1735 Gardenia Drive New Braunfels Texas 78130-6250
830-606-0252

# INVOICE COVER LETTER

Monday, September 10, 2018

ATTN: Andrew Hoekzema
Director of Regional Services
Capital Area Council of Governments
6800 Burleson Road, Bldg. 310, Suite 165
Austin, TX 78744

RE: Contract #: Operation of Continuous Air Monitoring Stations 2018 / 2019
Invoice #: CAPCOG 18-014
Invoice Period of Service: 8/1/18 – 8/31/18
Total Invoice Amount: $11,602.79

This invoice is for services provided by Dios Dado Environmental Ltd. for operation and network maintenance of CAPCOG sites, as the terms set forth in the above referenced contract.

See the discussion and list of deliverables as follows:

1. August Data Return reported in attachment 1: Data Return Report for Austin -- Region 11.
   All O3 sites reporting >99% data return, Rh units were all at 99.9%. Individual RH reports are included for each site. TEOM data return from 601 is >99%.
2. Site activities are reported in attachment 2: CAPCOG activities log and operator's log set.
3. C6602 Hutto site trailer move has been completed, We had to repair the Teledyne API O3 unit prior to any data going bad due to low flow alarm. All data verified accurate with testing prior to and following repair so no data was lost.
4. All units have good data that is reporting to LEADS system correctly. The data sets for August have been validated.
5. A site survey of C690 is on hold until CAPCOG decides to move forward.
6. We have indications that the AC unit for Lockhart has been repaired under warranty.
7. TCEQ may have un-validated data from July by doing a data reload on the data they lost in July, see the operation logs. No one informed us of that process.

Please be aware that from October 1st forward Dios Dado Environmental Ltd. will no longer be working from the Selma office. We will be moving to our corporate location in New Braunfels Texas.

The address is 1735 Gardenia Drive, New Braunfels Texas, 78130.

Please remit payment to address above, respectfully,
Jim McCraw
Founding Partner
Dios Dado Environmental Ltd.

## Attachment 1: CAPCOG Data Return Report – August 2018
**Austin - Region 11**

***00:00 LST August 1, 2018 through 00:00 LST September 1, 2018***

| CAMS | Location | Pollution Data | | | Meteorological Data | | | |
|---|---|---|---|---|---|---|---|---|
| | | O3 % | PM2.5(Lcl)accpt % | Poll % | WDR % | WSR % | Out Temp % | Met % |
| 601 | Fayette County C601 | 99.7 | 99.6 | 99.7 | 100.0 | 100.0 | 100.0 | 100.0 |
| 614 | Dripping Springs School C614 | 99.7 | * | 99.7 | 100.0 | 100.0 | 100.0 | 100.0 |
| 684 | CAPCOG McKinney Roughs C684 | 99.7 | * | 99.7 | 100.0 | 100.0 | 100.0 | 100.0 |
| 690 | CAPCOG Lake Georgetown C690 | 99.6 | * | 99.6 | 99.9 | 99.9 | 99.9 | 99.9 |
| 1603 | Gorzycki Middle School C1603 | 99.7 | * | 99.7 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1604 | Lockhart C1604 | 99.7 | * | 99.7 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1605 | St. Edwards University C1605 | 100.0 | * | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1675 | CAPCOG San Marcos Staples Road C1675 | 99.7 | * | 99.7 | 100.0 | 100.0 | 100.0 | 100.0 |
| 6602 | CAPCOG Hutto College Street C6602 | 99.7 | * | 99.7 | 100.0 | 100.0 | 100.0 | 100.0 |
| | **Region 11 Averages** | **99.7** | **99.6** | **99.7** | **100.0** | **100.0** | **100.0** | **100.0** |

## Relative Humidity – Data Return Loss for Austin -- Region 11

**00:00 LST August 1, 2018 through 00:00 LST September 1, 2018**
**Selected date range: 31 days (744 hours)**

**Report includes an average of data from only these CAMS: 614 684 690 1603 1604 1605 1675 6602**

| Data Flag | Rel Humid 62201 |
|---|---|
| **Null Data Codes** | |
| FEW => AI (Insufficient Samples) | 1 |
| QAS => AZ (QA Check in Progress) | 3 |
| | |
| **Ambient or Ambient With Qualifier Code** | |
| VAL (Ambient Data) † | 5948 |
| | |
| **Summary** | |
| **Total Monitors** | 8 |
| **Total Null Data Code Flags** | 4 |
| **Total Ambient Flags †** | 5948 |
| **Total Samples** | 5952 |
| **Invalid Percent** | 0.1 |
| **Valid Percent** | 99.9 |
| | **Rel Humid** |
| † Ambient data includes all data with the following flags or qualifier codes: VAL | |

**Relative Humidity – Data Return Loss for Austin -- Region 11**

**00:00 LST August 1, 2018 through 00:00 LST September 1, 2018**
**Selected date range: 31 days (744 hours)**

**INDIVIDUAL SITES:**

**Report includes data from only these CAMS: 614**

| Data Flag | Rel Humid 62201 |
|---|---|
| **Null Data Codes** | |
| | |
| **Ambient or Ambient With Qualifier Code** | |
| VAL (Ambient Data) † | 744 |
| | |
| **Summary** | |
| **Total Monitors** | 1 |
| **Total Null Data Code Flags** | 0 |
| **Total Ambient Flags †** | 744 |
| **Total Samples** | 744 |
| **Invalid Percent** | 0.0 |
| **Valid Percent** | 100 |
| | **Rel Humid** |
| † Ambient data includes all data with the following flags or qualifier codes: VAL | |

**Report includes data from only these CAMS: 684**

| Data Flag | Rel Humid 62201 |
|---|---|
| **Null Data Codes** | |
| QAS => AZ (QA Check in Progress) | 1 |
| | |
| **Ambient or Ambient With Qualifier Code** | |
| VAL (Ambient Data) † | 743 |
| | |
| **Summary** | |
| **Total Monitors** | 1 |
| **Total Null Data Code Flags** | 1 |
| **Total Ambient Flags †** | 743 |
| **Total Samples** | 744 |
| **Invalid Percent** | 0.1 |
| **Valid Percent** | 99.9 |
| | **Rel Humid** |
| † Ambient data includes all data with the following flags or qualifier codes: VAL | |

**Report includes data from only these CAMS: 690**

| Data Flag | Rel Humid 62201 |
|---|---|
| **Null Data Codes** | |
| QAS => AZ (QA Check in Progress) | 1 |
| FEW => AI (Insufficient Samples) | 1 |
| | |
| **Ambient or Ambient With Qualifier Code** | |
| VAL (Ambient Data) † | 742 |
| | |
| **Summary** | |
| **Total Monitors** | 1 |
| **Total Null Data Code Flags** | 2 |
| **Total Ambient Flags †** | 742 |
| **Total Samples** | 744 |
| **Invalid Percent** | 0.3 |
| **Valid Percent** | 99.7 |
| | **Rel Humid** |
| † Ambient data includes all data with the following flags or qualifier codes: VAL | |

**Report includes data from only these CAMS: 1603**

| Data Flag | Rel Humid 62201 |
|---|---|
| **Null Data Codes** | |
| QAS => AZ (QA Check in Progress) | 1 |
| | |
| **Ambient or Ambient With Qualifier Code** | |
| VAL (Ambient Data) † | 743 |
| | |
| **Summary** | |
| **Total Monitors** | 1 |
| **Total Null Data Code Flags** | 1 |
| **Total Ambient Flags †** | 743 |
| **Total Samples** | 744 |
| **Invalid Percent** | 0.1 |
| **Valid Percent** | 99.9 |
| | **Rel Humid** |
| † Ambient data includes all data with the following flags or qualifier codes: VAL | |

