## Corrective Action Report

Site Name:		Near Road	ID#:47-037-0040
			Pollutant: CO - 42101
Date	2020 Co	rrective Actions	Time
Monito	or SN	Teledyne T300 SN# 1360	
DESC	RIPTION		
□1-P0	DINT QC I	EXCEEDANCE	
□MU	LTI-POIN	Γ CALIBRATION	
□OPE	ERATIONA	AL EXCEEDANCE	
⊠AUI	OIT FAILU	JRE	
CORR	ECTIVE A	ACTION TAKEN	

TDEC Quarterly Audit 5/26/2020 - Failed CO Audit Level 3

- TDEC recommended that while the CO Level 3 audit point exceeded the standard ±15.1 acceptable range, if the analyzer's zero point were closer to actual zero, it is believed that the monitor would have passed the Level 3 audit point.
- Prior to the audit a zero was run 5/19/20; following the audit a zero was run 5/28/20; no adjustments were

EEMS Audit 10/19/2020 - Failed CO Audit Level 3

- EEMS has recommended implementing automatic zeros for the CO monitor to improve it's performance at lower audit points; however, the Teledyne T300 CO monitor does not have a special part that enables automatic zeroing and would have to be retrofitted.
- Prior to the audit a zero was run 10/17/20; following the audit a zero was run 10/26/20; no adjustments were needed.

TDEC Quarterly Audit 12/1/2020 - Failed CO Audit Levels 3 & 4

- It is believed that if the CO monitor read zero closer to actual zero, the monitor would have showed satisfactory correlation. TDEC recommended that we re-zero the CO monitor.
- Prior to the audit a zero was run 11/24/20; following the audit a zero was run 12/4/20; no adjustments were

See attached scans below of the Near Road CO field logbook detailing the results of the zero tests run prior to and after each of the audits listed. MPHDAMP has implemented a target frequency of one zero test every 7 days, which is more stringent than the 14-day frequency requirement in the EPA QA Handbook Validation Templates, to prevent zero drift in the absence of automatic zero checks.

_NOTEBOOK NO
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42	PROJECT NAI	temp check		c def
	5/14/10	3:		G OUTF
		D/3:1		
	Hracal			1.5
		27.2		
	26.1		a Note	
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	PROJECT NAMENOTEBOOK NO
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	whend It 35.2 persone 27.4 here IV 4B.0 co not 1965.7
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	the 0.817 ty 278
	5/26/10 Hm visted ste-all ok
	Went see 35.7 presser 283
	have the 48.0 coret 18240
	1 2 2 2
	Har 0.8/7 Hp 28.2
_	5/26/2020 TDEC BAPA Audity Near Boad CO Teledyne # 7.30 1N 1360 Audit Equip Teledyne 7.50 #71 Took TRO2370 ZAS #183 SIP 150304
_	70-2 71-20/0 2//3 7/0
	Setpt OA QM(88.32 QM(1300)
	DIDL *0.0 - 140 -0.1 -0.140
	10101 40.0 - 10.110
	0/10L *0.0 - 148-0.1 -0.140 30c/10L .603 0.5 0.491
	30x/10L .603 0.5 0.491 50x/10L 1.003 0.9 0.857
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PROJECT NAME    G 14/20   Hm completed   R/2009	Start offset -0.006  end slope  end offset  feep 27.8  Qdf  2.5
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Island temp 48.0  Span 20.00	Nrotro  Stert stage 0.865  Stert stage 0.865  Stert offset -0.006  end slape end offset 27.8  2.4ff  2.5
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beak key 680  Well tay 466  Scaple tery 0,316  Par 283  pressure 2000  Span	Start offset -0.006  end slope  end offset  feep 27.8  Qdf  2.5
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68	1100000	JECT N	_			-	Acceptable Range	
			10/24	lan		Internal temp	5-48°C	360
-		Date:		Ith	1	Bench temp	46-50°C	470
		Operator	-	edyne T300	-		10-35 inHg	2.85
-		Monitor	-	ermo 146i	54 2075907	Pressure	0.5 - 1.0 lpm	0776
_		Calibrato		ermo 111	SW DISPIESE	Flow	66-70°C	680
		Zero Air	-	N/A	0164	Wheel Temp	10-100 °C	909
		Start Slop		Name and Address of the Owner, where the Owner, which is the Ow	6006	Sample Temp	1250-4950	17012
		Start Offs		N/A		CORef	ERIOL COOK	1.157
		End Slope		N/A		M/R ratio	20-30°C	
		End Offse		N/A	107/428	Shelter Temp	20 30 €	18.1
		Gas Cylino	der 00	1446	485			
		Gas Conc.				Presicion/zero/sp	an Yes	No []
	- 5	Through p	robe Yes	3/	No 🗆	Calibration	Yes 🗆	No D
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	READ AN						DATE	20

