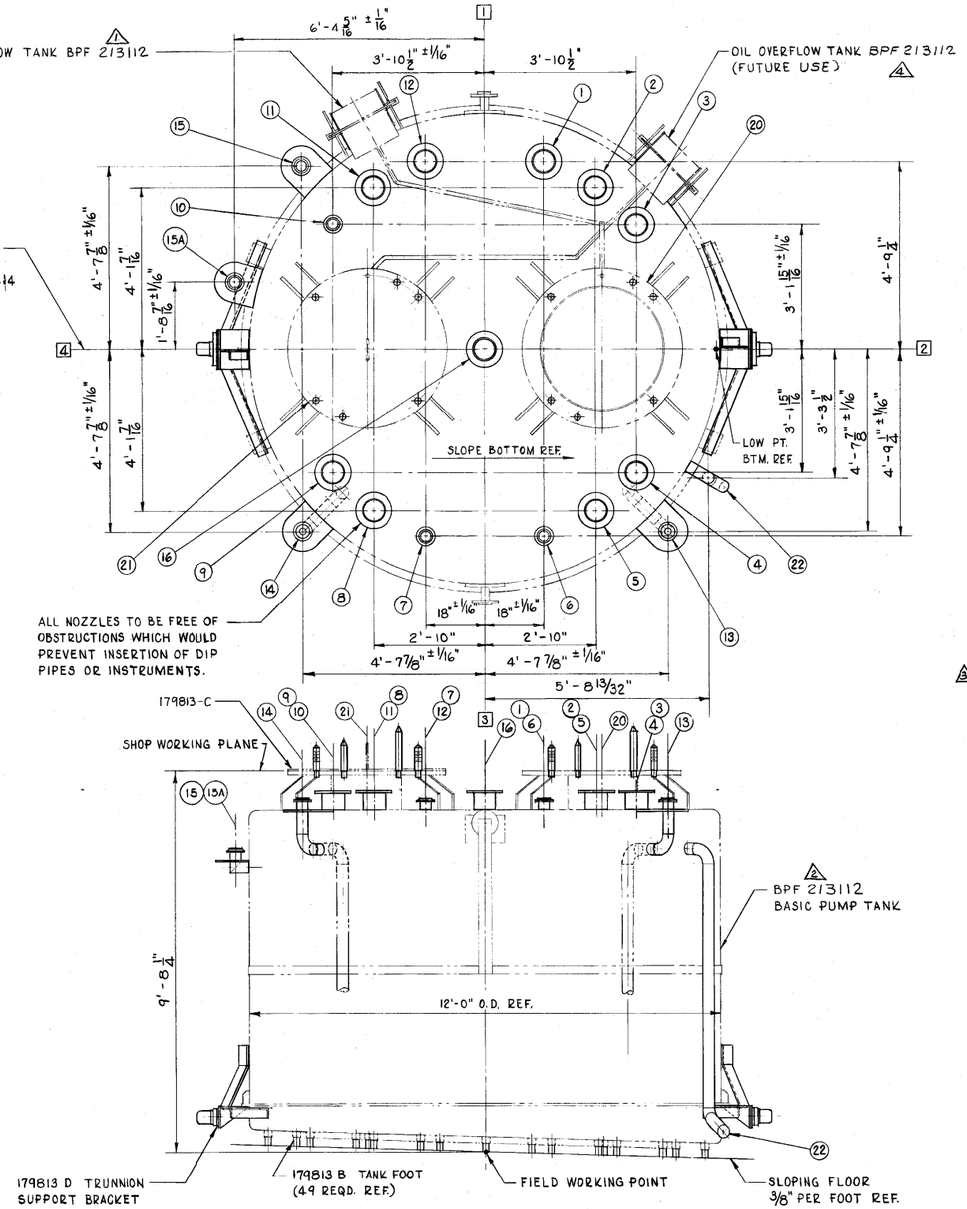
ORIGINAL DRAWING MADE ON DU PONT POLYESTER FILM



