

Test = US06 90Idle US06

Options = CVS Bag Dil Sec ShowTo1 Methane ModalMethane MethaneRF

Test Init Start = April 28, 2021 11:44:04  
 Posttest Completed At = April 28, 2021 12:30:05  
 Hot Soak Start Time = April 27, 2021 21:00:00

Test Start = April 28, 2021 11:57:58  
 Test Finish = April 28, 2021 12:19:50

Personnel Information::

Driver = REDACTED  
 Requestor = REDACTED

Operator = REDACTED  
 Supervisor = REDACTED

Vehicle Information:

VIN = REDACTED /  
 Vehicle Model = JEEP GRAN CHEROKEE  
 Engine Family = ECRXT03.05PV ✓  
 Ignition Status = No  
 Automatic = 1  
 Sample Delay =

Cert Tracking ID = 3029-ECRXT0305PV-244  
 Model Year = 2014  
 Eng. Disp. = 3.0L  
 Transmission =  
 Idle RPM =

Vehicle Conditions:

Soak Start Time: = APR 27, 2021 21:00

Ambient Limit Type = OTHER7

Test Specifications:

TO-Number = W0110  
 TestNet Number = 3029

CVS BulkStream Flow : = 3) 625 scfm

Dynamometer:

Inertia = 5500 (1b) /  
 Road Load B = 0.3804 /

Road Load A = 17.89 (lbs) /  
 Road Load C = 0.02537 /

Fuel Information:

Fuel = DIE-DJ1621HW10 ✓  
 NHV = 18083.00  
 CWF = 0.8710  
 HWF = 0.1290

Specific gravity = 0.8520  
 Fuel R-Factor = 0.60  
 OWF = 0.0000  
 Fuel Calculation Type = Diesel/EPA Calcs

Phase Information:

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

Response Factors:

Bag Methane = 1.05

Pre Test Remarks:


TEST #1 AS RECEIVED

Post Test Remarks:

Non-Critical Information:

Begin Odo = 66539  
 Test end Odometer = 66555  
 Engine performance = No Problem  
 Transmission = No Problem

Idle RPM =  
 Driveability = Good  
 Brakes = No Problem  
 Vehicle stalls = None

	QUALITY ASSURANCE
	INSPECTED BY: <u>REDACTED</u>
	DATE: <u>4-28-21</u>
	COMMENTS: <u>Okay</u>
_____	

SUMMARY REPORT


Test = US06 90Idle US06 Test Id = ONT52255 TestNet Number = 3029  
 Options = CVS Bag Dil Sec ShowToI Methane ModalMethane MethaneRF  
 Test Init Start = April 28, 2021 11:44:04 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	100	2.00	10.0			
Sample	2.914	-0.088	0.08	1.6850	2.053			
Range	10.0	50.0	100	2.00	10.0			
Ambient	3.187	0.445	0.06	0.0853	2.128			
Net Conc.	0.128	0.000	0.02	1.6105	0.193	0.0000		
Modal Corr.	0.0005	0.0000	0.0000	9.1377	0.0004	0.0001		
Grams/ph.	0.0125	0.0000	0.0065	4809.4453	0.0214	0.0001		17.0448
Grams/mi	0.0016	0.0000	0.0008	597.3836	0.0027	0.0000		

----- Dyno Information -----  
 Inertia = 5500  
 Inertia Units = lb  
 Dynamometer will be set manually = False  
 Dyno Coefficient Units = 2  
 Road Load A = 17.89  
 Road Load B = 0.3804  
 Road Load C = 0.02537  
 Use Augmented Braking System? = False

MODE NO.	MODE TYPE	TEST TIME sec	MODE TIME sec	DIST mi	SAMPLE POINT	DILUTE CONCENTRATIONS					CVS VOLUME ft3 20 C	MODAL GRAMS				F.E. mpg	D/V		
						THC ppmC	CO ppm	NOX ppm	CO2 %	CH4 ppmC		THC	CO	NOX	CO2			CH4	NMHC wRF
PHASE One MODAL SUMMARY																			
				0.247	DIL						611.72	0.004	0.00	0.002	249.7	0.024	0.000	1.39	0.0
				2.050	DIL						1613.06	0.009	-0.01	0.006	1170.0	0.064	0.000	17.83	0.0
				4.691	DIL						2511.93	0.006	-0.03	0.009	2463.4	0.092	0.000	19.38	0.0
				1.063	DIL						1025.98	0.005	-0.01	0.004	956.0	0.040	0.000	11.32	0.0
				8.051	DIL						5762.70	0.024	-0.05	0.021	4839.1	0.220	0.000	16.93	0.0



