

211B (COPY 2)

STRUCTURAL ASSESSMENT BOOK 2 OF 4

DESIGN LEVEL ANALYSIS OUTPUT

SHELL OIL COMPANY
WEST DELTA 103 "A"
8-PILE, 12-WELL PLATFORM
223' WATER DEPTH

FOR
U.S. MINERALS MANAGEMENT SERVICE

PERFORMED BY:



W. H. LINDER & ASSOCIATES, INC.
3330 WEST ESPLANADE AVENUE
METAIRIE, LOUISIANA 70002
(504) 835-2577

JULY, 1994

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PERFORMED BY:



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8.1 DESIGN LEVEL ANALYSIS OUTPUT



8.1.1 WD103DL.OT1

| | |
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*****
*          STRUCAD=3D          *
*  STRUCTURAL SOFTWARE INC.  *
*    HOUSTON TEXAS          *
*  VERSION 3.50-E MAR 1994   *
*****

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Friday 7/22/94 17:35: 3

*** Program Options ***

Soil Structure Interaction

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Shear Deformation Included
AISC-ASD 9th Edition + API-ASD 20th Edition Pipe Code Check
No. Of Segments For Prismatic Members 1
No. Of Segments/Section For Non-Prismatic Members 1

```

Load

```

No. Of Basic Load Cases 5
No. Of Comb. Load Cases 3

```

Print Options

```

Input Echo
Joint Deflections
Unity Check Range
Member Stress At Maximum Unity Check
Beam Combined And Shear Unity Check
Element Stress At Maximum Unity Check

```

Joint Equilibrium Check Edit Values:

```

Forces (Kips) .100
Moments (In-Kips) 1.000

```

Solution Technique:

Make Combined Load Cases Basic

Member Force File Type:

Long (Normal)

*** Units Definition ***

| * Description * | * Input Units * | * Output Units * |
|--|----------------------|----------------------|
| A. Joint Information | | |
| 1. Joint Coordinates | Ft | Ft |
| 2. Joint Settlements | In | In |
| Joint Translations | | |
| B. Structure Description | | |
| 3. All Lengths, Heights & Depths .. | Ft | Ft |
| Joint Thickness, Area Centroids | | |
| 4. Projected Areas | Ft ² | Ft ² |
| 5. Volumes | Ft ³ | Ft ³ |
| C. Element Properties | | |
| 6. Element Offsets | In | In |
| 7. Element Dimensions | In | In |
| Rebar Area and Spacing | | |
| Marine Growth Thickness | | |
| 8. Element Cross Section Areas | In ² | In ² |
| 9. Element Moment of Inertia | In ⁴ | In ⁴ |
| D. Material Properties & Stresses | | |
| 10. Steel E & G Modulus | 1000KSI | 1000KSI |
| 11. All Stresses | KSI | KSI |
| Steel And Concrete Strength | | |
| 12. Material Density | PCF | PCF |
| E. Spring Constants | | |
| 13. Rotational Spring Constant | In-Kips/Rad | In-Kips/Rad |
| 14. Translational Spring Constant .. | Kips/In | Kips/In |
| F. Load Data | | |
| 15. Concentrated Loads & Weights ... | Kips | Kips |
| 16. Uniform Loads & Weights | Kips/Ft | Kips/Ft |
| 17. Concentrated Moments | In-Kips | In-Kips |
| 18. Uniform Moments | In-Kips/Ft | In-Kips/Ft |
| 19. Weight Moment of Inertia | Kips-Ft ² | Kips-Ft ² |
| 20. Load Distances | Ft | Ft |
| 21. Pressures | PSF | PSF |
| 22. Wind & Current Velocity | Knots | Knots |
| 23. Wave Velocity | Ft/Sec | Ft/Sec |
| 24. Wave Acceleration | Ft/Sec ² | Ft/Sec ² |
| 25. Kinematic Viscosity | Ft ² /Sec | Ft ² /Sec |
| 26. Response Curve Acceleration | G's | G's |
| 27. Response Curve Velocities | In/Sec | In/Sec |
| 28. Response Curve Displacements ... | In | In |
| G. Soil Data And Pile Forces | | |
| 29. Soil Friction, Soil Force | Kips/In | Kips/In |
| 30. Soil Moments | In-Kips/In | In-Kips/In |
| 31. Undrained Shear Strength | KSF | KSF |

*** Echo Of Input Data - PREP ***

Line 1...5...0...5...0...5...0...5...0...5...0...5...0...5...0...5...0

1 SHELL OIL CO. WEST DELTA BLK 103A Z23 FT WATER 8-BATTERED LEG K-BRACED

2 NOTES:

- 3 EL +57.38 SKID BM JNTS 107 THRU 110
4 EL +55 UPPER DECK JNTS 81 THRU 106
5 EL +49 LEG JNTS 73 THRU 80
6 EL +41 LOWER DECK JNTS 18 THRU 70
7 EL +19.5 & +33.875 FRAME LEG INTERMEDIATE JNTS 1 THRU 17
8 EL +15 JACKET TO DECK TRUSS FRAME LEG JNTS 811 THRU 881
9 EL +12 JACKET JNT (NONE) PILE JNTS 712 THRU 782 RISER 800
10 EL +9'4 5/8 611 THRU 681 " " 612 " 682 " 699-700
11 EL -9'8" 501,502,503,504 ROW 283 ONLY
12 EL -26'6" 511 THRU 581 PILE JNTS 512 " 582 " 599-600
13 EL -46' 505,506,507,508 ROW 283 ONLY
14 EL -68' 411 THRU 481 PILE JNTS 412 " 482 " 499-500
15 EL -91'3" 301,302,303,304 ROW 283 ONLY
16 EL -114'6" 311 THRU 381 PILE JNTS 312 " 382 " 399-400
17 EL -136' 205,206,207,208 ROW 283 ONLY
18 EL -140'3" 201,202,203,204 ROW 283 ONLY
19 EL -166' 211 THRU 281 PILE JNTS 212 " 282 " 299-300
20 EL -188' 101,102,103,104 ROW 283 ONLY
21 EL -223' 111 THRU 181 PILE JNTS 112 " 182 " 199-200
22 EL -386' LOWER TIP OF RISER
23 EL -493' LOWER TIP OF PILES

24 BASIC LOADS:

- 25 LC 1 : DEAD LD + BOAT LND + BUMPERS + WALK WAY (EL+10')
26 LC 2 : DECK & EQUIP LD @ JOINTS

27 WIND, WAVE & CURRENT

- 28 LC 3 : WIND 55 KT, WAVE 49.3 FT/11.3 SEC, CURR 1.2 KT @ 45.0 DEGR
29 LC 4 : WIND 55 KT, WAVE 49.3 FT/11.3 SEC, CURR 1.2 KT @ 67.5 DEGR
30 LC 5 : WIND 55 KT, WAVE 49.3 FT/11.3 SEC, CURR 1.2 KT @ 90.0 DEGR

31 COMBINED LDS:

- 32 LC 6 : LC 1*100% + LC 2*100% + LC3*100% (H=49.3', 45.0 DGR)
33 LC 7 : LC 1*100% + LC 2*100% + LC4*100% (H=49.3', 67.5 DGR)
34 LC 8 : LC 1*100% + LC 2*100% + LC5*100% (H=49.3', 90.0 DGR)

35 OPTIONS EN S1 SDPA20 1 1 5 3 PTPPTPTPTPT

36 LDOPT SF MF 64.20 490.00 -223.00 223.00

37 LDCASE 6 7 8

38 UNITS

39 AMOD 6 1.33 7 1.33 8 1.33

Table with 7 columns: Line, GRUP, and numerical values. Rows 40-50 list groups 165 through 112 with associated values.

*** Echo Of Input Data - PREP ***

Line 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8
 1...5...0...5...0...5...0...5...0...5...0...5...0...5...0

| | | | | | | | | |
|-----|----------|--------|-------|-----------------|---|----------|-----------------|--------|
| 51 | GRUP J16 | 16.000 | 0.500 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 52 | GRUP J20 | 20.000 | 0.812 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 53 | GRUP J24 | 24.000 | 0.687 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 54 | GRUP J25 | 24.000 | 0.500 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 55 | GRUP K08 | 8.625 | 0.322 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 56 | GRUP K11 | 12.750 | 0.500 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 57 | GRUP K12 | 12.750 | 0.687 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 58 | GRUP K13 | 12.750 | 0.375 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 59 | GRUP K18 | 18.000 | 0.500 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 60 | GRUP K20 | 20.000 | 0.812 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 61 | GRUP K24 | 24.000 | 0.375 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 62 | GRUP L20 | 20.000 | 0.500 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 63 | GRUP L24 | 24.000 | 0.375 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 64 | GRUP L25 | 24.000 | 0.500 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 65 | GRUP LG2 | 46.000 | 1.000 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50F490.005.00 | |
| 66 | GRUP LG2 | 46.000 | 0.500 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50F490.00 | |
| 67 | GRUP LG2 | 46.000 | 1.000 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50F490.005.00 | |
| 68 | GRUP LG3 | 46.000 | 1.000 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50F490.005.00 | |
| 69 | GRUP LG3 | 46.000 | 0.500 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50F490.00 | |
| 70 | GRUP LG4 | 46.000 | 0.500 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50F490.00 | |
| 71 | GRUP LG4 | 46.000 | 1.000 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50F490.005.00 | |
| 72 | GRUP LG5 | 46.000 | 0.500 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50F490.00 | |
| 73 | GRUP LG7 | 46.000 | 1.000 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50F490.00 | |
| 74 | GRUP M08 | 8.625 | 0.322 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 75 | GRUP M09 | 10.750 | 0.375 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 76 | GRUP M10 | 10.750 | 0.365 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 77 | GRUP M11 | 12.750 | 0.500 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 78 | GRUP M12 | 12.750 | 0.687 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 79 | GRUP M14 | 14.000 | 0.375 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 80 | GRUP M18 | 18.000 | 0.500 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 81 | GRUP M20 | 20.000 | 0.375 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 82 | GRUP M21 | 20.000 | 0.812 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 83 | GRUP N16 | 16.000 | 0.375 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 84 | GRUP N20 | 20.000 | 0.375 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 85 | GRUP P08 | 8.625 | 0.322 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 86 | GRUP P10 | 10.750 | 0.365 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 87 | GRUP P12 | 12.750 | 0.500 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 88 | GRUP P14 | 14.000 | 0.500 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 89 | GRUP P16 | 16.000 | 0.500 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 90 | GRUP P18 | 18.000 | 0.375 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 91 | GRUP P21 | 20.000 | 0.812 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50 | 490.00 |
| 92 | GRUP PL2 | 42.000 | 1.750 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50F490.0027.3 | |
| 93 | GRUP PL2 | 42.000 | 1.500 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50F490.0020.0 | |
| 94 | GRUP PL2 | 42.000 | 1.250 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50F490.00 | |
| 95 | GRUP PL3 | 42.000 | 1.250 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50F490.004.80 | |
| 96 | GRUP PL3 | 42.000 | 1.000 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50F490.00 | |
| 97 | GRUP PL4 | 42.000 | 1.000 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50F490.00 | |
| 98 | GRUP PL5 | 42.000 | 1.000 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50F490.00 | |
| 99 | GRUP PL6 | 42.000 | 1.000 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50F490.00 | |
| 100 | GRUP PL7 | 42.000 | 1.000 | 29.0011.6036.00 | 1 | 1.001.00 | 0.50F490.00 | |

*** Echo Of Input Data - PREP ***

Line 1...5...0...5...0...5...0...5...0...5...0...5...0...5...0...5...0...5...0

| | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 |
|-----|--------|---------------|--------|-------|-------------------|---|----------|---|-------------|-----|---|---|---|---|---|
| 101 | GRUP | PL8 | 42.000 | 1.000 | 29.0011.6036.00 | 1 | 1.001.00 | | 0.50F490.00 | | | | | | |
| 102 | GRUP | SIH | 12.750 | 0.687 | 29.0011.6036.00 | 1 | 1.001.00 | | 0.50 490.00 | | | | | | |
| 103 | GRUP | W.B | 42.000 | 1.000 | 29.0011.6036.00 | 1 | 1.001.00 | | 0.50F490.00 | | | | | | |
| 104 | GRUP | CHZ | 29.500 | 2.000 | 29.0011.6036.00 | 1 | 1.001.00 | | 0.50 490.00 | | | | | | |
| 105 | GRUP | CH1 | 33.000 | 16.49 | 29.0011.6036.00 | 1 | 1.001.00 | | 0.50 490.00 | | | | | | |
| 106 | GRUP | SXD | 12.750 | 0.500 | 29.0011.6036.00 | 9 | 1.001.00 | | 0.50F490.00 | | | | | | |
| 107 | GRUP | W76 W24X76 | | | 29.0011.6036.00 | 9 | 1.001.00 | | F490.00 | | | | | | |
| 108 | GRUP | WFO W24X104 | | | 29.0011.6036.00 | 9 | 1.001.00 | | F490.00 | | | | | | |
| 109 | GRUP | WF2 W24X117 | | | 29.0011.6036.00 | 9 | 1.001.00 | | F490.00 | | | | | | |
| 110 | GRUP | WF3 W24X131 | | | 29.0011.6036.00 | 9 | 1.001.00 | | F490.00 | | | | | | |
| 111 | GRUP | WF4 W24X146 | | | 29.0011.6036.00 | 9 | 1.001.00 | | F490.00 | | | | | | |
| 112 | GRUP | WF6 W24X162 | | | 29.0011.6036.00 | 9 | 1.001.00 | | F490.00 | | | | | | |
| 113 | GRUP | Y24 | 30.000 | 1.750 | 29.0011.6036.00 | 9 | 1.001.00 | | 1.00F490.00 | | | | | | |
| 114 | GRUP | Z24 | 32.000 | 2.875 | 29.0011.6036.00 | 9 | 1.001.00 | | 1.00F490.00 | | | | | | |
| 115 | GRUP | Y25 | 24.000 | 0.625 | 29.0011.6036.00 | 9 | 1.001.00 | | 1.00F490.00 | | | | | | |
| 116 | GRUP | Y32 | 35.000 | 1.125 | 29.0011.6036.00 | 9 | 1.001.00 | | 1.00F490.00 | | | | | | |
| 117 | GRUP | Y33 | 38.000 | 0.650 | 29.0011.6036.00 | 9 | 1.001.00 | | 1.00F490.00 | | | | | | |
| 118 | GRUP | Y76 | 30.000 | 1.750 | 29.0011.6036.00 | 9 | 1.001.00 | | 1.00F490.00 | | | | | | |
| 119 | GRUP | D85 | 8.000 | .625 | 29.0011.6036.00 | 9 | 1.001.00 | | 0.50M490.00 | | | | | | |
| 120 | GRUP | D83 | 8.000 | .328 | 29.0011.6036.00 | 9 | 1.001.00 | | 0.50M490.00 | | | | | | |
| 121 | GRUP | D10 | 10.750 | .365 | 29.0011.6036.00 | 9 | 1.001.00 | | 0.50M490.00 | | | | | | |
| 122 | GRUP | D11 | 10.750 | .500 | 29.0011.6036.00 | 9 | 1.001.00 | | 0.50M490.00 | | | | | | |
| 123 | GRUP | D12 | 12.750 | 0.500 | 29.0011.6036.00 | 9 | 1.001.00 | | 0.50M490.00 | | | | | | |
| 124 | GRUP | D16 | 16.000 | 0.500 | 29.0011.6036.00 | 9 | 1.001.00 | | 0.50M490.00 | | | | | | |
| 125 | GRUP | D17 | 16.000 | 0.656 | 29.0011.6036.00 | 9 | 1.001.00 | | 0.50M490.00 | | | | | | |
| 126 | GRUP | D24 | 24.000 | 0.750 | 29.0011.6036.00 | 9 | 1.001.00 | | 0.50M490.00 | | | | | | |
| 127 | GRUP | TL1 | 42.000 | 1.000 | 29.0011.6036.00D1 | 1 | 1.001.00 | | 0.50M490.00 | 0.5 | | | | | |
| 128 | GRUP | TL1 | 36.000 | 1.000 | 29.0011.6036.00D1 | 1 | 1.001.00 | | 0.50M490.00 | 0.5 | | | | | |
| 129 | GRUP | TL2 | 36.000 | 1.000 | 29.0011.6036.00D1 | 1 | 1.001.00 | | 0.50M490.00 | | | | | | |
| 130 | GRUP | TL3 | 36.000 | 1.250 | 29.0011.6036.00D1 | 1 | 1.001.00 | | 0.50M490.00 | | | | | | |
| 131 | MEMBER | 1 511 621 165 | | | | | | | | | | | | | |
| 132 | MEMBER | OFFSETS | | | 14.000 | | | | -14.00 | | | | | | |
| 133 | MEMBER | 1 521 631 165 | | | | | | | | | | | | | |
| 134 | MEMBER | OFFSETS | | | 14.000 | | | | -14.00 | | | | | | |
| 135 | MEMBER | 1 531 641 165 | | | | | | | | | | | | | |
| 136 | MEMBER | OFFSETS | | | 14.000 | | | | -14.00 | | | | | | |
| 137 | MEMBER | 1 561 651 165 | | | | | | | | | | | | | |
| 138 | MEMBER | OFFSETS | | | -14.00 | | | | 14.000 | | | | | | |
| 139 | MEMBER | 1 571 661 165 | | | | | | | | | | | | | |
| 140 | MEMBER | OFFSETS | | | -14.00 | | | | 14.000 | | | | | | |
| 141 | MEMBER | 1 581 671 165 | | | | | | | | | | | | | |
| 142 | MEMBER | OFFSETS | | | -14.00 | | | | 14.000 | | | | | | |
| 143 | MEMBER | 1 321 431 185 | | | | | | | | | | | | | |
| 144 | MEMBER | OFFSETS | | | 14.000 | | | | -14.00 | | | | | | |
| 145 | MEMBER | 1 451 561 185 | | | | | | | | | | | | | |
| 146 | MEMBER | OFFSETS | | | 14.000 | | | | -14.00 | | | | | | |
| 147 | MEMBER | 1 461 571 185 | | | | | | | | | | | | | |
| 148 | MEMBER | OFFSETS | | | 14.000 | | | | -14.00 | | | | | | |
| 149 | MEMBER | 1 471 581 185 | | | | | | | | | | | | | |
| 150 | MEMBER | OFFSETS | | | 14.000 | | | | -14.00 | | | | | | |

*** Echo Of Input Data - PREP ***

| | | | | | | | | | | | | | | | |
|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 |
| Line | 1...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 |

- 301 MEMBER 171 175 J20
- 302 MEMBER 175 181 J20
- 303 MEMBER 111 145 J24
- 304 MEMBER 121 155 J24
- 305 MEMBER 131 146 J24
- 306 MEMBER 141 148 J24
- 307 MEMBER 145 151 J24
- 308 MEMBER 146 171 J24
- 309 MEMBER 148 181 J24
- 310 MEMBER 155 161 J24
- 311 MEMBER 121 145 J25
- 312 MEMBER 145 161 J25
- 313 MEMBER 148 131 J25
- 314 MEMBER 171 148 J25
- 315 MEMBER 223 254 K08
- 316 MEMBER 224 255 K08
- 317 MEMBER 244 255 K08
- 318 MEMBER 254 243 K08
- 319 MEMBER 254 263 K08
- 320 MEMBER 255 264 K08
- 321 MEMBER 221 225 K11
- 322 MEMBER 225 231 K11
- 323 MEMBER 261 265 K11
- 324 MEMBER 265 271 K11
- 325 MEMBER 223 224 K12
- 326 MEMBER 263 264 K12
- 327 MEMBER 221 223 K13
- 328 MEMBER 223 205 K13
- 329 MEMBER 223 225 K13
- 330 MEMBER 224 206 K13
- 331 MEMBER 224 231 K13
- 332 MEMBER 225 224 K13
- 333 MEMBER 261 263 K13
- 334 MEMBER 263 207 K13
- 335 MEMBER 263 265 K13
- 336 MEMBER 264 208 K13
- 337 MEMBER 264 271 K13
- 338 MEMBER 265 264 K13
- 339 MEMBER 211 221 K18
- 340 MEMBER 271 281 K18
- 341 MEMBER 223 243 K20
- 342 MEMBER 224 244 K20
- 343 MEMBER 243 263 K20
- 344 MEMBER 244 264 K20
- 345 MEMBER 211 251 K24
- 346 MEMBER 221 251 K24
- 347 MEMBER 221 253 K24
- 348 MEMBER 231 255 K24
- 349 MEMBER 241 271 K24
- 350 MEMBER 241 281 K24

*** Echo Of Input Data - PREP ***

| | | | | | | | | | | | | | | | |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---|
| | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 |
| Line | 1...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0 |

- 351 MEMBER 253 254 K24
- 352 MEMBER 254 261 K24
- 353 MEMBER 255 271 K24
- 354 MEMBER 331 346 L20
- 355 MEMBER 346 371 L20
- 356 MEMBER 311 361 L24
- 357 MEMBER 331 381 L24
- 358 MEMBER 321 343 L25
- 359 MEMBER 343 361 L25
- 360 MEMBER 111 211 LG2
- 361 MEMBER 141 241 LG2
- 362 MEMBER 151 251 LG2
- 363 MEMBER 181 281 LG2
- 364 MEMBER 211 311 LG2
- 365 MEMBER 281 381 LG2
- 366 MEMBER 311 411 LG2
- 367 MEMBER 361 461 LG2
- 368 MEMBER 371 471 LG2
- 369 MEMBER 381 481 LG2
- 370 MEMBER 411 511 LG2
- 371 MEMBER 481 581 LG2
- 372 MEMBER 511 611 LG2
- 373 MEMBER 581 681 LG2
- 374 MEMBER 121 101 LG3
- 375 MEMBER 131 102 LG3
- 376 MEMBER 161 103 LG3
- 377 MEMBER 171 104 LG3
- 378 MEMBER 241 341 LG3
- 379 MEMBER 251 351 LG3
- 380 MEMBER 261 207 LG3
- 381 MEMBER 271 208 LG3
- 382 MEMBER 321 302 LG3
- 383 MEMBER 331 303 LG3
- 384 MEMBER 421 507 LG3
- 385 MEMBER 431 506 LG3
- 386 MEMBER 441 541 LG3
- 387 MEMBER 451 551 LG3
- 388 MEMBER 461 508 LG3
- 389 MEMBER 471 505 LG3
- 390 MEMBER 521 503 LG3
- 391 MEMBER 531 502 LG3
- 392 MEMBER 561 504 LG3
- 393 MEMBER 571 501 LG3
- 394 MEMBER 101 221 LG4
- 395 MEMBER 102 231 LG4
- 396 MEMBER 103 261 LG4
- 397 MEMBER 104 271 LG4
- 398 MEMBER 207 361 LG4
- 399 MEMBER 208 371 LG4
- 400 MEMBER 302 421 LG4

*** Echo Of Input Data - PREP ***

| | | | | | | | | | | | | | | | | |
|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | |
| Line | 1...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 |

- S01 MEMBER 531 581 N20
- S02 MEMBER 626 643 P08
- S03 MEMBER 628 646 P08
- S04 MEMBER 643 666 P08
- S05 MEMBER 646 668 P08
- S06 MEMBER 621 626 P10
- S07 MEMBER 623 625 P10
- S08 MEMBER 625 624 P10
- S09 MEMBER 626 503 P10
- S10 MEMBER 628 502 P10
- S11 MEMBER 631 628 P10
- S12 MEMBER 663 665 P10
- S13 MEMBER 665 664 P10
- S14 MEMBER 666 504 P10
- S15 MEMBER 666 661 P10
- S16 MEMBER 668 501 P10
- S17 MEMBER 668 671 P10
- S18 MEMBER 611 621 P12
- S19 MEMBER 621 625 P12
- S20 MEMBER 625 631 P12
- S21 MEMBER 631 641 P12
- S22 MEMBER 651 661 P12
- S23 MEMBER 661 665 P12
- S24 MEMBER 665 671 P12
- S25 MEMBER 671 681 P12
- S26 MEMBER 611 651 P14
- S27 MEMBER 621 643 P14
- S28 MEMBER 631 646 P14
- S29 MEMBER 641 681 P14
- S30 MEMBER 643 661 P14
- S31 MEMBER 646 671 P14
- S32 MEMBER 623 624 P16
- S33 MEMBER 626 628 P16
- S34 MEMBER 663 664 P16
- S35 MEMBER 666 668 P16
- S36 MEMBER 621 651 P18
- S37 MEMBER 641 671 P18
- S38 MEMBER 623 626 P21
- S39 MEMBER 624 628 P21
- S40 MEMBER 626 666 P21
- S41 MEMBER 628 668 P21
- S42 MEMBER 666 663 P21
- S43 MEMBER 668 664 P21
- S44 MEMBER 112 212 PL2
- S45 MEMBER 122 222 PL2
- S46 MEMBER 132 232 PL2
- S47 MEMBER 142 242 PL2
- S48 MEMBER 152 252 PL2
- S49 MEMBER 162 262 PL2
- S50 MEMBER 172 272 PL2

*** Echo Of Input Data - PREP ***

| | | | | | | | | | | | | | | | | |
|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | |
| Line | 1...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 |

- 551 MEMBER 182 282 PL2
- 552 MEMBER 212 312 PL3
- 553 MEMBER 222 322 PL3
- 554 MEMBER 232 332 PL3
- 555 MEMBER 242 342 PL3
- 556 MEMBER 252 352 PL3
- 557 MEMBER 262 362 PL3
- 558 MEMBER 272 372 PL3
- 559 MEMBER 282 382 PL3
- 560 MEMBER 312 412 PL4
- 561 MEMBER 322 422 PL4
- 562 MEMBER 332 432 PL4
- 563 MEMBER 342 442 PL4
- 564 MEMBER 352 452 PL4
- 565 MEMBER 362 462 PL4
- 566 MEMBER 372 472 PL4
- 567 MEMBER 382 482 PL4
- 568 MEMBER 412 512 PL5
- 569 MEMBER 422 522 PL5
- 570 MEMBER 432 532 PL5
- 571 MEMBER 442 542 PL5
- 572 MEMBER 452 552 PL5
- 573 MEMBER 462 562 PL5
- 574 MEMBER 472 572 PL5
- 575 MEMBER 482 582 PL5
- 576 MEMBER 512 612 PL6
- 577 MEMBER 522 622 PL6
- 578 MEMBER 532 632 PL6
- 579 MEMBER 542 642 PL6
- 580 MEMBER 552 652 PL6
- 581 MEMBER 562 662 PL6
- 582 MEMBER 572 672 PL6
- 583 MEMBER 582 682 PL6
- 584 MEMBER 612 712 PL7
- 585 MEMBER 622 722 PL7
- 586 MEMBER 632 732 PL7
- 587 MEMBER 642 742 PL7
- 588 MEMBER 652 752 PL7
- 589 MEMBER 662 762 PL7
- 590 MEMBER 672 772 PL7
- 591 MEMBER 682 782 PL7
- 592 MEMBER 712 811 PL8
- 593 MEMBER 722 821 PL8
- 594 MEMBER 732 831 PL8
- 595 MEMBER 742 841 PL8
- 596 MEMBER 752 851 PL8
- 597 MEMBER 762 861 PL8
- 598 MEMBER 772 871 PL8
- 599 MEMBER 782 881 PL8
- 600 MEMBER 123 199 SIM

*** Echo Of Input Data - PREP ***

| | | | | | | | | | | | | | | | |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---|
| | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 |
| Line | 1...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0 |

| | | | | | | | | | | | | | | | |
|-----|---------|---------|-----|-------|--------|--|-------|-------|-------|--|--|--|--|--|--|
| 601 | MEMBER | 124 | 199 | SIM | | | | | | | | | | | |
| 602 | MEMBER | 199 | 163 | SIM | | | | | | | | | | | |
| 603 | MEMBER | 199 | 164 | SIM | | | | | | | | | | | |
| 604 | MEMBER | 223 | 299 | SIM | | | | | | | | | | | |
| 605 | MEMBER | 224 | 299 | SIM | | | | | | | | | | | |
| 606 | MEMBER | 299 | 263 | SIM | | | | | | | | | | | |
| 607 | MEMBER | 299 | 264 | SIM | | | | | | | | | | | |
| 608 | MEMBER | 423 | 499 | SIM | | | | | | | | | | | |
| 609 | MEMBER | 424 | 499 | SIM | | | | | | | | | | | |
| 610 | MEMBER | 463 | 499 | SIM | | | | | | | | | | | |
| 611 | MEMBER | 499 | 464 | SIM | | | | | | | | | | | |
| 612 | MEMBER | 626 | 699 | SIM | | | | | | | | | | | |
| 613 | MEMBER | 628 | 699 | SIM | | | | | | | | | | | |
| 614 | MEMBER | 699 | 666 | SIM | | | | | | | | | | | |
| 615 | MEMBER | 699 | 668 | SIM | | | | | | | | | | | |
| 616 | MEMBER1 | 111 | 112 | W.BSK | 100111 | | | | F | | | | | | |
| 617 | MEMBER | OFFSETS | | | | | .590 | .590 | 5.940 | | | | | | |
| 618 | MEMBER1 | 121 | 122 | W.BSK | 100111 | | | | F | | | | | | |
| 619 | MEMBER | OFFSETS | | | | | .600 | 5.970 | | | | | | | |
| 620 | MEMBER1 | 131 | 132 | W.BSK | 100111 | | | | F | | | | | | |
| 621 | MEMBER | OFFSETS | | | | | .600 | 5.970 | | | | | | | |
| 622 | MEMBER1 | 141 | 142 | W.BSK | 100111 | | | | F | | | | | | |
| 623 | MEMBER | OFFSETS | | | | | -.590 | .590 | 5.940 | | | | | | |
| 624 | MEMBER1 | 151 | 152 | W.BSK | 100111 | | | | F | | | | | | |
| 625 | MEMBER | OFFSETS | | | | | .590 | -.590 | 5.940 | | | | | | |
| 626 | MEMBER1 | 161 | 162 | W.BSK | 100111 | | | | F | | | | | | |
| 627 | MEMBER | OFFSETS | | | | | -.600 | 5.970 | | | | | | | |
| 628 | MEMBER1 | 171 | 172 | W.BSK | 100111 | | | | F | | | | | | |
| 629 | MEMBER | OFFSETS | | | | | -.600 | 5.970 | | | | | | | |
| 630 | MEMBER1 | 181 | 182 | W.BSK | 100111 | | | | F | | | | | | |
| 631 | MEMBER | OFFSETS | | | | | -.590 | -.590 | 5.940 | | | | | | |
| 632 | MEMBER1 | 199 | 200 | W.BSK | 100111 | | | | F | | | | | | |
| 633 | MEMBER | OFFSETS | | | | | | 6.000 | | | | | | | |
| 634 | MEMBER1 | 211 | 212 | W.BSK | 100111 | | | | F | | | | | | |
| 635 | MEMBER | OFFSETS | | | | | .590 | .590 | 5.940 | | | | | | |
| 636 | MEMBER1 | 221 | 222 | W.BSK | 100111 | | | | F | | | | | | |
| 637 | MEMBER | OFFSETS | | | | | .600 | 5.970 | | | | | | | |
| 638 | MEMBER1 | 231 | 232 | W.BSK | 100111 | | | | F | | | | | | |
| 639 | MEMBER | OFFSETS | | | | | .600 | 5.970 | | | | | | | |
| 640 | MEMBER1 | 241 | 242 | W.BSK | 100111 | | | | F | | | | | | |
| 641 | MEMBER | OFFSETS | | | | | -.590 | .590 | 5.940 | | | | | | |
| 642 | MEMBER1 | 251 | 252 | W.BSK | 100111 | | | | F | | | | | | |
| 643 | MEMBER | OFFSETS | | | | | .590 | -.590 | 5.940 | | | | | | |
| 644 | MEMBER1 | 261 | 262 | W.BSK | 100111 | | | | F | | | | | | |
| 645 | MEMBER | OFFSETS | | | | | -.600 | 5.970 | | | | | | | |
| 646 | MEMBER1 | 271 | 272 | W.BSK | 100111 | | | | F | | | | | | |
| 647 | MEMBER | OFFSETS | | | | | -.600 | 5.970 | | | | | | | |
| 648 | MEMBER1 | 281 | 282 | W.BSK | 100111 | | | | F | | | | | | |
| 649 | MEMBER | OFFSETS | | | | | -.590 | -.590 | 5.940 | | | | | | |
| 650 | MEMBER1 | 299 | 300 | W.BSK | 100111 | | | | F | | | | | | |

*** Echo Of Input Data - PREP ***

| | | | | | | | | | | | | | | | |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---|
| | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 |
| Line | 1...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0 |

- 701 MEMBER 66 67 WF3SK
- 702 MEMBER 67 21 WF3SK
- 703 MEMBER 23 47 WF3SK
- 704 MEMBER 47 43 WF3SK
- 705 MEMBER 43 48 WF3SK
- 706 MEMBER 48 50 WF3SK
- 707 MEMBER 50 24 WF3SK
- 708 MEMBER 24 56 WF3SK
- 709 MEMBER 56 37 WF3SK
- 710 MEMBER 37 58 WF3SK
- 711 MEMBER 58 25 WF3SK
- 712 MEMBER 25 60 WF3SK
- 713 MEMBER 60 68 WF3SK
- 714 MEMBER 68 69 WF3SK
- 715 MEMBER 69 70 WF3SK
- 716 MEMBER 70 26 WF3SK
- 717 MEMBER 54 34 WF6SK
- 718 MEMBER 34 40 WF6SK
- 719 MEMBER 40 35 WF6SK
- 720 MEMBER 35 64 WF6SK
- 721 MEMBER 53 31 WF6SK
- 722 MEMBER 31 39 WF6SK
- 723 MEMBER 39 33 WF6SK
- 724 MEMBER 33 63 WF6SK
- 725 MEMBER 18 27 WFOSK
- 726 MEMBER 27 23 WFOSK
- 727 MEMBER 21 30 WFOSK
- 728 MEMBER 30 26 WFOSK
- 729 MEMBER 53 49 WFOSK
- 730 MEMBER 49 51 Y32SK
- 731 MEMBER 51 50 Y32SK
- 732 MEMBER 50 54 WFOSK
- 733 MEMBER 63 59 WFOSK
- 734 MEMBER 59 61 WF3SK
- 735 MEMBER 61 60 WF3SK
- 736 MEMBER 60 64 WFOSK
- 737 MEMBER 20 29 WF3SK
- 738 MEMBER 29 25 WF3SK
- 739 MEMBER 19 28 WF3SK
- 740 MEMBER 28 24 WF3SK
- 741 MEMBER 39 36 Y24SK
- 742 MEMBER 36 38 Y24SK
- 743 MEMBER 38 37 Y24SK
- 744 MEMBER 37 40 Y24SK
- 745 MEMBER 81 113 WF4SK
- 746 MEMBER 113 114 WF4SK
- 747 MEMBER 114 116 WF4SK
- 748 MEMBER 116 83 WF4SK
- 749 MEMBER 83 117 WF4SK
- 750 MEMBER 117 118 WF4SK

*** Echo Of Input Data - PREP ***

| | | | | | | | | | | | | | | | |
|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 |
| Line | 1...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 |

- 751 MEMBER 118 119 WF4SK
- 752 MEMBER 119 84 WF4SK
- 753 MEMBER 84 120 WF4SK
- 754 MEMBER 120 126 WF4SK
- 755 MEMBER 126 127 WF4SK
- 756 MEMBER 127 85 WF4SK
- 757 MEMBER 86 128 WF4SK
- 758 MEMBER 128 129 WF4SK
- 759 MEMBER 129 130 WF4SK
- 760 MEMBER 130 87 WF4SK
- 761 MEMBER 87 133 WF4SK
- 762 MEMBER 133 134 WF4SK
- 763 MEMBER 134 136 WF4SK
- 764 MEMBER 136 88 WF4SK
- 765 MEMBER 88 137 WF4SK
- 766 MEMBER 137 138 WF4SK
- 767 MEMBER 138 139 WF4SK
- 768 MEMBER 139 89 WF4SK
- 769 MEMBER 81 90 V2SSK
- 770 MEMBER 90 94 V2SSK
- 771 MEMBER 94 98 V2SSK
- 772 MEMBER 98 86 V2SSK
- 773 MEMBER 85 93 V2SSK
- 774 MEMBER 93 97 V2SSK
- 775 MEMBER 97 106 V2SSK
- 776 MEMBER 106 89 V2SSK
- 777 MEMBER 91 95 V33
- 778 MEMBER 95 99 V33
- 779 MEMBER 92 96 V33
- 780 MEMBER 96 105 V33
- 781 MEMBER 811 1 IL1
- 782 MEMBER 821 2 IL1
- 783 MEMBER 831 3 IL1
- 784 MEMBER 841 4 IL1
- 785 MEMBER 1 9 IL2
- 786 MEMBER 2 10 IL2
- 787 MEMBER 3 11 IL2
- 788 MEMBER 4 13 IL2
- 789 MEMBER 9 18 IL3
- 790 MEMBER 18 73 IL3
- 791 MEMBER 73 81 IL2
- 792 MEMBER 10 19 IL3
- 793 MEMBER 19 74 IL3
- 794 MEMBER 74 83 IL2
- 795 MEMBER 11 20 IL3
- 796 MEMBER 20 75 IL3
- 797 MEMBER 75 84 IL2
- 798 MEMBER 13 21 IL3
- 799 MEMBER 21 76 IL3
- 800 MEMBER 76 85 IL2

*** Echo Of Input Data - PREP ***

| | | | | | | | | | | | | | | | |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---|
| | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 |
| Line | 1...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0 |

- 801 MEMBER 45 113 D10
- 802 MEMBER 46 116 D10
- 803 MEMBER 65 120 D10
- 804 MEMBER 67 127 D10
- 805 MEMBER 55 117 D10
- 806 MEMBER 36 118 D10
- 807 MEMBER 57 119 D10
- 808 MEMBER 41 114 D16
- 809 MEMBER 41 113 D16
- 810 MEMBER 41 116 D16
- 811 MEMBER 66 126 D16
- 812 MEMBER 66 120 D16
- 813 MEMBER 66 127 D16
- 814 MEMBER 18 113 D24
- 815 MEMBER 19 116 D24
- 816 MEMBER 20 120 D24
- 817 MEMBER 21 127 D24
- 818 MEMBER 19 117 D11
- 819 MEMBER 36 117 D11
- 820 MEMBER 36 119 D11
- 821 MEMBER 20 119 D11
- 822 MEMBER 24 133 D11
- 823 MEMBER 37 133 D11
- 824 MEMBER 37 134 D11
- 825 MEMBER 37 136 D11
- 826 MEMBER 25 136 D11
- 827 MEMBER 23 128 D24
- 828 MEMBER 24 130 D24
- 829 MEMBER 25 137 D24
- 830 MEMBER 26 139 D24
- 831 MEMBER 47 128 D10
- 832 MEMBER 48 130 D10
- 833 MEMBER 56 133 D10
- 834 MEMBER 58 136 D10
- 835 MEMBER 68 137 D10
- 836 MEMBER 70 139 D10
- 837 MEMBER 43 129 D16
- 838 MEMBER 43 128 D16
- 839 MEMBER 43 130 D16
- 840 MEMBER 69 138 D16
- 841 MEMBER 69 137 D16
- 842 MEMBER 69 139 D16
- 843 MEMBER 851 5 TL1
- 844 MEMBER 861 6 TL1
- 845 MEMBER 871 7 TL1
- 846 MEMBER 881 8 TL1
- 847 MEMBER 5 14 TL2
- 848 MEMBER 6 15 TL2
- 849 MEMBER 7 16 TL2
- 850 MEMBER 8 17 TL2

*** Echo Of Input Data - PREP ***

| | | | | | | | | | | | | | | | | |
|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | |
| Line | 1...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 |

- 851 MEMBER 14 23 IL3
- 852 MEMBER 23 77 IL3
- 853 MEMBER 77 86 IL2
- 854 MEMBER 15 24 IL3
- 855 MEMBER 24 78 IL3
- 856 MEMBER 78 87 IL2
- 857 MEMBER 16 25 IL3
- 858 MEMBER 25 79 IL3
- 859 MEMBER 79 88 IL2
- 860 MEMBER 17 26 IL3
- 861 MEMBER 26 80 IL3
- 862 MEMBER 80 89 IL2
- 863 MEMBER 18 90 D10
- 864 MEMBER 90 27 D10
- 865 MEMBER 27 98 D10
- 866 MEMBER 98 23 D10
- 867 MEMBER 27 94 D83
- 868 MEMBER 30 97 D83
- 869 MEMBER 21 93 D10
- 870 MEMBER 93 30 D10
- 871 MEMBER 30 106 D10
- 872 MEMBER 106 26 D10
- 873 MEMBER 33 108 D85
- 874 MEMBER 35 110 D85
- 875 MEMBER 20 108 D17
- 876 MEMBER 20 92 D17
- 877 MEMBER 25 105 D17
- 878 MEMBER 25 110 D17
- 879 MEMBER 29 96 D12
- 880 MEMBER 29 92 D12
- 881 MEMBER 29 105 D12
- 882 MEMBER 28 95 D12
- 883 MEMBER 28 91 D12
- 884 MEMBER 28 99 D12
- 885 MEMBER 19 91 D17
- 886 MEMBER 24 99 D17
- 887 MEMBER 19 107 D17
- 888 MEMBER 24 109 D17
- 889 MEMBER 31 107 D85
- 890 MEMBER 34 109 D85
- 891 MEMBER 107 140 Y33
- 892 MEMBER 140 91 Y33
- 893 MEMBER 83 140 IL2
- 894 MEMBER 87 147 IL2
- 895 MEMBER 99 147 Y33
- 896 MEMBER 147 109 Y33
- 897 MEMBER 108 149 Y33
- 898 MEMBER 149 92 Y33
- 899 MEMBER 105 150 Y33
- 900 MEMBER 150 110 Y33

*** Echo Of Input Data - PREP ***

| | | | | | | | | | | | | | | | |
|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 |
| Line | 1...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 | ...0 | ...5 |

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901 MEMBER 84 149 TLZ
902 MEMBER 88 150 TLZ
903 MEMBER 66 71 V24SK
904 MEMBER 71 69 V24SK
905 MEMBER 41 44 V76SK
906 MEMBER 44 43 V76SK
907 MEMBER 81 153 V2SSK
908 MEMBER 153 87 V2SSK
909 MEMBER 83 153 V2SSK
910 MEMBER 153 86 V2SSK
911 MEMBER 88 154 V2SSK
912 MEMBER 154 83 V2SSK
913 MEMBER 87 154 V2SSK
914 MEMBER 154 84 V2SSK
915 MEMBER 85 156 V2SSK
916 MEMBER 156 88 V2SSK
917 MEMBER 84 156 V2SSK
918 MEMBER 156 89 V2SSK
919 PILOPI PA20135 490. PTPPTPTPTPTPT
920 PGRP P42 42.0 1.75 170.0
921 PGRP P42 42.0 1.50 10.0
922 PGRP P42 42.0 1.25 10.0
923 PGRP P42 42.0 1.00 80.0
924 PGRP P33 33.0 16.49 163.0
925 PILE 200 300 P33 81SOL1
926 PILE 112 212 P42 135SOL1
927 PILE 122 222 P42 135SOL1
928 PILE 132 232 P42 135SOL1
929 PILE 142 242 P42 135SOL1
930 PILE 152 252 P42 135SOL1
931 PILE 162 262 P42 135SOL1
932 PILE 172 272 P42 135SOL1
933 PILE 182 282 P42 135SOL1
934 SOIL SOL1 1.
935 I-Z 7 0.0 .07336 42. S
936 TVAL 0.0 0.30 0.50 0.75 0.90 1.00 0.70
937 ZVAL 0.0 .0016 .0031 .0057 .0080 .0100 .0200
938 I-Z 7 33.0 .07336 42. S
939 TVAL 0.0 0.30 0.50 0.75 0.90 1.00 0.70
940 ZVAL 0.0 .0016 .0031 .0057 .0080 .0100 .0200
941 I-Z 7 33.1 .38528 42. S
942 TVAL 0.0 0.30 0.50 0.75 0.90 1.00 0.70
943 ZVAL 0.0 .0016 .0031 .0057 .0080 .0100 .0200
944 I-Z 7 100.0 .38528 42. S
945 TVAL 0.0 0.30 0.50 0.75 0.90 1.00 0.70
946 ZVAL 0.0 .0016 .0031 .0057 .0080 .0100 .0200
947 I-Z 2 100.1 2.4278 42. S
948 TVAL 0.0 1.00
949 ZVAL 0.0 0.01
950 I-Z 2 150.0 2.4278 42. S

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*** Echo Of Input Data - PREP ***

| Line | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|------|------|------|------|------|------|------|------|------|
| 1... | 5... | 0... | 5... | 0... | 5... | 0... | 5... | 0... |

| | | | | | | | | |
|------|-------|-----|---------|---------|---------|--|--|--------|
| 1051 | JOINT | 164 | 9.583 | 13.781 | -223.00 | | | |
| 1052 | JOINT | 165 | .000 | 46.302 | -223.00 | | | |
| 1053 | JOINT | 171 | 22.500 | 46.302 | -223.00 | | | |
| 1054 | JOINT | 172 | 22.500 | 46.302 | -223.00 | | | ZZZZZZ |
| 1055 | JOINT | 175 | 52.906 | 46.302 | -223.00 | | | |
| 1056 | JOINT | 181 | 86.302 | 46.302 | -223.00 | | | |
| 1057 | JOINT | 182 | 86.302 | 46.302 | -223.00 | | | ZZZZZZ |
| 1058 | JOINT | 199 | .000 | .000 | -223.00 | | | |
| 1059 | JOINT | 200 | .000 | .000 | -223.00 | | | ZZZZZZ |
| 1060 | JOINT | 201 | -22.500 | -2.575 | -140.25 | | | |
| 1061 | JOINT | 202 | -22.500 | -38.027 | -140.25 | | | |
| 1062 | JOINT | 203 | 22.500 | -38.027 | -140.25 | | | |
| 1063 | JOINT | 204 | 22.500 | 2.575 | -140.25 | | | |
| 1064 | JOINT | 205 | -22.500 | -37.602 | -136.00 | | | |
| 1065 | JOINT | 206 | 22.500 | -37.602 | -136.00 | | | |
| 1066 | JOINT | 207 | -22.500 | 37.602 | -136.00 | | | |
| 1067 | JOINT | 208 | 22.500 | 37.602 | -136.00 | | | |
| 1068 | JOINT | 211 | -80.602 | -40.602 | -166.00 | | | |
| 1069 | JOINT | 212 | -80.602 | -40.602 | -166.00 | | | |
| 1070 | JOINT | 221 | -22.500 | -40.602 | -166.00 | | | |
| 1071 | JOINT | 222 | -22.500 | -40.602 | -166.00 | | | |
| 1072 | JOINT | 223 | -9.583 | -13.781 | -166.00 | | | |
| 1073 | JOINT | 224 | 9.583 | -13.781 | -166.00 | | | |
| 1074 | JOINT | 225 | .000 | -40.599 | -166.00 | | | |
| 1075 | JOINT | 231 | 22.500 | -40.602 | -166.00 | | | |
| 1076 | JOINT | 232 | 22.500 | -40.602 | -166.00 | | | |
| 1077 | JOINT | 241 | 80.602 | -40.602 | -166.00 | | | |
| 1078 | JOINT | 242 | 80.602 | -40.602 | -166.00 | | | |
| 1079 | JOINT | 243 | -9.583 | .000 | -166.00 | | | |
| 1080 | JOINT | 244 | 9.583 | .000 | -166.00 | | | |
| 1081 | JOINT | 251 | -80.602 | 40.602 | -166.00 | | | |
| 1082 | JOINT | 252 | -80.602 | 40.602 | -166.00 | | | |
| 1083 | JOINT | 253 | -22.500 | -7.469 | -166.00 | | | |
| 1084 | JOINT | 254 | -22.500 | .000 | -166.00 | | | |
| 1085 | JOINT | 255 | 22.500 | .000 | -166.00 | | | |
| 1086 | JOINT | 261 | -22.500 | 40.602 | -166.00 | | | |
| 1087 | JOINT | 262 | -22.500 | 40.602 | -166.00 | | | |
| 1088 | JOINT | 263 | -9.583 | 13.781 | -166.00 | | | |
| 1089 | JOINT | 264 | 9.583 | 13.781 | -166.00 | | | |
| 1090 | JOINT | 265 | .000 | 40.599 | -166.00 | | | |
| 1091 | JOINT | 271 | 22.500 | 40.602 | -166.00 | | | |
| 1092 | JOINT | 272 | 22.500 | 40.602 | -166.00 | | | |
| 1093 | JOINT | 281 | 80.602 | 40.602 | -166.00 | | | |
| 1094 | JOINT | 282 | 80.602 | 40.602 | -166.00 | | | |
| 1095 | JOINT | 299 | .000 | .000 | -166.00 | | | |
| 1096 | JOINT | 300 | .000 | .000 | -166.00 | | | |
| 1097 | JOINT | 301 | -22.500 | 2.325 | -91.250 | | | |
| 1098 | JOINT | 302 | -22.500 | -33.127 | -91.250 | | | |
| 1099 | JOINT | 303 | 22.500 | -33.127 | -91.250 | | | |
| 1100 | JOINT | 304 | 22.500 | -2.325 | -91.250 | | | |

*** Echo Of Input Data - PREP ***

| Line | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1... | 5... | 0... | 5... | 0... | 5... | 0... | 5... | 0... | 5... | 0... | 5... | 0... | 5... | 0... | 5... |

1101 JOINT 311 -75.452-35.452-114.50
 1102 JOINT 312 -75.452-35.452-114.50
 1103 JOINT 321 -22.500-35.452-114.50
 1104 JOINT 322 -22.500-35.452-114.50
 1105 JOINT 331 22.500-35.452-114.50
 1106 JOINT 332 22.500-35.452-114.50
 1107 JOINT 341 75.452-35.452-114.50
 1108 JOINT 342 75.452-35.452-114.50
 1109 JOINT 343 -22.500 .000-114.50
 1110 JOINT 346 22.500 7.552-114.50
 1111 JOINT 351 -75.452 35.452-114.50
 1112 JOINT 352 -75.452 35.452-114.50
 1113 JOINT 361 -22.500 35.452-114.50
 1114 JOINT 362 -22.500 35.452-114.50
 1115 JOINT 371 22.500 35.452-114.50
 1116 JOINT 372 22.500 35.452-114.50
 1117 JOINT 381 75.452 35.452-114.50
 1118 JOINT 382 75.452 35.452-114.50
 1119 JOINT 411 -70.802-30.802-68.000
 1120 JOINT 412 -70.802-30.802-68.000
 1121 JOINT 421 -22.500-30.802-68.000
 1122 JOINT 422 -22.500-30.802-68.000
 1123 JOINT 423 -9.583-13.781-68.000
 1124 JOINT 424 9.583-13.781-68.000
 1125 JOINT 425 .000-30.802-68.000
 1126 JOINT 431 22.500-30.802-68.000
 1127 JOINT 432 22.500-30.802-68.000
 1128 JOINT 441 70.802-30.802-68.000
 1129 JOINT 442 70.802-30.802-68.000
 1130 JOINT 443 -22.500 .000-68.000
 1131 JOINT 446 22.500 .000-68.000
 1132 JOINT 451 -70.802 30.802-68.000
 1133 JOINT 452 -70.802 30.802-68.000
 1134 JOINT 461 -22.500 30.802-68.000
 1135 JOINT 462 -22.500 30.802-68.000
 1136 JOINT 463 -9.583 13.781-68.000
 1137 JOINT 464 9.583 13.781-68.000
 1138 JOINT 465 .000 30.802-68.000
 1139 JOINT 471 22.500 30.802-68.000
 1140 JOINT 472 22.500 30.802-68.000
 1141 JOINT 481 70.802 30.802-68.000
 1142 JOINT 482 70.802 30.802-68.000
 1143 JOINT 499 .000 .000-68.000
 1144 JOINT 500 .000 .000-68.000
 1145 JOINT 501 22.500 24.967 -9.667
 1146 JOINT 502 22.500-24.967 -9.667
 1147 JOINT 503 -22.500-24.967 -9.667
 1148 JOINT 504 -22.500 24.967 -9.667
 1149 JOINT 505 22.500 28.602-46.000
 1150 JOINT 506 22.500-28.602-46.000

*** Echo Of Input Data - PREP ***

| | | | | | | | | | | | | | | | |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---|
| | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 |
| Line | 1...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0...5... | 0 |

| | | | | | |
|------|-------|-----|---------|---------|--------|
| 1201 | JOINT | 732 | 22.500 | -22.802 | 12.000 |
| 1202 | JOINT | 742 | 62.802 | -22.802 | 12.000 |
| 1203 | JOINT | 752 | -62.802 | 22.802 | 12.000 |
| 1204 | JOINT | 762 | -22.500 | 22.802 | 12.000 |
| 1205 | JOINT | 772 | 22.500 | 22.802 | 12.000 |
| 1206 | JOINT | 782 | 62.802 | 22.802 | 12.000 |
| 1207 | JOINT | 811 | -62.500 | -22.500 | 15.000 |
| 1208 | JOINT | 821 | -22.500 | -22.500 | 15.000 |
| 1209 | JOINT | 831 | 22.500 | -22.500 | 15.000 |
| 1210 | JOINT | 841 | 62.500 | -22.500 | 15.000 |
| 1211 | JOINT | 851 | -62.500 | 22.500 | 15.000 |
| 1212 | JOINT | 861 | -22.500 | 22.500 | 15.000 |
| 1213 | JOINT | 871 | 22.500 | 22.500 | 15.000 |
| 1214 | JOINT | 881 | 62.500 | 22.500 | 15.000 |
| 1215 | JOINT | 900 | .000 | .000 | 19.000 |
| 1216 | JOINT | 1 | -62.500 | -22.500 | 19.500 |
| 1217 | JOINT | 2 | -22.500 | -22.500 | 19.500 |
| 1218 | JOINT | 3 | 22.500 | -22.500 | 19.500 |
| 1219 | JOINT | 4 | 62.500 | -22.500 | 19.500 |
| 1220 | JOINT | 5 | -62.500 | 22.500 | 19.500 |
| 1221 | JOINT | 6 | -22.500 | 22.500 | 19.500 |
| 1222 | JOINT | 7 | 22.500 | 22.500 | 19.500 |
| 1223 | JOINT | 8 | 62.500 | 22.500 | 19.500 |
| 1224 | JOINT | 9 | -62.500 | -22.500 | 33.875 |
| 1225 | JOINT | 10 | -22.500 | -22.500 | 33.875 |
| 1226 | JOINT | 11 | 22.500 | -22.500 | 33.875 |
| 1227 | JOINT | 13 | 62.500 | -22.500 | 33.875 |
| 1228 | JOINT | 14 | -62.500 | 22.500 | 33.875 |
| 1229 | JOINT | 15 | -22.500 | 22.500 | 33.875 |
| 1230 | JOINT | 16 | 22.500 | 22.500 | 33.875 |
| 1231 | JOINT | 17 | 62.500 | 22.500 | 33.875 |
| 1232 | JOINT | 18 | -62.500 | -22.500 | 41.000 |
| 1233 | JOINT | 19 | -22.500 | -22.500 | 41.000 |
| 1234 | JOINT | 20 | 22.500 | -22.500 | 41.000 |
| 1235 | JOINT | 21 | 62.500 | -22.500 | 41.000 |
| 1236 | JOINT | 23 | -62.500 | 22.500 | 41.000 |
| 1237 | JOINT | 24 | -22.500 | 22.500 | 41.000 |
| 1238 | JOINT | 25 | 22.500 | 22.500 | 41.000 |
| 1239 | JOINT | 26 | 62.500 | 22.500 | 41.000 |
| 1240 | JOINT | 27 | -62.500 | .000 | 41.000 |
| 1241 | JOINT | 28 | -22.500 | .000 | 41.000 |
| 1242 | JOINT | 29 | 22.500 | .000 | 41.000 |
| 1243 | JOINT | 30 | 62.500 | .000 | 41.000 |
| 1244 | JOINT | 31 | -22.500 | -42.500 | 41.000 |
| 1245 | JOINT | 33 | 22.500 | -42.500 | 41.000 |
| 1246 | JOINT | 34 | -22.500 | 42.500 | 41.000 |
| 1247 | JOINT | 35 | 22.500 | 42.500 | 41.000 |
| 1248 | JOINT | 36 | .000 | -22.500 | 41.000 |
| 1249 | JOINT | 37 | .000 | 22.500 | 41.000 |
| 1250 | JOINT | 38 | .000 | .000 | 41.000 |

*** Echo Of Input Data - PREP ***

Line 1...5...0...5...0...5...0...5...0...5...0...5...0...5...0...5...0

| | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 |
|------|------------|--------|---------|---------|---------|---------|-----|------|-----|-----|---|---|---|---|---|
| 1301 | JOINT | 94 | -62.500 | .000 | 55.000 | | | | | | | | | | |
| 1302 | JOINT | 95 | -22.500 | .000 | 57.380 | | | | | | | | | | |
| 1303 | JOINT | 96 | 22.500 | .000 | 57.380 | | | | | | | | | | |
| 1304 | JOINT | 97 | 62.500 | .000 | 55.000 | | | | | | | | | | |
| 1305 | JOINT | 98 | -62.500 | 11.250 | 55.000 | | | | | | | | | | |
| 1306 | JOINT | 99 | -22.500 | 11.250 | 57.380 | | | | | | | | | | |
| 1307 | JOINT | 105 | 22.500 | 11.250 | 57.380 | | | | | | | | | | |
| 1308 | JOINT | 106 | 62.500 | 11.250 | 55.000 | | | | | | | | | | |
| 1309 | JOINT | 107 | -22.500 | -29.000 | 57.380 | | | | | | | | | | |
| 1310 | JOINT | 108 | 22.500 | -29.000 | 57.380 | | | | | | | | | | |
| 1311 | JOINT | 109 | -22.500 | 29.000 | 57.380 | | | | | | | | | | |
| 1312 | JOINT | 110 | 22.500 | 29.000 | 57.380 | | | | | | | | | | |
| 1313 | JOINT | 113 | -52.500 | -22.500 | 55.000 | | | | | | | | | | |
| 1314 | JOINT | 114 | -42.500 | -22.500 | 55.000 | | | | | | | | | | |
| 1315 | JOINT | 116 | -32.500 | -22.500 | 55.000 | | | | | | | | | | |
| 1316 | JOINT | 117 | -11.250 | -22.500 | 55.000 | | | | | | | | | | |
| 1317 | JOINT | 118 | .000 | -22.500 | 55.000 | | | | | | | | | | |
| 1318 | JOINT | 119 | 11.250 | -22.500 | 55.000 | | | | | | | | | | |
| 1319 | JOINT | 120 | 32.500 | -22.500 | 55.000 | | | | | | | | | | |
| 1320 | JOINT | 126 | 42.500 | -22.500 | 55.000 | | | | | | | | | | |
| 1321 | JOINT | 127 | 52.500 | -22.500 | 55.000 | | | | | | | | | | |
| 1322 | JOINT | 128 | -52.500 | 22.500 | 55.000 | | | | | | | | | | |
| 1323 | JOINT | 129 | -42.500 | 22.500 | 55.000 | | | | | | | | | | |
| 1324 | JOINT | 130 | -32.500 | 22.500 | 55.000 | | | | | | | | | | |
| 1325 | JOINT | 133 | -11.250 | 22.500 | 55.000 | | | | | | | | | | |
| 1326 | JOINT | 134 | .000 | 22.500 | 55.000 | | | | | | | | | | |
| 1327 | JOINT | 136 | 11.250 | 22.500 | 55.000 | | | | | | | | | | |
| 1328 | JOINT | 137 | 32.500 | 22.500 | 55.000 | | | | | | | | | | |
| 1329 | JOINT | 138 | 42.500 | 22.500 | 55.000 | | | | | | | | | | |
| 1330 | JOINT | 139 | 52.500 | 22.500 | 55.000 | | | | | | | | | | |
| 1331 | JOINT | 140 | -22.500 | -22.500 | 57.380 | | | | | | | | | | |
| 1332 | JOINT | 147 | -22.500 | 22.500 | 57.380 | | | | | | | | | | |
| 1333 | JOINT | 149 | 22.500 | -22.500 | 57.380 | | | | | | | | | | |
| 1334 | JOINT | 150 | 22.500 | 22.500 | 57.380 | | | | | | | | | | |
| 1335 | JOINT | 153 | -42.500 | .000 | 55.000 | | | | | | | | | | |
| 1336 | JOINT | 154 | .000 | .000 | 55.000 | | | | | | | | | | |
| 1337 | JOINT | 156 | 42.500 | .000 | 55.000 | | | | | | | | | | |
| 1338 | AREABL | 33. | 480. | 120. | 42.5 | -26.3 | 2.5 | 1.05 | 631 | 641 | | | | | D |
| 1339 | AREABL | 1440. | 1440. | 1440. | 42.5 | -26.3 | 2.5 | 1.4 | 631 | 641 | | | | | I |
| 1340 | AREABB | 62. | 62. | 14.4 | -63.064 | -28.064 | 1.0 | 0.7 | 611 | | | | | | D |
| 1341 | AREABB151. | 27151. | 27151. | 27 | -63.064 | -28.064 | 1.0 | 1.45 | 611 | | | | | | I |
| 1342 | AREABB | 62. | 62. | 14.4 | -22.5 | -28.064 | 1.0 | 0.7 | 621 | | | | | | D |
| 1343 | AREABB151. | 27151. | 27151. | 27 | -22.5 | -28.064 | 1.0 | 1.45 | 621 | | | | | | I |
| 1344 | AREABB | 62. | 62. | 14.4 | -63.064 | -28.064 | 1.0 | 0.7 | 651 | | | | | | D |
| 1345 | AREABB151. | 27151. | 27151. | 27 | -63.064 | -28.064 | 1.0 | 1.45 | 651 | | | | | | I |
| 1346 | AREABB | 62. | 62. | 14.4 | -22.5 | -28.064 | 1.0 | 0.7 | 661 | | | | | | D |
| 1347 | AREABB151. | 27151. | 27151. | 27 | -22.5 | -28.064 | 1.0 | 1.45 | 661 | | | | | | I |
| 1348 | AREABB | 62. | 62. | 14.4 | 22.5 | -28.064 | 1.0 | 0.7 | 671 | | | | | | D |
| 1349 | AREABB151. | 27151. | 27151. | 27 | 22.5 | -28.064 | 1.0 | 1.45 | 671 | | | | | | I |
| 1350 | AREABB | 62. | 62. | 14.4 | 63.064 | -28.064 | 1.0 | 0.7 | 681 | | | | | | D |

*** Echo Of Input Data - PREP ***

Line 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8
1...5...0...5...0...5...0...5...0...5...0...5...0...5...0

Table with columns for line numbers and various numerical values. Includes entries like 1351 AREABB, 1370 MGROU, 1371 MGROU, 1372 MGROU, 1373 GRPOU, 1374 GRPOU, 1375 GRPOU, 1376 GRPOU, 1377 GRPOU, 1378 GRPOU, 1379 GRPOU, 1380 GRPOU, 1381 GRPOU, 1382 GRPOU, 1383 GRPOU, 1384 GRPOU, 1385 GRPOU, 1386 GRPOU, 1387 GRPOU, 1388 LOADCH, 1389 DEAD, 1390 LOAD, 1391 LOAD, 1392 LOAD, 1393 LOAD, 1394 LOAD, 1395 LOAD, 1396 LOAD, 1397 LOAD, 1398 LOAD, 1399 LOAD, 1400 LOAD.

*** Tubular Member Properties ***

| GRP | M/S | Joint | | OD (In) | E (1000KSI) | G (In ²) | Ax (In ²) | Ix /----- (In ⁴) | Iy /----- (In ⁴) | Iz /----- (In ⁴) | Fy (KSI) | Ky | Kz | Shear | Sec |
|-----|-----|---------------|------------|------------|----------------|-------------------------|--------------------------|------------------------------------|------------------------------------|------------------------------------|-------------|-----|-----|----------------------------|-------------|
| | | Thick (Ft) | WT (In) | | | | | | | | | | | Area (In ²) | Len (Ft) |
| 165 | 1 | .00 | .500 | 16.000 | 29.0 | 11.6 | 24.3 | 1464. | 732. | 732. | 36.0 | 1.0 | 1.0 | 12.17 | .00 |
| 185 | 1 | .00 | .500 | 18.000 | 29.0 | 11.6 | 27.5 | 2106. | 1053. | 1053. | 36.0 | 1.0 | 1.0 | 13.74 | .00 |
| 203 | 1 | .00 | .375 | 20.000 | 29.0 | 11.6 | 23.1 | 2227. | 1113. | 1113. | 36.0 | 1.0 | 1.0 | 11.56 | .00 |
| 205 | 1 | .00 | .500 | 20.000 | 29.0 | 11.6 | 30.6 | 2914. | 1457. | 1457. | 36.0 | 1.0 | 1.0 | 15.32 | .00 |
| 243 | 1 | .00 | .375 | 24.000 | 29.0 | 11.6 | 27.8 | 3885. | 1942. | 1942. | 36.0 | 1.0 | 1.0 | 13.92 | .00 |
| 245 | 1 | .00 | .500 | 24.000 | 29.0 | 11.6 | 36.9 | 5099. | 2549. | 2549. | 36.0 | 1.0 | 1.0 | 18.46 | .00 |
| 263 | 1 | .00 | .375 | 26.000 | 29.0 | 11.6 | 30.2 | 4957. | 2478. | 2478. | 36.0 | 1.0 | 1.0 | 15.09 | .00 |
| 265 | 1 | .00 | .500 | 26.000 | 29.0 | 11.6 | 40.1 | 6514. | 3257. | 3257. | 36.0 | 1.0 | 1.0 | 20.03 | .00 |
| J08 | 1 | .00 | .500 | 8.625 | 29.0 | 11.6 | 12.8 | 211. | 106. | 106. | 36.0 | 1.0 | 1.0 | 6.38 | .00 |
| J11 | 1 | .00 | .500 | 12.750 | 29.0 | 11.6 | 19.2 | 723. | 362. | 362. | 36.0 | 1.0 | 1.0 | 9.62 | .00 |
| J12 | 1 | .00 | .687 | 12.750 | 29.0 | 11.6 | 26.0 | 950. | 475. | 475. | 36.0 | 1.0 | 1.0 | 13.02 | .00 |
| J16 | 1 | .00 | .500 | 16.000 | 29.0 | 11.6 | 24.3 | 1464. | 732. | 732. | 36.0 | 1.0 | 1.0 | 12.17 | .00 |
| J20 | 1 | .00 | .812 | 20.000 | 29.0 | 11.6 | 48.9 | 4513. | 2257. | 2257. | 36.0 | 1.0 | 1.0 | 24.47 | .00 |
| J24 | 1 | .00 | .687 | 24.000 | 29.0 | 11.6 | 50.3 | 6843. | 3421. | 3421. | 36.0 | 1.0 | 1.0 | 25.16 | .00 |
| J25 | 1 | .00 | .500 | 24.000 | 29.0 | 11.6 | 36.9 | 5099. | 2549. | 2549. | 36.0 | 1.0 | 1.0 | 18.46 | .00 |
| K08 | 1 | .00 | .322 | 8.625 | 29.0 | 11.6 | 8.4 | 145. | 72. | 72. | 36.0 | 1.0 | 1.0 | 4.20 | .00 |
| K11 | 1 | .00 | .500 | 12.750 | 29.0 | 11.6 | 19.2 | 723. | 362. | 362. | 36.0 | 1.0 | 1.0 | 9.62 | .00 |
| K12 | 1 | .00 | .687 | 12.750 | 29.0 | 11.6 | 26.0 | 950. | 475. | 475. | 36.0 | 1.0 | 1.0 | 13.02 | .00 |
| K13 | 1 | .00 | .375 | 12.750 | 29.0 | 11.6 | 14.6 | 559. | 279. | 279. | 36.0 | 1.0 | 1.0 | 7.29 | .00 |
| K18 | 1 | .00 | .500 | 18.000 | 29.0 | 11.6 | 27.5 | 2106. | 1053. | 1053. | 36.0 | 1.0 | 1.0 | 13.74 | .00 |
| K20 | 1 | .00 | .812 | 20.000 | 29.0 | 11.6 | 48.9 | 4513. | 2257. | 2257. | 36.0 | 1.0 | 1.0 | 24.47 | .00 |
| K24 | 1 | .00 | .375 | 24.000 | 29.0 | 11.6 | 27.8 | 3885. | 1942. | 1942. | 36.0 | 1.0 | 1.0 | 13.92 | .00 |
| L20 | 1 | .00 | .500 | 20.000 | 29.0 | 11.6 | 30.6 | 2914. | 1457. | 1457. | 36.0 | 1.0 | 1.0 | 15.32 | .00 |
| L24 | 1 | .00 | .375 | 24.000 | 29.0 | 11.6 | 27.8 | 3885. | 1942. | 1942. | 36.0 | 1.0 | 1.0 | 13.92 | .00 |
| L25 | 1 | .00 | .500 | 24.000 | 29.0 | 11.6 | 36.9 | 5099. | 2549. | 2549. | 36.0 | 1.0 | 1.0 | 18.46 | .00 |
| LG2 | 1 | .00 | 1.000 | 46.000 | 29.0 | 11.6 | 141.4 | 71605. | 35802. | 35802. | 36.0 | 1.0 | 1.0 | 70.69 | 5.00 |
| LG2 | 1 | .00 | .500 | 46.000 | 29.0 | 11.6 | 71.5 | 36995. | 18498. | 18498. | 36.0 | 1.0 | 1.0 | 35.74 | .00 |
| LG2 | 1 | .00 | 1.000 | 46.000 | 29.0 | 11.6 | 141.4 | 71605. | 35802. | 35802. | 36.0 | 1.0 | 1.0 | 70.69 | 5.00 |
| LG3 | 1 | .00 | 1.000 | 46.000 | 29.0 | 11.6 | 141.4 | 71605. | 35802. | 35802. | 36.0 | 1.0 | 1.0 | 70.69 | 5.00 |
| LG3 | 1 | .00 | .500 | 46.000 | 29.0 | 11.6 | 71.5 | 36995. | 18498. | 18498. | 36.0 | 1.0 | 1.0 | 35.74 | .00 |
| LG4 | 1 | .00 | .500 | 46.000 | 29.0 | 11.6 | 71.5 | 36995. | 18498. | 18498. | 36.0 | 1.0 | 1.0 | 35.74 | .00 |
| LG4 | 1 | .00 | 1.000 | 46.000 | 29.0 | 11.6 | 141.4 | 71605. | 35802. | 35802. | 36.0 | 1.0 | 1.0 | 70.69 | 5.00 |
| LG5 | 1 | .00 | .500 | 46.000 | 29.0 | 11.6 | 71.5 | 36995. | 18498. | 18498. | 36.0 | 1.0 | 1.0 | 35.74 | .00 |
| LG7 | 1 | .00 | 1.000 | 46.000 | 29.0 | 11.6 | 141.4 | 71605. | 35802. | 35802. | 36.0 | 1.0 | 1.0 | 70.69 | .00 |
| M08 | 1 | .00 | .322 | 8.625 | 29.0 | 11.6 | 8.4 | 145. | 72. | 72. | 36.0 | 1.0 | 1.0 | 4.20 | .00 |
| M09 | 1 | .00 | .375 | 10.750 | 29.0 | 11.6 | 12.2 | 329. | 165. | 165. | 36.0 | 1.0 | 1.0 | 6.11 | .00 |
| M10 | 1 | .00 | .365 | 10.750 | 29.0 | 11.6 | 11.9 | 321. | 161. | 161. | 36.0 | 1.0 | 1.0 | 5.95 | .00 |
| M11 | 1 | .00 | .500 | 12.750 | 29.0 | 11.6 | 19.2 | 723. | 362. | 362. | 36.0 | 1.0 | 1.0 | 9.62 | .00 |
| M12 | 1 | .00 | .687 | 12.750 | 29.0 | 11.6 | 26.0 | 950. | 475. | 475. | 36.0 | 1.0 | 1.0 | 13.02 | .00 |
| M14 | 1 | .00 | .375 | 14.000 | 29.0 | 11.6 | 16.1 | 746. | 373. | 373. | 36.0 | 1.0 | 1.0 | 8.03 | .00 |
| M18 | 1 | .00 | .500 | 18.000 | 29.0 | 11.6 | 27.5 | 2106. | 1053. | 1053. | 36.0 | 1.0 | 1.0 | 13.74 | .00 |
| M20 | 1 | .00 | .375 | 20.000 | 29.0 | 11.6 | 23.1 | 2227. | 1113. | 1113. | 36.0 | 1.0 | 1.0 | 11.56 | .00 |
| M21 | 1 | .00 | .812 | 20.000 | 29.0 | 11.6 | 48.9 | 4513. | 2257. | 2257. | 36.0 | 1.0 | 1.0 | 24.47 | .00 |
| M16 | 1 | .00 | .375 | 16.000 | 29.0 | 11.6 | 18.4 | 1124. | 562. | 562. | 36.0 | 1.0 | 1.0 | 9.20 | .00 |

*** Tubular Member Properties ***

| GRP | M/S | Joint Thick (Ft) | WT (In) | OD (In) | E (1000KSI) | G (1000KSI) | Ax (In ²) | Ix /----- (In ⁴) | Iy /----- (In ⁴) | Iz /----- (In ⁴) | Fy (KSI) | Ky | Kz | Shear Area (In ²) | Sec Len (Ft) |
|-----|-----|------------------|---------|---------|-------------|-------------|-----------------------|------------------------------|------------------------------|------------------------------|----------|-----|-----|-------------------------------|--------------|
| N20 | 1 | .00 | .375 | 20.000 | 29.0 | 11.6 | 23.1 | 2227. | 1113. | 1113. | 36.0 | 1.0 | 1.0 | 11.56 | .00 |
| P08 | 1 | .00 | .322 | 8.625 | 29.0 | 11.6 | 8.4 | 145. | 72. | 72. | 36.0 | 1.0 | 1.0 | 4.20 | .00 |
| P10 | 1 | .00 | .365 | 10.750 | 29.0 | 11.6 | 11.9 | 321. | 161. | 161. | 36.0 | 1.0 | 1.0 | 5.95 | .00 |
| P12 | 1 | .00 | .500 | 12.750 | 29.0 | 11.6 | 19.2 | 723. | 362. | 362. | 36.0 | 1.0 | 1.0 | 9.62 | .00 |
| P14 | 1 | .00 | .500 | 14.000 | 29.0 | 11.6 | 21.2 | 968. | 484. | 484. | 36.0 | 1.0 | 1.0 | 10.60 | .00 |
| P16 | 1 | .00 | .500 | 16.000 | 29.0 | 11.6 | 24.3 | 1464. | 732. | 732. | 36.0 | 1.0 | 1.0 | 12.17 | .00 |
| P18 | 1 | .00 | .375 | 18.000 | 29.0 | 11.6 | 20.8 | 1613. | 807. | 807. | 36.0 | 1.0 | 1.0 | 10.38 | .00 |
| P21 | 1 | .00 | .812 | 20.000 | 29.0 | 11.6 | 48.9 | 4513. | 2257. | 2257. | 36.0 | 1.0 | 1.0 | 24.47 | .00 |
| PL2 | 1 | .00 | 1.750 | 42.000 | 29.0 | 11.6 | 221.3 | 89794. | 44897. | 44897. | 36.0 | 1.0 | 1.0 | 110.64 | 27.30 |
| PL2 | 1 | .00 | 1.500 | 42.000 | 29.0 | 11.6 | 190.9 | 78369. | 39184. | 39184. | 36.0 | 1.0 | 1.0 | 95.43 | 20.00 |
| PL2 | 1 | .00 | 1.250 | 42.000 | 29.0 | 11.6 | 160.0 | 66495. | 33248. | 33248. | 36.0 | 1.0 | 1.0 | 80.01 | .00 |
| PL3 | 1 | .00 | 1.250 | 42.000 | 29.0 | 11.6 | 160.0 | 66495. | 33248. | 33248. | 36.0 | 1.0 | 1.0 | 80.01 | 4.80 |
| PL3 | 1 | .00 | 1.000 | 42.000 | 29.0 | 11.6 | 128.8 | 54163. | 27081. | 27081. | 36.0 | 1.0 | 1.0 | 64.40 | .00 |
| PL4 | 1 | .00 | 1.000 | 42.000 | 29.0 | 11.6 | 128.8 | 54163. | 27081. | 27081. | 36.0 | 1.0 | 1.0 | 64.40 | .00 |
| PL5 | 1 | .00 | 1.000 | 42.000 | 29.0 | 11.6 | 128.8 | 54163. | 27081. | 27081. | 36.0 | 1.0 | 1.0 | 64.40 | .00 |
| PL6 | 1 | .00 | 1.000 | 42.000 | 29.0 | 11.6 | 128.8 | 54163. | 27081. | 27081. | 36.0 | 1.0 | 1.0 | 64.40 | .00 |
| PL7 | 1 | .00 | 1.000 | 42.000 | 29.0 | 11.6 | 128.8 | 54163. | 27081. | 27081. | 36.0 | 1.0 | 1.0 | 64.40 | .00 |
| PL8 | 1 | .00 | 1.000 | 42.000 | 29.0 | 11.6 | 128.8 | 54163. | 27081. | 27081. | 36.0 | 1.0 | 1.0 | 64.40 | .00 |
| SIM | 1 | .00 | .687 | 12.750 | 29.0 | 11.6 | 26.0 | 950. | 475. | 475. | 36.0 | 1.0 | 1.0 | 13.02 | .00 |
| W.B | 1 | .00 | 1.000 | 42.000 | 29.0 | 11.6 | 128.8 | 54163. | 27081. | 27081. | 36.0 | 1.0 | 1.0 | 64.40 | .00 |
| CH2 | 1 | .00 | 2.000 | 29.500 | 29.0 | 11.6 | 172.8 | 32840. | 16420. | 16420. | 36.0 | 1.0 | 1.0 | 86.39 | .00 |
| CH1 | 1 | .00 | 16.490 | 33.000 | 29.0 | 11.6 | 855.3 | 116428. | 58214. | 58214. | 36.0 | 1.0 | 1.0 | 427.65 | .00 |
| SKD | 9 | .00 | .500 | 12.750 | 29.0 | 11.6 | 19.2 | 723. | 362. | 362. | 36.0 | 1.0 | 1.0 | 9.62 | .00 |
| Y24 | 9 | .00 | 1.750 | 30.000 | 29.0 | 11.6 | 155.3 | 31106. | 15553. | 15553. | 36.0 | 1.0 | 1.0 | 155.31 | .00 |
| Z24 | 9 | .00 | 2.875 | 32.000 | 29.0 | 11.6 | 263.1 | 56330. | 28165. | 28165. | 36.0 | 1.0 | 1.0 | 263.06 | .00 |
| Y25 | 9 | .00 | .625 | 24.000 | 29.0 | 11.6 | 45.9 | 6274. | 3137. | 3137. | 36.0 | 1.0 | 1.0 | 45.90 | .00 |
| Y32 | 9 | .00 | 1.125 | 35.000 | 29.0 | 11.6 | 119.7 | 34384. | 17192. | 17192. | 36.0 | 1.0 | 1.0 | 119.72 | .00 |
| Y33 | 9 | .00 | .650 | 38.000 | 29.0 | 11.6 | 76.3 | 26608. | 13304. | 13304. | 36.0 | 1.0 | 1.0 | 76.27 | .00 |
| Y76 | 9 | .00 | 1.750 | 30.000 | 29.0 | 11.6 | 155.3 | 31106. | 15553. | 15553. | 36.0 | 1.0 | 1.0 | 155.31 | .00 |
| D85 | 9 | .00 | .625 | 8.000 | 29.0 | 11.6 | 14.5 | 198. | 99. | 99. | 36.0 | 1.0 | 1.0 | 7.24 | .00 |
| D83 | 9 | .00 | .328 | 8.000 | 29.0 | 11.6 | 7.9 | 117. | 58. | 58. | 36.0 | 1.0 | 1.0 | 3.95 | .00 |
| D10 | 9 | .00 | .365 | 10.750 | 29.0 | 11.6 | 11.9 | 321. | 161. | 161. | 36.0 | 1.0 | 1.0 | 5.95 | .00 |
| D11 | 9 | .00 | .500 | 10.750 | 29.0 | 11.6 | 16.1 | 424. | 212. | 212. | 36.0 | 1.0 | 1.0 | 8.05 | .00 |
| D12 | 9 | .00 | .500 | 12.750 | 29.0 | 11.6 | 19.2 | 723. | 362. | 362. | 36.0 | 1.0 | 1.0 | 9.62 | .00 |
| D16 | 9 | .00 | .500 | 16.000 | 29.0 | 11.6 | 24.3 | 1464. | 732. | 732. | 36.0 | 1.0 | 1.0 | 12.17 | .00 |
| D17 | 9 | .00 | .656 | 16.000 | 29.0 | 11.6 | 31.6 | 1865. | 932. | 932. | 36.0 | 1.0 | 1.0 | 15.81 | .00 |
| D24 | 9 | .00 | .750 | 24.000 | 29.0 | 11.6 | 54.8 | 7411. | 3705. | 3705. | 36.0 | 1.0 | 1.0 | 27.39 | .00 |
| TL1 | 1 | .00 | 1.000 | 42.000 | 29.0 | 11.6 | 128.8 | 54163. | 27081. | 27081. | 36.0 | 1.0 | 1.0 | 64.40 | .50 |
| TL1 | 1 | .00 | 1.000 | 36.000 | 29.0 | 11.6 | 110.0 | 33701. | 16851. | 16851. | 36.0 | 1.0 | 1.0 | 54.98 | .50 |
| TL2 | 1 | .00 | 1.000 | 36.000 | 29.0 | 11.6 | 110.0 | 33701. | 16851. | 16851. | 36.0 | 1.0 | 1.0 | 54.98 | .00 |
| TL3 | 1 | .00 | 1.250 | 36.000 | 29.0 | 11.6 | 136.5 | 41250. | 20625. | 20625. | 36.0 | 1.0 | 1.0 | 68.23 | .00 |

*** Wide Flange/Wide Flange Compact, Member Properties ***

| Joint | | --Flange-- | | Web | | Filet | | | | | | | | | | | | |
|-------|-----|------------|-------|-------|-------|-------|-------|-----------|------|--------------------|-----|--------------------|------|-------|-----|-----|------|------|
| GRP | M/S | Thick | Thick | Width | Thick | Rad. | Depth | E | G | Ax | Ix | Iy | Ix | Fy | Ky | Kz | Lb | Sec |
| | | (Ft) | | (In) | | | | (1000KSI) | | (In ²) | | (In ⁴) | | (KSI) | | | (Ft) | (Ft) |
| W76 | 9 | .00 | .680 | 8.99 | .440 | .500 | 23.9 | 29.0 | 11.6 | 22.4 | 3. | 2100. | 83. | 36.0 | 1.0 | 1.0 | .00 | .00 |
| WFO | 9 | .00 | .750 | 12.75 | .500 | .500 | 24.1 | 29.0 | 11.6 | 30.6 | 5. | 3100. | 259. | 36.0 | 1.0 | 1.0 | .00 | .00 |
| WF2 | 9 | .00 | .850 | 12.80 | .550 | .500 | 24.3 | 29.0 | 11.6 | 34.4 | 7. | 3540. | 297. | 36.0 | 1.0 | 1.0 | .00 | .00 |
| WF3 | 9 | .00 | .960 | 12.85 | .605 | .500 | 24.5 | 29.0 | 11.6 | 38.5 | 10. | 4020. | 340. | 36.0 | 1.0 | 1.0 | .00 | .00 |
| WF4 | 9 | .00 | 1.090 | 12.90 | .650 | .500 | 24.7 | 29.0 | 11.6 | 43.0 | 13. | 4580. | 391. | 36.0 | 1.0 | 1.0 | .00 | .00 |
| WF6 | 9 | .00 | 1.220 | 12.95 | .705 | .500 | 25.0 | 29.0 | 11.6 | 47.7 | 19. | 5170. | 443. | 36.0 | 1.0 | 1.0 | .00 | .00 |

*** Input Soil Curves For Soil Type SOL1 ***

Pile Head Linear Springs:

| | |
|--------------------------|------|
| X-Translation (Kips/In) | .00 |
| Y-Translation (Kips/In) | .00 |
| Z-Translation (Kips/In) | .00 |
| X-Rotation (In-Kips/Rad) | 1.00 |
| Y-Rotation (In-Kips/Rad) | .00 |
| Z-Rotation (In-Kips/Rad) | .00 |

I-Z Curves:

| | | | | | | | |
|-----------------|---------|--------------|-------|-------------------|--------|------------------|------|
| Depth (Ft) = | .000 | Force Mult = | .073 | Deflection Mult = | 42.000 | Curve Symmetric: | YES |
| Force (Kips/In) | .000 | .300 | .500 | .750 | .900 | 1.000 | .700 |
| Deflection (In) | .000 | .002 | .003 | .006 | .008 | .010 | .020 |
| Depth (Ft) = | 33.000 | Force Mult = | .073 | Deflection Mult = | 42.000 | Curve Symmetric: | YES |
| Force (Kips/In) | .000 | .300 | .500 | .750 | .900 | 1.000 | .700 |
| Deflection (In) | .000 | .002 | .003 | .006 | .008 | .010 | .020 |
| Depth (Ft) = | 33.100 | Force Mult = | .385 | Deflection Mult = | 42.000 | Curve Symmetric: | YES |
| Force (Kips/In) | .000 | .300 | .500 | .750 | .900 | 1.000 | .700 |
| Deflection (In) | .000 | .002 | .003 | .006 | .008 | .010 | .020 |
| Depth (Ft) = | 100.000 | Force Mult = | .385 | Deflection Mult = | 42.000 | Curve Symmetric: | YES |
| Force (Kips/In) | .000 | .300 | .500 | .750 | .900 | 1.000 | .700 |
| Deflection (In) | .000 | .002 | .003 | .006 | .008 | .010 | .020 |
| Depth (Ft) = | 100.100 | Force Mult = | 2.428 | Deflection Mult = | 42.000 | Curve Symmetric: | YES |
| Force (Kips/In) | .000 | 1.000 | | | | | |
| Deflection (In) | .000 | .010 | | | | | |
| Depth (Ft) = | 150.000 | Force Mult = | 2.428 | Deflection Mult = | 42.000 | Curve Symmetric: | YES |
| Force (Kips/In) | .000 | 1.000 | | | | | |
| Deflection (In) | .000 | .010 | | | | | |
| Depth (Ft) = | 150.100 | Force Mult = | 2.602 | Deflection Mult = | 42.000 | Curve Symmetric: | YES |
| Force (Kips/In) | .000 | 1.000 | | | | | |
| Deflection (In) | .000 | .010 | | | | | |
| Depth (Ft) = | 210.000 | Force Mult = | 2.602 | Deflection Mult = | 42.000 | Curve Symmetric: | YES |
| Force (Kips/In) | .000 | 1.000 | | | | | |
| Deflection (In) | .000 | .010 | | | | | |
| Depth (Ft) = | 211.100 | Force Mult = | 1.942 | Deflection Mult = | 42.000 | Curve Symmetric: | YES |
| Force (Kips/In) | .000 | .300 | .500 | .750 | .900 | 1.000 | .700 |
| Deflection (In) | .000 | .002 | .003 | .006 | .008 | .010 | .020 |
| Depth (Ft) = | 270.000 | Force Mult = | 1.942 | Deflection Mult = | 42.000 | Curve Symmetric: | YES |
| Force (Kips/In) | .000 | .300 | .500 | .750 | .900 | 1.000 | .700 |
| Deflection (In) | .000 | .002 | .003 | .006 | .008 | .010 | .020 |

IB-Z Curves:

| | | | | | | | |
|-----------------|--------|--------------|-------|-------------------|--------|------------------|----|
| Depth (Ft) = | .000 | Force Mult = | 6.930 | Deflection Mult = | 42.000 | Curve Symmetric: | NO |
| Force (Kips) | .000 | .250 | .500 | .750 | .900 | 1.000 | |
| Deflection (In) | .000 | .002 | .013 | .042 | .073 | .100 | |
| Depth (Ft) = | 33.000 | Force Mult = | 6.930 | Deflection Mult = | 42.000 | Curve Symmetric: | NO |
| Force (Kips) | .000 | .250 | .500 | .750 | .900 | 1.000 | |
| Deflection (In) | .000 | .002 | .013 | .042 | .073 | .100 | |

| | | | | | |
|----------------------|-----------------------|--------------------------|---------------------|--|--|
| Depth (Ft) = 33.100 | Force Mult = 36.370 | Deflection Mult = 42.000 | Curve Symmetric: NO | | |
| Force (Kips) | .000 .250 .500 | .750 .900 1.000 | | | |
| Deflection (In) | .000 .002 .013 | .042 .073 .100 | | | |
| Depth (Ft) = 100.000 | Force Mult = 36.370 | Deflection Mult = 42.000 | Curve Symmetric: NO | | |
| Force (Kips) | .000 .250 .500 | .750 .900 1.000 | | | |
| Deflection (In) | .000 .002 .013 | .042 .073 .100 | | | |
| Depth (Ft) = 100.100 | Force Mult = 2693.300 | Deflection Mult = 42.000 | Curve Symmetric: NO | | |
| Force (Kips) | .000 .250 .500 | .750 .900 1.000 | | | |
| Deflection (In) | .000 .002 .013 | .042 .073 .100 | | | |
| Depth (Ft) = 150.000 | Force Mult = 2693.300 | Deflection Mult = 42.000 | Curve Symmetric: NO | | |
| Force (Kips) | .000 .250 .500 | .750 .900 1.000 | | | |
| Deflection (In) | .000 .002 .013 | .042 .073 .100 | | | |
| Depth (Ft) = 150.100 | Force Mult = 2886.300 | Deflection Mult = 42.000 | Curve Symmetric: NO | | |
| Force (Kips) | .000 .250 .500 | .750 .900 1.000 | | | |
| Deflection (In) | .000 .002 .013 | .042 .073 .100 | | | |
| Depth (Ft) = 210.000 | Force Mult = 2886.300 | Deflection Mult = 42.000 | Curve Symmetric: NO | | |
| Force (Kips) | .000 .250 .500 | .750 .900 1.000 | | | |
| Deflection (In) | .000 .002 .013 | .042 .073 .100 | | | |
| Depth (Ft) = 211.100 | Force Mult = 71.000 | Deflection Mult = 42.000 | Curve Symmetric: NO | | |
| Force (Kips) | .000 .250 .500 | .750 .900 1.000 | | | |
| Deflection (In) | .000 .002 .013 | .042 .073 .100 | | | |
| Depth (Ft) = 270.000 | Force Mult = 71.000 | Deflection Mult = 42.000 | Curve Symmetric: NO | | |
| Force (Kips) | .000 .250 .500 | .750 .900 1.000 | | | |
| Deflection (In) | .000 .002 .013 | .042 .073 .100 | | | |

IR-TH Curves:

None

P-Y Curves:

| | | | | | | | | | |
|----------------------|-------------------------|-------------------------|-------------------------|---------|--|--|--|--|--|
| Depth (Ft) = .000 | Force Mult = 1.000 | Deflection Mult = 1.000 | Curve Symmetric: YES | | | | | | |
| Force (Kips/In) | .000 .010 .013 | .016 .020 .025 | .029 .032 .034 | .037 | | | | | |
| Force (Kips/In) | .039 .041 .043 | .047 .050 .057 | .062 .069 .069 | .069 | | | | | |
| Deflection (In) | .000 .206 .412 | .825 1.650 3.300 | 4.950 6.600 8.250 | 10.313 | | | | | |
| Deflection (In) | 12.375 14.438 16.500 | 20.625 24.750 37.125 | 49.500 66.000 123.750 | 999.000 | | | | | |
| Depth (Ft) = 33.000 | Force Mult = 1.000 | Deflection Mult = 1.000 | Curve Symmetric: YES | | | | | | |
| Force (Kips/In) | .000 .030 .038 | .048 .060 .076 | .087 .096 .103 | .111 | | | | | |
| Force (Kips/In) | .118 .124 .130 | .140 .149 .170 | .187 .206 .206 | .206 | | | | | |
| Deflection (In) | .000 .206 .412 | .825 1.650 3.300 | 4.950 6.600 8.250 | 10.313 | | | | | |
| Deflection (In) | 12.375 14.438 16.500 | 20.625 24.750 37.125 | 49.500 66.000 123.750 | 999.000 | | | | | |
| Depth (Ft) = 33.100 | Force Mult = 1.000 | Deflection Mult = 1.000 | Curve Symmetric: YES | | | | | | |
| Force (Kips/In) | .000 .136 .171 | .215 .271 .342 | .391 .431 .464 | .500 | | | | | |
| Force (Kips/In) | .531 .559 .585 | .630 .669 .766 | .843 .928 .928 | .928 | | | | | |
| Deflection (In) | .000 .206 .412 | .825 1.650 3.300 | 4.950 6.600 8.250 | 10.313 | | | | | |
| Deflection (In) | 12.375 14.438 16.500 | 20.625 24.750 37.125 | 49.500 66.000 123.750 | 999.000 | | | | | |
| Depth (Ft) = 100.000 | Force Mult = 1.000 | Deflection Mult = 1.000 | Curve Symmetric: YES | | | | | | |
| Force (Kips/In) | .000 .136 .171 | .215 .271 .342 | .391 .431 .464 | .500 | | | | | |
| Force (Kips/In) | .531 .559 .585 | .630 .669 .766 | .843 .928 .928 | .928 | | | | | |
| Deflection (In) | .000 .206 .412 | .825 1.650 3.300 | 4.950 6.600 8.250 | 10.313 | | | | | |
| Deflection (In) | 12.375 14.438 16.500 | 20.625 24.750 37.125 | 49.500 66.000 123.750 | 999.000 | | | | | |
| Depth (Ft) = 100.100 | Force Mult = 1.000 | Deflection Mult = 1.000 | Curve Symmetric: YES | | | | | | |
| Force (Kips/In) | .000 16.921 33.841 | 50.762 59.223 67.683 | 76.144 84.604 93.064 | 101.524 | | | | | |
| Force (Kips/In) | 109.985 118.445 126.905 | 135.366 143.826 152.287 | 160.747 165.823 167.515 | 169.207 | | | | | |

| | | | | | | | | | | |
|-----------------|------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| Deflection (in) | .000 | .116 | .234 | .357 | .422 | .489 | .560 | .634 | .714 | .800 |
| Deflection (in) | .895 | 1.001 | 1.123 | 1.268 | 1.450 | 1.700 | 2.115 | 2.653 | 3.056 | 999.000 |

| | | | | | | | | | | |
|----------------------|--------------|---------|-------------------|---------|------------------|---------|---------|---------|---------|---------|
| Depth (Ft) = 150.000 | Force Mult = | 1.000 | Deflection Mult = | 1.000 | Curve Symmetric: | YES | | | | |
| Force (Kips/in) | .000 | 25.356 | 50.712 | 76.067 | 88.745 | 101.423 | 114.101 | 126.779 | 139.457 | 152.135 |
| Force (Kips/in) | 164.812 | 177.490 | 190.168 | 202.846 | 215.524 | 228.202 | 240.880 | 248.487 | 251.022 | 253.558 |
| Deflection (in) | .000 | .116 | .234 | .357 | .422 | .489 | .560 | .634 | .714 | .800 |
| Deflection (in) | .895 | 1.001 | 1.123 | 1.268 | 1.450 | 1.700 | 2.115 | 2.653 | 3.056 | 999.000 |

| | | | | | | | | | | |
|----------------------|--------------|---------|-------------------|---------|------------------|---------|---------|---------|---------|---------|
| Depth (Ft) = 150.100 | Force Mult = | 1.000 | Deflection Mult = | 1.000 | Curve Symmetric: | YES | | | | |
| Force (Kips/in) | .000 | 26.116 | 52.232 | 78.349 | 91.407 | 104.465 | 117.523 | 130.581 | 143.639 | 156.697 |
| Force (Kips/in) | 169.755 | 182.814 | 195.872 | 208.930 | 221.988 | 235.046 | 248.104 | 255.939 | 258.551 | 261.162 |
| Deflection (in) | .000 | .092 | .186 | .284 | .335 | .389 | .445 | .504 | .567 | .636 |
| Deflection (in) | .711 | .796 | .893 | 1.008 | 1.153 | 1.351 | 1.681 | 2.108 | 2.429 | 999.000 |

| | | | | | | | | | | |
|----------------------|--------------|---------|-------------------|---------|------------------|---------|---------|---------|---------|---------|
| Depth (Ft) = 210.000 | Force Mult = | 1.000 | Deflection Mult = | 1.000 | Curve Symmetric: | YES | | | | |
| Force (Kips/in) | .000 | 36.538 | 73.077 | 109.615 | 127.884 | 146.153 | 164.423 | 182.692 | 200.961 | 219.230 |
| Force (Kips/in) | 237.499 | 255.769 | 274.038 | 292.307 | 310.576 | 328.845 | 347.115 | 358.076 | 361.730 | 365.384 |
| Deflection (in) | .000 | .092 | .186 | .284 | .335 | .389 | .445 | .504 | .567 | .636 |
| Deflection (in) | .711 | .796 | .893 | 1.008 | 1.153 | 1.351 | 1.681 | 2.108 | 2.429 | 999.000 |

| | | | | | | | | | | |
|----------------------|--------------|--------|-------------------|--------|------------------|--------|--------|--------|--------|---------|
| Depth (Ft) = 210.100 | Force Mult = | 1.000 | Deflection Mult = | 1.000 | Curve Symmetric: | YES | | | | |
| Force (Kips/in) | .000 | .362 | .456 | .574 | .724 | .912 | 1.044 | 1.149 | 1.237 | 1.333 |
| Force (Kips/in) | 1.417 | 1.491 | 1.559 | 1.680 | 1.785 | 2.043 | 2.249 | 2.475 | 2.475 | 2.475 |
| Deflection (in) | .000 | .165 | .330 | .660 | 1.320 | 2.640 | 3.960 | 5.280 | 6.600 | 8.250 |
| Deflection (in) | 9.900 | 11.550 | 13.200 | 16.500 | 19.800 | 29.700 | 39.600 | 52.800 | 99.000 | 999.000 |

| | | | | | | | | | | |
|----------------------|--------------|--------|-------------------|--------|------------------|--------|--------|--------|--------|---------|
| Depth (Ft) = 270.000 | Force Mult = | 1.000 | Deflection Mult = | 1.000 | Curve Symmetric: | YES | | | | |
| Force (Kips/in) | .000 | .362 | .456 | .574 | .724 | .912 | 1.044 | 1.149 | 1.237 | 1.333 |
| Force (Kips/in) | 1.417 | 1.491 | 1.559 | 1.680 | 1.785 | 2.043 | 2.249 | 2.475 | 2.475 | 2.475 |
| Deflection (in) | .000 | .165 | .330 | .660 | 1.320 | 2.640 | 3.960 | 5.280 | 6.600 | 8.250 |
| Deflection (in) | 9.900 | 11.550 | 13.200 | 16.500 | 19.800 | 29.700 | 39.600 | 52.800 | 99.000 | 999.000 |

*** Pile Data Report ***

| Pile No. | Pile Joint | Batter Joint | Refer. Joint | No. Of Segments | Group ID | Soil ID | Pile Density (PCF) | Chord Angle (Deg) | /--- Batter Increments ---/ | | | Pile Length (Ft) |
|----------|------------|--------------|--------------|-----------------|----------|---------|----------------------|-------------------|-----------------------------|--------|--------|------------------|
| | | | | | | | | | X (Ft) | Y (Ft) | Z (Ft) | |
| 1 | 200 | 300 | 0 | 81 | P33 | SOL1 | 490.00 | .00 | .00 | .00 | 684.00 | 163.00 |
| 2 | 112 | 212 | 0 | 135 | P42 | SOL1 | 490.00 | .00 | 68.40 | 68.40 | 684.00 | 270.00 |
| 3 | 122 | 222 | 0 | 135 | P42 | SOL1 | 490.00 | .00 | .00 | 68.40 | 684.00 | 270.00 |
| 4 | 132 | 232 | 0 | 135 | P42 | SOL1 | 490.00 | .00 | .00 | 68.40 | 684.00 | 270.00 |
| 5 | 142 | 242 | 0 | 135 | P42 | SOL1 | 490.00 | .00 | -68.40 | 68.40 | 684.00 | 270.00 |
| 6 | 152 | 252 | 0 | 135 | P42 | SOL1 | 490.00 | .00 | 68.40 | -68.40 | 684.00 | 270.00 |
| 7 | 162 | 262 | 0 | 135 | P42 | SOL1 | 490.00 | .00 | .00 | -68.40 | 684.00 | 270.00 |
| 8 | 172 | 272 | 0 | 135 | P42 | SOL1 | 490.00 | .00 | .00 | -68.40 | 684.00 | 270.00 |
| 9 | 182 | 282 | 0 | 135 | P42 | SOL1 | 490.00 | .00 | -68.40 | -68.40 | 684.00 | 270.00 |

* * * Pile Group Report * * *

| Group ID | Section Label | Outer Dia. (In) | Wall Thick. (In) | Mod. Of. Elasticity (1000KSI) | Mod. Of Rigidity (1000KSI) | Yield Strength (KSI) | Segment Length (Ft) | Section Area (In ²) | /----- Moments of Inertia -----/ | | |
|----------|---------------|-----------------|------------------|--------------------------------|-----------------------------|------------------------|---------------------|---------------------------------|----------------------------------|-----------------------|-----------------------|
| | | | | | | | | | Ix (In ⁴) | Iy (In ⁴) | Iz (In ⁴) |
| P42 | | 42.00 | 1.750 | 29.0 | 11.6 | 36.0 | 170.00 | 221.29 | 89793.7 | 44896.8 | 44896.8 |
| P42 | | 42.00 | 1.500 | 29.0 | 11.6 | 36.0 | 10.00 | 190.85 | 78368.5 | 39184.3 | 39184.3 |
| P42 | | 42.00 | 1.250 | 29.0 | 11.6 | 36.0 | 10.00 | 160.02 | 66495.3 | 33247.7 | 33247.7 |
| P42 | | 42.00 | 1.000 | 29.0 | 11.6 | 36.0 | 80.00 | 128.81 | 54162.6 | 27081.3 | 27081.3 |
| P33 | | 33.00 | 16.490 | 29.0 | 11.6 | 36.0 | 163.00 | 855.30 | 116427.5 | 58213.8 | 58213.8 |

Friday 7/22/94 17:39: 5

Input File Name:\STRUCAD\WD103A\WD103DL
Output File Name:\STRUCAD\WD103A\WD103DL.OT1

*** Problem Description ***

| | |
|--------------------------------|-----|
| Number Of Joints | 316 |
| Number Of Beams (Steel) | 672 |
| Number Of Piles | 9 |
| Number Of Plates | 16 |
| No. Of Basic Load Cases | 5 |
| No. Of Combined Load Cases ... | 3 |

Time For PREP Module = 0: 4: 1

End of PREP module

***** Load Generation Options *****

| | |
|---|-------------|
| Seawater Density (PCF) | 64.20 |
| Structural Material Density (Steel) (PCF) . | 490.00 |
| Structural Material Density (Concrete)(PCF) | 150.00 |
| Member Flood Option | Non-Flooded |
| Mudline Elevation (Ft) | -223.00 |
| Water Depth (Ft) | 223.00 |

*** UAGA Drag And Mass Coefficients Table ***

| Element Diameter (in) | Clean Element | | | | Element With Marine Growth | | | |
|-----------------------------|-------------------|------------|-------------------|------------|----------------------------|------------|-------------------|------------|
| | Drag Coefficients | | Mass Coefficients | | Drag Coefficients | | Mass Coefficients | |
| | Normal | Tangential | Normal | Tangential | Normal | Tangential | Normal | Tangential |
| 12.00 | .6100 | .0000 | 1.3900 | .0000 | .6100 | .0000 | 1.3900 | .0000 |
| 24.00 | .6650 | .0000 | 1.4000 | .0000 | .6650 | .0000 | 1.4000 | .0000 |
| 48.00 | .7200 | .0000 | 1.4500 | .0000 | .7200 | .0000 | 1.4500 | .0000 |
| 72.00 | .7500 | .0000 | 1.6000 | .0000 | .7500 | .0000 | 1.6000 | .0000 |
| 96.00 | .7810 | .0000 | 1.6700 | .0000 | .7810 | .0000 | 1.6700 | .0000 |
| 120.00 | .7990 | .0000 | 1.7100 | .0000 | .7990 | .0000 | 1.7100 | .0000 |

*** UACA Initial Group Property Definition ***

| Group Label | Section Type | Length (Ft) | Area Weight (In ²) | Buoy. | Diameter Y (In) | Diameter Z (In) | Material Density (PCF) | Joint Thick (Ft) | Flood | Drag And Mass Coefficients | | | | | |
|-------------|--------------|-------------|--------------------------------|---------|-----------------|-----------------|------------------------|------------------|-------|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | | | | | | | | | C _{dy} | C _{dx} | C _{dy} | C _{dz} | C _{dt} | C _{wt} |
| 16S | TUB | | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 18S | TUB | | 27.49 | 254.47 | 18.00 | 18.00 | 490.0 | | NO | .64 | .64 | 1.39 | 1.39 | .00 | .00 |
| 203 | TUB | | 23.12 | 314.16 | 20.00 | 20.00 | 490.0 | | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 |
| 205 | TUB | | 30.63 | 314.16 | 20.00 | 20.00 | 490.0 | | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 |
| 243 | TUB | | 27.83 | 452.39 | 24.00 | 24.00 | 490.0 | | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 245 | TUB | | 36.91 | 452.39 | 24.00 | 24.00 | 490.0 | | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 263 | TUB | | 30.19 | 530.93 | 26.00 | 26.00 | 490.0 | | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 265 | TUB | | 40.06 | 530.93 | 26.00 | 26.00 | 490.0 | | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| J08 | TUB | | 12.76 | 58.43 | 8.63 | 8.63 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| J11 | TUB | | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| J12 | TUB | | 26.04 | 127.68 | 12.75 | 12.75 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| J16 | TUB | | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| J20 | TUB | | 48.95 | 314.16 | 20.00 | 20.00 | 490.0 | | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 |
| J24 | TUB | | 50.32 | 452.39 | 24.00 | 24.00 | 490.0 | | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| J25 | TUB | | 36.91 | 452.39 | 24.00 | 24.00 | 490.0 | | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| K08 | TUB | | 8.40 | 58.43 | 8.63 | 8.63 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| K11 | TUB | | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| K12 | TUB | | 26.04 | 127.68 | 12.75 | 12.75 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| K13 | TUB | | 14.58 | 127.68 | 12.75 | 12.75 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| K18 | TUB | | 27.49 | 254.47 | 18.00 | 18.00 | 490.0 | | NO | .64 | .64 | 1.39 | 1.39 | .00 | .00 |
| K20 | TUB | | 48.95 | 314.16 | 20.00 | 20.00 | 490.0 | | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 |
| K24 | TUB | | 27.83 | 452.39 | 24.00 | 24.00 | 490.0 | | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| L20 | TUB | | 30.63 | 314.16 | 20.00 | 20.00 | 490.0 | | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 |
| L24 | TUB | | 27.83 | 452.39 | 24.00 | 24.00 | 490.0 | | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| L25 | TUB | | 36.91 | 452.39 | 24.00 | 24.00 | 490.0 | | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| LG2 | TUB | 5.00 | 141.37 | 1661.90 | 46.00 | 46.00 | 490.0 | | YES | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| LG2 | TUB | | 71.47 | 1661.90 | 46.00 | 46.00 | 490.0 | | YES | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| LG2 | TUB | 5.00 | 141.37 | 1661.90 | 46.00 | 46.00 | 490.0 | | YES | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| LG3 | TUB | 5.00 | 141.37 | 1661.90 | 46.00 | 46.00 | 490.0 | | YES | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| LG3 | TUB | | 71.47 | 1661.90 | 46.00 | 46.00 | 490.0 | | YES | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| LG4 | TUB | | 71.47 | 1661.90 | 46.00 | 46.00 | 490.0 | | YES | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| LG4 | TUB | 5.00 | 141.37 | 1661.90 | 46.00 | 46.00 | 490.0 | | YES | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| LG5 | TUB | | 71.47 | 1661.90 | 46.00 | 46.00 | 490.0 | | YES | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| LG7 | TUB | | 141.37 | 1661.90 | 46.00 | 46.00 | 490.0 | | YES | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| M08 | TUB | | 8.40 | 58.43 | 8.63 | 8.63 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| M09 | TUB | | 12.22 | 90.76 | 10.75 | 10.75 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| M10 | TUB | | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| M11 | TUB | | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| M12 | TUB | | 26.04 | 127.68 | 12.75 | 12.75 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| M14 | TUB | | 16.05 | 153.94 | 14.00 | 14.00 | 490.0 | | NO | .62 | .62 | 1.39 | 1.39 | .00 | .00 |
| M18 | TUB | | 27.49 | 254.47 | 18.00 | 18.00 | 490.0 | | NO | .64 | .64 | 1.39 | 1.39 | .00 | .00 |
| M20 | TUB | | 23.12 | 314.16 | 20.00 | 20.00 | 490.0 | | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 |
| M21 | TUB | | 48.95 | 314.16 | 20.00 | 20.00 | 490.0 | | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 |
| N16 | TUB | | 18.41 | 201.06 | 16.00 | 16.00 | 490.0 | | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| N20 | TUB | | 23.12 | 314.16 | 20.00 | 20.00 | 490.0 | | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 |
| P08 | TUB | | 8.40 | 58.43 | 8.63 | 8.63 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| P10 | TUB | | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| P12 | TUB | | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| P14 | TUB | | 21.21 | 153.94 | 14.00 | 14.00 | 490.0 | | NO | .62 | .62 | 1.39 | 1.39 | .00 | .00 |
| P16 | TUB | | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |

*** UAGA Initial Group Property Definition ***

| Group Label | Section Type | Length (Ft) | Area | | Diameter | | Material Density (PCF) | Joint Thick (Ft) | Flood | Drag And Mass Coefficients | | | | | | | |
|-------------|--------------|-------------|--------|---------|----------|-------|--------------------------|------------------|-------|----------------------------|-----|------|------|-----|-----|--|--|
| | | | Weight | Buoy. | Y | Z | | | | Cdy | Cdx | Cdy | Cxz | Cdt | Cxt | | |
| | | | (In^2) | | (In) | | | | | | | | | | | | |
| P18 | TUB | | 20.76 | 254.47 | 18.00 | 18.00 | 490.0 | | NO | .64 | .64 | 1.39 | 1.39 | .00 | .00 | | |
| P21 | TUB | | 48.95 | 314.16 | 20.00 | 20.00 | 490.0 | | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 | | |
| PL2 | TUB | 27.30 | 221.29 | 1385.44 | 42.00 | 42.00 | 490.0 | | YES | .71 | .71 | 1.44 | 1.44 | .00 | .00 | | |
| PL2 | TUB | 20.00 | 190.85 | 1385.44 | 42.00 | 42.00 | 490.0 | | YES | .71 | .71 | 1.44 | 1.44 | .00 | .00 | | |
| PL2 | TUB | | 160.02 | 1385.44 | 42.00 | 42.00 | 490.0 | | YES | .71 | .71 | 1.44 | 1.44 | .00 | .00 | | |
| PL3 | TUB | 4.80 | 160.02 | 1385.44 | 42.00 | 42.00 | 490.0 | | YES | .71 | .71 | 1.44 | 1.44 | .00 | .00 | | |
| PL3 | TUB | | 128.81 | 1385.44 | 42.00 | 42.00 | 490.0 | | YES | .71 | .71 | 1.44 | 1.44 | .00 | .00 | | |
| PL4 | TUB | | 128.81 | 1385.44 | 42.00 | 42.00 | 490.0 | | YES | .71 | .71 | 1.44 | 1.44 | .00 | .00 | | |
| PL5 | TUB | | 128.81 | 1385.44 | 42.00 | 42.00 | 490.0 | | YES | .71 | .71 | 1.44 | 1.44 | .00 | .00 | | |
| PL6 | TUB | | 128.81 | 1385.44 | 42.00 | 42.00 | 490.0 | | YES | .71 | .71 | 1.44 | 1.44 | .00 | .00 | | |
| PL7 | TUB | | 128.81 | 1385.44 | 42.00 | 42.00 | 490.0 | | YES | .71 | .71 | 1.44 | 1.44 | .00 | .00 | | |
| PL8 | TUB | | 128.81 | 1385.44 | 42.00 | 42.00 | 490.0 | | YES | .71 | .71 | 1.44 | 1.44 | .00 | .00 | | |
| SIM | TUB | | 25.04 | 127.68 | 12.75 | 12.75 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 | | |
| W.B | TUB | | 128.81 | 1385.44 | 42.00 | 42.00 | 490.0 | | YES | .71 | .71 | 1.44 | 1.44 | .00 | .00 | | |
| CN2 | TUB | | 172.79 | 683.49 | 29.50 | 29.50 | 490.0 | | NO | .68 | .68 | 1.41 | 1.41 | .00 | .00 | | |
| CN1 | TUB | | 855.30 | 855.30 | 33.00 | 33.00 | 490.0 | | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 | | |
| SKD | TUB | | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | | YES | .61 | .61 | 1.39 | 1.39 | .00 | .00 | | |
| W76 | WF | | 22.40 | 22.40 | 23.92 | 8.99 | 490.0 | | YES | .66 | .61 | 1.40 | 1.39 | .00 | .00 | | |
| WFO | WF | | 30.60 | 30.60 | 24.06 | 12.75 | 490.0 | | YES | .67 | .61 | 1.40 | 1.39 | .00 | .00 | | |
| WF2 | WF | | 34.40 | 34.40 | 24.26 | 12.80 | 490.0 | | YES | .67 | .61 | 1.40 | 1.39 | .00 | .00 | | |
| WF3 | WF | | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | | YES | .67 | .61 | 1.40 | 1.39 | .00 | .00 | | |
| WF4 | WF | | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | | YES | .67 | .61 | 1.40 | 1.39 | .00 | .00 | | |
| WF6 | WF | | 47.70 | 47.70 | 25.00 | 12.95 | 490.0 | | YES | .67 | .61 | 1.40 | 1.39 | .00 | .00 | | |
| Y24 | TUB | | 155.31 | 706.86 | 30.00 | 30.00 | 490.0 | | YES | .68 | .68 | 1.41 | 1.41 | .00 | .00 | | |
| Z24 | TUB | | 263.06 | 804.25 | 32.00 | 32.00 | 490.0 | | YES | .68 | .68 | 1.42 | 1.42 | .00 | .00 | | |
| Y25 | TUB | | 45.90 | 452.39 | 24.00 | 24.00 | 490.0 | | YES | .67 | .67 | 1.40 | 1.40 | .00 | .00 | | |
| Y32 | TUB | | 119.72 | 962.11 | 35.00 | 35.00 | 490.0 | | YES | .69 | .69 | 1.42 | 1.42 | .00 | .00 | | |
| Y33 | TUB | | 76.27 | 1134.12 | 38.00 | 38.00 | 490.0 | | YES | .70 | .70 | 1.43 | 1.43 | .00 | .00 | | |
| Y76 | TUB | | 155.31 | 706.86 | 30.00 | 30.00 | 490.0 | | YES | .68 | .68 | 1.41 | 1.41 | .00 | .00 | | |
| D85 | TUB | | 14.48 | 50.27 | 8.00 | 8.00 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 | | |
| D83 | TUB | | 7.91 | 50.27 | 8.00 | 8.00 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 | | |
| D10 | TUB | | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 | | |
| D11 | TUB | | 16.10 | 90.76 | 10.75 | 10.75 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 | | |
| D12 | TUB | | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 | | |
| D16 | TUB | | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 | | |
| D17 | TUB | | 31.62 | 201.06 | 16.00 | 16.00 | 490.0 | | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 | | |
| D24 | TUB | | 54.78 | 452.39 | 24.00 | 24.00 | 490.0 | | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 | | |
| TL1 | TUB | .50 | 128.81 | 1385.44 | 42.00 | 42.00 | 490.0 | | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 | | |
| TL1 | TUB | .50 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 | | |
| TL2 | TUB | | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 | | |
| TL3 | TUB | | 136.46 | 1017.88 | 36.00 | 36.00 | 490.0 | | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 | | |

*** WAGA Global Group Override Description ***

| Group | Area | | Diameter | | Material | Flood | Marine | Drag And Mass Coefficients | | | | | |
|-------|--------|--------|----------|-------|----------|-------|--------|----------------------------|-------|------|------|-----|-----|
| Label | Weight | Buoy. | Y | Z | Density | | Growth | Cdy | Cdx | Cmy | Cmx | Cdt | Cwt |
| | (In^2) | | (In) | (In) | (PCF) | | | ----- | | | | | |
| Y76 | 156.80 | | 30.00 | 30.00 | 490.00 | F | | 1.84 | 1.84 | | | | |
| Y32 | 116.70 | | 35.00 | 35.00 | 490.00 | F | | 1.97 | 1.97 | | | | |
| Y24 | 153.20 | | 30.00 | 30.00 | 490.00 | F | | 1.84 | 1.84 | | | | |
| SKD | 19.24 | | 12.75 | 12.75 | 490.00 | F | N | 4.00 | 4.00 | 1.40 | 1.40 | | |
| CN1 | 854.90 | 855.30 | 33.00 | 33.00 | 490.00 | N | N | 9.20 | 9.20 | 7.60 | 7.60 | | |
| CN2 | 442.90 | 683.50 | 29.50 | 29.50 | 490.00 | N | N | 10.30 | 10.30 | 9.50 | 9.50 | | |
| PL2 | 221.29 | | .00 | .00 | 490.00 | F | N | .00 | .00 | .00 | .00 | .00 | .00 |
| PL2 | 190.85 | | .00 | .00 | 490.00 | F | N | .00 | .00 | .00 | .00 | .00 | .00 |
| PL2 | 160.02 | | .00 | .00 | 490.00 | F | N | .00 | .00 | .00 | .00 | .00 | .00 |
| PL3 | 160.02 | | .00 | .00 | 490.00 | F | N | .00 | .00 | .00 | .00 | .00 | .00 |
| PL3 | 128.81 | | .00 | .00 | 490.00 | F | N | .00 | .00 | .00 | .00 | .00 | .00 |
| PL4 | 128.81 | | .00 | .00 | 490.00 | F | N | .00 | .00 | .00 | .00 | .00 | .00 |
| PL5 | 128.81 | | .00 | .00 | 490.00 | F | N | .00 | .00 | .00 | .00 | .00 | .00 |
| PL6 | 128.81 | | .00 | .00 | 490.00 | F | N | .00 | .00 | .00 | .00 | .00 | .00 |
| PL7 | 128.81 | | .00 | .00 | 490.00 | F | N | .00 | .00 | .00 | .00 | .00 | .00 |

*** WACA Global Marine Growth Zone Description ***
 Mudline Elevation (Ft) = -223.00

| Vertical Distance Of Zone From Mudline | | Marine Growth Thickness (In) | /-- Drag And Mass Coefficients --/ | | | | | |
|---|--------|---------------------------------------|------------------------------------|------|------|------|-----|-----|
| Bottom | Top | | Cdy | Cdx | Cwy | Cwz | Cdt | Cwt |
| /----- (Ft) -----/ | | | /-----/ | | | | | |
| .00 | 57.00 | 1.000 | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 57.00 | 156.00 | 1.500 | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 156.00 | 224.00 | 2.000 | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |

*** UAGA Area Description ***

| Group Label | Type Of Loading | / Projected Areas/ Or Volumes / | | | /--- Centroid Of ---/ Area Or Volume | | | Shape Coeff | Area Type | /----- Applicable Joints -----/ | | | | | | | |
|-------------|-----------------|---------------------------------|--------|--------|--------------------------------------|-------|------|-------------|-----------|---------------------------------|-----|----|----|---|---|---|--|
| | | /(Ft^2) Or (Ft^3)/ | | | /(Ft) | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| | | Ax | Ay | Az | X | Y | Z | | | | | | | | | | |
| BL | Fluid-Drag | 33.0 | 480.0 | 120.0 | 42.5 | -26.3 | 2.5 | 1.05 | F | 631 | 641 | | | | | | |
| BL | Fluid-Inertial | 1440.0 | 1440.0 | 1440.0 | 42.5 | -26.3 | 2.5 | 1.40 | F | 631 | 641 | | | | | | |
| BB | Fluid-Drag | 62.0 | 62.0 | 14.4 | -63.1 | -28.1 | 1.0 | .70 | F | 611 | | | | | | | |
| BB | Fluid-Inertial | 151.3 | 151.3 | 151.3 | -63.1 | -28.1 | 1.0 | 1.45 | F | 611 | | | | | | | |
| BB | Fluid-Drag | 62.0 | 62.0 | 14.4 | -22.5 | -28.1 | 1.0 | .70 | F | 621 | | | | | | | |
| BB | Fluid-Inertial | 151.3 | 151.3 | 151.3 | -22.5 | -28.1 | 1.0 | 1.45 | F | 621 | | | | | | | |
| BB | Fluid-Drag | 62.0 | 62.0 | 14.4 | -63.1 | -28.1 | 1.0 | .70 | F | 651 | | | | | | | |
| BB | Fluid-Inertial | 151.3 | 151.3 | 151.3 | -63.1 | -28.1 | 1.0 | 1.45 | F | 651 | | | | | | | |
| BB | Fluid-Drag | 62.0 | 62.0 | 14.4 | -22.5 | -28.1 | 1.0 | .70 | F | 661 | | | | | | | |
| BB | Fluid-Inertial | 151.3 | 151.3 | 151.3 | -22.5 | -28.1 | 1.0 | 1.45 | F | 661 | | | | | | | |
| BB | Fluid-Drag | 62.0 | 62.0 | 14.4 | 22.5 | -28.1 | 1.0 | .70 | F | 671 | | | | | | | |
| BB | Fluid-Inertial | 151.3 | 151.3 | 151.3 | 22.5 | -28.1 | 1.0 | 1.45 | F | 671 | | | | | | | |
| BB | Fluid-Drag | 62.0 | 62.0 | 14.4 | 63.1 | -28.1 | 1.0 | .70 | F | 681 | | | | | | | |
| BB | Fluid-Inertial | 151.3 | 151.3 | 151.3 | 63.1 | -28.1 | 1.0 | 1.45 | F | 681 | | | | | | | |
| W1 | Wind-Drag | 672.0 | 1792.0 | .0 | .0 | .0 | 47.0 | 1.00 | F | 19 | 20 | 24 | 25 | | | | |
| W2 | Wind-Drag | 642.0 | 1713.0 | .0 | .0 | .0 | 60.7 | 1.00 | F | 83 | 84 | 87 | 88 | | | | |
| DD | Fluid-Drag | .0 | .0 | 450.0 | -52.5 | -11.3 | 41.0 | 1.00 | F | 18 | 27 | 41 | 44 | | | | |
| DD | Fluid-Drag | .0 | .0 | 450.0 | -52.5 | 11.3 | 41.0 | 1.00 | F | 23 | 27 | 43 | 44 | | | | |
