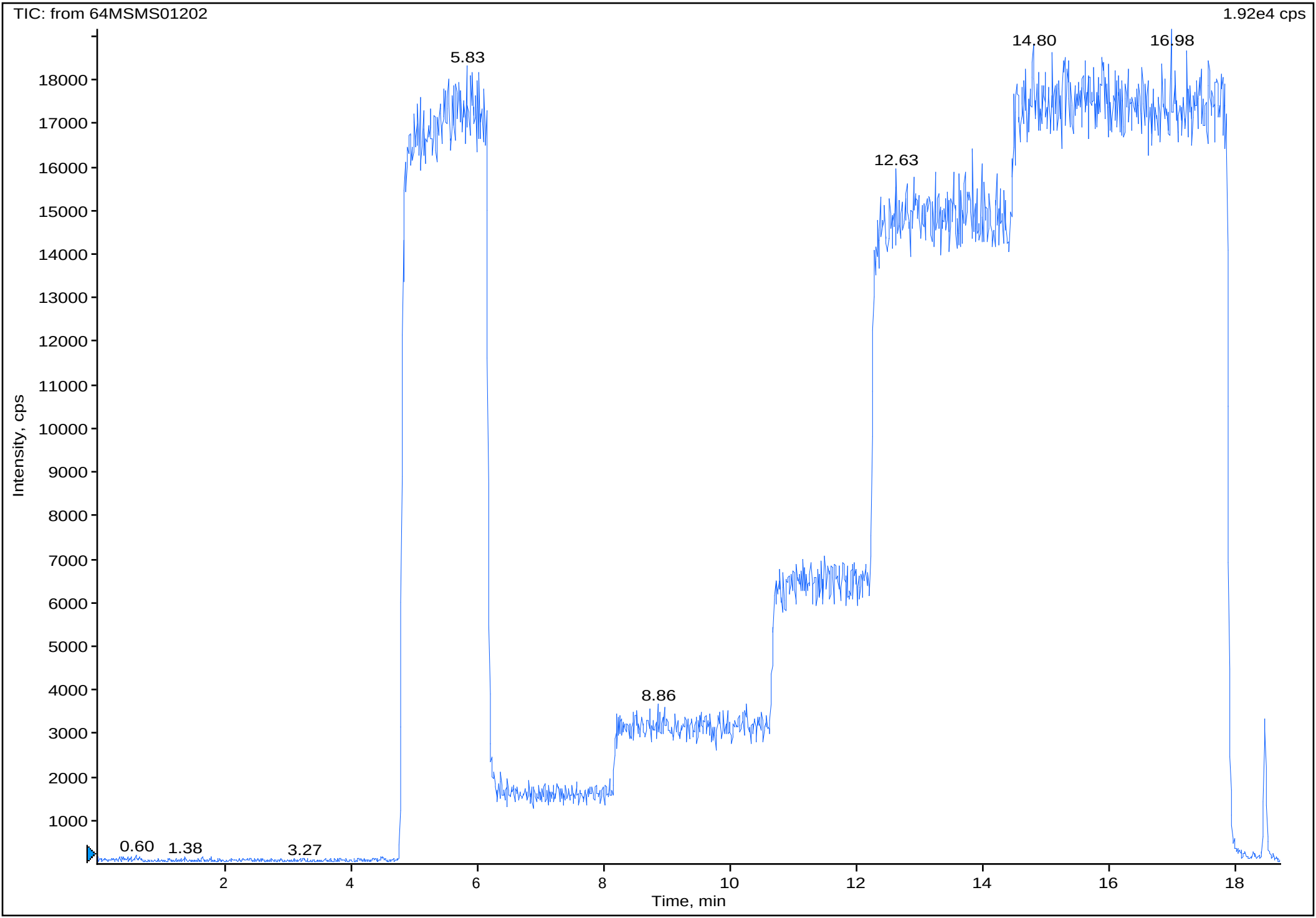
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	9.79058199	150.775571
Intercept:	-4.1199798	-256.20268
Correlation:	0.99941279	0.99088286

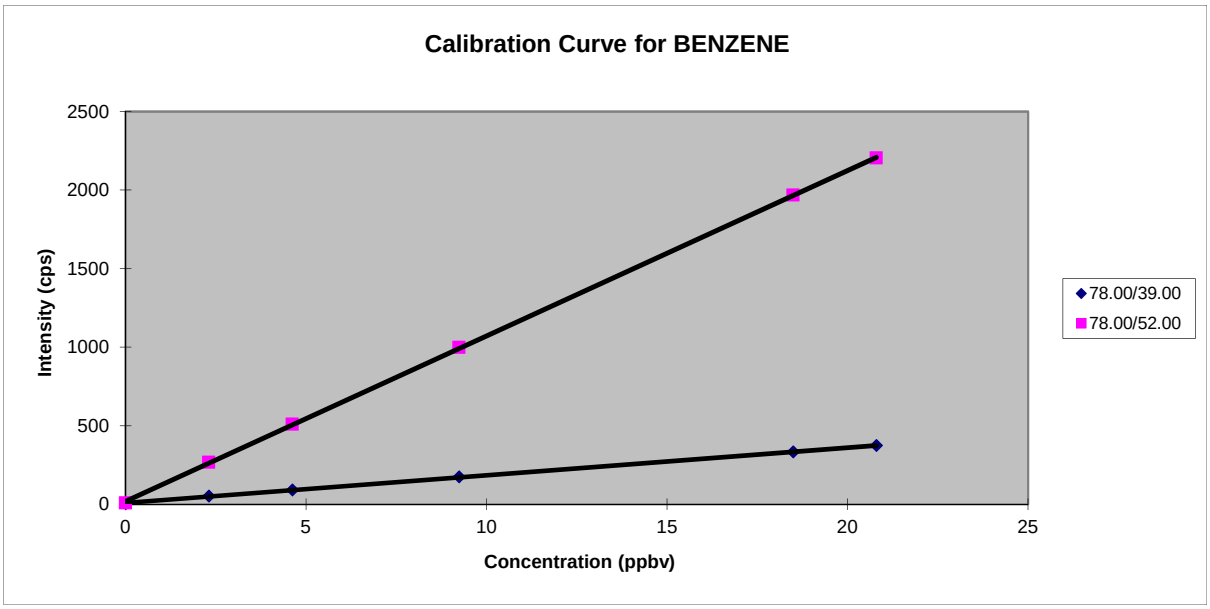
Concentratior	106.00/65.00	106.00/91.00
0	1.5625	3.75
3.48	31.25	333.541667
6.96	57.8125	694.479167
13.91	128.541667	1431.25
27.82	267.8125	3818.75
31.3	305.520833	4766.25

Report	File Name	64MSMS01198 et al.			
	Sample Name	MOD Calibration - BTX 20190516			
	Date	Thursday, May 16, 2019 13:18:22			
	Time Range	4.00	to	5.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	14.52	90.75	278.31	81.40	9.79	150.78
Intercept	11.19	14.93	-99.99	-34.36	-4.12	-256.20
Intensity	1.67	6.15	9.90	4.58	1.56	3.75
Int SD	4.27	9.10	13.26	10.35	3.65	7.00
Concentration	-0.66	-0.10	0.39	0.48	0.58	1.72
Conc SD	0.29	0.10	0.05	0.13	0.37	0.05
Compound Con	-0.38		0.44		1.15	
Compound SD	0.14		0.06		0.15	
Det. Limit	0.88	0.30	0.14	0.38	1.12	0.14
Compound DL	0.59		0.26		0.63	

5/16/19.18.34.17
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Thu, May 16, 2019 at 18:34:15; Exp. Comment: BTX

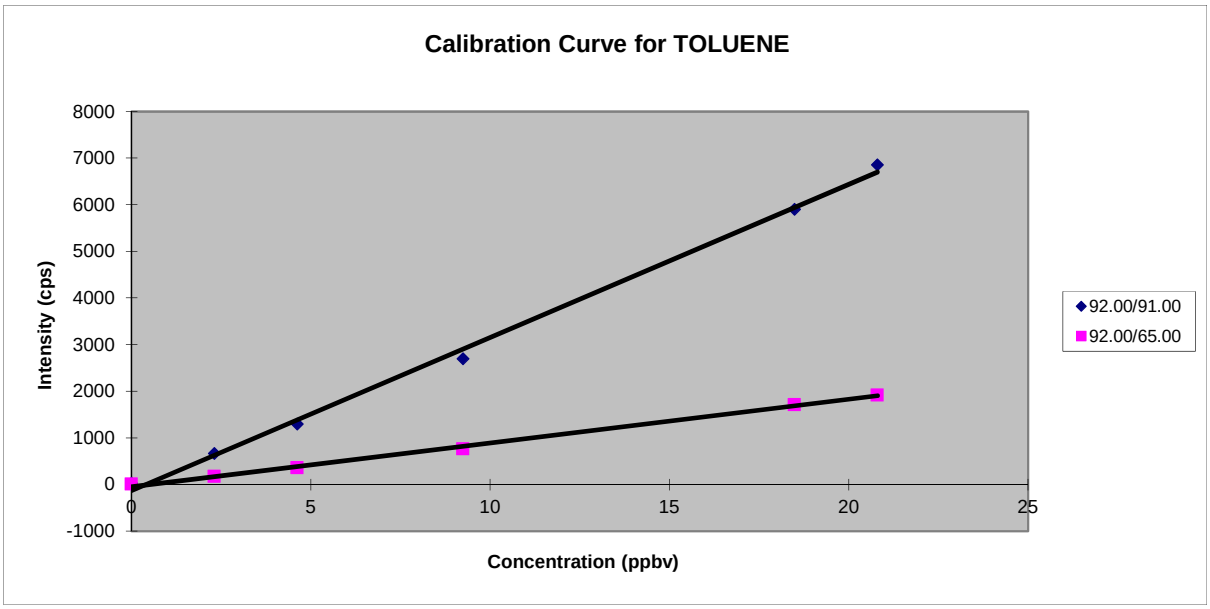




Filename:	64MSMS01202 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 16, 2019 18:53:45					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.50	7.18	9.39	11.41	13.29	15.95

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	17.5883278	105.298435
Intercept:	8.79675083	18.6011906
Correlation:	0.99973491	0.99997601

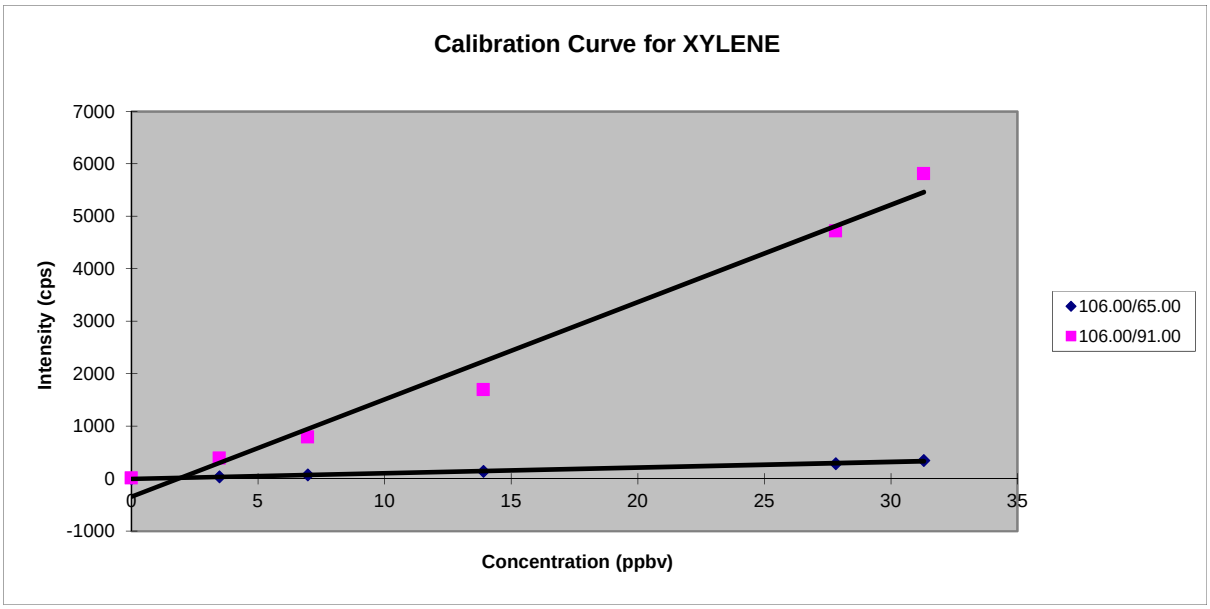
Concentratior	78.00/39.00	78.00/52.00
0	2.8125	8.33333333
2.31	52.8125	266.354167
4.62	92.0833333	508.854167
9.24	174.0625	997.291667
18.49	332.8125	1966.77083
20.8	373.645833	2203.85417



Filename:	64MSMS01202 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 16, 2019 18:54:24					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.50	7.18	9.39	11.41	13.29	15.95

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	328.606478	93.7728292
Intercept:	-130.66574	-45.332545
Correlation:	0.99872661	0.9988225

Concentratior	92.00/91.00	92.00/65.00
0	29.2708333	7.8125
2.31	663.75	170.416667
4.62	1297.5	358.4375
9.24	2696.35417	763.229167
18.49	5900.10417	1713.02083
20.8	6853.54167	1915.72917



Filename:	64MSMS01202 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Thursday, May 16, 2019 18:54:51					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.50	7.18	9.39	11.41	13.29	15.95

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	10.8026984	185.467697
Intercept:	-3.165484	-341.91825
Correlation:	0.99780107	0.99015106

Concentratior	106.00/65.00	106.00/91.00
0	1.875	13.2291667
3.48	34.0625	391.25
6.96	71.6666667	791.458333
13.91	141.770833	1697.91667
27.82	284.0625	4722.08333
31.3	349.270833	5813.54167

Report	File Name	64MSMS01202 et al.		
	Sample Name	EOD Calibration - BTX 20190516		
	Date	Thursday, May 16, 2019 18:55:30		
	Time Range	3.00	to	4.00 min
	Conc Units:	ppbv		
	Num Ions	6.00		

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	17.59	105.30	328.61	93.77	10.80	185.47
Intercept	8.80	18.60	-130.67	-45.33	-3.17	-341.92
Intensity	2.81	8.33	29.27	7.81	1.88	13.23
Int SD	5.56	9.70	16.50	7.84	4.18	13.65
Concentration	-0.34	-0.10	0.49	0.57	0.47	1.91
Conc SD	0.32	0.09	0.05	0.08	0.39	0.07
Compound Con	-0.22		0.53		1.19	
Compound SD	0.14		0.05		0.16	
Det. Limit	0.95	0.28	0.15	0.25	1.16	0.22
Compound DL	0.61		0.20		0.69	

TAGA FLOW CALIBRATION LOG

Work Assignment: 372 Initial: BM Date: 05/17/19

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 3200	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error (± 10%) $\frac{Difference}{Reference} x\ 100$
0631	1500	1491 SCFH	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DW400-0925		Calibration Date: EXP 09/04/19	

Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error (± 10%) $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error (± 10%) $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Fri, May 17, 2019, 6:52:16
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY17 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Fri, May 17, 2019, 6:49:06

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.600
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.069
100.000	0.075
120.000	0.083
160.000	0.095

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.043
70.000	0.043
100.000	0.041
130.000	0.041
160.000	0.048

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Fri, May 17, 2019, 6:52:43
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY17 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Fri, May 17, 2019, 6:49:06

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.600
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.063
75.000	0.069
100.000	0.075
120.000	0.083
160.000	0.095

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.043
70.000	0.043
100.000	0.041
130.000	0.041
160.000	0.048

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

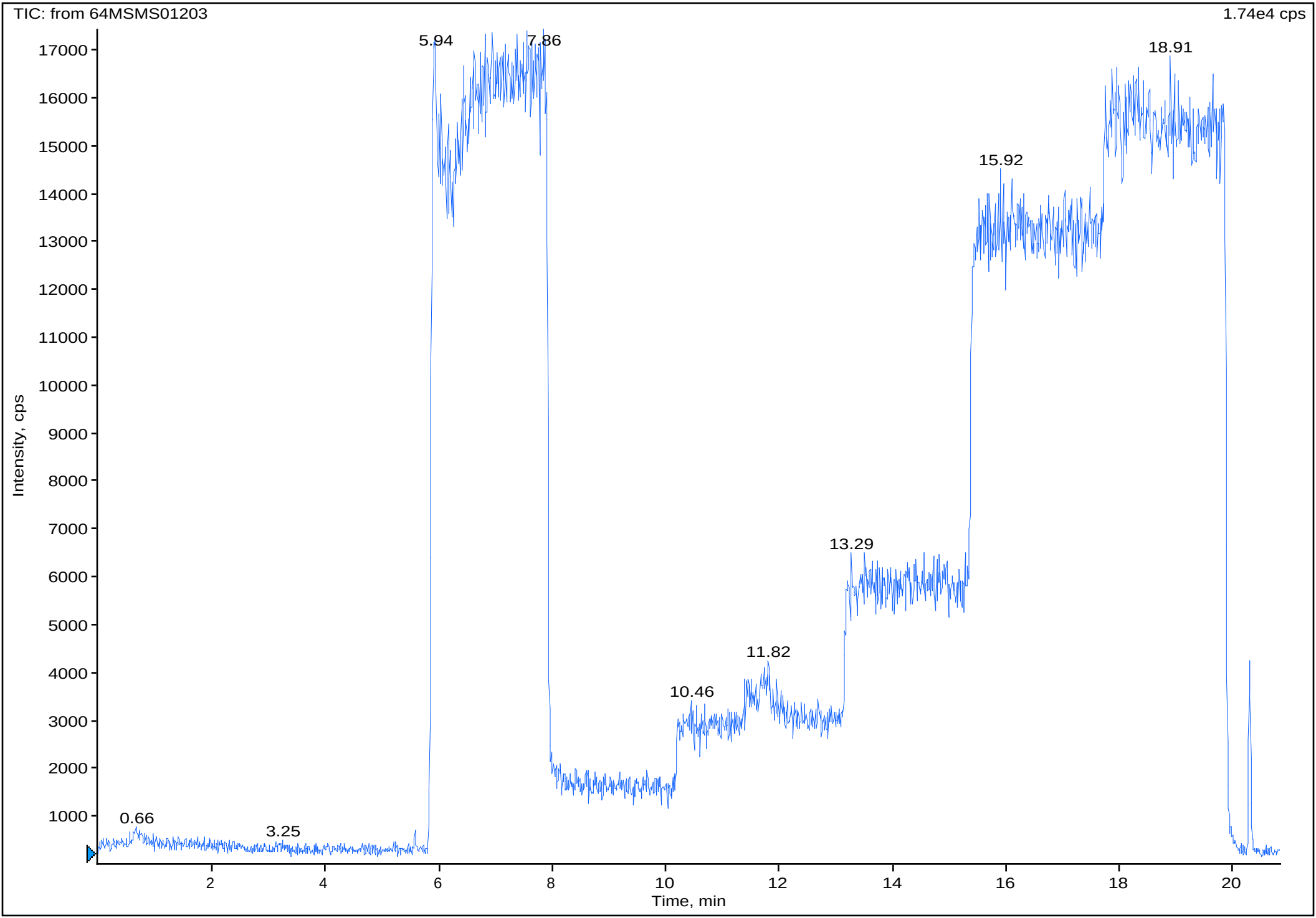
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

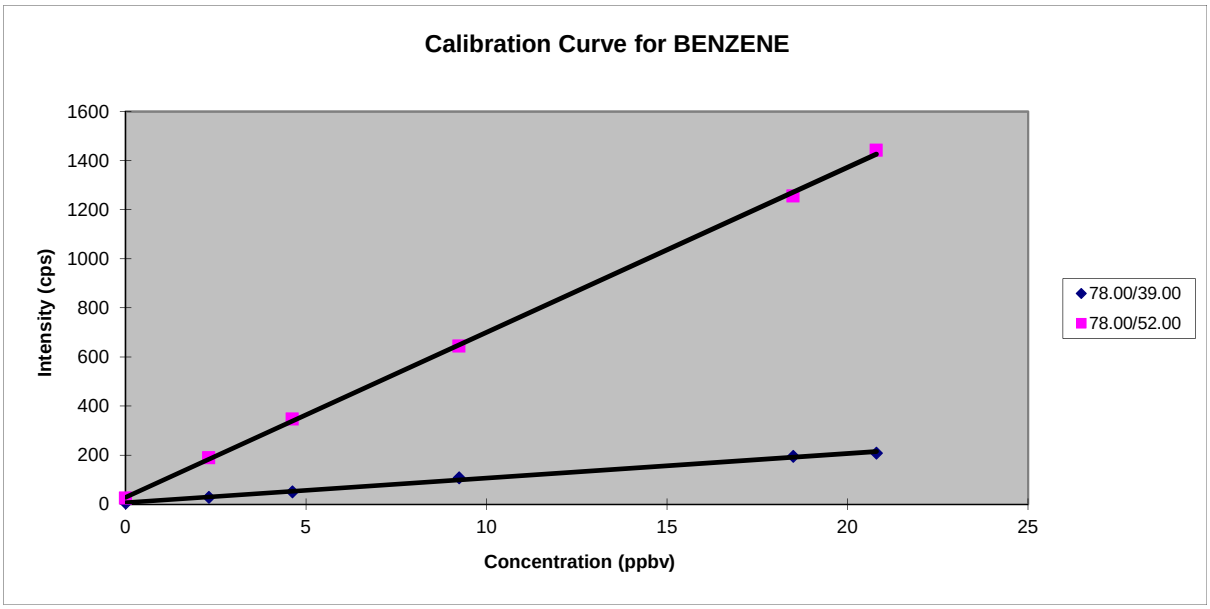
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

5/17/19.6.53.42
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, May 17, 2019 at 6:53:41; Exp. Comment: BTX

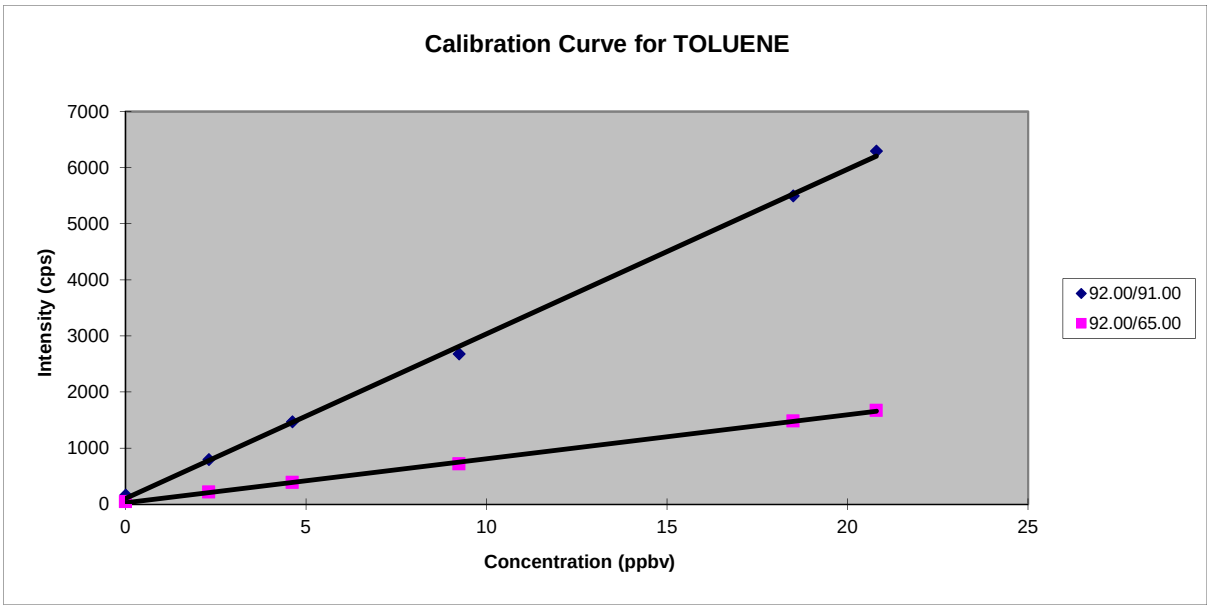




Filename:	64MSMS01203 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, May 17, 2019 7:20:44					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	9.06	12.53	14.29	16.65	18.79

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	10.0107721	67.200298
Intercept:	6.91333069	28.7441216
Correlation:	0.99814383	0.99981749

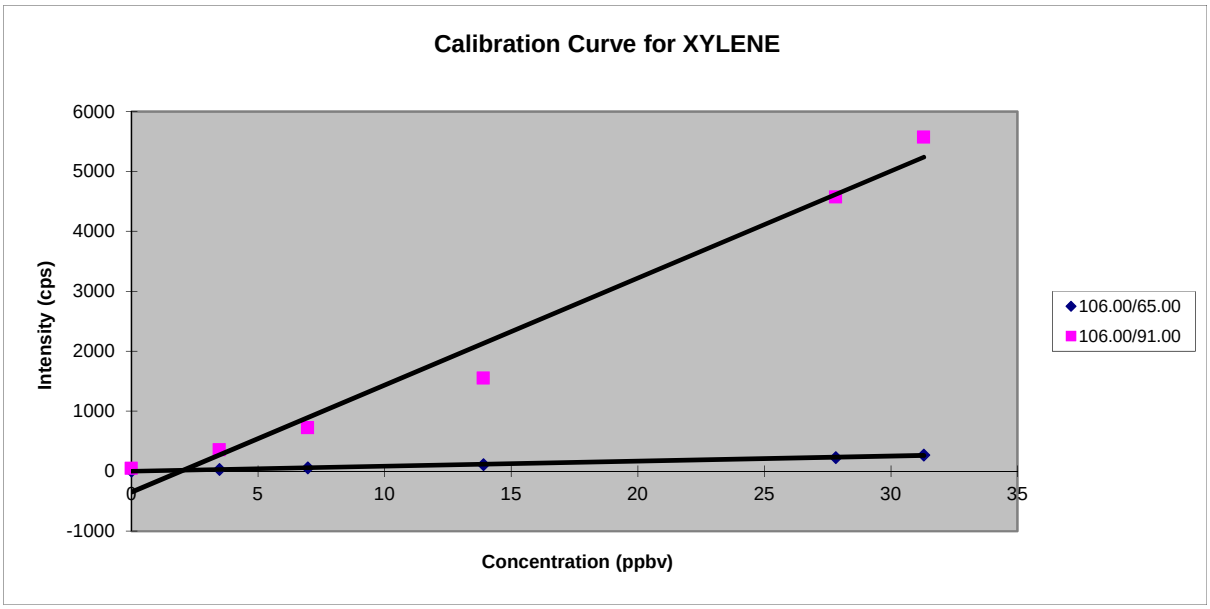
Concentratior	78.00/39.00	78.00/52.00
0	4.375	24.6875
2.31	28.9690722	188.247423
4.62	50.9375	346.25
9.24	108.125	643.541667
18.49	195.416667	1255
20.8	208.854167	1441.66667



Filename:	64MSMS01203 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, May 17, 2019 7:21:24					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	9.06	12.53	14.29	16.65	18.79

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	293.440051	78.4347115
Intercept:	103.213546	29.1056608
Correlation:	0.99951107	0.99961794

Concentratior	92.00/91.00	92.00/65.00
0	161.770833	45.7291667
2.31	797.216495	216.185567
4.62	1468.4375	388.229167
9.24	2676.77083	718.125
18.49	5495.3125	1483.95833
20.8	6293.95833	1672.39583



Filename:	64MSMS01203 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, May 17, 2019 7:21:52					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	4.50	9.06	12.53	14.29	16.65	18.79

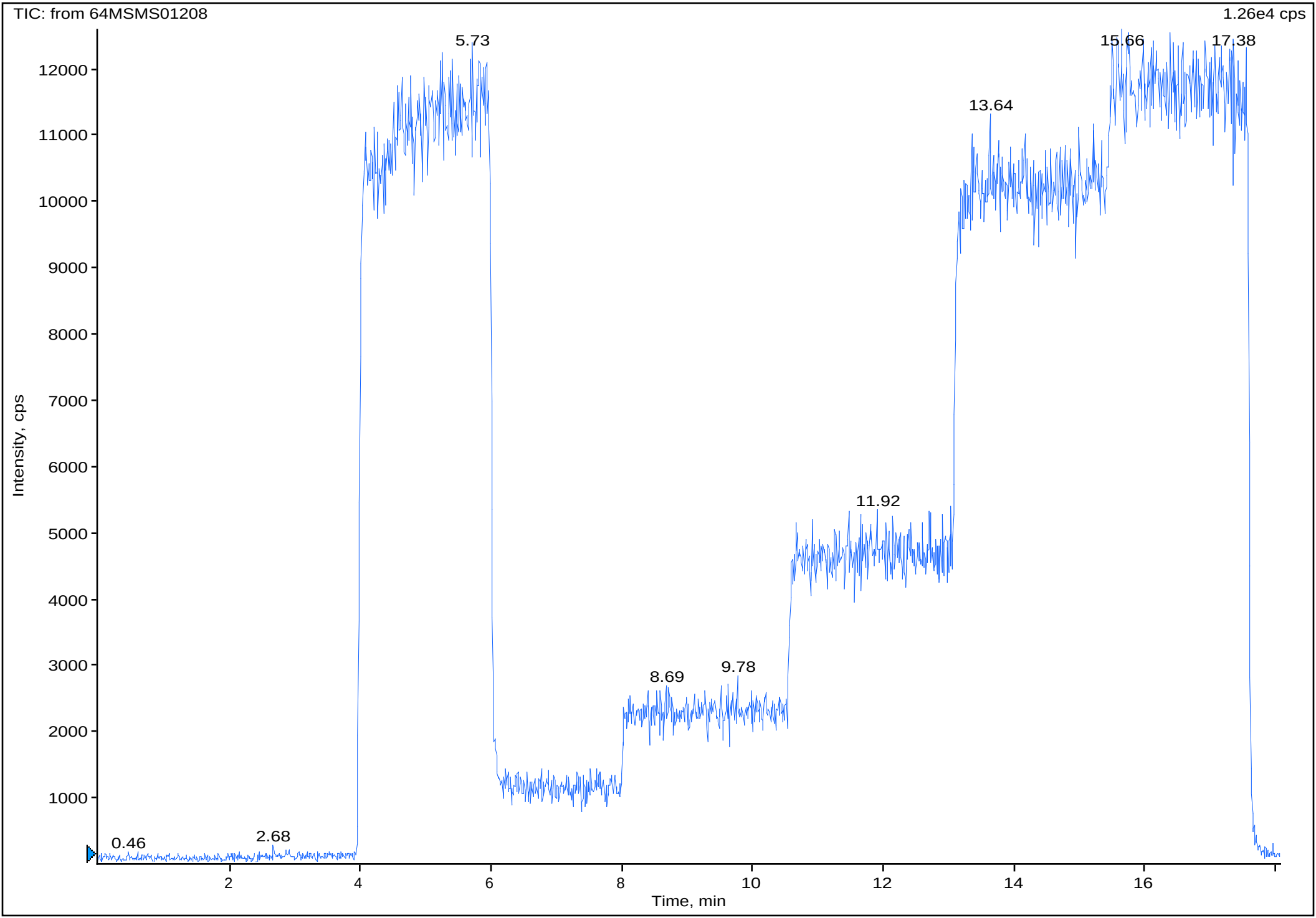
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	8.38123964	178.405962
Intercept:	-0.1358151	-345.93057
Correlation:	0.99866467	0.9882765

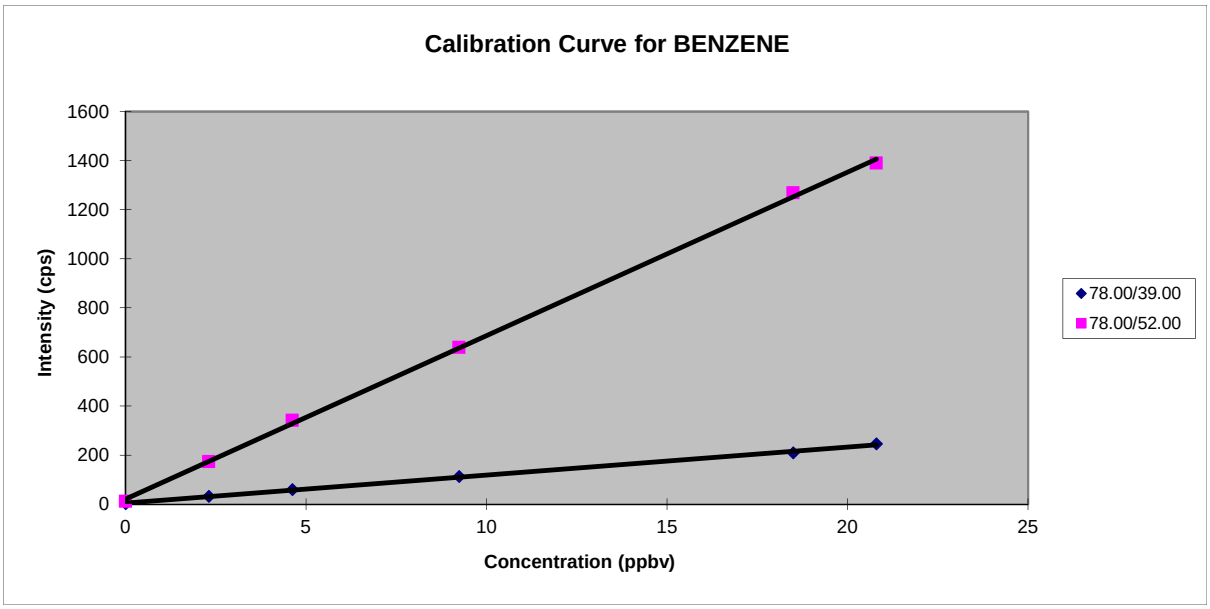
Concentratior	106.00/65.00	106.00/91.00
0	5.3125	44.8958333
3.48	28.3505155	357.628866
6.96	58.125	723.125
13.91	108.645833	1551.04167
27.82	228.958333	4570.10417
31.3	269.375	5569.16667

Report	File Name	64MSMS01203 et al.			
	Sample Name	BOD Calibration - BTX 20190517			
	Date	Friday, May 17, 2019 7:25:17			
	Time Range	3.00	to	4.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	10.01	67.20	293.44	78.43	8.38	178.41
Intercept	6.91	28.74	103.21	29.11	-0.14	-345.93
Intensity	3.54	22.19	177.40	43.96	5.42	43.54
Int SD	7.40	15.23	44.13	25.48	8.93	23.21
Concentration	-0.34	-0.10	0.25	0.19	0.66	2.18
Conc SD	0.74	0.23	0.15	0.32	1.07	0.13
Compound Con	-0.22		0.22		1.42	
Compound SD	0.34		0.17		0.42	
Det. Limit	2.22	0.68	0.45	0.97	3.20	0.39
Compound DL	1.45		0.71		1.79	

5/17/19.13.01.06
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, May 17, 2019 at 13:01:06; Exp. Comment: BTX



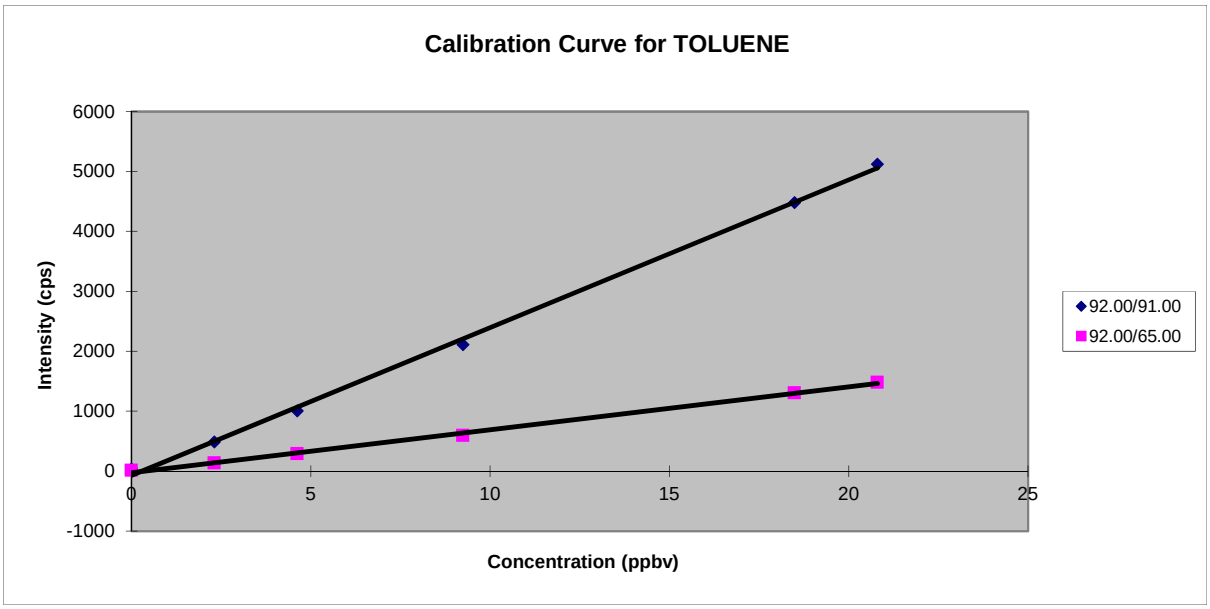


Filename:	64MSMS01208 et al.
Compound na	BENZENE
Conc. units:	ppbv
Width (min):	0.5
User name:	BPK
Comment:	
Date:	Friday, May 17, 2019 13:19:50
Num. ions:	2
Num. concs.	6

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.08	9.14	11.71	14.30	16.64

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	11.3700414	66.5874477
Intercept:	5.437711	21.5203345
Correlation:	0.99927952	0.99975947

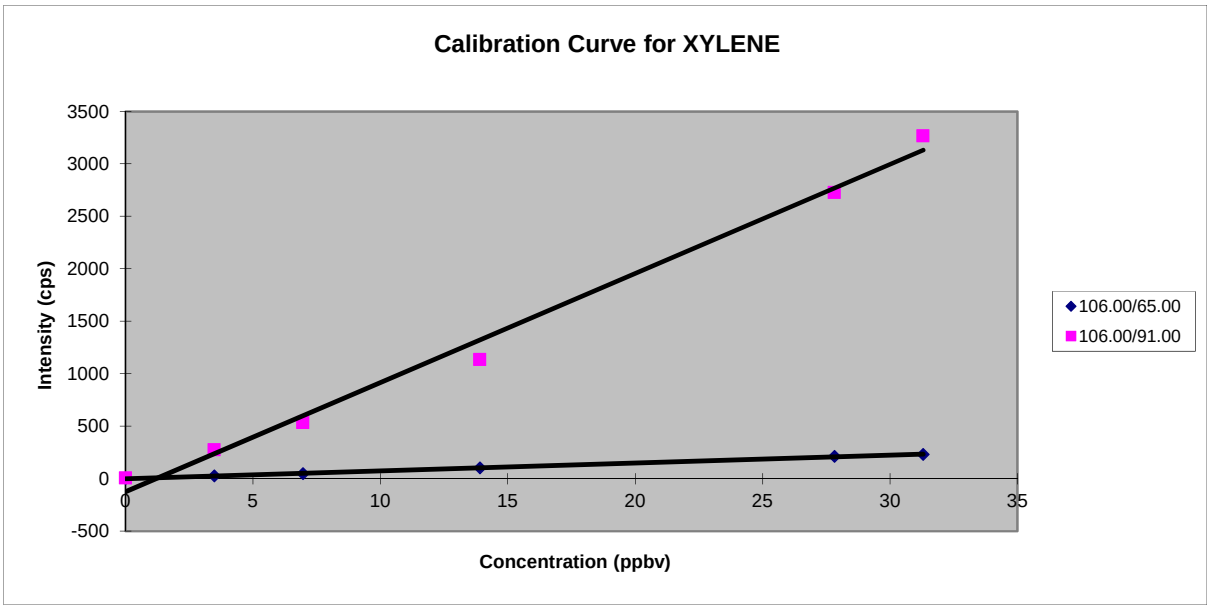
Concentratior	78.00/39.00	78.00/52.00
0	2.37113402	11.0309278
2.31	32.7083333	173.75
4.62	59.5876289	341.030928
9.24	113.333333	638.4375
18.49	209.6875	1268.4375
20.8	245.520833	1389.375



Filename:	64MSMS01208 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, May 17, 2019 13:20:22					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.08	9.14	11.71	14.30	16.64

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	246.522497	71.613254
Intercept:	-70.834516	-25.094877
Correlation:	0.99932723	0.99895103

Concentratior	92.00/91.00	92.00/65.00
0	41.6494845	13.6082474
2.31	489.791667	136.770833
4.62	1003.81443	290.618557
9.24	2110.52083	592.708333
18.49	4478.54167	1304.79167
20.8	5122.8125	1482.60417



Filename:	64MSMS01208 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, May 17, 2019 13:20:53					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	7.08	9.14	11.71	14.30	16.64

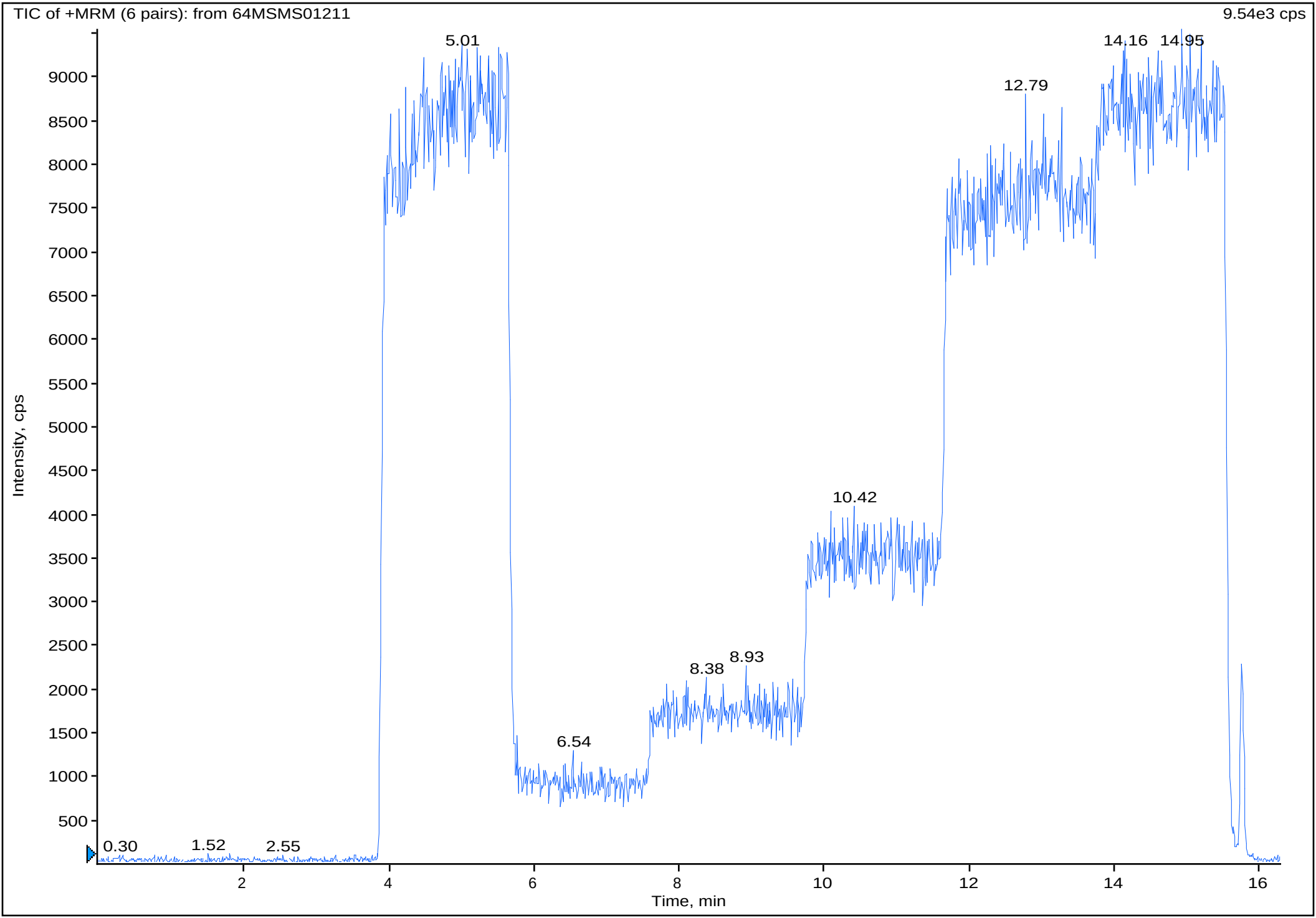
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	7.46499649	104.002685
Intercept:	0.07199434	-123.29398
Correlation:	0.9995664	0.99578123

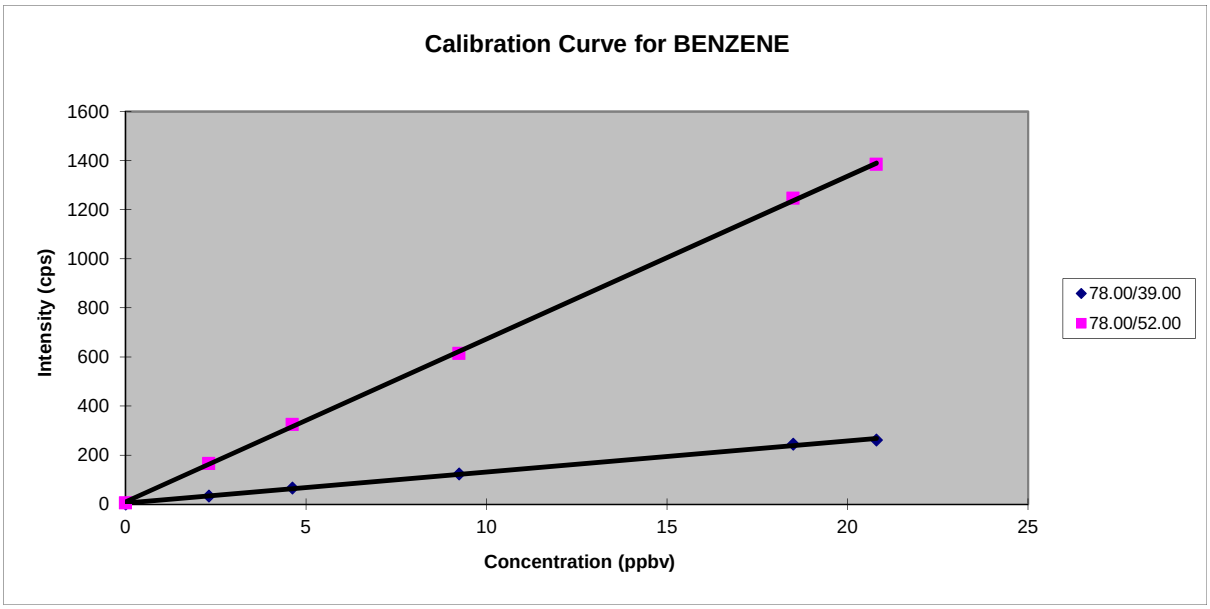
Concentratior	106.00/65.00	106.00/91.00
0	1.8556701	6.39175258
3.48	27.3958333	273.854167
6.96	48.7628866	534.948454
13.91	102.291667	1134.0625
27.82	211.875	2727.08333
31.3	231.354167	3265

Report	File Name	64MSMS01208 et al.			
	Sample Name	MOD Calibration - BTX 20190517			
	Date	Friday, May 17, 2019 13:21:28			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	11.37	66.59	246.52	71.61	7.46	104.00
Intercept	5.44	21.52	-70.83	-25.09	0.07	-123.29
Intensity	2.29	10.83	41.77	13.65	1.77	6.25
Int SD	4.70	11.39	27.53	12.58	4.10	9.21
Concentration	-0.28	-0.16	0.46	0.54	0.23	1.25
Conc SD	0.41	0.17	0.11	0.18	0.55	0.09
Compound Con	-0.22		0.50		0.74	
Compound SD	0.21		0.10		0.23	
Det. Limit	1.24	0.51	0.34	0.53	1.65	0.27
Compound DL	0.88		0.43		0.96	

64MSMS01211
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Fri, May 17, 2019 at 17:35:23; Exp. Comment: BTX

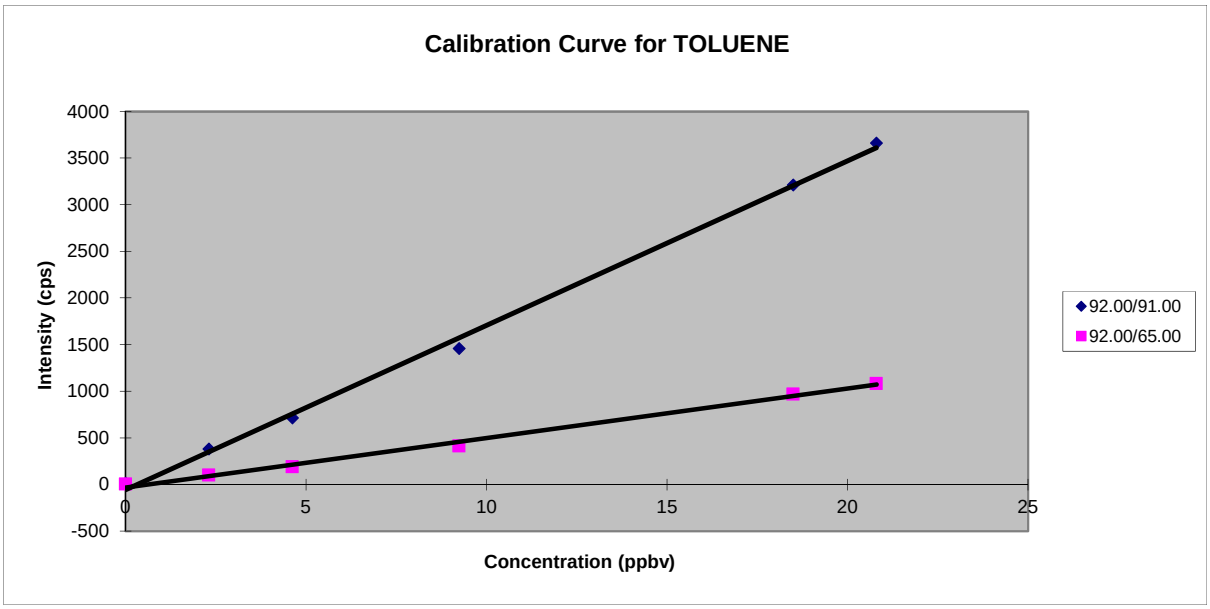




Filename:	64MSMS01211					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, May 17, 2019 18:54:11					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.58	8.63	10.45	12.80	14.70

