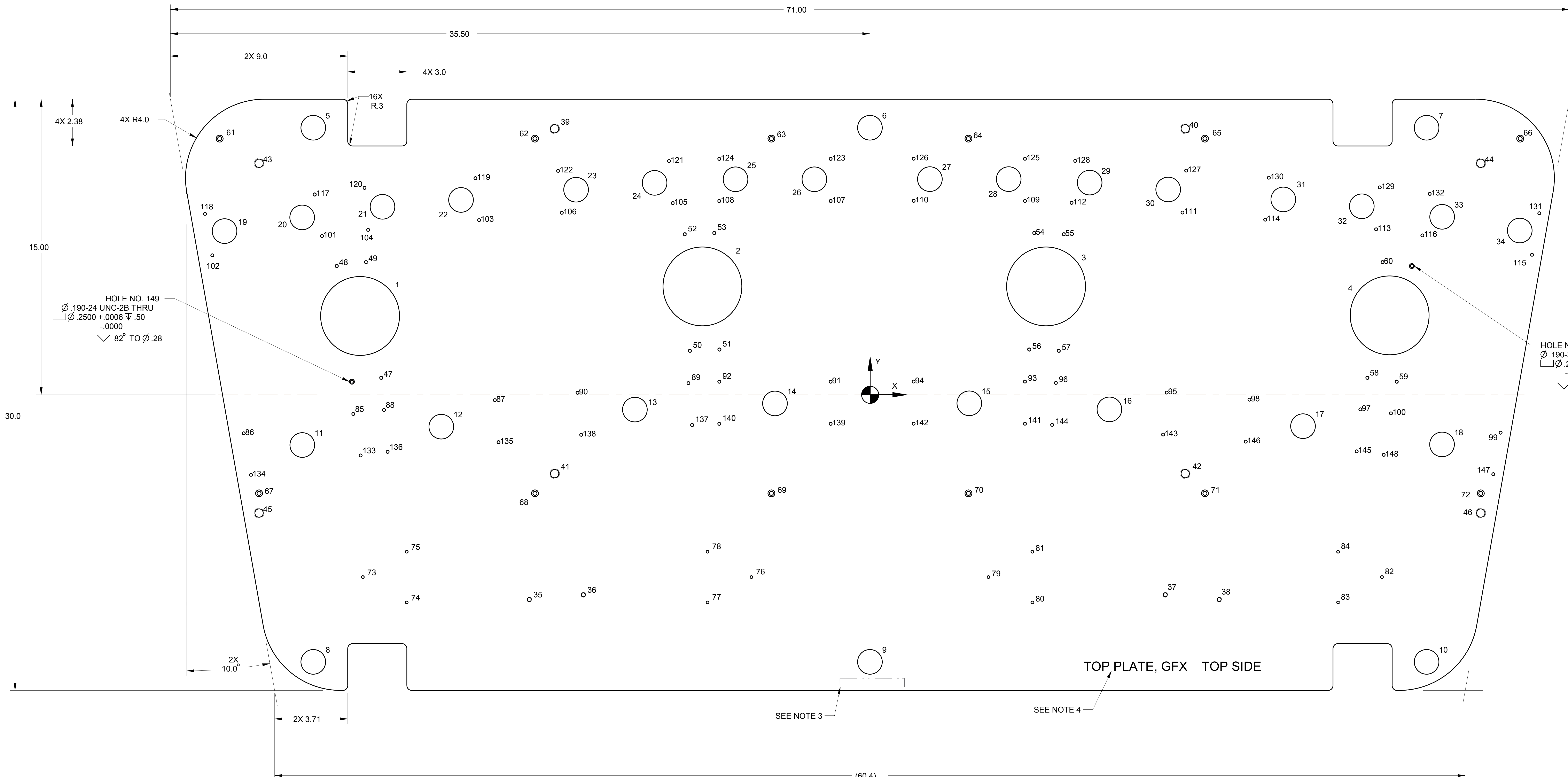


- NOTES:
1. MATERIAL: PLATE ALUMINUM TYPE 6061-T6 PER ASTM B209.
 2. MAKE FROM DXF FILE
 3. VIBRO-ETCH PART WITH DRAWING NUMBER WITH MIN .25 HIGH CHARACTERS IN ACCORDANCE WITH MIL-STD-130, LOCATE APPROX AS SHOWN.
 4. VIBRO-ETCH PLATE WITH PART NAME AND ORIENTATION WITH MIN .25 HIGH CHARACTERS. LOCATE APPROX AS SHOWN.

