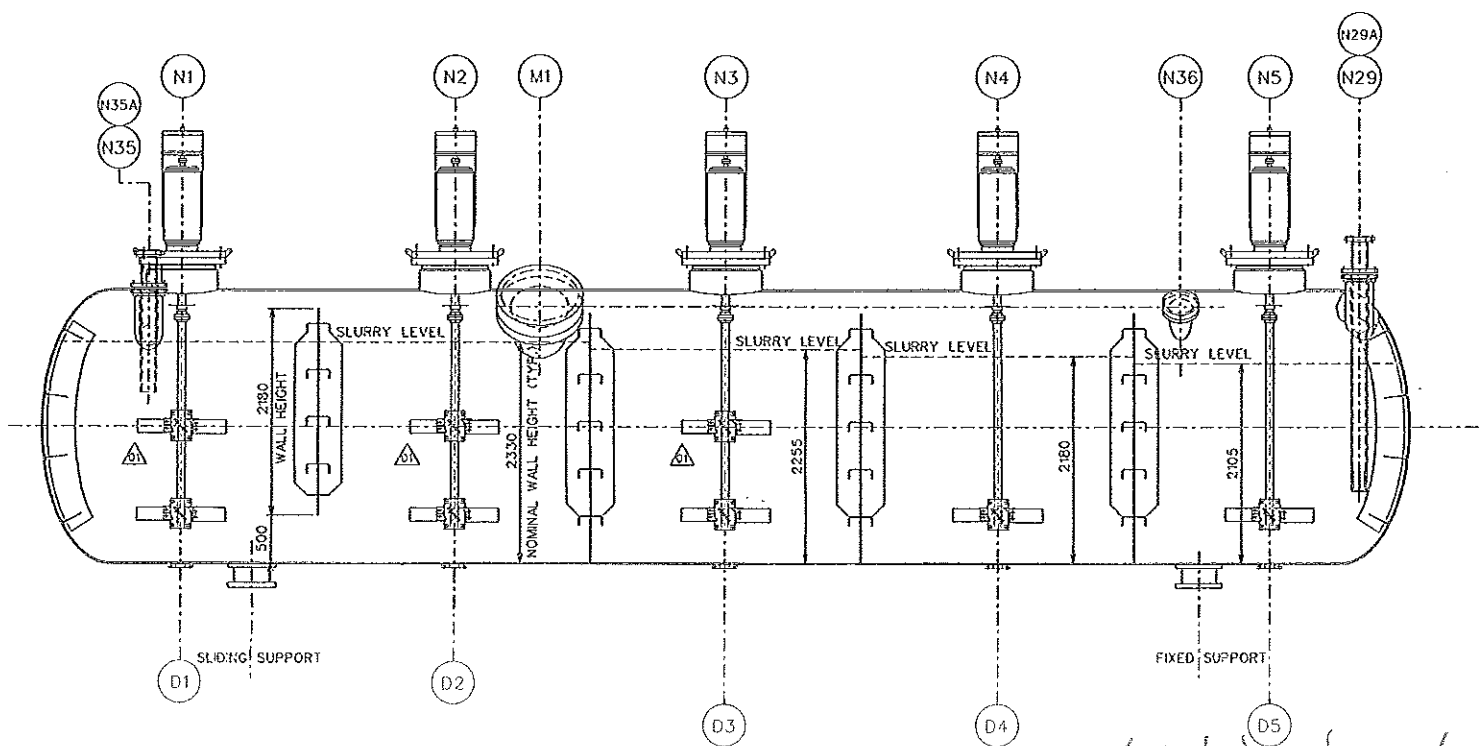


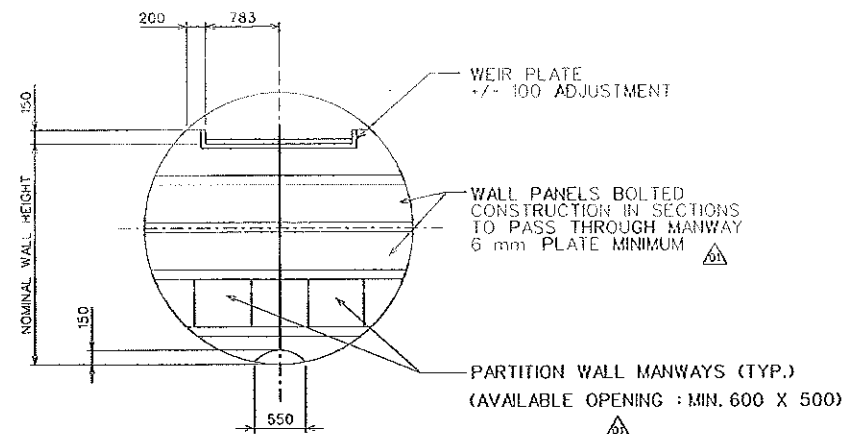
N31 TO N34 DELETED

PLAN VIEW