**QUALITY ASSURANCE**  
 REDACTED

INSPECTED BY: \_\_\_\_\_

DATE: 4-28-21

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	100	2.00	10.0			
Sample		2.914	-0.088	0.08	1.6850	2.053			
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Grams/ph.		0.0125	0.0000	0.0065	4809.4453	0.0214	0.0001		17.0448
Grams/mi		0.0016	0.0000	0.0008	597.3836	0.0027	0.0000		

Test Info		Times Info	
Baro(inHg)	= 29.03	Phase Start	= 12:09:49
Temp( F)	= 75.2	Phase Finish	= 12:19:50
Tdew( F)	= 48.6	Analysis End	= 12:25:37
Rhum(%)	= 39.1	Elapsed (sec)	= 600.7
Ahum(gr/lb)	= 52.2	Bag Fill (sec)	= 601.0
NOX Factor	= 0.9031	Bag Anl (sec)	= 347.7
		Drv Err (sec)	= 0.0
Vmix(ft3 20 C)	= 5752.08	Crank Time	= 0.7
Dilu. Factor	= 7.9511		
Dist(mi)	= 8.0508		

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	DETAILS BELOW	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 (%) Pre-Bag Z/S Offset 25 (%) Pre-Bag Zero Drift 1 (%) Post-Bag Z/S Drift 2 (%)
Bag Zero/Span Sequence	VALID	Stabilization Time (T2) 10 (sec) Integration Time (T3) 3 (sec) Stability Time Out (T4) 30 (sec) Stability Chk Tolerance 2 (%)
Hot Soak Length	VALID	
Analyzer Overscale	VALID	10 (sec)
Venturi Inlet Temperature	VALID	32 - 300 (degF)

Ambient Bag Readings

Limits:	THC (ppm)	CO (ppm)	NOX (ppm)	CO2 (ppm)	CH4 (ppm)
Lower	-0.55	-0.55	-0.55	350.00	-0.55
Upper	10.00	15.00	2.00	850.00	10.00

Phase	THC (ppm)	CO (ppm)	NOX (ppm)	CO2 (ppm)	CH4 (ppm)
2	3.19	0.45	0.06	853.12*	2.13

1 violation.

*no regulation for this error.*

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	0.264	0.53	0.02209	47.235	47.176	-0.12	0.04768	-0.048	-0.10	0.04746	PASS
BAG	CO2	(2)	2.00%	0.0016	0.08	0.01069	1.8723	1.8639	-0.42	0.03529	0.0012	0.06	0.00915	PASS
BAG	THC	(1)	10.0ppm	0.107	1.07	0.03138	9.355	9.334	-0.21	0.05902	-0.018	-0.18	0.04002	PASS
BAG	NOX	(3)	100ppm	0.49	0.49	0.07330	91.84	92.28	0.44	0.12331	0.11	0.11	0.03860	PASS
BAG	CH4	(1)	10.0ppm	0.106	1.06	0.06954	9.219	9.267	0.47	0.09950	0.033	0.33	0.04058	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	-0.061	-0.12	0.04399	47.235	47.340	0.21	0.03632	PASS			
BAG	CO2	(2)	2.00%	0.0014	0.07	0.01254	1.8723	1.8787	0.32	0.06014	PASS			
BAG	THC	(1)	10.0ppm	-0.007	-0.07	0.01960	9.355	9.353	-0.02	0.04821	PASS			
BAG	NOX	(3)	100ppm	0.02	0.02	0.08988	91.84	90.98	-0.86	0.17250	PASS			
BAG	CH4	(1)	10.0ppm	0.024	0.24	0.06059	9.219	9.239	0.20	0.11101	PASS			