FINISHED PUMP TANK
179667A

NOZZLE SCHEDULE

NUMBER MARK	SIZE	SCH.	FLANGE TYPE	PURPOSE
1	6"	40S	PLATE	PROCESS INLET
2	6"		PLATE	SUMP JET TRANS/SP
3	6"		PLATE	TRANSFER JET
4	6"		PLATE	STEAM SUMP JET
5	6"		PLATE	SPARE
6	3"		REMOTE	LIQUID LEVEL
7	3"		REMOTE	LIQUID LEVEL
8	6"		PLATE	TANK FILL
9	6"		PLATE	TANK TEMP
10	3"		REMOTE	TANK VENT
11	6"		PLATE	PROCESS INLET
12	6"		PLATE	DEMISTER COND/SP
13	2"		REMOTE	COOLING WATER IN
14	2"		REMOTE	COOLING WATER OUT
15	3"		REMOTE	PROCESS INLET
15A	3"		REMOTE	PROCESS INLET
16	6"	40S	PLATE	SPARE
20	38"	3/8"℞	PLATE	PUMP
21	38"	3/8"℞	PLATE	AGITATOR FUTURE*
22	3"	40S	3"-8NPT	OVER FLOW

NOZZLE FABRICATION DETAILS PER DRAWING D179812
2" REMOTE TYPE FLANGES PER DETAIL 138620-E (REF.)
3" REMOTE TYPE FLANGES PER DETAIL 138620-F (REF.)
6" PLATE FLANGES (UNDRILLED) PER DETAIL 179812-A
38" PLATE FLANGES PER DETAIL 179812-F
3" OVERFLOW PER DETAIL 179813 A
* WITH COVER PLATE 179813 C

FABRICATION OF FINISHED PUMP TANK FROM BASIC PUMP TANK

3 TAKE BASIC PUMP TANK BPF 213112 AND PROCEDE AS FOLLOWS:-
A. INSTALL ALL TANK FEET AND THEN MACHINE OR GRIND PER 179813 B.
B. INSTALL ALL NOZZLES LISTED IN NOZZLE SCHEDULE EXCEPT 20 & 21 (ALREADY IN PLACE).
C. DRILL AND INSTALL DOWELS AND STUDS IN NOZZLES 20 & 21 PER 179812 F.
D. DRILL COVER PLATE PER 179813 C.
E INSTALL TRUNNION SUPPORT BRACKET PER 179813 D.
F. BALANCE TANK TO UPRIGHT POSITION BY LIFTING FROM FLOOR AND ADDING WEIGHTS AS REQD. BALANCING WEIGHTS MAY BE IN THE FORM OF SCRAP METAL WELDED TO THE GUIDE TRUNNION SUPPORT RING.
G. RETEST VESSEL AND COIL PER TEST REQUIREMENTS THIS DRAWING.

USE THIS DRAWING WITH
D179812 FINISHED PUMP TANK DETAILS SH. #1
D179813 FINISHED PUMP TANK DETAILS SH. #2

RMD REVIEWED AT REV. 7 DATE 8/14/85

ANALYZE FOR SAFETY, ECOLOGY, AND MINIMUM ESSENTIAL DESIGN

DESIGN AND FABRICATION	1977 ASME SEC VIII DIV.1 & DU PONT SPEC SG25
DESIGN PRESSURE	SEE NOTE 1
DESIGN TEMPERATURE	SEE NOTE 1
CORROSION ALLOWANCE	NONE
MATERIAL: CORROSION EVALUATED	304L S/S PER SPEC 4498
SHELL	SA240-304L (REF.)
HEADS	SA240-304L (REF.)
NOZZLE NECKS SEAMLESS	SA312-TP304L
MANHOLE NECK	–
REINFORCING PADS	
NOZZLE PLUS MANHOLE FLANGES	SA240-304L & PER DETAILS
SHELL AND HEAD FLANGES	
BOLTS	PER DETAIL CALL OUT
NUTS	PER DETAIL CALL OUT
GASKETS	
JACKET CLOSURE RINGS	
LIFTING LUGS & SUPPORTS	SA240 & SA479-304L (REF.)
PIPE COIL SEAMLESS	SA312-TP 304L
TYPE OF HEAD	FLANGED ONLY (REF.)
WELDING USE 308L WELD ROD ONLY	UW-47
FLANGE FACE FINISH	125 AA & PER DETAILS
RADIOGRAPHIC EXAMINATION	FULL UW-51
HEAT TREATMENT	NONE
TEST PROCEDURE	UG-99
FINAL TEST PRESSURE	SEE NOTE 2
TEST PRESSURE BASED ON	SEE NOTE 2
WEIGHT EMPTY WITH COIL	14000 LBS.
WEIGHT FULL OF WATER	74000 LBS.
OPERATING WEIGHT	-
CAPACITY – GALLONS	7200
SURFACE – SQUARE FEET	-
PAINTING	-
INSPECTION	BY DU PONT
STAMPING	NOT REQD.