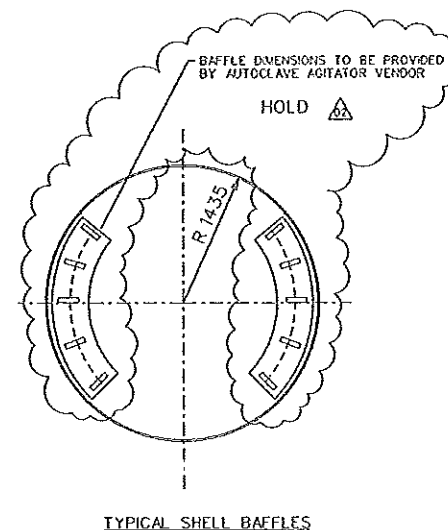


ELEVATION VIEW

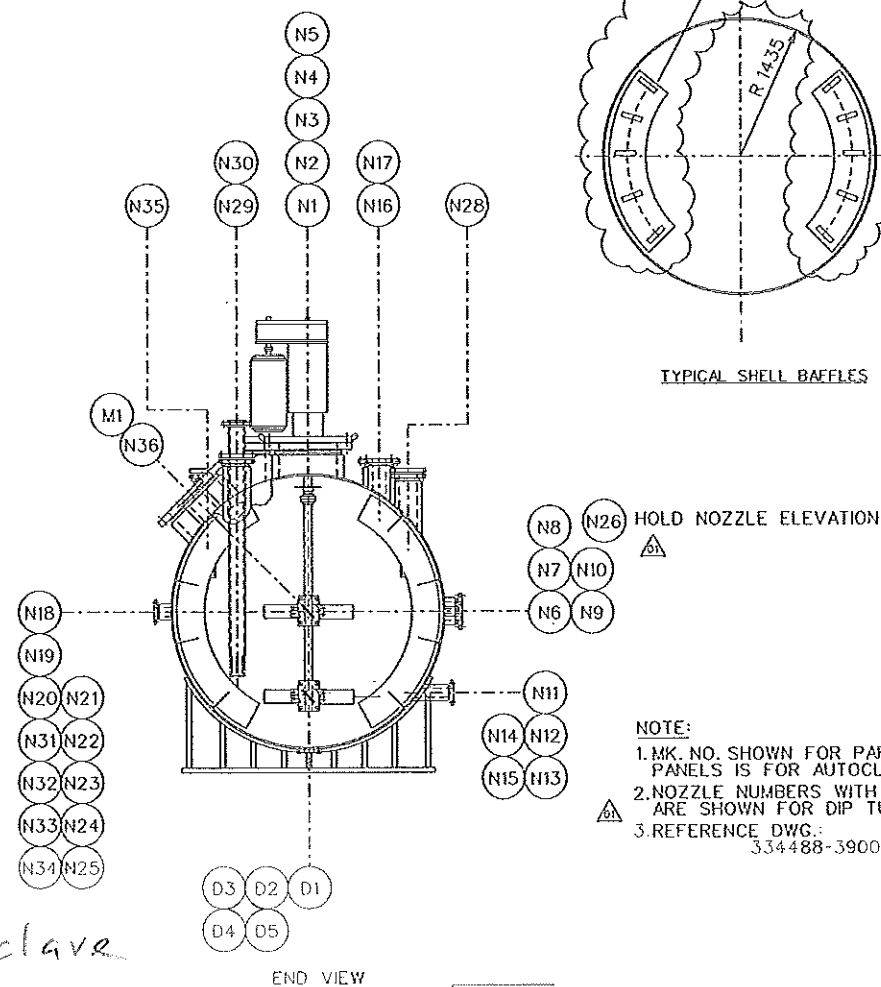
Sulphide Leach Autoclave
Internal Arrangement



