

**LEAD PAINT HAZARDS**

OCCUPATIONAL HEALTH DEPARTMENT (OHD) PERSONNEL COLLECTED PAINT SAMPLES FOR PLANNED DEMOLITIONS IN THE 60% DESIGN OF THE BUILDING 24 UPGRADE (NASA PROJECT NO. 09003). AS THE FOLLOWING TABLE LISTS THE RESULTS AS DETERMINED BY THE ENVIRONMENTAL HEALTH LABORATORY:

LOCATION	REPORTING LIMIT	RESULT	UNITS
<b>BLOWDOWN FLASH VENT</b>			
CADMIUM (CD)	46	< 46	PPM
CHROMIUM (CR)	230	240	PPM
LEAD (PB)	1100	160000	PPM
ZINC (ZN)	230	2000	PPM
<b>BLOWDOWN FLASH TANK</b>			
CADMIUM (CD)	46	< 46	PPM
CHROMIUM (CR)	230	41000	PPM
LEAD (PB)	1100	190000	PPM
ZINC (ZN)	230	420	PPM
<b>SC-24-1 FRAME</b>			
CADMIUM (CD)	46	< 46	PPM
CHROMIUM (CR)	230	< 230	PPM
LEAD (PB)	1100	180000	PPM
ZINC (ZN)	230	1500	PPM
<b>SC-24-1 TANK</b>			
CADMIUM (CD)	46	< 46	PPM
CHROMIUM (CR)	230	< 230	PPM
LEAD (PB)	1100	56000	PPM
ZINC (ZN)	230	1500	PPM
<b>SC-24-1 GREEN PIPE</b>			
CADMIUM (CD)	46	< 46	PPM
CHROMIUM (CR)	230	5800	PPM
LEAD (PB)	1100	160000	PPM
ZINC (ZN)	230	4900	PPM
<b>SC-24-1 YELLOW PIPE</b>			
CADMIUM (CD)	46	< 46	PPM
CHROMIUM (CR)	230	27000	PPM
LEAD (PB)	2300	340000	PPM
ZINC (ZN)	230	3300	PPM
<b>SC-24-1 BLACK PIPE</b>			
CADMIUM (CD)	46	< 46	PPM
CHROMIUM (CR)	230	< 230	PPM
LEAD (PB)	2300	420000	PPM
ZINC (ZN)	230	510	PPM
<b>SC-24-1 GREEN FLOOR</b>			
CADMIUM (CD)	46	< 46	PPM
CHROMIUM (CR)	230	< 230	PPM
LEAD (PB)	230	740	PPM
ZINC (ZN)	230	< 230	PPM
<b>COND-24-1 TANK</b>			
CADMIUM (CD)	46	< 46	PPM
CHROMIUM (CR)	230	1500	PPM
LEAD (PB)	230	5500	PPM
ZINC (ZN)	230	5600	PPM
<b>COND-24-1 GREEN FLOOR</b>			
CADMIUM (CD)	46	< 46	PPM
CHROMIUM (CR)	230	2300	PPM
LEAD (PB)	230	7600	PPM
ZINC (ZN)	230	3300	PPM
<b>BUILDING 24 STRUCTURAL BEAM</b>			
CADMIUM (CD)	46	< 46	PPM
CHROMIUM (CR)	230	< 230	PPM
LEAD (PB)	2300	230000	PPM
ZINC (ZN)	230	7600	PPM

RESULTS ARE REPORTED IN PARTS PER MILLION (PPM).

ACCORDING TO THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD), LEAD-BASED PAINT IS DEFINED AS PAINT CONTAINING LEAD EXCEEDING 0.5% (5000 PPM). THE CONSUMER PRODUCT SAFETY COMMISSION (CPSC) DEFINES LEAD-BASED PAINT AS PAINT CONTAINING LEAD EXCEEDING 0.05% (500 PPM). THUS, ALL PAINT SAMPLES CONTAINED LEAD.

THE JSC POLICY IS TO NOT EXPOSE ANY EMPLOYEE TO AIRBORNE CONCENTRATIONS GREATER THAN 50 MICROGRAMS PER CUBIC METER (MICROGRAMS/M<sup>3</sup>) OF AIR AVERAGED OVER AN 8-HOUR PERIOD (OSHA PEL AND ACGIH-TLV).

