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INVOICE COVER LETTER

Thursday, July 30, 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 18-012
Invoice Period of Service: 6/1/18 – 6/30/18
Total Invoice Amount: $12,212.74

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. June Data Return reported in attachment 1: Data Return Report for Austin -- Region 11.
   All O3 sites reporting >95% data return, with the exception of C601 Fayette County Meteorological Gear. *Explanation:* We found a W/D sensor in the site trailer that did not belong to us, nor that was sent to us, we returned it to TCEQ. TCEQ performed site audit without telling us. The TCEQ auditor left the TEOM in Q code deliberately when leaving the site after the audit so when we went to the site to restore the unit to proper operation and found that the W/D unit had lost the tail fin. We requested the replacement unit shipped to us and when it arrived we traveled to restore it to proper operation. The W/S unit was not affected by this but the TCEQ validates this data so I cannot restore this data.
2. June Data Return Rh units were all at 100%.
3. TEOM data return from 601 is >95%.
4. Site activities are reported in attachment 2: operator's log set.
5. C690 Lake Georgetown AC unit was replaced.
6. The new AC unit replaced at Lockhart last year has developed a problem and we are pursuing a solution for it under warranty.
7. All units have good data that is reporting to LEADS system correctly. The data sets for June have been validated.
8. The sites that had questionable calibration results from the last month's calibration checks were performed at the beginning of this month with a different calibration system to ensure proper operation of the instruments was occurring.
9. A site survey of C690 is on hold until CAPCOG decides to move forward.
10. We have continued to work on the AIR NOW/ TCEQ bypass.

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

Attachment 1: CAPCOG Data Return Report – May 2018
Austin - Region 11

00:00 LST June 1, 2018 through 00:00 LST July 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	99.9	99.8	73.5	73.5	99.9	82.3
614	Dripping Springs School C614	99.7	*	99.7	100	100	100	100
684	CAPCOG McKinney Roughs C684	99.7	*	99.7	100	100	100	100
690	CAPCOG Lake Georgetown C690	99.7	*	99.7	100	100	100	100
1603	Gorzycki Middle School C1603	99.7	*	99.7	100	100	100	100
1604	Lockhart C1604	99.7	*	99.7	100	100	100	100
1605	St. Edwards University C1605	100	*	100	100	100	100	100
1675	CAPCOG San Marcos Staples Road C1675	99.7	*	99.7	100	100	100	100
6602	CAPCOG Hutto College Street C6602	99.7	*	99.7	100	100	100	100
	Region 11 Averages	99.8	99.9	99.8	97.1	97.1	100	98

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

00:00 LST June 1, 2018 through 00:00 LST July 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	
Ambient or Ambient With Qualifier Code	
VAL (Ambient Data) †	5760
Summary	
Total Monitors	8
Total Null Data Code Flags	0
Total Ambient Flags †	5760
Total Samples	5760
Invalid Percent	0
Valid Percent	100
	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 June 1, 2018 through 00:00 LST July 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) †	720
Summary	
Total Monitors	1
Total Null Data Code Flags	0
Total Ambient Flags †	720
Total Samples	720
Invalid Percent	0.0
Valid Percent	100.0
	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	
Ambient or Ambient With Qualifier Code	
VAL (Ambient Data) †	720
Summary	
Total Monitors	1
Total Null Data Code Flags	0
Total Ambient Flags †	720
Total Samples	720
Invalid Percent	0.0
Valid Percent	100.0
	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	
Ambient or Ambient With Qualifier Code	
VAL (Ambient Data) †	720
Summary	
Total Monitors	1
Total Null Data Code Flags	0
Total Ambient Flags †	720
Total Samples	720
Invalid Percent	0.0
Valid Percent	100.0
	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	
Ambient or Ambient With Qualifier Code	
VAL (Ambient Data) †	720
Summary	
Total Monitors	1
Total Null Data Code Flags	0
Total Ambient Flags †	720
Total Samples	720
Invalid Percent	0.0
Valid Percent	100.0
	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) †	720
Summary	
Total Monitors	1
Total Null Data Code Flags	0
Total Ambient Flags †	720
Total Samples	720
Invalid Percent	0.0
Valid Percent	100.0
	Rel Humid

Report includes data from only these CAMS: 1675

Data Flag	Rel Humid 62201
Null Data Codes	
Ambient or Ambient With Qualifier Code	
VAL (Ambient Data) †	720
Summary	
Total Monitors	1
Total Null Data Code Flags	0
Total Ambient Flags †	720
Total Samples	720
Invalid Percent	0.0
Valid Percent	100.0
	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) †	720
Summary	
Total Monitors	1
Total Null Data Code Flags	0
Total Ambient Flags †	720
Total Samples	720
Invalid Percent	0.0
Valid Percent	100.0
	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.