**Report includes data from only these CAMS: 1604**

| Data Flag | Rel Humid 62201 |
|---|---|
| **Null Data Codes** | |
| | |
| **Ambient or Ambient With Qualifier Code** | |
| VAL (Ambient Data) † | 744 |
| | |
| **Summary** | |
| **Total Monitors** | 1 |
| **Total Null Data Code Flags** | 0 |
| **Total Ambient Flags †** | 744 |
| **Total Samples** | 744 |
| **Invalid Percent** | 0.0 |
| **Valid Percent** | 100 |
| | **Rel Humid** |
| † Ambient data includes all data with the following flags or qualifier codes: VAL | |

**Report includes data from only these CAMS: 1675**

| Data Flag | Rel Humid 62201 |
|---|---|
| **Null Data Codes** | |
| LST => AQ (Lost) | 1 |
| | |
| **Ambient or Ambient With Qualifier Code** | |
| VAL (Ambient Data) † | 744 |
| | |
| **Summary** | |
| **Total Monitors** | 1 |
| **Total Null Data Code Flags** | 0 |
| **Total Ambient Flags †** | 744 |
| **Total Samples** | 744 |
| **Invalid Percent** | 0.0 |
| **Valid Percent** | 100 |
| | **Rel Humid** |
| † Ambient data includes all data with the following flags or qualifier codes: VAL | |

**Report includes data from only these CAMS: 6602**

| Data Flag | Rel Humid 62201 |
|---|---|
| **Null Data Codes** | |
| | |
| **Ambient or Ambient With Qualifier Code** | |
| VAL (Ambient Data) † | 744 |
| | |
| **Summary** | |
| **Total Monitors** | 1 |
| **Total Null Data Code Flags** | 0 |
| **Total Ambient Flags †** | 744 |
| **Total Samples** | 744 |
| **Invalid Percent** | 0.0 |
| **Valid Percent** | 100 |
| | **Rel Humid** |
| † Ambient data includes all data with the following flags or qualifier codes: VAL | |

## Attachment 2: CAPCOG Site Activities Log and Operators Log set.

### August 2018 CAPCOG Activity Logs:

| DATE | DESCRIPTON |
|---|---|
| 08/01/2018 | C601 - Performed PMI 04-014, PMI 41-030, 41-030a, 41-030b |
| | C1604 - Performed PMI - 04-014 |
| 08/02/2018 | C1603 - Performed PMI 04-014 |
| 08/06/2018 | C614 - Performed PMI 04-014 |
| | C1675 - Performed PMI 04-014 |
| 08/07/2018 | C614 - resolved dead signal |
| | C684 - Performed PMI 04-014 |
| 08/08/2018 | C690 - Performed PMI 04-014 |
| | C6602 - Performed PMI 04-014, resolved tilted MET tower |
| 08/09/2018 | C1604 - Restarted AC unit |
| 08/20/2018 | C690 - Conducted 5pt calibration, Performed PMI 04-014, |
| | C6602 - recorded sample flow warning fault |
| 08/21/2018 | C614 - Conducted 5pt calibration, Performed PMI 04-014 |
| | C1603 - Performed PMI 04-014, 5pt calibration |
| | C6602 - Replaced diaphragm and resolved flow warning fault, conducted 5pt calibration, Performed PMI 04-014 |
| 08/22/2018 | C1604 - Conducted 5pt calibration, Performed PMI 04-014 |
| | C601 - Conducted 5pt calibration, Performed PMI 04-014 |
| 08/23/2018 | C684 - Conducted 5pt calibration, Performed PMI 04-014 |
| | C1675 - Conducted 5pt calibration, Performed PMI 04-014 |

## August 2018 CAPCOG Operator Logs:

### Operator Logs for Fayette County C601

| Date | Time (CST) | Operator | Visit Date | Log Entry<br>08/01/2018 -- 09/01/2018 Fayette County C601 (48_149_0001) |
|---|---|---|---|---|
| Wed Aug 01, 2018 | 06:29:37 | Ccarrasco | 08/01/2018 | Checked site status online |
| Wed Aug 01, 2018 | 13:19:35 | | | Entered station to conduct PMI 04-014 41-030 41-030a 41-030b 41-180 41-180a monthly TEOM verification and PMI 4-14. Placed TEOM to q-code. TEOM values pre audit: OK, 4, 35%, 11.5, 0.0567,251.67474, 50,50,50, 3.00, 13.67,post values= OK, 4, 20%, 1.5, 0.031, 223.06706, 50, 50, 50, 3.00, 13.62, (Changed filter).Placed instrument back in K code, and departed site, all secure. NC/ma/jrm |
| Thu Aug 02, 2018 | 06:52:07 | Ccarrasco | 08/02/2018 | Checked site status online |
| Fri Aug 03, 2018 | 05:55:10 | Ccarrasco | 08/03/2018 | Checked site status online |
| Fri Aug 03, 2018 | 07:52:02 | | | ok, 4, 21% Filter Loading, 14.2 Mass, 0.060 Noise, 253.03413 Freq, Total Mass Not on the diplay, All Temps 50, 3.0 Main Flow, 13.64 Aux Flow. Mark Olsovsky LCRA |
| Sat Aug 04, 2018 | 03:28:50 | | | Automatic time sync |
| Mon Aug 06, 2018 | 06:16:32 | Ccarrasco | 08/06/2018 | Checked site status online |
| Mon Aug 06, 2018 | 15:23:45 | leadsadmin | 08/06/2018 | Reloaded CAMS data as follows:<br>CAMS: 601 EPA Site: 48_149_0001<br>Start Date: July 25, 2018 00:00 UTC End Date: July 25, 2018 17:00 UTC<br><br>rhone5tst interrupted data collection on July 25 for all CAMS<br><br>Parameters reloaded:<br>Standard Deviation of Horizontal Wind Direction-61106:1<br>Wind Speed-61101:1<br>Resultant Wind Direction-61104:1<br>Outdoor Temperature-62101:1<br>Resultant Wind Speed-61103:1<br>Internal Station Temperature-62107:3<br>Ozone-44201:2<br>PM-2.5 (Local Conditions) Acceptable-88502:3<br>Internal Station Temperature-62107:1<br>Maximum Wind Gust-61105:1 |
| Tue Aug 07, 2018 | 03:28:50 | | | Automatic time sync |
| Tue Aug 07, 2018 | 06:29:24 | Ccarrasco | 08/07/2018 | Checked site status online |
| Wed Aug 08, 2018 | 06:04:09 | Ccarrasco | 08/08/2018 | Checked site status online |
| Wed Aug 08, 2018 | 07:49:43 | | | Status OK, Mode 4, %Filter Loading 23%, Mass 7.4, Noise 0.069, Frequency 252.97306, Total Mass N/A, Case Temp 50.00, Air Temp 50.00, Cap Temp 50.00, Main Flow 3.00, Aux Flow 13.63, BH/DP, LCRA, 8/8/18 |
| Thu Aug 09, 2018 | 05:41:01 | Ccarrasco | 08/09/2018 | Checked site status online |
| Fri Aug 10, 2018 | 05:40:04 | Ccarrasco | 08/10/2018 | Checked site status online |
| Sat Aug 11, 2018 | 03:28:48 | | | Automatic time sync |
| Mon Aug 13, 2018 | 06:11:22 | Ccarrasco | 08/13/2018 | Checked site status online |
| Tue Aug 14, 2018 | 03:28:51 | | | Automatic time sync |