DETAIL 1 - PARTITION WALL DETAILS
Mk. 39-AU-01-PANEL-01/02/03/04

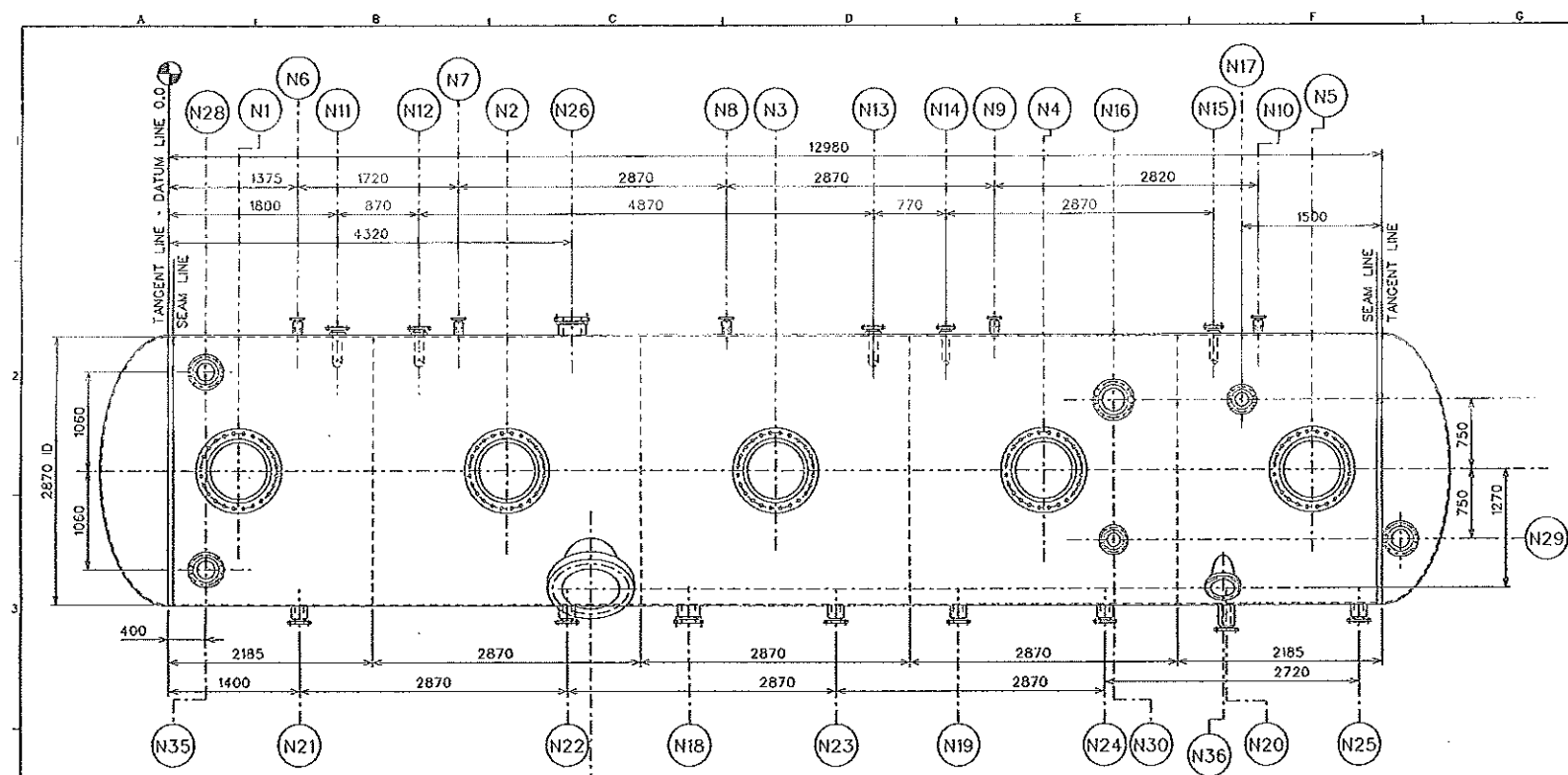


TYPICAL SHELL BAFFLES

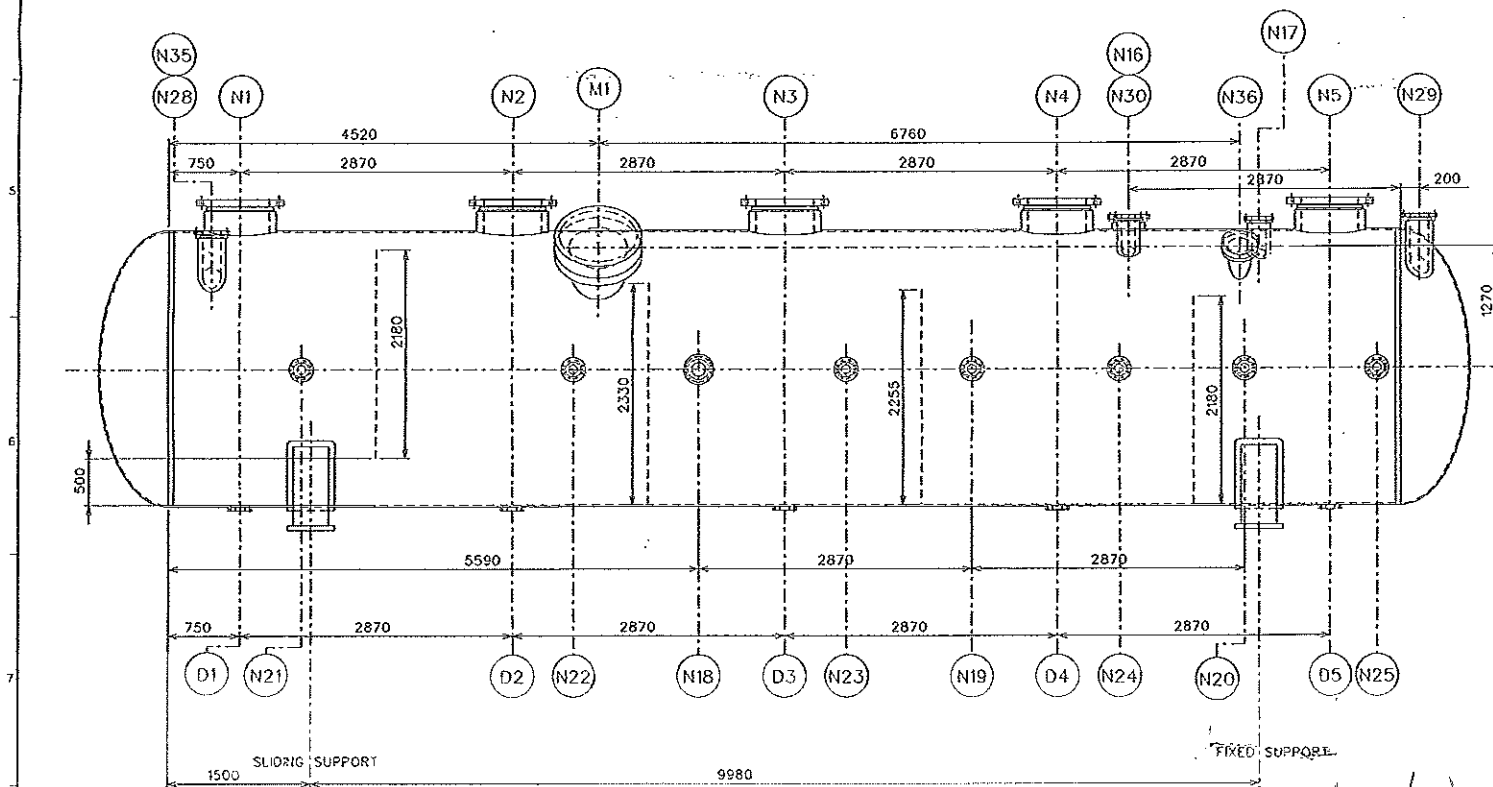


END VIEW

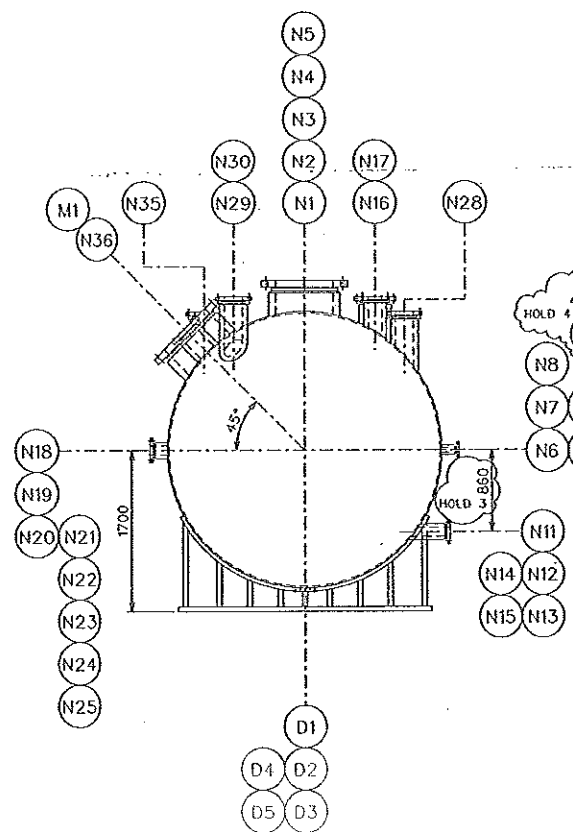
- NOTE:
1. MK. NO. SHOWN FOR PARTITION WALL PANELS IS FOR AUTOCLAVE 39-AU-01
 2. NOZZLE NUMBERS WITH SUFFIX "A" ARE SHOWN FOR DIP TUBES
 3. REFERENCE DWG.: 334488-3900-4504-0001-2



PLAN VIEW



ELEVATION VIEW



END VIEW

Sulphide Leach Autoclave

VESSEL INTERNAL DESIGN CONDITIONS		1500 MPa @ 150 °C
VESSEL OPERATING CONDITIONS		1500 MPa @ 155 °C
AGITATOR	STATIC HT	52.17
ISSEE NOTE 01	WAVE TOPSIDE	15.175 m
WEIGHT OF ENTIRE AGITATOR ASSEMBLY: 5500 KG		
CODES: ASME BOILER & PRESSURE VESSEL CODE SECTION VIII DIV 1		
STRESS RELIEF PER CODE		
RADIATION: 100%		
