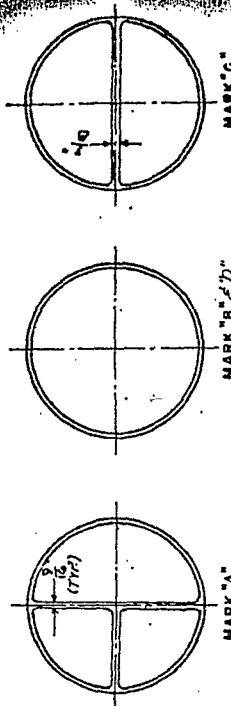


19-409 Test Rings for L-1932
A&B

EXHIBIT
CHV-504

CHEV B8 6361

SOUTHWESTERN ENGINEERING COMPANY
44500 SANTA FE AVENUE
LOS ANGELES, CALIF.



NOTE: $\frac{1}{2}$ RADIUS IN ALL CORNERS

GASKETS					
NO.	MARK	SIZE	LOCATION	THA.	MATERIAL
1	A	30" O.D. x 36" I.D.	COVER TO CHANNEL	1/8"	J.M.-60
1	A	30" O.D. x 36" I.D.	CHANNEL TO TUBE SHEET	1/8"	J.M.-60
1	B	37 3/8" O.D. x 36" I.D.	TUBE SHEET TO SHELL	1/2"	D.J. CO. CLAD ASP.
1	D	42 1/2" O.D. x 41" I.D.	SHELL TO SHELL COVER	1/2"	D.J. STK CLAD ASP.
1	C	35 3/8" O.D. x 34 1/2" I.D.	FLOATING HEAD	1/2"	D.J. CO. CLAD ASP.
		0.0 X			
		0.0 X			

STUD BOLTS & NUTS

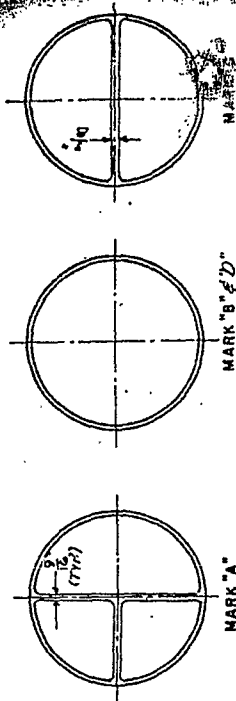
NO. BOULTS	DIA.	LENGTH	NO. NUTS	LOCATION	MATERIAL
36	7/8"	7 1/8"	72	CHANNEL COVER TO CHANNEL	ASTM. A-193 GR. B7
36	3/8"	18"	72	CHANNEL TO SHELL	✓
36	1"	18 1/2"	72	SHELL TO SHELL COVER	✓
32	7/8"	7 7/8"	64	FLOATING HEAD FP19E 40-3-01-5330-39 R0	SEE BELOW

STUD BOLTS, EXCEPT AS NOTED, SHALL BE THREADED FULL LENGTH AMERICAN NATIONAL COARSE
FOR SIZES 1" AND BELOW AND 3 THREADS PER INCH ABOVE 1" SIZE. CLASS 5 FIT.
ALL BOLTS SHALL HAVE CLASS 5 FIT ON TAP END AND CLASS 3 FIT ON END.
ALL UNFINISHED BOLTS NOTED, SHALL BE AMERICAN STANDARD HEAVY, SEMI-FINISHED, CHAMFERED
ENDS, UNDRILLED AS NOTED, AND TRIMMED TO A D. 1/16" 1941 AND A D. 1/8" SPEC. A-1341-48 CLASS 5 H, CLASS 5 FIT -
2. COMPLETE SET OF BASKETS FOR JOB A-3783
TAG-E-1902
THE FLUOR CORP. FOR STD.
OIL OF TEXAS-EL PASO TEX
NO. 403-01-5130 ITEM E-1902

REV	DATE	BY	CHK
0	0	0	0
AM-5352 Z			
BOLT & GASKET LIST			
SIZE: 36X240X3860 TYPE: AC-39-52H			
JOB			
A-4260			

E-1901 & E-1902

SOUTHWESTERN ENGINEERING COMPANY
4800 SANTA FE AVENUE
LOS ANGELES, CALIF.