| | | | | |
|---|---|---|---|---|
| Tue Aug 14, 2018 | 05:59:29 | Ccarrasco | 08/14/2018 | Checked site status online |
| Wed Aug 15, 2018 | 06:34:41 | Ccarrasco | 08/15/2018 | Checked site status online |
| Thu Aug 16, 2018 | 06:16:03 | Ccarrasco | 08/16/2018 | Checked site status online |
| Fri Aug 17, 2018 | 05:02:10 | Ccarrasco | 08/17/2018 | Checked site status online |
| Fri Aug 17, 2018 | 13:59:49 | | | Status: OK, Mode: 4, %Filter Loading: 28%, Mass: 8.8, Noise: 0.042, Frequency: 252.66372, Total Mass: Not listed, Case Temp: 50.00, Air Temp: 50.00, Cap Temp:50.00, Main Flow: 3.00, Aux Flow: 13.63 q |
| Sat Aug 18, 2018 | 03:28:50 | | | Automatic time sync |
| Mon Aug 20, 2018 | 05:43:47 | Ccarrasco | 08/20/2018 | Checked site status online |
| Tue Aug 21, 2018 | 03:28:50 | | | Automatic time sync |
| Tue Aug 21, 2018 | 05:19:39 | Ccarrasco | 08/21/2018 | Checked site status online |
| Wed Aug 22, 2018 | 05:39:46 | Ccarrasco | 08/22/2018 | Checked site status online |
| Wed Aug 22, 2018 | 14:37:51 | | | 8-22-18 Entered station to conduct monthly 5 pt manual calibration on capcog unit 006595 with calibrator unit 165C-45919-275 next calibration due 6-7-19 . placed unit in Q code.400 set = 400.8 ppb. 300 set = 299.7 ppb. 200 set = 200.7 ppb. 70 set = 070.0 ppb. 0 set = 000.6 ppb. performed PMI 04-014. placed unit back in k code. Left site safe and secure. JRM NC |
| Wed Aug 22, 2018 | 18:28:55 | | | Air Site check 8/22/18 Status OK Mode 4 % Filter Loading 30% Mass 6.5 Noise 0.081 Frequency 252.5 total Mass N/A Case Temp 50.00 Air Temp 50.00 Cap Temp 50.00 Main Flow 3.0 Aux Flow 13.62 Tech AKeate 9-21-18. 400 set = 800.7 mv = 400.35 ppb 300 set = 600.5 mv = 300.25 ppb 200 set = 400.9 mv = 200.47 ppb 70 set = 140.55 mv = 70.22 ppb 0 set = .065 mv = .302 ppb No adjustments were made also performed PMI 04-14. Left site safe and secure. MA |
| Thu Aug 23, 2018 | 06:07:04 | Ccarrasco | 08/23/2018 | Checked site status online |
| Fri Aug 24, 2018 | 05:32:36 | Ccarrasco | 08/24/2018 | Checked site status online |
| Sat Aug 25, 2018 | 03:28:49 | | | Automatic time sync |
| Sat Aug 25, 2018 | 18:24:43 | | | STATUS OK, MODE 4, FILTER LOADING 31%, MASS 16.6, NOISE 0.101, FREQ 252.52500, CASE TEMP 50, AIR TEMP 50, CAP TEMP 50, MAIN FLOW 3, AUX FLOW 13.63 BILLY BISHOP |
| Mon Aug 27, 2018 | 05:25:36 | Ccarrasco | 08/27/2018 | Checked site status online |
| Tue Aug 28, 2018 | 03:28:51 | | | Automatic time sync |
| Tue Aug 28, 2018 | 05:10:54 | Ccarrasco | 08/28/2018 | Checked site status online |
| Wed Aug 29, 2018 | 05:03:27 | Ccarrasco | 08/29/2018 | Checked site status online |
| Wed Aug 29, 2018 | 13:25:04 | | | Status: ok, Mode: 4, %filterloading: 31%B[D[C8[C8[C, Mass: 7.2, Noise: 0.050, Freq: 252.47093, Total mass: n/a, Case Temp: 50, Air Temp: 50, Cap Temp: 50, Main Flow: 3.00, Aux Flow: 13.62. JT 08/29/18 X X* |
| Thu Aug 30, 2018 | 07:16:14 | Ccarrasco | 08/30/2018 | Checked site status online |
| Fri Aug 31, 2018 | 06:48:25 | | 08/31/2018 | Checked site status online |

**Operator Logs for Dripping Springs School C614**

| Date | Time (CST) | Operator | Visit Date | Log Entry |
|---|---|---|---|---|
| | | | | **08/01/2018 -- 09/01/2018 Dripping Springs School C614 (48_209_0614)** |
| Wed Aug 01, 2018 | 06:29:54 | Ccarrasco | 08/01/2018 | Checked site status online |
| Thu Aug 02, 2018 | 06:52:23 | Ccarrasco | 08/02/2018 | Checked site status online |
| Fri Aug 03, 2018 | 05:55:25 | Ccarrasco | 08/03/2018 | Checked site status online |
| Sat Aug 04, 2018 | 03:28:40 | | | Automatic time sync |
| Sat Aug 04, 2018 | 03:28:40 | | | Automatic time sync |
| Mon Aug 06, 2018 | 06:16:51 | Ccarrasco | 08/06/2018 | Checked site status online |
| Mon Aug 06, 2018 | 10:40:11 | | | entered station temp 84 f. performed 04-014, filter change and equipment checks. left site safe and secure. jrm/nc |
| Mon Aug 06, 2018 | 15:23:55 | leadsadmin | 08/06/2018 | Reloaded CAMS data as follows:<br>CAMS: 614 EPA Site: 48_209_0614<br>Start Date: July 25, 2018 00:00 UTC End Date: July 25, 2018 17:00 UTC<br><br>rhone5tst interrupted data collection on July 25 for all CAMS<br><br>Parameters reloaded:<br>Dew Point Temperature-62103:1<br>Ozone-44201:1<br>Standard Deviation of Horizontal Wind Direction-61106:1<br>Wind Speed-61101:1<br>Resultant Wind Direction-61104:1<br>Outdoor Temperature-62101:1<br>Resultant Wind Speed-61103:1<br>Relative Humidity-62201:1<br>Internal Station Temperature-62107:1<br>Maximum Wind Gust-61105:1 |
| Tue Aug 07, 2018 | 06:29:59 | Ccarrasco | 08/07/2018 | Could not check site status online |
| Wed Aug 08, 2018 | 06:04:26 | Ccarrasco | 08/08/2018 | Checked site status online |
| Thu Aug 09, 2018 | 05:41:17 | Ccarrasco | 08/09/2018 | Checked site status online |
| Fri Aug 10, 2018 | 05:40:19 | Ccarrasco | 08/10/2018 | Checked site status online |
| Sat Aug 11, 2018 | 03:28:44 | | | Automatic time sync |
| Mon Aug 13, 2018 | 06:11:37 | Ccarrasco | 08/13/2018 | Checked site status online |
| Tue Aug 14, 2018 | 03:28:40 | | | Automatic time sync |
| Tue Aug 14, 2018 | 05:59:46 | Ccarrasco | 08/14/2018 | Checked site status online |
| Wed Aug 15, 2018 | 06:34:56 | Ccarrasco | 08/15/2018 | Checked site status online |
| Thu Aug 16, 2018 | 06:16:23 | Ccarrasco | 08/16/2018 | Checked site status online |
| Fri Aug 17, 2018 | 05:02:25 | Ccarrasco | 08/17/2018 | Checked site status online |
| Mon Aug 20, 2018 | 05:44:04 | Ccarrasco | 08/20/2018 | Checked site status online |
| Tue Aug 21, 2018 | 03:28:44 | | | Automatic time sync |
| Tue Aug 21, 2018 | 05:19:57 | Ccarrasco | 08/21/2018 | Checked site status online |

