

Houston Lighting & Power Company

Electric Tower
P.O. Box 1700
Houston, Texas 77001

August 31, 1979
ST-HL-AE-370
SFN: V-0540

Director, Region IV
Office of Inspection & Enforcement
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76102

Dear Sir:

South Texas Project
Units 1 & 2
Docket Nos. STN 50-498, STN 50-499
IE Bulletin No. 79-15

Bulletin Number 79-15 has been reviewed by Houston Lighting & Power Company. The data requested under items 1, 2, and 3 of the Bulletin are being submitted as attachments to this letter. Responses to items 4, 5, and 6 have not been included since the pumps in question have not yet gone into service and Houston Lighting & Power has not conducted any tests of the pumps.

If you have any questions, please contact us.

Very truly yours,

E. A. Turner
Vice President
Power Plant Construction
& Technical Services

PLW:bf

Attachments

cc: Director, Division of Reactor Construction Inspection

NRC Office of Inspection & Enforcement

M. D. Schwarz (Baker & Botts)

R. Gordon Gooch (Baker & Botts)

J. R. Newman (Lowenstein, Newman, Reis, Axelrad & Toll)

D. G. Barker

A. J. Granger

R. A. Frazar

1373 203



7911200 123

SOUTH TEXAS PROJECT

Response to NRC IE Bulletin 79-15

I. High Head Safety Injection Pumps

Quantity : 3 per unit
Manufacturer : Pacific Pump Co.
Size/Type : 60 x 10 WYRF/Multi-Stage Vertical
Design Capacity: 800 USGPM
System : Safety Injection System

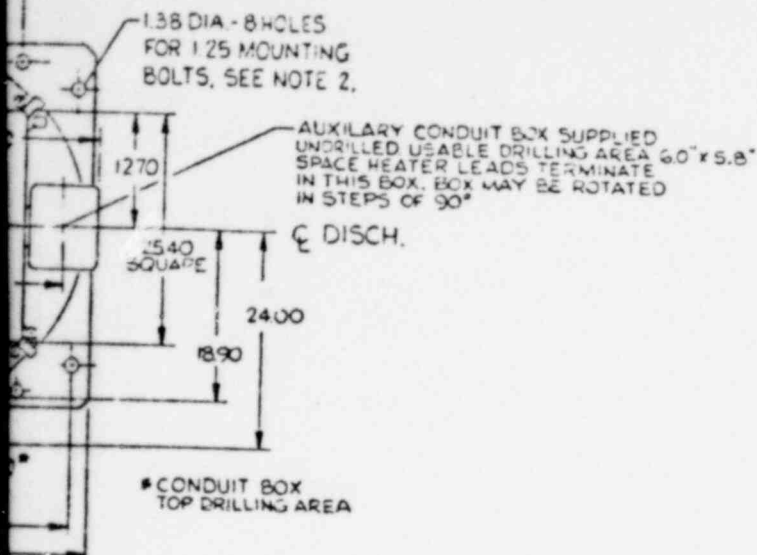
II. Low Head Safety Injection Pumps Containment Spray Pumps

Quantity : 6 per unit, total
Manufacturer : Pacific Pump Co.
Size/Type : 10 x 16 WYRF/Multi-Stage Vertical
Design Capacity: 1900 USGPM
System : Safety Injection System
Containment Spray System

III. Essential Cooling Water Pumps

Quantity : 3 per unit
Manufacturer : Hayward Tyler Pump Co.
Size : 24 VSN
Design Capacity: 17800 USGPM
System : Essential Cooling Water System

1373 204



PUMP CONNECTIONS

- P-A1 SUCTION NOZZLE 12"-400# R.F. FLANGE ANSI STD.
- P-B1 DISCHARGE RATED FOR 10"-400# R.F. ANSI (FOR CUST. USE) SEE NOTE 1.
- P-D4 DRIP POCKET DRAIN - 3/4 NPT
- P-V1 PUMP VENT (PLUGGED FOR SHIPMENT) CAN BE USED TO VENT ENTIRE PUMP HOWEVER IT IS RECOMMENDED A LARGER VENT PORT BE PUT INTO DISCHARGE PIPING TO SPEED VENTING. 3/4 NPT
- P-D1 SEAL LEAK DRAIN - 3/4 NPT

MOTOR CONNECTIONS

HM-E3 MOTOR GROUND PADS WITH ONE .500-13UNC-2B .50 DEEP HOLE IN EACH PAD.