| DD | Fluid-Drag | .0 | .0 | 450.0 | 52.5 | -11.3 | 41.0 | 1.00 | F | 21 | 30 | 66 | 71 | | | | |
| DD | Fluid-Drag | .0 | .0 | 450.0 | 52.5 | 11.3 | 41.0 | 1.00 | F | 26 | 30 | 69 | 71 | | | | |
| DD | Fluid-Drag | .0 | .0 | 450.0 | -32.5 | -11.3 | 41.0 | 1.00 | F | 19 | 28 | 41 | 44 | | | | |
| DD | Fluid-Drag | .0 | .0 | 450.0 | -32.5 | 11.3 | 41.0 | 1.00 | F | 24 | 28 | 43 | 44 | | | | |
| DD | Fluid-Drag | .0 | .0 | 450.0 | 32.5 | -11.3 | 41.0 | 1.00 | F | 20 | 29 | 66 | 71 | | | | |
| DD | Fluid-Drag | .0 | .0 | 450.0 | 32.5 | 11.3 | 41.0 | 1.00 | F | 25 | 29 | 69 | 71 | | | | |
| DD | Fluid-Drag | .0 | .0 | 506.3 | -11.3 | -11.3 | 41.0 | 1.00 | F | 19 | 28 | 36 | 38 | | | | |
| DD | Fluid-Drag | .0 | .0 | 506.3 | -11.3 | 11.3 | 41.0 | 1.00 | F | 24 | 28 | 37 | 38 | | | | |
| DD | Fluid-Drag | .0 | .0 | 506.3 | 11.3 | -11.3 | 41.0 | 1.00 | F | 20 | 29 | 36 | 38 | | | | |
| DD | Fluid-Drag | .0 | .0 | 506.3 | 11.3 | 11.3 | 41.0 | 1.00 | F | 25 | 29 | 37 | 38 | | | | |
| DD | Fluid-Drag | .0 | .0 | 523.4 | -13.1 | -32.5 | 41.0 | 1.00 | F | 19 | 31 | 36 | 39 | | | | |
| DD | Fluid-Drag | .0 | .0 | 523.4 | -13.1 | 32.5 | 41.0 | 1.00 | F | 24 | 34 | 37 | 40 | | | | |
| DD | Fluid-Drag | .0 | .0 | 516.6 | 13.1 | -32.5 | 41.0 | 1.00 | F | 20 | 33 | 36 | 39 | | | | |
| DD | Fluid-Drag | .0 | .0 | 516.6 | 13.1 | 32.5 | 41.0 | 1.00 | F | 25 | 35 | 37 | 40 | | | | |

*** UAGA Member Property Summary ***

| JA | JB | Label | Group /---Section---/ | Type | Length (Ft) | Area | | Diameters | | Matl. Density (PCF) | Flood | Marine Growth | Drag And Mass Coefficients | | | | | |
|-----|-----|-------|-----------------------|------|----------------|----------------|--------|--------------|-------|-----------------------------|-------|------------------|----------------------------|------|------|------|-----|-----|
| | | | | | | Const. | Displ. | Y | Z | | | | Cdy | Cdx | Cmy | Cmz | Cdt | Cwt |
| | | | | | | --- (In^2) --- | | --- (In) --- | | ----- | | | | | | | | |
| 511 | 621 | 165 | TUB | | 42.32 | 24.35 | 201.06 | 20.00 | 20.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 511 | 621 | 165 | TUB | | 12.90 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 521 | 631 | 165 | TUB | | 42.81 | 24.35 | 201.06 | 20.00 | 20.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 521 | 631 | 165 | TUB | | 13.05 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 531 | 641 | 165 | TUB | | 40.28 | 24.35 | 201.06 | 20.00 | 20.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 531 | 641 | 165 | TUB | | 12.28 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 561 | 651 | 165 | TUB | | 40.28 | 24.35 | 201.06 | 20.00 | 20.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 561 | 651 | 165 | TUB | | 12.28 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 571 | 661 | 165 | TUB | | 42.81 | 24.35 | 201.06 | 20.00 | 20.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 571 | 661 | 165 | TUB | | 13.05 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 581 | 671 | 165 | TUB | | 42.32 | 24.35 | 201.06 | 20.00 | 20.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 581 | 671 | 165 | TUB | | 12.90 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 321 | 431 | 185 | TUB | | 63.28 | 27.49 | 254.47 | 21.00 | 21.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 451 | 561 | 185 | TUB | | 1.50 | 27.49 | 254.47 | 21.00 | 21.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 451 | 561 | 185 | TUB | | 60.57 | 27.49 | 254.47 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 461 | 571 | 185 | TUB | | 1.44 | 27.49 | 254.47 | 21.00 | 21.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 461 | 571 | 185 | TUB | | 58.23 | 27.49 | 254.47 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 471 | 581 | 185 | TUB | | 1.42 | 27.49 | 254.47 | 21.00 | 21.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 471 | 581 | 185 | TUB | | 57.64 | 27.49 | 254.47 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 371 | 461 | 185 | TUB | | 63.28 | 27.49 | 254.47 | 21.00 | 21.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 421 | 511 | 185 | TUB | | 1.42 | 27.49 | 254.47 | 21.00 | 21.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 421 | 511 | 185 | TUB | | 57.64 | 27.49 | 254.47 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 431 | 521 | 185 | TUB | | 1.44 | 27.49 | 254.47 | 21.00 | 21.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 431 | 521 | 185 | TUB | | 58.23 | 27.49 | 254.47 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 441 | 531 | 185 | TUB | | 1.50 | 27.49 | 254.47 | 21.00 | 21.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 441 | 531 | 185 | TUB | | 60.57 | 27.49 | 254.47 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 331 | 441 | 203 | TUB | | 65.55 | 23.12 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 361 | 451 | 203 | TUB | | 65.55 | 23.12 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 253 | 201 | 205 | TUB | | 26.21 | 30.63 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 311 | 421 | 205 | TUB | | 68.89 | 30.63 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 231 | 321 | 205 | TUB | | 67.08 | 30.63 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 346 | 304 | 205 | TUB | | 25.26 | 30.63 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 261 | 371 | 205 | TUB | | 67.08 | 30.63 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 421 | 561 | 205 | TUB | | 1.66 | 30.63 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 421 | 561 | 205 | TUB | | 67.33 | 30.63 | 314.16 | 24.00 | 24.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 441 | 581 | 205 | TUB | | 1.67 | 30.63 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 441 | 581 | 205 | TUB | | 67.46 | 30.63 | 314.16 | 24.00 | 24.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 451 | 511 | 205 | TUB | | 1.67 | 30.63 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 451 | 511 | 205 | TUB | | 67.46 | 30.63 | 314.16 | 24.00 | 24.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 381 | 471 | 205 | TUB | | 68.89 | 30.63 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 471 | 531 | 205 | TUB | | 1.66 | 30.63 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 471 | 531 | 205 | TUB | | 67.33 | 30.63 | 314.16 | 24.00 | 24.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 511 | 651 | 205 | TUB | | 45.63 | 30.63 | 314.16 | 24.00 | 24.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 511 | 651 | 205 | TUB | | 13.91 | 30.63 | 314.16 | 20.00 | 20.00 | 490.0 | NO | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 |
| 531 | 671 | 205 | TUB | | 45.55 | 30.63 | 314.16 | 24.00 | 24.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 531 | 671 | 205 | TUB | | 13.89 | 30.63 | 314.16 | 20.00 | 20.00 | 490.0 | NO | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 |
| 561 | 621 | 205 | TUB | | 45.55 | 30.63 | 314.16 | 24.00 | 24.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |

*** UAGA Member Property Summary ***

| JA | JB | Group Label | Type | Section | | Areas | | Diameters | | Matl. Density | Flood | Marine Growth | Drag And Mass Coefficients | | | | | |
|-----|-----|-------------|------|-------------|--------|--------|--------|-----------|-------|---------------|-------|---------------|----------------------------|------|------|-----|-----|--|
| | | | | Length (Ft) | Const. | Displ. | Y (In) | Z (In) | Cdy | | | | Cdx | Cwy | Cwz | Cdt | Cct | |
| 561 | 621 | 205 | TUB | 13.89 | 30.63 | 314.16 | 20.00 | 20.00 | 490.0 | NO | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 | |
| 581 | 641 | 205 | TUB | 45.63 | 30.63 | 314.16 | 24.00 | 24.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 581 | 641 | 205 | TUB | 13.91 | 30.63 | 314.16 | 20.00 | 20.00 | 490.0 | NO | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 | |
| 145 | 251 | 243 | TUB | 69.55 | 27.83 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 146 | 231 | 243 | TUB | 69.31 | 27.83 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 146 | 271 | 243 | TUB | 69.31 | 27.83 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 155 | 221 | 243 | TUB | 69.31 | 27.83 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 155 | 261 | 243 | TUB | 69.31 | 27.83 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 201 | 321 | 243 | TUB | 40.85 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 145 | 211 | 243 | TUB | 69.55 | 27.83 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 231 | 204 | 243 | TUB | 49.27 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 148 | 241 | 243 | TUB | 69.55 | 27.83 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 148 | 281 | 243 | TUB | 69.55 | 27.83 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 251 | 361 | 243 | TUB | 76.08 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 304 | 431 | 243 | TUB | 35.87 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 221 | 311 | 243 | TUB | 72.39 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 311 | 451 | 243 | TUB | 79.18 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 321 | 301 | 243 | TUB | 43.37 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 241 | 331 | 243 | TUB | 76.08 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 271 | 381 | 243 | TUB | 72.39 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 381 | 441 | 243 | TUB | 79.18 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 201 | 343 | 245 | TUB | 25.88 | 36.91 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 202 | 201 | 245 | TUB | 35.45 | 36.91 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 203 | 204 | 245 | TUB | 40.60 | 36.91 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 301 | 343 | 245 | TUB | 23.37 | 36.91 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 301 | 421 | 245 | TUB | 39.52 | 36.91 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 302 | 301 | 245 | TUB | 35.45 | 36.91 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 303 | 304 | 245 | TUB | 30.80 | 36.91 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 331 | 304 | 245 | TUB | 39.52 | 36.91 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 304 | 471 | 245 | TUB | 39.52 | 36.91 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 361 | 301 | 245 | TUB | 39.52 | 36.91 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 131 | 241 | 263 | TUB | 79.95 | 30.19 | 530.93 | 28.00 | 28.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 161 | 251 | 263 | TUB | 79.95 | 30.19 | 530.93 | 28.00 | 28.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 111 | 221 | 265 | TUB | 84.02 | 40.06 | 530.93 | 28.00 | 28.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 121 | 231 | 265 | TUB | 71.43 | 40.06 | 530.93 | 28.00 | 28.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 171 | 261 | 265 | TUB | 71.43 | 40.06 | 530.93 | 28.00 | 28.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 181 | 271 | 265 | TUB | 84.02 | 40.06 | 530.93 | 28.00 | 28.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 271 | 204 | 265 | TUB | 44.96 | 40.06 | 530.93 | 29.00 | 29.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 204 | 331 | 265 | TUB | 44.96 | 40.06 | 530.93 | 29.00 | 29.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 221 | 201 | 265 | TUB | 44.96 | 40.06 | 530.93 | 29.00 | 29.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 201 | 361 | 265 | TUB | 44.96 | 40.06 | 530.93 | 29.00 | 29.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 241 | 381 | 265 | TUB | 90.08 | 40.06 | 530.93 | 29.00 | 29.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 251 | 311 | 265 | TUB | 90.08 | 40.06 | 530.93 | 29.00 | 29.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 | |
| 200 | 300 | CH1 | TUB | 57.00 | 854.90 | 855.30 | 33.00 | 33.00 | 490.0 | NO | NO | 9.20 | 9.20 | 7.60 | 7.60 | .00 | .00 | |
| 300 | 500 | CH2 | TUB | 98.00 | 442.90 | 683.50 | 29.50 | 29.50 | 490.0 | NO | NO | 10.30 | 10.30 | 9.50 | 9.50 | .00 | .00 | |
| 500 | 700 | CH2 | TUB | 77.39 | 442.90 | 683.50 | 29.50 | 29.50 | 490.0 | NO | NO | 10.30 | 10.30 | 9.50 | 9.50 | .00 | .00 | |
| 700 | 900 | CH2 | TUB | 9.61 | 442.90 | 683.50 | 29.50 | 29.50 | 490.0 | NO | NO | 10.30 | 10.30 | 9.50 | 9.50 | .00 | .00 | |

*** UAGA Member Property Summary ***

| Member JA | Group JB | ---Section--- | | ---Area--- | | Diameters | | Matl. Density (PCF) | Flood | Marine Growth | Drag And Mass Coefficients | | | | | | |
|--------------|-------------|---------------|----------------|------------------|----------------|-----------|-------|-----------------------------|-------|------------------|----------------------------|------|------|------|------|-----|-----|
| | | Type | Length (Ft) | Const. (In^2) | Diapi. (In) | Y | Z | | | | Cdy | Cdx | Cwy | Cwz | Cdt | Cwt | |
| 123 | 155 | J08 | TUB | 18.89 | 12.76 | 58.43 | 10.63 | 10.63 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 124 | 146 | J08 | TUB | 18.89 | 12.76 | 58.43 | 10.63 | 10.63 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 144 | 146 | J08 | TUB | 12.92 | 12.76 | 58.43 | 10.63 | 10.63 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 146 | 164 | J08 | TUB | 18.89 | 12.76 | 58.43 | 10.63 | 10.63 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 155 | 143 | J08 | TUB | 12.92 | 12.76 | 58.43 | 10.63 | 10.63 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 155 | 163 | J08 | TUB | 18.89 | 12.76 | 58.43 | 10.63 | 10.63 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 123 | 101 | J11 | TUB | 47.27 | 19.24 | 127.68 | 14.75 | 14.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 124 | 102 | J11 | TUB | 47.27 | 19.24 | 127.68 | 14.75 | 14.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 163 | 103 | J11 | TUB | 47.27 | 19.24 | 127.68 | 14.75 | 14.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 164 | 104 | J11 | TUB | 47.27 | 19.24 | 127.68 | 14.75 | 14.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 123 | 124 | J12 | TUB | 19.17 | 26.04 | 127.68 | 14.75 | 14.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 163 | 164 | J12 | TUB | 19.17 | 26.04 | 127.68 | 14.75 | 14.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 121 | 123 | J16 | TUB | 34.99 | 24.35 | 201.06 | 18.00 | 18.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 123 | 125 | J16 | TUB | 33.90 | 24.35 | 201.06 | 18.00 | 18.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 124 | 131 | J16 | TUB | 34.99 | 24.35 | 201.06 | 18.00 | 18.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 125 | 124 | J16 | TUB | 33.90 | 24.35 | 201.06 | 18.00 | 18.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 161 | 163 | J16 | TUB | 34.99 | 24.35 | 201.06 | 18.00 | 18.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 163 | 165 | J16 | TUB | 33.90 | 24.35 | 201.06 | 18.00 | 18.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 164 | 171 | J16 | TUB | 34.99 | 24.35 | 201.06 | 18.00 | 18.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 165 | 164 | J16 | TUB | 33.90 | 24.35 | 201.06 | 18.00 | 18.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 111 | 115 | J20 | TUB | 33.40 | 48.95 | 314.16 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 115 | 121 | J20 | TUB | 30.41 | 48.95 | 314.16 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 121 | 125 | J20 | TUB | 22.50 | 48.95 | 314.16 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 123 | 143 | J20 | TUB | 13.78 | 48.95 | 314.16 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 124 | 144 | J20 | TUB | 13.78 | 48.95 | 314.16 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 125 | 131 | J20 | TUB | 22.50 | 48.95 | 314.16 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 131 | 135 | J20 | TUB | 30.41 | 48.95 | 314.16 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 135 | 141 | J20 | TUB | 33.40 | 48.95 | 314.16 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 143 | 163 | J20 | TUB | 13.78 | 48.95 | 314.16 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 144 | 164 | J20 | TUB | 13.78 | 48.95 | 314.16 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 151 | 159 | J20 | TUB | 33.40 | 48.95 | 314.16 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 159 | 161 | J20 | TUB | 30.41 | 48.95 | 314.16 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 161 | 165 | J20 | TUB | 22.50 | 48.95 | 314.16 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 165 | 171 | J20 | TUB | 22.50 | 48.95 | 314.16 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 171 | 175 | J20 | TUB | 30.41 | 48.95 | 314.16 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 175 | 181 | J20 | TUB | 33.40 | 48.95 | 314.16 | 22.00 | 22.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 111 | 145 | J24 | TUB | 46.30 | 50.32 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 121 | 155 | J24 | TUB | 46.30 | 50.32 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 131 | 146 | J24 | TUB | 46.30 | 50.32 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 141 | 148 | J24 | TUB | 46.30 | 50.32 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 145 | 151 | J24 | TUB | 46.30 | 50.32 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 146 | 171 | J24 | TUB | 46.30 | 50.32 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 148 | 181 | J24 | TUB | 46.30 | 50.32 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 155 | 161 | J24 | TUB | 46.30 | 50.32 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 121 | 145 | J25 | TUB | 78.83 | 36.91 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 145 | 161 | J25 | TUB | 78.83 | 36.91 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 148 | 131 | J25 | TUB | 78.83 | 36.91 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |

*** UACA Member Property Summary ***

| Member JA | Group JB | Section | | Area | | Diameters | | Matl. Density (PCF) | Flood | Marine Growth | Drag And Mass Coefficients | | | | | | |
|--------------|-------------|---------|----------------|------------------|------------------|-----------|-----------|-----------------------------|-------|------------------|----------------------------|------|------|------|------|-----|-----|
| | | Type | Length (Ft) | Const. (In^2) | Displ. (In^2) | Y (In) | Z (In) | | | | Cdy | Cdx | Cey | Cez | Cdt | Cdt | |
| 171 | 148 | J25 | TUB | 78.83 | 36.91 | 452.39 | 26.00 | 26.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 223 | 254 | K08 | TUB | 18.89 | 8.40 | 58.43 | 11.63 | 11.63 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 224 | 255 | K08 | TUB | 18.89 | 8.40 | 58.43 | 11.63 | 11.63 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 244 | 255 | K08 | TUB | 12.92 | 8.40 | 58.43 | 11.63 | 11.63 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 254 | 243 | K08 | TUB | 12.92 | 8.40 | 58.43 | 11.63 | 11.63 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 254 | 263 | K08 | TUB | 18.89 | 8.40 | 58.43 | 11.63 | 11.63 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 255 | 264 | K08 | TUB | 18.89 | 8.40 | 58.43 | 11.63 | 11.63 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 221 | 225 | K11 | TUB | 22.50 | 19.24 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 225 | 231 | K11 | TUB | 22.50 | 19.24 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 261 | 265 | K11 | TUB | 22.50 | 19.24 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 265 | 271 | K11 | TUB | 22.50 | 19.24 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 223 | 224 | K12 | TUB | 19.17 | 26.04 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 263 | 264 | K12 | TUB | 19.17 | 26.04 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 221 | 223 | K13 | TUB | 29.77 | 14.58 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 223 | 205 | K13 | TUB | 40.43 | 14.58 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 223 | 225 | K13 | TUB | 28.48 | 14.58 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 224 | 206 | K13 | TUB | 40.43 | 14.58 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 224 | 231 | K13 | TUB | 29.77 | 14.58 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 225 | 224 | K13 | TUB | 28.48 | 14.58 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 261 | 263 | K13 | TUB | 29.77 | 14.58 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 263 | 207 | K13 | TUB | 40.43 | 14.58 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 263 | 265 | K13 | TUB | 28.48 | 14.58 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 264 | 208 | K13 | TUB | 40.43 | 14.58 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 264 | 271 | K13 | TUB | 29.77 | 14.58 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 265 | 264 | K13 | TUB | 28.48 | 14.58 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 211 | 221 | K18 | TUB | 58.10 | 27.49 | 254.47 | 21.00 | 21.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 271 | 281 | K18 | TUB | 58.10 | 27.49 | 254.47 | 21.00 | 21.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 223 | 243 | K20 | TUB | 13.78 | 48.95 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 224 | 244 | K20 | TUB | 13.78 | 48.95 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 243 | 263 | K20 | TUB | 13.78 | 48.95 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 244 | 264 | K20 | TUB | 13.78 | 48.95 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 211 | 251 | K24 | TUB | 81.20 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 221 | 251 | K24 | TUB | 99.85 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 221 | 253 | K24 | TUB | 33.13 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 231 | 255 | K24 | TUB | 40.60 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 241 | 271 | K24 | TUB | 99.85 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 241 | 281 | K24 | TUB | 81.20 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 253 | 254 | K24 | TUB | 7.47 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 254 | 261 | K24 | TUB | 40.60 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 255 | 271 | K24 | TUB | 40.60 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 331 | 346 | L20 | TUB | 43.00 | 30.63 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 346 | 371 | L20 | TUB | 27.90 | 30.63 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 311 | 361 | L24 | TUB | 88.49 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 331 | 381 | L24 | TUB | 88.49 | 27.83 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 321 | 343 | L25 | TUB | 35.45 | 36.91 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 343 | 361 | L25 | TUB | 35.45 | 36.91 | 452.39 | 27.00 | 27.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 111 | 211 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |

*** UAGA Member Property Summary ***

| Member | | Group | Section | Length | Area | | Diameter | | Matl. | Flood | Marine | Drag And Mass Coefficients | | | | | |
|--------|-----|-------|---------|--------|----------|--------|----------|-------|---------|-------|--------|----------------------------|----------------|----------------|----------------|----------------|----------------|
| JA | JB | Label | Type | (Ft) | Const. | Displ. | Y | Z | Density | | Growth | C _d | C _x | C _y | C _z | C _d | C _w |
| | | | | | / (In^2) | | / (In) | | (PCF) | | | / | | | | | |
| 111 | 211 | LG2 | TUB | 47.57 | 71.47 | 71.47 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 111 | 211 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 141 | 241 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 141 | 241 | LG2 | TUB | 47.57 | 71.47 | 71.47 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 141 | 241 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 151 | 251 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 151 | 251 | LG2 | TUB | 47.57 | 71.47 | 71.47 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 151 | 251 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 181 | 281 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 181 | 281 | LG2 | TUB | 47.57 | 71.47 | 71.47 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 181 | 281 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 211 | 311 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 211 | 311 | LG2 | TUB | 42.01 | 71.47 | 71.47 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 211 | 311 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 281 | 381 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 281 | 381 | LG2 | TUB | 42.01 | 71.47 | 71.47 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 281 | 381 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 311 | 411 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 311 | 411 | LG2 | TUB | 36.96 | 71.47 | 71.47 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 311 | 411 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 361 | 461 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 361 | 461 | LG2 | TUB | 36.73 | 71.47 | 71.47 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 361 | 461 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 371 | 471 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 371 | 471 | LG2 | TUB | 36.73 | 71.47 | 71.47 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 371 | 471 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 381 | 481 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 381 | 481 | LG2 | TUB | 36.96 | 71.47 | 71.47 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 381 | 481 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 411 | 511 | LG2 | TUB | 1.01 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 411 | 511 | LG2 | TUB | 3.99 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 411 | 511 | LG2 | TUB | 31.91 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 411 | 511 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 481 | 581 | LG2 | TUB | 1.01 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 481 | 581 | LG2 | TUB | 3.99 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 481 | 581 | LG2 | TUB | 31.91 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 481 | 581 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 511 | 611 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 511 | 611 | LG2 | TUB | 22.77 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 511 | 611 | LG2 | TUB | 3.47 | 71.47 | 71.47 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| 511 | 611 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| 581 | 681 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 581 | 681 | LG2 | TUB | 22.77 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 581 | 681 | LG2 | TUB | 3.47 | 71.47 | 71.47 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| 581 | 681 | LG2 | TUB | 5.00 | 141.37 | 141.37 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| 121 | 101 | LG3 | TUB | 5.00 | 141.37 | 141.37 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 121 | 101 | LG3 | TUB | 30.17 | 71.47 | 71.47 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |

*** UAGA Member Property Summary ***

| Member | | Group | Section | Length (Ft) | Area | | Diameters | | Matl. Density (PCF) | Flood | Marine Growth | Drag And Mass Coefficients | | | | | |
|--------|-----|-------|---------|----------------|----------------|--------|--------------|-------|-----------------------------|-------|------------------|----------------------------|------|------|------|-----|-----|
| JA | JB | Label | Type | | Const. | Displ. | Y | Z | | | | Cdy | Cdx | Cay | Cax | Cdt | Cat |
| | | | | | --- (in^2) --- | | --- (in) --- | | | | | | | | | | |
| 131 | 102 | LG3 | TUB | 5.00 | 141.37 | 141.37 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 131 | 102 | LG3 | TUB | 30.17 | 71.47 | 71.47 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 161 | 103 | LG3 | TUB | 5.00 | 141.37 | 141.37 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 161 | 103 | LG3 | TUB | 30.17 | 71.47 | 71.47 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 171 | 104 | LG3 | TUB | 5.00 | 141.37 | 141.37 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 171 | 104 | LG3 | TUB | 30.17 | 71.47 | 71.47 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 241 | 341 | LG3 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 241 | 341 | LG3 | TUB | 47.01 | 71.47 | 71.47 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 251 | 351 | LG3 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 251 | 351 | LG3 | TUB | 47.01 | 71.47 | 71.47 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 261 | 207 | LG3 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 261 | 207 | LG3 | TUB | 25.15 | 71.47 | 71.47 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 271 | 208 | LG3 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 271 | 208 | LG3 | TUB | 25.15 | 71.47 | 71.47 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 321 | 302 | LG3 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 321 | 302 | LG3 | TUB | 18.37 | 71.47 | 71.47 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 331 | 303 | LG3 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 331 | 303 | LG3 | TUB | 18.37 | 71.47 | 71.47 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 421 | 507 | LG3 | TUB | 1.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 421 | 507 | LG3 | TUB | 4.00 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 421 | 507 | LG3 | TUB | 17.11 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 431 | 506 | LG3 | TUB | 1.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 431 | 506 | LG3 | TUB | 4.00 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 431 | 506 | LG3 | TUB | 17.11 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 441 | 541 | LG3 | TUB | 1.01 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 441 | 541 | LG3 | TUB | 3.99 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 441 | 541 | LG3 | TUB | 36.91 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 451 | 551 | LG3 | TUB | 1.01 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 451 | 551 | LG3 | TUB | 3.99 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 451 | 551 | LG3 | TUB | 36.91 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 461 | 508 | LG3 | TUB | 1.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 461 | 508 | LG3 | TUB | 4.00 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 461 | 508 | LG3 | TUB | 17.11 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 471 | 505 | LG3 | TUB | 1.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 471 | 505 | LG3 | TUB | 4.00 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 471 | 505 | LG3 | TUB | 17.11 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 521 | 503 | LG3 | TUB | 5.00 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 521 | 503 | LG3 | TUB | 11.92 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 531 | 502 | LG3 | TUB | 5.00 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 531 | 502 | LG3 | TUB | 11.92 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 561 | 504 | LG3 | TUB | 5.00 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 561 | 504 | LG3 | TUB | 11.92 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 571 | 501 | LG3 | TUB | 5.00 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 571 | 501 | LG3 | TUB | 11.92 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 101 | 221 | LG4 | TUB | 17.11 | 71.47 | 71.47 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 101 | 221 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 102 | 231 | LG4 | TUB | 17.11 | 71.47 | 71.47 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |

*** UAGA Member Property Summary ***

| Member | | Group | Section | | Areas | | Diameter | | Matl. | Flood | Marine | Drag And Mass Coefficients | | | | | |
|--------|-----|-------|---------|----------------|------------------------------|--------|-----------|-----------|--------------------|-------|--------|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| JA | JB | Label | Type | Length (Ft) | Const. (in ²) | Displ. | Y (In) | Z (In) | Density (PCF) | | Growth | C _{dy} | C _{dx} | C _{dy} | C _{dz} | C _{dt} | C _{wt} |
| 102 | 231 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 103 | 261 | LG4 | TUB | 17.11 | 71.47 | 71.47 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 103 | 261 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 104 | 271 | LG4 | TUB | 17.11 | 71.47 | 71.47 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 104 | 271 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 48.00 | 48.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 207 | 361 | LG4 | TUB | 16.61 | 71.47 | 71.47 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 207 | 361 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 208 | 371 | LG4 | TUB | 16.61 | 71.47 | 71.47 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 208 | 371 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 302 | 421 | LG4 | TUB | 18.37 | 71.47 | 71.47 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 302 | 421 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 303 | 431 | LG4 | TUB | 18.37 | 71.47 | 71.47 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 303 | 431 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 341 | 441 | LG4 | TUB | 41.96 | 71.47 | 71.47 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 341 | 441 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 351 | 451 | LG4 | TUB | 41.96 | 71.47 | 71.47 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 351 | 451 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 501 | 671 | LG4 | TUB | 10.72 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 501 | 671 | LG4 | TUB | 3.43 | 71.47 | 71.47 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| 501 | 671 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| 502 | 631 | LG4 | TUB | 10.72 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 502 | 631 | LG4 | TUB | 3.43 | 71.47 | 71.47 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| 502 | 631 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| 503 | 621 | LG4 | TUB | 10.72 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 503 | 621 | LG4 | TUB | 3.43 | 71.47 | 71.47 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| 503 | 621 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| 504 | 661 | LG4 | TUB | 10.72 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 504 | 661 | LG4 | TUB | 3.43 | 71.47 | 71.47 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| 504 | 661 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| 505 | 571 | LG4 | TUB | 14.60 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 505 | 571 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 506 | 531 | LG4 | TUB | 14.60 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 506 | 531 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 507 | 521 | LG4 | TUB | 14.60 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 507 | 521 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 508 | 561 | LG4 | TUB | 14.60 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 508 | 561 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 541 | 641 | LG4 | TUB | 27.77 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 541 | 641 | LG4 | TUB | 3.47 | 71.47 | 71.47 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| 541 | 641 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| 551 | 651 | LG4 | TUB | 27.77 | 71.47 | 71.47 | 50.00 | 50.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 551 | 651 | LG4 | TUB | 3.47 | 71.47 | 71.47 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| 551 | 651 | LG4 | TUB | 5.00 | 141.37 | 141.37 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| 202 | 205 | LG7 | TUB | 4.27 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 205 | 321 | LG7 | TUB | 21.61 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 203 | 206 | LG7 | TUB | 4.27 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 206 | 331 | LG7 | TUB | 21.61 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |

*** UAGA Member Property Summary ***

| Member | | Group | Section | Areas | | Diameters | | Matl. | Flood | Marine | Drag And Mass Coefficients | | | | | | | | |
|--------|----|-------|---------|--------|----------------|-----------|--------------|--------|---------|--------|----------------------------|-----|-----|------|------|------|------|-----|-----|
| JA | JB | Label | Type | Length | Const. | Displ. | Y | Z | Density | Growth | Cdy | Cdx | Cwy | Cwz | Cdt | Cwt | | | |
| | | | | (Ft) | --- (In^2) --- | | --- (In) --- | | (PCF) | ----- | | | | | | | | | |
| | | 221 | 202 | LG7 | TUB | 25.88 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 231 | 203 | LG7 | TUB | 25.88 | 141.37 | 141.37 | 49.00 | 49.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 611 | 712 | LG7 | TUB | 2.64 | 141.37 | 141.37 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| | | 621 | 722 | LG7 | TUB | 2.63 | 141.37 | 141.37 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| | | 631 | 732 | LG7 | TUB | 2.63 | 141.37 | 141.37 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| | | 641 | 742 | LG7 | TUB | 2.64 | 141.37 | 141.37 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| | | 651 | 752 | LG7 | TUB | 2.64 | 141.37 | 141.37 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| | | 661 | 762 | LG7 | TUB | 2.63 | 141.37 | 141.37 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| | | 671 | 772 | LG7 | TUB | 2.63 | 141.37 | 141.37 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| | | 681 | 782 | LG7 | TUB | 2.64 | 141.37 | 141.37 | 46.00 | 46.00 | 490.0 | YES | NO | .72 | .72 | 1.45 | 1.45 | .00 | .00 |
| | | 121 | 101 | SKD | TUB | 35.17 | 19.24 | 19.24 | 12.75 | 12.75 | 490.0 | YES | NO | 4.00 | 4.00 | 1.40 | 1.40 | .00 | .00 |
| | | 101 | 221 | SKD | TUB | 22.11 | 19.24 | 19.24 | 12.75 | 12.75 | 490.0 | YES | NO | 4.00 | 4.00 | 1.40 | 1.40 | .00 | .00 |
| | | 221 | 202 | SKD | TUB | 25.88 | 19.24 | 19.24 | 12.75 | 12.75 | 490.0 | YES | NO | 4.00 | 4.00 | 1.40 | 1.40 | .00 | .00 |
| | | 202 | 321 | SKD | TUB | 25.88 | 19.24 | 19.24 | 12.75 | 12.75 | 490.0 | YES | NO | 4.00 | 4.00 | 1.40 | 1.40 | .00 | .00 |
| | | 321 | 302 | SKD | TUB | 23.37 | 19.24 | 19.24 | 12.75 | 12.75 | 490.0 | YES | NO | 4.00 | 4.00 | 1.40 | 1.40 | .00 | .00 |
| | | 302 | 421 | SKD | TUB | 23.37 | 19.24 | 19.24 | 12.75 | 12.75 | 490.0 | YES | NO | 4.00 | 4.00 | 1.40 | 1.40 | .00 | .00 |
| | | 421 | 507 | SKD | TUB | 22.11 | 19.24 | 19.24 | 12.75 | 12.75 | 490.0 | YES | NO | 4.00 | 4.00 | 1.40 | 1.40 | .00 | .00 |
| | | 507 | 521 | SKD | TUB | 19.60 | 19.24 | 19.24 | 12.75 | 12.75 | 490.0 | YES | NO | 4.00 | 4.00 | 1.40 | 1.40 | .00 | .00 |
| | | 521 | 503 | SKD | TUB | 16.92 | 19.24 | 19.24 | 12.75 | 12.75 | 490.0 | YES | NO | 4.00 | 4.00 | 1.40 | 1.40 | .00 | .00 |
| | | 131 | 102 | SKD | TUB | 35.17 | 19.24 | 19.24 | 12.75 | 12.75 | 490.0 | YES | NO | 4.00 | 4.00 | 1.40 | 1.40 | .00 | .00 |
| | | 102 | 231 | SKD | TUB | 22.11 | 19.24 | 19.24 | 12.75 | 12.75 | 490.0 | YES | NO | 4.00 | 4.00 | 1.40 | 1.40 | .00 | .00 |
| | | 231 | 203 | SKD | TUB | 25.88 | 19.24 | 19.24 | 12.75 | 12.75 | 490.0 | YES | NO | 4.00 | 4.00 | 1.40 | 1.40 | .00 | .00 |
| | | 203 | 331 | SKD | TUB | 25.88 | 19.24 | 19.24 | 12.75 | 12.75 | 490.0 | YES | NO | 4.00 | 4.00 | 1.40 | 1.40 | .00 | .00 |
| | | 331 | 303 | SKD | TUB | 23.37 | 19.24 | 19.24 | 12.75 | 12.75 | 490.0 | YES | NO | 4.00 | 4.00 | 1.40 | 1.40 | .00 | .00 |
| | | 303 | 431 | SKD | TUB | 23.37 | 19.24 | 19.24 | 12.75 | 12.75 | 490.0 | YES | NO | 4.00 | 4.00 | 1.40 | 1.40 | .00 | .00 |
| | | 431 | 506 | SKD | TUB | 22.11 | 19.24 | 19.24 | 12.75 | 12.75 | 490.0 | YES | NO | 4.00 | 4.00 | 1.40 | 1.40 | .00 | .00 |
| | | 506 | 531 | SKD | TUB | 19.60 | 19.24 | 19.24 | 12.75 | 12.75 | 490.0 | YES | NO | 4.00 | 4.00 | 1.40 | 1.40 | .00 | .00 |
| | | 531 | 502 | SKD | TUB | 16.92 | 19.24 | 19.24 | 12.75 | 12.75 | 490.0 | YES | NO | 4.00 | 4.00 | 1.40 | 1.40 | .00 | .00 |
| | | 424 | 446 | MO8 | TUB | 18.89 | 8.40 | 58.43 | 11.63 | 11.63 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 443 | 423 | MO8 | TUB | 18.89 | 8.40 | 58.43 | 11.63 | 11.63 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 443 | 463 | MO8 | TUB | 18.89 | 8.40 | 58.43 | 11.63 | 11.63 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 446 | 464 | MO8 | TUB | 18.89 | 8.40 | 58.43 | 11.63 | 11.63 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 423 | 507 | MO9 | TUB | 1.34 | 12.22 | 90.76 | 13.75 | 13.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 423 | 507 | MO9 | TUB | 28.16 | 12.22 | 90.76 | 14.75 | 14.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 424 | 506 | MO9 | TUB | 1.34 | 12.22 | 90.76 | 13.75 | 13.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 424 | 506 | MO9 | TUB | 28.16 | 12.22 | 90.76 | 14.75 | 14.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 463 | 508 | MO9 | TUB | 1.34 | 12.22 | 90.76 | 13.75 | 13.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 463 | 508 | MO9 | TUB | 28.16 | 12.22 | 90.76 | 14.75 | 14.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 464 | 505 | MO9 | TUB | 1.34 | 12.22 | 90.76 | 13.75 | 13.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 464 | 505 | MO9 | TUB | 28.16 | 12.22 | 90.76 | 14.75 | 14.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 421 | 423 | M10 | TUB | 21.37 | 11.91 | 90.76 | 13.75 | 13.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 423 | 425 | M10 | TUB | 19.53 | 11.91 | 90.76 | 13.75 | 13.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 424 | 431 | M10 | TUB | 21.37 | 11.91 | 90.76 | 13.75 | 13.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 425 | 424 | M10 | TUB | 19.53 | 11.91 | 90.76 | 13.75 | 13.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 461 | 463 | M10 | TUB | 21.37 | 11.91 | 90.76 | 13.75 | 13.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 463 | 465 | M10 | TUB | 19.53 | 11.91 | 90.76 | 13.75 | 13.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| | | 464 | 471 | M10 | TUB | 21.37 | 11.91 | 90.76 | 13.75 | 13.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |

*** UAGA Member Property Summary ***

| Member | Group | Section | Area | Diameter | Matl. | Flood | Marine | Drag And Mass Coefficients | | | | | | | | | |
|--------|-------|---------|------|----------|---------|--------|--------|----------------------------|---------|---------|-----|------|------|------|------|-----|-----|
| JA | JB | Label | Type | Length | Const. | Dispi. | Y | Z | Density | Growth | Cdy | Cdx | Cmy | Cmz | Cdt | Cwt | |
| | | | | (Ft) | /(In^2) | | /(In) | | (PCF) | /-----/ | | | | | | | |
| 465 | 464 | M10 | TUB | 19.53 | 11.91 | 90.76 | 13.75 | 13.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 421 | 425 | M11 | TUB | 22.50 | 19.24 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 425 | 431 | M11 | TUB | 22.50 | 19.24 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 461 | 465 | M11 | TUB | 22.50 | 19.24 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 465 | 471 | M11 | TUB | 22.50 | 19.24 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 423 | 424 | M12 | TUB | 19.17 | 26.04 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 463 | 464 | M12 | TUB | 19.17 | 26.04 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 411 | 421 | M14 | TUB | 48.30 | 16.05 | 153.94 | 17.00 | 17.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 471 | 481 | M14 | TUB | 48.30 | 16.05 | 153.94 | 17.00 | 17.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 411 | 451 | M18 | TUB | 61.60 | 27.49 | 254.47 | 21.00 | 21.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 421 | 443 | M18 | TUB | 30.80 | 27.49 | 254.47 | 21.00 | 21.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 431 | 446 | M18 | TUB | 30.80 | 27.49 | 254.47 | 21.00 | 21.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 441 | 481 | M18 | TUB | 61.60 | 27.49 | 254.47 | 21.00 | 21.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 443 | 461 | M18 | TUB | 30.80 | 27.49 | 254.47 | 21.00 | 21.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 446 | 471 | M18 | TUB | 30.80 | 27.49 | 254.47 | 21.00 | 21.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 421 | 451 | M20 | TUB | 78.28 | 23.12 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 441 | 471 | M20 | TUB | 78.28 | 23.12 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 463 | 423 | M21 | TUB | 27.56 | 48.95 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 464 | 424 | M21 | TUB | 27.56 | 48.95 | 314.16 | 23.00 | 23.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 521 | 561 | M16 | TUB | 53.30 | 18.41 | 201.06 | 20.00 | 20.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 531 | 571 | M16 | TUB | 53.30 | 18.41 | 201.06 | 20.00 | 20.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 511 | 561 | N20 | TUB | 69.21 | 23.12 | 314.16 | 24.00 | 24.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 531 | 581 | N20 | TUB | 69.21 | 23.12 | 314.16 | 24.00 | 24.00 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 626 | 643 | P08 | TUB | 16.25 | 8.40 | 58.43 | 8.63 | 8.63 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 628 | 646 | P08 | TUB | 16.25 | 8.40 | 58.43 | 8.63 | 8.63 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 643 | 666 | P08 | TUB | 16.25 | 8.40 | 58.43 | 8.63 | 8.63 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 646 | 668 | P08 | TUB | 16.25 | 8.40 | 58.43 | 8.63 | 8.63 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 621 | 626 | P10 | TUB | 18.37 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 623 | 625 | P10 | TUB | 13.19 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 625 | 624 | P10 | TUB | 13.19 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 626 | 503 | P10 | TUB | 12.05 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 626 | 503 | P10 | TUB | 15.39 | 11.91 | 90.76 | 14.75 | 14.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 628 | 502 | P10 | TUB | 12.05 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 628 | 502 | P10 | TUB | 15.39 | 11.91 | 90.76 | 14.75 | 14.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 631 | 628 | P10 | TUB | 18.37 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 663 | 665 | P10 | TUB | 13.19 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 665 | 664 | P10 | TUB | 13.19 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 666 | 504 | P10 | TUB | 12.05 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 666 | 504 | P10 | TUB | 15.39 | 11.91 | 90.76 | 14.75 | 14.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 666 | 661 | P10 | TUB | 18.37 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 668 | 501 | P10 | TUB | 12.05 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 668 | 501 | P10 | TUB | 15.39 | 11.91 | 90.76 | 14.75 | 14.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 668 | 671 | P10 | TUB | 18.37 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 611 | 621 | P12 | TUB | 40.56 | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 621 | 625 | P12 | TUB | 22.50 | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 625 | 631 | P12 | TUB | 22.50 | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 631 | 641 | P12 | TUB | 40.56 | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |

*** UAGA Member Property Summary ***

| Member | Group | ---Section--- | | ---Areas--- | | Diameters | | Matl. | Flood | Marine | Drag And Mass Coefficients | | | | | | |
|--------|-------|---------------|------|-------------|----------------|-----------|--------------|-------|---------|--------|----------------------------|-----|-----|------|------|-----|-----|
| JA | JB | Label | Type | Length | Const. | Displ. | Y | Z | Density | Growth | Cdy | Cdz | Cwy | Cwz | Cdt | Cct | |
| | | | | (Ft) | --- (In^2) --- | | --- (In) --- | | (PCF) | ----- | | | | | | | |
| 651 | 661 | P12 | TUB | 40.56 | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 661 | 665 | P12 | TUB | 22.50 | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 665 | 671 | P12 | TUB | 22.50 | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 671 | 681 | P12 | TUB | 40.56 | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 611 | 651 | P14 | TUB | 46.13 | 21.21 | 153.94 | 14.00 | 14.00 | 490.0 | NO | NO | .62 | .62 | 1.39 | 1.39 | .00 | .00 |
| 621 | 643 | P14 | TUB | 23.06 | 21.21 | 153.94 | 14.00 | 14.00 | 490.0 | NO | NO | .62 | .62 | 1.39 | 1.39 | .00 | .00 |
| 631 | 646 | P14 | TUB | 23.06 | 21.21 | 153.94 | 14.00 | 14.00 | 490.0 | NO | NO | .62 | .62 | 1.39 | 1.39 | .00 | .00 |
| 641 | 681 | P14 | TUB | 46.13 | 21.21 | 153.94 | 14.00 | 14.00 | 490.0 | NO | NO | .62 | .62 | 1.39 | 1.39 | .00 | .00 |
| 643 | 661 | P14 | TUB | 23.06 | 21.21 | 153.94 | 14.00 | 14.00 | 490.0 | NO | NO | .62 | .62 | 1.39 | 1.39 | .00 | .00 |
| 646 | 671 | P14 | TUB | 23.06 | 21.21 | 153.94 | 14.00 | 14.00 | 490.0 | NO | NO | .62 | .62 | 1.39 | 1.39 | .00 | .00 |
| 623 | 624 | P16 | TUB | 19.29 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 626 | 628 | P16 | TUB | 19.29 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 663 | 664 | P16 | TUB | 19.29 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 666 | 668 | P16 | TUB | 19.29 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 621 | 651 | P18 | TUB | 61.43 | 20.76 | 254.47 | 18.00 | 18.00 | 490.0 | NO | NO | .64 | .64 | 1.39 | 1.39 | .00 | .00 |
| 641 | 671 | P18 | TUB | 61.43 | 20.76 | 254.47 | 18.00 | 18.00 | 490.0 | NO | NO | .64 | .64 | 1.39 | 1.39 | .00 | .00 |
| 623 | 626 | P21 | TUB | 4.13 | 48.95 | 314.16 | 20.00 | 20.00 | 490.0 | NO | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 |
| 624 | 628 | P21 | TUB | 4.13 | 48.95 | 314.16 | 20.00 | 20.00 | 490.0 | NO | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 |
| 626 | 666 | P21 | TUB | 19.88 | 48.95 | 314.16 | 20.00 | 20.00 | 490.0 | NO | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 |
| 628 | 668 | P21 | TUB | 19.88 | 48.95 | 314.16 | 20.00 | 20.00 | 490.0 | NO | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 |
| 666 | 663 | P21 | TUB | 4.13 | 48.95 | 314.16 | 20.00 | 20.00 | 490.0 | NO | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 |
| 668 | 664 | P21 | TUB | 4.13 | 48.95 | 314.16 | 20.00 | 20.00 | 490.0 | NO | NO | .65 | .65 | 1.40 | 1.40 | .00 | .00 |
| 112 | 212 | PL2 | TUB | 27.30 | 221.29 | 221.29 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 112 | 212 | PL2 | TUB | 20.00 | 190.85 | 190.85 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 112 | 212 | PL2 | TUB | 10.27 | 160.02 | 160.02 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 122 | 222 | PL2 | TUB | 27.30 | 221.29 | 221.29 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 122 | 222 | PL2 | TUB | 20.00 | 190.85 | 190.85 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 122 | 222 | PL2 | TUB | 9.98 | 160.02 | 160.02 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 132 | 232 | PL2 | TUB | 27.30 | 221.29 | 221.29 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 132 | 232 | PL2 | TUB | 20.00 | 190.85 | 190.85 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 132 | 232 | PL2 | TUB | 9.98 | 160.02 | 160.02 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 142 | 242 | PL2 | TUB | 27.30 | 221.29 | 221.29 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 142 | 242 | PL2 | TUB | 20.00 | 190.85 | 190.85 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 142 | 242 | PL2 | TUB | 10.27 | 160.02 | 160.02 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 152 | 252 | PL2 | TUB | 27.30 | 221.29 | 221.29 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 152 | 252 | PL2 | TUB | 20.00 | 190.85 | 190.85 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 152 | 252 | PL2 | TUB | 10.27 | 160.02 | 160.02 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 162 | 262 | PL2 | TUB | 27.30 | 221.29 | 221.29 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 162 | 262 | PL2 | TUB | 20.00 | 190.85 | 190.85 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 162 | 262 | PL2 | TUB | 9.98 | 160.02 | 160.02 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 172 | 272 | PL2 | TUB | 27.30 | 221.29 | 221.29 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 172 | 272 | PL2 | TUB | 20.00 | 190.85 | 190.85 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 172 | 272 | PL2 | TUB | 9.98 | 160.02 | 160.02 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 182 | 282 | PL2 | TUB | 27.30 | 221.29 | 221.29 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 182 | 282 | PL2 | TUB | 20.00 | 190.85 | 190.85 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 182 | 282 | PL2 | TUB | 10.27 | 160.02 | 160.02 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 212 | 312 | PL3 | TUB | 4.80 | 160.02 | 160.02 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |

*** UAGA Member Property Summary ***

| Member | | Group | Section | Length (Ft) | Areas | | Diameters | | Matl. Density (PCF) | Flood | Marine Growth | Drag And Mass Coefficients | | | | | |
|--------|-----|-------|---------|----------------|--------|--------|-----------|-----|-----------------------------|-------|------------------|----------------------------|-----|-----|-----|-----|-----|
| JA | JB | Label | Type | | Const. | Displ. | Y | Z | | | | Cdy | Cdx | Ccy | Ccz | Cdt | Cwt |
| | | | | | (In^2) | | (In) | | | | | | | | | | |
| 212 | 312 | PL3 | TUB | 47.21 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 222 | 322 | PL3 | TUB | 4.80 | 160.02 | 160.02 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 222 | 322 | PL3 | TUB | 46.96 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 232 | 332 | PL3 | TUB | 4.80 | 160.02 | 160.02 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 232 | 332 | PL3 | TUB | 46.96 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 242 | 342 | PL3 | TUB | 4.80 | 160.02 | 160.02 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 242 | 342 | PL3 | TUB | 47.21 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 252 | 352 | PL3 | TUB | 4.80 | 160.02 | 160.02 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 252 | 352 | PL3 | TUB | 47.21 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 262 | 362 | PL3 | TUB | 4.80 | 160.02 | 160.02 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 262 | 362 | PL3 | TUB | 46.96 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 272 | 372 | PL3 | TUB | 4.80 | 160.02 | 160.02 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 272 | 372 | PL3 | TUB | 46.96 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 282 | 382 | PL3 | TUB | 4.80 | 160.02 | 160.02 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 282 | 382 | PL3 | TUB | 47.21 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 312 | 412 | PL4 | TUB | 46.96 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 322 | 422 | PL4 | TUB | 46.73 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 332 | 432 | PL4 | TUB | 46.73 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 342 | 442 | PL4 | TUB | 46.96 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 352 | 452 | PL4 | TUB | 46.96 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 362 | 462 | PL4 | TUB | 46.73 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 372 | 472 | PL4 | TUB | 46.73 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 382 | 482 | PL4 | TUB | 46.96 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 412 | 512 | PL5 | TUB | 41.91 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 422 | 522 | PL5 | TUB | 41.71 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 432 | 532 | PL5 | TUB | 41.71 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 442 | 542 | PL5 | TUB | 41.91 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 452 | 552 | PL5 | TUB | 41.91 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 462 | 562 | PL5 | TUB | 41.71 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 472 | 572 | PL5 | TUB | 41.71 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 482 | 582 | PL5 | TUB | 41.91 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 512 | 612 | PL6 | TUB | 36.24 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 522 | 622 | PL6 | TUB | 36.06 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 532 | 632 | PL6 | TUB | 36.06 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 542 | 642 | PL6 | TUB | 36.24 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 552 | 652 | PL6 | TUB | 36.24 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 562 | 662 | PL6 | TUB | 36.06 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 572 | 672 | PL6 | TUB | 36.06 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 582 | 682 | PL6 | TUB | 36.24 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 612 | 712 | PL7 | TUB | 2.64 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 622 | 722 | PL7 | TUB | 2.63 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 632 | 732 | PL7 | TUB | 2.63 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 642 | 742 | PL7 | TUB | 2.64 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 652 | 752 | PL7 | TUB | 2.64 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 662 | 762 | PL7 | TUB | 2.63 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 672 | 772 | PL7 | TUB | 2.63 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |
| 682 | 782 | PL7 | TUB | 2.64 | 128.81 | 128.81 | .00 | .00 | 490.0 | YES | NO | .00 | .00 | .00 | .00 | .00 | .00 |

*** UAGA Member Property Summary ***

| Member JA | Group JB | Section | | Area | | Diameter | | Matl. Density (PCF) | Flood | Marine Growth | Drag And Mass Coefficients | | | | | | |
|-----------|----------|---------|------|-------------|---------------|---------------|--------|-----------------------|-------|---------------|----------------------------|------|------|------|------|-----|-----|
| | | Label | Type | Length (Ft) | Const. (In^2) | Displ. (In^2) | Y (In) | | | | Z (In) | Cdy | Cdx | Cwy | Cwz | Cdt | Cwt |
| 712 | 811 | PLB | TUB | 3.03 | 128.81 | 128.81 | 42.00 | 42.00 | 490.0 | YES | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 722 | 821 | PLB | TUB | 3.02 | 128.81 | 128.81 | 42.00 | 42.00 | 490.0 | YES | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 732 | 831 | PLB | TUB | 3.02 | 128.81 | 128.81 | 42.00 | 42.00 | 490.0 | YES | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 742 | 841 | PLB | TUB | 3.03 | 128.81 | 128.81 | 42.00 | 42.00 | 490.0 | YES | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 752 | 851 | PLB | TUB | 3.03 | 128.81 | 128.81 | 42.00 | 42.00 | 490.0 | YES | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 762 | 861 | PLB | TUB | 3.02 | 128.81 | 128.81 | 42.00 | 42.00 | 490.0 | YES | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 772 | 871 | PLB | TUB | 3.02 | 128.81 | 128.81 | 42.00 | 42.00 | 490.0 | YES | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 782 | 881 | PLB | TUB | 3.03 | 128.81 | 128.81 | 42.00 | 42.00 | 490.0 | YES | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 123 | 199 | SIM | TUB | 16.79 | 26.04 | 127.68 | 14.75 | 14.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 124 | 199 | SIM | TUB | 16.79 | 26.04 | 127.68 | 14.75 | 14.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 199 | 163 | SIM | TUB | 16.79 | 26.04 | 127.68 | 14.75 | 14.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 199 | 164 | SIM | TUB | 16.79 | 26.04 | 127.68 | 14.75 | 14.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 223 | 299 | SIM | TUB | 16.79 | 26.04 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 224 | 299 | SIM | TUB | 16.79 | 26.04 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 299 | 263 | SIM | TUB | 16.79 | 26.04 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 299 | 264 | SIM | TUB | 16.79 | 26.04 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 423 | 499 | SIM | TUB | 16.79 | 26.04 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 424 | 499 | SIM | TUB | 16.79 | 26.04 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 463 | 499 | SIM | TUB | 16.79 | 26.04 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 499 | 464 | SIM | TUB | 16.79 | 26.04 | 127.68 | 15.75 | 15.75 | 490.0 | NO | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 626 | 699 | SIM | TUB | 13.85 | 26.04 | 127.68 | 12.75 | 12.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 628 | 699 | SIM | TUB | 13.85 | 26.04 | 127.68 | 12.75 | 12.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 699 | 666 | SIM | TUB | 13.85 | 26.04 | 127.68 | 12.75 | 12.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 699 | 668 | SIM | TUB | 13.85 | 26.04 | 127.68 | 12.75 | 12.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 111 | 112 | W.B | TUB | .50 | 128.81 | 128.81 | 44.00 | 44.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 121 | 122 | W.B | TUB | .50 | 128.81 | 128.81 | 44.00 | 44.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 131 | 132 | W.B | TUB | .50 | 128.81 | 128.81 | 44.00 | 44.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 141 | 142 | W.B | TUB | .50 | 128.81 | 128.81 | 44.00 | 44.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 151 | 152 | W.B | TUB | .50 | 128.81 | 128.81 | 44.00 | 44.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 161 | 162 | W.B | TUB | .50 | 128.81 | 128.81 | 44.00 | 44.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 171 | 172 | W.B | TUB | .50 | 128.81 | 128.81 | 44.00 | 44.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 181 | 182 | W.B | TUB | .50 | 128.81 | 128.81 | 44.00 | 44.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 199 | 200 | W.B | TUB | .50 | 128.81 | 128.81 | 44.00 | 44.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 211 | 212 | W.B | TUB | .50 | 128.81 | 128.81 | 45.00 | 45.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 221 | 222 | W.B | TUB | .50 | 128.81 | 128.81 | 45.00 | 45.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 231 | 232 | W.B | TUB | .50 | 128.81 | 128.81 | 45.00 | 45.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 241 | 242 | W.B | TUB | .50 | 128.81 | 128.81 | 45.00 | 45.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 251 | 252 | W.B | TUB | .50 | 128.81 | 128.81 | 45.00 | 45.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 261 | 262 | W.B | TUB | .50 | 128.81 | 128.81 | 45.00 | 45.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 271 | 272 | W.B | TUB | .50 | 128.81 | 128.81 | 45.00 | 45.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 281 | 282 | W.B | TUB | .50 | 128.81 | 128.81 | 45.00 | 45.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 299 | 300 | W.B | TUB | .50 | 128.81 | 128.81 | 45.00 | 45.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 411 | 412 | W.B | TUB | .50 | 128.81 | 128.81 | 45.00 | 45.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 421 | 422 | W.B | TUB | .50 | 128.81 | 128.81 | 45.00 | 45.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 431 | 432 | W.B | TUB | .50 | 128.81 | 128.81 | 45.00 | 45.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 441 | 442 | W.B | TUB | .50 | 128.81 | 128.81 | 45.00 | 45.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 451 | 452 | W.B | TUB | .50 | 128.81 | 128.81 | 45.00 | 45.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |

*** UAGA Member Property Summary ***

| Member | | Group | Section | Area | Diameter | | Matl. | Flood | Marine | Drag And Mass Coefficients | | | | | | | |
|--------|-----|-------|---------|--------|----------|--------|-------|-------|---------|----------------------------|-----|------|------|------|------|-----|-----|
| JA | JB | Label | Type | Length | Const. | Displ. | Y | Z | Density | Growth | Cdy | Cdx | Cey | Cez | Cdt | Cat | |
| | | | | (Ft) | (In^2) | | (In) | | (PCF) | | | | | | | | |
| 461 | 462 | W.B | TUB | .50 | 128.81 | 128.81 | 45.00 | 45.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 471 | 472 | W.B | TUB | .50 | 128.81 | 128.81 | 45.00 | 45.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 481 | 482 | W.B | TUB | .50 | 128.81 | 128.81 | 45.00 | 45.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 499 | 500 | W.B | TUB | .50 | 128.81 | 128.81 | 45.00 | 45.00 | 490.0 | YES | YES | 1.05 | 1.05 | 1.20 | 1.20 | .00 | .00 |
| 611 | 612 | W.B | TUB | .50 | 128.81 | 128.81 | 42.00 | 42.00 | 490.0 | YES | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 621 | 622 | W.B | TUB | .50 | 128.81 | 128.81 | 42.00 | 42.00 | 490.0 | YES | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 631 | 632 | W.B | TUB | .50 | 128.81 | 128.81 | 42.00 | 42.00 | 490.0 | YES | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 641 | 642 | W.B | TUB | .50 | 128.81 | 128.81 | 42.00 | 42.00 | 490.0 | YES | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 651 | 652 | W.B | TUB | .50 | 128.81 | 128.81 | 42.00 | 42.00 | 490.0 | YES | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 661 | 662 | W.B | TUB | .50 | 128.81 | 128.81 | 42.00 | 42.00 | 490.0 | YES | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 671 | 672 | W.B | TUB | .50 | 128.81 | 128.81 | 42.00 | 42.00 | 490.0 | YES | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 681 | 682 | W.B | TUB | .50 | 128.81 | 128.81 | 42.00 | 42.00 | 490.0 | YES | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 699 | 700 | W.B | TUB | .50 | 128.81 | 128.81 | 42.00 | 42.00 | 490.0 | YES | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 18 | 45 | WF3 | WF | 10.00 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 45 | 41 | WF3 | WF | 10.00 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 41 | 46 | WF3 | WF | 10.00 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 46 | 49 | WF3 | WF | 6.33 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 49 | 19 | WF3 | WF | 3.67 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 19 | 55 | WF3 | WF | 11.25 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 55 | 36 | WF3 | WF | 11.25 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 36 | 57 | WF3 | WF | 11.25 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 57 | 20 | WF3 | WF | 11.25 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 20 | 59 | WF3 | WF | 3.33 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 59 | 65 | WF3 | WF | 6.67 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 65 | 65 | WF3 | WF | 6.67 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 65 | 66 | WF3 | WF | 10.00 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 66 | 67 | WF3 | WF | 10.00 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 67 | 21 | WF3 | WF | 10.00 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 23 | 47 | WF3 | WF | 10.00 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 47 | 43 | WF3 | WF | 10.00 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 43 | 48 | WF3 | WF | 10.00 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 48 | 50 | WF3 | WF | 6.33 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 50 | 24 | WF3 | WF | 3.67 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 24 | 56 | WF3 | WF | 11.25 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 56 | 37 | WF3 | WF | 11.25 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 37 | 58 | WF3 | WF | 11.25 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 58 | 25 | WF3 | WF | 11.25 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 25 | 60 | WF3 | WF | 3.33 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 60 | 68 | WF3 | WF | 6.67 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 68 | 69 | WF3 | WF | 10.00 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 69 | 70 | WF3 | WF | 10.00 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 70 | 26 | WF3 | WF | 10.00 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 54 | 34 | WF6 | WF | 3.67 | 47.70 | 47.70 | 25.00 | 12.95 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 34 | 40 | WF6 | WF | 22.50 | 47.70 | 47.70 | 25.00 | 12.95 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 40 | 35 | WF6 | WF | 22.50 | 47.70 | 47.70 | 25.00 | 12.95 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 35 | 64 | WF6 | WF | 3.33 | 47.70 | 47.70 | 25.00 | 12.95 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 53 | 31 | WF6 | WF | 3.67 | 47.70 | 47.70 | 25.00 | 12.95 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |

*** UAGA Member Property Summary ***

| Member | | Group | ---Section--- | -----Areas----- | | Diameters | | Matl. | Flood | Marine | / Drag And Mass Coefficients / | | | | | | |
|--------|-----|-------|---------------|-----------------|----------------|-----------|--------------|-------|---------|--------|--------------------------------|------|------|------|------|-----|-----|
| JA | JB | Label | Type | Length | Const. | Displ. | Y | Z | Density | Growth | Cdy | Cdx | Cwy | Cwz | Cdt | Cwt | |
| | | | | (Ft) | --- (In^2) --- | | --- (In) --- | | (PCF) | ----- | | | | | | | |
| 31 | 39 | WF6 | WF | 22.50 | 47.70 | 47.70 | 25.00 | 12.95 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 39 | 33 | WF6 | WF | 22.50 | 47.70 | 47.70 | 25.00 | 12.95 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 33 | 63 | WF6 | WF | 3.33 | 47.70 | 47.70 | 25.00 | 12.95 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 18 | 27 | WFO | WF | 22.50 | 30.60 | 30.60 | 24.06 | 12.75 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 27 | 23 | WFO | WF | 22.50 | 30.60 | 30.60 | 24.06 | 12.75 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 21 | 30 | WFO | WF | 22.50 | 30.60 | 30.60 | 24.06 | 12.75 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 30 | 26 | WFO | WF | 22.50 | 30.60 | 30.60 | 24.06 | 12.75 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 53 | 49 | WFO | WF | 20.00 | 30.60 | 30.60 | 24.06 | 12.75 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 49 | 51 | Y32 | TUB | 22.50 | 116.70 | 116.70 | 35.00 | 35.00 | 490.0 | YES | NO | 1.97 | 1.97 | 1.42 | 1.42 | .00 | .00 |
| 51 | 50 | Y32 | TUB | 22.50 | 116.70 | 116.70 | 35.00 | 35.00 | 490.0 | YES | NO | 1.97 | 1.97 | 1.42 | 1.42 | .00 | .00 |
| 50 | 54 | WFO | WF | 20.00 | 30.60 | 30.60 | 24.06 | 12.75 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 63 | 59 | WFO | WF | 20.00 | 30.60 | 30.60 | 24.06 | 12.75 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 59 | 61 | WF3 | WF | 22.50 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 61 | 60 | WF3 | WF | 22.50 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 60 | 64 | WFO | WF | 20.00 | 30.60 | 30.60 | 24.06 | 12.75 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 20 | 29 | WF3 | WF | 22.50 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 29 | 25 | WF3 | WF | 22.50 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 19 | 28 | WF3 | WF | 22.50 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 28 | 24 | WF3 | WF | 22.50 | 38.50 | 38.50 | 24.48 | 12.85 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 39 | 36 | Y24 | TUB | 20.00 | 153.20 | 153.20 | 30.00 | 30.00 | 490.0 | YES | NO | 1.84 | 1.84 | 1.41 | 1.41 | .00 | .00 |
| 36 | 38 | Y24 | TUB | 22.50 | 153.20 | 153.20 | 30.00 | 30.00 | 490.0 | YES | NO | 1.84 | 1.84 | 1.41 | 1.41 | .00 | .00 |
| 38 | 37 | Y24 | TUB | 22.50 | 153.20 | 153.20 | 30.00 | 30.00 | 490.0 | YES | NO | 1.84 | 1.84 | 1.41 | 1.41 | .00 | .00 |
| 37 | 40 | Y24 | TUB | 20.00 | 153.20 | 153.20 | 30.00 | 30.00 | 490.0 | YES | NO | 1.84 | 1.84 | 1.41 | 1.41 | .00 | .00 |
| 81 | 113 | WF4 | WF | 10.00 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 113 | 114 | WF4 | WF | 10.00 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 114 | 116 | WF4 | WF | 10.00 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 116 | 83 | WF4 | WF | 10.00 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 83 | 117 | WF4 | WF | 11.25 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 117 | 118 | WF4 | WF | 11.25 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 118 | 119 | WF4 | WF | 11.25 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 119 | 84 | WF4 | WF | 11.25 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 84 | 120 | WF4 | WF | 10.00 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 120 | 126 | WF4 | WF | 10.00 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 126 | 127 | WF4 | WF | 10.00 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 127 | 85 | WF4 | WF | 10.00 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 86 | 128 | WF4 | WF | 10.00 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 128 | 129 | WF4 | WF | 10.00 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 129 | 130 | WF4 | WF | 10.00 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 130 | 87 | WF4 | WF | 10.00 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 87 | 133 | WF4 | WF | 11.25 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 133 | 134 | WF4 | WF | 11.25 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 134 | 136 | WF4 | WF | 11.25 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 136 | 88 | WF4 | WF | 11.25 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 88 | 137 | WF4 | WF | 10.00 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 137 | 138 | WF4 | WF | 10.00 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 138 | 139 | WF4 | WF | 10.00 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |
| 139 | 89 | WF4 | WF | 10.00 | 43.00 | 43.00 | 24.74 | 12.90 | 490.0 | YES | NO | .67 | .61 | 1.40 | 1.39 | .00 | .00 |

*** UAGA Member Property Summary ***

| Member | | Group | Section | Length | Area | | Diameter | | Matl. | Flood | Marine | Drag And Mass Coefficients | | | | | |
|--------|-----|-------|---------|--------|------------------|---------|----------------|-------|---------|-------|--------|----------------------------|-----|------|------|-----|-----|
| JA | JB | Label | Type | (Ft) | Const. | Displ. | Y | Z | Density | | Growth | Cdy | Cdz | Cmy | Cmx | Cdt | Cwt |
| | | | | | /--- (In^2) ---/ | | /--- (In) ---/ | | (PCF) | | | /-----/ | | | | | |
| 81 | 90 | Y25 | TUB | 11.25 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 90 | 94 | Y25 | TUB | 11.25 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 94 | 98 | Y25 | TUB | 11.25 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 98 | 86 | Y25 | TUB | 11.25 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 85 | 93 | Y25 | TUB | 11.25 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 93 | 97 | Y25 | TUB | 11.25 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 97 | 106 | Y25 | TUB | 11.25 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 106 | 89 | Y25 | TUB | 11.25 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 91 | 95 | Y33 | TUB | 11.25 | 76.27 | 76.27 | 38.00 | 38.00 | 490.0 | YES | NO | .70 | .70 | 1.43 | 1.43 | .00 | .00 |
| 95 | 99 | Y33 | TUB | 11.25 | 76.27 | 76.27 | 38.00 | 38.00 | 490.0 | YES | NO | .70 | .70 | 1.43 | 1.43 | .00 | .00 |
| 92 | 96 | Y33 | TUB | 11.25 | 76.27 | 76.27 | 38.00 | 38.00 | 490.0 | YES | NO | .70 | .70 | 1.43 | 1.43 | .00 | .00 |
| 96 | 105 | Y33 | TUB | 11.25 | 76.27 | 76.27 | 38.00 | 38.00 | 490.0 | YES | NO | .70 | .70 | 1.43 | 1.43 | .00 | .00 |
| 811 | 1 | TL1 | TUB | 2.25 | 128.81 | 1385.44 | 42.00 | 42.00 | 490.0 | NO | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 811 | 1 | TL1 | TUB | 2.25 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 821 | 2 | TL1 | TUB | 2.25 | 128.81 | 1385.44 | 42.00 | 42.00 | 490.0 | NO | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 821 | 2 | TL1 | TUB | 2.25 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 831 | 3 | TL1 | TUB | 2.25 | 128.81 | 1385.44 | 42.00 | 42.00 | 490.0 | NO | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 831 | 3 | TL1 | TUB | 2.25 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 841 | 4 | TL1 | TUB | 2.25 | 128.81 | 1385.44 | 42.00 | 42.00 | 490.0 | NO | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 841 | 4 | TL1 | TUB | 2.25 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 1 | 9 | TL2 | TUB | 14.38 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 2 | 10 | TL2 | TUB | 14.38 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 3 | 11 | TL2 | TUB | 14.38 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 4 | 13 | TL2 | TUB | 14.38 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 9 | 18 | TL3 | TUB | 7.13 | 136.46 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 18 | 73 | TL3 | TUB | 8.00 | 136.46 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 73 | 81 | TL2 | TUB | 6.00 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 10 | 19 | TL3 | TUB | 7.13 | 136.46 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 19 | 74 | TL3 | TUB | 8.00 | 136.46 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 74 | 83 | TL2 | TUB | 6.00 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 11 | 20 | TL3 | TUB | 7.13 | 136.46 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 20 | 75 | TL3 | TUB | 8.00 | 136.46 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 75 | 84 | TL2 | TUB | 6.00 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 13 | 21 | TL3 | TUB | 7.13 | 136.46 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 21 | 76 | TL3 | TUB | 8.00 | 136.46 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 76 | 85 | TL2 | TUB | 6.00 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 45 | 113 | D10 | TUB | 14.00 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 46 | 116 | D10 | TUB | 14.00 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 65 | 120 | D10 | TUB | 14.00 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 67 | 127 | D10 | TUB | 14.00 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 55 | 117 | D10 | TUB | 14.00 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 36 | 118 | D10 | TUB | 14.00 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 57 | 119 | D10 | TUB | 14.00 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 41 | 114 | D16 | TUB | 14.00 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 41 | 113 | D16 | TUB | 17.20 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 41 | 116 | D16 | TUB | 17.20 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 66 | 126 | D16 | TUB | 14.00 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |

*** UAGA Member Property Summary ***

| Member JA | Group JB | Section | | Area | | Diameters | | Matl. Density | Flood | Marine Growth | Drag And Mass Coefficients | | | | | | |
|--------------|-------------|---------|----------------|------------------|------------------|-----------|-----------|------------------|-------|------------------|----------------------------|-----|-----|------|------|-----|-----|
| | | Type | Length (Ft) | Const. (In^2) | Displ. (In^3) | Y (In) | Z (In) | | | | Cdy | Cdx | Cy | Cxz | Cdt | Cmt | |
| 66 | 120 | D16 | TUB | 17.20 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 66 | 127 | D16 | TUB | 17.20 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 18 | 113 | D24 | TUB | 17.20 | 54.78 | 452.39 | 24.00 | 24.00 | 490.0 | NO | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 19 | 116 | D24 | TUB | 17.20 | 54.78 | 452.39 | 24.00 | 24.00 | 490.0 | NO | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 20 | 120 | D24 | TUB | 17.20 | 54.78 | 452.39 | 24.00 | 24.00 | 490.0 | NO | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 21 | 127 | D24 | TUB | 17.20 | 54.78 | 452.39 | 24.00 | 24.00 | 490.0 | NO | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 19 | 117 | D11 | TUB | 17.96 | 16.10 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 36 | 117 | D11 | TUB | 17.96 | 16.10 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 36 | 119 | D11 | TUB | 17.96 | 16.10 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 20 | 119 | D11 | TUB | 17.96 | 16.10 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 24 | 133 | D11 | TUB | 17.96 | 16.10 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 37 | 133 | D11 | TUB | 17.96 | 16.10 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 37 | 134 | D11 | TUB | 14.00 | 16.10 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 37 | 136 | D11 | TUB | 17.96 | 16.10 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 25 | 136 | D11 | TUB | 17.96 | 16.10 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 23 | 128 | D24 | TUB | 17.20 | 54.78 | 452.39 | 24.00 | 24.00 | 490.0 | NO | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 24 | 130 | D24 | TUB | 17.20 | 54.78 | 452.39 | 24.00 | 24.00 | 490.0 | NO | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 25 | 137 | D24 | TUB | 17.20 | 54.78 | 452.39 | 24.00 | 24.00 | 490.0 | NO | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 26 | 139 | D24 | TUB | 17.20 | 54.78 | 452.39 | 24.00 | 24.00 | 490.0 | NO | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 47 | 128 | D10 | TUB | 14.00 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 48 | 130 | D10 | TUB | 14.00 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 56 | 133 | D10 | TUB | 14.00 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 58 | 136 | D10 | TUB | 14.00 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 68 | 137 | D10 | TUB | 14.00 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 70 | 139 | D10 | TUB | 14.00 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 43 | 129 | D16 | TUB | 14.00 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 43 | 128 | D16 | TUB | 17.20 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 43 | 130 | D16 | TUB | 17.20 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 69 | 138 | D16 | TUB | 14.00 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 69 | 137 | D16 | TUB | 17.20 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 69 | 139 | D16 | TUB | 17.20 | 24.35 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 851 | 5 | TL1 | TUB | 2.25 | 128.81 | 1385.44 | 42.00 | 42.00 | 490.0 | NO | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 851 | 5 | TL1 | TUB | 2.25 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 861 | 6 | TL1 | TUB | 2.25 | 128.81 | 1385.44 | 42.00 | 42.00 | 490.0 | NO | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 861 | 6 | TL1 | TUB | 2.25 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 871 | 7 | TL1 | TUB | 2.25 | 128.81 | 1385.44 | 42.00 | 42.00 | 490.0 | NO | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 871 | 7 | TL1 | TUB | 2.25 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 881 | 8 | TL1 | TUB | 2.25 | 128.81 | 1385.44 | 42.00 | 42.00 | 490.0 | NO | NO | .71 | .71 | 1.44 | 1.44 | .00 | .00 |
| 881 | 8 | TL1 | TUB | 2.25 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 5 | 14 | TL2 | TUB | 14.38 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 6 | 15 | TL2 | TUB | 14.38 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 7 | 16 | TL2 | TUB | 14.38 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 8 | 17 | TL2 | TUB | 14.38 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 14 | 23 | TL3 | TUB | 7.13 | 136.46 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 23 | 77 | TL3 | TUB | 8.00 | 136.46 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 77 | 86 | TL2 | TUB | 6.00 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 15 | 24 | TL3 | TUB | 7.13 | 136.46 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |

*** UAGA Member Property Summary ***

| Member JA | Group JB | Section | | Area | | Diameter | | Matl. Density (PCF) | Flood | Marine Growth | Drag And Mass Coefficients | | | | | | |
|--------------|-------------|---------|----------------|------------------|------------------|-----------|-----------|-----------------------------|-------|------------------|----------------------------|-----|-----|------|------|-----|-----|
| | | Type | Length (Ft) | Const. (In^2) | Displ. (In^2) | Y (In) | Z (In) | | | | Cdy | Cdx | Cey | Cex | Cdt | Cdt | |
| 24 | 78 | IL3 | TUB | 8.00 | 136.46 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 78 | 87 | TL2 | TUB | 6.00 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 16 | 25 | TL3 | TUB | 7.13 | 136.46 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 25 | 79 | TL3 | TUB | 8.00 | 136.46 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 79 | 88 | TL2 | TUB | 6.00 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 17 | 26 | TL3 | TUB | 7.13 | 136.46 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 26 | 80 | IL3 | TUB | 8.00 | 136.46 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 80 | 89 | TL2 | TUB | 6.00 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 18 | 90 | D10 | TUB | 17.96 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 90 | 27 | D10 | TUB | 17.96 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 27 | 98 | D10 | TUB | 17.96 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 98 | 23 | D10 | TUB | 17.96 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 27 | 94 | D83 | TUB | 14.00 | 7.91 | 50.27 | 8.00 | 8.00 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 30 | 97 | D83 | TUB | 14.00 | 7.91 | 50.27 | 8.00 | 8.00 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 21 | 93 | D10 | TUB | 17.96 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 93 | 30 | D10 | TUB | 17.96 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 30 | 106 | D10 | TUB | 17.96 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 106 | 26 | D10 | TUB | 17.96 | 11.91 | 90.76 | 10.75 | 10.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 33 | 108 | D85 | TUB | 21.23 | 14.48 | 50.27 | 8.00 | 8.00 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 35 | 110 | D85 | TUB | 21.23 | 14.48 | 50.27 | 8.00 | 8.00 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 20 | 108 | D17 | TUB | 17.62 | 31.62 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 20 | 92 | D17 | TUB | 19.87 | 31.62 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 25 | 105 | D17 | TUB | 19.87 | 31.62 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 25 | 110 | D17 | TUB | 17.62 | 31.62 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 29 | 96 | D12 | TUB | 16.38 | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 29 | 92 | D12 | TUB | 19.87 | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 29 | 105 | D12 | TUB | 19.87 | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 28 | 95 | D12 | TUB | 16.38 | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 28 | 91 | D12 | TUB | 19.87 | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 28 | 99 | D12 | TUB | 19.87 | 19.24 | 127.68 | 12.75 | 12.75 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 19 | 91 | D17 | TUB | 19.87 | 31.62 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 24 | 99 | D17 | TUB | 19.87 | 31.62 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 19 | 107 | D17 | TUB | 17.62 | 31.62 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 24 | 109 | D17 | TUB | 17.62 | 31.62 | 201.06 | 16.00 | 16.00 | 490.0 | NO | NO | .63 | .63 | 1.39 | 1.39 | .00 | .00 |
