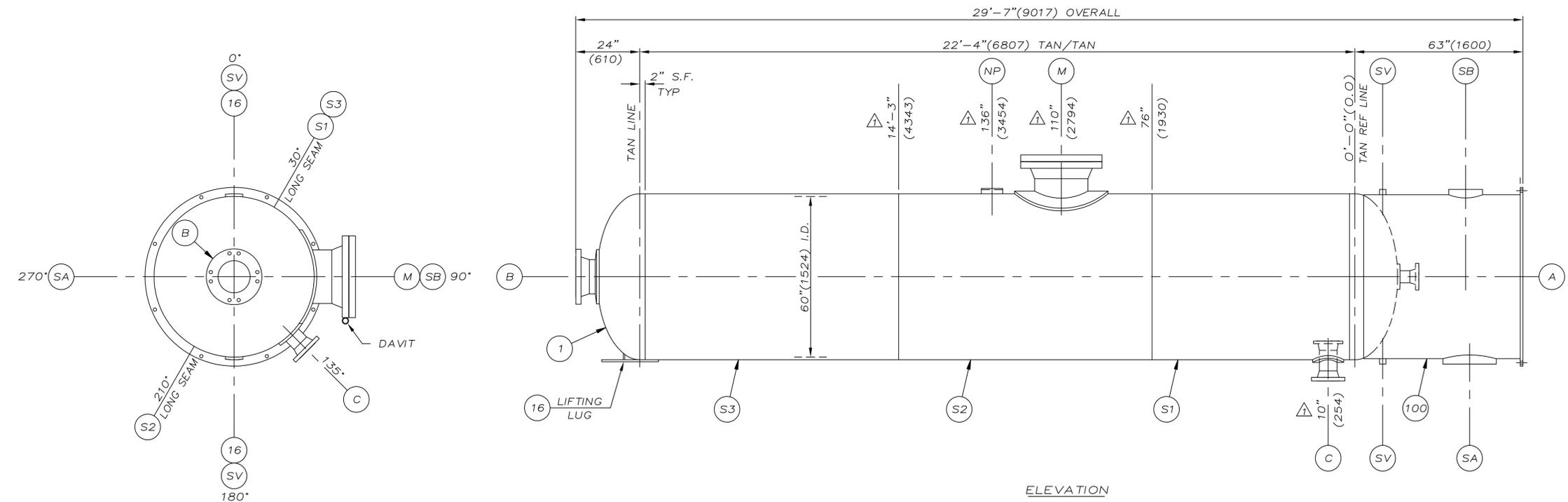


NOZZLE SCHEDULE AND WELDING DETAILS

		I	II	III	IV	TYP. LONG & CIRC SEAM					
MARK NO.	NO. REQ'D	SIZE	RATING	TYPE	SCH	SERVICE	PROJECTION FROM CENTERLINE	WELDING DETAIL NO.	WELD SIZES	BILL OF MATERIAL ITEM NUMBER	REMARKS
A	1	4"	300#	RFWN	80S	LIQUID INLET	SHOWN	I,II	3/8" 3/4"	SEE DWG 3398-1	
B	1	12"			80S	OUTLET	SHOWN	I,II	3/8" 3/4"	12,13,14	
C	1	6"			80S	GAS INLET	39"	I,III	3/8" 3/4"	SEE DWG 3398-1	c/w INT. FLG.
M	1	20"			80S	MANWAY	43"	I,II	3/8" 3/4"	4 to 10	c/w BLD. FLG. & DAVIT

BILL OF MATERIAL

ITEM NO.	NO. REQ'D	DESCRIPTION	MATERIAL	MARK NO.
S1	1	SHELL 1" PL x 60" I.D. x 74" LG	SA-240-304L	
S2	2	SHELL 1" PL x 60" I.D. x 95" LG		
1	2	HEADS .9312" MIN. x 60" I.D. x 2:1 S.E. w/ 2" S.F.		
4	1	FLG 20"~300# ANSI RFWN SCH 80S BORE	SA-182-F304L	
5	1	BLD FLG 20"~300# ANSI R.F.	SA-182-F304L	
6	1	NECK 20" SCH 80S PIPE x 9 3/8" LG	SA-312-TP304L	
7	1	REPAD 1" PL x 20 3/8" I.D. x 35 1/2" O.D.	SA-240-304L	M
8	24	STUD 1 1/4"Ø x 8 1/4" LG c/w(2) HEX NUTS	SEE NOTE 12	
9	1	GASKET FOR A 20"~300# FLG	SEE NOTE 13	
10	1	DAVIT PER DWG 3398-MD	S.S./C.S.	
12	1	FLG 12"~300# ANSI RFWN SCH 80S BORE	SA-182-F304L	
13	1	NECK 12" SCH 80S PIPE x 6 1/4" LG	SA-312-TP304L	B
14	1	REPAD 1" PL x 13 1/8" I.D. x 20 1/4" O.D.	SA-240-304L	
16	2	LIFTING LUG 3/4" PL x 6 1/2" x 21 1/4" LG	SA-240-304L	
17	2	GUSSET 3/8" PL x 2" x 6 1/2" LG	SA-240-304L	
NP	1	CESSCO NAMEPLATE c/w BRACKET	304 SS	