June 2018 CAPCOG Activity Logs:

DATE	DESCRIPTON
06/04/2018	C601 - Performed monthly TEOM audit, performed PMIs 41-030,41-030a,41-030b,PMI 4-14
	C684 - monthly 5 point cal was redone using different calibrator/previous calibrator used had bad pump, PMI 04-14
06/05/2018	C614 - monthly 5 point cal was redone using different calibrator/previous calibrator used had bad pump. PMI 04-14
	C1603 - monthly 5 point cal was redone using different calibrator/previous calibrator used had bad pump, PMI 04-14
	C1675 - monthly 5 point cal was redone using different calibrator/previous calibrator used had bad pump, PMI 04-14
06/06/2018	C1604 - PMI 04-14, Christiane Alepuz, from CAPCOG, visited site with operator tech.
06/12/2018	C601 - Replaced broken wind vane and sensor.
06/13/2018	C690 - Replaced station AC unit, PMI 4-14,
06/14/2018	C690 - Adjusted AC Temperature
06/18/2018	C690 - 5 pt cal, PMI 04-14
	C6602 - 5 pt cal, PMI 04-14, troubleshoot the modem. Reset the sim card and relocated the antenna to a higher position.
06/19/2018	C601 - 5 pt cal, PMI 04-14
	C1604 - 5 pt cal, PMI 04-14
06/20/2018	C614 - PMI 04-14
	C684 - PMI 04-14
	C1675 - PMI 04-14
06/21/2018	C1603 - PMI 04-14

June 2018 CAPCOG Operator Logs:

Operator Logs for Fayette County C601

Date	Time (CST)	Operator	Visit Date	Log Entry
				06/01/2018 -- 07/01/2018 Fayette County C601 (48_149_0001)
Fri Jun 01, 2018	06:37:29	Ccarrasco	06/01/2018	Checked site status online
Fri Jun 01, 2018	14:44:25			Status ok, mode 4, %filter loading 38, mass 13.7, noise 0.1, freq 253.25592, total mass 564.68, all temps 50, main flow 2.99, aux flow 13.62 Billy Bishop
Sat Jun 02, 2018	03:28:50			Automatic time sync
Mon Jun 04, 2018	06:24:56	Ccarrasco	06/04/2018	Checked site status online
Mon Jun 04, 2018	12:17:26			06-04-2018:Entered station to conduct monthly TEOM verification and PMIs. TEOM values pre audit: OK, 4, 40%, 6.8, 0.070, 253.19715, 50,50,50, 3.00, 13.62, tot mass 665.45. Performed TEOM PMI's 41-030,41-030a and b. Upon cleaning the site I found the blade for the wind direction sensor broken, will place in P code until we can replace it. TEOM passed verification, final values= OK, 4, 19%, 11, 0.075, 252.78221, 50, 50, 50, 2.99, 13.62, tot mass=0.06. Placed instrument back in K code, and departed site, all secure. M Aguilar
Tue Jun 05, 2018	03:28:49			Automatic time sync
Tue Jun 05, 2018	06:17:52	Ccarrasco	06/05/2018	Checked site status online
Wed Jun 06, 2018	06:11:55	Ccarrasco	06/06/2018	Checked site status online
Thu Jun 07, 2018	06:33:32	Ccarrasco	06/07/2018	Checked site status online
Fri Jun 08, 2018	06:33:45	Ccarrasco	06/08/2018	Checked site status online
Sat Jun 09, 2018	03:28:50			Automatic time sync
Mon Jun 11, 2018	09:23:40	CC	06/11/2018	Checked site status online
Tue Jun 12, 2018	03:28:49			Automatic time sync
Tue Jun 12, 2018	10:47:03			Entered station to replace broken wind vane and sensor. Upon inspection of temp boom found a nest of yellowjackets in the aspirator fan. Sensor and vane replaced. New sensor# T21853, new wind vane# 101907. Instruments placed back in K code and departed site, all secure. L Thompson/ J McCraw
Tue Jun 12, 2018	11:05:19	koneal	06/12/2018	Checked site status online
Wed Jun 13, 2018	06:10:33	Ccarrasco	06/13/2018	Checked site status online
Thu Jun 14, 2018	06:11:14	Ccarrasco	06/14/2018	Checked site status online
Fri Jun 15, 2018	06:28:11	Ccarrasco	06/15/2018	Checked site status online
Fri Jun 15, 2018	15:13:22			STATUS OK, MODE 4, FILTER LOADING 28%, -2.0Mass -2.0, noise .078, freq 252.58827, total mass 334.93, case temp 50, air temp 50, cap temp 50, main flow 3 , aux flow 13.63 CS LCRA 6/15/18
Sat Jun 16, 2018	03:28:53			Automatic time sync
Mon Jun 18, 2018	06:25:34	Ccarrasco	06/18/2018	Checked site status online
Tue Jun 19, 2018	03:28:50			Automatic time sync