ANY CONSTRUCTION ACTIVITY THAT WOULD GENERATE DUSTS, MISTS OR FUMES WILL NEED TO BE EVALUATED AGAINST THE REQUIREMENTS OF THE OSHA CONSTRUCTION INDUSTRY STANDARD, 29 CFR 1926.62. LEAD CONSTRUCTION ACTIVITIES WILL REQUIRE THE USE OF ENGINEERING CONTROLS OR PERSONAL PROTECTIVE EQUIPMENT SUFFICIENT TO REDUCE POTENTIAL PERSONAL EXPOSURES TO LESS THAN 50 MICROGRAMS/M<sup>3</sup> AS AN 8-HOUR TIME WEIGHTED AVERAGE.

LEAD PAINT MUST NOT BE SUBJECT TO CUTTING, SANDING, GRINDING, DRILLING, TORCHING, OR WELDING WITHOUT PROPER CONTROLS. OHD RECOMMENDS THAT ANY LEAD PAINT BE REMOVED WITH A CHEMICAL PAINT STRIPPING SYSTEM (PEEL-AWAY, OR EQUIVALENT) BEFORE CUTTING, DRILLING, WELDING, ETC. PAINT MUST BE REMOVED FOR A DISTANCE OF 6-INCHES ON EITHER SIDE OF A CUT-LINE OR WELD-LINE.

THE PRESENCE OF CHROMIUM IN ASSOCIATION WITH ZINC IS PROBABLY THE RESULT OF THE USE OF ZINC CHROMATE IN THE PAINT. ZINC CHROMATE IS ONE OF THE FORMS OF HEXAVALENT CHROMIUM THAT HAS BEEN DETERMINED TO BE CARCINOGENIC. ACTIVITIES WHICH MAY RENDER THE MATERIAL INTO AIRBORNE PARTICLES SHOULD BE PERFORMED IN A MANNER TO LIMIT POTENTIAL AIRBORNE EXPOSURES TO LEVELS BELOW 5 MICROGRAMS PER CUBIC METER OF AIR.

**ASBESTOS HAZARD**

NASA HAS CONDUCTED CERTAIN TESTS OF AREAS AFFECTED BY THIS CONSTRUCTION PROJECT TO DETERMINE WHERE POSSIBLE ASBESTOS HAZARDS EXIST. CONTRACTOR SHOULD USE CAUTION WHERE EXISTING INSULATION IS TO BE REMOVED AND REPORT ALL SUSPECT ASBESTOS HAZARDS TO NASA FOR IMMEDIATE TESTING. DO NOT PROCEED WITH DEMOLITION WHERE POTENTIAL ASBESTOS HAZARDS EXIST.

THE FOLLOWING SPECIFIC EQUIPMENT WAS TESTED FOR ASBESTOS HAZARD.

- BLOWDOWN FLASH TANK INSULATION: NEGATIVE
- BLOWDOWN FLASH PIPE INSULATION: RUNS, ELBOWS, AND VALVES - NEGATIVE
- SC-24-1 ORANGE PIPE INSULATION: NEGATIVE
- COT-24-1 WHITE VALVE INSULATION - POSITIVE (4% CHRYSOTILE)

**COORDINATION OF CONSTRUCTION WITH NASA**

ALL ASPECTS OF THIS CONSTRUCTION PACKAGE REQUIRE CLOSE COORDINATION WITH NASA PERSONNEL. THIS INCLUDES, BUT IS NOT LIMITED TO, THE TIME SCHEDULE OF DEMOLITION AND NEW CONSTRUCTION INCLUDED IN THE SPECIFICATION. CONTRACTOR SHALL CLOSELY COORDINATE ALL DEMOLITION AND NEW CONSTRUCTION WITH NASA TO REDUCE DOWN TIME AND INCONVENIENCE OF NASA OPERATIONS TO LOWEST POSSIBLE LEVEL.

ALL WORK ON THE STEAM AND BLOWDOWN SYSTEMS SHALL BE COORDINATED WITH THE PRESSURE SYSTEMS MANAGEMENT OFFICE (PSMO) AT NASA.

UNDER NO CIRCUMSTANCES SHALL CONTRACTOR TAKE ANY OPERATING EQUIPMENT OR ANY EQUIPMENT REQUIRED FOR OPERATION OF OTHER EQUIPMENT OUT OF SERVICE WITHOUT ADVANCED NOTIFICATION AND APPROVAL OF NASA PERSONNEL.