| 31 | 107 | D85 | TUB | 21.23 | 14.48 | 50.27 | 8.00 | 8.00 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 34 | 109 | D85 | TUB | 21.23 | 14.48 | 50.27 | 8.00 | 8.00 | 490.0 | NO | NO | .61 | .61 | 1.39 | 1.39 | .00 | .00 |
| 107 | 140 | V33 | TUB | 6.50 | 76.27 | 76.27 | 38.00 | 38.00 | 490.0 | YES | NO | .70 | .70 | 1.43 | 1.43 | .00 | .00 |
| 140 | 91 | V33 | TUB | 11.25 | 76.27 | 76.27 | 38.00 | 38.00 | 490.0 | YES | NO | .70 | .70 | 1.43 | 1.43 | .00 | .00 |
| 83 | 140 | TL2 | TUB | 2.38 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 87 | 147 | TL2 | TUB | 2.38 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 99 | 147 | V33 | TUB | 11.25 | 76.27 | 76.27 | 38.00 | 38.00 | 490.0 | YES | NO | .70 | .70 | 1.43 | 1.43 | .00 | .00 |
| 147 | 109 | V33 | TUB | 6.50 | 76.27 | 76.27 | 38.00 | 38.00 | 490.0 | YES | NO | .70 | .70 | 1.43 | 1.43 | .00 | .00 |
| 108 | 149 | V33 | TUB | 6.50 | 76.27 | 76.27 | 38.00 | 38.00 | 490.0 | YES | NO | .70 | .70 | 1.43 | 1.43 | .00 | .00 |
| 149 | 92 | V33 | TUB | 11.25 | 76.27 | 76.27 | 38.00 | 38.00 | 490.0 | YES | NO | .70 | .70 | 1.43 | 1.43 | .00 | .00 |
| 105 | 150 | V33 | TUB | 11.25 | 76.27 | 76.27 | 38.00 | 38.00 | 490.0 | YES | NO | .70 | .70 | 1.43 | 1.43 | .00 | .00 |
| 150 | 110 | V33 | TUB | 6.50 | 76.27 | 76.27 | 38.00 | 38.00 | 490.0 | YES | NO | .70 | .70 | 1.43 | 1.43 | .00 | .00 |
| 84 | 149 | TL2 | TUB | 2.38 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |

*** UAGA Member Property Summary ***

| Member | Group | ---Section--- | | -----Areas----- | | / Diameters / | | Matl. | Flood | Marine | / Drag And Mass Coefficients / | | | | | | |
|--------|-------|---------------|-----|-----------------|---------|---------------|--------|-------|---------|---------|--------------------------------|------|------|---------|--------|-----|-----|
| | | JA | JB | Label | Type | Length | Const. | | | | Displ. | Y | Z | Density | Growth | Cdy | Cdx |
| | | | | (Ft) | /(In^2) | /(In^2) | /(In) | /(In) | (PCF) | /-----/ | | | | | | | |
| 88 | 150 | TL2 | TUB | 2.38 | 109.96 | 1017.88 | 36.00 | 36.00 | 490.0 | NO | NO | .69 | .69 | 1.42 | 1.42 | .00 | .00 |
| 66 | 71 | V24 | TUB | 22.50 | 153.20 | 153.20 | 30.00 | 30.00 | 490.0 | YES | NO | 1.84 | 1.84 | 1.41 | 1.41 | .00 | .00 |
| 71 | 69 | V24 | TUB | 22.50 | 153.20 | 153.20 | 30.00 | 30.00 | 490.0 | YES | NO | 1.84 | 1.84 | 1.41 | 1.41 | .00 | .00 |
| 41 | 44 | V76 | TUB | 22.50 | 156.80 | 156.80 | 30.00 | 30.00 | 490.0 | YES | NO | 1.84 | 1.84 | 1.41 | 1.41 | .00 | .00 |
| 44 | 43 | V76 | TUB | 22.50 | 156.80 | 156.80 | 30.00 | 30.00 | 490.0 | YES | NO | 1.84 | 1.84 | 1.41 | 1.41 | .00 | .00 |
| 81 | 153 | V25 | TUB | 30.10 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 153 | 87 | V25 | TUB | 30.10 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 83 | 153 | V25 | TUB | 30.10 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 153 | 86 | V25 | TUB | 30.10 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 88 | 154 | V25 | TUB | 31.82 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 154 | 83 | V25 | TUB | 31.82 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 87 | 154 | V25 | TUB | 31.82 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 154 | 84 | V25 | TUB | 31.82 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 85 | 156 | V25 | TUB | 30.10 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 156 | 88 | V25 | TUB | 30.10 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 84 | 156 | V25 | TUB | 30.10 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |
| 156 | 89 | V25 | TUB | 30.10 | 45.90 | 45.90 | 24.00 | 24.00 | 490.0 | YES | NO | .67 | .67 | 1.40 | 1.40 | .00 | .00 |

*** Dead Load Generation For Load Case 1 ***

| | |
|-------------------------------|----------|
| Gravity Direction | -Z |
| Water Depth (Ft) | 223.00 |
| Mudline Elevation (Ft) | -223.00 |
| Water Density (PCF) | 64.20 |
| Flood Override | |
| Dead Weight In Air (Kips) ... | 3646.809 |
| Buoyancy Load (Kips) | 1555.407 |
| Net Gravity Load (Kips) | 2091.405 |

*** Wave Description For Load Case 3 ***

Water Depth (Ft) 223.00
 Mudline Elevation (Ft)..... -223.00

Wave Theory Stokes 5th
 Height (Ft) 49.30
 Period (Sec) 11.30
 Length (Ft) 670.85
 Direction X TO Y (Deg). 45.00
 Celerity (Ft/Sec) 59.37
 Kinematic Factor 1.00

No. of Segments Max 10
 Min 1

Wave Step Size (Ft) 10.00
 No. of Steps 9
 Crest Position Determined By Maximum Base Shear

Crest Elevation (Ft) 251.03
 Trough Elevation (Ft) 201.73

*** Current Description ***

Current Direction (Deg) 45.00
 Current Stretching Normal
 Blockage Factor 1.00

| Elevation Above Mudline (Ft) | Current Velocity (Knots) |
|------------------------------|--------------------------|
| .00 | .970 |
| 23.00 | 1.200 |
| 223.00 | 1.200 |

*** Dynamic Wave Pressure ***

| Phase (Deg) | 0. | 10. | 20. | 30. | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | 170. | 180. |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| Horz Dist (Ft) | .0 | 18.6 | 37.3 | 55.9 | 74.5 | 93.2 | 111.8 | 130.4 | 149.1 | 167.7 | 186.3 | 205.0 | 223.6 | 242.3 | 260.9 | 279.5 | 298.2 | 316.8 | 335.4 |
| Surf Prof (Ft) | 251.0 | 250.3 | 248.4 | 245.3 | 241.5 | 237.2 | 232.7 | 228.2 | 223.9 | 219.8 | 216.2 | 212.8 | 209.9 | 207.5 | 205.4 | 203.8 | 202.7 | 202.0 | 201.7 |
| Surf Pressure (PSF) | 1797. | 1742. | 1587. | 1353. | 1069. | 763. | 455. | 160. | -114. | -361. | -581. | -771. | -934. | -1069. | -1178. | -1262. | -1321. | -1355. | -1367. |

Elevations Above
Mudline (Ft)

| | | | | | | | | | | | | | | | | | | | |
|--------|-------|-------|-------|-------|-------|------|------|------|------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| 251.03 | 1797. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 250.03 | 1783. | 1738. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 247.68 | 1750. | 1706. | 1578. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 243.96 | 1699. | 1657. | 1535. | 1340. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 238.89 | 1631. | 1592. | 1477. | 1294. | 1053. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 232.46 | 1549. | 1512. | 1407. | 1237. | 1014. | 748. | 455. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 224.68 | 1453. | 1421. | 1324. | 1170. | 965. | 723. | 453. | 169. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 215.54 | 1349. | 1319. | 1233. | 1094. | 910. | 690. | 446. | 187. | -76. | -332. | -575. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 205.04 | 1237. | 1211. | 1134. | 1011. | 848. | 652. | 433. | 200. | -38. | -271. | -494. | -699. | -883. | -1042. | -1174. | 0. | 0. | 0. | 0. |
| 193.18 | 1122. | 1099. | 1032. | 924. | 781. | 608. | 414. | 207. | -5. | -215. | -417. | -604. | -772. | -919. | -1041. | -1137. | -1207. | -1249. | -1263. |
| 179.97 | 1006. | 987. | 929. | 835. | 711. | 560. | 391. | 209. | 21. | -166. | -346. | -515. | -668. | -801. | -914. | -1002. | -1067. | -1105. | -1118. |
| 165.40 | 893. | 877. | 827. | 747. | 640. | 510. | 364. | 205. | 41. | -124. | -284. | -434. | -571. | -692. | -794. | -875. | -934. | -969. | -981. |
| 149.48 | 786. | 772. | 730. | 662. | 571. | 460. | 334. | 197. | 54. | -89. | -230. | -363. | -485. | -593. | -685. | -758. | -811. | -843. | -854. |
| 132.19 | 687. | 675. | 640. | 582. | 505. | 411. | 303. | 186. | 63. | -62. | -185. | -301. | -409. | -505. | -587. | -653. | -701. | -730. | -739. |
| 113.55 | 599. | 589. | 559. | 510. | 445. | 365. | 273. | 173. | 67. | -41. | -148. | -250. | -345. | -430. | -503. | -561. | -604. | -630. | -639. |
| 93.56 | 522. | 514. | 489. | 448. | 392. | 324. | 246. | 160. | 68. | -25. | -119. | -208. | -292. | -367. | -432. | -484. | -522. | -546. | -554. |
| 72.20 | 460. | 453. | 431. | 396. | 349. | 290. | 222. | 147. | 68. | -15. | -97. | -176. | -250. | -317. | -375. | -422. | -457. | -478. | -485. |
| 49.49 | 413. | 407. | 388. | 357. | 316. | 264. | 204. | 137. | 66. | -7. | -81. | -153. | -220. | -281. | -334. | -377. | -408. | -428. | -434. |
| 25.42 | 384. | 378. | 361. | 333. | 294. | 247. | 192. | 131. | 65. | -3. | -72. | -138. | -201. | -258. | -308. | -348. | -378. | -396. | -402. |
| .00 | 373. | 368. | 351. | 324. | 287. | 241. | 188. | 128. | 64. | -2. | -68. | -133. | -195. | -250. | -299. | -338. | -367. | -385. | -391. |

*** Horizontal Velocity Without Current ***

| Phase (Deg) | 0. | 10. | 20. | 30. | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | 170. | 180. |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| Horz Dist (Ft) | .0 | 18.6 | 37.3 | 55.9 | 74.5 | 93.2 | 111.8 | 130.4 | 149.1 | 167.7 | 186.3 | 205.0 | 223.6 | 242.3 | 260.9 | 279.5 | 298.2 | 316.8 | 335.4 |
| Surf Prof (Ft) | 251.0 | 250.3 | 248.4 | 245.3 | 241.5 | 237.2 | 232.7 | 228.2 | 223.9 | 219.8 | 216.2 | 212.8 | 209.9 | 207.5 | 205.4 | 203.8 | 202.7 | 202.0 | 201.7 |
| Surf Velocity (Ft/Sec) | 17.85 | 17.43 | 16.23 | 14.39 | 12.11 | 9.58 | 6.95 | 4.36 | 1.88 | -.44 | -2.55 | -4.43 | -6.06 | -7.45 | -8.59 | -9.47 | -10.10 | -10.47 | -10.59 |

Elevations Above Mudline (Ft)

| | | | | | | | | | | | | | | | | | | | |
|--------|-------|-------|-------|-------|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 251.03 | 17.85 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 250.03 | 17.68 | 17.38 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 247.68 | 17.29 | 16.99 | 16.12 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 243.96 | 16.68 | 16.40 | 15.56 | 14.21 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 238.89 | 15.90 | 15.63 | 14.83 | 13.55 | 11.82 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 232.46 | 14.96 | 14.70 | 13.96 | 12.76 | 11.14 | 9.18 | 6.94 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 224.68 | 13.90 | 13.66 | 12.98 | 11.87 | 10.37 | 8.55 | 6.48 | 4.23 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 215.54 | 12.75 | 12.54 | 11.92 | 10.90 | 9.54 | 7.88 | 5.98 | 3.92 | 1.77 | -.40 | -2.53 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 205.04 | 11.57 | 11.38 | 10.82 | 9.90 | 8.67 | 7.17 | 5.46 | 3.60 | 1.64 | -.33 | -2.27 | -4.11 | -5.79 | -7.29 | -8.56 | .00 | .00 | .00 | .00 |
| 193.18 | 10.38 | 10.21 | 9.71 | 8.89 | 7.80 | 6.46 | 4.93 | 3.26 | 1.51 | -.27 | -2.01 | -3.67 | -5.20 | -6.55 | -7.70 | -8.63 | -9.30 | -9.70 | -9.84 |
| 179.97 | 9.21 | 9.06 | 8.62 | 7.90 | 6.93 | 5.75 | 4.40 | 2.92 | 1.37 | -.21 | -1.76 | -3.24 | -4.61 | -5.83 | -6.86 | -7.69 | -8.30 | -8.67 | -8.79 |
| 165.40 | 8.09 | 7.96 | 7.58 | 6.95 | 6.11 | 5.08 | 3.89 | 2.59 | 1.23 | -.16 | -1.53 | -2.84 | -4.05 | -5.13 | -6.05 | -6.79 | -7.33 | -7.66 | -7.77 |
| 149.48 | 7.05 | 6.94 | 6.61 | 6.07 | 5.34 | 4.44 | 3.41 | 2.28 | 1.09 | -.12 | -1.32 | -2.46 | -3.53 | -4.48 | -5.30 | -5.95 | -6.43 | -6.72 | -6.82 |
| 132.19 | 6.12 | 6.02 | 5.73 | 5.27 | 4.64 | 3.86 | 2.97 | 2.00 | .97 | -.09 | -1.13 | -2.13 | -3.06 | -3.89 | -4.61 | -5.18 | -5.60 | -5.86 | -5.94 |
| 113.55 | 5.29 | 5.21 | 4.96 | 4.56 | 4.02 | 3.35 | 2.58 | 1.74 | .85 | -.06 | -.97 | -1.84 | -2.65 | -3.37 | -4.00 | -4.50 | -4.87 | -5.09 | -5.17 |
| 93.56 | 4.59 | 4.52 | 4.30 | 3.96 | 3.49 | 2.91 | 2.25 | 1.52 | .75 | -.04 | -.83 | -1.59 | -2.29 | -2.93 | -3.47 | -3.92 | -4.24 | -4.44 | -4.50 |
| 72.20 | 4.02 | 3.96 | 3.77 | 3.47 | 3.06 | 2.56 | 1.98 | 1.34 | .67 | -.03 | -.72 | -1.39 | -2.01 | -2.57 | -3.05 | -3.44 | -3.73 | -3.90 | -3.96 |
| 49.49 | 3.60 | 3.54 | 3.38 | 3.11 | 2.75 | 2.30 | 1.78 | 1.21 | .60 | -.02 | -.64 | -1.24 | -1.80 | -2.30 | -2.74 | -3.09 | -3.35 | -3.50 | -3.56 |
| 25.42 | 3.33 | 3.28 | 3.13 | 2.88 | 2.54 | 2.13 | 1.65 | 1.12 | .56 | -.02 | -.59 | -1.15 | -1.67 | -2.14 | -2.54 | -2.87 | -3.11 | -3.25 | -3.30 |
| .00 | 3.24 | 3.19 | 3.04 | 2.80 | 2.47 | 2.07 | 1.61 | 1.09 | .55 | -.01 | -.57 | -1.11 | -1.62 | -2.08 | -2.47 | -2.79 | -3.02 | -3.16 | -3.21 |

*** Horizontal Velocity With Current ***

| Phase (Deg) | 0. | 10. | 20. | 30. | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | 170. | 180. |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Horz Dist (Ft) | .0 | 18.6 | 37.3 | 55.9 | 74.5 | 93.2 | 111.8 | 130.4 | 149.1 | 167.7 | 186.3 | 205.0 | 223.6 | 242.3 | 260.9 | 279.5 | 298.2 | 316.8 | 335.4 |
| Surf Prof (Ft) | 251.0 | 250.3 | 248.4 | 245.3 | 241.5 | 237.2 | 232.7 | 228.2 | 223.9 | 219.8 | 216.2 | 212.8 | 209.9 | 207.5 | 205.4 | 203.8 | 202.7 | 202.0 | 201.7 |
| Surf Velocity (Ft/Sec) | 19.88 | 19.46 | 18.26 | 16.42 | 14.14 | 11.60 | 8.98 | 6.38 | 3.90 | 1.59 | -.52 | -2.40 | -4.04 | -5.43 | -6.56 | -7.44 | -8.07 | -8.44 | -8.57 |

Elevations Above

Mudline (Ft)

| Mudline (Ft) | 251.03 | 250.03 | 247.68 | 243.96 | 238.89 | 232.46 | 224.68 | 215.54 | 205.04 | 193.18 | 179.97 | 165.40 | 149.48 | 132.19 | 113.55 | 93.56 | 72.20 | 49.49 | 25.42 | .00 |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-----|
| 19.88 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 19.71 | 19.41 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 19.31 | 19.02 | 18.15 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 18.71 | 18.43 | 17.59 | 16.23 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 17.92 | 17.65 | 16.86 | 15.57 | 13.85 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 16.98 | 16.73 | 15.99 | 14.78 | 13.17 | 11.20 | 8.97 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 15.92 | 15.69 | 15.00 | 13.89 | 12.40 | 10.58 | 8.51 | 6.26 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 14.78 | 14.57 | 13.94 | 12.93 | 11.57 | 9.91 | 8.01 | 5.95 | 3.80 | 1.62 | -.50 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 13.59 | 13.40 | 12.84 | 11.93 | 10.70 | 9.20 | 7.49 | 5.62 | 3.67 | 1.69 | -.24 | -2.08 | -3.77 | -5.27 | -6.53 | .00 | .00 | .00 | .00 | .00 | .00 |
| 12.40 | 12.23 | 11.73 | 10.92 | 9.82 | 8.48 | 6.95 | 5.28 | 3.53 | 1.76 | .02 | -1.64 | -3.17 | -4.53 | -5.68 | -6.60 | -7.27 | -7.68 | -7.82 | | |
| 11.23 | 11.08 | 10.64 | 9.93 | 8.96 | 7.78 | 6.43 | 4.95 | 3.39 | 1.82 | .27 | -1.22 | -2.58 | -3.80 | -4.84 | -5.67 | -6.27 | -6.64 | -6.76 | | |
| 10.12 | 9.99 | 9.60 | 8.98 | 8.13 | 7.10 | 5.92 | 4.62 | 3.26 | 1.87 | .50 | -.81 | -2.02 | -3.11 | -4.03 | -4.77 | -5.31 | -5.64 | -5.75 | | |
| 9.08 | 8.97 | 8.63 | 8.09 | 7.36 | 6.47 | 5.44 | 4.31 | 3.12 | 1.91 | .71 | -.44 | -1.50 | -2.46 | -3.27 | -3.92 | -4.40 | -4.70 | -4.79 | | |
| 8.14 | 8.04 | 7.76 | 7.29 | 6.66 | 5.89 | 5.00 | 4.02 | 2.99 | 1.94 | .90 | -.10 | -1.03 | -1.87 | -2.58 | -3.15 | -3.58 | -3.83 | -3.92 | | |
| 7.31 | 7.23 | 6.99 | 6.58 | 6.04 | 5.38 | 4.61 | 3.77 | 2.88 | 1.96 | 1.06 | .19 | -.62 | -1.35 | -1.97 | -2.47 | -2.84 | -3.07 | -3.14 | | |
| 6.61 | 6.54 | 6.33 | 5.98 | 5.51 | 4.94 | 4.28 | 3.55 | 2.77 | 1.98 | 1.20 | .44 | -.27 | -.90 | -1.45 | -1.89 | -2.21 | -2.41 | -2.48 | | |
| 6.05 | 5.98 | 5.80 | 5.50 | 5.09 | 4.59 | 4.01 | 3.37 | 2.69 | 2.00 | 1.30 | .64 | .01 | -.55 | -1.03 | -1.42 | -1.70 | -1.88 | -1.94 | | |
| 5.62 | 5.57 | 5.40 | 5.13 | 4.77 | 4.32 | 3.80 | 3.23 | 2.63 | 2.00 | 1.38 | .79 | .23 | -.28 | -.71 | -1.06 | -1.32 | -1.48 | -1.53 | | |
| 5.36 | 5.31 | 5.16 | 4.91 | 4.57 | 4.16 | 3.68 | 3.15 | 2.59 | 2.01 | 1.43 | .88 | .36 | -.11 | -.51 | -.84 | -1.08 | -1.23 | -1.28 | | |
| 4.88 | 4.83 | 4.68 | 4.44 | 4.11 | 3.71 | 3.24 | 2.73 | 2.18 | 1.62 | 1.06 | .52 | .02 | -.44 | -.83 | -1.15 | -1.38 | -1.53 | -1.57 | | |

*** Horizontal Acceleration ***

| Phase (Deg) | 0. | 10. | 20. | 30. | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | 170. | 180. |
|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Horz Dist (Ft) | .0 | 18.6 | 37.3 | 55.9 | 74.5 | 93.2 | 111.8 | 130.4 | 149.1 | 167.7 | 186.3 | 205.0 | 223.6 | 242.3 | 260.9 | 279.5 | 298.2 | 316.8 | 335.4 |
| Surf Prof (Ft) | 251.0 | 250.3 | 248.4 | 245.3 | 241.5 | 237.2 | 232.7 | 228.2 | 223.9 | 219.8 | 216.2 | 212.8 | 209.9 | 207.5 | 205.4 | 203.8 | 202.7 | 202.0 | 201.7 |
| Surf Accel. (Ft/Sec ²) | .00 | 1.88 | 3.61 | 5.07 | 6.18 | 6.95 | 7.38 | 7.53 | 7.42 | 7.11 | 6.64 | 6.03 | 5.31 | 4.52 | 3.68 | 2.79 | 1.87 | .94 | .00 |

Elevations Above
Mudline (Ft)

| | | | | | | | | | | | | | | | | | | | | |
|--------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|
| 251.03 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 250.03 | .00 | 1.88 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 247.68 | .00 | 1.83 | 3.58 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 243.96 | .00 | 1.76 | 3.45 | 5.00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 238.89 | .00 | 1.67 | 3.27 | 4.74 | 6.02 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 232.46 | .00 | 1.56 | 3.06 | 4.44 | 5.65 | 6.63 | 7.37 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 224.68 | .00 | 1.44 | 2.83 | 4.11 | 5.22 | 6.14 | 6.83 | 7.28 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 215.54 | .00 | 1.32 | 2.58 | 3.75 | 4.77 | 5.62 | 6.26 | 6.68 | 6.87 | 6.84 | 6.60 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 205.04 | .00 | 1.18 | 2.32 | 3.38 | 4.30 | 5.07 | 5.66 | 6.05 | 6.24 | 6.23 | 6.03 | 5.64 | 5.11 | 4.44 | 3.67 | .00 | .00 | .00 | .00 | .00 |
| 193.18 | .00 | 1.05 | 2.07 | 3.01 | 3.84 | 4.53 | 5.06 | 5.42 | 5.61 | 5.61 | 5.44 | 5.11 | 4.63 | 4.04 | 3.34 | 2.57 | 1.75 | .88 | .00 | .00 |
| 179.97 | .00 | .93 | 1.82 | 2.65 | 3.38 | 4.00 | 4.48 | 4.81 | 4.98 | 5.00 | 4.86 | 4.57 | 4.16 | 3.64 | 3.02 | 2.33 | 1.58 | .80 | .00 | .00 |
| 165.40 | .00 | .81 | 1.58 | 2.31 | 2.95 | 3.49 | 3.92 | 4.22 | 4.38 | 4.41 | 4.30 | 4.06 | 3.70 | 3.24 | 2.70 | 2.08 | 1.42 | .72 | .00 | .00 |
| 149.48 | .00 | .70 | 1.37 | 1.99 | 2.55 | 3.03 | 3.41 | 3.67 | 3.82 | 3.85 | 3.77 | 3.57 | 3.26 | 2.87 | 2.39 | 1.85 | 1.26 | .64 | .00 | .00 |
| 132.19 | .00 | .60 | 1.17 | 1.71 | 2.20 | 2.61 | 2.94 | 3.18 | 3.32 | 3.35 | 3.28 | 3.12 | 2.86 | 2.52 | 2.10 | 1.63 | 1.11 | .56 | .00 | .00 |
| 113.55 | .00 | .51 | 1.00 | 1.47 | 1.88 | 2.24 | 2.53 | 2.74 | 2.87 | 2.91 | 2.86 | 2.72 | 2.50 | 2.21 | 1.85 | 1.43 | .98 | .50 | .00 | .00 |
| 93.56 | .00 | .44 | .86 | 1.26 | 1.62 | 1.93 | 2.19 | 2.37 | 2.49 | 2.53 | 2.49 | 2.38 | 2.19 | 1.94 | 1.62 | 1.26 | .86 | .44 | .00 | .00 |
| 72.20 | .00 | .38 | .75 | 1.09 | 1.41 | 1.68 | 1.91 | 2.08 | 2.18 | 2.22 | 2.19 | 2.10 | 1.94 | 1.71 | 1.44 | 1.12 | .77 | .39 | .00 | .00 |
| 49.49 | .00 | .34 | .66 | .97 | 1.25 | 1.50 | 1.70 | 1.85 | 1.95 | 1.99 | 1.97 | 1.89 | 1.74 | 1.55 | 1.30 | 1.02 | .70 | .35 | .00 | .00 |
| 25.42 | .00 | .31 | .61 | .89 | 1.15 | 1.38 | 1.57 | 1.71 | 1.81 | 1.85 | 1.83 | 1.75 | 1.62 | 1.44 | 1.22 | .95 | .65 | .33 | .00 | .00 |
| .00 | .00 | .30 | .59 | .87 | 1.12 | 1.34 | 1.52 | 1.66 | 1.76 | 1.79 | 1.78 | 1.71 | 1.58 | 1.41 | 1.18 | .92 | .63 | .32 | .00 | .00 |

*** Wave Position Summary Report ***

| Step No | Crest Position (Ft) | Phase Angle (Deg) | Force(X) | Force(Y) | Force(Z) | Moment(X) | Moment(Y) | Moment(Z) | Horizontal Shear(Kips) | Overturning Moment(Ft-Kips) |
|---------|---------------------|-------------------|----------------------------|----------|----------|-------------------------------|-----------|-----------|-----------------------------|-----------------------------|
| | | | /-----/ | | | /-----/ | | | /-----Resultant Loads-----/ | |
| | | | Force(X) Force(Y) Force(Z) | | | Moment(X) Moment(Y) Moment(Z) | | | Horizontal Overturning | |
| | | | /----- (Kips) -----/ | | | /----- (Ft-Kips) -----/ | | | Shear(Kips) Moment(Ft-Kips) | |
| 1 | -50.00 | -26.8 | 1520.85 | 1490.39 | 166.05 | -249016.60 | 240573.70 | 3657.03 | 2129.38 | 346244.10 |
| 2 | -40.00 | -21.5 | 1565.99 | 1538.95 | 117.11 | -257865.60 | 248657.90 | 4860.98 | 2195.61 | 358225.40 |
| 3 | -30.00 | -16.1 | 1593.63 | 1569.68 | 66.48 | -263564.70 | 253816.70 | 6110.44 | 2236.86 | 365908.80 |
| 4 | -20.00 | -10.7 | 1602.19 | 1580.91 | 14.71 | -265800.80 | 255777.80 | 7358.76 | 2250.84 | 368879.90 |
| 5 | -10.00 | -5.4 | 1590.68 | 1571.54 | -37.22 | -264367.40 | 254349.50 | 8555.11 | 2236.07 | 366856.60 |
| 6 | .00 | .0 | 1558.94 | 1541.29 | -88.62 | -259222.80 | 249509.30 | 9658.32 | 2192.23 | 359793.50 |
| 7 | 10.00 | 5.4 | 1506.75 | 1489.90 | -139.00 | -250319.70 | 241214.40 | 10612.74 | 2118.98 | 347626.70 |
| 8 | 20.00 | 10.7 | 1435.60 | 1418.97 | -187.84 | -237965.40 | 229736.10 | 11369.75 | 2018.52 | 330766.10 |
| 9 | 30.00 | 16.1 | 1347.08 | 1330.25 | -234.50 | -222492.00 | 215355.10 | 11897.69 | 1893.19 | 309645.80 |
| 10 | 40.00 | 21.5 | 1243.21 | 1225.85 | -278.15 | -204292.90 | 198427.90 | 12176.43 | 1745.93 | 284796.80 |

Note: Moments are about Mudline at Elevation (Ft) -223.00
 Wave Loads calculated with only one segment
 Included Drag IDS : DD BL BB

* * LOAD SUMMARY REPORT * *

Load Case = 3

Wave Direction = 45.00 Deg

| | |
|--|------------|
| X Shear Force (Kips) | 1567.28 |
| Y Shear Force (Kips) | 1546.14 |
| Resultant Shear Force (Kips) | 2201.57 |
| | |
| X Mudline Moment (Ft-Kips) | -260028.30 |
| Y Mudline Moment (Ft-Kips) | 250031.20 |
| Resultant Mudline Moment (Ft-Kips) | 360735.80 |
| | |
| Z Vertical Force (Kips) | 14.17 |

Note: Critical Crest Position (Ft) : -20.00
Crest Position Determined By Maximum Base Shear
Wave Loads calculated with user specified Member Segments

*** Wind Load Generation For Load Case 3 ***

| | |
|-------------------------------|--------|
| Wind Velocity (Knots) | 55.000 |
| Wind Pressure (PSF) | .000 |
| Wind Direction (Deg) | 45.000 |
| Surface Elevation (Ft) | .000 |
| Wind Profile | 1.0 |

Included Area IDS : W1 W2

Wind Load On Members Not Calculated

Generated Wind Forces And Moments

Moments About Mudline At Elevation (Ft) -223.00

| | | |
|---------------------|-----|-------|
| Forces (Kips) | X - | 12.23 |
| | Y - | 32.62 |
| | Z - | .00 |

| | | |
|------------------------|-----|----------|
| Moments (Ft-Kips) | X - | -9026.55 |
| | Y - | 3383.97 |
| | Z - | .00 |

*** Wave Description For Load Case 4 ***

Water Depth (Ft) 223.00
 Mudline Elevation (Ft)..... -223.00

Wave Theory Stokes 5th
 Height (Ft) 49.30
 Period (Sec) 11.30
 Length (Ft) 670.85
 Direction X TO Y (Deg).. 67.50
 Celerity (Ft/Sec) 59.37
 Kinematic Factor 1.00

No. of Segments Max 10
 Min 1

Wave Step Size (Ft) 10.00
 No. of Steps 9
 Crest Position Determined By Maximum Base Shear

Crest Elevation (Ft) 251.03
 Trough Elevation (Ft) 201.73

*** Current Description ***

Current Direction (Deg) 67.50
 Current Stretching Normal
 Blockage Factor 1.00

| Elevation | Current |
|-----------|-----------|
| Above | Velocity |
| Mudline | (Knots) |
| (Ft) | |
| .00 | .970 |
| 23.00 | 1.200 |
| 223.00 | 1.200 |

*** Dynamic Wave Pressure ***

| Phase (Deg) | 0. | 10. | 20. | 30. | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | 170. | 180. |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| Horz Dist (Ft) | .0 | 18.6 | 37.3 | 55.9 | 74.5 | 93.2 | 111.8 | 130.4 | 149.1 | 167.7 | 186.3 | 205.0 | 223.6 | 242.3 | 260.9 | 279.5 | 298.2 | 316.8 | 335.4 |
| Surf Prof (Ft) | 251.0 | 250.3 | 248.4 | 245.3 | 241.5 | 237.2 | 232.7 | 228.2 | 223.9 | 219.8 | 216.2 | 212.8 | 209.9 | 207.5 | 205.4 | 203.8 | 202.7 | 202.0 | 201.7 |
| Surf Pressure (PSF) | 1797. | 1742. | 1587. | 1353. | 1069. | 763. | 455. | 160. | -114. | -361. | -581. | -771. | -934. | -1069. | -1178. | -1262. | -1321. | -1355. | -1367. |

Elevations Above
Mudline (Ft)

| | | | | | | | | | | | | | | | | | | | |
|--------|-------|-------|-------|-------|-------|------|------|------|------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| 251.03 | 1797. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 250.03 | 1783. | 1738. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 247.68 | 1750. | 1706. | 1578. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 243.96 | 1699. | 1657. | 1535. | 1340. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 238.89 | 1631. | 1592. | 1477. | 1294. | 1053. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 232.46 | 1549. | 1512. | 1407. | 1237. | 1014. | 748. | 455. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 224.68 | 1453. | 1421. | 1324. | 1170. | 965. | 723. | 453. | 169. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 215.54 | 1349. | 1319. | 1233. | 1094. | 910. | 690. | 446. | 187. | -76. | -332. | -575. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 205.04 | 1237. | 1211. | 1134. | 1011. | 848. | 652. | 433. | 200. | -38. | -271. | -494. | -699. | -883. | -1042. | -1174. | 0. | 0. | 0. | 0. |
| 193.18 | 1122. | 1099. | 1032. | 924. | 781. | 608. | 414. | 207. | -5. | -215. | -417. | -604. | -772. | -919. | -1041. | -1137. | -1207. | -1249. | -1263. |
| 179.97 | 1006. | 987. | 929. | 835. | 711. | 560. | 391. | 209. | 21. | -166. | -346. | -515. | -668. | -801. | -914. | -1002. | -1067. | -1105. | -1118. |
| 165.40 | 893. | 877. | 827. | 747. | 640. | 510. | 364. | 205. | 41. | -124. | -284. | -434. | -571. | -692. | -794. | -875. | -934. | -969. | -981. |
| 149.48 | 786. | 772. | 730. | 662. | 571. | 460. | 334. | 197. | 54. | -89. | -230. | -363. | -485. | -593. | -685. | -758. | -811. | -843. | -854. |
| 132.19 | 687. | 675. | 640. | 582. | 505. | 411. | 303. | 186. | 63. | -62. | -185. | -301. | -409. | -505. | -587. | -653. | -701. | -730. | -739. |
| 113.55 | 599. | 589. | 559. | 510. | 445. | 365. | 273. | 173. | 67. | -41. | -148. | -250. | -345. | -430. | -503. | -561. | -604. | -630. | -639. |
| 93.56 | 522. | 514. | 489. | 448. | 392. | 324. | 246. | 160. | 68. | -25. | -119. | -208. | -292. | -367. | -432. | -484. | -522. | -546. | -554. |
| 72.20 | 460. | 453. | 431. | 396. | 349. | 290. | 222. | 147. | 68. | -15. | -97. | -176. | -250. | -317. | -375. | -422. | -457. | -478. | -485. |
| 49.49 | 413. | 407. | 388. | 357. | 316. | 264. | 204. | 137. | 66. | -7. | -81. | -153. | -220. | -281. | -334. | -377. | -408. | -428. | -434. |
| 25.42 | 384. | 378. | 361. | 333. | 294. | 247. | 192. | 131. | 65. | -3. | -72. | -138. | -201. | -258. | -308. | -348. | -378. | -396. | -402. |
| .00 | 373. | 368. | 351. | 324. | 287. | 241. | 188. | 128. | 64. | -2. | -68. | -133. | -195. | -250. | -299. | -338. | -367. | -385. | -391. |

*** Horizontal Velocity Without Current ***

| Phase (Deg) | 0. | 10. | 20. | 30. | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | 170. | 180. |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| Horz Dist (Ft) | .0 | 18.6 | 37.3 | 55.9 | 74.5 | 93.2 | 111.8 | 130.4 | 149.1 | 167.7 | 186.3 | 205.0 | 223.6 | 242.3 | 260.9 | 279.5 | 298.2 | 316.8 | 335.4 |
| Surf Prof (Ft) | 251.0 | 250.3 | 248.4 | 245.3 | 241.5 | 237.2 | 232.7 | 228.2 | 223.9 | 219.8 | 216.2 | 212.8 | 209.9 | 207.5 | 205.4 | 203.8 | 202.7 | 202.0 | 201.7 |
| Surf Velocity (Ft/Sec) | 17.85 | 17.43 | 16.23 | 14.39 | 12.11 | 9.58 | 6.95 | 4.36 | 1.88 | -.44 | -2.55 | -4.43 | -6.06 | -7.45 | -8.59 | -9.47 | -10.10 | -10.47 | -10.59 |

Elevations Above
Mudline (Ft)

| | | | | | | | | | | | | | | | | | | | |
|--------|-------|-------|-------|-------|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 251.03 | 17.85 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 250.03 | 17.68 | 17.38 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 247.68 | 17.29 | 16.99 | 16.12 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 243.96 | 16.68 | 16.40 | 15.56 | 14.21 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 238.89 | 15.90 | 15.63 | 14.83 | 13.55 | 11.82 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 232.46 | 14.96 | 14.70 | 13.96 | 12.76 | 11.14 | 9.18 | 6.94 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 224.68 | 13.90 | 13.66 | 12.98 | 11.87 | 10.37 | 8.55 | 6.48 | 4.23 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 215.54 | 12.75 | 12.54 | 11.92 | 10.90 | 9.54 | 7.88 | 5.98 | 3.92 | 1.77 | -.40 | -2.53 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 205.04 | 11.57 | 11.38 | 10.82 | 9.90 | 8.67 | 7.17 | 5.46 | 3.60 | 1.64 | -.33 | -2.27 | -4.11 | -5.79 | -7.29 | -8.56 | .00 | .00 | .00 | .00 |
| 193.18 | 10.38 | 10.21 | 9.71 | 8.89 | 7.80 | 6.46 | 4.93 | 3.26 | 1.51 | -.27 | -2.01 | -3.67 | -5.20 | -6.55 | -7.70 | -8.63 | -9.30 | -9.70 | -9.84 |
| 179.97 | 9.21 | 9.06 | 8.62 | 7.90 | 6.93 | 5.75 | 4.40 | 2.92 | 1.37 | -.21 | -1.76 | -3.24 | -4.61 | -5.83 | -6.86 | -7.69 | -8.30 | -8.67 | -8.79 |
| 165.40 | 8.09 | 7.96 | 7.58 | 6.95 | 6.11 | 5.08 | 3.89 | 2.59 | 1.23 | -.16 | -1.53 | -2.84 | -4.05 | -5.13 | -6.05 | -6.79 | -7.33 | -7.66 | -7.77 |
| 149.48 | 7.05 | 6.94 | 6.61 | 6.07 | 5.34 | 4.44 | 3.41 | 2.28 | 1.09 | -.12 | -1.32 | -2.46 | -3.53 | -4.48 | -5.30 | -5.95 | -6.43 | -6.72 | -6.82 |
| 132.19 | 6.12 | 6.02 | 5.73 | 5.27 | 4.64 | 3.86 | 2.97 | 2.00 | .97 | -.09 | -1.13 | -2.13 | -3.06 | -3.89 | -4.61 | -5.18 | -5.60 | -5.86 | -5.94 |
| 113.55 | 5.29 | 5.21 | 4.96 | 4.56 | 4.02 | 3.35 | 2.58 | 1.74 | .85 | -.06 | -.97 | -1.84 | -2.65 | -3.37 | -4.00 | -4.50 | -4.87 | -5.09 | -5.17 |
| 93.56 | 4.59 | 4.52 | 4.30 | 3.96 | 3.49 | 2.91 | 2.25 | 1.52 | .75 | -.04 | -.83 | -1.59 | -2.29 | -2.93 | -3.47 | -3.92 | -4.24 | -4.44 | -4.50 |
| 72.20 | 4.02 | 3.96 | 3.77 | 3.47 | 3.06 | 2.56 | 1.98 | 1.34 | .67 | -.03 | -.72 | -1.39 | -2.01 | -2.57 | -3.05 | -3.44 | -3.73 | -3.90 | -3.96 |
| 49.49 | 3.60 | 3.54 | 3.38 | 3.11 | 2.75 | 2.30 | 1.78 | 1.21 | .60 | -.02 | -.64 | -1.24 | -1.80 | -2.30 | -2.74 | -3.09 | -3.35 | -3.50 | -3.56 |
| 25.42 | 3.33 | 3.28 | 3.13 | 2.88 | 2.54 | 2.13 | 1.65 | 1.12 | .56 | -.02 | -.59 | -1.15 | -1.67 | -2.14 | -2.54 | -2.87 | -3.11 | -3.25 | -3.30 |
| .00 | 3.24 | 3.19 | 3.04 | 2.80 | 2.47 | 2.07 | 1.61 | 1.09 | .55 | -.01 | -.57 | -1.11 | -1.62 | -2.08 | -2.47 | -2.79 | -3.02 | -3.16 | -3.21 |

*** Horizontal Velocity With Current ***

| Phase (Deg) | 0. | 10. | 20. | 30. | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | 170. | 180. |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Horz Dist (Ft) | .0 | 18.6 | 37.3 | 55.9 | 74.5 | 93.2 | 111.8 | 130.4 | 149.1 | 167.7 | 186.3 | 205.0 | 223.6 | 242.3 | 260.9 | 279.5 | 298.2 | 316.8 | 335.4 |
| Surf Prof (Ft) | 251.0 | 250.3 | 248.4 | 245.3 | 241.5 | 237.2 | 232.7 | 228.2 | 223.9 | 219.8 | 216.2 | 212.8 | 209.9 | 207.5 | 205.4 | 203.8 | 202.7 | 202.0 | 201.7 |
| Surf Velocity (Ft/Sec) | 19.88 | 19.46 | 18.26 | 16.42 | 14.14 | 11.60 | 8.98 | 6.38 | 3.90 | 1.59 | -.52 | -2.40 | -4.04 | -5.43 | -6.56 | -7.44 | -8.07 | -8.44 | -8.57 |

Elevations Above

Mudline (Ft)

| | | | | | | | | | | | | | | | | | | | |
|--------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 251.03 | 19.88 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 250.03 | 19.71 | 19.41 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 247.68 | 19.31 | 19.02 | 18.15 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 243.96 | 18.71 | 18.43 | 17.59 | 16.23 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 238.89 | 17.92 | 17.65 | 16.86 | 15.57 | 13.85 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 232.46 | 16.98 | 16.73 | 15.99 | 14.78 | 13.17 | 11.20 | 8.97 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 224.68 | 15.92 | 15.69 | 15.00 | 13.89 | 12.40 | 10.58 | 8.51 | 6.26 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 215.54 | 14.78 | 14.57 | 13.94 | 12.93 | 11.57 | 9.91 | 8.01 | 5.95 | 3.80 | 1.62 | -.50 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 205.04 | 13.59 | 13.40 | 12.84 | 11.93 | 10.70 | 9.20 | 7.49 | 5.62 | 3.67 | 1.69 | -.24 | -2.08 | -3.77 | -5.27 | -6.53 | .00 | .00 | .00 | .00 |
| 193.18 | 12.40 | 12.23 | 11.73 | 10.92 | 9.82 | 8.48 | 6.95 | 5.28 | 3.53 | 1.76 | .02 | -1.64 | -3.17 | -4.53 | -5.68 | -6.60 | -7.27 | -7.68 | -7.82 |
| 179.97 | 11.23 | 11.08 | 10.64 | 9.93 | 8.96 | 7.78 | 6.43 | 4.95 | 3.39 | 1.82 | .27 | -1.22 | -2.58 | -3.80 | -4.84 | -5.67 | -6.27 | -6.64 | -6.76 |
| 165.40 | 10.12 | 9.99 | 9.60 | 8.98 | 8.13 | 7.10 | 5.92 | 4.62 | 3.26 | 1.87 | .50 | -.81 | -2.02 | -3.11 | -4.03 | -4.77 | -5.31 | -5.64 | -5.75 |
| 149.48 | 9.08 | 8.97 | 8.63 | 8.09 | 7.36 | 6.47 | 5.44 | 4.31 | 3.12 | 1.91 | .71 | -.44 | -1.50 | -2.46 | -3.27 | -3.92 | -4.40 | -4.70 | -4.79 |
| 132.19 | 8.14 | 8.04 | 7.76 | 7.29 | 6.66 | 5.89 | 5.00 | 4.02 | 2.99 | 1.94 | .90 | -.10 | -1.03 | -1.87 | -2.58 | -3.15 | -3.58 | -3.83 | -3.92 |
| 113.55 | 7.31 | 7.23 | 6.99 | 6.58 | 6.04 | 5.38 | 4.61 | 3.77 | 2.88 | 1.96 | 1.06 | .19 | -.62 | -1.35 | -1.97 | -2.47 | -2.84 | -3.07 | -3.14 |
| 93.56 | 6.61 | 6.54 | 6.33 | 5.98 | 5.51 | 4.94 | 4.28 | 3.55 | 2.77 | 1.98 | 1.20 | .44 | -.27 | -.90 | -1.45 | -1.89 | -2.21 | -2.41 | -2.48 |
| 72.20 | 6.05 | 5.98 | 5.80 | 5.50 | 5.09 | 4.59 | 4.01 | 3.37 | 2.69 | 2.00 | 1.30 | .64 | .01 | -.55 | -1.03 | -1.42 | -1.70 | -1.88 | -1.94 |
| 49.49 | 5.62 | 5.57 | 5.40 | 5.13 | 4.77 | 4.32 | 3.80 | 3.23 | 2.63 | 2.00 | 1.38 | .79 | .23 | -.28 | -.71 | -1.06 | -1.32 | -1.48 | -1.53 |
| 25.42 | 5.36 | 5.31 | 5.16 | 4.91 | 4.57 | 4.16 | 3.68 | 3.15 | 2.59 | 2.01 | 1.43 | .88 | .36 | -.11 | -.51 | -.84 | -1.08 | -1.23 | -1.28 |
| .00 | 4.88 | 4.83 | 4.68 | 4.44 | 4.11 | 3.71 | 3.24 | 2.73 | 2.18 | 1.62 | 1.06 | .52 | .02 | -.44 | -.83 | -1.15 | -1.38 | -1.53 | -1.57 |

*** Horizontal Acceleration ***

| Phase (Deg) | 0. | 10. | 20. | 30. | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | 170. | 180. |
|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Horz Dist (Ft) | .0 | 18.6 | 37.3 | 55.9 | 74.5 | 93.2 | 111.8 | 130.4 | 149.1 | 167.7 | 186.3 | 205.0 | 223.6 | 242.3 | 260.9 | 279.5 | 298.2 | 316.8 | 335.4 |
| Surf Prof (Ft) | 251.0 | 250.3 | 248.4 | 245.3 | 241.5 | 237.2 | 232.7 | 228.2 | 223.9 | 219.8 | 216.2 | 212.8 | 209.9 | 207.5 | 205.4 | 203.8 | 202.7 | 202.0 | 201.7 |
| Surf Accel. (Ft/Sec ²) | .00 | 1.88 | 3.61 | 5.07 | 6.18 | 6.95 | 7.38 | 7.53 | 7.42 | 7.11 | 6.64 | 6.03 | 5.31 | 4.52 | 3.68 | 2.79 | 1.87 | .94 | .00 |

Elevations Above
Mudline (Ft)

| | | | | | | | | | | | | | | | | | | | | |
|--------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|
| 251.03 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 250.03 | .00 | 1.88 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 247.68 | .00 | 1.83 | 3.58 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 243.96 | .00 | 1.76 | 3.45 | 5.00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 238.89 | .00 | 1.67 | 3.27 | 4.74 | 6.02 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 232.46 | .00 | 1.56 | 3.06 | 4.44 | 5.65 | 6.63 | 7.37 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 224.68 | .00 | 1.44 | 2.83 | 4.11 | 5.22 | 6.14 | 6.83 | 7.28 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 215.54 | .00 | 1.32 | 2.58 | 3.75 | 4.77 | 5.62 | 6.26 | 6.68 | 6.87 | 6.84 | 6.60 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 205.04 | .00 | 1.18 | 2.32 | 3.38 | 4.30 | 5.07 | 5.66 | 6.05 | 6.24 | 6.23 | 6.03 | 5.64 | 5.11 | 4.44 | 3.67 | .00 | .00 | .00 | .00 | .00 |
| 193.18 | .00 | 1.05 | 2.07 | 3.01 | 3.84 | 4.53 | 5.06 | 5.42 | 5.61 | 5.61 | 5.44 | 5.11 | 4.63 | 4.04 | 3.34 | 2.57 | 1.75 | .88 | .00 | .00 |
| 179.97 | .00 | .93 | 1.82 | 2.65 | 3.38 | 4.00 | 4.48 | 4.81 | 4.98 | 5.00 | 4.86 | 4.57 | 4.16 | 3.64 | 3.02 | 2.33 | 1.58 | .80 | .00 | .00 |
| 165.40 | .00 | .81 | 1.58 | 2.31 | 2.95 | 3.49 | 3.92 | 4.22 | 4.38 | 4.41 | 4.30 | 4.06 | 3.70 | 3.24 | 2.70 | 2.08 | 1.42 | .72 | .00 | .00 |
| 149.48 | .00 | .70 | 1.37 | 1.99 | 2.55 | 3.03 | 3.41 | 3.67 | 3.82 | 3.85 | 3.77 | 3.57 | 3.26 | 2.87 | 2.39 | 1.85 | 1.26 | .64 | .00 | .00 |
| 132.19 | .00 | .60 | 1.17 | 1.71 | 2.20 | 2.61 | 2.94 | 3.18 | 3.32 | 3.35 | 3.28 | 3.12 | 2.86 | 2.52 | 2.10 | 1.63 | 1.11 | .56 | .00 | .00 |
| 113.55 | .00 | .51 | 1.00 | 1.47 | 1.88 | 2.24 | 2.53 | 2.74 | 2.87 | 2.91 | 2.86 | 2.72 | 2.50 | 2.21 | 1.85 | 1.43 | .98 | .50 | .00 | .00 |
| 93.56 | .00 | .44 | .86 | 1.26 | 1.62 | 1.93 | 2.19 | 2.37 | 2.49 | 2.53 | 2.49 | 2.38 | 2.19 | 1.94 | 1.62 | 1.26 | .86 | .44 | .00 | .00 |
| 72.20 | .00 | .38 | .75 | 1.09 | 1.41 | 1.68 | 1.91 | 2.08 | 2.18 | 2.22 | 2.19 | 2.10 | 1.94 | 1.71 | 1.44 | 1.12 | .77 | .39 | .00 | .00 |
| 49.49 | .00 | .34 | .66 | .97 | 1.25 | 1.50 | 1.70 | 1.85 | 1.95 | 1.99 | 1.97 | 1.89 | 1.74 | 1.55 | 1.30 | 1.02 | .70 | .35 | .00 | .00 |
| 25.42 | .00 | .31 | .61 | .89 | 1.15 | 1.38 | 1.57 | 1.71 | 1.81 | 1.85 | 1.83 | 1.75 | 1.62 | 1.44 | 1.22 | .95 | .65 | .33 | .00 | .00 |
| .00 | .00 | .30 | .59 | .87 | 1.12 | 1.34 | 1.52 | 1.66 | 1.76 | 1.79 | 1.78 | 1.71 | 1.58 | 1.41 | 1.18 | .92 | .63 | .32 | .00 | .00 |

*** Wave Position Summary Report ***

| Step No | Crest Position (Ft) | Phase Angle (Deg) | Force | | | Moment | | | Resultant Loads | |
|---------|---------------------|-------------------|--------|---------|---------|------------|-----------|---------|-------------------------|------------------------------|
| | | | (X) | (Y) | (Z) | (X) | (Y) | (Z) | Horizontal Shear (Kips) | Overturning Moment (Ft-Kips) |
| | | | ----- | | | ----- | | | ----- | |
| | | | (Kips) | | | (Ft-Kips) | | | | |
| 1 | -50.00 | -26.8 | 837.56 | 1978.89 | 159.98 | -330149.30 | 133800.20 | 4623.51 | 2148.84 | 356231.70 |
| 2 | -40.00 | -21.5 | 859.91 | 2046.17 | 111.19 | -342584.90 | 137877.80 | 5376.37 | 2219.52 | 369289.40 |
| 3 | -30.00 | -16.1 | 872.25 | 2088.95 | 60.83 | -350682.60 | 140259.90 | 6109.86 | 2263.75 | 377691.80 |
| 4 | -20.00 | -10.7 | 873.75 | 2104.84 | 9.64 | -353979.00 | 140780.60 | 6799.09 | 2278.99 | 380946.60 |
| 5 | -10.00 | -5.4 | 863.96 | 2092.49 | -41.73 | -352222.50 | 139358.90 | 7421.45 | 2263.83 | 378789.60 |
| 6 | .00 | .0 | 842.75 | 2051.38 | -92.67 | -345315.00 | 135973.10 | 7950.69 | 2217.74 | 371121.50 |
| 7 | 10.00 | 5.4 | 810.13 | 1981.38 | -142.55 | -333242.60 | 130625.90 | 8358.99 | 2140.61 | 357929.80 |
| 8 | 20.00 | 10.7 | 767.03 | 1884.63 | -190.76 | -316409.60 | 123484.80 | 8622.85 | 2034.73 | 339652.00 |
| 9 | 30.00 | 16.1 | 714.45 | 1763.52 | -236.69 | -295280.60 | 114737.40 | 8727.21 | 1902.75 | 316789.10 |
| 10 | 40.00 | 21.5 | 653.73 | 1621.42 | -279.72 | -270502.30 | 104626.80 | 8669.63 | 1748.24 | 290031.50 |

Note: Moments are about Mudline at Elevation (Ft) -223.00
 Wave Loads calculated with only one segment
 Included Drag IDS : DD BL BB

** LOAD SUMMARY REPORT **

Load Case = 4

Wave Direction = 67.50 Deg

| | |
|--|------------|
| X Shear Force (Kips) | 855.26 |
| Y Shear Force (Kips) | 2059.90 |
| Resultant Shear Force (Kips) | 2230.39 |
| | |
| X Mudline Moment (Ft-Kips) | -346531.20 |
| Y Mudline Moment (Ft-Kips) | 137702.30 |
| Resultant Mudline Moment (Ft-Kips) | 372888.50 |
| | |
| Z Vertical Force (Kips) | 9.12 |

Note: Critical Crest Position (Ft) : -20.00
Crest Position Determined By Maximum Base Shear
Wave Loads calculated with user specified Member Segments

* * Wind Load Generation For Load Case 4 * *

| | |
|-------------------------------|--------|
| Wind Velocity (Knots) | 55.000 |
| Wind Pressure (PSF) | .000 |
| Wind Direction (Deg) | 67.500 |
| Surface Elevation (Ft) | .000 |
| Wind Profile | 1.0 |

Included Area IDS : W1 W2

Wind Load On Members Not Calculated

Generated Wind Forces And Moments:

Moments About Nadline At Elevation (Ft) -223.00

| | | |
|------------------------|-----|----------|
| Forces (Kips) | X - | 13.43 |
| | Y - | 35.82 |
| | Z - | .00 |
| Moments (Ft-Kips) | X - | -9909.99 |
| | Y - | 3715.16 |
| | Z - | .00 |

*** Wave Description For Load Case 5 ***

Water Depth (Ft) 223.00
 Mudline Elevation (Ft)..... -223.00

Wave Theory Stokes 5th
 Height (Ft) 49.30
 Period (Sec) 11.30
 Length (Ft) 670.85
 Direction X TO Y (Deg). 90.00
 Celerity (Ft/Sec) 59.37
 Kinematic Factor 1.00

No. of Segments Max 10
 Min 1

Wave Step Size (Ft) 10.00
 No. of Steps 9
 Crest Position Determined By Maximum Base Shear

Crest Elevation (Ft) 251.03
 Trough Elevation (Ft) 201.73

*** Current Description ***

Current Direction (Deg) 90.00
 Current Stretching Normal
 Blockage Factor 1.00

| Elevation Above Mudline (Ft) | Current Velocity (Knots) |
|---------------------------------------|--------------------------------|
| .00 | .970 |
| 23.00 | 1.200 |
| 223.00 | 1.200 |

*** Dynamic Wave Pressure ***

| Phase (Deg) | 0. | 10. | 20. | 30. | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | 170. | 180. |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| Horz Dist (Ft) | .0 | 18.6 | 37.3 | 55.9 | 74.5 | 93.2 | 111.8 | 130.4 | 149.1 | 167.7 | 186.3 | 205.0 | 223.6 | 242.3 | 260.9 | 279.5 | 298.2 | 316.8 | 335.4 |
| Surf Prof (Ft) | 251.0 | 250.3 | 248.4 | 245.3 | 241.5 | 237.2 | 232.7 | 228.2 | 223.9 | 219.8 | 216.2 | 212.8 | 209.9 | 207.5 | 205.4 | 203.8 | 202.7 | 202.0 | 201.7 |
| Surf Pressure (PSF) | 1797. | 1742. | 1587. | 1353. | 1069. | 763. | 455. | 160. | -114. | -361. | -581. | -771. | -934. | -1069. | -1178. | -1262. | -1321. | -1355. | -1367. |

Elevations Above
Mudline (Ft)

| | | | | | | | | | | | | | | | | | | | |
|--------|-------|-------|-------|-------|-------|------|------|------|------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| 251.03 | 1797. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 250.03 | 1783. | 1738. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 247.68 | 1750. | 1706. | 1578. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 243.96 | 1699. | 1657. | 1535. | 1340. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 238.89 | 1631. | 1592. | 1477. | 1294. | 1053. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 232.46 | 1549. | 1512. | 1407. | 1237. | 1014. | 748. | 455. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 224.68 | 1453. | 1421. | 1324. | 1170. | 965. | 723. | 453. | 169. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 215.54 | 1349. | 1319. | 1233. | 1094. | 910. | 690. | 446. | 187. | -76. | -332. | -575. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 205.04 | 1237. | 1211. | 1134. | 1011. | 848. | 652. | 433. | 200. | -38. | -271. | -494. | -699. | -883. | -1042. | -1174. | 0. | 0. | 0. | 0. |
| 193.18 | 1122. | 1099. | 1032. | 924. | 781. | 608. | 414. | 207. | -5. | -215. | -417. | -604. | -772. | -919. | -1041. | -1137. | -1207. | -1249. | -1263. |
| 179.97 | 1006. | 987. | 929. | 835. | 711. | 560. | 391. | 209. | 21. | -166. | -346. | -515. | -668. | -801. | -914. | -1002. | -1067. | -1105. | -1118. |
| 165.40 | 893. | 877. | 827. | 747. | 640. | 510. | 364. | 205. | 41. | -124. | -284. | -434. | -571. | -692. | -794. | -875. | -934. | -969. | -981. |
| 149.48 | 786. | 772. | 730. | 662. | 571. | 460. | 334. | 197. | 54. | -89. | -230. | -363. | -485. | -593. | -685. | -758. | -811. | -843. | -854. |
| 132.19 | 687. | 675. | 640. | 582. | 505. | 411. | 303. | 186. | 63. | -62. | -185. | -301. | -409. | -505. | -587. | -653. | -701. | -730. | -739. |
| 113.55 | 599. | 589. | 559. | 510. | 445. | 365. | 273. | 173. | 67. | -41. | -148. | -250. | -345. | -430. | -503. | -561. | -604. | -630. | -639. |
| 93.56 | 522. | 514. | 489. | 448. | 392. | 324. | 246. | 160. | 68. | -25. | -119. | -208. | -292. | -367. | -432. | -484. | -522. | -546. | -554. |
| 72.20 | 460. | 453. | 431. | 396. | 349. | 290. | 222. | 147. | 68. | -15. | -97. | -176. | -250. | -317. | -375. | -422. | -457. | -478. | -485. |
| 49.49 | 413. | 407. | 388. | 357. | 316. | 264. | 204. | 137. | 66. | -7. | -81. | -153. | -220. | -281. | -334. | -377. | -408. | -428. | -434. |
| 25.42 | 384. | 378. | 361. | 333. | 294. | 247. | 192. | 131. | 65. | -3. | -72. | -138. | -201. | -258. | -308. | -348. | -378. | -396. | -402. |
| .00 | 373. | 368. | 351. | 324. | 287. | 241. | 188. | 128. | 64. | -2. | -68. | -133. | -195. | -250. | -299. | -338. | -367. | -385. | -391. |

*** Horizontal Velocity Without Current ***

| Phase (Deg) | 0. | 10. | 20. | 30. | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | 170. | 180. |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| Horz Dist (Ft) | .0 | 18.6 | 37.3 | 55.9 | 74.5 | 93.2 | 111.8 | 130.4 | 149.1 | 167.7 | 186.3 | 205.0 | 223.6 | 242.3 | 260.9 | 279.5 | 298.2 | 316.8 | 335.4 |
| Surf Prof (Ft) | Z51.0 | Z50.3 | Z48.4 | Z45.3 | Z41.5 | Z37.2 | Z32.7 | Z28.2 | Z23.9 | Z19.8 | Z16.2 | Z12.8 | Z09.9 | Z07.5 | Z05.4 | Z03.8 | Z02.7 | Z02.0 | Z01.7 |
| Surf Velocity (Ft/Sec) | 17.85 | 17.43 | 16.23 | 14.39 | 12.11 | 9.58 | 6.95 | 4.36 | 1.88 | -.44 | -2.55 | -4.43 | -6.06 | -7.45 | -8.59 | -9.47 | -10.10 | -10.47 | -10.59 |

Elevations Above Mudline (Ft)

| | | | | | | | | | | | | | | | | | | | | |
|--------|-------|-------|-------|-------|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 251.03 | 17.85 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 250.03 | 17.68 | 17.38 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 247.68 | 17.29 | 16.99 | 16.12 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 243.96 | 16.68 | 16.40 | 15.56 | 14.21 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 238.89 | 15.90 | 15.63 | 14.83 | 13.55 | 11.82 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 232.46 | 14.96 | 14.70 | 13.96 | 12.76 | 11.14 | 9.18 | 6.94 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 224.68 | 13.90 | 13.66 | 12.98 | 11.87 | 10.37 | 8.55 | 6.48 | 4.23 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 215.54 | 12.75 | 12.54 | 11.92 | 10.90 | 9.54 | 7.88 | 5.98 | 3.92 | 1.77 | -.40 | -2.53 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 205.04 | 11.57 | 11.38 | 10.82 | 9.90 | 8.67 | 7.17 | 5.46 | 3.60 | 1.64 | -.33 | -2.27 | -4.11 | -5.79 | -7.29 | -8.56 | .00 | .00 | .00 | .00 | .00 |
| 193.18 | 10.38 | 10.21 | 9.71 | 8.89 | 7.80 | 6.46 | 4.93 | 3.26 | 1.51 | -.27 | -2.01 | -3.67 | -5.20 | -6.55 | -7.70 | -8.63 | -9.30 | -9.70 | -9.84 | -9.84 |
| 179.97 | 9.21 | 9.06 | 8.62 | 7.90 | 6.93 | 5.75 | 4.40 | 2.92 | 1.37 | -.21 | -1.76 | -3.24 | -4.61 | -5.83 | -6.86 | -7.69 | -8.30 | -8.67 | -8.79 | -8.79 |
| 165.40 | 8.09 | 7.96 | 7.58 | 6.95 | 6.11 | 5.08 | 3.89 | 2.59 | 1.23 | -.16 | -1.53 | -2.84 | -4.05 | -5.13 | -6.05 | -6.79 | -7.33 | -7.66 | -7.77 | -7.77 |
| 149.48 | 7.05 | 6.94 | 6.61 | 6.07 | 5.34 | 4.44 | 3.41 | 2.28 | 1.09 | -.12 | -1.32 | -2.46 | -3.53 | -4.48 | -5.30 | -5.95 | -6.43 | -6.72 | -6.82 | -6.82 |
| 132.19 | 6.12 | 6.02 | 5.73 | 5.27 | 4.64 | 3.86 | 2.97 | 2.00 | .97 | -.09 | -1.13 | -2.13 | -3.06 | -3.89 | -4.61 | -5.18 | -5.60 | -5.86 | -5.94 | -5.94 |
| 113.55 | 5.29 | 5.21 | 4.96 | 4.56 | 4.02 | 3.35 | 2.58 | 1.74 | .85 | -.06 | -.97 | -1.84 | -2.65 | -3.37 | -4.00 | -4.50 | -4.87 | -5.09 | -5.17 | -5.17 |
| 93.56 | 4.59 | 4.52 | 4.30 | 3.96 | 3.49 | 2.91 | 2.25 | 1.52 | .75 | -.04 | -.83 | -1.59 | -2.29 | -2.93 | -3.47 | -3.92 | -4.24 | -4.44 | -4.50 | -4.50 |
| 72.20 | 4.02 | 3.96 | 3.77 | 3.47 | 3.06 | 2.56 | 1.98 | 1.34 | .67 | -.03 | -.72 | -1.39 | -2.01 | -2.57 | -3.05 | -3.44 | -3.73 | -3.90 | -3.96 | -3.96 |
| 49.49 | 3.60 | 3.54 | 3.38 | 3.11 | 2.75 | 2.30 | 1.78 | 1.21 | .60 | -.02 | -.64 | -1.24 | -1.80 | -2.30 | -2.74 | -3.09 | -3.35 | -3.50 | -3.56 | -3.56 |
| 25.42 | 3.33 | 3.28 | 3.13 | 2.88 | 2.54 | 2.13 | 1.65 | 1.12 | .56 | -.02 | -.59 | -1.15 | -1.67 | -2.14 | -2.54 | -2.87 | -3.11 | -3.25 | -3.30 | -3.30 |
| .00 | 3.24 | 3.19 | 3.04 | 2.80 | 2.47 | 2.07 | 1.61 | 1.09 | .55 | -.01 | -.57 | -1.11 | -1.62 | -2.08 | -2.47 | -2.79 | -3.02 | -3.16 | -3.21 | -3.21 |

*** Horizontal Velocity With Current ***

| Phase (Deg) | 0. | 10. | 20. | 30. | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | 170. | 180. |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Horz Dist (Ft) | .0 | 18.6 | 37.3 | 55.9 | 74.5 | 93.2 | 111.8 | 130.4 | 149.1 | 167.7 | 186.3 | 205.0 | 223.6 | 242.3 | 260.9 | 279.5 | 298.2 | 316.8 | 335.4 |
| Surf Prof (Ft) | 251.0 | 250.3 | 248.4 | 245.3 | 241.5 | 237.2 | 232.7 | 228.2 | 223.9 | 219.8 | 216.2 | 212.8 | 209.9 | 207.5 | 205.4 | 203.8 | 202.7 | 202.0 | 201.7 |
| Surf Velocity (Ft/Sec) | 19.88 | 19.46 | 18.26 | 16.42 | 14.14 | 11.60 | 8.98 | 6.38 | 3.90 | 1.59 | -.52 | -2.40 | -4.04 | -5.43 | -6.56 | -7.44 | -8.07 | -8.44 | -8.57 |

Elevations Above

Mudline (Ft)

| | | | | | | | | | | | | | | | | | | | | |
|--------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 251.03 | 19.88 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 250.03 | 19.71 | 19.41 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 247.68 | 19.31 | 19.02 | 18.15 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 243.96 | 18.71 | 18.43 | 17.59 | 16.23 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 238.89 | 17.92 | 17.65 | 16.86 | 15.57 | 13.85 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 232.46 | 16.98 | 16.73 | 15.99 | 14.78 | 13.17 | 11.20 | 8.97 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 224.68 | 15.92 | 15.69 | 15.00 | 13.89 | 12.40 | 10.58 | 8.51 | 6.26 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 215.54 | 14.78 | 14.57 | 13.94 | 12.93 | 11.57 | 9.91 | 8.01 | 5.95 | 3.80 | 1.62 | -.50 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 205.04 | 13.59 | 13.40 | 12.84 | 11.93 | 10.70 | 9.20 | 7.49 | 5.62 | 3.67 | 1.69 | -.24 | -2.08 | -3.77 | -5.27 | -6.53 | .00 | .00 | .00 | .00 | .00 |
| 193.18 | 12.40 | 12.23 | 11.73 | 10.92 | 9.82 | 8.48 | 6.95 | 5.28 | 3.53 | 1.76 | .02 | -1.64 | -3.17 | -4.53 | -5.68 | -6.60 | -7.27 | -7.68 | -7.82 | -7.82 |
| 179.97 | 11.23 | 11.08 | 10.64 | 9.93 | 8.96 | 7.78 | 6.43 | 4.95 | 3.39 | 1.82 | .27 | -1.22 | -2.58 | -3.80 | -4.84 | -5.67 | -6.27 | -6.64 | -6.76 | -6.76 |
| 165.40 | 10.12 | 9.99 | 9.60 | 8.98 | 8.13 | 7.10 | 5.92 | 4.62 | 3.26 | 1.87 | .50 | -.81 | -2.02 | -3.11 | -4.03 | -4.77 | -5.31 | -5.64 | -5.75 | -5.75 |
| 149.48 | 9.08 | 8.97 | 8.63 | 8.09 | 7.36 | 6.47 | 5.44 | 4.31 | 3.12 | 1.91 | .71 | -.44 | -1.50 | -2.46 | -3.27 | -3.92 | -4.40 | -4.70 | -4.79 | -4.79 |
| 132.19 | 8.14 | 8.04 | 7.76 | 7.29 | 6.66 | 5.89 | 5.00 | 4.02 | 2.99 | 1.94 | .90 | -.10 | -1.03 | -1.87 | -2.58 | -3.15 | -3.58 | -3.83 | -3.92 | -3.92 |
| 113.55 | 7.31 | 7.23 | 6.99 | 6.58 | 6.04 | 5.38 | 4.61 | 3.77 | 2.88 | 1.96 | 1.06 | .19 | -.62 | -1.35 | -1.97 | -2.47 | -2.84 | -3.07 | -3.14 | -3.14 |
| 93.56 | 6.61 | 6.54 | 6.33 | 5.98 | 5.51 | 4.94 | 4.28 | 3.55 | 2.77 | 1.98 | 1.20 | .44 | -.27 | -.90 | -1.45 | -1.89 | -2.21 | -2.41 | -2.48 | -2.48 |
| 72.20 | 6.05 | 5.98 | 5.80 | 5.50 | 5.09 | 4.59 | 4.01 | 3.37 | 2.69 | 2.00 | 1.30 | .64 | .01 | -.55 | -1.03 | -1.42 | -1.70 | -1.88 | -1.94 | -1.94 |
| 49.49 | 5.62 | 5.57 | 5.40 | 5.13 | 4.77 | 4.32 | 3.80 | 3.23 | 2.63 | 2.00 | 1.38 | .79 | .23 | -.28 | -.71 | -1.06 | -1.32 | -1.48 | -1.53 | -1.53 |
| 25.42 | 5.36 | 5.31 | 5.16 | 4.91 | 4.57 | 4.16 | 3.68 | 3.15 | 2.59 | 2.01 | 1.43 | .88 | .36 | -.11 | -.51 | -.84 | -1.08 | -1.23 | -1.28 | -1.28 |
| .00 | 4.88 | 4.83 | 4.68 | 4.44 | 4.11 | 3.71 | 3.24 | 2.73 | 2.18 | 1.62 | 1.06 | .52 | .02 | -.44 | -.83 | -1.15 | -1.38 | -1.53 | -1.57 | -1.57 |

*** Horizontal Acceleration ***

| Phase (Deg) | 0. | 10. | 20. | 30. | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | 170. | 180. |
|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Horz Dist (Ft) | .0 | 18.6 | 37.3 | 55.9 | 74.5 | 93.2 | 111.8 | 130.4 | 149.1 | 167.7 | 186.3 | 205.0 | 223.6 | 242.3 | 260.9 | 279.5 | 298.2 | 316.8 | 335.4 |
| Surf Prof (Ft) | 251.0 | 250.3 | 248.4 | 245.3 | 241.5 | 237.2 | 232.7 | 228.2 | 223.9 | 219.8 | 216.2 | 212.8 | 209.9 | 207.5 | 205.4 | 203.8 | 202.7 | 202.0 | 201.7 |
| Surf Accel. (Ft/Sec ²) | .00 | 1.88 | 3.61 | 5.07 | 6.18 | 6.95 | 7.38 | 7.53 | 7.42 | 7.11 | 6.64 | 6.03 | 5.31 | 4.52 | 3.68 | 2.79 | 1.87 | .94 | .00 |

Elevations Above
Mudline (Ft)

| | | | | | | | | | | | | | | | | | | | | |
|--------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|
| 251.03 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 250.03 | .00 | 1.88 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 247.68 | .00 | 1.83 | 3.58 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 243.96 | .00 | 1.76 | 3.45 | 5.00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 238.89 | .00 | 1.67 | 3.27 | 4.74 | 6.02 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 232.46 | .00 | 1.56 | 3.06 | 4.44 | 5.65 | 6.63 | 7.37 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 224.68 | .00 | 1.44 | 2.83 | 4.11 | 5.22 | 6.14 | 6.83 | 7.28 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 215.54 | .00 | 1.32 | 2.58 | 3.75 | 4.77 | 5.62 | 6.26 | 6.68 | 6.87 | 6.84 | 6.60 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 205.04 | .00 | 1.18 | 2.32 | 3.38 | 4.30 | 5.07 | 5.66 | 6.05 | 6.24 | 6.23 | 6.03 | 5.64 | 5.11 | 4.44 | 3.67 | .00 | .00 | .00 | .00 | .00 |
| 193.18 | .00 | 1.05 | 2.07 | 3.01 | 3.84 | 4.53 | 5.06 | 5.42 | 5.61 | 5.61 | 5.44 | 5.11 | 4.63 | 4.04 | 3.34 | 2.57 | 1.75 | .88 | .00 | .00 |
| 179.97 | .00 | .93 | 1.82 | 2.65 | 3.38 | 4.00 | 4.48 | 4.81 | 4.98 | 5.00 | 4.86 | 4.57 | 4.16 | 3.64 | 3.02 | 2.33 | 1.58 | .80 | .00 | .00 |
| 165.40 | .00 | .81 | 1.58 | 2.31 | 2.95 | 3.49 | 3.92 | 4.22 | 4.38 | 4.41 | 4.30 | 4.06 | 3.70 | 3.24 | 2.70 | 2.08 | 1.42 | .72 | .00 | .00 |
| 149.48 | .00 | .70 | 1.37 | 1.99 | 2.55 | 3.03 | 3.41 | 3.67 | 3.82 | 3.85 | 3.77 | 3.57 | 3.26 | 2.87 | 2.39 | 1.85 | 1.26 | .64 | .00 | .00 |
| 132.19 | .00 | .60 | 1.17 | 1.71 | 2.20 | 2.61 | 2.94 | 3.18 | 3.32 | 3.35 | 3.28 | 3.12 | 2.86 | 2.52 | 2.10 | 1.63 | 1.11 | .56 | .00 | .00 |
| 113.55 | .00 | .51 | 1.00 | 1.47 | 1.88 | 2.24 | 2.53 | 2.74 | 2.87 | 2.91 | 2.86 | 2.72 | 2.50 | 2.21 | 1.85 | 1.43 | .98 | .50 | .00 | .00 |
| 93.56 | .00 | .44 | .86 | 1.26 | 1.62 | 1.93 | 2.19 | 2.37 | 2.49 | 2.53 | 2.49 | 2.38 | 2.19 | 1.94 | 1.62 | 1.26 | .86 | .44 | .00 | .00 |
| 72.20 | .00 | .38 | .75 | 1.09 | 1.41 | 1.68 | 1.91 | 2.08 | 2.18 | 2.22 | 2.19 | 2.10 | 1.94 | 1.71 | 1.44 | 1.12 | .77 | .39 | .00 | .00 |
| 49.49 | .00 | .34 | .66 | .97 | 1.25 | 1.50 | 1.70 | 1.85 | 1.95 | 1.99 | 1.97 | 1.89 | 1.74 | 1.55 | 1.30 | 1.02 | .70 | .35 | .00 | .00 |
| 25.42 | .00 | .31 | .61 | .89 | 1.15 | 1.38 | 1.57 | 1.71 | 1.81 | 1.85 | 1.83 | 1.75 | 1.62 | 1.44 | 1.22 | .95 | .65 | .33 | .00 | .00 |
| .00 | .00 | .30 | .59 | .87 | 1.12 | 1.34 | 1.52 | 1.66 | 1.76 | 1.79 | 1.78 | 1.71 | 1.58 | 1.41 | 1.18 | .92 | .63 | .32 | .00 | .00 |

*** Wave Position Summary Report ***

| Step No | Crest Position (Ft) | Phase Angle (Deg) | Force | | | Moment | | | Resultant Loads | |
|---------|---------------------|-------------------|--------|---------|---------|------------|----------|---------|-------------------------|------------------------------|
| | | | (X) | (Y) | (Z) | (X) | (Y) | (Z) | Horizontal Shear (Kips) | Overturning Moment (Ft-Kips) |
| 1 | -50.00 | -26.8 | 30.30 | 2131.61 | 146.64 | -354110.10 | 5385.37 | 5144.43 | 2131.82 | 354151.10 |
| 2 | -40.00 | -21.5 | 26.57 | 2203.32 | 98.02 | -367313.80 | 4630.08 | 4954.05 | 2203.48 | 367343.00 |
| 3 | -30.00 | -16.1 | 22.36 | 2248.78 | 48.41 | -375907.70 | 3783.79 | 4676.35 | 2248.89 | 375926.80 |
| 4 | -20.00 | -10.7 | 17.73 | 2265.41 | -1.59 | -379391.20 | 2861.48 | 4318.28 | 2265.48 | 379402.00 |
| 5 | -10.00 | -5.4 | 12.80 | 2251.48 | -51.67 | -377425.60 | 1882.96 | 3890.92 | 2251.52 | 377430.30 |
| 6 | .00 | .0 | 7.65 | 2206.45 | -101.11 | -369904.00 | 867.27 | 3406.90 | 2206.46 | 369905.00 |
| 7 | 10.00 | 5.4 | 2.41 | 2130.26 | -149.32 | -356830.70 | -163.79 | 2882.35 | 2130.27 | 356830.80 |
| 8 | 20.00 | 10.7 | -2.79 | 2025.27 | -195.77 | -338650.70 | -1180.21 | 2335.26 | 2025.27 | 338652.70 |
| 9 | 30.00 | 16.1 | -7.77 | 1894.18 | -239.77 | -315894.50 | -2151.63 | 1782.30 | 1894.20 | 315901.80 |
| 10 | 40.00 | 21.5 | -12.43 | 1740.77 | -281.05 | -289294.80 | -3053.87 | 1243.54 | 1740.81 | 289310.90 |

Note: Moments are about Mudline at Elevation (Ft) -223.00

Wave Loads calculated with only one segment

Included Drag IDS : DD BL BB

* * LOAD SUMMARY REPORT * *

Load Case * 5

Wave Direction * 90.00 Deg

| | |
|--|------------|
| X Shear Force (Kips) | 17.69 |
| Y Shear Force (Kips) | 2217.46 |
| Resultant Shear Force (Kips) | 2217.53 |
| | |
| X Mudline Moment (Ft-Kips) | -371380.90 |
| Y Mudline Moment (Ft-Kips) | 2845.93 |
| Resultant Mudline Moment (Ft-Kips) | 371391.80 |
| | |
| Z Vertical Force (Kips) | -1.11 |

Note: Critical Crest Position (Ft) : -20.00
Crest Position Determined By Maximum Base Shear
Wave Loads calculated with user specified Member Segments

*** Wind Load Generation For Load Case 5 ***

| | |
|-------------------------------|--------|
| Wind Velocity (Knots) | 55.000 |
| Wind Pressure (PSF) | .000 |
| Wind Direction (Deg) | 90.000 |
| Surface Elevation (Ft) | .000 |
| Wind Profile | 1.0 |

Included Area IDS : W1 W2

Wind Load On Members Not Calculated

Generated Wind Forces And Moments
Moments About Nadline At Elevation (Ft) -223.00

| | | |
|------------------------|-----|----------|
| Forces (Kips) | X - | 12.58 |
| | Y - | 33.56 |
| | Z - | .00 |
| Moments (Ft-Kips) | X - | -9284.72 |
| | Y - | 3480.75 |
| | Z - | .00 |

Applied Load Summary

| Load Case | Total Force(X) (Kips) | Total Force(Y) (Kips) | Total Force(Z) (Kips) | Total Moment(X) (In-Kips) | Total Moment(Y) (In-Kips) | Total Moment(Z) (In-Kips) |
|-------------|---------------------------|---------------------------|---------------------------|------------------------------|------------------------------|------------------------------|
| 1 | .000 | .000 | -2209.377 | .000 | .000 | .000 |
| C.G. X (Ft) | .000 | .000 | .346 | | | |
| C.G. Y (Ft) | .000 | .000 | -.724 | | | |
| C.G. Z (Ft) | .000 | .000 | -47.631 | | | |
| | | | Global Moments (Ft-Kips) | 1598.673 | 764.613 | .000 |
| | | | Mudline Moments (Ft-Kips) | 1598.673 | 764.613 | .000 |
| 2 | .000 | .000 | -6067.000 | .000 | .000 | .000 |
| C.G. X (Ft) | .000 | .000 | 13.604 | | | |
| C.G. Y (Ft) | .000 | .000 | -.412 | | | |
| C.G. Z (Ft) | .000 | .000 | 51.354 | | | |
| | | | Global Moments (Ft-Kips) | 2497.500 | 82537.500 | .000 |
| | | | Mudline Moments (Ft-Kips) | 2497.500 | 82537.500 | .000 |
| 3 | 1579.506 | 1578.766 | 14.170 | 7829.528 | -4666.349 | 21071.380 |
| C.G. X (Ft) | .038 | 1.953 | 593.831 | | | |
| C.G. Y (Ft) | -1.582 | -2.569 | 226.619 | | | |
| C.G. Z (Ft) | -56.988 | -50.132 | 183.031 | | | |
| | | | Global Moments (Ft-Kips) | 83009.910 | -98815.610 | 7337.261 |
| | | | Mudline Moments (Ft-Kips) | -269055.000 | 253414.300 | 7337.261 |
| 4 | 868.687 | 2095.718 | 9.119 | 10886.390 | -4032.363 | 17896.350 |
| C.G. X (Ft) | -.610 | 1.998 | 553.777 | | | |
| C.G. Y (Ft) | -1.247 | -2.795 | 448.348 | | | |
| C.G. Z (Ft) | -54.005 | -50.536 | 345.405 | | | |
| | | | Global Moments (Ft-Kips) | 110904.200 | -52299.720 | 6762.467 |
| | | | Mudline Moments (Ft-Kips) | -356440.800 | 141417.500 | 6762.467 |
| 5 | 30.273 | 2251.021 | -1.114 | 11173.570 | -2080.695 | 8871.796 |
| C.G. X (Ft) | -29.660 | 1.746 | -943.064 | | | |
| C.G. Y (Ft) | 12.647 | -2.879 | -3794.011 | | | |
| C.G. Z (Ft) | 26.424 | -51.600 | -2913.348 | | | |
| | | | Global Moments (Ft-Kips) | 121311.400 | -424.236 | 4287.351 |
| | | | Mudline Moments (Ft-Kips) | -380666.300 | 6326.695 | 4287.351 |
| 6 | 1579.506 | 1578.766 | -8262.207 | 7829.528 | -4666.349 | 21071.380 |
| C.G. X (Ft) | .038 | 1.953 | 9.064 | | | |
| C.G. Y (Ft) | -1.582 | -2.569 | -.884 | | | |
| C.G. Z (Ft) | -56.988 | -50.132 | 24.659 | | | |
| | | | Global Moments (Ft-Kips) | 87106.080 | -15513.500 | 7337.261 |
| | | | Mudline Moments (Ft-Kips) | -264958.800 | 336716.400 | 7337.261 |
| 7 | 868.687 | 2095.718 | -8267.258 | 10886.390 | -4032.363 | 17896.350 |
| C.G. X (Ft) | -.610 | 1.998 | 9.465 | | | |
| C.G. Y (Ft) | -1.247 | -2.795 | -.990 | | | |
| C.G. Z (Ft) | -54.005 | -50.536 | 24.577 | | | |
| | | | Global Moments (Ft-Kips) | 115000.400 | 31002.400 | 6762.467 |
| | | | Mudline Moments (Ft-Kips) | -352344.600 | 224719.600 | 6762.467 |

Applied Load Summary

| Load Case | Total Force(X) (Kips) | Total Force(Y) (Kips) | Total Force(Z) (Kips) | Total Moment(X) (In-Kips) | Total Moment(Y) (In-Kips) | Total Moment(Z) (In-Kips) |
|-------------|---------------------------|---------------------------|---------------------------|------------------------------|------------------------------|------------------------------|
| 8 | 30.273 | 2251.021 | -8277.491 | 11173.570 | -2080.695 | 8871.796 |
| C.G. X (Ft) | -29.660 | 1.746 | 9.937 | | | |
| C.G. Y (Ft) | 12.647 | -2.879 | -1.006 | | | |
| C.G. Z (Ft) | 26.424 | -51.600 | 24.534 | | | |
| | | Global Moments (Ft-Kips) | | 125407.600 | 82877.880 | 4287.351 |
| | | Midline Moments (Ft-Kips) | | -376570.100 | 89628.810 | 4287.351 |

*** NOAH Load Case Report ***

| Load Case | Type | Anal. Opt. | Print Opt. | AMOD Factor | Comb. Type | LC Percent | LC Percent | LC Percent | LC Percent | LC Percent | LC Percent |
|-----------|-------|------------|------------|-------------|------------|------------|------------|------------|------------|------------|------------|
| 1 | BASIC | NO | NO | 1.000 | | | | | | | |
| 2 | BASIC | NO | NO | 1.000 | | | | | | | |
| 3 | BASIC | NO | NO | 1.000 | | | | | | | |
| 4 | BASIC | NO | NO | 1.000 | | | | | | | |
| 5 | BASIC | NO | NO | 1.000 | | | | | | | |
| 6 | COMB | YES | YES | 1.330 | | 1 100.00 | 2 100.00 | 3 100.00 | | | |
| 7 | COMB | YES | YES | 1.330 | | 1 100.00 | 2 100.00 | 4 100.00 | | | |
| 8 | COMB | YES | YES | 1.330 | | 1 100.00 | 2 100.00 | 5 100.00 | | | |

Friday 7/22/94 18: 7:45

Input File Name:\NSTRUCAD\WD103d\NWD103DL

Output File Name:\NSTRUCAD\WD103d\NWD103DL.OT1

*** Problem Description ***

Number Of Joints 316

Number Of Beams (Steel) 672

Number Of Piles 9

Number Of Plates 16

No. Of Basic Load Cases 5

No. Of Combined Load Cases ... 3

Time For PREP Module = 0: 4: 1

Time For LOAD Module = 0:28:29

Total Processing Time = 0:32:31

Number Of Plates 16

No. Of Basic Load Cases 5

No. Of Combined Load Cases ... 3

Time For PREP Module = 0: 4: 1

Time For LOAD Module = 0:28:29

Total Processing Time = 0:32:31

8.1.2 WD103DL.OT2

| | |
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| | |
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***** Soil Structure Interaction Program Options *****

Number Of Piles 9
Pile Code Check API-4SD 20th Edition
Maximum Number of Iterations 100
Deflection Tolerance (In)00100
Rotation Tolerance (Rad)00100
Deflection Tolerance (Percentage)100
Rotation Tolerance (Percentage)100
Pile Iteration Control Report Print
Pile Detail Report Print
Pile Critical Load Case Report Print
Pile Head And Critical Section Report .. Print
Pile Group Summary Report Print
Pile Segment Deflection Report Print

*** Reduced Superstructure Loads In Structural Coordinates ***

| Load Case | Pile Joint | Forces (Kips) | | | Moments (In-Kips) | | |
|-----------|------------|---------------|-----------|------------|-------------------|-----------|-----------|
| | | X | Y | Z | X | Y | Z |
| 6 | 200 | 95.953 | 466.748 | -372.307 | -16769.121 | 14254.045 | .000 |
| | 112 | 32.066 | 55.198 | 601.290 | -9892.820 | 8673.645 | 96.016 |
| | 122 | 448.541 | 196.355 | -126.728 | -13072.487 | 9710.861 | -1125.312 |
| | 132 | 297.948 | 348.572 | -427.088 | -12304.926 | 9573.846 | -1067.690 |
| | 142 | 14.777 | 376.472 | -1228.180 | -13161.478 | 7033.677 | -2495.264 |
| | 152 | 39.800 | 245.104 | -730.091 | -11234.061 | 8225.897 | 2802.960 |
| | 162 | 119.221 | 46.770 | -1552.662 | -10547.982 | 9265.694 | 1615.987 |
| | 172 | 554.143 | -108.550 | -1863.897 | -11791.727 | 9439.467 | 1731.490 |
| 182 | -22.942 | -47.903 | -2562.548 | -8969.088 | 6915.903 | 762.962 | |
| 7 | 200 | 59.035 | 604.616 | -372.307 | -22293.403 | 9120.163 | .000 |
| | 112 | -36.258 | 182.035 | 517.148 | -13660.998 | 5090.564 | 996.509 |
| | 122 | 307.713 | 270.026 | 51.085 | -17285.675 | 5889.844 | -654.793 |
| | 132 | 109.813 | 363.402 | -138.884 | -16014.540 | 5683.526 | -610.847 |
| | 142 | 70.899 | 362.931 | -701.309 | -16763.819 | 3783.508 | -2447.205 |
| | 152 | 96.936 | 230.853 | -1256.509 | -14799.857 | 5129.280 | 2769.404 |
| | 162 | -70.342 | 50.302 | -1832.726 | -14201.355 | 5410.958 | 1078.824 |
| | 172 | 419.892 | -44.395 | -2043.655 | -15962.684 | 5597.963 | 1135.059 |
| 182 | -89.001 | 75.947 | -2490.104 | -12745.769 | 3282.788 | -283.167 | |
| 8 | 200 | 15.636 | 637.212 | -372.307 | -23992.638 | 2658.897 | .000 |
| | 112 | -95.848 | 286.572 | 214.917 | -15171.489 | 847.408 | 1699.109 |
| | 122 | 103.433 | 321.825 | 49.580 | -18640.322 | 1171.102 | -117.180 |
| | 132 | -80.465 | 342.102 | -12.949 | -17049.988 | 948.859 | -86.143 |
| | 142 | 112.740 | 296.015 | -276.835 | -17489.110 | -154.479 | -1972.761 |
| | 152 | 139.916 | 168.368 | -1688.158 | -15720.002 | 1366.976 | 2198.945 |
| | 162 | -256.189 | 24.018 | -1959.081 | -15269.455 | 808.635 | 341.254 |
| | 172 | 232.067 | 1.658 | -2043.543 | -17216.495 | 989.495 | 343.722 |
| 182 | -141.017 | 173.249 | -2189.117 | -14078.286 | -852.967 | -1392.030 | |

*** Pile Head Forces and Displacements in Pile Coordinates During Iterations - Load Case 6 ***

| Pile Joint | Iter. No. | | Force or Displ. | | | Moment or Rotation | | |
|------------|-----------|-------------|-------------------------------|---------|---------|----------------------------------|-----------|-----------|
| | | | X | Y | Z | X | Y | Z |
| | | | /----- (Kips) or (In) -----/ | | | /----- (In-Kips) or (Rad) -----/ | | |
| 200 | 1 | Old Forces | -337.564 | .000 | .000 | .000 | .000 | .000 |
| | | Old Displ. | .0000 | .0000 | .0000 | .00000 | .00000 | .00000 |
| | | New Displ. | .0915 | -3.4298 | 3.1367 | .00000 | .00487 | .00533 |
| | | Diff Displ. | -.0915 | 3.4298 | -3.1367 | .00000 | -.00487 | -.00533 |
| 112 | 1 | Old Forces | -73.576 | .000 | .000 | .000 | .000 | .000 |
| | | Old Displ. | .0000 | .0000 | .0000 | .00000 | .00000 | .00000 |
| | | New Displ. | -.1969 | .7778 | -4.4638 | -.00019 | -.00691 | -.00097 |
| | | Diff Displ. | .1969 | -.7778 | 4.4638 | .00019 | .00691 | .00097 |
| 122 | 1 | Old Forces | -73.383 | .000 | .000 | .000 | .000 | .000 |
| | | Old Displ. | .0000 | .0000 | .0000 | .00000 | .00000 | .00000 |
| | | New Displ. | .0520 | 3.7942 | -3.0129 | .00038 | -.00489 | -.00566 |
| | | Diff Displ. | -.0520 | -3.7942 | 3.0129 | -.00038 | .00489 | .00566 |
| 132 | 1 | Old Forces | -73.383 | .000 | .000 | .000 | .000 | .000 |
| | | Old Displ. | .0000 | .0000 | .0000 | .00000 | .00000 | .00000 |
| | | New Displ. | .1144 | 3.7283 | -3.2599 | .00019 | -.00508 | -.00561 |
| | | Diff Displ. | -.1144 | -3.7283 | 3.2599 | -.00019 | .00508 | .00561 |
| 142 | 1 | Old Forces | -73.576 | .000 | .000 | .000 | .000 | .000 |
| | | Old Displ. | .0000 | .0000 | .0000 | .00000 | .00000 | .00000 |
| | | New Displ. | .3832 | 4.9341 | .0494 | .00198 | -.00014 | -.00750 |
| | | Diff Displ. | -.3832 | -4.9341 | -.0494 | -.00198 | .00014 | .00750 |
| 152 | 1 | Old Forces | -73.576 | .000 | .000 | .000 | .000 | .000 |
| | | Old Displ. | .0000 | .0000 | .0000 | .00000 | .00000 | .00000 |
| | | New Displ. | .2275 | -4.2761 | -.5045 | -.00435 | -.00052 | .00666 |
| | | Diff Displ. | -.2275 | 4.2761 | .5045 | .00435 | .00052 | -.00666 |
| 162 | 1 | Old Forces | -73.383 | .000 | .000 | .000 | .000 | .000 |
| | | Old Displ. | .0000 | .0000 | .0000 | .00000 | .00000 | .00000 |
| | | New Displ. | .5003 | -3.3892 | 2.9041 | -.00348 | .00459 | .00517 |
| | | Diff Displ. | -.5003 | 3.3892 | -2.9041 | .00348 | -.00459 | -.00517 |
| 172 | 1 | Old Forces | -73.383 | .000 | .000 | .000 | .000 | .000 |
| | | Old Displ. | .0000 | .0000 | .0000 | .00000 | .00000 | .00000 |
| | | New Displ. | .5730 | -3.4497 | 2.9690 | -.00389 | .00485 | .00521 |
| | | Diff Displ. | -.5730 | 3.4497 | -2.9690 | .00389 | -.00485 | -.00521 |
| 182 | 1 | Old Forces | -73.576 | .000 | .000 | .000 | .000 | .000 |
| | | Old Displ. | .0000 | .0000 | .0000 | .00000 | .00000 | .00000 |
| | | New Displ. | .8218 | -.1117 | 4.3722 | -.00494 | .00677 | .00008 |
| | | Diff Displ. | -.8218 | .1117 | -4.3722 | .00494 | -.00677 | -.00008 |
| 200 | 2 | Old Forces | 371.287 | -49.734 | 45.498 | .000 | -5927.713 | -6473.074 |
| | | Old Displ. | .0915 | -3.4298 | 3.1367 | .00000 | .00487 | .00533 |
| | | New Displ. | .0920 | -8.1819 | 7.0685 | .00000 | .00652 | .00766 |
| | | Diff Displ. | -.0005 | 4.7521 | -3.9318 | .00000 | -.00165 | -.00233 |

*** Pile Head Forces and Displacements in Pile Coordinates During Iterations - Load Case 6 ***

| Pile Joint | Iter. No. | | Force or Displ. | | | Moment or Rotation | | |
|---|-----------|-------------|------------------------------|----------|----------|----------------------------------|------------|------------|
| | | | X | Y | Z | X | Y | Z |
| | | | /----- (Kips) or (In) -----/ | | | /----- (In-Kips) or (Rad) -----/ | | |
| 112 | 2 | Old Forces | -734.762 | 15.178 | -71.097 | .000 | 9627.620 | 3146.646 |
| | | Old Displ. | -.1969 | .7778 | -4.4638 | -.00019 | -.00691 | -.00097 |
| | | New Displ. | -.2316 | 1.9988 | -10.4510 | -.00075 | -.01022 | -.00178 |
| | | Diff Displ. | .0347 | -1.2209 | 5.9872 | .00056 | .00331 | .00081 |
| 122 | 2 | Old Forces | 106.150 | 57.882 | -41.402 | .000 | 5213.505 | 9574.516 |
| | | Old Displ. | .0520 | 3.7942 | -3.0129 | .00038 | -.00489 | -.00566 |
| | | New Displ. | .0690 | 8.8656 | -6.8173 | -.00011 | -.00686 | -.00848 |
| | | Diff Displ. | -.0170 | -5.0714 | 3.8043 | .00049 | .00197 | .00282 |
| 132 | 2 | Old Forces | 317.943 | 54.837 | -45.871 | .000 | 6861.533 | 9090.820 |
| | | Old Displ. | .1144 | 3.7283 | -3.2599 | .00019 | -.00508 | -.00561 |
| | | New Displ. | .0802 | 8.7927 | -7.3439 | -.00029 | -.00713 | -.00839 |
| | | Diff Displ. | .0342 | -5.0644 | 4.0840 | .00048 | .00204 | .00278 |
| 142 | 2 | Old Forces | 1164.269 | 67.294 | 3.095 | .002 | -1372.579 | 12187.541 |
| | | Old Displ. | .3832 | 4.9341 | .0494 | .00198 | -.00014 | -.00750 |
| | | New Displ. | .4180 | 11.6671 | .4546 | .00154 | .00024 | -.01124 |
| | | Diff Displ. | -.0348 | -6.7330 | -.4052 | .00044 | -.00038 | .00374 |
| 152 | 2 | Old Forces | 680.953 | -63.081 | -10.655 | -.004 | 2859.604 | -10296.077 |
| | | Old Displ. | .2275 | -4.2761 | -.5045 | -.00435 | -.00052 | .00666 |
| | | New Displ. | .2253 | -9.7983 | -1.2920 | -.00496 | -.00109 | .00987 |
| | | Diff Displ. | .0023 | 5.5222 | .7874 | .00061 | .00058 | -.00321 |
| 162 | 2 | Old Forces | 1522.988 | -47.328 | 38.725 | -.003 | -6811.560 | -9032.465 |
| | | Old Displ. | .5003 | -3.3892 | 2.9041 | -.00348 | .00459 | .00517 |
| | | New Displ. | .5803 | -7.8643 | 6.6898 | -.00405 | .00672 | .00790 |
| | | Diff Displ. | -.0800 | 4.4751 | -3.7857 | .00057 | -.00213 | -.00273 |
| 172 | 2 | Old Forces | 1735.872 | -47.649 | 36.686 | -.004 | -6030.996 | -9551.075 |
| | | Old Displ. | .5730 | -3.4497 | 2.9690 | -.00389 | .00485 | .00521 |
| | | New Displ. | .6217 | -7.9371 | 7.0559 | -.00445 | .00725 | .00793 |
| | | Diff Displ. | -.0487 | 4.4874 | -4.0869 | .00056 | -.00240 | -.00272 |
| 182 | 2 | Old Forces | 2411.930 | -2.530 | 56.071 | -.005 | -11751.068 | -847.991 |
| | | Old Displ. | .8218 | -.1117 | 4.3722 | -.00494 | .00677 | .00008 |
| | | New Displ. | .9823 | -.1336 | 10.7346 | -.00544 | .01080 | .00020 |
| | | Diff Displ. | -.1605 | .0219 | -6.3624 | .00050 | -.00402 | -.00012 |
| **** Warning: Axial Deflections Are Off I-Z Curves Pile Joint 182 | | | | | | | | |
| 200 | 3 | Old Forces | 375.235 | -114.146 | 99.610 | .000 | -29659.440 | -33599.759 |
| | | Old Displ. | .0920 | -8.1819 | 7.0685 | .00000 | .00652 | .00766 |
| | | New Displ. | .0920 | -9.8257 | 8.4157 | .00000 | .00676 | .00810 |
| | | Diff Displ. | .0000 | 1.6439 | -1.3472 | .00000 | -.00024 | -.00044 |
| 112 | 3 | Old Forces | -845.157 | 30.941 | -153.476 | -.001 | 38631.922 | 8346.493 |
| | | Old Displ. | -.2316 | 1.9988 | -10.4510 | -.00075 | -.01022 | -.00178 |
| | | New Displ. | -.2370 | 2.4204 | -12.5221 | -.00093 | -.01071 | -.00193 |
| | | Diff Displ. | .0054 | -.4217 | 2.0711 | .00018 | .00049 | .00015 |

*** Pile Head Forces and Displacements in Pile Coordinates During Iterations - Load Case 5 ***

| Pile Joint | Iter. No. | | Force or Displ. | | | Moment or Rotation | | |
|--|-----------|-------------|------------------------------|----------|----------|----------------------------------|------------|------------|
| | | | X | Y | Z | X | Y | Z |
| | | | /----- (Kips) or (In) -----/ | | | /----- (In-Kips) or (Rad) -----/ | | |
| 122 | 3 | Old Forces | 164.990 | 121.239 | -90.253 | .000 | 24427.346 | 34066.802 |
| | | Old Displ. | .0690 | 8.8656 | -6.8173 | -.00011 | -.00696 | -.00848 |
| | | New Displ. | .0769 | 10.6165 | -8.1237 | -.00027 | -.00714 | -.00894 |
| | | Diff Displ. | -.0079 | -1.7509 | 1.3065 | .00016 | .00028 | .00046 |
| 132 | 3 | Old Forces | 203.342 | 118.623 | -97.998 | .000 | 27383.427 | 33555.442 |
| | | Old Displ. | .0602 | 8.7927 | -7.3439 | -.00029 | -.00713 | -.00839 |
| | | New Displ. | .0688 | 10.5424 | -8.7428 | -.00044 | -.00743 | -.00887 |
| | | Diff Displ. | .0113 | -1.7497 | 1.3989 | .00015 | .00030 | .00049 |
| 142 | 3 | Old Forces | 1270.244 | 143.853 | 7.319 | .002 | -2752.983 | 44949.845 |
| | | Old Displ. | .4180 | 11.6671 | .4546 | .00154 | .00024 | -.01124 |
| | | New Displ. | .4194 | 13.9894 | .6042 | .00141 | .00035 | -.01179 |
| | | Diff Displ. | -.0015 | -2.3223 | -.1496 | .00014 | -.00011 | .00055 |
| 152 | 3 | Old Forces | 673.833 | -133.215 | -19.502 | -.005 | 6093.579 | -37716.040 |
| | | Old Displ. | .2253 | -9.7983 | -1.2920 | -.00496 | -.00109 | .00987 |
| | | New Displ. | .2208 | -11.7101 | -1.5703 | -.00517 | -.00122 | .01040 |
| | | Diff Displ. | .0044 | 1.9117 | .2784 | .00021 | .00012 | -.00053 |
| 162 | 3 | Old Forces | 1756.859 | -96.934 | 82.463 | -.004 | -26183.631 | -30776.670 |
| | | Old Displ. | .5803 | -7.8643 | 6.6898 | -.00405 | .00672 | .00790 |
| | | New Displ. | .5925 | -9.4161 | 7.9910 | -.00424 | .00705 | .00837 |
| | | Diff Displ. | -.0122 | 1.5519 | -1.3011 | .00019 | -.00033 | -.00048 |
| 172 | 3 | Old Forces | 1874.497 | -96.103 | 83.633 | -.004 | -26600.776 | -31076.015 |
| | | Old Displ. | .6217 | -7.9371 | 7.0559 | -.00445 | .00725 | .00793 |
| | | New Displ. | .6154 | -9.4918 | 8.4601 | -.00463 | .00762 | .00836 |
| | | Diff Displ. | .0063 | 1.5547 | -1.4042 | .00018 | -.00037 | -.00043 |
| 182 | 3 | Old Forces | 2838.291 | -.860 | 118.383 | -.005 | -42603.724 | -187.883 |
| | | Old Displ. | .9823 | -.1336 | 10.7346 | -.00544 | .01080 | .00020 |
| | | New Displ. | .9930 | -.1493 | 12.9403 | -.00560 | .01140 | .00024 |
| | | Diff Displ. | -.0108 | .0156 | -2.2057 | .00016 | -.00061 | -.00004 |
| ***** Warning: Axial Deflections Are Off I-Z Curves Pile Joint 182 | | | | | | | | |
| 200 | 4 | Old Forces | 375.235 | -134.649 | 117.002 | .000 | -38486.978 | -43661.083 |
| | | Old Displ. | .0920 | -9.8257 | 8.4157 | .00000 | .00676 | .00810 |
| | | New Displ. | .0920 | -9.9031 | 8.4811 | .00000 | .00678 | .00813 |
| | | Diff Displ. | .0000 | .0774 | -.0654 | .00000 | -.00001 | -.00003 |
| 112 | 4 | Old Forces | -862.223 | 36.031 | -180.215 | -.001 | 49970.762 | 10402.383 |
| | | Old Displ. | -.2370 | 2.4204 | -12.5221 | -.00093 | -.01071 | -.00193 |
| | | New Displ. | -.2373 | 2.4296 | -12.6240 | -.00093 | -.01073 | -.00193 |
| | | Diff Displ. | .0003 | -.0091 | .1020 | .00000 | .00002 | .00000 |
| 122 | 4 | Old Forces | 191.991 | 141.511 | -105.757 | .000 | 31713.793 | 43463.253 |
| | | Old Displ. | .0769 | 10.6165 | -8.1237 | -.00027 | -.00714 | -.00894 |
| | | New Displ. | .0772 | 10.6945 | -8.1896 | -.00026 | -.00716 | -.00896 |
| | | Diff Displ. | -.0004 | -.0780 | .0658 | .00000 | .00002 | .00002 |

*** Pile Head Forces and Displacements In Pile Coordinates During Iterations - Load Case 6 ***

| Pile Joint | Iter. No. | | Force or Displ. | | | Moment or Rotation | | |
|--|-----------|-------------|------------------------------|----------|----------|----------------------------------|------------|------------|
| | | | X | Y | Z | X | Y | Z |
| | | | /----- (Kips) or (In) -----/ | | | /----- (In-Kips) or (Rad) -----/ | | |
| 132 | 4 | Old Forces | 164.438 | 139.111 | -114.768 | .000 | 35044.027 | 42698.392 |
| | | Old Displ. | .0688 | 10.5424 | -8.7428 | -.00044 | -.00743 | -.00887 |
| | | New Displ. | .0684 | 10.6203 | -8.8084 | -.00044 | -.00744 | -.00889 |
| | | Diff Displ. | .0005 | -.0779 | .0656 | .00000 | .00001 | .00002 |
| 142 | 4 | Old Forces | 1274.676 | 168.676 | 8.607 | .001 | -3275.446 | 57463.149 |
| | | Old Displ. | .4194 | 13.9894 | .6042 | .00141 | .00035 | -.01179 |
| | | New Displ. | .4196 | 14.0908 | .6128 | .00141 | .00036 | -.01181 |
| | | Diff Displ. | -.0001 | -.1014 | -.0086 | .00000 | -.00001 | .00002 |
| 152 | 4 | Old Forces | 659.841 | -155.870 | -22.461 | -.005 | 7382.667 | -48139.741 |
| | | Old Displ. | .2208 | -11.7101 | -1.5703 | -.00517 | -.00122 | .01040 |
| | | New Displ. | .2207 | -11.8115 | -1.5796 | -.00517 | -.00122 | .01041 |
| | | Diff Displ. | .0001 | .1014 | .0092 | .00000 | .00000 | -.00001 |
| 162 | 4 | Old Forces | 1791.731 | -112.929 | 96.354 | -.004 | -33437.282 | -39045.371 |
| | | Old Displ. | .5925 | -9.4161 | 7.9910 | -.00424 | .00705 | .00837 |
| | | New Displ. | .5931 | -9.4944 | 8.0567 | -.00424 | .00706 | .00839 |
| | | Diff Displ. | -.0006 | .0783 | -.0658 | .00000 | -.00001 | -.00002 |
| 172 | 4 | Old Forces | 1856.820 | -112.398 | 98.743 | -.005 | -34282.511 | -39406.758 |
| | | Old Displ. | .6154 | -9.4918 | 8.4601 | -.00463 | .00762 | .00836 |
| | | New Displ. | .6150 | -9.5701 | 8.5258 | -.00463 | .00763 | .00837 |
| | | Diff Displ. | .0004 | .0783 | -.0657 | .00000 | -.00001 | -.00001 |
| 182 | 4 | Old Forces | 2866.780 | -.648 | 139.130 | -.006 | -54543.829 | -81.388 |
| | | Old Displ. | .9930 | -.1493 | 12.9403 | -.00560 | .01140 | .00024 |
| | | New Displ. | .9933 | -.1584 | 13.0431 | -.00560 | .01143 | .00025 |
| | | Diff Displ. | -.0003 | .0091 | -.1028 | .00000 | -.00002 | .00000 |
| ***** Warning: Axial Deflections Are Off I-Z Curves Pile Joint 182 | | | | | | | | |
| 200 | 5 | Old Forces | 375.235 | -135.521 | 117.824 | .000 | -38903.552 | -44084.750 |
| | | Old Displ. | .0920 | -9.9031 | 8.4811 | .00000 | .00678 | .00813 |
| | | New Displ. | .0920 | -9.9037 | 8.4807 | .00000 | .00678 | .00813 |
| | | Diff Displ. | .0000 | .0005 | .0004 | .00000 | .00000 | .00000 |
| 112 | 5 | Old Forces | -863.206 | 36.088 | -181.515 | -.001 | 50530.683 | 10443.100 |
| | | Old Displ. | -.2373 | 2.4296 | -12.6240 | -.00093 | -.01073 | -.00193 |
| | | New Displ. | -.2373 | 2.4329 | -12.6233 | -.00094 | -.01073 | -.00193 |
| | | Diff Displ. | .0000 | -.0033 | -.0007 | .00000 | .00000 | .00000 |
| 122 | 5 | Old Forces | 193.216 | 142.351 | -106.515 | .000 | 32063.400 | 43862.944 |
| | | Old Displ. | .0772 | 10.6945 | -8.1896 | -.00026 | -.00716 | -.00896 |
| | | New Displ. | .0772 | 10.6963 | -8.1885 | -.00027 | -.00716 | -.00896 |
| | | Diff Displ. | .0000 | -.0018 | -.0011 | .00000 | .00000 | .00000 |
| 132 | 5 | Old Forces | 162.817 | 140.009 | -115.589 | .000 | 35433.576 | 43117.939 |
| | | Old Displ. | .0684 | 10.6203 | -8.8084 | -.00044 | -.00744 | -.00889 |
| | | New Displ. | .0684 | 10.6221 | -8.8085 | -.00045 | -.00744 | -.00889 |
| | | Diff Displ. | .0000 | -.0018 | .0002 | .00000 | .00000 | .00000 |

*** Pile Head Load And Deformation Report For Pile Joint 200 Load Case No. 6 ***

| | | Allowable Modifier | 1.330 | | |
|---------------------------|--------------------------|--------------------|---------|------------|------------|
| | | | X | Y | Z |
| Specified Springs: | Translational (Kips/In) | | | | |
| | Rotational (In-Kips/Rad) | 1.00 | | | |
| Calculated Loads: | Force (Kips) | | 375.235 | -135.530 | 117.815 |
| | Moment (In-Kips) | | .000 | -38899.640 | -44088.790 |
| Calculated Displacements: | Translational (In) | | .0920 | -9.9037 | 8.4807 |
| | Rotational (Rad) | | .00000 | .00678 | .00813 |

*** Pile Head Load And Deformation Report For Pile Joint 112 Load Case No. 6 ***

| | Allowable Modifier | 1.330 | | | |
|---------------------------|--------------------------|----------|-----------|-----------|---|
| | | | X | Y | Z |
| Specified Springs: | Translational (Kips/In) | | | | |
| | Rotational (In-Kips/Rad) | 1.00 | | | |
| Calculated Loads: | Force (Kips) | -863.142 | 36.160 | -181.501 | |
| | Moment (In-Kips) | -.001 | 50525.600 | 10471.560 | |
| Calculated Displacements: | Translational (In) | -.2373 | 2.4329 | -12.6233 | |
| | Rotational (Rad) | -.00094 | -.01073 | -.00193 | |

*** Pile Head Load And Deformation Report For Pile Joint 122 Load Case No. 6 ***

Allowable Modifier 1.330

X Y Z

Specified Springs: Translational (Kips/In)

Rotational (In-Kips/Rad) 1.00

Calculated Loads: Force (Kips)

193.268 142.379 -106.488

Moment (In-Kips)

.000 32052.410 43874.730

Calculated Displacements: Translational (In)

.0772 10.6963 -8.1885

Rotational (Rad)

-.00027 -.00716 -.00896

*** Pile Head Load And Deformation Report For Pile Joint 132 Load Case No. 6 ***

Allowable Modifier 1.330

X Y Z

Specified Springs: Translational (Kips/In)

Rotational (In-Kips/Rad) 1.00

Calculated Loads: Force (Kips) 162.764 140.034 -115.583

Moment (In-Kips) .000 35431.420 43128.350

Calculated Displacements: Translational (In) .0684 10.6221 -8.8085

Rotational (Rad) -.00045 -.00744 -.00889

*** Pile Head Load And Deformation Report For Pile Joint 142 Load Case No. 6 ***

| | | Allowable Modifier | 1.330 | | |
|---------------------------|--------------------------|--------------------|----------|-----------|-----------|
| | | | X | Y | Z |
| Specified Springs: | Translational (Kips/In) | | | | |
| | Rotational (In-Kips/Rad) | | 1.00 | | |
| Calculated Loads: | Force (Kips) | | 1275.051 | 169.751 | 8.661 |
| | Moment (In-Kips) | | .001 | -3292.258 | 58019.640 |
| Calculated Displacements: | Translational (In) | | .4195 | 14.0934 | .6127 |
| | Rotational (Rad) | | .00141 | .00036 | -.01182 |

*** Pile Head Load And Deformation Report For Pile Joint 152 Load Case No. 6 ***

| | | | | |
|---------------------------|--------------------------|---------|----------|------------|
| | Allowable Modifier | 1.330 | | |
| | | | X | Y |
| | | | | Z |
| Specified Springs: | Translational (Kips/In) | | | |
| | Rotational (In-Kips/Rad) | 1.00 | | |
| Calculated Loads: | Force (Kips) | 659.379 | -157.083 | -22.580 |
| | Moment (In-Kips) | -.005 | 7446.230 | -48726.740 |
| Calculated Displacements: | Translational (In) | .2207 | -11.8090 | -1.5811 |
| | Rotational (Rad) | -.00517 | -.00122 | .01041 |

*** Pile Head Load And Deformation Report For Pile Joint 162 Load Case No. 6 ***

Allowable Modifier 1.330

X Y Z

Specified Springs: Translational (Kips/in)
Rotational (In-Kips/Rad) 1.00

Calculated Loads: Force (Kips) 1793.406 -113.714 97.026
Moment (In-Kips) -.004 -33800.440 -39464.650

Calculated Displacements: Translational (in) .5931 -9.4937 8.0557
Rotational (Rad) -.00424 .00706 .00839

*** Pile Head Load And Deformation Report For Pile Joint 172 Load Case No. 6 ***

| | | Allowable Modifier | 1.330 | | |
|---------------------------|--------------------------|--------------------|----------|------------|------------|
| | | | X | Y | Z |
| Specified Springs: | Translational (Kips/In) | | | | |
| | Rotational (In-Kips/Rad) | | 1.00 | | |
| Calculated Loads: | Force (Kips) | | 1855.792 | -113.265 | 99.443 |
| | Moment (In-Kips) | | -.005 | -34654.020 | -39862.660 |
| Calculated Displacements: | Translational (In) | | .6151 | -9.5694 | 8.5260 |
| | Rotational (Rad) | | -.00464 | .00763 | .00837 |

*** Pile Head Load And Deformation Report For Pile Joint 182 Load Case No. 6 ***

| | | | | |
|---------------------------|--------------------------|----------|------------|----------|
| | Allowable Modifier | 1.330 | | |
| | | | X | Y |
| | | | | Z |
| Specified Springs: | Translational (Kips/In) | | | |
| | Rotational (In-Kips/Rad) | 1.00 | | |
| Calculated Loads: | Force (Kips) | 2867.753 | -.730 | 140.072 |
| | Moment (In-Kips) | -.006 | -55100.820 | -116.041 |
| Calculated Displacements: | Translational (In) | .9934 | -.1565 | 13.0440 |
| | Rotational (Rad) | -.00560 | .01143 | .00025 |

*** Pile Head Load And Deformation Report For Pile Joint 200 Load Case No. 7 ***

| | | Allowable Modifier | 1.330 | | |
|---------------------------|--------------------------|--------------------|---------|------------|------------|
| | | | X | Y | Z |
| Specified Springs: | Translational (Kips/In) | | | | |
| | Rotational (In-Kips/Rad) | 1.00 | | | |
| Calculated Loads: | Force (Kips) | | 375.235 | -68.390 | 154.610 |
| | Moment (In-Kips) | | .000 | -50009.740 | -21420.200 |
| Calculated Displacements: | Translational (In) | | .0920 | -4.9414 | 10.8251 |
| | Rotational (Rad) | | .00000 | .00887 | .00427 |

*** Pile Head Load And Deformation Report For Pile Joint 112 Load Case No. 7 ***

Allowable Modifier 1.330

X Y Z

Specified Springs: Translational (Kips/In)

Rotational (In-Kips/Rad) 1.00

Calculated Loads: Force (Kips) -723.676 -42.085 -160.030

