

**COLORADO DEPARTMENT OF TRANSPORTATION**

**REPORT ON CENTRAL LABORATORY TO REGION LAB INSPECTION**

This inspection is designed to cover apparatus and documentation used in CDOT Region Laboratories. Equipment was inspected according to applicable CDOT, ASTM and AASHTO specifications.

Region	Location	Date
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**Region personnel present during inspection**

**Central Laboratory personnel present during inspection**

Name and title	Name and title

General	Rating	Equip ID# (Y/N/NA)
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1. Lab cleanliness & housekeeping? (Good/Fair/Poor)		
2. Equipment cleanliness & functionality? (Good/Fair/Poor)		
3. Region Quality Manual present, current & complete? (Y/N)		
4. Scales: Certified & level? (Y/N/NA)		
5. Ovens: Accurate or temperature corrected? (Y/N/NA)		
6. Thermometers: Certified or verified? (Y/N/NA)		
7. Sieves in good condition & within specification? (Y/N/NA)		
8. Sieving adequacy performed annually for coarse & fine aggregate? (Y/N/NA)		
9. Tester certifications present and complete? (Y/N)		
10. Current CDOT Field Materials Manuals, Laboratory Manual of Test Procedures, & CDOT Forms? (Y/N/NA)		

**Comments**

Aggregates	Applicable ( Y/ N)	Rating	Equip ID# (Y/N/NA)
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1. Aggregate splitter in good condition, correct size & number of openings? (Y/N/NA)			
2. Coarse specific gravity equipment within specifications? (Y/N/NA):			
3. Fine specific gravity equipment within specifications? (Y/N/NA)			
4. Sand equivalence equipment within specification? (Y/N/NA)			
5. L.A. Abrasion machine & Spheres within specification? (Y/N/NA)			
6. Fine Aggregate Angularity apparatus within specification? (Y/N/NA)			
7. Fine Aggregate Angularity cylinder calibrated & logged? (Y/N/NA)			
8. Lime wash water pressure set at 10 PSI? (Y/N/NA)			
9. Micro Deval equipment within specification? (Y/N/NA)			

**Comments**

Concrete	Applicable ( Y/ N)	Rating	Equip ID# (Y/N/NA)
1. Curing tank at correct temperature? (Y/N/NA)			
Recording thermometer present & accurate? (Y/N/NA)			
Curing tank water saturated with lime? (Y/N/NA)			
Curing tank water is being circulated? (Y/N/NA)			
Curing tank water fully immerses specimens? (Y/N/NA)			
2. Concrete testing equipment:			
Air meter calibrated & accurate? (Y/N/NA)			
Slump cone dimensions accurate? (Y/N/NA)			
Strike off plate for unit weight within specification? (Y/N/NA)			
Tamping rods and mallets within specification? (Y/N/NA)			
Cylinder molds within specification & source documented? (Y/N/NA)			
Beam molds within specification? (Y/N/NA)			
3. Concrete compression machine:			
Certified within the last 12 months? (Y/N/NA)			
Platen & head meet specification? (Y/N/NA)			
Compression head rotates & tilts freely at least 4° in any direction? (Y/N/NA)			
Compression head inscribed concentric circles within specification? (Y/N/NA)			
Condition of retainer rings within specification? (Y/N/NA)			
Neoprene pad use logged? (Y/N/NA)			
Neoprene pad's shore hardness recorded & meets specification? (Y/N/NA)			
Beam apparatus within specification? (Y/N/NA)			
<b>Comments</b>			

Asphalt	Applicable ( Y/ N)	Rating	Equip ID# (Y/N/NA)
1. Square splitting pan for asphalt within specification? (Y/N/NA)			
Square sided scoop for asphalt within specification?(Y/N/NA)			
2. Maximum specific gravity (Rice) set up within specification? (Y/N/NA)			
Manometer free of air? (Y/N/NA)			
Pump oil free of water? (Y/N/NA)			
Desiccating crystals free of water? (Y/N/NA)			
Flasks calibrated and logged? (Y/N/NA)			
Vacuum pump pressure at $28 \pm 2$ mm Hg? (Y/N/NA)			
3. Bulk specific gravity equipment:			
a. Tank at correct temperature? (Y/N/NA)			
b. Suspension wire of small diameter? (Y/N/NA)			
4. SuperPave compactor checked? (Y/N/NA)			
Gyratory compactor angle checked with TMA? (Y/N/NA)			
5. Gyratory compactor molds within specification? (Y/N/NA)			
6. Gyratory ram head diameter & base plate within tolerance? (Y/N/NA)			
7. Compression testing machine certified &/or checked within the last 12 months? (Y/N/NA)			
8. Program correct for Stabilities & Lottmans? (Y/N/NA)			
9. Ignition furnace has correct settings programmed? (Y/N/NA)			
10. Freezer within specification? (Y/N/NA)			
11. Incubator within specification? (Y/N/NA)			
12. Water baths within specification? (Y/N/NA)			
13. Stabilometer checked and within specification? (Y/N/NA)			