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	12.6391769	66.3663301
Intercept:	5.27256886	9.86986133
Correlation:	0.99907789	0.9999147

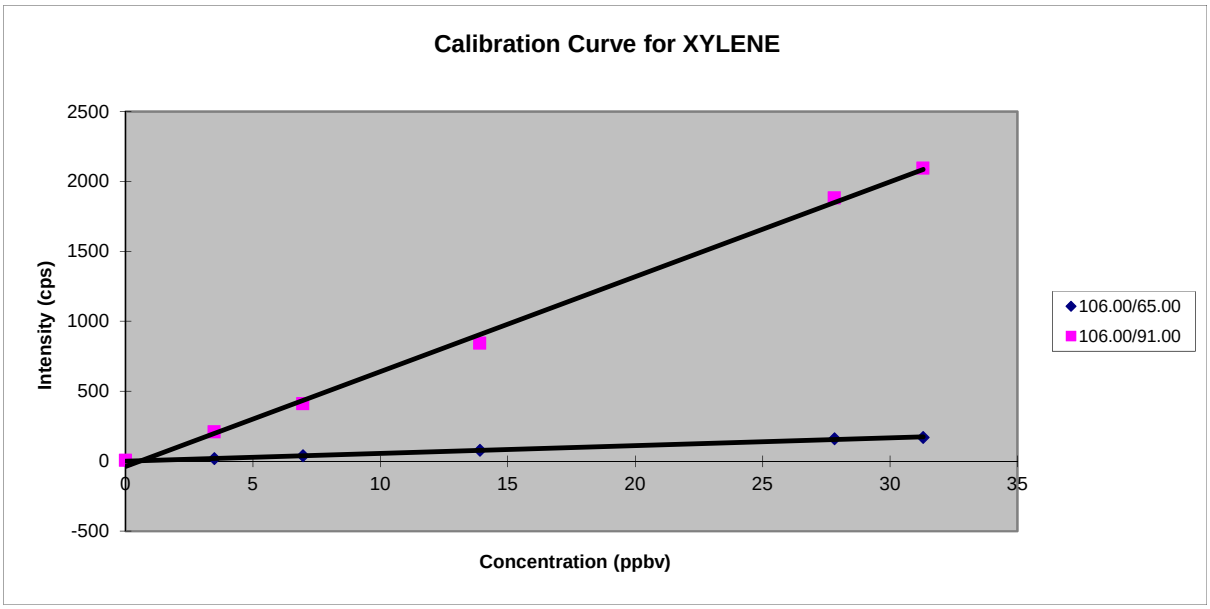
Concentratior	78.00/39.00	78.00/52.00
0	1.5625	5.41666667
2.31	33.9583333	165.833333
4.62	66.875	324.375
9.24	123.854167	614.0625
18.49	245	1245.72917
20.8	261.354167	1384.47917



Filename:	64MSMS01211					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, May 17, 2019 18:54:42					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.58	8.63	10.45	12.80	14.70

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	176.332259	53.0781635
Intercept:	-55.679095	-31.817075
Correlation:	0.99897824	0.99777908

Concentratior	92.00/91.00	92.00/65.00
0	14.7916667	4.79166667
2.31	382.291667	98.5416667
4.62	714.6875	188.958333
9.24	1458.02083	410.9375
18.49	3213.64583	967.8125
20.8	3661.875	1081.77083



Filename:	64MSMS01211					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Friday, May 17, 2019 18:55:11					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.58	8.63	10.45	12.80	14.70

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	5.56649145	67.8562939
Intercept:	0.72054869	-37.39692
Correlation:	0.99889606	0.99903481

Concentratior	106.00/65.00	106.00/91.00
0	1.77083333	5.41666667
3.48	18.8541667	208.854167
6.96	39.1666667	409.270833
13.91	77.5	843.125
27.82	161.354167	1880.20833
31.3	170.3125	2092.70833

Report	File Name	64MSMS01211			
	Sample Name	EOD Calibration - BTX 20190517			
	Date	Friday, May 17, 2019 18:55:36			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	12.64	66.37	176.33	53.08	5.57	67.86
Intercept	5.27	9.87	-55.68	-31.82	0.72	-37.40
Intensity	1.56	5.42	14.79	4.79	1.77	5.42
Int SD	4.19	7.53	13.61	7.94	4.81	8.70
Concentration	-0.29	-0.07	0.40	0.69	0.19	0.63
Conc SD	0.33	0.11	0.08	0.15	0.86	0.13
Compound Con	-0.18		0.54		0.41	
Compound SD	0.16		0.08		0.35	
Det. Limit	0.99	0.34	0.23	0.45	2.59	0.38
Compound DL	0.67		0.34		1.49	

TAGA FLOW CALIBRATION LOG

Work Assignment: 372 Initial: YH Date: 5/18/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error (± 10%) $\frac{Difference}{Reference} x\ 100$
6:50	1800SCCS	2/91	1800	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY00-0925		Calibration Date:	Exp: 9/4/2019
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error (± 10%) $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error (± 10%) $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Sat, May 18, 2019, 7:15:43
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY18 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sat, May 18, 2019, 7:12:37

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.600
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.060
75.000	0.067
100.000	0.075
120.000	0.083
160.000	0.092

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.043
70.000	0.043
100.000	0.040
130.000	0.045
160.000	0.046

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Sat, May 18, 2019, 7:15:52
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY18 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sat, May 18, 2019, 7:12:37

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.600
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.060
75.000	0.067
100.000	0.075
120.000	0.083
160.000	0.092

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.043
70.000	0.043
100.000	0.040
130.000	0.045
160.000	0.046

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

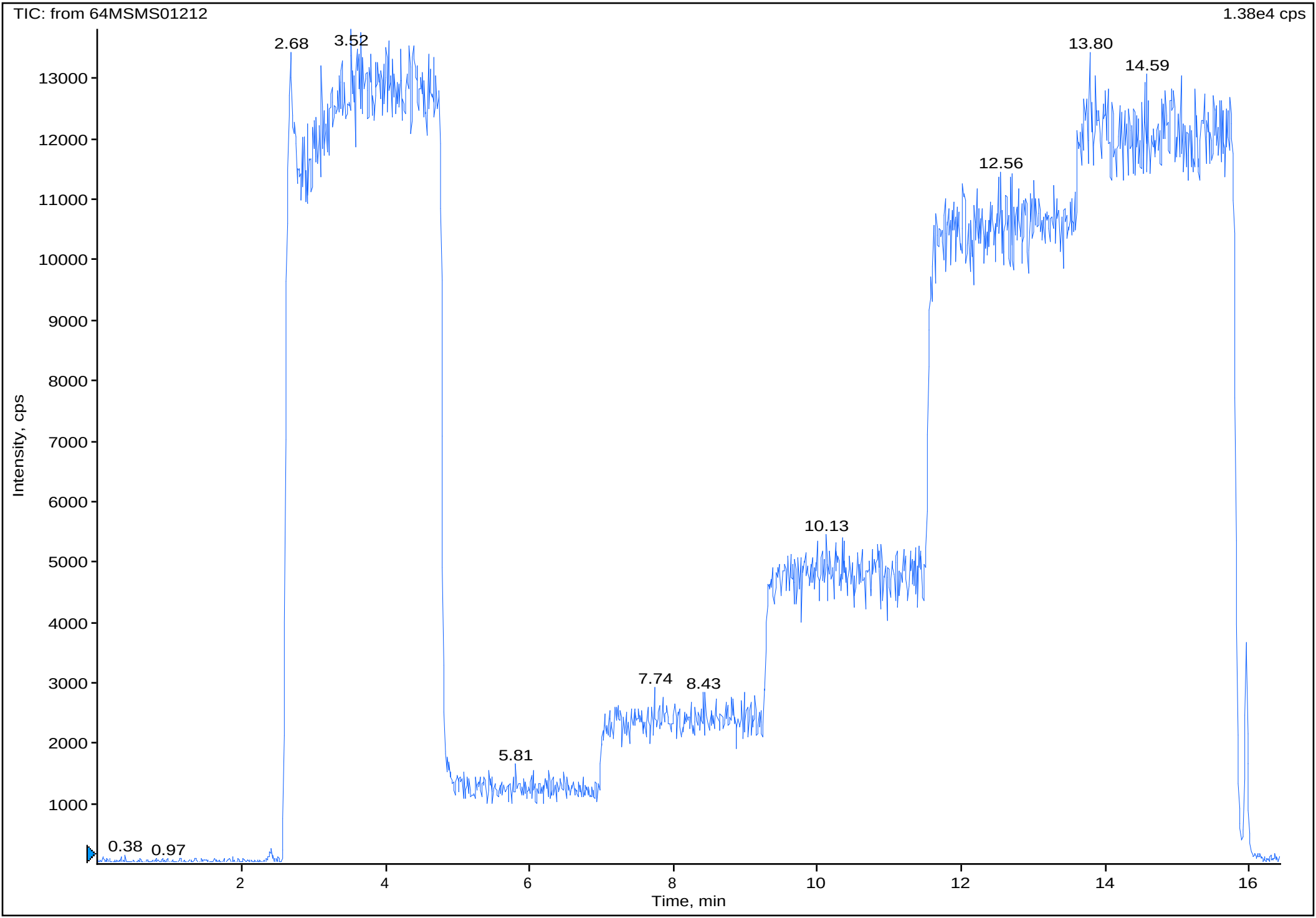
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

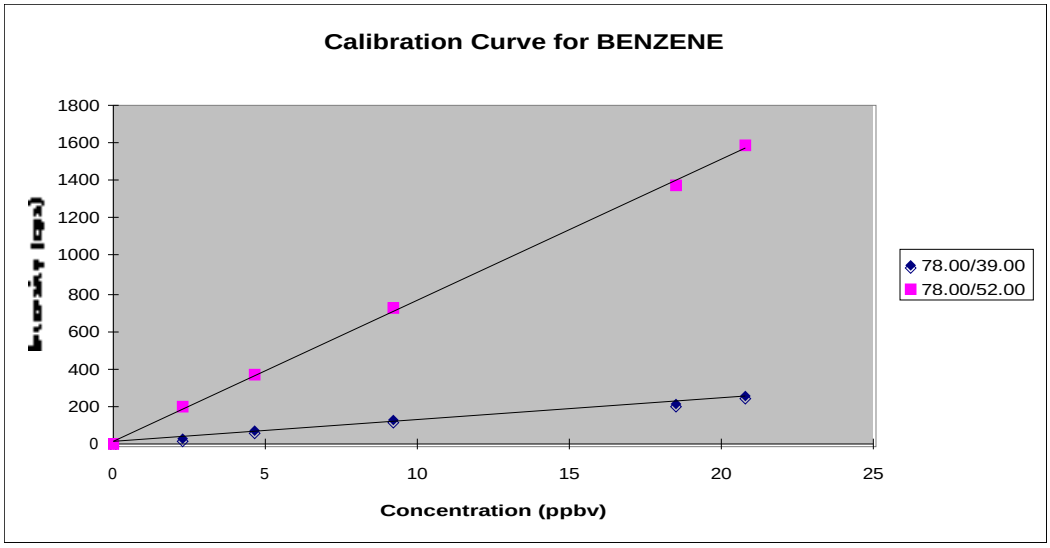
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

5/18/19.7.17.44
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sat, May 18, 2019 at 7:17:42; Exp. Comment: BTX

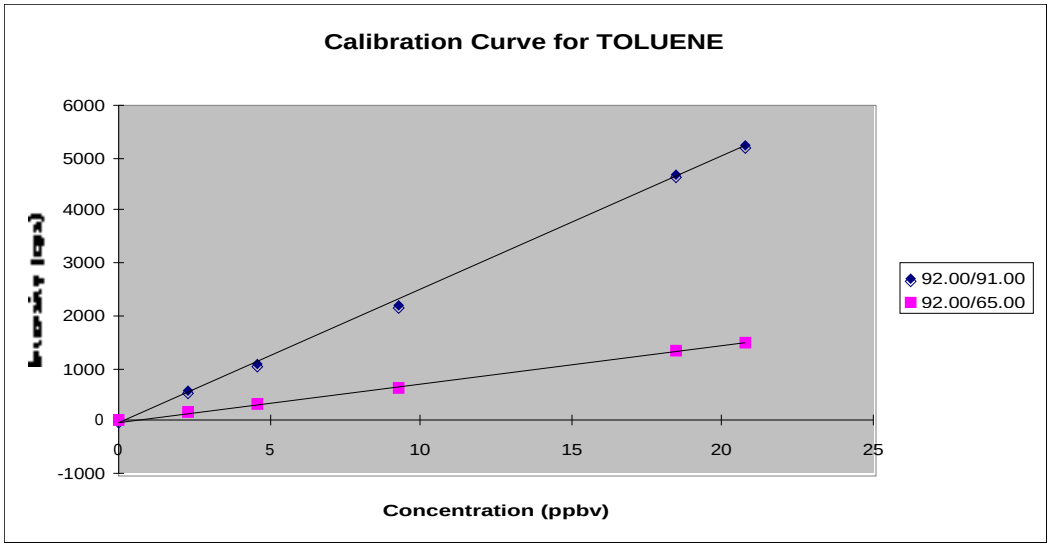




Filename:	64MSMS01212 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, May 18, 2019 7:35:29					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.95	8.22	10.34	12.60	14.65

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	11.6565065	74.810257
Intercept:	7.43847957	20.1485101
Correlation:	0.9990372	0.99960916

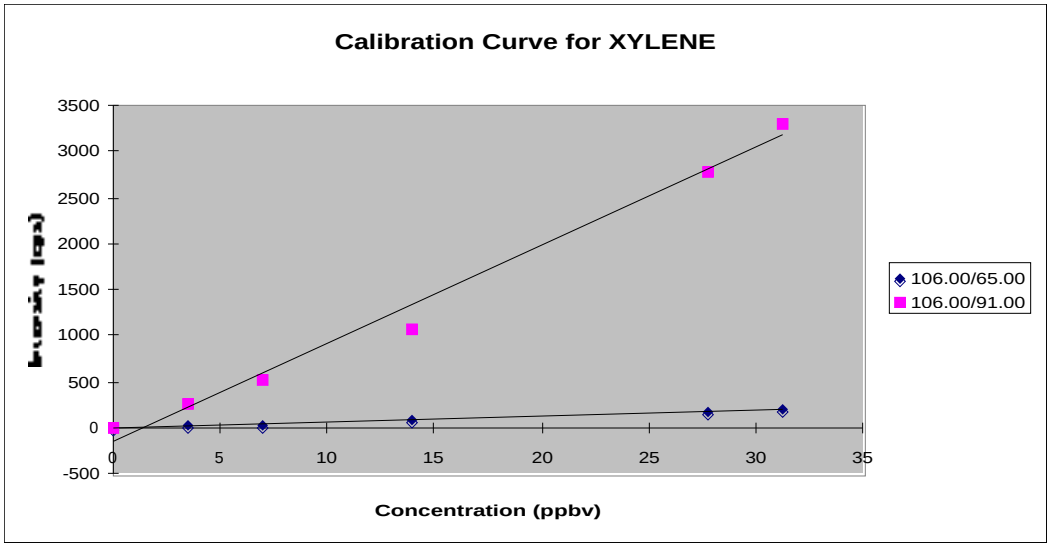
Concentration	78.00/39.00	78.00/52.00
0	1.875	4.6875
2.31	34.375	200.833333
4.62	64.3298969	372.680412
9.24	121.666667	722.708333
18.49	219.0625	1374.58333
20.8	249.791667	1594.375



Filename:	64MSMS01212 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, May 18, 2019 7:36:10					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.95	8.22	10.34	12.60	14.65

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	252.457744	71.4784011
Intercept:	-32.981386	-11.666615
Correlation:	0.99971516	0.99964049

Concentration	92.00/91.00	92.00/65.00
0	18.8541667	7.39583333
2.31	573.541667	153.229167
4.62	1101.85567	307.525773
9.24	2208.95833	626.458333
18.49	4656.35417	1329.16667
20.8	5243.85417	1470.41667



Filename:	64MSMS01212 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, May 18, 2019 7:36:44					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	5.95	8.22	10.34	12.60	14.65

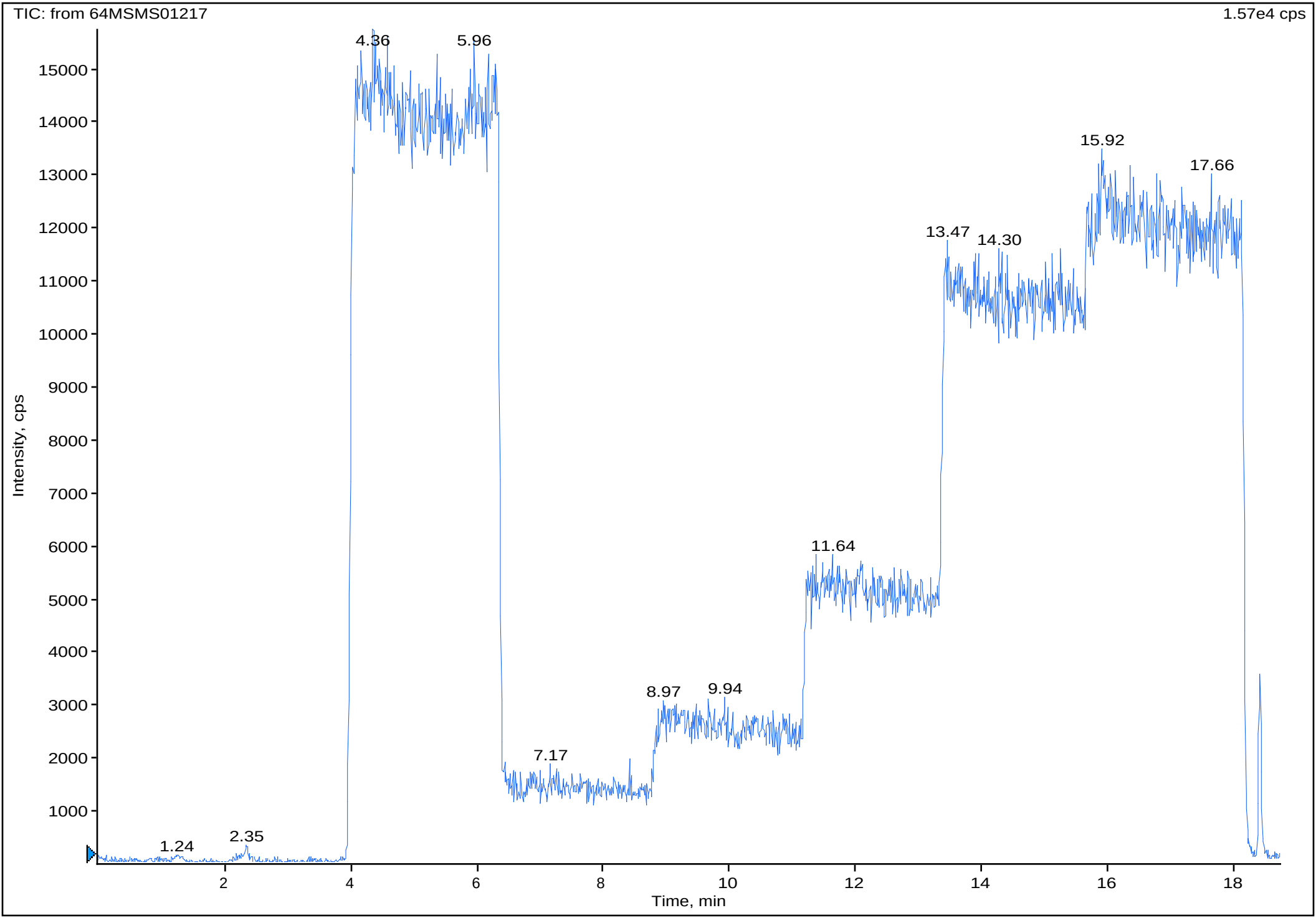
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	6.42623898	106.157101
Intercept:	-2.9680294	-155.32163
Correlation:	0.99751779	0.99410413

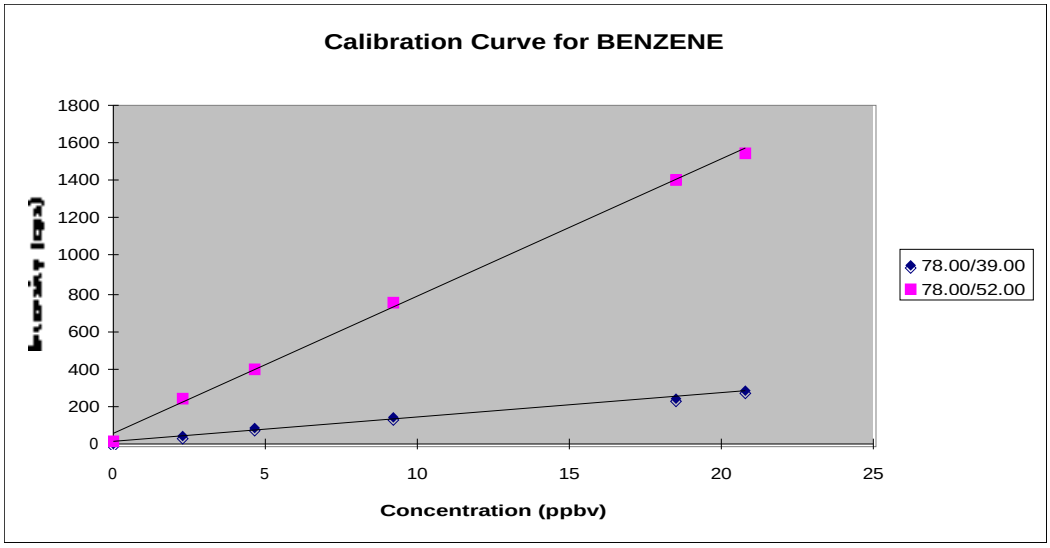
Concentration	106.00/65.0(	106.00/91.00
0	1.875	3.95833333
3.48	24.5833333	259.6875
6.96	35.3608247	505.670103
13.91	78.0208333	1073.75
27.82	177.5	2782.70833
31.3	201.25	3303.22917

Report	File Name	64MSMS01212 et al.			
	Sample Name	BOD Calibration - BTX 20190518			
	Date	Saturday, May 18, 2019 7:37:38			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	11.66	74.81	252.46	71.48	6.43	106.16
Intercept	7.44	20.15	-32.98	-11.67	-2.97	-155.32
Intensity	1.88	4.69	18.85	7.40	1.88	3.96
Int SD	3.92	7.10	17.22	9.43	4.43	7.03
Concentration	-0.48	-0.21	0.21	0.27	0.75	1.50
Conc SD	0.34	0.09	0.07	0.13	0.69	0.07
Compound Con	-0.34		0.24		1.13	
Compound SD	0.15		0.07		0.27	
Det. Limit	1.01	0.28	0.20	0.40	2.07	0.20
Compound DL	0.65		0.30		1.13	

5/18/19.13.52.01
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sat, May 18, 2019 at 13:52:00; Exp. Comment: BTX

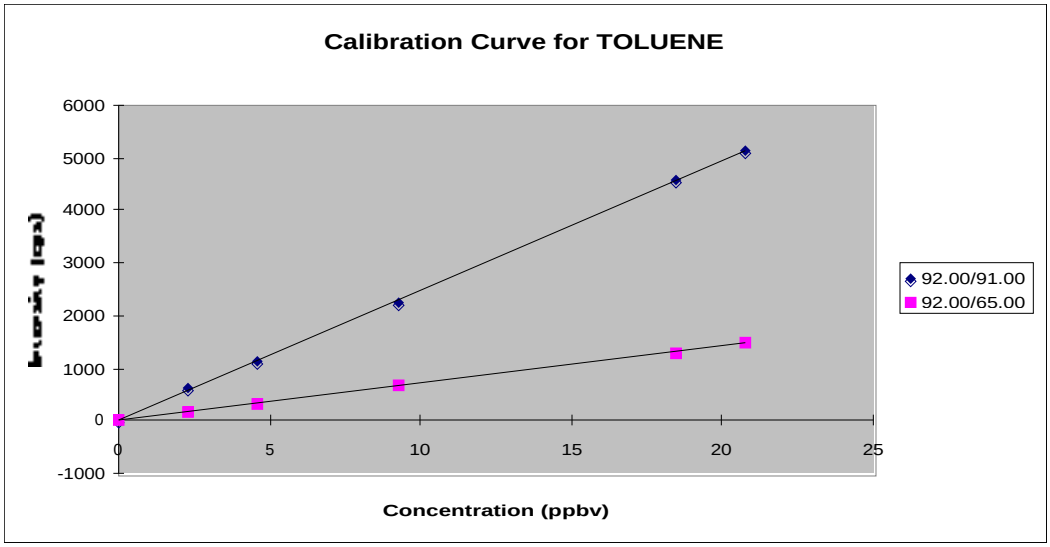




Filename:	64MSMS01217 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, May 18, 2019 14:11:59					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.00	7.74	10.13	12.28	14.64	16.89

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	12.7581289	73.0431593
Intercept:	12.4543061	49.768286
Correlation:	0.99681726	0.99919088

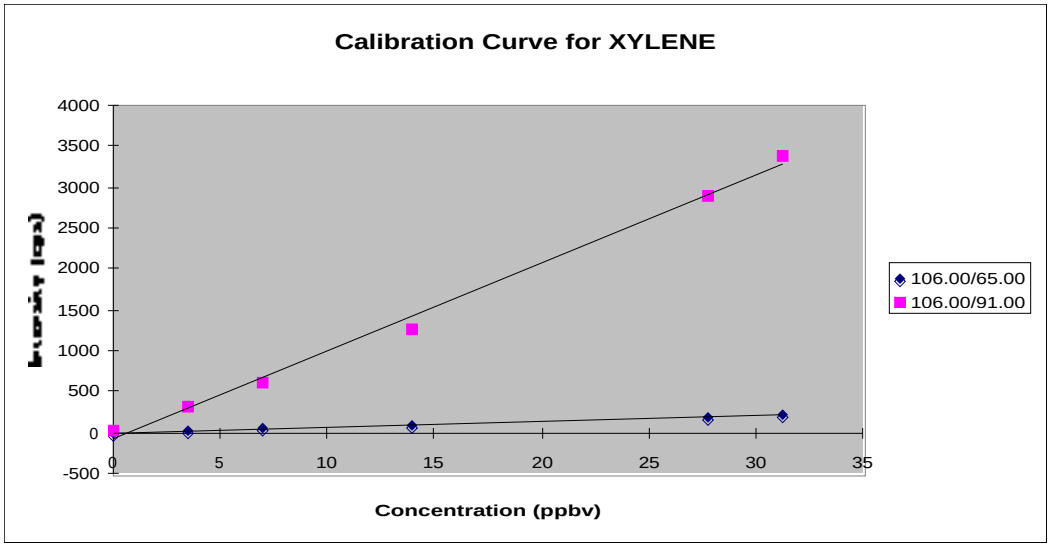
Concentration	78.00/39.00	78.00/52.00
0	2.29166667	9.375
2.31	42.6041667	240.208333
4.62	79.6875	398.541667
9.24	138.229167	744.895833
18.49	236.875	1409.89583
20.8	282.604167	1546.66667



Filename:	64MSMS01217 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, May 18, 2019 14:12:44					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.00	7.74	10.13	12.28	14.64	16.89

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	246.368003	70.6381875
Intercept:	4.78703944	-2.0989799
Correlation:	0.99991085	0.99974141

Concentration	92.00/91.00	92.00/65.00
0	15.7291667	5.10416667
2.31	610.9375	173.125
4.62	1109.27083	303.958333
9.24	2246.77083	649.166667
18.49	4573.85417	1291.97917
20.8	5135.72917	1481.66667



Filename:	64MSMS01217 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, May 18, 2019 14:13:15					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	3.00	7.74	10.13	12.28	14.64	16.89

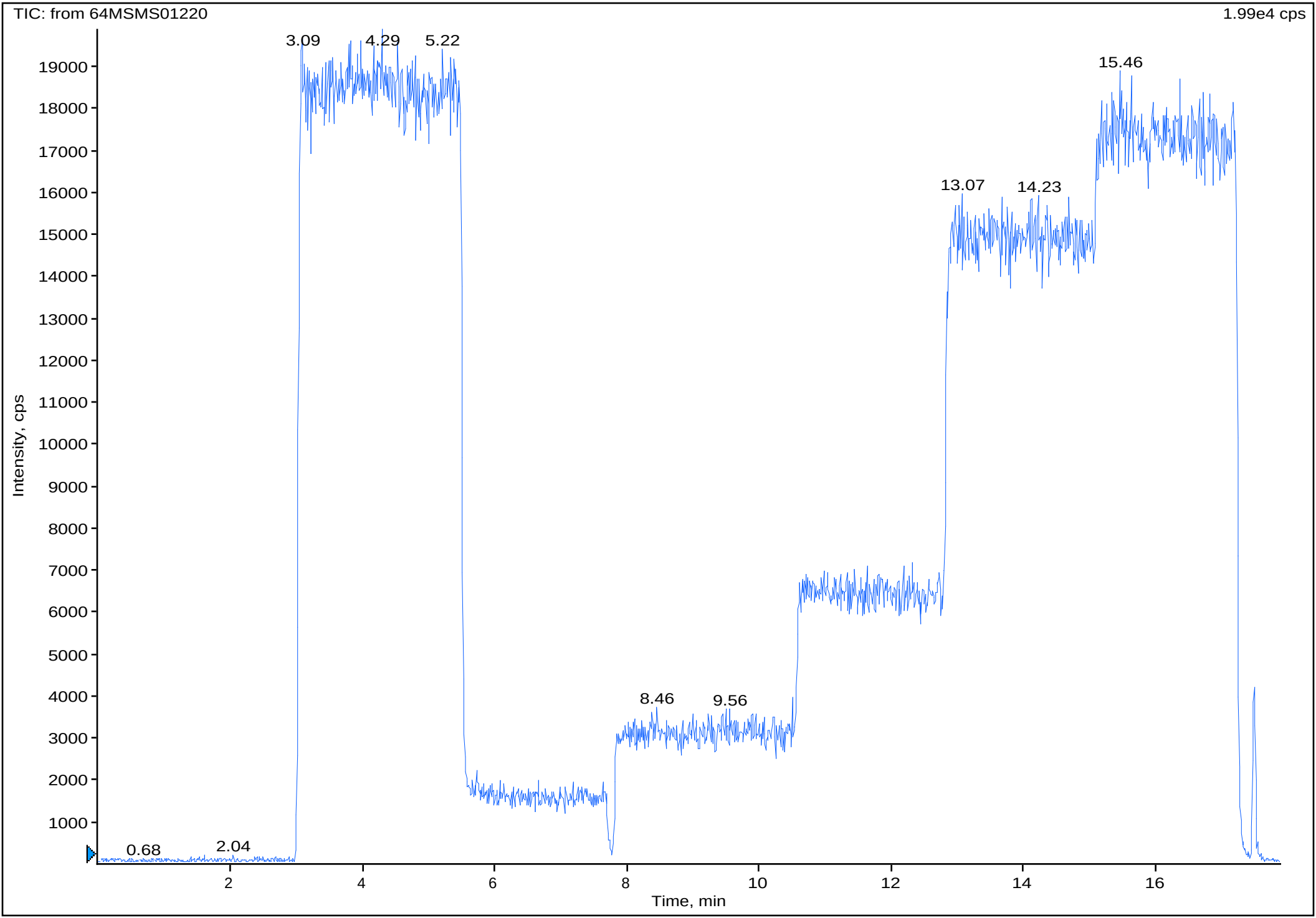
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	7.01118802	107.628643
Intercept:	2.23699483	-87.328534
Correlation:	0.99973943	0.99784057

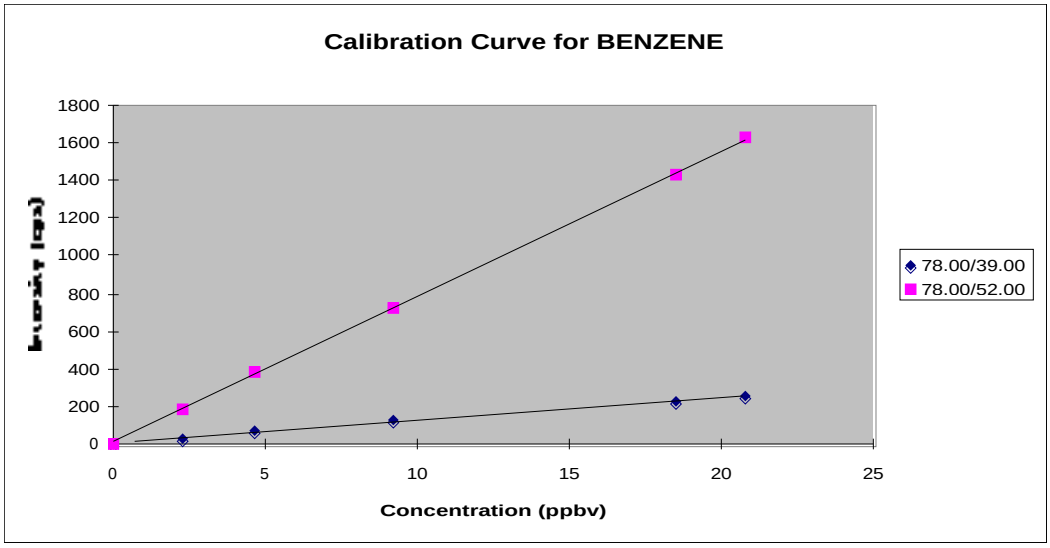
Concentration	106.00/65.0(	106.00/91.00
0	1.77083333	6.875
3.48	29.4791667	324.583333
6.96	47.6041667	603.541667
13.91	100.729167	1265.20833
27.82	197.916667	2890.625
31.3	221.145833	3368.95833

Report	File Name	64MSMS01217 et al.			
	Sample Name	Background check			
	Date	Saturday, May 18, 2019 14:14:10			
	Time Range	2.50	to	3.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	12.76	73.04	246.37	70.64	7.01	107.63
Intercept	12.45	49.77	4.79	-2.10	2.24	-87.33
Intensity	2.29	9.38	15.73	5.10	1.77	6.88
Int SD	4.92	11.86	15.68	8.83	4.81	11.08
Concentration	-0.80	-0.55	0.04	0.10	-0.07	0.88
Conc SD	0.39	0.16	0.06	0.12	0.69	0.10
Compound Con	-0.67		0.07		0.40	
Compound SD	0.19		0.07		0.28	
Det. Limit	1.16	0.49	0.19	0.37	2.06	0.31
Compound DL	0.82		0.28		1.18	

5/18/19.18.17.01
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sat, May 18, 2019 at 18:17:00; Exp. Comment: BTX

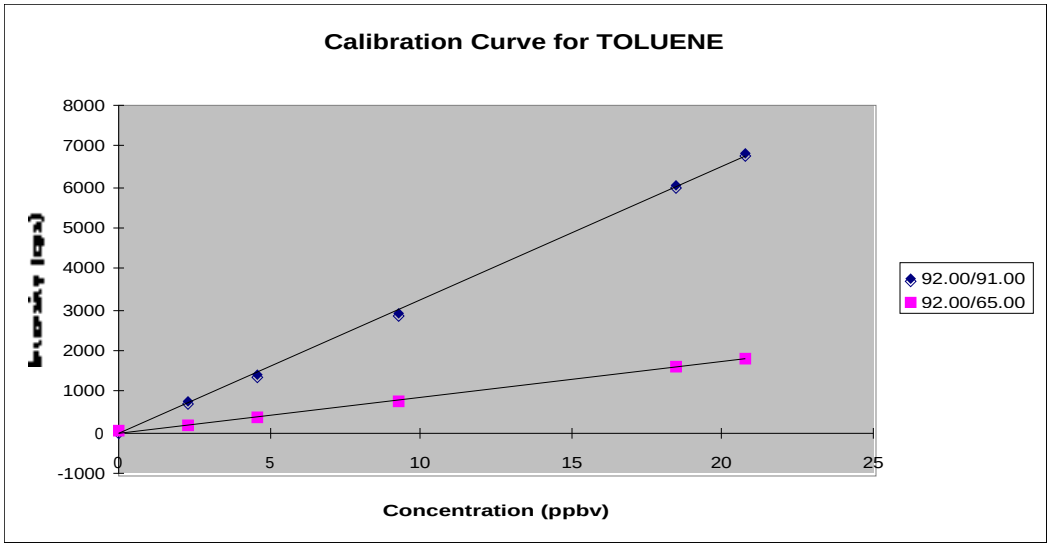




Filename:	64MSMS01220 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, May 18, 2019 18:35:42					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.66	9.10	11.68	13.97	16.12

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	12.219311	77.2702183
Intercept:	6.58408529	13.630199
Correlation:	0.9991406	0.99995266

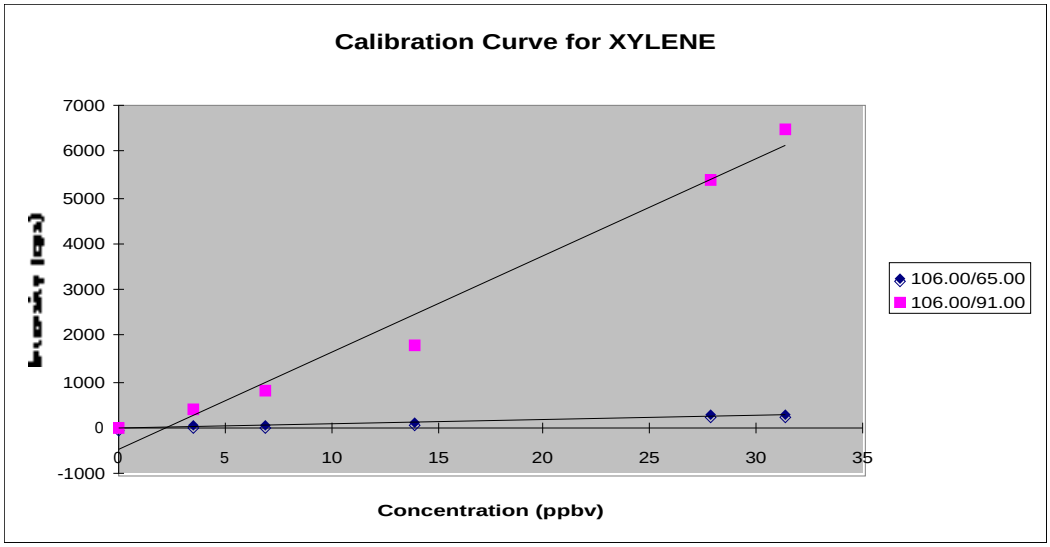
Concentration	78.00/39.00	78.00/52.00
0	1.77083333	6.77083333
2.31	32.9166667	190.9375
4.62	66.6666667	381.25
9.24	126.458333	728.229167
18.49	230.729167	1436.04167
20.8	258.645833	1623.95833



Filename:	64MSMS01220 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, May 18, 2019 18:36:23					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.66	9.10	11.68	13.97	16.12

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	328.494291	87.6080813
Intercept:	-40.392646	-4.9990318
Correlation:	0.9997239	0.99980442

Concentration	92.00/91.00	92.00/65.00
0	39.0625	11.4583333
2.31	731.666667	203.020833
4.62	1430.83333	388.125
9.24	2898.64583	782.708333
18.49	6018.85417	1611.97917
20.8	6856.875	1831.45833



Filename:	64MSMS01220 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Saturday, May 18, 2019 18:36:54					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.66	9.10	11.68	13.97	16.12

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	9.3224451	210.074202
Intercept:	-0.6456099	-458.14199
Correlation:	0.99919042	0.98846175

Concentration	106.00/65.0(	106.00/91.00
0	1.77083333	10.625
3.48	36.5625	368.4375
6.96	60.8333333	784.6875
13.91	121.041667	1778.22917
27.82	262.604167	5366.875
31.3	291.458333	6477.1875

Report	File Name	64MSMS01220 et al.			
	Sample Name	EOD Calibration - BTX 20190518			
	Date	Saturday, May 18, 2019 18:37:35			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	12.22	77.27	328.49	87.61	9.32	210.07
Intercept	6.58	13.63	-40.39	-5.00	-0.65	-458.14
Intensity	1.77	6.77	39.06	11.46	1.77	10.63
Int SD	4.81	10.81	21.33	11.51	5.98	13.12
Concentration	-0.39	-0.09	0.24	0.19	0.26	2.23
Conc SD	0.39	0.14	0.06	0.13	0.64	0.06
Compound Con	-0.24		0.21		1.25	
Compound SD	0.19		0.07		0.25	
Det. Limit	1.18	0.42	0.19	0.39	1.92	0.19
Compound DL	0.80		0.29		1.06	