Moment (In-Kips) -.002 43712.860 -11353.060

Calculated Displacements: Translational (In) -.1935 -2.8455 -10.7116

Rotational (Rad) -.00177 -.00950 .00257

*** Pile Head Load And Deformation Report For Pile Joint 122 Load Case No. 7 ***

Allowable Modifier 1.330

X Y Z

Specified Springs: Translational (Kips/In)
 Rotational (In-Kips/Rad) 1.00

Calculated Loads: Force (Kips) -101.928 79.244 -146.128
 Moment (In-Kips) -.001 41999.170 23190.070

Calculated Displacements: Translational (In) -.0083 5.6174 -10.5319
 Rotational (Rad) -.00070 -.00942 -.00487

*** Pile Head Load And Deformation Report For Pile Joint 132 Load Case No. 7 ***

| | | Allowable Modifier | 1.330 | | |
|---------------------------|--------------------------|--------------------|---------|-----------|-----------|
| | | | X | Y | Z |
| Specified Springs: | Translational (Kips/In) | | | | |
| | Rotational (In-Kips/Rad) | | | | 1.00 |
| Calculated Loads: | Force (Kips) | | -86.396 | 77.144 | -153.394 |
| | Moment (In-Kips) | | -.001 | 45018.240 | 22731.350 |
| Calculated Displacements: | Translational (In) | | -.0038 | 5.5722 | -11.1214 |
| | Rotational (Rad) | | -.00079 | -.00966 | -.00481 |

*** Pile Head Load And Deformation Report For Pile Joint 14Z Load Case No. 7 ***

| | | Allowable Modifier | 1.330 | | |
|---------------------------|--------------------------|--------------------|---------|-----------|-----------|
| | | | X | Y | Z |
| Specified Springs: | Translational (Kips/In) | | | | |
| | Rotational (In-Kips/Rad) | | | | 1.00 |
| Calculated Loads: | Force (Kips) | | 634.990 | 158.597 | -56.685 |
| | Moment (In-Kips) | | .001 | 17453.290 | 50157.940 |
| Calculated Displacements: | Translational (In) | | .2130 | 12.2225 | -4.4959 |
| | Rotational (Rad) | | .00099 | -.00404 | -.01046 |

*** Pile Head Load And Deformation Report For Pile Joint 152 Load Case No. 7 ***

Allowable Modifier 1.330

X Y Z

Specified Springs: Translational (Kips/In)

Rotational (In-Kips/Rad) 1.00

Calculated Loads: Force (Kips) 1305.069 -131.117 45.668

Moment (In-Kips) -.005 -14347.260 -41735.640

Calculated Displacements: Translational (In) .4295 -9.9568 3.5234

Rotational (Rad) -.00478 .00334 .00921

*** Pile Head Load And Deformation Report For Pile Joint 162 Load Case No. 7 ***

| | | | | |
|---------------------------|--------------------------|----------|------------|------------|
| | Allowable Modifier | 1.330 | | |
| | | | X | Y |
| | | | | Z |
| Specified Springs: | Translational (Kips/In) | | | |
| | Rotational (In-Kips/Rad) | 1.00 | | |
| Calculated Loads: | Force (Kips) | 2029.463 | -53.199 | 126.585 |
| | Moment (In-Kips) | -.004 | -44044.520 | -18249.360 |
| Calculated Displacements: | Translational (In) | .6772 | -4.4517 | 10.3678 |
| | Rotational (Rad) | -.00351 | .00938 | .00416 |

*** Pile Head Load And Deformation Report For Pile Joint 172 Load Case No. 7 ***

| | | Allowable Modifier | 1.330 | | |
|---------------------------|--------------------------|--------------------|----------|------------|------------|
| | | | X | Y | Z |
| Specified Springs: | Translational (Kips/In) | | | | |
| | Rotational (In-Kips/Rad) | | | | 1.00 |
| Calculated Loads: | Force (Kips) | | 2141.598 | -52.671 | 127.949 |
| | Moment (In-Kips) | | -.004 | -45012.800 | -18472.900 |
| Calculated Displacements: | Translational (In) | | .7179 | -4.4951 | 10.8673 |
| | Rotational (Rad) | | -.00364 | .00995 | .00415 |

*** Pile Head Load And Deformation Report For Pile Joint 182 Load Case No. 7 ***

| | | Allowable Modifier | 1.330 | | |
|---------------------------|--------------------------|--------------------|----------|------------|-----------|
| | | | X | Y | Z |
| Specified Springs: | Translational (Kips/In) | | | | |
| | Rotational (In-Kips/Rad) | 1.00 | | | |
| Calculated Loads: | Force (Kips) | | 2749.470 | 58.234 | 123.147 |
| | Moment (In-Kips) | | -.004 | -46983.140 | 22514.190 |
| Calculated Displacements: | Translational (In) | | .9487 | 5.1188 | 11.1245 |
| | Rotational (Rad) | | -.00409 | .00996 | -.00440 |

*** Pile Head Load And Deformation Report For Pile Joint 200 Load Case No. 8 ***

| | | Allowable Modifier | 1.330 | | |
|---------------------------|--------------------------|--------------------|---------|------------|----------|
| | | | X | Y | Z |
| Specified Springs: | Translational (Kips/In) | | | | |
| | Rotational (In-Kips/Rad) | | | | 1.00 |
| Calculated Loads: | Force (Kips) | | 375.235 | 8.983 | 165.472 |
| | Moment (In-Kips) | | .000 | -53104.090 | 3664.408 |
| Calculated Displacements: | Translational (in) | | .0920 | .4537 | 11.4688 |
| | Rotational (Rad) | | .00000 | .00948 | -.00013 |

*** Pile Head Load And Deformation Report For Pile Joint 112 Load Case No. 8 ***

| | Allowable Modifier | 1.330 | | | |
|---------------------------|--------------------------|----------|-----------|------------|---|
| | | | X | Y | Z |
| Specified Springs: | Translational (Kips/In) | | | | |
| | Rotational (In-Kips/Rad) | 1.00 | | | |
| Calculated Loads: | Force (Kips) | -334.397 | -112.641 | -109.065 | |
| | Moment (In-Kips) | -.002 | 30216.450 | -31764.600 | |
| Calculated Displacements: | Translational (In) | -.0757 | -7.5477 | -7.4224 | |
| | Rotational (Rad) | -.00215 | -.00676 | .00669 | |

*** Pile Head Load And Deformation Report For Pile Joint 122 Load Case No. 8 ***

Allowable Modifier 1.330

X Y Z

Specified Springs: Translational (Kips/In)
 Rotational (In-Kips/Rad) 1.00

Calculated Loads: Force (Kips) -201.541 -1.823 -160.866
 Moment (In-Kips) -.001 45485.090 -850.967

Calculated Displacements: Translational (In) -.0371 -.0540 -11.2671
 Rotational (Rad) -.00076 -.01016 -.00007

*** Pile Head Load And Deformation Report For Pile Joint 132 Load Case No. 8 ***

| | Allowable Modifier | 1.330 | | | |
|---------------------------|--------------------------|----------|-----------|----------|---|
| | | | X | Y | Z |
| Specified Springs: | Translational (Kips/In) | | | | |
| | Rotational (In-Kips/Rad) | 1.00 | | | |
| Calculated Loads: | Force (Kips) | -136.407 | -1.762 | -164.961 | |
| | Moment (In-Kips) | -.001 | 47597.050 | -785.592 | |
| Calculated Displacements: | Translational (In) | -.0182 | -.0626 | -11.6775 | |
| | Rotational (Rad) | -.00081 | -.01031 | -.00005 | |

*** Pile Head Load And Deformation Report For Pile Joint 142 Load Case No. 8 ***

| | | Allowable Modifier | 1.330 | | |
|---------------------------|--------------------------|--------------------|---------|-----------|-----------|
| | | | X | Y | Z |
| Specified Springs: | Translational (Kips/In) | | | | |
| | Rotational (In-Kips/Rad) | | | 1.00 | |
| Calculated Loads: | Force (Kips) | | 108.548 | 117.478 | -117.830 |
| | Moment (In-Kips) | | .000 | 34739.000 | 34866.320 |
| Calculated Displacements: | Translational (In) | | .0529 | 8.5606 | -8.6411 |
| | Rotational (Rad) | | .00049 | -.00765 | -.00749 |

*** Pile Head Load And Deformation Report For Pile Joint 152 Load Case No. 8 ***

| | Allowable Modifier | 1.330 | | | |
|---------------------------|--------------------------|----------|------------|------------|---|
| | | | X | Y | Z |
| Specified Springs: | Translational (Kips/In) | | | | |
| | Rotational (In-Kips/Rad) | 1.00 | | | |
| Calculated Loads: | Force (Kips) | 1841.325 | -86.168 | 100.131 | |
| | Moment (In-Kips) | -.003 | -33566.180 | -28488.000 | |
| Calculated Displacements: | Translational (In) | .6128 | -6.8939 | 7.8569 | |
| | Rotational (Rad) | -.00314 | .00727 | .00656 | |

*** Pile Head Load And Deformation Report For Pile Joint 162 Load Case No. 8 ***

Allowable Modifier 1.330

X Y Z

Specified Springs: Translational (Kips/In)

Rotational (In-Kips/Rad) 1.00

Calculated Loads: Force (Kips)

2089.031 12.946 134.846

Moment (In-Kips)

-.002 -46956.630 4968.587

Calculated Displacements:

Translational (In)

.6987 .8937 11.0659

Rotational (Rad)

-.00193 .01009 -.00058

*** Pile Head Load And Deformation Report For Pile Joint 172 Load Case No. 8 ***

| | | Allowable Modifier | 1.330 | | | |
|---------------------------|--------------------------|--------------------|----------|------------|----------|---|
| | | | | X | Y | Z |
| Specified Springs: | Translational (Kips/In) | | | | | |
| | Rotational (In-Kips/Rad) | | 1.00 | | | |
| Calculated Loads: | Force (Kips) | | 2226.287 | 12.575 | 135.132 | |
| | Moment (In-Kips) | | -.002 | -47740.190 | 4905.249 | |
| Calculated Displacements: | Translational (In) | | .7489 | .8876 | 11.4605 | |
| | Rotational (Rad) | | -.00185 | .01055 | -.00058 | |

*** Pile Head Load And Deformation Report For Pile Joint 182 Load Case No. 8 ***

| | | Allowable Modifier | 1.330 | | |
|---------------------------|--------------------------|--------------------|----------|------------|-----------|
| | | | X | Y | Z |
| Specified Springs: | Translational (Kips/In) | | | | |
| | Rotational (In-Kips/Rad) | | 1.00 | | |
| Calculated Loads: | Force (Kips) | | 2366.239 | 108.585 | 87.538 |
| | Moment (In-Kips) | | -.001 | -31770.660 | 40011.910 |
| Calculated Displacements: | Translational (In) | | .8047 | 9.2302 | 7.6420 |
| | Rotational (Rad) | | -.00111 | .00694 | -.00805 |

*** Pile Critical Load Case Report For Pile Joint Z00 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|-------------------|---------------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|-------|----------|--------------------|----------------|--------------------|-------|-------|
| | Normal Value (In) | To Pile Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | | | Axial | Bend. | Total |
| .00 | 13.04 | 139 | -374.9 | 0. | 179.1 | 138 | 58796. | 138 | 33.00 | 16.49 | 36.0 | -.44 | 16.67 | .02 | .46 | .48 |
| 2.01 | 12.77 | 139 | -380.1 | 0. | 178.0 | 138 | 54372. | 138 | 33.00 | 16.49 | 36.0 | -.44 | 15.41 | .02 | .43 | .44 |
| 4.02 | 12.49 | 139 | -385.3 | 0. | 176.8 | 138 | 49965. | 138 | 33.00 | 16.49 | 36.0 | -.45 | 14.16 | .02 | .39 | .41 |
| 6.04 | 12.19 | 139 | -390.5 | 0. | 175.5 | 138 | 45579. | 138 | 33.00 | 16.49 | 36.0 | -.46 | 12.92 | .02 | .36 | .38 |
| 8.05 | 11.87 | 139 | -395.7 | 0. | 174.1 | 138 | 41217. | 138 | 33.00 | 16.49 | 36.0 | -.46 | 11.68 | .02 | .33 | .34 |
| 10.06 | 11.54 | 139 | -400.9 | 0. | 172.6 | 138 | 36881. | 138 | 33.00 | 16.49 | 36.0 | -.47 | 10.45 | .02 | .29 | .31 |
| 12.07 | 11.19 | 139 | -406.1 | 0. | 171.0 | 138 | 32575. | 138 | 33.00 | 16.49 | 36.0 | -.47 | 9.23 | .02 | .26 | .27 |
| 14.09 | 10.84 | 139 | -411.3 | 0. | 169.3 | 138 | 28302. | 138 | 33.00 | 16.49 | 36.0 | -.48 | 8.02 | .02 | .22 | .24 |
| 16.10 | 10.47 | 139 | -416.5 | 0. | 167.5 | 138 | 24064. | 137 | 33.00 | 16.49 | 36.0 | -.49 | 6.82 | .02 | .19 | .21 |
| 18.11 | 10.10 | 139 | -421.7 | 0. | 165.6 | 138 | 19864. | 137 | 33.00 | 16.49 | 36.0 | -.49 | 5.63 | .02 | .16 | .17 |
| 20.12 | 9.72 | 139 | -426.9 | 0. | 163.6 | 138 | 15705. | 137 | 33.00 | 16.49 | 36.0 | -.50 | 4.45 | .02 | .12 | .14 |
| 22.14 | 9.33 | 139 | -432.1 | 0. | 161.6 | 138 | 11591. | 136 | 33.00 | 16.49 | 36.0 | -.51 | 3.29 | .02 | .09 | .11 |
| 24.15 | 8.94 | 139 | -437.3 | 0. | 159.5 | 138 | 7525. | 135 | 33.00 | 16.49 | 36.0 | -.51 | 2.13 | .02 | .06 | .08 |
| 26.16 | 8.55 | 139 | -442.5 | 0. | 157.3 | 138 | 3517. | 131 | 33.00 | 16.49 | 36.0 | -.52 | 1.00 | .02 | .03 | .05 |
| 28.17 | 8.16 | 139 | -447.7 | 0. | 155.0 | 138 | 649. | 1 | 33.00 | 16.49 | 36.0 | -.52 | .18 | .02 | .01 | .02 |
| 30.19 | 7.76 | 139 | -452.9 | 0. | 152.7 | 138 | 4422. | -35 | 33.00 | 16.49 | 36.0 | -.53 | 1.25 | .02 | .03 | .05 |
| 32.20 | 7.37 | 139 | -456.8 | 0. | 146.1 | 138 | 8276. | -38 | 33.00 | 16.49 | 36.0 | -.53 | 2.35 | .02 | .07 | .08 |
| 34.21 | 6.98 | 139 | -459.4 | 0. | 135.5 | 138 | 11977. | -38 | 33.00 | 16.49 | 36.0 | -.54 | 3.39 | .02 | .09 | .11 |
| 36.22 | 6.60 | 139 | -461.9 | 0. | 125.1 | 138 | 15424. | -39 | 33.00 | 16.49 | 36.0 | -.54 | 4.37 | .02 | .12 | .14 |
| 38.23 | 6.22 | 139 | -464.5 | 0. | 114.9 | 138 | 18618. | -39 | 33.00 | 16.49 | 36.0 | -.54 | 5.28 | .02 | .15 | .17 |
| 40.25 | 5.85 | 139 | -467.0 | 0. | 104.9 | 138 | 21565. | -39 | 33.00 | 16.49 | 36.0 | -.55 | 6.11 | .02 | .17 | .19 |
| 42.26 | 5.48 | 139 | -469.6 | 0. | 95.2 | 138 | 24269. | -40 | 33.00 | 16.49 | 36.0 | -.55 | 6.88 | .02 | .19 | .21 |
| 44.27 | 5.12 | 139 | -472.2 | 0. | 85.6 | 138 | 26735. | -40 | 33.00 | 16.49 | 36.0 | -.55 | 7.58 | .02 | .21 | .23 |
| 46.28 | 4.77 | 139 | -474.8 | 0. | 76.3 | 138 | 28966. | -40 | 33.00 | 16.49 | 36.0 | -.56 | 8.21 | .02 | .23 | .25 |
| 48.30 | 4.44 | 139 | -477.5 | 0. | 67.2 | 138 | 30969. | -40 | 33.00 | 16.49 | 36.0 | -.56 | 8.78 | .02 | .24 | .26 |
| 50.31 | 4.11 | 139 | -480.1 | 0. | 58.4 | 138 | 32748. | -40 | 33.00 | 16.49 | 36.0 | -.56 | 9.28 | .02 | .26 | .28 |
| 52.32 | 3.79 | 139 | -482.8 | 0. | 49.8 | 138 | 34310. | -40 | 33.00 | 16.49 | 36.0 | -.56 | 9.72 | .02 | .27 | .29 |
| 54.33 | 3.49 | 139 | -485.4 | 0. | 41.4 | 138 | 35658. | -40 | 33.00 | 16.49 | 36.0 | -.57 | 10.11 | .02 | .28 | .30 |
| 56.35 | 3.20 | 139 | -488.1 | 0. | 33.2 | 138 | 36798. | -40 | 33.00 | 16.49 | 36.0 | -.57 | 10.43 | .02 | .29 | .31 |
| 58.36 | 2.92 | 139 | -490.8 | 0. | 25.4 | 137 | 37737. | -40 | 33.00 | 16.49 | 36.0 | -.57 | 10.70 | .02 | .30 | .32 |
| 60.37 | 2.65 | 139 | -493.5 | 0. | 17.8 | 137 | 38480. | -40 | 33.00 | 16.49 | 36.0 | -.58 | 10.91 | .02 | .30 | .32 |
| 62.38 | 2.40 | 139 | -496.3 | 0. | 10.5 | 135 | 39033. | -40 | 33.00 | 16.49 | 36.0 | -.58 | 11.06 | .02 | .31 | .33 |
| 64.40 | 2.16 | 139 | -499.0 | 0. | 3.4 | 128 | 39404. | -40 | 33.00 | 16.49 | 36.0 | -.58 | 11.17 | .02 | .31 | .33 |
| 66.41 | 1.93 | 139 | -501.8 | 0. | 3.5 | -30 | 39598. | -40 | 33.00 | 16.49 | 36.0 | -.59 | 11.22 | .02 | .31 | .33 |
| 68.42 | 1.72 | 139 | -504.5 | 0. | 10.1 | -37 | 39621. | -40 | 33.00 | 16.49 | 36.0 | -.59 | 11.23 | .02 | .31 | .33 |
| 70.43 | 1.52 | 139 | -507.3 | 0. | 16.5 | -38 | 39477. | -40 | 33.00 | 16.49 | 36.0 | -.59 | 11.19 | .02 | .31 | .33 |
| 72.44 | 1.34 | 139 | -510.1 | 0. | 22.5 | -39 | 39174. | -40 | 33.00 | 16.49 | 36.0 | -.60 | 11.10 | .02 | .31 | .33 |
| 74.46 | 1.16 | 139 | -512.9 | 0. | 28.2 | -39 | 38718. | -40 | 33.00 | 16.49 | 36.0 | -.60 | 10.97 | .02 | .31 | .33 |
| 76.47 | 1.01 | 139 | -515.8 | 0. | 33.7 | -39 | 38118. | -40 | 33.00 | 16.49 | 36.0 | -.60 | 10.80 | .02 | .30 | .32 |
| 78.48 | .86 | 139 | -518.6 | 0. | 39.0 | -40 | 37378. | -40 | 33.00 | 16.49 | 36.0 | -.61 | 10.59 | .02 | .30 | .32 |
| 80.49 | .73 | 139 | -521.5 | 0. | 43.9 | -40 | 36505. | -40 | 33.00 | 16.49 | 36.0 | -.61 | 10.35 | .02 | .29 | .31 |
| 82.51 | .61 | 139 | -524.3 | 0. | 48.6 | -40 | 35506. | -40 | 33.00 | 16.49 | 36.0 | -.61 | 10.06 | .02 | .28 | .30 |
| 84.52 | .50 | 138 | -527.2 | 0. | 52.9 | -40 | 34389. | -40 | 33.00 | 16.49 | 36.0 | -.62 | 9.75 | .02 | .27 | .29 |
| 86.53 | .41 | 138 | -530.1 | 0. | 57.0 | -40 | 33160. | -40 | 33.00 | 16.49 | 36.0 | -.62 | 9.40 | .02 | .26 | .28 |
| 88.54 | .32 | 138 | -533.0 | 0. | 60.8 | -40 | 31827. | -40 | 33.00 | 16.49 | 36.0 | -.62 | 9.02 | .02 | .25 | .27 |
| 90.56 | .25 | 138 | -536.0 | 0. | 64.3 | -40 | 30398. | -40 | 33.00 | 16.49 | 36.0 | -.63 | 8.62 | .02 | .24 | .26 |
| 92.57 | .19 | 138 | -538.9 | 0. | 67.2 | -40 | 28880. | -40 | 33.00 | 16.49 | 36.0 | -.63 | 8.19 | .02 | .23 | .25 |
| 94.58 | .13 | 138 | -541.9 | 0. | 69.4 | -40 | 27285. | -40 | 33.00 | 16.49 | 36.0 | -.63 | 7.73 | .02 | .22 | .24 |
| 96.59 | .09 | 138 | -544.9 | 0. | 70.8 | -40 | 25633. | -40 | 33.00 | 16.49 | 36.0 | -.64 | 7.27 | .02 | .20 | .22 |
| 98.60 | .06 | 138 | -547.9 | 0. | 71.7 | -40 | 23942. | -40 | 33.00 | 16.49 | 36.0 | -.64 | 6.79 | .02 | .19 | .21 |

* * * Pile Critical Load Case Report For Pile Joint Z00 - Critical Load Case 6 * * *

| Dist. Along Pile (Ft) | Deflection Normal To Pile | | Axial Force | | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|-------|------|--------------------|----------------|--------------------|-------|-------|
| | Value (In) | Angle (Deg) | Force (Kips) | Torsion (In-Kips) | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy | | | Axial | Bend. | Axial |
| 100.62 | .03 | 138 | -547.5 | 0. | 127.0 | -40 | 22224. | -41 | 33.00 | 16.49 | 36.0 | -.64 | 6.30 | .02 | .18 | .20 |
| 102.63 | .01 | 138 | -543.8 | 0. | 173.3 | -40 | 19167. | -41 | 33.00 | 16.49 | 36.0 | -.64 | 5.43 | .02 | .15 | .17 |
| 104.64 | .00 | 136 | -540.2 | 0. | 177.4 | -41 | 14968. | -41 | 33.00 | 16.49 | 36.0 | -.63 | 4.25 | .02 | .12 | .14 |
| 106.65 | .01 | -40 | -536.6 | 0. | 156.8 | -41 | 10709. | -41 | 33.00 | 16.49 | 36.0 | -.63 | 3.04 | .02 | .08 | .11 |
| 108.67 | .01 | -40 | -533.1 | 0. | 124.9 | -41 | 6924. | -41 | 33.00 | 16.49 | 36.0 | -.62 | 1.96 | .02 | .05 | .08 |
| 110.68 | .01 | -41 | -529.7 | 0. | 90.6 | -41 | 3909. | -41 | 33.00 | 16.49 | 36.0 | -.62 | 1.11 | .02 | .03 | .05 |
| 112.69 | .01 | -41 | -526.4 | 0. | 59.6 | -41 | 1720. | -41 | 33.00 | 16.49 | 36.0 | -.62 | .49 | .02 | .01 | .04 |
| 114.70 | .01 | -41 | -523.1 | 0. | 34.4 | -41 | 281. | -42 | 33.00 | 16.49 | 36.0 | -.61 | .08 | .02 | .00 | .02 |
| 116.72 | .00 | -41 | -519.9 | 0. | 15.8 | -41 | 549. | 139 | 33.00 | 16.49 | 36.0 | -.61 | .16 | .02 | .00 | .03 |
| 118.73 | .00 | -41 | -516.8 | 0. | 3.3 | -41 | 930. | 139 | 33.00 | 16.49 | 36.0 | -.60 | .26 | .02 | .01 | .03 |
| 120.74 | .00 | -41 | -513.7 | 0. | 4.0 | 139 | 1012. | 138 | 33.00 | 16.49 | 36.0 | -.60 | .29 | .02 | .01 | .03 |
| 122.75 | .00 | -41 | -510.8 | 0. | 7.4 | 139 | 916. | 138 | 33.00 | 16.49 | 36.0 | -.60 | .26 | .02 | .01 | .03 |
| 124.77 | .00 | -41 | -507.8 | 0. | 8.3 | 139 | 737. | 138 | 33.00 | 16.49 | 36.0 | -.59 | .21 | .02 | .01 | .03 |
| 126.78 | .00 | 139 | -505.0 | 0. | 7.6 | 138 | 537. | 138 | 33.00 | 16.49 | 36.0 | -.59 | .15 | .02 | .00 | .02 |
| 128.79 | .00 | 139 | -502.2 | 0. | 6.2 | 138 | 352. | 138 | 33.00 | 16.49 | 36.0 | -.59 | .10 | .02 | .00 | .02 |
| 130.80 | .00 | 139 | -499.5 | 0. | 4.5 | 138 | 203. | 138 | 33.00 | 16.49 | 36.0 | -.58 | .06 | .02 | .00 | .02 |
| 132.81 | .00 | 138 | -496.9 | 0. | 3.0 | 138 | 93. | 138 | 33.00 | 16.49 | 36.0 | -.58 | .03 | .02 | .00 | .02 |
| 134.83 | .00 | 138 | -494.3 | 0. | 1.7 | 138 | 21. | 138 | 33.00 | 16.49 | 36.0 | -.58 | .01 | .02 | .00 | .02 |
| 136.84 | .00 | 138 | -491.8 | 0. | .8 | 138 | 20. | -40 | 33.00 | 16.49 | 36.0 | -.57 | .01 | .02 | .00 | .02 |
| 138.85 | .00 | 0 | -489.4 | 0. | .2 | 138 | 40. | -40 | 33.00 | 16.49 | 36.0 | -.57 | .01 | .02 | .00 | .02 |
| 140.86 | .00 | 0 | -487.0 | 0. | .2 | -40 | 44. | -40 | 33.00 | 16.49 | 36.0 | -.57 | .01 | .02 | .00 | .02 |
| 142.88 | .00 | 0 | -484.7 | 0. | .3 | -40 | 40. | -41 | 33.00 | 16.49 | 36.0 | -.57 | .01 | .02 | .00 | .02 |
| 144.89 | .00 | 0 | -482.4 | 0. | .4 | -40 | 32. | -41 | 33.00 | 16.49 | 36.0 | -.56 | .01 | .02 | .00 | .02 |
| 146.90 | .00 | 0 | -480.3 | 0. | .3 | -41 | 23. | -41 | 33.00 | 16.49 | 36.0 | -.56 | .01 | .02 | .00 | .02 |
| 148.91 | .00 | 0 | -478.1 | 0. | .3 | -41 | 14. | -41 | 33.00 | 16.49 | 36.0 | -.56 | .00 | .02 | .00 | .02 |
| 150.93 | .00 | 0 | -475.8 | 0. | .2 | -41 | 8. | -41 | 33.00 | 16.49 | 36.0 | -.56 | .00 | .02 | .00 | .02 |
| 152.94 | .00 | 0 | -473.3 | 0. | .1 | -41 | 3. | -41 | 33.00 | 16.49 | 36.0 | -.55 | .00 | .02 | .00 | .02 |
| 154.95 | .00 | 0 | -470.8 | 0. | .0 | -41 | 0. | -42 | 33.00 | 16.49 | 36.0 | -.55 | .00 | .02 | .00 | .02 |
| 156.96 | .00 | 0 | -468.4 | 0. | .0 | -42 | 0. | 139 | 33.00 | 16.49 | 36.0 | -.55 | .00 | .02 | .00 | .02 |
| 158.98 | .00 | 0 | -466.1 | 0. | .0 | 139 | 0. | 139 | 33.00 | 16.49 | 36.0 | -.54 | .00 | .02 | .00 | .02 |
| 160.99 | .00 | 0 | -463.8 | 0. | .0 | 139 | 0. | 139 | 33.00 | 16.49 | 36.0 | -.54 | .00 | .02 | .00 | .02 |

*** Pile Critical Load Case Report For Pile Joint 112 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|-------------------|---------------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|----------|--------------------|----------------|--------------------|-------|-------|
| | Normal Value (In) | To Pile Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | | | Axial | Bend. | Total |
| .00 | 12.86 | -79 | 862.5 | 0. | 184.5 | -78 | 51599. | -78 | 42.00 | 1.75 | 36.0 | 3.90 | 24.14 | .14 | .67 | .81 |
| 2.00 | 12.58 | -79 | 859.7 | 0. | 183.3 | -78 | 47406. | -78 | 42.00 | 1.75 | 36.0 | 3.88 | 22.17 | .14 | .62 | .75 |
| 4.00 | 12.29 | -79 | 856.9 | 0. | 181.9 | -78 | 43261. | -78 | 42.00 | 1.75 | 36.0 | 3.87 | 20.23 | .13 | .56 | .70 |
| 6.00 | 11.98 | -79 | 854.1 | 0. | 180.4 | -78 | 39163. | -78 | 42.00 | 1.75 | 36.0 | 3.86 | 18.32 | .13 | .51 | .64 |
| 8.00 | 11.65 | -79 | 851.3 | 0. | 178.8 | -78 | 35116. | -78 | 42.00 | 1.75 | 36.0 | 3.85 | 16.43 | .13 | .46 | .59 |
| 10.00 | 11.30 | -79 | 848.6 | 0. | 177.1 | -78 | 31119. | -78 | 42.00 | 1.75 | 36.0 | 3.83 | 14.56 | .13 | .41 | .54 |
| 12.00 | 10.94 | -79 | 845.9 | 0. | 175.3 | -78 | 27174. | -77 | 42.00 | 1.75 | 36.0 | 3.82 | 12.71 | .13 | .35 | .49 |
| 14.00 | 10.57 | -79 | 843.1 | 0. | 173.4 | -78 | 23281. | -77 | 42.00 | 1.75 | 36.0 | 3.81 | 10.89 | .13 | .30 | .44 |
| 16.00 | 10.19 | -78 | 840.4 | 0. | 171.4 | -78 | 19443. | -77 | 42.00 | 1.75 | 36.0 | 3.80 | 9.09 | .13 | .25 | .39 |
| 18.00 | 9.80 | -78 | 837.7 | 0. | 169.3 | -78 | 15659. | -77 | 42.00 | 1.75 | 36.0 | 3.79 | 7.32 | .13 | .20 | .34 |
| 20.00 | 9.40 | -78 | 835.0 | 0. | 167.1 | -78 | 11931. | -77 | 42.00 | 1.75 | 36.0 | 3.77 | 5.58 | .13 | .16 | .29 |
| 22.00 | 9.00 | -78 | 832.3 | 0. | 164.8 | -78 | 8261. | -76 | 42.00 | 1.75 | 36.0 | 3.76 | 3.86 | .13 | .11 | .24 |
| 24.00 | 8.59 | -78 | 829.7 | 0. | 162.4 | -78 | 4650. | -74 | 42.00 | 1.75 | 36.0 | 3.75 | 2.18 | .13 | .06 | .19 |
| 26.00 | 8.18 | -78 | 827.0 | 0. | 160.0 | -78 | 1130. | -61 | 42.00 | 1.75 | 36.0 | 3.74 | .53 | .13 | .01 | .14 |
| 28.00 | 7.77 | -78 | 824.4 | 0. | 157.4 | -78 | 2444. | 93 | 42.00 | 1.75 | 36.0 | 3.73 | 1.14 | .13 | .03 | .16 |
| 30.00 | 7.36 | -78 | 821.8 | 0. | 154.9 | -78 | 5873. | 98 | 42.00 | 1.75 | 36.0 | 3.71 | 2.75 | .13 | .08 | .21 |
| 32.00 | 6.96 | -78 | 819.1 | 0. | 152.2 | -78 | 9253. | 99 | 42.00 | 1.75 | 36.0 | 3.70 | 4.33 | .13 | .12 | .25 |
| 34.00 | 6.56 | -78 | 814.2 | 0. | 144.8 | -78 | 12577. | 99 | 42.00 | 1.75 | 36.0 | 3.68 | 5.88 | .13 | .16 | .29 |
| 36.00 | 6.16 | -78 | 807.0 | 0. | 133.0 | -78 | 15730. | 100 | 42.00 | 1.75 | 36.0 | 3.65 | 7.36 | .13 | .20 | .33 |
| 38.00 | 5.77 | -78 | 799.9 | 0. | 121.4 | -78 | 18607. | 100 | 42.00 | 1.75 | 36.0 | 3.61 | 8.70 | .13 | .24 | .37 |
| 40.00 | 5.39 | -78 | 792.8 | 0. | 110.1 | -78 | 21216. | 100 | 42.00 | 1.75 | 36.0 | 3.58 | 9.92 | .12 | .28 | .40 |
| 42.00 | 5.02 | -78 | 785.8 | 0. | 99.1 | -78 | 23564. | 100 | 42.00 | 1.75 | 36.0 | 3.55 | 11.02 | .12 | .31 | .43 |
| 44.00 | 4.66 | -78 | 778.8 | 0. | 88.3 | -78 | 25658. | 100 | 42.00 | 1.75 | 36.0 | 3.52 | 12.00 | .12 | .33 | .46 |
| 46.00 | 4.31 | -78 | 772.0 | 0. | 77.8 | -78 | 27505. | 100 | 42.00 | 1.75 | 36.0 | 3.49 | 12.87 | .12 | .36 | .48 |
| 48.00 | 3.98 | -78 | 765.1 | 0. | 67.6 | -78 | 29111. | 100 | 42.00 | 1.75 | 36.0 | 3.46 | 13.62 | .12 | .38 | .50 |
| 50.00 | 3.65 | -78 | 758.4 | 0. | 57.7 | -78 | 30484. | 100 | 42.00 | 1.75 | 36.0 | 3.43 | 14.26 | .12 | .40 | .52 |
| 52.00 | 3.34 | -78 | 751.7 | 0. | 48.1 | -78 | 31632. | 100 | 42.00 | 1.75 | 36.0 | 3.40 | 14.80 | .12 | .41 | .53 |
| 54.00 | 3.04 | -78 | 745.0 | 0. | 38.9 | -78 | 32563. | 100 | 42.00 | 1.75 | 36.0 | 3.37 | 15.23 | .12 | .42 | .54 |
| 56.00 | 2.76 | -78 | 738.4 | 0. | 29.9 | -77 | 33285. | 100 | 42.00 | 1.75 | 36.0 | 3.34 | 15.57 | .12 | .43 | .55 |
| 58.00 | 2.49 | -78 | 731.9 | 0. | 21.2 | -77 | 33804. | 100 | 42.00 | 1.75 | 36.0 | 3.31 | 15.81 | .12 | .44 | .56 |
| 60.00 | 2.24 | -78 | 725.4 | 0. | 12.8 | -76 | 34128. | 100 | 42.00 | 1.75 | 36.0 | 3.28 | 15.96 | .11 | .44 | .56 |
| 62.00 | 2.00 | -78 | 719.0 | 0. | 4.7 | -72 | 34261. | 100 | 42.00 | 1.75 | 36.0 | 3.25 | 16.03 | .11 | .45 | .56 |
| 64.00 | 1.78 | -78 | 712.7 | 0. | 3.2 | 92 | 34212. | 100 | 42.00 | 1.75 | 36.0 | 3.22 | 16.00 | .11 | .45 | .56 |
| 66.00 | 1.57 | -78 | 706.4 | 0. | 10.6 | 98 | 33989. | 100 | 42.00 | 1.75 | 36.0 | 3.19 | 15.90 | .11 | .44 | .55 |
| 68.00 | 1.38 | -78 | 700.1 | 0. | 17.7 | 99 | 33599. | 101 | 42.00 | 1.75 | 36.0 | 3.16 | 15.72 | .11 | .44 | .55 |
| 70.00 | 1.20 | -78 | 693.9 | 0. | 24.5 | 100 | 33050. | 101 | 42.00 | 1.75 | 36.0 | 3.14 | 15.46 | .11 | .43 | .54 |
| 72.00 | 1.04 | -78 | 687.8 | 0. | 31.1 | 100 | 32349. | 101 | 42.00 | 1.75 | 36.0 | 3.11 | 15.13 | .11 | .42 | .53 |
| 74.00 | .89 | -78 | 681.7 | 0. | 37.2 | 100 | 31501. | 101 | 42.00 | 1.75 | 36.0 | 3.08 | 14.73 | .11 | .41 | .52 |
| 76.00 | .76 | -78 | 675.8 | 0. | 43.1 | 100 | 30515. | 101 | 42.00 | 1.75 | 36.0 | 3.05 | 14.27 | .11 | .40 | .50 |
| 78.00 | .63 | -78 | 669.9 | 0. | 48.6 | 100 | 29400. | 101 | 42.00 | 1.75 | 36.0 | 3.03 | 13.75 | .11 | .38 | .49 |
| 80.00 | .53 | -78 | 664.0 | 0. | 53.8 | 100 | 28162. | 101 | 42.00 | 1.75 | 36.0 | 3.00 | 13.17 | .10 | .37 | .47 |
| 82.00 | .43 | -78 | 658.3 | 0. | 58.6 | 100 | 26807. | 101 | 42.00 | 1.75 | 36.0 | 2.97 | 12.54 | .10 | .35 | .45 |
| 84.00 | .35 | -78 | 652.6 | 0. | 63.1 | 100 | 25345. | 101 | 42.00 | 1.75 | 36.0 | 2.95 | 11.86 | .10 | .33 | .43 |
| 86.00 | .27 | -78 | 646.9 | 0. | 67.3 | 100 | 23783. | 101 | 42.00 | 1.75 | 36.0 | 2.92 | 11.12 | .10 | .31 | .41 |
| 88.00 | .21 | -78 | 641.4 | 0. | 70.6 | 100 | 22127. | 101 | 42.00 | 1.75 | 36.0 | 2.90 | 10.35 | .10 | .29 | .39 |
| 90.00 | .16 | -78 | 635.9 | 0. | 73.2 | 100 | 20398. | 101 | 42.00 | 1.75 | 36.0 | 2.87 | 9.54 | .10 | .27 | .37 |
| 92.00 | .12 | -78 | 630.5 | 0. | 75.0 | 100 | 18615. | 101 | 42.00 | 1.75 | 36.0 | 2.85 | 8.71 | .10 | .24 | .34 |
| 94.00 | .08 | -78 | 625.2 | 0. | 76.2 | 100 | 16793. | 101 | 42.00 | 1.75 | 36.0 | 2.83 | 7.86 | .10 | .22 | .32 |
| 96.00 | .05 | -78 | 619.9 | 0. | 77.1 | 100 | 14946. | 101 | 42.00 | 1.75 | 36.0 | 2.80 | 6.99 | .10 | .19 | .29 |
| 98.00 | .03 | -78 | 614.7 | 0. | 77.6 | 100 | 13083. | 101 | 42.00 | 1.75 | 36.0 | 2.78 | 6.12 | .10 | .17 | .27 |

*** Pile Critical Load Case Report For Pile Joint 112 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection Normal To Pile | | Axial Force | | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|----------|--------------|----------------|--------------------|-------|-------|
| | Value (In) | Angle (Deg) | Force (Kips) | Torsion (In-Kips) | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | | | Axial | Bend. | Total |
| 100.00 | .02 | -78 | 609.6 | 0. | 77.8 | 100 | 11212. | 101 | 42.00 | 1.75 | 36.0 | 2.75 | 5.24 | .10 | .15 | .24 |
| 102.00 | .01 | -77 | 595.0 | 0. | 97.0 | 101 | 9338. | 101 | 42.00 | 1.75 | 36.0 | 2.69 | 4.37 | .09 | .12 | .22 |
| 104.00 | .00 | 97 | 580.8 | 0. | 94.0 | 101 | 7005. | 101 | 42.00 | 1.75 | 36.0 | 2.62 | 3.28 | .09 | .09 | .18 |
| 106.00 | .00 | 100 | 566.8 | 0. | 79.0 | 101 | 4748. | 101 | 42.00 | 1.75 | 36.0 | 2.56 | 2.22 | .09 | .06 | .15 |
| 108.00 | .01 | 101 | 553.2 | 0. | 59.6 | 101 | 2851. | 101 | 42.00 | 1.75 | 36.0 | 2.50 | 1.33 | .09 | .04 | .12 |
| 110.00 | .01 | 101 | 539.8 | 0. | 40.6 | 101 | 1420. | 101 | 42.00 | 1.75 | 36.0 | 2.44 | .66 | .08 | .02 | .10 |
| 112.00 | .00 | 101 | 526.8 | 0. | 24.4 | 101 | 447. | 102 | 42.00 | 1.75 | 36.0 | 2.38 | .21 | .08 | .01 | .09 |
| 114.00 | .00 | 101 | 513.9 | 0. | 12.1 | 101 | 138. | -80 | 42.00 | 1.75 | 36.0 | 2.32 | .06 | .08 | .00 | .08 |
| 116.00 | .00 | 101 | 501.4 | 0. | 3.8 | 102 | 429. | -78 | 42.00 | 1.75 | 36.0 | 2.27 | .20 | .08 | .01 | .08 |
| 118.00 | .00 | 101 | 489.1 | 0. | 1.2 | -80 | 519. | -78 | 42.00 | 1.75 | 36.0 | 2.21 | .24 | .08 | .01 | .08 |
| 120.00 | .00 | 101 | 477.1 | 0. | 3.7 | -78 | 489. | -78 | 42.00 | 1.75 | 36.0 | 2.16 | .23 | .08 | .01 | .08 |
| 122.00 | .00 | 90 | 465.3 | 0. | 4.5 | -78 | 399. | -78 | 42.00 | 1.75 | 36.0 | 2.10 | .19 | .07 | .01 | .08 |
| 124.00 | .00 | 0 | 453.8 | 0. | 4.2 | -78 | 291. | -78 | 42.00 | 1.75 | 36.0 | 2.05 | .14 | .07 | .00 | .08 |
| 126.00 | .00 | -90 | 442.5 | 0. | 3.4 | -78 | 189. | -78 | 42.00 | 1.75 | 36.0 | 2.00 | .09 | .07 | .00 | .07 |
| 128.00 | .00 | -90 | 431.4 | 0. | 2.5 | -78 | 107. | -78 | 42.00 | 1.75 | 36.0 | 1.95 | .05 | .07 | .00 | .07 |
| 130.00 | .00 | -90 | 420.6 | 0. | 1.6 | -78 | 47. | -78 | 42.00 | 1.75 | 36.0 | 1.90 | .02 | .07 | .00 | .07 |
| 132.00 | .00 | -90 | 409.9 | 0. | .9 | -78 | 9. | -76 | 42.00 | 1.75 | 36.0 | 1.85 | .00 | .06 | .00 | .06 |
| 134.00 | .00 | -90 | 399.5 | 0. | .4 | -77 | 12. | 100 | 42.00 | 1.75 | 36.0 | 1.81 | .01 | .06 | .00 | .06 |
| 136.00 | .00 | 0 | 389.3 | 0. | .1 | -75 | 21. | 101 | 42.00 | 1.75 | 36.0 | 1.76 | .01 | .06 | .00 | .06 |
| 138.00 | .00 | 0 | 379.3 | 0. | .1 | 100 | 22. | 101 | 42.00 | 1.75 | 36.0 | 1.71 | .01 | .06 | .00 | .06 |
| 140.00 | .00 | 0 | 369.5 | 0. | .2 | 101 | 19. | 101 | 42.00 | 1.75 | 36.0 | 1.67 | .01 | .06 | .00 | .06 |
| 142.00 | .00 | 0 | 359.9 | 0. | .2 | 101 | 15. | 101 | 42.00 | 1.75 | 36.0 | 1.63 | .01 | .06 | .00 | .06 |
| 144.00 | .00 | 0 | 350.5 | 0. | .2 | 101 | 10. | 101 | 42.00 | 1.75 | 36.0 | 1.58 | .00 | .06 | .00 | .06 |
| 146.00 | .00 | 0 | 341.2 | 0. | .1 | 101 | 6. | 101 | 42.00 | 1.75 | 36.0 | 1.54 | .00 | .05 | .00 | .05 |
| 148.00 | .00 | 0 | 332.1 | 0. | .1 | 101 | 2. | 101 | 42.00 | 1.75 | 36.0 | 1.50 | .00 | .05 | .00 | .05 |
| 150.00 | .00 | 0 | 323.2 | 0. | .1 | 101 | 0. | 102 | 42.00 | 1.75 | 36.0 | 1.46 | .00 | .05 | .00 | .05 |
| 152.00 | .00 | 0 | 314.2 | 0. | .0 | 101 | 0. | -79 | 42.00 | 1.75 | 36.0 | 1.42 | .00 | .05 | .00 | .05 |
| 154.00 | .00 | 0 | 305.2 | 0. | .0 | 103 | 1. | -78 | 42.00 | 1.75 | 36.0 | 1.38 | .00 | .05 | .00 | .05 |
| 156.00 | .00 | 0 | 296.3 | 0. | .0 | -79 | 1. | -78 | 42.00 | 1.75 | 36.0 | 1.34 | .00 | .05 | .00 | .05 |
| 158.00 | .00 | 0 | 287.5 | 0. | .0 | -78 | 0. | -78 | 42.00 | 1.75 | 36.0 | 1.30 | .00 | .05 | .00 | .05 |
| 160.00 | .00 | 0 | 278.9 | 0. | .0 | -78 | 0. | -78 | 42.00 | 1.75 | 36.0 | 1.26 | .00 | .04 | .00 | .04 |
| 162.00 | .00 | 0 | 270.5 | 0. | .0 | -78 | 0. | -78 | 42.00 | 1.75 | 36.0 | 1.22 | .00 | .04 | .00 | .04 |
| 164.00 | .00 | 0 | 262.2 | 0. | .0 | -78 | 0. | -78 | 42.00 | 1.75 | 36.0 | 1.19 | .00 | .04 | .00 | .04 |
| 166.00 | .00 | 0 | 254.1 | 0. | .0 | -78 | 0. | -78 | 42.00 | 1.75 | 36.0 | 1.15 | .00 | .04 | .00 | .04 |
| 168.00 | .00 | 0 | 246.1 | 0. | .0 | -78 | 0. | -72 | 42.00 | 1.75 | 36.0 | 1.11 | .00 | .04 | .00 | .04 |
| 170.00 | .00 | 0 | 238.4 | 0. | .0 | -90 | 0. | 100 | 42.00 | 1.50 | 36.0 | 1.25 | .00 | .04 | .00 | .04 |
| 172.00 | .00 | 0 | 230.9 | 0. | .0 | 90 | 0. | 101 | 42.00 | 1.50 | 36.0 | 1.21 | .00 | .04 | .00 | .04 |
| 174.00 | .00 | 0 | 223.5 | 0. | .0 | 90 | 0. | 101 | 42.00 | 1.50 | 36.0 | 1.17 | .00 | .04 | .00 | .04 |
| 176.00 | .00 | 0 | 216.3 | 0. | .0 | 90 | 0. | 101 | 42.00 | 1.50 | 36.0 | 1.13 | .00 | .04 | .00 | .04 |
| 178.00 | .00 | 0 | 209.3 | 0. | .0 | 90 | 0. | 101 | 42.00 | 1.50 | 36.0 | 1.10 | .00 | .04 | .00 | .04 |
| 180.00 | .00 | 0 | 202.4 | 0. | .0 | 90 | 0. | 101 | 42.00 | 1.25 | 36.0 | 1.27 | .00 | .04 | .00 | .04 |
| 182.00 | .00 | 0 | 195.9 | 0. | .0 | 90 | 0. | 101 | 42.00 | 1.25 | 36.0 | 1.22 | .00 | .04 | .00 | .04 |
| 184.00 | .00 | 0 | 189.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.25 | 36.0 | 1.18 | .00 | .04 | .00 | .04 |
| 186.00 | .00 | 0 | 183.2 | 0. | .0 | 0 | 0. | -78 | 42.00 | 1.25 | 36.0 | 1.14 | .00 | .04 | .00 | .04 |
| 188.00 | .00 | 0 | 177.1 | 0. | .0 | 0 | 0. | -78 | 42.00 | 1.25 | 36.0 | 1.11 | .00 | .04 | .00 | .04 |
| 190.00 | .00 | 0 | 171.2 | 0. | .0 | 0 | 0. | -78 | 42.00 | 1.00 | 36.0 | 1.33 | .00 | .05 | .00 | .05 |
| 192.00 | .00 | 0 | 165.6 | 0. | .0 | 0 | 0. | -78 | 42.00 | 1.00 | 36.0 | 1.29 | .00 | .04 | .00 | .04 |
| 194.00 | .00 | 0 | 160.1 | 0. | .0 | 0 | 0. | -78 | 42.00 | 1.00 | 36.0 | 1.24 | .00 | .04 | .00 | .04 |
| 196.00 | .00 | 0 | 154.8 | 0. | .0 | 0 | 0. | -78 | 42.00 | 1.00 | 36.0 | 1.20 | .00 | .04 | .00 | .04 |
| 198.00 | .00 | 0 | 149.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | 1.16 | .00 | .04 | .00 | .04 |

*** Pile Critical Load Case Report For Pile Joint 112 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection Normal To Pile | | Axial | | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|----------|--------------|----------------|--------------------|-------|-------|
| | Value (In) | Angle (Deg) | Force (Kips) | Torsion (In-Kips) | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | | | Axial | Bend. | Total |
| 200.00 | .00 | 0 | 144.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | 1.12 | .00 | .04 | .00 | .04 |
| 202.00 | .00 | 0 | 139.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | 1.09 | .00 | .04 | .00 | .04 |
| 204.00 | .00 | 0 | 135.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | 1.05 | .00 | .04 | .00 | .04 |
| 206.00 | .00 | 0 | 130.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | 1.01 | .00 | .04 | .00 | .04 |
| 208.00 | .00 | 0 | 126.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .98 | .00 | .03 | .00 | .03 |
| 210.00 | .00 | 0 | 121.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .94 | .00 | .03 | .00 | .03 |
| 212.00 | .00 | 0 | 117.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .91 | .00 | .03 | .00 | .03 |
| 214.00 | .00 | 0 | 112.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .87 | .00 | .03 | .00 | .03 |
| 216.00 | .00 | 0 | 106.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .83 | .00 | .03 | .00 | .03 |
| 218.00 | .00 | 0 | 101.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .79 | .00 | .03 | .00 | .03 |
| 220.00 | .00 | 0 | 96.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .75 | .00 | .03 | .00 | .03 |
| 222.00 | .00 | 0 | 91.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .71 | .00 | .02 | .00 | .02 |
| 224.00 | .00 | 0 | 86.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .67 | .00 | .02 | .00 | .02 |
| 226.00 | .00 | 0 | 82.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .64 | .00 | .02 | .00 | .02 |
| 228.00 | .00 | 0 | 77.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .60 | .00 | .02 | .00 | .02 |
| 230.00 | .00 | 0 | 73.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .57 | .00 | .02 | .00 | .02 |
| 232.00 | .00 | 0 | 69.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .54 | .00 | .02 | .00 | .02 |
| 234.00 | .00 | 0 | 64.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .50 | .00 | .02 | .00 | .02 |
| 236.00 | .00 | 0 | 60.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .47 | .00 | .02 | .00 | .02 |
| 238.00 | .00 | 0 | 56.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .44 | .00 | .02 | .00 | .02 |
| 240.00 | .00 | 0 | 52.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .41 | .00 | .01 | .00 | .01 |
| 242.00 | .00 | 0 | 48.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .38 | .00 | .01 | .00 | .01 |
| 244.00 | .00 | 0 | 44.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .35 | .00 | .01 | .00 | .01 |
| 246.00 | .00 | 0 | 40.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .32 | .00 | .01 | .00 | .01 |
| 248.00 | .00 | 0 | 37.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .29 | .00 | .01 | .00 | .01 |
| 250.00 | .00 | 0 | 33.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .26 | .00 | .01 | .00 | .01 |
| 252.00 | .00 | 0 | 29.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .23 | .00 | .01 | .00 | .01 |
| 254.00 | .00 | 0 | 26.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .20 | .00 | .01 | .00 | .01 |
| 256.00 | .00 | 0 | 22.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .18 | .00 | .01 | .00 | .01 |
| 258.00 | .00 | 0 | 19.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .15 | .00 | .01 | .00 | .01 |
| 260.00 | .00 | 0 | 15.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .12 | .00 | .00 | .00 | .00 |
| 262.00 | .00 | 0 | 12.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .09 | .00 | .00 | .00 | .00 |
| 264.00 | .00 | 0 | 8.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .07 | .00 | .00 | .00 | .00 |
| 266.00 | .00 | 0 | 5.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .04 | .00 | .00 | .00 | .00 |
| 268.00 | .00 | 0 | 1.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | .01 | .00 | .00 | .00 | .00 |

*** Pile Critical Load Case Report For Pile Joint 122 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection Normal To Pile | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force (Kips) | | Bending Moment (In-Kips) | | Pile Properties | | | Axial Stress (KSI) | Bending Stress (KSI) | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------------|-------------|--------------------------|-------------|-----------------|------|------|--------------------|----------------------|--------------------|-------|-------|
| | Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy | | | Axial | Bend. | Total |
| .00 | 13.47 | -37 | -193.0 | 0. | 177.2 | -36 | 54395. | -36 | 42.00 | 1.75 | 36.0 | -.87 | 25.41 | .03 | .71 | .74 |
| 2.00 | 13.18 | -37 | -193.9 | 0. | 176.0 | -36 | 50027. | -36 | 42.00 | 1.75 | 36.0 | -.88 | 23.40 | .03 | .65 | .68 |
| 4.00 | 12.87 | -37 | -194.8 | 0. | 174.6 | -36 | 45744. | -36 | 42.00 | 1.75 | 36.0 | -.88 | 21.40 | .03 | .60 | .63 |
| 6.00 | 12.55 | -37 | -195.8 | 0. | 173.1 | -36 | 41491. | -35 | 42.00 | 1.75 | 36.0 | -.88 | 19.41 | .03 | .54 | .57 |
| 8.00 | 12.20 | -37 | -196.7 | 0. | 171.4 | -36 | 37270. | -35 | 42.00 | 1.75 | 36.0 | -.89 | 17.43 | .03 | .49 | .52 |
| 10.00 | 11.83 | -37 | -197.6 | 0. | 169.7 | -36 | 33084. | -35 | 42.00 | 1.75 | 36.0 | -.89 | 15.47 | .03 | .43 | .46 |
| 12.00 | 11.46 | -37 | -198.6 | 0. | 167.9 | -36 | 28937. | -35 | 42.00 | 1.75 | 36.0 | -.90 | 13.54 | .03 | .38 | .41 |
| 14.00 | 11.06 | -37 | -199.5 | 0. | 165.9 | -36 | 24832. | -35 | 42.00 | 1.75 | 36.0 | -.90 | 11.61 | .03 | .32 | .35 |
| 16.00 | 10.66 | -37 | -200.5 | 0. | 163.9 | -36 | 20771. | -35 | 42.00 | 1.75 | 36.0 | -.91 | 9.72 | .03 | .27 | .30 |
| 18.00 | 10.25 | -37 | -201.5 | 0. | 161.7 | -36 | 16757. | -34 | 42.00 | 1.75 | 36.0 | -.91 | 7.84 | .03 | .22 | .25 |
| 20.00 | 9.83 | -37 | -202.4 | 0. | 159.5 | -36 | 12795. | -34 | 42.00 | 1.75 | 36.0 | -.91 | 5.98 | .03 | .17 | .20 |
| 22.00 | 9.41 | -37 | -203.4 | 0. | 157.2 | -36 | 8887. | -32 | 42.00 | 1.75 | 36.0 | -.92 | 4.16 | .03 | .12 | .15 |
| 24.00 | 8.98 | -37 | -204.4 | 0. | 154.8 | -36 | 5043. | -29 | 42.00 | 1.75 | 36.0 | -.92 | 2.36 | .03 | .07 | .10 |
| 26.00 | 8.55 | -37 | -205.3 | 0. | 152.3 | -36 | 1344. | -10 | 42.00 | 1.75 | 36.0 | -.93 | .63 | .03 | .02 | .05 |
| 28.00 | 8.11 | -37 | -206.3 | 0. | 149.8 | -36 | 2607. | 130 | 42.00 | 1.75 | 36.0 | -.93 | 1.22 | .03 | .03 | .07 |
| 30.00 | 7.68 | -37 | -207.3 | 0. | 147.1 | -36 | 6249. | 137 | 42.00 | 1.75 | 36.0 | -.94 | 2.92 | .03 | .08 | .11 |
| 32.00 | 7.26 | -37 | -208.3 | 0. | 144.5 | -36 | 9858. | 139 | 42.00 | 1.75 | 36.0 | -.94 | 4.61 | .03 | .13 | .16 |
| 34.00 | 6.83 | -37 | -208.2 | 0. | 137.0 | -36 | 13409. | 140 | 42.00 | 1.75 | 36.0 | -.94 | 6.27 | .03 | .17 | .21 |
| 36.00 | 6.42 | -37 | -207.1 | 0. | 125.0 | -36 | 16781. | 141 | 42.00 | 1.75 | 36.0 | -.94 | 7.85 | .03 | .22 | .25 |
| 38.00 | 6.01 | -37 | -206.0 | 0. | 113.2 | -36 | 19863. | 141 | 42.00 | 1.75 | 36.0 | -.93 | 9.29 | .03 | .26 | .29 |
| 40.00 | 5.61 | -37 | -204.9 | 0. | 101.8 | -36 | 22661. | 141 | 42.00 | 1.75 | 36.0 | -.93 | 10.60 | .03 | .30 | .33 |
| 42.00 | 5.21 | -37 | -203.9 | 0. | 90.6 | -36 | 25183. | 141 | 42.00 | 1.75 | 36.0 | -.92 | 11.78 | .03 | .33 | .36 |
| 44.00 | 4.83 | -37 | -202.9 | 0. | 79.7 | -36 | 27433. | 142 | 42.00 | 1.75 | 36.0 | -.92 | 12.83 | .03 | .36 | .39 |
| 46.00 | 4.47 | -37 | -202.0 | 0. | 69.1 | -36 | 29420. | 142 | 42.00 | 1.75 | 36.0 | -.91 | 13.76 | .03 | .38 | .41 |
| 48.00 | 4.11 | -37 | -201.0 | 0. | 58.7 | -36 | 31148. | 142 | 42.00 | 1.75 | 36.0 | -.91 | 14.57 | .03 | .41 | .44 |
| 50.00 | 3.77 | -37 | -200.1 | 0. | 48.7 | -35 | 32625. | 142 | 42.00 | 1.75 | 36.0 | -.90 | 15.26 | .03 | .42 | .46 |
| 52.00 | 3.44 | -37 | -199.2 | 0. | 39.0 | -35 | 33858. | 142 | 42.00 | 1.75 | 36.0 | -.90 | 15.84 | .03 | .44 | .47 |
| 54.00 | 3.13 | -36 | -198.4 | 0. | 29.7 | -35 | 34857. | 142 | 42.00 | 1.75 | 36.0 | -.90 | 16.30 | .03 | .45 | .49 |
| 56.00 | 2.84 | -36 | -197.6 | 0. | 20.7 | -34 | 35627. | 142 | 42.00 | 1.75 | 36.0 | -.89 | 16.66 | .03 | .46 | .50 |
| 58.00 | 2.55 | -36 | -196.8 | 0. | 11.9 | -32 | 36178. | 142 | 42.00 | 1.75 | 36.0 | -.89 | 16.92 | .03 | .47 | .50 |
| 60.00 | 2.29 | -36 | -196.1 | 0. | 3.5 | -22 | 36515. | 142 | 42.00 | 1.75 | 36.0 | -.89 | 17.08 | .03 | .48 | .51 |
| 62.00 | 2.04 | -36 | -195.3 | 0. | 4.9 | 132 | 36645. | 142 | 42.00 | 1.75 | 36.0 | -.88 | 17.14 | .03 | .48 | .51 |
| 64.00 | 1.81 | -36 | -194.6 | 0. | 12.6 | 139 | 36574. | 142 | 42.00 | 1.75 | 36.0 | -.88 | 17.11 | .03 | .48 | .51 |
| 66.00 | 1.59 | -36 | -194.0 | 0. | 20.1 | 140 | 36314. | 142 | 42.00 | 1.75 | 36.0 | -.88 | 16.99 | .03 | .47 | .50 |
| 68.00 | 1.39 | -36 | -193.4 | 0. | 27.2 | 141 | 35870. | 142 | 42.00 | 1.75 | 36.0 | -.87 | 16.78 | .03 | .47 | .50 |
| 70.00 | 1.21 | -36 | -192.8 | 0. | 34.1 | 141 | 35252. | 142 | 42.00 | 1.75 | 36.0 | -.87 | 16.49 | .03 | .46 | .49 |
| 72.00 | 1.04 | -36 | -192.2 | 0. | 40.6 | 141 | 34467. | 142 | 42.00 | 1.75 | 36.0 | -.87 | 16.12 | .03 | .45 | .48 |
| 74.00 | .89 | -36 | -191.6 | 0. | 46.8 | 142 | 33522. | 142 | 42.00 | 1.75 | 36.0 | -.87 | 15.68 | .03 | .44 | .47 |
| 76.00 | .75 | -36 | -191.1 | 0. | 52.6 | 142 | 32426. | 142 | 42.00 | 1.75 | 36.0 | -.86 | 15.17 | .03 | .42 | .45 |
| 78.00 | .62 | -36 | -190.7 | 0. | 58.0 | 142 | 31188. | 142 | 42.00 | 1.75 | 36.0 | -.86 | 14.59 | .03 | .41 | .44 |
| 80.00 | .51 | -36 | -190.2 | 0. | 63.2 | 142 | 29816. | 142 | 42.00 | 1.75 | 36.0 | -.86 | 13.95 | .03 | .39 | .42 |
| 82.00 | .42 | -36 | -189.8 | 0. | 68.0 | 142 | 28317. | 142 | 42.00 | 1.75 | 36.0 | -.86 | 13.25 | .03 | .37 | .40 |
| 84.00 | .33 | -36 | -189.4 | 0. | 72.4 | 142 | 26702. | 142 | 42.00 | 1.75 | 36.0 | -.86 | 12.49 | .03 | .35 | .38 |
| 86.00 | .26 | -36 | -189.0 | 0. | 76.5 | 142 | 24977. | 142 | 42.00 | 1.75 | 36.0 | -.85 | 11.68 | .03 | .33 | .36 |
| 88.00 | .20 | -36 | -188.7 | 0. | 79.6 | 142 | 23153. | 143 | 42.00 | 1.75 | 36.0 | -.85 | 10.83 | .03 | .30 | .33 |
| 90.00 | .14 | -36 | -188.4 | 0. | 81.9 | 142 | 21252. | 143 | 42.00 | 1.75 | 36.0 | -.85 | 9.94 | .03 | .28 | .31 |
| 92.00 | .10 | -36 | -188.1 | 0. | 83.5 | 142 | 19295. | 143 | 42.00 | 1.75 | 36.0 | -.85 | 9.03 | .03 | .25 | .28 |
| 94.00 | .07 | -36 | -187.9 | 0. | 84.6 | 142 | 17297. | 143 | 42.00 | 1.75 | 36.0 | -.85 | 8.09 | .03 | .23 | .25 |
| 96.00 | .04 | -36 | -187.6 | 0. | 85.3 | 142 | 15272. | 143 | 42.00 | 1.75 | 36.0 | -.85 | 7.14 | .03 | .20 | .23 |
| 98.00 | .02 | -35 | -187.5 | 0. | 85.6 | 142 | 13230. | 143 | 42.00 | 1.75 | 36.0 | -.85 | 6.19 | .03 | .17 | .20 |

*** Pile Critical Load Case Report For Pile Joint 122 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection Normal To Pile | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|------|--------------------|----------------|--------------------|--------|-------|
| | Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD | WT | Fy | | | Stress | Stress | Axial |
| 100.00 | .01 | -35 | -185.3 | 0. | 102.9 | 142 | 11177. | 143 | 42.00 | 1.75 | 36.0 | -.84 | 5.23 | .03 | .15 | .17 |
| 102.00 | .00 | -29 | -181.3 | 0. | 107.2 | 143 | 8710. | 143 | 42.00 | 1.75 | 36.0 | -.82 | 4.07 | .03 | .11 | .14 |
| 104.00 | .00 | 142 | -177.4 | 0. | 94.5 | 143 | 6138. | 143 | 42.00 | 1.75 | 36.0 | -.80 | 2.87 | .03 | .08 | .11 |
| 106.00 | .01 | 142 | -173.6 | 0. | 74.1 | 143 | 3871. | 143 | 42.00 | 1.75 | 36.0 | -.78 | 1.81 | .03 | .05 | .08 |
| 108.00 | .01 | 143 | -169.9 | 0. | 52.4 | 143 | 2093. | 144 | 42.00 | 1.75 | 36.0 | -.77 | .98 | .03 | .03 | .05 |
| 110.00 | .01 | 143 | -166.3 | 0. | 33.1 | 143 | 836. | 144 | 42.00 | 1.75 | 36.0 | -.75 | .39 | .03 | .01 | .04 |
| 112.00 | .00 | 143 | -162.7 | 0. | 17.9 | 144 | 44. | 160 | 42.00 | 1.75 | 36.0 | -.74 | .02 | .03 | .00 | .03 |
| 114.00 | .00 | 143 | -159.2 | 0. | 7.1 | 144 | 386. | -37 | 42.00 | 1.75 | 36.0 | -.72 | .18 | .03 | .01 | .03 |
| 116.00 | .00 | 143 | -155.9 | 0. | .3 | 166 | 556. | -36 | 42.00 | 1.75 | 36.0 | -.70 | .26 | .02 | .01 | .03 |
| 118.00 | .00 | 144 | -152.6 | 0. | 3.4 | -37 | 563. | -36 | 42.00 | 1.75 | 36.0 | -.69 | .26 | .02 | .01 | .03 |
| 120.00 | .00 | 144 | -149.3 | 0. | 4.9 | -36 | 481. | -36 | 42.00 | 1.75 | 36.0 | -.67 | .23 | .02 | .01 | .03 |
| 122.00 | .00 | 0 | -146.2 | 0. | 4.9 | -36 | 364. | -36 | 42.00 | 1.75 | 36.0 | -.66 | .17 | .02 | .00 | .03 |
| 124.00 | .00 | -37 | -143.1 | 0. | 4.1 | -36 | 247. | -36 | 42.00 | 1.75 | 36.0 | -.65 | .12 | .02 | .00 | .03 |
| 126.00 | .00 | -36 | -140.1 | 0. | 3.1 | -36 | 148. | -36 | 42.00 | 1.75 | 36.0 | -.63 | .07 | .02 | .00 | .02 |
| 128.00 | .00 | -36 | -137.2 | 0. | 2.1 | -36 | 73. | -35 | 42.00 | 1.75 | 36.0 | -.62 | .03 | .02 | .00 | .02 |
| 130.00 | .00 | -36 | -134.4 | 0. | 1.2 | -36 | 22. | -34 | 42.00 | 1.75 | 36.0 | -.61 | .01 | .02 | .00 | .02 |
| 132.00 | .00 | -36 | -131.6 | 0. | .6 | -35 | 7. | 139 | 42.00 | 1.75 | 36.0 | -.59 | .00 | .02 | .00 | .02 |
| 134.00 | .00 | 0 | -128.9 | 0. | .2 | -34 | 21. | 142 | 42.00 | 1.75 | 36.0 | -.58 | .01 | .02 | .00 | .02 |
| 136.00 | .00 | 0 | -126.2 | 0. | .1 | 140 | 25. | 143 | 42.00 | 1.75 | 36.0 | -.57 | .01 | .02 | .00 | .02 |
| 138.00 | .00 | 0 | -123.7 | 0. | .2 | 142 | 23. | 143 | 42.00 | 1.75 | 36.0 | -.56 | .01 | .02 | .00 | .02 |
| 140.00 | .00 | 0 | -121.1 | 0. | .2 | 143 | 18. | 143 | 42.00 | 1.75 | 36.0 | -.55 | .01 | .02 | .00 | .02 |
| 142.00 | .00 | 0 | -118.7 | 0. | .2 | 143 | 13. | 143 | 42.00 | 1.75 | 36.0 | -.54 | .01 | .02 | .00 | .02 |
| 144.00 | .00 | 0 | -116.3 | 0. | .2 | 143 | 8. | 143 | 42.00 | 1.75 | 36.0 | -.53 | .00 | .02 | .00 | .02 |
| 146.00 | .00 | 0 | -114.0 | 0. | .1 | 143 | 4. | 144 | 42.00 | 1.75 | 36.0 | -.52 | .00 | .02 | .00 | .02 |
| 148.00 | .00 | 0 | -111.7 | 0. | .1 | 143 | 1. | 144 | 42.00 | 1.75 | 36.0 | -.50 | .00 | .02 | .00 | .02 |
| 150.00 | .00 | 0 | -109.4 | 0. | .0 | 144 | 0. | -46 | 42.00 | 1.75 | 36.0 | -.49 | .00 | .02 | .00 | .02 |
| 152.00 | .00 | 0 | -106.9 | 0. | .0 | 145 | 0. | -37 | 42.00 | 1.75 | 36.0 | -.48 | .00 | .02 | .00 | .02 |
| 154.00 | .00 | 0 | -104.6 | 0. | .0 | -38 | 1. | -36 | 42.00 | 1.75 | 36.0 | -.47 | .00 | .02 | .00 | .02 |
| 156.00 | .00 | 0 | -102.3 | 0. | .0 | -37 | 1. | -36 | 42.00 | 1.75 | 36.0 | -.46 | .00 | .02 | .00 | .02 |
| 158.00 | .00 | 0 | -100.0 | 0. | .0 | -36 | 0. | -36 | 42.00 | 1.75 | 36.0 | -.45 | .00 | .02 | .00 | .02 |
| 160.00 | .00 | 0 | -97.8 | 0. | .0 | -36 | 0. | -36 | 42.00 | 1.75 | 36.0 | -.44 | .00 | .02 | .00 | .02 |
| 162.00 | .00 | 0 | -95.7 | 0. | .0 | -36 | 0. | -36 | 42.00 | 1.75 | 36.0 | -.43 | .00 | .02 | .00 | .02 |
| 164.00 | .00 | 0 | -93.6 | 0. | .0 | -36 | 0. | -35 | 42.00 | 1.75 | 36.0 | -.42 | .00 | .01 | .00 | .01 |
| 166.00 | .00 | 0 | -91.6 | 0. | .0 | -36 | 0. | -33 | 42.00 | 1.75 | 36.0 | -.41 | .00 | .01 | .00 | .01 |
| 168.00 | .00 | 0 | -89.6 | 0. | .0 | -35 | 0. | 141 | 42.00 | 1.75 | 36.0 | -.40 | .00 | .01 | .00 | .01 |
| 170.00 | .00 | 0 | -87.6 | 0. | .0 | 0 | 0. | 143 | 42.00 | 1.50 | 36.0 | -.46 | .00 | .02 | .00 | .02 |
| 172.00 | .00 | 0 | -85.5 | 0. | .0 | 142 | 0. | 143 | 42.00 | 1.50 | 36.0 | -.45 | .00 | .02 | .00 | .02 |
| 174.00 | .00 | 0 | -83.5 | 0. | .0 | 143 | 0. | 143 | 42.00 | 1.50 | 36.0 | -.44 | .00 | .02 | .00 | .02 |
| 176.00 | .00 | 0 | -81.5 | 0. | .0 | 143 | 0. | 143 | 42.00 | 1.50 | 36.0 | -.43 | .00 | .01 | .00 | .01 |
| 178.00 | .00 | 0 | -79.6 | 0. | .0 | 143 | 0. | 143 | 42.00 | 1.50 | 36.0 | -.42 | .00 | .01 | .00 | .01 |
| 180.00 | .00 | 0 | -77.6 | 0. | .0 | 143 | 0. | 144 | 42.00 | 1.25 | 36.0 | -.49 | .00 | .02 | .00 | .02 |
| 182.00 | .00 | 0 | -75.6 | 0. | .0 | 0 | 0. | 146 | 42.00 | 1.25 | 36.0 | -.47 | .00 | .02 | .00 | .02 |
| 184.00 | .00 | 0 | -73.6 | 0. | .0 | 0 | 0. | -37 | 42.00 | 1.25 | 36.0 | -.46 | .00 | .02 | .00 | .02 |
| 186.00 | .00 | 0 | -71.7 | 0. | .0 | 0 | 0. | -36 | 42.00 | 1.25 | 36.0 | -.45 | .00 | .02 | .00 | .02 |
| 188.00 | .00 | 0 | -69.9 | 0. | .0 | 0 | 0. | -36 | 42.00 | 1.25 | 36.0 | -.44 | .00 | .02 | .00 | .02 |
| 190.00 | .00 | 0 | -68.0 | 0. | .0 | 0 | 0. | -36 | 42.00 | 1.00 | 36.0 | -.53 | .00 | .02 | .00 | .02 |
| 192.00 | .00 | 0 | -66.1 | 0. | .0 | 0 | 0. | -36 | 42.00 | 1.00 | 36.0 | -.51 | .00 | .02 | .00 | .02 |
| 194.00 | .00 | 0 | -64.2 | 0. | .0 | 0 | 0. | -36 | 42.00 | 1.00 | 36.0 | -.50 | .00 | .02 | .00 | .02 |
| 196.00 | .00 | 0 | -62.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.48 | .00 | .02 | .00 | .02 |
| 198.00 | .00 | 0 | -60.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.47 | .00 | .02 | .00 | .02 |

*** File Critical Load Case Report For Pile Joint 122 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|-------------------|---------------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|----------|--------------------|----------------|--------------------|-------|-------|
| | Normal Value (In) | To Pile Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | | | Axial | Bend. | Total |
| 200.00 | .00 | 0 | -58.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.46 | .00 | .02 | .00 | .02 |
| 202.00 | .00 | 0 | -57.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.44 | .00 | .02 | .00 | .02 |
| 204.00 | .00 | 0 | -55.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.43 | .00 | .02 | .00 | .02 |
| 206.00 | .00 | 0 | -54.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.42 | .00 | .01 | .00 | .01 |
| 208.00 | .00 | 0 | -52.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.41 | .00 | .01 | .00 | .01 |
| 210.00 | .00 | 0 | -51.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.40 | .00 | .01 | .00 | .01 |
| 212.00 | .00 | 0 | -49.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.38 | .00 | .01 | .00 | .01 |
| 214.00 | .00 | 0 | -47.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.37 | .00 | .01 | .00 | .01 |
| 216.00 | .00 | 0 | -45.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.35 | .00 | .01 | .00 | .01 |
| 218.00 | .00 | 0 | -42.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.33 | .00 | .01 | .00 | .01 |
| 220.00 | .00 | 0 | -40.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.32 | .00 | .01 | .00 | .01 |
| 222.00 | .00 | 0 | -38.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.30 | .00 | .01 | .00 | .01 |
| 224.00 | .00 | 0 | -37.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.29 | .00 | .01 | .00 | .01 |
| 226.00 | .00 | 0 | -35.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.27 | .00 | .01 | .00 | .01 |
| 228.00 | .00 | 0 | -33.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.26 | .00 | .01 | .00 | .01 |
| 230.00 | .00 | 0 | -31.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.24 | .00 | .01 | .00 | .01 |
| 232.00 | .00 | 0 | -29.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.23 | .00 | .01 | .00 | .01 |
| 234.00 | .00 | 0 | -28.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.22 | .00 | .01 | .00 | .01 |
| 236.00 | .00 | 0 | -26.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.20 | .00 | .01 | .00 | .01 |
| 238.00 | .00 | 0 | -24.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.19 | .00 | .01 | .00 | .01 |
| 240.00 | .00 | 0 | -23.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.18 | .00 | .01 | .00 | .01 |
| 242.00 | .00 | 0 | -21.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.17 | .00 | .01 | .00 | .01 |
| 244.00 | .00 | 0 | -20.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.15 | .00 | .01 | .00 | .01 |
| 246.00 | .00 | 0 | -18.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.14 | .00 | .00 | .00 | .00 |
| 248.00 | .00 | 0 | -16.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.13 | .00 | .00 | .00 | .00 |
| 250.00 | .00 | 0 | -15.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.12 | .00 | .00 | .00 | .00 |
| 252.00 | .00 | 0 | -14.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.11 | .00 | .00 | .00 | .00 |
| 254.00 | .00 | 0 | -12.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.10 | .00 | .00 | .00 | .00 |
| 256.00 | .00 | 0 | -11.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.09 | .00 | .00 | .00 | .00 |
| 258.00 | .00 | 0 | -9.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.08 | .00 | .00 | .00 | .00 |
| 260.00 | .00 | 0 | -8.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.07 | .00 | .00 | .00 | .00 |
| 262.00 | .00 | 0 | -7.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.05 | .00 | .00 | .00 | .00 |
| 264.00 | .00 | 0 | -5.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.04 | .00 | .00 | .00 | .00 |
| 266.00 | .00 | 0 | -4.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.03 | .00 | .00 | .00 | .00 |
| 268.00 | .00 | 0 | -2.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.02 | .00 | .00 | .00 | .00 |

*** Pile Critical Load Case Report For Pile Joint 132 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|-------------------|---------------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|------|--------------------|----------------|--------------------|-------|-------|
| | Normal Value (In) | To Pile Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy | | | Axial | Bend. | Axial |
| .00 | 13.80 | -39 | -162.5 | 0. | 181.0 | -39 | 55816. | -39 | 42.00 | 1.75 | 36.0 | -.73 | 26.11 | .03 | .73 | .75 |
| 2.00 | 13.51 | -39 | -163.5 | 0. | 179.7 | -39 | 51425. | -39 | 42.00 | 1.75 | 36.0 | -.74 | 24.05 | .03 | .67 | .70 |
| 4.00 | 13.20 | -39 | -164.4 | 0. | 178.3 | -39 | 47060. | -39 | 42.00 | 1.75 | 36.0 | -.74 | 22.01 | .03 | .61 | .64 |
| 6.00 | 12.86 | -39 | -165.4 | 0. | 176.8 | -39 | 42726. | -39 | 42.00 | 1.75 | 36.0 | -.75 | 19.98 | .03 | .56 | .58 |
| 8.00 | 12.51 | -39 | -166.4 | 0. | 175.2 | -39 | 38424. | -39 | 42.00 | 1.75 | 36.0 | -.75 | 17.97 | .03 | .50 | .53 |
| 10.00 | 12.14 | -39 | -167.4 | 0. | 173.4 | -39 | 34159. | -39 | 42.00 | 1.75 | 36.0 | -.76 | 15.98 | .03 | .44 | .47 |
| 12.00 | 11.76 | -39 | -168.4 | 0. | 171.6 | -39 | 29932. | -39 | 42.00 | 1.75 | 36.0 | -.76 | 14.00 | .03 | .39 | .42 |
| 14.00 | 11.36 | -39 | -169.4 | 0. | 169.6 | -39 | 25748. | -39 | 42.00 | 1.75 | 36.0 | -.77 | 12.04 | .03 | .34 | .36 |
| 16.00 | 10.95 | -39 | -170.4 | 0. | 167.5 | -39 | 21608. | -39 | 42.00 | 1.75 | 36.0 | -.77 | 10.11 | .03 | .28 | .31 |
| 18.00 | 10.53 | -39 | -171.4 | 0. | 165.4 | -39 | 17516. | -39 | 42.00 | 1.75 | 36.0 | -.77 | 8.19 | .03 | .23 | .26 |
| 20.00 | 10.10 | -39 | -172.5 | 0. | 163.1 | -39 | 13474. | -38 | 42.00 | 1.75 | 36.0 | -.78 | 6.30 | .03 | .18 | .20 |
| 22.00 | 9.67 | -39 | -173.5 | 0. | 160.8 | -39 | 9485. | -38 | 42.00 | 1.75 | 36.0 | -.78 | 4.44 | .03 | .12 | .15 |
| 24.00 | 9.23 | -39 | -174.5 | 0. | 158.4 | -39 | 5551. | -38 | 42.00 | 1.75 | 36.0 | -.79 | 2.60 | .03 | .07 | .10 |
| 26.00 | 8.79 | -39 | -175.5 | 0. | 155.9 | -39 | 1678. | -35 | 42.00 | 1.75 | 36.0 | -.79 | .78 | .03 | .02 | .05 |
| 28.00 | 8.35 | -39 | -176.6 | 0. | 153.3 | -39 | 2147. | 137 | 42.00 | 1.75 | 36.0 | -.80 | 1.00 | .03 | .03 | .06 |
| 30.00 | 7.91 | -39 | -177.6 | 0. | 150.6 | -39 | 5901. | 139 | 42.00 | 1.75 | 36.0 | -.80 | 2.76 | .03 | .08 | .10 |
| 32.00 | 7.48 | -39 | -178.7 | 0. | 147.9 | -39 | 9593. | 139 | 42.00 | 1.75 | 36.0 | -.81 | 4.49 | .03 | .12 | .15 |
| 34.00 | 7.04 | -39 | -178.8 | 0. | 140.4 | -39 | 13221. | 139 | 42.00 | 1.75 | 36.0 | -.81 | 6.18 | .03 | .17 | .20 |
| 36.00 | 6.62 | -39 | -177.9 | 0. | 128.2 | -39 | 16666. | 140 | 42.00 | 1.75 | 36.0 | -.80 | 7.80 | .03 | .22 | .25 |
| 38.00 | 6.20 | -39 | -177.1 | 0. | 116.4 | -39 | 19818. | 140 | 42.00 | 1.75 | 36.0 | -.80 | 9.27 | .03 | .26 | .29 |
| 40.00 | 5.79 | -39 | -176.3 | 0. | 104.8 | -39 | 22683. | 140 | 42.00 | 1.75 | 36.0 | -.80 | 10.61 | .03 | .30 | .32 |
| 42.00 | 5.39 | -39 | -175.6 | 0. | 93.5 | -39 | 25268. | 140 | 42.00 | 1.75 | 36.0 | -.79 | 11.82 | .03 | .33 | .36 |
| 44.00 | 5.00 | -39 | -174.8 | 0. | 82.4 | -39 | 27580. | 140 | 42.00 | 1.75 | 36.0 | -.79 | 12.90 | .03 | .36 | .39 |
| 46.00 | 4.62 | -39 | -174.1 | 0. | 71.7 | -39 | 29624. | 140 | 42.00 | 1.75 | 36.0 | -.79 | 13.86 | .03 | .39 | .41 |
| 48.00 | 4.26 | -39 | -173.4 | 0. | 61.2 | -39 | 31408. | 140 | 42.00 | 1.75 | 36.0 | -.78 | 14.69 | .03 | .41 | .44 |
| 50.00 | 3.91 | -39 | -172.8 | 0. | 51.1 | -39 | 32938. | 140 | 42.00 | 1.75 | 36.0 | -.78 | 15.41 | .03 | .43 | .46 |
| 52.00 | 3.57 | -39 | -172.2 | 0. | 41.3 | -39 | 34222. | 140 | 42.00 | 1.75 | 36.0 | -.78 | 16.01 | .03 | .45 | .47 |
| 54.00 | 3.25 | -39 | -171.6 | 0. | 31.8 | -39 | 35267. | 140 | 42.00 | 1.75 | 36.0 | -.78 | 16.50 | .03 | .46 | .49 |
| 56.00 | 2.95 | -39 | -171.0 | 0. | 22.6 | -39 | 36082. | 140 | 42.00 | 1.75 | 36.0 | -.77 | 16.88 | .03 | .47 | .50 |
| 58.00 | 2.66 | -39 | -170.5 | 0. | 13.8 | -38 | 36675. | 140 | 42.00 | 1.75 | 36.0 | -.77 | 17.15 | .03 | .48 | .50 |
| 60.00 | 2.39 | -39 | -169.9 | 0. | 5.2 | -37 | 37052. | 140 | 42.00 | 1.75 | 36.0 | -.77 | 17.33 | .03 | .48 | .51 |
| 62.00 | 2.13 | -39 | -169.4 | 0. | 3.1 | 137 | 37220. | 140 | 42.00 | 1.75 | 36.0 | -.77 | 17.41 | .03 | .48 | .51 |
| 64.00 | 1.89 | -39 | -169.0 | 0. | 11.1 | 139 | 37186. | 140 | 42.00 | 1.75 | 36.0 | -.76 | 17.39 | .03 | .48 | .51 |
| 66.00 | 1.67 | -39 | -168.5 | 0. | 18.7 | 139 | 36957. | 140 | 42.00 | 1.75 | 36.0 | -.76 | 17.29 | .03 | .48 | .51 |
| 68.00 | 1.46 | -39 | -168.1 | 0. | 25.9 | 140 | 36544. | 140 | 42.00 | 1.75 | 36.0 | -.76 | 17.09 | .03 | .48 | .50 |
| 70.00 | 1.27 | -39 | -167.7 | 0. | 32.8 | 140 | 35955. | 140 | 42.00 | 1.75 | 36.0 | -.76 | 16.82 | .03 | .47 | .49 |
| 72.00 | 1.09 | -39 | -167.4 | 0. | 39.5 | 140 | 35196. | 140 | 42.00 | 1.75 | 36.0 | -.76 | 16.46 | .03 | .46 | .48 |
| 74.00 | .93 | -39 | -167.0 | 0. | 45.8 | 140 | 34275. | 140 | 42.00 | 1.75 | 36.0 | -.75 | 16.03 | .03 | .45 | .47 |
| 76.00 | .79 | -39 | -166.7 | 0. | 51.7 | 140 | 33200. | 140 | 42.00 | 1.75 | 36.0 | -.75 | 15.53 | .03 | .43 | .46 |
| 78.00 | .66 | -39 | -166.4 | 0. | 57.3 | 140 | 31981. | 140 | 42.00 | 1.75 | 36.0 | -.75 | 14.96 | .03 | .42 | .44 |
| 80.00 | .54 | -39 | -166.2 | 0. | 62.5 | 140 | 30627. | 140 | 42.00 | 1.75 | 36.0 | -.75 | 14.33 | .03 | .40 | .43 |
| 82.00 | .44 | -39 | -166.0 | 0. | 67.4 | 140 | 29143. | 140 | 42.00 | 1.75 | 36.0 | -.75 | 13.63 | .03 | .38 | .41 |
| 84.00 | .35 | -39 | -165.7 | 0. | 71.9 | 140 | 27540. | 140 | 42.00 | 1.75 | 36.0 | -.75 | 12.88 | .03 | .36 | .38 |
| 86.00 | .28 | -39 | -165.6 | 0. | 76.1 | 140 | 25826. | 140 | 42.00 | 1.75 | 36.0 | -.75 | 12.08 | .03 | .34 | .36 |
| 88.00 | .21 | -39 | -165.4 | 0. | 79.5 | 140 | 24010. | 140 | 42.00 | 1.75 | 36.0 | -.75 | 11.23 | .03 | .31 | .34 |
| 90.00 | .16 | -39 | -165.3 | 0. | 81.9 | 140 | 22112. | 140 | 42.00 | 1.75 | 36.0 | -.75 | 10.34 | .03 | .29 | .31 |
| 92.00 | .11 | -39 | -165.2 | 0. | 83.7 | 140 | 20152. | 140 | 42.00 | 1.75 | 36.0 | -.75 | 9.43 | .03 | .26 | .29 |
| 94.00 | .08 | -39 | -165.1 | 0. | 84.9 | 140 | 18149. | 140 | 42.00 | 1.75 | 36.0 | -.75 | 8.49 | .03 | .24 | .26 |
| 96.00 | .05 | -39 | -165.0 | 0. | 85.6 | 140 | 16117. | 140 | 42.00 | 1.75 | 36.0 | -.75 | 7.54 | .03 | .21 | .24 |
| 98.00 | .03 | -39 | -165.0 | 0. | 86.1 | 140 | 14065. | 140 | 42.00 | 1.75 | 36.0 | -.75 | 6.58 | .03 | .18 | .21 |

*** Pile Critical Load Case Report For Pile Joint 132 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection Normal To Pile | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|----------|--------------|----------------|--------------------|-------------|-----|
| | Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | | | Axial | Bend. Total | |
| 100.00 | .01 | -39 | -163.2 | 0. | 106.3 | 140 | 12002. | 140 | 42.00 | 1.75 | 36.0 | -.74 | 5.61 | .03 | .16 | .18 |
| 102.00 | .00 | -38 | -159.7 | 0. | 113.5 | 140 | 9451. | 140 | 42.00 | 1.75 | 36.0 | -.72 | 4.42 | .03 | .12 | .15 |
| 104.00 | .00 | 140 | -156.3 | 0. | 101.4 | 140 | 6728. | 140 | 42.00 | 1.75 | 36.0 | -.71 | 3.15 | .02 | .09 | .11 |
| 106.00 | .01 | 140 | -153.0 | 0. | 80.3 | 140 | 4296. | 140 | 42.00 | 1.75 | 36.0 | -.69 | 2.01 | .02 | .06 | .08 |
| 108.00 | .01 | 140 | -149.8 | 0. | 57.4 | 140 | 2368. | 140 | 42.00 | 1.75 | 36.0 | -.68 | 1.11 | .02 | .03 | .05 |
| 110.00 | .01 | 140 | -146.6 | 0. | 36.7 | 140 | 990. | 140 | 42.00 | 1.75 | 36.0 | -.66 | .46 | .02 | .01 | .04 |
| 112.00 | .00 | 140 | -143.5 | 0. | 20.2 | 140 | 109. | 141 | 42.00 | 1.75 | 36.0 | -.65 | .05 | .02 | .00 | .02 |
| 114.00 | .00 | 140 | -140.5 | 0. | 8.4 | 140 | 375. | -39 | 42.00 | 1.75 | 36.0 | -.63 | .18 | .02 | .00 | .03 |
| 116.00 | .00 | 140 | -137.6 | 0. | .8 | 142 | 577. | -39 | 42.00 | 1.75 | 36.0 | -.62 | .27 | .02 | .01 | .03 |
| 118.00 | .00 | 140 | -134.7 | 0. | 3.3 | -39 | 597. | -39 | 42.00 | 1.75 | 36.0 | -.61 | .28 | .02 | .01 | .03 |
| 120.00 | .00 | 140 | -131.9 | 0. | 5.0 | -39 | 517. | -39 | 42.00 | 1.75 | 36.0 | -.60 | .24 | .02 | .01 | .03 |
| 122.00 | .00 | 0 | -129.2 | 0. | 5.2 | -39 | 396. | -39 | 42.00 | 1.75 | 36.0 | -.58 | .19 | .02 | .01 | .03 |
| 124.00 | .00 | -39 | -126.5 | 0. | 4.5 | -39 | 272. | -39 | 42.00 | 1.75 | 36.0 | -.57 | .13 | .02 | .00 | .02 |
| 126.00 | .00 | -39 | -123.9 | 0. | 3.4 | -39 | 165. | -39 | 42.00 | 1.75 | 36.0 | -.56 | .08 | .02 | .00 | .02 |
| 128.00 | .00 | -39 | -121.4 | 0. | 2.3 | -39 | 83. | -39 | 42.00 | 1.75 | 36.0 | -.55 | .04 | .02 | .00 | .02 |
| 130.00 | .00 | -39 | -118.9 | 0. | 1.4 | -39 | 28. | -39 | 42.00 | 1.75 | 36.0 | -.54 | .01 | .02 | .00 | .02 |
| 132.00 | .00 | -39 | -116.5 | 0. | .7 | -39 | 5. | 139 | 42.00 | 1.75 | 36.0 | -.53 | .00 | .02 | .00 | .02 |
| 134.00 | .00 | 0 | -114.2 | 0. | .2 | -39 | 21. | 140 | 42.00 | 1.75 | 36.0 | -.52 | .01 | .02 | .00 | .02 |
| 136.00 | .00 | 0 | -111.9 | 0. | .1 | 139 | 26. | 140 | 42.00 | 1.75 | 36.0 | -.51 | .01 | .02 | .00 | .02 |
| 138.00 | .00 | 0 | -109.7 | 0. | .2 | 140 | 24. | 140 | 42.00 | 1.75 | 36.0 | -.50 | .01 | .02 | .00 | .02 |
| 140.00 | .00 | 0 | -107.5 | 0. | .2 | 140 | 20. | 140 | 42.00 | 1.75 | 36.0 | -.49 | .01 | .02 | .00 | .02 |
| 142.00 | .00 | 0 | -105.4 | 0. | .2 | 140 | 14. | 140 | 42.00 | 1.75 | 36.0 | -.48 | .01 | .02 | .00 | .02 |
| 144.00 | .00 | 0 | -103.3 | 0. | .2 | 140 | 9. | 140 | 42.00 | 1.75 | 36.0 | -.47 | .00 | .02 | .00 | .02 |
| 146.00 | .00 | 0 | -101.3 | 0. | .1 | 140 | 4. | 140 | 42.00 | 1.75 | 36.0 | -.46 | .00 | .02 | .00 | .02 |
| 148.00 | .00 | 0 | -99.3 | 0. | .1 | 140 | 1. | 140 | 42.00 | 1.75 | 36.0 | -.45 | .00 | .02 | .00 | .02 |
| 150.00 | .00 | 0 | -97.3 | 0. | .0 | 140 | 0. | -49 | 42.00 | 1.75 | 36.0 | -.44 | .00 | .02 | .00 | .02 |
| 152.00 | .00 | 0 | -95.2 | 0. | .0 | 140 | 1. | -39 | 42.00 | 1.75 | 36.0 | -.43 | .00 | .01 | .00 | .01 |
| 154.00 | .00 | 0 | -93.2 | 0. | .0 | -40 | 1. | -39 | 42.00 | 1.75 | 36.0 | -.42 | .00 | .01 | .00 | .01 |
| 156.00 | .00 | 0 | -91.2 | 0. | .0 | -39 | 1. | -39 | 42.00 | 1.75 | 36.0 | -.41 | .00 | .01 | .00 | .01 |
| 158.00 | .00 | 0 | -89.2 | 0. | .0 | -39 | 0. | -39 | 42.00 | 1.75 | 36.0 | -.40 | .00 | .01 | .00 | .01 |
| 160.00 | .00 | 0 | -87.4 | 0. | .0 | -39 | 0. | -39 | 42.00 | 1.75 | 36.0 | -.39 | .00 | .01 | .00 | .01 |
| 162.00 | .00 | 0 | -85.5 | 0. | .0 | -39 | 0. | -39 | 42.00 | 1.75 | 36.0 | -.39 | .00 | .01 | .00 | .01 |
| 164.00 | .00 | 0 | -83.7 | 0. | .0 | -39 | 0. | -39 | 42.00 | 1.75 | 36.0 | -.38 | .00 | .01 | .00 | .01 |
| 166.00 | .00 | 0 | -82.0 | 0. | .0 | -39 | 0. | -39 | 42.00 | 1.75 | 36.0 | -.37 | .00 | .01 | .00 | .01 |
| 168.00 | .00 | 0 | -80.3 | 0. | .0 | -39 | 0. | 140 | 42.00 | 1.75 | 36.0 | -.36 | .00 | .01 | .00 | .01 |
| 170.00 | .00 | 0 | -78.5 | 0. | .0 | 0 | 0. | 140 | 42.00 | 1.50 | 36.0 | -.41 | .00 | .01 | .00 | .01 |
| 172.00 | .00 | 0 | -76.7 | 0. | .0 | 140 | 0. | 140 | 42.00 | 1.50 | 36.0 | -.40 | .00 | .01 | .00 | .01 |
| 174.00 | .00 | 0 | -74.9 | 0. | .0 | 140 | 0. | 140 | 42.00 | 1.50 | 36.0 | -.39 | .00 | .01 | .00 | .01 |
| 176.00 | .00 | 0 | -73.2 | 0. | .0 | 140 | 0. | 140 | 42.00 | 1.50 | 36.0 | -.38 | .00 | .01 | .00 | .01 |
| 178.00 | .00 | 0 | -71.5 | 0. | .0 | 140 | 0. | 140 | 42.00 | 1.50 | 36.0 | -.37 | .00 | .01 | .00 | .01 |
| 180.00 | .00 | 0 | -69.8 | 0. | .0 | 140 | 0. | 140 | 42.00 | 1.25 | 36.0 | -.44 | .00 | .02 | .00 | .02 |
| 182.00 | .00 | 0 | -68.0 | 0. | .0 | 0 | 0. | 140 | 42.00 | 1.25 | 36.0 | -.43 | .00 | .01 | .00 | .01 |
| 184.00 | .00 | 0 | -66.3 | 0. | .0 | 0 | 0. | -39 | 42.00 | 1.25 | 36.0 | -.41 | .00 | .01 | .00 | .01 |
| 186.00 | .00 | 0 | -64.6 | 0. | .0 | 0 | 0. | -39 | 42.00 | 1.25 | 36.0 | -.40 | .00 | .01 | .00 | .01 |
| 188.00 | .00 | 0 | -63.0 | 0. | .0 | 0 | 0. | -39 | 42.00 | 1.25 | 36.0 | -.39 | .00 | .01 | .00 | .01 |
| 190.00 | .00 | 0 | -61.3 | 0. | .0 | 0 | 0. | -39 | 42.00 | 1.00 | 36.0 | -.48 | .00 | .02 | .00 | .02 |
| 192.00 | .00 | 0 | -59.6 | 0. | .0 | 0 | 0. | -39 | 42.00 | 1.00 | 36.0 | -.46 | .00 | .02 | .00 | .02 |
| 194.00 | .00 | 0 | -57.9 | 0. | .0 | 0 | 0. | -39 | 42.00 | 1.00 | 36.0 | -.45 | .00 | .02 | .00 | .02 |
| 196.00 | .00 | 0 | -56.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.44 | .00 | .02 | .00 | .02 |
| 198.00 | .00 | 0 | -54.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.42 | .00 | .01 | .00 | .01 |

*** Pile Critical Load Case Report For Pile Joint 132 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection Normal To Pile | | Axial Force | | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|----------|--------------------|----------------|--------------------|-------|-------|
| | Value (In) | Angle (Deg) | Force (Kips) | Torsion (In-Kips) | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | | | Axial | Bend. | Total |
| 200.00 | .00 | 0 | -53.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.41 | .00 | .01 | .00 | .01 |
| 202.00 | .00 | 0 | -51.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.40 | .00 | .01 | .00 | .01 |
| 204.00 | .00 | 0 | -50.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.39 | .00 | .01 | .00 | .01 |
| 206.00 | .00 | 0 | -49.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.38 | .00 | .01 | .00 | .01 |
| 208.00 | .00 | 0 | -47.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.37 | .00 | .01 | .00 | .01 |
| 210.00 | .00 | 0 | -46.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.36 | .00 | .01 | .00 | .01 |
| 212.00 | .00 | 0 | -44.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.35 | .00 | .01 | .00 | .01 |
| 214.00 | .00 | 0 | -42.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.33 | .00 | .01 | .00 | .01 |
| 216.00 | .00 | 0 | -40.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.32 | .00 | .01 | .00 | .01 |
| 218.00 | .00 | 0 | -38.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.30 | .00 | .01 | .00 | .01 |
| 220.00 | .00 | 0 | -37.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.29 | .00 | .01 | .00 | .01 |
| 222.00 | .00 | 0 | -35.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.27 | .00 | .01 | .00 | .01 |
| 224.00 | .00 | 0 | -33.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.26 | .00 | .01 | .00 | .01 |
| 226.00 | .00 | 0 | -31.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.25 | .00 | .01 | .00 | .01 |
| 228.00 | .00 | 0 | -30.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.23 | .00 | .01 | .00 | .01 |
| 230.00 | .00 | 0 | -28.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.22 | .00 | .01 | .00 | .01 |
| 232.00 | .00 | 0 | -26.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.21 | .00 | .01 | .00 | .01 |
| 234.00 | .00 | 0 | -25.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.20 | .00 | .01 | .00 | .01 |
| 236.00 | .00 | 0 | -23.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.19 | .00 | .01 | .00 | .01 |
| 238.00 | .00 | 0 | -22.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.17 | .00 | .01 | .00 | .01 |
| 240.00 | .00 | 0 | -20.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.16 | .00 | .01 | .00 | .01 |
| 242.00 | .00 | 0 | -19.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.15 | .00 | .01 | .00 | .01 |
| 244.00 | .00 | 0 | -18.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.14 | .00 | .00 | .00 | .00 |
| 246.00 | .00 | 0 | -16.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.13 | .00 | .00 | .00 | .00 |
| 248.00 | .00 | 0 | -15.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.12 | .00 | .00 | .00 | .00 |
| 250.00 | .00 | 0 | -14.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.11 | .00 | .00 | .00 | .00 |
| 252.00 | .00 | 0 | -12.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.10 | .00 | .00 | .00 | .00 |
| 254.00 | .00 | 0 | -11.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.09 | .00 | .00 | .00 | .00 |
| 256.00 | .00 | 0 | -10.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.08 | .00 | .00 | .00 | .00 |
| 258.00 | .00 | 0 | -8.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.07 | .00 | .00 | .00 | .00 |
| 260.00 | .00 | 0 | -7.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.06 | .00 | .00 | .00 | .00 |
| 262.00 | .00 | 0 | -6.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.05 | .00 | .00 | .00 | .00 |
| 264.00 | .00 | 0 | -5.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.04 | .00 | .00 | .00 | .00 |
| 266.00 | .00 | 0 | -4.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.03 | .00 | .00 | .00 | .00 |
| 268.00 | .00 | 0 | -2.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.02 | .00 | .00 | .00 | .00 |

*** Pile Critical Load Case Report For Pile Joint 142 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|----------|--------------------|----------------|--------------------|-------|-------|
| | Normal To Pile Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | | | Axial | Bend. | Total |
| .00 | 14.11 | 2 | -1274.2 | 0. | 169.4 | 2 | 58112. | 3 | 42.00 | 1.75 | 36.0 | -5.76 | 27.18 | .20 | .76 | .96 |
| 2.00 | 13.81 | 2 | -1273.9 | 0. | 168.1 | 2 | 53670. | 3 | 42.00 | 1.75 | 36.0 | -5.76 | 25.10 | .20 | .70 | .90 |
| 4.00 | 13.49 | 2 | -1273.7 | 0. | 166.7 | 2 | 49228. | 3 | 42.00 | 1.75 | 36.0 | -5.76 | 23.03 | .20 | .64 | .84 |
| 6.00 | 13.15 | 2 | -1273.5 | 0. | 165.2 | 2 | 44792. | 3 | 42.00 | 1.75 | 36.0 | -5.75 | 20.95 | .20 | .58 | .78 |
| 8.00 | 12.79 | 2 | -1273.3 | 0. | 163.5 | 2 | 40368. | 3 | 42.00 | 1.75 | 36.0 | -5.75 | 18.88 | .20 | .53 | .73 |
| 10.00 | 12.41 | 2 | -1273.1 | 0. | 161.8 | 2 | 35961. | 3 | 42.00 | 1.75 | 36.0 | -5.75 | 16.82 | .20 | .47 | .67 |
| 12.00 | 12.01 | 2 | -1272.9 | 0. | 159.9 | 2 | 31576. | 3 | 42.00 | 1.75 | 36.0 | -5.75 | 14.77 | .20 | .41 | .61 |
| 14.00 | 11.60 | 2 | -1272.7 | 0. | 157.9 | 2 | 27218. | 3 | 42.00 | 1.75 | 36.0 | -5.75 | 12.73 | .20 | .35 | .55 |
| 16.00 | 11.18 | 2 | -1272.5 | 0. | 155.8 | 2 | 22893. | 3 | 42.00 | 1.75 | 36.0 | -5.75 | 10.71 | .20 | .30 | .50 |
| 18.00 | 10.75 | 2 | -1272.3 | 0. | 153.7 | 2 | 18605. | 4 | 42.00 | 1.75 | 36.0 | -5.75 | 8.70 | .20 | .24 | .44 |
| 20.00 | 10.31 | 2 | -1272.2 | 0. | 151.4 | 2 | 14359. | 4 | 42.00 | 1.75 | 36.0 | -5.75 | 6.72 | .20 | .19 | .39 |
| 22.00 | 9.86 | 2 | -1272.0 | 0. | 149.0 | 2 | 10160. | 5 | 42.00 | 1.75 | 36.0 | -5.75 | 4.75 | .20 | .13 | .33 |
| 24.00 | 9.41 | 2 | -1271.9 | 0. | 146.6 | 2 | 6016. | 6 | 42.00 | 1.75 | 36.0 | -5.75 | 2.81 | .20 | .08 | .28 |
| 26.00 | 8.96 | 2 | -1271.8 | 0. | 144.1 | 2 | 1948. | 14 | 42.00 | 1.75 | 36.0 | -5.75 | .91 | .20 | .03 | .23 |
| 28.00 | 8.51 | 2 | -1271.7 | 0. | 141.5 | 2 | 2161. | 172 | 42.00 | 1.75 | 36.0 | -5.75 | 1.01 | .20 | .03 | .23 |
| 30.00 | 8.05 | 2 | -1271.6 | 0. | 138.8 | 2 | 6109. | 179 | 42.00 | 1.75 | 36.0 | -5.75 | 2.86 | .20 | .08 | .28 |
| 32.00 | 7.60 | 2 | -1271.5 | 0. | 136.1 | 3 | 10009. | -179 | 42.00 | 1.75 | 36.0 | -5.75 | 4.68 | .20 | .13 | .33 |
| 34.00 | 7.16 | 2 | -1268.0 | 0. | 128.5 | 3 | 13840. | -178 | 42.00 | 1.75 | 36.0 | -5.73 | 6.47 | .20 | .18 | .38 |
| 36.00 | 6.72 | 2 | -1261.2 | 0. | 116.3 | 3 | 17481. | -178 | 42.00 | 1.75 | 36.0 | -5.70 | 8.18 | .20 | .23 | .43 |
| 38.00 | 6.29 | 2 | -1254.5 | 0. | 104.4 | 3 | 20817. | -178 | 42.00 | 1.75 | 36.0 | -5.67 | 9.74 | .20 | .27 | .47 |
| 40.00 | 5.86 | 2 | -1247.8 | 0. | 92.7 | 3 | 23852. | -177 | 42.00 | 1.75 | 36.0 | -5.64 | 11.16 | .20 | .31 | .51 |
| 42.00 | 5.45 | 2 | -1241.3 | 0. | 81.4 | 3 | 26592. | -177 | 42.00 | 1.75 | 36.0 | -5.61 | 12.44 | .20 | .35 | .54 |
| 44.00 | 5.05 | 2 | -1234.7 | 0. | 70.3 | 3 | 29042. | -177 | 42.00 | 1.75 | 36.0 | -5.58 | 13.58 | .19 | .38 | .57 |
| 46.00 | 4.66 | 2 | -1228.3 | 0. | 59.6 | 3 | 31208. | -177 | 42.00 | 1.75 | 36.0 | -5.55 | 14.60 | .19 | .41 | .60 |
| 48.00 | 4.29 | 2 | -1221.9 | 0. | 49.1 | 3 | 33097. | -177 | 42.00 | 1.75 | 36.0 | -5.52 | 15.48 | .19 | .43 | .62 |
| 50.00 | 3.93 | 2 | -1215.6 | 0. | 38.9 | 3 | 34713. | -177 | 42.00 | 1.75 | 36.0 | -5.49 | 16.24 | .19 | .45 | .64 |
| 52.00 | 3.58 | 2 | -1209.3 | 0. | 29.1 | 4 | 36064. | -177 | 42.00 | 1.75 | 36.0 | -5.47 | 16.87 | .19 | .47 | .66 |
| 54.00 | 3.26 | 2 | -1203.2 | 0. | 19.6 | 4 | 37159. | -177 | 42.00 | 1.75 | 36.0 | -5.44 | 17.38 | .19 | .48 | .67 |
| 56.00 | 2.94 | 2 | -1197.0 | 0. | 10.5 | 6 | 38004. | -177 | 42.00 | 1.75 | 36.0 | -5.41 | 17.78 | .19 | .50 | .68 |
| 58.00 | 2.65 | 2 | -1191.0 | 0. | 1.7 | 24 | 38607. | -177 | 42.00 | 1.75 | 36.0 | -5.38 | 18.06 | .19 | .50 | .69 |
| 60.00 | 2.37 | 2 | -1185.0 | 0. | 7.0 | 177 | 38976. | -177 | 42.00 | 1.75 | 36.0 | -5.35 | 18.23 | .19 | .51 | .69 |
| 62.00 | 2.11 | 2 | -1179.0 | 0. | 15.3 | 180 | 39118. | -177 | 42.00 | 1.75 | 36.0 | -5.33 | 18.30 | .19 | .51 | .69 |
| 64.00 | 1.87 | 2 | -1173.2 | 0. | 23.2 | 181 | 39038. | -177 | 42.00 | 1.75 | 36.0 | -5.30 | 18.26 | .18 | .51 | .69 |
| 66.00 | 1.64 | 2 | -1167.4 | 0. | 30.7 | 181 | 38746. | -177 | 42.00 | 1.75 | 36.0 | -5.28 | 18.12 | .18 | .50 | .69 |
| 68.00 | 1.43 | 2 | -1161.6 | 0. | 37.9 | 181 | 38253. | -177 | 42.00 | 1.75 | 36.0 | -5.25 | 17.89 | .18 | .50 | .68 |
| 70.00 | 1.24 | 2 | -1155.9 | 0. | 44.8 | 182 | 37566. | -177 | 42.00 | 1.75 | 36.0 | -5.22 | 17.57 | .18 | .49 | .67 |
| 72.00 | 1.06 | 2 | -1150.3 | 0. | 51.4 | 182 | 36693. | -177 | 42.00 | 1.75 | 36.0 | -5.20 | 17.16 | .18 | .48 | .66 |
| 74.00 | .90 | 2 | -1144.8 | 0. | 57.6 | 182 | 35642. | -177 | 42.00 | 1.75 | 36.0 | -5.17 | 16.67 | .18 | .46 | .64 |
| 76.00 | .76 | 2 | -1139.3 | 0. | 63.5 | 182 | 34423. | -177 | 42.00 | 1.75 | 36.0 | -5.15 | 16.10 | .18 | .45 | .63 |
| 78.00 | .63 | 2 | -1133.8 | 0. | 69.0 | 182 | 33047. | -177 | 42.00 | 1.75 | 36.0 | -5.12 | 15.46 | .18 | .43 | .61 |
| 80.00 | .52 | 2 | -1128.5 | 0. | 74.2 | 182 | 31521. | -177 | 42.00 | 1.75 | 36.0 | -5.10 | 14.74 | .18 | .41 | .59 |
| 82.00 | .42 | 3 | -1123.2 | 0. | 78.9 | 182 | 29854. | -177 | 42.00 | 1.75 | 36.0 | -5.08 | 13.96 | .18 | .39 | .57 |
| 84.00 | .33 | 3 | -1118.1 | 0. | 83.4 | 182 | 28056. | -177 | 42.00 | 1.75 | 36.0 | -5.06 | 13.12 | .18 | .37 | .54 |
| 86.00 | .26 | 3 | -1113.0 | 0. | 87.4 | 182 | 26139. | -177 | 42.00 | 1.75 | 36.0 | -5.03 | 12.23 | .18 | .34 | .52 |
| 88.00 | .20 | 3 | -1108.0 | 0. | 90.5 | 182 | 24110. | -177 | 42.00 | 1.75 | 36.0 | -5.01 | 11.28 | .17 | .31 | .49 |
| 90.00 | .14 | 3 | -1103.1 | 0. | 92.8 | 182 | 21995. | -177 | 42.00 | 1.75 | 36.0 | -4.98 | 10.29 | .17 | .29 | .46 |
| 92.00 | .10 | 3 | -1098.3 | 0. | 94.4 | 182 | 19814. | -177 | 42.00 | 1.75 | 36.0 | -4.96 | 9.27 | .17 | .26 | .43 |
| 94.00 | .07 | 3 | -1093.5 | 0. | 95.5 | 182 | 17586. | -177 | 42.00 | 1.75 | 36.0 | -4.94 | 8.23 | .17 | .23 | .40 |
| 96.00 | .04 | 3 | -1088.9 | 0. | 96.1 | 182 | 15323. | -177 | 42.00 | 1.75 | 36.0 | -4.92 | 7.17 | .17 | .20 | .37 |
| 98.00 | .02 | 3 | -1084.3 | 0. | 96.5 | 182 | 13036. | -177 | 42.00 | 1.75 | 36.0 | -4.90 | 6.10 | .17 | .17 | .34 |

*** Pile Critical Load Case Report For Pile Joint 142 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection Normal To Pile | | Axial Force | | Torsion | | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------|-----------|--------------|-------------|--------------|-------------|-----------------|-------------|-----------------|-------|----------|--------------|----------------|--------------------|-------|-------|
| | Value (In) | Angle (Deg) | Force (Kips) | (In-Kips) | Value (Kips) | Angle (Deg) | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | (KSI) | (KSI) | Axial | Bend. | Total |
| 100.00 | .01 | 4 | -1079.9 | 0. | 96.6 | 182 | 10735. | -176 | 42.00 | 1.75 | 36.0 | -4.88 | 5.02 | .17 | .14 | .31 | | |
| 102.00 | .00 | 8 | -1055.0 | 0. | 102.0 | 182 | 8425. | -176 | 42.00 | 1.75 | 36.0 | -4.77 | 3.94 | .17 | .11 | .28 | | |
| 104.00 | .00 | 181 | -1030.7 | 0. | 90.6 | 183 | 5983. | -176 | 42.00 | 1.75 | 36.0 | -4.66 | 2.80 | .16 | .08 | .24 | | |
| 106.00 | .01 | 182 | -1006.9 | 0. | 71.6 | 183 | 3811. | -176 | 42.00 | 1.75 | 36.0 | -4.55 | 1.78 | .16 | .05 | .21 | | |
| 108.00 | .01 | 182 | -983.6 | 0. | 51.0 | 183 | 2093. | -176 | 42.00 | 1.75 | 36.0 | -4.44 | .98 | .15 | .03 | .18 | | |
| 110.00 | .00 | 183 | -960.8 | 0. | 32.6 | 183 | 868. | -175 | 42.00 | 1.75 | 36.0 | -4.34 | .41 | .15 | .01 | .16 | | |
| 112.00 | .00 | 183 | -938.6 | 0. | 17.9 | 183 | 85. | -168 | 42.00 | 1.75 | 36.0 | -4.24 | .04 | .15 | .00 | .15 | | |
| 114.00 | .00 | 183 | -916.8 | 0. | 7.4 | 184 | 346. | 1 | 42.00 | 1.75 | 36.0 | -4.14 | .16 | .14 | .00 | .15 | | |
| 116.00 | .00 | 183 | -895.5 | 0. | .7 | 192 | 524. | 2 | 42.00 | 1.75 | 36.0 | -4.05 | .25 | .14 | .01 | .15 | | |
| 118.00 | .00 | 183 | -874.7 | 0. | 3.0 | 1 | 540. | 2 | 42.00 | 1.75 | 36.0 | -3.95 | .25 | .14 | .01 | .14 | | |
| 120.00 | .00 | 184 | -854.3 | 0. | 4.6 | 2 | 468. | 3 | 42.00 | 1.75 | 36.0 | -3.86 | .22 | .13 | .01 | .14 | | |
| 122.00 | .00 | 0 | -834.4 | 0. | 4.7 | 2 | 359. | 3 | 42.00 | 1.75 | 36.0 | -3.77 | .17 | .13 | .00 | .14 | | |
| 124.00 | .00 | 1 | -814.8 | 0. | 4.0 | 3 | 246. | 3 | 42.00 | 1.75 | 36.0 | -3.68 | .12 | .13 | .00 | .13 | | |
| 126.00 | .00 | 2 | -795.8 | 0. | 3.1 | 3 | 150. | 3 | 42.00 | 1.75 | 36.0 | -3.60 | .07 | .13 | .00 | .13 | | |
| 128.00 | .00 | 2 | -777.1 | 0. | 2.1 | 3 | 76. | 3 | 42.00 | 1.75 | 36.0 | -3.51 | .04 | .12 | .00 | .12 | | |
| 130.00 | .00 | 3 | -758.8 | 0. | 1.3 | 3 | 25. | 4 | 42.00 | 1.75 | 36.0 | -3.43 | .01 | .12 | .00 | .12 | | |
| 132.00 | .00 | 3 | -741.0 | 0. | .6 | 3 | 4. | 176 | 42.00 | 1.75 | 36.0 | -3.35 | .00 | .12 | .00 | .12 | | |
| 134.00 | .00 | 0 | -723.5 | 0. | .2 | 4 | 19. | -177 | 42.00 | 1.75 | 36.0 | -3.27 | .01 | .11 | .00 | .11 | | |
| 136.00 | .00 | 0 | -706.4 | 0. | .1 | 179 | 24. | -177 | 42.00 | 1.75 | 36.0 | -3.19 | .01 | .11 | .00 | .11 | | |
| 138.00 | .00 | 0 | -689.6 | 0. | .2 | 182 | 22. | -177 | 42.00 | 1.75 | 36.0 | -3.12 | .01 | .11 | .00 | .11 | | |
| 140.00 | .00 | 0 | -673.2 | 0. | .2 | 182 | 18. | -176 | 42.00 | 1.75 | 36.0 | -3.04 | .01 | .11 | .00 | .11 | | |
| 142.00 | .00 | 0 | -657.2 | 0. | .2 | 183 | 13. | -176 | 42.00 | 1.75 | 36.0 | -2.97 | .01 | .10 | .00 | .10 | | |
| 144.00 | .00 | 0 | -641.5 | 0. | .2 | 183 | 8. | -176 | 42.00 | 1.75 | 36.0 | -2.90 | .00 | .10 | .00 | .10 | | |
| 146.00 | .00 | 0 | -626.1 | 0. | .1 | 183 | 4. | -176 | 42.00 | 1.75 | 36.0 | -2.83 | .00 | .10 | .00 | .10 | | |
| 148.00 | .00 | 0 | -611.1 | 0. | .1 | 183 | 1. | -175 | 42.00 | 1.75 | 36.0 | -2.76 | .00 | .10 | .00 | .10 | | |
| 150.00 | .00 | 0 | -596.4 | 0. | .0 | 183 | 0. | -165 | 42.00 | 1.75 | 36.0 | -2.70 | .00 | .09 | .00 | .09 | | |
| 152.00 | .00 | 0 | -581.4 | 0. | .0 | 184 | 0. | 2 | 42.00 | 1.75 | 36.0 | -2.63 | .00 | .09 | .00 | .09 | | |
| 154.00 | .00 | 0 | -566.2 | 0. | .0 | -2 | 1. | 2 | 42.00 | 1.75 | 36.0 | -2.56 | .00 | .09 | .00 | .09 | | |
| 156.00 | .00 | 0 | -551.2 | 0. | .0 | 2 | 1. | 2 | 42.00 | 1.75 | 36.0 | -2.49 | .00 | .09 | .00 | .09 | | |
| 158.00 | .00 | 0 | -536.6 | 0. | .0 | 2 | 0. | 3 | 42.00 | 1.75 | 36.0 | -2.43 | .00 | .08 | .00 | .08 | | |
| 160.00 | .00 | 0 | -522.3 | 0. | .0 | 3 | 0. | 3 | 42.00 | 1.75 | 36.0 | -2.36 | .00 | .08 | .00 | .08 | | |
| 162.00 | .00 | 0 | -508.3 | 0. | .0 | 3 | 0. | 3 | 42.00 | 1.75 | 36.0 | -2.30 | .00 | .08 | .00 | .08 | | |
| 164.00 | .00 | 0 | -494.6 | 0. | .0 | 3 | 0. | 3 | 42.00 | 1.75 | 36.0 | -2.23 | .00 | .08 | .00 | .08 | | |
| 166.00 | .00 | 0 | -481.1 | 0. | .0 | 3 | 0. | 4 | 42.00 | 1.75 | 36.0 | -2.17 | .00 | .08 | .00 | .08 | | |
| 168.00 | .00 | 0 | -467.9 | 0. | .0 | 4 | 0. | -180 | 42.00 | 1.75 | 36.0 | -2.11 | .00 | .07 | .00 | .07 | | |
| 170.00 | .00 | 0 | -454.9 | 0. | .0 | 8 | 0. | -177 | 42.00 | 1.50 | 36.0 | -2.38 | .00 | .08 | .00 | .08 | | |
| 172.00 | .00 | 0 | -442.0 | 0. | .0 | 181 | 0. | -177 | 42.00 | 1.50 | 36.0 | -2.32 | .00 | .08 | .00 | .08 | | |
| 174.00 | .00 | 0 | -429.4 | 0. | .0 | 182 | 0. | -176 | 42.00 | 1.50 | 36.0 | -2.25 | .00 | .08 | .00 | .08 | | |
| 176.00 | .00 | 0 | -417.1 | 0. | .0 | 183 | 0. | -176 | 42.00 | 1.50 | 36.0 | -2.19 | .00 | .08 | .00 | .08 | | |
| 178.00 | .00 | 0 | -405.1 | 0. | .0 | 183 | 0. | -176 | 42.00 | 1.50 | 36.0 | -2.12 | .00 | .07 | .00 | .07 | | |
| 180.00 | .00 | 0 | -393.3 | 0. | .0 | 183 | 0. | -176 | 42.00 | 1.25 | 36.0 | -2.46 | .00 | .09 | .00 | .09 | | |
| 182.00 | .00 | 0 | -381.6 | 0. | .0 | 183 | 0. | -175 | 42.00 | 1.25 | 36.0 | -2.38 | .00 | .08 | .00 | .08 | | |
| 184.00 | .00 | 0 | -370.2 | 0. | .0 | 0 | 0. | 0 | 42.00 | 1.25 | 36.0 | -2.31 | .00 | .08 | .00 | .08 | | |
| 186.00 | .00 | 0 | -359.1 | 0. | .0 | 0 | 0. | 0 | 42.00 | 1.25 | 36.0 | -2.24 | .00 | .08 | .00 | .08 | | |
| 188.00 | .00 | 0 | -348.3 | 0. | .0 | 0 | 0. | 0 | 42.00 | 1.25 | 36.0 | -2.18 | .00 | .08 | .00 | .08 | | |
| 190.00 | .00 | 0 | -337.7 | 0. | .0 | 0 | 0. | 0 | 42.00 | 1.00 | 36.0 | -2.62 | .00 | .09 | .00 | .09 | | |
| 192.00 | .00 | 0 | -327.2 | 0. | .0 | 0 | 0. | 0 | 42.00 | 1.00 | 36.0 | -2.54 | .00 | .09 | .00 | .09 | | |
| 194.00 | .00 | 0 | -317.1 | 0. | .0 | 0 | 0. | 0 | 42.00 | 1.00 | 36.0 | -2.46 | .00 | .09 | .00 | .09 | | |
| 196.00 | .00 | 0 | -307.3 | 0. | .0 | 0 | 0. | 0 | 42.00 | 1.00 | 36.0 | -2.39 | .00 | .08 | .00 | .08 | | |
| 198.00 | .00 | 0 | -297.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.31 | .00 | .08 | .00 | .08 | | |

*** Pile Critical Load Case Report For Pile Joint 142 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection Normal To Pile | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|----------|--------------------|----------------|--------------------|-------|-------|
| | Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | | | Axial | Bend. | Total |
| 200.00 | .00 | 0 | -288.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.24 | .00 | .08 | .00 | .08 |
| 202.00 | .00 | 0 | -279.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.17 | .00 | .08 | .00 | .08 |
| 204.00 | .00 | 0 | -270.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.10 | .00 | .07 | .00 | .07 |
| 206.00 | .00 | 0 | -262.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.04 | .00 | .07 | .00 | .07 |
| 208.00 | .00 | 0 | -254.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.97 | .00 | .07 | .00 | .07 |
| 210.00 | .00 | 0 | -246.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.91 | .00 | .07 | .00 | .07 |
| 212.00 | .00 | 0 | -238.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.85 | .00 | .06 | .00 | .06 |
| 214.00 | .00 | 0 | -227.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.77 | .00 | .06 | .00 | .06 |
| 216.00 | .00 | 0 | -217.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.69 | .00 | .06 | .00 | .06 |
| 218.00 | .00 | 0 | -207.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.61 | .00 | .06 | .00 | .06 |
| 220.00 | .00 | 0 | -197.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.53 | .00 | .05 | .00 | .05 |
| 222.00 | .00 | 0 | -187.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.45 | .00 | .05 | .00 | .05 |
| 224.00 | .00 | 0 | -178.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.38 | .00 | .05 | .00 | .05 |
| 226.00 | .00 | 0 | -168.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.31 | .00 | .05 | .00 | .05 |
| 228.00 | .00 | 0 | -159.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.24 | .00 | .04 | .00 | .04 |
| 230.00 | .00 | 0 | -151.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.17 | .00 | .04 | .00 | .04 |
| 232.00 | .00 | 0 | -142.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.11 | .00 | .04 | .00 | .04 |
| 234.00 | .00 | 0 | -134.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.04 | .00 | .04 | .00 | .04 |
| 236.00 | .00 | 0 | -125.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.98 | .00 | .03 | .00 | .03 |
| 238.00 | .00 | 0 | -117.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.92 | .00 | .03 | .00 | .03 |
| 240.00 | .00 | 0 | -110.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.85 | .00 | .03 | .00 | .03 |
| 242.00 | .00 | 0 | -102.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.79 | .00 | .03 | .00 | .03 |
| 244.00 | .00 | 0 | -94.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.74 | .00 | .03 | .00 | .03 |
| 246.00 | .00 | 0 | -87.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.68 | .00 | .02 | .00 | .02 |
| 248.00 | .00 | 0 | -80.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.62 | .00 | .02 | .00 | .02 |
| 250.00 | .00 | 0 | -72.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.56 | .00 | .02 | .00 | .02 |
| 252.00 | .00 | 0 | -65.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.51 | .00 | .02 | .00 | .02 |
| 254.00 | .00 | 0 | -58.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.45 | .00 | .02 | .00 | .02 |
| 256.00 | .00 | 0 | -51.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.40 | .00 | .01 | .00 | .01 |
| 258.00 | .00 | 0 | -44.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.35 | .00 | .01 | .00 | .01 |
| 260.00 | .00 | 0 | -37.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.29 | .00 | .01 | .00 | .01 |
| 262.00 | .00 | 0 | -31.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.24 | .00 | .01 | .00 | .01 |