NOTE: $\frac{1}{2}$ RADIUS IN ALL CORNERS

NO.	MARK	SIZE	LOCATION	THK.	MATERIAL
1	A'	30 1/2" O.D. X 36 3/4" I.D.	COVER TO CHANNEL	1/4"	J.M.-60
1	A	30 1/2" O.D. X 36 3/4" I.D.	CHANNEL TO TUBE SHEET	1/4"	J.M.-60
1	B'	37 1/2" O.D. X 36 3/4" I.D.	TUBE SHEET TO SHELL	3/4"	D-Z. CV. CLAD ASB.
1	B	37 1/2" O.D. X 36 3/4" I.D.	SHELL TO SHELL COVER	1/2"	D-Z. 57L CLAD ASB.
1	D'	42 1/2" O.D. X 41" I.D.	FLOATING HEAD	1/2"	D-Z. CV. CLAD ASB.
1	C	35 3/4" O.D. X 34 1/2" I.D.			
		O.D. X I.D.			
		O.D. X I.D.			
LONGITUDINAL SHELL			5" TYPICAL NO. 160-CCD CORE		
RAFFLE			8" X 32" 1/2" 1/2" 1/2" 1/2"		
			SEAL-RING RECD. 1/2"		

STUD BOLTS & NUTS

NO.	ROOTS	DIA.	LENGTH	NO NUTS	LOCATION	MATERIAL
36	3/8"	7 1/8"	7 1/8"	72	CHANNEL COVER TO CHANNEL	ASTM A-193 GR B7
36	3/8"	10"	10"	72	CHANNEL TO SHELL	✓
36	1"	8 1/2"	8 1/2"	72	SHELL TO SHELL COVER	✓
32	1/8"	7 3/8"	7 3/8"	64	FLOATING HEAD FLANGE	40-3-01-544-39 R0
SEE BELOW						JUN 14 1957

STUD BOLTS, EXCEPT AS NOTED, SHALL BE THREADED FULL LENGTH AMERICAN NATIONAL COARSE FOR SIZES 1" AND BELOW AND 8 THREADS PER INCH ABOVE 1" SIZE. CLASS 3 FIT.

STUDS SHALL HAVE CLASS 5 FIT ON TAP END AND CLASS 3 FIT ON NUT END.

ALL NUTS, EXCEPT AS NOTED, SHALL BE AMERICAN STANDARD HEAVY, SEMI-FINISHED, CHAMFERED AND TRIMMED TO A S.A. FIN. 1941 AND A. B. T. SPEC. A-194-40 CLASS 8 H, CLASS 8 FIT -

2-COMPLETE SETS OF SPARE GASKETS FOR JOB A-3783

CUSTOMER TAG: E-15702
403-07-1310

THE FLUOR CORP. FOR STD. OIL OF TEXAS-EL PASO, INC. P.O. 403-01-5730 ITEM E-15702

QUANTITIES SHOWN ABOVE ARE FOR ONE UNIT REQD

JOB	BOLT & GASKET LIST	REV 13/12/2015	0
A-4260	SIZE: 36X240X3860 TYPE: AC-39-52H	AM-53522	0

F-1901 & F-1902

HEAT EXCHANGER SPECIFICATION
THE FLUOR CORPORATION, LTD.
SHEET NO. E-1902 REV. DATE 1/28/56 BY JL CHECK PGT JOB NO. 5750

ITEM NO. E-1902 SERVICE Light Oil Stripper Reboiler EXCHANGER TYPE: MONI. XXX Horizontal S & T NO. 100000