NO MORE THAN ONE BOILER MAY BE OUT OF SERVICE AT ANY GIVEN TIME.

**COMPLIANCE WITH JPR 1710.13E**

ALL HIGH PRESSURE STEAM, CONDENSATE, AND BLOWDOWN PIPING SYSTEMS SHALL BE INSTALLED IN COMPLETE COMPLIANCE WITH JOHNSON SPACE CENTER PROCEDURAL REQUIREMENTS, DESIGN, INSPECTION, AND CERTIFICATION OF GROUND-BASED PRESSURE VESSELS AND PRESSURIZED SYSTEMS JPR NO. 1710.13E, DATED SEPTEMBER 9, 2010. CONTRACTOR SHALL PROVIDE A COMPLETE SYSTEM SAFETY AND RISK ASSESSMENT OF ALL HIGH PRESSURE STEAM, CONDENSATE, AND BLOWDOWN SYSTEMS IN FULL ACCORDANCE WITH APPENDIX J.

**COMPLIANCE WITH ASME 31.3**

ALL HIGH PRESSURE STEAM, CONDENSATE, AND BLOWDOWN PIPING SYSTEMS SHALL BE INSTALLED IN COMPLETE COMPLIANCE WITH ASME-31.3-2008 PROCESS PIPING. ALL WELDS SHALL BE INSPECTED, EXAMINED, AND TESTED IN COMPLETE ACCORDANCE WITH CHAPTER VI, INSPECTION, EXAMINATION, AND TESTING.

**NASA PAINT SPECIFICATIONS AND COLORS**

1. CONTRACTOR SHALL REPAIR AND PAINT ALL DISTURBED, DAMAGED, AND EXPOSED FLOOR SURFACES, EQUIPMENT SUPPORT STRUCTURES, AND GROUNDED SURFACES ADJOINING FLOOR WITH NASA STANDARD FLOOR PAINT INDICATED BELOW AND IN SPECIFICATION SECTION 09 90 00. SURFACES SHALL BE CLEANED, REPAIRED, SCRAPED, AND SANDED SMOOTH PRIOR TO APPLICATION OF PAINT. THE FOLLOWING PPG INDUSTRIES PAINT SHALL BE PROVIDED AND APPLIED BY THE CONTRACTOR. CONTRACTOR SHALL APPLY PAINT IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.

MEGASEAL SL-99-8680 SERIES AS INDICATED IN SPECIFICATION SECTION 09 99 00

2. EQUIPMENT, PIPING, AND SUPPORTS SHALL BE PAINTED IN ACCORDANCE WITH NASA COLOR AND COATING TYPE FORMULATIONS STANDARD BELOW.

BARE PIPE, INSULATION OVER PIPE, AND PIPE TO BE INSULATED SHALL BE PAINTED PER THE FOLLOWING TABLE.

IF PIPING IS INSULATED, THE EXTERIOR SURFACE OF THE PIPING SHALL BE PAINTED AND CURED PRIOR TO APPLICATION OF INSULATION WITH THE FOLLOWING CARBOLINE PAINTS. WELDS, GRINDS, AND DAMAGE TO PAINTED SURFACES SHALL BE REPAIRED PRIOR TO INSULATING. IF EQUIPMENT OR PIPING IS PROVIDED WITH FACTORY COATING, THE COATING SHALL BE TOUCHED UP WITH FACTORY PAINT BUT NOT REPAINTED WITH CARBOLINE PRODUCT. SEE PAINT SPECIFICATION SECTION 09 90 00.

IF EQUIPMENT AND PIPING IS INSULATED, THE EXTERIOR INSULATED SURFACES SHALL BE PAINTED WITH THE FOLLOWING CARBOLINE PAINTS. IF EQUIPMENT AND PIPING IS NOT INSULATED, THE BARE EQUIPMENT AND BARE PIPING SURFACES SHALL BE PAINTED WITH THE FOLLOWING CARBOLINE PAINTS.