| | | | | |
|---|---|---|---|---|
| Tue Aug 21, 2018 | 10:06:39 | | | Entered station to conduct O3 unit 5-pt manual calibration check. Placed O3 unit in q-code. Commenced 5-pt calibration with Transfer standard sn 165c-45919-275 cal due date 6/7/2019, on O3 unit 49i capcog 006592, and completed satisfactory.400 set = 401.7 ppb, 300 set = 299.0 ppb, 200 set = 199.5 ppb, 070 set = 069.6 ppb. 000 set = 000.2 ppb. Performed pmi 04-014 filter replaced, performed PMI 29-180, PMI 26-180, PMI 01-180, PMI 07-180, PMi 03-030.Placed unit in k-code and left station safe and secure. jmccraw/ nc |
| Wed Aug 22, 2018 | 05:40:02 | Ccarrasco | 08/22/2018 | Checked site status online |
| Thu Aug 23, 2018 | 06:07:22 | Ccarrasco | 08/23/2018 | Checked site status online |
| Fri Aug 24, 2018 | 05:32:53 | Ccarrasco | 08/24/2018 | Checked site status online |
| Sat Aug 25, 2018 | 03:28:44 | | | Automatic time sync |
| Mon Aug 27, 2018 | 05:25:53 | Ccarrasco | 08/27/2018 | Checked site status online |
| Tue Aug 28, 2018 | 03:28:40 | | | Automatic time sync |
| Tue Aug 28, 2018 | 05:11:09 | Ccarrasco | 08/28/2018 | Checked site status online |
| Wed Aug 29, 2018 | 05:03:41 | Ccarrasco | 08/29/2018 | Checked site status online |
| Thu Aug 30, 2018 | 07:16:36 | Ccarrasco | 08/30/2018 | Checked site status online |
| Fri Aug 31, 2018 | 06:48:43 | | 08/31/2018 | Checked site status online |

**Operator Logs for CAPCOG McKinney Roughs C684**

| Date | Time (CST) | Operator | Visit Date | Log Entry |
|---|---|---|---|---|
| | | | | 08/01/2018 -- 09/01/2018 CAPCOG McKinney Roughs C684 (48_021_0684) |
| Thu Aug 02, 2018 | 06:52:40 | Ccarrasco | 08/02/2018 | Checked site status online |
| Fri Aug 03, 2018 | 05:55:41 | Ccarrasco | 08/03/2018 | Checked site status online |
| Sat Aug 04, 2018 | 03:43:38 | | | Automatic time sync |
| Mon Aug 06, 2018 | 06:17:08 | Ccarrasco | 08/06/2018 | Checked site status online |
| Mon Aug 06, 2018 | 15:24:22 | leadsadmin | 08/06/2018 | Reloaded CAMS data as follows:<br>CAMS: 684 EPA Site: 48_021_0684<br>Start Date: July 25, 2018 00:00 UTC End Date: July 25, 2018 17:00 UTC<br><br>rhone5tst interrupted data collection on July 25 for all CAMS<br><br>Parameters reloaded:<br>Dew Point Temperature-62103:1<br>Ozone-44201:1<br>Standard Deviation of Horizontal Wind Direction-61106:1<br>Wind Speed-61101:1<br>Resultant Wind Direction-61104:1<br>Outdoor Temperature-62101:1<br>Resultant Wind Speed-61103:1<br>Relative Humidity-62201:1<br>Internal Station Temperature-62107:1<br>Maximum Wind Gust-61105:1 |
| Tue Aug 07, 2018 | 06:30:15 | Ccarrasco | 08/07/2018 | Checked site status online |
| Tue Aug 07, 2018 | 12:40:15 | | | Entered station to conduct 04-014 maintenance, changed particulate filter, verified system parameters correct. left site secure. New equipment moved into area filter wrench and spare filters now missing. jrm/nc |
| Wed Aug 08, 2018 | 06:04:42 | Ccarrasco | 08/08/2018 | Checked site status online |
| Thu Aug 09, 2018 | 05:41:38 | Ccarrasco | 08/09/2018 | Checked site status online |
| Fri Aug 10, 2018 | 05:40:35 | Ccarrasco | 08/10/2018 | Checked site status online |
| Sat Aug 11, 2018 | 03:43:39 | | | Automatic time sync |
| Mon Aug 13, 2018 | 06:11:57 | Ccarrasco | 08/13/2018 | Checked site status online |
| Tue Aug 14, 2018 | 03:43:39 | | | Automatic time sync |
| Tue Aug 14, 2018 | 06:00:03 | Ccarrasco | 08/14/2018 | Checked site status online |
| Wed Aug 15, 2018 | 06:35:13 | Ccarrasco | 08/15/2018 | Checked site status online |
| Thu Aug 16, 2018 | 06:16:41 | Ccarrasco | 08/16/2018 | Checked site status online |
| Fri Aug 17, 2018 | 05:02:42 | Ccarrasco | 08/17/2018 | Checked site status online |
| Sat Aug 18, 2018 | 03:43:37 | | | Automatic time sync |
| Mon Aug 20, 2018 | 05:44:20 | Ccarrasco | 08/20/2018 | Checked site status online |
| Tue Aug 21, 2018 | 03:43:39 | | | Automatic time sync |
| Tue Aug 21, 2018 | 05:20:14 | Ccarrasco | 08/21/2018 | Checked site status online |
| Wed Aug 22, 2018 | 05:40:19 | Ccarrasco | 08/22/2018 | Checked site status online |
| Thu Aug 23, 2018 | 06:07:38 | Ccarrasco | 08/23/2018 | Checked site status online |

| | | | | |
|---|---|---|---|---|
| Thu Aug 23, 2018 | 10:52:58 | | | entered station to conduct PMI 04-014, 07-180, 29-180, and 5pt calibration check with sn165-45919-275, cal due date 6-7-19, on o3 unit 49i capcog #006521 placed rh sensor and O3 unit into q code, and completed satisfactory. 400 set = 399.7 ppb, 300 set = 299.6 ppb, 200 set = 200.9 ppb, 070 set = 070.3 ppb. 000 set = 000.3. placed rh and O3 units K code and left site secure. jrm/nc |
| Fri Aug 24, 2018 | 05:33:13 | Ccarrasco | 08/24/2018 | Checked site status online |
| Mon Aug 27, 2018 | 05:26:13 | Ccarrasco | 08/27/2018 | Checked site status online |
| Tue Aug 28, 2018 | 03:43:37 | | | Automatic time sync |
| Tue Aug 28, 2018 | 05:11:24 | Ccarrasco | 08/28/2018 | Checked site status online |
| Wed Aug 29, 2018 | 05:03:58 | Ccarrasco | 08/29/2018 | Checked site status online |
| Thu Aug 30, 2018 | 07:17:12 | Ccarrasco | 08/30/2018 | Checked site status online |
| Fri Aug 31, 2018 | 06:48:59 | | 08/31/2018 | Checked site status online |