FLUID: Light Oil Stripper Reboiler
TOTAL FLOW: 100,000
SHELL ON TUBE SIDE

FLUID	INLET	OUTLET	INLET	OUTLET
LIQUID	100,000	84,592	250,000	250,000
VAPOR	100,000	84,592	250,000	250,000

ADDITIONAL DATA ON SHEET NO. 1
OPERATING TEMPERATURE: 100, 100, 100, 100
PRESSURE: 100, 100, 100, 100
CORROSION: 100, 100, 100, 100
MATERIAL: 100, 100, 100, 100
SHELL: 100, 100, 100, 100
TUBE: 100, 100, 100, 100
BUNDLE: 100, 100, 100, 100
SUPPORT: 100, 100, 100, 100
ANCHOR: 100, 100, 100, 100
LIFT: 100, 100, 100, 100
WIND: 100, 100, 100, 100
SEISMIC: 100, 100, 100, 100
OTHER: 100, 100, 100, 100

FE-19-15122-2

HEAT EXCHANGER SPECIFICATION
THE FLUOR CORPORATION, LTD.
SHEET NO. E-1901 REV. DATE 1/28/56 BY JL CHECK PGT JOB NO. 5750

ITEM NO. E-1901 SERVICE Fractionator Reflux Condenser EXCHANGER TYPE: MONI. XXX Horizontal S & T NO. 100000

FLUID: Fractionator Reflux Condenser
TOTAL FLOW: 100,000
SHELL ON TUBE SIDE

FLUID	INLET	OUTLET	INLET	OUTLET
LIQUID	100,000	84,592	250,000	250,000
VAPOR	100,000	84,592	250,000	250,000

ADDITIONAL DATA ON SHEET NO. 1
OPERATING TEMPERATURE: 100, 100, 100, 100
PRESSURE: 100, 100, 100, 100
CORROSION: 100, 100, 100, 100
MATERIAL: 100, 100, 100, 100
SHELL: 100, 100, 100, 100
TUBE: 100, 100, 100, 100
BUNDLE: 100, 100, 100, 100
SUPPORT: 100, 100, 100, 100
ANCHOR: 100, 100, 100, 100
LIFT: 100, 100, 100, 100
WIND: 100, 100, 100, 100
SEISMIC: 100, 100, 100, 100
OTHER: 100, 100, 100, 100

FE-19-15122-2

HEAT EXCHANGER SPECIFICATION
THE FLUOR CORPORATION, LTD.
SHEET NO. E-1904 REV. DATE 1/28/56 BY JL CHECK PGT JOB NO. 5750

ITEM NO. E-1904 SERVICE Light Oil Stripper Reboiler EXCHANGER TYPE: MONI. XXX Horizontal S & T NO. 100000

FLUID: Light Oil Stripper Reboiler
TOTAL FLOW: 100,000
SHELL ON TUBE SIDE

FLUID	INLET	OUTLET	INLET	OUTLET
LIQUID	100,000	84,592	250,000	250,000
VAPOR	100,000	84,592	250,000	250,000

ADDITIONAL DATA ON SHEET NO. 1
OPERATING TEMPERATURE: 100, 100, 100, 100
PRESSURE: 100, 100, 100, 100
CORROSION: 100, 100, 100, 100
MATERIAL: 100, 100, 100, 100
SHELL: 100, 100, 100, 100
TUBE: 100, 100, 100, 100
BUNDLE: 100, 100, 100, 100
SUPPORT: 100, 100, 100, 100
ANCHOR: 100, 100, 100, 100
LIFT: 100, 100, 100, 100
WIND: 100, 100, 100, 100
SEISMIC: 100, 100, 100, 100
OTHER: 100, 100, 100, 100

FE-19-15122-4

HEAT EXCHANGER SPECIFICATION
THE FLUOR CORPORATION, LTD.
SHEET NO. E-1905 REV. DATE 1/28/56 BY JL CHECK PGT JOB NO. 5750

ITEM NO. E-1905 SERVICE Heavy Gasoline Cooler EXCHANGER TYPE: MONI. XXX Horizontal S & T NO. 100000