TAGA FLOW CALIBRATION LOG

Work Assignment: 48001 Initial: YH Date: 5/19/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error (± 10%) $\frac{Difference}{Reference} x\ 100$
6:33	1500SCCS	~191	1500	N/A	N/A
Dwyer Rotameter	Certificate of Calibration #	18DWY00-0925		Calibration Date:	Exp: 9/4/19
Time	Reference Flow Meter	Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error (± 10%) $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
Time	Reference Flow Meter	Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error (± 10%) $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Sun, May 19, 2019, 7:08:21
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY19 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
```

Step	T.Time (min)	Dura.(min)	Flow (µL/min)	Sol.1
0	-0.10	0.10	0.00	100.00
1	0.00	2.00	0.00	100.00
2	2.00	1.00	90.00	100.00
3	3.00	2.00	10.00	100.00
4	5.00	2.00	20.00	100.00
5	7.00	2.00	40.00	100.00

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sun, May 19, 2019, 7:05:07

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.600
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.060
75.000	0.069
100.000	0.077
120.000	0.084
160.000	0.092

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.035
70.000	0.035
100.000	0.033
130.000	0.040
160.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Sun, May 19, 2019, 7:08:31
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY19 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Sun, May 19, 2019, 7:05:07

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.600
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.060
75.000	0.069
100.000	0.077
120.000	0.084
160.000	0.092

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.035
70.000	0.035
100.000	0.033
130.000	0.040
160.000	0.040

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

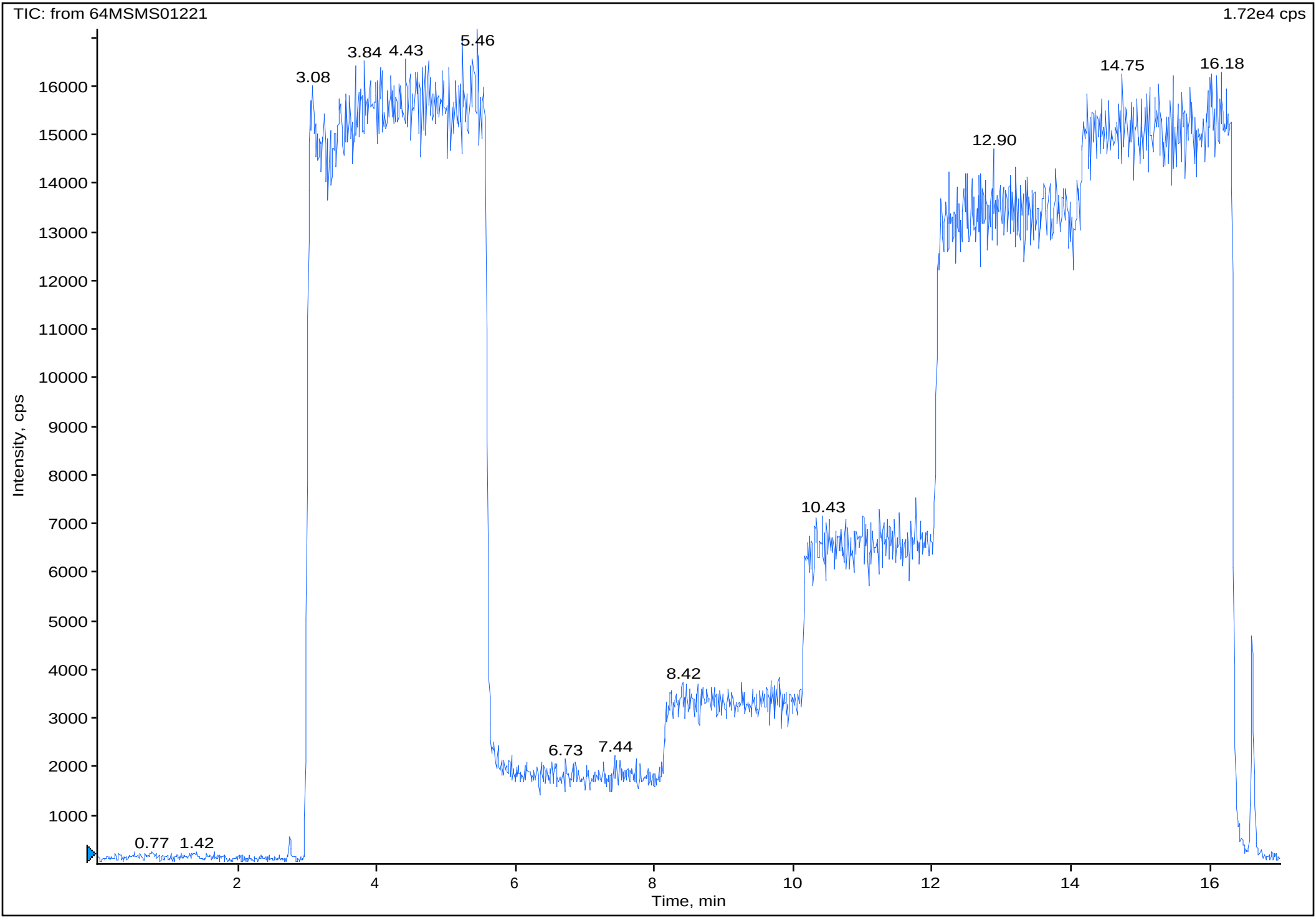
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

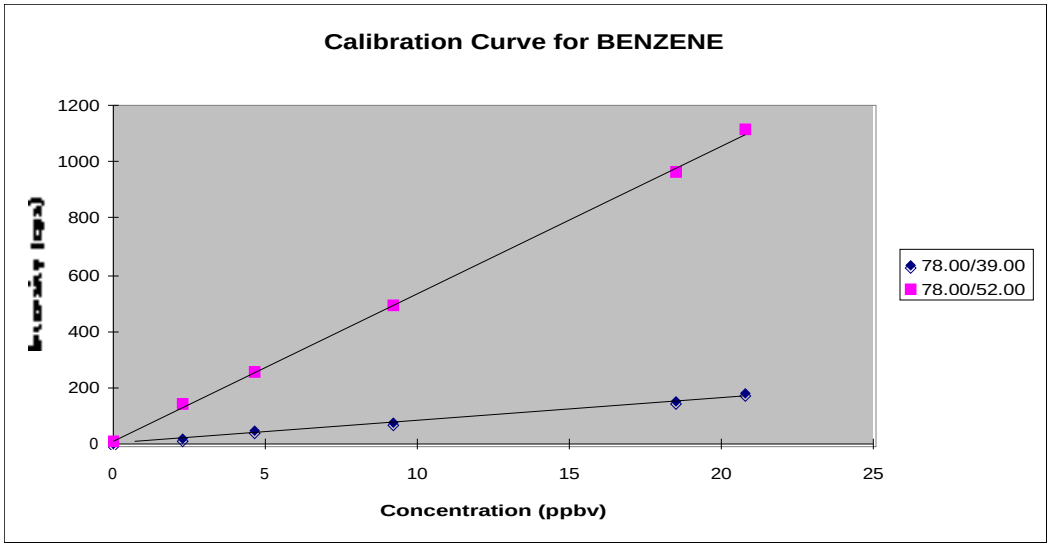
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

5/19/19.7.10.01
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, May 19, 2019 at 7:10:00; Exp. Comment: BTX

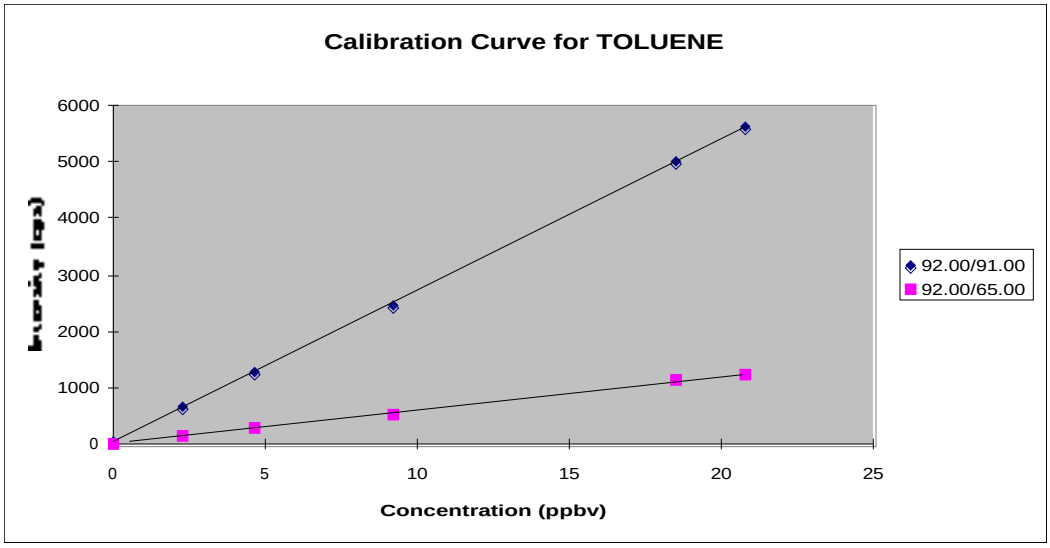




Filename:	64MSMS01221 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, May 19, 2019 7:28:32					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.98	9.18	11.10	13.05	15.21

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	8.10631337	52.2241148
Intercept:	3.10346844	13.457802
Correlation:	0.99931269	0.99978166

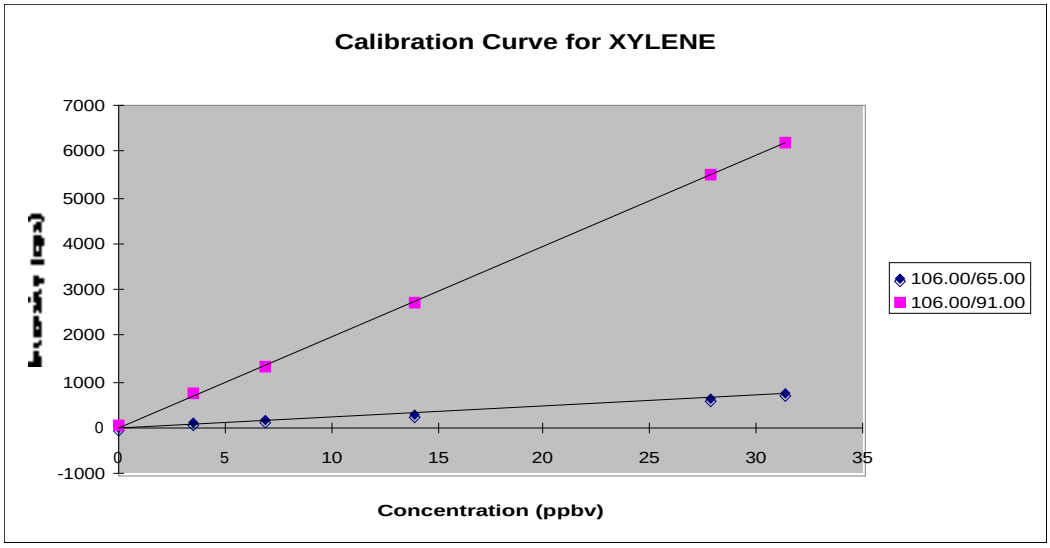
Concentration	78.00/39.00	78.00/52.00
0	3.02083333	7.29166667
2.31	20.625	140.625
4.62	43.0927835	258.762887
9.24	77.2916667	493.854167
18.49	149.166667	964.895833
20.8	175	1111.66667



Filename:	64MSMS01221 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, May 19, 2019 7:29:19					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.98	9.18	11.10	13.05	15.21

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	268.463871	59.9003254
Intercept:	31.7402853	3.20724331
Correlation:	0.99989866	0.99968574

Concentration	92.00/91.00	92.00/65.00
0	49.5833333	11.25
2.31	682.708333	149.791667
4.62	1252.98969	273.71134
9.24	2454.0625	535
18.49	5013.4375	1124.79167
20.8	5626.66667	1246.77083



Filename:	64MSMS01221 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, May 19, 2019 7:29:53					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.98	9.18	11.10	13.05	15.21

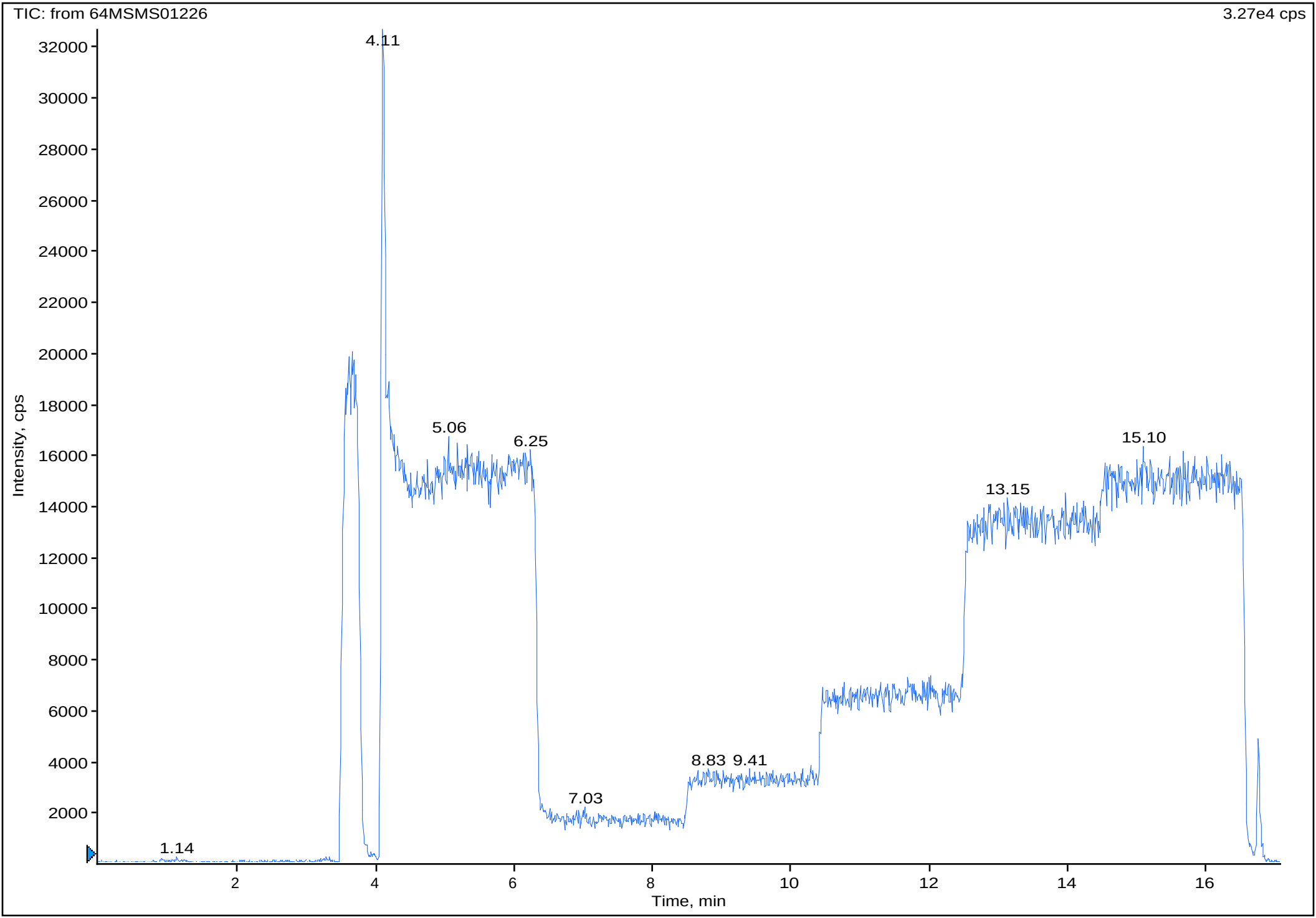
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	23.3176706	197.135475
Intercept:	-3.3325705	9.34956479
Correlation:	0.99927131	0.99989314

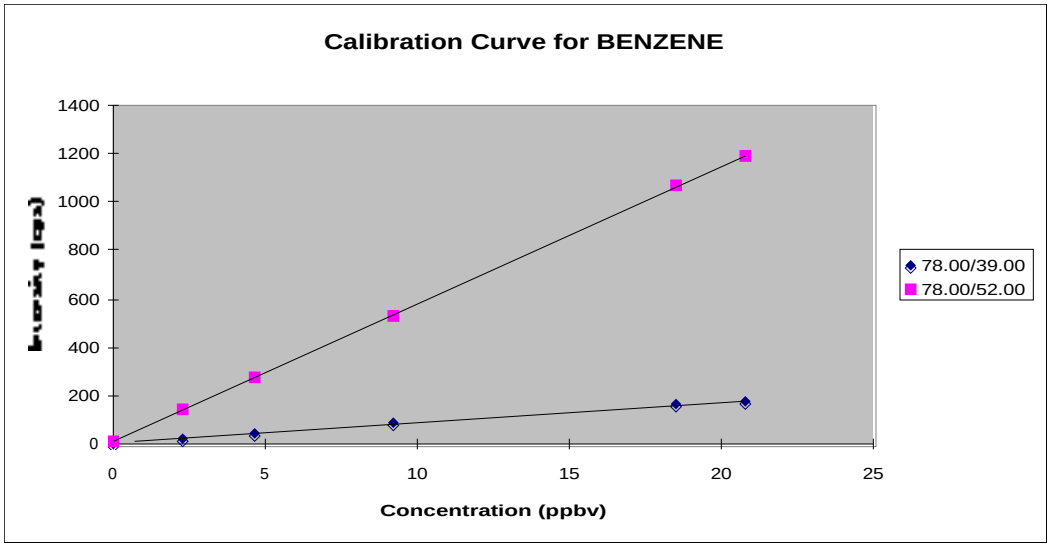
Concentration	106.00/65.0(	106.00/91.00
0	6.5625	45.7291667
3.48	84.7916667	722.291667
6.96	152.268041	1334.43299
13.91	301.5625	2704.375
27.82	644.583333	5515.41667
31.3	736.5625	6188.75

Report	File Name	64MSMS01221 et al.			
	Sample Name	BOD Calibration - BTX 20190519			
	Date	Sunday, May 19, 2019 7:30:28			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	8.11	52.22	268.46	59.90	23.32	197.14
Intercept	3.10	13.46	31.74	3.21	-3.33	9.35
Intensity	3.02	7.29	49.58	11.25	6.56	45.73
Int SD	6.18	10.61	27.91	13.24	9.71	26.90
Concentration	-0.01	-0.12	0.07	0.13	0.42	0.18
Conc SD	0.76	0.20	0.10	0.22	0.42	0.14
Compound Con	-0.06		0.10		0.30	
Compound SD	0.34		0.11		0.20	
Det. Limit	2.29	0.61	0.31	0.66	1.25	0.41
Compound DL	1.45		0.49		0.83	

5/19/19.13.01.06
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, May 19, 2019 at 13:01:05; Exp. Comment: BTX

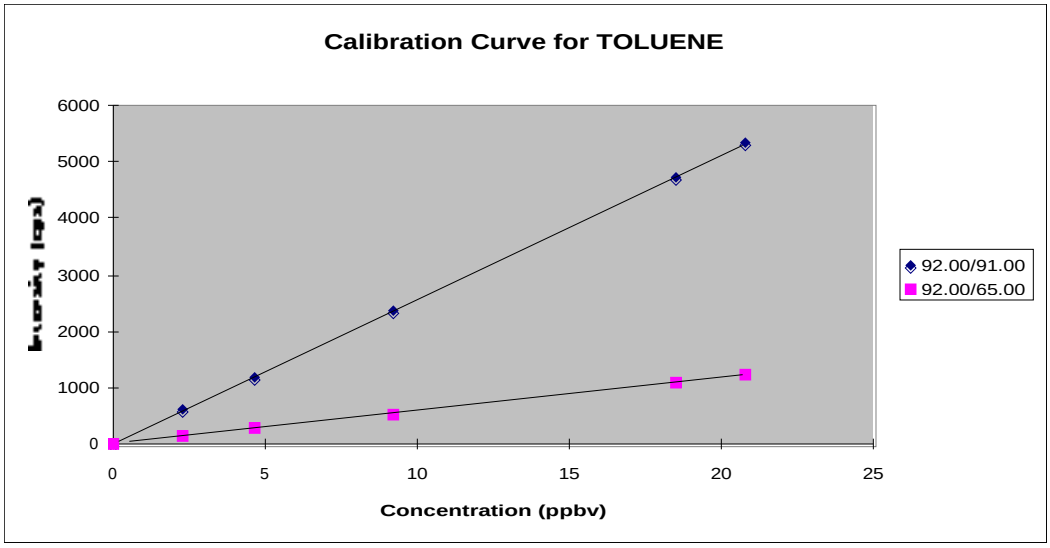




Filename:	64MSMS01226 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, May 19, 2019 13:19:19					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	7.48	9.52	11.39	13.46	15.49

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	8.5460961	57.0991896
Intercept:	2.4526426	7.6151475
Correlation:	0.99962412	0.9999593

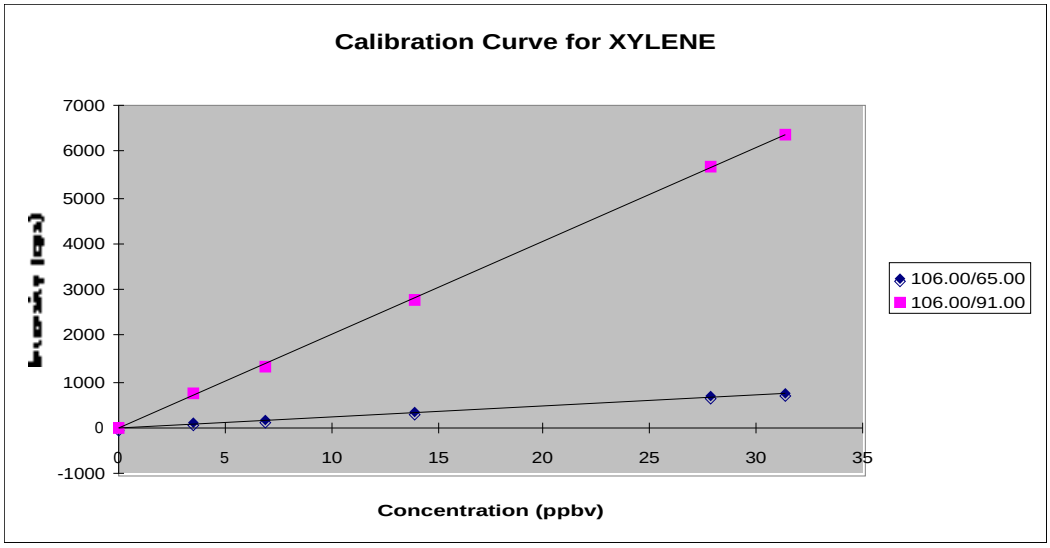
Concentration	78.00/39.00	78.00/52.00
0	1.75257732	8.55670103
2.31	21.9791667	140.9375
4.62	40.5208333	271.354167
9.24	84.742268	529.896907
18.49	161.770833	1070.52083
20.8	177.916667	1191.14583



Filename:	64MSMS01226 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, May 19, 2019 13:19:56					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	7.48	9.52	11.39	13.46	15.49

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	255.068359	58.4457647
Intercept:	18.6393737	0.89621861
Correlation:	0.99999792	0.99981738

Concentration	92.00/91.00	92.00/65.00
0	22.5773196	6.70103093
2.31	606.145833	142.8125
4.62	1192.39583	268.333333
9.24	2376.39175	522.474227
18.49	4741.04167	1084.47917
20.8	5319.375	1221.97917



Filename:	64MSMS01226 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, May 19, 2019 13:20:28					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	2.00	7.48	9.52	11.39	13.46	15.49

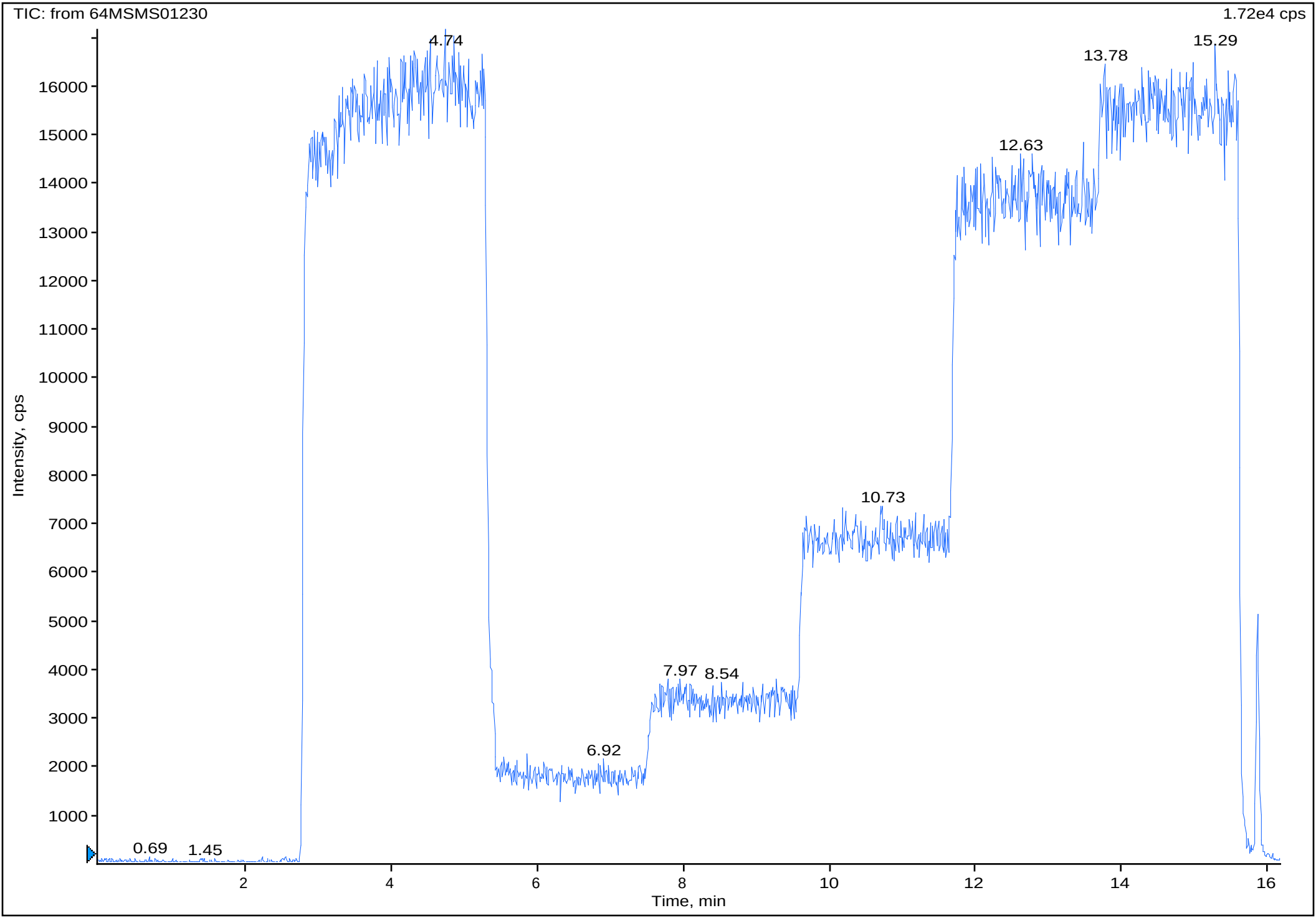
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	23.4299006	204.191045
Intercept:	-5.883103	-27.492533
Correlation:	0.99956664	0.9998636

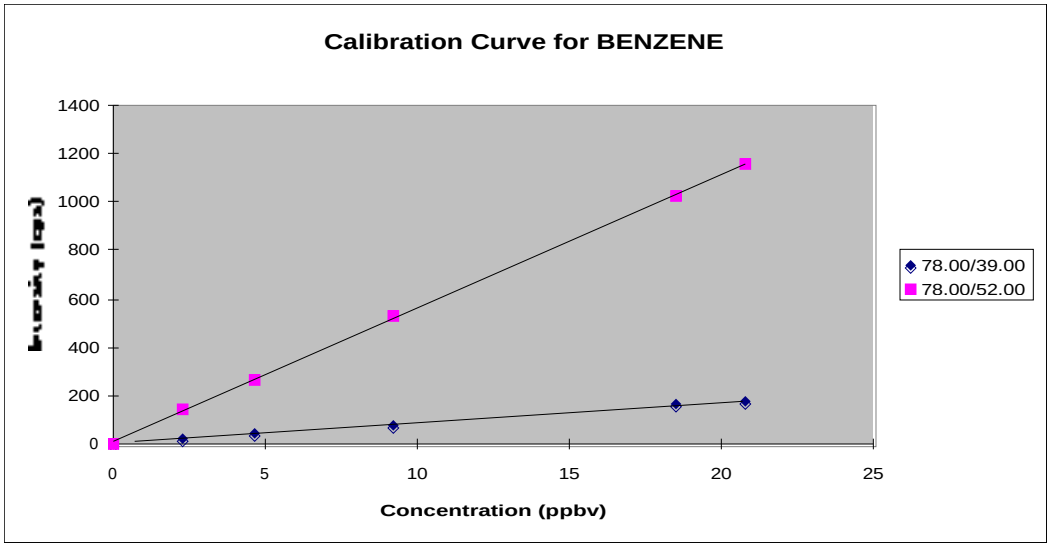
Concentration	106.00/65.0(	106.00/91.00
0	2.16494845	13.814433
3.48	78.9583333	716.875
6.96	148.645833	1341.25
13.91	309.896907	2754.53608
27.82	657.5	5669.375
31.3	723.229167	6383.02083

Report	File Name	64MSMS01226 et al.			
	Sample Name	MOD Calibration - BTX 20190519			
	Date	Sunday, May 19, 2019 13:21:11			
	Time Range	1.50	to	2.50	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	8.55	57.10	255.07	58.45	23.43	204.19
Intercept	2.45	7.62	18.64	0.90	-5.88	-27.49
Intensity	1.77	8.65	22.40	6.77	2.08	13.85
Int SD	4.59	10.53	19.34	8.52	5.21	13.01
Concentration	-0.08	0.02	0.01	0.10	0.34	0.20
Conc SD	0.54	0.18	0.08	0.15	0.22	0.06
Compound Con	-0.03		0.06		0.27	
Compound SD	0.25		0.08		0.10	
Det. Limit	1.61	0.55	0.23	0.44	0.67	0.19
Compound DL	1.08		0.33		0.43	

5/19/19.18.18.46
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Sun, May 19, 2019 at 18:18:45; Exp. Comment: BTX

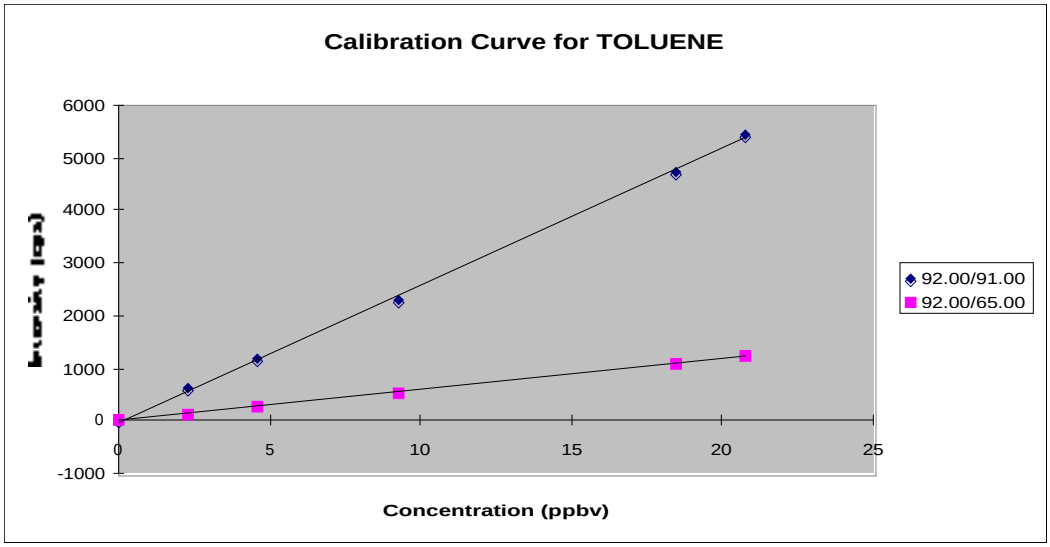




Filename:	64MSMS01230 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, May 19, 2019 18:35:59					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.54	8.63	10.61	12.68	14.61

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	8.47483925	55.100192
Intercept:	1.71631917	13.3294473
Correlation:	0.99976838	0.99984677

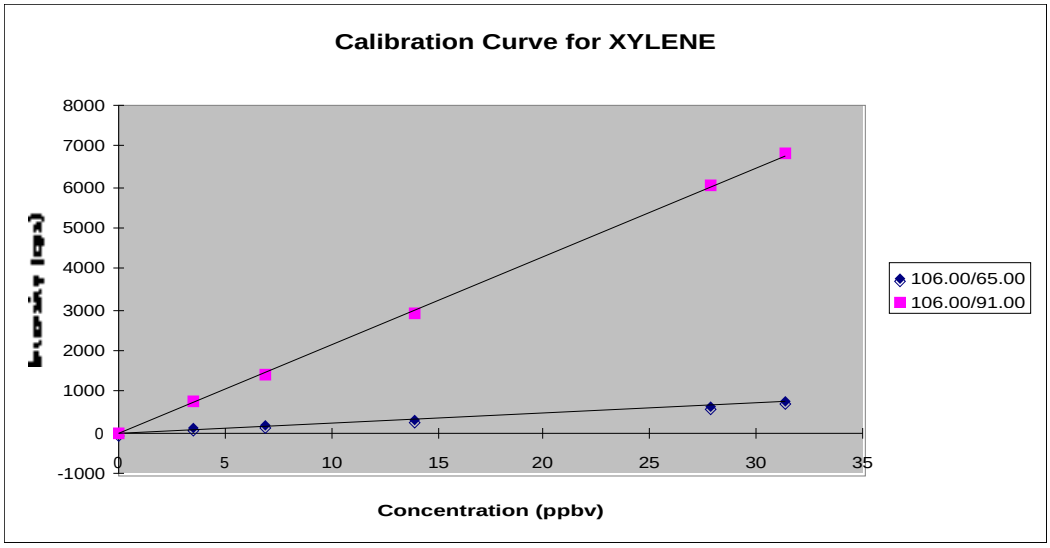
Concentration	78.00/39.00	78.00/52.00
0	0.83333333	2.39583333
2.31	20.7291667	147.604167
4.62	41.5625	267.1875
9.24	81.1458333	533.4375
18.49	160.416667	1024.58333
20.8	175.625	1160.625



Filename:	64MSMS01230 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, May 19, 2019 18:36:36					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.54	8.63	10.61	12.68	14.61

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	259.682192	59.2448632
Intercept:	-21.613781	-1.8908519
Correlation:	0.99976948	0.99989917

Concentration	92.00/91.00	92.00/65.00
0	16.6666667	4.6875
2.31	600.9375	139.583333
4.62	1156.35417	264.166667
9.24	2309.16667	537.8125
18.49	4749.79167	1089.58333
20.8	5439.375	1238.54167



Filename:	64MSMS01230 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Sunday, May 19, 2019 18:37:16					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.54	8.63	10.61	12.68	14.61

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	23.5759334	217.883786
Intercept:	-4.9770547	-28.157852
Correlation:	0.999569	0.99982387

Concentration	106.00/65.0(	106.00/91.00
0	2.39583333	9.375
3.48	82.8125	783.75
6.96	153.958333	1427.5
13.91	306.875	2934.6875
27.82	655.104167	6031.45833
31.3	736.875	6831.04167

Report	File Name	64MSMS01230 et al.			
	Sample Name	EOD Calibration - BTX 20190519			
	Date	Sunday, May 19, 2019 18:37:53			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	8.47	55.10	259.68	59.24	23.58	217.88
Intercept	1.72	13.33	-21.61	-1.89	-4.98	-28.16
Intensity	0.83	2.40	16.67	4.69	2.40	9.38
Int SD	3.13	5.18	16.78	7.67	5.57	10.64
Concentration	-0.10	-0.20	0.15	0.11	0.31	0.17
Conc SD	0.37	0.09	0.06	0.13	0.24	0.05
Compound Con	-0.15		0.13		0.24	
Compound SD	0.16		0.07		0.10	
Det. Limit	1.11	0.28	0.19	0.39	0.71	0.15
Compound DL	0.70		0.29		0.43	

TAGA FLOW CALIBRATION LOG

Work Assignment: 98001 Initial: YH Date: 5/20/2019

Time	Reference Flow Meter	Sample Air Flow (SAF)		MKS Channel 3 Span 1625	
		Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error (± 10%) $\frac{Difference}{Reference} x\ 100$
6:43	1500 SCCS	~191	1500 SCCS	N/A	
Dwyer Rotameter	Certificate of Calibration #	18DWY00-0425		Calibration Date:	Exp: 9/4/2019
		Channel 1 Standard Gas Flow Calibration		MKS Channel 1 Span _____	
Time	Reference Flow Meter	Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error (± 10%) $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	
		Channel 2 Standard Gas Flow Calibration		MKS Channel 2 Span _____	
Time	Reference Flow Meter	Reference Meter Reading	MKS Meter Reading	Difference (Reference-MKS)	% Error (± 10%) $\frac{Difference}{Reference} x\ 100$
Gilibrator Flow Cell	S/N #			Calibration Date:	

Notes:

Method Information

Method Name: BTX CALIBRATION
Last Modified: Mon, May 20, 2019, 7:08:38
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	5714	60.000	01:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY20 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

```
Device Type:                LC Pump
Device Name:                MKS 146 Single
ROM Version:                ROM version cannot be checked.
Comment:                    ROM version cannot be checked.
Solvents:                       1
Solvent name:               Solvent A  %
Timed events:                   0
Device specific parameters:     2
Gradient: 1=Step, 2=Linear      1.0000
Gradient: 1=Step, 2=Linear
Gradient resolution (sec)       5.0000
Gradient resolution in seconds
Timed steps:                    8