**Operator Logs for CAPCOG Lake Georgetown C690**

| Date | Time (CST) | Operator | Visit Date | Log Entry |
|---|---|---|---|---|
| | | | | 08/01/2018 -- 09/01/2018 CAPCOG Lake Georgetown C690 (48_491_0690) |
| Wed Aug 01, 2018 | 06:31:33 | Ccarrasco | 08/01/2018 | Checked site status online |
| Thu Aug 02, 2018 | 06:52:56 | Ccarrasco | 08/02/2018 | Checked site status online |
| Fri Aug 03, 2018 | 05:55:57 | Ccarrasco | 08/03/2018 | Checked site status online |
| Sat Aug 04, 2018 | 03:13:09 | | | Automatic time sync |
| Mon Aug 06, 2018 | 06:17:27 | Ccarrasco | 08/06/2018 | Checked site status online |
| Mon Aug 06, 2018 | 15:24:27 | leadsadmin | 08/06/2018 | Reloaded CAMS data as follows:<br>CAMS: 690 EPA Site: 48_491_0690<br>Start Date: July 25, 2018 00:00 UTC End Date: July 25, 2018 17:00 UTC<br><br>rhone5tst interrupted data collection on July 25 for all CAMS<br><br>Parameters reloaded:<br>Dew Point Temperature-62103:1<br>Ozone-44201:1<br>Standard Deviation of Horizontal Wind Direction-61106:1<br>Wind Speed-61101:1<br>Resultant Wind Direction-61104:1<br>Outdoor Temperature-62101:1<br>Resultant Wind Speed-61103:1<br>Relative Humidity-62201:1<br>Internal Station Temperature-62107:1<br>Maximum Wind Gust-61105:1 |
| Tue Aug 07, 2018 | 03:13:09 | | | Automatic time sync |
| Tue Aug 07, 2018 | 06:30:31 | Ccarrasco | 08/07/2018 | Checked site status online |
| Wed Aug 08, 2018 | 06:05:01 | Ccarrasco | 08/08/2018 | Checked site status online |
| Wed Aug 08, 2018 | 10:29:37 | | | Entered station to conduct 04-014 maintenance, changed particulate filter, verified system parameters correct. left site secure. Filter wrench missing. jrm/nc |
| Thu Aug 09, 2018 | 05:41:56 | Ccarrasco | 08/09/2018 | Checked site status online |
| Fri Aug 10, 2018 | 05:40:51 | Ccarrasco | 08/10/2018 | Checked site status online |
| Sat Aug 11, 2018 | 03:13:09 | | | Automatic time sync |
| Mon Aug 13, 2018 | 06:12:13 | Ccarrasco | 08/13/2018 | Checked site status online |
| Tue Aug 14, 2018 | 03:13:07 | | | Automatic time sync |
| Tue Aug 14, 2018 | 06:00:20 | Ccarrasco | 08/14/2018 | Checked site status online |
| Wed Aug 15, 2018 | 06:35:30 | Ccarrasco | 08/15/2018 | Checked site status online |
| Thu Aug 16, 2018 | 06:17:00 | Ccarrasco | 08/16/2018 | Checked site status online |
| Fri Aug 17, 2018 | 05:02:56 | Ccarrasco | 08/17/2018 | Checked site status online |
| Sat Aug 18, 2018 | 03:13:09 | | | Automatic time sync |
| Mon Aug 20, 2018 | 05:44:37 | Ccarrasco | 08/20/2018 | Checked site status online |

| | | | | |
|---|---|---|---|---|
| Mon Aug 20, 2018 | 11:40:51 | | | Entered station to conduct O3 unit 5-pt manual calibration check. Placed unit in q-code. Commenced 5-pt calibration with Transfer standard sn 165c-45919-275 cal due date 6/7/2019, on O3 unit 49i capcog 006592, and completed satisfactory. 400 set = 401.0 ppb, 300 set = 300.0 ppb, 200 set = 201.5 ppb, 070 set = 070.8 ppb. 000 set = 001.3 ppb. Pmi 04-014 filter replaced, Placed unit in k-code and left station safe and secure. jmccraw/ nc |
| Tue Aug 21, 2018 | 03:13:09 | | | Automatic time sync |
| Tue Aug 21, 2018 | 05:20:32 | Ccarrasco | 08/21/2018 | Checked site status online |
| Wed Aug 22, 2018 | 05:40:39 | Ccarrasco | 08/22/2018 | Checked site status online |
| Thu Aug 23, 2018 | 06:07:54 | Ccarrasco | 08/23/2018 | Checked site status online |
| Fri Aug 24, 2018 | 05:33:33 | Ccarrasco | 08/24/2018 | Checked site status online |
| Sat Aug 25, 2018 | 03:13:09 | | | Automatic time sync |
| Mon Aug 27, 2018 | 05:26:31 | Ccarrasco | 08/27/2018 | Checked site status online |
| Tue Aug 28, 2018 | 03:13:09 | | | Automatic time sync |
| Tue Aug 28, 2018 | 05:11:43 | Ccarrasco | 08/28/2018 | Checked site status online |
| Wed Aug 29, 2018 | 05:04:14 | Ccarrasco | 08/29/2018 | Checked site status online |
| Thu Aug 30, 2018 | 07:17:29 | Ccarrasco | 08/30/2018 | Checked site status online |
| Fri Aug 31, 2018 | 06:49:15 | | 08/31/2018 | Checked site status online |

**Operator Logs for Gorzycki Middle School C1603**

| Date | Time (CST) | Operator | Visit Date | Log Entry |
|---|---|---|---|---|
| | | | | 08/01/2018 -- 09/01/2018 Gorzycki Middle School C1603 (48_453_1603) |
| Wed Aug 01, 2018 | 06:34:19 | Ccarrasco | 08/01/2018 | Checked site status online |
| Thu Aug 02, 2018 | 06:54:00 | Ccarrasco | 08/02/2018 | Checked site status online |
| Thu Aug 02, 2018 | 10:37:29 | | | 08-02-18 entered station to perform 04-014 and installed new UPS battery backup. repaired ozone inlet line near filter to prevent a kink. left st |
| Thu Aug 02, 2018 | 10:39:09 | | | 08-02-18 entered station to perform 04-014 and installed new UPS battery backup. repaired ozone inlet line near filter to prevent a kink. left station secure. NC MA |
| Fri Aug 03, 2018 | 05:57:08 | Ccarrasco | 08/03/2018 | Checked site status online |
| Sat Aug 04, 2018 | 03:13:08 | | | Automatic time sync |
| Mon Aug 06, 2018 | 06:18:40 | Ccarrasco | 08/06/2018 | Checked site status online |
| Mon Aug 06, 2018 | 15:25:57 | leadsadmin | 08/06/2018 | Reloaded CAMS data as follows:<br>CAMS: 1603 EPA Site: 48_453_1603<br>Start Date: July 25, 2018 00:00 UTC End Date: July 25, 2018 17:00 UTC<br><br>rhone5tst interrupted data collection on July 25 for all CAMS<br><br>Parameters reloaded:<br>Ozone-44201:1<br>Standard Deviation of Horizontal Wind Direction-61106:1<br>Wind Speed-61101:1<br>Resultant Wind Direction-61104:1<br>Outdoor Temperature-62101:1<br>Resultant Wind Speed-61103:1<br>Relative Humidity-62201:1<br>Internal Station Temperature-62107:1<br>Maximum Wind Gust-61105:1 |
| Tue Aug 07, 2018 | 03:13:08 | | | Automatic time sync |
| Tue Aug 07, 2018 | 06:31:43 | Ccarrasco | 08/07/2018 | Checked site status online |
| Wed Aug 08, 2018 | 06:06:13 | Ccarrasco | 08/08/2018 | Checked site status online |
| Thu Aug 09, 2018 | 05:43:00 | Ccarrasco | 08/09/2018 | Checked site status online |
| Fri Aug 10, 2018 | 05:41:58 | Ccarrasco | 08/10/2018 | Checked site status online |
| Sat Aug 11, 2018 | 03:13:10 | | | Automatic time sync |
| Mon Aug 13, 2018 | 06:13:27 | Ccarrasco | 08/13/2018 | Checked site status online |
| Tue Aug 14, 2018 | 03:13:08 | | | Automatic time sync |
| Tue Aug 14, 2018 | 06:01:28 | Ccarrasco | 08/14/2018 | Checked site status online |
| Wed Aug 15, 2018 | 06:36:35 | Ccarrasco | 08/15/2018 | Checked site status online |
| Thu Aug 16, 2018 | 06:18:07 | Ccarrasco | 08/16/2018 | Checked site status online |
| Fri Aug 17, 2018 | 05:05:22 | Ccarrasco | 08/17/2018 | Checked site status online |
| Sat Aug 18, 2018 | 03:13:10 | | | Automatic time sync |
| Mon Aug 20, 2018 | 05:45:36 | Ccarrasco | 08/20/2018 | Checked site status online |
| Tue Aug 21, 2018 | 03:13:11 | | | Automatic time sync |