FLUID: Heavy Gasoline Cooler
TOTAL FLOW: 100,000
SHELL ON TUBE SIDE

FLUID	INLET	OUTLET	INLET	OUTLET
LIQUID	100,000	84,592	250,000	250,000
VAPOR	100,000	84,592	250,000	250,000

ADDITIONAL DATA ON SHEET NO. 1
OPERATING TEMPERATURE: 100, 100, 100, 100
PRESSURE: 100, 100, 100, 100
CORROSION: 100, 100, 100, 100
MATERIAL: 100, 100, 100, 100
SHELL: 100, 100, 100, 100
TUBE: 100, 100, 100, 100
BUNDLE: 100, 100, 100, 100
SUPPORT: 100, 100, 100, 100
ANCHOR: 100, 100, 100, 100
LIFT: 100, 100, 100, 100
WIND: 100, 100, 100, 100
SEISMIC: 100, 100, 100, 100
OTHER: 100, 100, 100, 100

FE-19-15122-2

HEAT EXCHANGER SPECIFICATION

DATE: 12/26/56

BY: J. H. HARRIS

FOR: CHEV. BB 6366

1. GENERAL DATA

TYPE	WATER-TO-WATER
HEAT EXCHANGER NO.	1
DESIGNER	J. H. HARRIS
DATE	12/26/56
FOR	CHEV. BB 6366

2. HEAT EXCHANGER DATA

HEAT EXCHANGER NO.	1
DESIGNER	J. H. HARRIS
DATE	12/26/56
FOR	CHEV. BB 6366

3. HEAT EXCHANGER DATA

HEAT EXCHANGER NO.	1
DESIGNER	J. H. HARRIS
DATE	12/26/56
FOR	CHEV. BB 6366

HEAT EXCHANGER SPECIFICATION

DATE: 12/26/56

BY: J. H. HARRIS

FOR: CHEV. BB 6366

1. GENERAL DATA

TYPE	WATER-TO-WATER
HEAT EXCHANGER NO.	1
DESIGNER	J. H. HARRIS
DATE	12/26/56