**Comments**

Soils Applicable ( Y/ N)	Rating	Equip ID# (Y/N/NA)
1. Compaction equipment:		
Compaction base of sufficient mass? (Y/N/NA):		
T99 manual rammer within specification? (Y/N/NA)		
T99 mechanical hammer within specification? (Y/N/NA)		
T180 manual hammer within specification? (Y/N/NA)		
T180 mechanical hammer within specification? (Y/N/NA)		
6" molds within specifications? (Y/N/NA)		
4" molds within specifications? (Y/N/NA)		
Straightedge (strike-off bars) within specifications? (Y/N/NA)		
2. Atterberg Equipment:		
Liquid limit device within specification? (Y/N/NA):		
Grooving tool within specification? (Y/N/NA)		
3. R-value equipment:		
Kneading compactor calibrated at required intervals? (Y/N/NA)		
Tampers foot meets dimensional limits? (Y/N/NA)		
Molds, dimensions within specifications? (Y/N/NA)		
4. Nuclear M/D gauges calibrated within 2 years & checked within 1 year? (Y/N/NA)		
5. Sulfate test equipment:		
Sulfate standard not expired & at proper concentration? (Y/N/NA)		
Correction curve generated for current batch of BaCl & not older than 6 months? (Y/N/NA)		
Glass test vials clear & unclouded? (Y/N/NA)		
Colorimeter set to correct program or proper colorimeter used? (Y/N/NA)		
BaCl reagent not expired? (Y/N/NA)		
<b>Comments</b>		

# ASPHALT LAB INSPECTION - FORM 520

REGION \_\_\_\_\_  
 LOCATION \_\_\_\_\_  
 DATE \_\_\_\_\_

Asphalt Laboratory Equipment		Passed		Applicable
Procedure	Description	Yes	No	( <input type="checkbox"/> Y/ <input type="checkbox"/> N)
G-1	Balance Verification of Calibration	<input type="checkbox"/>	<input type="checkbox"/>	( <input type="checkbox"/> Y/ <input type="checkbox"/> N)
G-2	Oven Check	<input type="checkbox"/>	<input type="checkbox"/>	( <input type="checkbox"/> Y/ <input type="checkbox"/> N)
HMA-1	Standardization of Low Temperature Oven and Freezer	<input type="checkbox"/>	<input type="checkbox"/>	( <input type="checkbox"/> Y/ <input type="checkbox"/> N)
HMA-2	Superpave Gyratory Compactor Mold Check	<input type="checkbox"/>	<input type="checkbox"/>	( <input type="checkbox"/> Y/ <input type="checkbox"/> N)
HMA-3	SuperPave Gyratory Compactor Ram Head Check	<input type="checkbox"/>	<input type="checkbox"/>	( <input type="checkbox"/> Y/ <input type="checkbox"/> N)
HMA-4	Troxler Gyratory Compactor True Mold Angle Check	<input type="checkbox"/>	<input type="checkbox"/>	( <input type="checkbox"/> Y/ <input type="checkbox"/> N)
HMA-5	Troxler Gyratory Compactor Pressure Check	<input type="checkbox"/>	<input type="checkbox"/>	( <input type="checkbox"/> Y/ <input type="checkbox"/> N)
HMA-6	Troxler Gyratory Compactor CDI Angle Check	<input type="checkbox"/>	<input type="checkbox"/>	( <input type="checkbox"/> Y/ <input type="checkbox"/> N)
HMA-7	Troxler Gyratory Compactor Height Calibration & Rotation Check	<input type="checkbox"/>	<input type="checkbox"/>	( <input type="checkbox"/> Y/ <input type="checkbox"/> N)
HMA-8	Maximum Specific Gravity and Lottman System Check	<input type="checkbox"/>	<input type="checkbox"/>	( <input type="checkbox"/> Y/ <input type="checkbox"/> N)
HMA-9	Standardization of Water Baths	<input type="checkbox"/>	<input type="checkbox"/>	( <input type="checkbox"/> Y/ <input type="checkbox"/> N)
HMA-10	Stabilometer Check	<input type="checkbox"/>	<input type="checkbox"/>	( <input type="checkbox"/> Y/ <input type="checkbox"/> N)
HMA-11	United Press Load Cell Calibration Check	<input type="checkbox"/>	<input type="checkbox"/>	( <input type="checkbox"/> Y/ <input type="checkbox"/> N)
HMA-12	Troxler Gyratory Compactor Region Load Cell Pressure Check	<input type="checkbox"/>	<input type="checkbox"/>	( <input type="checkbox"/> Y/ <input type="checkbox"/> N)

**Comments**