POOR ORIGINAL

WEIGHTS

PUMP (LESS OUTER BARREL)	7155 *
MOTOR	3400 *
MOTOR MOUNT	1190 *
OUTER BARREL (DRY)	3500 *
TOTAL	15245
MINIMUM FLOW ORIFICE	20 *

* APPROXIMATE WEIGHTS - LBS.

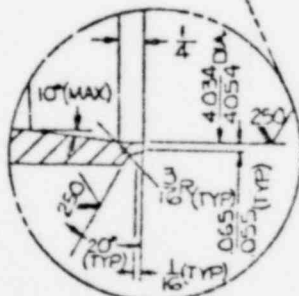
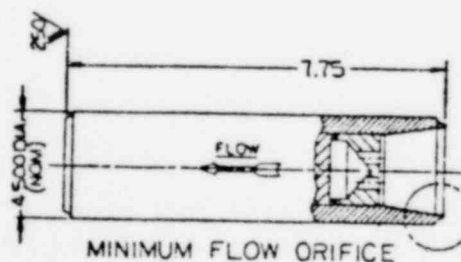
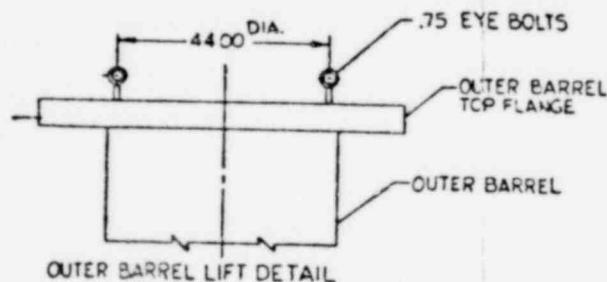
REFERENCE DRAWINGS:

ASSEMBLY DRAWING 500-V49754
SEAL DRAWING CF-SP-43412-1

TGX SIAPLH	V49754	51701, 02, 03
THX SIAPLH	V49755	51704, 05, 06
TGX CIAPCS	V49756	51707, 08, 09
THX CIAPCS	V49757	51710, 11, 12.
<u>SPIN NO.</u>	<u>SO. NO.</u>	<u>SERIAL NO.</u>

CONTRACTOR: WESTINGHOUSE NE S
SERVICE: LOW HEAD SAFETY INJECTION
CONTAINMENT SPRAY
SIZE/TYPER: 10x16 WYRF/MULTI-STAGE VERTICAL

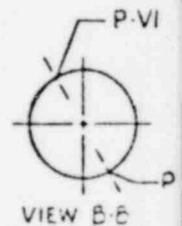
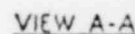
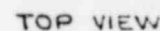
1373 206








Cg
MOUNT Cg
AND INTERNAL PARTS Cg
BASE Cg
PUMP W/MOTOR & OUTER BARREL Cg

PACIFIC PUMPS DIVISION DRESSER INDUSTRIES, INC.			
TITLE PUMP AND MOTOR OUTLINE			
REV	QTY	DATE	BY
1	1	10/1/74	10/1/74
SHT 1 OF 2		300-V49754	6

REV	QTY	DATE	BY
1	1	10/1/74	10/1/74
ADDED GROUND MOTOR, NPS ON LIFTING LOGS, AND REVISED OUTER BARREL LIFT DETAIL			
REVISED & UPDATED PER LATEST INFORMATION & CUST COMMENTS			