FOR	CHEV. BB 6366

2. HEAT EXCHANGER DATA

HEAT EXCHANGER NO.	1
DESIGNER	J. H. HARRIS
DATE	12/26/56
FOR	CHEV. BB 6366

3. HEAT EXCHANGER DATA

HEAT EXCHANGER NO.	1
DESIGNER	J. H. HARRIS
DATE	12/26/56
FOR	CHEV. BB 6366

HEAT EXCHANGER SPECIFICATION

DATE: 12/26/56

BY: J. H. HARRIS

FOR: CHEV. BB 6366

1. GENERAL DATA

TYPE	WATER-TO-WATER
HEAT EXCHANGER NO.	1
DESIGNER	J. H. HARRIS
DATE	12/26/56
FOR	CHEV. BB 6366

2. HEAT EXCHANGER DATA

HEAT EXCHANGER NO.	1
DESIGNER	J. H. HARRIS
DATE	12/26/56
FOR	CHEV. BB 6366

3. HEAT EXCHANGER DATA

HEAT EXCHANGER NO.	1
DESIGNER	J. H. HARRIS
DATE	12/26/56
FOR	CHEV. BB 6366

HEAT EXCHANGER SPECIFICATION

DATE: 12/26/56

BY: J. H. HARRIS

FOR: CHEV. BB 6366

1. GENERAL DATA

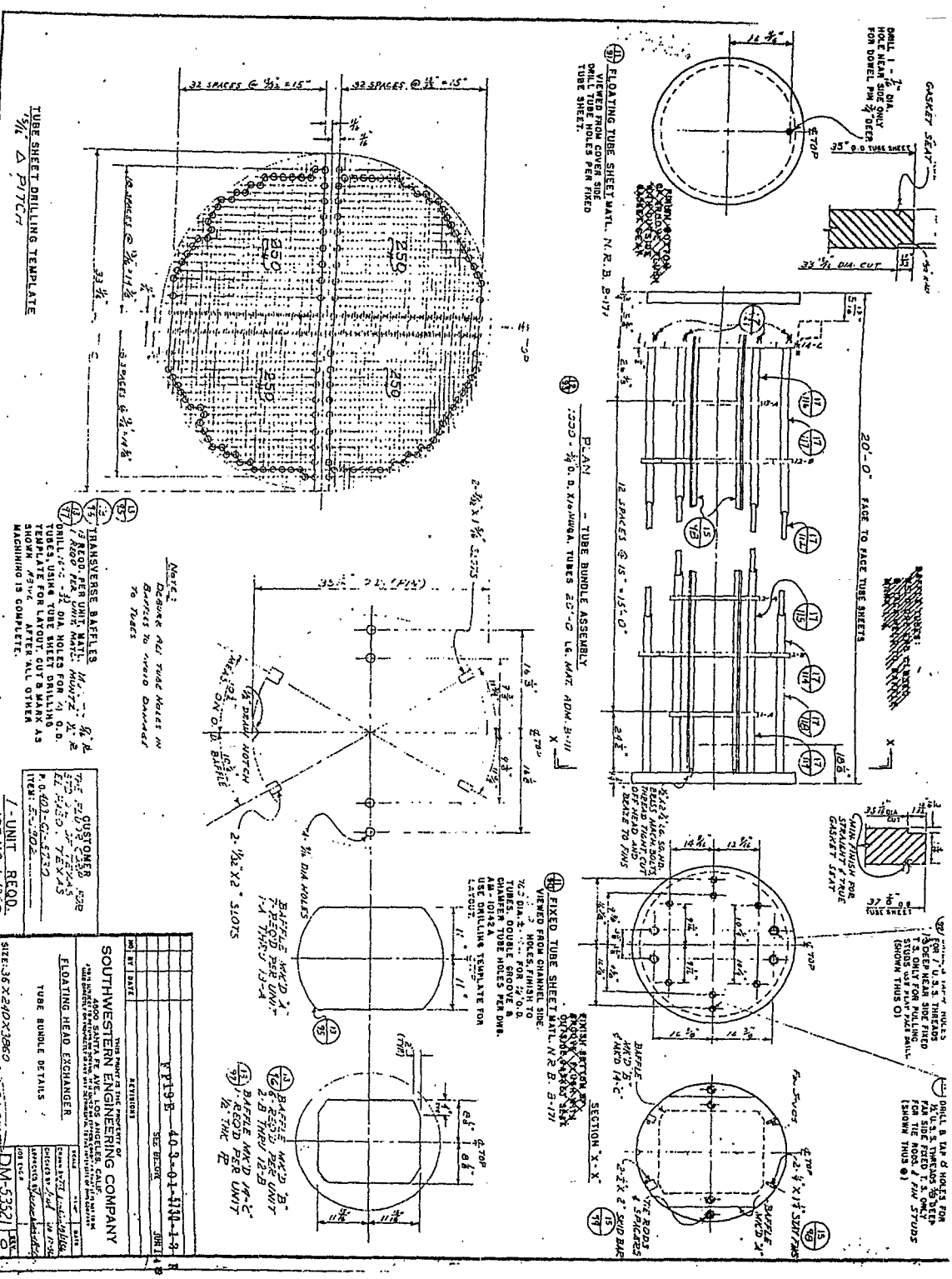
TYPE	WATER-TO-WATER
HEAT EXCHANGER NO.	1
DESIGNER	J. H. HARRIS
DATE	12/26/56
FOR	CHEV. BB 6366

2. HEAT EXCHANGER DATA

HEAT EXCHANGER NO.	1
DESIGNER	J. H. HARRIS
DATE	12/26/56
FOR	CHEV. BB 6366

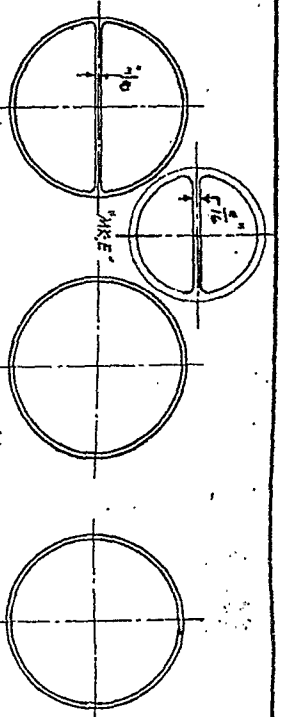
3. HEAT EXCHANGER DATA

HEAT EXCHANGER NO.	1
DESIGNER	J. H. HARRIS
DATE	12/26/56
FOR	CHEV. BB 6366



CHEV BB 6367

E-1922



NOTE: $\frac{1}{2}$ RADIUS IN ALL CORNERS

[illegible]