PIPING AND SUPPORTS	INSULATED		NON-INSULATED		TYPE
	COATING UNDER INSULATION	COATING ON ASI	COLOR (FED-STD-595B)	TYPE	
POTABLE WATER PIPING (DW, DE, MW, SW)	NEUTRAL GRAY	CARBOGUARD 890	"BLUE" #15102	CARBOGUARD 890	-
CHILLED WATER PIPING (CHR, CHS)	NEUTRAL GRAY	CARBOGUARD 890	"BLUE" #15044	CARBOGUARD 890	-
CONDENSER WATER (CS, CR)	-	-	-	"GREEN" #14120	CARBOGUARD 890
INSTRUMENT AIR (IA)	-	-	-	"GREEN" #14120	CARBOGUARD 890
LOW & MEDIUM PRESSURE STEAM PIPING (LS)	NEUTRAL GRAY	THERMALINE 450	"YELLOW" #13655	CARBOGUARD 890	-
HIGH PRESSURE STEAM PIPING (HS)	NEUTRAL GRAY	THERMALINE 4700	"ORANGE" #12473	CARBOGUARD 890	-
HOT BLOWDOWN PIPING (CB, IB)	NEUTRAL GRAY	THERMALINE 4700	"YELLOW" #13655	CARBOGUARD 890	-
STEAM CONDENSATE PIPING (PC, C)	NEUTRAL GRAY	THERMALINE 450	"YELLOW" #13655	CARBOGUARD 890	-
DRAINS AND VENTS (HOT)	NEUTRAL GRAY	THERMALINE 450	"YELLOW" #13655	CARBOGUARD 890	-
DRAINS AND VENTS (NOT HOT)	-	-	-	"BLACK" #17038	CARBOGUARD 890
UNDERGROUND DRAINS (ALL)	-	-	-	"BLACK" #17038	PHENOLINE 1205
REFRIGERANT GAS PIPING (RG)	-	-	-	"GREEN" #14120	CARBOGUARD 890
REFRIGERANT LIQUID PIPING (RL)	-	-	-	"GREEN" #14120	CARBOGUARD 890
SERVICE PLATFORMS	-	-	-	MATCH EXISTING	CARBOGUARD 890
MEZZANINE FLOOR GRATING	-	-	-	GALVANIZED	GALVANIZED
SUPPORT STANDS	-	-	-	MATCH EXISTING	CARBOGUARD 890

ALL OTHER EQUIPMENT AND PIPING SHALL BE PAINTED TO MATCH EXISTING, EXCEPT THE FOLLOWING SHALL NOT BE PAINTED:

- STAINLESS STEEL SURFACES
- INSTRUMENTS, CONTROLS, LEVEL GAUGES, HAND VALVES
- PUMPS
- BACKFLOW PREVENTERS

**PIPE LINE ACCESSORIES**

- GATE VALVE
- OUTSIDE SCREW & YOKE
- KNIFE GATE VALVE
- HOSE GATE DRAIN VALVE
- GLOBE VALVE
- BUTTERFLY VALVE
- ANGLE VALVE
- CHECK VALVE
- STOP CHECK VALVE
- AUTOMATIC RECIRCULATION CHECK VALVE
- PLUG VALVE
- DOUBLE BLOCK & BLEED PLUG VALVE
- 3-WAY PLUG VALVE (2-PORT)
- 3-WAY VALVE
- NEEDLE VALVE
- BALL VALVE
- SPRING RETURN CLOSED BALL VALVE
- PUMP DISCHARGE VALVE
- BALANCING VALVE
- RELIEF, SAFETY OR THERMAL RELIEF VALVE
- PINCH VALVE
- CONTROL VALVE
- SUCTION DIFFUSER
- HOSE BIB (HB)
- WALL HYDRANT (WH)
- AIR COCK
- AUTOMATIC AIR VENT ASSEMBLY
- MANUAL AIR VENT - SEE SPECIFICATIONS FOR APPROPRIATE VALVE TYPE.
- PIPE ANCHOR
- PIPE GUIDE
- PIPE SUPPORT
- PIPE SPRING HANGER
- FLEX CONNECTION
- PUMP
- SOLENOID
- LOCAL TEMPERATURE INDICATOR
- BACKFLOW PREVENTION ASSEMBLY
- LOCKED OPEN
- LOCKED CLOSED
- SELF CONTAINED PRESSURE REDUCING (REGULATING) VALVE
- LOCAL PRESSURE INDICATOR
- EXPANSION ELEMENT (JT)
- FLEXIBLE BALL JOINT
- BASKET TYPE STRAINER
- TEE TYPE STRAINER
- Y-TYPE STRAINER
- CONICAL STRAINER
- RUPTURE DISC
- DUPLEX STRAINER
- DRESSER COUPLING (DC)
- INSULATED DRESSER COUPLING (IDC)
- HARNESSED DRESSER COUPLING (HDC)
- DRIP POCKET ASSEMBLY
- STEAM TRAP ASSEMBLY
- DRAINER
- SAMPLE COOLER
- (I.F.) INSULATING FLANGE
- RESTRICTING ORIFICE
- SIGHT FLOW INDICATOR
- FLOW METER
- MOISTURE SEPARATOR
- DISCHARGE ELBOW ASSEMBLY
- STRAIGHTENING VANE
- WELD CAP
- REMOVABLE CAP
- REMOVABLE PLUG
- PIPE WITH HEATING CABLE
- REDUCER (CONCENTRIC)
- REDUCER (ECCENTRIC)
- UNION
- BLIND FLANGE
- CHEMICAL INJECTION QUILL
- ELECTRIC HEATER

