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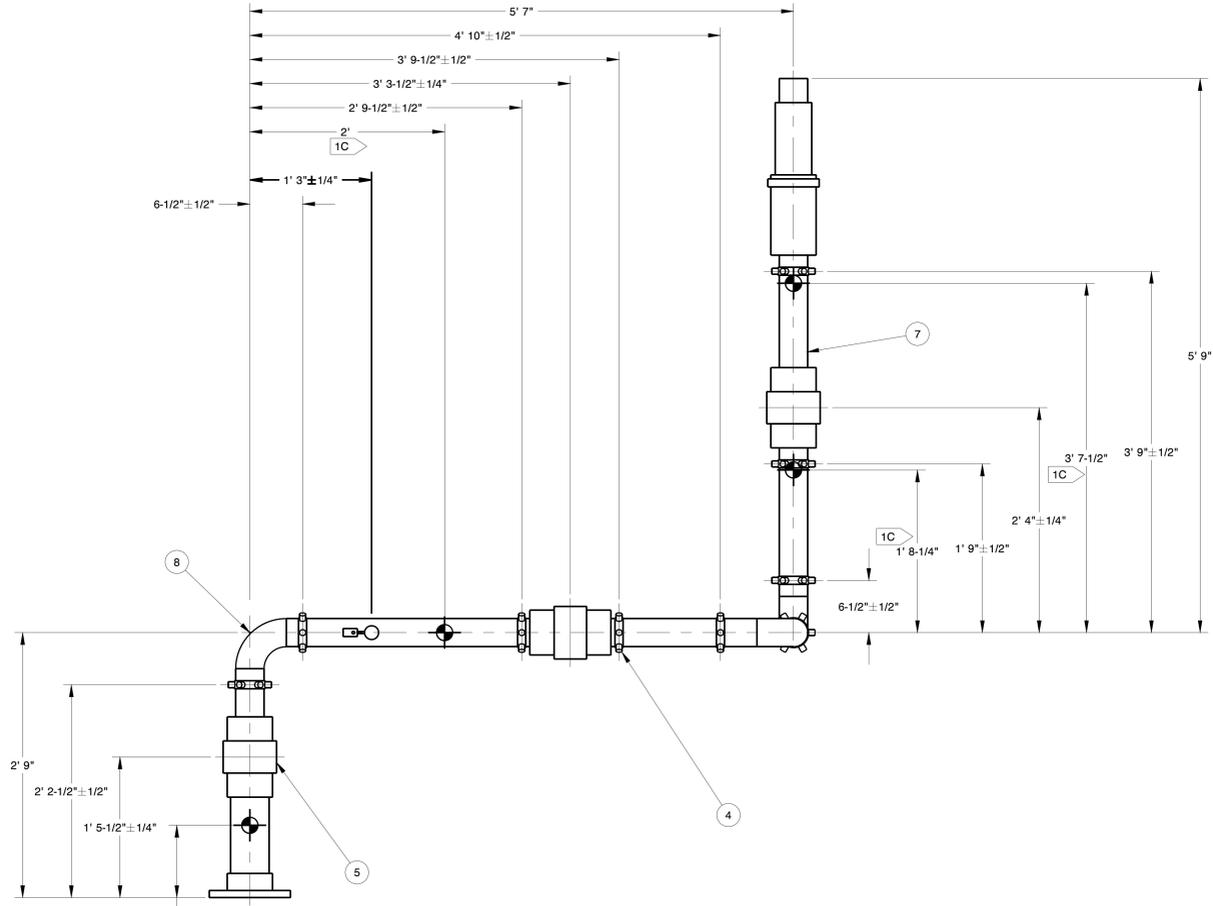
EAR 99 NLR

REVISION HISTORY					
PART NO.	ZONE	REV	DESCRIPTION	DATE	APPROVAL

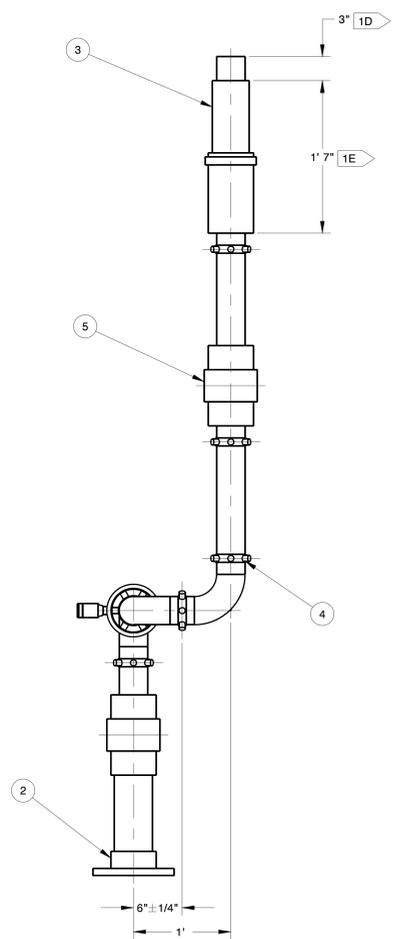
NOTES:

GENERAL

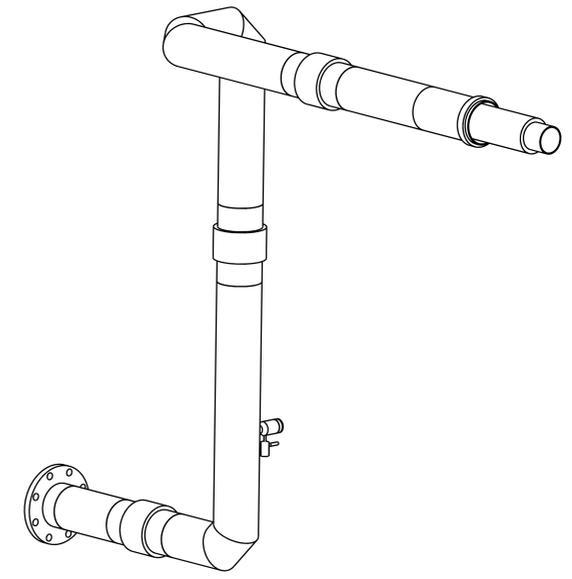
- 1A. INTERPRET THIS DRAWING PER ASME Y14.5-2009.
- 1B. THIS DRAWING PROVIDES THE PHYSICAL DIMENSIONS AND PARTS LIST FOR PIPE SPOOL ASSEMBLY. REFER TO PROCUREMENT SPECIFICATION K0000146598 FOR TECHNICAL, FABRICATION, TEST AND INSPECTION REQUIREMENTS.
- 1C. NOTED DIMENSION INDICATES CENTER LINE LOCATION FOR EXTERNAL SUPPORTS OF PIPE SPOOL ASSEMBLY. SUPPORT CONTACTS PIPE SPOOL FOR 2.0 INCHES ON EACH SIDE OF NOTED DIMENSION. WELDS ON EXTERNAL PIPE (EXCEPT PIPE SEAM WELD IF APPLICABLE) SHALL BE AVOIDED IN THIS AREA.
- 1D. NOTED DIMENSION INDICATES NOMINAL LENGTH OF INNER PIPE REQUIRED AT NEXT LEVEL OF ASSEMBLY. ADDITIONAL LENGTH OF INNER PIPE AND PACKAGING CLOSE-OUT MUST BE ADDED DURING FABRICATION PER SPECIFICATION REQUIREMENT.
- 1E. NOTED DIMENSION INDICATES MAXIMUM ALLOWABLE LENGTH OF FIELD WELDED TRANSITION JOINT. SEE SPECIFICATION FOR TRANSITION JOINT REQUIREMENT.
- 1F. PIPE SPOOL REFERENCE DESIGNATOR NUMBER IS 2180.



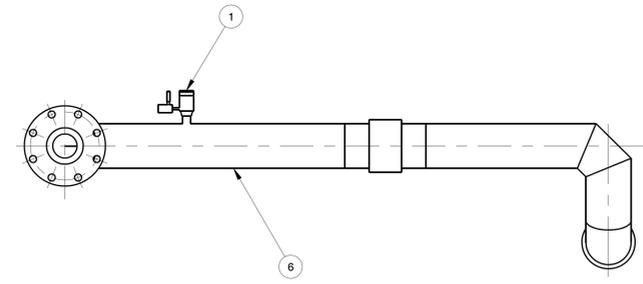
OUTER JACKET REMOVED



OUTER JACKET REMOVED



ISOMETRIC



QTY	FIG NO OR REV NO	DESCRIPTION
3	8	ELBOW, 90 DEG, LONG, B16.9, SCHED 10
AR	7	PIPE 3 NPS, SCHED 10, ASTM A312
AR	6	PIPE 5 NPS, SCHED 10, ASTM A312
3	5	BELLOWS 5 NPS 10 LG CONVOLUTE 4 LG
9	4	SUPPORT, INTERNAL PIPE
1	3	TRANSITION JOINT, 3X5 FIELD WELDED
1	2	BAYONET, FEMALE, 3X5
1	1	ASSEMBLY, VACUUM VALVE

PARTS LIST

PROCUREMENT CONTROL DRAWING

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED ONLY BY THE DESIGN ACTIVITY.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M-1994. TOLERANCES ON: FRACTIONS DECIMALS ANGLES	ORIGINAL DATE OF DRAWING (YY/MM/DD) 2013/03/19
SOFTWARE: PRO/ENGINEER	± 1/16 1 PL ± .060 1 PL ± 1°	DESIGNED BY: D. C. STANIFER
FIGURE NO: K0000065251D	2 PL ± .030	DRAWN BY: J. A. STAGLI
NOTES: NOTED	3 PL ± .010	CHECKED BY: W. C. PATRICK
TREAT TREATMENT: K0000061124 SLS ML	THIRD ANGLE PROJECTION	ENGINEER: E. L. THOMPSON
APPROVED BY: T. O. ADAMS	APPROVED BY: A. C. LITTLEFIELD	DATE: 2013/03/19
SCALE: .125	UNIT WEIGHT: 213.44	SHEET: 1 OF 1

JOHN F. KENNEDY SPACE CENTER, NASA KENNEDY SPACE CENTER, FLORIDA	
SPOOL 3 X 5, VACUUM JACKET PIPE, LIQUID HYDROGEN, FILL DRAIN	
SIZE: E	DRW NO: K0000065251
SCALE: .125	UNIT WEIGHT: 213.44
SHEET: 1	OF: 1