JOINT EFFICIENCY:		HEAD: 1.0 SHELL: 1.0 CORROSION ALLOWANCE: 2 mm EXTERNAL
STRUCTURAL LOAD: 1.2 BY VENDOR (SEE NOTE 1)		
SEISMIC DESIGN SEISMIC COEFFICIENT		0.0045
WIND LOAD: 274 kN/m		

NOZZLE SCHEDULE									
MARK	QTY	NPS	CM	HOLD	RATING	PROJECTION FROM CENTERLINE	SERVICE		
N1-N5	5	24	600	210	CL300 RF TYPE H	1750	AGITATOR		
N6-N10	5	2	50	49	CL300 RF TYPE H	1640	THERMOWELL		
N11-N15	5	4	100	97	CL300 RF TYPE H	1540	OXYGEN		
N16-N20	5	3	80	74	CL300 RF TYPE H	1540	OXYGEN DP TUBE		
N21-N25	5	2	50	49	CL300 RF TYPE H	1540	OXYGEN DP TUBE		
N26	1	30	250	243	CL300 RF TYPE H	1675	VENT		
N27	1	6	150	145	CL300 RF TYPE H	1575	VENT DP TUBE		
N28	1	6	150	145	CL300 RF TYPE H	1575	VENT DP TUBE		
N29	1	6	150	145	CL300 RF TYPE H	1540	OXYGEN		
N30	1	6	150	145	CL300 RF TYPE H	1540	OXYGEN DP TUBE		