STUD BOLTS & NUTS

NO.	DIA.	LENGTH	NO.	LOCATION	MATERIAL
32	1/4"	7 1/2'	44	CHANNEL COVER TO CHANNEL	ASTM A 193 GR B7
32	1/4"	9 3/8'	44	CHANNEL TO SHEL	
36	3/8"	7 1/2'	72	SHEL TO SHEL COVER	
28	1/4"	7 1/2'	54	FLOATING HEAD	
				FP19E 403-01-5130-38-R0	
				SEE BELOW	JUN 14 1957

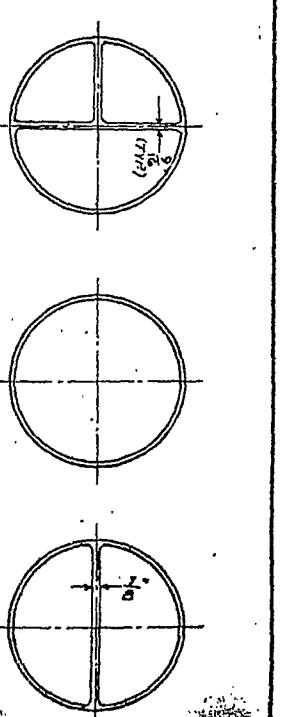
STUD BOLTS, EXCEPT AS NOTED, SHALL BE THREADED FULL LENGTH AMERICAN NATIONAL COARSE FOR SIZES 1" AND BELOW AND 8 THREADS PER INCH ABOVE 1" SIZE. CLASS 3 FIT. STUDS SHALL HAVE CLASS 4 FIT ON TAP END AND CLASS 3 FIT ON OTHER END.

ALL NOTES, EXCEPT AS NOTED, SHALL BE AMERICAN STANDARD AND FINISHED CHAMFERED AND TAPPED TO A. S. A. SIZE 1-19.41 AND A. S. I. M. SPEC. A. 1-24.41 CLASS 2H, CLASS 2 FIT 2-SEDS OF SPARE SKELETS PER UBA-5783. CUSTOMER TAG - 403-01-5730 THE FLUOR CORP FOR 57D 01 EL PASO, TEX
E-1101-A, B, C, D, E
QUANTITIES SHOWN ABOVE ARE FOR ONE UNIT
EO. 403-01-5730

4 UNITS NEED	ITEM - E-1904 A-4259
JOB	BOLT & GASKET LIST
A-4259	SIZE: 3/8 X 2.40X TYPE: DX-32-52H AM-53604
REV	DATE
0	10/18/82
1	11/13/82
2	11/13/82

TO SHOP NO OF PRINTS DATE	
ISSUED	
REV 1	REV 4
2	5
3	6

TO CUSTOMER NO OF PRINTS DATE !	
ISSUED	
REV 1	REV 4
2	5
3	6



NOTE: $\frac{1}{2}$ RADIUS IN ALL CORNERS

GASKETS				
NO	MARK	SIZE	LOCATION	MATERIAL
1	A	3/8" x 3/8" D	COVER TO CHANNEL	1/2" J.M.-60
1	A	3/8" x 3/8" D	CHANNEL TO TUBE SHEET	1/2" J.M.-60
1	B	3/8" x 3/8" D	TUBE SHEET TO SHELL	1/2" D.I. CR. CLAD ASB.
1	D	4 1/2" D. x 4 1/2" D	SHELL TO SHELL COVER	1/2" D.I. 574 CLAD ASB.
1	C	3 5/8" D x 3 7/8" D	FLOATING HEAD	1/2" D.I. CR. CLAD ASB.
		O.D. x I.D.		
		O.D. x I.D.		
LONGITUDINAL SHELL			1/2" D. PALMETO GASKET FOR	1/2" x 3/4" CR. CLAD NO SEC. TEND CONC
RAFFLE			SEAL RING	ASB. 4540