**MECHANICAL ABBREVIATIONS**

- 24x12 RECTANGULAR DUCT DIMENSION (INCHES)
- 24x12 OV OVAL DUCT DIMENSION (INCHES)
- 126 ROUND DUCT DIMENSION (INCHES)
- AFB ABOVE FINISHED FLOOR
- AHU AIR HANDLING UNIT
- ARV AIR RELEASE VALVE
- PCA AIRCRAFT PRECONDITIONED AIR
- BSC BAGGAGE COMPARTMENT SUPPLY AIR
- BE BEVEL END
- BLE BEVELED LARGE END
- BLVD BEVELED
- BOB BOTTOM OF DUCT
- BW BUTT WELD
- OCS CABIN COMPARTMENT SUPPLY AIR
- CUH CABINET UNIT HEATER
- CONC CONCENTRIC
- CORP STOP CORPORATION STOP
- CR CONDENSATE RETURN
- CWS CONDENSATE WATER SUPPLY
- OWR CONDENSATE WATER RETURN
- DE DEALKALYZED WATER
- DH DOOR HEATER
- DN DOWN
- ELL ELBOW
- EA EXHAUST AIR
- EG EXHAUST GRILLE
- ER EXHAUST REGISTER
- ETR EXISTS TO REMAIN
- EXIST EXISTING
- F FAN
- FD FLOOR DRAIN
- FW FIELD WELD
- FF FLAT FACED
- FOB FLAT ON BOTTOM
- FOT FLAT ON TOP
- FCS FUEL CELL SUPPLY AIR
- FCE FUEL CELL EXHAUST AIR
- IA INSTRUMENT AIR
- INV. EL. INVERT ELEVATION
- LOUVER LOUVER
- LR LONG RADIUS
- MJ MECHANICAL JOINT
- MA MIXED AIR
- OA OUTSIDE AIR
- OB OPPOSED BLADE
- PB PARALLEL BLADE
- PBE PLAIN BOTH ENDS
- PE PLAIN END
- POE PLAIN ONE END
- PSIA POUNDS PER SQUARE INCH ABSOLUTE
- PSIG POUNDS PER SQUARE INCH GAUGE
- PW POTABLE WATER
- RF RAISED FACE
- RED REDUCER-REDUCING
- RMJ RESTRAINED MECHANICAL JOINT
- RA RETURN AIR
- RG RETURN AIR GRILLE
- RJ RING JOINT
- SCH SCHEDULE
- SR SHORT RADIUS
- SLIP ON SLIP ON
- STM STEAM
- ST STEAM TRAP
- SA SUPPLY AIR
- SR SPRING RETURN CLOSED
- SR SUPPLY REGISTER
- STP SURGE TANK TRANSFER PUMP
- SW SOFTENED WATER
- TOC TOP OF CONCRETE
- TOD TOP OF DUCT
- TOS TOP OF GRATING
- TOT TOP OF STEEL
- UH UNIT HEATER
- VAV VARIABLE AIR VOLUME
- V VENT
- VCU VENTILATING CABINET UNIT
- VTR VENT THROUGH ROOF
- WE WELD END
- WN WELD NECK
- XXS DOUBLE EXTRA STRONG