Min. Pressure :                 0.0000
Max. Pressure :               100.0000
  Step  T.Time (min)  Dura.(min)  Flow (µL/min)   Sol.1
    0      -0.10         0.10         0.00     100.00
    1       0.00         2.00         0.00     100.00
    2       2.00         1.00        90.00     100.00
    3       3.00         2.00        10.00     100.00
    4       5.00         2.00        20.00     100.00
    5       7.00         2.00        40.00     100.00
```

6	9.00	2.00	80.00	100.00
7	11.00	2.00	90.00	100.00

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Mon, May 20, 2019, 7:05:31

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.600
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.062
75.000	0.067
100.000	0.077
120.000	0.084
160.000	0.092

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.037
70.000	0.042
100.000	0.042
130.000	0.048
160.000	0.042

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

Method Information

Method Name: BTX monitoring
Last Modified: Mon, May 20, 2019, 7:09:07
Comment:

Command	Description		Time (sec)	Reps	Duration (min)	Total Time (hh:mm:ss)
Scan	Mode:	Profile	0.630	17142	180.000	03:00:00
	Thres :	0.1 x 10 E1 cps				
	Pause:	0.0 sec				
	Expt:	MacHD3064:Instrument:expt:MRM BTX				
	State:	MacHD3064:Instrument:state:LPCI2019MAY20 BTX				
	Q1 Cal:	MacHD3064:Instrument:calibration:Q1 Calib LPCI 20190118				
	Q3 Cal:	MacHD3064:Instrument:calibration:Q3 Calib LPCI 20190118				

Active Device Methods:

Experiment Information

Experiment Name: MRM BTX
Last Modified: Mon, Mar 25, 2019, 19:07:38
Scan Type: MRM
Scan Time: 00:00.630 secs
Peak Hopping : Disabled
Q2 Purge : Enabled
Comment: BTX

Mass Defect: 0 mmu/100amu
Pause Time: 5.000 msec

Mass Range Information

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	39.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
78.000	52.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	91.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
92.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	65.000	100.000

Q1 Mass(amu)	Q3 Mass(amu)	Dwell(msec)
106.000	91.000	100.000

State File Information

Last Modified: Mon, May 20, 2019, 7:05:31

Analog Parameters

NC	0.000
TEM	80.000
OR	0.000
RNG	0.000
Q0	-4.600
IQ1	-14.100
ST	-15.000
RO1	-8.000
IQ2	-15.000
RO2	-33.000
IQ3	-34.500
RO3	-38.000
DF	-390.000
CEM	1750.000

On/Off Parameters

POL	Off
NEB	Off
CUR	4
CAD	7

Q1 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.062
75.000	0.067
100.000	0.077
120.000	0.084
160.000	0.092

Q3 Peak Resolution Table

Mass Peak	Mass Shift
30.000	0.037
70.000	0.042
100.000	0.042
130.000	0.048
160.000	0.042

Calibration File Information

Type: Q1 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:38

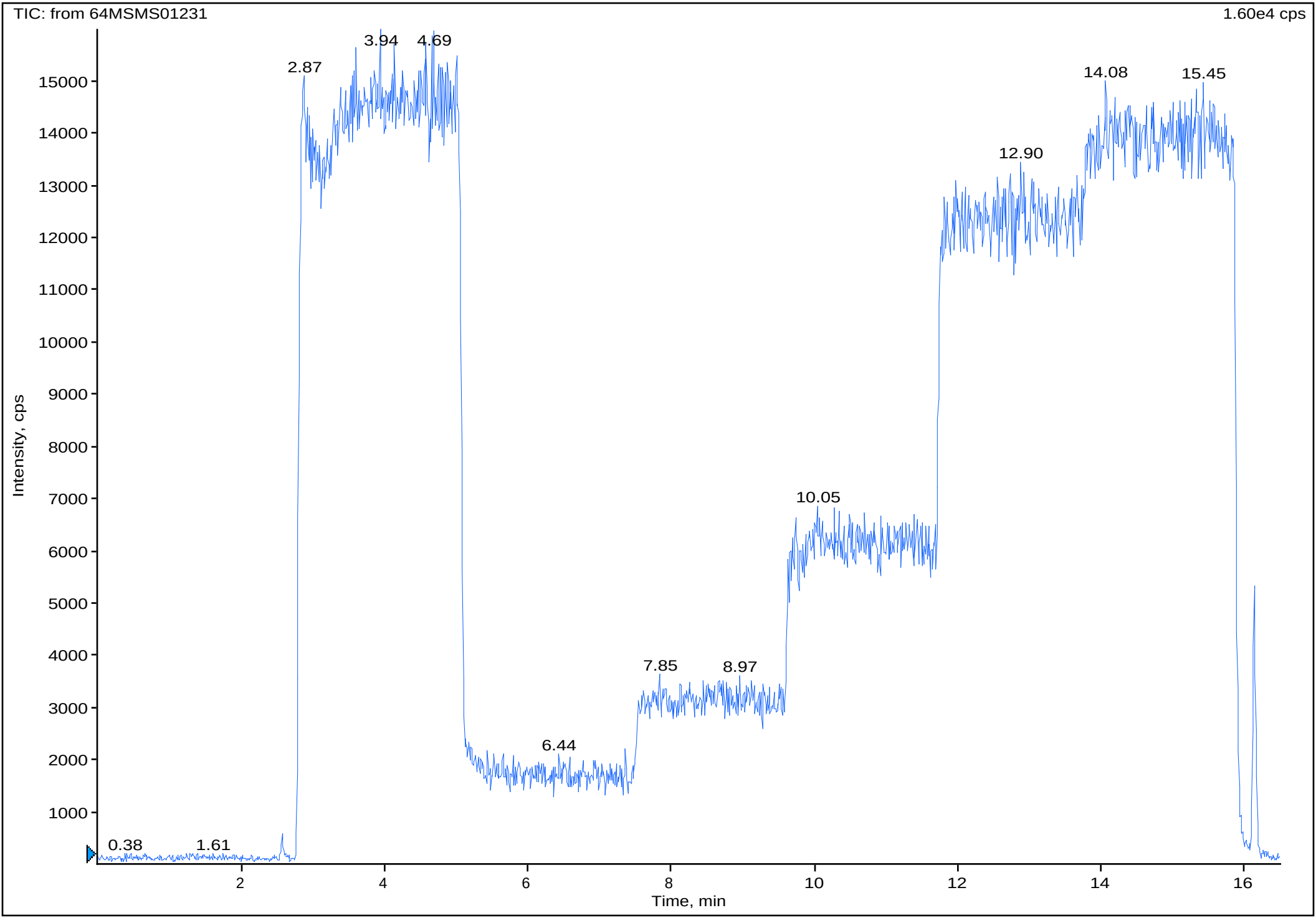
Mass	DAC
78.050	1466
106.080	2002
129.910	2459
165.870	3146

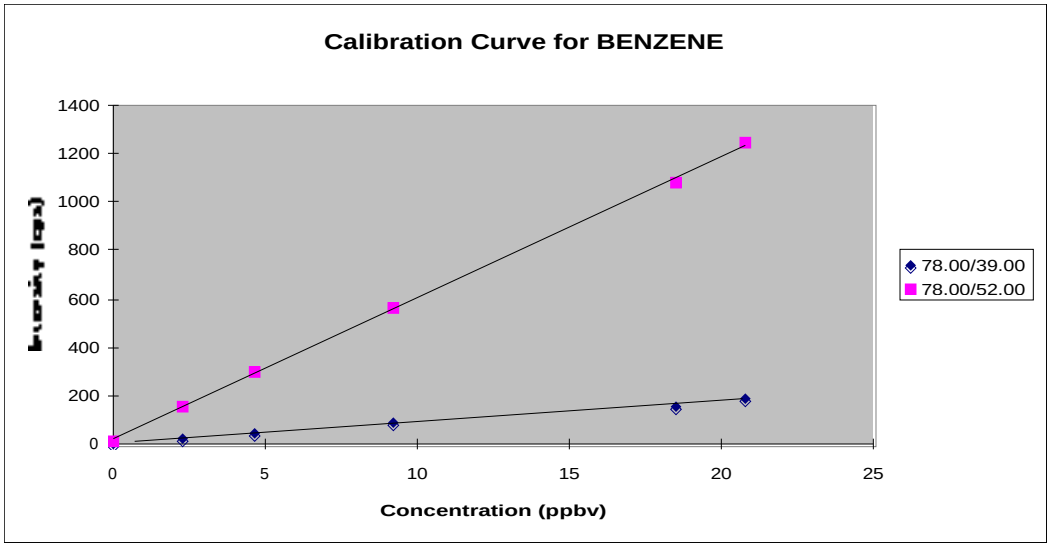
Calibration File Information

Type: Q3 Calibration
Last Modified: Fri, Jan 18, 2019, 9:15:23

Mass	DAC
30.000	551
78.050	1472
105.070	1992
128.910	2449
165.870	3159

5/20/19.7.10.35
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Mon, May 20, 2019 at 7:10:34; Exp. Comment: BTX

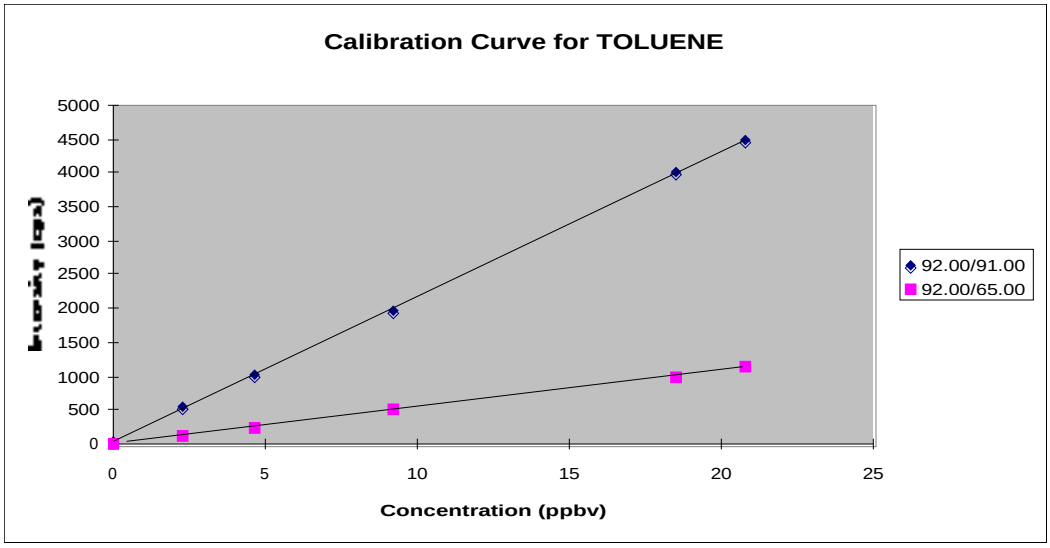




Filename:	64MSMS01231 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, May 20, 2019 7:28:56					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.42	8.58	10.64	12.75	14.77

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	8.54762331	58.6477328
Intercept:	4.46404876	17.1787017
Correlation:	0.99968299	0.99976624

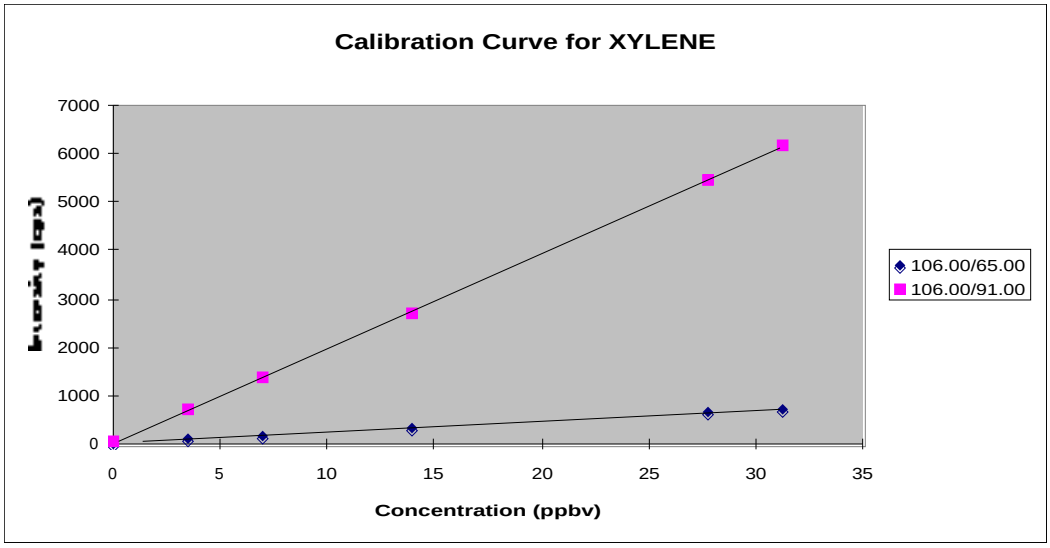
Concentration	78.00/39.00	78.00/52.00
0	2.60416667	8.33333333
2.31	25.4166667	153.75
4.62	44.1666667	299.270833
9.24	85.1041667	560.9375
18.49	159.793814	1085.15464
20.8	183.75	1248.22917



Filename:	64MSMS01231 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, May 20, 2019 7:29:49					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.42	8.58	10.64	12.75	14.77

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	213.911663	53.7315255
Intercept:	36.2558626	5.85412799
Correlation:	0.99989932	0.99992699

Concentration	92.00/91.00	92.00/65.00
0	41.1458333	10.8333333
2.31	547.395833	130.625
4.62	1023.02083	250
9.24	1971.875	499.375
18.49	4026.70103	992.783505
20.8	4470.9375	1131.45833



Filename:	64MSMS01231 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, May 20, 2019 7:30:20					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.42	8.58	10.64	12.75	14.77

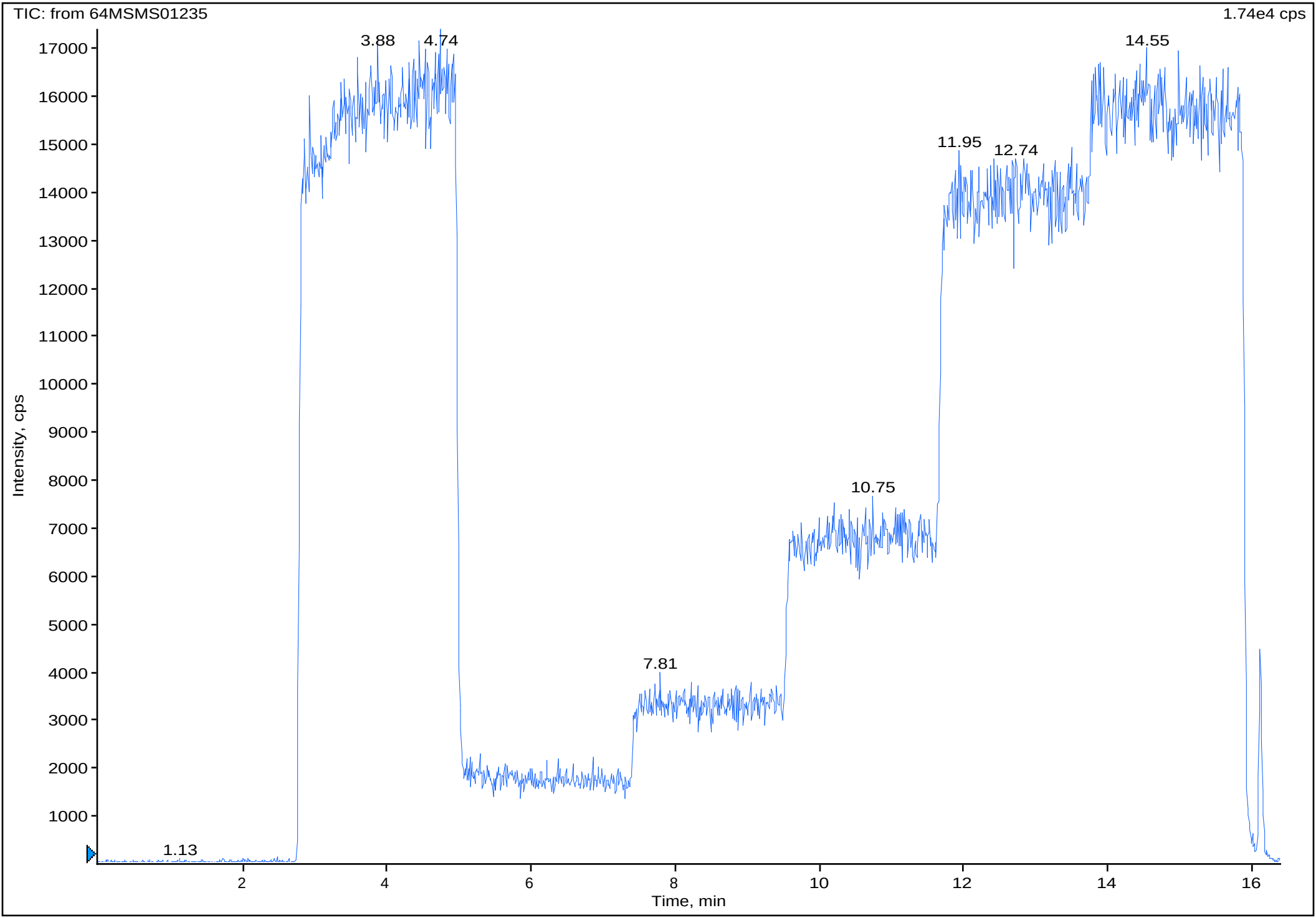
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	23.3869024	195.664143
Intercept:	6.41234623	26.094193
Correlation:	0.99983567	0.99992163

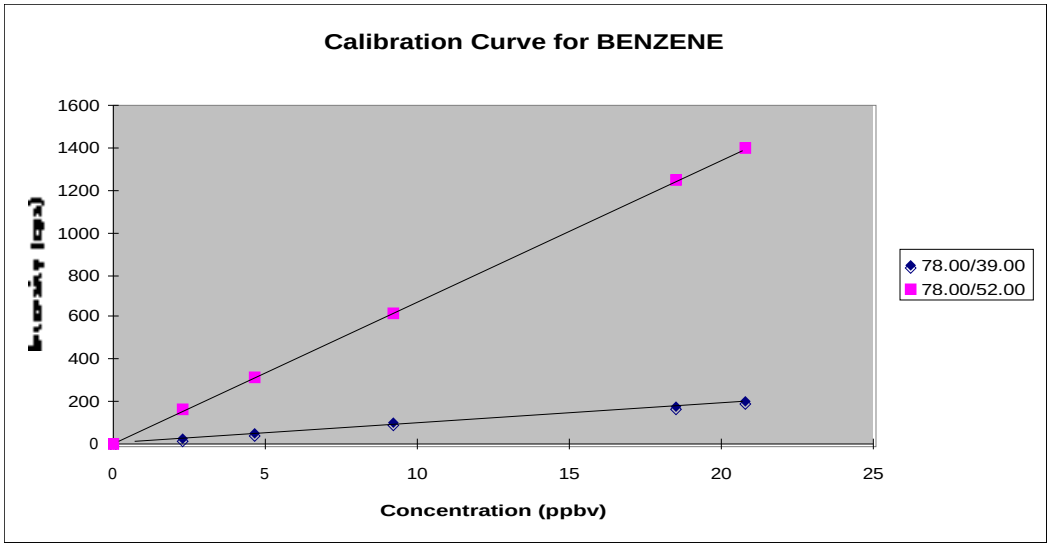
Concentration	106.00/65.0(	106.00/91.00
0	5.52083333	44.2708333
3.48	89.6875	738.333333
6.96	172.8125	1365.83333
13.91	323.75	2693.85417
27.82	664.43299	5479.48454
31.3	734.375	6166.875

Report	File Name	64MSMS01231 et al.			
	Sample Name	BOD Calibration - BTX 20190520			
	Date	Monday, May 20, 2019 7:30:54			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	8.55	58.65	213.91	53.73	23.39	195.66
Intercept	4.46	17.18	36.26	5.85	6.41	26.09
Intensity	2.60	8.33	41.15	10.83	5.52	44.27
Int SD	5.48	10.83	22.05	11.02	7.80	22.98
Concentration	-0.22	-0.15	0.02	0.09	-0.04	0.09
Conc SD	0.64	0.18	0.10	0.21	0.33	0.12
Compound Con	-0.18		0.06		0.03	
Compound SD	0.29		0.11		0.16	
Det. Limit	1.92	0.55	0.31	0.62	1.00	0.35
Compound DL	1.24		0.46		0.68	

5/20/19.13.40.01
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Mon, May 20, 2019 at 13:40:01; Exp. Comment: BTX

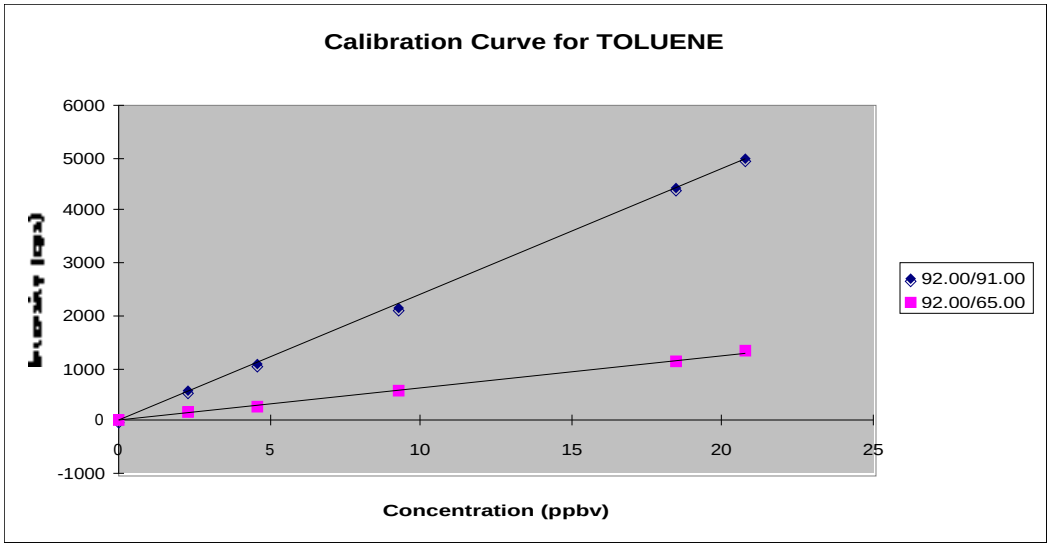




Filename:	64MSMS01235 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, May 20, 2019 13:57:21					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.23	8.54	10.58	12.75	14.78

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	9.56801519	66.8614322
Intercept:	4.52839625	5.1198565
Correlation:	0.99929099	0.99997477

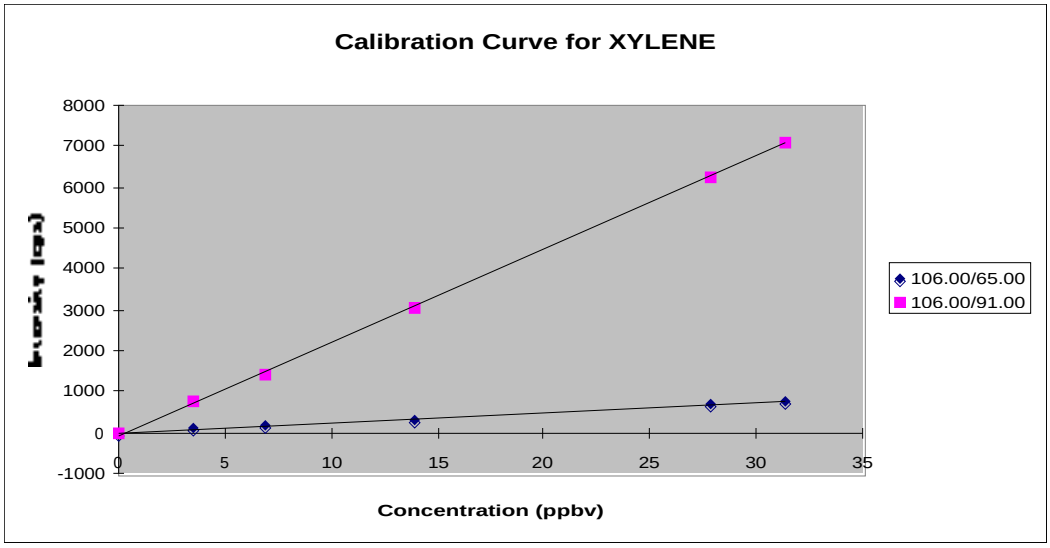
Concentration	78.00/39.00	78.00/52.00
0	1.66666667	3.64583333
2.31	24.375	163.541667
4.62	51.9791667	316.458333
9.24	97.5	615.416667
18.49	179.6875	1243.33333
20.8	202.604167	1396.45833



Filename:	64MSMS01235 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, May 20, 2019 13:58:00					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.23	8.54	10.58	12.75	14.78

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	239.286039	62.6659892
Intercept:	-3.69298	2.54556766
Correlation:	0.99985784	0.99985056

Concentration	92.00/91.00	92.00/65.00
0	14.8958333	5.3125
2.31	583.229167	146.770833
4.62	1075.20833	279.6875
9.24	2151.14583	596.25
18.49	4447.1875	1153.85417
20.8	4976.97917	1308.85417



Filename:	64MSMS01235 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, May 20, 2019 13:58:34					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.23	8.54	10.58	12.75	14.78

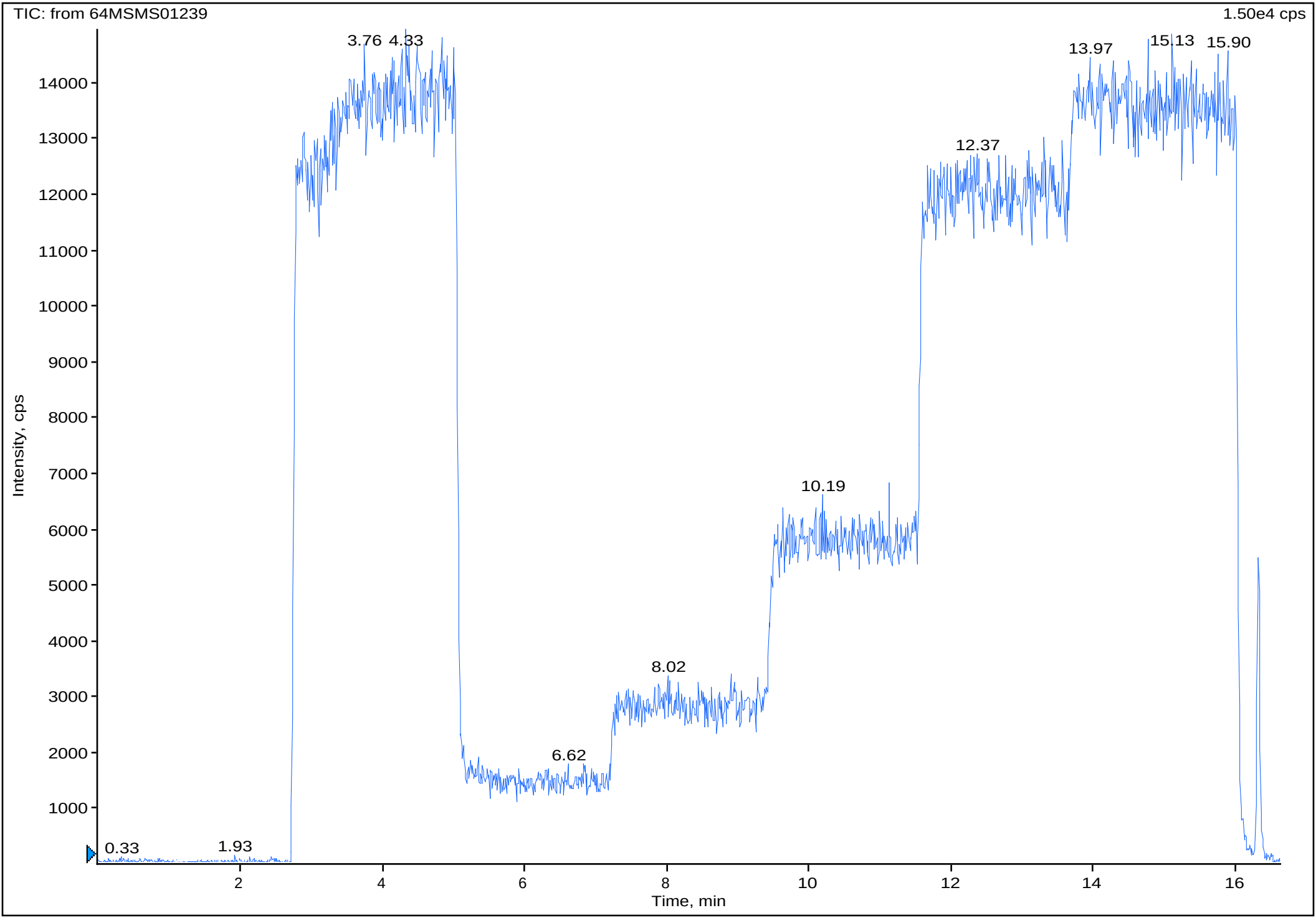
	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	24.4976755	227.618929
Intercept:	-13.21669	-68.433669
Correlation:	0.99908734	0.99977478

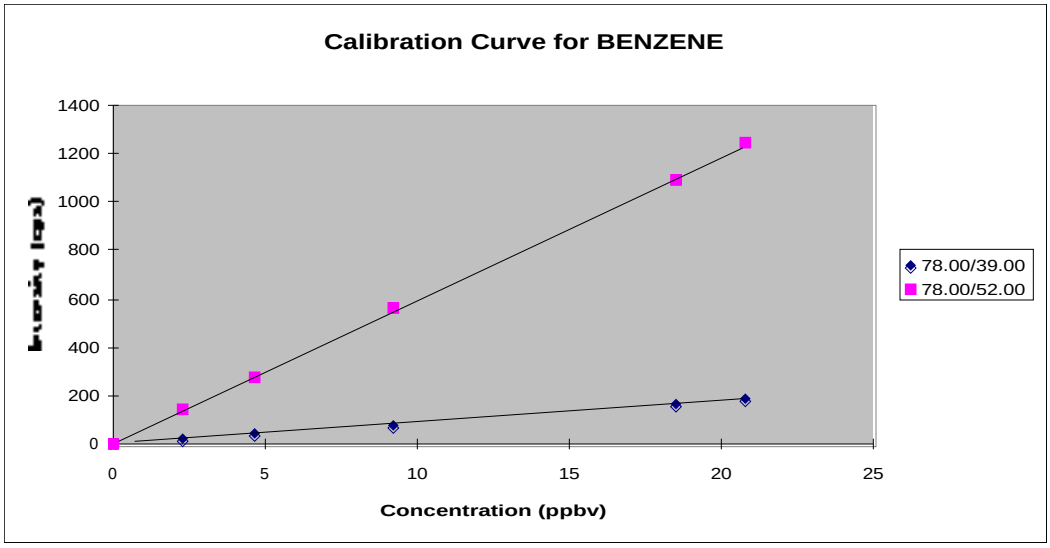
Concentration	106.00/65.0(	106.00/91.00
0	1.97916667	9.27083333
3.48	77.1875	747.8125
6.96	147.083333	1422.08333
13.91	305.520833	3052.39583
27.82	671.875	6254.16667
31.3	761.875	7103.02083

Report	File Name	64MSMS01235 et al.			
	Sample Name	MOD Calibration - BTX 20190520			
	Date	Monday, May 20, 2019 13:59:07			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	9.57	66.86	239.29	62.67	24.50	227.62
Intercept	4.53	5.12	-3.69	2.55	-13.22	-68.43
Intensity	1.67	3.65	14.90	5.31	1.98	9.27
Int SD	4.02	6.34	14.94	7.10	5.15	8.97
Concentration	-0.30	-0.02	0.08	0.04	0.62	0.34
Conc SD	0.42	0.09	0.06	0.11	0.21	0.04
Compound Con	-0.16		0.06		0.48	
Compound SD	0.18		0.06		0.09	
Det. Limit	1.26	0.28	0.19	0.34	0.63	0.12
Compound DL	0.77		0.26		0.37	

5/20/19.19.17.18
Period 1, Expt. 1; Dwell: 100.0 ms; Pause: 5.0 ms
Acq. Time: Mon, May 20, 2019 at 19:17:18; Exp. Comment: BTX

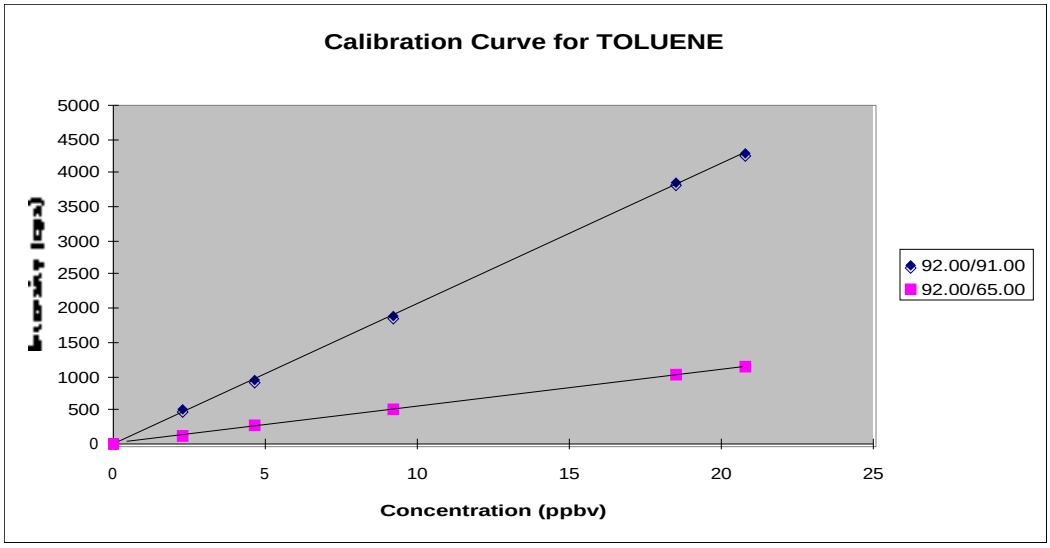




Filename:	64MSMS01239 et al.					
Compound na	BENZENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, May 20, 2019 19:34:48					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.18	8.32	10.53	12.60	14.81

	Ion 1	Ion 2
Q1 Mass:	78	78
Q3 Mass:	39	52
Slope:	8.83479372	59.3006668
Intercept:	1.54886223	5.423198
Correlation:	0.99953284	0.99992645

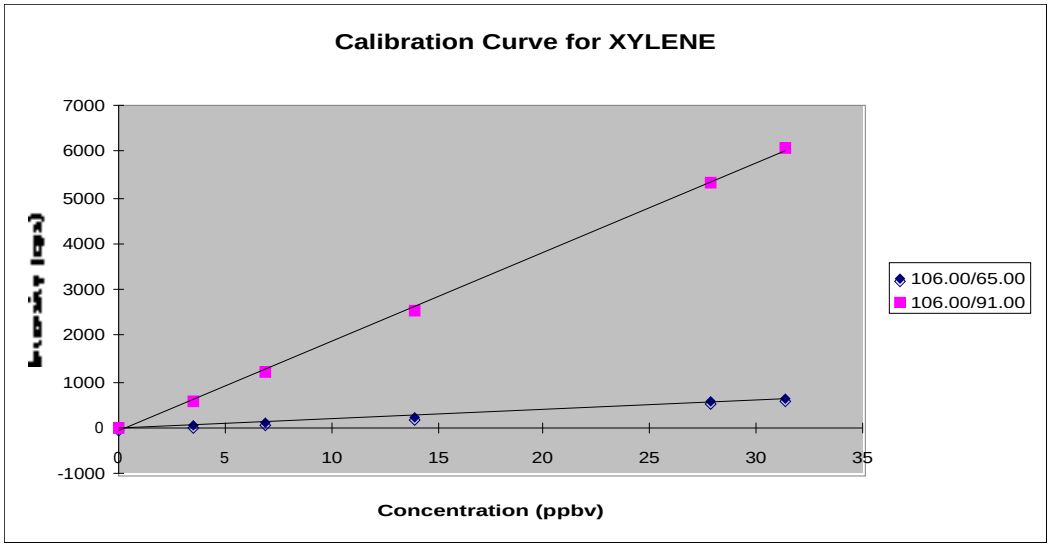
Concentration	78.00/39.00	78.00/52.00
0	1.66666667	3.54166667
2.31	24.6875	145.208333
4.62	40.2083333	273.541667
9.24	81.0416667	561.979167
18.49	167.8125	1094.27083
20.8	183.854167	1242.8125



Filename:	64MSMS01239 et al.					
Compound na	TOLUENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, May 20, 2019 19:35:49					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.18	8.32	10.53	12.60	14.81

	Ion 1	Ion 2
Q1 Mass:	92	92
Q3 Mass:	91	65
Slope:	207.470309	55.263988
Intercept:	3.34180552	2.94389876
Correlation:	0.99993013	0.99993658

Concentration	92.00/91.00	92.00/65.00
0	11.7708333	3.95833333
2.31	497.291667	136.25
4.62	941.354167	257.1875
9.24	1904.16667	504.583333
18.49	3870.625	1023.02083
20.8	4301.14583	1157.60417



Filename:	64MSMS01239 et al.					
Compound na	XYLENE					
Conc. units:	ppbv					
Width (min):	0.5					
User name:	BPK					
Comment:						
Date:	Monday, May 20, 2019 19:36:22					
Num. ions:	2					
Num. concs.	6					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Ctr Pt.(min):	1.50	6.18	8.32	10.53	12.60	14.81

	Ion 1	Ion 2
Q1 Mass:	106	106
Q3 Mass:	65	91
Slope:	19.697955	195.444366
Intercept:	-15.732773	-96.561036
Correlation:	0.99891037	0.99948013

Concentration	106.00/65.0(	106.00/91.00
0	1.14583333	9.79166667
3.48	52.0833333	592.395833
6.96	108.125	1195
13.91	245.625	2516.45833
27.82	542.083333	5322.1875
31.3	600.729167	6098.54167

Report	File Name	64MSMS01239 et al.			
	Sample Name	EOD Calibration - BTX 20190520			
	Date	Monday, May 20, 2019 19:36:54			
	Time Range	1.00	to	2.00	min
	Conc Units:	ppbv			
	Num Ions	6.00			

Name	BENZENE	BENZENE	TOLUENE	TOLUENE	XYLENE	XYLENE
Q1 Mass	78.00	78.00	92.00	92.00	106.00	106.00
Q3 Mass	39.00	52.00	91.00	65.00	65.00	91.00
Slope	8.83	59.30	207.47	55.26	19.70	195.44
Intercept	1.55	5.42	3.34	2.94	-15.73	-96.56
Intensity	1.67	3.54	11.77	3.96	1.15	9.79
Int SD	4.74	6.49	12.57	7.18	3.80	11.33
Concentration	0.01	-0.03	0.04	0.02	0.86	0.54
Conc SD	0.54	0.11	0.06	0.13	0.19	0.06
Compound Con	-0.01		0.03		0.70	
Compound SD	0.23		0.07		0.09	
Det. Limit	1.61	0.33	0.18	0.39	0.58	0.17
Compound DL	0.97		0.29		0.38	

APPENDIX C

Compiled Meteorological Data

Intercontinental Terminals Company Emergency Response

Final Analytical TAGA Report

Agust 2019

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
03/19/19	0:00	56.3	47.5	72.2	2.4	73	-	-
03/19/19	1:00	56.6	46.6	69.1	2.2	76	-	-
03/19/19	2:00	56.8	46.4	68.3	2.7	70	-	-
03/19/19	3:00	56.5	46.8	69.9	2.3	72	-	-
03/19/19	4:00	56.1	47.2	71.9	1.9	52	-	-
03/19/19	5:00	55.8	46.9	72	1.7	35	-	-
03/19/19	6:00	55.4	46	70.6	2.1	36	-	-
03/19/19	7:00	56.4	44.3	64.1	3.4	65	-	-
03/19/19	8:00	59.9	38.4	44.9	6.6	84	-	-
03/19/19	9:00	64.2	35.3	34.2	9.7	91	-	-
03/19/19	10:00	64.6	37	36.1	12.5	95	-	-
03/19/19	11:00	65.9	37.9	35.6	11.9	103	-	-
03/19/19	12:00	67.2	38.5	34.8	12	100	-	-
03/19/19	13:00	67.8	38.2	33.7	12.4	103	-	-
03/19/19	14:00	68.3	36.5	31	12.4	107	-	-
03/19/19	15:00	68.2	35.5	30	12.4	109	-	-
03/19/19	16:00	66.7	38.7	35.8	11	116	-	-
03/19/19	17:00	64.6	38.9	38.8	9.4	146	-	-
03/19/19	18:00	61.2	42.2	49.7	7	143	-	-
03/19/19	19:00	59.1	44.8	59.2	3.2	161	-	-
03/19/19	20:00	58	46	64.2	2.5	156	-	-
03/19/19	21:00	56.8	47.3	70.6	1.6	199	-	-
03/19/19	22:00	55.6	47.4	74	0.6	238	-	-
03/19/19	23:00	55.1	47.6	76	0.9	69	-	-
03/20/19	0:00	54.5	48.1	79	0.9	4	-	-
03/20/19	1:00	53.6	47.9	81	0.7	325	-	-
03/20/19	2:00	52.5	47.6	83.2	0.5	124	-	-
03/20/19	3:00	51	47.1	86.7	0.9	332	-	-
03/20/19	4:00	50.4	47.4	89.6	0.8	63	-	-
03/20/19	5:00	51.5	49.3	92.1	1.6	38	-	-
03/20/19	6:00	50.8	48.7	92.6	1	34	-	-
03/20/19	7:00	54	48.3	81.2	0.9	9	-	-
03/20/19	8:00	60.4	46.3	59.8	2.8	58	-	-
03/20/19	9:00	64.4	38.7	39.1	4.1	99	-	-
03/20/19	10:00	67.3	34	29.2	3.6	125	-	-
03/20/19	11:00	69.4	32.7	25.8	4.1	74	-	-
03/20/19	12:00	70.8	32.4	24.3	4.6	117	-	-
03/20/19	13:00	72.4	33.5	24	4.7	139	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
03/20/19	14:00	72.8	35.8	25.9	5.6	126	-	-
03/20/19	15:00	73.7	34.4	23.8	4.6	146	-	-
03/20/19	16:00	73.8	35.3	24.5	4.7	119	-	-
03/20/19	17:00	71.5	37.9	29.5	5.4	129	-	-
03/20/19	18:00	68.6	41.2	37	6.7	177	-	-
03/20/19	19:00	65.3	41.9	42.4	6.8	203	-	-
03/20/19	20:00	63.2	43.7	49.1	5.2	218	-	-
03/20/19	21:00	61.6	47.4	59.6	4.6	242	-	-
03/20/19	22:00	60.1	48.3	65.1	3.9	268	-	-
03/20/19	23:00	59.5	48.4	66.5	4.8	255	-	-
03/21/19	0:00	59.6	49.4	68.9	3.9	281	-	-
03/21/19	1:00	59.7	49	67.6	2	354	-	-
03/21/19	2:00	59.7	49.1	67.8	2.2	24	-	-
03/21/19	3:00	58.8	49.1	69.9	1.7	33	-	-
03/21/19	4:00	57.5	47.9	70.3	1.6	49	-	-
03/21/19	5:00	56.8	47.7	71.7	1.9	73	-	-
03/21/19	6:00	54.4	47.5	77.6	1.1	122	-	-
03/21/19	7:00	57.5	45.6	64.6	1.8	98	-	-
03/21/19	8:00	62.4	41.1	45.7	4.4	98	-	-
03/21/19	9:00	65.7	32.5	29.2	3.3	55	-	-
03/21/19	10:00	67.8	27.7	22.2	4.4	55	-	-
03/21/19	11:00	69.8	27.6	20.6	4.1	65	-	-
03/21/19	12:00	70.9	27.1	19.5	4.2	269	-	-
03/21/19	13:00	72.3	24.7	16.9	3.8	324	-	-
03/21/19	14:00	73.7	27	17.7	3.8	335	-	-
03/21/19	15:00	75.2	26.9	16.7	5	314	-	-
03/21/19	16:00	75.2	27.6	17.2	4.4	328	-	-
03/21/19	17:00	74.4	27.9	17.8	3.6	331	-	-
03/21/19	18:00	68.9	39.5	35.4	6	172	-	-
03/21/19	19:00	63.2	43.8	49.2	5.9	197	-	-
03/21/19	20:00	60.6	45.9	58.3	5.2	208	-	-
03/21/19	21:00	59.4	47.3	64.3	4.2	218	-	-
03/21/19	22:00	58.7	47.5	66.3	4.4	222	-	-
03/21/19	23:00	57.6	48.2	70.8	3.7	230	-	-
03/22/19	0:00	56.5	48.8	75.6	2.8	235	-	-
03/22/19	1:00	55.9	48.8	77.1	3.8	241	-	-
03/22/19	2:00	55.4	49	78.9	3.6	249	-	-
03/22/19	3:00	54.6	49.4	82.6	2.5	269	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
03/22/19	4:00	53.7	49.6	86	1.8	261	-	-
03/22/19	5:00	53.1	49.7	88.1	1.9	274	-	-
03/22/19	6:00	53.5	50.7	90.2	1.6	268	-	-
03/22/19	7:00	56.5	51.2	82.4	1.1	323	-	-
03/22/19	8:00	62.9	52.8	69.9	2.1	312	-	-
03/22/19	9:00	68.7	51.5	54.4	3.4	299	-	-
03/22/19	10:00	72.2	43.1	35.6	2.8	291	-	-
03/22/19	11:00	74.9	38	26.3	4	142	-	-
03/22/19	12:00	75.9	36.9	24.5	5.7	140	-	-
03/22/19	13:00	77.1	37.7	24.3	6.1	140	-	-
03/22/19	14:00	77.2	41.4	27.9	9.5	133	-	-
03/22/19	15:00	76.6	40.3	27.3	10.5	127	-	-
03/22/19	16:00	76.1	37.7	25	10.3	128	-	-
03/22/19	17:00	74.2	35.2	24.1	9	157	-	-
03/22/19	18:00	69.9	37.9	31.1	6.7	166	-	-
03/22/19	19:00	66.7	41.6	40.2	4.8	177	-	-
03/22/19	20:00	63.9	51.3	63.8	4.6	188	-	-
03/22/19	21:00	62.4	54.8	76.3	4.8	190	-	-
03/22/19	22:00	61.3	55	79.6	4.1	180	-	-
03/22/19	23:00	60.3	54.9	82.3	1.7	170	-	-
03/23/19	0:00	59.5	55.2	85.6	2.8	151	-	-
03/23/19	1:00	59.4	56	88.4	2.6	177	-	-
03/23/19	2:00	58.6	55.9	90.5	0.9	138	-	-
03/23/19	3:00	58.4	56.1	92	2.4	133	-	-
03/23/19	4:00	59	56.5	91.6	3	134	-	-
03/23/19	5:00	60.3	56.4	87.1	4.1	129	-	-
03/23/19	6:00	61	55.4	81.8	3.5	134	-	-
03/23/19	7:00	63.8	55.2	73.4	5.3	130	-	-
03/23/19	8:00	66.7	55.7	67.6	7.4	128	-	-
03/23/19	9:00	69.8	55.3	59.9	11	127	-	-
03/23/19	10:00	70.4	55.1	58.3	12.1	127	-	-
03/23/19	11:00	70.8	55.1	57.6	12.9	125	-	-
03/23/19	12:00	70.6	55.6	59	13.4	123	-	-
03/23/19	13:00	69.5	55.9	62.1	13	124	-	-
03/23/19	14:00	69.1	55.4	61.9	12.5	125	-	-
03/23/19	15:00	69.8	55.2	59.8	12.7	124	-	-
03/23/19	16:00	68.9	56.6	65	12.4	121	-	-
03/23/19	17:00	68	57.4	68.7	10.4	124	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
03/23/19	18:00	67.1	57.6	71.6	9.5	126	-	-
03/23/19	19:00	65.6	57.6	75.4	7.7	127	-	-
03/23/19	20:00	64.6	58.8	81.4	7.3	128	-	-
03/23/19	21:00	64.3	58.8	82.5	6.7	130	-	-
03/23/19	22:00	63.8	58.4	82.6	2.3	138	-	-
03/23/19	23:00	62.9	59	87.5	1.8	107	-	-
03/24/19	0:00	63.7	59.3	85.5	4.7	128	-	-
03/24/19	1:00	63.5	59	85.5	3.4	129	-	-
03/24/19	2:00	63.2	60	89.4	3.2	114	-	-
03/24/19	3:00	62.8	60	90.6	3.1	97	-	-
03/24/19	4:00	62.2	60.1	92.8	3.2	99	-	-
03/24/19	5:00	62.2	60.3	93.6	2.9	88	-	-
03/24/19	6:00	62.3	60.5	93.9	1.5	81	-	-
03/24/19	7:00	64.5	61.9	91.4	3.9	120	-	-
03/24/19	8:00	69.7	61.6	75.7	7.8	150	-	-
03/24/19	9:00	72.1	61.8	69.9	9.6	172	-	-
03/24/19	10:00	73.4	61.6	66.5	8.1	176	-	-
03/24/19	11:00	73.7	62	67	8.6	172	-	-
03/24/19	12:00	74.7	61.2	63	9.4	154	-	-
03/24/19	13:00	75.2	62.4	64.4	8.6	169	-	-
03/24/19	14:00	75.7	62.8	64.2	8.9	161	-	-
03/24/19	15:00	75.2	63.1	66	9.4	160	-	-
03/24/19	16:00	73.9	63.4	69.9	10.1	161	-	-
03/24/19	17:00	72.8	63.5	72.7	9.2	168	-	-
03/24/19	18:00	71.3	63.6	76.7	8.2	168	-	-
03/24/19	19:00	69.6	63.8	81.9	6.7	166	-	-
03/24/19	20:00	68.6	64	85.3	6.3	173	-	-
03/24/19	21:00	68.2	64.1	86.7	6	175	-	-
03/24/19	22:00	68.2	63.9	86	6.6	175	-	-
03/24/19	23:00	67.1	64	89.6	5.2	174	-	-
03/25/19	0:00	67.1	64.3	90.8	5.3	183	-	-
03/25/19	1:00	66.8	64	90.8	5	196	-	-
03/25/19	2:00	66.1	63.7	92	5.4	205	-	-
03/25/19	3:00	66.4	63.9	91.6	5.6	206	-	-
03/25/19	4:00	66.8	64.2	91.3	4.6	239	-	-
03/25/19	5:00	67.2	64.3	90.4	4.2	212	-	-
03/25/19	6:00	67.9	64.4	88.4	2.1	241	-	-
03/25/19	7:00	68.6	64.4	86.7	0.9	279	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
03/25/19	8:00	69.5	64.4	83.7	2.7	202	-	-
03/25/19	9:00	71.1	64.1	78.8	3	261	-	-
03/25/19	10:00	75.5	61.8	62.4	6.5	261	-	-
03/25/19	11:00	77.3	61.6	58.5	6.1	270	-	-
03/25/19	12:00	79.1	60.8	53.7	5.5	281	-	-
03/25/19	13:00	80.5	61	51.6	4.8	271	-	-
03/25/19	14:00	82.1	59.8	46.9	5.2	255	-	-
03/25/19	15:00	82.1	60.1	47.5	3.6	274	-	-
03/25/19	16:00	83.4	58.5	43	4.5	262	-	-
03/25/19	17:00	79.8	62.7	56.3	5.1	41	-	-
03/25/19	18:00	77.7	61.1	56.9	5.1	29	-	-
03/25/19	19:00	74.3	61.8	66.5	6.4	74	-	-
03/25/19	20:00	70.8	65.5	83.3	5.5	112	-	-
03/25/19	21:00	69.4	65.1	86.1	3	114	-	-
03/25/19	22:00	68	64.8	89.4	1.1	5	-	-
03/25/19	23:00	66.5	64.1	92.2	1.4	353	-	-
03/26/19	0:00	67	55.9	68.7	3.8	18	-	-
03/26/19	1:00	64.8	49.8	58.2	4.4	20	-	-
03/26/19	2:00	62.4	49.1	61.8	4.6	23	-	-
03/26/19	3:00	60.4	49.5	67.3	4.5	23	-	-
03/26/19	4:00	59.3	49.4	69.6	3.9	34	-	-
03/26/19	5:00	58.5	48.8	70.3	4	41	-	-
03/26/19	6:00	57.6	48.2	70.7	3	48	-	-
03/26/19	7:00	60.1	46	59.7	5.8	68	-	-
03/26/19	8:00	62.6	45.5	53.7	6.1	62	-	-
03/26/19	9:00	65.4	44.8	47.3	5.9	73	-	-
03/26/19	10:00	67.7	44.5	43.2	5.1	64	-	-
03/26/19	11:00	69.9	44.2	39.7	5.6	21	-	-
03/26/19	12:00	71.5	43.9	37.1	5.4	19	-	-
03/26/19	13:00	73.1	43.3	34.4	5.7	55	-	-
03/26/19	14:00	74.8	44.5	34	5.1	51	-	-
03/26/19	15:00	75.3	43.9	32.6	4.7	33	-	-
03/26/19	16:00	75.3	43.8	32.5	4.6	33	-	-
03/26/19	17:00	74.5	44.6	34.5	4.4	32	-	-
03/26/19	18:00	72.2	46.4	39.9	3.7	33	-	-
03/26/19	19:00	70.1	48.3	45.9	2.8	23	-	-
03/26/19	20:00	68.6	49.3	50.2	3.3	45	-	-
03/26/19	21:00	65.8	50	56.7	4.7	84	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
03/26/19	22:00	63.7	50	61.1	3.7	83	-	-
03/26/19	23:00	61.8	48.9	62.6	4.5	87	-	-
03/27/19	0:00	61.1	47.2	60.2	5.8	85	-	-
03/27/19	1:00	60	47.2	62.6	3.9	71	-	-
03/27/19	2:00	59.1	47.7	65.9	4.6	79	-	-
03/27/19	3:00	58.8	45.6	61.5	6.8	86	-	-
03/27/19	4:00	58.3	45.1	61.4	6.2	83	-	-
03/27/19	5:00	57.7	46.9	67.5	6	82	-	-
03/27/19	6:00	57.7	47.7	69.4	6	82	-	-
03/27/19	7:00	60.7	46.1	58.8	8.1	87	-	-
03/27/19	8:00	63.5	42.7	46.8	10.1	94	-	-
03/27/19	9:00	64.9	40.3	40.6	10.9	100	-	-
03/27/19	10:00	65.8	37.8	35.6	10.3	102	-	-
03/27/19	11:00	67.3	36.9	32.7	7.4	111	-	-
03/27/19	12:00	67.9	35.8	30.5	7.5	119	-	-
03/27/19	13:00	69.6	35.2	28.2	7.1	103	-	-
03/27/19	14:00	70.1	39.5	32.8	8.1	120	-	-
03/27/19	15:00	69.6	41.7	36.3	8.4	118	-	-
03/27/19	16:00	68.1	41.3	37.6	9.1	138	-	-
03/27/19	17:00	66.4	40.2	38.4	8.8	137	-	-
03/27/19	18:00	63	42.5	47.5	7.2	134	-	-
03/27/19	19:00	60.5	48.1	63.6	5.8	138	-	-
03/27/19	20:00	58.9	50	72.1	3.6	170	-	-
03/27/19	21:00	58.6	50.8	75.4	3.4	160	-	-
03/27/19	22:00	58.2	51.3	77.8	2.8	141	-	-
03/27/19	23:00	58.5	51.8	78.4	3.6	141	-	-
03/28/19	0:00	57.7	52.2	81.9	2.4	150	-	-
03/28/19	1:00	57.3	52.6	84.5	2.5	127	-	-
03/28/19	2:00	57.7	52.8	83.8	3.1	133	-	-
03/28/19	3:00	58.5	53.5	83.3	3.4	126	-	-
03/28/19	4:00	59.6	54	81.6	5.1	129	-	-
03/28/19	5:00	60.5	54.8	81.5	5.1	128	-	-
03/28/19	6:00	60.8	54.8	80.7	3.9	141	-	-
03/28/19	7:00	63.4	53.9	71.1	5.8	140	-	-
03/28/19	8:00	67	53.5	62.1	7.5	141	-	-
03/28/19	9:00	69.3	52.9	56	9.7	152	-	-
03/28/19	10:00	70.4	52.8	53.6	9.6	151	-	-
03/28/19	11:00	71.5	52.2	50.7	9.7	147	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
03/28/19	12:00	72.7	51.5	47.5	10.7	141	-	-
03/28/19	13:00	73.5	51.4	46	12.1	147	-	-
03/28/19	14:00	73.2	52.1	47.7	12.3	144	-	-
03/28/19	15:00	71.9	52.6	50.6	12.3	152	-	-
03/28/19	16:00	71	53.3	53.6	12.1	152	-	-
03/28/19	17:00	69.5	54.3	58.5	10.3	150	-	-
03/28/19	18:00	68.1	55.5	64.2	7.3	155	-	-
03/28/19	19:00	66.8	56.3	69.1	4.8	145	-	-
03/28/19	20:00	65.9	57.8	75.4	5.4	133	-	-
03/28/19	21:00	65.8	59.4	80	7.7	128	-	-
03/28/19	22:00	65.1	59.6	82.5	5	138	-	-
03/29/19	23:00	64	59.4	85.1	4.3	131	-	-
03/29/19	0:00	64.1	59.1	83.8	5.4	132	-	-
03/29/19	1:00	63.2	58.8	85.8	3	155	-	-
03/29/19	2:00	63	59.1	87.2	5.3	137	-	-
03/29/19	3:00	64.7	60.6	86.4	7.6	142	-	-
03/29/19	4:00	65.2	60.9	86.1	6.3	150	-	-
03/29/19	5:00	64.8	61	87.5	4.2	150	-	-
03/29/19	6:00	65.4	61.1	86	4.3	127	-	-
03/29/19	7:00	66.9	61.2	81.9	4.7	133	-	-
03/29/19	8:00	68.8	60.8	75.5	6.2	140	-	-
03/29/19	9:00	70.3	60.4	71	7.8	128	-	-
03/29/19	10:00	71.8	60.4	67.5	8.6	129	-	-
03/29/19	11:00	75.4	58.3	55.4	12.6	154	-	-
03/29/19	12:00	75.8	57.6	53.3	12.7	151	-	-
03/29/19	13:00	76	58.1	53.8	13.2	154	-	-
03/29/19	14:00	76.9	58.4	52.8	14.5	149	-	-
03/29/19	15:00	75.8	57.4	52.8	12.5	155	-	-
03/29/19	16:00	75.3	58.3	55.6	12.8	147	-	-
03/29/19	17:00	72.8	59.8	63.9	12	152	-	-
03/29/19	18:00	70.6	60.3	69.8	10.9	151	-	-
03/29/19	19:00	68.9	60.5	74.6	7.4	155	-	-
03/29/19	20:00	67.9	61.1	78.9	5.5	150	-	-
03/29/19	21:00	67.3	61.7	82.1	5.2	148	-	-
03/29/19	22:00	66.5	61.2	83.3	4.8	144	-	-
03/29/19	23:00	66.1	61.2	84.3	4.2	153	-	-
03/30/19	0:00	65.4	61.9	88.4	4.3	151	-	-
03/30/19	1:00	65.5	62.4	89.7	4.5	157	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
03/30/19	2:00	66.7	63.2	88.6	6.9	160	-	-
03/30/19	3:00	67.6	63.7	87.2	6.9	169	-	-
03/30/19	4:00	67.3	64	88.9	6.8	169	-	-
03/30/19	5:00	67.2	64.2	90.2	5.7	170	-	-
03/30/19	6:00	67.3	64.2	89.6	5.4	157	-	-
03/30/19	7:00	68.6	64.1	85.6	6.2	158	-	-
03/30/19	8:00	71.4	64	77.5	7.7	185	-	-
03/30/19	9:00	73.5	64.1	72.6	6.9	192	-	-
03/30/19	10:00	74	64.5	72.4	5	222	-	-
03/30/19	11:00	74.8	63.2	67.3	3.4	247	-	-
03/30/19	12:00	75.9	61.4	60.8	4	280	-	-
03/30/19	13:00	75.9	61.8	61.6	5.1	316	-	-
03/30/19	14:00	75.7	61.1	60.6	4.1	325	-	-
03/30/19	15:00	73.9	60.5	63.2	5.5	337	-	-
03/30/19	16:00	62.1	57.4	84.9	9.2	334	-	-
03/30/19	17:00	58.4	52.9	82	9.8	343	-	-
03/30/19	18:00	58	49.7	73.9	9.3	346	-	-
03/30/19	19:00	57.6	47	67.7	9.3	347	-	-
03/30/19	20:00	56.1	44.9	66	10.1	343	-	-
03/30/19	21:00	54.1	42.7	65.3	8.9	345	-	-
03/30/19	22:00	52.7	39.8	61.5	9.8	344	-	-
03/30/19	23:00	52.2	39.4	61.5	9.7	359	-	-
03/31/19	0:00	51.3	37	58	9	7	-	-
03/31/19	1:00	50.6	35.5	56.1	10.4	11	-	-
03/31/19	2:00	49.7	36.6	60.5	10.1	12	-	-
03/31/19	3:00	49.6	36.1	59.6	8.3	11	-	-
03/31/19	4:00	49.3	34.8	57.3	8.6	9	-	-
03/31/19	5:00	49.1	35	58.2	7.4	14	-	-
03/31/19	6:00	48.8	35	58.7	8.6	8	-	-
03/31/19	7:00	48.7	35.2	59.5	8.7	9	-	-
03/31/19	8:00	48.9	35.7	60.3	7.8	10	-	-
03/31/19	9:00	49.3	36.1	60.3	6.3	25	-	-
03/31/19	10:00	49.8	36.2	59.3	6.7	14	-	-
03/31/19	11:00	50.7	36.1	57.1	6	14	-	-
03/31/19	12:00	51.7	35.5	53.9	5.9	20	-	-
03/31/19	13:00	52.9	36.5	53.7	6.8	13	-	-
03/31/19	14:00	53.6	37.2	53.6	5.5	359	-	-
03/31/19	15:00	53.1	37.3	54.8	5.9	18	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
03/31/19	16:00	52.8	36.9	54.5	5.9	25	-	-
03/31/19	17:00	52.1	37.7	57.7	5.5	14	-	-
03/31/19	18:00	51.8	37.7	58.6	4.6	21	-	-
03/31/19	19:00	50.6	38.2	62.3	3.7	34	-	-
03/31/19	20:00	49.3	38.5	66.4	2.3	29	-	-
03/31/19	21:00	49.1	38.6	67	3.3	36	-	-
03/31/19	22:00	47.9	37.1	66	2.8	57	-	-
03/31/19	23:00	47.2	35.7	64.1	3.7	69	-	-
04/01/19	0:00	46.7	35.5	64.9	4	75	-	-
04/01/19	1:00	46.6	35.4	64.7	4.2	68	-	-
04/01/19	2:00	46.3	35.9	67	4.4	63	-	-
04/01/19	3:00	45.6	35.6	67.9	3.1	53	-	-
04/01/19	4:00	44.5	36.4	72.9	2.2	18	-	-
04/01/19	5:00	43.5	36.6	76.5	2.5	24	-	-
04/01/19	6:00	43.7	35.6	73.2	3.3	23	-	-
04/01/19	7:00	46.8	33.3	59.5	3.8	38	-	-
04/01/19	8:00	49.5	32.2	51.3	4.8	47	-	-
04/01/19	9:00	50.4	33.7	52.6	4.6	28	-	-
04/01/19	10:00	52.4	33.5	48.3	4.7	38	-	-
04/01/19	11:00	53.5	33.7	46.9	4	3	-	-
04/01/19	12:00	54	33.6	45.8	3.4	330	-	-
04/01/19	13:00	54.3	34	46.2	5.2	327	-	-
04/01/19	14:00	54.5	33.9	45.6	4.4	322	-	-
04/01/19	15:00	54.6	34.2	46	2.7	352	-	-
04/01/19	16:00	54.7	35.9	49	2.9	33	-	-
04/01/19	17:00	54.3	36.4	50.6	3.5	24	-	-
04/01/19	18:00	53.2	38.2	56.9	2.7	23	-	-
04/01/19	19:00	51.1	39.1	63.4	1.6	355	-	-
04/01/19	20:00	50.2	39.3	66.1	2	350	-	-
04/01/19	21:00	49.7	39.3	67.4	1.4	344	-	-
04/01/19	22:00	48.5	39.3	70.5	0.8	350	-	-
04/01/19	23:00	47.8	38.6	70.5	1.6	23	-	-
04/02/19	0:00	46.5	38.1	72.4	1.4	73	-	-
04/02/19	1:00	45.6	38.6	76.6	1.6	76	-	-
04/02/19	2:00	44.7	38	77.4	1.8	73	-	-
04/02/19	3:00	43.6	38.4	81.6	2.1	87	-	-
04/02/19	4:00	43.9	39.1	83.3	2.8	77	-	-
04/02/19	5:00	44.4	40.5	86	3.4	77	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/02/19	6:00	44.6	40.9	86.9	1.7	85	-	-
04/02/19	7:00	48.8	40.5	72.8	2.2	86	-	-
04/02/19	8:00	54.2	39.4	57.6	3.8	111	-	-
04/02/19	9:00	57.8	35	42.4	3.2	124	-	-
04/02/19	10:00	60.7	30.2	31.6	2.9	51	-	-
04/02/19	11:00	63.6	28.7	26.8	3.9	58	-	-
04/02/19	12:00	65.3	27.5	24	4.8	83	-	-
04/02/19	13:00	67.5	30.3	24.8	4.3	50	-	-
04/02/19	14:00	67.9	28.6	22.9	5.6	22	-	-
04/02/19	15:00	68.9	26.6	20.4	4.5	46	-	-
04/02/19	16:00	69.1	31.3	24.6	5.9	77	-	-
04/02/19	17:00	65.8	39	37.6	8.9	113	-	-
04/02/19	18:00	61	44.7	55.4	7.1	133	-	-
04/02/19	19:00	58	44.6	61	5.7	153	-	-
04/02/19	20:00	56.5	44.8	64.9	4.2	158	-	-
04/02/19	21:00	55.5	45.6	69.4	2	152	-	-
04/02/19	22:00	54.6	45.8	72.2	2	132	-	-
04/02/19	23:00	53.7	46	75.3	1.5	100	-	-
04/03/19	0:00	53	46.5	78.5	1.6	86	-	-
04/03/19	1:00	53.6	45.8	74.9	1.7	80	-	-
04/03/19	2:00	52.7	45.7	77	1	117	-	-
04/03/19	3:00	54	46.8	76.8	1.6	119	-	-
04/03/19	4:00	55.2	47.4	75.1	1.2	98	-	-
04/03/19	5:00	54.5	48	78.7	1.8	73	-	-
04/03/19	6:00	55.9	50.1	80.8	3	69	-	-
04/03/19	7:00	58	50.3	75.6	5	86	-	-
04/03/19	8:00	61.2	49.6	65.8	6.7	92	-	-
04/03/19	9:00	64.2	49.3	58.4	9.6	104	-	-
04/03/19	10:00	65.8	51.3	59.7	11.3	102	-	-
04/03/19	11:00	66.3	52.8	61.8	10.3	102	-	-
04/03/19	12:00	66.4	53.2	62.3	11.7	105	-	-
04/03/19	13:00	67.4	54	62.4	13.6	102	-	-
04/03/19	14:00	67.5	55	64.1	12.9	106	-	-
04/03/19	15:00	66.9	55.4	66.5	13.3	108	-	-
04/03/19	16:00	65.8	56.5	71.9	10.8	108	-	-
04/03/19	17:00	64.5	57.4	77.8	13.4	104	-	-
04/03/19	18:00	63.9	57.4	79.5	12.8	103	-	-
04/03/19	19:00	64	57.7	80	11.5	105	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/03/19	20:00	64.4	58.5	81.2	12.6	106	-	-
04/03/19	21:00	65.2	59.2	81.1	12.2	110	-	-
04/03/19	22:00	65.4	60.4	83.7	10.3	115	-	-
04/03/19	23:00	65.6	61.5	86.9	9	115	-	-
04/04/19	0:00	65.2	62.4	90.9	9.9	127	-	-
04/04/19	1:00	65.7	63.2	91.3	8.8	129	-	-
04/04/19	2:00	66.5	64.2	92	6.5	143	-	-
04/04/19	3:00	68.1	65.9	92.6	8.1	148	-	-
04/04/19	4:00	69.2	66.8	92.3	7.2	154	-	-
04/04/19	5:00	69.9	67.3	91.4	7.7	168	-	-
04/04/19	6:00	70.5	67.5	90.3	6.9	183	-	-
04/04/19	7:00	71.1	67.5	88.4	6.9	189	-	-
04/04/19	8:00	71.5	67.7	87.8	5.9	211	-	-
04/04/19	9:00	72.2	68.7	88.9	5	220	-	-
04/04/19	10:00	75.7	68.6	78.7	9.6	200	-	-
04/04/19	11:00	77.5	68.6	74.3	10.3	229	-	-
04/04/19	12:00	77.1	68.8	75.7	9	236	-	-
04/04/19	13:00	80.2	67	64.2	11.1	222	-	-
04/04/19	14:00	81.7	65.8	58.6	11.2	225	-	-
04/04/19	15:00	81.7	65.7	58.6	10.5	234	-	-
04/04/19	16:00	81.4	65.7	59.2	8.8	236	-	-
04/04/19	17:00	81	65.6	59.6	7.7	221	-	-
04/04/19	18:00	78.6	67.1	68	5.4	192	-	-
04/04/19	19:00	74	68.4	82.6	4.7	174	-	-
04/04/19	20:00	71.2	67.6	88.2	5.3	177	-	-
04/04/19	21:00	69.9	67.2	91.3	6.6	192	-	-
04/04/19	22:00	69	66.7	92.1	6	189	-	-
04/04/19	23:00	68.8	66.6	92.9	5.2	198	-	-
04/05/19	0:00	68.8	66.9	93.6	4.7	194	-	-
04/05/19	1:00	68.7	66.7	93.2	4.4	200	-	-
04/05/19	2:00	68.5	66.5	93.6	2	288	-	-
04/05/19	3:00	68.4	66.7	94.3	0.8	356	-	-
04/05/19	4:00	68.7	66.9	94.1	0.8	174	-	-
04/05/19	5:00	68.8	66.9	93.6	2.8	89	-	-
04/05/19	6:00	68.4	66.3	93.1	4.4	102	-	-
04/05/19	7:00	68.3	66.2	92.9	3.5	90	-	-
04/05/19	8:00	68.9	66.4	91.8	3.3	84	-	-
04/05/19	9:00	70.3	65.3	84.4	4.1	90	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/05/19	10:00	72.6	64.7	76.4	3	116	-	-
04/05/19	11:00	71.5	65.5	81.4	5.6	134	-	-
04/05/19	12:00	73.3	64.9	75.1	6.5	124	-	-
04/05/19	13:00	75.3	64.7	69.8	6.5	125	-	-
04/05/19	14:00	78	64.9	64.3	6.5	116	-	-
04/05/19	15:00	76.8	65.9	69.1	9.1	121	-	-
04/05/19	16:00	74.3	66	75.6	9.4	132	-	-
04/05/19	17:00	72.6	66.5	81.4	9.6	113	-	-
04/05/19	18:00	71.7	66.9	84.9	8.3	114	-	-
04/05/19	19:00	71.7	66.7	84.1	7.2	101	-	-
04/05/19	20:00	71	66.4	85.4	8	103	-	-
04/05/19	21:00	70.7	66.5	86.5	9.2	101	-	-
04/05/19	22:00	69.9	66	87.6	8.9	102	-	-
04/05/19	23:00	69	66.2	90.8	6	113	-	-
04/06/19	0:00	69.2	66.2	90.2	4.1	129	-	-
04/06/19	1:00	68.8	65.7	89.7	5.6	109	-	-
04/06/19	2:00	68.4	65.5	90.7	4.7	102	-	-
04/06/19	3:00	68.3	65.8	91.7	5.7	104	-	-
04/06/19	4:00	68.9	66.6	92.1	7.8	103	-	-
04/06/19	5:00	69.2	66.7	91.5	5.8	109	-	-
04/06/19	6:00	69.9	66.8	89.8	4.5	111	-	-
04/06/19	7:00	69.7	66.5	89.7	6.6	102	-	-
04/06/19	8:00	69.6	66.9	91.3	5.3	82	-	-
04/06/19	9:00	70	66.9	89.9	8.3	93	-	-
04/06/19	10:00	71.1	66.9	86.8	8.4	105	-	-
04/06/19	11:00	74.3	66.7	77.2	7.4	126	-	-
04/06/19	12:00	78.8	66.3	66	11.1	151	-	-
04/06/19	13:00	81.8	64.2	55.3	11.3	153	-	-
04/06/19	14:00	81.4	64.6	56.7	11.8	151	-	-
04/06/19	15:00	78.3	65.3	64.6	10.5	122	-	-
04/06/19	16:00	75.3	66.6	74.5	9.5	113	-	-
04/06/19	17:00	73.4	66.9	80.2	9.6	106	-	-
04/06/19	18:00	72.1	67.9	86.6	8.2	104	-	-
04/06/19	19:00	71.6	67.5	86.9	8.2	106	-	-
04/06/19	20:00	72	67.9	86.7	9.3	113	-	-
04/06/19	21:00	71.5	67.9	88.4	9.4	126	-	-
04/06/19	22:00	71.8	67.7	87	6.7	123	-	-
04/06/19	23:00	72.5	68.4	87.1	5.4	132	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/07/19	0:00	73.3	69.3	87.2	6	147	-	-
04/07/19	1:00	73.2	68.5	85.2	7.9	154	-	-
04/07/19	2:00	72.8	68.1	85.1	8.3	150	-	-
04/07/19	3:00	71.7	68.1	88.5	7.6	143	-	-
04/07/19	4:00	70.4	67.5	90.5	5.9	143	-	-
04/07/19	5:00	70.9	67.2	88.1	5.9	124	-	-
04/07/19	6:00	72.2	67.6	85.5	9.3	119	-	-
04/07/19	7:00	72.5	67.9	85.7	8.4	135	-	-
04/07/19	8:00	72.4	67.8	85.6	6.7	114	-	-
04/07/19	9:00	72.5	67.7	84.9	9.1	106	-	-
04/07/19	10:00	71.8	68.1	88.2	9.9	103	-	-
04/07/19	11:00	70.2	66.8	89	12	152	-	-
04/07/19	12:00	63.5	60.6	90.2	7.5	233	-	-
04/07/19	13:00	63.8	61.1	90.8	5.5	70	-	-
04/07/19	14:00	66.4	62.7	87.9	4.1	299	-	-
04/07/19	15:00	67	62.1	84.4	8.2	99	-	-