STUD BOLTS & NUTS

BOUL.	DIA.	LETH. INDS	LOCATION	MATERIAL
36	1/8"	7 1/8"	CHANNEL COVER TO CHANNEL	ASTM. A 193 GR. B7
36	1/8"	10 1/4"	CHANNEL TO SHELL	✓
36	1"	8 1/2"	SHELL TO SHELL COVER.	✓
32	1/8"	7 1/8"	FLOATING HEAD PIPE	403
			SPE. BELOW	01-5330-39 RO
				JUN 14-1957

STUD BOLTS, EXCEPT AS NOTED, SHALL BE THREADED FULL LENGTH AMERICAN NATIONAL COARSEST FOR SIZES 1" AND BELOW AND 3 THREADS PER INCH ABOVE 1" SIZE. CLASS 3 FIT. STUDS SHALL HAVE CLASS 3 FIT ON TAP END AND CLASS 3 FIT ON NUT END.

ALL WTS, EXCEPT AS NOTED, SHALL BE AMERICAN STANDARD HEAVY, SEMI-FINISHED, CHAMFERED AND TRIMMED TO U.S.A. B182 - 1941 AND A.S.T.M. SPEC. A. 194 - 48 CLASS 2 H, CLASS F. 717
2-COMPLETE SETS OF SPARE
GASKETS FOR VOB A-3783
TAG: E-1902
480-01-5302
CUSTOMER
THE FLUOR CORP. FL PASO TEX
OIL OF TEXAS- FL PASO TEX
P.O. 403-01-530 ITEM E-1902

REVISED 3/1/65	AM-5352 Z	SIZE: 36X240X3860 TYPE: AC-37-52H	JOB	UNIT NO. 1
0	AM-5352 Z	SIZE: 36X240X3860 TYPE: AC-37-52H	JOB	UNIT NO. 1

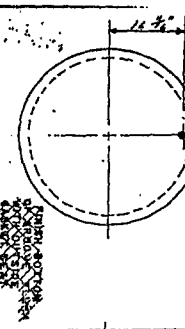
TO SHQP NO OF PRINTS DATE	
ISSUED	
REV 1	REV 4
2	3
3	6

TO	CUSTOMER	NO	OF	PRINTS	DATE
ISSUED					
REV	1			REV	4
	2				5
	3				6

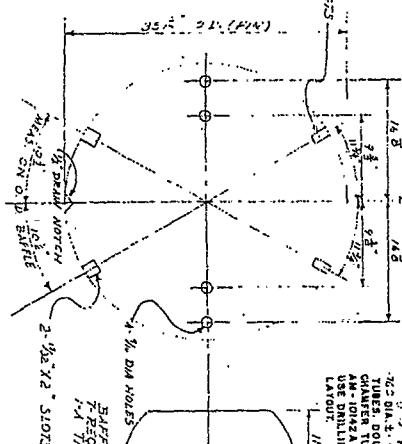
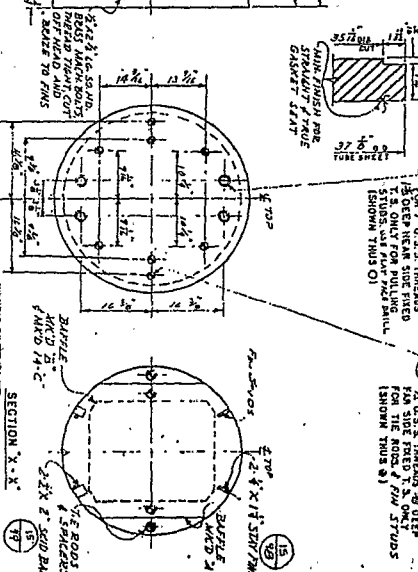
CHEV B8 6368

E. 1901 E-1902

[illegible][illegible]



⑫
PLAN - TUBE BUNDLE ASSEMBLY
:550 - 1/4" O. D. X 16 IN. L. TUBES 20' - 0 L. L. M.