Tue Jun 19, 2018	06:30:52	Ccarrasco	06/19/2018	Checked site status online
Tue Jun 19, 2018	10:47:31			6-19-18: Entered station to conduct monthly 5 pt calibration with TS 165C-74465-376 cal date 9-21-18. 400 set = 801.7 mv = 400.85 ppb 300 set = 601.55 mv = 300.77 ppb 200 set = 400.6 mv = 200.3 ppb 70 set = 139.75 mv = 69.88 ppb 0 set = 2.5 mv = 1.25 ppb No adjustments were made also performed PMI 04-14. Left site safe and secure. M Aguilar aslo placed o3 unit in Qcode and K code
Tue Jun 19, 2018	14:43:20			dialed into station and placed o3 unit to k code, left in q code. jmccraw
Wed Jun 20, 2018	06:41:13	Ccarrasco	06/20/2018	Checked site status online
Thu Jun 21, 2018	06:54:46			06.21.2018 Status: OK, Mode: 4, % Filter Loading 29%^[D/[D/[D [D:[C: 29%, Mass: 9.1, Noise: 0.116, Frequency: 252.52819, Total Mass: 438.94, Case Temp: 50, Air Temp: 50, Cap Temp: 50, Main Flow: 3.00, Aux Flow: 13.63 Billy Bishop
Thu Jun 21, 2018	08:19:44	Ccarrasco	06/21/2018	Checked site status online
Fri Jun 22, 2018	05:02:37	Ccarrasco	06/22/2018	Checked site status online
Sat Jun 23, 2018	03:28:50			Automatic time sync
Mon Jun 25, 2018	06:20:43	Ccarrasco	06/25/2018	Checked site status online
Tue Jun 26, 2018	03:28:49			Automatic time sync
Tue Jun 26, 2018	06:32:46	Ccarrasco	06/26/2018	Checked site status online
Wed Jun 27, 2018	06:50:17	Ccarrasco	06/27/2018	Checked site status online
Thu Jun 28, 2018	06:24:54	Ccarrasco	06/28/2018	Checked site status online
Fri Jun 29, 2018	06:29:29	Ccarrasco	06/29/2018	Checked site status online
Fri Jun 29, 2018	19:37:54			OK, Mode: 4, % Filter Loading: 29%, Mass: 9.1, Noise: 0.116, Frequency: 252.52819, Total Mass: 438.94, Case Temp: 50, Air Temp: 50, Cap Temp: 50, Main Flow: 3.00, Aux Flow: 13.63 Billy Bishop
Fri Jun 29, 2018	19:45:28			Status ok, mode 4, % filter loading 32, noise 0.082, freq 252.33554, total m772.61, all temps 50, main flow 3.00, aux flow 13.63 Billy Bishop x q q Q X
Sat Jun 30, 2018	03:28:49			Automatic time sync

Operator Logs for Dripping Springs School C614

Date	Time (CST)	Operator	Visit Date	Log Entry
				06/01/2018 -- 07/01/2018 Dripping Springs School C614 (48_209_0614)
Fri Jun 01, 2018	06:37:45	Ccarrasco	06/01/2018	Checked site status online
Sat Jun 02, 2018	03:28:43			Automatic time sync
Mon Jun 04, 2018	06:25:12	Ccarrasco	06/04/2018	Checked site status online
Tue Jun 05, 2018	03:28:41			Automatic time sync
Tue Jun 05, 2018	06:18:08	Ccarrasco	06/05/2018	Checked site status online
Tue Jun 05, 2018	09:35:06			06-05-18: Entered the station to reconduct monthly 5 point cal using 165 sn 165-74465-376 cal date 9-21-18.The pump on unit 165-46229-275 was bad. Placed unit in Q code. 400:801.5 mv: 400.76 300:600.8 mv: 300.4 ppb 200:398.4 mv: 199.2 ppb 70:139.85 mv: 9.92 ppb 0:1.8 mv: 0.9 ppb No adjustments were made, placed unit back in K code ,made log entry , left site safe. MA p u u adu u u u u u capcog u u
Tue Jun 05, 2018	09:38:11			06-05-18: Entered the station to reconduct monthly 5 point cal using 165 sn 165-74465-376 cal date 9-21-18.The pump on unit 165-46229-275 was bad. Placed unit in Q code. 400:801.5 mv: 400.76 300:600.8 mv: 300.4 ppb 200:398.4 mv: 199.2 ppb 70:139.85 mv: 69.92 ppb 0:1.8 mv: 0.9 ppb No adjustments were made, placed unit back in K code ,made log entry , left site safe. MA
Wed Jun 06, 2018	06:12:10	Ccarrasco	06/06/2018	Checked site status online
Thu Jun 07, 2018	06:33:50	Ccarrasco	06/07/2018	Checked site status online
Fri Jun 08, 2018	06:34:01	Ccarrasco	06/08/2018	Checked site status online
Sat Jun 09, 2018	03:28:41			Automatic time sync
Mon Jun 11, 2018	09:23:50	CC	06/11/2018	Checked site status online
Tue Jun 12, 2018	03:28:43			Automatic time sync
Tue Jun 12, 2018	11:05:28	koneal	06/12/2018	Checked site status online
Wed Jun 13, 2018	06:10:48	Ccarrasco	06/13/2018	Checked site status online
Thu Jun 14, 2018	06:11:32	Ccarrasco	06/14/2018	Checked site status online
Fri Jun 15, 2018	06:28:27	Ccarrasco	06/15/2018	Checked site status online
Sat Jun 16, 2018	03:28:43			Automatic time sync
Mon Jun 18, 2018	06:25:49	Ccarrasco	06/18/2018	Checked site status online
Tue Jun 19, 2018	06:31:07	Ccarrasco	06/19/2018	Checked site status online
Wed Jun 20, 2018	06:41:28	Ccarrasco	06/20/2018	Checked site status online
Wed Jun 20, 2018	12:07:40			06-20-18: Entered the station to perform PMI 04-014. Also checked the O3 unit pressures, temps, and flows. All are ok. Made log, left site securely. M aguilar
Thu Jun 21, 2018	08:20:01	Ccarrasco	06/21/2018	Checked site status online
Fri Jun 22, 2018	05:02:52	Ccarrasco	06/22/2018	Checked site status online
Sat Jun 23, 2018	03:28:40			Automatic time sync
Mon Jun 25, 2018	06:20:58	Ccarrasco	06/25/2018	Checked site status online
Tue Jun 26, 2018	03:28:44			Automatic time sync
Tue Jun 26, 2018	06:33:00	Ccarrasco	06/26/2018	Checked site status online