04/07/19	16:00	67.8	60.4	77.2	8.4	113	-	-
04/07/19	17:00	68.5	60.7	76.2	7.7	154	-	-
04/07/19	18:00	68.2	61.2	78.4	6.8	169	-	-
04/07/19	19:00	66.4	61.6	84.5	6.4	165	-	-
04/07/19	20:00	66.1	62.3	87.7	5.5	179	-	-
04/07/19	21:00	66.5	63	88.3	7.2	184	-	-
04/07/19	22:00	66.5	61.6	84.2	5.2	227	-	-
04/07/19	23:00	64.1	58.9	83.1	3.5	291	-	-
04/08/19	0:00	62.8	58.3	85.1	3.4	265	-	-
04/08/19	1:00	63.6	58.1	82.2	6.3	247	-	-
04/08/19	2:00	63	57.9	83.5	6.4	257	-	-
04/08/19	3:00	62.3	58.5	87.3	4.6	271	-	-
04/08/19	4:00	62.7	59.6	89.7	3.9	297	-	-
04/08/19	5:00	63.4	59.6	87.4	4.7	298	-	-
04/08/19	6:00	63.6	59.7	87.3	4.5	300	-	-
04/08/19	7:00	64.1	60.2	87.3	6.7	308	-	-
04/08/19	8:00	66.5	58.7	76.1	7.3	329	-	-
04/08/19	9:00	68.2	57.9	69.7	8.8	329	-	-
04/08/19	10:00	69.9	57.7	65.4	8.4	325	-	-
04/08/19	11:00	73.7	57.3	56.5	9	321	-	-
04/08/19	12:00	76.5	57	50.8	9	318	-	-
04/08/19	13:00	78.4	57.1	48	9.7	321	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/08/19	14:00	80.3	56.7	44.4	8.3	315	-	-
04/08/19	15:00	81	57.5	44.9	7.4	326	-	-
04/08/19	16:00	81.1	56.9	43.7	7.5	327	-	-
04/08/19	17:00	79.1	59.5	51.1	5.6	336	-	-
04/08/19	18:00	77.8	60.4	55.2	4.1	326	-	-
04/08/19	19:00	75.6	61.3	61.1	2.2	325	-	-
04/08/19	20:00	73.8	61.7	65.9	1.8	302	-	-
04/08/19	21:00	71.8	61.9	71.2	1.1	287	-	-
04/08/19	22:00	69.6	61.5	75.5	1.5	255	-	-
04/08/19	23:00	68	61.6	79.7	2	257	-	-
04/09/19	0:00	66.9	61.3	82.4	1.9	261	-	-
04/09/19	1:00	65.7	60.9	84.5	1.8	274	-	-
04/09/19	2:00	64	60.2	87.3	1.7	236	-	-
04/09/19	3:00	63.4	60.2	89.4	2.8	259	-	-
04/09/19	4:00	63.2	60.2	89.9	1.3	265	-	-
04/09/19	5:00	63	60.1	90.1	1.3	295	-	-
04/09/19	6:00	63.6	59.2	85.7	1.4	228	-	-
04/09/19	7:00	68.1	58.6	71.7	3.2	244	-	-
04/09/19	8:00	73.4	58.2	59.1	5.5	260	-	-
04/09/19	9:00	78.3	57.8	49.4	5.8	263	-	-
04/09/19	10:00	81.8	55.6	40.9	6.5	256	-	-
04/09/19	11:00	84.2	51.9	33	5.5	268	-	-
04/09/19	12:00	85.8	48.3	27.5	6	276	-	-
04/09/19	13:00	87.2	46.4	24.3	4.8	294	-	-
04/09/19	14:00	87.9	43.6	21.4	4.1	319	-	-
04/09/19	15:00	88.2	40	18.6	4.3	307	-	-
04/09/19	16:00	88	43.4	21.3	3.6	328	-	-
04/09/19	17:00	87	45.4	23.7	3.2	333	-	-
04/09/19	18:00	83.9	50	31.5	2.7	125	-	-
04/09/19	19:00	79.2	55.1	43.4	3.2	127	-	-
04/09/19	20:00	76.7	58.8	54.2	3.6	125	-	-
04/09/19	21:00	73.2	62.9	70.4	2.7	183	-	-
04/09/19	22:00	71.6	64.5	78.4	4.2	193	-	-
04/09/19	23:00	70.4	62.5	76.3	4.7	194	-	-
04/10/19	0:00	68.7	61.7	78.3	3.9	190	-	-
04/10/19	1:00	67.4	62	83	2.8	196	-	-
04/10/19	2:00	66.3	62.4	87	2.8	195	-	-
04/10/19	3:00	65.4	62.2	89.1	3.3	172	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/10/19	4:00	65.8	61.9	87.1	4.5	164	-	-
04/10/19	5:00	66.4	62.2	86.3	3.9	187	-	-
04/10/19	6:00	67.3	62.7	85.3	4	191	-	-
04/10/19	7:00	71.5	62.2	72.8	6.9	182	-	-
04/10/19	8:00	76.2	59.9	57.4	9.2	193	-	-
04/10/19	9:00	80	58.9	48.7	9.3	191	-	-
04/10/19	10:00	82.6	56.2	40.5	11.9	192	-	-
04/10/19	11:00	84.8	54.2	35.1	11.9	193	-	-
04/10/19	12:00	85.7	52.6	32.2	12.4	191	-	-
04/10/19	13:00	86.1	54.9	34.6	13.3	188	-	-
04/10/19	14:00	85.5	57.3	38.5	13.3	179	-	-
04/10/19	15:00	84	59.1	43	12.5	173	-	-
04/10/19	16:00	81.5	59.6	47.5	13.1	170	-	-
04/10/19	17:00	79.1	59.3	50.7	12.7	173	-	-
04/10/19	18:00	75.7	60.5	59.2	11.3	161	-	-
04/10/19	19:00	73.1	61.4	66.8	10.3	159	-	-
04/10/19	20:00	72	62	70.8	9.6	158	-	-
04/10/19	21:00	71.7	62.7	73.2	9.9	157	-	-
04/10/19	22:00	71.3	62.6	74	10.8	155	-	-
04/10/19	23:00	70.9	62.9	75.8	10.3	156	-	-
04/11/19	0:00	70.5	63.7	78.9	12.1	156	-	-
04/11/19	1:00	70.2	64.3	81.6	11.4	162	-	-
04/11/19	2:00	69.9	64.9	84.3	12.5	160	-	-
04/11/19	3:00	69.6	64.8	84.7	11.8	159	-	-
04/11/19	4:00	69.5	64.5	84.3	12.4	162	-	-
04/11/19	5:00	70	64.3	82.4	8.5	198	-	-
04/11/19	6:00	70.4	64.2	80.9	5.6	191	-	-
04/11/19	7:00	72.5	63	72.3	6.2	160	-	-
04/11/19	8:00	74.4	62.4	66.4	9.2	171	-	-
04/11/19	9:00	76.8	61.3	58.7	11.1	182	-	-
04/11/19	10:00	78	61.4	56.9	9.9	190	-	-
04/11/19	11:00	78.7	61.7	56	9.6	186	-	-
04/11/19	12:00	77.2	63.1	62.3	9.3	187	-	-
04/11/19	13:00	73.5	65.5	76.2	8.2	191	-	-
04/11/19	14:00	72.6	66.3	81	4.6	199	-	-
04/11/19	15:00	75.9	65.5	70.4	6.9	182	-	-
04/11/19	16:00	75.8	65.6	70.5	6.6	167	-	-
04/11/19	17:00	74.8	66.9	76.4	5.5	150	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/11/19	18:00	73.6	67.3	80.5	4.7	142	-	-
04/11/19	19:00	72.4	67	83	2.9	164	-	-
04/11/19	20:00	71.3	67	86.3	2.8	126	-	-
04/11/19	21:00	70.8	67.1	88	2.1	143	-	-
04/11/19	22:00	70.1	66.8	89.4	2.2	358	-	-
04/11/19	23:00	68.3	56.8	67.5	6.1	10	-	-
04/12/19	0:00	66.3	49.1	54	5.6	30	-	-
04/12/19	1:00	65.3	49	55.6	3.3	49	-	-
04/12/19	2:00	64.9	46.6	51.5	3.9	38	-	-
04/12/19	3:00	64.3	47	53.6	5.3	64	-	-
04/12/19	4:00	64.3	46.7	52.9	5.7	49	-	-
04/12/19	5:00	62.7	48.7	60.3	4.9	24	-	-
04/12/19	6:00	61.9	48.9	62.5	4.7	26	-	-
04/12/19	7:00	63	50.1	62.7	6.1	69	-	-
04/12/19	8:00	64.4	49.7	58.9	6.9	61	-	-
04/12/19	9:00	64.6	52.6	65	7.1	78	-	-
04/12/19	10:00	65.8	54.4	66.6	8.2	88	-	-
04/12/19	11:00	69.8	57.4	64.8	9.8	91	-	-
04/12/19	12:00	73.3	61.1	65.9	11.1	94	-	-
04/12/19	13:00	75.7	63.8	66.6	11.6	92	-	-
04/12/19	14:00	76.4	64.1	65.8	13.6	103	-	-
04/12/19	15:00	75.8	64.8	68.7	13.2	95	-	-
04/12/19	16:00	74.7	65.2	72.4	13.4	94	-	-
04/12/19	17:00	73.6	65.6	76.2	12.4	93	-	-
04/12/19	18:00	73.1	66.4	79.5	12.2	94	-	-
04/12/19	19:00	72.8	67	82	12.7	101	-	-
04/12/19	20:00	72.6	67.3	83.4	12.4	100	-	-
04/12/19	21:00	72.5	67.7	85	13.2	107	-	-
04/12/19	22:00	72.2	68	86.6	12.8	111	-	-
04/12/19	23:00	72.5	68	85.7	11.8	112	-	-
04/13/19	0:00	72.5	68.1	86	11.8	111	-	-
04/13/19	1:00	72.8	68.1	85	13	119	-	-
04/13/19	2:00	72.6	68	85.7	12.4	131	-	-
04/13/19	3:00	72.2	68.1	87.1	11.9	130	-	-
04/13/19	4:00	72.3	68.2	86.8	10.1	127	-	-
04/13/19	5:00	72.7	68.3	86.1	10.8	129	-	-
04/13/19	6:00	72.5	68.1	86.1	10.4	131	-	-
04/13/19	7:00	72.7	68.2	85.7	9.5	119	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/13/19	8:00	73.5	68.3	83.9	9.5	126	-	-
04/13/19	9:00	75.8	68.8	79	9.6	148	-	-
04/13/19	10:00	77.5	69.3	75.9	11.6	171	-	-
04/13/19	11:00	78.9	69.2	72.5	12.9	182	-	-
04/13/19	12:00	79.8	69	69.5	15	194	-	-
04/13/19	13:00	82	67.4	61.3	15.2	206	-	-
04/13/19	14:00	82.4	63.3	52.6	12.2	218	-	-
04/13/19	15:00	71.1	59.7	67.7	5.2	303	-	-
04/13/19	16:00	72.1	57.6	60.3	5.5	311	-	-
04/13/19	17:00	72.9	58.6	60.7	4.1	320	-	-
04/13/19	18:00	72.5	58.6	61.7	4	315	-	-
04/13/19	19:00	69	48.2	47.5	10.9	289	-	-
04/13/19	20:00	62.6	44.9	52.5	10.1	296	-	-
04/13/19	21:00	59.4	42.6	53.9	8.2	288	-	-
04/13/19	22:00	56.2	39.3	53.2	8.4	289	-	-
04/13/19	23:00	53.1	38.9	58.5	9.2	301	-	-
04/14/19	0:00	51.5	38.5	61.1	9	305	-	-
04/14/19	1:00	49.5	37.4	63	8.1	304	-	-
04/14/19	2:00	48.4	37.1	64.9	8.8	298	-	-
04/14/19	3:00	48.2	37	65	7	303	-	-
04/14/19	4:00	48.8	37.4	64.8	5.8	304	-	-
04/14/19	5:00	48.4	38.2	67.6	5.9	301	-	-
04/14/19	6:00	48.9	38.1	66.1	7.5	303	-	-
04/14/19	7:00	50.9	37.8	60.6	8.2	308	-	-
04/14/19	8:00	53.8	37.9	54.7	8.2	315	-	-
04/14/19	9:00	57.2	38	48.8	8.6	324	-	-
04/14/19	10:00	60.8	36.9	40.9	8.9	330	-	-
04/14/19	11:00	63.8	36.3	36	8.7	329	-	-
04/14/19	12:00	66.8	36.1	32.3	7.7	318	-	-
04/14/19	13:00	68.6	35.4	29.4	8.3	319	-	-
04/14/19	14:00	70.1	35.3	27.7	7.2	322	-	-
04/14/19	15:00	71.1	35.4	27.1	7	321	-	-
04/14/19	16:00	70.8	35.2	27	6.1	326	-	-
04/14/19	17:00	70.2	34.9	27.3	4.7	322	-	-
04/14/19	18:00	68.1	35.7	30.4	3	343	-	-
04/14/19	19:00	65.1	37.8	36.5	1.7	341	-	-
04/14/19	20:00	62.9	39.4	42	1.3	319	-	-
04/14/19	21:00	59.9	42	51.5	1.9	171	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/14/19	22:00	58.5	42.4	55.2	2	213	-	-
04/14/19	23:00	56.2	43.6	62.6	1.1	155	-	-
04/15/19	0:00	55.1	43.9	65.9	1.5	153	-	-
04/15/19	1:00	53.9	44.3	69.9	1.4	151	-	-
04/15/19	2:00	53	44.1	71.8	1.2	123	-	-
04/15/19	3:00	52.7	44	72.2	2.4	187	-	-
04/15/19	4:00	52.5	43.3	71	2.2	174	-	-
04/15/19	5:00	51.8	44.1	75	2	138	-	-
04/15/19	6:00	54.7	46.7	74.4	1.4	163	-	-
04/15/19	7:00	62	50.1	65.1	3.1	185	-	-
04/15/19	8:00	67.8	51.8	56.7	6.7	179	-	-
04/15/19	9:00	71.1	49.4	46.3	8.2	162	-	-
04/15/19	10:00	73.4	47.3	39.6	9.7	158	-	-
04/15/19	11:00	74.6	46	36.1	11	160	-	-
04/15/19	12:00	74.7	46.4	36.6	10.7	170	-	-
04/15/19	13:00	76.1	47.4	36.3	10.3	164	-	-
04/15/19	14:00	76.2	48.2	37.3	11	157	-	-
04/15/19	15:00	75.6	50.5	41.4	11.5	155	-	-
04/15/19	16:00	74.5	51.3	44.3	10.8	153	-	-
04/15/19	17:00	72.7	52.4	49	10.6	152	-	-
04/15/19	18:00	69.4	54	58.2	9.3	151	-	-
04/15/19	19:00	67	55.6	66.7	6.9	147	-	-
04/15/19	20:00	65.9	55.6	69.4	6.1	148	-	-
04/15/19	21:00	64.7	56.4	74.3	4.9	143	-	-
04/15/19	22:00	64.4	56.5	75.6	4.7	148	-	-
04/15/19	23:00	63.7	57	78.9	3.3	132	-	-
04/16/19	0:00	63.5	57.3	80.2	4	128	-	-
04/16/19	1:00	63.5	57.4	80.7	4.5	130	-	-
04/16/19	2:00	63	57.8	83.2	5.5	134	-	-
04/16/19	3:00	63.5	58.4	83.5	6.3	136	-	-
04/16/19	4:00	64.2	58.7	82.4	6.2	146	-	-
04/16/19	5:00	64.3	59.2	83.4	5.3	140	-	-
04/16/19	6:00	65.2	59.2	81.1	6.3	141	-	-
04/16/19	7:00	68.7	58.7	70.3	9.5	146	-	-
04/16/19	8:00	72.1	57.7	60.7	12.1	148	-	-
04/16/19	9:00	74.2	56.9	54.9	12.3	151	-	-
04/16/19	10:00	75.4	56.6	52.3	11.9	160	-	-
04/16/19	11:00	76.6	56.9	50.5	12	157	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/16/19	12:00	77.2	57.4	50.5	12.5	148	-	-
04/16/19	13:00	77.7	58.4	51.5	13.5	146	-	-
04/16/19	14:00	77.4	57.9	51.1	12.9	144	-	-
04/16/19	15:00	74.9	60.3	60.6	12.4	127	-	-
04/16/19	16:00	73.2	61.9	67.8	12.1	129	-	-
04/16/19	17:00	71.9	62.4	72.1	11.6	130	-	-
04/16/19	18:00	70.8	62.8	75.8	12.6	131	-	-
04/16/19	19:00	70	63.1	78.8	12.4	128	-	-
04/16/19	20:00	69.5	63.4	80.8	11.1	131	-	-
04/16/19	21:00	69.7	63.9	82	10.8	131	-	-
04/16/19	22:00	69.8	64	81.8	7.4	132	-	-
04/16/19	23:00	70.1	63.9	80.6	8.1	139	-	-
04/17/19	0:00	70.2	64.2	81.4	8.2	148	-	-
04/17/19	1:00	69.6	64.4	83.7	7.4	136	-	-
04/17/19	2:00	69.9	64.7	83.6	7.4	142	-	-
04/17/19	3:00	70.7	65	82.2	8.4	149	-	-
04/17/19	4:00	70.4	65.6	84.8	8.9	147	-	-
04/17/19	5:00	70	66.4	88.4	9	146	-	-
04/17/19	6:00	71	66.9	86.9	8	142	-	-
04/17/19	7:00	72	67.1	84.8	7.3	147	-	-
04/17/19	8:00	73.6	67.5	81.3	9.9	151	-	-
04/17/19	9:00	76.2	66.9	73.2	11.6	150	-	-
04/17/19	10:00	77.8	66.1	67.4	12.2	151	-	-
04/17/19	11:00	75.7	66.9	74	11	145	-	-
04/17/19	12:00	74.4	66.8	77.4	11.4	125	-	-
04/17/19	13:00	74	66.7	78.1	12.2	121	-	-
04/17/19	14:00	74.5	66.8	77.1	12.6	133	-	-
04/17/19	15:00	75.1	65.9	73.1	11.1	129	-	-
04/17/19	16:00	73.6	66.3	78.1	12.8	131	-	-
04/17/19	17:00	71.1	67.4	88.3	12	127	-	-
04/17/19	18:00	70.8	68	90.8	11.8	119	-	-
04/17/19	19:00	71.3	67.7	88.5	11	126	-	-
04/17/19	20:00	71.8	68	87.8	8.6	129	-	-
04/17/19	21:00	73	68.4	85.4	9.4	142	-	-
04/17/19	22:00	73.2	68.8	86.2	12.4	144	-	-
04/17/19	23:00	73.3	68.4	84.8	12.9	150	-	-
04/18/19	0:00	73.4	68.3	84.3	15.6	150	-	-
04/18/19	1:00	73.2	67.9	83.5	13.8	157	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/18/19	2:00	73.9	67.6	80.7	8.7	232	-	-
04/18/19	3:00	72.9	65.9	78.8	7.5	254	-	-
04/18/19	4:00	63.5	60	88	9	349	-	-
04/18/19	5:00	63.6	59.8	87.3	6.8	352	-	-
04/18/19	6:00	62.3	59.5	90.7	6.3	11	-	-
04/18/19	7:00	62.4	59.7	90.8	4.3	11	-	-
04/18/19	8:00	62.3	59.3	89.9	5	9	-	-
04/18/19	9:00	62.5	59.6	90.1	5.5	51	-	-
04/18/19	10:00	63.9	59.9	86.6	3.9	15	-	-
04/18/19	11:00	66.8	59.3	77	4.2	329	-	-
04/18/19	12:00	70.5	59.1	67.3	5.9	295	-	-
04/18/19	13:00	72.8	57.4	58.5	7.1	300	-	-
04/18/19	14:00	74.3	55.9	52.8	8.9	302	-	-
04/18/19	15:00	74.8	54.7	49.7	8.7	306	-	-
04/18/19	16:00	75	54.4	48.8	8.3	318	-	-
04/18/19	17:00	71.1	57.2	61.6	8.6	329	-	-
04/18/19	18:00	68.5	57	66.7	7.6	334	-	-
04/18/19	19:00	67.4	54.7	64	7.3	329	-	-
04/18/19	20:00	65.5	54.2	66.8	3.8	325	-	-
04/18/19	21:00	64.8	53.7	67.4	3.4	308	-	-
04/18/19	22:00	64.9	49.7	57.8	4.2	312	-	-
04/18/19	23:00	63.4	48.1	57.5	2.6	311	-	-
04/19/19	0:00	62.8	46.5	55.3	2.9	314	-	-
04/19/19	1:00	62.8	44.9	52.1	4.2	318	-	-
04/19/19	2:00	61.1	45.9	57.5	3.9	298	-	-
04/19/19	3:00	59.7	46.5	61.6	3.7	303	-	-
04/19/19	4:00	58.8	46	62.5	4.6	310	-	-
04/19/19	5:00	57.7	45.8	64.5	4.4	306	-	-
04/19/19	6:00	58.8	44	58	4.9	312	-	-
04/19/19	7:00	61.3	43.4	51.7	6.2	318	-	-
04/19/19	8:00	63.6	42.2	45.6	8	328	-	-
04/19/19	9:00	65.7	42	42	6.7	334	-	-
04/19/19	10:00	67.8	40.9	37.6	8.2	319	-	-
04/19/19	11:00	70.2	36.8	29.5	9.1	323	-	-
04/19/19	12:00	71.1	35.5	27.1	10	316	-	-
04/19/19	13:00	72	34.3	25.1	10.9	314	-	-
04/19/19	14:00	72.3	33.8	24.4	10.8	322	-	-
04/19/19	15:00	72.3	29.8	20.7	10.5	317	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/19/19	16:00	71.7	32.3	23.4	8.6	310	-	-
04/19/19	17:00	70.4	33.7	25.9	7.8	319	-	-
04/19/19	18:00	68.2	35.4	29.9	6.3	326	-	-
04/19/19	19:00	65.7	36.9	34.5	4.2	331	-	-
04/19/19	20:00	63.4	39.5	41.3	3.3	329	-	-
04/19/19	21:00	61.9	40.7	45.6	2.6	328	-	-
04/19/19	22:00	60.4	41.1	48.9	1.9	299	-	-
04/19/19	23:00	58.6	42	54.1	1.5	277	-	-
04/20/19	0:00	55.5	43.8	64.9	1.4	192	-	-
04/20/19	1:00	54.5	44.3	68.5	1.7	241	-	-
04/20/19	2:00	53.2	45.2	74.2	0.7	228	-	-
04/20/19	3:00	51.6	45.4	79.5	2	239	-	-
04/20/19	4:00	51.3	44.6	77.9	1.3	269	-	-
04/20/19	5:00	51.4	44.8	78.2	1.3	246	-	-
04/20/19	6:00	52.2	43.4	72	1.3	278	-	-
04/20/19	7:00	59.2	42.5	54.3	1.8	323	-	-
04/20/19	8:00	65.5	37.9	36.4	2.3	321	-	-
04/20/19	9:00	68.8	33	26.6	2.9	256	-	-
04/20/19	10:00	70.9	31	22.8	3.3	265	-	-
04/20/19	11:00	72.4	32	22.6	3.9	233	-	-
04/20/19	12:00	73.6	32.8	22.4	4.7	215	-	-
04/20/19	13:00	76	34.8	22.4	5.6	238	-	-
04/20/19	14:00	76.6	32.2	19.8	4.7	246	-	-
04/20/19	15:00	77.3	32.3	19.5	5.3	237	-	-
04/20/19	16:00	77.7	36.5	22.7	5.8	239	-	-
04/20/19	17:00	76.9	39.3	25.9	5.7	240	-	-
04/20/19	18:00	71.5	45.8	39.9	7.1	178	-	-
04/20/19	19:00	67.7	46.7	47.1	5.2	165	-	-
04/20/19	20:00	65.4	49.8	57.2	5.3	175	-	-
04/20/19	21:00	63.8	51.2	63.5	4.6	196	-	-
04/20/19	22:00	62.5	51	66	4.2	203	-	-
04/20/19	23:00	61.4	52.5	72.4	3.3	194	-	-
04/21/19	0:00	60.5	52.8	75.8	2.4	204	-	-
04/21/19	1:00	59.9	53	77.8	2.6	183	-	-
04/21/19	2:00	59.6	54.5	83.4	2.1	141	-	-
04/21/19	3:00	59.3	55.4	86.8	2.5	132	-	-
04/21/19	4:00	59.8	56.2	87.8	3.4	120	-	-
04/21/19	5:00	60	56.7	88.7	2.8	130	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/21/19	6:00	62.3	56.4	81.1	4.3	129	-	-
04/21/19	7:00	67.5	56.1	66.8	7.2	148	-	-
04/21/19	8:00	71.7	53.5	52.9	10.4	153	-	-
04/21/19	9:00	75.1	49.1	40.1	11.3	148	-	-
04/21/19	10:00	76.7	49	37.7	11.9	134	-	-
04/21/19	11:00	77.4	48.1	35.7	12.2	143	-	-
04/21/19	12:00	77.6	49.7	37.8	12	152	-	-
04/21/19	13:00	78.3	53.5	42.3	12.7	138	-	-
04/21/19	14:00	78.2	54.1	43.4	13.4	138	-	-
04/21/19	15:00	77.5	55.6	46.9	12.3	139	-	-
04/21/19	16:00	76.6	55.6	48.3	11.6	141	-	-
04/21/19	17:00	74.3	57.3	55.5	11.7	137	-	-
04/21/19	18:00	71.4	59	65	9.8	141	-	-
04/21/19	19:00	69.2	59.9	72.2	8.8	129	-	-
04/21/19	20:00	68.1	60.6	76.9	6.9	135	-	-
04/21/19	21:00	67.2	60.6	79.5	5.7	137	-	-
04/21/19	22:00	66.8	60.9	81.1	6.2	138	-	-
04/21/19	23:00	66.7	60.8	81.3	5.9	134	-	-
04/22/19	0:00	67	60.8	80.4	6.5	131	-	-
04/22/19	1:00	66.9	60.8	80.8	5.3	129	-	-
04/22/19	2:00	66.3	61.3	83.9	4.2	130	-	-
04/22/19	3:00	66.3	61.4	84.2	5	127	-	-
04/22/19	4:00	66.3	61.8	85.5	4.8	133	-	-
04/22/19	5:00	67	62	84	5.7	130	-	-
04/22/19	6:00	67.9	61.6	80.3	5	140	-	-
04/22/19	7:00	70.3	60.3	70.5	6.8	137	-	-
04/22/19	8:00	73.5	57.7	57.8	11.3	139	-	-
04/22/19	9:00	74.9	56.7	53.2	11.1	155	-	-
04/22/19	10:00	76.3	57.2	51.6	11.3	135	-	-
04/22/19	11:00	76.7	59.4	55.2	12.7	125	-	-
04/22/19	12:00	76.7	58.5	53.6	13.2	119	-	-
04/22/19	13:00	77.3	58.8	52.8	12.8	123	-	-
04/22/19	14:00	76.9	59.2	54.5	12.9	124	-	-
04/22/19	15:00	76.1	59.4	56.4	12	121	-	-
04/22/19	16:00	75.2	60.3	59.9	11.4	122	-	-
04/22/19	17:00	74	61.3	64.5	10.7	125	-	-
04/22/19	18:00	72	62.4	71.9	9.6	122	-	-
04/22/19	19:00	71	62.9	75.8	9	117	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/22/19	20:00	70.8	63.5	77.9	8.4	111	-	-
04/22/19	21:00	70.7	64	79.6	9.4	126	-	-
04/22/19	22:00	70.3	64.2	80.9	10.8	131	-	-
04/22/19	23:00	70.1	64.5	82.3	8.9	132	-	-
04/23/19	0:00	70	64.6	83.3	7.6	130	-	-
04/23/19	1:00	69.9	64.6	83.3	8.2	132	-	-
04/23/19	2:00	69.9	64.9	84.3	7.4	131	-	-
04/23/19	3:00	69.9	65.2	85.2	6.5	137	-	-
04/23/19	4:00	69.8	65.3	85.7	5.7	131	-	-
04/23/19	5:00	69.9	65.6	86	6.3	133	-	-
04/23/19	6:00	70.3	65.6	85.2	7.1	132	-	-
04/23/19	7:00	70.8	65.8	84.2	7.2	130	-	-
04/23/19	8:00	71	65.8	83.5	9.1	122	-	-
04/23/19	9:00	71.5	65.8	82.1	7.6	147	-	-
04/23/19	10:00	71.7	65.1	79.9	8.8	128	-	-
04/23/19	11:00	71.6	64.8	79.1	11.8	121	-	-
04/23/19	12:00	72.9	64.5	74.9	9.5	139	-	-
04/23/19	13:00	75.3	62.6	64.9	10.3	157	-	-
04/23/19	14:00	75.7	61.3	61.1	10.8	141	-	-
04/23/19	15:00	73.9	62.7	68	10	126	-	-
04/23/19	16:00	73.1	64.2	73.8	8.8	127	-	-
04/23/19	17:00	72.5	64.5	76	9.4	131	-	-
04/23/19	18:00	71.3	64.9	80.3	8.4	128	-	-
04/23/19	19:00	70.6	64.3	80.6	8.6	131	-	-
04/23/19	20:00	70.4	64.5	81.7	8.8	129	-	-
04/23/19	21:00	70.4	64.9	82.9	9.6	125	-	-
04/23/19	22:00	70.3	64.1	80.6	7.5	127	-	-
04/23/19	23:00	70.3	64.8	82.7	5.8	116	-	-
04/24/19	0:00	70.1	65.4	84.9	4.9	92	-	-
04/24/19	1:00	69.9	65.1	84.8	6.6	101	-	-
04/24/19	2:00	69.9	65.4	85.7	5	99	-	-
04/24/19	3:00	69.8	65.7	86.6	4.6	98	-	-
04/24/19	4:00	69.4	65.7	88.1	4	84	-	-
04/24/19	5:00	69.4	65.6	87.9	4.2	83	-	-
04/24/19	6:00	69.1	65.2	87.3	6.5	88	-	-
04/24/19	7:00	69.9	65.3	85.2	8.4	97	-	-
04/24/19	8:00	69.8	66.2	88.4	8.6	94	-	-
04/24/19	9:00	70.1	66.6	88.6	9.1	102	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/24/19	10:00	71.5	65.6	81.8	10	103	-	-
04/24/19	11:00	73.4	66.1	77.9	11.9	122	-	-
04/24/19	12:00	75.8	65.3	69.8	13.1	126	-	-
04/24/19	13:00	77.8	64.7	64.2	14.2	132	-	-
04/24/19	14:00	76.1	65	68.6	14.4	127	-	-
04/24/19	15:00	76.6	65.1	67.7	13.7	125	-	-
04/24/19	16:00	76.2	65	68.4	12.9	127	-	-
04/24/19	17:00	74	66	76.4	12.2	124	-	-
04/24/19	18:00	72.9	67	81.8	9	129	-	-
04/24/19	19:00	72.6	67.6	84.4	5.9	133	-	-
04/24/19	20:00	72.5	69	88.6	5.4	146	-	-
04/24/19	21:00	72.3	68.7	88.4	7.5	158	-	-
04/24/19	22:00	72.9	68.8	87.1	3.7	206	-	-
04/24/19	23:00	73	69.3	88.4	3.6	179	-	-
04/25/19	0:00	72.7	69.1	88.3	4.3	192	-	-
04/25/19	1:00	72.7	69.7	90.2	4.3	215	-	-
04/25/19	2:00	70.6	68.1	91.9	4.2	279	-	-
04/25/19	3:00	66.8	64.3	91.7	4.3	303	-	-
04/25/19	4:00	65	62.4	91.2	4.7	313	-	-
04/25/19	5:00	63.8	61.1	91	2.6	312	-	-
04/25/19	6:00	64.3	60.1	86.5	3.8	320	-	-
04/25/19	7:00	66.6	58.5	75.2	4.5	311	-	-
04/25/19	8:00	68.9	57.1	66.3	5.8	317	-	-
04/25/19	9:00	72.2	56.1	56.9	5.8	316	-	-
04/25/19	10:00	75.5	54.7	48.5	5.3	320	-	-
04/25/19	11:00	77.6	54.2	44.6	6.4	311	-	-
04/25/19	12:00	79.7	53.8	41.1	6.2	322	-	-
04/25/19	13:00	81.2	51.3	35.5	6.4	322	-	-
04/25/19	14:00	82.1	47.2	29.5	6.5	327	-	-
04/25/19	15:00	82.7	49.3	31.4	6.4	318	-	-
04/25/19	16:00	82.6	50	32.4	6.8	329	-	-
04/25/19	17:00	81.7	49.3	32.4	6.8	339	-	-
04/25/19	18:00	79.8	53.3	40.1	4.5	334	-	-
04/25/19	19:00	77.4	54	44.3	2.8	332	-	-
04/25/19	20:00	75.6	55	48.8	2	326	-	-
04/25/19	21:00	74	56.6	54.7	2.1	325	-	-
04/25/19	22:00	73.2	56.7	56.3	2.4	336	-	-
04/25/19	23:00	71.4	57.7	62	2.1	349	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/26/19	0:00	69.8	58	66	1.8	340	-	-
04/26/19	1:00	68.4	57.4	67.8	1.4	320	-	-
04/26/19	2:00	68.3	57.8	69.1	2.1	337	-	-
04/26/19	3:00	66.4	57.7	73.7	1.2	316	-	-
04/26/19	4:00	64.4	58.2	80.4	1	313	-	-
04/26/19	5:00	63.2	58.3	83.9	1.1	343	-	-
04/26/19	6:00	65	57.4	76.7	1	292	-	-
04/26/19	7:00	70.8	57	61.9	4.4	348	-	-
04/26/19	8:00	73.6	56	54.3	4.8	19	-	-
04/26/19	9:00	75.2	55.7	50.7	4.8	19	-	-
04/26/19	10:00	77.5	55.7	47.1	3.8	33	-	-
04/26/19	11:00	79.7	54.5	41.9	4.5	42	-	-
04/26/19	12:00	80.9	54.8	40.7	4.2	12	-	-
04/26/19	13:00	82.2	54.8	38.9	3.6	37	-	-
04/26/19	14:00	83.5	54.1	36.5	4.5	12	-	-
04/26/19	15:00	84	54	35.8	4.3	42	-	-
04/26/19	16:00	83.4	54.6	37.3	4.2	59	-	-
04/26/19	17:00	81.7	57.7	44.1	5	98	-	-
04/26/19	18:00	80.3	59.2	48.7	3.3	104	-	-
04/26/19	19:00	77.2	60.7	56.8	5.7	195	-	-
04/26/19	20:00	74.3	60.1	61.4	5.2	201	-	-
04/26/19	21:00	72.2	59.6	64.7	3.5	208	-	-
04/26/19	22:00	70.8	59.2	66.9	2.6	195	-	-
04/26/19	23:00	69.1	59.5	71.5	2.6	208	-	-
04/27/19	0:00	67.9	60	75.8	2.5	197	-	-
04/27/19	1:00	67.5	60.3	77.9	2.5	231	-	-
04/27/19	2:00	68.1	61.4	79.1	2.2	226	-	-
04/27/19	3:00	66.1	61.2	84	3	140	-	-
04/27/19	4:00	65.4	61.7	87.7	2.4	147	-	-
04/27/19	5:00	65.1	62.1	90	2.3	164	-	-
04/27/19	6:00	67.1	61.7	82.8	2.7	168	-	-
04/27/19	7:00	71.8	61.4	70.1	5.9	161	-	-
04/27/19	8:00	75.8	58.2	54.5	8.5	177	-	-
04/27/19	9:00	76.2	56.1	49.8	8.7	183	-	-
04/27/19	10:00	77.3	55.8	47.6	9.4	166	-	-
04/27/19	11:00	78.1	54.6	44.4	9.9	170	-	-
04/27/19	12:00	78.4	54.2	43.2	10.9	176	-	-
04/27/19	13:00	79.3	53.8	41.3	9.7	177	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/27/19	14:00	79.5	53.2	40.1	9.8	176	-	-
04/27/19	15:00	79.1	54.1	42.2	10.4	162	-	-
04/27/19	16:00	78.3	56.8	47.8	10.6	173	-	-
04/27/19	17:00	76.5	57.3	51.3	10.1	177	-	-
04/27/19	18:00	74	58.2	57.8	8.6	169	-	-
04/27/19	19:00	71.7	58.7	63.7	7.6	161	-	-
04/27/19	20:00	70.3	60.2	70.6	6.8	156	-	-
04/27/19	21:00	69.4	60.5	73.4	4.9	156	-	-
04/27/19	22:00	68.5	60.3	74.9	3.6	162	-	-
04/27/19	23:00	68.4	61.4	78.5	2.5	169	-	-
04/28/19	0:00	68.2	61.7	79.6	2.2	163	-	-
04/28/19	1:00	67.1	61.1	81.2	1.6	83	-	-
04/28/19	2:00	66.1	62	86.7	1.5	61	-	-
04/28/19	3:00	66.1	62.1	87	2.2	109	-	-
04/28/19	4:00	66.7	62.4	86.1	3	138	-	-
04/28/19	5:00	66.7	63	87.7	3.9	138	-	-
04/28/19	6:00	68	62.5	82.7	4.7	144	-	-
04/28/19	7:00	72	61.9	70.7	6.6	146	-	-
04/28/19	8:00	74	60.6	63	8.2	143	-	-
04/28/19	9:00	75.3	59.1	57.4	7.4	160	-	-
04/28/19	10:00	77.6	57.2	49.5	8.7	146	-	-
04/28/19	11:00	78	57.6	49.6	9.6	131	-	-
04/28/19	12:00	78	58.9	52	11.7	116	-	-
04/28/19	13:00	78.4	60.1	53.3	13	119	-	-
04/28/19	14:00	78.9	57.6	48.1	11.5	139	-	-
04/28/19	15:00	78.5	56.6	47.1	10.5	140	-	-
04/28/19	16:00	77.1	59.5	54.8	11	128	-	-
04/28/19	17:00	75.5	61.2	61.3	10	125	-	-
04/28/19	18:00	73.3	62.2	68.1	10.2	129	-	-
04/28/19	19:00	72	62.7	72.5	8.7	132	-	-
04/28/19	20:00	71.4	63.3	75.7	7.6	136	-	-
04/28/19	21:00	71.2	63.6	76.9	7.2	145	-	-
04/28/19	22:00	71	63.4	77.2	6.5	148	-	-
04/28/19	23:00	70.7	64.7	81.5	6.2	142	-	-
04/29/19	0:00	71.3	65.9	83	7.6	144	-	-
04/29/19	1:00	71.5	66.2	83.3	6.1	148	-	-
04/29/19	2:00	71.9	66.8	83.9	7	152	-	-
04/29/19	3:00	72.3	67.5	84.8	8.5	156	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/29/19	4:00	72.7	67.9	85	7.8	149	-	-
04/29/19	5:00	73	68.3	85.3	8.2	146	-	-
04/29/19	6:00	73.6	68.7	84.7	8.3	148	-	-
04/29/19	7:00	75.9	68.4	77.5	9.2	151	-	-
04/29/19	8:00	77.6	68	72.4	11.4	156	-	-
04/29/19	9:00	79.2	67.5	67.5	12.3	159	-	-
04/29/19	10:00	81.4	66.7	61.2	13.3	156	-	-
04/29/19	11:00	81.6	67.3	61.9	13.5	148	-	-
04/29/19	12:00	82.4	67.3	60.4	11.9	154	-	-
04/29/19	13:00	82.2	67.6	61.5	13.5	146	-	-
04/29/19	14:00	81.6	68.5	64.7	12.2	140	-	-
04/29/19	15:00	81	68.8	66.8	10.9	144	-	-
04/29/19	16:00	79.2	69.9	73.3	11	133	-	-
04/29/19	17:00	77.7	70.8	79.4	10.3	127	-	-
04/29/19	18:00	76.9	71.5	83.4	11.2	120	-	-
04/29/19	19:00	76.7	71.5	84.3	12.6	128	-	-
04/29/19	20:00	76.3	71.5	85.1	12.4	131	-	-
04/29/19	21:00	76.2	71.6	85.6	12.5	131	-	-
04/29/19	22:00	76.3	71.3	84.7	11.4	134	-	-
04/29/19	23:00	76.2	71.3	85	11.3	136	-	-
04/30/19	0:00	76.1	71.4	85.4	10.5	141	-	-
04/30/19	1:00	76.2	71	84	10.3	149	-	-
04/30/19	2:00	76.2	70.7	83.2	12.2	146	-	-
04/30/19	3:00	76.2	70.6	82.9	10.7	150	-	-
04/30/19	4:00	76	70.5	83.1	10	144	-	-
04/30/19	5:00	76.1	70.4	82.6	10.5	149	-	-
04/30/19	6:00	76.4	70.1	80.9	11.2	147	-	-
04/30/19	7:00	77.4	69.5	76.7	12.4	146	-	-
04/30/19	8:00	78.4	68.5	71.8	14.2	146	-	-
04/30/19	9:00	79.1	68.4	69.9	13.9	148	-	-
04/30/19	10:00	81.5	67.3	62.1	15.2	144	-	-
04/30/19	11:00	83.1	65.6	55.6	15.4	144	-	-
04/30/19	12:00	84.1	64.4	51.7	15.5	146	-	-
04/30/19	13:00	82.3	66	58.2	15.2	148	-	-
04/30/19	14:00	81.1	67	62.4	13.3	150	-	-
04/30/19	15:00	80.2	67	64.1	14.1	153	-	-
04/30/19	16:00	79.4	68.5	69.4	12.5	152	-	-
04/30/19	17:00	78.2	69.1	73.6	12.4	156	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/30/19	18:00	77.1	69.6	77.7	11.2	147	-	-
04/30/19	19:00	76.7	69.6	78.8	11	153	-	-
04/30/19	20:00	76.6	69.7	79.4	11.7	153	-	-
04/30/19	21:00	76.4	69.9	80.3	11.1	153	-	-
04/30/19	22:00	76.2	69.7	80.4	9.9	157	-	-
04/30/19	23:00	76	69.5	80.5	10.3	153	-	-
05/01/19	0:00	75.5	69.5	81.7	10.5	161	-	-
05/01/19	1:00	75.5	69	80.1	9.9	162	-	-
05/01/19	2:00	75.4	68.9	80.5	9.9	159	-	-
05/01/19	3:00	75.4	69.2	81.1	8.7	155	-	-
05/01/19	4:00	75.2	69.2	81.4	7.1	158	-	-
05/01/19	5:00	75.1	69.3	82	7.2	154	-	-
05/01/19	6:00	75.4	69.2	81.1	7.5	150	-	-
05/01/19	7:00	76.9	68.8	76.3	10.4	148	-	-
05/01/19	8:00	78.5	68.4	71.3	11.7	150	-	-
05/01/19	9:00	81.3	66.8	61.4	13.2	150	-	-
05/01/19	10:00	81.6	67.2	61.9	14	150	-	-
05/01/19	11:00	81.1	68.1	64.9	13.2	143	-	-
05/01/19	12:00	81	68.2	65.1	12.3	139	-	-
05/01/19	13:00	80	69.1	69.3	10.2	148	-	-
05/01/19	14:00	79.5	68.7	69.6	11.8	135	-	-
05/01/19	15:00	78.5	70.2	75.7	10.2	132	-	-
05/01/19	16:00	78.2	70.8	78.3	8.9	134	-	-
05/01/19	17:00	78.2	70.6	77.5	14	131	-	-
05/01/19	18:00	77.4	70.8	80.3	10.5	137	-	-
05/01/19	19:00	77.1	70.3	79.5	10.2	146	-	-
05/01/19	20:00	76.9	70.4	80.3	9.1	145	-	-
05/01/19	21:00	76.8	70.4	80.8	9.4	154	-	-
05/01/19	22:00	76.7	70.1	80	9.7	155	-	-
05/01/19	23:00	76.2	70.2	81.7	8.6	149	-	-
05/02/19	0:00	75.8	70.1	82.7	8.8	153	-	-
05/02/19	1:00	75.9	69.6	80.8	9	159	-	-
05/02/19	2:00	75.5	69.5	81.5	9.7	152	-	-
05/02/19	3:00	75.4	69.5	81.9	9.3	156	-	-
05/02/19	4:00	75.6	69.5	81.1	8.4	169	-	-
05/02/19	5:00	75.6	69.4	81.1	5.9	168	-	-
05/02/19	6:00	75.8	69.5	80.9	2.1	339	-	-
05/02/19	7:00	73.2	65.5	77	6.4	34	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/02/19	8:00	73	62.7	70.3	10.8	84	-	-
05/02/19	9:00	76.2	63.5	64.7	10.7	91	-	-
05/02/19	10:00	79.1	65.3	62.6	14.5	106	-	-
05/02/19	11:00	80	67.7	66.3	14.5	118	-	-
05/02/19	12:00	80.3	67.9	65.8	15.1	116	-	-
05/02/19	13:00	79.7	68.3	68.3	14.1	117	-	-
05/02/19	14:00	79.5	67.9	67.9	12.6	117	-	-
05/02/19	15:00	79.3	67.7	67.9	13.1	123	-	-
05/02/19	16:00	78.8	68	69.4	11.2	125	-	-
05/02/19	17:00	77.1	68.7	75.2	10.7	124	-	-
05/02/19	18:00	75.4	70.1	83.7	6.2	139	-	-
05/02/19	19:00	75	70.2	85.1	3.5	175	-	-
05/02/19	20:00	74.7	70.4	86.4	2.6	143	-	-
05/02/19	21:00	74.3	70.7	88.6	4.7	101	-	-
05/02/19	22:00	74.6	70	85.8	4.7	115	-	-
05/02/19	23:00	74.3	69.4	84.7	2.4	67	-	-
05/03/19	0:00	73.6	69.8	87.9	4.6	76	-	-
05/03/19	1:00	73.5	69.7	88	6.2	81	-	-
05/03/19	2:00	73.4	69.8	88.4	6.4	80	-	-
05/03/19	3:00	73.6	70	88.5	4.8	100	-	-
05/03/19	4:00	73.9	69.6	86.4	4.7	155	-	-
05/03/19	5:00	73.8	69.6	86.6	5.1	106	-	-
05/03/19	6:00	74.6	69.1	82.8	8.2	101	-	-
05/03/19	7:00	76.1	68.2	76.5	8.6	127	-	-
05/03/19	8:00	76.1	68.4	77.3	8.3	132	-	-
05/03/19	9:00	76.1	68.6	77.6	8.2	117	-	-
05/03/19	10:00	76.2	68.3	76.6	9.3	123	-	-
05/03/19	11:00	76	68.4	77.5	9.9	127	-	-
05/03/19	12:00	76.1	68.8	78.3	11.5	123	-	-
05/03/19	13:00	76.3	68.4	76.5	10.2	117	-	-
05/03/19	14:00	76.7	68.7	76.4	9.7	132	-	-
05/03/19	15:00	76.3	69.6	79.6	8.2	138	-	-
05/03/19	16:00	75.9	69.6	80.9	7.7	139	-	-
05/03/19	17:00	77	68.5	75.1	8.2	148	-	-
05/03/19	18:00	76	68.7	78.2	6.7	150	-	-
05/03/19	19:00	74.6	68.8	82	5.6	151	-	-
05/03/19	20:00	73.7	69.2	85.7	3.6	148	-	-
05/03/19	21:00	73.5	69.9	88.6	4.7	121	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/03/19	22:00	74.1	70.1	87.2	5.4	126	-	-
05/03/19	23:00	74.4	70.4	87.6	4.9	119	-	-
05/04/19	0:00	74.8	71.1	88.2	5.5	134	-	-
05/04/19	1:00	69.7	66.9	90.7	11.2	240	-	-
05/04/19	2:00	66.3	63.9	92.2	5.4	86	-	-
05/04/19	3:00	67.1	65.1	93.5	5.5	105	-	-
05/04/19	4:00	66.3	64.4	93.8	4.1	279	-	-
05/04/19	5:00	66.4	64.6	93.8	3	303	-	-
05/04/19	6:00	66.8	64.7	93	2.5	300	-	-
05/04/19	7:00	69.6	63.7	81.6	2.9	285	-	-
05/04/19	8:00	72.2	63.1	73.1	4.5	323	-	-
05/04/19	9:00	75	63	66.4	4.3	331	-	-
05/04/19	10:00	77.5	62.5	60	4.5	324	-	-
05/04/19	11:00	79.3	62	55.5	5.7	333	-	-
05/04/19	12:00	80.7	61.7	52.7	5.1	339	-	-
05/04/19	13:00	81.5	60.7	49.3	4.9	346	-	-
05/04/19	14:00	82	58.9	45.5	4.3	332	-	-
05/04/19	15:00	82.5	56	40.4	4.5	335	-	-
05/04/19	16:00	82.5	57.4	42.4	3.8	338	-	-
05/04/19	17:00	82.6	58.3	43.8	3.5	339	-	-
05/04/19	18:00	81.6	61	49.9	3	346	-	-
05/04/19	19:00	79.4	62.3	56	2.4	357	-	-
05/04/19	20:00	77.7	61.2	56.8	1.7	15	-	-
05/04/19	21:00	76.2	62.1	61.9	1.1	54	-	-
05/04/19	22:00	74.4	63.2	68.2	2.1	46	-	-
05/04/19	23:00	73.9	63.3	69.7	2.7	26	-	-
05/05/19	0:00	72.2	64.5	76.9	1.9	63	-	-
05/05/19	1:00	70.7	64	79.5	1.9	49	-	-
05/05/19	2:00	69.5	63.8	82.1	2.4	52	-	-
05/05/19	3:00	69.2	64.4	84.6	3.3	82	-	-
05/05/19	4:00	68.5	64.3	86.5	4.5	80	-	-
05/05/19	5:00	68.2	64.8	88.8	4.5	84	-	-
05/05/19	6:00	69.4	64.5	84.4	4	82	-	-
05/05/19	7:00	71.7	65	79.3	6.2	82	-	-
05/05/19	8:00	74	63.4	69.5	7.6	97	-	-
05/05/19	9:00	75.8	62.7	63.9	9.7	103	-	-
05/05/19	10:00	77.4	63	61.2	8.9	103	-	-
05/05/19	11:00	78.6	60.6	54.2	7.8	103	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/05/19	12:00	79.5	59.2	50.1	7.8	119	-	-
05/05/19	13:00	80.7	56.6	43.7	7.7	116	-	-
05/05/19	14:00	81.2	60.3	49.1	6.4	143	-	-
05/05/19	15:00	81.6	59.9	47.9	7.6	141	-	-
05/05/19	16:00	81.5	59.4	47.2	7.3	134	-	-
05/05/19	17:00	80.8	60.1	49.6	6.4	125	-	-
05/05/19	18:00	79.1	57.8	48	6.1	103	-	-
05/05/19	19:00	76.6	59.7	56.1	4.9	108	-	-
05/05/19	20:00	75.2	61.8	63.3	3.7	110	-	-
05/05/19	21:00	73.5	63	69.6	1.6	170	-	-
05/05/19	22:00	72.5	64	74.6	1.4	178	-	-
05/05/19	23:00	71.2	64.2	78.7	2.9	161	-	-
05/06/19	0:00	70.1	64	81.1	2	131	-	-
05/06/19	1:00	71	62.5	74.8	4.1	124	-	-
05/06/19	2:00	70.2	61.2	73.3	2.8	168	-	-
05/06/19	3:00	68.2	61.6	79.6	2.1	164	-	-
05/06/19	4:00	67.5	61.9	82.5	2.5	212	-	-
05/06/19	5:00	66.4	62.4	86.8	2.1	344	-	-
05/06/19	6:00	68	63.2	84.6	1.1	338	-	-
05/06/19	7:00	72	64.9	78.6	1.6	8	-	-
05/06/19	8:00	75	64.5	69.9	3.2	50	-	-
05/06/19	9:00	77.8	63	60.6	7.3	109	-	-
05/06/19	10:00	78.8	61.8	56	8.9	121	-	-
05/06/19	11:00	79.7	62.3	55.5	9.6	113	-	-
05/06/19	12:00	80.2	62.2	54.4	10.3	104	-	-
05/06/19	13:00	80	62.3	54.8	10.7	112	-	-
05/06/19	14:00	79.4	63.6	58.5	9.9	132	-	-
05/06/19	15:00	78.6	65.1	63.4	9	127	-	-
05/06/19	16:00	78.4	66	65.7	8	124	-	-
05/06/19	17:00	77.3	67.2	70.9	8.1	114	-	-
05/06/19	18:00	76.1	67	73.4	10.9	93	-	-
05/06/19	19:00	75.9	66.3	72.1	11.2	107	-	-
05/06/19	20:00	76.3	65.4	68.9	9.7	108	-	-
05/06/19	21:00	76.4	64.3	66.3	6.3	102	-	-
05/06/19	22:00	76.1	67.1	73.9	6.7	121	-	-
05/06/19	23:00	75.8	69.5	80.8	8.6	138	-	-
05/07/19	0:00	75.5	70.4	84	5.6	142	-	-
05/07/19	1:00	75.1	70.3	85.3	5	149	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/07/19	2:00	74.9	70.7	86.8	6	134	-	-
05/07/19	3:00	75	71	87.3	5.5	131	-	-
05/07/19	4:00	75.7	71	85.4	7.5	137	-	-
05/07/19	5:00	75.6	70.8	85.2	5.7	138	-	-
05/07/19	6:00	76.4	71	83.4	6.9	131	-	-
05/07/19	7:00	77.6	70.9	80	9.1	128	-	-
05/07/19	8:00	78.5	70.7	76.9	10.4	126	-	-
05/07/19	9:00	77.9	72.2	82.8	9.4	126	-	-
05/07/19	10:00	77.5	72.2	83.9	13.3	128	-	-
05/07/19	11:00	76.6	73.1	89	10.9	128	-	-
05/07/19	12:00	75.5	72.6	90.9	11.7	127	-	-
05/07/19	13:00	75.7	72.9	91.2	10.8	127	-	-
05/07/19	14:00	71.9	68.4	88.7	14.6	133	-	-
05/07/19	15:00	71.6	67.4	86.4	9.3	109	-	-
05/07/19	16:00	74.1	71.5	91.7	6.1	83	-	-