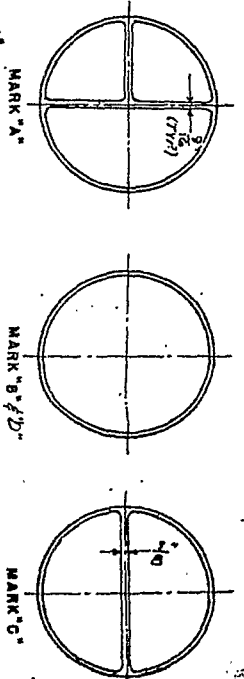
15. TRANSVERSE RIFLES.
16. READ BY UNIT MAIL. *1200* - *100* *100*
17. DRILL - *10* DIA. HOLES FOR *10* O.O.
18. TUBES, USING FREE SHEET DRILLING
TEMPLATE FOR LAYOUT. CUTS MARK AS
SHOWN 7/16". AFTER ALL OTHER
MACHINING IS COMPLETE.

CUSTOMER FOR
THE FLOOR COVER
570 24 ST TEXAS
EL PASO, TEXAS
P.O. BOX 51-550
ITEM: 5-3208

[illegible]

CHEV B8 6370

£-1422



NOTE: $\frac{1}{2}$ RADIUS IN ALL CORNERS

GASKETS				
-NO.	MARK	SIZE	LOCATION	THK.
1	A	38 ³ / ₈ x 36 ³ / ₈ 1.0	COVER TO CHANNEL	1/8"
1	A	38 ³ / ₈ x 36 ³ / ₈ 1.0	CHANNEL TO TUBE SHEET	1/8"
1	B	37 ³ / ₈ x 36 ³ / ₈ 1.0	TUBE SHEET TO SHELL	1/2"
1	D	42.0 D. x 41" 1.0	SHELL TO SHELL COVER	1/2" D. x 57 ¹ / ₂ CLAD ASB.
1	C	35 ³ / ₈ x 34 ³ / ₈ 1.0	FLATING HEAD	1/2" D. x 57 ¹ / ₂ CLAD ASB.
		O. D. x 1.0		
		O. D. x 1.0		
LONGITUDINAL SHELL				
RAFFLE			17 50" PATENTED GASKET FOR	3/4" x 5/8" GRAPHIC NO 150 - 1750 CONE
		SEAL-BAND	RECD	ASBESTOS

STUD BOLTS & NUTS

BOATS	DIA.	LENGTH	LOCATION	MATERIAL
36	1/8"	7 1/8'	72	CHANNEL COVER TO CHANNEL
36	1/8"	10 "	72	CHANNEL TO SHELL
36	1 "	8 1/2'	72	SHELL TO SHELL COVER
32	1/8"	7 9/8'	64	FLOATING HEAD F P 19 E 40 3
				SEE BELOW
				JUN 4 - 1957

100

STUD BOLTS, EXCEPT AS NOTED, SHALL BE THREADED FULL LENGTH AMERICAN NATIONAL COARSE FOR SIZES 1" AND BELOW AND 8 THREADS PER INCH ABOVE 1" SIZE. CLASS 3 FIT. STUDS SHALL HAVE CLASS 5 FIT ON TAP END AND CLASS 3 FIT ON NUT END.

2-COMPLETE SETS OF SPARE
GASKETS FOR UOB A-37B3
TAG: E-1902
4024-6772
CUSTOMER
THE FLUOR CORP FAR 5711

QUANTITIES SHOWN ABOVE ARE FOR ONE UNIT	REC'D	UNITS
403-01-5730		
OIL OF TEXAS-EL PASO, TEX.		
P.O. 403-01-5730 ITEM E-18		

REVISED BY	DATE	BY	DATE
0	0	0	0
AM-53522			
BOLT & GASKET LIST			
JOB			
A-4260			
SIZE: 36X240X3860 TYPE: 4C-34-52H			

CHEV B8 6371

E-1901 & E-1902

1