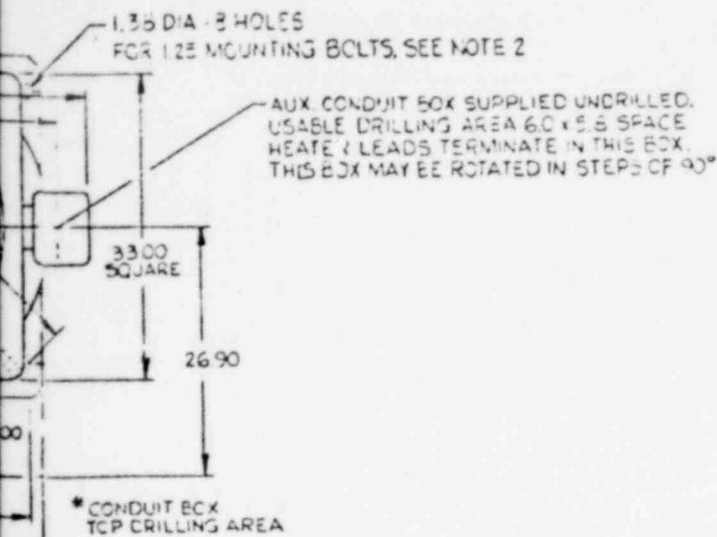


- A.  DRIVER Cg
- B.  MOTOR MOUNT
- C.  HEAD AND INT.
- D.  OUTER CASE C
- E.  UNIT Cg

1373 207

PCR ORIGINAL

		0 M 15 30 45 60 75 90
--	--	-----------------------



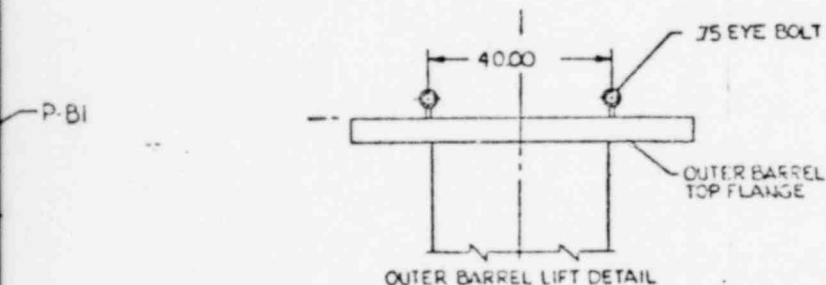
PUMP CONNECTIONS

- P-A1 SUCTION NOZZLE 10"-300# R.F. FLANGE ANSI STD
- P-B1 DISCHARGE RATED FOR 6"-1500# R.F. ANSI
(FOR CUST. USE) SEE NOTE 1.
- P-D4 DRIP POCKET DRAIN - 3/4 NPT
- P-V1 PUMP VENT (PLUGGED FOR SHIPMENT) 3/4 NPT.
PLUG MUST BE REMOVED AND VENT
PIPING INSTALLED BY INSTALLATION CONTRACTOR
- P-D1 SEAL LEAK DRAIN - 3/4 NPT

MOTOR CONNECTIONS

HM-E3 MOTOR GROUND PADS WITH TWO .500-13 UNC-2B
.50 DEEP HOLES IN EACH PAD

POOR ORIGINAL



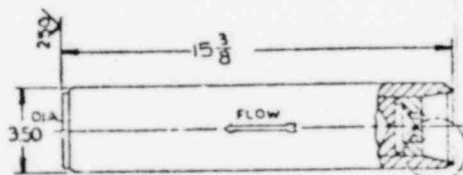
WEIGHTS

OUTER BARREL (DRY)	2850 *
PUMP (LESS OUTER BARREL)	5000 *
MOTOR	5820 *
MOTOR MOUNT	1330 *
TOTAL	15,000 *
MINIMUM FLOW CRIFICE	39 *

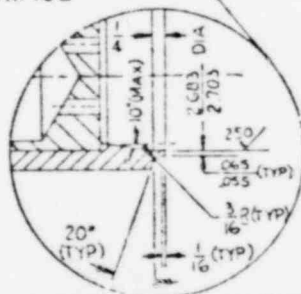
* APPROXIMATE WEIGHTS-LBS.

REFERENCE DRAWINGS:

ASSEMBLY DWG. 500-V49752
SEAL DWG. CF-SP-43323-1



MINIMUM FLOW CRIFICE



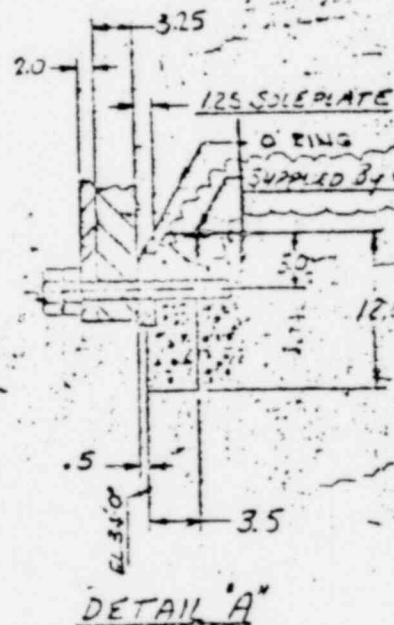
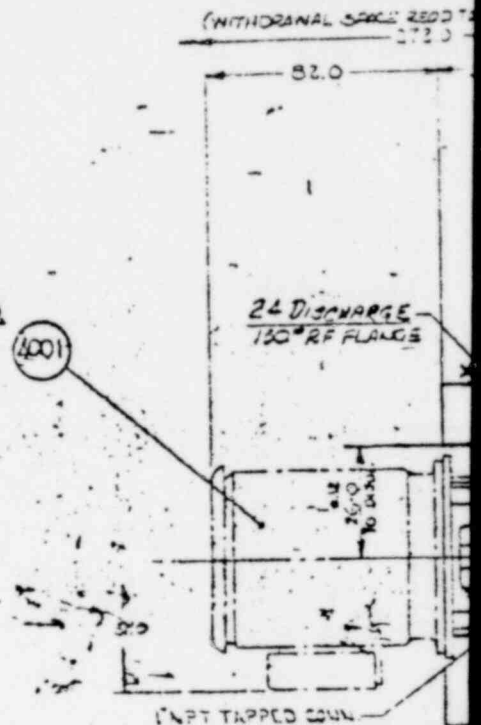
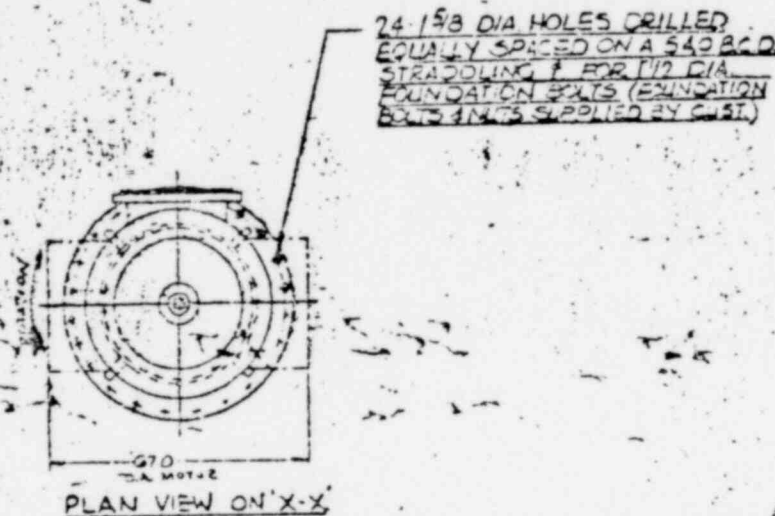
1373 208

TGX-SIAPHH-01, 01.03	V49752	51695.6.7
THX-SIAPHH-01, 02.03	V49753	51699.9.10
SPIN NO.	S.O. NO.	SERIAL NO.

CONTRACTOR: WESTINGHOUSE N.E.S.
SERVICE: HIGH HEAD SAFETY INJECTION
SIZE/TYPE: 6x10 WYRF/MULTI-STAGE VERTICAL

REV	DATE	BY	CHK	ZONE	REV	DATE	BY	CHK	ZONE	PACIFIC PUMPS DIVISION DRESSER INDUSTRIES, INC.	
1	10/1/80	...	...	...	1	10/1/80	...	...	...	PUMP AND MOTOR OUTLINE	
2	10/1/80	...	...	...	2	10/1/80	...	...	...	SHT 1 OF 2	
3	10/1/80	...	...	...	3	10/1/80	...	...	...	300-V49752	