Wed Jun 27, 2018	06:50:34	Ccarrasco	06/27/2018	Checked site status online
Thu Jun 28, 2018	06:25:10	Ccarrasco	06/28/2018	Checked site status online
Fri Jun 29, 2018	06:29:46	Ccarrasco	06/29/2018	Checked site status online
Sat Jun 30, 2018	03:28:43			Automatic time sync

Operator Logs for CAPCOG McKinney Roughs C684

Date	Time (CST)	Operator	Visit Date	Log Entry
				06/01/2018 -- 07/01/2018 CAPCOG McKinney Roughs C684 (48_021_0684)
Fri Jun 01, 2018	06:38:03	Ccarrasco	06/01/2018	Checked site status online
Sat Jun 02, 2018	03:43:37			Automatic time sync
Mon Jun 04, 2018	06:25:37	Ccarrasco	06/04/2018	Checked site status online
Mon Jun 04, 2018	15:00:56			06-04-18: Entered the station to reconduct monthly 5 point cal using 165 sn 165-74465-7 cal date 9-21-18. The pump on unit 165-46229-275 was bad. Placed unit in Q code. Performed PMI04014. 400:800.8 mv: 400.4 300:600.7 mv: 300.35 ppb 200:400.45 mv: 200.225 ppb 70:140.15 mv: 70.07 ppb 0:0.2 mv: 0.1 ppb No adjustments were made, placed unit back in K code, made log entry, left site safe. MA
Tue Jun 05, 2018	03:43:37			Automatic time sync
Tue Jun 05, 2018	06:18:26	Ccarrasco	06/05/2018	Checked site status online
Wed Jun 06, 2018	06:12:27	Ccarrasco	06/06/2018	Checked site status online
Thu Jun 07, 2018	06:34:07	Ccarrasco	06/07/2018	Checked site status online
Fri Jun 08, 2018	06:34:18	Ccarrasco	06/08/2018	Checked site status online
Sat Jun 09, 2018	03:43:39			Automatic time sync
Mon Jun 11, 2018	09:23:59	CC	06/11/2018	Checked site status online
Tue Jun 12, 2018	03:43:39			Automatic time sync
Tue Jun 12, 2018	11:05:39	koneal	06/12/2018	Checked site status online
Wed Jun 13, 2018	06:11:04	Ccarrasco	06/13/2018	Checked site status online
Thu Jun 14, 2018	06:12:05	Ccarrasco	06/14/2018	Checked site status online
Fri Jun 15, 2018	06:28:45	Ccarrasco	06/15/2018	Checked site status online
Sat Jun 16, 2018	03:43:38			Automatic time sync
Mon Jun 18, 2018	06:26:09	Ccarrasco	06/18/2018	Checked site status online
Tue Jun 19, 2018	06:31:23	Ccarrasco	06/19/2018	Checked site status online
Wed Jun 20, 2018	06:41:45	Ccarrasco	06/20/2018	Checked site status online
Wed Jun 20, 2018	10:09:54			06-20-18: Entered the station to perform PMI 04-014. Also checked the O3 unit pressures, temps, and flows. All are ok. Made log, left site securely. M aguilar
Thu Jun 21, 2018	08:20:17	Ccarrasco	06/21/2018	Checked site status online
Fri Jun 22, 2018	05:03:09	Ccarrasco	06/22/2018	Checked site status online
Mon Jun 25, 2018	06:21:15	Ccarrasco	06/25/2018	Checked site status online
Tue Jun 26, 2018	03:43:39			Automatic time sync
Tue Jun 26, 2018	06:33:14	Ccarrasco	06/26/2018	Checked site status online
Wed Jun 27, 2018	06:50:49	Ccarrasco	06/27/2018	Checked site status online
Thu Jun 28, 2018	06:25:30	Ccarrasco	06/28/2018	Checked site status online
Fri Jun 29, 2018	06:30:10	Ccarrasco	06/29/2018	Checked site status online
Sat Jun 30, 2018	03:43:40			Automatic time sync

