Test = US06 90Idle US06

Options = CVS Bag Dil Sec ShowTol Methane ModalMethane MethaneRF

Test Init Start	= April 20, 2021 13:09:26	Test Start	= April 20, 2021 13:26:41
Posttest Completed At	= April 20, 2021 13:57:36	Test Finish	= April 20, 2021 13:48:34
Hot Soak Start Time	= April 19, 2021 16:10:00		

Personnel Information::

Driver	= REDACTED	Operator	= REDACTED
Requestor	= REDACTED	Supervisor	= REDACTED

Vehicle Information:

VIN	= REDACTED		
Vehicle Model	= RAM 1500	Cert Tracking ID	= 3029-ECRXT03.05PV-862
Engine Family	= ECRXT03.05PV	Model Year	= 2014
Ignition Status	= No	Eng. Disp.	= 3.0L
Automatic	= 1	Transmission	=
Sample Delay	=	Idle RPM	=

Vehicle Conditions:

Soak Start Time:	= APR 19, 2021 16:10	Ambient Limit Type	= OTHER7

Test Specifications:

TO-Number	= W0110	CVS BulkStream Flow :	= 2) 350 scfm
TestNet Number	= 3029		

Dynamometer:

Inertia	= 6000 (lb)	Road Load A	= 10.38 (lbs)
Road Load B	= 0.0313	Road Load C	= 0.03565

Fuel Information:

Fuel	= DIE-DJ1621HW10	Specific gravity	= 0.8520
NHV	= 18083.00	Fuel R-Factor	= 0.60
CWF	= 0.8710	OWF	= 0.0000
HWF	= 0.1290	Fuel Calculation Type	= Diesel/EPA Calcs

Phase Information:

	Shift Tables	Event Tables
Phase 1	N/A	NotRequired
Phase 2	N/A	NotRequired

Response Factors:
Bag Methane = 1.05

Pre Test Remarks:
TEST #1 AS RECEIVED

Post Test Remarks:

Non-Critical Information:

Begin Odo	= 107254	Idle RPM	=
Test end Odometer	= 107270	Driveability	= Good
Engine performance	= No Problem	Brakes	= No Problem
Transmission	= No Problem	Vehicle stalls	= None

QUALITY ASSURANCE
INSPECTED BY: REDACTED
DATE: 4-21-21
COMMENTS: Okay

SUMMARY REPORT

Test = US06 90Idle US06 Test Id = ONT52198 TestNet Number = 3029
Options = CVS Bag Dil Sec ShowTol Methane ModalMethane MethaneRF
Test Init Start = April 20, 2021 13:09:26 Fuel Calculation Type = Diesel/EPA Calcs Idle RPM = Driver = **REDACTED**

MASS calculated by DF method

Phase 1 Bag 2	THC (ppmC)	CO (ppm)	NOX (ppm)	CO2 (%)	CH4 (ppmC)	NM-HC (wRF)	NMHC+NOX (wRF)	FE (mpg)
Range	10.0	50.0	30.0	4.00	10.0			
Sample	4.519	0.244	5.279	2.0108	2.143			
Range	10.0	50.0	30.0	4.00	10.0			
Ambient	4.923	0.652	0.135	0.0820	2.237			
Net Conc.	0.335	0.000	5.164	1.9411	0.242	0.0820		
Modal Corr.	0.0008	0.0001	0.0027	10.6257	0.0004	0.0004		
Grams/ph.	0.0183	0.0001	0.8144	3237.7380	0.0151	0.0047		25.1873
Grams/mi	0.0023	0.0000	0.1016	403.8953	0.0019	0.0006		

----- Dyno Information -----

Inertia = 6000

Inertia Units = lb

Dynamometer will be set manually = False

Dyno Coefficient Units = 2

Road Load A = 10.38

Road Load B = 0.0313

Road Load C = 0.03565

Use Augmented Braking System? = False

MODE NO.	MODE TYPE	TEST TIME sec	MODE TIME sec	DIST mi	SAMPLE POINT	DILUTE CONCENTRATIONS THC ppmC	CO ppm	NOX ppm	CO2 %	CH4 ppmC	CVS VOLUME ft3 20 C	MODAL GRAMS THC	CO	NOX	CO2	CH4	NMHC wRF	F.E. mpg	D/V
|PHASE One MODAL SUMMARY|																			
IDLE				0.240	DIL						340.84	0.005	0.00	0.064	142.6	0.015	0.000	0.79	0.0
ACCEL				2.054	DIL						901.52	0.012	0.00	0.176	790.2	0.039	0.000	26.45	0.0
CRUISE				4.689	DIL						1403.19	0.014	0.00	0.297	1636.8	0.056	0.000	29.15	0.0
DECEL				1.033	DIL						573.25	0.007	0.00	0.290	591.2	0.023	0.000	17.78	0.0
TOTAL				8.016	DIL						3218.79	0.038	0.00	0.827	3160.8	0.133	0.000	25.81	0.0