REVISION APPROVALS								
REV	ECN NO.	DESCRIPTION	DATE	BY	CHK	DES	ENG	SUPV
A	-	INITIAL RELEASE	-	-	-	-	-	-



HOLE NO. 149
 $\varnothing .190-24 \text{ UNC-2B THRU}$
 $\varnothing .2500 +.0006 \sqrt{.50}$
 $-.0000$
 $\sphericalangle 82^\circ \text{ TO } \varnothing .28$

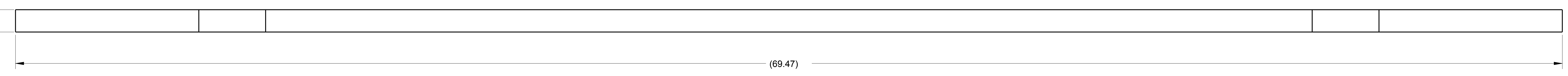
HOLE NO. 150
 $\varnothing .190-24 \text{ UNC-2B THRU}$
 $\varnothing .2500 +.0006 \sqrt{.50}$
 $-.0000$
 $\sphericalangle 82^\circ \text{ TO } \varnothing .28$

TOP PLATE, GFX TOP SIDE

SEE NOTE 3

SEE NOTE 4

1.0 STOCK



INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.5				COLLIDER-ACCELERATOR DEPARTMENT BROOKHAVEN NATIONAL LABORATORY UPTON, N.Y. 11973	
UNLESS OTHERWISE SPECIFIED		DRAWN BY: S. TRABOCCHI 3/20/17 CHECKED BY: S. RESTMEYER 3/21/18 DESIGN APPROVAL: A. ARNO 3/21/18 ENG'G APPR: G. MAHLER 3/21/18 APPROVAL: J. TUOZZOLO 3/21/18 CEE (M): DESIGN: DRA: SA:		CBETA TOP PLATE ASSEMBLY TOP PLATE, GFX	
DIMENSIONAL TOLERANCES JOB 005 JOB 016 JOB 005		ANGULAR TOLERANCE ±1°		SIZE: E DRAWING NUMBER: 2570M0009 REV: A	
2570M0010 1		FINISH: 125 BREAK SHARP EDGES		D.A. CATEGORY: A3 SCALE: 1/2 WEIGHT: 186.7 SHEET OF 1 2	
USED ON DRAWING NO. QTY. PER ASSY.		SAFETY / RSC DEPARTMENT ISSUE		CREO	

HOLE TABLE			
HOLE NO.	X	Y	NOTE
1	-25.88	4.00	Ø 4.00 THRU
2	-8.50	5.50	Ø 4.00 THRU
3	8.94	5.50	Ø 4.00 THRU
4	26.38	4.03	Ø 4.00 THRU
5	-28.25	13.55	Ø 1.25 THRU
6	0.00	13.55	Ø 1.25 THRU
7	28.25	13.55	Ø 1.25 THRU
8	-28.25	-13.55	Ø 1.25 THRU
9	0.00	-13.55	Ø 1.25 THRU
10	28.25	-13.55	Ø 1.25 THRU
11	-28.81	-2.55	Ø 1.25 THRU
12	-21.75	-1.62	Ø 1.25 THRU
13	-11.93	-0.75	Ø 1.25 THRU
14	-4.82	-0.44	Ø 1.25 THRU
15	5.04	-0.43	Ø 1.25 THRU
16	12.15	-0.74	Ø 1.25 THRU
17	21.98	-1.59	Ø 1.25 THRU
18	29.03	-2.52	Ø 1.25 THRU
19	-32.75	8.31	Ø 1.25 THRU
20	-28.81	9.00	Ø 1.25 THRU
21	-24.74	9.54	Ø 1.25 THRU
22	-20.75	9.89	Ø 1.25 THRU
23	-14.91	10.41	Ø 1.25 THRU
24	-10.93	10.76	Ø 1.25 THRU
25	-6.82	10.94	Ø 1.25 THRU
26	-2.82	10.94	Ø 1.25 THRU
27	3.04	10.94	Ø 1.25 THRU
28	7.04	10.94	Ø 1.25 THRU
29	11.15	10.77	Ø 1.25 THRU
30	15.14	10.42	Ø 1.25 THRU
31	20.98	9.92	Ø 1.25 THRU
32	24.96	9.57	Ø 1.25 THRU
33	29.04	9.03	Ø 1.25 THRU
34	32.98	8.34	Ø 1.25 THRU
35	-17.28	-10.39	Ø 250-20 UNC-2B ∇ .75
36	-14.55	-10.15	Ø 250-20 UNC-2B ∇ .75
37	14.99	-10.15	Ø 250-20 UNC-2B ∇ .75
38	17.72	-10.39	Ø 250-20 UNC-2B ∇ .75
39	-16.00	13.50	Ø 500-13 UNC-2B THRU
40	16.00	13.50	Ø 500-13 UNC-2B THRU
41	-16.00	-4.00	Ø 500-13 UNC-2B THRU
42	16.00	-4.00	Ø 500-13 UNC-2B THRU
43	-31.00	11.75	Ø 500-13 UNC-2B THRU
44	31.00	11.75	Ø 500-13 UNC-2B THRU
45	-31.00	-6.00	Ø 500-13 UNC-2B THRU
46	31.00	-6.00	Ø 500-13 UNC-2B THRU
47	-24.80	0.86	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
48	-27.06	6.53	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
49	-25.57	6.73	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
50	-9.14	2.23	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
51	-7.64	2.30	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
52	-9.40	8.14	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
53	-7.90	8.21	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
54	8.34	8.21	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
55	9.84	8.14	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
56	8.08	2.30	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
57	9.58	2.23	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
58	25.24	0.86	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
59	26.73	0.67	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
60	26.01	6.73	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
61	-33.00	13.00	Ø 203 ∇ .19, ∇ Ø .350 X 120°
62	-17.00	13.00	Ø 203 ∇ .19, ∇ Ø .350 X 120°
63	-5.00	13.00	Ø 203 ∇ .19, ∇ Ø .350 X 120°
64	5.00	13.00	Ø 203 ∇ .19, ∇ Ø .350 X 120°
65	17.00	13.00	Ø 203 ∇ .19, ∇ Ø .350 X 120°
66	33.00	13.00	Ø 203 ∇ .19, ∇ Ø .350 X 120°
67	-31.00	-5.00	Ø 203 ∇ .19, ∇ Ø .350 X 120°
68	-17.00	-5.00	Ø 203 ∇ .19, ∇ Ø .350 X 120°
69	-5.00	-5.00	Ø 203 ∇ .19, ∇ Ø .350 X 120°
70	5.00	-5.00	Ø 203 ∇ .19, ∇ Ø .350 X 120°

