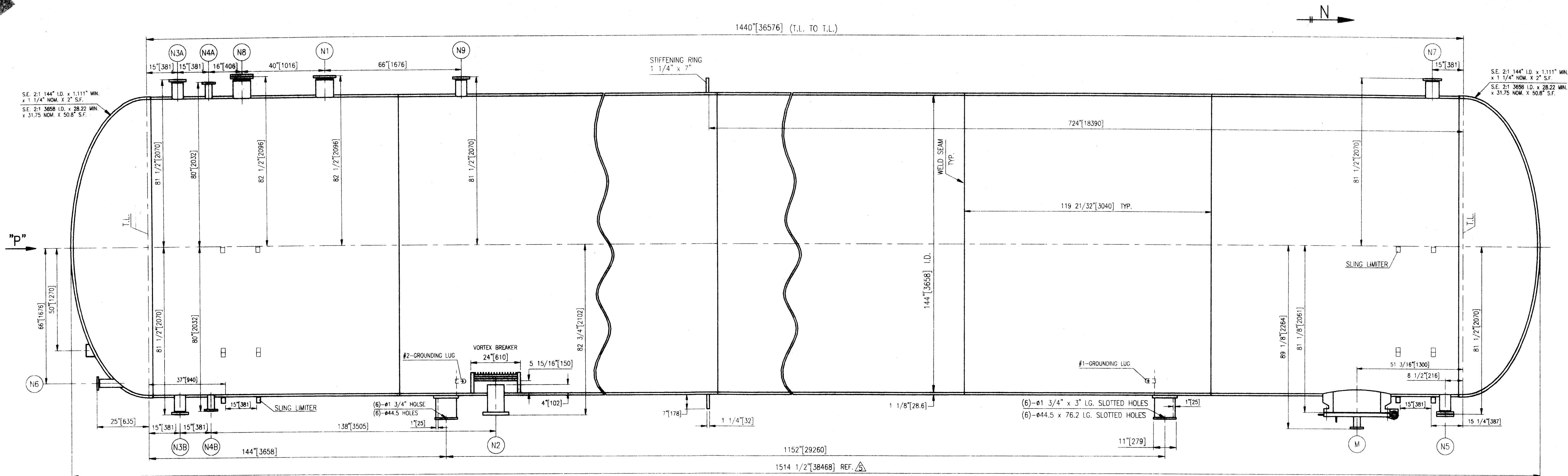




NOZZLE SCHEDULE

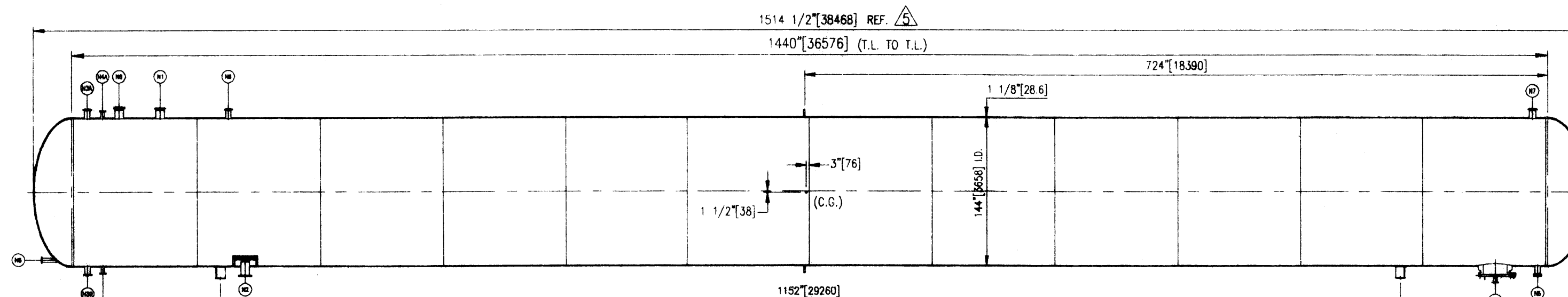
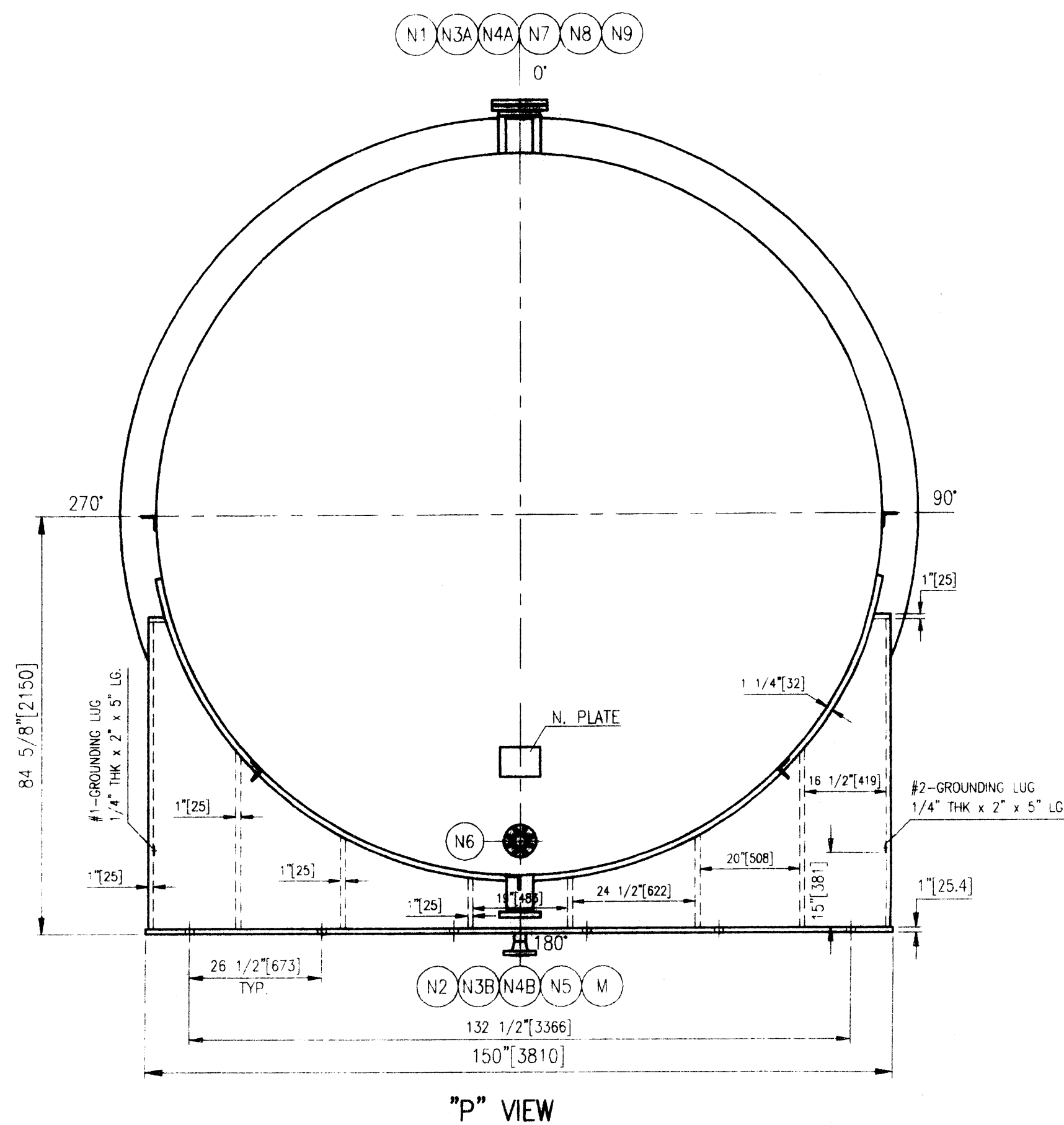
MARK	QUAN	SIZE	RATING	TYPE	I.D.	SCH/THK.	STRAIGHT WALL PROJECTION	THINDEST SECTION	REMARKS
N1	1	6"	150#	INTEGRAL	5.761"	1.3695"	7.303"	1.057"	INLET
N2	1	6"	300#	RFLWNF	6"	1.0625"	8.188"	1.0625"	LIQUID OUTLET
N3A, N3B	2	3"	300#	INTEGRAL	2.9"	1.2375"	6.758"	1.05"	LEVEL CONTROL
N4A, N4B	2	2"	300#	RFLWNF	2"	0.6563"	6.00"	0.6563"	LEVEL INDICATION/TRIP
N5	1	3"	300#	INTEGRAL	2.9"	1.2375"	6.758"	1.05"	PURGE C/W BLIND
N6	1	2"	300#	INTEGRAL	1.938"	1.00"	5.477"	0.812"	THERMOWELL
N7	1	4"	150#	INTEGRAL	3.828"	1.305"	6.945"	1.117"	RELIEF
N8	1	6"	150#	INTEGRAL	5.761"	1.3695"	7.303"	1.057"	VENT C/W BLIND
N9	1	3"	300#	INTEGRAL	2.9"	1.2375"	6.758"	1.05"	PRESSURE VENT TO FLARE
M	1	24"	150#	INTEGRAL	23"	5"	3.037"	1.937"	MANWAY C/W BLIND WITH HINGE & 2"-300# RFLWNF