05/07/19	17:00	70.7	67.6	90	12.9	88	-	-
05/07/19	18:00	68.9	64.4	85.4	7.4	356	-	-
05/07/19	19:00	70.3	67.4	90.5	8.4	95	-	-
05/07/19	20:00	70.9	68.6	92.4	10.8	100	-	-
05/07/19	21:00	72.6	70.1	92.2	13.8	114	-	-
05/07/19	22:00	70.4	67.2	89.6	9	135	-	-
05/07/19	23:00	71.5	67.4	86.8	9.7	111	-	-
05/08/19	0:00	73.2	66.9	80.7	9.3	121	-	-
05/08/19	1:00	73.6	66.7	79.2	11.8	141	-	-
05/08/19	2:00	72.3	66.3	81.5	9.8	151	-	-
05/08/19	3:00	72.4	66.8	82.6	5.3	150	-	-
05/08/19	4:00	73	66.7	80.7	5	147	-	-
05/08/19	5:00	73.8	68.4	83.3	5.3	124	-	-
05/08/19	6:00	75.3	69.2	81.6	8.5	125	-	-
05/08/19	7:00	76.3	70.2	81.5	10.1	143	-	-
05/08/19	8:00	77.9	70.7	78.6	9.7	160	-	-
05/08/19	9:00	78.6	71.1	77.9	9.3	155	-	-
05/08/19	10:00	80	71.3	74.8	9.2	164	-	-
05/08/19	11:00	80.5	71.5	74.2	11.7	155	-	-
05/08/19	12:00	80	72.4	77.8	10.2	154	-	-
05/08/19	13:00	79.8	73.5	81.5	9.1	159	-	-
05/08/19	14:00	80.5	73	78.2	8.4	154	-	-
05/08/19	15:00	79.2	74.3	85.4	8.1	142	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/08/19	16:00	79.4	73.8	82.8	9.4	149	-	-
05/08/19	17:00	79.1	73.2	82.2	10.8	152	-	-
05/08/19	18:00	78.7	73	82.7	10.8	155	-	-
05/08/19	19:00	78.2	72.8	83.4	10.5	154	-	-
05/08/19	20:00	78.2	73	84.1	9.4	157	-	-
05/08/19	21:00	77.3	73.9	89.2	9.3	158	-	-
05/08/19	22:00	77.3	73.5	88.1	8.7	169	-	-
05/08/19	23:00	77.7	72.9	85	10.3	175	-	-
05/09/19	0:00	77.7	72.8	84.7	9.2	184	-	-
05/09/19	1:00	77.5	72.6	84.7	9.3	184	-	-
05/09/19	2:00	77.1	72.6	86.1	7	185	-	-
05/09/19	3:00	76.9	72.8	87.1	7.4	180	-	-
05/09/19	4:00	76.9	72.5	86.4	6.3	185	-	-
05/09/19	5:00	77	72.5	86.2	5.5	185	-	-
05/09/19	6:00	76.9	73	87.9	4.9	166	-	-
05/09/19	7:00	77.9	73.1	85.2	5.6	145	-	-
05/09/19	8:00	78.8	73.1	82.8	6	150	-	-
05/09/19	9:00	79.9	73.2	80.1	4.5	183	-	-
05/09/19	10:00	81.7	72.5	73.9	4.3	153	-	-
05/09/19	11:00	83.1	72.2	70	4	195	-	-
05/09/19	12:00	85.4	70.6	61.2	2.9	163	-	-
05/09/19	13:00	86.6	70.9	59.8	5.1	149	-	-
05/09/19	14:00	85.6	72.2	64.3	9.3	112	-	-
05/09/19	15:00	85.6	72.3	64.6	8.8	123	-	-
05/09/19	16:00	83.7	71.9	67.8	9.2	109	-	-
05/09/19	17:00	81.3	72.9	75.8	9.7	114	-	-
05/09/19	18:00	79.8	74.2	83.1	10.2	109	-	-
05/09/19	19:00	77.7	72.2	83.2	13.2	95	-	-
05/09/19	20:00	76.8	72.6	86.9	13.6	105	-	-
05/09/19	21:00	69.9	67.8	93	9.5	356	-	-
05/09/19	22:00	66.1	64.2	93.8	9.3	47	-	-
05/09/19	23:00	67.4	64.8	91.4	9.2	75	-	-
05/10/19	0:00	68.2	65.1	90	6.8	69	-	-
05/10/19	1:00	67.4	64.9	91.6	6.2	150	-	-
05/10/19	2:00	67.7	65.6	93.1	10.8	91	-	-
05/10/19	3:00	67.6	65.7	93.3	15.3	97	-	-
05/10/19	4:00	67.8	65.7	93	14.6	100	-	-
05/10/19	5:00	67.5	65.2	92.1	11.4	92	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/10/19	6:00	67.7	65.2	91.5	5.6	79	-	-
05/10/19	7:00	67.8	65.5	92.4	3.9	53	-	-
05/10/19	8:00	68.2	66.1	93.1	2.5	0	-	-
05/10/19	9:00	68.4	66	91.9	2.8	332	-	-
05/10/19	10:00	70	66	87.3	3.3	1	-	-
05/10/19	11:00	71.4	65.6	82	3.4	28	-	-
05/10/19	12:00	72.9	65.2	76.7	3.2	27	-	-
05/10/19	13:00	73.6	65.6	76.4	4.1	69	-	-
05/10/19	14:00	74.4	65.7	74.5	6.8	89	-	-
05/10/19	15:00	74.5	66.3	75.7	8.1	96	-	-
05/10/19	16:00	75.2	65.7	72.2	8.2	85	-	-
05/10/19	17:00	75.5	65.1	70.4	6.9	77	-	-
05/10/19	18:00	74.6	66	74.7	3.9	91	-	-
05/10/19	19:00	73.1	66.3	79.2	3.1	91	-	-
05/10/19	20:00	71.9	66.7	83.7	2	67	-	-
05/10/19	21:00	71.2	66.9	86.4	0.8	50	-	-
05/10/19	22:00	70.2	66.7	88.6	0.8	14	-	-
05/10/19	23:00	69.4	66.8	91.5	1.5	33	-	-
05/11/19	0:00	69.9	67.6	92.3	2.2	38	-	-
05/11/19	1:00	69.3	66.9	92.1	2.3	47	-	-
05/11/19	2:00	69.8	66.9	90.5	2.7	59	-	-
05/11/19	3:00	69.6	67	91.5	3.5	80	-	-
05/11/19	4:00	69.4	67.1	92.1	3.1	80	-	-
05/11/19	5:00	70	67.8	92.7	4.5	85	-	-
05/11/19	6:00	70.6	68.4	92.7	2.1	53	-	-
05/11/19	7:00	71.1	68.9	93	1.4	7	-	-
05/11/19	8:00	71.2	69.4	93.9	1.8	357	-	-
05/11/19	9:00	70.7	69	94.3	2.4	332	-	-
05/11/19	10:00	71.5	69.7	94.2	2.8	336	-	-
05/11/19	11:00	73.2	69.8	89.1	2.9	340	-	-
05/11/19	12:00	71.2	69	92.8	3	16	-	-
05/11/19	13:00	71.1	69.1	93.5	3.1	322	-	-
05/11/19	14:00	71.3	68.6	91	3.2	19	-	-
05/11/19	15:00	71.4	68.1	89.3	2.1	350	-	-
05/11/19	16:00	71.9	69.1	90.8	3.5	36	-	-
05/11/19	17:00	72.4	68.8	88.3	3.3	62	-	-
05/11/19	18:00	72.3	68.6	88	3	96	-	-
05/11/19	19:00	71.7	67.8	87.4	3.6	93	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/11/19	20:00	71.4	68.4	90.2	2.7	84	-	-
05/11/19	21:00	71.4	68.4	90.5	1.4	59	-	-
05/11/19	22:00	70.3	67.3	90.3	2.4	351	-	-
05/11/19	23:00	68.1	66.3	93.9	3.6	346	-	-
05/12/19	0:00	67.4	65.6	93.9	2.5	2	-	-
05/12/19	1:00	66.8	64.5	92.1	3.7	330	-	-
05/12/19	2:00	66.2	64.5	94.3	4.4	325	-	-
05/12/19	3:00	65	63.3	94.4	4.1	320	-	-
05/12/19	4:00	64.2	62.4	94	4.3	337	-	-
05/12/19	5:00	64.1	62	92.8	3.9	330	-	-
05/12/19	6:00	64.4	62.1	92	3.4	331	-	-
05/12/19	7:00	65.3	61.9	89	4.6	332	-	-
05/12/19	8:00	66.9	61.8	83.6	5	329	-	-
05/12/19	9:00	67.6	61.3	80.4	6.7	352	-	-
05/12/19	10:00	68.7	61.1	76.9	3	359	-	-
05/12/19	11:00	70	60.7	72.4	3.3	15	-	-
05/12/19	12:00	71.3	59.2	65.8	3.9	29	-	-
05/12/19	13:00	72.4	59.8	64.8	3.9	30	-	-
05/12/19	14:00	73.5	59	60.6	4.3	33	-	-
05/12/19	15:00	74.8	58.4	56.8	4.1	37	-	-
05/12/19	16:00	74.8	58	55.9	4.3	42	-	-
05/12/19	17:00	74.2	58.5	58.1	2.9	42	-	-
05/12/19	18:00	73	59.6	62.8	2.5	61	-	-
05/12/19	19:00	71.8	59.9	66.2	2	62	-	-
05/12/19	20:00	70.2	60.2	70.5	2	50	-	-
05/12/19	21:00	69.1	60.9	75.3	1.2	43	-	-
05/12/19	22:00	68.1	60.8	77.4	1.5	34	-	-
05/12/19	23:00	67.3	60.5	78.9	2.3	23	-	-
05/13/19	0:00	66.4	60.5	81.1	1.9	38	-	-
05/13/19	1:00	65.6	59.9	81.8	2.4	45	-	-
05/13/19	2:00	64.5	59.8	84.8	1.8	54	-	-
05/13/19	3:00	63.9	58.6	83	2.6	86	-	-
05/13/19	4:00	63.3	59.5	87.2	1.9	43	-	-
05/13/19	5:00	62.6	59.2	88.7	1.7	35	-	-
05/13/19	6:00	64.9	59.1	81.6	1.2	21	-	-
05/13/19	7:00	68.5	58.5	70.3	2.9	52	-	-
05/13/19	8:00	71.5	56.5	59.3	6.5	84	-	-
05/13/19	9:00	73.5	55.7	53.7	7.6	92	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/13/19	10:00	74.5	56.7	53.9	7.9	90	-	-
05/13/19	11:00	76.1	56.5	50.7	8.4	89	-	-
05/13/19	12:00	77.4	56	47.8	8	90	-	-
05/13/19	13:00	79.2	55.6	44.4	7.9	82	-	-
05/13/19	14:00	80.2	55.7	43.2	8.9	108	-	-
05/13/19	15:00	79.9	57.2	45.9	8.5	117	-	-
05/13/19	16:00	79.4	58.9	49.7	8	123	-	-
05/13/19	17:00	78	60.8	55.4	7.4	137	-	-
05/13/19	18:00	76	61.9	61.9	6.4	135	-	-
05/13/19	19:00	73.9	62.6	67.8	4.4	122	-	-
05/13/19	20:00	72.6	63.5	73.1	2.2	140	-	-
05/13/19	21:00	71.6	64.1	77.5	0.7	172	-	-
05/13/19	22:00	70.7	63.9	79.1	1.1	143	-	-
05/13/19	23:00	69.4	63.9	82.5	0.9	59	-	-
05/14/19	0:00	68	63.7	86.2	1.1	334	-	-
05/14/19	1:00	67.7	63.5	86.5	0.9	23	-	-
05/14/19	2:00	67.4	63.5	87.3	0.6	26	-	-
05/14/19	3:00	66.4	63.6	90.9	0.9	345	-	-
05/14/19	4:00	67.2	64.4	90.7	1.2	21	-	-
05/14/19	5:00	68.1	63.2	84.3	3	74	-	-
05/14/19	6:00	69.9	61.7	75.2	3.4	75	-	-
05/14/19	7:00	73.1	60.9	65.5	5.9	90	-	-
05/14/19	8:00	75.7	60	58.3	7.7	93	-	-
05/14/19	9:00	78.3	58	49.9	9.6	100	-	-
05/14/19	10:00	79.5	59.7	50.9	9.2	99	-	-
05/14/19	11:00	80.6	60.9	51.2	7.5	94	-	-
05/14/19	12:00	80.7	60.6	50.5	6.5	89	-	-
05/14/19	13:00	82	60.3	48	6.9	97	-	-
05/14/19	14:00	81.8	60.5	48.7	9.7	126	-	-
05/14/19	15:00	80.7	59.2	48.1	12.2	134	-	-
05/14/19	16:00	80.3	60.4	50.8	11.3	131	-	-
05/14/19	17:00	78.9	61.6	55.3	10.8	132	-	-
05/14/19	18:00	77.1	62.8	61.3	8.2	134	-	-
05/14/19	19:00	75.4	63.1	65.7	6.1	129	-	-
05/14/19	20:00	74.6	62.9	66.9	3.7	125	-	-
05/14/19	21:00	74	63	68.7	2.8	125	-	-
05/14/19	22:00	73.8	61.9	66.4	3.7	121	-	-
05/14/19	23:00	74	64.4	72.1	4.3	132	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/15/19	0:00	73.3	64.9	75	3.7	140	-	-
05/15/19	1:00	71.7	64.8	78.9	1.4	202	-	-
05/15/19	2:00	70.8	64.6	80.8	1.4	78	-	-
05/15/19	3:00	68.8	64.1	85	1.2	8	-	-
05/15/19	4:00	69	63.4	82.4	0.9	2	-	-
05/15/19	5:00	69.3	63.1	80.5	0.9	68	-	-
05/15/19	6:00	70.3	63.3	78.6	0.5	355	-	-
05/15/19	7:00	73.6	64.2	72.6	2.3	83	-	-
05/15/19	8:00	77.2	61.5	58.6	6.9	92	-	-
05/15/19	9:00	78.9	59.7	51.9	8.5	101	-	-
05/15/19	10:00	79.7	59.2	49.6	9.8	104	-	-
05/15/19	11:00	80.5	59.2	48.3	9.7	100	-	-
05/15/19	12:00	80.9	58.3	46.2	10.3	103	-	-
05/15/19	13:00	82	55.9	41.1	9.7	116	-	-
05/15/19	14:00	82.4	52.4	35.6	10.6	121	-	-
05/15/19	15:00	82.1	56.2	41.3	9.8	140	-	-
05/15/19	16:00	81.2	56	42.2	10.2	137	-	-
05/15/19	17:00	79.5	59.6	50.6	9.8	143	-	-
05/15/19	18:00	77.5	61.7	58.3	8.9	138	-	-
05/15/19	19:00	75.7	63.7	66.4	7.1	139	-	-
05/15/19	20:00	74.6	63.5	68.3	5.2	135	-	-
05/15/19	21:00	73.8	62.6	68.1	4.7	129	-	-
05/15/19	22:00	73.1	62.2	68.7	4.7	135	-	-
05/15/19	23:00	72	62.8	73	2.8	149	-	-
05/16/19	0:00	71	63.6	77.7	2	152	-	-
05/16/19	1:00	69.4	63.8	82.5	0.5	270	-	-
05/16/19	2:00	68.4	63.9	86	0.8	240	-	-
05/16/19	3:00	67.7	64.1	88.1	0.8	352	-	-
05/16/19	4:00	66.3	63.7	91.2	0.6	37	-	-
05/16/19	5:00	66.6	64.1	91.4	0.9	48	-	-
05/16/19	6:00	70.5	64.9	82.7	1.4	73	-	-
05/16/19	7:00	75.2	65.9	72.8	4.1	94	-	-
05/16/19	8:00	76.5	65.7	69.2	5	125	-	-
05/16/19	9:00	78.6	64.9	63	6.9	111	-	-
05/16/19	10:00	79.5	65	61.2	8.5	98	-	-
05/16/19	11:00	80.4	63.1	55.6	9.3	101	-	-
05/16/19	12:00	81.3	60.1	48.8	10.6	96	-	-
05/16/19	13:00	82	57.4	43.2	11.6	102	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/16/19	14:00	82.3	56.5	41.5	12.2	103	-	-
05/16/19	15:00	82.2	56.7	41.8	12.2	104	-	-
05/16/19	16:00	81.3	57.1	43.7	11.8	116	-	-
05/16/19	17:00	79.8	57.9	47.2	10.9	116	-	-
05/16/19	18:00	77.4	61.5	58.2	9	120	-	-
05/16/19	19:00	75.4	63.4	66.3	8	131	-	-
05/16/19	20:00	74.4	64.9	72.3	6.8	138	-	-
05/16/19	21:00	73.5	65.6	76.4	5.2	142	-	-
05/16/19	22:00	72.6	65.5	78.5	4	155	-	-
05/16/19	23:00	72.1	66.2	81.6	3.8	146	-	-
05/17/19	0:00	71.7	66.7	84.5	3.2	135	-	-
05/17/19	1:00	71.5	66.7	85	2.9	132	-	-
05/17/19	2:00	71.2	67.1	87	2.6	134	-	-
05/17/19	3:00	71.2	67.5	88.1	2.9	141	-	-
05/17/19	4:00	71.8	67.8	87.3	4.3	130	-	-
05/17/19	5:00	73.1	68.7	86.2	5.4	134	-	-
05/17/19	6:00	74.4	69.2	83.8	5.5	127	-	-
05/17/19	7:00	76.6	69.3	78.3	6.6	128	-	-
05/17/19	8:00	78.9	68.7	71	9.2	141	-	-
05/17/19	9:00	81.2	67.9	64.1	10.6	141	-	-
05/17/19	10:00	81.5	68.7	65.4	11.2	128	-	-
05/17/19	11:00	81.6	69.3	66.3	12.3	123	-	-
05/17/19	12:00	81.8	69.4	66.3	12.5	129	-	-
05/17/19	13:00	82.2	69.5	65.7	13.3	132	-	-
05/17/19	14:00	81.6	70.3	68.5	13.5	126	-	-
05/17/19	15:00	81.6	70.1	68.3	14.1	126	-	-
05/17/19	16:00	80.6	70.4	71.3	14	125	-	-
05/17/19	17:00	79.5	70.9	75.3	13.4	127	-	-
05/17/19	18:00	78.5	71.3	78.6	13.1	127	-	-
05/17/19	19:00	77.9	71.4	80.6	11.5	128	-	-
05/17/19	20:00	77.7	71.8	82	11.5	129	-	-
05/17/19	21:00	77.8	72	82.5	11.1	130	-	-
05/17/19	22:00	77.5	71.6	82	11.8	132	-	-
05/17/19	23:00	77.4	71.8	83	9.7	141	-	-
05/18/19	0:00	77.2	71.9	83.6	8.5	135	-	-
05/18/19	1:00	77.3	71.7	82.8	9.8	142	-	-
05/18/19	2:00	77.4	71.8	82.9	10.4	148	-	-
05/18/19	3:00	77.4	72.2	83.9	8.6	150	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/18/19	4:00	77.1	72.5	85.6	8.3	145	-	-
05/18/19	5:00	77.1	72.4	85.5	9.2	143	-	-
05/18/19	6:00	77.8	71.8	81.8	9.9	149	-	-
05/18/19	7:00	78.6	71.4	78.5	10.4	155	-	-
05/18/19	8:00	79.6	70.7	74.3	10.7	152	-	-
05/18/19	9:00	80.6	70.7	72.1	11	156	-	-
05/18/19	10:00	82	70.5	68.4	13.1	154	-	-
05/18/19	11:00	83.8	69.3	61.8	14.2	157	-	-
05/18/19	12:00	82.9	70.1	65.4	13.4	164	-	-
05/18/19	13:00	81.8	71.3	70.7	12.5	157	-	-
05/18/19	14:00	82	71.4	70.4	11.7	157	-	-
05/18/19	15:00	82.5	70.5	67.2	12.3	160	-	-
05/18/19	16:00	80.3	73.8	80.7	8.5	156	-	-
05/18/19	17:00	80.4	74.1	81.2	8.9	153	-	-
05/18/19	18:00	80.1	73.8	81.2	10.4	149	-	-
05/18/19	19:00	80	73.2	80	9.2	150	-	-
05/18/19	20:00	79.9	74.1	82.5	9.5	149	-	-
05/18/19	21:00	79.8	74.1	82.8	10.3	162	-	-
05/18/19	22:00	79.9	73.6	81.3	8.9	169	-	-
05/18/19	23:00	79.5	74.4	84.4	8.7	170	-	-
05/19/19	0:00	79.3	74.3	84.7	8.1	182	-	-
05/19/19	1:00	79.1	73.8	83.7	6.8	183	-	-
05/19/19	2:00	79.1	74.5	85.9	6.3	190	-	-
05/19/19	3:00	78.6	74.9	88.4	5.2	191	-	-
05/19/19	4:00	78.6	74.6	87.6	5.1	196	-	-
05/19/19	5:00	78.4	74.4	87.5	6.5	167	-	-
05/19/19	6:00	78.9	74.3	85.9	7.3	181	-	-
05/19/19	7:00	80.5	73.9	80.3	8.1	192	-	-
05/19/19	8:00	82.7	72.8	72	9.3	191	-	-
05/19/19	9:00	84.4	72.3	67.1	7.8	189	-	-
05/19/19	10:00	86.4	71.4	61	7.7	172	-	-
05/19/19	11:00	87.3	71.4	59.4	7.4	177	-	-
05/19/19	12:00	87.7	70.6	57.1	8.7	158	-	-
05/19/19	13:00	88.4	71.5	57.5	9.5	147	-	-
05/19/19	14:00	87.9	71.8	59.1	9.8	153	-	-
05/19/19	15:00	86.8	72	61.5	10.6	143	-	-
05/19/19	16:00	86.2	72	62.7	10.1	133	-	-
05/19/19	17:00	84.1	72.5	68.1	10.8	142	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
Houston Deer Park #2 TCEQ Monitoring Station
Elevation: 6.0 m above sea level
Latitude: 29.6700250
Longitude: -95.1285077
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/19/19	18:00	82.1	73.8	76.2	9.6	130	-	-
05/19/19	19:00	80.3	74.4	82.4	9.4	127	-	-
05/19/19	20:00	80	74.8	84.3	10.3	127	-	-
05/19/19	21:00	79.5	74.2	83.8	10.8	127	-	-
05/19/19	22:00	79.2	73.9	83.7	7.9	133	-	-
05/19/19	23:00	78.6	74	85.8	6	149	-	-
05/20/19	0:00	78.6	74.2	86.5	6.3	159	-	-
05/20/19	1:00	78.9	74	85.1	7.4	157	-	-
05/20/19	2:00	78.3	74.1	86.8	6.8	141	-	-
05/20/19	3:00	77.9	74	88	6.6	126	-	-
05/20/19	4:00	77.9	73.9	87.5	6.7	136	-	-
05/20/19	5:00	77.7	73.9	88	5.6	141	-	-
05/20/19	6:00	78.7	73.7	84.6	8.2	136	-	-
05/20/19	7:00	80.3	72.4	76.8	10.3	144	-	-
05/20/19	8:00	82.3	70.7	68.1	12.3	144	-	-
05/20/19	9:00	83.9	70.2	63.4	14.1	143	-	-
05/20/19	10:00	84.7	69.4	60.2	14.1	150	-	-
05/20/19	11:00	85.3	69.4	59	13	149	-	-
05/20/19	12:00	85.7	69.2	58	14.5	140	-	-
05/20/19	13:00	86.4	68.8	55.7	15.2	145	-	-
05/20/19	14:00	85.7	70.3	60.2	14.8	143	-	-
05/20/19	15:00	84.6	71	64.1	14.8	150	-	-
05/20/19	16:00	83.3	72.1	69	13	148	-	-
05/20/19	17:00	81.9	72.8	74	12.4	144	-	-
05/20/19	18:00	81.2	73.1	76.7	12	145	-	-
05/20/19	19:00	80.7	72.9	77.3	12	145	-	-
05/20/19	20:00	80.3	73	78.3	13.3	148	-	-
05/20/19	21:00	80.2	72.5	77.5	14.9	151	-	-
05/20/19	22:00	79.9	72.2	77.6	14.1	150	-	-
05/20/19	23:00	79.6	71.7	76.8	15	150	-	-

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
03/19/19	0:00	56.1	-	-	4.1	70	-	0
03/19/19	1:00	56.2	-	-	3.5	72	-	0
03/19/19	2:00	56.7	-	-	4.4	56	-	0
03/19/19	3:00	56	-	-	3.7	59	-	0
03/19/19	4:00	55.8	-	-	3.4	50	-	0
03/19/19	5:00	56	-	-	4.8	46	-	0
03/19/19	6:00	56	-	-	5.3	41	-	0
03/19/19	7:00	56	-	-	6.6	62	-	0
03/19/19	8:00	58.8	-	-	9.2	70	-	0
03/19/19	9:00	63.2	-	-	12.8	83	-	0
03/19/19	10:00	64	-	-	14.1	89	-	0
03/19/19	11:00	65.7	-	-	13.4	100	-	0
03/19/19	12:00	66.4	-	-	14.2	110	-	0
03/19/19	13:00	66	-	-	15.6	114	-	0
03/19/19	14:00	65.6	-	-	16.7	112	-	0
03/19/19	15:00	65.1	-	-	15.5	119	-	0
03/19/19	16:00	64.6	-	-	14.7	122	-	0
03/19/19	17:00	63.4	-	-	12.6	130	-	0
03/19/19	18:00	60.5	-	-	9.4	132	-	0
03/19/19	19:00	58.6	-	-	5.8	134	-	0
03/19/19	20:00	56.5	-	-	3.4	138	-	0
03/19/19	21:00	54.9	-	-	2	187	-	0
03/19/19	22:00	53.5	-	-	1	261	-	0
03/19/19	23:00	53.9	-	-	0.5	63	-	0
03/20/19	0:00	54.7	-	-	0.3	27	-	0
03/20/19	1:00	53.7	-	-	0.5	303	-	0
03/20/19	2:00	51.3	-	-	0.7	274	-	0
03/20/19	3:00	53.1	-	-	2	14	-	0
03/20/19	4:00	52.2	-	-	1.6	55	-	0
03/20/19	5:00	52.2	-	-	4	46	-	0
03/20/19	6:00	51.5	-	-	2	45	-	0
03/20/19	7:00	54.3	-	-	1.9	53	-	0
03/20/19	8:00	60.8	-	-	5.4	59	-	0
03/20/19	9:00	64.9	-	-	5.2	74	-	0
03/20/19	10:00	68.7	-	-	4.2	94	-	0
03/20/19	11:00	69.9	-	-	4.5	91	-	0
03/20/19	12:00	71.3	-	-	5.9	85	-	0
03/20/19	13:00	71.7	-	-	8.4	106	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
03/20/19	14:00	71.7	-	-	7.5	120	-	0
03/20/19	15:00	73.7	-	-	6.2	116	-	0
03/20/19	16:00	72.7	-	-	5.2	99	-	0
03/20/19	17:00	69.6	-	-	5.8	136	-	0
03/20/19	18:00	67.8	-	-	9.1	184	-	0
03/20/19	19:00	65.2	-	-	8	199	-	0
03/20/19	20:00	62.7	-	-	7	212	-	0
03/20/19	21:00	60.7	-	-	4.9	240	-	0
03/20/19	22:00	58.4	-	-	3.7	262	-	0
03/20/19	23:00	58.8	-	-	6.7	259	-	0
03/21/19	0:00	59	-	-	6.4	277	-	0
03/21/19	1:00	60.9	-	-	5.2	342	-	0
03/21/19	2:00	59.7	-	-	4.7	11	-	0
03/21/19	3:00	58.6	-	-	3.1	55	-	0
03/21/19	4:00	56.5	-	-	1.8	50	-	0
03/21/19	5:00	56.3	-	-	2.8	49	-	0
03/21/19	6:00	55.2	-	-	2.5	52	-	0
03/21/19	7:00	58.2	-	-	2.5	76	-	0
03/21/19	8:00	63.7	-	-	3.7	95	-	0
03/21/19	9:00	65.8	-	-	4.2	42	-	0
03/21/19	10:00	66.3	-	-	5.5	14	-	0
03/21/19	11:00	69.2	-	-	4.1	318	-	0
03/21/19	12:00	70.1	-	-	5.1	335	-	0
03/21/19	13:00	72.2	-	-	4.3	302	-	0
03/21/19	14:00	72.1	-	-	5.2	350	-	0
03/21/19	15:00	74.9	-	-	7.5	275	-	0
03/21/19	16:00	74.5	-	-	5.7	333	-	0
03/21/19	17:00	72.6	-	-	6.2	146	-	0
03/21/19	18:00	67.7	-	-	9.4	187	-	0
03/21/19	19:00	62.8	-	-	8.6	195	-	0
03/21/19	20:00	60.3	-	-	6.1	213	-	0
03/21/19	21:00	58.9	-	-	5.7	223	-	0
03/21/19	22:00	57.6	-	-	5.4	227	-	0
03/21/19	23:00	56.4	-	-	5.8	231	-	0
03/22/19	0:00	55.4	-	-	5.4	240	-	0
03/22/19	1:00	54.9	-	-	5.6	239	-	0
03/22/19	2:00	54.8	-	-	5.3	245	-	0
03/22/19	3:00	52.4	-	-	2.9	264	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
03/22/19	4:00	52.4	-	-	3	256	-	0
03/22/19	5:00	50.7	-	-	2.1	276	-	0
03/22/19	6:00	50.6	-	-	1.1	287	-	0
03/22/19	7:00	54.2	-	-	0.8	316	-	0
03/22/19	8:00	63.8	-	-	2.1	317	-	0
03/22/19	9:00	69.6	-	-	5.7	285	-	0
03/22/19	10:00	71.8	-	-	3.2	351	-	0
03/22/19	11:00	75.8	-	-	6.2	106	-	0
03/22/19	12:00	75.7	-	-	10.7	122	-	0
03/22/19	13:00	75.5	-	-	11.7	110	-	0
03/22/19	14:00	74.5	-	-	13.4	117	-	0
03/22/19	15:00	74.4	-	-	14.3	116	-	0
03/22/19	16:00	74.5	-	-	13.5	130	-	0
03/22/19	17:00	73.2	-	-	12.8	152	-	0
03/22/19	18:00	69.8	-	-	10	175	-	0
03/22/19	19:00	66.8	-	-	8.2	183	-	0
03/22/19	20:00	63.7	-	-	7.4	192	-	0
03/22/19	21:00	62.7	-	-	8.5	191	-	0
03/22/19	22:00	62	-	-	7.1	192	-	0
03/22/19	23:00	61	-	-	4.4	190	-	0
03/23/19	0:00	62	-	-	8.4	173	-	0
03/23/19	1:00	62.6	-	-	8.2	172	-	0
03/23/19	2:00	61.4	-	-	4.3	186	-	0
03/23/19	3:00	61.5	-	-	6.8	169	-	0
03/23/19	4:00	62.3	-	-	7.5	160	-	0
03/23/19	5:00	62.8	-	-	8	139	-	0
03/23/19	6:00	62.7	-	-	6	130	-	0
03/23/19	7:00	64.5	-	-	7.5	120	-	0
03/23/19	8:00	66	-	-	10.2	116	-	0
03/23/19	9:00	68.2	-	-	14.9	120	-	0
03/23/19	10:00	69	-	-	17.7	120	-	0
03/23/19	11:00	69.5	-	-	17.5	118	-	0
03/23/19	12:00	68.9	-	-	19.2	116	-	0
03/23/19	13:00	68.2	-	-	17.7	120	-	0
03/23/19	14:00	68.4	-	-	16.5	124	-	0
03/23/19	15:00	68.2	-	-	17.3	128	-	0
03/23/19	16:00	68.3	-	-	14.3	129	-	0
03/23/19	17:00	67.3	-	-	13.9	130	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
03/23/19	18:00	65.6	-	-	10.6	125	-	0
03/23/19	19:00	64.7	-	-	10.1	125	-	0
03/23/19	20:00	64.3	-	-	9.7	124	-	0
03/23/19	21:00	64.1	-	-	9.9	125	-	0
03/23/19	22:00	64.1	-	-	7.9	130	-	0
03/23/19	23:00	63.4	-	-	5.6	108	-	0
03/24/19	0:00	63.5	-	-	6.9	115	-	0
03/24/19	1:00	63.4	-	-	6.5	111	-	0
03/24/19	2:00	62.5	-	-	5.6	98	-	0
03/24/19	3:00	62.3	-	-	5.7	91	-	0
03/24/19	4:00	62.9	-	-	6.3	111	-	0
03/24/19	5:00	62.6	-	-	5.9	104	-	0
03/24/19	6:00	62.9	-	-	4.3	99	-	0
03/24/19	7:00	64.9	-	-	6.9	122	-	0
03/24/19	8:00	68.6	-	-	9	130	-	0
03/24/19	9:00	71.8	-	-	12	166	-	0
03/24/19	10:00	72.7	-	-	10.5	187	-	0
03/24/19	11:00	73.6	-	-	12.9	169	-	0
03/24/19	12:00	73.9	-	-	11.5	158	-	0
03/24/19	13:00	74.1	-	-	12.1	151	-	0
03/24/19	14:00	75	-	-	13.3	161	-	0
03/24/19	15:00	74.8	-	-	12.9	158	-	0
03/24/19	16:00	73.6	-	-	15.1	162	-	0
03/24/19	17:00	72.3	-	-	13.9	164	-	0
03/24/19	18:00	71	-	-	13.5	162	-	0
03/24/19	19:00	69.8	-	-	13.1	165	-	0
03/24/19	20:00	68.9	-	-	11.4	166	-	0
03/24/19	21:00	68.5	-	-	8.9	169	-	0
03/24/19	22:00	68.8	-	-	9.8	175	-	0
03/24/19	23:00	68.1	-	-	8.8	188	-	0
03/25/19	0:00	67.9	-	-	9.9	191	-	0
03/25/19	1:00	67.7	-	-	9.7	190	-	0
03/25/19	2:00	66.9	-	-	8.1	204	-	0
03/25/19	3:00	66.8	-	-	7.4	209	-	0
03/25/19	4:00	66.8	-	-	5.4	242	-	0
03/25/19	5:00	66.8	-	-	6.6	226	-	0
03/25/19	6:00	67.2	-	-	2.7	232	-	0
03/25/19	7:00	67.8	-	-	1.2	104	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
03/25/19	8:00	69	-	-	2.7	215	-	0
03/25/19	9:00	71	-	-	4.6	268	-	0
03/25/19	10:00	76.6	-	-	9	267	-	0
03/25/19	11:00	78.8	-	-	9.1	270	-	0
03/25/19	12:00	79.9	-	-	8.3	274	-	0
03/25/19	13:00	81.1	-	-	8.1	261	-	0
03/25/19	14:00	82.9	-	-	7.7	254	-	0
03/25/19	15:00	83.5	-	-	5.6	289	-	0
03/25/19	16:00	84	-	-	5.3	47	-	0
03/25/19	17:00	77.4	-	-	8.5	51	-	0
03/25/19	18:00	77.3	-	-	8.3	27	-	0
03/25/19	19:00	71.6	-	-	8.6	90	-	0
03/25/19	20:00	69.6	-	-	6.9	118	-	0
03/25/19	21:00	68	-	-	4.4	88	-	0
03/25/19	22:00	67	-	-	3.1	34	-	0
03/25/19	23:00	66.7	-	-	3.5	356	-	0
03/26/19	0:00	67.1	-	-	8	11	-	0
03/26/19	1:00	65	-	-	8.5	13	-	0
03/26/19	2:00	62.3	-	-	8.9	15	-	0
03/26/19	3:00	61.2	-	-	9	24	-	0
03/26/19	4:00	60.6	-	-	8.2	39	-	0
03/26/19	5:00	59.8	-	-	10.2	54	-	0
03/26/19	6:00	58.5	-	-	7.5	53	-	0
03/26/19	7:00	59.5	-	-	8.6	62	-	0
03/26/19	8:00	61.6	-	-	10.2	58	-	0
03/26/19	9:00	64.7	-	-	9.2	68	-	0
03/26/19	10:00	66.7	-	-	7.1	57	-	0
03/26/19	11:00	68.9	-	-	7.8	26	-	0
03/26/19	12:00	70.5	-	-	7.1	36	-	0
03/26/19	13:00	71.7	-	-	7.8	17	-	0
03/26/19	14:00	72.6	-	-	8.7	10	-	0
03/26/19	15:00	73.6	-	-	9.1	33	-	0
03/26/19	16:00	74.1	-	-	7.5	31	-	0
03/26/19	17:00	73.6	-	-	6.7	27	-	0
03/26/19	18:00	71.8	-	-	5.8	356	-	0
03/26/19	19:00	70.5	-	-	6.4	5	-	0
03/26/19	20:00	68.4	-	-	6.3	47	-	0
03/26/19	21:00	64.5	-	-	6.8	72	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
03/26/19	22:00	62.6	-	-	6.7	70	-	0
03/26/19	23:00	61.3	-	-	7.8	73	-	0
03/27/19	0:00	60.6	-	-	7.9	73	-	0
03/27/19	1:00	59.7	-	-	4.5	60	-	0
03/27/19	2:00	58.9	-	-	8.8	81	-	0
03/27/19	3:00	58.7	-	-	9.9	85	-	0
03/27/19	4:00	58.1	-	-	10.1	82	-	0
03/27/19	5:00	57.3	-	-	10.6	80	-	0
03/27/19	6:00	57.5	-	-	9.6	80	-	0
03/27/19	7:00	60.7	-	-	11.9	86	-	0
03/27/19	8:00	62.9	-	-	14.3	91	-	0
03/27/19	9:00	64.1	-	-	14	96	-	0
03/27/19	10:00	65.4	-	-	11.7	108	-	0
03/27/19	11:00	67	-	-	10.7	119	-	0
03/27/19	12:00	68	-	-	10.3	113	-	0
03/27/19	13:00	68	-	-	10.4	122	-	0
03/27/19	14:00	67.7	-	-	11.9	123	-	0
03/27/19	15:00	67	-	-	12	119	-	0
03/27/19	16:00	66.7	-	-	12.2	133	-	0
03/27/19	17:00	65	-	-	12.4	132	-	0
03/27/19	18:00	62.1	-	-	11.4	133	-	0
03/27/19	19:00	60.4	-	-	8.6	140	-	0
03/27/19	20:00	59.6	-	-	6.4	142	-	0
03/27/19	21:00	59.2	-	-	5.2	142	-	0
03/27/19	22:00	59.1	-	-	5.5	135	-	0
03/27/19	23:00	59.5	-	-	6.2	140	-	0
03/28/19	0:00	59.5	-	-	6.1	157	-	0
03/28/19	1:00	59.2	-	-	5.7	156	-	0
03/28/19	2:00	58.7	-	-	5.6	131	-	0
03/28/19	3:00	59.7	-	-	5.8	132	-	0
03/28/19	4:00	60.3	-	-	6.9	130	-	0
03/28/19	5:00	61.3	-	-	8.5	128	-	0
03/28/19	6:00	61.9	-	-	8.3	133	-	0
03/28/19	7:00	64.6	-	-	11.5	137	-	0
03/28/19	8:00	67.1	-	-	14.9	137	-	0
03/28/19	9:00	68.7	-	-	15	144	-	0
03/28/19	10:00	69.2	-	-	15.3	130	-	0
03/28/19	11:00	69.8	-	-	15.4	128	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
03/28/19	12:00	70.8	-	-	15.4	126	-	0
03/28/19	13:00	70.8	-	-	18.5	132	-	0
03/28/19	14:00	70.9	-	-	18.6	131	-	0
03/28/19	15:00	70.4	-	-	17.8	129	-	0
03/28/19	16:00	70.8	-	-	16.2	149	-	0
03/28/19	17:00	69.3	-	-	14.8	133	-	0
03/28/19	18:00	67.5	-	-	11.5	125	-	0
03/28/19	19:00	66.5	-	-	8.5	127	-	0
03/28/19	20:00	65.7	-	-	8.2	122	-	0
03/28/19	21:00	65.4	-	-	10.8	124	-	0
03/28/19	22:00	65.2	-	-	8.1	132	-	0
03/28/19	23:00	64.7	-	-	7.5	126	-	0
03/29/19	0:00	64.6	-	-	8	125	-	0
03/29/19	1:00	64.7	-	-	6.8	135	-	0
03/29/19	2:00	65	-	-	8.9	134	-	0
03/29/19	3:00	65.6	-	-	11.5	142	-	0
03/29/19	4:00	65.8	-	-	9.8	145	-	0
03/29/19	5:00	65.1	-	-	6.7	135	-	0
03/29/19	6:00	66.3	-	-	8.7	140	-	0
03/29/19	7:00	67.6	-	-	7.7	130	-	0
03/29/19	8:00	68.9	-	-	8.2	121	-	0
03/29/19	9:00	69.2	-	-	11.6	117	-	0
03/29/19	10:00	70.8	-	-	13.7	121	-	0
03/29/19	11:00	73	-	-	18.6	132	-	0
03/29/19	12:00	72.9	-	-	19	127	-	0
03/29/19	13:00	73.2	-	-	18.2	134	-	0
03/29/19	14:00	74.6	-	-	18.3	138	-	0
03/29/19	15:00	74.9	-	-	17	147	-	0
03/29/19	16:00	73.4	-	-	17.3	126	-	0
03/29/19	17:00	71.8	-	-	17.1	142	-	0
03/29/19	18:00	70.4	-	-	15.1	144	-	0
03/29/19	19:00	68.7	-	-	13.3	144	-	0
03/29/19	20:00	68.1	-	-	10.6	144	-	0
03/29/19	21:00	67.9	-	-	9.8	140	-	0
03/29/19	22:00	67.3	-	-	9.9	151	-	0
03/29/19	23:00	67.5	-	-	9.2	158	-	0
03/30/19	0:00	67.3	-	-	9.2	159	-	0
03/30/19	1:00	67.5	-	-	12.8	164	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
03/30/19	2:00	67.6	-	-	12.3	165	-	0
03/30/19	3:00	68.2	-	-	11.8	165	-	0
03/30/19	4:00	68.1	-	-	8.9	172	-	0
03/30/19	5:00	67.9	-	-	9.3	167	-	0
03/30/19	6:00	67.9	-	-	11.2	162	-	0
03/30/19	7:00	69.2	-	-	12.2	167	-	0
03/30/19	8:00	71.7	-	-	11.7	180	-	0
03/30/19	9:00	73.3	-	-	8.7	193	-	0
03/30/19	10:00	75	-	-	7.2	226	-	0
03/30/19	11:00	75.8	-	-	5.7	280	-	0
03/30/19	12:00	75.2	-	-	3.5	35	-	0
03/30/19	13:00	76.7	-	-	6.7	310	-	0
03/30/19	14:00	76.6	-	-	7.5	295	-	0
03/30/19	15:00	74.2	-	-	7.2	341	-	0
03/30/19	16:00	63.6	-	-	16.9	319	-	0
03/30/19	17:00	58.6	-	-	16.7	341	-	0
03/30/19	18:00	57.9	-	-	16	349	-	0
03/30/19	19:00	57.8	-	-	14.4	345	-	0
03/30/19	20:00	56.7	-	-	15.9	337	-	0
03/30/19	21:00	54.5	-	-	16.6	343	-	0
03/30/19	22:00	53.3	-	-	14.2	347	-	0
03/30/19	23:00	52.1	-	-	19.3	358	-	0
03/31/19	0:00	51.1	-	-	17.8	357	-	0
03/31/19	1:00	50.5	-	-	19.6	5	-	0
03/31/19	2:00	49.8	-	-	15.7	8	-	0
03/31/19	3:00	49.6	-	-	16	6	-	0
03/31/19	4:00	49.4	-	-	12.8	11	-	0
03/31/19	5:00	49	-	-	12.1	9	-	0
03/31/19	6:00	48.8	-	-	14.5	6	-	0
03/31/19	7:00	48.7	-	-	13.1	6	-	0
03/31/19	8:00	48.8	-	-	13.6	9	-	0
03/31/19	9:00	49.1	-	-	12.2	14	-	0
03/31/19	10:00	49.7	-	-	11	8	-	0
03/31/19	11:00	50.4	-	-	10.8	10	-	0
03/31/19	12:00	51.2	-	-	10.2	6	-	0
03/31/19	13:00	52.5	-	-	11.4	6	-	0
03/31/19	14:00	53.2	-	-	10.2	0	-	0
03/31/19	15:00	52.7	-	-	10.3	2	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
03/31/19	16:00	52.4	-	-	11.4	5	-	0.01
03/31/19	17:00	51.8	-	-	9.5	15	-	0
03/31/19	18:00	51.4	-	-	7.8	22	-	0
03/31/19	19:00	51	-	-	8.2	18	-	0
03/31/19	20:00	50.7	-	-	7.7	30	-	0
03/31/19	21:00	49.6	-	-	8.2	51	-	0
03/31/19	22:00	48.6	-	-	9.2	58	-	0
03/31/19	23:00	47	-	-	7.2	62	-	0
04/01/19	0:00	46	-	-	6.3	65	-	0
04/01/19	1:00	46.4	-	-	7	54	-	0
04/01/19	2:00	46.1	-	-	7.5	54	-	0
04/01/19	3:00	45.4	-	-	7.1	52	-	0.02
04/01/19	4:00	45.8	-	-	7.1	43	-	0
04/01/19	5:00	45.1	-	-	6.5	39	-	0
04/01/19	6:00	44.8	-	-	5.8	24	-	0
04/01/19	7:00	46.4	-	-	8.7	39	-	0
04/01/19	8:00	49.1	-	-	8.8	53	-	0
04/01/19	9:00	50.5	-	-	8.8	45	-	0
04/01/19	10:00	52	-	-	8	37	-	0
04/01/19	11:00	54	-	-	7.2	63	-	0
04/01/19	12:00	53.9	-	-	6.1	340	-	0
04/01/19	13:00	54.4	-	-	8	324	-	0
04/01/19	14:00	54.3	-	-	7.5	344	-	0
04/01/19	15:00	54.4	-	-	4.8	347	-	0
04/01/19	16:00	54.5	-	-	4.8	19	-	0
04/01/19	17:00	54	-	-	5.2	11	-	0
04/01/19	18:00	53.1	-	-	4.9	11	-	0
04/01/19	19:00	52	-	-	3.7	0	-	0
04/01/19	20:00	51.6	-	-	5.2	352	-	0
04/01/19	21:00	51.2	-	-	4.6	359	-	0
04/01/19	22:00	50.2	-	-	4	2	-	0
04/01/19	23:00	49.4	-	-	3	33	-	0.18
04/02/19	0:00	47.5	-	-	2.1	45	-	0
04/02/19	1:00	44.2	-	-	2	70	-	0
04/02/19	2:00	44.7	-	-	4.9	62	-	0
04/02/19	3:00	44.1	-	-	5	78	-	0
04/02/19	4:00	43.9	-	-	3.6	59	-	0
04/02/19	5:00	43.4	-	-	3.4	64	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table

La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/02/19	6:00	42.2	-	-	0.9	88	-	0
04/02/19	7:00	48.6	-	-	2.1	66	-	0
04/02/19	8:00	56.1	-	-	4.9	93	-	0
04/02/19	9:00	58.8	-	-	3.6	84	-	0
04/02/19	10:00	62	-	-	3.9	60	-	0
04/02/19	11:00	62.7	-	-	5.4	39	-	0
04/02/19	12:00	64.7	-	-	5.8	29	-	0
04/02/19	13:00	65.4	-	-	7.1	25	-	0
04/02/19	14:00	67.2	-	-	7.6	30	-	0
04/02/19	15:00	68.5	-	-	6.7	54	-	0
04/02/19	16:00	68	-	-	11.7	89	-	0
04/02/19	17:00	63	-	-	12.4	122	-	0
04/02/19	18:00	59.5	-	-	12.1	133	-	0
04/02/19	19:00	57.8	-	-	9.2	156	-	0
04/02/19	20:00	57.2	-	-	9	165	-	0
04/02/19	21:00	56.2	-	-	6.1	165	-	0
04/02/19	22:00	54	-	-	2.8	157	-	0
04/02/19	23:00	52	-	-	1.8	107	-	0
04/03/19	0:00	51.6	-	-	2.4	104	-	0
04/03/19	1:00	53.1	-	-	3	99	-	0
04/03/19	2:00	53.6	-	-	3.1	116	-	0
04/03/19	3:00	55.4	-	-	4	122	-	0
04/03/19	4:00	56.6	-	-	3.4	122	-	0
04/03/19	5:00	55.2	-	-	4.1	59	-	0
04/03/19	6:00	55.9	-	-	6.3	59	-	0
04/03/19	7:00	57.5	-	-	6.2	66	-	0
04/03/19	8:00	61.5	-	-	9.4	91	-	0
04/03/19	9:00	63.7	-	-	11.4	106	-	0
04/03/19	10:00	65	-	-	11.8	109	-	0
04/03/19	11:00	65.5	-	-	13.8	110	-	0
04/03/19	12:00	66	-	-	14.7	109	-	0
04/03/19	13:00	66.8	-	-	15.7	110	-	0
04/03/19	14:00	66.8	-	-	17.6	112	-	0
04/03/19	15:00	66.6	-	-	16.1	108	-	0
04/03/19	16:00	65.3	-	-	15.9	105	-	0
04/03/19	17:00	64.2	-	-	16.5	104	-	0
04/03/19	18:00	63.7	-	-	15.9	101	-	0
04/03/19	19:00	63.7	-	-	14.9	106	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/03/19	20:00	64	-	-	15.3	111	-	0
04/03/19	21:00	64.4	-	-	16.1	115	-	0
04/03/19	22:00	64.5	-	-	12.5	115	-	0
04/03/19	23:00	64.4	-	-	8.4	115	-	0
04/04/19	0:00	64.5	-	-	12.1	133	-	0
04/04/19	1:00	65.4	-	-	14.2	134	-	0
04/04/19	2:00	66.4	-	-	14.5	145	-	0
04/04/19	3:00	67.3	-	-	12.3	146	-	0
04/04/19	4:00	68.2	-	-	8.8	135	-	0
04/04/19	5:00	69.2	-	-	11.6	162	-	0
04/04/19	6:00	70.3	-	-	10.1	183	-	0
04/04/19	7:00	71.1	-	-	10.4	193	-	0
04/04/19	8:00	71.6	-	-	8.5	204	-	0
04/04/19	9:00	71.9	-	-	6.4	223	-	0
04/04/19	10:00	75.1	-	-	11.2	194	-	0
04/04/19	11:00	77.3	-	-	11.8	208	-	0
04/04/19	12:00	77.9	-	-	12.7	215	-	0
04/04/19	13:00	79.6	-	-	14.4	220	-	0
04/04/19	14:00	81	-	-	16	224	-	0
04/04/19	15:00	81.2	-	-	14	223	-	0
04/04/19	16:00	81.2	-	-	12.1	226	-	0
04/04/19	17:00	81	-	-	9.6	218	-	0
04/04/19	18:00	77.4	-	-	7.9	179	-	0
04/04/19	19:00	73.5	-	-	7.5	176	-	0
04/04/19	20:00	71.2	-	-	9	185	-	0
04/04/19	21:00	69.8	-	-	10.5	189	-	0
04/04/19	22:00	69.2	-	-	7.6	188	-	0
04/04/19	23:00	69	-	-	5.9	202	-	0
04/05/19	0:00	69.1	-	-	5.6	191	-	0
04/05/19	1:00	68.9	-	-	6	208	-	0.04
04/05/19	2:00	68.7	-	-	3.5	288	-	0
04/05/19	3:00	68.5	-	-	2	301	-	0
04/05/19	4:00	68.6	-	-	2.2	82	-	0
04/05/19	5:00	68.5	-	-	5.3	77	-	0
04/05/19	6:00	68	-	-	4.9	93	-	0
04/05/19	7:00	68.2	-	-	5.7	89	-	0
04/05/19	8:00	68.4	-	-	5.9	77	-	0
04/05/19	9:00	69.1	-	-	3.8	53	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/05/19	10:00	71.8	-	-	5.8	123	-	0
04/05/19	11:00	71	-	-	6.5	120	-	0
04/05/19	12:00	72.2	-	-	6.1	136	-	0
04/05/19	13:00	74.7	-	-	6.3	132	-	0
04/05/19	14:00	76.5	-	-	8.5	115	-	0
04/05/19	15:00	74.5	-	-	12.9	121	-	0
04/05/19	16:00	72.7	-	-	14.1	127	-	0
04/05/19	17:00	71.3	-	-	13.5	122	-	0
04/05/19	18:00	70.7	-	-	11.1	117	-	0
04/05/19	19:00	70.3	-	-	8	103	-	0
04/05/19	20:00	70.6	-	-	8.3	102	-	0
04/05/19	21:00	70.5	-	-	10.7	99	-	0.06
04/05/19	22:00	69.6	-	-	11.7	107	-	0
04/05/19	23:00	68.3	-	-	8.2	114	-	0
04/06/19	0:00	68	-	-	6.3	110	-	0
04/06/19	1:00	67.9	-	-	7.2	108	-	0
04/06/19	2:00	67.1	-	-	7.5	107	-	0
04/06/19	3:00	67.5	-	-	8.6	111	-	0
04/06/19	4:00	68	-	-	15.1	111	-	0
04/06/19	5:00	67.9	-	-	8.6	105	-	0
04/06/19	6:00	68.2	-	-	9.9	118	-	0
04/06/19	7:00	68.4	-	-	9.2	110	-	0.01
04/06/19	8:00	68.5	-	-	6.8	85	-	0
04/06/19	9:00	69.2	-	-	11.9	96	-	0
04/06/19	10:00	69.3	-	-	11	114	-	0
04/06/19	11:00	71.6	-	-	11.7	124	-	0
04/06/19	12:00	76	-	-	13.5	115	-	0
04/06/19	13:00	76	-	-	16.9	114	-	0
04/06/19	14:00	74.7	-	-	18.7	116	-	0
04/06/19	15:00	74	-	-	16.4	115	-	0
04/06/19	16:00	72.9	-	-	14.1	116	-	0
04/06/19	17:00	72.1	-	-	12.7	113	-	0.1
04/06/19	18:00	71.3	-	-	10.7	107	-	0
04/06/19	19:00	71.1	-	-	10.7	113	-	0
04/06/19	20:00	70.9	-	-	12.4	118	-	0
04/06/19	21:00	70.5	-	-	12.1	123	-	0
04/06/19	22:00	71	-	-	12.7	129	-	0
04/06/19	23:00	71.3	-	-	11.7	133	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/07/19	0:00	71.6	-	-	7.9	124	-	0
04/07/19	1:00	71.6	-	-	10.3	133	-	0
04/07/19	2:00	71.3	-	-	11.8	143	-	0
04/07/19	3:00	70.5	-	-	11.4	136	-	0