QUALITY ASSURANCE

REDACTED

INSPECTED BY: _____

DATE: 4-21-21

COMMENTS: Okay

CVS Bag report
MASS calculated by DF method

Phase 1 Bag 2	THC (ppmC)	CO (ppm)	NOX (ppm)	CO2 (%)	CH4 (ppmC)	NM-HC (wRF)	NMHC+NOX (wRF)	FE (mpg)
Range	10.0	50.0	30.0	4.00	10.0			
Sample	4.519	0.244	5.279	2.0108	2.143			
Range	10.0	50.0	30.0	4.00	10.0			
Ambient	4.923	0.652	0.135	0.0820	2.237			
Net Conc.	0.335	0.000	5.164	1.9411	0.242	0.0820		
Modal Corr.	0.0008	0.0001	0.0027	10.6257	0.0004	0.0004		
Grams/ph.	0.0183	0.0001	0.8144	3237.7380	0.0151	0.0047		25.1873
Grams/mi	0.0023	0.0000	0.1016	403.8953	0.0019	0.0006		

Test Info

Baro(inHg)	=	28.86
Temp(F)	=	78.3
Tdew(F)	=	48.6
Rhum(%)	=	35.3
Ahum(gr/lb)	=	52.5
NOX Factor	=	0.9044
Vmix(ft3 20 C)	=	3208.19
Dilu. Factor	=	6.6624
Dist(mi)	=	8.0163

Times Info

Phase Start	= 13:38:34
Phase Finish	= 13:48:34
Analysis End	= 13:53:40
Elapsed (sec)	= 600.5
Bag Fill (sec)	= 601.0
Bag Anl (sec)	= 305.6
Drv Err (sec)	= 0.0
Crank Time	= 0.5

Legend
* denotes Unstable Reading
(wRF) denotes with Response Factor
(woRF) denotes without Response Factor

DATA VALIDATION

PARAMETER DESCRIPTION	VALUE OF PARAMETER	LIMIT OF PARAMETER
Temperature	VALID	68 - 86 (degF)
Barometer	VALID	26.99 - 33.0001 (inHg)
Dew Point	VALID	-20 - 200 (degF)
Absolute Humidity	VALID	0 - 150 (gr/lb)
Crank Time	VALID	5 (sec)
Restart Attempts	VALID	1
Pretest Soak Time	VALID	12 - 36 (hr)
Phase Length	VALID	2 (%)
Distance	VALID	2 (%)
Test Hold Conditions	VALID	60 (sec)
Leak Check	VALID	1
Bag Analysis Time	VALID	1200 (sec)
Bag Fill Time	VALID	5 (sec)
Ambient Bag Readings	VALID	THC -0.55 - 10 (ppm) CO -0.55 - 15 (ppm) NOX -0.55 - 2 (ppm) CO2 350 - 850 (ppm) CH4 -0.55 - 10 (ppm)
Sample Bag Readings	VALID	THC -0.55 (ppm) CO -0.55 (ppm) NOX -0.55 (ppm) CO2 350 (ppm) CH4 -0.55 (ppm)
Bag Read Sequence	VALID	Stabilization Time (T2) 10 (sec) Integration Time (T3) 3 (sec) Stability Time Out (T4) 30 (sec) Stability Chk Tolerance 2 (%)
Bag Zero/Span Sequence	VALID	Pre-Bag Z/S Offset 25 (%) Pre-Bag Zero Drift 1 (%) Post-Bag Z/S Drift 2 (%) Stabilization Time (T2) 10 (sec) Integration Time (T3) 3 (sec) Stability Time Out (T4) 30 (sec) Stability Chk Tolerance 2 (%)
Hot Soak Length	VALID	10 (sec)
Analyzer Overscale	VALID	
Venturi Inlet Temperature	VALID	32 - 300 (degF)

BAG Zero/Span Results
* Single Roll Dyno Configuration *

Bag Pair 2 Zero/Span Concentrations (Offset Limit = 25.0% ReZero Limit = 1.0%)

Samp	Gas	Range	Fullscale	Zero	Offset	Std Dev	Spec	Span	Offset	Std Dev	Rezero	Drift	Std Dev	Status
BAG	LCO	(1)	50.0ppm	0.395	0.79	0.05742	47.235	47.223	-0.02	0.03958	-0.051	-0.10	0.06204	PASS
BAG	CO2	(3)	4.00%	0.0014	0.04	0.01120	3.7398	3.7481	0.21	0.04938	0.0029	0.07	0.00608	PASS
BAG	THC	(1)	10.0ppm	0.141	1.41	0.02360	9.355	9.382	0.27	0.04493	-0.027	-0.27	0.02447	PASS
BAG	NOX	(2)	30.0ppm	0.582	1.94	0.31916	28.153	28.145	-0.03	0.32508	-0.051	-0.17	0.22901	PASS
BAG	CH4	(1)	10.0ppm	0.165	1.65	0.07660	9.219	9.220	0.00	0.08426	-0.002	-0.02	0.07984	PASS

Bag Pair 2 Post Bag Check (Drift Limit = 2.0%)

Samp	Gas	Range	Fullscale	Zero	Drift	Std Dev	Spec	Span	Drift	Std Dev	Status
BAG	LCO	(1)	50.0ppm	-0.107	-0.21	0.08096	47.235	47.209	-0.05	0.04776	PASS
BAG	CO2	(3)	4.00%	0.0034	0.09	0.00344	3.7398	3.7470	0.18	0.05359	PASS
BAG	THC	(1)	10.0ppm	-0.016	-0.16	0.03452	9.355	9.295	-0.60	0.04150	PASS
BAG	NOX	(2)	30.0ppm	0.053	0.18	0.22307	28.153	27.895	-0.86	0.27647	PASS
BAG	CH4	(1)	10.0ppm	0.004	0.04	0.08243	9.219	9.216	-0.04	0.08849	PASS