

ELEVATION

BILL OF MATERIAL

ITEM NO.	NO REQ'D	DESCRIPTION
1	2	HEAD, HEMI, SA-516-70, .75" THK X 153.2928" I.D.
2	11	7 GORES AND 84" CROWN PLATE PER ORDER TO 10187-02
3	1	PLATE, SA-516-70, 1.375" X 112 3/4" X 4.86 13/16"
4	1	FLG. W.N. ANSI B16.5, A-350-LF2 V-NOTCH, 24" - 300 LB. 1/16" R.F. & 22 1/2" DIA. BORE
5	1	FLG. W.N. ANSI B16.5, A-350-LF2 V-NOTCH, 8" - 300 LB. 1/16" R.F. & SCH. 80 BORE
6	3	FLG. W.N. ANSI B16.5, A-350-LF2 V-NOTCH, 6" - 300 LB. 1/16" R.F. & SCH. 80 BORE
7	4	FLG. W.N. ANSI B16.5, A-350-LF2 V-NOTCH, 4" - 300 LB. 1/16" R.F. & SCH. 160 BORE
8	2	FLG. W.N. ANSI B16.5, A-350-LF2 V-NOTCH, 2" - 300 LB. 1/16" R.F. & SCH. XX-STG. BORE

(SEE SHEET NO. 7 FOR CONT.)

NO.	DESCRIPTION	BY	DATE	CHK.	APPROV.
F	MANWP CORR WAS 45°F	TS	11/19	TS	N
E	ADDED POST WELD HEAT TREATMENT	EN	11/19	TS	N
D	TAIL DIM @ B3 WAS 17'-8 7/16"	DT	11/19	TS	N
C	ITEM #4 FING IN WORK 5, 14, 23, ITEM 5 WAS 3 REG. FROM LINES 1 AND 2	TS	11/19	EN	N
B	REVISED NOZZLES & ADDED NAME PLATE	DAD	11/19	TS	EN
A	ADDED NOZZLES & DETAILS	DAD	11/19	TS	EN

RECEIVED  
FEB 12 1995  
COMP. NO. 1091  
EQ. NO. V-20 A-1

APPROVED FOR  
GENERAL ARRANGEMENT  
DETAILS  
CONSTRUCTION

CHEVRON U.S.A. INC.  
DATE 1/15/95

CERTIFIED  
RILEY-BEARD  
DATE 2-7-95

\* SEE DETAIL SHEET # 13 & 14  
● SEE END VIEW

MARK	NO. REQ'D	SIZE	ANSI RATING	FACING	DESCRIPTION	B/M ITEM NO.	TYPE	L	E	FLG. TO NECK	B/M ITEM NO.	W	X	Y	
	MHI	1	24"	300#	RF	MANWAY w/ BLIND FLG & DAVIT	3, 9, 12, 18, 19, 20	4	13 3/8	10"	21	21	3/8	7/8	3/8
	B3	1	3/4"	6000#	CPLG	PSH / L	10	*	*	*	*	3/8	*	*	
	B2	1	3/4"	6000#	CPLG	PI	10	*	*	*	*	3/8	*	*	
	N8B	1	3"	300#	RF	LIT / L	7, 11	5	9"	25	25	3/8	1 1/2		
	N8A	1	3"	300#	RF	LIT / H	7, 11	5	9"	25	25	3/8	1 1/2		
	N7	1	4"	300#	RF	RELIEF / PSV	6, 15	5	9"	21	24	3/8	7/8		
	N6	1	4"	300#	RF	RELIEF / PSV	6, 15	5	9"	21	24	3/8	7/8		
	N5	1	4"	300#	RF	VAPOR	6, 15	5	9"	21	24	3/8	1 1/2		
	N4B	1	2"	300#	RF	(SPARE)	8, 17	8	*	21	*	3/8	*		
	N4A	1	2"	300#	RF	TI	8, 17	8	*	21	*	3/8	*		
	N3B	1	3"	300#	RF	LSL / LAL	7, 16	5	9"	21	25	3/8	1 1/2		
	N3A	1	3"	300#	RF	LSH / LAH	7, 16	5	9"	21	25	3/8	1 1/2		
	N2	1	8"	300#	RF	OUTLET w/ VORTEX BREAKER	4, 13	6	9"	21	22	3/8	7/8		
	N1	1	6"	300#	RF	INLET	5, 14	5	9"	21	23	3/8	7/8		