POOR ORIGINAL



DESIGN PRESSURE
DESIGN TEMPERATURE
ASME SECTION II (1974 EDITION)
SEISMIC DESIGN

MINIMUM DESIGN FORCES
AXIAL FORCE - 20,000
SHEAR FORCE - 20,000

MINIMUM DESIGN FORCES
601401
601402
601403
601404
601405
601406

NOTES
1. ALL DIMENSIONS TO BE
2. ALL DIMENSIONS TO BE
3. ALL DIMENSIONS TO BE
4. ALL DIMENSIONS TO BE
5. ALL DIMENSIONS TO BE
6. ALL DIMENSIONS TO BE
7. ALL DIMENSIONS TO BE
8. ALL DIMENSIONS TO BE
9. ALL DIMENSIONS TO BE
10. ALL DIMENSIONS TO BE
11. ALL DIMENSIONS TO BE
12. ALL DIMENSIONS TO BE
13. ALL DIMENSIONS TO BE
14. ALL DIMENSIONS TO BE
15. ALL DIMENSIONS TO BE
16. ALL DIMENSIONS TO BE
17. ALL DIMENSIONS TO BE
18. ALL DIMENSIONS TO BE
19. ALL DIMENSIONS TO BE
20. ALL DIMENSIONS TO BE
21. ALL DIMENSIONS TO BE
22. ALL DIMENSIONS TO BE
23. ALL DIMENSIONS TO BE
24. ALL DIMENSIONS TO BE
25. ALL DIMENSIONS TO BE
26. ALL DIMENSIONS TO BE
27. ALL DIMENSIONS TO BE
28. ALL DIMENSIONS TO BE
29. ALL DIMENSIONS TO BE
30. ALL DIMENSIONS TO BE
31. ALL DIMENSIONS TO BE
32. ALL DIMENSIONS TO BE
33. ALL DIMENSIONS TO BE
34. ALL DIMENSIONS TO BE
35. ALL DIMENSIONS TO BE
36. ALL DIMENSIONS TO BE
37. ALL DIMENSIONS TO BE
38. ALL DIMENSIONS TO BE
39. ALL DIMENSIONS TO BE
40. ALL DIMENSIONS TO BE
41. ALL DIMENSIONS TO BE
42. ALL DIMENSIONS TO BE
43. ALL DIMENSIONS TO BE
44. ALL DIMENSIONS TO BE
45. ALL DIMENSIONS TO BE
46. ALL DIMENSIONS TO BE
47. ALL DIMENSIONS TO BE
48. ALL DIMENSIONS TO BE
49. ALL DIMENSIONS TO BE
50. ALL DIMENSIONS TO BE
51. ALL DIMENSIONS TO BE
52. ALL DIMENSIONS TO BE
53. ALL DIMENSIONS TO BE
54. ALL DIMENSIONS TO BE
55. ALL DIMENSIONS TO BE
56. ALL DIMENSIONS TO BE
57. ALL DIMENSIONS TO BE
58. ALL DIMENSIONS TO BE
59. ALL DIMENSIONS TO BE
60. ALL DIMENSIONS TO BE
61. ALL DIMENSIONS TO BE
62. ALL DIMENSIONS TO BE
63. ALL DIMENSIONS TO BE
64. ALL DIMENSIONS TO BE
65. ALL DIMENSIONS TO BE
66. ALL DIMENSIONS TO BE
67. ALL DIMENSIONS TO BE
68. ALL DIMENSIONS TO BE
69. ALL DIMENSIONS TO BE
70. ALL DIMENSIONS TO BE
71. ALL DIMENSIONS TO BE
72. ALL DIMENSIONS TO BE
73. ALL DIMENSIONS TO BE
74. ALL DIMENSIONS TO BE
75. ALL DIMENSIONS TO BE
76. ALL DIMENSIONS TO BE
77. ALL DIMENSIONS TO BE
78. ALL DIMENSIONS TO BE
79. ALL DIMENSIONS TO BE
80. ALL DIMENSIONS TO BE
81. ALL DIMENSIONS TO BE
82. ALL DIMENSIONS TO BE
83. ALL DIMENSIONS TO BE
84. ALL DIMENSIONS TO BE
85. ALL DIMENSIONS TO BE
86. ALL DIMENSIONS TO BE
87. ALL DIMENSIONS TO BE
88. ALL DIMENSIONS TO BE
89. ALL DIMENSIONS TO BE
90. ALL DIMENSIONS TO BE
91. ALL DIMENSIONS TO BE
92. ALL DIMENSIONS TO BE
93. ALL DIMENSIONS TO BE
94. ALL DIMENSIONS TO BE
95. ALL DIMENSIONS TO BE
96. ALL DIMENSIONS TO BE
97. ALL DIMENSIONS TO BE
98. ALL DIMENSIONS TO BE
99. ALL DIMENSIONS TO BE
100. ALL DIMENSIONS TO BE

1373 209

DETAIL SEISMIC SUPPORT

3-26-78

