Scan Tool Diagnosis

Meets NATEF Task: (A8-B-1) Retrieve and record diagnostic trouble codes, OBD monitor status, and freeze frame data; clear codes when applicable. (P-1)

Name _____ **Date** _____ **Time on Task** _____

Make/Model/Year _____ **VIN** _____ **Evaluation: 4 3 2 1**

(Not all of this data will be available on all vehicles or scan tools - if not available, put NA.)

_____ **1.** DTCs: _____ Pending DTC:_____

_____ **2.** Engine coolant temperature (ECT): cold _____ warm _____

_____ **3.** Intake air temperature (IAT): cold _____ warm _____

_____ **4.** Upstream O2S1: lowest voltage observed _____ highest voltage observed _____

_____ **5.** Upstream O2S2: lowest voltage observed _____ highest voltage observed _____

_____ **6.** Downstream O2S: lowest voltage observed _____ highest voltage observed _____

_____ **7.** O_2 cross counts: @ idle____ @ 2,000 RPM____

_____ **8.** Injector pulse width: @ idle (park)_____ @ idle (drive)_____

@ 2,000 RPM (park)_____ @ 3,000 RPM (park)_____

_____ **9.** Spark advance: @ idle (park)_____ @ idle (drive)_____

@ 2,000 RPM (park)_____ @ 3,000 RPM (park)_____

_____**10.** Short term fuel trim (integrator): @ idle (park)_____

@ idle (drive)_____ @ 2,000 RPM (park)_____

_____**11.** Long term fuel trim (block learn): @ idle (park)_____ @ idle (drive)_____

_____**12.** MAP: @ idle (park)_____ @ idle (drive)_____

_____**13.** MAF (grams/sec): @ idle (park)_____ @ idle (drive)_____

@ 2,000 RPM (park)_____ @ key on (engine off)_____

_____**14.** IAC counts: @ idle (park)_____ @ idle (drive)_____

@ A/C on (drive)_____ @ 2,000 RPM (park)_____

_____**15.** Throttle position (TP) sensor: @ idle____ @ W.O.T. engine off, ignition "on"_____

_____**16.** Battery voltage:_____

_____**17**. All monitors run and passed? OK_____ NOT OK_____

_____**18.** Troubles with the vehicle? (if any)_____