HOLE TABLE			
HOLE NO.	X	Y	NOTE
71	17.00	-5.00	Ø 203 ∇ .19, ∇ Ø .350 X 120°
72	31.00	-5.00	Ø 203 ∇ .19, ∇ Ø .350 X 120°
73	-25.74	-9.25	Ø .164-32 UNC-2B ∇ .50
74	-23.51	-10.54	Ø .164-32 UNC-2B ∇ .50
75	-23.51	-7.96	Ø .164-32 UNC-2B ∇ .50
76	-6.02	-9.25	Ø .164-32 UNC-2B ∇ .50
77	-8.24	-10.54	Ø .164-32 UNC-2B ∇ .50
78	-8.24	-7.96	Ø .164-32 UNC-2B ∇ .50
79	6.02	-9.25	Ø .164-32 UNC-2B ∇ .50
80	8.24	-10.54	Ø .164-32 UNC-2B ∇ .50
81	8.24	-7.96	Ø .164-32 UNC-2B ∇ .50
82	25.99	-9.25	Ø .164-32 UNC-2B ∇ .50
83	23.76	-10.54	Ø .164-32 UNC-2B ∇ .50
84	23.76	-7.96	Ø .164-32 UNC-2B ∇ .50
85	-26.22	-0.97	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
86	-31.78	-1.95	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
87	-19.03	-0.27	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
88	-24.66	-0.77	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
89	-9.21	0.59	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
90	-14.84	0.10	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
91	-1.99	0.66	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
92	-7.64	0.66	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
93	7.87	0.67	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
94	2.22	0.67	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
95	15.06	0.11	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
96	9.43	0.61	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
97	24.89	-0.74	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
98	19.26	-0.25	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
99	32.01	-1.92	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
100	26.44	-0.94	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
101	-27.81	8.06	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
102	-33.37	7.08	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
103	-19.83	8.86	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
104	-25.46	8.37	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
105	-10.01	9.73	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
106	-15.64	9.24	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
107	-1.99	9.83	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
108	-7.64	9.83	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
109	7.87	9.84	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
110	2.22	9.84	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
111	15.86	9.25	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
112	10.23	9.74	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
113	25.69	8.40	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
114	20.06	8.89	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
115	33.60	7.11	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
116	28.03	8.09	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
117	-28.18	10.16	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
118	-33.74	9.18	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
119	-20.02	10.99	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
120	-25.65	10.50	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
121	-10.20	11.86	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
122	-15.82	11.37	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
123	-1.99	11.97	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
124	-7.64	11.97	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
125	7.87	11.98	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
126	2.22	11.98	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
127	16.05	11.38	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
128	10.42	11.87	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
129	25.87	10.53	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
130	20.24	11.02	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
131	33.97	9.21	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
132	28.41	10.19	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
133	-25.85	-3.08	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
134	-31.41	-4.06	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
135	-18.85	-2.40	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
136	-24.48	-2.89	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
137	-9.02	-1.54	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
138	-14.65	-2.03	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
139	-1.99	-1.47	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
140	-7.64	-1.47	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.

HOLE TABLE			
HOLE NO.	X	Y	NOTE
141	7.87	-1.47	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
142	2.22	-1.47	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
143	14.88	-2.02	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
144	9.25	-1.52	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
145	24.70	-2.87	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
146	19.07	-2.38	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
147	31.63	-4.03	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
148	26.07	-3.05	Ø .149 THRU .190-24 UNC-2B X .50 FULL THD. MIN.
149	-26.289 ± .002	0.666 ± .002	SEE VIEW
150	27.501 ± .002	6.534 ± .002	SEE VIEW