CODE: ASME SECT VIII DIV 1 1995 & A96
PARA: UW12(a)

DESIGN PRESSURE: 250 & -9 PSIG/1724 & -62 kPag
DESIGN TEMPERATURE: 149° F/65° C
MIN DESIGN METAL TEMP: -16.6° F/-27° C
AT PRESSURE: 250 & -9 PSIG/1724 & -62 kPag
HYDRO TEST PRESSURE: 375 PSIG/2586 kPag
CORROSION ALLOWANCE: 0.063"/1.6 MM
RADIOGRAPHY: FULL

MATERIAL:
SHELL: SA516-70N
HEADS: SA516-70N
FLANGES: SA105N, SA350-LF2, SA516-70N
NOZZLES: SA105N, SA350-LF2
SADDLE: SA516-70
GASKET: 316 S.S. SPIRAL WOUND GRAFOIL FILLED
STUDS & NUTS: SA193-B7, TEFLON COATED, SA194-2H TEFLON COATED
INTERNAL: SA516-70N

WEIGHT EMPTY: 240000 LB
SERIAL NO.: 98CA9735A
REGISTRATION BY: PROVINCE OF NOVA SCOTIA
INSPECTION BY: TSSA ONTARIO, PATTERSON INDUSTRIES
FINISH:
INTERNAL: PLATES WITH MILL FINISH,
WELDS WITH FLUX AND SPATTER REMOVED.
EXTERNAL: PLATES WITH MILL FINISH,
WELDS WITH FLUX AND SPATTER REMOVED.



SCALE: 1"=100"

D2005 DEPROPANIZER FEED DRUM	
CERTIFIED BY PATTERSON INDUSTRIES (CANADA) LIMITED	
MAX ALLOWABLE W.P.	250 & -9 PSIG
AT TEMP.	149° F
MIN DESIGN METAL TEMP	-16.6° F
AT PRESSURE	250 & -9 PSIG
SERIAL NO.	98CA9735A
YEAR BUILT	1998
C.R.N.	9093.8
O.I.N.	-
PATTERSON INDUSTRIES (CANADA) LIMITED SCARBOROUGH (TORONTO) ONTARIO, CANADA MADE IN CANADA	

D2005 DEPROPANIZER FEED DRUM	
CERTIFIED BY PATTERSON INDUSTRIES (CANADA) LIMITED	
MAX ALLOWABLE W.P.	1724 & -62 kPag
AT TEMP.	65° C
MIN DESIGN METAL TEMP	-27° C
AT PRESSURE	1724 & -62 kPag
SERIAL NO.	98CA9735A
YEAR BUILT	1998
C.R.N.	9093.8
O.I.N.	-
PATTERSON INDUSTRIES (CANADA) LIMITED SCARBOROUGH (TORONTO) ONTARIO, CANADA MADE IN CANADA	

SURF. PREP. & PAINTING:
PER SPEC. XA-A00-Y-15-0005 TABLE 1

- DESIGN LIQUID LEVEL: FULL
- LIQUID S.G. (DESIGN): 0.666
- PWHT: NO
- IMPACT TESTING: NOT REQUIRED PER UCS-66
- INSULATION: NO

NOTE: 1) HYDROSTATIC TEST PRESSURE TO BE HELD FOR ONE HOUR.
2) ALL WELDS TO BE FULL PENETRATION.

REV. 1	CUSTOMER'S CHANGES	M.L.	MAR 24/98
REV. 2	CUSTOMER'S CHANGES	M.L.	MAY 25/98
REV. 3	C.G. ADDED	M.L.	JUN 11/98
REV. 4	CUSTOMER'S CHANGES	M.L.	JUN 18/98
REV. 5	AS MARKED	M.L.	NOV 13/98

THIS DRAWING AND ALL INFORMATION THEREON IS THE PROPERTY OF PATTERSON INDUSTRIES (CANADA) LIMITED AND IS SUBMITTED CONFIDENTIALLY. SUBJECT TO RETURN UPON DEMAND. THE USE OR DUPLICATION WITHOUT EXPLICIT AUTHORIZATION IS EXPRESSLY FORBIDDEN.