Operator Logs for CAPCOG Lake Georgetown C690

Date	Time (CST)	Operator	Visit Date	Log Entry
				06/01/2018 -- 07/01/2018 CAPCOG Lake Georgetown C690 (48_491_0690)
Fri Jun 01, 2018	06:38:18	Ccarrasco	06/01/2018	Checked site status online
Sat Jun 02, 2018	03:13:10			Automatic time sync
Mon Jun 04, 2018	06:25:54	Ccarrasco	06/04/2018	Checked site status online
Tue Jun 05, 2018	03:13:09			Automatic time sync
Tue Jun 05, 2018	06:18:51	Ccarrasco	06/05/2018	Checked site status online
Wed Jun 06, 2018	06:12:46	Ccarrasco	06/06/2018	Checked site status online
Thu Jun 07, 2018	06:34:23	Ccarrasco	06/07/2018	Checked site status online
Fri Jun 08, 2018	06:34:36	Ccarrasco	06/08/2018	Checked site status online
Sat Jun 09, 2018	03:13:10			Automatic time sync
Mon Jun 11, 2018	09:24:09	CC	06/11/2018	Checked site status online
Tue Jun 12, 2018	03:13:10			Automatic time sync
Tue Jun 12, 2018	11:05:46	koneal	06/12/2018	Checked site status online
Wed Jun 13, 2018	06:11:22	Ccarrasco	06/13/2018	Checked site status online
Wed Jun 13, 2018	13:54:11			Entered station to replace station AC unit. Unit replaced, also performed PMI 4-14, departing site, all secure. L Thompson/ J McCraw/ M Aguilar
Thu Jun 14, 2018	06:12:32	Ccarrasco	06/14/2018	Checked site status online
Thu Jun 14, 2018	10:54:43			Entered station to adjust new AC temperature. Departing site, all secure. L Thompson
Fri Jun 15, 2018	06:29:00	Ccarrasco	06/15/2018	Checked site status online
Sat Jun 16, 2018	03:13:12			Automatic time sync
Mon Jun 18, 2018	06:26:25	Ccarrasco	06/18/2018	Checked site status online
Mon Jun 18, 2018	15:30:19			6-18-18: Entered the station to conduct monthly 5 point cal using 165 sn 165- 74465-376 cal da Placed unit in Q code. Performed pmi 04-014. 400:803.1 mv: 401.5 300:601.15 mv: 300. ppb 200:400.65 mv: 200.32 ppb 70:140.5 mv: 70.25 ppb 0:2.7 mv: 1.35 ppb No adjustments were made, placed unit back in K code ,made log entry , left site safe. MA
Tue Jun 19, 2018	03:13:09			Automatic time sync
Tue Jun 19, 2018	06:31:38	Ccarrasco	06/19/2018	Checked site status online
Wed Jun 20, 2018	06:42:02	Ccarrasco	06/20/2018	Checked site status online
Thu Jun 21, 2018	08:20:33	Ccarrasco	06/21/2018	Checked site status online
Fri Jun 22, 2018	05:03:24	Ccarrasco	06/22/2018	Checked site status online
Sat Jun 23, 2018	03:13:10			Automatic time sync
Mon Jun 25, 2018	06:21:30	Ccarrasco	06/25/2018	Checked site status online
Tue Jun 26, 2018	03:13:10			Automatic time sync
Tue Jun 26, 2018	06:33:30	Ccarrasco	06/26/2018	Checked site status online
Wed Jun 27, 2018	06:51:05	Ccarrasco	06/27/2018	Checked site status online
Thu Jun 28, 2018	06:25:46	Ccarrasco	06/28/2018	Checked site status online
Fri Jun 29, 2018	06:30:25	Ccarrasco	06/29/2018	Checked site status online
Sat Jun 30, 2018	03:13:11			Automatic time sync