| 264.00 | .00 | 0 | -24.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.19 | .00 | .01 | .00 | .01 |
| 266.00 | .00 | 0 | -17.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.14 | .00 | .00 | .00 | .00 |
| 268.00 | .00 | 0 | -11.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.09 | .00 | .00 | .00 | .00 |

*** Pile Critical Load Case Report For Pile Joint 152 - Critical Load Case 8 ***

| Dist. Along Pile (Ft) | Deflection Normal To Pile | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|----------|--------------------|----------------|--------------------|-------|-------|
| | Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | | | Axial | Bend. | Total |
| .00 | 10.45 | 131 | -1840.6 | 0. | 131.6 | 130 | 44025. | 130 | 42.00 | 1.75 | 36.0 | -8.32 | 20.59 | .29 | .57 | .86 |
| 2.00 | 10.21 | 131 | -1840.5 | 0. | 130.4 | 130 | 40418. | 130 | 42.00 | 1.75 | 36.0 | -8.32 | 18.91 | .29 | .53 | .82 |
| 4.00 | 9.95 | 131 | -1840.5 | 0. | 129.1 | 130 | 36805. | 130 | 42.00 | 1.75 | 36.0 | -8.32 | 17.22 | .29 | .48 | .77 |
| 6.00 | 9.67 | 131 | -1840.5 | 0. | 127.8 | 130 | 33193. | 130 | 42.00 | 1.75 | 36.0 | -8.32 | 15.53 | .29 | .43 | .72 |
| 8.00 | 9.37 | 131 | -1840.4 | 0. | 126.3 | 130 | 29588. | 130 | 42.00 | 1.75 | 36.0 | -8.32 | 13.84 | .29 | .39 | .67 |
| 10.00 | 9.07 | 131 | -1840.4 | 0. | 124.7 | 130 | 25994. | 129 | 42.00 | 1.75 | 36.0 | -8.32 | 12.16 | .29 | .34 | .63 |
| 12.00 | 8.75 | 131 | -1840.3 | 0. | 123.0 | 130 | 22417. | 129 | 42.00 | 1.75 | 36.0 | -8.32 | 10.49 | .29 | .29 | .58 |
| 14.00 | 8.42 | 131 | -1840.2 | 0. | 121.2 | 130 | 18862. | 129 | 42.00 | 1.75 | 36.0 | -8.32 | 8.82 | .29 | .25 | .54 |
| 16.00 | 8.09 | 131 | -1840.2 | 0. | 119.4 | 130 | 15335. | 129 | 42.00 | 1.75 | 36.0 | -8.32 | 7.17 | .29 | .20 | .49 |
| 18.00 | 7.74 | 131 | -1840.1 | 0. | 117.4 | 130 | 11841. | 128 | 42.00 | 1.75 | 36.0 | -8.32 | 5.54 | .29 | .15 | .44 |
| 20.00 | 7.40 | 131 | -1840.0 | 0. | 115.4 | 130 | 8385. | 128 | 42.00 | 1.75 | 36.0 | -8.31 | 3.92 | .29 | .11 | .40 |
| 22.00 | 7.04 | 131 | -1839.9 | 0. | 113.3 | 130 | 4975. | 126 | 42.00 | 1.75 | 36.0 | -8.31 | 2.33 | .29 | .06 | .35 |
| 24.00 | 6.69 | 131 | -1839.7 | 0. | 111.1 | 130 | 1636. | 117 | 42.00 | 1.75 | 36.0 | -8.31 | .77 | .29 | .02 | .31 |
| 26.00 | 6.33 | 131 | -1839.6 | 0. | 108.9 | 130 | 1771. | -36 | 42.00 | 1.75 | 36.0 | -8.31 | .83 | .29 | .02 | .31 |
| 28.00 | 5.98 | 131 | -1839.5 | 0. | 106.6 | 130 | 5007. | -44 | 42.00 | 1.75 | 36.0 | -8.31 | 2.34 | .29 | .07 | .35 |
| 30.00 | 5.63 | 131 | -1839.3 | 0. | 104.2 | 130 | 8205. | -46 | 42.00 | 1.75 | 36.0 | -8.31 | 3.84 | .29 | .11 | .40 |
| 32.00 | 5.28 | 131 | -1839.2 | 0. | 101.8 | 130 | 11344. | -47 | 42.00 | 1.75 | 36.0 | -8.31 | 5.31 | .29 | .15 | .44 |
| 34.00 | 4.94 | 131 | -1835.5 | 0. | 95.1 | 130 | 14417. | -47 | 42.00 | 1.75 | 36.0 | -8.29 | 6.74 | .29 | .19 | .48 |
| 36.00 | 4.60 | 131 | -1828.2 | 0. | 84.4 | 130 | 17317. | -47 | 42.00 | 1.75 | 36.0 | -8.26 | 8.10 | .29 | .23 | .51 |
| 38.00 | 4.27 | 131 | -1820.9 | 0. | 73.9 | 130 | 19943. | -48 | 42.00 | 1.75 | 36.0 | -8.23 | 9.33 | .29 | .26 | .55 |
| 40.00 | 3.95 | 130 | -1813.5 | 0. | 63.7 | 130 | 22299. | -48 | 42.00 | 1.75 | 36.0 | -8.20 | 10.43 | .29 | .29 | .58 |
| 42.00 | 3.64 | 130 | -1806.1 | 0. | 53.8 | 130 | 24390. | -48 | 42.00 | 1.75 | 36.0 | -8.16 | 11.41 | .28 | .32 | .60 |
| 44.00 | 3.34 | 130 | -1798.6 | 0. | 44.3 | 130 | 26223. | -48 | 42.00 | 1.75 | 36.0 | -8.13 | 12.27 | .28 | .34 | .62 |
| 46.00 | 3.05 | 130 | -1791.1 | 0. | 35.0 | 129 | 27803. | -48 | 42.00 | 1.75 | 36.0 | -8.09 | 13.00 | .28 | .36 | .64 |
| 48.00 | 2.78 | 130 | -1783.6 | 0. | 26.0 | 129 | 29137. | -48 | 42.00 | 1.75 | 36.0 | -8.06 | 13.63 | .28 | .38 | .66 |
| 50.00 | 2.51 | 130 | -1776.0 | 0. | 17.3 | 128 | 30230. | -48 | 42.00 | 1.75 | 36.0 | -8.03 | 14.14 | .28 | .39 | .67 |
| 52.00 | 2.26 | 130 | -1768.3 | 0. | 8.9 | 126 | 31088. | -48 | 42.00 | 1.75 | 36.0 | -7.99 | 14.54 | .28 | .40 | .68 |
| 54.00 | 2.03 | 130 | -1760.6 | 0. | .9 | 85 | 31717. | -48 | 42.00 | 1.75 | 36.0 | -7.96 | 14.84 | .28 | .41 | .69 |
| 56.00 | 1.81 | 130 | -1752.9 | 0. | 7.2 | -43 | 32123. | -48 | 42.00 | 1.75 | 36.0 | -7.92 | 15.03 | .28 | .42 | .69 |
| 58.00 | 1.60 | 130 | -1745.2 | 0. | 14.6 | -46 | 32315. | -48 | 42.00 | 1.75 | 36.0 | -7.89 | 15.12 | .27 | .42 | .70 |
| 60.00 | 1.41 | 130 | -1737.6 | 0. | 21.8 | -47 | 32302. | -48 | 42.00 | 1.75 | 36.0 | -7.85 | 15.11 | .27 | .42 | .69 |
| 62.00 | 1.23 | 130 | -1730.1 | 0. | 28.7 | -47 | 32090. | -48 | 42.00 | 1.75 | 36.0 | -7.82 | 15.01 | .27 | .42 | .69 |
| 64.00 | 1.06 | 130 | -1722.6 | 0. | 35.3 | -48 | 31687. | -48 | 42.00 | 1.75 | 36.0 | -7.78 | 14.82 | .27 | .41 | .68 |
| 66.00 | .91 | 130 | -1715.2 | 0. | 41.5 | -48 | 31101. | -48 | 42.00 | 1.75 | 36.0 | -7.75 | 14.55 | .27 | .41 | .67 |
| 68.00 | .77 | 130 | -1707.8 | 0. | 47.3 | -48 | 30341. | -48 | 42.00 | 1.75 | 36.0 | -7.72 | 14.19 | .27 | .40 | .66 |
| 70.00 | .65 | 130 | -1700.6 | 0. | 52.9 | -48 | 29416. | -48 | 42.00 | 1.75 | 36.0 | -7.68 | 13.76 | .27 | .38 | .65 |
| 72.00 | .54 | 130 | -1693.4 | 0. | 58.1 | -48 | 28336. | -48 | 42.00 | 1.75 | 36.0 | -7.65 | 13.25 | .27 | .37 | .64 |
| 74.00 | .44 | 130 | -1686.3 | 0. | 63.0 | -48 | 27107. | -48 | 42.00 | 1.75 | 36.0 | -7.62 | 12.68 | .27 | .35 | .62 |
| 76.00 | .35 | 130 | -1679.2 | 0. | 67.5 | -48 | 25740. | -48 | 42.00 | 1.75 | 36.0 | -7.59 | 12.04 | .26 | .34 | .60 |
| 78.00 | .28 | 130 | -1672.2 | 0. | 71.8 | -48 | 24244. | -48 | 42.00 | 1.75 | 36.0 | -7.56 | 11.34 | .26 | .32 | .58 |
| 80.00 | .22 | 130 | -1665.3 | 0. | 75.2 | -48 | 22629. | -49 | 42.00 | 1.75 | 36.0 | -7.53 | 10.58 | .26 | .29 | .56 |
| 82.00 | .16 | 130 | -1658.5 | 0. | 77.7 | -48 | 20916. | -49 | 42.00 | 1.75 | 36.0 | -7.49 | 9.78 | .26 | .27 | .53 |
| 84.00 | .12 | 130 | -1651.7 | 0. | 79.6 | -48 | 19125. | -49 | 42.00 | 1.75 | 36.0 | -7.46 | 8.95 | .26 | .25 | .51 |
| 86.00 | .08 | 129 | -1645.0 | 0. | 80.8 | -48 | 17276. | -49 | 42.00 | 1.75 | 36.0 | -7.43 | 8.08 | .26 | .23 | .48 |
| 88.00 | .05 | 129 | -1638.4 | 0. | 81.6 | -48 | 15384. | -49 | 42.00 | 1.75 | 36.0 | -7.40 | 7.20 | .26 | .20 | .46 |
| 90.00 | .03 | 129 | -1631.9 | 0. | 82.1 | -48 | 13460. | -49 | 42.00 | 1.75 | 36.0 | -7.37 | 6.30 | .26 | .18 | .43 |
| 92.00 | .01 | 127 | -1625.5 | 0. | 82.3 | -48 | 11516. | -49 | 42.00 | 1.75 | 36.0 | -7.35 | 5.39 | .26 | .15 | .41 |
| 94.00 | .00 | 115 | -1619.2 | 0. | 82.3 | -48 | 9559. | -49 | 42.00 | 1.75 | 36.0 | -7.32 | 4.47 | .25 | .12 | .38 |
| 96.00 | .00 | -42 | -1612.9 | 0. | 82.3 | -48 | 7594. | -49 | 42.00 | 1.75 | 36.0 | -7.29 | 3.55 | .25 | .10 | .35 |
| 98.00 | .01 | -46 | -1606.8 | 0. | 82.2 | -48 | 5625. | -49 | 42.00 | 1.75 | 36.0 | -7.26 | 2.63 | .25 | .07 | .33 |

*** Pile Critical Load Case Report For Pile Joint 152 - Critical Load Case 8 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force (Kips) | | Bending Moment (In-Kips) | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------------|-------------|--------------------------|-------------|-----------------|------|------|--------------------|----------------|--------------------|-------|-------|
| | Normal To Pile Value (In) | Angle (Deg) | | | Value | Angle (Deg) | Value | Angle (Deg) | OD (In) | WT | Fy | | | Axial | Bend. | Axial |
| 100.00 | .01 | -47 | -1600.7 | 0. | 82.0 | -48 | 3655. | -49 | 42.00 | 1.75 | 36.0 | -7.23 | 1.71 | .25 | .05 | .30 |
| 102.00 | .01 | -48 | -1563.7 | 0. | 54.3 | -49 | 1686. | -51 | 42.00 | 1.75 | 36.0 | -7.07 | .79 | .25 | .02 | .27 |
| 104.00 | .01 | -48 | -1527.4 | 0. | 31.6 | -49 | 382. | -57 | 42.00 | 1.75 | 36.0 | -6.90 | .18 | .24 | .00 | .25 |
| 106.00 | .00 | -48 | -1492.0 | 0. | 14.7 | -50 | 384. | 137 | 42.00 | 1.75 | 36.0 | -6.74 | .18 | .23 | .01 | .24 |
| 108.00 | .00 | -49 | -1457.3 | 0. | 3.5 | -56 | 738. | 133 | 42.00 | 1.75 | 36.0 | -6.59 | .35 | .23 | .01 | .24 |
| 110.00 | .00 | -49 | -1423.4 | 0. | 3.2 | 137 | 822. | 132 | 42.00 | 1.75 | 36.0 | -6.43 | .38 | .22 | .01 | .23 |
| 112.00 | .00 | -50 | -1390.3 | 0. | 6.3 | 133 | 747. | 131 | 42.00 | 1.75 | 36.0 | -6.28 | .35 | .22 | .01 | .23 |
| 114.00 | .00 | -56 | -1357.8 | 0. | 7.0 | 132 | 597. | 131 | 42.00 | 1.75 | 36.0 | -6.14 | .28 | .21 | .01 | .22 |
| 116.00 | .00 | 137 | -1326.1 | 0. | 6.4 | 131 | 429. | 131 | 42.00 | 1.75 | 36.0 | -5.99 | .20 | .21 | .01 | .21 |
| 118.00 | .00 | 133 | -1295.0 | 0. | 5.1 | 131 | 276. | 130 | 42.00 | 1.75 | 36.0 | -5.85 | .13 | .20 | .00 | .21 |
| 120.00 | .00 | 132 | -1264.6 | 0. | 3.7 | 131 | 153. | 130 | 42.00 | 1.75 | 36.0 | -5.71 | .07 | .20 | .00 | .20 |
| 122.00 | .00 | 131 | -1234.9 | 0. | 2.3 | 130 | 65. | 128 | 42.00 | 1.75 | 36.0 | -5.58 | .03 | .19 | .00 | .19 |
| 124.00 | .00 | 131 | -1205.8 | 0. | 1.3 | 129 | 9. | 116 | 42.00 | 1.75 | 36.0 | -5.45 | .00 | .19 | .00 | .19 |
| 126.00 | .00 | 131 | -1177.3 | 0. | .5 | 128 | 21. | -44 | 42.00 | 1.75 | 36.0 | -5.32 | .01 | .19 | .00 | .19 |
| 128.00 | .00 | 0 | -1149.5 | 0. | .1 | 110 | 34. | -46 | 42.00 | 1.75 | 36.0 | -5.19 | .02 | .18 | .00 | .18 |
| 130.00 | .00 | 0 | -1122.2 | 0. | .2 | -44 | 35. | -47 | 42.00 | 1.75 | 36.0 | -5.07 | .02 | .18 | .00 | .18 |
| 132.00 | .00 | 0 | -1095.5 | 0. | .3 | -47 | 30. | -48 | 42.00 | 1.75 | 36.0 | -4.95 | .01 | .17 | .00 | .17 |
| 134.00 | .00 | 0 | -1069.4 | 0. | .3 | -47 | 23. | -48 | 42.00 | 1.75 | 36.0 | -4.83 | .01 | .17 | .00 | .17 |
| 136.00 | .00 | 0 | -1043.9 | 0. | .3 | -48 | 15. | -49 | 42.00 | 1.75 | 36.0 | -4.72 | .01 | .16 | .00 | .16 |
| 138.00 | .00 | 0 | -1018.9 | 0. | .2 | -48 | 9. | -49 | 42.00 | 1.75 | 36.0 | -4.60 | .00 | .16 | .00 | .16 |
| 140.00 | .00 | 0 | -994.4 | 0. | .1 | -49 | 4. | -50 | 42.00 | 1.75 | 36.0 | -4.49 | .00 | .16 | .00 | .16 |
| 142.00 | .00 | 0 | -970.4 | 0. | .1 | -49 | 1. | -53 | 42.00 | 1.75 | 36.0 | -4.39 | .00 | .15 | .00 | .15 |
| 144.00 | .00 | 0 | -947.0 | 0. | .0 | -50 | 0. | 141 | 42.00 | 1.75 | 36.0 | -4.28 | .00 | .15 | .00 | .15 |
| 146.00 | .00 | 0 | -924.0 | 0. | .0 | -55 | 1. | 133 | 42.00 | 1.75 | 36.0 | -4.18 | .00 | .15 | .00 | .15 |
| 148.00 | .00 | 0 | -901.5 | 0. | .0 | 138 | 1. | 132 | 42.00 | 1.75 | 36.0 | -4.07 | .00 | .14 | .00 | .14 |
| 150.00 | .00 | 0 | -879.5 | 0. | .0 | 133 | 1. | 131 | 42.00 | 1.75 | 36.0 | -3.97 | .00 | .14 | .00 | .14 |
| 152.00 | .00 | 0 | -857.1 | 0. | .0 | 132 | 1. | 131 | 42.00 | 1.75 | 36.0 | -3.87 | .00 | .13 | .00 | .13 |
| 154.00 | .00 | 0 | -834.3 | 0. | .0 | 131 | 0. | 130 | 42.00 | 1.75 | 36.0 | -3.77 | .00 | .13 | .00 | .13 |
| 156.00 | .00 | 0 | -812.1 | 0. | .0 | 131 | 0. | 130 | 42.00 | 1.75 | 36.0 | -3.67 | .00 | .13 | .00 | .13 |
| 158.00 | .00 | 0 | -790.2 | 0. | .0 | 130 | 0. | 129 | 42.00 | 1.75 | 36.0 | -3.57 | .00 | .12 | .00 | .12 |
| 160.00 | .00 | 0 | -768.8 | 0. | .0 | 130 | 0. | 126 | 42.00 | 1.75 | 36.0 | -3.47 | .00 | .12 | .00 | .12 |
| 162.00 | .00 | 0 | -747.9 | 0. | .0 | 128 | 0. | -41 | 42.00 | 1.75 | 36.0 | -3.38 | .00 | .12 | .00 | .12 |
| 164.00 | .00 | 0 | -727.3 | 0. | .0 | 90 | 0. | -46 | 42.00 | 1.75 | 36.0 | -3.29 | .00 | .11 | .00 | .11 |
| 166.00 | .00 | 0 | -707.2 | 0. | .0 | -44 | 0. | -47 | 42.00 | 1.75 | 36.0 | -3.20 | .00 | .11 | .00 | .11 |
| 168.00 | .00 | 0 | -687.4 | 0. | .0 | -47 | 0. | -48 | 42.00 | 1.75 | 36.0 | -3.11 | .00 | .11 | .00 | .11 |
| 170.00 | .00 | 0 | -667.9 | 0. | .0 | -48 | 0. | -48 | 42.00 | 1.50 | 36.0 | -3.50 | .00 | .12 | .00 | .12 |
| 172.00 | .00 | 0 | -648.8 | 0. | .0 | -48 | 0. | -49 | 42.00 | 1.50 | 36.0 | -3.40 | .00 | .12 | .00 | .12 |
| 174.00 | .00 | 0 | -630.1 | 0. | .0 | -49 | 0. | -50 | 42.00 | 1.50 | 36.0 | -3.30 | .00 | .11 | .00 | .11 |
| 176.00 | .00 | 0 | -611.8 | 0. | .0 | -49 | 0. | -52 | 42.00 | 1.50 | 36.0 | -3.21 | .00 | .11 | .00 | .11 |
| 178.00 | .00 | 0 | -593.8 | 0. | .0 | 0 | 0. | 144 | 42.00 | 1.50 | 36.0 | -3.11 | .00 | .11 | .00 | .11 |
| 180.00 | .00 | 0 | -576.2 | 0. | .0 | 0 | 0. | 133 | 42.00 | 1.25 | 36.0 | -3.60 | .00 | .13 | .00 | .13 |
| 182.00 | .00 | 0 | -558.9 | 0. | .0 | 0 | 0. | 132 | 42.00 | 1.25 | 36.0 | -3.49 | .00 | .12 | .00 | .12 |
| 184.00 | .00 | 0 | -542.0 | 0. | .0 | 0 | 0. | 131 | 42.00 | 1.25 | 36.0 | -3.39 | .00 | .12 | .00 | .12 |
| 186.00 | .00 | 0 | -525.5 | 0. | .0 | 0 | 0. | 131 | 42.00 | 1.25 | 36.0 | -3.28 | .00 | .11 | .00 | .11 |
| 188.00 | .00 | 0 | -509.5 | 0. | .0 | 0 | 0. | 130 | 42.00 | 1.25 | 36.0 | -3.18 | .00 | .11 | .00 | .11 |
| 190.00 | .00 | 0 | -493.7 | 0. | .0 | 0 | 0. | 129 | 42.00 | 1.00 | 36.0 | -3.83 | .00 | .13 | .00 | .13 |
| 192.00 | .00 | 0 | -478.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.71 | .00 | .13 | .00 | .13 |
| 194.00 | .00 | 0 | -463.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.60 | .00 | .13 | .00 | .13 |
| 196.00 | .00 | 0 | -448.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.48 | .00 | .12 | .00 | .12 |
| 198.00 | .00 | 0 | -434.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.38 | .00 | .12 | .00 | .12 |

*** Pile Critical Load Case Report For Pile Joint 152 - Critical Load Case 8 ***

| Dist. Along Pile (Ft) | Deflection Normal To Pile | | Axial Force | | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|------|--------------------|----------------|--------------------|-------|-------|
| | Value (In) | Angle (Deg) | Force (Kips) | Torsion (In-Kips) | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WI | Fy | | | Axial | Bend. | Axial |
| 200.00 | .00 | 0 | -421.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.27 | .00 | .11 | .00 | .11 |
| 202.00 | .00 | 0 | -407.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.17 | .00 | .11 | .00 | .11 |
| 204.00 | .00 | 0 | -394.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.07 | .00 | .11 | .00 | .11 |
| 206.00 | .00 | 0 | -382.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.97 | .00 | .10 | .00 | .10 |
| 208.00 | .00 | 0 | -370.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.87 | .00 | .10 | .00 | .10 |
| 210.00 | .00 | 0 | -358.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.78 | .00 | .10 | .00 | .10 |
| 212.00 | .00 | 0 | -347.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.69 | .00 | .09 | .00 | .09 |
| 214.00 | .00 | 0 | -332.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.58 | .00 | .09 | .00 | .09 |
| 216.00 | .00 | 0 | -317.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.46 | .00 | .09 | .00 | .09 |
| 218.00 | .00 | 0 | -302.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.35 | .00 | .08 | .00 | .08 |
| 220.00 | .00 | 0 | -288.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.24 | .00 | .08 | .00 | .08 |
| 222.00 | .00 | 0 | -274.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.13 | .00 | .07 | .00 | .07 |
| 224.00 | .00 | 0 | -261.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.03 | .00 | .07 | .00 | .07 |
| 226.00 | .00 | 0 | -247.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.92 | .00 | .07 | .00 | .07 |
| 228.00 | .00 | 0 | -234.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.82 | .00 | .06 | .00 | .06 |
| 230.00 | .00 | 0 | -221.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.72 | .00 | .06 | .00 | .06 |
| 232.00 | .00 | 0 | -209.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.62 | .00 | .06 | .00 | .06 |
| 234.00 | .00 | 0 | -196.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.53 | .00 | .05 | .00 | .05 |
| 236.00 | .00 | 0 | -184.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.43 | .00 | .05 | .00 | .05 |
| 238.00 | .00 | 0 | -172.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.34 | .00 | .05 | .00 | .05 |
| 240.00 | .00 | 0 | -161.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.25 | .00 | .04 | .00 | .04 |
| 242.00 | .00 | 0 | -150.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.17 | .00 | .04 | .00 | .04 |
| 244.00 | .00 | 0 | -138.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.08 | .00 | .04 | .00 | .04 |
| 246.00 | .00 | 0 | -128.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.99 | .00 | .03 | .00 | .03 |
| 248.00 | .00 | 0 | -117.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.91 | .00 | .03 | .00 | .03 |
| 250.00 | .00 | 0 | -106.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.83 | .00 | .03 | .00 | .03 |
| 252.00 | .00 | 0 | -96.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.75 | .00 | .03 | .00 | .03 |
| 254.00 | .00 | 0 | -85.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.67 | .00 | .02 | .00 | .02 |
| 256.00 | .00 | 0 | -75.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.59 | .00 | .02 | .00 | .02 |
| 258.00 | .00 | 0 | -65.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.51 | .00 | .02 | .00 | .02 |
| 260.00 | .00 | 0 | -55.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.43 | .00 | .01 | .00 | .01 |
| 262.00 | .00 | 0 | -45.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.35 | .00 | .01 | .00 | .01 |
| 264.00 | .00 | 0 | -35.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.28 | .00 | .01 | .00 | .01 |
| 266.00 | .00 | 0 | -25.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.20 | .00 | .01 | .00 | .01 |
| 268.00 | .00 | 0 | -15.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.12 | .00 | .00 | .00 | .00 |

*** Pile Critical Load Case Report For Pile Joint 162 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|------|--------------------|----------------|--------------------|-------------|-----|
| | Normal To Pile Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy | | | Axial | Bend. Total | |
| .00 | 12.45 | 139 | -1792.6 | 0. | 148.9 | 139 | 51960. | 139 | 42.00 | 1.75 | 36.0 | -8.10 | 24.30 | .28 | .68 | .96 |
| 2.00 | 12.18 | 139 | -1792.6 | 0. | 147.7 | 139 | 47894. | 139 | 42.00 | 1.75 | 36.0 | -8.10 | 22.40 | .28 | .62 | .91 |
| 4.00 | 11.88 | 139 | -1792.5 | 0. | 146.3 | 139 | 43820. | 139 | 42.00 | 1.75 | 36.0 | -8.10 | 20.50 | .28 | .57 | .85 |
| 6.00 | 11.57 | 139 | -1792.5 | 0. | 144.9 | 139 | 39743. | 139 | 42.00 | 1.75 | 36.0 | -8.10 | 18.59 | .28 | .52 | .80 |
| 8.00 | 11.23 | 139 | -1792.4 | 0. | 143.3 | 139 | 35670. | 139 | 42.00 | 1.75 | 36.0 | -8.10 | 16.68 | .28 | .46 | .75 |
| 10.00 | 10.89 | 139 | -1792.3 | 0. | 141.6 | 139 | 31606. | 139 | 42.00 | 1.75 | 36.0 | -8.10 | 14.78 | .28 | .41 | .69 |
| 12.00 | 10.52 | 139 | -1792.2 | 0. | 139.8 | 139 | 27558. | 139 | 42.00 | 1.75 | 36.0 | -8.10 | 12.89 | .28 | .36 | .64 |
| 14.00 | 10.15 | 139 | -1792.1 | 0. | 137.9 | 139 | 23531. | 139 | 42.00 | 1.75 | 36.0 | -8.10 | 11.01 | .28 | .31 | .59 |
| 16.00 | 9.76 | 139 | -1792.0 | 0. | 135.9 | 139 | 19531. | 139 | 42.00 | 1.75 | 36.0 | -8.10 | 9.14 | .28 | .25 | .54 |
| 18.00 | 9.37 | 139 | -1791.9 | 0. | 133.9 | 139 | 15564. | 139 | 42.00 | 1.75 | 36.0 | -8.10 | 7.28 | .28 | .20 | .48 |
| 20.00 | 8.97 | 139 | -1791.8 | 0. | 131.7 | 139 | 11634. | 138 | 42.00 | 1.75 | 36.0 | -8.10 | 5.44 | .28 | .15 | .43 |
| 22.00 | 8.56 | 139 | -1791.7 | 0. | 129.5 | 139 | 7746. | 138 | 42.00 | 1.75 | 36.0 | -8.10 | 3.62 | .28 | .10 | .38 |
| 24.00 | 8.15 | 139 | -1791.5 | 0. | 127.1 | 139 | 3908. | 137 | 42.00 | 1.75 | 36.0 | -8.10 | 1.83 | .28 | .05 | .33 |
| 26.00 | 7.74 | 139 | -1791.4 | 0. | 124.7 | 139 | 173. | 93 | 42.00 | 1.75 | 36.0 | -8.10 | .08 | .28 | .00 | .28 |
| 28.00 | 7.33 | 139 | -1791.2 | 0. | 122.3 | 139 | 3612. | -38 | 42.00 | 1.75 | 36.0 | -8.09 | 1.69 | .28 | .05 | .33 |
| 30.00 | 6.92 | 139 | -1791.1 | 0. | 119.7 | 139 | 7278. | -39 | 42.00 | 1.75 | 36.0 | -8.09 | 3.40 | .28 | .09 | .38 |
| 32.00 | 6.52 | 139 | -1790.9 | 0. | 117.2 | 139 | 10879. | -39 | 42.00 | 1.75 | 36.0 | -8.09 | 5.09 | .28 | .14 | .42 |
| 34.00 | 6.12 | 139 | -1787.1 | 0. | 109.9 | 139 | 14409. | -39 | 42.00 | 1.75 | 36.0 | -8.08 | 6.74 | .28 | .19 | .47 |
| 36.00 | 5.72 | 139 | -1779.7 | 0. | 98.4 | 139 | 17753. | -40 | 42.00 | 1.75 | 36.0 | -8.04 | 8.30 | .28 | .23 | .51 |
| 38.00 | 5.33 | 139 | -1772.3 | 0. | 87.1 | 139 | 20804. | -40 | 42.00 | 1.75 | 36.0 | -8.01 | 9.73 | .28 | .27 | .55 |
| 40.00 | 4.96 | 139 | -1764.8 | 0. | 76.2 | 139 | 23564. | -40 | 42.00 | 1.75 | 36.0 | -7.98 | 11.02 | .28 | .31 | .58 |
| 42.00 | 4.59 | 139 | -1757.3 | 0. | 65.4 | 139 | 26041. | -40 | 42.00 | 1.75 | 36.0 | -7.94 | 12.18 | .28 | .34 | .62 |
| 44.00 | 4.23 | 139 | -1749.7 | 0. | 55.0 | 139 | 28236. | -40 | 42.00 | 1.75 | 36.0 | -7.91 | 13.21 | .28 | .37 | .64 |
| 46.00 | 3.89 | 139 | -1742.1 | 0. | 44.8 | 139 | 30156. | -40 | 42.00 | 1.75 | 36.0 | -7.87 | 14.11 | .27 | .39 | .67 |
| 48.00 | 3.56 | 139 | -1734.5 | 0. | 35.0 | 139 | 31807. | -40 | 42.00 | 1.75 | 36.0 | -7.84 | 14.88 | .27 | .41 | .69 |
| 50.00 | 3.24 | 139 | -1726.8 | 0. | 25.6 | 139 | 33197. | -40 | 42.00 | 1.75 | 36.0 | -7.80 | 15.53 | .27 | .43 | .70 |
| 52.00 | 2.94 | 139 | -1719.0 | 0. | 16.4 | 138 | 34331. | -40 | 42.00 | 1.75 | 36.0 | -7.77 | 16.06 | .27 | .45 | .72 |
| 54.00 | 2.66 | 139 | -1711.3 | 0. | 7.6 | 137 | 35217. | -40 | 42.00 | 1.75 | 36.0 | -7.73 | 16.47 | .27 | .46 | .73 |
| 56.00 | 2.39 | 139 | -1703.7 | 0. | 1.0 | -28 | 35862. | -40 | 42.00 | 1.75 | 36.0 | -7.70 | 16.77 | .27 | .47 | .74 |
| 58.00 | 2.13 | 139 | -1696.2 | 0. | 9.3 | -39 | 36272. | -40 | 42.00 | 1.75 | 36.0 | -7.67 | 16.97 | .27 | .47 | .74 |
| 60.00 | 1.89 | 139 | -1688.8 | 0. | 17.3 | -39 | 36453. | -40 | 42.00 | 1.75 | 36.0 | -7.63 | 17.05 | .27 | .47 | .74 |
| 62.00 | 1.67 | 139 | -1681.4 | 0. | 24.9 | -39 | 36415. | -40 | 42.00 | 1.75 | 36.0 | -7.60 | 17.03 | .26 | .47 | .74 |
| 64.00 | 1.46 | 139 | -1674.0 | 0. | 32.1 | -40 | 36165. | -40 | 42.00 | 1.75 | 36.0 | -7.57 | 16.92 | .26 | .47 | .73 |
| 66.00 | 1.27 | 139 | -1666.8 | 0. | 39.1 | -40 | 35713. | -40 | 42.00 | 1.75 | 36.0 | -7.53 | 16.70 | .26 | .47 | .73 |
| 68.00 | 1.10 | 139 | -1659.6 | 0. | 45.7 | -40 | 35067. | -40 | 42.00 | 1.75 | 36.0 | -7.50 | 16.40 | .26 | .46 | .72 |
| 70.00 | .94 | 139 | -1652.5 | 0. | 52.0 | -40 | 34234. | -40 | 42.00 | 1.75 | 36.0 | -7.47 | 16.01 | .26 | .45 | .71 |
| 72.00 | .79 | 139 | -1645.4 | 0. | 57.9 | -40 | 33224. | -40 | 42.00 | 1.75 | 36.0 | -7.44 | 15.54 | .26 | .43 | .69 |
| 74.00 | .66 | 139 | -1638.5 | 0. | 63.5 | -40 | 32047. | -40 | 42.00 | 1.75 | 36.0 | -7.40 | 14.99 | .26 | .42 | .68 |
| 76.00 | .55 | 139 | -1631.6 | 0. | 68.8 | -40 | 30712. | -40 | 42.00 | 1.75 | 36.0 | -7.37 | 14.37 | .26 | .40 | .66 |
| 78.00 | .45 | 139 | -1624.7 | 0. | 73.7 | -40 | 29227. | -40 | 42.00 | 1.75 | 36.0 | -7.34 | 13.67 | .26 | .38 | .64 |
| 80.00 | .36 | 139 | -1617.9 | 0. | 78.2 | -40 | 27603. | -40 | 42.00 | 1.75 | 36.0 | -7.31 | 12.91 | .25 | .36 | .61 |
| 82.00 | .28 | 139 | -1611.3 | 0. | 82.4 | -40 | 25850. | -40 | 42.00 | 1.75 | 36.0 | -7.28 | 12.09 | .25 | .34 | .59 |
| 84.00 | .22 | 139 | -1604.7 | 0. | 85.9 | -40 | 23976. | -40 | 42.00 | 1.75 | 36.0 | -7.25 | 11.21 | .25 | .31 | .56 |
| 86.00 | .16 | 139 | -1598.2 | 0. | 88.4 | -40 | 22004. | -40 | 42.00 | 1.75 | 36.0 | -7.22 | 10.29 | .25 | .29 | .54 |
| 88.00 | .12 | 139 | -1591.7 | 0. | 90.2 | -40 | 19954. | -40 | 42.00 | 1.75 | 36.0 | -7.19 | 9.33 | .25 | .26 | .51 |
| 90.00 | .08 | 139 | -1585.4 | 0. | 91.5 | -40 | 17845. | -40 | 42.00 | 1.75 | 36.0 | -7.16 | 8.35 | .25 | .23 | .48 |
| 92.00 | .05 | 139 | -1579.2 | 0. | 92.3 | -40 | 15694. | -40 | 42.00 | 1.75 | 36.0 | -7.14 | 7.34 | .25 | .20 | .45 |
| 94.00 | .03 | 139 | -1573.0 | 0. | 92.8 | -40 | 13511. | -40 | 42.00 | 1.75 | 36.0 | -7.11 | 6.32 | .25 | .18 | .42 |
| 96.00 | .02 | 139 | -1566.9 | 0. | 93.1 | -40 | 11308. | -40 | 42.00 | 1.75 | 36.0 | -7.08 | 5.29 | .25 | .15 | .39 |
| 98.00 | .01 | 138 | -1560.9 | 0. | 93.2 | -40 | 9090. | -40 | 42.00 | 1.75 | 36.0 | -7.05 | 4.25 | .25 | .12 | .36 |

*** Pile Critical Load Case Report For Pile Joint 162 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection Normal To Pile | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|------|--------------------|----------------|--------------------|-------|-------|
| | Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy | | | Axial | Bend. | Axial |
| 100.00 | .00 | -36 | -1539.8 | 0. | 91.7 | -40 | 6864. | -40 | 42.00 | 1.75 | 36.0 | -6.96 | 3.21 | .24 | .09 | .33 |
| 102.00 | .00 | -39 | -1504.2 | 0. | 77.2 | -40 | 4669. | -40 | 42.00 | 1.75 | 36.0 | -6.80 | 2.18 | .24 | .06 | .30 |
| 104.00 | .01 | -40 | -1469.4 | 0. | 58.4 | -40 | 2817. | -40 | 42.00 | 1.75 | 36.0 | -6.64 | 1.32 | .23 | .04 | .27 |
| 106.00 | .00 | -40 | -1435.4 | 0. | 39.9 | -40 | 1414. | -40 | 42.00 | 1.75 | 36.0 | -6.49 | .66 | .23 | .02 | .24 |
| 108.00 | .00 | -40 | -1402.1 | 0. | 24.1 | -40 | 456. | -41 | 42.00 | 1.75 | 36.0 | -6.34 | .21 | .22 | .01 | .23 |
| 110.00 | .00 | -40 | -1369.5 | 0. | 12.1 | -40 | 124. | 142 | 42.00 | 1.75 | 36.0 | -6.19 | .06 | .22 | .00 | .22 |
| 112.00 | .00 | -40 | -1337.6 | 0. | 3.9 | -41 | 415. | 139 | 42.00 | 1.75 | 36.0 | -6.04 | .19 | .21 | .01 | .22 |
| 114.00 | .00 | -40 | -1306.5 | 0. | 1.1 | 141 | 509. | 139 | 42.00 | 1.75 | 36.0 | -5.90 | .24 | .21 | .01 | .21 |
| 116.00 | .00 | -40 | -1276.0 | 0. | 3.6 | 139 | 483. | 139 | 42.00 | 1.75 | 36.0 | -5.77 | .23 | .20 | .01 | .21 |
| 118.00 | .00 | -41 | -1246.2 | 0. | 4.4 | 139 | 396. | 139 | 42.00 | 1.75 | 36.0 | -5.63 | .19 | .20 | .01 | .20 |
| 120.00 | .00 | 0 | -1217.0 | 0. | 4.2 | 139 | 291. | 139 | 42.00 | 1.75 | 36.0 | -5.50 | .14 | .19 | .00 | .20 |
| 122.00 | .00 | 139 | -1188.5 | 0. | 3.4 | 139 | 191. | 139 | 42.00 | 1.75 | 36.0 | -5.37 | .09 | .19 | .00 | .19 |
| 124.00 | .00 | 139 | -1160.5 | 0. | 2.5 | 139 | 109. | 139 | 42.00 | 1.75 | 36.0 | -5.24 | .05 | .18 | .00 | .18 |
| 126.00 | .00 | 139 | -1133.2 | 0. | 1.6 | 139 | 49. | 138 | 42.00 | 1.75 | 36.0 | -5.12 | .02 | .18 | .00 | .18 |
| 128.00 | .00 | 139 | -1106.5 | 0. | .9 | 139 | 10. | 137 | 42.00 | 1.75 | 36.0 | -5.00 | .01 | .17 | .00 | .17 |
| 130.00 | .00 | 0 | -1080.3 | 0. | .4 | 138 | 11. | -39 | 42.00 | 1.75 | 36.0 | -4.88 | .01 | .17 | .00 | .17 |
| 132.00 | .00 | 0 | -1054.7 | 0. | .1 | 137 | 20. | -40 | 42.00 | 1.75 | 36.0 | -4.77 | .01 | .17 | .00 | .17 |
| 134.00 | .00 | 0 | -1029.7 | 0. | .1 | -39 | 22. | -40 | 42.00 | 1.75 | 36.0 | -4.65 | .01 | .16 | .00 | .16 |
| 136.00 | .00 | 0 | -1005.1 | 0. | .2 | -40 | 19. | -40 | 42.00 | 1.75 | 36.0 | -4.54 | .01 | .16 | .00 | .16 |
| 138.00 | .00 | 0 | -981.1 | 0. | .2 | -40 | 15. | -40 | 42.00 | 1.75 | 36.0 | -4.43 | .01 | .15 | .00 | .15 |
| 140.00 | .00 | 0 | -957.7 | 0. | .2 | -40 | 10. | -40 | 42.00 | 1.75 | 36.0 | -4.33 | .00 | .15 | .00 | .15 |
| 142.00 | .00 | 0 | -934.7 | 0. | .1 | -40 | 6. | -40 | 42.00 | 1.75 | 36.0 | -4.22 | .00 | .15 | .00 | .15 |
| 144.00 | .00 | 0 | -912.2 | 0. | .1 | -40 | 3. | -40 | 42.00 | 1.75 | 36.0 | -4.12 | .00 | .14 | .00 | .14 |
| 146.00 | .00 | 0 | -890.1 | 0. | .1 | -40 | 0. | -41 | 42.00 | 1.75 | 36.0 | -4.02 | .00 | .14 | .00 | .14 |
| 148.00 | .00 | 0 | -868.6 | 0. | .0 | -40 | 0. | 141 | 42.00 | 1.75 | 36.0 | -3.93 | .00 | .14 | .00 | .14 |
| 150.00 | .00 | 0 | -846.6 | 0. | .0 | -41 | 0. | 139 | 42.00 | 1.75 | 36.0 | -3.83 | .00 | .13 | .00 | .13 |
| 152.00 | .00 | 0 | -824.3 | 0. | .0 | 140 | 1. | 139 | 42.00 | 1.75 | 36.0 | -3.73 | .00 | .13 | .00 | .13 |
| 154.00 | .00 | 0 | -802.5 | 0. | .0 | 139 | 0. | 139 | 42.00 | 1.75 | 36.0 | -3.63 | .00 | .13 | .00 | .13 |
| 156.00 | .00 | 0 | -781.1 | 0. | .0 | 139 | 0. | 139 | 42.00 | 1.75 | 36.0 | -3.53 | .00 | .12 | .00 | .12 |
| 158.00 | .00 | 0 | -760.2 | 0. | .0 | 139 | 0. | 139 | 42.00 | 1.75 | 36.0 | -3.44 | .00 | .12 | .00 | .12 |
| 160.00 | .00 | 0 | -739.7 | 0. | .0 | 139 | 0. | 139 | 42.00 | 1.75 | 36.0 | -3.34 | .00 | .12 | .00 | .12 |
| 162.00 | .00 | 0 | -719.6 | 0. | .0 | 139 | 0. | 139 | 42.00 | 1.75 | 36.0 | -3.25 | .00 | .11 | .00 | .11 |
| 164.00 | .00 | 0 | -699.9 | 0. | .0 | 139 | 0. | 137 | 42.00 | 1.75 | 36.0 | -3.16 | .00 | .11 | .00 | .11 |
| 166.00 | .00 | 0 | -680.6 | 0. | .0 | 138 | 0. | -39 | 42.00 | 1.75 | 36.0 | -3.08 | .00 | .11 | .00 | .11 |
| 168.00 | .00 | 0 | -661.6 | 0. | .0 | 0 | 0. | -40 | 42.00 | 1.75 | 36.0 | -2.99 | .00 | .10 | .00 | .10 |
| 170.00 | .00 | 0 | -643.0 | 0. | .0 | -40 | 0. | -40 | 42.00 | 1.50 | 36.0 | -3.37 | .00 | .12 | .00 | .12 |
| 172.00 | .00 | 0 | -624.6 | 0. | .0 | -40 | 0. | -40 | 42.00 | 1.50 | 36.0 | -3.27 | .00 | .11 | .00 | .11 |
| 174.00 | .00 | 0 | -606.6 | 0. | .0 | -40 | 0. | -40 | 42.00 | 1.50 | 36.0 | -3.18 | .00 | .11 | .00 | .11 |
| 176.00 | .00 | 0 | -589.1 | 0. | .0 | -40 | 0. | -40 | 42.00 | 1.50 | 36.0 | -3.09 | .00 | .11 | .00 | .11 |
| 178.00 | .00 | 0 | -571.9 | 0. | .0 | -40 | 0. | -40 | 42.00 | 1.50 | 36.0 | -3.00 | .00 | .10 | .00 | .10 |
| 180.00 | .00 | 0 | -555.0 | 0. | .0 | 0 | 0. | -42 | 42.00 | 1.25 | 36.0 | -3.47 | .00 | .12 | .00 | .12 |
| 182.00 | .00 | 0 | -538.4 | 0. | .0 | 0 | 0. | 140 | 42.00 | 1.25 | 36.0 | -3.36 | .00 | .12 | .00 | .12 |
| 184.00 | .00 | 0 | -522.2 | 0. | .0 | 0 | 0. | 139 | 42.00 | 1.25 | 36.0 | -3.26 | .00 | .11 | .00 | .11 |
| 186.00 | .00 | 0 | -506.4 | 0. | .0 | 0 | 0. | 139 | 42.00 | 1.25 | 36.0 | -3.16 | .00 | .11 | .00 | .11 |
| 188.00 | .00 | 0 | -491.0 | 0. | .0 | 0 | 0. | 139 | 42.00 | 1.25 | 36.0 | -3.07 | .00 | .11 | .00 | .11 |
| 190.00 | .00 | 0 | -475.9 | 0. | .0 | 0 | 0. | 139 | 42.00 | 1.00 | 36.0 | -3.69 | .00 | .13 | .00 | .13 |
| 192.00 | .00 | 0 | -461.1 | 0. | .0 | 0 | 0. | 139 | 42.00 | 1.00 | 36.0 | -3.58 | .00 | .12 | .00 | .12 |
| 194.00 | .00 | 0 | -446.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.47 | .00 | .12 | .00 | .12 |
| 196.00 | .00 | 0 | -432.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.36 | .00 | .12 | .00 | .12 |
| 198.00 | .00 | 0 | -419.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.26 | .00 | .11 | .00 | .11 |

*** Pile Critical Load Case Report For Pile Joint 162 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|------------|-------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|------|--------------------|----------------|--------------------|-------|-------|
| | Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy | | | Axial | Bend. | Total |
| 200.00 | .00 | 0 | -406.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.15 | .00 | .11 | .00 | .11 |
| 202.00 | .00 | 0 | -393.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.06 | .00 | .11 | .00 | .11 |
| 204.00 | .00 | 0 | -381.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.96 | .00 | .10 | .00 | .10 |
| 206.00 | .00 | 0 | -369.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.87 | .00 | .10 | .00 | .10 |
| 208.00 | .00 | 0 | -357.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.78 | .00 | .10 | .00 | .10 |
| 210.00 | .00 | 0 | -346.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.69 | .00 | .09 | .00 | .09 |
| 212.00 | .00 | 0 | -333.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.59 | .00 | .09 | .00 | .09 |
| 214.00 | .00 | 0 | -318.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.48 | .00 | .09 | .00 | .09 |
| 216.00 | .00 | 0 | -304.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.36 | .00 | .08 | .00 | .08 |
| 218.00 | .00 | 0 | -290.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.26 | .00 | .08 | .00 | .08 |
| 220.00 | .00 | 0 | -276.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.15 | .00 | .07 | .00 | .07 |
| 222.00 | .00 | 0 | -263.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.04 | .00 | .07 | .00 | .07 |
| 224.00 | .00 | 0 | -250.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.94 | .00 | .07 | .00 | .07 |
| 226.00 | .00 | 0 | -237.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.84 | .00 | .06 | .00 | .06 |
| 228.00 | .00 | 0 | -224.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.74 | .00 | .06 | .00 | .06 |
| 230.00 | .00 | 0 | -212.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.65 | .00 | .06 | .00 | .06 |
| 232.00 | .00 | 0 | -200.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.55 | .00 | .05 | .00 | .05 |
| 234.00 | .00 | 0 | -188.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.46 | .00 | .05 | .00 | .05 |
| 236.00 | .00 | 0 | -176.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.37 | .00 | .05 | .00 | .05 |
| 238.00 | .00 | 0 | -165.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.29 | .00 | .04 | .00 | .04 |
| 240.00 | .00 | 0 | -154.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.20 | .00 | .04 | .00 | .04 |
| 242.00 | .00 | 0 | -143.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.12 | .00 | .04 | .00 | .04 |
| 244.00 | .00 | 0 | -133.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.03 | .00 | .04 | .00 | .04 |
| 246.00 | .00 | 0 | -122.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.95 | .00 | .03 | .00 | .03 |
| 248.00 | .00 | 0 | -112.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.87 | .00 | .03 | .00 | .03 |
| 250.00 | .00 | 0 | -102.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.79 | .00 | .03 | .00 | .03 |
| 252.00 | .00 | 0 | -92.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.71 | .00 | .02 | .00 | .02 |
| 254.00 | .00 | 0 | -82.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.64 | .00 | .02 | .00 | .02 |
| 256.00 | .00 | 0 | -72.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.56 | .00 | .02 | .00 | .02 |
| 258.00 | .00 | 0 | -62.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.49 | .00 | .02 | .00 | .02 |
| 260.00 | .00 | 0 | -53.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.41 | .00 | .01 | .00 | .01 |
| 262.00 | .00 | 0 | -43.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.34 | .00 | .01 | .00 | .01 |
| 264.00 | .00 | 0 | -34.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.26 | .00 | .01 | .00 | .01 |
| 266.00 | .00 | 0 | -24.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.19 | .00 | .01 | .00 | .01 |
| 268.00 | .00 | 0 | -15.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.12 | .00 | .00 | .00 | .00 |

*** Pile Critical Load Case Report For Pile Joint 172 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force (Kips) | | Bending Moment (In-Kips) | | Pile Properties | | | Axial Stress (KSI) | Bending Stress (KSI) | Unity Check Values | | |
|-----------------------|-------------------|---------------------|--------------------|-------------------|--------------------|-------------|--------------------------|-------------|-----------------|------|----------|--------------------|----------------------|--------------------|-------|-------|
| | Normal Value (In) | To Pile Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | | | Axial | Bend. | Total |
| .00 | 12.82 | 138 | -1855.0 | 0. | 150.2 | 138 | 52819. | 138 | 42.00 | 1.75 | 36.0 | -8.38 | 24.71 | .29 | .69 | .98 |
| 2.00 | 12.53 | 138 | -1855.0 | 0. | 148.9 | 138 | 48690. | 139 | 42.00 | 1.75 | 36.0 | -8.38 | 22.77 | .29 | .63 | .93 |
| 4.00 | 12.23 | 138 | -1855.0 | 0. | 147.6 | 138 | 44551. | 139 | 42.00 | 1.75 | 36.0 | -8.38 | 20.84 | .29 | .58 | .87 |
| 6.00 | 11.90 | 138 | -1855.0 | 0. | 146.1 | 138 | 40408. | 139 | 42.00 | 1.75 | 36.0 | -8.38 | 18.90 | .29 | .53 | .82 |
| 8.00 | 11.56 | 138 | -1854.9 | 0. | 144.5 | 138 | 36267. | 139 | 42.00 | 1.75 | 36.0 | -8.38 | 16.96 | .29 | .47 | .76 |
| 10.00 | 11.20 | 138 | -1854.9 | 0. | 142.8 | 138 | 32135. | 139 | 42.00 | 1.75 | 36.0 | -8.38 | 15.03 | .29 | .42 | .71 |
| 12.00 | 10.83 | 138 | -1854.8 | 0. | 141.0 | 138 | 28018. | 139 | 42.00 | 1.75 | 36.0 | -8.38 | 13.11 | .29 | .36 | .66 |
| 14.00 | 10.45 | 138 | -1854.7 | 0. | 139.1 | 138 | 23921. | 139 | 42.00 | 1.75 | 36.0 | -8.38 | 11.19 | .29 | .31 | .60 |
| 16.00 | 10.05 | 138 | -1854.6 | 0. | 137.1 | 138 | 19850. | 139 | 42.00 | 1.75 | 36.0 | -8.38 | 9.28 | .29 | .26 | .55 |
| 18.00 | 9.65 | 138 | -1854.6 | 0. | 135.0 | 138 | 15811. | 139 | 42.00 | 1.75 | 36.0 | -8.38 | 7.40 | .29 | .21 | .50 |
| 20.00 | 9.23 | 138 | -1854.5 | 0. | 132.8 | 138 | 11811. | 140 | 42.00 | 1.75 | 36.0 | -8.38 | 5.52 | .29 | .15 | .45 |
| 22.00 | 8.82 | 138 | -1854.4 | 0. | 130.5 | 138 | 7854. | 141 | 42.00 | 1.75 | 36.0 | -8.38 | 3.67 | .29 | .10 | .39 |
| 24.00 | 8.40 | 138 | -1854.2 | 0. | 128.2 | 138 | 3951. | 143 | 42.00 | 1.75 | 36.0 | -8.38 | 1.85 | .29 | .05 | .34 |
| 26.00 | 7.98 | 138 | -1854.1 | 0. | 125.7 | 138 | 349. | -144 | 42.00 | 1.75 | 36.0 | -8.38 | .16 | .29 | .00 | .30 |
| 28.00 | 7.55 | 138 | -1854.0 | 0. | 123.2 | 138 | 3736. | -46 | 42.00 | 1.75 | 36.0 | -8.38 | 1.75 | .29 | .05 | .34 |
| 30.00 | 7.13 | 138 | -1853.8 | 0. | 120.7 | 138 | 7465. | -43 | 42.00 | 1.75 | 36.0 | -8.38 | 3.49 | .29 | .10 | .39 |
| 32.00 | 6.72 | 138 | -1853.7 | 0. | 118.1 | 138 | 11132. | -43 | 42.00 | 1.75 | 36.0 | -8.38 | 5.21 | .29 | .14 | .44 |
| 34.00 | 6.30 | 138 | -1850.0 | 0. | 110.8 | 138 | 14728. | -42 | 42.00 | 1.75 | 36.0 | -8.36 | 6.89 | .29 | .19 | .48 |
| 36.00 | 5.90 | 138 | -1842.7 | 0. | 99.1 | 138 | 18136. | -42 | 42.00 | 1.75 | 36.0 | -8.33 | 8.48 | .29 | .24 | .53 |
| 38.00 | 5.50 | 138 | -1835.4 | 0. | 87.7 | 138 | 21247. | -42 | 42.00 | 1.75 | 36.0 | -8.29 | 9.94 | .29 | .28 | .57 |
| 40.00 | 5.11 | 138 | -1828.0 | 0. | 76.6 | 138 | 24065. | -42 | 42.00 | 1.75 | 36.0 | -8.26 | 11.26 | .29 | .31 | .60 |
| 42.00 | 4.74 | 138 | -1820.6 | 0. | 65.8 | 139 | 26594. | -42 | 42.00 | 1.75 | 36.0 | -8.23 | 12.44 | .29 | .35 | .63 |
| 44.00 | 4.37 | 138 | -1813.2 | 0. | 55.2 | 139 | 28839. | -41 | 42.00 | 1.75 | 36.0 | -8.19 | 13.49 | .29 | .38 | .66 |
| 46.00 | 4.02 | 138 | -1805.7 | 0. | 45.0 | 139 | 30805. | -41 | 42.00 | 1.75 | 36.0 | -8.16 | 14.41 | .28 | .40 | .69 |
| 48.00 | 3.68 | 138 | -1798.1 | 0. | 35.1 | 139 | 32497. | -41 | 42.00 | 1.75 | 36.0 | -8.13 | 15.20 | .28 | .42 | .71 |
| 50.00 | 3.35 | 138 | -1790.5 | 0. | 25.5 | 139 | 33923. | -41 | 42.00 | 1.75 | 36.0 | -8.09 | 15.87 | .28 | .44 | .72 |
| 52.00 | 3.04 | 138 | -1782.9 | 0. | 16.3 | 140 | 35090. | -41 | 42.00 | 1.75 | 36.0 | -8.06 | 16.41 | .28 | .46 | .74 |
| 54.00 | 2.75 | 138 | -1775.2 | 0. | 7.3 | 143 | 36005. | -41 | 42.00 | 1.75 | 36.0 | -8.02 | 16.84 | .28 | .47 | .75 |
| 56.00 | 2.47 | 138 | -1767.5 | 0. | 1.5 | -63 | 36674. | -41 | 42.00 | 1.75 | 36.0 | -7.99 | 17.15 | .28 | .48 | .76 |
| 58.00 | 2.21 | 138 | -1759.8 | 0. | 9.8 | -44 | 37105. | -41 | 42.00 | 1.75 | 36.0 | -7.95 | 17.36 | .28 | .48 | .76 |
| 60.00 | 1.96 | 138 | -1752.2 | 0. | 17.8 | -43 | 37303. | -41 | 42.00 | 1.75 | 36.0 | -7.92 | 17.45 | .28 | .49 | .76 |
| 62.00 | 1.73 | 138 | -1744.6 | 0. | 25.5 | -42 | 37277. | -41 | 42.00 | 1.75 | 36.0 | -7.88 | 17.44 | .27 | .49 | .76 |
| 64.00 | 1.52 | 138 | -1737.1 | 0. | 32.9 | -42 | 37036. | -41 | 42.00 | 1.75 | 36.0 | -7.85 | 17.32 | .27 | .48 | .76 |
| 66.00 | 1.32 | 138 | -1729.7 | 0. | 39.9 | -42 | 36589. | -41 | 42.00 | 1.75 | 36.0 | -7.82 | 17.11 | .27 | .48 | .75 |
| 68.00 | 1.14 | 138 | -1722.4 | 0. | 46.6 | -42 | 35944. | -41 | 42.00 | 1.75 | 36.0 | -7.78 | 16.81 | .27 | .47 | .74 |
| 70.00 | .98 | 138 | -1715.1 | 0. | 53.0 | -41 | 35108. | -41 | 42.00 | 1.75 | 36.0 | -7.75 | 16.42 | .27 | .46 | .73 |
| 72.00 | .83 | 138 | -1707.9 | 0. | 59.0 | -41 | 34092. | -41 | 42.00 | 1.75 | 36.0 | -7.72 | 15.95 | .27 | .44 | .71 |
| 74.00 | .69 | 138 | -1700.8 | 0. | 64.7 | -41 | 32905. | -41 | 42.00 | 1.75 | 36.0 | -7.69 | 15.39 | .27 | .43 | .70 |
| 76.00 | .57 | 138 | -1693.7 | 0. | 70.0 | -41 | 31556. | -41 | 42.00 | 1.75 | 36.0 | -7.65 | 14.76 | .27 | .41 | .68 |
| 78.00 | .47 | 138 | -1686.8 | 0. | 75.0 | -41 | 30054. | -41 | 42.00 | 1.75 | 36.0 | -7.62 | 14.06 | .27 | .39 | .66 |
| 80.00 | .38 | 138 | -1679.8 | 0. | 79.6 | -41 | 28410. | -41 | 42.00 | 1.75 | 36.0 | -7.59 | 13.29 | .26 | .37 | .63 |
| 82.00 | .30 | 138 | -1673.0 | 0. | 83.9 | -41 | 26633. | -41 | 42.00 | 1.75 | 36.0 | -7.56 | 12.46 | .26 | .35 | .61 |
| 84.00 | .23 | 138 | -1666.2 | 0. | 87.5 | -41 | 24734. | -41 | 42.00 | 1.75 | 36.0 | -7.53 | 11.57 | .26 | .32 | .58 |
| 86.00 | .17 | 138 | -1659.6 | 0. | 90.2 | -41 | 22729. | -41 | 42.00 | 1.75 | 36.0 | -7.50 | 10.63 | .26 | .30 | .56 |
| 88.00 | .12 | 139 | -1653.0 | 0. | 92.1 | -41 | 20642. | -41 | 42.00 | 1.75 | 36.0 | -7.47 | 9.66 | .26 | .27 | .53 |
| 90.00 | .09 | 139 | -1646.5 | 0. | 93.5 | -41 | 18494. | -41 | 42.00 | 1.75 | 36.0 | -7.44 | 8.65 | .26 | .24 | .50 |
| 92.00 | .06 | 139 | -1640.1 | 0. | 94.4 | -41 | 16299. | -41 | 42.00 | 1.75 | 36.0 | -7.41 | 7.62 | .26 | .21 | .47 |
| 94.00 | .03 | 139 | -1633.7 | 0. | 94.9 | -41 | 14070. | -41 | 42.00 | 1.75 | 36.0 | -7.38 | 6.58 | .26 | .18 | .44 |
| 96.00 | .02 | 139 | -1627.5 | 0. | 95.2 | -41 | 11819. | -41 | 42.00 | 1.75 | 36.0 | -7.35 | 5.53 | .26 | .15 | .41 |
| 98.00 | .01 | 140 | -1621.4 | 0. | 95.3 | -41 | 9552. | -41 | 42.00 | 1.75 | 36.0 | -7.33 | 4.47 | .26 | .12 | .38 |

*** Pile Critical Load Case Report For Pile Joint 172 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|-------------------|---------------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|----------|--------------------|----------------|--------------------|-------|-------|
| | Normal Value (In) | To Pile Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | | | Axial | Bend. | Total |
| 100.00 | .00 | -70 | -1599.4 | 0. | 94.8 | -41 | 7276. | -41 | 42.00 | 1.75 | 36.0 | -7.23 | 3.40 | .25 | .09 | .35 |
| 102.00 | .00 | -42 | -1562.4 | 0. | 80.9 | -41 | 5008. | -40 | 42.00 | 1.75 | 36.0 | -7.06 | 2.34 | .25 | .07 | .31 |
| 104.00 | .01 | -41 | -1526.3 | 0. | 61.9 | -41 | 3068. | -40 | 42.00 | 1.75 | 36.0 | -6.90 | 1.44 | .24 | .04 | .28 |
| 106.00 | .01 | -41 | -1490.9 | 0. | 42.8 | -40 | 1582. | -40 | 42.00 | 1.75 | 36.0 | -6.74 | .74 | .23 | .02 | .26 |
| 108.00 | .00 | -41 | -1456.3 | 0. | 26.2 | -40 | 555. | -38 | 42.00 | 1.75 | 36.0 | -6.58 | .26 | .23 | .01 | .24 |
| 110.00 | .00 | -41 | -1422.5 | 0. | 13.5 | -40 | 78. | 127 | 42.00 | 1.75 | 36.0 | -6.43 | .04 | .22 | .00 | .22 |
| 112.00 | .00 | -40 | -1389.3 | 0. | 4.7 | -38 | 403. | 137 | 42.00 | 1.75 | 36.0 | -6.28 | .19 | .22 | .01 | .22 |
| 114.00 | .00 | -40 | -1357.0 | 0. | .7 | 128 | 517. | 138 | 42.00 | 1.75 | 36.0 | -6.13 | .24 | .21 | .01 | .22 |
| 116.00 | .00 | -40 | -1325.3 | 0. | 3.5 | 137 | 500. | 138 | 42.00 | 1.75 | 36.0 | -5.99 | .23 | .21 | .01 | .21 |
| 118.00 | .00 | -38 | -1294.3 | 0. | 4.5 | 138 | 416. | 138 | 42.00 | 1.75 | 36.0 | -5.85 | .19 | .20 | .01 | .21 |
| 120.00 | .00 | 0 | -1264.0 | 0. | 4.3 | 138 | 309. | 139 | 42.00 | 1.75 | 36.0 | -5.71 | .14 | .20 | .00 | .20 |
| 122.00 | .00 | 137 | -1234.3 | 0. | 3.6 | 138 | 205. | 139 | 42.00 | 1.75 | 36.0 | -5.58 | .10 | .19 | .00 | .20 |
| 124.00 | .00 | 138 | -1205.3 | 0. | 2.6 | 139 | 119. | 139 | 42.00 | 1.75 | 36.0 | -5.45 | .06 | .19 | .00 | .19 |
| 126.00 | .00 | 138 | -1176.9 | 0. | 1.7 | 139 | 56. | 140 | 42.00 | 1.75 | 36.0 | -5.32 | .03 | .19 | .00 | .19 |
| 128.00 | .00 | 138 | -1149.1 | 0. | 1.0 | 139 | 14. | 142 | 42.00 | 1.75 | 36.0 | -5.19 | .01 | .18 | .00 | .18 |
| 130.00 | .00 | 0 | -1121.9 | 0. | .5 | 140 | 9. | -44 | 42.00 | 1.75 | 36.0 | -5.07 | .00 | .18 | .00 | .18 |
| 132.00 | .00 | 0 | -1095.3 | 0. | .1 | 143 | 20. | -42 | 42.00 | 1.75 | 36.0 | -4.95 | .01 | .17 | .00 | .17 |
| 134.00 | .00 | 0 | -1069.2 | 0. | .1 | -43 | 23. | -41 | 42.00 | 1.75 | 36.0 | -4.83 | .01 | .17 | .00 | .17 |
| 136.00 | .00 | 0 | -1043.7 | 0. | .2 | -42 | 20. | -41 | 42.00 | 1.75 | 36.0 | -4.72 | .01 | .16 | .00 | .16 |
| 138.00 | .00 | 0 | -1018.8 | 0. | .2 | -41 | 16. | -41 | 42.00 | 1.75 | 36.0 | -4.60 | .01 | .16 | .00 | .16 |
| 140.00 | .00 | 0 | -994.4 | 0. | .2 | -41 | 11. | -40 | 42.00 | 1.75 | 36.0 | -4.49 | .01 | .16 | .00 | .16 |
| 142.00 | .00 | 0 | -970.5 | 0. | .1 | -41 | 6. | -40 | 42.00 | 1.75 | 36.0 | -4.39 | .00 | .15 | .00 | .15 |
| 144.00 | .00 | 0 | -947.1 | 0. | .1 | -40 | 3. | -40 | 42.00 | 1.75 | 36.0 | -4.28 | .00 | .15 | .00 | .15 |
| 146.00 | .00 | 0 | -924.1 | 0. | .1 | -40 | 1. | -39 | 42.00 | 1.75 | 36.0 | -4.18 | .00 | .15 | .00 | .15 |
| 148.00 | .00 | 0 | -901.7 | 0. | .0 | -40 | 0. | 129 | 42.00 | 1.75 | 36.0 | -4.07 | .00 | .14 | .00 | .14 |
| 150.00 | .00 | 0 | -878.9 | 0. | .0 | -38 | 0. | 137 | 42.00 | 1.75 | 36.0 | -3.97 | .00 | .14 | .00 | .14 |
| 152.00 | .00 | 0 | -855.8 | 0. | .0 | 135 | 1. | 138 | 42.00 | 1.75 | 36.0 | -3.87 | .00 | .13 | .00 | .13 |
| 154.00 | .00 | 0 | -833.1 | 0. | .0 | 138 | 0. | 138 | 42.00 | 1.75 | 36.0 | -3.76 | .00 | .13 | .00 | .13 |
| 156.00 | .00 | 0 | -810.9 | 0. | .0 | 138 | 0. | 138 | 42.00 | 1.75 | 36.0 | -3.66 | .00 | .13 | .00 | .13 |
| 158.00 | .00 | 0 | -789.1 | 0. | .0 | 138 | 0. | 139 | 42.00 | 1.75 | 36.0 | -3.57 | .00 | .12 | .00 | .12 |
| 160.00 | .00 | 0 | -767.8 | 0. | .0 | 138 | 0. | 139 | 42.00 | 1.75 | 36.0 | -3.47 | .00 | .12 | .00 | .12 |
| 162.00 | .00 | 0 | -746.8 | 0. | .0 | 139 | 0. | 139 | 42.00 | 1.75 | 36.0 | -3.38 | .00 | .12 | .00 | .12 |
| 164.00 | .00 | 0 | -726.4 | 0. | .0 | 139 | 0. | 142 | 42.00 | 1.75 | 36.0 | -3.28 | .00 | .11 | .00 | .11 |
| 166.00 | .00 | 0 | -706.3 | 0. | .0 | 140 | 0. | -43 | 42.00 | 1.75 | 36.0 | -3.19 | .00 | .11 | .00 | .11 |
| 168.00 | .00 | 0 | -686.6 | 0. | .0 | 0 | 0. | -41 | 42.00 | 1.75 | 36.0 | -3.10 | .00 | .11 | .00 | .11 |
| 170.00 | .00 | 0 | -667.2 | 0. | .0 | -42 | 0. | -41 | 42.00 | 1.50 | 36.0 | -3.50 | .00 | .12 | .00 | .12 |
| 172.00 | .00 | 0 | -648.1 | 0. | .0 | -41 | 0. | -41 | 42.00 | 1.50 | 36.0 | -3.40 | .00 | .12 | .00 | .12 |
| 174.00 | .00 | 0 | -629.4 | 0. | .0 | -41 | 0. | -40 | 42.00 | 1.50 | 36.0 | -3.30 | .00 | .11 | .00 | .11 |
| 176.00 | .00 | 0 | -611.2 | 0. | .0 | -41 | 0. | -40 | 42.00 | 1.50 | 36.0 | -3.20 | .00 | .11 | .00 | .11 |
| 178.00 | .00 | 0 | -593.3 | 0. | .0 | -40 | 0. | -40 | 42.00 | 1.50 | 36.0 | -3.11 | .00 | .11 | .00 | .11 |
| 180.00 | .00 | 0 | -575.7 | 0. | .0 | 0 | 0. | -38 | 42.00 | 1.25 | 36.0 | -3.60 | .00 | .13 | .00 | .13 |
| 182.00 | .00 | 0 | -558.4 | 0. | .0 | 0 | 0. | 136 | 42.00 | 1.25 | 36.0 | -3.49 | .00 | .12 | .00 | .12 |
| 184.00 | .00 | 0 | -541.6 | 0. | .0 | 0 | 0. | 138 | 42.00 | 1.25 | 36.0 | -3.38 | .00 | .12 | .00 | .12 |
| 186.00 | .00 | 0 | -525.2 | 0. | .0 | 0 | 0. | 138 | 42.00 | 1.25 | 36.0 | -3.28 | .00 | .11 | .00 | .11 |
| 188.00 | .00 | 0 | -509.2 | 0. | .0 | 0 | 0. | 138 | 42.00 | 1.25 | 36.0 | -3.18 | .00 | .11 | .00 | .11 |
| 190.00 | .00 | 0 | -493.5 | 0. | .0 | 0 | 0. | 139 | 42.00 | 1.00 | 36.0 | -3.83 | .00 | .13 | .00 | .13 |
| 192.00 | .00 | 0 | -478.1 | 0. | .0 | 0 | 0. | 139 | 42.00 | 1.00 | 36.0 | -3.71 | .00 | .13 | .00 | .13 |
| 194.00 | .00 | 0 | -463.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.60 | .00 | .13 | .00 | .13 |
| 196.00 | .00 | 0 | -448.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.48 | .00 | .12 | .00 | .12 |
| 198.00 | .00 | 0 | -434.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.38 | .00 | .12 | .00 | .12 |

*** File Critical Load Case Report For Pile Joint 172 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force | | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|-------------------|---------------------|--------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|----------|--------------------|----------------|--------------------|-------------|-----|
| | Normal Value (In) | To Pile Angle (Deg) | Force (Kips) | Torsion (In-Kips) | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | | | Axial | Bend. Total | |
| 200.00 | .00 | 0 | -421.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.27 | .00 | .11 | .00 | .11 |
| 202.00 | .00 | 0 | -407.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.17 | .00 | .11 | .00 | .11 |
| 204.00 | .00 | 0 | -395.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.07 | .00 | .11 | .00 | .11 |
| 206.00 | .00 | 0 | -382.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.97 | .00 | .10 | .00 | .10 |
| 208.00 | .00 | 0 | -370.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.88 | .00 | .10 | .00 | .10 |
| 210.00 | .00 | 0 | -358.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.79 | .00 | .10 | .00 | .10 |
| 212.00 | .00 | 0 | -345.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.68 | .00 | .09 | .00 | .09 |
| 214.00 | .00 | 0 | -330.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.57 | .00 | .09 | .00 | .09 |
| 216.00 | .00 | 0 | -315.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.45 | .00 | .09 | .00 | .09 |
| 218.00 | .00 | 0 | -301.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.34 | .00 | .08 | .00 | .08 |
| 220.00 | .00 | 0 | -287.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.23 | .00 | .08 | .00 | .08 |
| 222.00 | .00 | 0 | -273.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.12 | .00 | .07 | .00 | .07 |
| 224.00 | .00 | 0 | -259.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.02 | .00 | .07 | .00 | .07 |
| 226.00 | .00 | 0 | -246.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.91 | .00 | .07 | .00 | .07 |
| 228.00 | .00 | 0 | -233.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.81 | .00 | .06 | .00 | .06 |
| 230.00 | .00 | 0 | -220.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.71 | .00 | .06 | .00 | .06 |
| 232.00 | .00 | 0 | -208.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.61 | .00 | .06 | .00 | .06 |
| 234.00 | .00 | 0 | -195.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.52 | .00 | .05 | .00 | .05 |
| 236.00 | .00 | 0 | -183.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.43 | .00 | .05 | .00 | .05 |
| 238.00 | .00 | 0 | -172.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.34 | .00 | .05 | .00 | .05 |
| 240.00 | .00 | 0 | -160.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.25 | .00 | .04 | .00 | .04 |
| 242.00 | .00 | 0 | -149.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.16 | .00 | .04 | .00 | .04 |
| 244.00 | .00 | 0 | -138.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.07 | .00 | .04 | .00 | .04 |
| 246.00 | .00 | 0 | -127.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.99 | .00 | .03 | .00 | .03 |
| 248.00 | .00 | 0 | -116.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.91 | .00 | .03 | .00 | .03 |
| 250.00 | .00 | 0 | -106.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.82 | .00 | .03 | .00 | .03 |
| 252.00 | .00 | 0 | -95.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.74 | .00 | .03 | .00 | .03 |
| 254.00 | .00 | 0 | -85.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.66 | .00 | .02 | .00 | .02 |
| 256.00 | .00 | 0 | -75.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.58 | .00 | .02 | .00 | .02 |
| 258.00 | .00 | 0 | -65.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.51 | .00 | .02 | .00 | .02 |
| 260.00 | .00 | 0 | -55.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.43 | .00 | .01 | .00 | .01 |
| 262.00 | .00 | 0 | -45.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.35 | .00 | .01 | .00 | .01 |
| 264.00 | .00 | 0 | -35.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.27 | .00 | .01 | .00 | .01 |
| 266.00 | .00 | 0 | -25.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.20 | .00 | .01 | .00 | .01 |
| 268.00 | .00 | 0 | -15.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.12 | .00 | .00 | .00 | .00 |

*** Pile Critical Load Case Report For Pile Joint 182 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|-------------------|---------------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|------|--------------------|----------------|--------------------|-------|-------|
| | Normal Value (In) | To Pile Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy | | | Axial | Bend. | Axial |
| .00 | 13.04 | 90 | -2867.2 | 0. | 139.5 | 90 | 55100. | 90 | 42.00 | 1.75 | 36.0 | -12.96 | 25.77 | .45 | .72 | 1.17 |
| 2.00 | 12.76 | 90 | -2867.7 | 0. | 138.3 | 90 | 50932. | 90 | 42.00 | 1.75 | 36.0 | -12.96 | 23.82 | .45 | .66 | 1.11 |
| 4.00 | 12.45 | 90 | -2868.1 | 0. | 136.9 | 90 | 46728. | 90 | 42.00 | 1.75 | 36.0 | -12.96 | 21.86 | .45 | .61 | 1.06 |
| 6.00 | 12.12 | 90 | -2868.6 | 0. | 135.4 | 90 | 42499. | 90 | 42.00 | 1.75 | 36.0 | -12.96 | 19.88 | .45 | .55 | 1.00 |
| 8.00 | 11.77 | 90 | -2869.0 | 0. | 133.8 | 90 | 38251. | 89 | 42.00 | 1.75 | 36.0 | -12.96 | 17.89 | .45 | .50 | .95 |
| 10.00 | 11.41 | 90 | -2869.4 | 0. | 132.1 | 90 | 33992. | 89 | 42.00 | 1.75 | 36.0 | -12.97 | 15.90 | .45 | .44 | .89 |
| 12.00 | 11.03 | 90 | -2869.7 | 0. | 130.3 | 90 | 29732. | 89 | 42.00 | 1.75 | 36.0 | -12.97 | 13.91 | .45 | .39 | .84 |
| 14.00 | 10.63 | 90 | -2870.1 | 0. | 128.3 | 90 | 25477. | 89 | 42.00 | 1.75 | 36.0 | -12.97 | 11.92 | .45 | .33 | .78 |
| 16.00 | 10.23 | 90 | -2870.5 | 0. | 126.3 | 90 | 21236. | 89 | 42.00 | 1.75 | 36.0 | -12.97 | 9.93 | .45 | .28 | .73 |
| 18.00 | 9.82 | 90 | -2870.8 | 0. | 124.2 | 90 | 17017. | 89 | 42.00 | 1.75 | 36.0 | -12.97 | 7.96 | .45 | .22 | .67 |
| 20.00 | 9.39 | 90 | -2871.2 | 0. | 122.0 | 90 | 12827. | 89 | 42.00 | 1.75 | 36.0 | -12.97 | 6.00 | .45 | .17 | .62 |
| 22.00 | 8.97 | 90 | -2871.5 | 0. | 119.7 | 90 | 8674. | 88 | 42.00 | 1.75 | 36.0 | -12.98 | 4.06 | .45 | .11 | .56 |
| 24.00 | 8.54 | 90 | -2871.8 | 0. | 117.4 | 90 | 4567. | 86 | 42.00 | 1.75 | 36.0 | -12.98 | 2.14 | .45 | .06 | .51 |
| 26.00 | 8.10 | 90 | -2872.1 | 0. | 114.9 | 90 | 580. | 59 | 42.00 | 1.75 | 36.0 | -12.98 | .27 | .45 | .01 | .46 |
| 28.00 | 7.67 | 90 | -2872.3 | 0. | 112.4 | 90 | 3517. | -84 | 42.00 | 1.75 | 36.0 | -12.98 | 1.65 | .45 | .05 | .50 |
| 30.00 | 7.24 | 90 | -2872.6 | 0. | 109.9 | 90 | 7449. | -87 | 42.00 | 1.75 | 36.0 | -12.98 | 3.48 | .45 | .10 | .55 |
| 32.00 | 6.81 | 90 | -2872.9 | 0. | 107.3 | 90 | 11315. | -88 | 42.00 | 1.75 | 36.0 | -12.98 | 5.29 | .45 | .15 | .60 |
| 34.00 | 6.39 | 90 | -2870.4 | 0. | 99.9 | 90 | 15104. | -88 | 42.00 | 1.75 | 36.0 | -12.97 | 7.07 | .45 | .20 | .65 |
| 36.00 | 5.97 | 90 | -2865.2 | 0. | 88.2 | 90 | 18698. | -88 | 42.00 | 1.75 | 36.0 | -12.95 | 8.75 | .45 | .24 | .69 |
| 38.00 | 5.56 | 90 | -2859.9 | 0. | 76.8 | 90 | 21985. | -88 | 42.00 | 1.75 | 36.0 | -12.92 | 10.28 | .45 | .29 | .74 |
| 40.00 | 5.16 | 90 | -2854.5 | 0. | 65.7 | 90 | 24968. | -88 | 42.00 | 1.75 | 36.0 | -12.90 | 11.68 | .45 | .33 | .77 |
| 42.00 | 4.77 | 90 | -2849.1 | 0. | 54.8 | 89 | 27650. | -89 | 42.00 | 1.75 | 36.0 | -12.87 | 12.93 | .45 | .36 | .81 |
| 44.00 | 4.40 | 90 | -2843.5 | 0. | 44.2 | 89 | 30035. | -89 | 42.00 | 1.75 | 36.0 | -12.85 | 14.05 | .45 | .39 | .84 |
| 46.00 | 4.04 | 90 | -2838.0 | 0. | 33.9 | 89 | 32126. | -89 | 42.00 | 1.75 | 36.0 | -12.82 | 15.03 | .45 | .42 | .86 |
| 48.00 | 3.69 | 90 | -2832.3 | 0. | 24.0 | 89 | 33928. | -89 | 42.00 | 1.75 | 36.0 | -12.80 | 15.87 | .45 | .44 | .89 |
| 50.00 | 3.35 | 90 | -2826.6 | 0. | 14.4 | 88 | 35448. | -89 | 42.00 | 1.75 | 36.0 | -12.77 | 16.58 | .44 | .46 | .91 |
| 52.00 | 3.04 | 90 | -2820.8 | 0. | 5.2 | 84 | 36691. | -89 | 42.00 | 1.75 | 36.0 | -12.75 | 17.16 | .44 | .48 | .92 |
| 54.00 | 2.74 | 90 | -2814.9 | 0. | 3.8 | -81 | 37665. | -89 | 42.00 | 1.75 | 36.0 | -12.72 | 17.62 | .44 | .49 | .93 |
| 56.00 | 2.45 | 90 | -2809.0 | 0. | 12.4 | -87 | 38376. | -89 | 42.00 | 1.75 | 36.0 | -12.69 | 17.95 | .44 | .50 | .94 |
| 58.00 | 2.18 | 90 | -2803.0 | 0. | 20.8 | -88 | 38830. | -89 | 42.00 | 1.75 | 36.0 | -12.67 | 18.16 | .44 | .51 | .95 |
| 60.00 | 1.93 | 90 | -2796.9 | 0. | 28.8 | -88 | 39033. | -89 | 42.00 | 1.75 | 36.0 | -12.64 | 18.26 | .44 | .51 | .95 |
| 62.00 | 1.70 | 90 | -2790.8 | 0. | 36.4 | -88 | 38994. | -89 | 42.00 | 1.75 | 36.0 | -12.61 | 18.24 | .44 | .51 | .95 |
| 64.00 | 1.48 | 90 | -2784.6 | 0. | 43.7 | -88 | 38723. | -89 | 42.00 | 1.75 | 36.0 | -12.58 | 18.11 | .44 | .50 | .94 |
| 66.00 | 1.28 | 90 | -2778.3 | 0. | 50.7 | -88 | 38227. | -89 | 42.00 | 1.75 | 36.0 | -12.56 | 17.88 | .44 | .50 | .93 |
| 68.00 | 1.10 | 90 | -2772.0 | 0. | 57.4 | -89 | 37516. | -89 | 42.00 | 1.75 | 36.0 | -12.53 | 17.55 | .44 | .49 | .92 |
| 70.00 | .94 | 90 | -2765.5 | 0. | 63.6 | -89 | 36598. | -89 | 42.00 | 1.75 | 36.0 | -12.50 | 17.12 | .44 | .48 | .91 |
| 72.00 | .79 | 90 | -2759.1 | 0. | 69.5 | -89 | 35483. | -89 | 42.00 | 1.75 | 36.0 | -12.47 | 16.60 | .43 | .46 | .90 |
| 74.00 | .65 | 90 | -2752.5 | 0. | 75.1 | -89 | 34183. | -89 | 42.00 | 1.75 | 36.0 | -12.44 | 15.99 | .43 | .45 | .88 |
| 76.00 | .54 | 90 | -2745.9 | 0. | 80.4 | -89 | 32706. | -89 | 42.00 | 1.75 | 36.0 | -12.41 | 15.30 | .43 | .43 | .86 |
| 78.00 | .43 | 90 | -2739.2 | 0. | 85.2 | -89 | 31063. | -89 | 42.00 | 1.75 | 36.0 | -12.38 | 14.53 | .43 | .40 | .84 |
| 80.00 | .34 | 90 | -2732.5 | 0. | 89.7 | -89 | 29266. | -89 | 42.00 | 1.75 | 36.0 | -12.35 | 13.69 | .43 | .38 | .81 |
| 82.00 | .26 | 90 | -2725.6 | 0. | 93.8 | -89 | 27325. | -89 | 42.00 | 1.75 | 36.0 | -12.32 | 12.78 | .43 | .36 | .78 |
| 84.00 | .20 | 90 | -2718.7 | 0. | 97.0 | -89 | 25251. | -89 | 42.00 | 1.75 | 36.0 | -12.29 | 11.81 | .43 | .33 | .76 |
| 86.00 | .15 | 90 | -2711.8 | 0. | 99.3 | -89 | 23071. | -89 | 42.00 | 1.75 | 36.0 | -12.25 | 10.79 | .43 | .30 | .73 |
| 88.00 | .10 | 89 | -2704.8 | 0. | 100.9 | -89 | 20808. | -89 | 42.00 | 1.75 | 36.0 | -12.22 | 9.73 | .43 | .27 | .70 |
| 90.00 | .07 | 89 | -2697.7 | 0. | 101.9 | -89 | 18481. | -89 | 42.00 | 1.75 | 36.0 | -12.19 | 8.64 | .42 | .24 | .67 |
| 92.00 | .04 | 89 | -2690.5 | 0. | 102.6 | -89 | 16106. | -89 | 42.00 | 1.75 | 36.0 | -12.16 | 7.53 | .42 | .21 | .63 |
| 94.00 | .02 | 88 | -2683.3 | 0. | 102.9 | -89 | 13697. | -89 | 42.00 | 1.75 | 36.0 | -12.13 | 6.41 | .42 | .18 | .60 |
| 96.00 | .01 | 87 | -2676.0 | 0. | 103.0 | -89 | 11264. | -89 | 42.00 | 1.75 | 36.0 | -12.09 | 5.27 | .42 | .15 | .57 |
| 98.00 | .00 | -69 | -2668.6 | 0. | 103.0 | -89 | 8814. | -89 | 42.00 | 1.75 | 36.0 | -12.06 | 4.12 | .42 | .11 | .53 |

*** Pile Critical Load Case Report For Pile Joint 182 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection | | Axial | | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|-------------------|---------------------|--------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|------|--------------------|----------------|--------------------|-------|-------|
| | Normal Value (In) | To Pile Angle (Deg) | Force (Kips) | Torsion (In-Kips) | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy | | | Axial | Bend. | Axial |
| 100.00 | .01 | -87 | -2661.2 | 0. | 102.9 | -89 | 6355. | -89 | 42.00 | 1.75 | 36.0 | -12.03 | 2.97 | .42 | .08 | .50 |
| 102.00 | .01 | -88 | -2599.1 | 0. | 78.6 | -89 | 3890. | -90 | 42.00 | 1.75 | 36.0 | -11.75 | 1.82 | .41 | .05 | .46 |
| 104.00 | .01 | -89 | -2538.4 | 0. | 54.3 | -89 | 2002. | -90 | 42.00 | 1.75 | 36.0 | -11.47 | .94 | .40 | .03 | .43 |
| 106.00 | .01 | -90 | -2479.0 | 0. | 33.4 | 269 | 697. | -92 | 42.00 | 1.75 | 36.0 | -11.20 | .33 | .39 | .01 | .40 |
| 108.00 | .00 | -90 | -2420.8 | 0. | 17.2 | 269 | 112. | 104 | 42.00 | 1.75 | 36.0 | -10.94 | .05 | .38 | .00 | .38 |
| 110.00 | .00 | -90 | -2363.9 | 0. | 6.0 | 267 | 525. | 92 | 42.00 | 1.75 | 36.0 | -10.68 | .25 | .37 | .01 | .38 |
| 112.00 | .00 | -90 | -2308.3 | 0. | 1.0 | 104 | 672. | 91 | 42.00 | 1.75 | 36.0 | -10.43 | .31 | .36 | .01 | .37 |
| 114.00 | .00 | -90 | -2253.8 | 0. | 4.5 | 92 | 651. | 90 | 42.00 | 1.75 | 36.0 | -10.19 | .30 | .35 | .01 | .36 |
| 116.00 | .00 | -90 | -2200.5 | 0. | 5.8 | 91 | 544. | 90 | 42.00 | 1.75 | 36.0 | -9.94 | .25 | .35 | .01 | .35 |
| 118.00 | .00 | 0 | -2148.4 | 0. | 5.6 | 90 | 406. | 90 | 42.00 | 1.75 | 36.0 | -9.71 | .19 | .34 | .01 | .34 |
| 120.00 | .00 | 90 | -2097.3 | 0. | 4.7 | 90 | 272. | 90 | 42.00 | 1.75 | 36.0 | -9.48 | .13 | .33 | .00 | .33 |
| 122.00 | .00 | 90 | -2047.4 | 0. | 3.5 | 90 | 160. | 89 | 42.00 | 1.75 | 36.0 | -9.25 | .07 | .32 | .00 | .32 |
| 124.00 | .00 | 90 | -1998.5 | 0. | 2.3 | 90 | 76. | 88 | 42.00 | 1.75 | 36.0 | -9.03 | .04 | .31 | .00 | .31 |
| 126.00 | .00 | 90 | -1950.7 | 0. | 1.3 | 89 | 21. | 86 | 42.00 | 1.75 | 36.0 | -8.82 | .01 | .31 | .00 | .31 |
| 128.00 | .00 | 90 | -1903.8 | 0. | .6 | 88 | 11. | -83 | 42.00 | 1.75 | 36.0 | -8.60 | .01 | .30 | .00 | .30 |
| 130.00 | .00 | 90 | -1858.0 | 0. | .2 | 85 | 26. | -88 | 42.00 | 1.75 | 36.0 | -8.40 | .01 | .29 | .00 | .29 |
| 132.00 | .00 | 0 | -1813.1 | 0. | .1 | -84 | 30. | -88 | 42.00 | 1.75 | 36.0 | -8.19 | .01 | .29 | .00 | .29 |
| 134.00 | .00 | 0 | -1769.2 | 0. | .2 | -88 | 27. | -89 | 42.00 | 1.75 | 36.0 | -7.99 | .01 | .28 | .00 | .28 |
| 136.00 | .00 | 0 | -1726.1 | 0. | .3 | -88 | 21. | -89 | 42.00 | 1.75 | 36.0 | -7.80 | .01 | .27 | .00 | .27 |
| 138.00 | .00 | 0 | -1684.0 | 0. | .2 | -89 | 15. | -89 | 42.00 | 1.75 | 36.0 | -7.61 | .01 | .26 | .00 | .26 |
| 140.00 | .00 | 0 | -1642.7 | 0. | .2 | -89 | 9. | -90 | 42.00 | 1.75 | 36.0 | -7.42 | .00 | .26 | .00 | .26 |
| 142.00 | .00 | 0 | -1602.3 | 0. | .1 | -89 | 4. | -90 | 42.00 | 1.75 | 36.0 | -7.24 | .00 | .25 | .00 | .25 |
| 144.00 | .00 | 0 | -1562.8 | 0. | .1 | 269 | 1. | -92 | 42.00 | 1.75 | 36.0 | -7.06 | .00 | .25 | .00 | .25 |
| 146.00 | .00 | 0 | -1524.0 | 0. | .0 | 269 | 0. | 136 | 42.00 | 1.75 | 36.0 | -6.89 | .00 | .24 | .00 | .24 |
| 148.00 | .00 | 0 | -1486.0 | 0. | .0 | 267 | 1. | 92 | 42.00 | 1.75 | 36.0 | -6.72 | .00 | .23 | .00 | .23 |
| 150.00 | .00 | 0 | -1448.8 | 0. | .0 | 105 | 1. | 91 | 42.00 | 1.75 | 36.0 | -6.55 | .00 | .23 | .00 | .23 |
| 152.00 | .00 | 0 | -1411.0 | 0. | .0 | 92 | 1. | 90 | 42.00 | 1.75 | 36.0 | -6.38 | .00 | .22 | .00 | .22 |
| 154.00 | .00 | 0 | -1372.6 | 0. | .0 | 91 | 1. | 90 | 42.00 | 1.75 | 36.0 | -6.20 | .00 | .22 | .00 | .22 |
| 156.00 | .00 | 0 | -1335.0 | 0. | .0 | 90 | 0. | 90 | 42.00 | 1.75 | 36.0 | -6.03 | .00 | .21 | .00 | .21 |
| 158.00 | .00 | 0 | -1298.1 | 0. | .0 | 90 | 0. | 89 | 42.00 | 1.75 | 36.0 | -5.87 | .00 | .20 | .00 | .20 |
| 160.00 | .00 | 0 | -1262.0 | 0. | .0 | 90 | 0. | 89 | 42.00 | 1.75 | 36.0 | -5.70 | .00 | .20 | .00 | .20 |
| 162.00 | .00 | 0 | -1226.5 | 0. | .0 | 90 | 0. | 87 | 42.00 | 1.75 | 36.0 | -5.54 | .00 | .19 | .00 | .19 |
| 164.00 | .00 | 0 | -1191.7 | 0. | .0 | 90 | 0. | -80 | 42.00 | 1.75 | 36.0 | -5.39 | .00 | .19 | .00 | .19 |
| 166.00 | .00 | 0 | -1157.6 | 0. | .0 | 90 | 0. | -88 | 42.00 | 1.75 | 36.0 | -5.23 | .00 | .18 | .00 | .18 |
| 168.00 | .00 | 0 | -1124.1 | 0. | .0 | -90 | 0. | -88 | 42.00 | 1.75 | 36.0 | -5.08 | .00 | .18 | .00 | .18 |
| 170.00 | .00 | 0 | -1091.2 | 0. | .0 | -90 | 0. | -89 | 42.00 | 1.50 | 36.0 | -5.72 | .00 | .20 | .00 | .20 |
| 172.00 | .00 | 0 | -1058.8 | 0. | .0 | -90 | 0. | -89 | 42.00 | 1.50 | 36.0 | -5.55 | .00 | .19 | .00 | .19 |
| 174.00 | .00 | 0 | -1027.2 | 0. | .0 | -90 | 0. | -90 | 42.00 | 1.50 | 36.0 | -5.38 | .00 | .19 | .00 | .19 |
| 176.00 | .00 | 0 | -996.2 | 0. | .0 | -90 | 0. | -90 | 42.00 | 1.50 | 36.0 | -5.22 | .00 | .18 | .00 | .18 |
| 178.00 | .00 | 0 | -965.8 | 0. | .0 | -90 | 0. | -91 | 42.00 | 1.50 | 36.0 | -5.06 | .00 | .18 | .00 | .18 |
| 180.00 | .00 | 0 | -936.0 | 0. | .0 | 0 | 0. | 108 | 42.00 | 1.25 | 36.0 | -5.85 | .00 | .20 | .00 | .20 |
| 182.00 | .00 | 0 | -906.7 | 0. | .0 | 0 | 0. | 91 | 42.00 | 1.25 | 36.0 | -5.67 | .00 | .20 | .00 | .20 |
| 184.00 | .00 | 0 | -878.2 | 0. | .0 | 0 | 0. | 91 | 42.00 | 1.25 | 36.0 | -5.49 | .00 | .19 | .00 | .19 |
| 186.00 | .00 | 0 | -850.3 | 0. | .0 | 0 | 0. | 90 | 42.00 | 1.25 | 36.0 | -5.31 | .00 | .18 | .00 | .18 |
| 188.00 | .00 | 0 | -823.1 | 0. | .0 | 0 | 0. | 90 | 42.00 | 1.25 | 36.0 | -5.14 | .00 | .18 | .00 | .18 |
| 190.00 | .00 | 0 | -796.4 | 0. | .0 | 0 | 0. | 89 | 42.00 | 1.00 | 36.0 | -6.18 | .00 | .22 | .00 | .22 |
| 192.00 | .00 | 0 | -770.4 | 0. | .0 | 0 | 0. | 89 | 42.00 | 1.00 | 36.0 | -5.98 | .00 | .21 | .00 | .21 |
| 194.00 | .00 | 0 | -745.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.79 | .00 | .20 | .00 | .20 |
| 196.00 | .00 | 0 | -720.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.59 | .00 | .19 | .00 | .19 |
| 198.00 | .00 | 0 | -696.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.41 | .00 | .19 | .00 | .19 |

*** Pile Critical Load Case Report For Pile Joint 1B2 - Critical Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection Normal To Pile | | Axial Force | | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|------|--------------------|----------------|--------------------|-------------|-----|
| | Value (In) | Angle (Deg) | Force (Kips) | Torsion (In-Kips) | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy | | | Axial | Bend. Total | |
| 200.00 | .00 | 0 | -673.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.23 | .00 | .18 | .00 | .18 |
| 202.00 | .00 | 0 | -650.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.05 | .00 | .18 | .00 | .18 |
| 204.00 | .00 | 0 | -628.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.88 | .00 | .17 | .00 | .17 |
| 206.00 | .00 | 0 | -607.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.72 | .00 | .16 | .00 | .16 |
| 208.00 | .00 | 0 | -586.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.56 | .00 | .16 | .00 | .16 |
| 210.00 | .00 | 0 | -566.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.40 | .00 | .15 | .00 | .15 |
| 212.00 | .00 | 0 | -546.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.25 | .00 | .15 | .00 | .15 |
| 214.00 | .00 | 0 | -524.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.07 | .00 | .14 | .00 | .14 |
| 216.00 | .00 | 0 | -501.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.89 | .00 | .14 | .00 | .14 |
| 218.00 | .00 | 0 | -479.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.72 | .00 | .13 | .00 | .13 |
| 220.00 | .00 | 0 | -457.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.55 | .00 | .12 | .00 | .12 |
| 222.00 | .00 | 0 | -436.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.39 | .00 | .12 | .00 | .12 |
| 224.00 | .00 | 0 | -415.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.23 | .00 | .11 | .00 | .11 |
| 226.00 | .00 | 0 | -395.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.07 | .00 | .11 | .00 | .11 |
| 228.00 | .00 | 0 | -375.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.91 | .00 | .10 | .00 | .10 |
| 230.00 | .00 | 0 | -355.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.76 | .00 | .10 | .00 | .10 |
| 232.00 | .00 | 0 | -336.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.61 | .00 | .09 | .00 | .09 |
| 234.00 | .00 | 0 | -317.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.46 | .00 | .09 | .00 | .09 |
| 236.00 | .00 | 0 | -298.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.32 | .00 | .08 | .00 | .08 |
| 238.00 | .00 | 0 | -280.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.17 | .00 | .08 | .00 | .08 |
| 240.00 | .00 | 0 | -261.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.03 | .00 | .07 | .00 | .07 |
| 242.00 | .00 | 0 | -243.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.89 | .00 | .07 | .00 | .07 |
| 244.00 | .00 | 0 | -226.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.76 | .00 | .06 | .00 | .06 |
| 246.00 | .00 | 0 | -208.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.62 | .00 | .06 | .00 | .06 |
| 248.00 | .00 | 0 | -191.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.49 | .00 | .05 | .00 | .05 |
| 250.00 | .00 | 0 | -174.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.35 | .00 | .05 | .00 | .05 |
| 252.00 | .00 | 0 | -157.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.22 | .00 | .04 | .00 | .04 |
| 254.00 | .00 | 0 | -140.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.09 | .00 | .04 | .00 | .04 |
| 256.00 | .00 | 0 | -123.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.96 | .00 | .03 | .00 | .03 |
| 258.00 | .00 | 0 | -107.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.83 | .00 | .03 | .00 | .03 |
| 260.00 | .00 | 0 | -91.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.71 | .00 | .02 | .00 | .02 |
| 262.00 | .00 | 0 | -74.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.58 | .00 | .02 | .00 | .02 |
| 264.00 | .00 | 0 | -58.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.45 | .00 | .02 | .00 | .02 |
| 266.00 | .00 | 0 | -42.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.33 | .00 | .01 | .00 | .01 |
| 268.00 | .00 | 0 | -26.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.20 | .00 | .01 | .00 | .01 |

*** Pile Head Unity Check Report ***

| Pile Joint | Group ID | Load Case | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress | Bending Stress | Unity Check |
|------------|----------|-----------|---------------------------|-------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|---------|----------|--------------|----------------|-------------|
| | | | Normal To Pile Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD | WT (In) | Fy (KSI) | | | |
| 200 | P33 | 6 | 13.04 | 139 | -374.9 | 0. | 179.1 | 138 | 58796. | 138 | 33.00 | 16.49 | 36.0 | -4.44 | 16.67 | .48 |
| | | 7 | 11.90 | 114 | -374.9 | 0. | 168.6 | 113 | 54404. | 113 | 33.00 | 16.49 | 36.0 | -4.44 | 15.42 | .44 |
| | | 8 | 11.48 | 87 | -374.9 | 0. | 165.3 | 86 | 53230. | 86 | 33.00 | 16.49 | 36.0 | -4.44 | 15.09 | .44 |
| 112 | P42 | 6 | 12.86 | -79 | 862.5 | 0. | 184.5 | -78 | 51599. | -78 | 42.00 | 1.75 | 36.0 | 3.90 | 24.14 | .81 |
| | | 7 | 11.08 | 255 | 723.1 | 0. | 164.9 | 255 | 45163. | -104 | 42.00 | 1.75 | 36.0 | 3.27 | 21.12 | .70 |
| | | 8 | 10.59 | 224 | 334.1 | 0. | 156.3 | 224 | 43840. | -136 | 42.00 | 1.75 | 36.0 | 1.51 | 20.51 | .62 |
| 122 | P42 | 6 | 13.47 | -37 | -193.0 | 0. | 177.2 | -36 | 54335. | -36 | 42.00 | 1.75 | 36.0 | -8.87 | 25.41 | .74 |
| | | 7 | 11.94 | -61 | 101.9 | 0. | 165.7 | -61 | 47976. | -61 | 42.00 | 1.75 | 36.0 | .46 | 22.44 | .64 |
| | | 8 | 11.27 | 269 | 201.4 | 0. | 160.3 | 269 | 45493. | -91 | 42.00 | 1.75 | 36.0 | .91 | 21.28 | .62 |
| 132 | P42 | 6 | 13.80 | -39 | -162.5 | 0. | 181.0 | -39 | 55816. | -39 | 42.00 | 1.75 | 36.0 | -7.73 | 26.11 | .75 |
| | | 7 | 12.44 | -63 | 86.4 | 0. | 171.1 | -63 | 50431. | -63 | 42.00 | 1.75 | 36.0 | .39 | 23.59 | .67 |
| | | 8 | 11.68 | 269 | 136.3 | 0. | 164.4 | 269 | 47603. | -90 | 42.00 | 1.75 | 36.0 | .62 | 22.27 | .64 |
| 142 | P42 | 6 | 14.11 | 2 | -1274.2 | 0. | 169.4 | 2 | 58112. | 3 | 42.00 | 1.75 | 36.0 | -5.76 | 27.18 | .96 |
| | | 7 | 13.02 | -20 | -634.4 | 0. | 167.9 | -19 | 53107. | -19 | 42.00 | 1.75 | 36.0 | -2.87 | 24.84 | .79 |
| | | 8 | 12.16 | -45 | -108.3 | 0. | 165.8 | -45 | 49218. | -44 | 42.00 | 1.75 | 36.0 | -4.49 | 23.02 | .66 |
| 152 | P42 | 6 | 11.91 | 187 | -658.8 | 0. | 158.2 | 188 | 49292. | -171 | 42.00 | 1.75 | 36.0 | -2.98 | 23.06 | .75 |
| | | 7 | 10.56 | 160 | -1304.2 | 0. | 138.3 | 160 | 44132. | 161 | 42.00 | 1.75 | 36.0 | -5.89 | 20.64 | .78 |
| | | 8 | 10.45 | 131 | -1840.6 | 0. | 131.6 | 130 | 44025. | 130 | 42.00 | 1.75 | 36.0 | -8.32 | 20.59 | .86 |
| 162 | P42 | 6 | 12.45 | 139 | -1792.6 | 0. | 148.9 | 139 | 51960. | 139 | 42.00 | 1.75 | 36.0 | -8.10 | 24.30 | .96 |
| | | 7 | 11.28 | 113 | -2028.7 | 0. | 136.8 | 112 | 47675. | 112 | 42.00 | 1.75 | 36.0 | -9.17 | 22.30 | .94 |
| | | 8 | 11.10 | 85 | -2088.3 | 0. | 134.9 | 84 | 47218. | 83 | 42.00 | 1.75 | 36.0 | -9.44 | 22.09 | .94 |
| 172 | P42 | 6 | 12.82 | 138 | -1855.0 | 0. | 150.2 | 138 | 52819. | 138 | 42.00 | 1.75 | 36.0 | -8.38 | 24.71 | .98 |
| | | 7 | 11.76 | 112 | -2140.9 | 0. | 137.8 | 112 | 48655. | 112 | 42.00 | 1.75 | 36.0 | -9.67 | 22.76 | .97 |
| | | 8 | 11.49 | 85 | -2225.6 | 0. | 135.2 | 84 | 47991. | 84 | 42.00 | 1.75 | 36.0 | -10.06 | 22.45 | .98 |
| 182 | P42 | 6 | 13.04 | 90 | -2867.2 | 0. | 139.5 | 90 | 55100. | 90 | 42.00 | 1.75 | 36.0 | -12.96 | 25.77 | 1.17 |
| | | 7 | 12.25 | 65 | -2748.9 | 0. | 135.7 | 64 | 52098. | 64 | 42.00 | 1.75 | 36.0 | -12.42 | 24.37 | 1.11 |
| | | 8 | 11.98 | 39 | -2365.6 | 0. | 138.9 | 38 | 51091. | 38 | 42.00 | 1.75 | 36.0 | -10.69 | 23.90 | 1.04 |

*** Pile Critical Section Unity Check Report ***

| Pile Joint | Group ID | Load Case | Dist. Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress (KSI) | Unity Check |
|------------|----------|-----------|------------------|---------------------|--------------------|-------------------|--------------|-------------|----------------|-------------|-----------------|-------------|---------|--------------------|----------------------|-------------|
| | | | Along Pile (Ft) | Normal To Pile (In) | | | Value (Kips) | Angle (Deg) | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | | | |
| 200 | P33 | 6 | .0013.04 | 139 | -374.9 | 0. | 179.1 | 138 | 58796. | 138 | 33.00 | 16.49 | 36.0 | -.44 | 16.67 | .48 |
| | | 7 | .0011.90 | 114 | -374.9 | 0. | 168.6 | 113 | 54404. | 113 | 33.00 | 16.49 | 36.0 | -.44 | 15.42 | .44 |
| | | 8 | .0011.48 | 87 | -374.9 | 0. | 165.3 | 86 | 53230. | 86 | 33.00 | 16.49 | 36.0 | -.44 | 15.09 | .44 |
| 112 | P42 | 6 | .0012.86 | -79 | 862.5 | 0. | 184.5 | -78 | 51599. | -78 | 42.00 | 1.75 | 36.0 | 3.90 | 24.14 | .81 |
| | | 7 | .0011.08 | 255 | 723.1 | 0. | 164.9 | 255 | 45163. | -104 | 42.00 | 1.75 | 36.0 | 3.27 | 21.12 | .70 |
| | | 8 | .0010.59 | 224 | 334.1 | 0. | 156.3 | 224 | 43840. | -136 | 42.00 | 1.75 | 36.0 | 1.51 | 20.51 | .62 |
| 122 | P42 | 6 | .0013.47 | -37 | -193.0 | 0. | 177.2 | -36 | 54335. | -36 | 42.00 | 1.75 | 36.0 | -.87 | 25.41 | .74 |
| | | 7 | .0011.94 | -61 | 101.9 | 0. | 165.7 | -61 | 47976. | -61 | 42.00 | 1.75 | 36.0 | .46 | 22.44 | .64 |
| | | 8 | .0011.27 | 269 | 201.4 | 0. | 160.3 | 269 | 45493. | -91 | 42.00 | 1.75 | 36.0 | .91 | 21.28 | .62 |
| 132 | P42 | 6 | .0013.80 | -39 | -162.5 | 0. | 181.0 | -39 | 55816. | -39 | 42.00 | 1.75 | 36.0 | -.73 | 26.11 | .75 |
| | | 7 | .0012.44 | -63 | 86.4 | 0. | 171.1 | -63 | 50431. | -63 | 42.00 | 1.75 | 36.0 | .39 | 23.59 | .67 |
| | | 8 | .0011.68 | 269 | 136.3 | 0. | 164.4 | 269 | 47603. | -90 | 42.00 | 1.75 | 36.0 | .62 | 22.27 | .64 |
| 142 | P42 | 6 | .0014.11 | 2 | -1274.2 | 0. | 169.4 | 2 | 58112. | 3 | 42.00 | 1.75 | 36.0 | -5.76 | 27.18 | .96 |
| | | 7 | .0013.02 | -20 | -634.4 | 0. | 167.9 | -19 | 53107. | -19 | 42.00 | 1.75 | 36.0 | -2.87 | 24.84 | .79 |
| | | 8 | .0012.16 | -45 | -108.3 | 0. | 165.8 | -45 | 49218. | -44 | 42.00 | 1.75 | 36.0 | -.49 | 23.02 | .66 |
| 152 | P42 | 6 | .0011.91 | 187 | -658.8 | 0. | 158.2 | 188 | 49292. | -171 | 42.00 | 1.75 | 36.0 | -2.98 | 23.06 | .75 |
| | | 7 | .0010.56 | 160 | -1304.2 | 0. | 138.3 | 160 | 44132. | 161 | 42.00 | 1.75 | 36.0 | -5.89 | 20.64 | .78 |
| | | 8 | .0010.45 | 131 | -1840.6 | 0. | 131.6 | 130 | 44025. | 130 | 42.00 | 1.75 | 36.0 | -8.32 | 20.59 | .86 |
| 162 | P42 | 6 | .0012.45 | 139 | -1792.6 | 0. | 148.9 | 139 | 51960. | 139 | 42.00 | 1.75 | 36.0 | -8.10 | 24.30 | .96 |
| | | 7 | .0011.28 | 113 | -2028.7 | 0. | 136.8 | 112 | 47675. | 112 | 42.00 | 1.75 | 36.0 | -9.17 | 22.30 | .94 |
| | | 8 | .0011.10 | 85 | -2088.3 | 0. | 134.9 | 84 | 47218. | 83 | 42.00 | 1.75 | 36.0 | -9.44 | 22.09 | .94 |
| 172 | P42 | 6 | .0012.82 | 138 | -1855.0 | 0. | 150.2 | 138 | 52819. | 138 | 42.00 | 1.75 | 36.0 | -8.38 | 24.71 | .98 |
| | | 7 | .0011.76 | 112 | -2140.9 | 0. | 137.8 | 112 | 48655. | 112 | 42.00 | 1.75 | 36.0 | -9.67 | 22.76 | .97 |
| | | 8 | .0011.49 | 85 | -2225.6 | 0. | 135.2 | 84 | 47991. | 84 | 42.00 | 1.75 | 36.0 | -10.06 | 22.45 | .98 |
| 182 | P42 | 6 | .0013.04 | 90 | -2867.2 | 0. | 139.5 | 90 | 55100. | 90 | 42.00 | 1.75 | 36.0 | -12.96 | 25.77 | 1.17 |
| | | 7 | .0012.25 | 65 | -2748.9 | 0. | 135.7 | 64 | 52098. | 64 | 42.00 | 1.75 | 36.0 | -12.42 | 24.37 | 1.11 |
| | | 8 | .0011.98 | 39 | -2365.6 | 0. | 138.9 | 38 | 51091. | 38 | 42.00 | 1.75 | 36.0 | -10.69 | 23.90 | 1.04 |

*** Pile Group Summary Report - Group P33 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Load Case | Pile Joint | Unity Check |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|-------|------|--------------------|----------------|-----------|------------|-------------|
| | Normal To Pile Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD | WT | Fy | | | | | |
| .00 | 13.04 | 139 | -374.9 | 0. | 179.1 | 138 | 58796. | 138 | 33.00 | 16.49 | 36.0 | -.44 | 16.67 | 6 | 200 | .48 |
| 2.01 | 12.77 | 139 | -380.1 | 0. | 178.0 | 138 | 54372. | 138 | 33.00 | 16.49 | 36.0 | -.44 | 15.41 | 6 | 200 | .44 |
| 4.02 | 12.49 | 139 | -385.3 | 0. | 176.8 | 138 | 49965. | 138 | 33.00 | 16.49 | 36.0 | -.45 | 14.16 | 6 | 200 | .41 |
| 6.04 | 12.19 | 139 | -390.5 | 0. | 175.5 | 138 | 45579. | 138 | 33.00 | 16.49 | 36.0 | -.46 | 12.92 | 6 | 200 | .38 |
| 8.05 | 11.87 | 139 | -395.7 | 0. | 174.1 | 138 | 41217. | 138 | 33.00 | 16.49 | 36.0 | -.46 | 11.68 | 6 | 200 | .34 |
| 10.06 | 11.54 | 139 | -400.9 | 0. | 172.6 | 138 | 36881. | 138 | 33.00 | 16.49 | 36.0 | -.47 | 10.45 | 6 | 200 | .31 |
| 12.07 | 11.19 | 139 | -406.1 | 0. | 171.0 | 138 | 32575. | 138 | 33.00 | 16.49 | 36.0 | -.47 | 9.23 | 6 | 200 | .27 |
| 14.09 | 10.84 | 139 | -411.3 | 0. | 169.3 | 138 | 28302. | 138 | 33.00 | 16.49 | 36.0 | -.48 | 8.02 | 6 | 200 | .24 |
| 16.10 | 10.47 | 139 | -416.5 | 0. | 167.5 | 138 | 24064. | 137 | 33.00 | 16.49 | 36.0 | -.49 | 6.82 | 6 | 200 | .21 |
| 18.11 | 10.10 | 139 | -421.7 | 0. | 165.6 | 138 | 19864. | 137 | 33.00 | 16.49 | 36.0 | -.49 | 5.63 | 6 | 200 | .17 |
| 20.12 | 9.72 | 139 | -426.9 | 0. | 163.6 | 138 | 15705. | 137 | 33.00 | 16.49 | 36.0 | -.50 | 4.45 | 6 | 200 | .14 |
| 22.14 | 9.33 | 139 | -432.1 | 0. | 161.6 | 138 | 11591. | 136 | 33.00 | 16.49 | 36.0 | -.51 | 3.29 | 6 | 200 | .11 |
| 24.15 | 8.94 | 139 | -437.3 | 0. | 159.5 | 138 | 7525. | 135 | 33.00 | 16.49 | 36.0 | -.51 | 2.13 | 6 | 200 | .08 |
| 26.16 | 8.55 | 139 | -442.5 | 0. | 157.3 | 138 | 3517. | 131 | 33.00 | 16.49 | 36.0 | -.52 | 1.00 | 6 | 200 | .05 |
| 28.17 | 7.10 | 87 | -447.7 | 0. | 142.2 | 86 | 1520. | -62 | 33.00 | 16.49 | 36.0 | -.52 | .43 | 8 | 200 | .03 |
| 30.19 | 7.02 | 114 | -452.9 | 0. | 143.0 | 113 | 4990. | -58 | 33.00 | 16.49 | 36.0 | -.53 | 1.41 | 7 | 200 | .06 |
| 32.20 | 6.65 | 114 | -456.8 | 0. | 136.6 | 113 | 8589. | -61 | 33.00 | 16.49 | 36.0 | -.53 | 2.43 | 7 | 200 | .09 |
| 34.21 | 6.30 | 114 | -459.4 | 0. | 126.4 | 113 | 12045. | -63 | 33.00 | 16.49 | 36.0 | -.54 | 3.41 | 7 | 200 | .11 |
| 36.22 | 6.60 | 139 | -461.9 | 0. | 125.1 | 138 | 15424. | -39 | 33.00 | 16.49 | 36.0 | -.54 | 4.37 | 6 | 200 | .14 |
| 38.23 | 6.22 | 139 | -464.5 | 0. | 114.9 | 138 | 18618. | -39 | 33.00 | 16.49 | 36.0 | -.54 | 5.28 | 6 | 200 | .17 |
| 40.25 | 5.85 | 139 | -467.0 | 0. | 104.9 | 138 | 21565. | -39 | 33.00 | 16.49 | 36.0 | -.55 | 6.11 | 6 | 200 | .19 |
| 42.26 | 5.48 | 139 | -469.6 | 0. | 95.2 | 138 | 24269. | -40 | 33.00 | 16.49 | 36.0 | -.55 | 6.88 | 6 | 200 | .21 |
| 44.27 | 5.12 | 139 | -472.2 | 0. | 85.6 | 138 | 26735. | -40 | 33.00 | 16.49 | 36.0 | -.55 | 7.58 | 6 | 200 | .23 |
| 46.28 | 4.77 | 139 | -474.8 | 0. | 76.3 | 138 | 28966. | -40 | 33.00 | 16.49 | 36.0 | -.56 | 8.21 | 6 | 200 | .25 |
| 48.30 | 4.44 | 139 | -477.5 | 0. | 67.2 | 138 | 30969. | -40 | 33.00 | 16.49 | 36.0 | -.56 | 8.78 | 6 | 200 | .26 |
| 50.31 | 4.11 | 139 | -480.1 | 0. | 58.4 | 138 | 32748. | -40 | 33.00 | 16.49 | 36.0 | -.56 | 9.28 | 6 | 200 | .28 |
| 52.32 | 3.79 | 139 | -482.8 | 0. | 49.8 | 138 | 34310. | -40 | 33.00 | 16.49 | 36.0 | -.56 | 9.72 | 6 | 200 | .29 |
| 54.33 | 3.49 | 139 | -485.4 | 0. | 41.4 | 138 | 35658. | -40 | 33.00 | 16.49 | 36.0 | -.57 | 10.11 | 6 | 200 | .30 |
| 56.35 | 3.20 | 139 | -488.1 | 0. | 33.2 | 138 | 36798. | -40 | 33.00 | 16.49 | 36.0 | -.57 | 10.43 | 6 | 200 | .31 |
| 58.36 | 2.92 | 139 | -490.8 | 0. | 25.4 | 137 | 37737. | -40 | 33.00 | 16.49 | 36.0 | -.57 | 10.70 | 6 | 200 | .32 |
| 60.37 | 2.65 | 139 | -493.5 | 0. | 17.8 | 137 | 38480. | -40 | 33.00 | 16.49 | 36.0 | -.58 | 10.91 | 6 | 200 | .32 |
| 62.38 | 2.40 | 139 | -496.3 | 0. | 10.5 | 135 | 39033. | -40 | 33.00 | 16.49 | 36.0 | -.58 | 11.06 | 6 | 200 | .33 |
| 64.40 | 2.16 | 139 | -499.0 | 0. | 3.4 | 128 | 39404. | -40 | 33.00 | 16.49 | 36.0 | -.58 | 11.17 | 6 | 200 | .33 |
| 66.41 | 1.93 | 139 | -501.8 | 0. | 3.5 | -30 | 39598. | -40 | 33.00 | 16.49 | 36.0 | -.59 | 11.22 | 6 | 200 | .33 |
| 68.42 | 1.72 | 139 | -504.5 | 0. | 10.1 | -37 | 39621. | -40 | 33.00 | 16.49 | 36.0 | -.59 | 11.23 | 6 | 200 | .33 |
| 70.43 | 1.52 | 139 | -507.3 | 0. | 16.5 | -38 | 39477. | -40 | 33.00 | 16.49 | 36.0 | -.59 | 11.19 | 6 | 200 | .33 |
| 72.44 | 1.34 | 139 | -510.1 | 0. | 22.5 | -39 | 39174. | -40 | 33.00 | 16.49 | 36.0 | -.60 | 11.10 | 6 | 200 | .33 |
| 74.46 | 1.16 | 139 | -512.9 | 0. | 28.2 | -39 | 38718. | -40 | 33.00 | 16.49 | 36.0 | -.60 | 10.97 | 6 | 200 | .33 |
| 76.47 | 1.01 | 139 | -515.8 | 0. | 33.7 | -39 | 38118. | -40 | 33.00 | 16.49 | 36.0 | -.60 | 10.80 | 6 | 200 | .32 |
| 78.48 | .86 | 139 | -518.6 | 0. | 39.0 | -40 | 37378. | -40 | 33.00 | 16.49 | 36.0 | -.61 | 10.59 | 6 | 200 | .32 |
| 80.49 | .73 | 139 | -521.5 | 0. | 43.9 | -40 | 36505. | -40 | 33.00 | 16.49 | 36.0 | -.61 | 10.35 | 6 | 200 | .31 |
| 82.51 | .61 | 139 | -524.3 | 0. | 48.6 | -40 | 35506. | -40 | 33.00 | 16.49 | 36.0 | -.61 | 10.06 | 6 | 200 | .30 |
| 84.52 | .50 | 138 | -527.2 | 0. | 52.9 | -40 | 34389. | -40 | 33.00 | 16.49 | 36.0 | -.62 | 9.75 | 6 | 200 | .29 |
| 86.53 | .41 | 138 | -530.1 | 0. | 57.0 | -40 | 33160. | -40 | 33.00 | 16.49 | 36.0 | -.62 | 9.40 | 6 | 200 | .28 |
| 88.54 | .32 | 138 | -533.0 | 0. | 60.8 | -40 | 31827. | -40 | 33.00 | 16.49 | 36.0 | -.62 | 9.02 | 6 | 200 | .27 |
| 90.56 | .25 | 138 | -536.0 | 0. | 64.3 | -40 | 30398. | -40 | 33.00 | 16.49 | 36.0 | -.63 | 8.62 | 6 | 200 | .26 |
| 92.57 | .19 | 138 | -538.9 | 0. | 67.2 | -40 | 28880. | -40 | 33.00 | 16.49 | 36.0 | -.63 | 8.19 | 6 | 200 | .25 |
| 94.58 | .13 | 138 | -541.9 | 0. | 69.4 | -40 | 27285. | -40 | 33.00 | 16.49 | 36.0 | -.63 | 7.73 | 6 | 200 | .24 |
| 96.59 | .09 | 138 | -544.9 | 0. | 70.8 | -40 | 25633. | -40 | 33.00 | 16.49 | 36.0 | -.64 | 7.27 | 6 | 200 | .22 |
| 98.60 | .06 | 138 | -547.9 | 0. | 71.7 | -40 | 23942. | -40 | 33.00 | 16.49 | 36.0 | -.64 | 6.79 | 6 | 200 | .21 |

*** Pile Group Summary Report - Group P33 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Load Case | Pile Joint | Unity Check |
|-----------------------|-------------------|---------------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|-------|----------|--------------------|----------------|-----------|------------|-------------|
| | Normal Value (In) | To Pile Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | | | | | |
| 100.62 | .03 | 138 | -547.5 | 0. | 127.0 | -40 | 22224. | -41 | 33.00 | 16.49 | 36.0 | -.64 | 6.30 | 6 | 200 | .20 |
| 102.63 | .01 | 138 | -543.8 | 0. | 173.3 | -40 | 19167. | -41 | 33.00 | 16.49 | 36.0 | -.64 | 5.43 | 6 | 200 | .17 |
| 104.64 | .00 | 136 | -540.2 | 0. | 177.4 | -41 | 14988. | -41 | 33.00 | 16.49 | 36.0 | -.63 | 4.25 | 6 | 200 | .14 |
| 106.65 | .01 | -40 | -536.6 | 0. | 156.8 | -41 | 10709. | -41 | 33.00 | 16.49 | 36.0 | -.63 | 3.04 | 6 | 200 | .11 |
| 108.67 | .01 | -40 | -533.1 | 0. | 124.9 | -41 | 6924. | -41 | 33.00 | 16.49 | 36.0 | -.62 | 1.96 | 6 | 200 | .08 |
| 110.68 | .01 | -41 | -529.7 | 0. | 90.6 | -41 | 3909. | -41 | 33.00 | 16.49 | 36.0 | -.62 | 1.11 | 6 | 200 | .05 |
| 112.69 | .01 | -41 | -526.4 | 0. | 59.6 | -41 | 1720. | -41 | 33.00 | 16.49 | 36.0 | -.62 | .49 | 6 | 200 | .04 |
| 114.70 | .01 | -41 | -523.1 | 0. | 34.4 | -41 | 281. | -42 | 33.00 | 16.49 | 36.0 | -.61 | .08 | 6 | 200 | .02 |
| 116.72 | .00 | -41 | -519.9 | 0. | 15.8 | -41 | 549. | 139 | 33.00 | 16.49 | 36.0 | -.61 | .16 | 6 | 200 | .03 |
| 118.73 | .00 | -41 | -516.8 | 0. | 3.3 | -41 | 930. | 139 | 33.00 | 16.49 | 36.0 | -.60 | .26 | 6 | 200 | .03 |
| 120.74 | .00 | -41 | -513.7 | 0. | 4.0 | 139 | 1012. | 138 | 33.00 | 16.49 | 36.0 | -.60 | .29 | 6 | 200 | .03 |
| 122.75 | .00 | -41 | -510.8 | 0. | 7.4 | 139 | 916. | 138 | 33.00 | 16.49 | 36.0 | -.60 | .26 | 6 | 200 | .03 |
| 124.77 | .00 | -41 | -507.8 | 0. | 8.3 | 139 | 737. | 138 | 33.00 | 16.49 | 36.0 | -.59 | .21 | 6 | 200 | .03 |
| 126.78 | .00 | 139 | -505.0 | 0. | 7.6 | 138 | 537. | 138 | 33.00 | 16.49 | 36.0 | -.59 | .15 | 6 | 200 | .02 |
| 128.79 | .00 | 139 | -502.2 | 0. | 6.2 | 138 | 352. | 138 | 33.00 | 16.49 | 36.0 | -.59 | .10 | 6 | 200 | .02 |
| 130.80 | .00 | 139 | -499.5 | 0. | 4.5 | 138 | 203. | 138 | 33.00 | 16.49 | 36.0 | -.58 | .06 | 6 | 200 | .02 |
| 132.81 | .00 | 138 | -496.9 | 0. | 3.0 | 138 | 93. | 138 | 33.00 | 16.49 | 36.0 | -.58 | .03 | 6 | 200 | .02 |
| 134.83 | .00 | 138 | -494.3 | 0. | 1.7 | 138 | 21. | 138 | 33.00 | 16.49 | 36.0 | -.58 | .01 | 6 | 200 | .02 |
| 136.84 | .00 | 138 | -491.8 | 0. | .8 | 138 | 20. | -40 | 33.00 | 16.49 | 36.0 | -.57 | .01 | 6 | 200 | .02 |
| 138.85 | .00 | 0 | -489.4 | 0. | .2 | 138 | 40. | -40 | 33.00 | 16.49 | 36.0 | -.57 | .01 | 6 | 200 | .02 |
| 140.86 | .00 | 0 | -487.0 | 0. | .2 | -40 | 44. | -40 | 33.00 | 16.49 | 36.0 | -.57 | .01 | 6 | 200 | .02 |
| 142.88 | .00 | 0 | -484.7 | 0. | .3 | -40 | 40. | -41 | 33.00 | 16.49 | 36.0 | -.57 | .01 | 6 | 200 | .02 |
| 144.89 | .00 | 0 | -482.4 | 0. | .4 | -40 | 32. | -41 | 33.00 | 16.49 | 36.0 | -.56 | .01 | 6 | 200 | .02 |
| 146.90 | .00 | 0 | -480.3 | 0. | .3 | -41 | 23. | -41 | 33.00 | 16.49 | 36.0 | -.56 | .01 | 6 | 200 | .02 |
| 148.91 | .00 | 0 | -478.1 | 0. | .3 | -41 | 14. | -41 | 33.00 | 16.49 | 36.0 | -.56 | .00 | 6 | 200 | .02 |
| 150.93 | .00 | 0 | -475.8 | 0. | .2 | -41 | 8. | -41 | 33.00 | 16.49 | 36.0 | -.56 | .00 | 6 | 200 | .02 |
| 152.94 | .00 | 0 | -473.3 | 0. | .1 | -41 | 3. | -41 | 33.00 | 16.49 | 36.0 | -.55 | .00 | 6 | 200 | .02 |
| 154.95 | .00 | 0 | -470.8 | 0. | .0 | -41 | 0. | -42 | 33.00 | 16.49 | 36.0 | -.55 | .00 | 6 | 200 | .02 |
| 156.96 | .00 | 0 | -468.4 | 0. | .0 | -42 | 0. | 139 | 33.00 | 16.49 | 36.0 | -.55 | .00 | 6 | 200 | .02 |
| 158.98 | .00 | 0 | -466.1 | 0. | .0 | 139 | 0. | 139 | 33.00 | 16.49 | 36.0 | -.54 | .00 | 6 | 200 | .02 |
| 160.99 | .00 | 0 | -463.8 | 0. | .0 | 139 | 0. | 139 | 33.00 | 16.49 | 36.0 | -.54 | .00 | 6 | 200 | .02 |

Group Critical Pile Report I - Group P33 - Pile 200 - Load Case 6

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|-------|------|--------------------|----------------|--------------------|-------|-------|
| | Normal To Pile Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy | | | Axial | Bend. | Axial |
| .00 | 13.04 | 139 | -374.9 | 0. | 179.1 | 138 | 58796. | 138 | 33.00 | 16.49 | 36.0 | -.44 | 16.67 | .02 | .46 | .48 |
| 2.01 | 12.77 | 139 | -380.1 | 0. | 178.0 | 138 | 54372. | 138 | 33.00 | 16.49 | 36.0 | -.44 | 15.41 | .02 | .43 | .44 |
| 4.02 | 12.49 | 139 | -385.3 | 0. | 176.8 | 138 | 49965. | 138 | 33.00 | 16.49 | 36.0 | -.45 | 14.16 | .02 | .39 | .41 |