ALL ITEMS AND LABOUR NOT SPECIFICALLY COVERED IN DETAIL BY FORMAL PROPOSAL IN WRITING MUST BE FURNISHED BY OTHERS.

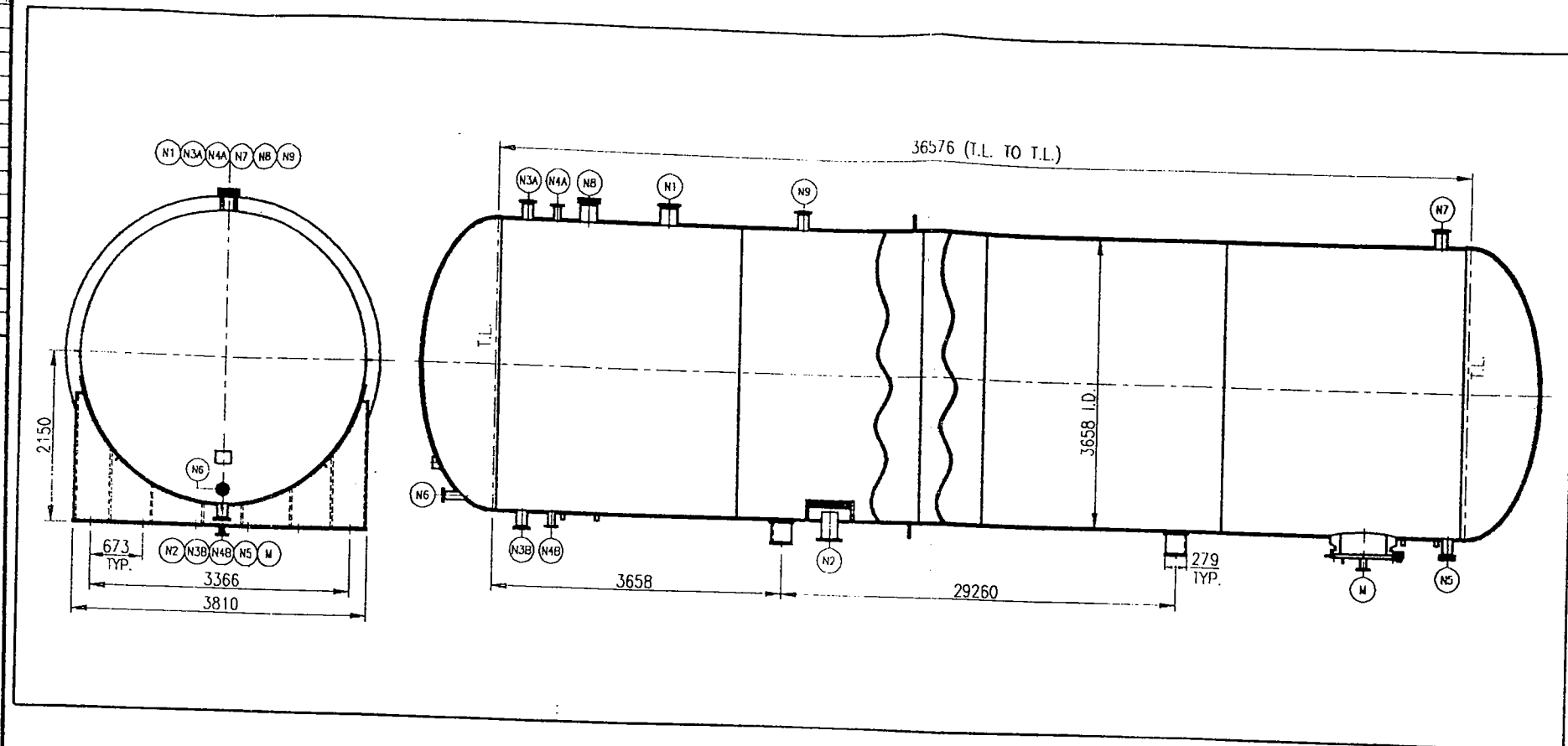
PATTERSON INDUSTRIES (CANADA) LIMITED SCARBOROUGH (TORONTO) ONTARIO, CANADA	
DEPROPANIZER FEED DRUM	
GENERAL ARRANGEMENT	
ITEM NO.: D2005	
DRAWN	M.L.
CHECKED	C.T.
APPROVED	-
SCALE	1"=24"
D	98-CA-399735-1A