N31-N35	5	4	100	97	CL300 RF TYPE H	1540	OXYGEN DP TUBE		
N36	1	8	200	194	CL300 RF TYPE H	1540	STEAM		
N37	1	8	200	194	CL300 RF TYPE H	1540	FLASH SLURRY RECYCLE DISCHARGE		
N38	1	8	200	194	CL300 RF TYPE H	1540	FL. SLUR. RECY. DISCHARGE DP TUBE		
N39	1	8	200	194	CL300 RF TYPE H	1540	SLURRY FEED DP TUBE		
N40	1	8	200	194	CL300 RF TYPE H	1575	SLURRY DISCHARGE		
N41	1	8	200	194	CL300 RF TYPE H	1575	SLURRY DISCHARGE DP TUBE		
N42	1	6	150	145	CL300 RF TYPE H	1575	SAFETY RELIEF		
N43-N44	2	1	1	1	CL300 RF TYPE H	1575	DELETED		
N45	1	8	200	194	CL300 RF TYPE H	1540	FLASH SLURRY RECYCLE KLET		
N46	1	8	200	194	CL300 RF TYPE H	1540	FL. SLUR. RECY. KLET DP TUBE		
N47	1	8	200	194	CL300 RF TYPE H	1545	VENTILATION FOR MAINTENANCE		
N48	1	24	600	610	CL300 RF TYPE H	1270	UNWAT		