| 6.04 | 12.19 | 139 | -390.5 | 0. | 175.5 | 138 | 45579. | 138 | 33.00 | 16.49 | 36.0 | -.46 | 12.92 | .02 | .36 | .38 |
| 8.05 | 11.87 | 139 | -395.7 | 0. | 174.1 | 138 | 41217. | 138 | 33.00 | 16.49 | 36.0 | -.46 | 11.68 | .02 | .33 | .34 |
| 10.06 | 11.54 | 139 | -400.9 | 0. | 172.6 | 138 | 36881. | 138 | 33.00 | 16.49 | 36.0 | -.47 | 10.45 | .02 | .29 | .31 |
| 12.07 | 11.19 | 139 | -406.1 | 0. | 171.0 | 138 | 32575. | 138 | 33.00 | 16.49 | 36.0 | -.47 | 9.23 | .02 | .26 | .27 |
| 14.09 | 10.84 | 139 | -411.3 | 0. | 169.3 | 138 | 28302. | 138 | 33.00 | 16.49 | 36.0 | -.48 | 8.02 | .02 | .22 | .24 |
| 16.10 | 10.47 | 139 | -416.5 | 0. | 167.5 | 138 | 24064. | 137 | 33.00 | 16.49 | 36.0 | -.49 | 6.82 | .02 | .19 | .21 |
| 18.11 | 10.10 | 139 | -421.7 | 0. | 165.6 | 138 | 19864. | 137 | 33.00 | 16.49 | 36.0 | -.49 | 5.63 | .02 | .16 | .17 |
| 20.12 | 9.72 | 139 | -426.9 | 0. | 163.6 | 138 | 15705. | 137 | 33.00 | 16.49 | 36.0 | -.50 | 4.45 | .02 | .12 | .14 |
| 22.14 | 9.33 | 139 | -432.1 | 0. | 161.6 | 138 | 11591. | 136 | 33.00 | 16.49 | 36.0 | -.51 | 3.29 | .02 | .09 | .11 |
| 24.15 | 8.94 | 139 | -437.3 | 0. | 159.5 | 138 | 7525. | 135 | 33.00 | 16.49 | 36.0 | -.51 | 2.13 | .02 | .06 | .08 |
| 26.16 | 8.55 | 139 | -442.5 | 0. | 157.3 | 138 | 3517. | 131 | 33.00 | 16.49 | 36.0 | -.52 | 1.00 | .02 | .03 | .05 |
| 28.17 | 8.16 | 139 | -447.7 | 0. | 155.0 | 138 | 649. | 1 | 33.00 | 16.49 | 36.0 | -.52 | .18 | .02 | .01 | .02 |
| 30.19 | 7.76 | 139 | -452.9 | 0. | 152.7 | 138 | 4422. | -35 | 33.00 | 16.49 | 36.0 | -.53 | 1.25 | .02 | .03 | .05 |
| 32.20 | 7.37 | 139 | -456.8 | 0. | 146.1 | 138 | 8276. | -38 | 33.00 | 16.49 | 36.0 | -.53 | 2.35 | .02 | .07 | .08 |
| 34.21 | 6.98 | 139 | -459.4 | 0. | 138.5 | 138 | 11977. | -38 | 33.00 | 16.49 | 36.0 | -.54 | 3.39 | .02 | .09 | .11 |
| 36.22 | 6.60 | 139 | -461.9 | 0. | 125.1 | 138 | 15424. | -39 | 33.00 | 16.49 | 36.0 | -.54 | 4.37 | .02 | .12 | .14 |
| 38.23 | 6.22 | 139 | -464.5 | 0. | 114.9 | 138 | 18618. | -39 | 33.00 | 16.49 | 36.0 | -.54 | 5.28 | .02 | .15 | .17 |
| 40.25 | 5.85 | 139 | -467.0 | 0. | 104.9 | 138 | 21565. | -39 | 33.00 | 16.49 | 36.0 | -.55 | 6.11 | .02 | .17 | .19 |
| 42.26 | 5.48 | 139 | -469.6 | 0. | 95.2 | 138 | 24269. | -40 | 33.00 | 16.49 | 36.0 | -.55 | 6.88 | .02 | .19 | .21 |
| 44.27 | 5.12 | 139 | -472.2 | 0. | 85.6 | 138 | 26735. | -40 | 33.00 | 16.49 | 36.0 | -.55 | 7.58 | .02 | .21 | .23 |
| 46.28 | 4.77 | 139 | -474.8 | 0. | 76.3 | 138 | 28966. | -40 | 33.00 | 16.49 | 36.0 | -.56 | 8.21 | .02 | .23 | .25 |
| 48.30 | 4.44 | 139 | -477.5 | 0. | 67.2 | 138 | 30969. | -40 | 33.00 | 16.49 | 36.0 | -.56 | 8.78 | .02 | .24 | .26 |
| 50.31 | 4.11 | 139 | -480.1 | 0. | 58.4 | 138 | 32748. | -40 | 33.00 | 16.49 | 36.0 | -.56 | 9.28 | .02 | .26 | .28 |
| 52.32 | 3.79 | 139 | -482.8 | 0. | 49.8 | 138 | 34310. | -40 | 33.00 | 16.49 | 36.0 | -.56 | 9.72 | .02 | .27 | .29 |
| 54.33 | 3.49 | 139 | -485.4 | 0. | 41.4 | 138 | 35658. | -40 | 33.00 | 16.49 | 36.0 | -.57 | 10.11 | .02 | .28 | .30 |
| 56.35 | 3.20 | 139 | -488.1 | 0. | 33.2 | 138 | 36798. | -40 | 33.00 | 16.49 | 36.0 | -.57 | 10.43 | .02 | .29 | .31 |
| 58.36 | 2.92 | 139 | -490.8 | 0. | 25.4 | 137 | 37737. | -40 | 33.00 | 16.49 | 36.0 | -.57 | 10.70 | .02 | .30 | .32 |
| 60.37 | 2.65 | 139 | -493.5 | 0. | 17.8 | 137 | 38480. | -40 | 33.00 | 16.49 | 36.0 | -.58 | 10.91 | .02 | .30 | .32 |
| 62.38 | 2.40 | 139 | -496.3 | 0. | 10.5 | 135 | 39033. | -40 | 33.00 | 16.49 | 36.0 | -.58 | 11.06 | .02 | .31 | .33 |
| 64.40 | 2.16 | 139 | -499.0 | 0. | 3.4 | 128 | 39404. | -40 | 33.00 | 16.49 | 36.0 | -.58 | 11.17 | .02 | .31 | .33 |
| 66.41 | 1.93 | 139 | -501.8 | 0. | 3.5 | -30 | 39598. | -40 | 33.00 | 16.49 | 36.0 | -.59 | 11.22 | .02 | .31 | .33 |
| 68.42 | 1.72 | 139 | -504.5 | 0. | 10.1 | -37 | 39621. | -40 | 33.00 | 16.49 | 36.0 | -.59 | 11.23 | .02 | .31 | .33 |
| 70.43 | 1.52 | 139 | -507.3 | 0. | 16.5 | -38 | 39477. | -40 | 33.00 | 16.49 | 36.0 | -.59 | 11.19 | .02 | .31 | .33 |
| 72.44 | 1.34 | 139 | -510.1 | 0. | 22.5 | -39 | 39174. | -40 | 33.00 | 16.49 | 36.0 | -.60 | 11.10 | .02 | .31 | .33 |
| 74.46 | 1.16 | 139 | -512.9 | 0. | 28.2 | -39 | 38718. | -40 | 33.00 | 16.49 | 36.0 | -.60 | 10.97 | .02 | .31 | .33 |
| 76.47 | 1.01 | 139 | -515.8 | 0. | 33.7 | -39 | 38118. | -40 | 33.00 | 16.49 | 36.0 | -.60 | 10.80 | .02 | .30 | .32 |
| 78.48 | .86 | 139 | -518.6 | 0. | 39.0 | -40 | 37378. | -40 | 33.00 | 16.49 | 36.0 | -.61 | 10.59 | .02 | .30 | .32 |
| 80.49 | .73 | 139 | -521.5 | 0. | 43.9 | -40 | 36505. | -40 | 33.00 | 16.49 | 36.0 | -.61 | 10.35 | .02 | .29 | .31 |
| 82.51 | .61 | 139 | -524.3 | 0. | 48.6 | -40 | 35506. | -40 | 33.00 | 16.49 | 36.0 | -.61 | 10.06 | .02 | .28 | .30 |
| 84.52 | .50 | 138 | -527.2 | 0. | 52.9 | -40 | 34389. | -40 | 33.00 | 16.49 | 36.0 | -.62 | 9.75 | .02 | .27 | .29 |
| 86.53 | .41 | 138 | -530.1 | 0. | 57.0 | -40 | 33160. | -40 | 33.00 | 16.49 | 36.0 | -.62 | 9.40 | .02 | .26 | .28 |
| 88.54 | .32 | 138 | -533.0 | 0. | 60.8 | -40 | 31827. | -40 | 33.00 | 16.49 | 36.0 | -.62 | 9.02 | .02 | .25 | .27 |
| 90.56 | .25 | 138 | -536.0 | 0. | 64.3 | -40 | 30398. | -40 | 33.00 | 16.49 | 36.0 | -.63 | 8.62 | .02 | .24 | .26 |
| 92.57 | .19 | 138 | -538.9 | 0. | 67.2 | -40 | 28880. | -40 | 33.00 | 16.49 | 36.0 | -.63 | 8.19 | .02 | .23 | .25 |
| 94.58 | .13 | 138 | -541.9 | 0. | 69.4 | -40 | 27285. | -40 | 33.00 | 16.49 | 36.0 | -.63 | 7.73 | .02 | .22 | .24 |
| 96.59 | .09 | 138 | -544.9 | 0. | 70.8 | -40 | 25633. | -40 | 33.00 | 16.49 | 36.0 | -.64 | 7.27 | .02 | .20 | .22 |
| 98.60 | .06 | 138 | -547.9 | 0. | 71.7 | -40 | 23942. | -40 | 33.00 | 16.49 | 36.0 | -.64 | 6.79 | .02 | .19 | .21 |

*** Group Critical Pile Report I - Group P33 - Pile 200 - Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|-------|------|--------------------|----------------|--------------------|-------|-------|
| | Normal To Pile Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy | | | Axial | Bend. | Axial |
| 100.62 | .03 | 138 | -547.5 | 0. | 127.0 | -40 | 22224. | -41 | 33.00 | 16.49 | 36.0 | -.64 | 6.30 | .02 | .18 | .20 |
| 102.63 | .01 | 138 | -543.8 | 0. | 173.3 | -40 | 19167. | -41 | 33.00 | 16.49 | 36.0 | -.64 | 5.43 | .02 | .15 | .17 |
| 104.64 | .00 | 136 | -540.2 | 0. | 177.4 | -41 | 14988. | -41 | 33.00 | 16.49 | 36.0 | -.63 | 4.25 | .02 | .12 | .14 |
| 106.65 | .01 | -40 | -536.6 | 0. | 156.8 | -41 | 10709. | -41 | 33.00 | 16.49 | 36.0 | -.63 | 3.04 | .02 | .08 | .11 |
| 108.67 | .01 | -40 | -533.1 | 0. | 124.9 | -41 | 6924. | -41 | 33.00 | 16.49 | 36.0 | -.62 | 1.96 | .02 | .05 | .08 |
| 110.68 | .01 | -41 | -529.7 | 0. | 90.6 | -41 | 3909. | -41 | 33.00 | 16.49 | 36.0 | -.62 | 1.11 | .02 | .03 | .05 |
| 112.69 | .01 | -41 | -526.4 | 0. | 59.6 | -41 | 1720. | -41 | 33.00 | 16.49 | 36.0 | -.62 | .49 | .02 | .01 | .04 |
| 114.70 | .01 | -41 | -523.1 | 0. | 34.4 | -41 | 281. | -42 | 33.00 | 16.49 | 36.0 | -.61 | .08 | .02 | .00 | .02 |
| 116.72 | .00 | -41 | -519.9 | 0. | 15.8 | -41 | 549. | 139 | 33.00 | 16.49 | 36.0 | -.61 | .16 | .02 | .00 | .03 |
| 118.73 | .00 | -41 | -516.8 | 0. | 3.3 | -41 | 930. | 139 | 33.00 | 16.49 | 36.0 | -.60 | .26 | .02 | .01 | .03 |
| 120.74 | .00 | -41 | -513.7 | 0. | 4.0 | 139 | 1012. | 138 | 33.00 | 16.49 | 36.0 | -.60 | .29 | .02 | .01 | .03 |
| 122.75 | .00 | -41 | -510.8 | 0. | 7.4 | 139 | 916. | 138 | 33.00 | 16.49 | 36.0 | -.60 | .26 | .02 | .01 | .03 |
| 124.77 | .00 | -41 | -507.8 | 0. | 8.3 | 139 | 737. | 138 | 33.00 | 16.49 | 36.0 | -.59 | .21 | .02 | .01 | .03 |
| 126.78 | .00 | 139 | -505.0 | 0. | 7.6 | 138 | 537. | 138 | 33.00 | 16.49 | 36.0 | -.59 | .15 | .02 | .00 | .02 |
| 128.79 | .00 | 139 | -502.2 | 0. | 6.2 | 138 | 352. | 138 | 33.00 | 16.49 | 36.0 | -.59 | .10 | .02 | .00 | .02 |
| 130.80 | .00 | 139 | -499.5 | 0. | 4.5 | 138 | 203. | 138 | 33.00 | 16.49 | 36.0 | -.58 | .06 | .02 | .00 | .02 |
| 132.81 | .00 | 138 | -496.9 | 0. | 3.0 | 138 | 93. | 138 | 33.00 | 16.49 | 36.0 | -.58 | .03 | .02 | .00 | .02 |
| 134.83 | .00 | 138 | -494.3 | 0. | 1.7 | 138 | 21. | 138 | 33.00 | 16.49 | 36.0 | -.58 | .01 | .02 | .00 | .02 |
| 136.84 | .00 | 138 | -491.8 | 0. | .8 | 138 | 20. | -40 | 33.00 | 16.49 | 36.0 | -.57 | .01 | .02 | .00 | .02 |
| 138.85 | .00 | 0 | -489.4 | 0. | .2 | 138 | 40. | -40 | 33.00 | 16.49 | 36.0 | -.57 | .01 | .02 | .00 | .02 |
| 140.86 | .00 | 0 | -487.0 | 0. | .2 | -40 | 44. | -40 | 33.00 | 16.49 | 36.0 | -.57 | .01 | .02 | .00 | .02 |
| 142.88 | .00 | 0 | -484.7 | 0. | .3 | -40 | 40. | -41 | 33.00 | 16.49 | 36.0 | -.57 | .01 | .02 | .00 | .02 |
| 144.89 | .00 | 0 | -482.4 | 0. | .4 | -40 | 32. | -41 | 33.00 | 16.49 | 36.0 | -.56 | .01 | .02 | .00 | .02 |
| 146.90 | .00 | 0 | -480.3 | 0. | .3 | -41 | 23. | -41 | 33.00 | 16.49 | 36.0 | -.56 | .01 | .02 | .00 | .02 |
| 148.91 | .00 | 0 | -478.1 | 0. | .3 | -41 | 14. | -41 | 33.00 | 16.49 | 36.0 | -.56 | .00 | .02 | .00 | .02 |
| 150.93 | .00 | 0 | -475.8 | 0. | .2 | -41 | 8. | -41 | 33.00 | 16.49 | 36.0 | -.56 | .00 | .02 | .00 | .02 |
| 152.94 | .00 | 0 | -473.3 | 0. | .1 | -41 | 3. | -41 | 33.00 | 16.49 | 36.0 | -.55 | .00 | .02 | .00 | .02 |
| 154.95 | .00 | 0 | -470.8 | 0. | .0 | -41 | 0. | -42 | 33.00 | 16.49 | 36.0 | -.55 | .00 | .02 | .00 | .02 |
| 156.96 | .00 | 0 | -468.4 | 0. | .0 | -42 | 0. | 139 | 33.00 | 16.49 | 36.0 | -.55 | .00 | .02 | .00 | .02 |
| 158.98 | .00 | 0 | -466.1 | 0. | .0 | 139 | 0. | 139 | 33.00 | 16.49 | 36.0 | -.54 | .00 | .02 | .00 | .02 |
| 160.99 | .00 | 0 | -463.8 | 0. | .0 | 139 | 0. | 139 | 33.00 | 16.49 | 36.0 | -.54 | .00 | .02 | .00 | .02 |

*** Group Critical Pile Report II - Group P33 - Pile 200 - Load Case 7 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force (Kips) | | Bending Moment (In-Kips) | | Pile Properties | | | Axial Stress (KSI) | Bending Stress (KSI) | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------------|-------------|--------------------------|-------------|-----------------|-------|----------|--------------------|----------------------|--------------------|-------------|-----|
| | Normal To Pile Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | | | Axial | Bend. Total | |
| 0.00 | 11.90 | 114 | -374.9 | 0. | 168.6 | 113 | 54404. | 113 | 33.00 | 16.49 | 36.0 | -.44 | 15.42 | .02 | .43 | .44 |
| 2.01 | 11.65 | 114 | -360.1 | 0. | 167.5 | 113 | 50240. | 113 | 33.00 | 16.49 | 36.0 | -.44 | 14.24 | .02 | .40 | .41 |
| 4.02 | 11.39 | 114 | -385.3 | 0. | 166.4 | 113 | 46094. | 113 | 33.00 | 16.49 | 36.0 | -.45 | 13.07 | .02 | .36 | .38 |
| 6.04 | 11.11 | 114 | -390.5 | 0. | 165.1 | 113 | 41969. | 112 | 33.00 | 16.49 | 36.0 | -.46 | 11.90 | .02 | .33 | .35 |
| 8.05 | 10.81 | 114 | -395.7 | 0. | 163.8 | 113 | 37867. | 112 | 33.00 | 16.49 | 36.0 | -.46 | 10.73 | .02 | .30 | .31 |
| 10.06 | 10.51 | 114 | -400.9 | 0. | 162.3 | 113 | 33791. | 112 | 33.00 | 16.49 | 36.0 | -.47 | 9.58 | .02 | .27 | .28 |
| 12.07 | 10.19 | 114 | -406.1 | 0. | 160.8 | 113 | 29744. | 112 | 33.00 | 16.49 | 36.0 | -.47 | 8.43 | .02 | .23 | .25 |
| 14.09 | 9.86 | 114 | -411.3 | 0. | 159.1 | 113 | 25730. | 112 | 33.00 | 16.49 | 36.0 | -.48 | 7.29 | .02 | .20 | .22 |
| 16.10 | 9.52 | 114 | -416.5 | 0. | 157.4 | 113 | 21750. | 112 | 33.00 | 16.49 | 36.0 | -.49 | 6.16 | .02 | .17 | .19 |
| 18.11 | 9.17 | 114 | -421.7 | 0. | 155.5 | 113 | 17808. | 111 | 33.00 | 16.49 | 36.0 | -.49 | 5.05 | .02 | .14 | .16 |
| 20.12 | 8.82 | 114 | -426.9 | 0. | 153.6 | 113 | 13907. | 111 | 33.00 | 16.49 | 36.0 | -.50 | 3.94 | .02 | .11 | .13 |
| 22.14 | 8.46 | 114 | -432.1 | 0. | 151.6 | 113 | 10051. | 110 | 33.00 | 16.49 | 36.0 | -.51 | 2.85 | .02 | .08 | .10 |
| 24.15 | 8.10 | 114 | -437.3 | 0. | 149.6 | 113 | 6246. | 107 | 33.00 | 16.49 | 36.0 | -.51 | 1.77 | .02 | .05 | .07 |
| 26.16 | 7.74 | 114 | -442.5 | 0. | 147.4 | 113 | 2526. | 99 | 33.00 | 16.49 | 36.0 | -.52 | .72 | .02 | .02 | .04 |
| 28.17 | 7.38 | 114 | -447.7 | 0. | 145.3 | 113 | 1431. | -39 | 33.00 | 16.49 | 36.0 | -.52 | .41 | .02 | .01 | .03 |
| 30.19 | 7.02 | 114 | -452.9 | 0. | 143.0 | 113 | 4990. | -58 | 33.00 | 16.49 | 36.0 | -.53 | 1.41 | .02 | .04 | .06 |
| 32.20 | 6.65 | 114 | -456.8 | 0. | 136.6 | 113 | 8589. | -61 | 33.00 | 16.49 | 36.0 | -.53 | 2.43 | .02 | .07 | .09 |
| 34.21 | 6.30 | 114 | -459.4 | 0. | 126.4 | 113 | 12045. | -63 | 33.00 | 16.49 | 36.0 | -.54 | 3.41 | .02 | .10 | .11 |
| 36.22 | 5.94 | 114 | -461.9 | 0. | 116.4 | 113 | 15256. | -63 | 33.00 | 16.49 | 36.0 | -.54 | 4.32 | .02 | .12 | .14 |
| 38.23 | 5.59 | 114 | -464.5 | 0. | 106.5 | 113 | 18225. | -64 | 33.00 | 16.49 | 36.0 | -.54 | 5.17 | .02 | .14 | .16 |
| 40.25 | 5.25 | 114 | -467.0 | 0. | 96.9 | 113 | 20955. | -64 | 33.00 | 16.49 | 36.0 | -.55 | 5.94 | .02 | .17 | .18 |
| 42.26 | 4.91 | 114 | -469.6 | 0. | 87.5 | 113 | 23451. | -64 | 33.00 | 16.49 | 36.0 | -.55 | 6.65 | .02 | .19 | .20 |
| 44.27 | 4.59 | 114 | -472.2 | 0. | 78.3 | 113 | 25717. | -64 | 33.00 | 16.49 | 36.0 | -.55 | 7.29 | .02 | .20 | .22 |
| 46.28 | 4.27 | 114 | -474.8 | 0. | 69.4 | 113 | 27757. | -64 | 33.00 | 16.49 | 36.0 | -.56 | 7.87 | .02 | .22 | .24 |
| 48.30 | 3.96 | 114 | -477.5 | 0. | 60.6 | 113 | 29578. | -65 | 33.00 | 16.49 | 36.0 | -.56 | 8.38 | .02 | .23 | .25 |
| 50.31 | 3.66 | 114 | -480.1 | 0. | 52.1 | 113 | 31184. | -65 | 33.00 | 16.49 | 36.0 | -.56 | 8.84 | .02 | .25 | .27 |
| 52.32 | 3.37 | 114 | -482.8 | 0. | 43.8 | 112 | 32580. | -65 | 33.00 | 16.49 | 36.0 | -.56 | 9.23 | .02 | .26 | .28 |
| 54.33 | 3.10 | 114 | -485.4 | 0. | 35.7 | 112 | 33770. | -65 | 33.00 | 16.49 | 36.0 | -.57 | 9.57 | .02 | .27 | .29 |
| 56.35 | 2.83 | 114 | -488.1 | 0. | 28.0 | 112 | 34761. | -65 | 33.00 | 16.49 | 36.0 | -.57 | 9.85 | .02 | .27 | .29 |
| 58.36 | 2.58 | 114 | -490.8 | 0. | 20.5 | 111 | 35560. | -65 | 33.00 | 16.49 | 36.0 | -.57 | 10.08 | .02 | .28 | .30 |
| 60.37 | 2.34 | 114 | -493.5 | 0. | 13.2 | 109 | 36171. | -65 | 33.00 | 16.49 | 36.0 | -.58 | 10.25 | .02 | .29 | .31 |
| 62.38 | 2.11 | 114 | -496.3 | 0. | 6.2 | 105 | 36602. | -65 | 33.00 | 16.49 | 36.0 | -.58 | 10.37 | .02 | .29 | .31 |
| 64.40 | 1.89 | 114 | -499.0 | 0. | 1.1 | -10 | 36858. | -65 | 33.00 | 16.49 | 36.0 | -.58 | 10.45 | .02 | .29 | .31 |
| 66.41 | 1.69 | 114 | -501.8 | 0. | 7.3 | -58 | 36943. | -65 | 33.00 | 16.49 | 36.0 | -.59 | 10.47 | .02 | .29 | .31 |
| 68.42 | 1.50 | 113 | -504.5 | 0. | 13.6 | -62 | 36863. | -65 | 33.00 | 16.49 | 36.0 | -.59 | 10.45 | .02 | .29 | .31 |
| 70.43 | 1.32 | 113 | -507.3 | 0. | 19.6 | -63 | 36625. | -65 | 33.00 | 16.49 | 36.0 | -.59 | 10.38 | .02 | .29 | .31 |
| 72.44 | 1.16 | 113 | -510.1 | 0. | 25.3 | -63 | 36236. | -65 | 33.00 | 16.49 | 36.0 | -.60 | 10.27 | .02 | .29 | .31 |
| 74.46 | 1.01 | 113 | -512.9 | 0. | 30.8 | -64 | 35702. | -65 | 33.00 | 16.49 | 36.0 | -.60 | 10.12 | .02 | .28 | .30 |
| 76.47 | .87 | 113 | -515.8 | 0. | 36.1 | -64 | 35029. | -65 | 33.00 | 16.49 | 36.0 | -.60 | 9.93 | .02 | .28 | .30 |
| 78.48 | .74 | 113 | -518.6 | 0. | 41.1 | -64 | 34223. | -65 | 33.00 | 16.49 | 36.0 | -.61 | 9.70 | .02 | .27 | .29 |
| 80.49 | .62 | 113 | -521.5 | 0. | 45.8 | -64 | 33291. | -65 | 33.00 | 16.49 | 36.0 | -.61 | 9.44 | .02 | .26 | .28 |
| 82.51 | .52 | 113 | -524.3 | 0. | 50.2 | -64 | 32240. | -65 | 33.00 | 16.49 | 36.0 | -.61 | 9.14 | .02 | .25 | .28 |
| 84.52 | .43 | 113 | -527.2 | 0. | 54.3 | -65 | 31077. | -65 | 33.00 | 16.49 | 36.0 | -.62 | 8.81 | .02 | .25 | .27 |
| 86.53 | .34 | 113 | -530.1 | 0. | 58.2 | -65 | 29809. | -65 | 33.00 | 16.49 | 36.0 | -.62 | 8.45 | .02 | .24 | .26 |
| 88.54 | .27 | 113 | -533.0 | 0. | 61.7 | -65 | 28442. | -65 | 33.00 | 16.49 | 36.0 | -.62 | 8.06 | .02 | .22 | .25 |
| 90.56 | .21 | 113 | -536.0 | 0. | 65.0 | -65 | 26985. | -65 | 33.00 | 16.49 | 36.0 | -.63 | 7.65 | .02 | .21 | .23 |
| 92.57 | .16 | 113 | -538.9 | 0. | 67.5 | -65 | 25444. | -65 | 33.00 | 16.49 | 36.0 | -.63 | 7.21 | .02 | .20 | .22 |
| 94.58 | .11 | 113 | -541.9 | 0. | 69.2 | -65 | 23839. | -66 | 33.00 | 16.49 | 36.0 | -.63 | 6.76 | .02 | .19 | .21 |
| 96.59 | .07 | 113 | -544.9 | 0. | 70.4 | -65 | 22186. | -66 | 33.00 | 16.49 | 36.0 | -.64 | 6.29 | .02 | .18 | .20 |
| 98.60 | .05 | 113 | -547.9 | 0. | 71.2 | -65 | 20501. | -66 | 33.00 | 16.49 | 36.0 | -.64 | 5.81 | .02 | .16 | .18 |

Group Critical Pile Report II - Group P33 - Pile 200 - Load Case 7

| Dist. Along Pile (Ft) | Deflection Normal To Pile | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress (KSI) | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|-------|------|--------------------|----------------------|--------------------|-------|-------|
| | Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy | | | Axial | Bend. | Total |
| 100.62 | .02 | 113 | -547.5 | 0. | 115.0 | -65 | 18795. | -66 | 33.00 | 16.49 | 36.0 | -.64 | 5.33 | .02 | .15 | .17 |
| 102.63 | .01 | 113 | -543.8 | 0. | 149.8 | -66 | 16027. | -66 | 33.00 | 16.49 | 36.0 | -.64 | 4.54 | .02 | .13 | .15 |
| 104.64 | .00 | 90 | -540.2 | 0. | 150.4 | -66 | 12414. | -66 | 33.00 | 16.49 | 36.0 | -.63 | 3.52 | .02 | .10 | .12 |
| 106.65 | .01 | -65 | -536.6 | 0. | 131.4 | -66 | 8785. | -66 | 33.00 | 16.49 | 36.0 | -.63 | 2.49 | .02 | .07 | .09 |
| 108.67 | .01 | -66 | -533.1 | 0. | 103.6 | -66 | 5614. | -66 | 33.00 | 16.49 | 36.0 | -.62 | 1.59 | .02 | .04 | .07 |
| 110.68 | .01 | -66 | -529.7 | 0. | 74.5 | -66 | 3113. | -66 | 33.00 | 16.49 | 36.0 | -.62 | .88 | .02 | .02 | .05 |
| 112.69 | .01 | -66 | -526.4 | 0. | 48.4 | -66 | 1314. | -66 | 33.00 | 16.49 | 36.0 | -.62 | .37 | .02 | .01 | .03 |
| 114.70 | .01 | -66 | -523.1 | 0. | 27.4 | -66 | 145. | -69 | 33.00 | 16.49 | 36.0 | -.61 | .04 | .02 | .00 | .02 |
| 116.72 | .00 | -66 | -519.9 | 0. | 12.1 | -66 | 518. | 114 | 33.00 | 16.49 | 36.0 | -.61 | .15 | .02 | .00 | .03 |
| 118.73 | .00 | -66 | -516.8 | 0. | 2.0 | -68 | 812. | 113 | 33.00 | 16.49 | 36.0 | -.60 | .23 | .02 | .01 | .03 |
| 120.74 | .00 | -66 | -513.7 | 0. | 3.8 | 114 | 862. | 113 | 33.00 | 16.49 | 36.0 | -.60 | .24 | .02 | .01 | .03 |
| 122.75 | .00 | -66 | -510.8 | 0. | 6.5 | 113 | 770. | 113 | 33.00 | 16.49 | 36.0 | -.60 | .22 | .02 | .01 | .03 |
| 124.77 | .00 | -90 | -507.8 | 0. | 7.1 | 113 | 613. | 113 | 33.00 | 16.49 | 36.0 | -.59 | .17 | .02 | .00 | .03 |
| 126.78 | .00 | 90 | -505.0 | 0. | 6.4 | 113 | 442. | 113 | 33.00 | 16.49 | 36.0 | -.59 | .13 | .02 | .00 | .02 |
| 128.79 | .00 | 114 | -502.2 | 0. | 5.2 | 113 | 287. | 113 | 33.00 | 16.49 | 36.0 | -.59 | .08 | .02 | .00 | .02 |
| 130.80 | .00 | 113 | -499.5 | 0. | 3.7 | 113 | 162. | 113 | 33.00 | 16.49 | 36.0 | -.58 | .05 | .02 | .00 | .02 |
| 132.81 | .00 | 113 | -496.9 | 0. | 2.4 | 113 | 72. | 113 | 33.00 | 16.49 | 36.0 | -.58 | .02 | .02 | .00 | .02 |
| 134.83 | .00 | 90 | -494.3 | 0. | 1.4 | 113 | 13. | 111 | 33.00 | 16.49 | 36.0 | -.58 | .00 | .02 | .00 | .02 |
| 136.84 | .00 | 90 | -491.8 | 0. | .6 | 113 | 20. | -65 | 33.00 | 16.49 | 36.0 | -.57 | .01 | .02 | .00 | .02 |
| 138.85 | .00 | 0 | -489.4 | 0. | .1 | 112 | 35. | -66 | 33.00 | 16.49 | 36.0 | -.57 | .01 | .02 | .00 | .02 |
| 140.86 | .00 | 0 | -487.0 | 0. | .2 | -65 | 38. | -66 | 33.00 | 16.49 | 36.0 | -.57 | .01 | .02 | .00 | .02 |
| 142.88 | .00 | 0 | -484.7 | 0. | .3 | -66 | 34. | -66 | 33.00 | 16.49 | 36.0 | -.57 | .01 | .02 | .00 | .02 |
| 144.89 | .00 | 0 | -482.4 | 0. | .3 | -66 | 26. | -66 | 33.00 | 16.49 | 36.0 | -.56 | .01 | .02 | .00 | .02 |
| 146.90 | .00 | 0 | -480.3 | 0. | .3 | -66 | 19. | -66 | 33.00 | 16.49 | 36.0 | -.56 | .01 | .02 | .00 | .02 |
| 148.91 | .00 | 0 | -478.1 | 0. | .2 | -66 | 12. | -66 | 33.00 | 16.49 | 36.0 | -.56 | .00 | .02 | .00 | .02 |
| 150.93 | .00 | 0 | -475.8 | 0. | .2 | -66 | 6. | -66 | 33.00 | 16.49 | 36.0 | -.56 | .00 | .02 | .00 | .02 |
| 152.94 | .00 | 0 | -473.3 | 0. | .1 | -66 | 2. | -66 | 33.00 | 16.49 | 36.0 | -.55 | .00 | .02 | .00 | .02 |
| 154.95 | .00 | 0 | -470.8 | 0. | .0 | -66 | 0. | -68 | 33.00 | 16.49 | 36.0 | -.55 | .00 | .02 | .00 | .02 |
| 156.96 | .00 | 0 | -468.4 | 0. | .0 | -72 | 0. | 114 | 33.00 | 16.49 | 36.0 | -.55 | .00 | .02 | .00 | .02 |
| 158.98 | .00 | 0 | -466.1 | 0. | .0 | 114 | 0. | 114 | 33.00 | 16.49 | 36.0 | -.54 | .00 | .02 | .00 | .02 |
| 160.99 | .00 | 0 | -463.8 | 0. | .0 | 113 | 0. | 113 | 33.00 | 16.49 | 36.0 | -.54 | .00 | .02 | .00 | .02 |

*** Group Critical Pile Report III - Group P33 - Pile 200 - Load Case 8 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force (Kips) | | Bending Moment (In-Kips) | | Pile Properties | | | Axial Stress (KSI) | Bending Stress (KSI) | Unity Check Values | | |
|-----------------------|-------------------|---------------------|--------------------|-------------------|--------------------|-------------|--------------------------|-------------|-----------------|-------|----------|--------------------|----------------------|--------------------|-------|-------|
| | Normal Value (In) | To Pile Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | | | Axial | Bend. | Total |
| .00 | 11.48 | 87 | -374.9 | 0. | 165.3 | 86 | 53230. | 86 | 33.00 | 16.49 | 36.0 | -.44 | 15.09 | .02 | .42 | .44 |
| 2.01 | 11.24 | 87 | -380.1 | 0. | 164.2 | 86 | 49151. | 85 | 33.00 | 16.49 | 36.0 | -.44 | 13.93 | .02 | .39 | .40 |
| 4.02 | 10.99 | 87 | -385.3 | 0. | 163.1 | 86 | 45089. | 85 | 33.00 | 16.49 | 36.0 | -.45 | 12.78 | .02 | .36 | .37 |
| 6.04 | 10.71 | 87 | -390.5 | 0. | 161.8 | 86 | 41047. | 85 | 33.00 | 16.49 | 36.0 | -.46 | 11.63 | .02 | .32 | .34 |
| 8.05 | 10.43 | 87 | -395.7 | 0. | 160.5 | 86 | 37029. | 85 | 33.00 | 16.49 | 36.0 | -.46 | 10.50 | .02 | .29 | .31 |
| 10.06 | 10.13 | 87 | -400.9 | 0. | 159.0 | 86 | 33037. | 85 | 33.00 | 16.49 | 36.0 | -.47 | 9.36 | .02 | .26 | .28 |
| 12.07 | 9.82 | 87 | -406.1 | 0. | 157.5 | 86 | 29074. | 85 | 33.00 | 16.49 | 36.0 | -.47 | 8.24 | .02 | .23 | .25 |
| 14.09 | 9.50 | 87 | -411.3 | 0. | 155.9 | 86 | 25143. | 85 | 33.00 | 16.49 | 36.0 | -.48 | 7.13 | .02 | .20 | .22 |
| 16.10 | 9.18 | 87 | -416.5 | 0. | 154.2 | 86 | 21246. | 84 | 33.00 | 16.49 | 36.0 | -.49 | 6.02 | .02 | .17 | .18 |
| 18.11 | 8.84 | 87 | -421.7 | 0. | 152.4 | 86 | 17387. | 84 | 33.00 | 16.49 | 36.0 | -.49 | 4.93 | .02 | .14 | .15 |
| 20.12 | 8.50 | 87 | -426.9 | 0. | 150.5 | 86 | 13569. | 83 | 33.00 | 16.49 | 36.0 | -.50 | 3.85 | .02 | .11 | .12 |
| 22.14 | 8.16 | 87 | -432.1 | 0. | 148.5 | 86 | 9797. | 82 | 33.00 | 16.49 | 36.0 | -.51 | 2.78 | .02 | .08 | .09 |
| 24.15 | 7.81 | 87 | -437.3 | 0. | 146.5 | 86 | 6080. | 79 | 33.00 | 16.49 | 36.0 | -.51 | 1.72 | .02 | .05 | .07 |
| 26.16 | 7.46 | 87 | -442.5 | 0. | 144.4 | 86 | 2466. | 68 | 33.00 | 16.49 | 36.0 | -.52 | .70 | .02 | .02 | .04 |
| 28.17 | 7.10 | 87 | -447.7 | 0. | 142.2 | 86 | 1520. | -62 | 33.00 | 16.49 | 36.0 | -.52 | .43 | .02 | .01 | .03 |
| 30.19 | 6.75 | 87 | -452.9 | 0. | 140.0 | 86 | 4956. | -84 | 33.00 | 16.49 | 36.0 | -.53 | 1.40 | .02 | .04 | .06 |
| 32.20 | 6.40 | 87 | -456.8 | 0. | 133.7 | 86 | 8468. | -87 | 33.00 | 16.49 | 36.0 | -.53 | 2.40 | .02 | .07 | .09 |
| 34.21 | 6.06 | 87 | -459.4 | 0. | 123.6 | 86 | 11844. | -89 | 33.00 | 16.49 | 36.0 | -.54 | 3.36 | .02 | .09 | .11 |
| 36.22 | 5.71 | 87 | -461.9 | 0. | 113.7 | 86 | 14980. | -90 | 33.00 | 16.49 | 36.0 | -.54 | 4.25 | .02 | .12 | .14 |
| 38.23 | 5.38 | 87 | -464.5 | 0. | 104.0 | 86 | 17878. | -90 | 33.00 | 16.49 | 36.0 | -.54 | 5.07 | .02 | .14 | .16 |
| 40.25 | 5.05 | 87 | -467.0 | 0. | 94.5 | 86 | 20541. | -91 | 33.00 | 16.49 | 36.0 | -.55 | 5.82 | .02 | .16 | .18 |
| 42.26 | 4.72 | 87 | -469.6 | 0. | 85.2 | 86 | 22973. | -91 | 33.00 | 16.49 | 36.0 | -.55 | 6.51 | .02 | .18 | .20 |
| 44.27 | 4.40 | 87 | -472.2 | 0. | 76.2 | 86 | 25177. | -91 | 33.00 | 16.49 | 36.0 | -.55 | 7.14 | .02 | .20 | .22 |
| 46.28 | 4.10 | 87 | -474.8 | 0. | 67.3 | 86 | 27160. | -91 | 33.00 | 16.49 | 36.0 | -.56 | 7.70 | .02 | .21 | .23 |
| 48.30 | 3.80 | 87 | -477.5 | 0. | 58.7 | 86 | 28927. | -91 | 33.00 | 16.49 | 36.0 | -.56 | 8.20 | .02 | .23 | .25 |
| 50.31 | 3.51 | 87 | -480.1 | 0. | 50.3 | 85 | 30481. | -91 | 33.00 | 16.49 | 36.0 | -.56 | 8.64 | .02 | .24 | .26 |
| 52.32 | 3.23 | 87 | -482.8 | 0. | 42.1 | 85 | 31828. | -91 | 33.00 | 16.49 | 36.0 | -.56 | 9.02 | .02 | .25 | .27 |
| 54.33 | 2.97 | 87 | -485.4 | 0. | 34.2 | 85 | 32973. | -92 | 33.00 | 16.49 | 36.0 | -.57 | 9.35 | .02 | .26 | .28 |
| 56.35 | 2.71 | 87 | -488.1 | 0. | 26.6 | 84 | 33922. | -92 | 33.00 | 16.49 | 36.0 | -.57 | 9.62 | .02 | .27 | .29 |
| 58.36 | 2.47 | 87 | -490.8 | 0. | 19.2 | 83 | 34682. | -92 | 33.00 | 16.49 | 36.0 | -.57 | 9.83 | .02 | .27 | .29 |
| 60.37 | 2.23 | 87 | -493.5 | 0. | 12.0 | 81 | 35257. | -92 | 33.00 | 16.49 | 36.0 | -.58 | 9.99 | .02 | .28 | .30 |
| 62.38 | 2.02 | 87 | -496.3 | 0. | 5.2 | 74 | 35655. | -92 | 33.00 | 16.49 | 36.0 | -.58 | 10.11 | .02 | .28 | .30 |
| 64.40 | 1.81 | 87 | -499.0 | 0. | 2.0 | -58 | 35880. | -92 | 33.00 | 16.49 | 36.0 | -.58 | 10.17 | .02 | .28 | .30 |
| 66.41 | 1.61 | 87 | -501.8 | 0. | 8.2 | -84 | 35937. | -92 | 33.00 | 16.49 | 36.0 | -.59 | 10.19 | .02 | .28 | .30 |
| 68.42 | 1.43 | 87 | -504.5 | 0. | 14.4 | -88 | 35831. | -92 | 33.00 | 16.49 | 36.0 | -.59 | 10.16 | .02 | .28 | .30 |
| 70.43 | 1.26 | 87 | -507.3 | 0. | 20.3 | -89 | 35570. | -92 | 33.00 | 16.49 | 36.0 | -.59 | 10.08 | .02 | .28 | .30 |
| 72.44 | 1.10 | 86 | -510.1 | 0. | 25.9 | 269 | 35161. | -92 | 33.00 | 16.49 | 36.0 | -.60 | 9.97 | .02 | .28 | .30 |
| 74.46 | .96 | 86 | -512.9 | 0. | 31.4 | 269 | 34609. | -92 | 33.00 | 16.49 | 36.0 | -.60 | 9.81 | .02 | .27 | .29 |
| 76.47 | .82 | 86 | -515.8 | 0. | 36.5 | 268 | 33921. | -92 | 33.00 | 16.49 | 36.0 | -.60 | 9.61 | .02 | .27 | .29 |
| 78.48 | .70 | 86 | -518.6 | 0. | 41.4 | 268 | 33102. | -92 | 33.00 | 16.49 | 36.0 | -.61 | 9.38 | .02 | .26 | .28 |
| 80.49 | .59 | 86 | -521.5 | 0. | 46.0 | 268 | 32159. | -92 | 33.00 | 16.49 | 36.0 | -.61 | 9.12 | .02 | .25 | .28 |
| 82.51 | .49 | 86 | -524.3 | 0. | 50.3 | 268 | 31100. | -92 | 33.00 | 16.49 | 36.0 | -.61 | 8.82 | .02 | .25 | .27 |
| 84.52 | .40 | 86 | -527.2 | 0. | 54.4 | 268 | 29931. | -92 | 33.00 | 16.49 | 36.0 | -.62 | 8.48 | .02 | .24 | .26 |
| 86.53 | .32 | 86 | -530.1 | 0. | 58.2 | 268 | 28659. | -92 | 33.00 | 16.49 | 36.0 | -.62 | 8.12 | .02 | .23 | .25 |
| 88.54 | .25 | 86 | -533.0 | 0. | 61.7 | 268 | 27290. | -92 | 33.00 | 16.49 | 36.0 | -.62 | 7.74 | .02 | .22 | .24 |
| 90.56 | .20 | 86 | -536.0 | 0. | 64.8 | 267 | 25833. | -92 | 33.00 | 16.49 | 36.0 | -.63 | 7.32 | .02 | .20 | .23 |
| 92.57 | .15 | 86 | -538.9 | 0. | 67.1 | 267 | 24296. | -92 | 33.00 | 16.49 | 36.0 | -.63 | 6.89 | .02 | .19 | .21 |
| 94.58 | .10 | 86 | -541.9 | 0. | 68.7 | 267 | 22699. | -92 | 33.00 | 16.49 | 36.0 | -.63 | 6.43 | .02 | .18 | .20 |
| 96.59 | .07 | 86 | -544.9 | 0. | 69.8 | 267 | 21058. | -93 | 33.00 | 16.49 | 36.0 | -.64 | 5.97 | .02 | .17 | .19 |
| 98.60 | .04 | 86 | -547.9 | 0. | 70.5 | 267 | 19387. | -93 | 33.00 | 16.49 | 36.0 | -.64 | 5.50 | .02 | .15 | .18 |

*** Group Critical Pile Report III - Group P33 - Pile 200 - Load Case B ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force (Kips) | | Bending Moment (In-Kips) | | Pile Properties | | | Axial Stress (KSI) | Bending Stress (KSI) | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------------|-------------|--------------------------|-------------|-----------------|-------|----------|--------------------|----------------------|--------------------|-------------|-----|
| | Normal To Pile Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | | | Axial | Bend. Total | |
| 100.62 | .02 | 86 | -547.5 | 0. | 110.7 | 267 | 17695. | -93 | 33.00 | 16.49 | 36.0 | -.64 | 5.02 | .02 | .14 | .16 |
| 102.63 | .01 | 85 | -543.8 | 0. | 142.2 | 266 | 15029. | -93 | 33.00 | 16.49 | 36.0 | -.64 | 4.26 | .02 | .12 | .14 |
| 104.64 | .00 | -90 | -540.2 | 0. | 141.7 | 266 | 11601. | -93 | 33.00 | 16.49 | 36.0 | -.63 | 3.29 | .02 | .09 | .11 |
| 106.65 | .00 | 267 | -536.6 | 0. | 123.3 | 266 | 8180. | -93 | 33.00 | 16.49 | 36.0 | -.63 | 2.32 | .02 | .06 | .09 |
| 108.67 | .01 | 266 | -533.1 | 0. | 96.9 | 266 | 5205. | -93 | 33.00 | 16.49 | 36.0 | -.62 | 1.48 | .02 | .04 | .06 |
| 110.68 | .01 | 266 | -529.7 | 0. | 69.4 | 266 | 2866. | -93 | 33.00 | 16.49 | 36.0 | -.62 | .81 | .02 | .02 | .04 |
| 112.69 | .01 | 266 | -526.4 | 0. | 44.9 | 266 | 1190. | -94 | 33.00 | 16.49 | 36.0 | -.62 | .34 | .02 | .01 | .03 |
| 114.70 | .00 | 266 | -523.1 | 0. | 25.3 | 266 | 106. | -99 | 33.00 | 16.49 | 36.0 | -.61 | .03 | .02 | .00 | .02 |
| 116.72 | .00 | 266 | -519.9 | 0. | 11.0 | 266 | 506. | 87 | 33.00 | 16.49 | 36.0 | -.61 | .14 | .02 | .00 | .03 |
| 118.73 | .00 | 266 | -516.8 | 0. | 1.7 | 263 | 773. | 87 | 33.00 | 16.49 | 36.0 | -.60 | .22 | .02 | .01 | .03 |
| 120.74 | .00 | -90 | -513.7 | 0. | 3.7 | 87 | 813. | 86 | 33.00 | 16.49 | 36.0 | -.60 | .23 | .02 | .01 | .03 |
| 122.75 | .00 | -90 | -510.8 | 0. | 6.2 | 87 | 723. | 86 | 33.00 | 16.49 | 36.0 | -.60 | .21 | .02 | .01 | .03 |
| 124.77 | .00 | -90 | -507.8 | 0. | 6.7 | 86 | 573. | 86 | 33.00 | 16.49 | 36.0 | -.59 | .16 | .02 | .00 | .03 |
| 126.78 | .00 | 90 | -505.0 | 0. | 6.0 | 86 | 412. | 86 | 33.00 | 16.49 | 36.0 | -.59 | .12 | .02 | .00 | .02 |
| 128.79 | .00 | 90 | -502.2 | 0. | 4.8 | 86 | 266. | 86 | 33.00 | 16.49 | 36.0 | -.59 | .08 | .02 | .00 | .02 |
| 130.80 | .00 | 90 | -499.5 | 0. | 3.5 | 86 | 150. | 86 | 33.00 | 16.49 | 36.0 | -.58 | .04 | .02 | .00 | .02 |
| 132.81 | .00 | 90 | -496.9 | 0. | 2.3 | 86 | 65. | 86 | 33.00 | 16.49 | 36.0 | -.58 | .02 | .02 | .00 | .02 |
| 134.83 | .00 | 90 | -494.3 | 0. | 1.3 | 86 | 11. | 84 | 33.00 | 16.49 | 36.0 | -.58 | .00 | .02 | .00 | .02 |
| 136.84 | .00 | 90 | -491.8 | 0. | .6 | 86 | 19. | -92 | 33.00 | 16.49 | 36.0 | -.57 | .01 | .02 | .00 | .02 |
| 138.85 | .00 | 0 | -489.4 | 0. | .1 | 84 | 33. | -92 | 33.00 | 16.49 | 36.0 | -.57 | .01 | .02 | .00 | .02 |
| 140.86 | .00 | 0 | -487.0 | 0. | .2 | 267 | 36. | -93 | 33.00 | 16.49 | 36.0 | -.57 | .01 | .02 | .00 | .02 |
| 142.88 | .00 | 0 | -484.7 | 0. | .3 | 267 | 32. | -93 | 33.00 | 16.49 | 36.0 | -.57 | .01 | .02 | .00 | .02 |
| 144.89 | .00 | 0 | -482.4 | 0. | .3 | 266 | 25. | -93 | 33.00 | 16.49 | 36.0 | -.56 | .01 | .02 | .00 | .02 |
| 146.90 | .00 | 0 | -480.3 | 0. | .3 | 266 | 17. | -93 | 33.00 | 16.49 | 36.0 | -.56 | .01 | .02 | .00 | .02 |
| 148.91 | .00 | 0 | -478.1 | 0. | .2 | 266 | 11. | -93 | 33.00 | 16.49 | 36.0 | -.56 | .00 | .02 | .00 | .02 |
| 150.93 | .00 | 0 | -475.8 | 0. | .1 | 266 | 5. | -93 | 33.00 | 16.49 | 36.0 | -.56 | .00 | .02 | .00 | .02 |
| 152.94 | .00 | 0 | -473.3 | 0. | .1 | 266 | 2. | -94 | 33.00 | 16.49 | 36.0 | -.55 | .00 | .02 | .00 | .02 |
| 154.95 | .00 | 0 | -470.8 | 0. | .0 | 266 | 0. | -97 | 33.00 | 16.49 | 36.0 | -.55 | .00 | .02 | .00 | .02 |
| 156.96 | .00 | 0 | -468.4 | 0. | .0 | 252 | 0. | 87 | 33.00 | 16.49 | 36.0 | -.55 | .00 | .02 | .00 | .02 |
| 158.98 | .00 | 0 | -466.1 | 0. | .0 | 87 | 0. | 87 | 33.00 | 16.49 | 36.0 | -.54 | .00 | .02 | .00 | .02 |
| 160.99 | .00 | 0 | -463.8 | 0. | .0 | 87 | 0. | 87 | 33.00 | 16.49 | 36.0 | -.54 | .00 | .02 | .00 | .02 |

*** Pile Group Summary Report - Group P42 ***

| Dist. Along Pile (Ft) | Deflection | | Axial | | Shear Force | | Bending Moment | | Pile Properties | | | Axial | Bending | Load Case | Pile Joint | Unity Check |
|--------------------------------|-------------------------|---------------------------|-----------------|----------------------|-----------------|----------------|--------------------|----------------|-----------------|----------------|---------------|-------------------|------------------|--------------|---------------|----------------|
| | Normal Value (In) | To Pile Angle (Deg) | Force (Kips) | Torsion (In-Kips) | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD /-- (In) | WT --/----- | Fy (KSI) | Stress (KSI) | Stress -----/ | | | |
| .00 | 13.04 | 90 | -2867.2 | 0. | 139.5 | 90 | 55100. | 90 | 42.00 | 1.75 | 36.0 | -12.96 | 25.77 | 6 | 182 | 1.17 |
| 2.00 | 12.76 | 90 | -2867.7 | 0. | 138.3 | 90 | 50932. | 90 | 42.00 | 1.75 | 36.0 | -12.96 | 23.82 | 6 | 182 | 1.11 |
| 4.00 | 12.45 | 90 | -2868.1 | 0. | 136.9 | 90 | 46728. | 90 | 42.00 | 1.75 | 36.0 | -12.96 | 21.86 | 6 | 182 | 1.06 |
| 6.00 | 12.12 | 90 | -2868.6 | 0. | 135.4 | 90 | 42499. | 90 | 42.00 | 1.75 | 36.0 | -12.96 | 19.88 | 6 | 182 | 1.00 |
| 8.00 | 11.77 | 90 | -2869.0 | 0. | 133.8 | 90 | 38251. | 89 | 42.00 | 1.75 | 36.0 | -12.96 | 17.89 | 6 | 182 | .95 |
| 10.00 | 11.41 | 90 | -2869.4 | 0. | 132.1 | 90 | 33992. | 89 | 42.00 | 1.75 | 36.0 | -12.97 | 15.90 | 6 | 182 | .89 |
| 12.00 | 11.03 | 90 | -2869.7 | 0. | 130.3 | 90 | 29732. | 89 | 42.00 | 1.75 | 36.0 | -12.97 | 13.91 | 6 | 182 | .84 |
| 14.00 | 10.63 | 90 | -2870.1 | 0. | 128.3 | 90 | 25477. | 89 | 42.00 | 1.75 | 36.0 | -12.97 | 11.92 | 6 | 182 | .78 |
| 16.00 | 10.23 | 90 | -2870.5 | 0. | 126.3 | 90 | 21236. | 89 | 42.00 | 1.75 | 36.0 | -12.97 | 9.93 | 6 | 182 | .73 |
| 18.00 | 9.82 | 90 | -2870.8 | 0. | 124.2 | 90 | 17017. | 89 | 42.00 | 1.75 | 36.0 | -12.97 | 7.96 | 6 | 182 | .67 |
| 20.00 | 9.39 | 90 | -2871.2 | 0. | 122.0 | 90 | 12827. | 89 | 42.00 | 1.75 | 36.0 | -12.97 | 6.00 | 6 | 182 | .62 |
| 22.00 | 8.97 | 90 | -2871.5 | 0. | 119.7 | 90 | 8674. | 88 | 42.00 | 1.75 | 36.0 | -12.98 | 4.06 | 6 | 182 | .56 |
| 24.00 | 8.54 | 90 | -2871.8 | 0. | 117.4 | 90 | 4567. | 86 | 42.00 | 1.75 | 36.0 | -12.98 | 2.14 | 6 | 182 | .51 |
| 26.00 | 8.10 | 90 | -2872.1 | 0. | 114.9 | 90 | 580. | 59 | 42.00 | 1.75 | 36.0 | -12.98 | .27 | 6 | 182 | .46 |
| 28.00 | 7.67 | 90 | -2872.3 | 0. | 112.4 | 90 | 3517. | -84 | 42.00 | 1.75 | 36.0 | -12.98 | 1.65 | 6 | 182 | .50 |
| 30.00 | 7.24 | 90 | -2872.6 | 0. | 109.9 | 90 | 7449. | -87 | 42.00 | 1.75 | 36.0 | -12.98 | 3.48 | 6 | 182 | .55 |
| 32.00 | 6.81 | 90 | -2872.9 | 0. | 107.3 | 90 | 11315. | -88 | 42.00 | 1.75 | 36.0 | -12.98 | 5.29 | 6 | 182 | .60 |
| 34.00 | 6.39 | 90 | -2870.4 | 0. | 99.9 | 90 | 15104. | -88 | 42.00 | 1.75 | 36.0 | -12.97 | 7.07 | 6 | 182 | .65 |
| 36.00 | 5.97 | 90 | -2865.2 | 0. | 88.2 | 90 | 18698. | -88 | 42.00 | 1.75 | 36.0 | -12.95 | 8.75 | 6 | 182 | .69 |
| 38.00 | 5.56 | 90 | -2859.9 | 0. | 76.8 | 90 | 21985. | -88 | 42.00 | 1.75 | 36.0 | -12.92 | 10.28 | 6 | 182 | .74 |
| 40.00 | 5.16 | 90 | -2854.5 | 0. | 65.7 | 90 | 24968. | -88 | 42.00 | 1.75 | 36.0 | -12.90 | 11.68 | 6 | 182 | .77 |
| 42.00 | 4.77 | 90 | -2849.1 | 0. | 54.8 | 89 | 27650. | -89 | 42.00 | 1.75 | 36.0 | -12.87 | 12.93 | 6 | 182 | .81 |
| 44.00 | 4.40 | 90 | -2843.5 | 0. | 44.2 | 89 | 30035. | -89 | 42.00 | 1.75 | 36.0 | -12.85 | 14.05 | 6 | 182 | .84 |
| 46.00 | 4.04 | 90 | -2838.0 | 0. | 33.9 | 89 | 32126. | -89 | 42.00 | 1.75 | 36.0 | -12.82 | 15.03 | 6 | 182 | .86 |
| 48.00 | 3.69 | 90 | -2832.3 | 0. | 24.0 | 89 | 33928. | -89 | 42.00 | 1.75 | 36.0 | -12.80 | 15.87 | 6 | 182 | .89 |
| 50.00 | 3.35 | 90 | -2826.6 | 0. | 14.4 | 88 | 35448. | -89 | 42.00 | 1.75 | 36.0 | -12.77 | 16.58 | 6 | 182 | .91 |
| 52.00 | 3.04 | 90 | -2820.8 | 0. | 5.2 | 84 | 36691. | -89 | 42.00 | 1.75 | 36.0 | -12.75 | 17.16 | 6 | 182 | .92 |
| 54.00 | 2.74 | 90 | -2814.9 | 0. | 3.8 | -81 | 37665. | -89 | 42.00 | 1.75 | 36.0 | -12.72 | 17.62 | 6 | 182 | .93 |
| 56.00 | 2.45 | 90 | -2809.0 | 0. | 12.4 | -87 | 38376. | -89 | 42.00 | 1.75 | 36.0 | -12.69 | 17.95 | 6 | 182 | .94 |
| 58.00 | 2.18 | 90 | -2803.0 | 0. | 20.8 | -88 | 38830. | -89 | 42.00 | 1.75 | 36.0 | -12.67 | 18.16 | 6 | 182 | .95 |
| 60.00 | 1.93 | 90 | -2796.9 | 0. | 28.8 | -88 | 39033. | -89 | 42.00 | 1.75 | 36.0 | -12.64 | 18.26 | 6 | 182 | .95 |
| 62.00 | 1.70 | 90 | -2790.8 | 0. | 36.4 | -88 | 38994. | -89 | 42.00 | 1.75 | 36.0 | -12.61 | 18.24 | 6 | 182 | .95 |
| 64.00 | 1.48 | 90 | -2784.6 | 0. | 43.7 | -88 | 38723. | -89 | 42.00 | 1.75 | 36.0 | -12.58 | 18.11 | 6 | 182 | .94 |
| 66.00 | 1.28 | 90 | -2778.3 | 0. | 50.7 | -88 | 38227. | -89 | 42.00 | 1.75 | 36.0 | -12.56 | 17.88 | 6 | 182 | .93 |
| 68.00 | 1.10 | 90 | -2772.0 | 0. | 57.4 | -89 | 37516. | -89 | 42.00 | 1.75 | 36.0 | -12.53 | 17.55 | 6 | 182 | .92 |
| 70.00 | .94 | 90 | -2765.5 | 0. | 63.6 | -89 | 36598. | -89 | 42.00 | 1.75 | 36.0 | -12.50 | 17.12 | 6 | 182 | .91 |
| 72.00 | .79 | 90 | -2759.1 | 0. | 69.5 | -89 | 35483. | -89 | 42.00 | 1.75 | 36.0 | -12.47 | 16.60 | 6 | 182 | .90 |
| 74.00 | .65 | 90 | -2752.5 | 0. | 75.1 | -89 | 34183. | -89 | 42.00 | 1.75 | 36.0 | -12.44 | 15.99 | 6 | 182 | .88 |
| 76.00 | .54 | 90 | -2745.9 | 0. | 80.4 | -89 | 32706. | -89 | 42.00 | 1.75 | 36.0 | -12.41 | 15.30 | 6 | 182 | .86 |
| 78.00 | .43 | 90 | -2739.2 | 0. | 85.2 | -89 | 31063. | -89 | 42.00 | 1.75 | 36.0 | -12.38 | 14.53 | 6 | 182 | .84 |
| 80.00 | .34 | 90 | -2732.5 | 0. | 89.7 | -89 | 29266. | -89 | 42.00 | 1.75 | 36.0 | -12.35 | 13.69 | 6 | 182 | .81 |
| 82.00 | .26 | 90 | -2725.6 | 0. | 93.8 | -89 | 27325. | -89 | 42.00 | 1.75 | 36.0 | -12.32 | 12.78 | 6 | 182 | .78 |
| 84.00 | .20 | 90 | -2718.7 | 0. | 97.0 | -89 | 25251. | -89 | 42.00 | 1.75 | 36.0 | -12.29 | 11.81 | 6 | 182 | .76 |
| 86.00 | .15 | 90 | -2711.8 | 0. | 99.3 | -89 | 23071. | -89 | 42.00 | 1.75 | 36.0 | -12.25 | 10.79 | 6 | 182 | .73 |
| 88.00 | .10 | 89 | -2704.8 | 0. | 100.9 | -89 | 20808. | -89 | 42.00 | 1.75 | 36.0 | -12.22 | 9.73 | 6 | 182 | .70 |
| 90.00 | .07 | 89 | -2697.7 | 0. | 101.9 | -89 | 18481. | -89 | 42.00 | 1.75 | 36.0 | -12.19 | 8.64 | 6 | 182 | .67 |
| 92.00 | .04 | 89 | -2690.5 | 0. | 102.6 | -89 | 16106. | -89 | 42.00 | 1.75 | 36.0 | -12.16 | 7.53 | 6 | 182 | .63 |
| 94.00 | .02 | 88 | -2683.3 | 0. | 102.9 | -89 | 13697. | -89 | 42.00 | 1.75 | 36.0 | -12.13 | 6.41 | 6 | 182 | .60 |
| 96.00 | .01 | 87 | -2676.0 | 0. | 103.0 | -89 | 11264. | -89 | 42.00 | 1.75 | 36.0 | -12.09 | 5.27 | 6 | 182 | .57 |
| 98.00 | .00 | -69 | -2668.6 | 0. | 103.0 | -89 | 8814. | -89 | 42.00 | 1.75 | 36.0 | -12.06 | 4.12 | 6 | 182 | .53 |

*** Pile Group Summary Report - Group P42 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Load Case | Pile Joint | Unity Check |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|------|--------------------|----------------|-----------|------------|-------------|
| | Normal To Pile Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy | | | | | |
| 100.00 | .01 | -87 | -2661.2 | 0. | 102.9 | -89 | 6355. | -89 | 42.00 | 1.75 | 36.0 | -12.03 | 2.97 | 6 | 182 | .50 |
| 102.00 | .01 | -88 | -2599.1 | 0. | 78.6 | -89 | 3890. | -90 | 42.00 | 1.75 | 36.0 | -11.75 | 1.82 | 6 | 182 | .46 |
| 104.00 | .01 | -89 | -2538.4 | 0. | 54.3 | -89 | 2002. | -90 | 42.00 | 1.75 | 36.0 | -11.47 | .94 | 6 | 182 | .43 |
| 106.00 | .01 | -90 | -2479.0 | 0. | 33.4 | 269 | 697. | -92 | 42.00 | 1.75 | 36.0 | -11.20 | .33 | 6 | 182 | .40 |
| 108.00 | .00 | -90 | -2420.8 | 0. | 17.2 | 269 | 112. | 104 | 42.00 | 1.75 | 36.0 | -10.94 | .05 | 6 | 182 | .38 |
| 110.00 | .00 | -90 | -2363.9 | 0. | 6.0 | 267 | 525. | 92 | 42.00 | 1.75 | 36.0 | -10.68 | .25 | 6 | 182 | .38 |
| 112.00 | .00 | -90 | -2308.3 | 0. | 1.0 | 104 | 672. | 91 | 42.00 | 1.75 | 36.0 | -10.43 | .31 | 6 | 182 | .37 |
| 114.00 | .00 | -90 | -2253.8 | 0. | 4.5 | 92 | 651. | 90 | 42.00 | 1.75 | 36.0 | -10.19 | .30 | 6 | 182 | .36 |
| 116.00 | .00 | -90 | -2200.5 | 0. | 5.8 | 91 | 544. | 90 | 42.00 | 1.75 | 36.0 | -9.94 | .25 | 6 | 182 | .35 |
| 118.00 | .00 | 0 | -2148.4 | 0. | 5.6 | 90 | 406. | 90 | 42.00 | 1.75 | 36.0 | -9.71 | .19 | 6 | 182 | .34 |
| 120.00 | .00 | 90 | -2097.3 | 0. | 4.7 | 90 | 272. | 90 | 42.00 | 1.75 | 36.0 | -9.48 | .13 | 6 | 182 | .33 |
| 122.00 | .00 | 90 | -2047.4 | 0. | 3.5 | 90 | 160. | 89 | 42.00 | 1.75 | 36.0 | -9.25 | .07 | 6 | 182 | .32 |
| 124.00 | .00 | 90 | -1998.5 | 0. | 2.3 | 90 | 76. | 88 | 42.00 | 1.75 | 36.0 | -9.03 | .04 | 6 | 182 | .31 |
| 126.00 | .00 | 90 | -1950.7 | 0. | 1.3 | 89 | 21. | 86 | 42.00 | 1.75 | 36.0 | -8.82 | .01 | 6 | 182 | .31 |
| 128.00 | .00 | 90 | -1903.8 | 0. | .6 | 88 | 11. | -83 | 42.00 | 1.75 | 36.0 | -8.60 | .01 | 6 | 182 | .30 |
| 130.00 | .00 | 90 | -1858.0 | 0. | .2 | 85 | 26. | -88 | 42.00 | 1.75 | 36.0 | -8.40 | .01 | 6 | 182 | .29 |
| 132.00 | .00 | 0 | -1813.1 | 0. | .1 | -84 | 30. | -88 | 42.00 | 1.75 | 36.0 | -8.19 | .01 | 6 | 182 | .29 |
| 134.00 | .00 | 0 | -1769.2 | 0. | .2 | -88 | 27. | -89 | 42.00 | 1.75 | 36.0 | -7.99 | .01 | 6 | 182 | .28 |
| 136.00 | .00 | 0 | -1726.1 | 0. | .3 | -88 | 21. | -89 | 42.00 | 1.75 | 36.0 | -7.80 | .01 | 6 | 182 | .27 |
| 138.00 | .00 | 0 | -1684.0 | 0. | .2 | -89 | 15. | -89 | 42.00 | 1.75 | 36.0 | -7.61 | .01 | 6 | 182 | .26 |
| 140.00 | .00 | 0 | -1642.7 | 0. | .2 | -89 | 9. | -90 | 42.00 | 1.75 | 36.0 | -7.42 | .00 | 6 | 182 | .26 |
| 142.00 | .00 | 0 | -1602.3 | 0. | .1 | -89 | 4. | -90 | 42.00 | 1.75 | 36.0 | -7.24 | .00 | 6 | 182 | .25 |
| 144.00 | .00 | 0 | -1562.8 | 0. | .1 | 269 | 1. | -92 | 42.00 | 1.75 | 36.0 | -7.06 | .00 | 6 | 182 | .25 |
| 146.00 | .00 | 0 | -1524.0 | 0. | .0 | 269 | 0. | 136 | 42.00 | 1.75 | 36.0 | -6.89 | .00 | 6 | 182 | .24 |
| 148.00 | .00 | 0 | -1486.0 | 0. | .0 | 267 | 1. | 92 | 42.00 | 1.75 | 36.0 | -6.72 | .00 | 6 | 182 | .23 |
| 150.00 | .00 | 0 | -1448.8 | 0. | .0 | 105 | 1. | 91 | 42.00 | 1.75 | 36.0 | -6.55 | .00 | 6 | 182 | .23 |
| 152.00 | .00 | 0 | -1411.0 | 0. | .0 | 92 | 1. | 90 | 42.00 | 1.75 | 36.0 | -6.38 | .00 | 6 | 182 | .22 |
| 154.00 | .00 | 0 | -1372.6 | 0. | .0 | 91 | 1. | 90 | 42.00 | 1.75 | 36.0 | -6.20 | .00 | 6 | 182 | .22 |
| 156.00 | .00 | 0 | -1335.0 | 0. | .0 | 90 | 0. | 90 | 42.00 | 1.75 | 36.0 | -6.03 | .00 | 6 | 182 | .21 |
| 158.00 | .00 | 0 | -1298.1 | 0. | .0 | 90 | 0. | 89 | 42.00 | 1.75 | 36.0 | -5.87 | .00 | 6 | 182 | .20 |
| 160.00 | .00 | 0 | -1262.0 | 0. | .0 | 90 | 0. | 89 | 42.00 | 1.75 | 36.0 | -5.70 | .00 | 6 | 182 | .20 |
| 162.00 | .00 | 0 | -1226.5 | 0. | .0 | 90 | 0. | 87 | 42.00 | 1.75 | 36.0 | -5.54 | .00 | 6 | 182 | .19 |
| 164.00 | .00 | 0 | -1191.7 | 0. | .0 | 90 | 0. | -80 | 42.00 | 1.75 | 36.0 | -5.39 | .00 | 6 | 182 | .19 |
| 166.00 | .00 | 0 | -1157.6 | 0. | .0 | 90 | 0. | -88 | 42.00 | 1.75 | 36.0 | -5.23 | .00 | 6 | 182 | .18 |
| 168.00 | .00 | 0 | -1124.1 | 0. | .0 | -90 | 0. | -88 | 42.00 | 1.75 | 36.0 | -5.08 | .00 | 6 | 182 | .18 |
| 170.00 | .00 | 0 | -1091.2 | 0. | .0 | -90 | 0. | -89 | 42.00 | 1.50 | 36.0 | -5.72 | .00 | 6 | 182 | .20 |
| 172.00 | .00 | 0 | -1058.8 | 0. | .0 | -90 | 0. | -89 | 42.00 | 1.50 | 36.0 | -5.55 | .00 | 6 | 182 | .19 |
| 174.00 | .00 | 0 | -1027.2 | 0. | .0 | -90 | 0. | -90 | 42.00 | 1.50 | 36.0 | -5.38 | .00 | 6 | 182 | .19 |
| 176.00 | .00 | 0 | -996.2 | 0. | .0 | -90 | 0. | -90 | 42.00 | 1.50 | 36.0 | -5.22 | .00 | 6 | 182 | .18 |
| 178.00 | .00 | 0 | -965.8 | 0. | .0 | -90 | 0. | -91 | 42.00 | 1.50 | 36.0 | -5.06 | .00 | 6 | 182 | .18 |
| 180.00 | .00 | 0 | -936.0 | 0. | .0 | 0 | 0. | 108 | 42.00 | 1.25 | 36.0 | -5.85 | .00 | 6 | 182 | .20 |
| 182.00 | .00 | 0 | -906.7 | 0. | .0 | 0 | 0. | 91 | 42.00 | 1.25 | 36.0 | -5.67 | .00 | 6 | 182 | .20 |
| 184.00 | .00 | 0 | -878.2 | 0. | .0 | 0 | 0. | 91 | 42.00 | 1.25 | 36.0 | -5.49 | .00 | 6 | 182 | .19 |
| 186.00 | .00 | 0 | -850.3 | 0. | .0 | 0 | 0. | 90 | 42.00 | 1.25 | 36.0 | -5.31 | .00 | 6 | 182 | .18 |
| 188.00 | .00 | 0 | -823.1 | 0. | .0 | 0 | 0. | 90 | 42.00 | 1.25 | 36.0 | -5.14 | .00 | 6 | 182 | .18 |
| 190.00 | .00 | 0 | -796.4 | 0. | .0 | 0 | 0. | 89 | 42.00 | 1.00 | 36.0 | -6.18 | .00 | 6 | 182 | .22 |
| 192.00 | .00 | 0 | -770.4 | 0. | .0 | 0 | 0. | 89 | 42.00 | 1.00 | 36.0 | -5.98 | .00 | 6 | 182 | .21 |
| 194.00 | .00 | 0 | -745.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.79 | .00 | 6 | 182 | .20 |
| 196.00 | .00 | 0 | -720.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.59 | .00 | 6 | 182 | .19 |
| 198.00 | .00 | 0 | -696.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.41 | .00 | 6 | 182 | .19 |

*** Pile Group Summary Report - Group P42 ***

| Dist. Along Pile (Ft) | Deflection Normal To Pile | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Load Case | Pile Joint | Unity Check |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|------|--------------------|----------------|-----------|------------|-------------|
| | Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy | | | | | |
| 200.00 | .00 | 0 | -673.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.23 | .00 | 6 | 182 | .18 |
| 202.00 | .00 | 0 | -650.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.05 | .00 | 6 | 182 | .18 |
| 204.00 | .00 | 0 | -628.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.88 | .00 | 6 | 182 | .17 |
| 206.00 | .00 | 0 | -607.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.72 | .00 | 6 | 182 | .16 |
| 208.00 | .00 | 0 | -586.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.56 | .00 | 6 | 182 | .16 |
| 210.00 | .00 | 0 | -566.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.40 | .00 | 6 | 182 | .15 |
| 212.00 | .00 | 0 | -546.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.25 | .00 | 6 | 182 | .15 |
| 214.00 | .00 | 0 | -524.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.07 | .00 | 6 | 182 | .14 |
| 216.00 | .00 | 0 | -501.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.89 | .00 | 6 | 182 | .14 |
| 218.00 | .00 | 0 | -479.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.72 | .00 | 6 | 182 | .13 |
| 220.00 | .00 | 0 | -457.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.55 | .00 | 6 | 182 | .12 |
| 222.00 | .00 | 0 | -436.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.39 | .00 | 6 | 182 | .12 |
| 224.00 | .00 | 0 | -415.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.23 | .00 | 6 | 182 | .11 |
| 226.00 | .00 | 0 | -395.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.07 | .00 | 6 | 182 | .11 |
| 228.00 | .00 | 0 | -375.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.91 | .00 | 6 | 182 | .10 |
| 230.00 | .00 | 0 | -355.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.76 | .00 | 6 | 182 | .10 |
| 232.00 | .00 | 0 | -336.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.61 | .00 | 6 | 182 | .09 |
| 234.00 | .00 | 0 | -317.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.46 | .00 | 6 | 182 | .09 |
| 236.00 | .00 | 0 | -298.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.32 | .00 | 6 | 182 | .08 |
| 238.00 | .00 | 0 | -280.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.17 | .00 | 6 | 182 | .08 |
| 240.00 | .00 | 0 | -261.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.03 | .00 | 6 | 182 | .07 |
| 242.00 | .00 | 0 | -243.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.89 | .00 | 6 | 182 | .07 |
| 244.00 | .00 | 0 | -226.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.76 | .00 | 6 | 182 | .06 |
| 246.00 | .00 | 0 | -208.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.62 | .00 | 6 | 182 | .06 |
| 248.00 | .00 | 0 | -191.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.49 | .00 | 6 | 182 | .05 |
| 250.00 | .00 | 0 | -174.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.35 | .00 | 6 | 182 | .05 |
| 252.00 | .00 | 0 | -157.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.22 | .00 | 6 | 182 | .04 |
| 254.00 | .00 | 0 | -140.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.09 | .00 | 6 | 182 | .04 |
| 256.00 | .00 | 0 | -123.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.96 | .00 | 6 | 182 | .03 |
| 258.00 | .00 | 0 | -107.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.83 | .00 | 6 | 182 | .03 |
| 260.00 | .00 | 0 | -91.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.71 | .00 | 6 | 182 | .02 |
| 262.00 | .00 | 0 | -74.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.58 | .00 | 6 | 182 | .02 |
| 264.00 | .00 | 0 | -58.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.45 | .00 | 6 | 182 | .02 |
| 266.00 | .00 | 0 | -42.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.33 | .00 | 6 | 182 | .01 |
| 268.00 | .00 | 0 | -26.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.20 | .00 | 6 | 182 | .01 |

*** Group Critical Pile Report I - Group P42 - Pile 182 - Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force | | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress | Bending Stress | Unity Check Values | | |
|-----------------------|-------------------|---------------------|--------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|----------|--------------|----------------|--------------------|-------|-------|
| | Normal Value (In) | To Pile Angle (Deg) | Force (Kips) | Torsion (In-Kips) | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | (KSI) | (KSI) | Axial | Bend. | Total |
| .00 | 13.04 | 90 | -2867.2 | 0. | 139.5 | 90 | 55100. | 90 | 42.00 | 1.75 | 36.0 | -12.96 | 25.77 | .45 | .72 | 1.17 |
| 2.00 | 12.76 | 90 | -2867.7 | 0. | 138.3 | 90 | 50932. | 90 | 42.00 | 1.75 | 36.0 | -12.96 | 23.82 | .45 | .66 | 1.11 |
| 4.00 | 12.45 | 90 | -2868.1 | 0. | 136.9 | 90 | 46728. | 90 | 42.00 | 1.75 | 36.0 | -12.96 | 21.86 | .45 | .61 | 1.06 |
| 6.00 | 12.12 | 90 | -2868.6 | 0. | 135.4 | 90 | 42499. | 90 | 42.00 | 1.75 | 36.0 | -12.96 | 19.88 | .45 | .55 | 1.00 |
| 8.00 | 11.77 | 90 | -2869.0 | 0. | 133.8 | 90 | 38251. | 89 | 42.00 | 1.75 | 36.0 | -12.96 | 17.89 | .45 | .50 | .95 |
| 10.00 | 11.41 | 90 | -2869.4 | 0. | 132.1 | 90 | 33992. | 89 | 42.00 | 1.75 | 36.0 | -12.97 | 15.90 | .45 | .44 | .89 |
| 12.00 | 11.03 | 90 | -2869.7 | 0. | 130.3 | 90 | 29732. | 89 | 42.00 | 1.75 | 36.0 | -12.97 | 13.91 | .45 | .39 | .84 |
| 14.00 | 10.63 | 90 | -2870.1 | 0. | 128.3 | 90 | 25477. | 89 | 42.00 | 1.75 | 36.0 | -12.97 | 11.92 | .45 | .33 | .78 |
| 16.00 | 10.23 | 90 | -2870.5 | 0. | 126.3 | 90 | 21236. | 89 | 42.00 | 1.75 | 36.0 | -12.97 | 9.93 | .45 | .28 | .73 |
| 18.00 | 9.82 | 90 | -2870.8 | 0. | 124.2 | 90 | 17017. | 89 | 42.00 | 1.75 | 36.0 | -12.97 | 7.96 | .45 | .22 | .67 |
| 20.00 | 9.39 | 90 | -2871.2 | 0. | 122.0 | 90 | 12827. | 89 | 42.00 | 1.75 | 36.0 | -12.97 | 6.00 | .45 | .17 | .62 |
| 22.00 | 8.97 | 90 | -2871.5 | 0. | 119.7 | 90 | 8674. | 88 | 42.00 | 1.75 | 36.0 | -12.98 | 4.06 | .45 | .11 | .56 |
| 24.00 | 8.54 | 90 | -2871.8 | 0. | 117.4 | 90 | 4567. | 86 | 42.00 | 1.75 | 36.0 | -12.98 | 2.14 | .45 | .06 | .51 |
| 26.00 | 8.10 | 90 | -2872.1 | 0. | 114.9 | 90 | 580. | 59 | 42.00 | 1.75 | 36.0 | -12.98 | .27 | .45 | .01 | .46 |
| 28.00 | 7.67 | 90 | -2872.3 | 0. | 112.4 | 90 | 3517. | -84 | 42.00 | 1.75 | 36.0 | -12.98 | 1.65 | .45 | .05 | .50 |
| 30.00 | 7.24 | 90 | -2872.6 | 0. | 109.9 | 90 | 7449. | -87 | 42.00 | 1.75 | 36.0 | -12.98 | 3.48 | .45 | .10 | .55 |
| 32.00 | 6.81 | 90 | -2872.9 | 0. | 107.3 | 90 | 11315. | -88 | 42.00 | 1.75 | 36.0 | -12.98 | 5.29 | .45 | .15 | .60 |
| 34.00 | 6.39 | 90 | -2870.4 | 0. | 99.9 | 90 | 15104. | -88 | 42.00 | 1.75 | 36.0 | -12.97 | 7.07 | .45 | .20 | .65 |
| 36.00 | 5.97 | 90 | -2865.2 | 0. | 88.2 | 90 | 18698. | -88 | 42.00 | 1.75 | 36.0 | -12.95 | 8.75 | .45 | .24 | .69 |
| 38.00 | 5.56 | 90 | -2859.9 | 0. | 76.8 | 90 | 21985. | -88 | 42.00 | 1.75 | 36.0 | -12.92 | 10.28 | .45 | .29 | .74 |
| 40.00 | 5.16 | 90 | -2854.5 | 0. | 65.7 | 90 | 24968. | -88 | 42.00 | 1.75 | 36.0 | -12.90 | 11.68 | .45 | .33 | .77 |
| 42.00 | 4.77 | 90 | -2849.1 | 0. | 54.8 | 89 | 27650. | -89 | 42.00 | 1.75 | 36.0 | -12.87 | 12.93 | .45 | .36 | .81 |
| 44.00 | 4.40 | 90 | -2843.5 | 0. | 44.2 | 89 | 30035. | -89 | 42.00 | 1.75 | 36.0 | -12.85 | 14.05 | .45 | .39 | .84 |
| 46.00 | 4.04 | 90 | -2838.0 | 0. | 33.9 | 89 | 32126. | -89 | 42.00 | 1.75 | 36.0 | -12.82 | 15.03 | .45 | .42 | .86 |
| 48.00 | 3.69 | 90 | -2832.3 | 0. | 24.0 | 89 | 33928. | -89 | 42.00 | 1.75 | 36.0 | -12.80 | 15.87 | .45 | .44 | .89 |
| 50.00 | 3.35 | 90 | -2826.6 | 0. | 14.4 | 88 | 35448. | -89 | 42.00 | 1.75 | 36.0 | -12.77 | 16.58 | .44 | .46 | .91 |
| 52.00 | 3.04 | 90 | -2820.8 | 0. | 5.2 | 84 | 36691. | -89 | 42.00 | 1.75 | 36.0 | -12.75 | 17.16 | .44 | .48 | .92 |
| 54.00 | 2.74 | 90 | -2814.9 | 0. | 3.8 | -81 | 37665. | -89 | 42.00 | 1.75 | 36.0 | -12.72 | 17.62 | .44 | .49 | .93 |
| 56.00 | 2.45 | 90 | -2809.0 | 0. | 12.4 | -87 | 38376. | -89 | 42.00 | 1.75 | 36.0 | -12.69 | 17.95 | .44 | .50 | .94 |
| 58.00 | 2.18 | 90 | -2803.0 | 0. | 20.8 | -88 | 38830. | -89 | 42.00 | 1.75 | 36.0 | -12.67 | 18.16 | .44 | .51 | .95 |
| 60.00 | 1.93 | 90 | -2796.9 | 0. | 28.8 | -88 | 39033. | -89 | 42.00 | 1.75 | 36.0 | -12.64 | 18.26 | .44 | .51 | .95 |
| 62.00 | 1.70 | 90 | -2790.8 | 0. | 36.4 | -88 | 38994. | -89 | 42.00 | 1.75 | 36.0 | -12.61 | 18.24 | .44 | .51 | .95 |
| 64.00 | 1.48 | 90 | -2784.6 | 0. | 43.7 | -88 | 38723. | -89 | 42.00 | 1.75 | 36.0 | -12.58 | 18.11 | .44 | .50 | .94 |
| 66.00 | 1.28 | 90 | -2778.3 | 0. | 50.7 | -88 | 38227. | -89 | 42.00 | 1.75 | 36.0 | -12.56 | 17.88 | .44 | .50 | .93 |
| 68.00 | 1.10 | 90 | -2772.0 | 0. | 57.4 | -89 | 37516. | -89 | 42.00 | 1.75 | 36.0 | -12.53 | 17.55 | .44 | .49 | .92 |
| 70.00 | .94 | 90 | -2765.5 | 0. | 63.6 | -89 | 36598. | -89 | 42.00 | 1.75 | 36.0 | -12.50 | 17.12 | .44 | .48 | .91 |
| 72.00 | .79 | 90 | -2759.1 | 0. | 69.5 | -89 | 35483. | -89 | 42.00 | 1.75 | 36.0 | -12.47 | 16.60 | .43 | .46 | .90 |
| 74.00 | .65 | 90 | -2752.5 | 0. | 75.1 | -89 | 34183. | -89 | 42.00 | 1.75 | 36.0 | -12.44 | 15.99 | .43 | .45 | .88 |
| 76.00 | .54 | 90 | -2745.9 | 0. | 80.4 | -89 | 32706. | -89 | 42.00 | 1.75 | 36.0 | -12.41 | 15.30 | .43 | .43 | .86 |
| 78.00 | .43 | 90 | -2739.2 | 0. | 85.2 | -89 | 31063. | -89 | 42.00 | 1.75 | 36.0 | -12.38 | 14.53 | .43 | .40 | .84 |
| 80.00 | .34 | 90 | -2732.5 | 0. | 89.7 | -89 | 29266. | -89 | 42.00 | 1.75 | 36.0 | -12.35 | 13.69 | .43 | .38 | .81 |
| 82.00 | .26 | 90 | -2725.6 | 0. | 93.8 | -89 | 27325. | -89 | 42.00 | 1.75 | 36.0 | -12.32 | 12.78 | .43 | .36 | .78 |
| 84.00 | .20 | 90 | -2718.7 | 0. | 97.0 | -89 | 25251. | -89 | 42.00 | 1.75 | 36.0 | -12.29 | 11.81 | .43 | .33 | .76 |
| 86.00 | .15 | 90 | -2711.8 | 0. | 99.3 | -89 | 23071. | -89 | 42.00 | 1.75 | 36.0 | -12.25 | 10.79 | .43 | .30 | .73 |
| 88.00 | .10 | 89 | -2704.8 | 0. | 100.9 | -89 | 20808. | -89 | 42.00 | 1.75 | 36.0 | -12.22 | 9.73 | .43 | .27 | .70 |
| 90.00 | .07 | 89 | -2697.7 | 0. | 101.9 | -89 | 18481. | -89 | 42.00 | 1.75 | 36.0 | -12.19 | 8.64 | .42 | .24 | .67 |
| 92.00 | .04 | 89 | -2690.5 | 0. | 102.6 | -89 | 16106. | -89 | 42.00 | 1.75 | 36.0 | -12.16 | 7.53 | .42 | .21 | .63 |
| 94.00 | .02 | 88 | -2683.3 | 0. | 102.9 | -89 | 13697. | -89 | 42.00 | 1.75 | 36.0 | -12.13 | 6.41 | .42 | .18 | .60 |
| 96.00 | .01 | 87 | -2676.0 | 0. | 103.0 | -89 | 11264. | -89 | 42.00 | 1.75 | 36.0 | -12.09 | 5.27 | .42 | .15 | .57 |
| 98.00 | .00 | -69 | -2668.6 | 0. | 103.0 | -89 | 8814. | -89 | 42.00 | 1.75 | 36.0 | -12.06 | 4.12 | .42 | .11 | .53 |

*** Group Critical Pile Report I - Group P42 - Pile 182 - Load Case 6 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------------|----------------------|------------------------|-----------------------|----------------------|-----------------|----------------|--------------------|----------------|--------------------|----------------|------------|-----------------------|----------------|--------------------|-----|-------|
| | Normal Value (In) | To Pile Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | | | WT | Fy | Axial |
| 100.00 | .01 | -87 | -2661.2 | 0. | 102.9 | -89 | 6355. | -89 | 42.00 | 1.75 | 36.0 | -12.03 | 2.97 | .42 | .08 | .50 |
| 102.00 | .01 | -88 | -2599.1 | 0. | 78.6 | -89 | 3890. | -90 | 42.00 | 1.75 | 36.0 | -11.75 | 1.82 | .41 | .05 | .46 |
| 104.00 | .01 | -89 | -2538.4 | 0. | 54.3 | -89 | 2002. | -90 | 42.00 | 1.75 | 36.0 | -11.47 | .94 | .40 | .03 | .43 |
| 106.00 | .01 | -90 | -2479.0 | 0. | 33.4 | 269 | 697. | -92 | 42.00 | 1.75 | 36.0 | -11.20 | .33 | .39 | .01 | .40 |
| 108.00 | .00 | -90 | -2420.8 | 0. | 17.2 | 269 | 112. | 104 | 42.00 | 1.75 | 36.0 | -10.94 | .05 | .38 | .00 | .38 |
| 110.00 | .00 | -90 | -2363.9 | 0. | 6.0 | 267 | 525. | 92 | 42.00 | 1.75 | 36.0 | -10.68 | .25 | .37 | .01 | .38 |
| 112.00 | .00 | -90 | -2308.3 | 0. | 1.0 | 104 | 672. | 91 | 42.00 | 1.75 | 36.0 | -10.43 | .31 | .36 | .01 | .37 |
| 114.00 | .00 | -90 | -2253.8 | 0. | 4.5 | 92 | 651. | 90 | 42.00 | 1.75 | 36.0 | -10.19 | .30 | .35 | .01 | .36 |
| 116.00 | .00 | -90 | -2200.5 | 0. | 5.8 | 91 | 544. | 90 | 42.00 | 1.75 | 36.0 | -9.94 | .25 | .35 | .01 | .35 |
| 118.00 | .00 | 0 | -2148.4 | 0. | 5.6 | 90 | 406. | 90 | 42.00 | 1.75 | 36.0 | -9.71 | .19 | .34 | .01 | .34 |
| 120.00 | .00 | 90 | -2097.3 | 0. | 4.7 | 90 | 272. | 90 | 42.00 | 1.75 | 36.0 | -9.48 | .13 | .33 | .00 | .33 |
| 122.00 | .00 | 90 | -2047.4 | 0. | 3.5 | 90 | 160. | 89 | 42.00 | 1.75 | 36.0 | -9.25 | .07 | .32 | .00 | .32 |
| 124.00 | .00 | 90 | -1998.5 | 0. | 2.3 | 90 | 76. | 88 | 42.00 | 1.75 | 36.0 | -9.03 | .04 | .31 | .00 | .31 |
| 126.00 | .00 | 90 | -1950.7 | 0. | 1.3 | 89 | 21. | 86 | 42.00 | 1.75 | 36.0 | -8.82 | .01 | .31 | .00 | .31 |
| 128.00 | .00 | 90 | -1903.8 | 0. | .6 | 88 | 11. | -83 | 42.00 | 1.75 | 36.0 | -8.60 | .01 | .30 | .00 | .30 |
| 130.00 | .00 | 90 | -1858.0 | 0. | .2 | 85 | 25. | -88 | 42.00 | 1.75 | 36.0 | -8.40 | .01 | .29 | .00 | .29 |
| 132.00 | .00 | 0 | -1813.1 | 0. | .1 | -84 | 30. | -88 | 42.00 | 1.75 | 36.0 | -8.19 | .01 | .29 | .00 | .29 |
| 134.00 | .00 | 0 | -1769.2 | 0. | .2 | -88 | 27. | -89 | 42.00 | 1.75 | 36.0 | -7.99 | .01 | .28 | .00 | .28 |
| 136.00 | .00 | 0 | -1725.1 | 0. | .3 | -88 | 21. | -89 | 42.00 | 1.75 | 36.0 | -7.80 | .01 | .27 | .00 | .27 |
| 138.00 | .00 | 0 | -1684.0 | 0. | .2 | -89 | 15. | -89 | 42.00 | 1.75 | 36.0 | -7.61 | .01 | .26 | .00 | .26 |
| 140.00 | .00 | 0 | -1642.7 | 0. | .2 | -89 | 9. | -90 | 42.00 | 1.75 | 36.0 | -7.42 | .00 | .26 | .00 | .26 |
| 142.00 | .00 | 0 | -1602.3 | 0. | .1 | -89 | 4. | -90 | 42.00 | 1.75 | 36.0 | -7.24 | .00 | .25 | .00 | .25 |
| 144.00 | .00 | 0 | -1562.8 | 0. | .1 | 269 | 1. | -92 | 42.00 | 1.75 | 36.0 | -7.06 | .00 | .25 | .00 | .25 |
| 146.00 | .00 | 0 | -1524.0 | 0. | .0 | 269 | 0. | 136 | 42.00 | 1.75 | 36.0 | -6.89 | .00 | .24 | .00 | .24 |
| 148.00 | .00 | 0 | -1486.0 | 0. | .0 | 267 | 1. | 92 | 42.00 | 1.75 | 36.0 | -6.72 | .00 | .23 | .00 | .23 |
| 150.00 | .00 | 0 | -1448.8 | 0. | .0 | 105 | 1. | 91 | 42.00 | 1.75 | 36.0 | -6.55 | .00 | .23 | .00 | .23 |
| 152.00 | .00 | 0 | -1411.0 | 0. | .0 | 92 | 1. | 90 | 42.00 | 1.75 | 36.0 | -6.38 | .00 | .22 | .00 | .22 |
| 154.00 | .00 | 0 | -1372.6 | 0. | .0 | 91 | 1. | 90 | 42.00 | 1.75 | 36.0 | -6.20 | .00 | .22 | .00 | .22 |
| 156.00 | .00 | 0 | -1335.0 | 0. | .0 | 90 | 0. | 90 | 42.00 | 1.75 | 36.0 | -6.03 | .00 | .21 | .00 | .21 |
| 158.00 | .00 | 0 | -1298.1 | 0. | .0 | 90 | 0. | 89 | 42.00 | 1.75 | 36.0 | -5.87 | .00 | .20 | .00 | .20 |
| 160.00 | .00 | 0 | -1262.0 | 0. | .0 | 90 | 0. | 89 | 42.00 | 1.75 | 36.0 | -5.70 | .00 | .20 | .00 | .20 |
| 162.00 | .00 | 0 | -1226.5 | 0. | .0 | 90 | 0. | 87 | 42.00 | 1.75 | 36.0 | -5.54 | .00 | .19 | .00 | .19 |
| 164.00 | .00 | 0 | -1191.7 | 0. | .0 | 90 | 0. | -80 | 42.00 | 1.75 | 36.0 | -5.39 | .00 | .19 | .00 | .19 |
| 166.00 | .00 | 0 | -1157.6 | 0. | .0 | 90 | 0. | -88 | 42.00 | 1.75 | 36.0 | -5.23 | .00 | .18 | .00 | .18 |
| 168.00 | .00 | 0 | -1124.1 | 0. | .0 | -90 | 0. | -88 | 42.00 | 1.75 | 36.0 | -5.08 | .00 | .18 | .00 | .18 |
| 170.00 | .00 | 0 | -1091.2 | 0. | .0 | -90 | 0. | -89 | 42.00 | 1.50 | 36.0 | -5.72 | .00 | .20 | .00 | .20 |
| 172.00 | .00 | 0 | -1058.8 | 0. | .0 | -90 | 0. | -89 | 42.00 | 1.50 | 36.0 | -5.55 | .00 | .19 | .00 | .19 |
| 174.00 | .00 | 0 | -1027.2 | 0. | .0 | -90 | 0. | -90 | 42.00 | 1.50 | 36.0 | -5.38 | .00 | .19 | .00 | .19 |
| 176.00 | .00 | 0 | -996.2 | 0. | .0 | -90 | 0. | -90 | 42.00 | 1.50 | 36.0 | -5.22 | .00 | .18 | .00 | .18 |
| 178.00 | .00 | 0 | -965.8 | 0. | .0 | -90 | 0. | -91 | 42.00 | 1.50 | 36.0 | -5.06 | .00 | .18 | .00 | .18 |
| 180.00 | .00 | 0 | -936.0 | 0. | .0 | 0 | 0. | 108 | 42.00 | 1.25 | 36.0 | -5.85 | .00 | .20 | .00 | .20 |
| 182.00 | .00 | 0 | -906.7 | 0. | .0 | 0 | 0. | 91 | 42.00 | 1.25 | 36.0 | -5.67 | .00 | .20 | .00 | .20 |
| 184.00 | .00 | 0 | -878.2 | 0. | .0 | 0 | 0. | 91 | 42.00 | 1.25 | 36.0 | -5.49 | .00 | .19 | .00 | .19 |
| 186.00 | .00 | 0 | -850.3 | 0. | .0 | 0 | 0. | 90 | 42.00 | 1.25 | 36.0 | -5.31 | .00 | .18 | .00 | .18 |
| 188.00 | .00 | 0 | -823.1 | 0. | .0 | 0 | 0. | 90 | 42.00 | 1.25 | 36.0 | -5.14 | .00 | .18 | .00 | .18 |
| 190.00 | .00 | 0 | -796.4 | 0. | .0 | 0 | 0. | 89 | 42.00 | 1.00 | 36.0 | -6.18 | .00 | .22 | .00 | .22 |
| 192.00 | .00 | 0 | -770.4 | 0. | .0 | 0 | 0. | 89 | 42.00 | 1.00 | 36.0 | -5.98 | .00 | .21 | .00 | .21 |
| 194.00 | .00 | 0 | -745.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.79 | .00 | .20 | .00 | .20 |
| 196.00 | .00 | 0 | -720.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.59 | .00 | .19 | .00 | .19 |
| 198.00 | .00 | 0 | -696.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.41 | .00 | .19 | .00 | .19 |

Group Critical Pile Report I - Group P42 - Pile 182 - Load Case 6

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------------|---------------------------------|----------------|-----------------------|----------------------|-----------------|----------------|--------------------|----------------|-----------------|------|------|-----------------------|----------------|--------------------|-------|-------|
| | Normal To Pile Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy | | | Stress | Axial | Bend. |
| 200.00 | .00 | 0 | -673.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.23 | .00 | .18 | .00 | .18 |
| 202.00 | .00 | 0 | -650.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.05 | .00 | .18 | .00 | .18 |
| 204.00 | .00 | 0 | -628.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.88 | .00 | .17 | .00 | .17 |
| 206.00 | .00 | 0 | -607.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.72 | .00 | .16 | .00 | .16 |
| 208.00 | .00 | 0 | -586.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.56 | .00 | .16 | .00 | .16 |
| 210.00 | .00 | 0 | -566.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.40 | .00 | .15 | .00 | .15 |
| 212.00 | .00 | 0 | -546.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.25 | .00 | .15 | .00 | .15 |
| 214.00 | .00 | 0 | -524.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.07 | .00 | .14 | .00 | .14 |
| 216.00 | .00 | 0 | -501.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.89 | .00 | .14 | .00 | .14 |
| 218.00 | .00 | 0 | -479.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.72 | .00 | .13 | .00 | .13 |
| 220.00 | .00 | 0 | -457.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.55 | .00 | .12 | .00 | .12 |
| 222.00 | .00 | 0 | -436.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.39 | .00 | .12 | .00 | .12 |
| 224.00 | .00 | 0 | -415.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.23 | .00 | .11 | .00 | .11 |
| 226.00 | .00 | 0 | -395.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.07 | .00 | .11 | .00 | .11 |
| 228.00 | .00 | 0 | -375.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.91 | .00 | .10 | .00 | .10 |
| 230.00 | .00 | 0 | -355.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.76 | .00 | .10 | .00 | .10 |
| 232.00 | .00 | 0 | -336.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.61 | .00 | .09 | .00 | .09 |
| 234.00 | .00 | 0 | -317.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.46 | .00 | .09 | .00 | .09 |
| 236.00 | .00 | 0 | -298.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.32 | .00 | .08 | .00 | .08 |
| 238.00 | .00 | 0 | -280.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.17 | .00 | .08 | .00 | .08 |
| 240.00 | .00 | 0 | -261.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.03 | .00 | .07 | .00 | .07 |
| 242.00 | .00 | 0 | -243.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.89 | .00 | .07 | .00 | .07 |
| 244.00 | .00 | 0 | -226.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.76 | .00 | .06 | .00 | .06 |
| 246.00 | .00 | 0 | -208.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.62 | .00 | .06 | .00 | .06 |
| 248.00 | .00 | 0 | -191.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.49 | .00 | .05 | .00 | .05 |
| 250.00 | .00 | 0 | -174.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.35 | .00 | .05 | .00 | .05 |
| 252.00 | .00 | 0 | -157.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.22 | .00 | .04 | .00 | .04 |
| 254.00 | .00 | 0 | -140.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.09 | .00 | .04 | .00 | .04 |
| 256.00 | .00 | 0 | -123.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.96 | .00 | .03 | .00 | .03 |
| 258.00 | .00 | 0 | -107.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.83 | .00 | .03 | .00 | .03 |
| 260.00 | .00 | 0 | -91.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.71 | .00 | .02 | .00 | .02 |
| 262.00 | .00 | 0 | -74.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.58 | .00 | .02 | .00 | .02 |
| 264.00 | .00 | 0 | -58.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.45 | .00 | .02 | .00 | .02 |
| 266.00 | .00 | 0 | -42.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.33 | .00 | .01 | .00 | .01 |
| 268.00 | .00 | 0 | -26.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.20 | .00 | .01 | .00 | .01 |

*** Group Critical Pile Report II - Group P42 - Pile 182 - Load Case 7 ***

| Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force (Kips) | | Bending Moment (In-Kips) | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------|-------------------|---------------------|--------------------|-------------------|--------------------|-------------|--------------------------|-------------|-----------------|------|------|--------------------|----------------|--------------------|-------|-------|
| | Normal Value (In) | To Pile Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OO (In) | WT | Fy | | | Stress | Axial | Bend. |
| .00 | 12.25 | 65 | -2748.9 | 0. | 135.7 | 64 | 52098. | 64 | 42.00 | 1.75 | 36.0 | -12.42 | 24.37 | .43 | .68 | 1.11 |
| 2.00 | 11.97 | 65 | -2749.3 | 0. | 134.4 | 64 | 48093. | 64 | 42.00 | 1.75 | 36.0 | -12.42 | 22.50 | .43 | .63 | 1.06 |
| 4.00 | 11.68 | 65 | -2749.7 | 0. | 133.1 | 64 | 44059. | 64 | 42.00 | 1.75 | 36.0 | -12.43 | 20.61 | .43 | .57 | 1.01 |
| 6.00 | 11.37 | 65 | -2750.1 | 0. | 131.6 | 64 | 40003. | 64 | 42.00 | 1.75 | 36.0 | -12.43 | 18.71 | .43 | .52 | .95 |
| 8.00 | 11.03 | 65 | -2750.4 | 0. | 130.1 | 64 | 35934. | 64 | 42.00 | 1.75 | 36.0 | -12.43 | 16.81 | .43 | .47 | .90 |
| 10.00 | 10.69 | 65 | -2750.8 | 0. | 128.4 | 64 | 31858. | 64 | 42.00 | 1.75 | 36.0 | -12.43 | 14.90 | .43 | .41 | .85 |
| 12.00 | 10.33 | 65 | -2751.1 | 0. | 126.6 | 64 | 27784. | 63 | 42.00 | 1.75 | 36.0 | -12.43 | 13.00 | .43 | .36 | .79 |
| 14.00 | 9.95 | 65 | -2751.4 | 0. | 124.7 | 64 | 23719. | 63 | 42.00 | 1.75 | 36.0 | -12.43 | 11.09 | .43 | .31 | .74 |
| 16.00 | 9.57 | 65 | -2751.7 | 0. | 122.8 | 64 | 19670. | 63 | 42.00 | 1.75 | 36.0 | -12.44 | 9.20 | .43 | .26 | .69 |
| 18.00 | 9.18 | 65 | -2752.0 | 0. | 120.7 | 64 | 15645. | 63 | 42.00 | 1.75 | 36.0 | -12.44 | 7.32 | .43 | .20 | .64 |
| 20.00 | 8.78 | 65 | -2752.3 | 0. | 118.6 | 64 | 11651. | 62 | 42.00 | 1.75 | 36.0 | -12.44 | 5.45 | .43 | .15 | .58 |
| 22.00 | 8.37 | 65 | -2752.6 | 0. | 116.3 | 64 | 7696. | 61 | 42.00 | 1.75 | 36.0 | -12.44 | 3.60 | .43 | .10 | .53 |
| 24.00 | 7.96 | 65 | -2752.8 | 0. | 114.0 | 64 | 3795. | 58 | 42.00 | 1.75 | 36.0 | -12.44 | 1.78 | .43 | .05 | .48 |
| 26.00 | 7.55 | 65 | -2753.1 | 0. | 111.6 | 64 | 453. | -37 | 42.00 | 1.75 | 36.0 | -12.44 | .21 | .43 | .01 | .44 |
| 28.00 | 7.15 | 65 | -2753.3 | 0. | 109.2 | 64 | 3926. | -108 | 42.00 | 1.75 | 36.0 | -12.44 | 1.84 | .43 | .05 | .48 |
| 30.00 | 6.74 | 65 | -2753.5 | 0. | 106.7 | 64 | 7658. | -111 | 42.00 | 1.75 | 36.0 | -12.44 | 3.58 | .43 | .10 | .53 |
| 32.00 | 6.33 | 65 | -2753.7 | 0. | 104.1 | 64 | 11328. | -112 | 42.00 | 1.75 | 36.0 | -12.44 | 5.30 | .43 | .15 | .58 |
| 34.00 | 5.93 | 65 | -2751.1 | 0. | 97.0 | 64 | 14925. | -113 | 42.00 | 1.75 | 36.0 | -12.43 | 6.98 | .43 | .19 | .63 |
| 36.00 | 5.54 | 65 | -2745.6 | 0. | 85.6 | 64 | 18333. | -113 | 42.00 | 1.75 | 36.0 | -12.41 | 8.58 | .43 | .24 | .67 |
| 38.00 | 5.16 | 65 | -2740.1 | 0. | 74.5 | 64 | 21443. | -114 | 42.00 | 1.75 | 36.0 | -12.38 | 10.03 | .43 | .28 | .71 |
| 40.00 | 4.78 | 65 | -2734.5 | 0. | 63.6 | 64 | 24258. | -114 | 42.00 | 1.75 | 36.0 | -12.36 | 11.35 | .43 | .32 | .75 |
| 42.00 | 4.42 | 64 | -2728.8 | 0. | 53.0 | 64 | 26781. | -114 | 42.00 | 1.75 | 36.0 | -12.33 | 12.53 | .43 | .35 | .78 |
| 44.00 | 4.06 | 64 | -2723.1 | 0. | 42.7 | 63 | 29015. | -114 | 42.00 | 1.75 | 36.0 | -12.31 | 13.57 | .43 | .38 | .81 |
| 46.00 | 3.72 | 64 | -2717.3 | 0. | 32.7 | 63 | 30966. | -114 | 42.00 | 1.75 | 36.0 | -12.28 | 14.48 | .43 | .40 | .83 |
| 48.00 | 3.40 | 64 | -2711.4 | 0. | 23.1 | 62 | 32638. | -114 | 42.00 | 1.75 | 36.0 | -12.25 | 15.27 | .43 | .43 | .85 |
| 50.00 | 3.08 | 64 | -2705.5 | 0. | 13.8 | 61 | 34038. | -114 | 42.00 | 1.75 | 36.0 | -12.23 | 15.92 | .43 | .44 | .87 |
| 52.00 | 2.79 | 64 | -2699.4 | 0. | 4.9 | 55 | 35173. | -114 | 42.00 | 1.75 | 36.0 | -12.20 | 16.45 | .42 | .46 | .88 |
| 54.00 | 2.51 | 64 | -2693.4 | 0. | 4.0 | 256 | 36048. | -114 | 42.00 | 1.75 | 36.0 | -12.17 | 16.86 | .42 | .47 | .89 |
| 56.00 | 2.24 | 64 | -2687.2 | 0. | 12.3 | 248 | 36670. | -114 | 42.00 | 1.75 | 36.0 | -12.14 | 17.15 | .42 | .48 | .90 |
| 58.00 | 1.99 | 64 | -2681.0 | 0. | 20.4 | 247 | 37044. | -114 | 42.00 | 1.75 | 36.0 | -12.12 | 17.33 | .42 | .48 | .90 |
| 60.00 | 1.76 | 64 | -2674.7 | 0. | 28.2 | 246 | 37178. | -114 | 42.00 | 1.75 | 36.0 | -12.09 | 17.39 | .42 | .48 | .91 |
| 62.00 | 1.54 | 64 | -2668.4 | 0. | 35.5 | 246 | 37081. | -114 | 42.00 | 1.75 | 36.0 | -12.06 | 17.34 | .42 | .48 | .90 |
| 64.00 | 1.34 | 64 | -2662.0 | 0. | 42.6 | 245 | 36762. | -114 | 42.00 | 1.75 | 36.0 | -12.03 | 17.20 | .42 | .48 | .90 |
| 66.00 | 1.16 | 64 | -2655.5 | 0. | 49.4 | 245 | 36229. | -114 | 42.00 | 1.75 | 36.0 | -12.00 | 16.95 | .42 | .47 | .89 |
| 68.00 | .99 | 64 | -2649.0 | 0. | 55.8 | 245 | 35490. | -114 | 42.00 | 1.75 | 36.0 | -11.97 | 16.60 | .42 | .46 | .88 |
| 70.00 | .84 | 64 | -2642.4 | 0. | 61.8 | 245 | 34554. | -114 | 42.00 | 1.75 | 36.0 | -11.94 | 16.16 | .42 | .45 | .87 |
| 72.00 | .70 | 64 | -2635.7 | 0. | 67.5 | 245 | 33432. | -114 | 42.00 | 1.75 | 36.0 | -11.91 | 15.64 | .41 | .44 | .85 |
| 74.00 | .58 | 64 | -2629.0 | 0. | 72.8 | 245 | 32135. | -114 | 42.00 | 1.75 | 36.0 | -11.88 | 15.03 | .41 | .42 | .83 |
| 76.00 | .47 | 64 | -2622.2 | 0. | 77.8 | 245 | 30670. | -114 | 42.00 | 1.75 | 36.0 | -11.85 | 14.35 | .41 | .40 | .81 |
| 78.00 | .38 | 64 | -2615.3 | 0. | 82.5 | 245 | 29049. | -114 | 42.00 | 1.75 | 36.0 | -11.82 | 13.59 | .41 | .38 | .79 |
| 80.00 | .30 | 64 | -2608.4 | 0. | 86.7 | 245 | 27283. | -114 | 42.00 | 1.75 | 36.0 | -11.79 | 12.76 | .41 | .36 | .77 |
| 82.00 | .23 | 64 | -2601.4 | 0. | 90.3 | 245 | 25382. | -115 | 42.00 | 1.75 | 36.0 | -11.76 | 11.87 | .41 | .33 | .74 |
| 84.00 | .17 | 64 | -2594.3 | 0. | 92.9 | 245 | 23367. | -115 | 42.00 | 1.75 | 36.0 | -11.72 | 10.93 | .41 | .30 | .71 |
| 86.00 | .12 | 64 | -2587.2 | 0. | 94.8 | 245 | 21260. | -115 | 42.00 | 1.75 | 36.0 | -11.69 | 9.94 | .41 | .28 | .68 |
| 88.00 | .08 | 63 | -2580.0 | 0. | 96.1 | 245 | 19083. | -115 | 42.00 | 1.75 | 36.0 | -11.66 | 8.93 | .41 | .25 | .65 |
| 90.00 | .05 | 63 | -2572.8 | 0. | 96.9 | 245 | 16854. | -115 | 42.00 | 1.75 | 36.0 | -11.63 | 7.88 | .40 | .22 | .62 |
| 92.00 | .03 | 62 | -2565.4 | 0. | 97.4 | 245 | 14586. | -115 | 42.00 | 1.75 | 36.0 | -11.59 | 6.82 | .40 | .19 | .59 |
| 94.00 | .01 | 61 | -2558.1 | 0. | 97.6 | 245 | 12290. | -115 | 42.00 | 1.75 | 36.0 | -11.56 | 5.75 | .40 | .16 | .56 |
| 96.00 | .00 | 47 | -2550.6 | 0. | 97.6 | 245 | 9975. | -115 | 42.00 | 1.75 | 36.0 | -11.53 | 4.67 | .40 | .13 | .53 |
| 98.00 | .00 | 250 | -2543.1 | 0. | 97.5 | 245 | 7648. | -115 | 42.00 | 1.75 | 36.0 | -11.49 | 3.58 | .40 | .10 | .50 |

*** Group Critical Pile Report II - Group P42 - Pile 182 - Load Case 7 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|----------|--------------------|----------------|--------------------|-------|-------|
| | Normal To Pile Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | | | Axial | Bend. | Total |
| 100.00 | .01 | 247 | -2535.5 | 0. | 97.4 | 245 | 5315. | -115 | 42.00 | 1.75 | 36.0 | -11.46 | 2.49 | .40 | .07 | .47 |
| 102.00 | .01 | 246 | -2476.4 | 0. | 70.3 | 244 | 2978. | -116 | 42.00 | 1.75 | 36.0 | -11.19 | 1.39 | .39 | .04 | .43 |
| 104.00 | .01 | 245 | -2418.6 | 0. | 45.6 | 244 | 1290. | -118 | 42.00 | 1.75 | 36.0 | -10.93 | .60 | .38 | .02 | .40 |
| 106.00 | .01 | 245 | -2362.0 | 0. | 25.7 | 243 | 199. | -131 | 42.00 | 1.75 | 36.0 | -10.67 | .09 | .37 | .00 | .37 |
| 108.00 | .00 | 244 | -2306.7 | 0. | 11.2 | 241 | 429. | 70 | 42.00 | 1.75 | 36.0 | -10.42 | .20 | .36 | .01 | .37 |
| 110.00 | .00 | 244 | -2252.5 | 0. | 1.8 | 229 | 699. | 67 | 42.00 | 1.75 | 36.0 | -10.18 | .33 | .35 | .01 | .36 |
| 112.00 | .00 | 243 | -2199.6 | 0. | 3.7 | 70 | 742. | 66 | 42.00 | 1.75 | 36.0 | -9.94 | .35 | .35 | .01 | .36 |
| 114.00 | .00 | 242 | -2147.7 | 0. | 6.0 | 67 | 656. | 65 | 42.00 | 1.75 | 36.0 | -9.71 | .31 | .34 | .01 | .35 |
| 116.00 | .00 | 0 | -2097.0 | 0. | 6.4 | 66 | 513. | 65 | 42.00 | 1.75 | 36.0 | -9.48 | .24 | .33 | .01 | .34 |
| 118.00 | .00 | 90 | -2047.4 | 0. | 5.6 | 65 | 361. | 64 | 42.00 | 1.75 | 36.0 | -9.25 | .17 | .32 | .00 | .33 |
| 120.00 | .00 | 67 | -1998.8 | 0. | 4.4 | 65 | 226. | 64 | 42.00 | 1.75 | 36.0 | -9.03 | .11 | .31 | .00 | .32 |
| 122.00 | .00 | 66 | -1951.2 | 0. | 3.1 | 64 | 120. | 63 | 42.00 | 1.75 | 36.0 | -8.82 | .06 | .31 | .00 | .31 |
| 124.00 | .00 | 65 | -1904.7 | 0. | 1.9 | 64 | 46. | 61 | 42.00 | 1.75 | 36.0 | -8.61 | .02 | .30 | .00 | .30 |
| 126.00 | .00 | 90 | -1859.2 | 0. | 1.0 | 63 | 2. | -9 | 42.00 | 1.75 | 36.0 | -8.40 | .00 | .29 | .00 | .29 |
| 128.00 | .00 | 90 | -1814.6 | 0. | .4 | 60 | 23. | -111 | 42.00 | 1.75 | 36.0 | -8.20 | .01 | .29 | .00 | .29 |
| 130.00 | .00 | 0 | -1771.0 | 0. | .0 | -71 | 32. | -113 | 42.00 | 1.75 | 36.0 | -8.00 | .02 | .28 | .00 | .28 |
| 132.00 | .00 | 0 | -1728.3 | 0. | .2 | 248 | 32. | -114 | 42.00 | 1.75 | 36.0 | -7.81 | .02 | .27 | .00 | .27 |
| 134.00 | .00 | 0 | -1686.5 | 0. | .3 | 246 | 26. | -114 | 42.00 | 1.75 | 36.0 | -7.62 | .01 | .27 | .00 | .27 |
| 136.00 | .00 | 0 | -1645.5 | 0. | .3 | 245 | 19. | -115 | 42.00 | 1.75 | 36.0 | -7.44 | .01 | .26 | .00 | .26 |
| 138.00 | .00 | 0 | -1605.4 | 0. | .2 | 245 | 13. | -115 | 42.00 | 1.75 | 36.0 | -7.25 | .01 | .25 | .00 | .25 |
| 140.00 | .00 | 0 | -1566.2 | 0. | .2 | 244 | 7. | -116 | 42.00 | 1.75 | 36.0 | -7.08 | .00 | .25 | .00 | .25 |
| 142.00 | .00 | 0 | -1527.7 | 0. | .1 | 244 | 3. | -117 | 42.00 | 1.75 | 36.0 | -6.90 | .00 | .24 | .00 | .24 |
| 144.00 | .00 | 0 | -1490.1 | 0. | .1 | 243 | 0. | -123 | 42.00 | 1.75 | 36.0 | -6.73 | .00 | .23 | .00 | .23 |
| 146.00 | .00 | 0 | -1453.2 | 0. | .0 | 242 | 0. | 71 | 42.00 | 1.75 | 36.0 | -6.57 | .00 | .23 | .00 | .23 |
| 148.00 | .00 | 0 | -1417.1 | 0. | .0 | 231 | 1. | 67 | 42.00 | 1.75 | 36.0 | -6.40 | .00 | .22 | .00 | .22 |
| 150.00 | .00 | 0 | -1381.7 | 0. | .0 | 70 | 1. | 66 | 42.00 | 1.75 | 36.0 | -6.24 | .00 | .22 | .00 | .22 |
| 152.00 | .00 | 0 | -1345.7 | 0. | .0 | 66 | 1. | 65 | 42.00 | 1.75 | 36.0 | -6.08 | .00 | .21 | .00 | .21 |
| 154.00 | .00 | 0 | -1309.2 | 0. | .0 | 65 | 0. | 64 | 42.00 | 1.75 | 36.0 | -5.92 | .00 | .21 | .00 | .21 |
| 156.00 | .00 | 0 | -1273.4 | 0. | .0 | 65 | 0. | 64 | 42.00 | 1.75 | 36.0 | -5.75 | .00 | .20 | .00 | .20 |
| 158.00 | .00 | 0 | -1238.3 | 0. | .0 | 64 | 0. | 63 | 42.00 | 1.75 | 36.0 | -5.60 | .00 | .19 | .00 | .19 |
| 160.00 | .00 | 0 | -1203.9 | 0. | .0 | 64 | 0. | 62 | 42.00 | 1.75 | 36.0 | -5.44 | .00 | .19 | .00 | .19 |
| 162.00 | .00 | 0 | -1170.2 | 0. | .0 | 63 | 0. | 53 | 42.00 | 1.75 | 36.0 | -5.29 | .00 | .18 | .00 | .18 |
| 164.00 | .00 | 0 | -1137.1 | 0. | .0 | 61 | 0. | -110 | 42.00 | 1.75 | 36.0 | -5.14 | .00 | .18 | .00 | .18 |
| 166.00 | .00 | 0 | -1104.7 | 0. | .0 | 0 | 0. | -113 | 42.00 | 1.75 | 36.0 | -4.99 | .00 | .17 | .00 | .17 |
| 168.00 | .00 | 0 | -1072.9 | 0. | .0 | 247 | 0. | -114 | 42.00 | 1.75 | 36.0 | -4.85 | .00 | .17 | .00 | .17 |
| 170.00 | .00 | 0 | -1041.5 | 0. | .0 | 246 | 0. | -114 | 42.00 | 1.50 | 36.0 | -5.46 | .00 | .19 | .00 | .19 |
| 172.00 | .00 | 0 | -1010.8 | 0. | .0 | 245 | 0. | -115 | 42.00 | 1.50 | 36.0 | -5.30 | .00 | .18 | .00 | .18 |
| 174.00 | .00 | 0 | -980.6 | 0. | .0 | 244 | 0. | -115 | 42.00 | 1.50 | 36.0 | -5.14 | .00 | .18 | .00 | .18 |
| 176.00 | .00 | 0 | -951.2 | 0. | .0 | 244 | 0. | -117 | 42.00 | 1.50 | 36.0 | -4.98 | .00 | .17 | .00 | .17 |
| 178.00 | .00 | 0 | -922.3 | 0. | .0 | -90 | 0. | -122 | 42.00 | 1.50 | 36.0 | -4.83 | .00 | .17 | .00 | .17 |
| 180.00 | .00 | 0 | -893.9 | 0. | .0 | 0 | 0. | 70 | 42.00 | 1.25 | 36.0 | -5.59 | .00 | .19 | .00 | .19 |
| 182.00 | .00 | 0 | -866.1 | 0. | .0 | 0 | 0. | 66 | 42.00 | 1.25 | 36.0 | -5.41 | .00 | .19 | .00 | .19 |
| 184.00 | .00 | 0 | -839.0 | 0. | .0 | 0 | 0. | 65 | 42.00 | 1.25 | 36.0 | -5.24 | .00 | .18 | .00 | .18 |
| 186.00 | .00 | 0 | -812.5 | 0. | .0 | 0 | 0. | 65 | 42.00 | 1.25 | 36.0 | -5.08 | .00 | .18 | .00 | .18 |
| 188.00 | .00 | 0 | -786.6 | 0. | .0 | 0 | 0. | 64 | 42.00 | 1.25 | 36.0 | -4.92 | .00 | .17 | .00 | .17 |
| 190.00 | .00 | 0 | -761.3 | 0. | .0 | 0 | 0. | 63 | 42.00 | 1.00 | 36.0 | -5.91 | .00 | .21 | .00 | .21 |
| 192.00 | .00 | 0 | -736.5 | 0. | .0 | 0 | 0. | 62 | 42.00 | 1.00 | 36.0 | -5.72 | .00 | .20 | .00 | .20 |
| 194.00 | .00 | 0 | -712.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.53 | .00 | .19 | .00 | .19 |
| 196.00 | .00 | 0 | -689.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.35 | .00 | .19 | .00 | .19 |
| 198.00 | .00 | 0 | -666.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.17 | .00 | .18 | .00 | .18 |

*** Group Critical Pile Report II - Group P42 - Pile 18Z - Load Case 7 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|------|--------------------|----------------|--------------------|-------|-------|
| | Normal To Pile Value (In) | Angle (Deg) | | | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy | | | Axial | Bend. | Axial |
| 200.00 | .00 | 0 | -644.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -5.00 | .00 | .17 | .00 | .17 |
| 202.00 | .00 | 0 | -622.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.84 | .00 | .17 | .00 | .17 |
| 204.00 | .00 | 0 | -602.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.67 | .00 | .16 | .00 | .16 |
| 206.00 | .00 | 0 | -581.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.52 | .00 | .16 | .00 | .16 |
| 208.00 | .00 | 0 | -562.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.36 | .00 | .15 | .00 | .15 |
| 210.00 | .00 | 0 | -542.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.21 | .00 | .15 | .00 | .15 |
| 212.00 | .00 | 0 | -524.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.07 | .00 | .14 | .00 | .14 |
| 214.00 | .00 | 0 | -502.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.90 | .00 | .14 | .00 | .14 |
| 216.00 | .00 | 0 | -480.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.73 | .00 | .13 | .00 | .13 |
| 218.00 | .00 | 0 | -459.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.57 | .00 | .12 | .00 | .12 |
| 220.00 | .00 | 0 | -438.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.40 | .00 | .12 | .00 | .12 |
| 222.00 | .00 | 0 | -418.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.25 | .00 | .11 | .00 | .11 |
| 224.00 | .00 | 0 | -398.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.09 | .00 | .11 | .00 | .11 |
| 226.00 | .00 | 0 | -378.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.94 | .00 | .10 | .00 | .10 |
| 228.00 | .00 | 0 | -359.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.79 | .00 | .10 | .00 | .10 |
| 230.00 | .00 | 0 | -340.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.65 | .00 | .09 | .00 | .09 |
| 232.00 | .00 | 0 | -322.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.50 | .00 | .09 | .00 | .09 |
| 234.00 | .00 | 0 | -304.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.36 | .00 | .08 | .00 | .08 |
| 236.00 | .00 | 0 | -286.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.22 | .00 | .08 | .00 | .08 |
| 238.00 | .00 | 0 | -268.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.08 | .00 | .07 | .00 | .07 |
| 240.00 | .00 | 0 | -251.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.95 | .00 | .07 | .00 | .07 |
| 242.00 | .00 | 0 | -233.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.82 | .00 | .06 | .00 | .06 |
| 244.00 | .00 | 0 | -216.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.68 | .00 | .06 | .00 | .06 |
| 246.00 | .00 | 0 | -200.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.55 | .00 | .05 | .00 | .05 |
| 248.00 | .00 | 0 | -183.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.43 | .00 | .05 | .00 | .05 |
| 250.00 | .00 | 0 | -167.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.30 | .00 | .05 | .00 | .05 |
| 252.00 | .00 | 0 | -151.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.17 | .00 | .04 | .00 | .04 |
| 254.00 | .00 | 0 | -135.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.05 | .00 | .04 | .00 | .04 |
| 256.00 | .00 | 0 | -119.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.92 | .00 | .03 | .00 | .03 |
| 258.00 | .00 | 0 | -103.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.80 | .00 | .03 | .00 | .03 |
| 260.00 | .00 | 0 | -87.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.68 | .00 | .02 | .00 | .02 |
| 262.00 | .00 | 0 | -71.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.56 | .00 | .02 | .00 | .02 |
| 264.00 | .00 | 0 | -56.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.44 | .00 | .02 | .00 | .02 |
| 266.00 | .00 | 0 | -40.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.32 | .00 | .01 | .00 | .01 |
| 268.00 | .00 | 0 | -25.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.20 | .00 | .01 | .00 | .01 |

*** Group Critical Pile Report III - Group P42 - Pile 182 - Load Case 8 ***

| Dist. Along Pile (Ft) | Deflection | | Axial | | Shear Force | | Bending Moment | | Pile Properties | | | Axial | Bending | Unity Check Values | | |
|-----------------------|-------------------|---------------------|--------------|-------------------|--------------|-------------|-----------------|-------------|-----------------|------|----------|--------|---------|--------------------|-------|-------|
| | Normal Value (In) | To Pile Angle (Deg) | Force (Kips) | Torsion (In-Kips) | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy (KSI) | Stress | Stress | Axial | Bend. | Total |
| .00 | 11.98 | 39 | -2365.6 | 0. | 138.9 | 38 | 51091. | 38 | 42.00 | 1.75 | 36.0 | -10.69 | 23.90 | .37 | .67 | 1.04 |
| 2.00 | 11.72 | 39 | -2365.8 | 0. | 137.7 | 38 | 47128. | 38 | 42.00 | 1.75 | 36.0 | -10.69 | 22.04 | .37 | .61 | .99 |
| 4.00 | 11.43 | 39 | -2366.0 | 0. | 136.4 | 38 | 43145. | 38 | 42.00 | 1.75 | 36.0 | -10.69 | 20.18 | .37 | .56 | .93 |
| 6.00 | 11.12 | 39 | -2366.2 | 0. | 134.9 | 38 | 39148. | 38 | 42.00 | 1.75 | 36.0 | -10.69 | 18.31 | .37 | .51 | .88 |
| 8.00 | 10.80 | 39 | -2366.4 | 0. | 133.4 | 38 | 35146. | 38 | 42.00 | 1.75 | 36.0 | -10.69 | 16.44 | .37 | .46 | .83 |
| 10.00 | 10.46 | 39 | -2366.6 | 0. | 131.7 | 38 | 31144. | 38 | 42.00 | 1.75 | 36.0 | -10.69 | 14.57 | .37 | .41 | .78 |
| 12.00 | 10.11 | 39 | -2366.7 | 0. | 129.9 | 38 | 27150. | 37 | 42.00 | 1.75 | 36.0 | -10.70 | 12.70 | .37 | .35 | .73 |
| 14.00 | 9.75 | 39 | -2366.9 | 0. | 128.1 | 38 | 23169. | 37 | 42.00 | 1.75 | 36.0 | -10.70 | 10.84 | .37 | .30 | .67 |
| 16.00 | 9.37 | 39 | -2367.0 | 0. | 126.1 | 38 | 19210. | 37 | 42.00 | 1.75 | 36.0 | -10.70 | 8.99 | .37 | .25 | .62 |
| 18.00 | 8.99 | 39 | -2367.2 | 0. | 124.1 | 38 | 15278. | 36 | 42.00 | 1.75 | 36.0 | -10.70 | 7.15 | .37 | .20 | .57 |
| 20.00 | 8.60 | 39 | -2367.3 | 0. | 121.9 | 38 | 11381. | 36 | 42.00 | 1.75 | 36.0 | -10.70 | 5.32 | .37 | .15 | .52 |
| 22.00 | 8.20 | 39 | -2367.4 | 0. | 119.7 | 38 | 7527. | 34 | 42.00 | 1.75 | 36.0 | -10.70 | 3.52 | .37 | .10 | .47 |
| 24.00 | 7.80 | 39 | -2367.5 | 0. | 117.4 | 38 | 3732. | 30 | 42.00 | 1.75 | 36.0 | -10.70 | 1.75 | .37 | .05 | .42 |
| 26.00 | 7.40 | 39 | -2367.6 | 0. | 115.1 | 38 | 564. | -58 | 42.00 | 1.75 | 36.0 | -10.70 | .26 | .37 | .01 | .38 |
| 28.00 | 7.00 | 39 | -2367.6 | 0. | 112.6 | 38 | 3824. | -132 | 42.00 | 1.75 | 36.0 | -10.70 | 1.79 | .37 | .05 | .42 |
| 30.00 | 6.61 | 39 | -2367.7 | 0. | 110.2 | 38 | 7450. | -136 | 42.00 | 1.75 | 36.0 | -10.70 | 3.49 | .37 | .10 | .47 |
| 32.00 | 6.21 | 39 | -2367.8 | 0. | 107.6 | 38 | 11022. | -138 | 42.00 | 1.75 | 36.0 | -10.70 | 5.16 | .37 | .14 | .52 |
| 34.00 | 5.82 | 39 | -2367.7 | 0. | 100.5 | 38 | 14525. | -138 | 42.00 | 1.75 | 36.0 | -10.69 | 6.79 | .37 | .19 | .56 |
| 36.00 | 5.44 | 39 | -2358.4 | 0. | 89.2 | 38 | 17843. | -139 | 42.00 | 1.75 | 36.0 | -10.66 | 8.35 | .37 | .23 | .60 |
| 38.00 | 5.06 | 39 | -2352.1 | 0. | 78.1 | 38 | 20869. | -139 | 42.00 | 1.75 | 36.0 | -10.63 | 9.76 | .37 | .27 | .64 |
| 40.00 | 4.69 | 39 | -2345.7 | 0. | 67.3 | 38 | 23606. | -139 | 42.00 | 1.75 | 36.0 | -10.60 | 11.04 | .37 | .31 | .68 |
| 42.00 | 4.34 | 39 | -2339.3 | 0. | 56.8 | 38 | 26056. | -139 | 42.00 | 1.75 | 36.0 | -10.57 | 12.19 | .37 | .34 | .71 |
| 44.00 | 3.99 | 39 | -2332.8 | 0. | 46.6 | 37 | 28225. | -139 | 42.00 | 1.75 | 36.0 | -10.54 | 13.20 | .37 | .37 | .73 |
| 46.00 | 3.66 | 39 | -2326.3 | 0. | 36.7 | 37 | 30117. | -140 | 42.00 | 1.75 | 36.0 | -10.51 | 14.09 | .37 | .39 | .76 |
| 48.00 | 3.34 | 39 | -2319.7 | 0. | 27.1 | 37 | 31739. | -140 | 42.00 | 1.75 | 36.0 | -10.48 | 14.85 | .36 | .41 | .78 |
| 50.00 | 3.04 | 39 | -2313.0 | 0. | 17.9 | 36 | 33096. | -140 | 42.00 | 1.75 | 36.0 | -10.45 | 15.48 | .36 | .43 | .79 |
| 52.00 | 2.75 | 39 | -2306.3 | 0. | 9.0 | 32 | 34196. | -140 | 42.00 | 1.75 | 36.0 | -10.42 | 15.99 | .36 | .45 | .81 |
| 54.00 | 2.47 | 39 | -2299.6 | 0. | 1.0 | -37 | 35044. | -140 | 42.00 | 1.75 | 36.0 | -10.39 | 16.39 | .36 | .46 | .82 |
| 56.00 | 2.21 | 39 | -2292.7 | 0. | 8.2 | 225 | 35646. | -140 | 42.00 | 1.75 | 36.0 | -10.36 | 16.67 | .36 | .46 | .82 |