REFERENCE DRAWINGS	VESEL DIMENSIONS
Construction: All Welded.	WIDTH: 13'-0"
Code: ASME 2.3 Edition; Sect. VIII, Div. 1 - S22 Addenda	HEIGHT: 14'-7"
To Be Stamped By: RILEY-BEARD	OAL: 115'-0"
To Be Inspected By: COMMERCIAL UNION INSURANCE COMPANY	
Design Pressure: 280 P.S.I. Design Temp.: 450 °F	
7.5 PSI EXT AT 450 °F	
Max. Allow. Working Press. P.S.I. Limited By New, Cold: 310 SHELL	TOTAL VOLUME: 106,153 W.G.
New, At 450 °F: 310 SHELL	VESEL WEIGHT: 228,263
Corroded At 450 °F: 280 DESIGN	
Hydrostatic Test Pressure: 366 P.S.I. (70 °F MAX WATER TEMP)	
Corrosion Allowance: Heads: 1/8" Shell: 1/8" Nozzles: 1/8"	TOTAL WEIGHT: 228,263 LBS (122.13 TONS)

CUSTOMER JOB NO. \_\_\_\_\_ ITEM NO. \_\_\_\_\_  
CUSTOMER ORDER NO. \_\_\_\_\_ NO. REQ'D 3

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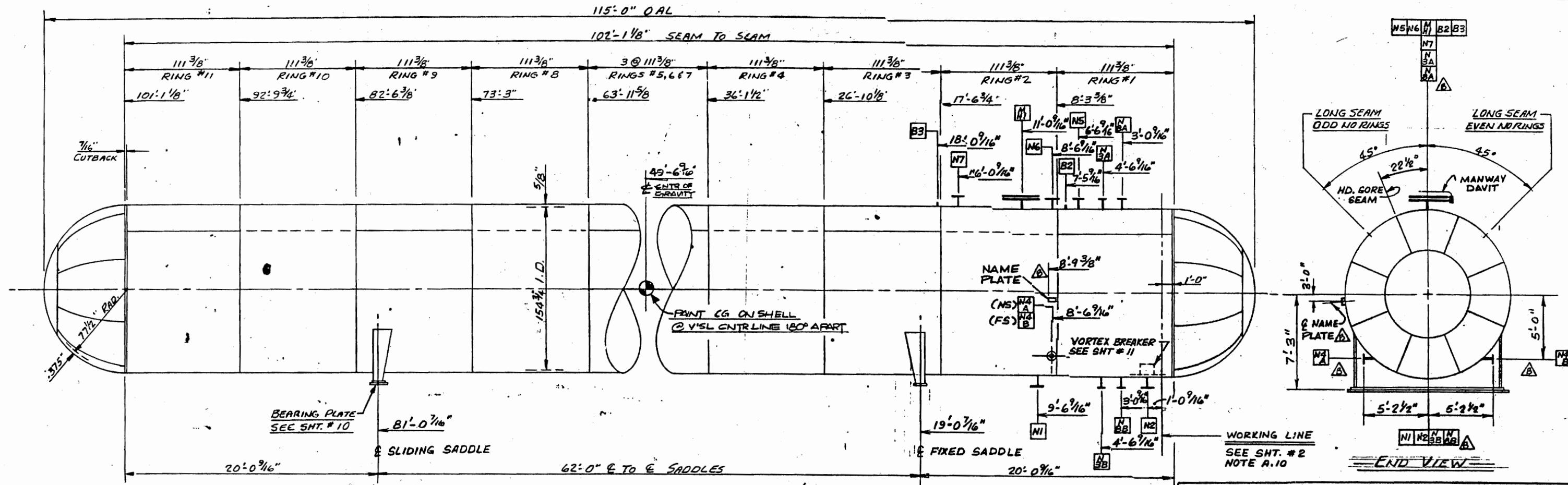
**RILEY-BEARD**  
SHREVEPORT, LOUISIANA

156" O.D. X 102'-4 7/8" SM TO SM  
PROPANE STORAGE TANK

FOR	DATE	ORDER NO.	DRAWING NO.
DRAWN	TS	9/22/84	
CHECKED	EN	11/12/84	
APPROVED	N	10-90	

SHEET 1 OF 14 SHEET OF

FEB 11 '95 REC



**ELEVATION**  
SEE DWG SHEET #15 FOR SADDLE STIFFENERS AND VACUUM STIFFENERS

APPROVED FOR  
GENERAL APPROVAL  
DESIGNER  
DATE: 2-7-95

**CERTIFIED**  
RILEY-BEARD  
DATE: 2-7-95

**BILL OF MATERIAL**

ITEM NO.	QTY	DESCRIPTION
1	2	HEAD, HEMI, SA-516-70, .375" THK X 156" I.D.
2	11	FLG. W.N. ANSI B16.5, A-105, 2" - 300 LB. 1/16" R.F. X SCH. 80 BORE
3	1	FLG. W.N. ANSI B16.5, A-105, 2" - 300 LB. 1/16" R.F. X SCH. 80 BORE
4	1	FLG. W.N. ANSI B16.5, A-105, 2" - 300 LB. 1/16" R.F. X SCH. 80 BORE
5	3	FLG. W.N. ANSI B16.5, A-105, 2" - 300 LB. 1/16" R.F. X SCH. 80 BORE
6	1	FLG. W.N. ANSI B16.5, A-105, 2" - 300 LB. 1/16" R.F. X SCH. 80 BORE
7	4	FLG. W.N. ANSI B16.5, A-105, 2" - 300 LB. 1/16" R.F. X SCH. 80 BORE
8	2	FLG. W.N. ANSI B16.5, A-105, 2" - 300 LB. 1/16" R.F. X SCH. XX 516 BORE