REFERENCE: TECHNICAL SPECIFICATION 334488-3200-4563-0001-2
ALL DIMENSIONS ARE IN mm UNLESS NOTED OTHERWISE

NOTES:
1. VESSEL HEAD MATERIALS: ASME SA-240-3000-150
2. FLANGE MATERIALS: ASME SA-240-3000-150
3. EXTERNAL BOLTS: PROCESS NOZZLES AND BOLTS - (SEE NOTE 4)
4. EXTERNAL BOLTS: PROCESS NOZZLES - ASME SA-240-3000-150
5. INTERNAL BOLTS: ZERON 100
6. CASING: 3 mm SPIRAL WOUND ZERON 100 ROVER RING/CLAMP, FILLER/180 SS OUTER RING
7. WELD CONSIDERED: REFER TO TECHNICAL SPECIFICATION 334488-3200-4563-0001-2
8. PARTITION WALLS AND Baffles: 6 mm 304L THICK ZERON 100
9. STD BOLTS AS PER ASME B31.3 CLASS 2B HEAVY HEX
10. NUTS AS PER ASME B31.3 CLASS 2B HEAVY HEX
11. NUTS COATED STUDS FOR STEEL'S OUTLETS

NOTES:
1. IN ADDITION TO THE WEIGHT OF THE AGITATOR, DESIGN THE AUTOCALVE TO ACCOMMODATE THE FULL SLURRY WEIGHT LOAD AND SCALE LOAD BY THE FACE ZONE BASED ON 100 TON SCALE WITH 2.52 SG
2. NOZZLE QUANTITIES SHOWN ARE FOR ONE AUTOCALVE
3. NOZZLE PROJECTIONS ARE TO BASKET SEATING FACE
4. VENDOR TO CONFIRM NOZZLE RATING
5. VESSEL TO HAVE 24 ELONGATIONAL HEADS
6. ALL FLANGES TO BE ROUNDED FACE
7. ESTIMATED FABRICATION WEIGHT BY VENDOR
8. 75 mm THICK FIBERGLASS INSULATION (BY OTHERS), VESSEL VENDOR TO PROVIDE INSULATION SUPPORT RINGS
9. UNLID - 100mm EDGE OF UNLID NOZZLE
10. VENDOR TO DESIGN SADDLES
11. ALL NOZZLE HEADS WITH SUTHER "A" ARE DP TUBES & QUANTITIES SHOWN ARE FOR ONE AUTOCALVE
12. MAXIMUM FROSTED PLATE THICKNESSES ARE LISTED AS FOLLOWS:
SHELL - 50 mm SA-240-3000-150
HEAD - 50 mm SA-240-3000-150
BOLTS - 5 mm ZERON 100
13. VESSEL AGITATOR NOZZLE SUCH THAT DYNAMIC ANGULAR DEFLECTION OF THE DRIVE IS LIMITED TO 0.25°
14. PROVIDE STUDS FOR AGITATOR ASSEMBLY BASE FLANGE. REFER DWG. 334488-3200-4563-0001-2