| | | | | |
|---|---|---|---|---|
| Tue Aug 21, 2018 | 05:21:44 | Ccarrasco | 08/21/2018 | Checked site status online |
| Tue Aug 21, 2018 | 12:44:05 | | | 8-21-18: Entered station to conduct O3 unit 5-pt manual calibration check. Placed O3 unit in q-code. Commenced 5-pt calibration with Transfer standard sn 165c-45919-275 cal due date 6/7/2019, on O3 unit 49i capcog 006522, and completed satisfactory.400 set = 402.4 ppb, 300 set = 300.0 ppb, 200 set = 199.7 ppb, 070 set = 069.9 ppb. 000 set = 000.09 ppb. Performed pmi 04-014 filter replaced, performed PMI 29-180 RH unit cleaning .Placed unit in k-code and left station safe and secure. jmccraw/ nc |
| Wed Aug 22, 2018 | 05:41:45 | Ccarrasco | 08/22/2018 | Checked site status online |
| Thu Aug 23, 2018 | 06:08:55 | Ccarrasco | 08/23/2018 | Checked site status online |
| Fri Aug 24, 2018 | 05:34:38 | Ccarrasco | 08/24/2018 | Checked site status online |
| Sat Aug 25, 2018 | 03:13:08 | | | Automatic time sync |
| Mon Aug 27, 2018 | 05:27:42 | Ccarrasco | 08/27/2018 | Checked site status online |
| Tue Aug 28, 2018 | 03:13:09 | | | Automatic time sync |
| Tue Aug 28, 2018 | 05:12:43 | Ccarrasco | 08/28/2018 | Checked site status online |
| Wed Aug 29, 2018 | 05:05:14 | Ccarrasco | 08/29/2018 | Checked site status online |
| Thu Aug 30, 2018 | 07:18:41 | Ccarrasco | 08/30/2018 | Checked site status online |
| Fri Aug 31, 2018 | 06:50:24 | | 08/31/2018 | Checked site status online |

**Operator Logs for Lockhart C1604**

| Date | Time (CST) | Operator | Visit Date | Log Entry |
|---|---|---|---|---|
| | | | | **08/01/2018 -- 09/01/2018 Lockhart C1604 (48_055_1604)** |
| Wed Aug 01, 2018 | 06:34:03 | Ccarrasco | 08/01/2018 | Checked site status online |
| Wed Aug 01, 2018 | 15:24:41 | | | 8-1-18 entered station installed portable fan and repaired UPS cp130avr. Alarm on O3 unit bench temp high <40-49 nop other alarms. unit operating properly otherwise NC/MA/JM |
| Wed Aug 01, 2018 | 15:29:49 | | | 8-1-18: Entered station to perform PMI 04-014. Made log entry , left site securely. NC/MA/JM |
| Thu Aug 02, 2018 | 06:53:46 | Ccarrasco | 08/02/2018 | Checked site status online |
| Fri Aug 03, 2018 | 05:56:52 | Ccarrasco | 08/03/2018 | Checked site status online |
| Sat Aug 04, 2018 | 03:13:09 | | | Automatic time sync |
| Mon Aug 06, 2018 | 06:18:24 | Ccarrasco | 08/06/2018 | Checked site status online |
| Mon Aug 06, 2018 | 15:26:02 | leadsadmin | 08/06/2018 | Reloaded CAMS data as follows:<br>CAMS: 1604 EPA Site: 48_055_1604<br>Start Date: July 25, 2018 00:00 UTC End Date: July 25, 2018 17:00 UTC<br><br>rhone5tst interrupted data collection on July 25 for all CAMS<br><br>Parameters reloaded:<br>Dew Point Temperature-62103:1<br>Ozone-44201:1<br>Standard Deviation of Horizontal Wind Direction-61106:1<br>Wind Speed-61101:1<br>Resultant Wind Direction-61104:1<br>Outdoor Temperature-62101:1<br>Resultant Wind Speed-61103:1<br>Relative Humidity-62201:1<br>Internal Station Temperature-62107:1<br>Maximum Wind Gust-61105:1 |
| Tue Aug 07, 2018 | 03:13:08 | | | Automatic time sync |
| Tue Aug 07, 2018 | 06:31:27 | Ccarrasco | 08/07/2018 | Checked site status online |
| Wed Aug 08, 2018 | 06:05:57 | Ccarrasco | 08/08/2018 | Checked site status online |
| Thu Aug 09, 2018 | 05:42:44 | Ccarrasco | 08/09/2018 | Checked site status online |
| Thu Aug 09, 2018 | 10:01:23 | | | entered station and checked repaired ac unit. left site secure started ac unit. jrm/nc |
| Fri Aug 10, 2018 | 05:41:44 | Ccarrasco | 08/10/2018 | Checked site status online |
| Sat Aug 11, 2018 | 03:13:10 | | | Automatic time sync |
| Mon Aug 13, 2018 | 06:13:14 | Ccarrasco | 08/13/2018 | Checked site status online |
| Tue Aug 14, 2018 | 03:13:07 | | | Automatic time sync |
| Tue Aug 14, 2018 | 06:01:11 | Ccarrasco | 08/14/2018 | Checked site status online |
| Wed Aug 15, 2018 | 06:36:21 | Ccarrasco | 08/15/2018 | Checked site status online |
| Thu Aug 16, 2018 | 06:17:51 | Ccarrasco | 08/16/2018 | Checked site status online |
| Fri Aug 17, 2018 | 05:05:08 | Ccarrasco | 08/17/2018 | Checked site status online |
| Sat Aug 18, 2018 | 03:13:10 | | | Automatic time sync |
| Mon Aug 20, 2018 | 05:45:22 | Ccarrasco | 08/20/2018 | Checked site status online |
| Tue Aug 21, 2018 | 03:13:10 | | | Automatic time sync |