ACCESSORIES AND ATTACHMENTS		STD DWG	TYPE	REQD	FURN. BY	INSTL. BY
Yes	No	FAB				
○ SUPPORT		CLIENT	SADD.	YES	YES	YES
○ VORTEX BREAKER		CLIENT		YES	YES	YES
○ MANWAY (DAVIT) CW COVER, BOLTS, GSKTS		FAB.				
○ LADDER CLIPS		CLIENT		YES	YES	YES
○ PLATFORM CLIPS		CLIENT				
○ PIPE SUPPORTS	REQD	CLIENT		YES	YES	YES
○ PIPE GUIDES	REQD	CLIENT		YES	YES	YES
○ INLET IMPINGEMENT PLATE		FAB		YES	YES	YES

NOTES

- SADDLE ANCHOR BOLT SIZE: **M42** (VENDOR TO CONFIRM)
BOLT HOLES AT FIXED END: **44.5 mm**
BOLT HOLES AT EXPANSION END: **44.5 mm x 76.2 mm LONG**

- BLIND $\frac{9}{16}$ " 2"-300# LWNF.



MATERIALS										DESIGN DATA									
SHELL SA-516-70(N)										PRESSURE									
HEADS SA-516-70(N)										DESIGN									
CLAD OR LINING										OPERATING									
SUPPORTS SA-516-70										INTERNAL									
NOZZLES										EXTERNAL									
FLANGE: SA-105(N)										WIND: SPEC. XA-A00-Z-15-0004									
NECK: SA-108B										SEISMIC: SPEC. XA-A00-Z-15-0004									
MANHOLES/ FORGINGS: SA-105(N) & SA350-LF2										MIN. DESIGN METAL TEMP. -27 °C									
HANDHOLES COVER: SA-105(N)										LIQ. SPECIFIC GRAVITY 0.668									
GASKETS 316 S/S SPIRAL WOUND - FLEXITALIC										SERVICE: SWEET									
BOLTING PRESS: SA-193 B7 TEF. CTD										MAWP (INT) AT DESIGN TEMP. & CORR. 1724 kPa(ga) LIMITED BY HEADS									
NUTS PRESS: SA-194 2H TEF. CTD										MAWP (EXT) AT DESIGN TEMP. & CORR. 101 kPa(ga) LIMITED BY SHELL									
INTERNAL PIPE: PLATE:										MAP (NEW & COLD) 1830 kPa(ga) LIMITED BY HEADS									
STRUCT: PLATING TYPE 316 S/S										HYDROSTATIC TEST 2586 kPa(ga)									
EXTERNAL PLATE: STRUCT:										CORROSION SHELL & HEADS 1.8 mm									
TRAYS										FIXED INTERNALS 3.2 mm									
SUPPORT RINGS										NOZZLES 1.8 mm									
REINFORC. PADS										REMOV. INTERNALS 1.8 mm									
STIFF. RINGS: SA516-70N										RADIOGRAPHY 100%									
SPECIFICATIONS										JOINT EFFICIENCY PER CODE									
XA-A00-Z-15-0004; XA-A00-Y-15-0005; XA-A00-W-15-0031										POST WELD HEAT TREATMENT N.A.									
REFERENCE DRAWINGS										IMPACT TEST N.A.									
ES-053-21.01-0; ES-053-11.02-0; ES-053-21.03-0; ES-053-21.04-0;										CODE: ASME SECT. VIII, DIV. 1									
ES-053-21.12-0; ES-053-11.08-0; ES-053-11.07-0; ES-053-11.09-0;										STAMPED: Yes									
ES-053-11.10-0; ES-053-11.13-0; ES-053-11.14-0;										INSPECTION BY TSSA, ONTARIO CRN: REQUIRED YES									
PAINTING SPEC. XA-A00-Y-15-0005 SURF. PREP. SPEC. XA-A00-Y-15-0005										TOTAL WEIGHTS									
OPERATING: 372860 kg										EMPTY: 108870 kg									
TEST: 505300 kg										ERECTION: 108870 kg									
C1 07-12-17										ISSUED FOR PURCHASE									
B2 07-08-01										ISSUED FOR INQUIRY									
A1 07-08-28										ISSUED FOR OFFICE CHECK									
REV DATE DESCRIPTION										BY DATE									

SABLE OFFSHORE ENERGY PROJECT

MONENCO AGRA - BROWN&ROOT

POINT TUPPER FRACTIONATION PLANT

Item Name: DEPROPANIZER FEED DRUM Item No.: D2005

Job No.: MBR09P020 Contract No.: ZAPM2103

Owner Drawing No. 98-CA-399735A

Date Sheet No. DS-D2005-01

SABLE
OFFSHORE ENERGY

Origin CALG.