ALL MANHOLE AND NOZZLE OPENINGS SHALL MEET THE REQUIREMENTS FOR REINFORCEMENT OF OPENINGS PER THE ASME CODE FOR UNFIRED PRESSURE VESSELS

MANHOLES AND NOZZLES SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
MANHOLES ____ NOZZLES AS DETAILED

UNLESS OTHERWISE NOTED:
ALL BOTTOM NOZZLES SHALL BE FLUSH WITH INSIDE OF VESSEL. OTHER NOZZLES SHALL HAVE MINIMUM PROJECTION

BOLT HOLES SHALL STRADDLE NORMAL VESSEL CENTERLINES

GASKETS, BOLTS, AND NUTS FOR SHELL, HEAD, MANHOLE AND BLIND FLANGES SHALL BE FURNISHED BY THE FABRICATOR.

REUSE OF THIS DRAWING IS LIMITED TO THE EXACT DUPLICATION OF THE ORIGINAL VESSEL.

NOTE:

PV 179667 LAST 7 REV.

1. DESIGN DATA
VESSEL - ATMOS. & 10 INCHES OF WATER VACUUM AT 257°F
COIL - 165 PSIG AT 373°F
2. TEST
4 VESSEL - *FILL WITH LIQUID TO TOP OF NOZZLES 6,7, & 10 AND HOLD FOR* 4 HOURS WITHOUT LEAKING. BOTTOM TO BE SUPPORTED ON ALL FOOTINGS DURING TEST
COIL - (A) 261 PSIG HYDRO BASED ON 1.5 × DESIGN PRES. (165 PSIG) × STRESS RATIO.
5
3. ALL CUT AND SHEARED SURFACES ON INSIDE OF PUMP TANK TO HAVE 1/8" MIN. WELD OVERLAY OR FUSE SURFACE TO A MIN. DEPTH OF 1/8"

THIS DOCUMENT CONTAINS INFORMATION RELATING TO ACTIVITIES OF THE U.S. DEPARTMENT OF ENERGY. NOT TO BE REPRODUCED OR RELEASED WITHOUT PRIOR APPROVAL.

DA	M/F	TYPE		LAST
Y520 Y521	M/F	27	PV 179667	7 REV.

SAVANNAH RIVER PLANT
BLDG 241H 200H AREA
WASTE STORAGE FACILITY
FINISHED PUMP TANK ASSEMBLY
PROCESS EP Y520-1-1 & 521-1-1

PROJ	NO.	REVISION	RVSD	CHKD	APPD	DATE
951965	1-4	ADDED BPF NO. 213112	[illegible]	[illegible]	Allport	11-26-80
951965	5	NOZ #6 PURPOSE WAS SPARE	[illegible]	[illegible]	Allport	12-9-80
951965	6	WAS 2.2 PSIG HYDRO TEST	[illegible]	[illegible]	[illegible]	[illegible]
951965	7	DELETED HALIDE LEAK TEST	[illegible]	[illegible]	Allport	1-8-81

STANDARDS: SG25, SPEC 4498

B.P.F. NO.

ENGINEERING DOC. CONTROL – SRS 00040189

THIS DRAWING HAS BEEN FURNISHED BY E. I. DU PONT DE NEMOURS & CO. THE INFORMATION AND KNOW–HOW THEREON MAY NOT BE USED NOR THE DRAWING REPRODUCED WITHOUT THE WRITTEN PERMISSION OF DU PONT. ALL REPRODUCTIONS IN WHOLE OR IN PART, INCLUDING VENDOR'S SHOP DRAWINGS, SHALL BEAR OR REFER TO THIS STAMP.

		DATE
PROJECT 951965		
SCALE 3/4" = 1'-0"		
DRAWN	S. RAYNES	3-8-80
CHECKED	B.P. Schmitt	4-18-80
APPROVED-I.C.R.		
APPROVED-FINAL	Allport	8-22-80

E. I. DU PONT DE NEMOURS & CO., INC.
WILMINGTON, DELAWARE
ENGINEERING DEPARTMENT
PV 179667