Operator Logs for Gorzycki Middle School C1603

Date	Time (CST)	Operator	Visit Date	Log Entry
				06/01/2018 -- 07/01/2018 Gorzycki Middle School C1603 (48_453_1603)
Fri Jun 01, 2018	06:39:07	Ccarrasco	06/01/2018	Checked site status online
Sat Jun 02, 2018	03:13:10			Automatic time sync
Mon Jun 04, 2018	06:27:10	Ccarrasco	06/04/2018	Checked site status online
Tue Jun 05, 2018	03:13:10			Automatic time sync
Tue Jun 05, 2018	06:20:26	Ccarrasco	06/05/2018	Checked site status online
Tue Jun 05, 2018	11:55:54			06-05-18: Entered the station to reconduct monthly 5 point cal using 165 sn 165-74465-376 cal date 9-21-18.The pump on unit 165-46229-275 was bad. Placed unit in Q code. 400:805.5 mv: 402.75 300:599.5 mv: 299.75 ppb 200:400.15 mv: 200.75 ppb 70:141.3 mv: 70.65 ppb 0:1.9 mv: 0.95 ppb No adjustments were made, placed unit back in K code ,made log entry , left site safe. MA
Wed Jun 06, 2018	06:14:56	Ccarrasco	06/06/2018	Checked site status online
Thu Jun 07, 2018	06:35:37	Ccarrasco	06/07/2018	Checked site status online
Fri Jun 08, 2018	06:35:45	Ccarrasco	06/08/2018	Checked site status online
Sat Jun 09, 2018	03:13:10			Automatic time sync
Mon Jun 11, 2018	09:24:58	CC	06/11/2018	Checked site status online
Tue Jun 12, 2018	03:13:08			Automatic time sync
Tue Jun 12, 2018	11:05:55	koneal	06/12/2018	Checked site status online
Wed Jun 13, 2018	06:12:36	Ccarrasco	06/13/2018	Checked site status online
Thu Jun 14, 2018	06:14:24	Ccarrasco	06/14/2018	Checked site status online
Fri Jun 15, 2018	06:30:13	Ccarrasco	06/15/2018	Checked site status online
Sat Jun 16, 2018	03:13:09			Automatic time sync
Mon Jun 18, 2018	06:27:43	Ccarrasco	06/18/2018	Checked site status online
Tue Jun 19, 2018	03:13:11			Automatic time sync
Tue Jun 19, 2018	06:32:39	Ccarrasco	06/19/2018	Checked site status online
Wed Jun 20, 2018	06:43:21	Ccarrasco	06/20/2018	Checked site status online
Thu Jun 21, 2018	08:21:34	Ccarrasco	06/21/2018	Checked site status online
Thu Jun 21, 2018	10:04:25			06-21-18: Entered the station to perform PMI 04-014. Also checked the O3 unit pressures, temps, and flows. All are ok. Made log, left site securely. M aguilar
Fri Jun 22, 2018	05:04:29	Ccarrasco	06/22/2018	Checked site status online
Sat Jun 23, 2018	03:13:10			Automatic time sync
Mon Jun 25, 2018	06:22:38	Ccarrasco	06/25/2018	Checked site status online
Tue Jun 26, 2018	03:13:10			Automatic time sync
Tue Jun 26, 2018	06:34:33	Ccarrasco	06/26/2018	Checked site status online
Wed Jun 27, 2018	06:52:07	Ccarrasco	06/27/2018	Checked site status online
Thu Jun 28, 2018	06:27:01	Ccarrasco	06/28/2018	Checked site status online
Fri Jun 29, 2018	06:31:43	Ccarrasco	06/29/2018	Checked site status online
Sat Jun 30, 2018	03:13:08			Automatic time sync

Operator Logs for Lockhart C1604

Date	Time (CST)	Operator	Visit Date	Log Entry
				06/01/2018 -- 07/01/2018 Lockhart C1604 (48_055_1604)
Fri Jun 01, 2018	06:38:51	Ccarrasco	06/01/2018	Checked site status online
Sat Jun 02, 2018	03:13:10			Automatic time sync
Mon Jun 04, 2018	06:26:51	Ccarrasco	06/04/2018	Checked site status online
Tue Jun 05, 2018	03:13:10			Automatic time sync
Tue Jun 05, 2018	06:20:12	Ccarrasco	06/05/2018	Checked site status online
Wed Jun 06, 2018	06:14:40	Ccarrasco	06/06/2018	Checked site status online
Wed Jun 06, 2018	12:07:29			Entered station and checked instrument parameters ok, changed particulate filter, met with Christiane, left site safe and secure. jmccraw
Thu Jun 07, 2018	06:35:18	Ccarrasco	06/07/2018	Checked site status online
Fri Jun 08, 2018	06:35:28	Ccarrasco	06/08/2018	Checked site status online
Sat Jun 09, 2018	03:13:09			Automatic time sync
Mon Jun 11, 2018	09:25:33	CC	06/11/2018	Checked site status online
Tue Jun 12, 2018	03:13:10			Automatic time sync
Tue Jun 12, 2018	11:06:01	koneal	06/12/2018	Checked site status online
Wed Jun 13, 2018	06:12:17	Ccarrasco	06/13/2018	Checked site status online
Thu Jun 14, 2018	06:14:09	Ccarrasco	06/14/2018	Checked site status online
Fri Jun 15, 2018	06:29:55	Ccarrasco	06/15/2018	Checked site status online
Sat Jun 16, 2018	03:13:10			Automatic time sync
Mon Jun 18, 2018	06:27:28	Ccarrasco	06/18/2018	Checked site status online
Tue Jun 19, 2018	03:13:10			Automatic time sync
Tue Jun 19, 2018	06:32:25	Ccarrasco	06/19/2018	Checked site status online
Tue Jun 19, 2018	13:47:04			6-19-18: Entered the station to conduct monthly 5 point cal using 165 sn 165-74465 -376 cal date 9-21-18.Plced the O3 unit into Q code. 400:797.96 mv: 398.9 ppb 300:600.3 mv: 300.15ppb 200:399.9 mv: 199.95 ppb 70:140.6 mv: 70.3 ppb 0:.06 mv: 0.3 ppb No adjustments were made, changed particulate filter, placed the O3 unit back into K code, made log entry, left site safe. M Aguilar
Wed Jun 20, 2018	06:42:52	Ccarrasco	06/20/2018	Checked site status online
Thu Jun 21, 2018	08:21:18	Ccarrasco	06/21/2018	Checked site status online
Fri Jun 22, 2018	05:04:15	Ccarrasco	06/22/2018	Checked site status online
Sat Jun 23, 2018	03:13:10			Automatic time sync
Mon Jun 25, 2018	06:22:24	Ccarrasco	06/25/2018	Checked site status online
Tue Jun 26, 2018	03:13:10			Automatic time sync
Tue Jun 26, 2018	06:34:17	Ccarrasco	06/26/2018	Checked site status online
Wed Jun 27, 2018	06:51:51	Ccarrasco	06/27/2018	Checked site status online
Thu Jun 28, 2018	06:26:47	Ccarrasco	06/28/2018	Checked site status online
Fri Jun 29, 2018	06:31:29	Ccarrasco	06/29/2018	Checked site status online
Sat Jun 30, 2018	03:13:08			Automatic time sync