72	PROJECT			At sale					
	11/19/20	HU W	orcal su	1 911 OL	2(8				
	internal te	1	6.6	perme	17125				
	beron top	-	11,0	coref					
	wheel they	. 6	(0)	hyrano					
	How	G	1784	Lev	29.9				
	1120120	HM VI	wheel si	te an or					
	11/20/20 Hm Visited site all ox pressure 28.8								
				ron	171	180			
	whell	Leno	680	Mr	ano 1.	204			
	Flow		0.782	Je	Mp 28	9			
	+1000								
				1 A	cceptable Range				
	Date: \\/	24/20		Internal temp	5-48°€	35:7			
	Operator	140		Bench temp	46-50°C	480			
	Monitor	Teledyna 1300		Pressure	10-35 inHg	24.5			
	Calibrator	Thermo 146i	\$4 EXPERT	Flow	0.5 - 1.01pm	0780			
	Zero Air	Thermo 111	SN BOSSES	Wheel Temp	66-70°C	61.0			
	Start Slope	N/A	-0,506	Sample Temp	10-100 °C	967			
	Start Offset	n/A	-0,0 6	CO Ref	1250-4950	1708.5			
	End Slope	N/A		M/R ratio		1202			
	End Offset	07440	107/9/28	Shelter Temp	20-30°C	287			
	Gas Cylinder	W 1990	945	31101111					
	Gas Conc.	-	_	Presicion/zero/sp	an Ves M	No D			
	Through prob	e Yes 🗹	No 🗆	Calibration	Yes 🗆	No 19			
	Chg inlet filte	r Yes 1/2	No 🗆	Canbration	17.70	727			
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Span									
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	11/25/20	hw A	mical site	- GII OK					
	menal		368		csive	216			
	bench sen		480		Corel 17129				
		terp	680		Control of the Contro	1.204			
	flow		0731	- "		- 74			
	3.00				POV P				

11/20/20 Hm	district and	t	- 1	IOTEBOOK NO
11/30/20 Hm	VISITED 540	all ok		
wern't temp	410		pressure	287
berch terp	610		coref	1714.1
wheel temp			Witho	1.203
Slow	0,712		Hyp	27.2
1000 0000	110 0 11	11 0		
THE CAME	TO Muder	Near ho	rd Teledy	1300 SN#1362 5#183 Tark FA02372
Nucci i	guy Tel	edyne T75	0#71 28	5# 183 Tout FADE 371
Oct	# 13030	times go	2	- TO THE THOUSE
Set	QA	an	Realys	cr %D/2D RA
9/101	0	-0,3	- A.280	- / - / - / - / - / - / - / - / - / - /
30/101	0.603	0.4	0.363	2397 33 300
99/DL 1	1.799	1.5	1.521	233 33.37
18410L 3	.566	3.3	3.328	16.6%/15.49
9101	0	-0.3	-0.260	83%/6.7%
1100	20.05		-0,00	
Time 11		11:20:00	9	
Temp ?	0.0	27.1		
8/2/20 Hm	wished on	11 - 1		
Menal teno	VISARD SA	WII OK	N270102121010	
			2.4	277
bench tens	410		corel	17165
wheel temp	68.0		Wrano	1.205
flau	0.720		terp	272
11/2/2- 1500	Air No. 1 en			
12/3/20 Hm	usited situ	t ah ok		V# 1
insunal temp	35.7		pressure	276
berch serp	480		coref	17134
wheel temp	61.0		wato	1205
Plan	0.779		sey	213
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12/3/20 HM	completed	the	cheek	
1.43				A
Haracas		DUS	def	F
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	Date: \1/	1/20			ptable Range	2-
	Operator	, Au		Internal temp	46-50°C	3516
	Monitor	Teledyna 1300	2/6 061	Bench temp		780
	Calibrator	Thermo 146i	94 0019911	Pressure	10-35 inHg	0.774
	Zero Air	Thermo 111	5/4 (3/(3/57848)	Flow	0.5 · 1.01pm	680
	- Start Slope	N/A	0944	Wheel Temp	10-100°C	467
	Start Offset	N/A	-0,000	Sample Temp	1250-4950	10992
	End Slope	N/A		CO Ref M/R ratio	1230 4330	LITY
	End Offset	N/A	14 10 5 10	Shelter Temp	20-30°C	277
	Gas Cylinder	007996	to 1/2/2	Shelter lemp	10.30 C	1
	Gas Conc.		985			
	Through pro	be Yes D	No 🔲	Presicion/zero/span		No 🗆
	Chg inlet filt	er Yes 🗌	No 12	Calibration	Yes 🗆	No Y
	City in account					
	0.0+		γ	PAS	20de fif	
	cai		-	710	240-11	
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