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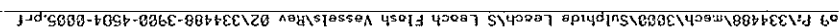
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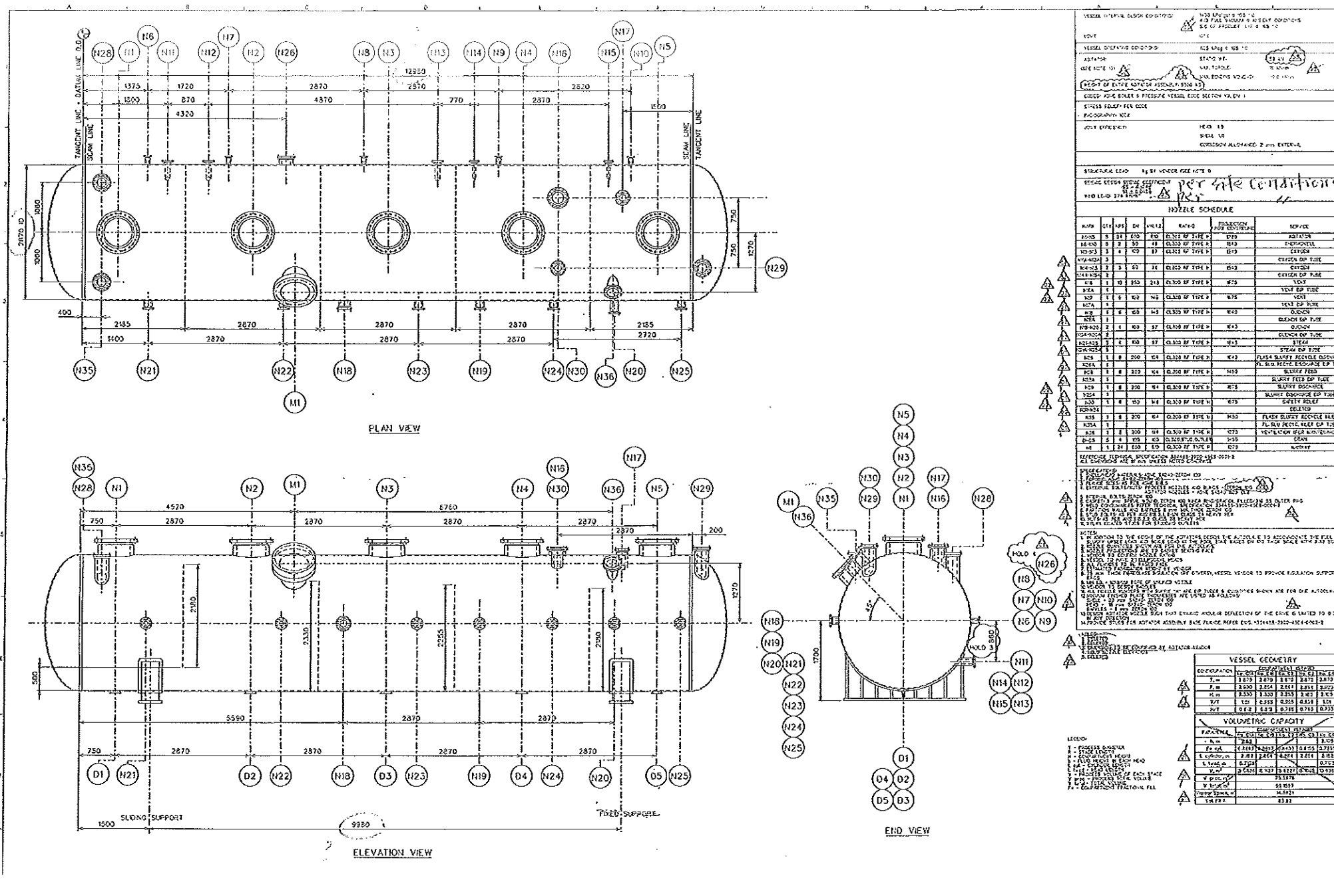
29. HAZOP

30. HAZOP

VESSEL GEOMETRY									
CONFIGURATION	COMPARTMENT (L) (G)								
	NO. C1A	NO. C1B	NO. C1C	NO. C1D	NO. C1E	NO. C1F	NO. C1G	NO. C1H	NO. C1I
T, m	2.870	2.870	2.870	2.870	2.870	2.870	2.870	2.870	2.870
R, m	2.900	2.864	2.864	2.864	2.864	2.864	2.864	2.864	2.864
V, m	2.950	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850
R/r	1.01	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959
H/T	0.812	0.812	0.785	0.785	0.785	0.785	0.785	0.785	0.785

PARAMETER	COMPARTMENT (L) (G)								
	NO. C1A	NO. C1B	NO. C1C	NO. C1D	NO. C1E	NO. C1F	NO. C1G	NO. C1H	NO. C1I
n, m	2.93								2.956
V, m	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
L, m	2.93	2.864	2.864	2.864	2.864	2.864	2.864	2.864	2.864
t, m	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
V, m	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
V, m	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
V, m	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
V, m	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
V, m	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
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Sulphide Leach Auto. 10/02

Tag No H431-AU-001/002

Dwg No 0667-001-H000-45D4-00002

Rev A