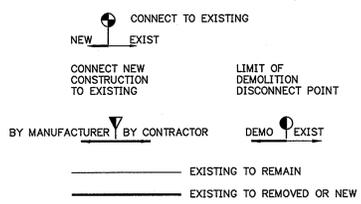
**PIPE LINE INSTRUMENT SYMBOLS**

- CI-CONDUCTIVITY INDICATOR
- CKV-CHECK VALVE
- CT-CONDUCTIVITY TRANSMITTER
- CTC-CHEMICAL TREATMENT CONTROLLER
- CV-CONTROL VALVE
- ARV AIR RELEASE VALVE
- DPLT-DIFFERENTIAL PRESSURE FLOW SWITCH
- DPLT-DIFFERENTIAL PRESSURE LEVEL TRANSMITTER
- FI-FLOW INDICATOR
- FT-FLOW TRANSMITTER
- HS-HIGH LEVEL SWITCH
- HPCS-HIGH PRESSURE CUTOFF SWITCH
- HV-HAND VALVE
- LG-LEVEL GAUGE GLASS
- LLS-LOW LEVEL SWITCH
- LT-LEVEL TRANSMITTER
- TS-TEMPERATURE SENSOR
- TI-TEMPERATURE INDICATOR
- TT-TEMPERATURE TRANSMITTER
- ORF-ORIFICE
- PI-PRESSURE INDICATOR
- PHI-PH INDICATOR
- PHT-PH TRANSMITTER
- PT-PRESSURE TRANSMITTER
- RV-RELIEF VALVE OR RUPTURE DISK

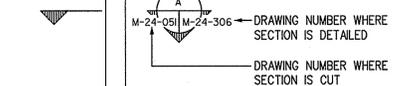
**VALVE OPERATORS**

- CYLINDER
- DIAPHRAGM
- MOTOR
- SOLENOID
- CHAINWHEEL

**CONSTRUCTION INTERFACE**



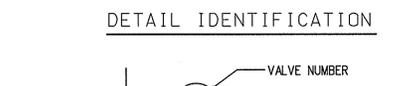
**SECTION IDENTIFICATION**



**DETAIL IDENTIFICATION**



**VALVE IDENTIFICATION**



**INSTRUMENT IDENTIFICATION**

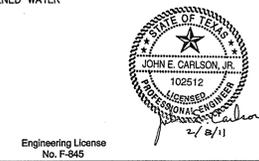


**IDENTIFICATION FOR INSTRUMENTATION PROVIDED BY CHILLER MANUFACTURER**

**SECTION, DETAIL, VALVE & INSTRUMENTATION IDENTIFICATION SYSTEMS**

**PIPE LINE DESIGNATIONS**

- BPD BOILER PIT DRAIN
- C CONDENSATE (FROM STEAM, VENTED)
- CB CONTINUOUS BLOWDOWN
- CHR CHILLED WATER RETURN
- CHS CHILLED WATER SUPPLY
- CR CONDENSER WATER RETURN
- CS CONDENSER WATER SUPPLY
- D DRAIN
- DE DEALKALYZED WATER
- HS HIGH PRESSURE STEAM (400 PSI & ABOVE)
- IA INSTRUMENT AIR
- IB INTERMITTENT BLOWDOWN
- LS LOW PRESSURE STEAM (BELOW 50 PSI)
- MW MAKE-UP WATER (AFTER BACKFLOW PREVENTER)
- PC PUMPED CONDENSATE
- PW POTABLE WATER
- R RELIEF LINE (STEAM)
- RG REFRIGERANT GAS
- RL REFRIGERANT LIQUID
- RV REFRIGERANT VENT
- SW SOFTENED WATER



**ISSUED FOR CONSTRUCTION**

THE REGISTRANT OF THE NEWLY APPLIED SEAL, DATED 02/08/11, ONLY ASSUMES RESPONSIBILITY FOR THE CHANGES AS INDICATED BY THE FOLLOWING REVISION(S) 1.

REVISION	DATE	ISSUED FOR CONSTRUCTION	DESCRIPTION
1	02-08-11	REVISED AS NOTED	
0	09-24-10	ISSUED FOR CONSTRUCTION	

SIGNATURES	DATE	NATIONAL AERONAUTICS & SPACE ADMINISTRATION
DR-DC	ENG RG	01-28-10
CH JA	APPR JC	09-24-10

LYNDON B. JOHNSON SPACE CENTER HOUSTON, TEXAS

BUILDING 24  
CENTRAL HEATING AND COOLING PLANT

**MECHANICAL LEGEND**

PROJECT NO.	SHEET NO.
PROJECT TITLE	OF
CODE IDENT. NO. & SIZE	DWG NO.

M-24-2

CAD FILE NAME: M-24-2.dgn