04/07/19	4:00	70.2	-	-	11.2	143	-	0
04/07/19	5:00	70.3	-	-	10.6	121	-	0
04/07/19	6:00	71.3	-	-	16.2	126	-	0
04/07/19	7:00	70.7	-	-	12.2	119	-	0
04/07/19	8:00	70.8	-	-	8	115	-	0
04/07/19	9:00	70.9	-	-	11.3	111	-	0
04/07/19	10:00	71.1	-	-	13.8	104	-	0
04/07/19	11:00	69.8	-	-	15.7	141	-	0
04/07/19	12:00	62.8	-	-	7.6	223	-	0
04/07/19	13:00	63.2	-	-	9.3	67	-	0.02
04/07/19	14:00	66.1	-	-	6.9	284	-	0
04/07/19	15:00	66.2	-	-	11.5	99	-	0
04/07/19	16:00	66.8	-	-	10.4	117	-	0
04/07/19	17:00	68.8	-	-	11.1	156	-	0
04/07/19	18:00	68.9	-	-	14.4	169	-	0
04/07/19	19:00	67	-	-	12.9	167	-	0
04/07/19	20:00	66.5	-	-	9.7	176	-	0
04/07/19	21:00	66.9	-	-	9.8	191	-	0
04/07/19	22:00	66.8	-	-	8.1	226	-	0
04/07/19	23:00	64.5	-	-	8.3	277	-	0
04/08/19	0:00	62	-	-	5.2	259	-	0
04/08/19	1:00	62.9	-	-	7.8	243	-	0
04/08/19	2:00	63.1	-	-	8.8	254	-	0
04/08/19	3:00	62.4	-	-	8.9	265	-	0
04/08/19	4:00	62.6	-	-	9.2	280	-	0
04/08/19	5:00	63.4	-	-	8.9	291	-	0
04/08/19	6:00	63	-	-	9.6	289	-	0
04/08/19	7:00	64	-	-	13.6	296	-	0
04/08/19	8:00	66.7	-	-	13.9	323	-	0
04/08/19	9:00	68.2	-	-	17.1	317	-	0.35
04/08/19	10:00	69	-	-	17	317	-	0
04/08/19	11:00	72.5	-	-	16.6	320	-	0
04/08/19	12:00	75.2	-	-	18.2	312	-	0
04/08/19	13:00	77.4	-	-	17.5	307	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/08/19	14:00	79.4	-	-	16.3	311	-	0
04/08/19	15:00	79.4	-	-	14.6	327	-	0.02
04/08/19	16:00	79.9	-	-	11.8	339	-	0
04/08/19	17:00	79.6	-	-	10.4	326	-	0
04/08/19	18:00	78.3	-	-	8	317	-	0
04/08/19	19:00	76	-	-	5.1	306	-	0
04/08/19	20:00	74.7	-	-	4.9	298	-	0
04/08/19	21:00	72.5	-	-	4.2	283	-	0
04/08/19	22:00	71.1	-	-	4.2	277	-	0
04/08/19	23:00	67	-	-	2	280	-	0
04/09/19	0:00	66.3	-	-	2.9	248	-	0
04/09/19	1:00	65.4	-	-	2.5	74	-	0
04/09/19	2:00	64.4	-	-	3.5	226	-	0
04/09/19	3:00	64	-	-	4.2	259	-	0
04/09/19	4:00	63.5	-	-	4.5	260	-	0
04/09/19	5:00	62.3	-	-	2.3	290	-	0.03
04/09/19	6:00	63	-	-	2.6	267	-	0
04/09/19	7:00	68.2	-	-	4.6	250	-	0
04/09/19	8:00	73.8	-	-	7.7	260	-	0
04/09/19	9:00	78.8	-	-	9.1	268	-	0
04/09/19	10:00	81.9	-	-	9.6	264	-	0
04/09/19	11:00	84.6	-	-	9.3	263	-	0
04/09/19	12:00	85.6	-	-	9	288	-	0
04/09/19	13:00	87	-	-	7.2	278	-	0
04/09/19	14:00	87.4	-	-	7.1	304	-	0
04/09/19	15:00	88.1	-	-	7.2	299	-	0
04/09/19	16:00	88	-	-	6	308	-	0
04/09/19	17:00	86.8	-	-	4	354	-	0
04/09/19	18:00	80.8	-	-	5.6	114	-	0
04/09/19	19:00	76.7	-	-	3.9	132	-	0
04/09/19	20:00	74.6	-	-	4	141	-	0
04/09/19	21:00	72.1	-	-	3.5	192	-	0
04/09/19	22:00	70.8	-	-	5.5	191	-	0
04/09/19	23:00	69.7	-	-	5.2	189	-	0
04/10/19	0:00	68.4	-	-	5.4	189	-	0
04/10/19	1:00	68	-	-	6.3	195	-	0
04/10/19	2:00	66.8	-	-	4.9	202	-	0
04/10/19	3:00	66.7	-	-	6.2	186	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/10/19	4:00	68.5	-	-	9.5	181	-	0
04/10/19	5:00	68	-	-	8.5	188	-	0
04/10/19	6:00	68.9	-	-	10.1	189	-	0
04/10/19	7:00	71.9	-	-	10.8	185	-	0
04/10/19	8:00	76.2	-	-	12.7	188	-	0
04/10/19	9:00	79.7	-	-	12.7	187	-	0
04/10/19	10:00	82.2	-	-	13.6	180	-	0.3
04/10/19	11:00	84.2	-	-	13.9	183	-	0
04/10/19	12:00	85.1	-	-	15.2	182	-	0
04/10/19	13:00	84.1	-	-	16.3	185	-	0
04/10/19	14:00	83.5	-	-	18.2	172	-	0
04/10/19	15:00	82.3	-	-	18.8	175	-	0
04/10/19	16:00	80.8	-	-	18.6	179	-	0
04/10/19	17:00	78.9	-	-	18.3	168	-	0
04/10/19	18:00	75.6	-	-	18.2	166	-	0
04/10/19	19:00	73.5	-	-	16.4	164	-	0
04/10/19	20:00	72.5	-	-	14.7	160	-	0
04/10/19	21:00	72.4	-	-	16.6	165	-	0
04/10/19	22:00	71.8	-	-	15.4	159	-	0
04/10/19	23:00	71.4	-	-	14.5	161	-	0
04/11/19	0:00	71.1	-	-	18	157	-	0
04/11/19	1:00	70.7	-	-	18.2	165	-	0
04/11/19	2:00	70.4	-	-	20.6	165	-	0
04/11/19	3:00	70.1	-	-	16.8	161	-	0
04/11/19	4:00	69.9	-	-	19	166	-	0
04/11/19	5:00	70.1	-	-	11.6	189	-	0
04/11/19	6:00	70.5	-	-	8.8	197	-	0.51
04/11/19	7:00	71.7	-	-	10.6	165	-	0
04/11/19	8:00	73.9	-	-	11.3	178	-	0
04/11/19	9:00	76.6	-	-	16.3	179	-	0
04/11/19	10:00	77.8	-	-	14.9	183	-	0
04/11/19	11:00	78.7	-	-	14.4	185	-	0
04/11/19	12:00	78	-	-	14.8	182	-	0
04/11/19	13:00	72.3	-	-	9.4	191	-	0
04/11/19	14:00	72.7	-	-	5.2	207	-	0
04/11/19	15:00	75.3	-	-	7	193	-	0
04/11/19	16:00	75.4	-	-	7.2	159	-	0
04/11/19	17:00	74.2	-	-	5.6	117	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table

La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/11/19	18:00	73.4	-	-	6.5	137	-	0
04/11/19	19:00	72.3	-	-	3.7	192	-	0
04/11/19	20:00	71	-	-	3.8	156	-	0
04/11/19	21:00	69.6	-	-	1.6	157	-	0
04/11/19	22:00	69.7	-	-	3.1	332	-	0
04/11/19	23:00	67.9	-	-	10.9	0	-	0
04/12/19	0:00	66.8	-	-	9.6	32	-	0
04/12/19	1:00	66	-	-	10.5	49	-	0
04/12/19	2:00	65.1	-	-	10.9	42	-	0.11
04/12/19	3:00	64	-	-	8.3	52	-	0
04/12/19	4:00	64	-	-	8.5	42	-	0
04/12/19	5:00	63.3	-	-	8.8	30	-	0
04/12/19	6:00	62.6	-	-	10.2	40	-	0.07
04/12/19	7:00	62.6	-	-	10.2	54	-	0
04/12/19	8:00	63.8	-	-	10.4	57	-	0
04/12/19	9:00	64.2	-	-	12.2	69	-	0
04/12/19	10:00	66	-	-	11.6	79	-	0
04/12/19	11:00	69.7	-	-	14.5	91	-	0
04/12/19	12:00	73	-	-	14.1	91	-	0
04/12/19	13:00	74.6	-	-	16.8	90	-	0
04/12/19	14:00	76.1	-	-	13.2	79	-	0
04/12/19	15:00	74.8	-	-	15.9	93	-	0
04/12/19	16:00	74.1	-	-	16.8	91	-	0
04/12/19	17:00	73.3	-	-	16.7	93	-	0
04/12/19	18:00	72.9	-	-	17.3	97	-	0
04/12/19	19:00	72.7	-	-	17.6	100	-	0
04/12/19	20:00	72.5	-	-	16.8	100	-	0
04/12/19	21:00	72.3	-	-	19.7	108	-	0
04/12/19	22:00	71.9	-	-	18	111	-	0
04/12/19	23:00	72	-	-	16.6	115	-	0
04/13/19	0:00	72.2	-	-	16.8	113	-	0
04/13/19	1:00	72.1	-	-	17.2	115	-	0
04/13/19	2:00	71.9	-	-	15.6	122	-	0.03
04/13/19	3:00	71.8	-	-	15.5	125	-	0
04/13/19	4:00	71.8	-	-	13.9	121	-	0
04/13/19	5:00	71.8	-	-	14.6	121	-	0
04/13/19	6:00	71.8	-	-	13.9	118	-	0
04/13/19	7:00	72	-	-	13.4	116	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/13/19	8:00	72.7	-	-	14	121	-	0
04/13/19	9:00	73.7	-	-	12.3	129	-	0
04/13/19	10:00	77.2	-	-	15.7	165	-	0
04/13/19	11:00	78.7	-	-	16.8	178	-	0
04/13/19	12:00	79.6	-	-	20.8	189	-	0
04/13/19	13:00	81	-	-	19.7	200	-	0
04/13/19	14:00	82.2	-	-	17.5	209	-	0
04/13/19	15:00	72.1	-	-	10.1	293	-	0
04/13/19	16:00	72.1	-	-	10	303	-	0
04/13/19	17:00	72.4	-	-	7.7	303	-	0
04/13/19	18:00	71.9	-	-	5.2	314	-	0
04/13/19	19:00	69.7	-	-	21.2	289	-	0
04/13/19	20:00	62.9	-	-	21.1	294	-	0
04/13/19	21:00	59.4	-	-	18.9	287	-	0
04/13/19	22:00	56.4	-	-	16.5	290	-	0
04/13/19	23:00	53	-	-	17.6	293	-	0
04/14/19	0:00	51.5	-	-	17.3	293	-	0.06
04/14/19	1:00	49.6	-	-	17	293	-	0
04/14/19	2:00	48.1	-	-	16	286	-	0
04/14/19	3:00	47.9	-	-	14.4	291	-	0
04/14/19	4:00	48.6	-	-	14	292	-	0
04/14/19	5:00	48.4	-	-	12.8	291	-	0
04/14/19	6:00	49.1	-	-	14.2	291	-	0
04/14/19	7:00	50.9	-	-	15.7	301	-	0
04/14/19	8:00	53.4	-	-	17.1	312	-	0
04/14/19	9:00	56.5	-	-	17.4	320	-	0
04/14/19	10:00	59.7	-	-	17.6	322	-	0
04/14/19	11:00	62.9	-	-	15.7	321	-	0
04/14/19	12:00	65.8	-	-	13.7	318	-	0
04/14/19	13:00	67.5	-	-	14.8	319	-	0
04/14/19	14:00	69.3	-	-	13.2	318	-	0
04/14/19	15:00	70.2	-	-	12.6	319	-	0
04/14/19	16:00	70.2	-	-	10.5	330	-	0
04/14/19	17:00	70.1	-	-	7.1	319	-	0
04/14/19	18:00	68.1	-	-	4.7	324	-	0
04/14/19	19:00	66.1	-	-	3.7	313	-	0
04/14/19	20:00	63.9	-	-	2.1	304	-	0
04/14/19	21:00	59.7	-	-	1.6	217	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/14/19	22:00	57.3	-	-	3.2	214	-	0
04/14/19	23:00	54.4	-	-	1.9	183	-	0
04/15/19	0:00	54.3	-	-	2.1	187	-	0
04/15/19	1:00	53.1	-	-	1.1	192	-	0
04/15/19	2:00	50.6	-	-	1.4	143	-	0
04/15/19	3:00	53.1	-	-	2.6	171	-	0
04/15/19	4:00	52.1	-	-	3.2	211	-	0
04/15/19	5:00	50.9	-	-	1.8	178	-	0
04/15/19	6:00	54.2	-	-	2.1	173	-	0
04/15/19	7:00	63.3	-	-	4.1	195	-	0
04/15/19	8:00	68.5	-	-	9.9	174	-	0
04/15/19	9:00	71.1	-	-	11.3	165	-	0
04/15/19	10:00	73.2	-	-	13	162	-	0
04/15/19	11:00	74.4	-	-	13.5	172	-	0
04/15/19	12:00	74.8	-	-	14.8	159	-	0
04/15/19	13:00	74.5	-	-	14.2	168	-	0
04/15/19	14:00	74.8	-	-	14.2	162	-	0
04/15/19	15:00	74.6	-	-	15.3	164	-	0
04/15/19	16:00	73.8	-	-	13.2	167	-	0
04/15/19	17:00	72.2	-	-	15.3	148	-	0
04/15/19	18:00	69.4	-	-	13.1	159	-	0
04/15/19	19:00	67.2	-	-	12.9	149	-	0
04/15/19	20:00	66.5	-	-	12.6	148	-	0
04/15/19	21:00	66.4	-	-	11.2	150	-	0
04/15/19	22:00	66.1	-	-	13.7	149	-	0
04/15/19	23:00	66	-	-	12.2	152	-	0
04/16/19	0:00	65.6	-	-	11.2	149	-	0
04/16/19	1:00	65.5	-	-	11.1	145	-	0
04/16/19	2:00	65.2	-	-	11.8	144	-	0
04/16/19	3:00	65.3	-	-	12.9	146	-	0
04/16/19	4:00	65.6	-	-	12.9	149	-	0
04/16/19	5:00	65.5	-	-	11.9	147	-	0
04/16/19	6:00	66.2	-	-	11.7	149	-	0
04/16/19	7:00	69.1	-	-	14.2	147	-	0
04/16/19	8:00	71.7	-	-	17.5	148	-	0
04/16/19	9:00	74.2	-	-	17.5	149	-	0
04/16/19	10:00	75.1	-	-	15.9	153	-	0
04/16/19	11:00	75.8	-	-	16	153	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/16/19	12:00	76.3	-	-	16.8	146	-	0
04/16/19	13:00	74	-	-	19.2	121	-	0
04/16/19	14:00	73.1	-	-	21	119	-	0
04/16/19	15:00	72.8	-	-	20.1	117	-	0
04/16/19	16:00	71.4	-	-	18.3	120	-	0
04/16/19	17:00	70.8	-	-	16.6	121	-	0
04/16/19	18:00	70.2	-	-	16	123	-	0
04/16/19	19:00	69.6	-	-	15.9	124	-	0
04/16/19	20:00	69.5	-	-	15.8	127	-	0
04/16/19	21:00	69.5	-	-	15.3	128	-	0
04/16/19	22:00	69.8	-	-	13.9	133	-	0
04/16/19	23:00	69.8	-	-	13.9	134	-	0
04/17/19	0:00	70.2	-	-	12.3	142	-	0
04/17/19	1:00	70.1	-	-	10.9	133	-	0
04/17/19	2:00	69.8	-	-	10.2	127	-	0
04/17/19	3:00	70.1	-	-	10.9	131	-	0
04/17/19	4:00	70.2	-	-	11.8	130	-	0
04/17/19	5:00	69.7	-	-	12.4	135	-	0
04/17/19	6:00	70.5	-	-	12.2	129	-	0
04/17/19	7:00	71.3	-	-	11.3	131	-	0
04/17/19	8:00	72.7	-	-	12.7	142	-	0
04/17/19	9:00	74.1	-	-	13.7	133	-	0
04/17/19	10:00	74.8	-	-	15.7	128	-	0
04/17/19	11:00	74	-	-	16.9	131	-	0
04/17/19	12:00	73.3	-	-	15.7	133	-	0
04/17/19	13:00	72.5	-	-	14.7	118	-	0
04/17/19	14:00	73.8	-	-	20.8	138	-	0
04/17/19	15:00	73.7	-	-	20.2	138	-	0
04/17/19	16:00	72.8	-	-	18.6	133	-	0
04/17/19	17:00	70.5	-	-	16.2	121	-	0
04/17/19	18:00	70.4	-	-	17.3	300	-	0
04/17/19	19:00	71	-	-	15.7	310	-	0
04/17/19	20:00	71.5	-	-	16.3	322	-	0
04/17/19	21:00	72.1	-	-	13.4	328	-	0
04/17/19	22:00	72.5	-	-	11.3	330	-	0
04/17/19	23:00	72.8	-	-	8.8	318	-	0
04/18/19	0:00	73.3	-	-	9	297	-	0
04/18/19	1:00	73.4	-	-	9.3	301	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/18/19	2:00	73.9	-	-	6.6	286	-	0
04/18/19	3:00	74	-	-	5.9	283	-	0
04/18/19	4:00	64.4	-	-	9.5	304	-	0
04/18/19	5:00	64.2	-	-	9.2	291	-	0
04/18/19	6:00	63.4	-	-	8.9	286	-	0
04/18/19	7:00	63.6	-	-	10.7	301	-	0
04/18/19	8:00	63	-	-	11.4	301	-	0
04/18/19	9:00	63	-	-	11.8	304	-	0
04/18/19	10:00	64.3	-	-	11.8	314	-	0
04/18/19	11:00	66.3	-	-	14.2	320	-	0
04/18/19	12:00	70.8	-	-	13	320	-	0
04/18/19	13:00	72.4	-	-	15.5	318	-	0
04/18/19	14:00	74	-	-	18.3	316	-	0
04/18/19	15:00	74.5	-	-	20.6	315	-	0
04/18/19	16:00	74.8	-	-	21.1	313	-	0
04/18/19	17:00	71.4	-	-	20.3	311	-	0
04/18/19	18:00	68.6	-	-	20.4	316	-	0
04/18/19	19:00	67.5	-	-	18.1	322	-	0
04/18/19	20:00	66.2	-	-	14.5	327	-	0
04/18/19	21:00	65.6	-	-	12.9	325	-	0
04/18/19	22:00	66.4	-	-	9.3	325	-	0
04/18/19	23:00	62.9	-	-	8	322	-	0
04/19/19	0:00	61.3	-	-	7	321	-	0
04/19/19	1:00	62.5	-	-	4.8	309	-	0
04/19/19	2:00	61.6	-	-	3.1	273	-	0
04/19/19	3:00	59	-	-	1.7	157	-	0
04/19/19	4:00	59.8	-	-	17.3	300	-	0
04/19/19	5:00	59	-	-	15.7	310	-	0
04/19/19	6:00	60	-	-	16.3	322	-	0
04/19/19	7:00	62	-	-	13.4	328	-	0
04/19/19	8:00	63.2	-	-	14.2	320	-	0
04/19/19	9:00	64.8	-	-	13	320	-	0
04/19/19	10:00	66.8	-	-	15.5	318	-	0
04/19/19	11:00	69.2	-	-	18.3	316	-	0
04/19/19	12:00	70	-	-	20.6	315	-	0
04/19/19	13:00	70.9	-	-	21.1	313	-	0
04/19/19	14:00	71.4	-	-	20.3	311	-	0
04/19/19	15:00	71.3	-	-	20.4	316	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table

La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/19/19	16:00	70.7	-	-	18.1	322	-	0
04/19/19	17:00	69.7	-	-	14.5	327	-	0
04/19/19	18:00	68.2	-	-	12.9	325	-	0
04/19/19	19:00	66.4	-	-	9.3	325	-	0
04/19/19	20:00	64.8	-	-	8	322	-	0
04/19/19	21:00	63.4	-	-	7	321	-	0
04/19/19	22:00	61.6	-	-	4.8	309	-	0
04/19/19	23:00	57.8	-	-	3.1	273	-	0
04/20/19	0:00	52.8	-	-	1.7	157	-	0
04/20/19	1:00	53.5	-	-	3.7	238	-	0
04/20/19	2:00	52.4	-	-	2.9	253	-	0
04/20/19	3:00	51.1	-	-	3.7	244	-	0
04/20/19	4:00	50.6	-	-	2.9	286	-	0
04/20/19	5:00	48.3	-	-	2.1	263	-	0
04/20/19	6:00	51	-	-	1.8	281	-	0.08
04/20/19	7:00	60.1	-	-	2.5	291	-	0
04/20/19	8:00	65.8	-	-	3.4	314	-	0
04/20/19	9:00	71.5	-	-	3.8	251	-	0
04/20/19	10:00	70.7	-	-	4.9	301	-	0
04/20/19	11:00	72.6	-	-	5	273	-	0
04/20/19	12:00	74.8	-	-	5.9	240	-	0
04/20/19	13:00	74.8	-	-	8.3	116	-	0
04/20/19	14:00	73	-	-	14.1	104	-	0
04/20/19	15:00	73.7	-	-	12.7	104	-	0
04/20/19	16:00	74	-	-	12.4	117	-	0
04/20/19	17:00	73.6	-	-	12	134	-	0
04/20/19	18:00	70.9	-	-	9.7	173	-	0
04/20/19	19:00	67.3	-	-	8.9	158	-	0
04/20/19	20:00	65.7	-	-	8.4	181	-	0
04/20/19	21:00	64.2	-	-	7.9	192	-	0
04/20/19	22:00	62.9	-	-	6.6	199	-	0
04/20/19	23:00	62.5	-	-	7	192	-	0
04/21/19	0:00	61.6	-	-	5.4	197	-	0
04/21/19	1:00	61.7	-	-	6.5	187	-	0
04/21/19	2:00	62.1	-	-	6.2	183	-	0
04/21/19	3:00	61.8	-	-	6.6	166	-	0
04/21/19	4:00	62	-	-	6.2	145	-	0
04/21/19	5:00	61.9	-	-	5.7	136	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/21/19	6:00	64.1	-	-	7	134	-	0
04/21/19	7:00	68.8	-	-	11.9	147	-	0
04/21/19	8:00	71.8	-	-	14.3	145	-	0
04/21/19	9:00	74.7	-	-	16	145	-	0
04/21/19	10:00	75.1	-	-	16	132	-	0
04/21/19	11:00	75.3	-	-	17.8	124	-	0
04/21/19	12:00	76	-	-	18.4	132	-	0
04/21/19	13:00	74.8	-	-	19.8	126	-	0
04/21/19	14:00	74.4	-	-	19.6	129	-	0
04/21/19	15:00	74	-	-	19.8	126	-	0
04/21/19	16:00	73.4	-	-	19.2	126	-	0
04/21/19	17:00	71.6	-	-	15.9	120	-	0
04/21/19	18:00	69.8	-	-	14.5	123	-	0
04/21/19	19:00	68.8	-	-	13.5	126	-	0
04/21/19	20:00	68.2	-	-	12	129	-	0
04/21/19	21:00	67.8	-	-	12.7	133	-	0
04/21/19	22:00	67.7	-	-	12.6	137	-	0
04/21/19	23:00	67.7	-	-	11.4	138	-	0
04/22/19	0:00	67.6	-	-	11.6	131	-	0
04/22/19	1:00	67.5	-	-	10.3	128	-	0
04/22/19	2:00	67.3	-	-	10.1	132	-	0
04/22/19	3:00	67.3	-	-	9.3	129	-	0
04/22/19	4:00	67.3	-	-	9.4	129	-	0
04/22/19	5:00	68	-	-	10.2	131	-	0
04/22/19	6:00	68.7	-	-	9.5	138	-	0
04/22/19	7:00	70.3	-	-	13	141	-	0
04/22/19	8:00	72.3	-	-	14.3	136	-	0
04/22/19	9:00	74.5	-	-	15.2	139	-	0
04/22/19	10:00	73.8	-	-	18.5	114	-	0
04/22/19	11:00	74.5	-	-	19.9	117	-	0
04/22/19	12:00	74.6	-	-	21.3	116	-	0
04/22/19	13:00	74.2	-	-	20.4	117	-	0
04/22/19	14:00	74.1	-	-	19.3	119	-	0
04/22/19	15:00	74	-	-	18	118	-	0
04/22/19	16:00	73.5	-	-	17.3	117	-	0
04/22/19	17:00	72.3	-	-	15.3	117	-	0
04/22/19	18:00	71.4	-	-	13.1	120	-	0
04/22/19	19:00	LIM	-	-	13.4	117	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided
LIM	=	Limited data			

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/22/19	20:00	LIM	-	-	13.3	113	-	0
04/22/19	21:00	LIM	-	-	14.2	120	-	0
04/22/19	22:00	LIM	-	-	15.1	122	-	0
04/22/19	23:00	LIM	-	-	13.5	124	-	0
04/23/19	0:00	LIM	-	-	12.3	127	-	0
04/23/19	1:00	LIM	-	-	12.4	124	-	0
04/23/19	2:00	LIM	-	-	12.1	125	-	0
04/23/19	3:00	LIM	-	-	11	131	-	0
04/23/19	4:00	LIM	-	-	9.8	131	-	0
04/23/19	5:00	LIM	-	-	10.4	126	-	0
04/23/19	6:00	LIM	-	-	11.1	123	-	0
04/23/19	7:00	70.8	-	-	13.2	129	-	0
04/23/19	8:00	70.8	-	-	13.8	119	-	0
04/23/19	9:00	71.2	-	-	12.5	146	-	0
04/23/19	10:00	71.7	-	-	9	127	-	0
04/23/19	11:00	71.1	-	-	16.6	122	-	0
04/23/19	12:00	71.9	-	-	16	133	-	0
04/23/19	13:00	73.3	-	-	17.3	143	-	0
04/23/19	14:00	73.2	-	-	14.8	122	-	0
04/23/19	15:00	72.5	-	-	16.4	117	-	0
04/23/19	16:00	71.8	-	-	15.4	117	-	0
04/23/19	17:00	71.5	-	-	14.3	123	-	0
04/23/19	18:00	70.9	-	-	10.6	122	-	0
04/23/19	19:00	70.4	-	-	12.5	121	-	0
04/23/19	20:00	70.2	-	-	14.2	122	-	0
04/23/19	21:00	70	-	-	15.8	122	-	0
04/23/19	22:00	70.1	-	-	11.2	122	-	0
04/23/19	23:00	70	-	-	9.9	110	-	0
04/24/19	0:00	69.9	-	-	8.4	95	-	0
04/24/19	1:00	69.8	-	-	9.7	101	-	0
04/24/19	2:00	69.8	-	-	8.4	92	-	0
04/24/19	3:00	69.2	-	-	9.4	86	-	0
04/24/19	4:00	69.2	-	-	6.9	72	-	0
04/24/19	5:00	69.1	-	-	7.8	60	-	0
04/24/19	6:00	68.8	-	-	10.8	79	-	0
04/24/19	7:00	69.7	-	-	11.4	95	-	0
04/24/19	8:00	69.9	-	-	11.9	101	-	0
04/24/19	9:00	70.7	-	-	13.6	106	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided
LIM	=	Limited data			

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/24/19	10:00	71.4	-	-	13.7	106	-	0
04/24/19	11:00	72.5	-	-	16.7	118	-	0
04/24/19	12:00	74.4	-	-	19.7	122	-	0
04/24/19	13:00	75	-	-	21.3	119	-	0
04/24/19	14:00	74.4	-	-	20.2	122	-	0
04/24/19	15:00	73.6	-	-	20.1	119	-	0
04/24/19	16:00	72.8	-	-	19.5	119	-	0
04/24/19	17:00	72.4	-	-	17.6	119	-	0
04/24/19	18:00	72.5	-	-	13.7	123	-	0
04/24/19	19:00	72.6	-	-	11.6	134	-	0
04/24/19	20:00	72.8	-	-	9.3	142	-	0.04
04/24/19	21:00	73.2	-	-	13.3	154	-	0
04/24/19	22:00	73.3	-	-	4.2	223	-	0
04/24/19	23:00	73.4	-	-	7.1	194	-	0
04/25/19	0:00	73.3	-	-	8.3	192	-	0
04/25/19	1:00	73.2	-	-	7.6	205	-	0.01
04/25/19	2:00	71.7	-	-	9.3	261	-	0.59
04/25/19	3:00	67.7	-	-	9.3	293	-	0.01
04/25/19	4:00	65.8	-	-	8.9	306	-	0
04/25/19	5:00	64.9	-	-	6.4	310	-	0
04/25/19	6:00	65.1	-	-	9.4	321	-	0
04/25/19	7:00	66.8	-	-	9.2	305	-	0
04/25/19	8:00	68.7	-	-	10.1	302	-	0
04/25/19	9:00	71.3	-	-	10.6	303	-	0
04/25/19	10:00	74.2	-	-	11.4	303	-	0
04/25/19	11:00	76.2	-	-	12.9	306	-	0
04/25/19	12:00	78.2	-	-	11.9	306	-	0
04/25/19	13:00	79.7	-	-	12	320	-	0
04/25/19	14:00	80.8	-	-	12.2	317	-	0
04/25/19	15:00	81.8	-	-	12.9	300	-	0
04/25/19	16:00	82.1	-	-	12.9	312	-	0
04/25/19	17:00	81.5	-	-	13.5	325	-	0
04/25/19	18:00	80	-	-	10	331	-	0
04/25/19	19:00	78.2	-	-	6.3	328	-	0
04/25/19	20:00	77.1	-	-	5.8	326	-	0
04/25/19	21:00	75.5	-	-	4.3	333	-	0
04/25/19	22:00	74	-	-	4.4	343	-	0
04/25/19	23:00	73.2	-	-	5.2	344	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/26/19	0:00	72	-	-	4.2	354	-	0
04/26/19	1:00	71	-	-	3.8	347	-	0
04/26/19	2:00	71.4	-	-	4.6	351	-	0
04/26/19	3:00	69.4	-	-	2.6	342	-	0
04/26/19	4:00	68.6	-	-	3.7	338	-	0
04/26/19	5:00	65.6	-	-	1.6	106	-	0
04/26/19	6:00	66.1	-	-	1.6	287	-	0
04/26/19	7:00	70.6	-	-	7.2	353	-	0
04/26/19	8:00	72.1	-	-	8.3	5	-	0
04/26/19	9:00	73.7	-	-	8.2	359	-	0
04/26/19	10:00	75.7	-	-	7	5	-	0
04/26/19	11:00	78	-	-	6.8	7	-	0
04/26/19	12:00	79.7	-	-	6.4	21	-	0
04/26/19	13:00	80.9	-	-	7.2	31	-	0
04/26/19	14:00	81.6	-	-	8.4	41	-	0
04/26/19	15:00	82.1	-	-	8.3	33	-	0
04/26/19	16:00	81.7	-	-	7.7	88	-	0
04/26/19	17:00	80.2	-	-	7.7	116	-	0
04/26/19	18:00	79.2	-	-	3.6	85	-	0
04/26/19	19:00	77.5	-	-	5.8	182	-	0
04/26/19	20:00	74.3	-	-	8.2	201	-	0
04/26/19	21:00	72.6	-	-	6.2	209	-	0
04/26/19	22:00	71	-	-	4.1	206	-	0
04/26/19	23:00	68.5	-	-	2.8	212	-	0
04/27/19	0:00	68.2	-	-	4.7	212	-	0
04/27/19	1:00	67.2	-	-	3.9	236	-	0
04/27/19	2:00	66.5	-	-	2.7	161	-	0
04/27/19	3:00	66.3	-	-	3.1	151	-	0
04/27/19	4:00	66.9	-	-	4.9	192	-	0
04/27/19	5:00	66.5	-	-	2.4	181	-	0
04/27/19	6:00	68.2	-	-	4.7	154	-	0
04/27/19	7:00	72.3	-	-	10.2	166	-	0
04/27/19	8:00	75.2	-	-	11.2	180	-	0
04/27/19	9:00	76.1	-	-	12.8	170	-	0
04/27/19	10:00	77.4	-	-	12.3	159	-	0
04/27/19	11:00	77.7	-	-	14.4	158	-	0
04/27/19	12:00	78.1	-	-	13.4	176	-	0
04/27/19	13:00	78.1	-	-	12.8	178	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/27/19	14:00	78.5	-	-	12.3	186	-	0
04/27/19	15:00	78.4	-	-	12.4	173	-	0
04/27/19	16:00	77.4	-	-	15.2	169	-	0
04/27/19	17:00	76.1	-	-	13	173	-	0
04/27/19	18:00	74	-	-	12.7	168	-	0
04/27/19	19:00	72.2	-	-	14.3	166	-	0
04/27/19	20:00	71.4	-	-	13.1	168	-	0
04/27/19	21:00	70.9	-	-	11.2	169	-	0
04/27/19	22:00	70.8	-	-	10.5	170	-	0
04/27/19	23:00	70.5	-	-	6.4	178	-	0
04/28/19	0:00	69.6	-	-	5.2	186	-	0
04/28/19	1:00	69.4	-	-	3.9	185	-	0
04/28/19	2:00	68.3	-	-	1.3	79	-	0
04/28/19	3:00	68.5	-	-	3.5	135	-	0
04/28/19	4:00	70	-	-	8	156	-	0
04/28/19	5:00	69.6	-	-	8.3	156	-	0
04/28/19	6:00	70.6	-	-	8.5	157	-	0
04/28/19	7:00	72.6	-	-	11.8	144	-	0
04/28/19	8:00	74.2	-	-	13.7	130	-	0
04/28/19	9:00	75.5	-	-	13.1	130	-	0
04/28/19	10:00	75.3	-	-	17	115	-	0
04/28/19	11:00	75.7	-	-	17.1	115	-	0
04/28/19	12:00	75.7	-	-	18.7	113	-	0
04/28/19	13:00	76.3	-	-	18.3	118	-	0
04/28/19	14:00	76.8	-	-	19	129	-	0
04/28/19	15:00	76	-	-	18.4	118	-	0
04/28/19	16:00	75.2	-	-	16.9	116	-	0
04/28/19	17:00	74.2	-	-	15.7	118	-	0
04/28/19	18:00	72.9	-	-	13.7	125	-	0
04/28/19	19:00	72.1	-	-	13.1	128	-	0
04/28/19	20:00	72	-	-	14.6	130	-	0
04/28/19	21:00	72.1	-	-	16.5	136	-	0
04/28/19	22:00	72.1	-	-	14.7	150	-	0
04/28/19	23:00	72	-	-	12.5	151	-	0
04/29/19	0:00	72.4	-	-	12.7	147	-	0
04/29/19	1:00	72.4	-	-	12.1	140	-	0
04/29/19	2:00	72.5	-	-	11.7	145	-	0
04/29/19	3:00	73.1	-	-	13.6	151	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/29/19	4:00	73.4	-	-	12.3	154	-	0
04/29/19	5:00	73.7	-	-	13.9	147	-	0
04/29/19	6:00	74.1	-	-	14.2	133	-	0
04/29/19	7:00	75.4	-	-	13.6	149	-	0
04/29/19	8:00	77.5	-	-	16	160	-	0
04/29/19	9:00	79.1	-	-	18.1	165	-	0
04/29/19	10:00	81	-	-	18.7	161	-	0
04/29/19	11:00	81.3	-	-	18.4	158	-	0
04/29/19	12:00	80.4	-	-	17.4	146	-	0
04/29/19	13:00	79.1	-	-	18.7	128	-	0
04/29/19	14:00	78.5	-	-	18	124	-	0
04/29/19	15:00	78	-	-	16.2	122	-	0
04/29/19	16:00	77.4	-	-	15.3	128	-	0
04/29/19	17:00	LIM	-	-	16.8	122	-	0
04/29/19	18:00	LIM	-	-	15.8	117	-	0
04/29/19	19:00	LIM	-	-	17	121	-	0
04/29/19	20:00	LIM	-	-	18.3	125	-	0
04/29/19	21:00	LIM	-	-	18.5	131	-	0
04/29/19	22:00	LIM	-	-	19.9	136	-	0
04/29/19	23:00	LIM	-	-	19.6	136	-	0
04/30/19	0:00	LIM	-	-	16.9	142	-	0
04/30/19	1:00	LIM	-	-	15.5	141	-	0
04/30/19	2:00	LIM	-	-	15.6	140	-	0
04/30/19	3:00	LIM	-	-	15.1	143	-	0
04/30/19	4:00	LIM	-	-	14.1	136	-	0
04/30/19	5:00	LIM	-	-	15.6	135	-	0
04/30/19	6:00	LIM	-	-	15.9	134	-	0
04/30/19	7:00	LIM	-	-	16.7	136	-	0
04/30/19	8:00	77.7	-	-	19.1	142	-	0
04/30/19	9:00	78.4	-	-	19.5	146	-	0
04/30/19	10:00	79.7	-	-	21.2	136	-	0
04/30/19	11:00	80	-	-	21.1	130	-	0
04/30/19	12:00	80.8	-	-	20.8	130	-	0
04/30/19	13:00	80.6	-	-	20.5	136	-	0
04/30/19	14:00	80.7	-	-	17.8	145	-	0
04/30/19	15:00	79.4	-	-	19.8	142	-	0
04/30/19	16:00	79.6	-	-	16.9	155	-	0
04/30/19	17:00	78.4	-	-	16.6	159	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided
LIM	=	Limited data			

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
04/30/19	18:00	76.9	-	-	16.7	145	-	0
04/30/19	19:00	76.8	-	-	17	153	-	0
04/30/19	20:00	76.8	-	-	19	152	-	0
04/30/19	21:00	76.6	-	-	18.5	150	-	0
04/30/19	22:00	76.6	-	-	14.9	160	-	0
04/30/19	23:00	76.4	-	-	15.2	158	-	0
05/01/19	0:00	76	-	-	16.1	164	-	0
05/01/19	1:00	75.8	-	-	17.5	167	-	0
05/01/19	2:00	75.7	-	-	15	163	-	0
05/01/19	3:00	75.7	-	-	14.9	159	-	0
05/01/19	4:00	75.7	-	-	12.2	160	-	0
05/01/19	5:00	75.5	-	-	11.9	155	-	0
05/01/19	6:00	75.8	-	-	13.5	149	-	0
05/01/19	7:00	76.8	-	-	16.7	147	-	0
05/01/19	8:00	78.2	-	-	16.4	145	-	0
05/01/19	9:00	79.9	-	-	18.8	137	-	0
05/01/19	10:00	80.3	-	-	18.9	136	-	0
05/01/19	11:00	79.6	-	-	19.4	131	-	0
05/01/19	12:00	79.5	-	-	17.4	131	-	0
05/01/19	13:00	78.4	-	-	14.5	131	-	0
05/01/19	14:00	78.4	-	-	16.1	130	-	0
05/01/19	15:00	77.7	-	-	16.6	128	-	0
05/01/19	16:00	77.5	-	-	16.6	135	-	0
05/01/19	17:00	77.6	-	-	20.5	131	-	0
05/01/19	18:00	76.9	-	-	18	139	-	0
05/01/19	19:00	76.9	-	-	16.4	145	-	0
05/01/19	20:00	76.9	-	-	16.1	144	-	0
05/01/19	21:00	77	-	-	15.2	150	-	0
05/01/19	22:00	77	-	-	14	166	-	0
05/01/19	23:00	76.6	-	-	15.4	153	-	0
05/02/19	0:00	76.5	-	-	14.8	167	-	0
05/02/19	1:00	76.3	-	-	15.5	167	-	0
05/02/19	2:00	75.9	-	-	15.2	152	-	0
05/02/19	3:00	75.8	-	-	15.5	159	-	0
05/02/19	4:00	76	-	-	15.2	169	-	0
05/02/19	5:00	76.2	-	-	13.1	169	-	0
05/02/19	6:00	76.1	-	-	4	322	-	0
05/02/19	7:00	73.1	-	-	10.9	31	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/02/19	8:00	72.2	-	-	17.2	75	-	0
05/02/19	9:00	75.5	-	-	16.3	84	-	0
05/02/19	10:00	78.1	-	-	20.9	109	-	0
05/02/19	11:00	78.9	-	-	21.8	115	-	0
05/02/19	12:00	78.9	-	-	22.4	120	-	0
05/02/19	13:00	78.5	-	-	20.4	117	-	0
05/02/19	14:00	78.3	-	-	18.8	117	-	0
05/02/19	15:00	78	-	-	19.1	122	-	0
05/02/19	16:00	77.3	-	-	17	117	-	0
05/02/19	17:00	76.4	-	-	14.7	123	-	0
05/02/19	18:00	75.9	-	-	10.7	126	-	0
05/02/19	19:00	76	-	-	8.8	149	-	0
05/02/19	20:00	75.6	-	-	4.9	133	-	0
05/02/19	21:00	74.9	-	-	6.3	101	-	0
05/02/19	22:00	74.9	-	-	8.3	118	-	0
05/02/19	23:00	74.8	-	-	8.1	92	-	0
05/03/19	0:00	73.7	-	-	8.9	84	-	0
05/03/19	1:00	73.5	-	-	9.7	80	-	0
05/03/19	2:00	73.4	-	-	10.2	82	-	0
05/03/19	3:00	73.5	-	-	8.5	88	-	0
05/03/19	4:00	74.3	-	-	8.6	123	-	0
05/03/19	5:00	74.4	-	-	8.7	115	-	0
05/03/19	6:00	74.7	-	-	11	107	-	0
05/03/19	7:00	75.7	-	-	13.3	115	-	0
05/03/19	8:00	75.7	-	-	12.8	121	-	0
05/03/19	9:00	75.7	-	-	13.4	117	-	0
05/03/19	10:00	75.6	-	-	14.6	118	-	0
05/03/19	11:00	75.6	-	-	13.8	124	-	0
05/03/19	12:00	75.4	-	-	16.2	121	-	0
05/03/19	13:00	75.8	-	-	15.7	115	-	0
05/03/19	14:00	75.9	-	-	15.3	122	-	0
05/03/19	15:00	76.2	-	-	14.9	136	-	0
05/03/19	16:00	75.5	-	-	12.4	132	-	0
05/03/19	17:00	76.5	-	-	13.8	141	-	0
05/03/19	18:00	76.2	-	-	12.2	153	-	0
05/03/19	19:00	75.4	-	-	11.3	162	-	0
05/03/19	20:00	74.8	-	-	7.9	155	-	0
05/03/19	21:00	74.2	-	-	7.5	125	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/03/19	22:00	74.5	-	-	7.1	124	-	0
05/03/19	23:00	74.6	-	-	8.8	119	-	0
05/04/19	0:00	75.2	-	-	9.3	120	-	0
05/04/19	1:00	71.3	-	-	15.3	207	-	1.18
05/04/19	2:00	67.1	-	-	8.6	84	-	0.19
05/04/19	3:00	67.3	-	-	7.7	111	-	0.02
05/04/19	4:00	67.2	-	-	8.3	267	-	0
05/04/19	5:00	66.8	-	-	8.5	288	-	0
05/04/19	6:00	67.2	-	-	6.9	290	-	0
05/04/19	7:00	69.4	-	-	5	277	-	0
05/04/19	8:00	71.8	-	-	7.7	320	-	0
05/04/19	9:00	73.3	-	-	7.3	2	-	0
05/04/19	10:00	75.3	-	-	6.7	353	-	0
05/04/19	11:00	77.3	-	-	8.2	16	-	0
05/04/19	12:00	79.1	-	-	7.2	345	-	0
05/04/19	13:00	80.6	-	-	7.5	333	-	0
05/04/19	14:00	81.3	-	-	7.6	335	-	0
05/04/19	15:00	81.5	-	-	7.2	338	-	0
05/04/19	16:00	81.6	-	-	5.6	16	-	0
05/04/19	17:00	80.7	-	-	3.5	18	-	0
05/04/19	18:00	80	-	-	4.4	16	-	0
05/04/19	19:00	78.2	-	-	4.3	13	-	0
05/04/19	20:00	77.4	-	-	4	12	-	0
05/04/19	21:00	75.9	-	-	4	15	-	0
05/04/19	22:00	75	-	-	4.8	6	-	0
05/04/19	23:00	73.9	-	-	5.7	16	-	0
05/05/19	0:00	73	-	-	4.8	46	-	0
05/05/19	1:00	71.8	-	-	5.2	39	-	0
05/05/19	2:00	70.4	-	-	5.2	55	-	0
05/05/19	3:00	69.2	-	-	6	74	-	0
05/05/19	4:00	68.6	-	-	5.5	79	-	0
05/05/19	5:00	68.9	-	-	7.8	86	-	0
05/05/19	6:00	69.9	-	-	6.7	84	-	0
05/05/19	7:00	71.5	-	-	9.8	82	-	0
05/05/19	8:00	73.1	-	-	10	87	-	0
05/05/19	9:00	74.6	-	-	12.7	108	-	0
05/05/19	10:00	76	-	-	11.8	122	-	0
05/05/19	11:00	77.1	-	-	9.5	116	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/05/19	12:00	77.7	-	-	10.6	127	-	0
05/05/19	13:00	78.8	-	-	10.1	121	-	0
05/05/19	14:00	79.9	-	-	8.8	114	-	0
05/05/19	15:00	79.9	-	-	10.4	115	-	0
05/05/19	16:00	79.6	-	-	9.5	114	-	0
05/05/19	17:00	79	-	-	8.9	113	-	0
05/05/19	18:00	77.3	-	-	7.6	118	-	0
05/05/19	19:00	75.8	-	-	7.5	114	-	0
05/05/19	20:00	75.3	-	-	6.8	115	-	0
05/05/19	21:00	74.9	-	-	5.7	125	-	0
05/05/19	22:00	74.2	-	-	4.2	131	-	0
05/05/19	23:00	73.8	-	-	5	153	-	0
05/06/19	0:00	71.9	-	-	2.8	133	-	0
05/06/19	1:00	72.9	-	-	7.1	126	-	0
05/06/19	2:00	73.6	-	-	7.1	139	-	0
05/06/19	3:00	72.9	-	-	7.4	156	-	0
05/06/19	4:00	72.2	-	-	7.8	164	-	0
05/06/19	5:00	68.4	-	-	4.4	321	-	0
05/06/19	6:00	69.2	-	-	3.3	305	-	0
05/06/19	7:00	72.2	-	-	2.8	21	-	0
05/06/19	8:00	74.7	-	-	4.7	48	-	0
05/06/19	9:00	76.7	-	-	10.4	110	-	0
05/06/19	10:00	77.5	-	-	13.5	110	-	0
05/06/19	11:00	78.1	-	-	14.3	112	-	0
05/06/19	12:00	78.5	-	-	13.9	116	-	0
05/06/19	13:00	77.9	-	-	15.3	121	-	0
05/06/19	14:00	77.8	-	-	13.7	121	-	0
05/06/19	15:00	77.7	-	-	11.8	128	-	0
05/06/19	16:00	77.1	-	-	12.2	111	-	0
05/06/19	17:00	76.3	-	-	11.5	118	-	0
05/06/19	18:00	75.7	-	-	15.8	94	-	0
05/06/19	19:00	75.9	-	-	17	108	-	0
05/06/19	20:00	76.3	-	-	15.6	114	-	0
05/06/19	21:00	76.2	-	-	10	110	-	0
05/06/19	22:00	76	-	-	11.2	124	-	0
05/06/19	23:00	75.9	-	-	12.6	129	-	0
05/07/19	0:00	76	-	-	10.2	131	-	0
05/07/19	1:00	76	-	-	12.2	140	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/07/19	2:00	75.7	-	-	12.8	136	-	0
05/07/19	3:00	75.8	-	-	11.5	129	-	0
05/07/19	4:00	76.1	-	-	11.2	132	-	0
05/07/19	5:00	76.3	-	-	10.5	138	-	0
05/07/19	6:00	76.8	-	-	11	130	-	0
05/07/19	7:00	77.4	-	-	13.1	124	-	0
05/07/19	8:00	77.9	-	-	15.6	118	-	0
05/07/19	9:00	77.7	-	-	15.5	120	-	0
05/07/19	10:00	77.7	-	-	18.9	123	-	0.03
05/07/19	11:00	77	-	-	18.1	125	-	0.01
05/07/19	12:00	FEW	-	-	FEW	FEW	-	FEW
05/07/19	13:00	LSD	-	-	LSD	LSD	-	LSD
05/07/19	14:00	LSD	-	-	LSD	LSD	-	LSD
05/07/19	15:00	LSD	-	-	LSD	LSD	-	LSD
05/07/19	16:00	LSD	-	-	LSD	LSD	-	LSD
05/07/19	17:00	LSD	-	-	LSD	LSD	-	LSD
05/07/19	18:00	LSD	-	-	LSD	LSD	-	LSD
05/07/19	19:00	LSD	-	-	LSD	LSD	-	LSD
05/07/19	20:00	LSD	-	-	LSD	LSD	-	LSD
05/07/19	21:00	LSD	-	-	LSD	LSD	-	LSD
05/07/19	22:00	LSD	-	-	LSD	LSD	-	LSD
05/07/19	23:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	0:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	1:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	2:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	3:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	4:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	5:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	6:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	7:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	8:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	9:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	10:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	11:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	12:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	13:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	14:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	15:00	LSD	-	-	LSD	LSD	-	LSD

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided
LSD	=	Lost data	FEW	=	Too few data points

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/08/19	16:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	17:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	18:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	19:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	20:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	21:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	22:00	LSD	-	-	LSD	LSD	-	LSD
05/08/19	23:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	0:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	1:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	2:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	3:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	4:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	5:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	6:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	7:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	8:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	9:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	10:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	11:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	12:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	13:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	14:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	15:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	16:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	17:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	18:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	19:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	20:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	21:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	22:00	LSD	-	-	LSD	LSD	-	LSD