- GENERAL NOTES**
- ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
 - ALL BOLT HOLES TO STRADDLE NATURAL VESSEL CENTER-LINES UNLESS OTHERWISE NOTED.
 - FULL PENETRATION WELDS TO BE CHIPPED OR GOUGED BEFORE BACKWELDING.
 - CORNER RADIUS 1/8" MINIMUM FOR NOZZLES AND 1/4" MINIMUM FOR MANWAYS.
 - ALL PADS TO HAVE A 1/4" NPT WEEPHOLE ON DOWN-HILL SIDE OF NOZZLE OR MANWAY.
 - TWO WEEPHOLES REQUIRED WHEN PAD IS SPLIT (ONE EACH).
 - NOZZLES AND MANWAYS ARE INSTALLED SET FLUSH WITH INSIDE OF VESSEL UNLESS OTHERWISE SPECIFIED ON THE VESSEL DRAWING.
 - CHASE THREADS ON COUPLINGS AFTER WELDING.
 - IMPACT TEST EXEMPT PER UHA-51.
 - PT ON ALL BUTT AND FILLET WELDS.
 - PSV IS ON PIPING.
 - PRESSURE BOLTING: SA-193-B7M/SA-194-2HM~XYLAN 1070 FLUOROCARBON COATED.
 - GASKET: FLEXITALLIC 304L S.S., NON ASBESTOS FLEXITE SUPER FILLED.
 - DESIGN LIQUID LEVEL = 22'-4"; S.G. = 1.3

DIMENSIONS IN BRACKETS ARE IN METRIC AND ARE FOR CLIENT INFO ONLY.
DO NOT USE FOR FABRICATION PURPOSES !

THE INFORMATION ON THIS DRAWING IS THE PROPERTY OF CESSCO FABRICATION AND ENGINEERING LTD. AND MUST NOT BE RE-USED IN ANY WAY WITHOUT WRITTEN PERMISSION.

DESIGN DATA

DESIGN & FABRICATE TO ASME UW 12(a) DIV. 1 SECT. VIII 1992 ED. 1992 ADDENDA

DESIGN PRESS(NT) 465 PSIG	DESIGN TEMP(NT) 150° F	DESIGN PRESS(EXT) ---	DESIGN TEMP(EXT) ---
M.A.W.P. 465 PSIG	LIMITED BY HEAD	M.A.W.P.(NEW&COLD) ---	LIMITED BY ---
SHELL EFFICIENCY(CIRC) 100%	SHELL EFFICIENCY(LONG) FULL RT2 PER UW-11(a)5(b)	HEAD EFFICIENCY ---	M.D.M.T.-20° F @ 465 PSIG
C.R No. ---	RADIOGRAPHY ---	HYDROTEST 702 PSIG @ 50° F (MIN)	CORR. ALLOW. .0625"
P.W.H.T. ---	MIN. @ ---	HYDROTEST ---	CORR. ALLOW. ---
SHELL THK.(NEW) 1"	HEAD THK.(NEW) .9312" MIN.	CONE THK.(NEW) ---	---
BOOT SHELL THK.(NEW) ---	BOOT HEAD THK.(NEW) ---	SKIRT THK. .25"	---
VOLUME 471 FT ³	WT. (EMPTY) 21540 LBS	WT. (FULL OF WATER) 50930 LBS	SKIRT THK. .25"
			WT. (OPERATING) 58450 LBS

MATERIAL SPECIFICATIONS

SHELL SA-240-304L	BASE PLATE SA-516-70
HEADS SA-240-304L	STIFFENING RINGS ---
CONE ---	INSUL RINGS ---
SKIRT SA-240-304L	INTERNAL PIPING SA-312-TP304L
BOLT CHAIR ---	INTERNAL PIPING ---
STRUCTURAL STEEL ---	INTERNAL PIPING ---
INTERNAL PLATE ---	INTERNAL PIPING ---
PAINT BASE PLATE ONLY WITH DEVCHEM 253	

REV	DESCRIPTION	DATE	BY	CHKD	APPR.
2	REVISED DAVIT DWG	4/29/94	GM	GEM	ASM
1	REVISED AS NOTED	3/16/94	GM	RAG	ASM

MANUAL CHANGES MADE-YES NO CAD DWG. FILE UPDATED-YES NO I.F. 24
CERTIFIED "AS BUILT" BY: DATE:

CUSTOMER I.P. CONSTRUCTORS	FINAL OWNER NORCEN ENERGY RESOURCES LTD.					
CUSTOMER P.O. 1536-1	TAG NO. T-203					
PROJECT: GOLDEN SPIKE PHASE II, SULFEROX PROCESS SKID PACKAGE						
SPARGED TOWER						
60" I.D. x 22'-4" T/T x 465 PSIG @ 150° F x .0625" C.A.						
I.P.C #D-1536-09-11						
DATE 2/15/94	DRAWN BY GMacMILLAN	CHECKED RAG	APPROVED ASM	JOB NO. 3398	DWG NO. 3398-0	REV 2