

**NOISE SURVEY REPORT
DAVID SKAGGS RESEARCH CENTER
325 BROADWAY
BOULDER, COLORADO
CO0055ZZ**

Survey Conducted: August 22, 2012

Survey Performed By:
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On August 22, 2012, Buddy Alkire, Regional OSH Manager, with the General Services Administration performed a noise survey at the David Skaggs Research Center (CO0055ZZ) in Boulder, Colorado. The noise survey was accomplished at the request of Dr. James W. Elkins, Chief, Supervisory Physicist, Halocarbons & Other Atmospheric Trace Species (HATS). Ms. Elizabeth Felder, GSA Representative, accompanied during the survey.

The survey primarily measured the noise level in various areas of the building and is not a indication of a personal Time Weighted Average (TWA) as expressed in the Occupational Safety and Health Administration's noise standard 29 CFR 1910.95.

The equipment used during this survey was a Quest Sound Level Meter, Model #2100, serial #DAL020008 that was factory calibrated on February 29, 2012. The meter was site calibrated using a Quest QC-10 Calibrator, Model QC-10/QC-20, serial #QIL020096 calibrated on February 29, 2012. The sound level meter was successfully site calibrated before and after the survey.

The results of the survey are as follows:

LOCATION/ACTIVITY	SOUND LEVEL (dBA)
Hallway at Conference Room 512	45.8
Stairwell	63
RD 103 Lab (Penthouse) with talking	54
RD 103 Lab with Grinder on	88
Dobson Roof	69.1
Dobson South Dome with dome rotation	76
Dobson South Dome with AC on	59.5
Radiation Deck by UV Radiation Monitor	60
Radiation Deck with stepper motor running	60
GD Lab 305 with flask vacuum running	51
GD Lab while talking	64
GD 405 Hallway	52
Freight Elevator while talking	61
GD 124 Station Sampling System	66
1D Lab 704	58.1
1D 709 with vacuum pump running	69
1D 709 while talking	72
2D 602 Flask Analysis Lab	66.5
GB 204 GMD Shop CNC machine running	61
GMD Shop – DeWalt Saw running (no cutting)	93
GMD Shop – Metal Chop Saw running (no cutting)	93
GMD Shop – CNC Machine changing tool	80
GMD Shop – Metal Lathe (running, no work)	77
GA 105 Fan Room AHU-1 running	72
GA 107 Mechanical Gear Room (switch gear)	68.5

GA 107 Plumbing Room AC-1 compressor running	82.3
GA 107 Plumbing Room AC-1 compressor fan only	70
GA 107 Switch Gear Room	68.5
GA 108 Chiller Room – compressor on	78.1
GA 108 Chiller Room between chiller 1 and 2	85.9
GA 108 Chiller Room between chiller 2 and 3	85.9
GA 108 Chiller Room Pump 7 running	73
GA 108 Chiller Room Pump 9 running	73
GA 109 Pump Room Georator electric motor on	77.5
GA 405 Computer Room just inside entrance	85.4
GA 405 Computer Room under ceiling fans	92
GA 405 Computer Room end of room by #8 on wall	88.5
GA 405 Computer Room middle of room by AT on wall	86.1
GA 405 Computer Room plastic enclosed area by CR-AC-16	91.7
1A 211	72.9
1A 212	62.9
2A 203	60.8
3A 202 vacuum pump with muffler	65
3A 202 vacuum pump with no muffler	70
1A 213	64
1A 203 Pump Room vacuum pump	76
1A 203 Pump Room vacuum pump	78
1A 203 Pump Room vacuum pump	72
1A 214 Laser on	68
RA 101 Mechanical Space on top A-B Boilers not on, vent fan running	67.9
RA 101 Mechanical Space AHU – fan 1, lab exhaust running	69.1
RA 101 Mechanical Space Pump 19, DPS-6 running	67.7
RA 103 Mechanical Space Pump Room	73.7
2B-201B Computer Room at entrance	74.9
2B-201B Computer Room by pillar AP	76.1
2B-201B Computer Room by rack 421 in plastic enclosure	80.7
2B-201B Computer room by TUB2C	75.2
2B-302 Computer Room at entrance	68
2B-302 Computer Room by wall marking AQ	71.1
2B-302 Computer Room at rack 340A	73.8
2B-518 Computer Room at entrance	75.1
2B-518 Computer Room at wall marking 12	76.8
2B-518 Computer Room at rack 5203	78.3
2B-518 Computer Room CRAC by marking AO-04	80.1
2B-518 Computer Room at rack 5403	78.1
Mechanical Room GC-419 AHU-4 running	79.4
GD 302 Plumbing Room with A-C-2 and AC-2 running	83
GD 302 Plumbing Room with only A-C-2 running	77

GD 302 Plumbing Room with P-20 running	78
GD 302 Plumbing Room with P-20 and Temperature Control Compressor running	83.1
GD 301 Mechanical Room at AHU-5/SF-5A	75.7
GD 301 Mechanical Room at SF-5B	77.3
GD 301 Mechanical Room between AHU-5 and SF-5B	84.3
GC 405 Machine Shop – no activity during survey	
1B 603 Computer Room with a rack moving computer tapes	66 to 72.5
1B 601 Computer Room	70.9
1B 609 Computer Room at CRAC-6	77.5
1B 609 Computer Room at rack 913	76.2
1B 609 Computer Room at rack 2	76.7
1B 609 Computer Room at rack 9	83

It was noted during the survey that areas that have the potential to produce high noise levels had hearing protection (personal protective equipment) stationed in the room. These areas included computer rooms, machine shops, and some labs.

It is recommended that all areas with a noise level at or above the OSHA action level of 85 dBA have a sign outside the room indicating hearing protection, PPE (personal protective equipment), must be used in the room. Computer rooms have signs and noise protection equipment on the inside of the room and one machine shop also had signs and PPE.

To determine a true employee noise exposure selected employees should be sampled using a noise dosimeter. These results can be measured against the OSHA Occupational Noise Standard (29 CFR 1910.95) Permissible Noise Exposures table (Table G-16) to determine if employee(s) should be placed in a hearing conservation program.

If you have questions concerning this report or the data presented contact Buddy Alkire, General Services Administration's Regional OSH Manager at 303-236-2987 or harold.alkire@gsa.gov.