\* SEE DETAIL SHEET #12 & 13  
● SEE END VIEW

MARK	NO. RECD.	SIZE	ANSI RATING	FACING	DESCRIPTION	B/M ITEM NO.	TYPE	L	E	FLG TO JACK	B/M ITEM NO.	W	X	Y
MH1	1	24"	300#	RF	MANWAY W/ BLIND FLG. & DAVIT	3, 9, 12, 18, 13, 23	4	11 1/8"	10"	21	21	3/8"	1/2"	3/8"
B3	1	3/4"	6000#	OP LG	PSH / L	10	*					3/8"		
B2	1	3/4"	6000#	CRLG	PI	10	*					3/8"		
N8B	1	3"	300#	RF	LIT / L	7, 11	5	9"	21	25	3/8"	3/8"		
N8A	1	3"	300#	RF	LIT / H	7, 11	5	9"	21	25	3/8"	3/8"		
N7	1	6"	300#	RF	RELIEF / PSV	5, 14	5	9"	21	23	3/8"	1/2"		
N6	1	6"	300#	RF	RELIEF / PSV	5, 14	5	9"	21	23	3/8"	1/2"		
N5	1	4"	300#	RF	VAPOR	6, 15	5	9"	21	24	3/8"	3/8"		
N4B	1	2"	300#	RF	(SPARE)	8, 17	8		21		3/8"			
N4A	1	2"	300#	RF	T	8, 17	8		21		3/8"			
N3B	1	3"	300#	RF	LSL / LAL	7, 16	5	9"	21	25	3/8"	3/8"		
N3A	1	3"	300#	RF	LSH / LAH	7, 16	5	9"	21	25	3/8"	3/8"		
N2	1	8"	300#	RF	OUTLET W/ VORTEX BREAKER	4, 13	6	9"	21	22	3/8"	1/2"		
N1	1	6"	300#	RF	INLET	5, 14	5	9"	21	23	3/8"	1/2"		

REFERENCE DRAWINGS	VESSEL DIMENSIONS
Construction: All Welded.	WIDTH: 156.0"
Code: ASME 2.2 Edition; Sect. VIII, Div. 1	HEIGHT: 14.7"
To Be Stamped By: RILEY-BEARD	O.A.L: 115.0"
To Be Inspected By: COMMERCIAL UNION INSURANCE COMPANY	
Design Pressure: 87 P.S.I. Design Temp: 450 F	
1.5 PSI EXT AT 450 F	
Max. Allow. Working Press. P.S.I. Limited By	TOTAL VOLUME: 102.165 W.G.
New, Cold: 117 SHELL	VESSEL WEIGHT: 138,373
New, At 450 F: 112 SHELL	
Corroded At 450 F: 87 DESIGN	
Hydrostatic Test Pressure: 129 P.S.I. (1.5 X MAWOP)	TOTAL WEIGHT: 138,373 LBS (62.5 TONS)
Corrosion Allowance: Heads 1/8" Shell 1/8" Nozzles 1/8"	

NO.	DESCRIPTION	BY	DATE	CHK.	APPVD.
D	ADDED CNTR OF GRAVITY	DT	2-11	TS	N
C	ADDED PWHT	TS	2/16/95	EN	N
B	REVISED NOZZLES & ADDED NAME PLATE	DAD	2/14/95	TS	EN
A	ADDED NOZZLES & DETAILS	DAD	2/11/95	TS	EN

CUSTOMER JOB NO. \_\_\_\_\_ ITEM NO. \_\_\_\_\_  
CUSTOMER ORDER NO. PPFG-DND-C-016 NO. REQ'D 5

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**RILEY-BEARD**  
SHREVEPORT, LOUISIANA

156" O.D. x 102'-1 1/8" SM TO SM  
BUTANE STORAGE TANK

FOR CHEVRON USA, INC.

DRAWN	TS	8/22/94	ORDER	
CHECKED	TS	2/16/95	11127	DRAWING NO.
APPROVED	J	10-84	SHEET 1	OF 1

FEB 12 1995 REC. F.P.I.C. 003-REV 3