SIZE E

FROM DE 4306A 9F05026 D-1 — 1/2"WL1323WD7

HEATING ELEMENT 9F05026 G-1 — 1 1/2"WL1275WN7

HOT WATER SUPPLY HDR 9F05026 G-1 — 1 1/2"WL1253WD7

VAPOUR BODY 9F05026 F-1 — 16"WL1552XX7

TO FV4314 9F05026 D-1 — 1 1/2"WL1268WR7

TO FEED BYPASS 9F05026 B-2 — 1 1/2"WL1258WD7

RECIRC. LINE LOW POINT DRAIN 9F05026 C-2 — 2"WL1255WR7

RECIR. PUMP L.O. COOLER 9F05026 D-1 — WL1346 — 3/4"WL1624XC7

GAS STRIP/VENT COOL 9F05026 H-1 — 1 1/2"WL1279XC7

10"WL1308XC7

10"WL1308XC7 — 10"CC1445XC7 — CCWS RETURN 9F05020 C-1

WL0660 V — WL0659 D

FE 4594 CC

S — SI

1"VE1010XC9 — VENT HEADER 9F05036 E-8

1 1/2"WL1280XC7

CC0277 — 10"CC1438XC7 — CCWS SUPPLY 9F05020 F-1

GAS STRIPPER/VENT GAS COOLER 9F05026 H-1 — 1 1/2"WL1277XC7

WL0773

INSTRUMENT RACK 9F05026 H-1 — 1/2"SS — ZLR-100

XWL0436 — HEATING ELEMENT/COND. VENT GAS COOLER 7R301NHX105A

1"WL1314WN7 — 3"X1" — TI 4323 — 3"X2" — 3"WL1314WN7

3"X1 1/2" — TI 4323 A — 3"X1 1/2"

XWL0405 — XWL0404 — 1 1/2"WL1283XC7

10 EDITORIAL

1"X3/4" — XWL0375 — 3"X1" (TYP)

TW 4323 — 1"WL1282WG7

1" SCRD. CAP (FILL CONN.)

24" (MIN) LOOP SEAL (NOTE 10)

10 ECN 89-M-01258 89-M-01256

WL1380 — 1"WL1601XC7 — PSV HDR DRAIN 9F05026 E-5

XWL0383 — 1"WL1309XC7

MAB FLOOR DRAIN SUMP * 2 9F90013 H-5

3/4"WL1623XC7 — WL1345 — RECIRC. PUMP L.O. COOLER 9F05026 D-2

1"WL1268WG7

10"WL1509XC7

XWL0435 — 1 1/2"WL1281WD7 — 2"X1 1/2"

CS SS — XWL0434 — 10"X8" TYP. — XWL0403

WL0785 V

2"WL1281WD7 — XWL0431

1 1/2"WL1271WD7 — WL0783 V

1"WL1306WD7 — WL0796 V — XWL0418 — XWL0438 — 3/4"

TR 4335 ZLP 185 — PI 4317 — TE 4317 — XWL0456

ENTRAINMENT SEPARATOR 1A 7R301NEV102A — NOTE 5 (TYP) — SIGHT WINDOWS

XWL0419 — XWL0422 — XWL0423

16"WL1553XX7

3/4" XWL0454 — PDIT 4316 ZLR 100 — FI 4316 A ZLR 100 NOTE 4 — PDI 4316 ZLP 185

3/4" XWL0455 — FI 4316 ZLR 100 NOTE 4 — HI A ZLP 185

XWL0442 — XWL0443 — XWL0444 — WL0786 V — 1"WL1315WD7

2" XWL0370 — 3'-0" — 2" XWL0371 — XWL0420

XWL0414 — WL0364

1"WL1286WD7 — 2"WL1266WG7

TI 4336 ZLP 185 — TE 4336 B — 10" — 16"

2"WL1560XX7

DISTILLATE CONDENSER 7R301NHX103A

1"WL1561XX7

TE 4319 A — TI 4336 ZLP 185

1 1/2"WL1558XX7 — XWL0330 — 1 1/2"X3/4

DISTILLATE SUBCOOLER 7R301NHX104A

XWL0331 — 1"WL1565XX7 — XWL0336 — 1 1/2"X1"

TR 4335 ZLP 185 — TE 4319

FIC 4324 ZLP 185 — FY 4324 ZLR 100 I/P — FV 4324 — FIT 4324 — XWL0340 — XWL0341 — 1/2" — 1/2" — F.C. — FC 4324

2"WL1555XX7

1 1/2"WL1557XX7

3/4"WL1564XX7

1 1/2" XWL0333

DISTILLATE LEVEL POT 7R10INTS114A VOLUME: 20 GAL.