| | | | | |
|---|---|---|---|---|
| Tue Aug 21, 2018 | 05:21:25 | Ccarrasco | 08/21/2018 | Checked site status online |
| Wed Aug 22, 2018 | 05:41:30 | Ccarrasco | 08/22/2018 | Checked site status online |
| Wed Aug 22, 2018 | 10:51:01 | | | Entered station to conduct O3 unit 5-pt manual calibration check. Placed O3 unit in q-code. Commenced 5-pt calibration with Transfer standard sn 165c-45919-275 cal due date 6/7/2019, on O3 unit 49i capcog 006733, and completed satisfactory. 400 set = 400.1 ppb, 300 set = 299.8 ppb, 200 set = 201.0 ppb, 070 set = 071.0 ppb. 000 set = 000.1 ppb. Perforned pmi04-014 filter replaced, performed PMI 29-180 RH unit cleaning .Placed unit in k-code and left station safe and secure. jmccraw/ nc |
| Thu Aug 23, 2018 | 06:08:41 | Ccarrasco | 08/23/2018 | Checked site status online |
| Fri Aug 24, 2018 | 05:34:23 | Ccarrasco | 08/24/2018 | Checked site status online |
| Sat Aug 25, 2018 | 03:13:08 | | | Automatic time sync |
| Mon Aug 27, 2018 | 05:27:27 | Ccarrasco | 08/27/2018 | Checked site status online |
| Tue Aug 28, 2018 | 03:13:09 | | | Automatic time sync |
| Tue Aug 28, 2018 | 05:12:29 | Ccarrasco | 08/28/2018 | Checked site status online |
| Wed Aug 29, 2018 | 05:04:57 | Ccarrasco | 08/29/2018 | Checked site status online |
| Thu Aug 30, 2018 | 07:18:23 | Ccarrasco | 08/30/2018 | Checked site status online |
| Fri Aug 31, 2018 | 06:50:08 | | 08/31/2018 | Checked site status online |

**Operator Logs for CAPCOG San Marcos Staples Road C1675**

| Date | Time (CST) | Operator | Visit Date | Log Entry |
|---|---|---|---|---|
| | | | | 08/01/2018 -- 09/01/2018 CAPCOG San Marcos Staples Road C1675 (48_209_1675) |
| Wed Aug 01, 2018 | 06:33:32 | Ccarrasco | 08/01/2018 | Checked site status online |
| Thu Aug 02, 2018 | 06:53:14 | Ccarrasco | 08/02/2018 | Checked site status online |
| Fri Aug 03, 2018 | 05:56:15 | Ccarrasco | 08/03/2018 | Checked site status online |
| Sat Aug 04, 2018 | 03:43:38 | | | Automatic time sync |
| Mon Aug 06, 2018 | 06:17:47 | Ccarrasco | 08/06/2018 | Checked site status online |
| Mon Aug 06, 2018 | 12:03:45 | | | Entered station to conduct 04-014, changed particulate filter, verified system parameters correct. left site secure. jmccraw/nc |
| Mon Aug 06, 2018 | 15:26:18 | leadsadmin | 08/06/2018 | Reloaded CAMS data as follows:<br>CAMS: 1675 EPA Site: 48_209_1675<br>Start Date: July 25, 2018 00:00 UTC End Date: July 25, 2018 17:00 UTC<br><br>rhone5tst interrupted data collection on July 25 for all CAMS<br><br>Parameters reloaded:<br>Dew Point Temperature-62103:1<br>Ozone-44201:1<br>Standard Deviation of Horizontal Wind Direction-61106:1<br>Wind Speed-61101:1<br>Resultant Wind Direction-61104:1<br>Outdoor Temperature-62101:1<br>Resultant Wind Speed-61103:1<br>Relative Humidity-62201:1<br>Internal Station Temperature-62107:1<br>Maximum Wind Gust-61105:1 |
| Tue Aug 07, 2018 | 03:43:39 | | | Automatic time sync |
| Tue Aug 07, 2018 | 06:30:49 | Ccarrasco | 08/07/2018 | Checked site status online |
| Wed Aug 08, 2018 | 06:05:19 | Ccarrasco | 08/08/2018 | Checked site status online |
| Wed Aug 08, 2018 | 06:05:37 | Ccarrasco | 08/08/2018 | Checked site status online |
| Thu Aug 09, 2018 | 05:42:11 | Ccarrasco | 08/09/2018 | Checked site status online |
| Fri Aug 10, 2018 | 05:41:08 | Ccarrasco | 08/10/2018 | Checked site status online |
| Sat Aug 11, 2018 | 03:43:39 | | | Automatic time sync |
| Mon Aug 13, 2018 | 06:12:29 | Ccarrasco | 08/13/2018 | Checked site status online |
| Tue Aug 14, 2018 | 03:43:37 | | | Automatic time sync |
| Tue Aug 14, 2018 | 06:00:38 | Ccarrasco | 08/14/2018 | Checked site status online |
| Wed Aug 15, 2018 | 06:35:50 | Ccarrasco | 08/15/2018 | Checked site status online |
| Thu Aug 16, 2018 | 06:17:18 | Ccarrasco | 08/16/2018 | Checked site status online |
| Fri Aug 17, 2018 | 05:03:26 | Ccarrasco | 08/17/2018 | Checked site status online |
| Sat Aug 18, 2018 | 03:43:38 | | | Automatic time sync |
| Mon Aug 20, 2018 | 05:44:53 | Ccarrasco | 08/20/2018 | Checked site status online |
| Tue Aug 21, 2018 | 03:43:39 | | | Automatic time sync |
| Tue Aug 21, 2018 | 05:20:51 | Ccarrasco | 08/21/2018 | Checked site status online |
| Wed Aug 22, 2018 | 05:40:59 | Ccarrasco | 08/22/2018 | Checked site status online |

| | | | | |
|---|---|---|---|---|
| Thu Aug 23, 2018 | 06:08:09 | Ccarrasco | 08/23/2018 | Checked site status online |
| Thu Aug 23, 2018 | 14:27:15 | | | entered station to conduct PMI 04-014, 07-180, 29-180, and 5pt calibration check with sn165-45919-275, cal due date 6-7-19, on o3 unit 49i capcog #006523 placed rh sensor and O3 unit into q code, and completed satisfactory. 400 set = 399.7 ppb, 300 set = 299.3 ppb, 200 set = 200.7 ppb, 070 set = 069.1 ppb. 000 set = 000.1 ppb. placed rh and O3 units back in K code and left site secure. jrm/nc |
| Fri Aug 24, 2018 | 05:33:49 | Ccarrasco | 08/24/2018 | Checked site status online |
| Sat Aug 25, 2018 | 03:43:37 | | | Automatic time sync |
| Mon Aug 27, 2018 | 05:26:51 | Ccarrasco | 08/27/2018 | Checked site status online |
| Tue Aug 28, 2018 | 03:43:38 | | | Automatic time sync |
| Tue Aug 28, 2018 | 05:12:00 | Ccarrasco | 08/28/2018 | Checked site status online |
| Wed Aug 29, 2018 | 05:04:28 | Ccarrasco | 08/29/2018 | Checked site status online |
| Thu Aug 30, 2018 | 07:17:49 | Ccarrasco | 08/30/2018 | Checked site status online |
| Fri Aug 31, 2018 | 06:49:36 | | 08/31/2018 | Checked site status online |