Operator Logs for CAPCOG San Marcos Staples Road C1675

Date	Time (CST)	Operator	Visit Date	Log Entry
				06/01/2018 -- 07/01/2018 CAPCOG San Marcos Staples Road C1675 (48_209_1675)
Fri Jun 01, 2018	06:38:34	Ccarrasco	06/01/2018	Checked site status online
Sat Jun 02, 2018	03:43:36			Automatic time sync
Mon Jun 04, 2018	06:26:16	Ccarrasco	06/04/2018	Checked site status online
Tue Jun 05, 2018	03:43:39			Automatic time sync
Tue Jun 05, 2018	06:19:25	Ccarrasco	06/05/2018	Could not check site status online
Tue Jun 05, 2018	15:12:28			06-05-18: Entered the station to reconduct monthly 5 point cal using 165 sn 165-74465-376 cal date 9-21-18.The pump on unit 165-46229-275 was bad. Placed unit in Q code. 400:803.2 mv: 401.6 300:599.83 mv: 299.94 ppb 200:400.5 mv: 200.25ppb 70:141.2 mv: 70.6 ppb 0:.15 mv: 0.075 ppb No adjustments were made, placed unit back in K code, made log entry, left site safe. MA
Wed Jun 06, 2018	06:13:09	Ccarrasco	06/06/2018	Checked site status online
Thu Jun 07, 2018	06:34:40	Ccarrasco	06/07/2018	Checked site status online
Fri Jun 08, 2018	06:34:53	Ccarrasco	06/08/2018	Checked site status online
Mon Jun 11, 2018	09:24:23	CC	06/11/2018	Checked site status online
Tue Jun 12, 2018	11:06:19	koneal	06/12/2018	Checked site status online
Wed Jun 13, 2018	06:11:45	Ccarrasco	06/13/2018	Checked site status online
Thu Jun 14, 2018	06:12:53	Ccarrasco	06/14/2018	Checked site status online
Fri Jun 15, 2018	06:29:20	Ccarrasco	06/15/2018	Checked site status online
Sat Jun 16, 2018	03:43:38			Automatic time sync
Mon Jun 18, 2018	06:26:43	Ccarrasco	06/18/2018	Checked site status online
Tue Jun 19, 2018	03:43:37			Automatic time sync
Tue Jun 19, 2018	06:31:53	Ccarrasco	06/19/2018	Checked site status online
Wed Jun 20, 2018	06:42:17	Ccarrasco	06/20/2018	Checked site status online
Wed Jun 20, 2018	13:21:57			06-20-18: Entered the station to perform PMI 04-014. Also checked the O3 unit pressures, temps, and flows. All are ok. Made log, left site securely. M aguilar
Thu Jun 21, 2018	08:20:49	Ccarrasco	06/21/2018	Checked site status online
Fri Jun 22, 2018	05:03:44	Ccarrasco	06/22/2018	Checked site status online
Sat Jun 23, 2018	03:43:38			Automatic time sync
Mon Jun 25, 2018	06:21:46	Ccarrasco	06/25/2018	Checked site status online
Tue Jun 26, 2018	03:43:38			Automatic time sync
Tue Jun 26, 2018	06:33:44	Ccarrasco	06/26/2018	Checked site status online
Wed Jun 27, 2018	06:51:20	Ccarrasco	06/27/2018	Checked site status online
Thu Jun 28, 2018	06:26:08	Ccarrasco	06/28/2018	Checked site status online
Fri Jun 29, 2018	06:30:42	Ccarrasco	06/29/2018	Checked site status online
Sat Jun 30, 2018	03:43:39			Automatic time sync