LG 4320 — LT 4320 — 1 1/2" XWL0334 — TE 4320 — TI 4336 ZLP 185

LSHL 4320 — LIC 4320 — LO A ZLP 185 — HI A ZLP 185

2"X3/4" XWL0337

XWL0332 — 1 1/2"WL1563XX7

3/4" XWL0338 — 1/2" XWL0339 — PI 4322

2"WL1556XX7 — 1 1/2"X1" — DISTILLATE PUMP 7R301NPA112A 35 GPM

1" XWL1201

DISTILLATE CONDENSER AND SUBCOOLER SKID BOUNDARY

VENDOR BECHTEL

1"WL1268WG7

WLED

FR 4321 ZLP 185 — FIT 4321 — XWL0342 — XWL0343 — FE 4321

CE 4321 — CIS 4321 ZLP 185 — XWL1340

HI A ZLP 185

TE 4321 — TR 4335 ZLP 185 — 35 — HI A ZLP 185

FY 4320 — S — I

LV 4320 — 1"X1 1/2" TYP — 1 1/2"WL1039WG7

WL0680 V — DISTILLATE OUT 9F05023 C-8 — 1"WL1278WD7

WL1187 — PROCESS SAMPLING SYSTEM 9Z00049 F-8

WL PS

LV 4320 A — FC — 1 1/2"X1" TYP — 1 1/2"WL1559XX7 — 1 1/2"X1" — 1 1/2"

REFERENCES

1. FOR PIPING & INSTRUMENT SYMBOLS SEE DRAWINGS 9A310F00001 & 9A310F00002.
2. LWPS P&ID NO. 5R309F05022.
3. LWPS P&ID NO. 7R309F05023.
4. LWPS P&ID NO. 7R309F05024.
5. LWPS P&ID NO. 7R309F05026.
6. LWPS P&ID NO. 7R309F90000.
7. LWPS P&ID NO. 7R309F90001.
8. LWPS P&ID NO. 7R309F90017.
9. LWPS P&ID NO. 7R309F9001B.
10. LWPS P&ID NO. 7R309F90021.
11. LWPS P&ID NO. 7R309F90022.
12. LWPS P&ID NO. 5R309F05027.
13. HOURLY PROCESS FLOWSHEET 4021-01131-HP.

NOTES

1. THIS DRAWING IS APPLICABLE TO UNITS 1 & 2, EXCEPT AS NOTED.
2. THIS DRAWING IS SHT 9 OF 12 OF THE LWPS SET. SEE REFERENCES 2 THROUGH 12 FOR OTHER LWPS P&ID SET DRAWINGS.
3. THE EQUIPMENT SHOWN ON THIS P&ID WAS ORIGINALLY SHOWN ON P&ID 9F05026 REV. 1.
4. DEMINERALISED WATER SUPPLY FROM ZLR100 FOR PURGE.
5. HORTON PROCESSING DESIGN INC. SCOPE OF SUPPLY COMPONENTS DESIGNATED WITH ⓈSYMBOLS.
6. ALL INSTRUMENTS SHOWN ON THIS DIAGRAM ARE PREFIXED BY THE UNIT NO 1 UNLESS OTHERWISE NOTED. SEE GENERAL NOTE D ON 9A310F00002.
7. ALL INSTRUMENTS ON THIS P&ID HAVE SYSTEM DESIGNATOR UNLESS OTHERWISE NOTED.
8. ALL INSTRUMENTS ON THIS P&ID HAVE SEPARATION GROUP N.
9. THE LIQUID WASTE PROCESSING SYSTEM (LWPS) OF UNIT 1 IS IDENTICAL TO THE LWPS OF UNIT 2. THE COMPONENTS OF UNIT 2 ARE IDENTICAL TO THOSE OF UNIT 1, EXCEPT THAT TPNS NUMBERS WILL BE FOR UNIT 2.
10. 24" MIN LOOP SEAL REQUIRED. SEE REFERENCE NO 13 FOR GAS COOLER DRAIN PRESSURE.

10 ECN 89-M-01258 89-M-01256

NO.	ISSUE DATE	HL&P REVISION	BY	CKR	RE	DV	NA	SE	PE
10		INCORP. ECN 89-M-01258, 89-M-01256,& EDITORIAL (DRAFTING ERROR)	NF						
9	10-6-88	HL&P ASSUMES DESIGN CHANGE CONTROL	SIGNATURES ON FILE						
		INCORP. HFCR SM00583 AND DCN MD00825							
0-8	4/26/84	ISSUED FOR CONSTRUCTION	SIGNATURES ON FILE						

HOUSTON LIGHTING & POWER COMPANY
SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

PIPING & INSTRUMENTATION DIAGRAM
LIQUID WASTE PROCESSING SYSTEM
WASTE EVAPORATOR PACKAGE

SCALE	DRAWING NO.	REV.
NONE	7R309F90020 #1	10

D310

LR BOUNDARY DRAWING NO.	REV.
LR-STP-WL-7R309F90020#1	0A

NMF — D070928 — FJA180.104