05/09/19	23:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	0:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	1:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	2:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	3:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	4:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	5:00	LSD	-	-	LSD	LSD	-	LSD

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided
LSD	=	Lost data			

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/10/19	6:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	7:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	8:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	9:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	10:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	11:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	12:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	13:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	14:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	15:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	16:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	17:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	18:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	19:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	20:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	21:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	22:00	LSD	-	-	LSD	LSD	-	LSD
05/10/19	23:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	0:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	1:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	2:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	3:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	4:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	5:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	6:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	7:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	8:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	9:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	10:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	11:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	12:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	13:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	14:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	15:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	16:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	17:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	18:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	19:00	LSD	-	-	LSD	LSD	-	LSD

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided
LSD	=	Lost data			

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/11/19	20:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	21:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	22:00	LSD	-	-	LSD	LSD	-	LSD
05/11/19	23:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	0:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	1:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	2:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	3:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	4:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	5:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	6:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	7:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	8:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	9:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	10:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	11:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	12:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	13:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	14:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	15:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	16:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	17:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	18:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	19:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	20:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	21:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	22:00	LSD	-	-	LSD	LSD	-	LSD
05/12/19	23:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	0:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	1:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	2:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	3:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	4:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	5:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	6:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	7:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	8:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	9:00	LSD	-	-	LSD	LSD	-	LSD

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided
LSD	=	Lost data			

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/13/19	10:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	11:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	12:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	13:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	14:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	15:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	16:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	17:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	18:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	19:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	20:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	21:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	22:00	LSD	-	-	LSD	LSD	-	LSD
05/13/19	23:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	0:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	1:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	2:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	3:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	4:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	5:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	6:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	7:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	8:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	9:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	10:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	11:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	12:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	13:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	14:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	15:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	16:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	17:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	18:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	19:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	20:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	21:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	22:00	LSD	-	-	LSD	LSD	-	LSD
05/14/19	23:00	LSD	-	-	LSD	LSD	-	LSD

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided
LSD	=	Lost data			

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/15/19	0:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	1:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	2:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	3:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	4:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	5:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	6:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	7:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	8:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	9:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	10:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	11:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	12:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	13:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	14:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	15:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	16:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	17:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	18:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	19:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	20:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	21:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	22:00	LSD	-	-	LSD	LSD	-	LSD
05/15/19	23:00	LSD	-	-	LSD	LSD	-	LSD
05/16/19	0:00	LSD	-	-	LSD	LSD	-	LSD
05/16/19	1:00	LSD	-	-	LSD	LSD	-	LSD
05/16/19	2:00	LSD	-	-	LSD	LSD	-	LSD
05/16/19	3:00	LSD	-	-	LSD	LSD	-	LSD
05/16/19	4:00	LSD	-	-	LSD	LSD	-	LSD
05/16/19	5:00	LSD	-	-	LSD	LSD	-	LSD
05/16/19	6:00	LSD	-	-	LSD	LSD	-	LSD
05/16/19	7:00	LSD	-	-	LSD	LSD	-	LSD
05/16/19	8:00	LSD	-	-	LSD	LSD	-	LSD
05/16/19	9:00	LSD	-	-	LSD	LSD	-	LSD
05/16/19	10:00	FEW	-	-	FEW	FEW	-	FEW
05/16/19	11:00	79.5	-	-	12.8	104	-	0
05/16/19	12:00	79.8	-	-	13.1	106	-	0
05/16/19	13:00	79.8	-	-	13.6	112	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided
LSD	=	Lost data	FEW	=	Too few data points

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/16/19	14:00	80	-	-	16.1	111	-	0
05/16/19	15:00	80.4	-	-	17.4	114	-	0
05/16/19	16:00	79.6	-	-	16	119	-	0
05/16/19	17:00	78.5	-	-	14.3	117	-	0
05/16/19	18:00	76.7	-	-	13.6	122	-	0
05/16/19	19:00	75.1	-	-	11.7	125	-	0
05/16/19	20:00	74.5	-	-	10.6	129	-	0
05/16/19	21:00	74.1	-	-	9.2	129	-	0
05/16/19	22:00	73.6	-	-	8.7	131	-	0
05/16/19	23:00	73.6	-	-	8.1	138	-	0
05/17/19	0:00	73.7	-	-	8.1	144	-	0
05/17/19	1:00	73	-	-	5.7	145	-	0
05/17/19	2:00	72.8	-	-	4.9	142	-	0
05/17/19	3:00	72.5	-	-	4.6	139	-	0
05/17/19	4:00	72.8	-	-	6.6	128	-	0
05/17/19	5:00	74	-	-	8.6	130	-	0
05/17/19	6:00	75.4	-	-	9.1	133	-	0
05/17/19	7:00	77.1	-	-	10.6	125	-	0
05/17/19	8:00	78.5	-	-	13.8	129	-	0
05/17/19	9:00	79.5	-	-	15.9	122	-	0
05/17/19	10:00	79.8	-	-	17.5	117	-	0
05/17/19	11:00	80	-	-	17.5	118	-	0
05/17/19	12:00	80.9	-	-	18.3	131	-	0
05/17/19	13:00	80.2	-	-	19.6	117	-	0
05/17/19	14:00	81	-	-	19.4	128	-	0
05/17/19	15:00	80.5	-	-	19.9	127	-	0
05/17/19	16:00	80.1	-	-	20.2	125	-	0
05/17/19	17:00	79.2	-	-	19.3	131	-	0
05/17/19	18:00	78.3	-	-	17.6	127	-	0
05/17/19	19:00	77.8	-	-	18	126	-	0
05/17/19	20:00	77.7	-	-	18.4	127	-	0
05/17/19	21:00	77.8	-	-	17.7	129	-	0
05/17/19	22:00	77.6	-	-	17.5	131	-	0
05/17/19	23:00	77.6	-	-	18.1	133	-	0
05/18/19	0:00	77.4	-	-	16.5	131	-	0
05/18/19	1:00	77.4	-	-	15.1	144	-	0
05/18/19	2:00	77.6	-	-	15.5	149	-	0
05/18/19	3:00	77.8	-	-	13.8	145	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/18/19	4:00	77.7	-	-	13.9	145	-	0
05/18/19	5:00	77.9	-	-	14.5	146	-	0
05/18/19	6:00	78.3	-	-	16.4	152	-	0
05/18/19	7:00	78.9	-	-	16.3	150	-	0
05/18/19	8:00	80.1	-	-	17.5	152	-	0
05/18/19	9:00	80.7	-	-	17.2	154	-	0
05/18/19	10:00	81.5	-	-	17.6	154	-	0
05/18/19	11:00	83.2	-	-	19.6	155	-	0
05/18/19	12:00	82.3	-	-	19.5	159	-	0
05/18/19	13:00	81.8	-	-	18	167	-	0
05/18/19	14:00	81.3	-	-	17.2	165	-	0
05/18/19	15:00	82.7	-	-	17.4	164	-	0
05/18/19	16:00	81.3	-	-	15.4	166	-	0
05/18/19	17:00	80.9	-	-	13.5	160	-	0
05/18/19	18:00	80.4	-	-	18.2	150	-	0
05/18/19	19:00	80.5	-	-	15.5	151	-	0
05/18/19	20:00	80.2	-	-	14.2	146	-	0
05/18/19	21:00	80.2	-	-	16.1	166	-	0
05/18/19	22:00	79.8	-	-	14.3	168	-	0.01
05/18/19	23:00	79.2	-	-	14.5	171	-	0
05/19/19	0:00	79.3	-	-	12.3	182	-	0
05/19/19	1:00	79.3	-	-	9.6	188	-	0
05/19/19	2:00	79.3	-	-	11.9	191	-	0
05/19/19	3:00	79.2	-	-	10.1	191	-	0
05/19/19	4:00	79.1	-	-	9.1	197	-	0
05/19/19	5:00	78.7	-	-	10.4	184	-	0
05/19/19	6:00	78.9	-	-	11.4	190	-	0
05/19/19	7:00	80.5	-	-	11.7	188	-	0
05/19/19	8:00	82.6	-	-	12.3	185	-	0
05/19/19	9:00	83.9	-	-	10.9	181	-	0
05/19/19	10:00	85.4	-	-	9.4	192	-	0
05/19/19	11:00	86.5	-	-	10.3	188	-	0
05/19/19	12:00	87.1	-	-	11.1	176	-	0
05/19/19	13:00	86.6	-	-	13.7	133	-	0
05/19/19	14:00	86.4	-	-	13.9	136	-	0
05/19/19	15:00	85.5	-	-	15.5	137	-	0
05/19/19	16:00	84.1	-	-	16.1	128	-	0
05/19/19	17:00	82.3	-	-	16.9	128	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
La Porte Municipal Airport TCEQ Monitoring Station
Elevation: 5.0 m above sea level
Latitude: 29.67200
Longitude: -95.06470
19 March through 20 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/19/19	18:00	80.6	-	-	15.1	127	-	0
05/19/19	19:00	79.9	-	-	14.8	125	-	0
05/19/19	20:00	79.5	-	-	15.7	123	-	0
05/19/19	21:00	79.3	-	-	14.7	127	-	0
05/19/19	22:00	79.2	-	-	13.7	133	-	0
05/19/19	23:00	79	-	-	12.1	150	-	0
05/20/19	0:00	79	-	-	12.4	171	-	0
05/20/19	1:00	79	-	-	12.7	165	-	0
05/20/19	2:00	78.6	-	-	11.4	144	-	0
05/20/19	3:00	78.4	-	-	9	132	-	0
05/20/19	4:00	78.4	-	-	12.3	131	-	0
05/20/19	5:00	78.3	-	-	12.9	133	-	0
05/20/19	6:00	78.9	-	-	15.9	134	-	0
05/20/19	7:00	80.2	-	-	18	136	-	0
05/20/19	8:00	81.6	-	-	19.1	136	-	0
05/20/19	9:00	82.3	-	-	21.5	137	-	0
05/20/19	10:00	83.2	-	-	20.1	137	-	0
05/20/19	11:00	84	-	-	18.8	143	-	0
05/20/19	12:00	84	-	-	21	133	-	0
05/20/19	13:00	83.8	-	-	22.6	132	-	0
05/20/19	14:00	83.6	-	-	21.4	137	-	0
05/20/19	15:00	83	-	-	21.2	138	-	0
05/20/19	16:00	82.7	-	-	19	140	-	0
05/20/19	17:00	81.5	-	-	19.7	142	-	0
05/20/19	18:00	81.1	-	-	17.9	146	-	0
05/20/19	19:00	80.6	-	-	18.9	146	-	0
05/20/19	20:00	80.3	-	-	20	147	-	0
05/20/19	21:00	80.4	-	-	22	152	-	0
05/20/19	22:00	80.3	-	-	22.3	154	-	0
05/20/19	23:00	79.9	-	-	22.6	155	-	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
William P Hobby Airport Houston, TX
Elevation: 43.9 ft. above sea level
Latitude: 29.63806
Longitude: - 95.28194
07 through 16 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/07/19	0:37	75	79	68	0	0	29.9	
05/07/19	0:51	75	78	68	0	0	29.9	
05/07/19	0:53	75	79	68	0	0	29.9	0
05/07/19	1:53	74	88	70	6	140	29.87	0
05/07/19	2:53	75	88	71	6	140	29.87	0
05/07/19	3:40	75	88	71	8	120	29.87	
05/07/19	3:53	75	88	71	8	120	29.88	0
05/07/19	4:53	75	88	71	6	140	29.91	0
05/07/19	5:43	76	85	71	8	140	29.93	
05/07/19	5:53	76	85	71	8	140	29.93	0
05/07/19	6:53	77	85	72	10	130	29.93	0
05/07/19	7:53	78	82	72	10	130	29.93	T
05/07/19	8:32	80	76	72	14	140	29.93	
05/07/19	8:53	80	74	71	13	130	29.93	0
05/07/19	9:24	81	74	72	13	140	29.92	
05/07/19	9:42	81	74	72	13	130	29.93	
05/07/19	9:53	80	76	72	14	140	29.93	0
05/07/19	10:22	80	76	72	16	160	29.93	T
05/07/19	10:53	81	72	71	21	150	29.89	T
05/07/19	11:12	80	76	72	17	150	29.91	T
05/07/19	11:14	80	76	72	18	160	29.91	T
05/07/19	11:18	79	79	72	14	150	29.9	T
05/07/19	11:51	79	84	73	15	160	29.91	
05/07/19	11:53	78	85	73	14	160	29.91	0.02s
05/07/19	12:29	77	90	74	13	130	29.87	0.02
05/07/19	12:51	75	89	72	11	130	29.9	
05/07/19	12:53	76	91	73	10	120	29.89	0.01
05/07/19	13:04	76	91	73	10	130	29.87	T
05/07/19	13:45	76	91	73	14	140	29.87	0.14
05/07/19	13:46	76	91	73	17	130	29.87	0.17
05/07/19	13:51	75	89	72	18	130	29.87	
05/07/19	13:53	75	90	72	17	130	29.87	0.29
05/07/19	14:25	75	90	72	23	140	29.87	0.11
05/07/19	14:30	75	90	72	16	140	29.86	0.11
05/07/19	14:51	75	89	72	18	130	29.84	
05/07/19	14:53	74	91	71	15	130	29.84	0.11
05/07/19	15:53	75	90	72	9	110	29.86	0.1
05/07/19	16:03	75	90	72	9	100	29.85	T

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided
T	=	Trace precipitation			

Local Climatological Data-Hourly Observations Table
William P Hobby Airport Houston, TX
Elevation: 43.9 ft. above sea level
Latitude: 29.63806
Longitude: - 95.28194
07 through 16 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/07/19	16:42	75	90	72	13	50	29.85	0.03
05/07/19	16:53	75	90	72	15	70	29.85	0.03
05/07/19	17:31	75	90	72	18	100	29.82	0.05
05/07/19	17:53	72	79	65	10	20	29.85	0.06
05/07/19	18:08	71	84	66	7	VRB	29.88	0.15
05/07/19	18:16	70	87	66	11	20	29.88	0.57
05/07/19	18:36	67	93	65	14	60	29.88	1.35
05/07/19	18:51	70	88	66	16	90	29.88	
05/07/19	18:53	68	93	66	15	90	29.87	2.03
05/07/19	18:59	68	90	65	18	110	29.86	0.07
05/07/19	19:17	68	87	64	21	110	29.83	0.25
05/07/19	19:31	69	84	64	11	130	29.84	0.37
05/07/19	19:53	70	87	66	13	180	29.87	0.33
05/07/19	20:08	71	87	67	18	110	29.86	0.02
05/07/19	20:53	71	94	69	15	110	29.84	0.11
05/07/19	21:53	72	87	68	17	140	29.9	0.14
05/07/19	22:07	70	87	66	24	140	29.87	0.13
05/07/19	22:53	70	87	66	11	110	29.88	0.14
05/07/19	23:24	71	87	67	11	130	29.84	0.01
05/07/19	23:53	71	87	67	15	120	29.8	0.01
05/08/19	0:53	72	84	67	14	150	29.76	0
05/08/19	1:53	72	82	66	15	150	29.73	0
05/08/19	2:53	72	84	67	16	170	29.71	0
05/08/19	3:53	73	79	66	10	160	29.73	0
05/08/19	4:53	73	84	68	6	140	29.72	0
05/08/19	5:53	73	84	68	6	100	29.73	0
05/08/19	6:53	75	84	70	9	120	29.72	0
05/08/19	7:09	75	84	70	10	140	29.72	
05/08/19	7:53	76	85	71	11	160	29.71	0
05/08/19	8:53	79	79	72	10	170	29.72	0
05/08/19	9:53	80	76	72	16	170	29.72	0
05/08/19	10:53	82	72	72	17	170	29.71	0
05/08/19	11:51	82	74	73	16	160	29.7	
05/08/19	11:53	82	74	73	18	150	29.7	0
05/08/19	12:15	82	72	72	17	170	29.7	
05/08/19	12:53	82	74	73	17	160	29.69	0
05/08/19	13:11	83	72	73	15	160	29.68	

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided
VRB	=	Variable direction			

Local Climatological Data-Hourly Observations Table
William P Hobby Airport Houston, TX
Elevation: 43.9 ft. above sea level
Latitude: 29.63806
Longitude: - 95.28194
07 through 16 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/08/19	13:53	83	72	73	13	150	29.68	0
05/08/19	14:53	82	74	73	13	150	29.67	0
05/08/19	15:53	82	77	74	13	160	29.66	0
05/08/19	16:23	82	77	74	14	160	29.65	
05/08/19	16:53	81	79	74	14	170	29.64	0
05/08/19	17:22	80	82	74	15	160	29.63	
05/08/19	17:49	81	79	73	15	150	29.62	
05/08/19	17:53	80	82	74	16	160	29.62	0
05/08/19	18:53	79	85	74	15	170	29.63	0
05/08/19	19:35	79	85	74	16	160	29.65	
05/08/19	19:53	79	85	74	13	170	29.65	0
05/08/19	20:53	79	85	74	16	160	29.67	T
05/08/19	21:53	78	87	74	11	170	29.69	T
05/08/19	22:53	78	87	74	16	180	29.69	T
05/08/19	23:53	78	87	74	13	180	29.7	0
05/09/19	0:53	78	87	74	13	190	29.7	0
05/09/19	1:53	78	85	73	11	190	29.69	0
05/09/19	2:53	78	85	73	7	190	29.69	0
05/09/19	3:53	77	88	73	8	170	29.69	0
05/09/19	4:32	77	88	73	8	190	29.7	
05/09/19	4:53	77	88	73	7	190	29.7	0
05/09/19	5:51	79	84	73	7	170	29.71	
05/09/19	5:53	77	88	73	9	170	29.71	0
05/09/19	6:11	77	88	73	9	170	29.72	
05/09/19	6:53	78	87	74	7	160	29.72	0
05/09/19	7:53	79	85	74	7	160	29.73	0
05/09/19	8:05	79	85	74	7	160	29.74	
05/09/19	8:33	80	82	74	9	170	29.74	
05/09/19	8:51	81	79	73	7	150	29.75	
05/09/19	8:53	80	82	74	8	150	29.75	0
05/09/19	9:53	82	77	74	7	180	29.76	0
05/09/19	10:07	82	77	74	7	180	29.76	
05/09/19	10:53	83	72	73	5	170	29.76	0
05/09/19	11:16	84	70	73	5	180	29.75	
05/09/19	11:53	85	70	74	3	VRB	29.74	0
05/09/19	12:36	87	63	73	5	VRB	29.74	
05/09/19	12:53	86	63	72	3	VRB	29.73	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided
T	=	Trace precipitation	VRB	=	Variable direction

Local Climatological Data-Hourly Observations Table
William P Hobby Airport Houston, TX
Elevation: 43.9 ft. above sea level
Latitude: 29.63806
Longitude: - 95.28194
07 through 16 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
05/09/19	13:53	88	61	73	6	220	29.71	0
05/09/19	14:53	89	57	72	7	120	29.69	0
05/09/19	15:53	87	65	74	13	130	29.67	0
05/09/19	16:53	85	70	74	13	100	29.69	0
05/09/19	17:53	83	74	74	17	110	29.69	0
05/09/19	18:44	81	79	74	14	110	29.69	
05/09/19	18:53	81	82	75	11	100	29.72	0
05/09/19	19:04	81	82	75	14	110	29.7	
05/09/19	19:25	80	85	75	14	110	29.73	
05/09/19	19:53	78	87	74	17	110	29.73	0.01
05/09/19	20:31	78	87	74	8	80	29.73	0.03
05/09/19	20:40	73	84	68	11	310	29.75	0.28
05/09/19	20:51	72	94	70	14	330	29.72	
05/09/19	20:53	72	91	69	10	VRB	29.71	0.90s
05/09/19	21:05	72	94	70	14	VRB	29.77	0.66
05/09/19	21:26	69	96	68	28	30	29.71	1.77
05/09/19	21:30	69	96	68	24	30	29.74	1.8
05/09/19	21:34	70	93	68	15	350	29.76	1.81
05/09/19	21:43	69	93	67	23	350	29.78	1.95
05/09/19	21:51	70	88	66	15	20	29.83	
05/09/19	21:53	69	93	67	16	30	29.83	2.09
05/09/19	22:00	68	96	67	22	40	29.77	0.12
05/09/19	22:05	68	93	66	25	50	29.75	0.18
05/09/19	22:12	68	93	66	22	40	29.74	0.25
05/09/19	22:21	68	93	66	15	30	29.77	0.28
05/09/19	22:51	70	83	64	15	100	29.79	
05/09/19	22:53	69	87	65	15	90	29.78	0.29
05/09/19	23:53	69	90	66	14	60	29.74	0.07
5/10/2019	0:53	70	84	65	3	160	29.88	0.12
5/10/2019	1:53	68	93	66	8	120	29.86	0.23
5/10/2019	2:41	69	90	66	11	110	29.84	0.11
5/10/2019	2:53	69	90	66	15	100	29.81	0.14
5/10/2019	3:53	69	90	66	25	100	29.82	0.12
5/10/2019	4:53	69	90	66	21	100	29.83	0.07
5/10/2019	5:53	69	87	65	13	90	29.83	0.05
5/10/2019	6:22	69	87	65	10	60	29.86	0.03
5/10/2019	6:53	69	90	66	10	120	29.84	0.06

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided
VRB	=	Variable direction			

Local Climatological Data-Hourly Observations Table
William P Hobby Airport Houston, TX
Elevation: 43.9 ft. above sea level
Latitude: 29.63806
Longitude: - 95.28194
10 through 16 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
5/10/2019	7:53	69	90	66	6	10	29.88	0.02
5/10/2019	8:44	68	93	66	8	340	29.89	0.01
5/10/2019	8:53	69	90	66	8	360	29.89	0.01
5/10/2019	9:51	70	88	66	8	350	29.89	-
5/10/2019	9:53	70	87	66	8	350	29.89	T
5/10/2019	10:53	71	84	66	10	360	29.87	0
5/10/2019	11:39	73	79	66	9	360	29.86	-
5/10/2019	11:53	73	79	66	3	VRB	29.86	0
5/10/2019	12:39	75	76	67	7	20	29.84	-
5/10/2019	12:53	75	74	66	8	30	29.84	0
5/10/2019	13:31	75	74	66	10	70	29.85	-
5/10/2019	13:53	76	72	66	11	80	29.85	0
5/10/2019	14:51	75	74	66	10	100	29.85	-
5/10/2019	14:53	76	72	66	10	80	29.85	0
5/10/2019	15:43	76	72	66	11	80	29.84	-
5/10/2019	15:53	76	74	67	13	120	29.84	0
5/10/2019	16:53	77	71	67	11	90	29.83	0
5/10/2019	17:53	77	69	66	10	70	29.82	0
5/10/2019	18:53	75	74	66	6	110	29.84	0
5/10/2019	19:53	74	76	66	5	80	29.85	0
5/10/2019	20:53	73	79	66	0	0	29.87	0
5/10/2019	21:53	72	82	66	0	0	29.88	0
5/10/2019	22:53	71	87	67	5	360	29.87	0
5/10/2019	23:53	71	87	67	7	360	29.84	0
5/11/2019	0:53	70	90	67	5	40	29.82	0
5/11/2019	1:53	70	90	67	8	20	29.79	0
5/11/2019	2:53	70	90	67	7	50	29.78	0
5/11/2019	3:09	70	90	67	6	60	29.78	-
5/11/2019	3:53	71	87	67	5	70	29.79	0
5/11/2019	4:32	71	87	67	6	80	29.79	-
5/11/2019	4:53	70	90	67	6	90	29.79	0
5/11/2019	5:51	72	88	68	5	80	29.8	-
5/11/2019	5:53	71	90	68	3	70	29.8	0
5/11/2019	6:53	71	94	69	6	350	29.81	0
5/11/2019	7:53	72	91	69	7	20	29.82	T
5/11/2019	8:42	72	91	69	6	320	29.82	0.02
5/11/2019	8:51	72	94	70	7	320	29.82	-
5/11/2019	8:53	71	94	69	6	330	29.82	0.07s

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided
T	=	Trace precipitation	VRB	=	Variable direction

Local Climatological Data-Hourly Observations Table
William P Hobby Airport Houston, TX
Elevation: 43.9 ft. above sea level
Latitude: 29.63806
Longitude: - 95.28194
10 through 16 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
5/11/2019	9:24	72	94	70	6	320	29.81	0.03
5/11/2019	9:51	72	94	70	5	310	29.81	-
5/11/2019	9:53	72	94	70	5	320	29.81	0.03
5/11/2019	10:40	74	91	71	8	350	29.8	T
5/11/2019	10:51	73	89	70	9	10	29.79	-
5/11/2019	10:53	73	90	70	9	360	29.79	0.02
5/11/2019	11:07	73	87	69	9	360	29.79	T
5/11/2019	11:35	73	90	70	7	360	29.79	0.04
5/11/2019	11:44	73	90	70	6	30	29.8	0.05
5/11/2019	11:53	73	87	69	5	150	29.82	0.30s
5/11/2019	11:56	73	87	69	10	140	29.82	0.12
5/11/2019	12:01	72	94	70	8	70	29.8	0.27
5/11/2019	12:22	71	96	70	11	20	29.78	0.52
5/11/2019	12:29	71	94	69	9	50	29.78	0.56
5/11/2019	12:40	71	94	69	6	300	29.8	0.65
5/11/2019	12:51	72	94	70	3	240	29.8	-
5/11/2019	12:53	71	94	69	0	0	29.79	0.6
5/11/2019	13:26	72	94	70	5	10	29.77	0.02
5/11/2019	13:51	72	94	70	8	20	29.76	-
5/11/2019	13:53	72	94	70	11	10	29.76	0.03
5/11/2019	14:53	72	94	70	7	360	29.76	0.02
5/11/2019	15:00	72	94	70	6	340	29.77	T
5/11/2019	15:53	72	94	70	8	10	29.73	0.09
5/11/2019	16:47	73	89	70	5	50	29.73	0.02
5/11/2019	16:53	74	85	69	3	VRB	29.73	0.01
5/11/2019	17:17	74	85	69	7	70	29.73	-
5/11/2019	17:32	74	85	69	6	60	29.73	-
5/11/2019	17:53	74	88	70	7	70	29.73	0
5/11/2019	18:37	73	90	70	0	0	29.74	-
5/11/2019	18:53	73	87	69	0	0	29.74	0
5/11/2019	19:53	73	87	69	3	50	29.75	0
5/11/2019	20:32	73	87	69	0	0	29.76	-
5/11/2019	20:51	72	94	70	8	280	29.76	-
5/11/2019	20:53	72	91	69	8	270	29.77	0
5/11/2019	21:53	71	90	68	6	310	29.79	T
5/11/2019	22:53	70	93	68	8	360	29.79	0.01
5/11/2019	23:53	68	93	66	10	360	29.78	T
5/12/2019	0:53	68	93	66	8	330	29.78	T

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided
T	=	Trace precipitation	VRB	=	Variable direction

Local Climatological Data-Hourly Observations Table
William P Hobby Airport Houston, TX
Elevation: 43.9 ft. above sea level
Latitude: 29.63806
Longitude: - 95.28194
10 through 16 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
5/12/2019	1:17	67	93	65	10	330	29.77	T
5/12/2019	1:34	67	93	65	9	340	29.77	T
5/12/2019	1:53	67	93	65	8	340	29.76	T
5/12/2019	2:53	66	93	64	14	350	29.77	T
5/12/2019	3:53	65	93	63	8	340	29.79	T
5/12/2019	4:51	64	94	63	8	340	29.8	-
5/12/2019	4:53	65	90	62	6	330	29.8	T
5/12/2019	5:14	65	90	62	8	330	29.8	-
5/12/2019	5:51	64	94	63	9	340	29.82	-
5/12/2019	5:53	65	90	62	8	330	29.82	0
5/12/2019	6:53	65	90	62	8	330	29.82	0
5/12/2019	7:53	67	84	62	8	350	29.82	0
5/12/2019	8:53	71	76	63	11	350	29.82	0
5/12/2019	9:51	72	73	63	13	360	29.79	-
5/12/2019	9:53	71	73	62	10	360	29.8	0
5/12/2019	10:53	71	71	61	8	10	29.84	0
5/12/2019	11:53	73	66	61	9	350	29.84	0
5/12/2019	12:51	75	65	63	11	360	29.83	-
5/12/2019	12:53	75	64	62	11	10	29.83	0
5/12/2019	13:53	76	58	60	10	360	29.81	0
5/12/2019	14:53	78	54	60	7	350	29.79	0
5/12/2019	15:53	78	54	60	8	10	29.77	0
5/12/2019	16:53	78	54	60	8	10	29.76	0
5/12/2019	17:53	77	54	59	6	30	29.77	0
5/12/2019	18:53	75	60	60	7	70	29.79	0
5/12/2019	19:53	73	64	60	5	100	29.81	0
5/12/2019	20:53	72	66	60	6	70	29.82	0
5/12/2019	21:53	71	68	60	6	60	29.84	0
5/12/2019	22:53	69	73	60	7	10	29.85	0
5/12/2019	23:53	68	76	60	5	20	29.85	0
5/13/2019	0:53	67	79	60	5	50	29.85	0
5/13/2019	1:53	66	81	60	7	50	29.84	0
5/13/2019	2:53	65	81	59	5	70	29.85	0
5/13/2019	3:53	63	87	59	0	0	29.85	0
5/13/2019	4:53	64	84	59	3	30	29.86	0
5/13/2019	5:53	62	86	58	5	340	29.88	0
5/13/2019	6:53	67	79	60	5	350	29.9	0
5/13/2019	7:53	71	66	59	7	50	29.91	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided
T	=	Trace precipitation			

Local Climatological Data-Hourly Observations Table
William P Hobby Airport Houston, TX
Elevation: 43.9 ft. above sea level
Latitude: 29.63806
Longitude: - 95.28194
10 through 16 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
5/13/2019	8:53	74	56	57	11	80	29.91	0
5/13/2019	9:53	76	52	57	11	120	29.91	0
5/13/2019	10:53	78	47	56	14	90	29.91	0
5/13/2019	11:53	79	47	57	16	90	29.89	0
5/13/2019	12:53	81	42	56	13	70	29.88	0
5/13/2019	13:53	82	42	57	11	80	29.86	0
5/13/2019	14:53	82	44	58	8	120	29.85	0
5/13/2019	15:53	82	47	60	10	110	29.84	0
5/13/2019	16:53	82	46	59	9	110	29.84	0
5/13/2019	17:53	81	49	60	11	120	29.84	0
5/13/2019	18:53	77	60	62	9	150	29.86	0
5/13/2019	19:53	74	67	62	5	120	29.87	0
5/13/2019	20:53	73	69	62	0	0	29.89	0
5/13/2019	21:53	72	71	62	3	190	29.91	0
5/13/2019	22:53	71	76	63	0	0	29.91	0
5/13/2019	23:53	71	76	63	0	0	29.9	0
5/14/2019	0:53	69	81	63	3	310	29.9	0
5/14/2019	1:53	69	81	63	0	0	29.89	0
5/14/2019	2:53	68	84	63	0	0	29.9	0
5/14/2019	3:53	68	87	64	5	340	29.91	0
5/14/2019	4:53	70	84	65	0	0	29.92	0
5/14/2019	5:53	69	84	64	7	70	29.92	0
5/14/2019	6:53	73	69	62	6	90	29.95	0
5/14/2019	7:53	76	64	63	9	80	29.95	0
5/14/2019	8:53	78	60	63	9	100	29.95	0
5/14/2019	9:53	81	53	62	14	110	29.95	0
5/14/2019	10:53	82	51	62	10	90	29.94	0
5/14/2019	11:53	83	49	62	8	60	29.93	0
5/14/2019	12:53	84	46	61	5	100	29.92	0
5/14/2019	13:53	85	46	62	13	140	29.91	0
5/14/2019	14:53	83	51	63	10	140	29.91	0
5/14/2019	15:53	82	53	63	14	120	29.9	0
5/14/2019	16:53	82	51	62	14	130	29.9	0
5/14/2019	17:53	81	51	61	15	130	29.91	0
5/14/2019	18:53	78	52	59	13	130	29.92	0
5/14/2019	19:53	76	62	62	7	120	29.93	0
5/14/2019	20:53	74	69	63	6	130	29.94	0
5/14/2019	21:53	73	71	63	5	130	29.95	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided

Local Climatological Data-Hourly Observations Table
William P Hobby Airport Houston, TX
Elevation: 43.9 ft. above sea level
Latitude: 29.63806
Longitude: - 95.28194
10 through 16 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
5/14/2019	22:53	73	71	63	6	130	29.94	0
5/14/2019	23:53	73	74	64	6	140	29.94	0
5/15/2019	0:53	72	76	64	3	130	29.93	0
5/15/2019	1:53	73	74	64	0	0	29.93	0
5/15/2019	2:53	71	79	64	0	0	29.92	0
5/15/2019	3:53	69	84	64	0	0	29.93	0
5/15/2019	4:53	70	82	64	0	0	29.94	0
5/15/2019	5:53	71	79	64	3	40	29.96	0
5/15/2019	6:53	73	79	66	0	0	29.98	T
5/15/2019	7:53	77	64	64	5	100	29.99	0
5/15/2019	8:53	79	56	62	9	90	30	0
5/15/2019	9:53	81	51	61	13	110	29.99	0
5/15/2019	10:53	82	49	61	9	130	29.99	0
5/15/2019	11:53	83	46	60	14	90	29.99	0
5/15/2019	12:53	84	40	57	15	130	29.97	0
5/15/2019	13:53	84	37	55	10	130	29.96	0
5/15/2019	14:53	84	37	55	14	120	29.94	0
5/15/2019	15:53	84	34	53	11	130	29.92	0
5/15/2019	16:53	83	41	57	10	120	29.92	0
5/15/2019	17:53	81	49	60	13	140	29.93	0
5/15/2019	18:53	78	60	63	11	130	29.94	0
5/15/2019	19:53	76	64	63	9	140	29.95	0
5/15/2019	20:53	74	69	63	8	130	29.96	0
5/15/2019	21:53	73	69	62	7	130	29.97	0
5/15/2019	22:53	72	73	63	6	140	29.96	0
5/15/2019	23:53	71	76	63	5	130	29.96	0
5/15/2019	0:53	72	76	64	3	130	29.93	0
5/16/2019	0:53	71	76	63	3	110	29.95	0
5/16/2019	1:53	70	79	63	0	0	29.95	0
5/16/2019	2:53	69	81	63	0	0	29.94	0
5/16/2019	3:53	69	81	63	0	0	29.94	0
5/16/2019	4:53	69	81	63	0	0	29.95	0
5/16/2019	5:53	71	79	64	3	60	29.96	0
5/16/2019	6:53	74	79	67	5	100	29.97	0
5/16/2019	7:53	77	74	68	8	120	29.98	0
5/16/2019	8:19	77	74	68	6	130	29.98	-
5/16/2019	8:51	79	70	68	5	170	29.99	-
5/16/2019	8:53	79	69	68	8	140	29.99	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided
T	=	Trace precipitation			

Local Climatological Data-Hourly Observations Table
William P Hobby Airport Houston, TX
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10 through 16 May 2019

Date	Time (LST)	Dry Bulb Temperature (F)	Dew point Temperature (F)	Relative Humidity %	Wind Speed (MPH)	Wind Direction	Station Pressure (in. hg)	Precipitation Total (inches)
5/16/2019	9:53	80	64	67	6	160	29.98	0
5/16/2019	10:53	83	59	67	10	100	29.98	0
5/16/2019	11:53	84	57	67	11	90	29.96	0
5/16/2019	12:53	85	51	65	13	100	29.95	0
5/16/2019	13:53	85	48	63	15	110	29.94	0
5/16/2019	14:53	85	45	61	15	120	29.92	0
5/16/2019	15:53	84	44	60	13	90	29.91	0
5/16/2019	16:53	83	46	60	14	140	29.9	0
5/16/2019	17:53	81	49	60	16	110	29.89	0
5/16/2019	18:53	78	56	61	11	120	29.89	0
5/16/2019	19:53	76	67	64	11	130	29.9	0
5/16/2019	20:53	74	74	65	8	130	29.9	0
5/16/2019	21:53	73	76	65	7	130	29.9	0
5/16/2019	22:53	72	79	65	5	140	29.9	0
5/16/2019	23:53	71	81	65	5	130	29.89	0

Wind direction is the direction from which the wind is blowing

LST	=	Local standard time	MPH	=	Miles per hour
F	=	Fahrenheit	in. Hg	=	inches of mercury
%	=	Percent	-	=	Data not provided