Operator Logs for CAPCOG Hutto College Street C6602

Date	Time (CST)	Operator	Visit Date	Log Entry
				06/01/2018 -- 07/01/2018 CAPCOG Hutto College Street C6602 (48_491_6602)
Fri Jun 01, 2018	07:06:51	Ccarrasco	06/01/2018	Could not check site status online
Mon Jun 04, 2018	06:26:34	Ccarrasco	06/04/2018	Checked site status online
Tue Jun 05, 2018	03:13:08			Automatic time sync
Tue Jun 05, 2018	06:19:56	Ccarrasco	06/05/2018	Checked site status online
Wed Jun 06, 2018	06:14:17	Ccarrasco	06/06/2018	Could not check site status online
Thu Jun 07, 2018	06:35:03	Ccarrasco	06/07/2018	Checked site status online
Fri Jun 08, 2018	06:35:13	Ccarrasco	06/08/2018	Checked site status online
Sat Jun 09, 2018	03:13:17			Automatic time sync
Mon Jun 11, 2018	09:24:37	CC	06/11/2018	Checked site status online
Tue Jun 12, 2018	11:06:31	koneal	06/12/2018	Checked site status online
Wed Jun 13, 2018	06:12:02	Ccarrasco	06/13/2018	Checked site status online
Thu Jun 14, 2018	06:13:17	Ccarrasco	06/14/2018	Checked site status online
Thu Jun 14, 2018	06:13:52	Ccarrasco	06/14/2018	Could not check site status online
Fri Jun 15, 2018	06:29:38	Ccarrasco	06/15/2018	Checked site status online
Sat Jun 16, 2018	03:13:10			Automatic time sync
Mon Jun 18, 2018	06:27:14	Ccarrasco	06/18/2018	Could not check site status online
Mon Jun 18, 2018	12:33:59			6-18-18: Entered the station to troubleshoot the modem. Reset the sim card and relocated the antenna to a higher position. Also to conduct monthly 5 point cal using 165 sn 165-74465-376 cal date 9-21-18.Placed the O3 unit in Q code. Performed pmi 04-014. 400:800.8 mv: 400.4 ppb 300:603.4 mv: 301.7 ppb 200:401 mv: 200.5 ppb 70:140.03 mv: 70.01 ppb 0: 1.4 mv: .7 ppb No adjustments were made, made log entry, left site safe. M Aguilar
Tue Jun 19, 2018	03:13:09			Automatic time sync
Tue Jun 19, 2018	06:32:10	Ccarrasco	06/19/2018	Checked site status online
Wed Jun 20, 2018	06:42:34	Ccarrasco	06/20/2018	Checked site status online
Thu Jun 21, 2018	08:21:05	Ccarrasco	06/21/2018	Checked site status online
Fri Jun 22, 2018	05:04:01	Ccarrasco	06/22/2018	Checked site status online
Sat Jun 23, 2018	03:13:09			Automatic time sync
Mon Jun 25, 2018	06:22:09	Ccarrasco	06/25/2018	Checked site status online
Tue Jun 26, 2018	03:13:08			Automatic time sync
Tue Jun 26, 2018	06:34:01	Ccarrasco	06/26/2018	Checked site status online
Wed Jun 27, 2018	06:51:37	Ccarrasco	06/27/2018	Checked site status online
Thu Jun 28, 2018	06:26:28	Ccarrasco	06/28/2018	Checked site status online
Fri Jun 29, 2018	06:31:03	Ccarrasco	06/29/2018	Checked site status online
Sat Jun 30, 2018	03:13:10			Automatic time sync

Attachment 3: CAPCOG 5 pt calibration results*.

CAPCOG June 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	**6/19/2018**	**1.3**	**0.3**	**yes**	**69.9**	**-0.2**	**yes**	**200.3**	**0.1**	**yes**	**300.8**	**0.3**	**yes**	**400.9**	**0.2**	**yes**
C614	**6/5/2018**	**0.9**	**0.2**	**yes**	**69.9**	**-0.1**	**yes**	**199.2**	**-0.4**	**yes**	**300.4**	**0.1**	**yes**	**400.8**	**0.2**	**yes**
C684	**6/4/2018**	**0.0**	**0.0**	**yes**	**70.1**	**0.1**	**yes**	**200.2**	**0.1**	**yes**	**300.4**	**0.1**	**yes**	**400.4**	**0.1**	**yes**
C690	**6/18/2018**	**1.4**	**0.3**	**yes**	**70.3**	**0.4**	**yes**	**200.3**	**0.2**	**yes**	**300.0**	**0.0**	**yes**	**401.5**	**0.4**	**yes**
C1603	**6/5/2018**	**1.0**	**0.2**	**yes**	**70.7**	**0.9**	**yes**	**200.8**	**0.4**	**yes**	**299.8**	**-0.1**	**yes**	**402.8**	**0.7**	**yes**
C1604	**6/19/2018**	**0.3**	**0.1**	**yes**	**70.3**	**0.4**	**yes**	**200.0**	**0.0**	**yes**	**300.2**	**0.0**	**yes**	**398.9**	**-0.3**	**yes**
C1675	**6/5/2018**	**0.1**	**0.0**	**yes**	**70.6**	**0.8**	**yes**	**200.3**	**0.1**	**yes**	**299.9**	**0.0**	**yes**	**401.6**	**0.4**	**yes**
C6602	**6/18/2018**	**0.7**	**0.1**	**yes**	**70.0**	**0.0**	**yes**	**200.5**	**0.2**	**yes**	**301.7**	**0.6**	**yes**	**400.4**	**0.1**	**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.