**Operator Logs for CAPCOG Hutto College Street C6602**

| Date | Time (CST) | Operator | Visit Date | Log Entry |
|---|---|---|---|---|
| | | | | 08/01/2018 -- 09/01/2018 CAPCOG Hutto College Street C6602 (48_491_6602) |
| Wed Aug 01, 2018 | 06:33:50 | Ccarrasco | 08/01/2018 | Checked site status online |
| Thu Aug 02, 2018 | 06:53:30 | Ccarrasco | 08/02/2018 | Checked site status online |
| Fri Aug 03, 2018 | 05:56:35 | Ccarrasco | 08/03/2018 | Checked site status online |
| Sat Aug 04, 2018 | 03:13:09 | | | Automatic time sync |
| Mon Aug 06, 2018 | 06:18:07 | Ccarrasco | 08/06/2018 | Checked site status online |
| Mon Aug 06, 2018 | 15:34:13 | leadsadmin | 08/06/2018 | Reloaded CAMS data as follows:<br>CAMS: 6602 EPA Site: 48_491_6602<br>Start Date: July 25, 2018 00:00 UTC End Date: July 25, 2018 17:00 UTC<br><br>rhone5tst interrupted data collection on July 25 for all CAMS<br><br>Parameters reloaded:<br>Dew Point Temperature-62103:1<br>Ozone-44201:1<br>Standard Deviation of Horizontal Wind Direction-61106:1<br>Wind Speed-61101:1<br>Resultant Wind Direction-61104:1<br>Outdoor Temperature-62101:1<br>Resultant Wind Speed-61103:1<br>Relative Humidity-62201:1<br>Internal Station Temperature-62107:1<br>Maximum Wind Gust-61105:1 |
| Tue Aug 07, 2018 | 03:13:09 | | | Automatic time sync |
| Tue Aug 07, 2018 | 06:31:12 | Ccarrasco | 08/07/2018 | Checked site status online |
| Wed Aug 08, 2018 | 12:05:53 | | | Entered station to conduct 04-014 maintenance, changed particulate filter, fixed tower to upright position, verified system parameters correct. left site secure. Filter wrench missing.jrm/nc |
| Thu Aug 09, 2018 | 05:42:29 | Ccarrasco | 08/09/2018 | Checked site status online |
| Fri Aug 10, 2018 | 05:41:28 | Ccarrasco | 08/10/2018 | Checked site status online |
| Sat Aug 11, 2018 | 03:13:09 | | | Automatic time sync |
| Mon Aug 13, 2018 | 06:12:45 | Ccarrasco | 08/13/2018 | Checked site status online |
| Tue Aug 14, 2018 | 03:13:06 | | | Automatic time sync |
| Tue Aug 14, 2018 | 06:00:56 | Ccarrasco | 08/14/2018 | Checked site status online |
| Wed Aug 15, 2018 | 06:36:08 | Ccarrasco | 08/15/2018 | Checked site status online |
| Thu Aug 16, 2018 | 06:17:34 | Ccarrasco | 08/16/2018 | Checked site status online |
| Fri Aug 17, 2018 | 05:03:42 | Ccarrasco | 08/17/2018 | Checked site status online |
| Sat Aug 18, 2018 | 03:13:09 | | | Automatic time sync |
| Mon Aug 20, 2018 | 05:45:09 | Ccarrasco | 08/20/2018 | Checked site status online |
| Mon Aug 20, 2018 | 13:52:41 | | | entered station to conduct 5 pt calibration check and pmi 04-014, found the station unit in alarm, sample flow warning, checks show flow at .495 cc/m just below setpoint. will return with repair solution prior to proceeding. unit values are accurate. jmccraw |
| Tue Aug 21, 2018 | 03:13:09 | | | Automatic time sync |

| | | | | |
|---|---|---|---|---|
| Tue Aug 21, 2018 | 05:21:10 | Ccarrasco | 08/21/2018 | Checked site status online |
| Tue Aug 21, 2018 | 17:14:34 | | | 8-21-18: Entered station temp of 88F. set up transfer unit 165c-45919-275 cal due date 6-7-18. placed O3 unit to Q code and ran zero and 400 point on unit with sample flow warning. 400 = 402.4 Zero = 0.9. Repaired teledyne 400E prior flow rate 475 cc/m now up to 780 cc/m. commenced 5pt. 400 = 399.4 ppb. 300 = 299.6 ppb. 200 = 200.4 ppb. 70 = 71.0 ppb. 0 = 0.05 ppb. performed PMI 04-014. performed PMI 29-180 RH unit cleaning. placed unit in K code. left site safe and secure. NC/JRM |
| Wed Aug 22, 2018 | 05:41:16 | Ccarrasco | 08/22/2018 | Checked site status online |
| Thu Aug 23, 2018 | 06:08:27 | Ccarrasco | 08/23/2018 | Checked site status online |
| Fri Aug 24, 2018 | 05:34:06 | Ccarrasco | 08/24/2018 | Checked site status online |
| Sat Aug 25, 2018 | 03:13:09 | | | Automatic time sync |
| Mon Aug 27, 2018 | 05:27:11 | Ccarrasco | 08/27/2018 | Checked site status online |
| Tue Aug 28, 2018 | 03:13:08 | | | Automatic time sync |
| Tue Aug 28, 2018 | 05:12:14 | Ccarrasco | 08/28/2018 | Checked site status online |
| Wed Aug 29, 2018 | 05:04:42 | Ccarrasco | 08/29/2018 | Checked site status online |
| Thu Aug 30, 2018 | 07:18:06 | Ccarrasco | 08/30/2018 | Checked site status online |
| Fri Aug 31, 2018 | 06:49:53 | | 08/31/2018 | Checked site status online |

## Attachment 3: CAPCOG 5 pt calibration results*.

| CAPCOG August 2018 – 5 point calibration results | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5pt. Monthly Calibrations **Site** | **Calibration Date** | **0 ppb check** | **% out** | **DQO met** | **70 ppb check** | **% out** | **DQO met** | **200 ppb check** | **% out** | **DQO met** | **300 ppb check** | **% out** | **DQO met** | **400 ppb check** | **% out** | **DQO met** |
| **C601** | 8/22/2018 | 0.6 | 0.1 | yes | 70.0 | 0.0 | yes | 200.7 | 0.3 | yes | 299.7 | -0.1 | yes | 400.8 | 0.2 | yes |
| **C614** | 8/21/2018 | 0.2 | 0.0 | yes | 69.6 | -0.6 | yes | 199.5 | -0.3 | yes | 299.0 | -0.3 | yes | 401.7 | 0.4 | yes |
| **C684** | 8/23/2018 | 0.3 | 0.1 | yes | 70.3 | 0.4 | yes | 200.9 | 0.4 | yes | 299.6 | -0.1 | yes | 399.7 | -0.1 | yes |
| **C690** | 8/20/2018 | 1.3 | 0.3 | yes | 70.8 | 1.1 | yes | 201.5 | 0.7 | yes | 300.0 | 0.0 | yes | 401.0 | 0.2 | yes |
| **C1603** | 8/21/2018 | 0.1 | 0.0 | yes | 69.9 | -0.1 | yes | 199.7 | -0.2 | yes | 300.0 | 0.0 | yes | 402.4 | 0.6 | yes |
| **C1604** | 8/22/2018 | 0.1 | 0.0 | yes | 71.0 | 1.4 | yes | 201.0 | 0.5 | yes | 299.8 | -0.1 | yes | 400.1 | 0.0 | yes |
| **C1675** | 8/23/2018 | 0.1 | 0.0 | yes | 69.1 | -1.3 | yes | 200.7 | 0.3 | yes | 299.3 | -0.2 | yes | 399.7 | -0.1 | yes |
| **C6602** | 8/21/2018 | 0.1 | 0.0 | yes | 71.0 | 1.4 | yes | 200.4 | 0.2 | yes | 299.6 | -0.1 | yes | 399.4 | -0.2 | yes |

This table shows the percentage of error of the machine from the known source.
<3% outstanding; <5% excellent; <7% good; >7% DQO not met.

In many cases we are able to maintain < 1% error for the most accurate data possible. None of the data was more than 5% out, and that is due to normal machine linearity imperfections.