| 58.00 | 1.97 | 39 | -2285.8 | 0. | 16.3 | 222 | 36009. | -140 | 42.00 | 1.75 | 36.0 | -10.33 | 16.84 | .36 | .47 | .83 |
| 60.00 | 1.74 | 39 | -2278.9 | 0. | 24.0 | 221 | 36140. | -140 | 42.00 | 1.75 | 36.0 | -10.30 | 16.90 | .36 | .47 | .83 |
| 62.00 | 1.53 | 39 | -2271.9 | 0. | 31.3 | 220 | 36049. | -140 | 42.00 | 1.75 | 36.0 | -10.27 | 16.86 | .36 | .47 | .83 |
| 64.00 | 1.33 | 39 | -2264.8 | 0. | 38.4 | 220 | 35743. | -140 | 42.00 | 1.75 | 36.0 | -10.23 | 16.72 | .36 | .47 | .82 |
| 66.00 | 1.15 | 38 | -2257.7 | 0. | 45.1 | 220 | 35231. | -140 | 42.00 | 1.75 | 36.0 | -10.20 | 16.48 | .36 | .46 | .81 |
| 68.00 | .98 | 38 | -2250.6 | 0. | 51.5 | 220 | 34522. | -140 | 42.00 | 1.75 | 36.0 | -10.17 | 16.15 | .35 | .45 | .80 |
| 70.00 | .84 | 38 | -2243.4 | 0. | 57.5 | 219 | 33622. | -140 | 42.00 | 1.75 | 36.0 | -10.14 | 15.73 | .35 | .44 | .79 |
| 72.00 | .70 | 38 | -2236.1 | 0. | 63.2 | 219 | 32544. | -140 | 42.00 | 1.75 | 36.0 | -10.10 | 15.22 | .35 | .42 | .78 |
| 74.00 | .58 | 38 | -2228.7 | 0. | 68.6 | 219 | 31296. | -140 | 42.00 | 1.75 | 36.0 | -10.07 | 14.64 | .35 | .41 | .76 |
| 76.00 | .47 | 38 | -2221.4 | 0. | 73.6 | 219 | 29888. | -140 | 42.00 | 1.75 | 36.0 | -10.04 | 13.98 | .35 | .39 | .74 |
| 78.00 | .38 | 38 | -2213.9 | 0. | 78.2 | 219 | 28330. | -140 | 42.00 | 1.75 | 36.0 | -10.00 | 13.25 | .35 | .37 | .72 |
| 80.00 | .30 | 38 | -2206.4 | 0. | 82.5 | 219 | 26632. | -140 | 42.00 | 1.75 | 36.0 | -9.97 | 12.46 | .35 | .35 | .69 |
| 82.00 | .23 | 38 | -2198.9 | 0. | 86.1 | 219 | 24804. | -140 | 42.00 | 1.75 | 36.0 | -9.94 | 11.60 | .35 | .32 | .67 |
| 84.00 | .17 | 38 | -2191.3 | 0. | 88.9 | 219 | 22864. | -140 | 42.00 | 1.75 | 36.0 | -9.90 | 10.69 | .34 | .30 | .64 |
| 86.00 | .12 | 38 | -2183.6 | 0. | 90.8 | 219 | 20836. | -140 | 42.00 | 1.75 | 36.0 | -9.87 | 9.75 | .34 | .27 | .61 |
| 88.00 | .09 | 37 | -2175.9 | 0. | 92.2 | 219 | 18741. | -140 | 42.00 | 1.75 | 36.0 | -9.83 | 8.77 | .34 | .24 | .59 |
| 90.00 | .06 | 37 | -2168.2 | 0. | 93.1 | 219 | 16594. | -140 | 42.00 | 1.75 | 36.0 | -9.80 | 7.76 | .34 | .22 | .56 |
| 92.00 | .03 | 36 | -2160.6 | 0. | 93.6 | 219 | 14410. | -140 | 42.00 | 1.75 | 36.0 | -9.76 | 6.74 | .34 | .19 | .53 |
| 94.00 | .02 | 35 | -2153.1 | 0. | 93.8 | 219 | 12200. | -141 | 42.00 | 1.75 | 36.0 | -9.73 | 5.71 | .34 | .16 | .50 |
| 96.00 | .00 | 29 | -2145.6 | 0. | 93.9 | 219 | 9972. | -141 | 42.00 | 1.75 | 36.0 | -9.70 | 4.66 | .34 | .13 | .47 |
| 98.00 | .00 | 232 | -2138.3 | 0. | 93.9 | 219 | 7733. | -141 | 42.00 | 1.75 | 36.0 | -9.66 | 3.62 | .34 | .10 | .44 |

Group Critical Pile Report III - Group P42 - Pile 182 - Load Case 8

| Dist. Along Pile (Ft) | Deflection | | | Shear Force | | | | Bending Moment | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|-------------------|---------------------|--------------------|-------------------|--------------|-------------|-----------------|----------------|---------|-----------------|------|-------|--------------------|----------------|--------------------|-------|-------|
| | Normal Value (In) | To Pile Angle (Deg) | Axial Force (Kips) | Torsion (in-Kips) | Value (Kips) | Angle (Deg) | Value (In-Kips) | Angle (Deg) | OD (In) | WT | Fy | Axial | | | Bend. | Axial | Bend. |
| 100.00 | .01 | 222 | -2131.0 | 0. | 93.8 | 219 | 5488. | -141 | 42.00 | 1.75 | 36.0 | -9.63 | 2.57 | .34 | .07 | .41 | |
| 102.00 | .01 | 220 | -2081.5 | 0. | 69.9 | 218 | 3240. | -142 | 42.00 | 1.75 | 36.0 | -9.41 | 1.52 | .33 | .04 | .37 | |
| 104.00 | .01 | 220 | -2033.1 | 0. | 47.0 | 218 | 1563. | -143 | 42.00 | 1.75 | 36.0 | -9.19 | .73 | .32 | .02 | .34 | |
| 106.00 | .01 | 219 | -1985.7 | 0. | 27.9 | 217 | 436. | -149 | 42.00 | 1.75 | 36.0 | -8.97 | .20 | .31 | .01 | .32 | |
| 108.00 | .00 | 218 | -1939.3 | 0. | 13.5 | 216 | 245. | 50 | 42.00 | 1.75 | 36.0 | -8.76 | .11 | .31 | .00 | .31 | |
| 110.00 | .00 | 218 | -1893.9 | 0. | 3.8 | 210 | 567. | 42 | 42.00 | 1.75 | 36.0 | -8.56 | .27 | .30 | .01 | .31 | |
| 112.00 | .00 | 217 | -1849.5 | 0. | 2.1 | 50 | 658. | 40 | 42.00 | 1.75 | 36.0 | -8.36 | .31 | .29 | .01 | .30 | |
| 114.00 | .00 | 216 | -1806.1 | 0. | 4.9 | 42 | 611. | 39 | 42.00 | 1.75 | 36.0 | -8.16 | .29 | .28 | .01 | .29 | |
| 116.00 | .00 | 210 | -1763.6 | 0. | 5.7 | 40 | 495. | 39 | 42.00 | 1.75 | 36.0 | -7.97 | .23 | .28 | .01 | .28 | |
| 118.00 | .00 | 0 | -1722.1 | 0. | 5.2 | 39 | 359. | 38 | 42.00 | 1.75 | 36.0 | -7.78 | .17 | .27 | .00 | .28 | |
| 120.00 | .00 | 42 | -1681.4 | 0. | 4.2 | 39 | 234. | 38 | 42.00 | 1.75 | 36.0 | -7.60 | .11 | .26 | .00 | .27 | |
| 122.00 | .00 | 40 | -1641.6 | 0. | 3.1 | 38 | 132. | 37 | 42.00 | 1.75 | 36.0 | -7.42 | .06 | .25 | .00 | .26 | |
| 124.00 | .00 | 39 | -1602.7 | 0. | 2.0 | 38 | 58. | 35 | 42.00 | 1.75 | 36.0 | -7.24 | .03 | .25 | .00 | .25 | |
| 126.00 | .00 | 39 | -1564.5 | 0. | 1.1 | 37 | 11. | 24 | 42.00 | 1.75 | 36.0 | -7.07 | .01 | .25 | .00 | .25 | |
| 128.00 | .00 | 38 | -1527.2 | 0. | .5 | 35 | 15. | -133 | 42.00 | 1.75 | 36.0 | -6.90 | .01 | .24 | .00 | .24 | |
| 130.00 | .00 | 0 | -1490.7 | 0. | .1 | 19 | 27. | -138 | 42.00 | 1.75 | 36.0 | -6.74 | .01 | .23 | .00 | .23 | |
| 132.00 | .00 | 0 | -1455.0 | 0. | .2 | 225 | 28. | -139 | 42.00 | 1.75 | 36.0 | -6.58 | .01 | .23 | .00 | .23 | |
| 134.00 | .00 | 0 | -1420.0 | 0. | .2 | 221 | 25. | -140 | 42.00 | 1.75 | 36.0 | -6.42 | .01 | .22 | .00 | .22 | |
| 136.00 | .00 | 0 | -1385.7 | 0. | .3 | 220 | 19. | -140 | 42.00 | 1.75 | 36.0 | -6.26 | .01 | .22 | .00 | .22 | |
| 138.00 | .00 | 0 | -1352.2 | 0. | .2 | 219 | 13. | -141 | 42.00 | 1.75 | 36.0 | -6.11 | .01 | .21 | .00 | .21 | |
| 140.00 | .00 | 0 | -1319.4 | 0. | .2 | 219 | 7. | -142 | 42.00 | 1.75 | 36.0 | -5.96 | .00 | .21 | .00 | .21 | |
| 142.00 | .00 | 0 | -1287.2 | 0. | .1 | 218 | 3. | -143 | 42.00 | 1.75 | 36.0 | -5.82 | .00 | .20 | .00 | .20 | |
| 144.00 | .00 | 0 | -1255.8 | 0. | .1 | 217 | 1. | -147 | 42.00 | 1.75 | 36.0 | -5.67 | .00 | .20 | .00 | .20 | |
| 146.00 | .00 | 0 | -1224.9 | 0. | .0 | 216 | 0. | 56 | 42.00 | 1.75 | 36.0 | -5.54 | .00 | .19 | .00 | .19 | |
| 148.00 | .00 | 0 | -1194.7 | 0. | .0 | 210 | 1. | 42 | 42.00 | 1.75 | 36.0 | -5.40 | .00 | .19 | .00 | .19 | |
| 150.00 | .00 | 0 | -1165.2 | 0. | .0 | 51 | 1. | 40 | 42.00 | 1.75 | 36.0 | -5.27 | .00 | .18 | .00 | .18 | |
| 152.00 | .00 | 0 | -1135.1 | 0. | .0 | 42 | 1. | 39 | 42.00 | 1.75 | 36.0 | -5.13 | .00 | .18 | .00 | .18 | |
| 154.00 | .00 | 0 | -1104.6 | 0. | .0 | 40 | 0. | 39 | 42.00 | 1.75 | 36.0 | -4.99 | .00 | .17 | .00 | .17 | |
| 156.00 | .00 | 0 | -1074.7 | 0. | .0 | 39 | 0. | 38 | 42.00 | 1.75 | 36.0 | -4.86 | .00 | .17 | .00 | .17 | |
| 158.00 | .00 | 0 | -1045.4 | 0. | .0 | 38 | 0. | 37 | 42.00 | 1.75 | 36.0 | -4.72 | .00 | .16 | .00 | .16 | |
| 160.00 | .00 | 0 | -1016.6 | 0. | .0 | 38 | 0. | 36 | 42.00 | 1.75 | 36.0 | -4.59 | .00 | .16 | .00 | .16 | |
| 162.00 | .00 | 0 | -988.5 | 0. | .0 | 37 | 0. | 31 | 42.00 | 1.75 | 36.0 | -4.47 | .00 | .16 | .00 | .16 | |
| 164.00 | .00 | 0 | -960.9 | 0. | .0 | 35 | 0. | -131 | 42.00 | 1.75 | 36.0 | -4.34 | .00 | .15 | .00 | .15 | |
| 166.00 | .00 | 0 | -933.8 | 0. | .0 | 15 | 0. | -138 | 42.00 | 1.75 | 36.0 | -4.22 | .00 | .15 | .00 | .15 | |
| 168.00 | .00 | 0 | -907.2 | 0. | .0 | 223 | 0. | -139 | 42.00 | 1.75 | 36.0 | -4.10 | .00 | .14 | .00 | .14 | |
| 170.00 | .00 | 0 | -881.1 | 0. | .0 | 220 | 0. | -140 | 42.00 | 1.50 | 36.0 | -4.62 | .00 | .16 | .00 | .16 | |
| 172.00 | .00 | 0 | -855.4 | 0. | .0 | 219 | 0. | -141 | 42.00 | 1.50 | 36.0 | -4.48 | .00 | .16 | .00 | .16 | |
| 174.00 | .00 | 0 | -830.2 | 0. | .0 | 219 | 0. | -141 | 42.00 | 1.50 | 36.0 | -4.35 | .00 | .15 | .00 | .15 | |
| 176.00 | .00 | 0 | -805.6 | 0. | .0 | 218 | 0. | -142 | 42.00 | 1.50 | 36.0 | -4.22 | .00 | .15 | .00 | .15 | |
| 178.00 | .00 | 0 | -781.5 | 0. | .0 | 217 | 0. | -146 | 42.00 | 1.50 | 36.0 | -4.09 | .00 | .14 | .00 | .14 | |
| 180.00 | .00 | 0 | -757.8 | 0. | .0 | 0 | 0. | 52 | 42.00 | 1.25 | 36.0 | -4.74 | .00 | .16 | .00 | .16 | |
| 182.00 | .00 | 0 | -734.6 | 0. | .0 | 0 | 0. | 41 | 42.00 | 1.25 | 36.0 | -4.59 | .00 | .16 | .00 | .16 | |
| 184.00 | .00 | 0 | -712.0 | 0. | .0 | 0 | 0. | 40 | 42.00 | 1.25 | 36.0 | -4.45 | .00 | .15 | .00 | .15 | |
| 186.00 | .00 | 0 | -689.9 | 0. | .0 | 0 | 0. | 39 | 42.00 | 1.25 | 36.0 | -4.31 | .00 | .15 | .00 | .15 | |
| 188.00 | .00 | 0 | -668.3 | 0. | .0 | 0 | 0. | 38 | 42.00 | 1.25 | 36.0 | -4.18 | .00 | .15 | .00 | .15 | |
| 190.00 | .00 | 0 | -647.1 | 0. | .0 | 0 | 0. | 37 | 42.00 | 1.00 | 36.0 | -5.02 | .00 | .17 | .00 | .17 | |
| 192.00 | .00 | 0 | -626.5 | 0. | .0 | 0 | 0. | 36 | 42.00 | 1.00 | 36.0 | -4.86 | .00 | .17 | .00 | .17 | |
| 194.00 | .00 | 0 | -606.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.71 | .00 | .16 | .00 | .16 | |
| 196.00 | .00 | 0 | -587.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.56 | .00 | .16 | .00 | .16 | |
| 198.00 | .00 | 0 | -568.0 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.41 | .00 | .15 | .00 | .15 | |

*** Group Critical Pile Report III - Group P42 - Pile 182 - Load Case 8 ***

| Dist. Along Pile (Ft) | Deflection | | Axial Force (Kips) | Torsion (In-Kips) | Shear Force (Kips) | | Bending Moment (In-Kips) | | Pile Properties | | | Axial Stress (KSI) | Bending Stress | Unity Check Values | | |
|-----------------------|---------------------------|-------------|--------------------|-------------------|--------------------|-------------|--------------------------|-------------|-----------------|-------------|---------|--------------------|----------------|--------------------|-----|-------|
| | Normal To Pile Value (In) | Angle (Deg) | | | Value | Angle (Deg) | Value | Angle (Deg) | Value | Angle (Deg) | OD (In) | | | WT | Fy | Axial |
| 200.00 | .00 | 0 | -549.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.27 | .00 | .15 | .00 | .15 |
| 202.00 | .00 | 0 | -531.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -4.13 | .00 | .14 | .00 | .14 |
| 204.00 | .00 | 0 | -514.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.99 | .00 | .14 | .00 | .14 |
| 206.00 | .00 | 0 | -497.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.86 | .00 | .13 | .00 | .13 |
| 208.00 | .00 | 0 | -481.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.74 | .00 | .13 | .00 | .13 |
| 210.00 | .00 | 0 | -465.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.61 | .00 | .13 | .00 | .13 |
| 212.00 | .00 | 0 | -449.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.49 | .00 | .12 | .00 | .12 |
| 214.00 | .00 | 0 | -430.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.35 | .00 | .12 | .00 | .12 |
| 216.00 | .00 | 0 | -412.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.20 | .00 | .11 | .00 | .11 |
| 218.00 | .00 | 0 | -394.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -3.06 | .00 | .11 | .00 | .11 |
| 220.00 | .00 | 0 | -376.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.92 | .00 | .10 | .00 | .10 |
| 222.00 | .00 | 0 | -358.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.79 | .00 | .10 | .00 | .10 |
| 224.00 | .00 | 0 | -341.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.65 | .00 | .09 | .00 | .09 |
| 226.00 | .00 | 0 | -324.9 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.52 | .00 | .09 | .00 | .09 |
| 228.00 | .00 | 0 | -308.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.39 | .00 | .08 | .00 | .08 |
| 230.00 | .00 | 0 | -292.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.27 | .00 | .08 | .00 | .08 |
| 232.00 | .00 | 0 | -276.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.15 | .00 | .07 | .00 | .07 |
| 234.00 | .00 | 0 | -260.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -2.02 | .00 | .07 | .00 | .07 |
| 236.00 | .00 | 0 | -245.3 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.90 | .00 | .07 | .00 | .07 |
| 238.00 | .00 | 0 | -230.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.79 | .00 | .06 | .00 | .06 |
| 240.00 | .00 | 0 | -215.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.67 | .00 | .06 | .00 | .06 |
| 242.00 | .00 | 0 | -200.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.56 | .00 | .05 | .00 | .05 |
| 244.00 | .00 | 0 | -185.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.44 | .00 | .05 | .00 | .05 |
| 246.00 | .00 | 0 | -171.5 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.33 | .00 | .05 | .00 | .05 |
| 248.00 | .00 | 0 | -157.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.22 | .00 | .04 | .00 | .04 |
| 250.00 | .00 | 0 | -143.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.11 | .00 | .04 | .00 | .04 |
| 252.00 | .00 | 0 | -129.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -1.00 | .00 | .03 | .00 | .03 |
| 254.00 | .00 | 0 | -115.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.90 | .00 | .03 | .00 | .03 |
| 256.00 | .00 | 0 | -101.7 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.79 | .00 | .03 | .00 | .03 |
| 258.00 | .00 | 0 | -88.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.68 | .00 | .02 | .00 | .02 |
| 260.00 | .00 | 0 | -74.6 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.58 | .00 | .02 | .00 | .02 |
| 262.00 | .00 | 0 | -61.2 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.47 | .00 | .02 | .00 | .02 |
| 264.00 | .00 | 0 | -47.8 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.37 | .00 | .01 | .00 | .01 |
| 266.00 | .00 | 0 | -34.4 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.27 | .00 | .01 | .00 | .01 |
| 268.00 | .00 | 0 | -21.1 | 0. | .0 | 0 | 0. | -90 | 42.00 | 1.00 | 36.0 | -.16 | .00 | .01 | .00 | .01 |

*** Pile Head And Structure Force Comparison In Global Coordinate System ***

| Load Case | Pile Joint | | Forces (Kips) | | | Moments (In-Kips) | | |
|-----------|------------|------------|---------------|---------|-----------|-------------------|------------|-----------|
| | | | X | Y | Z | X | Y | Z |
| 6 | 200 | Pile Head | 135.530 | 117.815 | -375.235 | 38899.635 | -44088.784 | .000 |
| | | Structure | 135.531 | 117.822 | -372.307 | 38903.870 | -44089.821 | .000 |
| | | Difference | .000 | .007 | 2.928 | 4.235 | -1.038 | .000 |
| 112 | Pile Head | Structure | 238.109 | 186.970 | 829.223 | 28395.421 | -43058.566 | 1466.312 |
| | | Structure | 238.179 | 187.064 | 829.989 | 28403.621 | -43056.236 | 1465.259 |
| | | Difference | .070 | .094 | .766 | 8.201 | 2.329 | -1.053 |
| 122 | Pile Head | Structure | 142.379 | 86.728 | -202.905 | 32052.411 | -43656.991 | 4365.697 |
| | | Structure | 142.375 | 86.814 | -202.137 | 32057.274 | -43655.317 | 4365.530 |
| | | Difference | -.005 | .086 | .768 | 4.863 | 1.674 | -.167 |
| 132 | Pile Head | Structure | 140.034 | 98.814 | -173.457 | 35431.419 | -42914.312 | 4291.429 |
| | | Structure | 140.030 | 98.892 | -172.725 | 35434.322 | -42913.131 | 4291.311 |
| | | Difference | -.004 | .078 | .732 | 2.903 | 1.181 | -.118 |
| 142 | Pile Head | Structure | 252.345 | -12.280 | -1261.275 | 38293.915 | -42949.837 | 8124.373 |
| | | Structure | 252.270 | -12.209 | -1260.548 | 38293.784 | -42949.344 | 8124.311 |
| | | Difference | -.075 | .071 | .727 | -.131 | .492 | -.062 |
| 152 | Pile Head | Structure | 61.595 | 160.554 | -656.044 | 28850.279 | -39380.811 | -6823.103 |
| | | Structure | 61.670 | 160.496 | -655.324 | 28857.380 | -39382.271 | -6823.959 |
| | | Difference | .075 | -.058 | .721 | 7.101 | -1.460 | -.856 |
| 162 | Pile Head | Structure | 113.714 | 274.995 | -1774.851 | 33800.441 | -39268.793 | -3926.873 |
| | | Structure | 113.718 | 274.928 | -1774.112 | 33804.221 | -39271.110 | -3927.105 |
| | | Difference | .004 | -.067 | .739 | 3.780 | -2.317 | -.232 |
| 172 | Pile Head | Structure | 113.265 | 283.607 | -1836.687 | 34654.020 | -39664.834 | -3966.477 |
| | | Structure | 113.270 | 283.534 | -1835.930 | 34655.632 | -39667.741 | -3966.767 |
| | | Difference | .005 | -.073 | .757 | 1.612 | -2.907 | -.291 |
| 182 | Pile Head | Structure | 382.536 | 381.503 | -2819.884 | 38880.901 | -39043.425 | -16.243 |
| | | Structure | 382.465 | 381.424 | -2819.115 | 38879.464 | -39047.110 | -16.756 |
| | | Difference | -.071 | -.080 | .769 | -1.438 | -3.685 | -.512 |
| 7 | 200 | Pile Head | 68.390 | 154.610 | -375.235 | 50009.740 | -21420.199 | .000 |
| | | Structure | 68.387 | 154.619 | -372.307 | 50015.047 | -21419.081 | .000 |
| | | Difference | -.003 | .009 | 2.928 | 5.307 | 1.119 | .000 |
| 112 | Pile Head | Structure | 153.940 | 213.456 | 694.137 | 38858.382 | -22960.940 | -1589.745 |
| | | Structure | 154.014 | 213.531 | 694.867 | 38859.945 | -22962.139 | -1589.781 |
| | | Difference | .074 | .075 | .730 | 1.562 | -1.199 | -.036 |
| 122 | Pile Head | Structure | 79.244 | 155.545 | 86.881 | 41999.168 | -23074.979 | 2307.497 |
| | | Structure | 79.244 | 155.626 | 87.633 | 42001.923 | -23075.352 | 2307.535 |
| | | Difference | .000 | .080 | .751 | 2.754 | -.373 | .037 |
| 132 | Pile Head | Structure | 77.144 | 161.229 | 70.704 | 45018.242 | -22618.542 | 2261.854 |
| | | Structure | 77.144 | 161.313 | 71.455 | 45022.796 | -22619.016 | 2261.901 |
| | | Difference | .000 | .084 | .751 | 4.554 | -.474 | .047 |

*** Pile Head And Structure Force Comparison In Global Coordinate System ***

| Load Case | Pile Joint | | Forces (Kips) | | | Moments (In-Kips) | | |
|-----------|------------|------------|---------------|---------|-----------|-------------------|------------|-----------|
| | | | X | Y | Z | X | Y | Z |
| 7 | 142 | Pile Head | 135.331 | 88.959 | -636.672 | 47458.929 | -22776.224 | 7023.515 |
| | | Structure | 135.254 | 89.048 | -635.908 | 47465.203 | -22776.435 | 7024.163 |
| | | Difference | -.077 | .088 | .764 | 6.274 | -.211 | .649 |
| | 152 | Pile Head | -68.481 | 253.909 | -1285.816 | 39365.849 | -19075.739 | -5844.154 |
| | | Structure | -68.412 | 253.837 | -1285.063 | 39368.248 | -19072.887 | -5844.109 |
| | | Difference | .069 | -.072 | .754 | 2.399 | 2.852 | .045 |
| | 162 | Pile Head | 53.199 | 327.896 | -2006.796 | 44044.515 | -18158.795 | -1815.875 |
| | | Structure | 53.193 | 327.827 | -2006.032 | 44048.649 | -18155.807 | -1815.576 |
| | | Difference | -.006 | -.069 | .764 | 4.134 | 2.988 | .299 |
| | 172 | Pile Head | 52.671 | 340.411 | -2118.238 | 45012.798 | -18381.223 | -1838.118 |
| | | Structure | 52.664 | 340.346 | -2117.504 | 45017.483 | -18377.768 | -1837.772 |
| | | Difference | -.007 | -.065 | .734 | 4.685 | 3.455 | .345 |
| | 182 | Pile Head | 317.281 | 399.635 | -2705.137 | 48985.178 | -17459.041 | 3152.620 |
| | | Structure | 317.200 | 399.571 | -2704.401 | 48990.817 | -17455.218 | 3153.567 |
| | | Difference | -.080 | -.064 | .736 | 5.639 | 3.823 | .946 |
| 8 | 200 | Pile Head | -8.983 | 165.472 | -375.235 | 53104.085 | 3664.409 | .000 |
| | | Structure | -8.994 | 165.476 | -372.307 | 53106.865 | 3669.375 | .000 |
| | | Difference | -.010 | .003 | 2.928 | 2.780 | 4.966 | .000 |
| | 112 | Pile Head | 29.822 | 189.120 | 315.830 | 43605.932 | 873.394 | -4447.932 |
| | | Structure | 29.886 | 189.196 | 315.567 | 43607.503 | 877.537 | -4448.503 |
| | | Difference | .064 | .075 | .736 | 1.571 | 4.143 | -.571 |
| | 122 | Pile Head | -1.823 | 180.122 | 184.534 | 45485.090 | 846.744 | -84.674 |
| | | Structure | -1.832 | 180.201 | 185.297 | 45486.943 | 850.822 | -85.081 |
| | | Difference | -.009 | .079 | .762 | 1.853 | 4.077 | -.408 |
| | 132 | Pile Head | -1.762 | 177.715 | 119.316 | 47597.046 | 781.694 | -78.169 |
| | | Structure | -1.772 | 177.792 | 120.051 | 47599.135 | 785.724 | -78.572 |
| | | Difference | -.009 | .076 | .735 | 2.089 | 4.030 | -.403 |
| | 142 | Pile Head | 11.320 | 154.819 | -123.978 | 48975.497 | 152.894 | 4882.261 |
| | | Structure | 11.236 | 154.898 | -123.224 | 48977.827 | 156.880 | 4882.096 |
| | | Difference | -.084 | .079 | .754 | 2.330 | 3.985 | -.166 |
| | 152 | Pile Head | -191.494 | 313.354 | -1809.162 | 43680.462 | 3789.301 | -3989.115 |
| | | Structure | -191.429 | 313.282 | -1808.421 | 43681.899 | 3794.080 | -3988.780 |
| | | Difference | .065 | -.072 | .741 | 1.437 | 4.779 | .334 |
| | 162 | Pile Head | -12.946 | 342.043 | -2065.246 | 46956.631 | 4943.929 | 494.395 |
| | | Structure | -12.955 | 341.969 | -2064.481 | 46958.325 | 4948.658 | 494.867 |
| | | Difference | -.009 | -.074 | .765 | 1.694 | 4.728 | .473 |
| | 172 | Pile Head | -12.575 | 355.985 | -2201.793 | 47740.190 | 4880.904 | 488.092 |
| | | Structure | -12.584 | 355.915 | -2201.058 | 47742.055 | 4885.605 | 488.562 |
| | | Difference | -.009 | -.071 | .735 | 1.865 | 4.701 | .470 |

*** Pile Head And Structure Force Comparison In Global Coordinate System ***

| Load Case | Pile Joint | | /----- Forces (Kips) -----/ | | | /----- Moments (In-Kips) -----/ | | |
|-----------|------------|-----------------|-----------------------------|---------|-----------|---------------------------------|----------|----------|
| | | | X | Y | Z | X | Y | Z |
| 8 | 182 | Pile Head | 218.801 | 372.363 | -2330.668 | 50479.193 | 5548.674 | 5602.789 |
| | | Structure | 218.717 | 372.291 | -2329.918 | 50481.288 | 5553.353 | 5603.467 |
| | | Difference | -.084 | -.072 | .750 | 2.095 | 4.678 | .677 |
| | | Max. Difference | -.084 | .094 | 2.928 | 8.201 | 4.966 | -1.053 |
| | | Pile Joint No. | 142 | 112 | 200 | 112 | 200 | 112 |
| | | Load Case No. | 8 | 6 | 6 | 6 | 8 | 6 |

*** Pile Head And Structure Force Comparison In Pile Coordinate System ***

| Load Case | Pile Joint | | Forces (Kips) | | | Moments (In-Kips) | | |
|-----------|------------|------------|---------------|----------|----------|-------------------|------------|------------|
| | | | X | Y | Z | X | Y | Z |
| 6 | 200 | Pile Head | 375.235 | -135.530 | 117.815 | .000 | -38899.635 | -44088.784 |
| | | Structure | 372.307 | -135.531 | 117.822 | .000 | -38903.870 | -44089.821 |
| | | Difference | -2.928 | .000 | .007 | .000 | -4.235 | -1.038 |
| 112 | | Pile Head | -863.142 | 36.160 | -181.501 | -.001 | 50525.606 | 10471.559 |
| | | Structure | -863.917 | 36.144 | -181.508 | -.001 | 50529.758 | 10464.039 |
| | | Difference | -.775 | -.017 | -.008 | .000 | 4.151 | -7.520 |
| 122 | | Pile Head | 193.268 | 142.379 | -106.488 | .000 | 32052.411 | 43874.733 |
| | | Structure | 192.496 | 142.375 | -106.497 | .000 | 32057.274 | 43873.051 |
| | | Difference | -.773 | -.005 | -.009 | .000 | 4.863 | -1.682 |
| 132 | | Pile Head | 162.764 | 140.034 | -115.583 | .000 | 35431.419 | 43128.350 |
| | | Structure | 162.028 | 140.030 | -115.588 | .000 | 35434.322 | 43127.163 |
| | | Difference | -.736 | -.004 | -.005 | .000 | 2.903 | -1.187 |
| 142 | | Pile Head | 1275.050 | 169.752 | 8.661 | .001 | -3292.258 | 58019.643 |
| | | Structure | 1274.316 | 169.749 | 8.660 | .001 | -3292.003 | 58019.198 |
| | | Difference | -.735 | -.003 | -.001 | .000 | .255 | -.445 |
| 152 | | Pile Head | 659.379 | -157.083 | -22.580 | -.005 | 7446.231 | -48726.742 |
| | | Structure | 658.653 | -157.096 | -22.572 | -.005 | 7442.242 | -48732.856 |
| | | Difference | -.727 | -.012 | .008 | .000 | -3.989 | -6.114 |
| 162 | | Pile Head | 1793.406 | -113.714 | 97.026 | -.004 | -33800.441 | -39464.648 |
| | | Structure | 1792.664 | -113.718 | 97.033 | -.004 | -33804.221 | -39466.977 |
| | | Difference | -.742 | -.004 | .007 | .000 | -3.780 | -2.329 |
| 172 | | Pile Head | 1855.792 | -113.265 | 99.443 | -.005 | -34654.020 | -39862.665 |
| | | Structure | 1855.031 | -113.270 | 99.445 | -.005 | -34655.632 | -39865.586 |
| | | Difference | -.761 | -.005 | .003 | .000 | -1.612 | -2.921 |
| 182 | | Pile Head | 2867.752 | -.730 | 140.072 | -.005 | -55100.823 | -116.040 |
| | | Structure | 2866.976 | -.736 | 140.074 | -.005 | -55102.412 | -119.699 |
| | | Difference | -.776 | -.006 | .002 | .000 | -1.589 | -3.658 |
| 7 | 200 | Pile Head | 375.235 | -68.390 | 154.610 | .000 | -50009.740 | -21420.199 |
| | | Structure | 372.307 | -68.387 | 154.619 | .000 | -50015.047 | -21419.081 |
| | | Difference | -2.928 | .003 | .009 | .000 | -5.307 | 1.119 |
| 112 | | Pile Head | -723.676 | -42.085 | -160.030 | -.002 | 43712.860 | -11353.063 |
| | | Structure | -724.413 | -42.086 | -160.032 | -.002 | 43714.813 | -11353.323 |
| | | Difference | -.738 | -.001 | -.002 | .000 | 1.953 | -.260 |
| 122 | | Pile Head | -101.928 | 79.244 | -146.128 | -.001 | 41999.168 | 23190.067 |
| | | Structure | -102.683 | 79.244 | -146.133 | -.001 | 42001.923 | 23190.442 |
| | | Difference | -.756 | .000 | -.005 | .000 | 2.754 | .375 |
| 132 | | Pile Head | -86.396 | 77.144 | -153.394 | -.001 | 45018.242 | 22731.353 |
| | | Structure | -87.151 | 77.144 | -153.402 | -.001 | 45022.796 | 22731.830 |
| | | Difference | -.755 | .000 | -.009 | .000 | 4.554 | .476 |

*** Pile Head And Structure Force Comparison In Pile Coordinate System ***

| Load Case | Pile Joint | | Forces (Kips) | | | Moments (In-Kips) | | |
|-----------|------------|------------|---------------|----------|----------|-------------------|------------|------------|
| | | | X | Y | Z | X | Y | Z |
| 7 | 142 | Pile Head | 634.990 | 158.597 | -56.685 | .001 | 17453.288 | 50157.940 |
| | | Structure | 634.218 | 158.605 | -56.694 | .001 | 17457.575 | 50162.571 |
| | | Difference | -.772 | .008 | -.009 | .000 | 4.287 | 4.631 |
| | 152 | Pile Head | 1305.069 | -131.117 | 45.668 | -.005 | -14347.258 | -41735.648 |
| | | Structure | 1304.309 | -131.115 | 45.675 | -.005 | -14350.971 | -41735.324 |
| | | Difference | -.760 | .002 | .007 | .000 | -3.713 | .324 |
| | 162 | Pile Head | 2029.463 | -53.199 | 126.585 | -.004 | -44044.515 | -18249.362 |
| | | Structure | 2028.696 | -53.193 | 126.592 | -.004 | -44048.649 | -18246.360 |
| | | Difference | -.767 | .006 | .007 | .000 | -4.134 | 3.003 |
| | 172 | Pile Head | 2141.598 | -52.671 | 127.949 | -.004 | -45012.798 | -18472.900 |
| | | Structure | 2140.861 | -52.664 | 127.957 | -.004 | -45017.483 | -18469.428 |
| | | Difference | -.737 | .007 | .008 | .000 | -4.685 | 3.472 |
| | 182 | Pile Head | 2749.470 | 58.234 | 123.147 | -.004 | -46983.152 | 22514.187 |
| | | Structure | 2748.727 | 58.245 | 123.148 | -.004 | -46984.435 | 22520.944 |
| | | Difference | -.743 | .012 | .002 | .000 | -1.284 | 6.757 |
| 8 | 200 | Pile Head | 375.235 | 8.983 | 165.472 | .000 | -53104.085 | 3664.409 |
| | | Structure | 372.307 | 8.994 | 165.476 | .000 | -53106.865 | 3669.375 |
| | | Difference | -2.928 | .010 | .003 | .000 | -2.780 | 4.966 |
| | 112 | Pile Head | -334.397 | -112.641 | -109.065 | -.002 | 30216.456 | -31764.606 |
| | | Structure | -335.140 | -112.649 | -109.060 | -.002 | 30214.637 | -31768.686 |
| | | Difference | -.743 | -.008 | .006 | .000 | -1.819 | -4.080 |
| | 122 | Pile Head | -201.541 | -1.823 | -160.866 | -.001 | 45485.090 | -850.967 |
| | | Structure | -202.308 | -1.832 | -160.869 | -.001 | 45486.943 | -855.065 |
| | | Difference | -.766 | -.009 | -.003 | .000 | 1.853 | -4.098 |
| | 132 | Pile Head | -136.407 | -1.762 | -164.961 | -.001 | 47597.046 | -785.592 |
| | | Structure | -137.146 | -1.772 | -164.964 | -.001 | 47599.135 | -789.643 |
| | | Difference | -.739 | -.009 | -.003 | .000 | 2.089 | -4.050 |
| | 142 | Pile Head | 108.548 | 117.478 | -117.830 | .001 | 34739.006 | 34866.328 |
| | | Structure | 107.785 | 117.474 | -117.839 | .001 | 34743.472 | 34865.145 |
| | | Difference | -.763 | -.004 | -.009 | .000 | 4.465 | -1.183 |
| | 152 | Pile Head | 1841.325 | -86.168 | 100.131 | -.003 | -33566.182 | -28488.002 |
| | | Structure | 1840.577 | -86.163 | 100.139 | -.003 | -33570.577 | -28485.615 |
| | | Difference | -.748 | .005 | .008 | .000 | -4.395 | 2.387 |
| | 162 | Pile Head | 2089.031 | 12.946 | 134.846 | -.002 | -46956.631 | 4968.588 |
| | | Structure | 2088.262 | 12.955 | 134.849 | -.002 | -46958.325 | 4973.339 |
| | | Difference | -.768 | .009 | .003 | .000 | -1.694 | 4.752 |
| | 172 | Pile Head | 2226.287 | 12.575 | 135.132 | -.002 | -47740.190 | 4905.248 |
| | | Structure | 2225.549 | 12.584 | 135.135 | -.002 | -47742.055 | 4909.972 |
| | | Difference | -.738 | .009 | .003 | .000 | -1.865 | 4.724 |

*** Pile Head And Structure Force Comparison In Pile Coordinate System ***

| Load Case | Pile Joint | | Forces (Kips) | | | Moments (In-Kips) | | |
|-----------------|------------|------------|---------------|---------|--------|-------------------|------------|-----------|
| | | | X | Y | Z | X | Y | Z |
| 8 | 182 | Pile Head | 2366.239 | 108.585 | 87.538 | -.001 | -31770.660 | 40011.915 |
| | | Structure | 2365.481 | 108.593 | 87.535 | -.001 | -31768.833 | 40016.752 |
| | | Difference | -.758 | .008 | -.004 | .000 | 1.827 | 4.837 |
| Max. Difference | | | -2.928 | -.017 | -.009 | .000 | -5.307 | -7.520 |
| Pile Joint No. | | | 200 | 112 | 122 | 182 | 200 | 112 |
| Load Case No. | | | 6 | 6 | 6 | 6 | 7 | 6 |

Friday 7/22/94 19:14:34

| | | |
|-----------------------|---|---------|
| Time For PREP Module | * | 0: 4: 1 |
| Time For LOAD Module | * | 0:28:29 |
| Time For SOLVE Module | * | 1: 6:39 |
| | | ----- |
| Total Processing Time | * | 1:39:10 |

8.1.3 WD103DL.OT3
(Deflection & Stress Unity Check)

| | |
|--|--------------|
| Joint Deflection Report | pp. 1 - 25 |
| Group Summary Report - Three Most Restrictive Members | pp. 26 - 28 |
| Report with Element Stress @ Maximum Unity Check | pp. 29 - 46 |
| (Not Printed | pp. 47 - 82) |
| Member Group Summary Report..... | pp. 83 - 98 |
| Global Equilibrium Check | p. 99 |
| End Page | p. 100 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|-----------|
| | | X | Y | Z | X | Y | Z |
| 1 | 6 | 13.0316057 | 9.8731498 | -1.4164591 | .0003696 | -.0002871 | .0009666 |
| | 7 | 7.2251933 | 13.1477899 | -1.3045269 | .0004408 | .0000118 | .0016724 |
| | 8 | .5673980 | 14.2895461 | -1.1444513 | .0004588 | .0002592 | .0019466 |
| 2 | 6 | 12.9665790 | 10.5355800 | -1.2503398 | .0006585 | -.0003372 | .0004308 |
| | 7 | 7.1749993 | 13.8368573 | -1.2894607 | .0008396 | -.0000144 | .0007682 |
| | 8 | .5355389 | 14.8339603 | -1.2902801 | .0009082 | .0002676 | .0007499 |
| 3 | 6 | 12.9155726 | 11.2637087 | -1.2889003 | .0007614 | -.0000699 | .0005539 |
| | 7 | 7.1069604 | 14.6217638 | -1.3815965 | .0010977 | .0002879 | .0008204 |
| | 8 | .4575372 | 15.4819103 | -1.4203342 | .0012789 | .0005664 | .0007592 |
| 4 | 6 | 12.7306242 | 11.6429022 | -1.1986139 | .0000944 | -.0000272 | -.0010118 |
| | 7 | 6.9380339 | 14.9293347 | -1.4506901 | .0002384 | .0002983 | -.0006546 |
| | 8 | .3139157 | 15.6069436 | -1.6509993 | .0003357 | .0005436 | -.0002699 |
| 5 | 6 | 12.2259700 | 9.7547408 | -.9006056 | .0005837 | -.0001943 | .0045831 |
| | 7 | 6.4248480 | 13.0106732 | -.6575267 | .0006126 | .0001269 | .0042580 |
| | 8 | -.0307702 | 14.1410198 | -.4596281 | .0005692 | .0004217 | .0028101 |
| 6 | 6 | 12.2444766 | 10.4634342 | -.7737271 | .0007652 | -.0001868 | .0037922 |
| | 7 | 6.4236037 | 13.8045446 | -.6862189 | .0010181 | .0002024 | .0032032 |
| | 8 | -.0587153 | 14.8245563 | -.6457445 | .0011472 | .0005563 | .0018452 |
| 7 | 6 | 12.2582315 | 11.1149457 | -.7703355 | .0007581 | -.0003252 | .0040978 |
| | 7 | 6.4533776 | 14.4337686 | -.7400611 | .0009875 | .0000519 | .0032891 |
| | 8 | -.0244268 | 15.2696690 | -.7466368 | .0011163 | .0004206 | .0017503 |
| 8 | 6 | 12.1642110 | 11.5215120 | -.6342864 | -.0001212 | -.0002261 | .0050731 |
| | 7 | 6.3458035 | 14.8294371 | -.7579139 | .0000664 | .0001346 | .0037954 |
| | 8 | -.1493718 | 15.5139137 | -.9247812 | .0002793 | .0005125 | .0011814 |
| 9 | 6 | 12.9279742 | 9.7522955 | -1.4415335 | .0008947 | -.0006486 | .0010751 |
| | 7 | 7.1767013 | 13.0129280 | -1.3300137 | .0010213 | -.0003244 | .0015198 |
| | 8 | .5709738 | 14.1546899 | -1.1706415 | .0010356 | .0000078 | .0015757 |
| 10 | 6 | 12.8970224 | 10.3732487 | -1.3009000 | .0010672 | -.0003745 | .0007977 |
| | 7 | 7.1550444 | 13.6450080 | -1.3382523 | .0012513 | -.0001131 | .0009867 |
| | 8 | .5613497 | 14.6331824 | -1.3368682 | .0013018 | .0001405 | .0008293 |
| 11 | 6 | 12.8791827 | 11.0701742 | -1.3297752 | .0012506 | -.0002389 | .0008626 |
| | 7 | 7.1315164 | 14.3618877 | -1.4245222 | .0016242 | .0000857 | .0010008 |
| | 8 | .5341052 | 15.1854217 | -1.4656891 | .0018167 | .0003843 | .0008122 |
| 13 | 6 | 12.8151604 | 11.5996304 | -1.2651353 | .0004841 | .0005590 | -.0001996 |
| | 7 | 7.0687868 | 14.8696870 | -1.5163564 | .0005893 | .0008098 | .0000393 |
| | 8 | .4758666 | 15.5279874 | -1.7158366 | .0006970 | .0009963 | .0001737 |
| 14 | 6 | 12.1989862 | 9.7040742 | -.9269312 | .0003212 | -.0001430 | .0032947 |
| | 7 | 6.4461522 | 12.9577344 | -.6846491 | .0003751 | .0001281 | .0030863 |
| | 8 | .0282321 | 14.0952750 | -.4875369 | .0003489 | .0003377 | .0020539 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|----------|
| | | X | Y | Z | X | Y | Z |
| 15 | 6 | 12.2066089 | 10.3476367 | -.8231370 | .0006901 | -.0002222 | .0026119 |
| | 7 | 6.4526055 | 13.6314567 | -.7338145 | .0010335 | .0001298 | .0023127 |
| | 8 | .0306544 | 14.6251740 | -.6913457 | .0011751 | .0004505 | .0014462 |
| 16 | 6 | 12.2075660 | 11.0124845 | -.8120742 | .0006092 | -.0002377 | .0027311 |
| | 7 | 6.4593452 | 14.2930502 | -.7834374 | .0008309 | .0000467 | .0023028 |
| | 8 | .0392843 | 15.1100621 | -.7918324 | .0009228 | .0003424 | .0013367 |
| 17 | 6 | 12.1825951 | 11.5616916 | -.6967688 | -.0000136 | .0001622 | .0036925 |
| | 7 | 6.4254564 | 14.8393086 | -.8199367 | .0001731 | .0005037 | .0028964 |
| | 8 | -.0049533 | 15.4977954 | -.9860928 | .0002850 | .0008649 | .0011361 |
| 18 | 6 | 12.8782287 | 9.6729140 | -1.4514538 | .0009139 | -.0004225 | .0011190 |
| | 7 | 7.1544255 | 12.9204153 | -1.3400986 | .0011038 | -.0001093 | .0014581 |
| | 8 | .5773648 | 14.0598111 | -1.1810073 | .0011526 | .0002192 | .0014255 |
| 19 | 6 | 12.8689428 | 10.2822634 | -1.3209986 | .0010027 | -.0002451 | .0009463 |
| | 7 | 7.1485023 | 13.5373345 | -1.3576445 | .0012151 | -.0000016 | .0010752 |
| | 8 | .5760243 | 14.5208950 | -1.3553804 | .0012769 | .0002401 | .0008614 |
| 20 | 6 | 12.8611999 | 10.9654530 | -1.3460058 | .0011152 | -.0001387 | .0009875 |
| | 7 | 7.1395273 | 14.2274176 | -1.4415718 | .0014144 | .0001351 | .0010738 |
| | 8 | .5666175 | 15.0366165 | -1.4837089 | .0015392 | .0003979 | .0008337 |
| 21 | 6 | 12.8531465 | 11.5481213 | -1.2916084 | .0007465 | .0001762 | .0001293 |
| | 7 | 7.1288287 | 14.8075289 | -1.5424880 | .0009066 | .0004566 | .0003203 |
| | 8 | .5538057 | 15.4574622 | -1.7416371 | .0009856 | .0007108 | .0003533 |
| 23 | 6 | 12.1869332 | 9.6673525 | -.9373511 | .0006419 | -.0001424 | .0027729 |
| | 7 | 6.4576665 | 12.9135344 | -.6953873 | .0007814 | .0001465 | .0026117 |
| | 8 | .0590161 | 14.0520914 | -.4985891 | .0007927 | .0004083 | .0017477 |
| 24 | 6 | 12.1886690 | 10.2852247 | -.8427762 | .0008044 | -.0001830 | .0021340 |
| | 7 | 6.4623788 | 13.5410835 | -.7527292 | .0010925 | .0000988 | .0019521 |
| | 8 | .0660234 | 14.5238922 | -.7094638 | .0011960 | .0003668 | .0012847 |
| 25 | 6 | 12.1898843 | 10.9549979 | -.8286497 | .0007967 | -.0001670 | .0021776 |
| | 7 | 6.4645872 | 14.2164324 | -.8006669 | .0010248 | .0000863 | .0019035 |
| | 8 | .0682965 | 15.0262406 | -.8097885 | .0011010 | .0003446 | .0011692 |
| 26 | 6 | 12.1908069 | 11.5462134 | -.7216288 | .0004894 | -.0000653 | .0031335 |
| | 7 | 6.4621836 | 14.8068657 | -.8446132 | .0007074 | .0002574 | .0025323 |
| | 8 | .0618325 | 15.4566133 | -1.0104852 | .0008063 | .0005953 | .0011177 |
| 27 | 6 | 12.5230000 | 9.6727814 | -1.2041192 | .0010000 | .0002789 | .0009892 |
| | 7 | 6.7996959 | 12.9207072 | -1.0259813 | .0012598 | .0004253 | .0009661 |
| | 8 | .3161109 | 14.0601937 | -.8466916 | .0013368 | .0004840 | .0006872 |
| 28 | 6 | 12.5879712 | 10.2828933 | -1.0908028 | .0008816 | -.0003130 | .0011594 |
| | 7 | 6.8495222 | 13.5383053 | -1.0644954 | .0011103 | -.0000208 | .0011819 |
| | 8 | .3424573 | 14.5216396 | -1.0414462 | .0011830 | .0002917 | .0008949 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (in) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|----------|
| | | X | Y | Z | X | Y | Z |
| 29 | 6 | 12.5883716 | 10.9604088 | -1.0903969 | .0009583 | -.0003155 | .0011301 |
| | 7 | 6.8471189 | 14.2217674 | -1.1239188 | .0011746 | -.0000124 | .0011726 |
| | 8 | .3378206 | 15.0308495 | -1.1497610 | .0012219 | .0003092 | .0009014 |
| 30 | 6 | 12.5176605 | 11.5531047 | -1.0185007 | .0011772 | .0006756 | .0010671 |
| | 7 | 6.7952155 | 14.8138880 | -1.2070306 | .0014249 | .0007458 | .0011642 |
| | 8 | .3134646 | 15.4634755 | -1.3905206 | .0014782 | .0006369 | .0009933 |
| 31 | 6 | 13.1608814 | 10.3074011 | -1.5716180 | .0009090 | .0004271 | .0017361 |
| | 7 | 7.4436862 | 13.5607332 | -1.6630733 | .0011323 | .0005452 | .0017375 |
| | 8 | .7947579 | 14.5433991 | -1.6779011 | .0012020 | .0006332 | .0013995 |
| 33 | 6 | 13.1644951 | 10.9788411 | -1.6048724 | .0008959 | -.0003255 | .0008456 |
| | 7 | 7.4472807 | 14.2367295 | -1.7544906 | .0011064 | -.0002075 | .0008486 |
| | 8 | .7983540 | 15.0430673 | -1.8111950 | .0011567 | -.0001169 | .0005141 |
| 34 | 6 | 11.8838108 | 10.2521775 | -.6637781 | .0008546 | .0002975 | .0007701 |
| | 7 | 6.1578516 | 13.5062601 | -.5180225 | .0010793 | .0004260 | .0007935 |
| | 8 | -.1579643 | 14.4899849 | -.4572468 | .0011533 | .0005420 | .0004849 |
| 35 | 6 | 11.8877482 | 10.9377845 | -.6320146 | .0009892 | -.0004502 | .0016671 |
| | 7 | 6.1618137 | 14.1951414 | -.5505403 | .0012000 | -.0003183 | .0016866 |
| | 8 | -.1540000 | 15.0006526 | -.5454376 | .0012479 | -.0002006 | .0013757 |
| 36 | 6 | 12.8615354 | 10.6200376 | -1.3640781 | .0010275 | .0000928 | .0012543 |
| | 7 | 7.1430206 | 13.8757201 | -1.4294287 | .0012576 | .0001558 | .0012630 |
| | 8 | .5733307 | 14.7703178 | -1.4490099 | .0013249 | .0001850 | .0009369 |
| 37 | 6 | 12.1866003 | 10.6183383 | -.8707501 | .0008184 | .0000066 | .0012397 |
| | 7 | 6.4633251 | 13.8740144 | -.8121169 | .0010484 | .0000774 | .0012507 |
| | 8 | .0698084 | 14.7686044 | -.7950442 | .0011157 | .0001241 | .0009287 |
| 38 | 6 | 12.5249606 | 10.6193532 | -1.1440126 | .0009039 | .0000540 | .0012512 |
| | 7 | 6.8031396 | 13.8750711 | -1.1473702 | .0011321 | .0001185 | .0012596 |
| | 8 | .3204805 | 14.7696679 | -1.1486173 | .0012001 | .0001534 | .0009323 |
| 39 | 6 | 13.1626254 | 10.6213567 | -1.6666969 | .0012984 | .0000724 | .0012529 |
| | 7 | 7.4454775 | 13.8770045 | -1.7874275 | .0015306 | .0001657 | .0012575 |
| | 8 | .7966099 | 14.7716022 | -1.8230792 | .0015974 | .0002274 | .0009264 |
| 40 | 6 | 11.8856580 | 10.6166881 | -.7258614 | .0005854 | -.0000386 | .0012623 |
| | 7 | 6.1597699 | 13.8723255 | -.6118116 | .0008180 | .0000650 | .0012725 |
| | 8 | -.1559721 | 14.7669117 | -.5786838 | .0008849 | .0001500 | .0009467 |
| 41 | 6 | 12.8743730 | 9.9750257 | -1.3898877 | .0004431 | -.0002944 | .0012809 |
| | 7 | 7.1512146 | 13.2257590 | -1.3557765 | .0006703 | .0000354 | .0012772 |
| | 8 | .5750988 | 14.2868542 | -1.2791576 | .0007310 | .0003872 | .0009368 |
| 43 | 6 | 12.1889202 | 9.9791311 | -.8990238 | .0013516 | -.0002273 | .0012018 |
| | 7 | 6.4598991 | 13.2299128 | -.7357365 | .0015925 | .0001072 | .0012228 |
| | 8 | .0608181 | 14.2910843 | -.6184365 | .0016801 | .0004498 | .0009190 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|----------|
| | | X | Y | Z | X | Y | Z |
| 44 | 6 | 12.5296768 | 9.9772026 | -1.2417163 | .0009105 | -.0002531 | .0012825 |
| | 7 | 6.8043691 | 13.2279852 | -1.1439330 | .0011514 | .0000770 | .0012944 |
| | 8 | .3176364 | 14.2891149 | -1.0487905 | .0012274 | .0004206 | .0009639 |
| 45 | 6 | 12.8763035 | 9.8191784 | -1.4204676 | .0008088 | -.0002242 | .0012903 |
| | 7 | 7.1528202 | 13.0787698 | -1.3469662 | .0009728 | .0000971 | .0012335 |
| | 8 | .5762286 | 14.1884185 | -1.2280899 | .0009864 | .0004409 | .0008437 |
| 46 | 6 | 12.8716400 | 10.1277669 | -1.3555288 | .0006849 | -.0002492 | .0012574 |
| | 7 | 7.1497112 | 13.3795042 | -1.3593643 | .0009309 | .0000486 | .0012742 |
| | 8 | .5753012 | 14.4011854 | -1.3232051 | .0010249 | .0003628 | .0009534 |
| 47 | 6 | 12.1879294 | 9.8711161 | -.9211653 | .0007023 | -.0001514 | .0009797 |
| | 7 | 6.4587825 | 13.1140553 | -.7172772 | .0009215 | .0001806 | .0010390 |
| | 8 | .0599131 | 14.1968243 | -.5583185 | .0010483 | .0005199 | .0008352 |
| 48 | 6 | 12.1889893 | 10.1286071 | -.8723999 | .0012326 | -.0002006 | .0012853 |
| | 7 | 6.4612866 | 13.3809643 | -.7479239 | .0014016 | .0001038 | .0012933 |
| | 8 | .0634769 | 14.4036147 | -.6702674 | .0013745 | .0004134 | .0009598 |
| 49 | 6 | 12.8699069 | 10.2237395 | -1.3382927 | .0006230 | -.0002913 | .0012726 |
| | 7 | 7.1487602 | 13.4767879 | -1.3637457 | .0008656 | -.0000339 | .0012873 |
| | 8 | .5754350 | 14.4740636 | -1.3501677 | .0009498 | .0002302 | .0009625 |
| 50 | 6 | 12.1890319 | 10.2256045 | -.8580653 | .0011496 | -.0002400 | .0012505 |
| | 7 | 6.4621674 | 13.4789404 | -.7557317 | .0013821 | .0000390 | .0012731 |
| | 8 | .0651670 | 14.4765612 | -.7004861 | .0014550 | .0003122 | .0009555 |
| 51 | 6 | 12.5301645 | 10.2247791 | -1.1636230 | .0008882 | -.0002609 | .0012606 |
| | 7 | 6.8057332 | 13.4779126 | -1.1245000 | .0011258 | .0000052 | .0012675 |
| | 8 | .3200752 | 14.4752902 | -1.0893268 | .0012040 | .0002717 | .0009385 |
| 53 | 6 | 13.1605998 | 10.2263332 | -1.5541276 | .0009477 | .0003853 | .0018024 |
| | 7 | 7.4433956 | 13.4795067 | -1.6403738 | .0012016 | .0005030 | .0018083 |
| | 8 | .7944560 | 14.4769556 | -1.6512998 | .0013056 | .0005907 | .0014760 |
| 54 | 6 | 11.8835137 | 10.2230456 | -.6519991 | .0008034 | .0002545 | .0006968 |
| | 7 | 6.1575414 | 13.4761482 | -.5005377 | .0010042 | .0003830 | .0007142 |
| | 8 | -.1582887 | 14.4735146 | -.4346038 | .0010453 | .0004990 | .0003993 |
| 55 | 6 | 12.8652092 | 10.4406906 | -1.3387829 | .0009381 | .0002333 | .0013211 |
| | 7 | 7.1457459 | 13.7001299 | -1.3931653 | .0011728 | .0003270 | .0012920 |
| | 8 | .5746788 | 14.6430024 | -1.4059250 | .0012468 | .0003933 | .0009345 |
| 56 | 6 | 12.1876107 | 10.4820389 | -.8563676 | .0009371 | .0001637 | .0010199 |
| | 7 | 6.4628421 | 13.7312708 | -.7859841 | .0011592 | .0002628 | .0010599 |
| | 8 | .0679218 | 14.6582932 | -.7599598 | .0012044 | .0003429 | .0008130 |
| 57 | 6 | 12.8613617 | 10.8016607 | -1.3613097 | .0010088 | -.0000834 | .0013540 |
| | 7 | 7.1412825 | 14.0578380 | -1.4377381 | .0012434 | .0000126 | .0013653 |
| | 8 | .5699995 | 14.9068100 | -1.4641436 | .0013131 | .0000788 | .0010329 |

* * * Joint Deflection Report * * *

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|----------|
| | | X | Y | Z | X | Y | Z |
| 58 | 6 | 12.1882431 | 10.7550950 | -.8557764 | .0008184 | -.0001817 | .0010272 |
| | 7 | 6.4639710 | 14.0232747 | -.8090510 | .0010678 | -.0000815 | .0011206 |
| | 8 | .0690830 | 14.8893865 | -.8010478 | .0011663 | .0000003 | .0009076 |
| 59 | 6 | 12.8609874 | 11.0061571 | -1.3460352 | .0007306 | -.0000641 | .0011395 |
| | 7 | 7.1387310 | 14.2645942 | -1.4528115 | .0009580 | .0002234 | .0010562 |
| | 8 | .5651851 | 15.0579710 | -1.5059572 | .0010149 | .0005074 | .0006594 |
| 60 | 6 | 12.1900783 | 11.0115329 | -.8265731 | .0012358 | -.0001430 | .0011546 |
| | 7 | 6.4641593 | 14.2694599 | -.8090299 | .0014667 | .0001189 | .0011405 |
| | 8 | .0671626 | 15.0622238 | -.8287959 | .0015254 | .0003876 | .0008166 |
| 61 | 6 | 12.5251829 | 11.0084177 | -1.2006683 | .0009655 | -.0001110 | .0012898 |
| | 7 | 6.8030530 | 14.2665751 | -1.2455338 | .0011970 | -.0000364 | .0013241 |
| | 8 | .3198815 | 15.0596991 | -1.2821117 | .0012590 | .0000233 | .0010138 |
| 63 | 6 | 13.1647743 | 11.0089589 | -1.5929135 | .0010790 | -.0002869 | .0007858 |
| | 7 | 7.4475489 | 14.2671518 | -1.7473030 | .0012735 | -.0001687 | .0008020 |
| | 8 | .7986122 | 15.0602799 | -1.8076783 | .0013008 | -.0000780 | .0004793 |
| 64 | 6 | 11.8880614 | 11.0084547 | -.6150134 | .0008171 | -.0004103 | .0017495 |
| | 7 | 6.1621183 | 14.2665374 | -.5388340 | .0010622 | -.0002787 | .0017660 |
| | 8 | -.1537081 | 15.0595360 | -.5384711 | .0011490 | -.0001614 | .0014490 |
| 65 | 6 | 12.8605168 | 11.1014091 | -1.3388748 | .0008667 | -.0000944 | .0012322 |
| | 7 | 7.1377495 | 14.3572590 | -1.4695402 | .0010524 | .0002137 | .0012369 |
| | 8 | .5636967 | 15.1222153 | -1.5467269 | .0010907 | .0005255 | .0009113 |
| 66 | 6 | 12.8591009 | 11.2537910 | -1.3260858 | .0004649 | -.0001312 | .0012672 |
| | 7 | 7.1348073 | 14.5131603 | -1.4965827 | .0007093 | .0002107 | .0012582 |
| | 8 | .5592413 | 15.2411345 | -1.6144748 | .0008012 | .0005615 | .0009319 |
| 67 | 6 | 12.8561225 | 11.4358853 | -1.3053882 | .0005737 | -.0001951 | .0014632 |
| | 7 | 7.1318131 | 14.6894773 | -1.5176882 | .0008093 | .0001463 | .0014204 |
| | 8 | .5565143 | 15.3671417 | -1.6784953 | .0009471 | .0004949 | .0010166 |
| 68 | 6 | 12.1910611 | 11.1095962 | -.8120054 | .0007483 | -.0001937 | .0012604 |
| | 7 | 6.4643045 | 14.3668285 | -.8175451 | .0010320 | .0001091 | .0012602 |
| | 8 | .0662645 | 15.1326461 | -.8610025 | .0011838 | .0004216 | .0009218 |
| 69 | 6 | 12.1925265 | 11.2582325 | -.7868011 | .0015261 | -.0002234 | .0011718 |
| | 7 | 6.4645189 | 14.5175191 | -.8309214 | .0017400 | .0001123 | .0012045 |
| | 8 | .0649201 | 15.2453205 | -.9144529 | .0017622 | .0004611 | .0009198 |
| 70 | 6 | 12.1916666 | 11.3422807 | -.7527617 | .0012006 | -.0003105 | .0007739 |
| | 7 | 6.4633487 | 14.6216059 | -.8370512 | .0013311 | .0000173 | .0009115 |
| | 8 | .0633709 | 15.3448823 | -.9625545 | .0012329 | .0003595 | .0008242 |
| 71 | 6 | 12.5262737 | 11.2561569 | -1.1635750 | .0009956 | -.0001619 | .0012414 |
| | 7 | 6.8008944 | 14.5155025 | -1.2688230 | .0012313 | .0001739 | .0012436 |
| | 8 | .3140996 | 15.2433924 | -1.3648309 | .0012980 | .0005176 | .0009105 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|----------|
| | | X | Y | Z | X | Y | Z |
| 73 | 6 | 12.8497104 | 9.5867812 | -1.4599607 | .0008853 | -.0002330 | .0011237 |
| | 7 | 7.1547726 | 12.8135348 | -1.3486183 | .0011165 | .0000625 | .0014012 |
| | 8 | .6078448 | 13.9467150 | -1.1895468 | .0011897 | .0003705 | .0013201 |
| 74 | 6 | 12.8507259 | 10.1902851 | -1.3320062 | .0009087 | -.0001471 | .0010198 |
| | 7 | 7.1540930 | 13.4234672 | -1.3685709 | .0011450 | .0000978 | .0011154 |
| | 8 | .6054499 | 14.4003223 | -1.3662100 | .0012201 | .0003433 | .0008734 |
| 75 | 6 | 12.8504997 | 10.8656663 | -1.3546614 | .0009814 | -.0000990 | .0010520 |
| | 7 | 7.1540324 | 14.1027573 | -1.4503247 | .0012178 | .0001529 | .0011189 |
| | 8 | .6057592 | 14.9033894 | -1.4925783 | .0012864 | .0004005 | .0008587 |
| 76 | 6 | 12.8516698 | 11.4658551 | -1.3169522 | .0009312 | -.0000942 | .0003163 |
| | 7 | 7.1554000 | 14.7067320 | -1.5678284 | .0011438 | .0002061 | .0004802 |
| | 8 | .6074071 | 15.3503701 | -1.7669759 | .0012024 | .0005042 | .0004603 |
| 77 | 6 | 12.1723933 | 9.5907244 | -.9459465 | .0008944 | -.0001577 | .0024702 |
| | 7 | 6.4713273 | 12.8190163 | -.7039865 | .0011081 | .0001403 | .0023385 |
| | 8 | .0999844 | 13.9537859 | -.5071836 | .0011640 | .0004385 | .0015778 |
| 78 | 6 | 12.1734154 | 10.2015640 | -.8537433 | .0009217 | -.0001351 | .0018757 |
| | 7 | 6.4724331 | 13.4331431 | -.7636126 | .0011560 | .0001146 | .0017509 |
| | 8 | .1008055 | 14.4085392 | -.7202584 | .0012207 | .0003618 | .0011859 |
| 79 | 6 | 12.1753857 | 10.8717978 | -.8367022 | .0009237 | -.0001480 | .0018934 |
| | 7 | 6.4744312 | 14.1104415 | -.8087899 | .0011643 | .0001010 | .0017105 |
| | 8 | .1026863 | 14.9126440 | -.8179845 | .0012427 | .0003502 | .0010994 |
| 80 | 6 | 12.1748819 | 11.4723685 | -.7470332 | .0009248 | -.0001975 | .0027702 |
| | 7 | 6.4758729 | 14.7113223 | -.8700062 | .0011556 | .0001048 | .0022869 |
| | 8 | .1062696 | 15.3531444 | -1.0358610 | .0012283 | .0004171 | .0010844 |
| 81 | 6 | 12.8359628 | 9.5237261 | -1.4678117 | .0008708 | -.0002080 | .0011280 |
| | 7 | 7.1620948 | 12.7330592 | -1.3564812 | .0011128 | .0000889 | .0013489 |
| | 8 | .6371295 | 13.8605596 | -1.1974282 | .0011902 | .0003993 | .0012233 |
| 83 | 6 | 12.8426995 | 10.1282239 | -1.3421849 | .0008106 | -.0000881 | .0010873 |
| | 7 | 7.1633573 | 13.3439913 | -1.3786740 | .0010510 | .0001401 | .0011523 |
| | 8 | .6320176 | 14.3151472 | -1.3762228 | .0011315 | .0003662 | .0008843 |
| 84 | 6 | 12.8439056 | 10.7984990 | -1.3626508 | .0009014 | -.0000984 | .0011112 |
| | 7 | 7.1648797 | 14.0197154 | -1.4584048 | .0011228 | .0001347 | .0011603 |
| | 8 | .6337741 | 14.8164824 | -1.5007667 | .0011758 | .0003612 | .0008817 |
| 85 | 6 | 12.8419108 | 11.3946187 | -1.3404750 | .0010128 | -.0000683 | .0004880 |
| | 7 | 7.1677220 | 14.6191544 | -1.5913481 | .0012412 | .0002412 | .0006271 |
| | 8 | .6420642 | 15.2589027 | -1.7904941 | .0012969 | .0005531 | .0005585 |
| 86 | 6 | 12.1606754 | 9.5211658 | -.9538799 | .0009799 | -.0001651 | .0021924 |
| | 7 | 6.4813358 | 12.7326338 | -.7119233 | .0012147 | .0001398 | .0020877 |
| | 8 | .1322011 | 13.8625314 | -.5151161 | .0012830 | .0004499 | .0014218 |

* * * Joint Deflection Report * * *

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|----------|
| | | X | Y | Z | X | Y | Z |
| 87 | 6 | 12.1652583 | 10.1322157 | -.8638842 | .0009884 | -.0000918 | .0016386 |
| | 7 | 6.4814178 | 13.3478286 | -.7736757 | .0012136 | .0001388 | .0015661 |
| | 8 | .1268996 | 14.3191130 | -.7302387 | .0012764 | .0003668 | .0010952 |
| 88 | 6 | 12.1646787 | 10.8017781 | -.8441302 | .0010088 | -.0001619 | .0016440 |
| | 7 | 6.4812438 | 14.0230157 | -.8162836 | .0012458 | .0000711 | .0015333 |
| | 8 | .1269427 | 14.8196925 | -.8255462 | .0013173 | .0003027 | .0010353 |
| 89 | 6 | 12.1599346 | 11.3979513 | -.7706125 | .0010228 | -.0001513 | .0024367 |
| | 7 | 6.4824346 | 14.6200361 | -.8935748 | .0012574 | .0001516 | .0020616 |
| | 8 | .1349820 | 15.2571529 | -1.0594136 | .0013216 | .0004639 | .0010538 |
| 90 | 6 | 12.6984210 | 9.5222474 | -1.3316077 | .0010023 | -.0001496 | .0009613 |
| | 7 | 7.0048620 | 12.7316973 | -1.1870356 | .0012509 | .0001363 | .0010410 |
| | 8 | .5010075 | 13.8596599 | -1.0178333 | .0013258 | .0004231 | .0008469 |
| 91 | 6 | 12.6933881 | 10.1057734 | -1.2099333 | .0009577 | -.0001145 | .0011104 |
| | 7 | 7.0131597 | 13.3148312 | -1.2150837 | .0011898 | .0001232 | .0011539 |
| | 8 | .5241851 | 14.2837521 | -1.2023951 | .0012658 | .0003605 | .0008797 |
| 92 | 6 | 12.6922509 | 10.7728001 | -1.2205547 | .0010307 | -.0001325 | .0011204 |
| | 7 | 7.0124890 | 13.9878368 | -1.2848174 | .0012618 | .0001088 | .0011711 |
| | 8 | .5237305 | 14.7832576 | -1.3186095 | .0013235 | .0003469 | .0009022 |
| 93 | 6 | 12.7572329 | 11.3932999 | -1.1642165 | .0012624 | -.0000227 | .0007900 |
| | 7 | 7.0633513 | 14.6169224 | -1.3844317 | .0014922 | .0002619 | .0009274 |
| | 8 | .5467993 | 15.2561177 | -1.5756823 | .0015505 | .0005329 | .0008357 |
| 94 | 6 | 12.5667706 | 9.5212033 | -1.2031747 | .0009620 | -.0001321 | .0010501 |
| | 7 | 6.8692919 | 12.7311897 | -1.0250559 | .0012078 | .0001504 | .0010368 |
| | 8 | .3975522 | 13.8597533 | -.8458070 | .0012794 | .0004310 | .0007456 |
| 95 | 6 | 12.5377315 | 10.1053978 | -1.0894246 | .0008780 | -.0001266 | .0012140 |
| | 7 | 6.8535737 | 13.3144726 | -1.0631167 | .0011123 | .0001135 | .0012266 |
| | 8 | .4036801 | 14.2834796 | -1.0400425 | .0011897 | .0003555 | .0009147 |
| 96 | 6 | 12.5358144 | 10.7726932 | -1.0891506 | .0009598 | -.0001596 | .0012169 |
| | 7 | 6.8506478 | 13.9876893 | -1.1226767 | .0011858 | .0000856 | .0012397 |
| | 8 | .3999374 | 14.7830321 | -1.1485435 | .0012436 | .0003306 | .0009347 |
| 97 | 6 | 12.6270439 | 11.3936180 | -1.0149340 | .0010774 | -.0000247 | .0011651 |
| | 7 | 6.9181700 | 14.6166225 | -1.2034331 | .0013170 | .0002537 | .0012318 |
| | 8 | .4211889 | 15.2551603 | -1.3868447 | .0013778 | .0005165 | .0010036 |
| 98 | 6 | 12.4023742 | 9.5201649 | -1.0723046 | .0009061 | -.0001429 | .0014519 |
| | 7 | 6.7109240 | 12.7306898 | -.8616325 | .0011410 | .0001454 | .0013824 |
| | 8 | .2879418 | 13.8598548 | -.6732822 | .0012042 | .0004348 | .0009404 |
| 99 | 6 | 12.3633808 | 10.1050178 | -.9724542 | .0008140 | -.0001296 | .0013860 |
| | 7 | 6.6799917 | 13.3141087 | -.9143313 | .0010513 | .0001105 | .0013602 |
| | 8 | .2760962 | 14.2832022 | -.8808357 | .0011270 | .0003537 | .0009841 |

* * * Joint Deflection Report * * *

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|----------|
| | | X | Y | Z | X | Y | Z |
| 101 | 6 | 11.3615075 | 8.9185103 | -.5459939 | -.0017900 | .0020347 | .0005149 |
| | 7 | 6.0302436 | 11.5767906 | -.4418097 | -.0023044 | .0012712 | .0007151 |
| | 8 | .0373445 | 12.4224555 | -.4520813 | -.0023878 | .0002869 | .0006247 |
| 102 | 6 | 11.4509946 | 9.4640024 | -.7917611 | -.0014676 | .0019574 | .0005038 |
| | 7 | 6.1068975 | 12.0898684 | -.6415331 | -.0020427 | .0012284 | .0007966 |
| | 8 | .0906881 | 12.7612048 | -.5750826 | -.0022316 | .0002952 | .0007566 |
| 103 | 6 | 10.4061634 | 8.8863592 | -1.2741337 | -.0013718 | .0017171 | .0015431 |
| | 7 | 5.0581402 | 11.4840277 | -1.4746343 | -.0020053 | .0009482 | .0013064 |
| | 8 | -.6812504 | 12.2763549 | -1.5709740 | -.0022603 | .0000233 | .0008071 |
| 104 | 6 | 10.3272729 | 9.5416992 | -1.5490641 | -.0018340 | .0018619 | .0017610 |
| | 7 | 4.9934041 | 12.1923111 | -1.6975565 | -.0024141 | .0010733 | .0015680 |
| | 8 | -.7246106 | 12.8633662 | -1.7056377 | -.0025414 | .0001219 | .0010882 |
| 105 | 6 | 12.3612584 | 10.7725872 | -.9613367 | .0008908 | -.0001790 | .0013877 |
| | 7 | 6.6761418 | 13.9875397 | -.9644185 | .0011178 | .0000672 | .0013580 |
| | 8 | .2709655 | 14.7828012 | -.9824384 | .0011791 | .0003152 | .0009787 |
| 106 | 6 | 12.4365099 | 11.3939490 | -.8745382 | .0008521 | -.0000756 | .0016934 |
| | 7 | 6.7284040 | 14.6163366 | -1.0302002 | .0010968 | .0002107 | .0015946 |
| | 8 | .2798524 | 15.2542163 | -1.2049506 | .0011629 | .0004908 | .0010705 |
| 107 | 6 | 12.9247445 | 10.1044026 | -1.3979113 | .0007205 | -.0000884 | .0010844 |
| | 7 | 7.2568110 | 13.3134049 | -1.4528532 | .0009574 | .0001409 | .0011473 |
| | 8 | .7111187 | 14.2823115 | -1.4564236 | .0010346 | .0003689 | .0008808 |
| 108 | 6 | 12.9272581 | 10.7718312 | -1.4280955 | .0008424 | -.0000985 | .0011043 |
| | 7 | 7.2589026 | 13.9867427 | -1.5421111 | .0010757 | .0001357 | .0011557 |
| | 8 | .7128807 | 14.7820308 | -1.5895485 | .0011400 | .0003640 | .0008817 |
| 109 | 6 | 12.0376082 | 10.1055187 | -.7783627 | .0010914 | -.0000843 | .0016031 |
| | 7 | 6.3655442 | 13.3146063 | -.6698608 | .0013252 | .0001452 | .0015366 |
| | 8 | .0532308 | 14.2838637 | -.6211744 | .0013918 | .0003710 | .0010790 |
| 110 | 6 | 12.0345332 | 10.7736741 | -.7614457 | .0010567 | -.0001486 | .0016107 |
| | 7 | 6.3654658 | 13.9883996 | -.7150678 | .0012945 | .0000831 | .0015117 |
| | 8 | .0552732 | 14.7833624 | -.7185304 | .0013690 | .0003117 | .0010308 |
| 111 | 6 | 10.7467451 | 7.3073240 | .1153939 | -.0015851 | .0006378 | .0013327 |
| | 7 | 5.6476403 | 9.6726136 | .1028424 | -.0021121 | .0005269 | .0016165 |
| | 8 | -.0493114 | 10.6273479 | -.1150277 | -.0022722 | .0002883 | .0015545 |
| 112 | 6 | 10.5812243 | 7.1423909 | -1.5327257 | -.0061459 | .0090331 | .0006550 |
| | 7 | 5.5064955 | 9.5307495 | -1.3083386 | -.0083440 | .0050926 | .0021136 |
| | 8 | -.1336224 | 10.5411295 | -.9642613 | -.0092505 | .0003155 | .0030674 |
| 113 | 6 | 12.8358335 | 9.6811351 | -1.4215242 | .0008435 | -.0003075 | .0013787 |
| | 7 | 7.1620059 | 12.9092118 | -1.3478854 | .0010808 | .0000099 | .0014468 |
| | 8 | .6373033 | 14.0130985 | -1.2288491 | .0011588 | .0003481 | .0011735 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|-----------|
| | | X | Y | Z | X | Y | Z |
| 114 | 6 | 12.8364975 | 9.8540584 | -1.3889046 | .0008521 | -.0002921 | .0013689 |
| | 7 | 7.1612963 | 13.0750687 | -1.3547525 | .0010054 | .0000303 | .0012653 |
| | 8 | .6349929 | 14.1320411 | -1.2780940 | .0010131 | .0003754 | .0008307 |
| 115 | 6 | 10.7209119 | 7.8141954 | -.1809862 | -.0015038 | .0006684 | .0011217 |
| | 7 | 5.6321957 | 10.2260923 | -.1327793 | -.0021825 | .0004982 | .0010449 |
| | 8 | -.0521725 | 11.1012608 | -.2532900 | -.0024741 | .0002568 | .0006962 |
| 116 | 6 | 12.8372169 | 10.0003667 | -1.3523080 | .0009026 | -.0001960 | .0010709 |
| | 7 | 7.1606090 | 13.2128561 | -1.3558820 | .0011105 | .0000970 | .0010897 |
| | 8 | .6326621 | 14.2209770 | -1.3194552 | .0011631 | .0004042 | .0007660 |
| 117 | 6 | 12.8491669 | 10.2844831 | -1.3408522 | .0009153 | .0000904 | .0012358 |
| | 7 | 7.1663902 | 13.5043346 | -1.3941989 | .0011525 | .0001859 | .0012345 |
| | 8 | .6309863 | 14.4346779 | -1.4057840 | .0012278 | .0002542 | .0009020 |
| 118 | 6 | 12.8476882 | 10.4570753 | -1.3614921 | .0009420 | .0000740 | .0013074 |
| | 7 | 7.1649837 | 13.6753849 | -1.4268111 | .0011610 | .0001643 | .0012932 |
| | 8 | .6296265 | 14.5593040 | -1.4463770 | .0012228 | .0002247 | .0009451 |
| 119 | 6 | 12.8461749 | 10.6338813 | -1.3598642 | .0009800 | .0000039 | .0012904 |
| | 7 | 7.1635711 | 13.8512236 | -1.4374714 | .0012051 | .0001063 | .0012965 |
| | 8 | .6282940 | 14.6889717 | -1.4651890 | .0012668 | .0001781 | .0009671 |
| 120 | 6 | 12.8435462 | 10.9534179 | -1.3368456 | .0008959 | -.0001471 | .0014168 |
| | 7 | 7.1674867 | 14.1742385 | -1.4673779 | .0011542 | .0001611 | .0014246 |
| | 8 | .6397869 | 14.9295191 | -1.5445641 | .0012532 | .0004729 | .0010834 |
| 121 | 6 | 10.6973917 | 8.1911347 | -.4030306 | -.0014297 | .0006974 | .0010573 |
| | 7 | 5.6181338 | 10.5567595 | -.3001432 | -.0022465 | .0005863 | .0010234 |
| | 8 | -.0547776 | 11.2918051 | -.3367170 | -.0026579 | .0003724 | .0007076 |
| 122 | 6 | 10.6956482 | 8.1407390 | -.8916825 | -.0071585 | .0089428 | -.0006273 |
| | 7 | 5.6171795 | 10.4806849 | -1.0397631 | -.0094187 | .0049185 | .0002071 |
| | 8 | -.0547518 | 11.2147738 | -1.0841900 | -.0101621 | .0001457 | .0007516 |
| 123 | 6 | 10.1143571 | 8.3807836 | -1.4239352 | .0000985 | -.0006743 | .0011033 |
| | 7 | 5.1220755 | 10.7366198 | -1.4453614 | .0003834 | -.0002668 | .0010092 |
| | 8 | -.3475982 | 11.4169329 | -1.4045161 | .0006300 | .0002022 | .0006564 |
| 124 | 6 | 10.1311217 | 8.6291065 | -.9951680 | .0005374 | -.0009630 | .0012115 |
| | 7 | 5.1454760 | 10.9775985 | -1.1955507 | .0007488 | -.0006752 | .0011625 |
| | 8 | -.3214300 | 11.5887461 | -1.3727767 | .0008752 | -.0002944 | .0008346 |
| 125 | 6 | 10.6572787 | 8.5071765 | -.5441460 | -.0020322 | .0002227 | .0011669 |
| | 7 | 5.5941765 | 10.8601992 | -.4410704 | -.0028963 | .0002183 | .0010692 |
| | 8 | -.0586886 | 11.5062942 | -.4579374 | -.0032371 | .0001933 | .0007043 |
| 126 | 6 | 12.8420519 | 11.1544733 | -1.3244540 | .0006526 | -.0001384 | .0016602 |
| | 7 | 7.1672221 | 14.3715509 | -1.4949826 | .0009077 | .0002027 | .0016205 |
| | 8 | .6409066 | 15.0765423 | -1.6129228 | .0010655 | .0005508 | .0011814 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|-----------|
| | | X | Y | Z | X | Y | Z |
| 127 | 6 | 12.8405848 | 11.3222999 | -1.3075128 | .0008864 | .0000333 | .0009238 |
| | 7 | 7.1669463 | 14.5382511 | -1.5196945 | .0010858 | .0003654 | .0009788 |
| | 8 | .6419692 | 15.1970837 | -1.6801949 | .0011436 | .0007014 | .0007289 |
| 128 | 6 | 12.1609950 | 9.7385078 | -.9206064 | .0009774 | -.0002215 | .0013763 |
| | 7 | 6.4820665 | 12.9461853 | -.7167728 | .0011671 | .0001034 | .0013468 |
| | 8 | .1333170 | 14.0135491 | -.5580722 | .0011846 | .0004324 | .0009153 |
| 129 | 6 | 12.1610443 | 9.8313800 | -.8981303 | .0006558 | -.0002131 | .0006581 |
| | 7 | 6.4810074 | 13.0441313 | -.7348268 | .0008753 | .0001191 | .0007316 |
| | 8 | .1309381 | 14.0658240 | -.6174909 | .0010045 | .0004576 | .0006024 |
| 130 | 6 | 12.1611378 | 9.9448410 | -.8699534 | .0008100 | -.0001495 | .0014866 |
| | 7 | 6.4799585 | 13.1636212 | -.7456125 | .0010759 | .0001511 | .0014660 |
| | 8 | .1285294 | 14.1828768 | -.6679168 | .0011977 | .0004557 | .0011026 |
| 131 | 6 | 10.6231254 | 8.7856461 | -.6851410 | -.0014063 | .0012562 | .0010297 |
| | 7 | 5.5729432 | 11.1269897 | -.5254724 | -.0021843 | .0008669 | .0011275 |
| | 8 | -.0634365 | 11.6909922 | -.4707249 | -.0025479 | .0003034 | .0009039 |
| 132 | 6 | 10.6214112 | 8.7581639 | -.9445197 | -.0074366 | .0088894 | -.0004418 |
| | 7 | 5.5720116 | 11.0671040 | -1.1029234 | -.0096579 | .0048603 | .0003123 |
| | 8 | -.0634133 | 11.6213674 | -1.1438056 | -.0103087 | .0001251 | .0007990 |
| 133 | 6 | 12.1698430 | 10.3228242 | -.8578070 | .0009656 | .0000361 | .0011999 |
| | 7 | 6.4827100 | 13.5353295 | -.7862145 | .0011781 | .0001432 | .0012237 |
| | 8 | .1244336 | 14.4552553 | -.7589199 | .0012155 | .0002291 | .0009240 |
| 134 | 6 | 12.1679072 | 10.4710764 | -.8689337 | .0009050 | -.0000073 | .0010488 |
| | 7 | 6.4808494 | 13.6901553 | -.8103358 | .0011172 | .0000901 | .0011089 |
| | 8 | .1226036 | 14.5747379 | -.7932734 | .0011732 | .0001678 | .0008630 |
| 135 | 6 | 10.5729125 | 9.2336100 | -.9149680 | -.0016959 | .0002169 | .0010841 |
| | 7 | 5.5444728 | 11.5873077 | -.7080333 | -.0024524 | .0001769 | .0010386 |
| | 8 | -.0643130 | 12.0405134 | -.5805008 | -.0027576 | .0001243 | .0007238 |
| 136 | 6 | 12.1659409 | 10.6162932 | -.8550048 | .0008418 | -.0000974 | .0011654 |
| | 7 | 6.4789945 | 13.8424447 | -.8093282 | .0010929 | .0000054 | .0011943 |
| | 8 | .1208200 | 14.6918857 | -.8025149 | .0011928 | .0000905 | .0008961 |
| 137 | 6 | 12.1625193 | 10.9663640 | -.8107387 | .0010918 | -.0002307 | .0011434 |
| | 7 | 6.4819532 | 14.1810885 | -.8164990 | .0012795 | .0000675 | .0011266 |
| | 8 | .1309840 | 14.9295881 | -.8601147 | .0012784 | .0003746 | .0007919 |
| 138 | 6 | 12.1602911 | 11.0422599 | -.7852537 | .0011697 | -.0002562 | .0005911 |
| | 7 | 6.4812454 | 14.2765180 | -.8294214 | .0012883 | .0000725 | .0008150 |
| | 8 | .1320275 | 15.0190802 | -.9130025 | .0011491 | .0004157 | .0008525 |
| 139 | 6 | 12.1581020 | 11.1634776 | -.7536425 | .0007792 | -.0000867 | .0017819 |
| | 7 | 6.4805435 | 14.4138988 | -.8381066 | .0010390 | .0002372 | .0016766 |
| | 8 | .1330393 | 15.1412956 | -.9638489 | .0011705 | .0005749 | .0011331 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (in) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|-----------|
| | | X | Y | Z | X | Y | Z |
| 140 | 6 | 12.8402240 | 10.1049015 | -1.3419470 | .0008231 | -.0000899 | .0010844 |
| | 7 | 7.1673967 | 13.3139017 | -1.3784386 | .0010600 | .0001392 | .0011469 |
| | 8 | .6424957 | 14.2828059 | -1.3759879 | .0011384 | .0003663 | .0008806 |
| 141 | 6 | 10.5177619 | 9.4153244 | -1.1424713 | -.0020140 | .0015266 | -.0002749 |
| | 7 | 5.5132028 | 11.7753680 | -.8063768 | -.0027470 | .0007174 | -.0000163 |
| | 8 | -.0652758 | 12.1730315 | -.5276935 | -.0029880 | -.0002454 | .0001376 |
| 142 | 6 | 10.4354157 | 9.4946328 | -.3296481 | -.0078794 | .0083873 | -.0030465 |
| | 7 | 5.5156952 | 11.7701062 | -.8405450 | -.0100871 | .0043680 | -.0024479 |
| | 8 | .0076975 | 12.0980432 | -1.2624293 | -.0106050 | -.0002120 | -.0015297 |
| 143 | 6 | 9.9604718 | 8.3877851 | -1.2774965 | .0012779 | -.0005181 | .0009599 |
| | 7 | 4.9686540 | 10.7401191 | -1.2207297 | .0018327 | -.0002722 | .0009339 |
| | 8 | -.4593705 | 11.4164831 | -1.1331837 | .0021298 | .0000407 | .0006619 |
| 144 | 6 | 9.9606901 | 8.6223429 | -.8032412 | .0014650 | -.0006625 | .0010794 |
| | 7 | 4.9687168 | 10.9745798 | -.9220153 | .0020839 | -.0004444 | .0010999 |
| | 8 | -.4594383 | 11.5898650 | -1.0560015 | .0024032 | -.0001786 | .0008446 |
| 145 | 6 | 10.1163322 | 7.9625613 | -.3732193 | -.0008046 | .0007091 | .0011172 |
| | 7 | 5.0452094 | 9.7488433 | -.5115450 | -.0010966 | .0001792 | .0010822 |
| | 8 | -.4762193 | 10.7110504 | -.7262491 | -.0011594 | -.0005140 | .0007822 |
| 146 | 6 | 9.9629417 | 8.8249669 | -1.0957187 | -.0008034 | .0025784 | .0009587 |
| | 7 | 4.9698565 | 11.1956146 | -1.0985054 | -.0009986 | .0016014 | .0009647 |
| | 8 | -.4595487 | 11.7776637 | -1.0829555 | -.0009856 | .0004198 | .0007272 |
| 147 | 6 | 12.1625391 | 10.1049915 | -.8636286 | .0009705 | -.0000949 | .0015962 |
| | 7 | 6.4853004 | 13.3140838 | -.7734196 | .0012014 | .0001365 | .0015310 |
| | 8 | .1373352 | 14.2833518 | -.7299850 | .0012691 | .0003659 | .0010760 |
| 148 | 6 | 10.1185591 | 9.4789531 | -1.6202184 | -.0008215 | .0022841 | .0008376 |
| | 7 | 5.0436546 | 11.8585469 | -1.5004849 | -.0011250 | .0016639 | .0008693 |
| | 8 | -.4796405 | 12.2625209 | -1.2933408 | -.0011942 | .0008915 | .0006691 |
| 149 | 6 | 12.8411306 | 10.7722763 | -1.3624654 | .0009212 | -.0001009 | .0011054 |
| | 7 | 7.1687456 | 13.9871876 | -1.4582231 | .0011483 | .0001329 | .0011571 |
| | 8 | .6440814 | 14.7824743 | -1.5005892 | .0012066 | .0003603 | .0008835 |
| 150 | 6 | 12.1599911 | 10.7732646 | -.8439653 | .0009897 | -.0001621 | .0016015 |
| | 7 | 6.4832468 | 13.9879808 | -.8161127 | .0012235 | .0000722 | .0015047 |
| | 8 | .1356092 | 14.7829279 | -.8253685 | .0012923 | .0003053 | .0010271 |
| 151 | 6 | 9.3953984 | 7.3090256 | -.8590730 | -.0014941 | .0017274 | .0022190 |
| | 7 | 4.4043806 | 9.6781954 | -1.2084677 | -.0022181 | .0009385 | .0019708 |
| | 8 | -.8852559 | 10.6353417 | -1.4943329 | -.0024986 | .0000266 | .0012956 |
| 152 | 6 | 9.4354832 | 7.2662121 | -.4398281 | -.0059175 | .0076366 | .0065789 |
| | 7 | 4.5304453 | 9.5498242 | .0682125 | -.0083386 | .0036141 | .0060192 |
| | 8 | -.6876805 | 10.4362194 | .4934569 | -.0094209 | -.0008538 | .0040240 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|----------|
| | | X | Y | Z | X | Y | Z |
| 153 | 6 | 12.5037135 | 9.8260530 | -1.2655347 | .0009143 | -.0002297 | .0011350 |
| | 7 | 6.8237668 | 13.0393526 | -1.1673248 | .0011526 | .0000897 | .0011367 |
| | 8 | .3828044 | 14.0895129 | -1.0709664 | .0012260 | .0004211 | .0008365 |
| 154 | 6 | 12.5043575 | 10.4647269 | -1.2458392 | .0009133 | .0000168 | .0011887 |
| | 7 | 6.8228809 | 13.6832274 | -1.2491469 | .0011449 | .0001057 | .0012109 |
| | 8 | .3798555 | 14.5672081 | -1.2504677 | .0012144 | .0001685 | .0009119 |
| 155 | 6 | 9.9626875 | 8.2735142 | -.9696490 | -.0008037 | .0025970 | .0010178 |
| | 7 | 4.9697733 | 10.6445018 | -1.0148326 | -.0009954 | .0016541 | .0010056 |
| | 8 | -.4594941 | 11.3701505 | -1.0549624 | -.0009836 | .0005199 | .0007352 |
| 156 | 6 | 12.5037696 | 11.0975522 | -1.1869183 | .0010112 | -.0001111 | .0011703 |
| | 7 | 6.8242348 | 14.3201190 | -1.2937024 | .0012439 | .0002151 | .0012155 |
| | 8 | .3833649 | 15.0381018 | -1.3937815 | .0013049 | .0005501 | .0009518 |
| 159 | 6 | 9.4477132 | 7.9293313 | -1.1601212 | -.0015765 | .0001687 | .0009641 |
| | 7 | 4.4291685 | 10.2909116 | -1.3974453 | -.0022334 | .0001796 | .0009956 |
| | 8 | -.8901995 | 11.0900174 | -1.5429869 | -.0024606 | .0001398 | .0007673 |
| 161 | 6 | 9.4953440 | 8.2364735 | -1.3801415 | -.0016516 | .0016573 | .0010504 |
| | 7 | 4.4517371 | 10.5806436 | -1.5828149 | -.0022473 | .0012746 | .0009453 |
| | 8 | -.8947005 | 11.2899810 | -1.6615393 | -.0024261 | .0007390 | .0006136 |
| 162 | 6 | 9.4938935 | 8.0752541 | .2114965 | -.0070594 | .0079292 | .0050554 |
| | 7 | 4.4510611 | 10.3839672 | .3578566 | -.0093804 | .0037887 | .0039032 |
| | 8 | -.8945295 | 11.0804651 | .4058332 | -.0100926 | -.0007731 | .0018652 |
| 163 | 6 | 9.7943370 | 8.3947343 | -1.0966283 | .0005872 | -.0008950 | .0008209 |
| | 7 | 4.8095959 | 10.7435425 | -.9673602 | .0007677 | -.0006229 | .0008648 |
| | 8 | -.5703516 | 11.4159468 | -.8401325 | .0008819 | -.0002239 | .0006695 |
| 164 | 6 | 9.7779053 | 8.6155207 | -.6144702 | .0003558 | -.0009147 | .0009234 |
| | 7 | 4.7866682 | 10.9714782 | -.6460783 | .0006768 | -.0005563 | .0010100 |
| | 8 | -.5959297 | 11.5908931 | -.7304589 | .0009385 | -.0001289 | .0008365 |
| 165 | 6 | 9.5300540 | 8.5071624 | -1.5656645 | -.0023928 | .0001770 | .0008287 |
| | 7 | 4.4718364 | 10.8604373 | -1.7107304 | -.0031322 | .0001595 | .0009267 |
| | 8 | -.6913460 | 11.5067361 | -1.7152606 | -.0033096 | .0001025 | .0007719 |
| 171 | 6 | 9.5709966 | 8.7408468 | -1.6994023 | -.0020531 | .0008617 | .0011230 |
| | 7 | 4.4951247 | 11.1088542 | -1.8410390 | -.0027012 | .0007346 | .0011496 |
| | 8 | -.8886044 | 11.7021563 | -1.8168618 | -.0028539 | .0004943 | .0009073 |
| 172 | 6 | 9.5695448 | 8.5450193 | .2363798 | -.0076320 | .0078694 | .0054447 |
| | 7 | 4.4944490 | 10.8852850 | .3670804 | -.0099542 | .0037634 | .0040361 |
| | 8 | -.8884374 | 11.4780936 | .3952151 | -.0105472 | -.0007589 | .0017847 |
| 175 | 6 | 9.6037797 | 9.1165926 | -1.9438066 | -.0019098 | .0004558 | .0008608 |
| | 7 | 4.5159927 | 11.5285692 | -2.0292873 | -.0024957 | .0002831 | .0009365 |
| | 8 | -.8827001 | 12.0632281 | -1.9224479 | -.0026214 | .0000605 | .0007533 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|-----------|
| | | X | Y | Z | X | Y | Z |
| 181 | 6 | 9.6397844 | 9.4178721 | -2.1435078 | -.0017524 | .0008658 | .0008093 |
| | 7 | 4.5389128 | 11.7805657 | -2.1587302 | -.0022701 | .0006975 | .0004938 |
| | 8 | -.8762152 | 12.1801332 | -1.9556934 | -.0023660 | .0004283 | -.0000043 |
| 182 | 6 | 9.3418164 | 9.1198765 | .8429184 | -.0084605 | .0077006 | .0055769 |
| | 7 | 4.2624615 | 11.5029851 | .6183683 | -.0105334 | .0035578 | .0034340 |
| | 8 | -1.0974182 | 11.9569000 | .2732446 | -.0106516 | -.0008410 | -.0000288 |
| 199 | 6 | 9.9050061 | 8.4824192 | -1.0592395 | .0013404 | -.0021513 | .0010202 |
| | 7 | 4.9416964 | 10.8272953 | -1.0908661 | .0019290 | -.0013555 | .0010186 |
| | 8 | -.4546526 | 11.4707254 | -1.1151666 | .0022426 | -.0003499 | .0007540 |
| 200 | 6 | 9.9034176 | 8.4810286 | -.0920438 | -.0067769 | .0081282 | .0000000 |
| | 7 | 4.9409097 | 10.8254834 | -.0920438 | -.0088671 | .0042707 | .0000000 |
| | 8 | -.4545298 | 11.4687944 | -.0920438 | -.0094833 | -.0001283 | .0000000 |
| 201 | 6 | 11.9055788 | 9.7596302 | -1.0247595 | -.0009150 | .0009784 | .0009567 |
| | 7 | 6.0614140 | 12.6892450 | -1.0717192 | -.0012560 | .0004460 | .0012039 |
| | 8 | -.3328742 | 13.5894984 | -1.1037615 | -.0013518 | -.0001116 | .0011213 |
| 202 | 6 | 12.0503531 | 9.7520641 | -.6937558 | -.0010968 | .0008383 | .0001789 |
| | 7 | 6.4226060 | 12.6747905 | -.6086117 | -.0015467 | .0004499 | .0006726 |
| | 8 | .0817749 | 13.5706815 | -.6070414 | -.0016931 | -.0000396 | .0007825 |
| 203 | 6 | 11.8289585 | 10.1641992 | -.8761400 | -.0014159 | .0004208 | .0000711 |
| | 7 | 6.2074707 | 13.0527593 | -.7583481 | -.0019022 | .0000050 | .0006537 |
| | 8 | -.0965541 | 13.7960560 | -.7017557 | -.0020192 | -.0004570 | .0008370 |
| 204 | 6 | 11.8118098 | 10.1477320 | -1.3876793 | -.0008739 | .0008460 | .0006127 |
| | 7 | 5.9254913 | 13.0350126 | -1.4530331 | -.0011928 | .0001913 | .0007844 |
| | 8 | -.4541194 | 13.7802269 | -1.4373632 | -.0012804 | -.0004381 | .0006741 |
| 205 | 6 | 12.0909563 | 9.8044583 | -.7030013 | -.0009907 | .0007949 | .0001643 |
| | 7 | 6.4415639 | 12.7482595 | -.6216769 | -.0013887 | .0004429 | .0006804 |
| | 8 | .0757805 | 13.6507113 | -.6215510 | -.0015102 | -.0000155 | .0008042 |
| 206 | 6 | 11.8502809 | 10.2415120 | -.8823878 | -.0015326 | .0004330 | .0000426 |
| | 7 | 6.2049980 | 13.1553368 | -.7699562 | -.0020399 | .0000450 | .0006488 |
| | 8 | -.1234373 | 13.9041216 | -.7165422 | -.0021542 | -.0004014 | .0008527 |
| 207 | 6 | 10.8731369 | 9.6897679 | -1.1777953 | -.0014621 | .0005680 | .0021788 |
| | 7 | 5.2446296 | 12.6224514 | -1.3198238 | -.0019268 | .0001867 | .0015955 |
| | 8 | -.8246652 | 13.5317429 | -1.3863852 | -.0020239 | -.0002464 | .0007621 |
| 208 | 6 | 11.0174488 | 10.3341999 | -1.3687521 | -.0011941 | .0007935 | .0022107 |
| | 7 | 5.3454929 | 13.2541401 | -1.4851875 | -.0017161 | .0003881 | .0017233 |
| | 8 | -.7781981 | 13.9966346 | -1.4983738 | -.0018876 | -.0000936 | .0009893 |
| 211 | 6 | 11.8370034 | 8.2873410 | -.1981743 | -.0008137 | .0016431 | .0010063 |
| | 7 | 6.3182050 | 11.0203916 | -.1611235 | -.0011829 | .0010622 | .0015880 |
| | 8 | .0967560 | 12.0839647 | -.2823779 | -.0012882 | .0003157 | .0018127 |

* * * Joint Deflection Report * * *

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|-----------|
| | | X | Y | Z | X | Y | Z |
| 212 | 6 | 11.6947946 | 8.1449409 | -1.6365138 | .0004139 | -.0011869 | .0010211 |
| | 7 | 6.1932583 | 10.8957043 | -1.4227250 | .0006486 | -.0003509 | .0017587 |
| | 8 | .0172980 | 12.0051837 | -1.0825205 | .0008552 | .0005328 | .0020351 |
| 221 | 6 | 11.7715445 | 9.3465946 | -.6275008 | -.0012241 | .0009423 | .0003077 |
| | 7 | 6.2820314 | 12.1138845 | -.5157066 | -.0015507 | .0006197 | .0006008 |
| | 8 | .0958383 | 12.9632658 | -.5041847 | -.0015524 | .0002203 | .0005801 |
| 222 | 6 | 11.7721883 | 9.3067198 | -1.0292414 | .0004633 | -.0013166 | .0003986 |
| | 7 | 6.2823732 | 12.0475930 | -1.1817451 | .0005503 | -.0004949 | .0007485 |
| | 8 | .0958282 | 12.8915095 | -1.2251159 | .0006168 | .0003610 | .0007300 |
| 223 | 6 | 11.5966418 | 9.4819509 | -1.1644218 | .0004786 | .0005269 | .0010489 |
| | 7 | 6.0637933 | 12.2491610 | -1.1716294 | .0004789 | .0006165 | .0010714 |
| | 8 | -.0934057 | 13.0592568 | -1.1554640 | .0004268 | .0006537 | .0008101 |
| 224 | 6 | 11.5900978 | 9.7168193 | -1.1825538 | .0003227 | -.0000910 | .0010339 |
| | 7 | 6.0557717 | 12.4863439 | -1.2294458 | .0002485 | -.0000372 | .0010346 |
| | 8 | -.1016898 | 13.2362928 | -1.2469494 | .0001825 | -.0000111 | .0007652 |
| 225 | 6 | 11.7634070 | 9.5983442 | -.8615056 | -.0015015 | .0002905 | .0007324 |
| | 7 | 6.2721606 | 12.3665221 | -.7461354 | -.0020571 | .0003353 | .0007206 |
| | 8 | .0866850 | 13.1465275 | -.6973026 | -.0022103 | .0003297 | .0005069 |
| 231 | 6 | 11.7333100 | 9.7938918 | -.8449853 | -.0010307 | .0001539 | .0003296 |
| | 7 | 6.2458808 | 12.5515093 | -.6963656 | -.0013767 | -.0000739 | .0006969 |
| | 8 | .0689265 | 13.2632723 | -.6206192 | -.0014309 | -.0002918 | .0007084 |
| 232 | 6 | 11.7339442 | 9.7725241 | -1.0632342 | .0007537 | -.0012012 | .0005673 |
| | 7 | 6.2462185 | 12.4982633 | -1.2332064 | .0007863 | -.0004322 | .0008415 |
| | 8 | .0689211 | 13.1974920 | -1.2825434 | .0007588 | .0003569 | .0007758 |
| 241 | 6 | 11.4180786 | 10.4783912 | -1.1559826 | -.0002448 | .0006332 | -.0010581 |
| | 7 | 5.9762735 | 13.2491713 | -.9091307 | -.0006423 | .0004617 | -.0005769 |
| | 8 | -.1157804 | 13.7814255 | -.6992423 | -.0007977 | .0002546 | -.0001445 |
| 242 | 6 | 11.3531447 | 10.5445283 | -.4962256 | .0011080 | -.0016935 | -.0011397 |
| | 7 | 5.9871441 | 13.2393442 | -1.0154986 | .0011022 | -.0009408 | -.0007981 |
| | 8 | -.0422954 | 13.7086697 | -1.4393645 | .0009697 | -.0001111 | -.0003823 |
| 243 | 6 | 11.4113527 | 9.4731752 | -1.0257941 | .0010619 | .0005078 | .0011137 |
| | 7 | 5.8753155 | 12.2413811 | -1.0182217 | .0011923 | .0005932 | .0011218 |
| | 8 | -.2363615 | 13.0537097 | -1.0064964 | .0011775 | .0006276 | .0008458 |
| 244 | 6 | 11.4097967 | 9.7255017 | -1.0884217 | .0006739 | -.0000117 | .0010680 |
| | 7 | 5.8749742 | 12.4938108 | -1.1386073 | .0006763 | .0000889 | .0010684 |
| | 8 | -.2356903 | 13.2412773 | -1.1658905 | .0006161 | .0001145 | .0007908 |
| 251 | 6 | 10.4297557 | 8.3945927 | -.8530968 | -.0009403 | .0002652 | .0030047 |
| | 7 | 5.0146596 | 11.1696427 | -1.1148439 | -.0013456 | .0001346 | .0025730 |
| | 8 | -.7988964 | 12.2478655 | -1.3323791 | -.0015325 | -.0000671 | .0016146 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|-----------|
| | | X | Y | Z | X | Y | Z |
| 252 | 6 | 10.4643187 | 8.3610443 | -.5113831 | .0009091 | -.0015735 | .0049752 |
| | 7 | 5.1259768 | 11.0591997 | .0025776 | .0009917 | -.0008006 | .0046447 |
| | 8 | -.6240200 | 12.0735913 | .4283055 | .0009468 | .0001143 | .0030841 |
| 253 | 6 | 11.5215150 | 9.2928524 | -.9345514 | -.0008009 | .0013263 | .0011216 |
| | 7 | 5.9775470 | 12.0572042 | -.9501306 | -.0012051 | .0004196 | .0010763 |
| | 8 | -.1631519 | 12.9118463 | -.9734798 | -.0013474 | -.0003896 | .0008045 |
| 254 | 6 | 11.4097755 | 9.2803971 | -.9746416 | -.0002153 | .0010028 | .0012826 |
| | 7 | 5.8737984 | 12.0439759 | -1.0210577 | -.0005093 | .0002491 | .0012191 |
| | 8 | -.2375614 | 12.8997830 | -1.0562782 | -.0006331 | -.0004238 | .0008825 |
| 255 | 6 | 11.4081539 | 9.8739607 | -.9288832 | -.0003846 | -.0003082 | .0009826 |
| | 7 | 5.8734865 | 12.6377218 | -.9601981 | -.0006856 | -.0005653 | .0009658 |
| | 8 | -.2367608 | 13.3409170 | -.9558301 | -.0008190 | -.0008632 | .0007019 |
| 261 | 6 | 10.6838776 | 9.1982330 | -1.2173922 | -.0010100 | -.0000013 | .0017145 |
| | 7 | 5.1947284 | 11.9551631 | -1.4152932 | -.0015007 | -.0001708 | .0014725 |
| | 8 | -.7150298 | 12.8176798 | -1.5197069 | -.0017026 | -.0003504 | .0009533 |
| 262 | 6 | 10.6844560 | 9.0666748 | .0963117 | .0007668 | -.0013286 | .0041297 |
| | 7 | 5.1949982 | 11.7878792 | .2553983 | .0008383 | -.0004801 | .0034763 |
| | 8 | -.7150987 | 12.6343387 | .3111730 | .0008215 | .0004109 | .0019836 |
| 263 | 6 | 11.2292981 | 9.4643921 | -.8589187 | .0007519 | .0005763 | .0011639 |
| | 7 | 5.6938430 | 12.2335920 | -.8359021 | .0007590 | .0006968 | .0011584 |
| | 8 | -.3718774 | 13.0481527 | -.8280040 | .0007149 | .0007542 | .0008648 |
| 264 | 6 | 11.2354716 | 9.7341795 | -.9925723 | .0003800 | .0002979 | .0011232 |
| | 7 | 5.7015063 | 12.5012669 | -1.0468568 | .0002976 | .0004717 | .0011139 |
| | 8 | -.3640036 | 13.2462491 | -1.0858121 | .0002122 | .0005276 | .0008254 |
| 265 | 6 | 10.7059512 | 9.5982104 | -1.2483738 | -.0015574 | .0005929 | .0014659 |
| | 7 | 5.2097772 | 12.3661805 | -1.4160883 | -.0021510 | .0006502 | .0014601 |
| | 8 | -.7086344 | 13.1459485 | -1.4902610 | -.0023575 | .0006207 | .0011057 |
| 271 | 6 | 10.7072379 | 9.9415434 | -1.4642134 | -.0009869 | .0003978 | .0019826 |
| | 7 | 5.2090932 | 12.7083678 | -1.6221252 | -.0012633 | .0000586 | .0017236 |
| | 8 | -.7109716 | 13.4021496 | -1.6522350 | -.0013230 | -.0003229 | .0011803 |
| 272 | 6 | 10.7078244 | 9.7809726 | .1381121 | .0006321 | -.0014429 | .0045134 |
| | 7 | 5.2093674 | 12.5184226 | .2739918 | .0007453 | -.0005339 | .0036064 |
| | 8 | -.7110396 | 13.2064631 | .3014162 | .0007796 | .0004154 | .0019022 |
| 281 | 6 | 10.7615247 | 10.3591914 | -1.8364394 | -.0011253 | .0012934 | .0015450 |
| | 7 | 5.2301357 | 13.0899288 | -1.9005325 | -.0015041 | .0007156 | .0008858 |
| | 8 | -.7253315 | 13.6104201 | -1.7898561 | -.0015979 | .0000200 | -.0000004 |
| 282 | 6 | 10.5090796 | 10.1067726 | .7104307 | .0005450 | -.0015461 | .0055528 |
| | 7 | 4.9926148 | 12.8529018 | .4929141 | .0008210 | -.0005596 | .0041578 |
| | 8 | -.9181999 | 13.4184030 | .1506677 | .0010566 | .0005000 | .0012761 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (in) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|-----------|
| | | X | Y | Z | X | Y | Z |
| 299 | 6 | 11.4500899 | 9.6130289 | -1.0858717 | .0008810 | .0002924 | .0010937 |
| | 7 | 5.9021177 | 12.3851679 | -1.1069917 | .0009510 | .0005511 | .0010964 |
| | 8 | -.2266163 | 13.1662156 | -1.1149927 | .0009133 | .0007274 | .0008171 |
| 300 | 6 | 11.4510794 | 9.6139714 | -.1003241 | .0003330 | -.0001621 | .0000000 |
| | 7 | 5.9026177 | 12.3863882 | -.1003241 | .0002727 | .0002160 | .0000000 |
| | 8 | -.2266709 | 13.1675242 | -.1003241 | .0002296 | .0005089 | .0000000 |
| 301 | 6 | 12.5738186 | 10.2178123 | -1.0686532 | -.0005854 | .0015612 | .0009223 |
| | 7 | 6.4837811 | 13.3287411 | -1.1316055 | -.0008487 | .0012091 | .0011902 |
| | 8 | -.1891020 | 14.2765266 | -1.1668633 | -.0009317 | .0007160 | .0010865 |
| 302 | 6 | 12.6058155 | 10.2254118 | -.8429864 | -.0009351 | .0013104 | -.0001440 |
| | 7 | 6.8073324 | 13.3424827 | -.7888038 | -.0013302 | .0011265 | .0005255 |
| | 8 | .2288697 | 14.2941003 | -.7850266 | -.0014528 | .0007104 | .0007599 |
| 303 | 6 | 12.4269535 | 10.9914555 | -1.0020965 | -.0009315 | .0018588 | -.0003110 |
| | 7 | 6.6278165 | 14.1889505 | -.9531883 | -.0013756 | .0017250 | .0003891 |
| | 8 | .0752763 | 15.0191909 | -.9290451 | -.0015395 | .0012940 | .0006932 |
| 304 | 6 | 12.5911238 | 11.0043684 | -1.1958607 | -.0006244 | .0012844 | .0000967 |
| | 7 | 6.5174717 | 14.2044520 | -1.2634373 | -.0009431 | .0012719 | .0004990 |
| | 8 | -.1625450 | 15.0345648 | -1.2854085 | -.0010626 | .0009791 | .0005946 |
| 311 | 6 | 12.2765225 | 9.0388292 | -.4625283 | -.0007068 | .0003303 | .0008653 |
| | 7 | 6.5846863 | 12.0752372 | -.4198783 | -.0008626 | .0004298 | .0016988 |
| | 8 | .1458159 | 13.2310117 | -.4888908 | -.0007881 | .0004399 | .0021890 |
| 312 | 6 | 11.9197793 | 8.7145914 | -1.5655349 | -.0015237 | .0014933 | .0009468 |
| | 7 | 6.4197119 | 11.6315662 | -1.3916289 | -.0019860 | .0010652 | .0018805 |
| | 8 | .2111370 | 12.7451618 | -1.1130759 | -.0020867 | .0004431 | .0023382 |
| 321 | 6 | 12.2710052 | 10.0024474 | -.7429451 | -.0006240 | .0006593 | .0000847 |
| | 7 | 6.5460727 | 13.0297645 | -.6786735 | -.0009458 | .0005593 | .0007133 |
| | 8 | .0852500 | 13.9568046 | -.6849842 | -.0010603 | .0003342 | .0009013 |
| 322 | 6 | 11.9671639 | 9.7223893 | -1.0951486 | -.0013688 | .0014786 | .0001191 |
| | 7 | 6.4770778 | 12.6398511 | -1.2168760 | -.0018943 | .0009739 | .0006016 |
| | 8 | .2540173 | 13.5307911 | -1.2486018 | -.0020632 | .0002889 | .0007373 |
| 331 | 6 | 11.9861667 | 10.6246511 | -.9129907 | -.0010839 | .0006888 | -.0001125 |
| | 7 | 6.2533588 | 13.6698207 | -.8281194 | -.0015565 | .0005727 | .0006032 |
| | 8 | -.1761881 | 14.4496457 | -.7911629 | -.0017093 | .0003219 | .0008990 |
| 332 | 6 | 11.9582290 | 10.2175947 | -1.1270819 | -.0016499 | .0014851 | .0002987 |
| | 7 | 6.4602298 | 13.1502307 | -1.2768561 | -.0022237 | .0009760 | .0007007 |
| | 8 | .2322318 | 13.9165055 | -1.3246938 | -.0023834 | .0002926 | .0007822 |
| 341 | 6 | 12.0985831 | 11.3183726 | -1.1750587 | -.0012327 | .0008138 | -.0019104 |
| | 7 | 6.3757091 | 14.3713506 | -1.0771881 | -.0017242 | .0004395 | -.0012972 |
| | 8 | -.0667377 | 14.9542036 | -.9848429 | -.0019012 | -.0000564 | -.0006217 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (in) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|-----------|
| | | X | Y | Z | X | Y | Z |
| 342 | 6 | 11.4723102 | 10.8613810 | -.7198644 | -.0013241 | .0013031 | -.0016826 |
| | 7 | 6.0603245 | 13.7431679 | -1.1563677 | -.0018696 | .0007423 | -.0012636 |
| | 8 | -.0462846 | 14.2921118 | -1.5086828 | -.0020581 | .0000570 | -.0007019 |
| 343 | 6 | 12.1949467 | 9.9961381 | -1.0465698 | -.0006270 | .0012020 | .0012798 |
| | 7 | 6.2115092 | 13.0236117 | -1.1021081 | -.0008733 | .0008593 | .0013467 |
| | 8 | -.3294070 | 13.9517416 | -1.1361143 | -.0009242 | .0004179 | .0011009 |
| 346 | 6 | 12.0663657 | 10.6366266 | -1.3487751 | -.0006020 | .0015002 | .0013420 |
| | 7 | 6.0523328 | 13.6851255 | -1.4796660 | -.0008013 | .0012226 | .0010031 |
| | 8 | -.4733972 | 14.4660073 | -1.5221165 | -.0008302 | .0007342 | .0005251 |
| 351 | 6 | 11.2414275 | 9.2747406 | -.8515061 | -.0007661 | .0009657 | .0039998 |
| | 7 | 5.5616309 | 12.3432734 | -.9630364 | -.0012324 | .0005679 | .0034216 |
| | 8 | -.6263615 | 13.4746258 | -1.0592375 | -.0014312 | .0000945 | .0021607 |
| 352 | 6 | 10.8066454 | 8.7843860 | -.6051313 | -.0009179 | .0011022 | .0054255 |
| | 7 | 5.4257180 | 11.6521392 | -.1769383 | -.0014657 | .0005304 | .0050235 |
| | 8 | -.4249927 | 12.6936766 | .1727149 | -.0017623 | -.0000883 | .0033347 |
| 361 | 6 | 11.1195679 | 9.9884011 | -1.1533422 | -.0007103 | .0009062 | .0024765 |
| | 7 | 5.4108298 | 13.0156956 | -1.2591916 | -.0009744 | .0008438 | .0017008 |
| | 8 | -.7663995 | 13.9448855 | -1.3007152 | -.0010500 | .0006574 | .0006916 |
| 362 | 6 | 11.0234567 | 9.4607304 | -.1511898 | -.0015829 | .0011014 | .0043727 |
| | 7 | 5.5284746 | 12.3854587 | -.0104806 | -.0021673 | .0006145 | .0035858 |
| | 8 | -.4595304 | 13.3026906 | .0425972 | -.0023415 | .0000488 | .0019474 |
| 371 | 6 | 11.2764541 | 10.6414530 | -1.2982984 | -.0011910 | .0007292 | .0023352 |
| | 7 | 5.5307298 | 13.6910694 | -1.3836857 | -.0016687 | .0006914 | .0017208 |
| | 8 | -.6981038 | 14.4722543 | -1.3847271 | -.0017992 | .0005331 | .0008895 |
| 372 | 6 | 11.0345362 | 10.1501356 | -.1221120 | -.0014334 | .0010875 | .0047665 |
| | 7 | 5.5395328 | 13.0643880 | -.0154524 | -.0019804 | .0006266 | .0037224 |
| | 8 | -.4507207 | 13.8041817 | .0032514 | -.0021423 | .0000777 | .0018684 |
| 381 | 6 | 11.2783031 | 11.0550386 | -1.5654523 | -.0011734 | .0005046 | .0019801 |
| | 7 | 5.5649341 | 14.1014330 | -1.6338389 | -.0013318 | .0006089 | .0010233 |
| | 8 | -.6383239 | 14.7404516 | -1.5748157 | -.0012401 | .0006259 | -.0002649 |
| 382 | 6 | 10.8344212 | 10.4668218 | .3111876 | -.0022128 | .0009604 | .0055276 |
| | 7 | 5.3347113 | 13.3899284 | .1326374 | -.0026236 | .0005785 | .0039271 |
| | 8 | -.6433646 | 14.0180109 | -.1465718 | -.0024641 | .0001785 | .0008919 |
| 411 | 6 | 12.8109141 | 9.6467966 | -.8446539 | -.0008739 | .0008343 | .0006332 |
| | 7 | 6.9797756 | 12.8519417 | -.7754995 | -.0011146 | .0006475 | .0017862 |
| | 8 | .3368591 | 14.0159909 | -.7541507 | -.0011452 | .0003411 | .0025238 |
| 412 | 6 | 12.7366434 | 9.5725396 | -1.5918683 | -.0009989 | .0011763 | .0009260 |
| | 7 | 6.9140881 | 12.7862108 | -1.4366364 | -.0012847 | .0006535 | .0018316 |
| | 8 | .2942249 | 13.9732611 | -1.1836069 | -.0013174 | .0003667 | .0022690 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|-----------|
| | | X | Y | Z | X | Y | Z |
| 421 | 6 | 12.8288869 | 10.4761106 | -.9415804 | -.0005996 | .0001455 | -.0001339 |
| | 7 | 6.9945713 | 13.7103948 | -.8987857 | -.0008318 | .0001640 | .0004573 |
| | 8 | .3462522 | 14.7033142 | -.8860337 | -.0008778 | .0001301 | .0006467 |
| 422 | 6 | 12.8288094 | 10.4513560 | -1.1876341 | -.0009709 | .0011518 | .0001518 |
| | 7 | 6.9945253 | 13.6705357 | -1.2949946 | -.0014019 | .0007378 | .0006252 |
| | 8 | .3462446 | 14.6595053 | -1.3214912 | -.0015377 | .0001836 | .0007478 |
| 423 | 6 | 12.6206989 | 10.7152143 | -1.1009600 | .0005796 | .0007869 | .0011366 |
| | 7 | 6.7397532 | 13.9779219 | -1.1162751 | .0007389 | .0009599 | .0012346 |
| | 8 | .1102492 | 14.9378172 | -1.1163003 | .0007826 | .0010243 | .0009944 |
| 424 | 6 | 12.6119254 | 10.9818014 | -1.2337105 | .0004167 | .0004032 | .0010902 |
| | 7 | 6.7288973 | 14.2561890 | -1.3045586 | .0005587 | .0005236 | .0011614 |
| | 8 | .0990147 | 15.1568535 | -1.3373005 | .0006491 | .0005524 | .0009116 |
| 425 | 6 | 12.8110107 | 10.8466020 | -1.0823321 | -.0007957 | .0002606 | .0014718 |
| | 7 | 6.9689580 | 14.1148753 | -1.0867932 | -.0011015 | .0003665 | .0014630 |
| | 8 | .3173368 | 15.0451576 | -1.0944826 | -.0011782 | .0004414 | .0011741 |
| 431 | 6 | 12.7780193 | 11.1323151 | -1.0675480 | -.0005838 | .0003684 | -.0000896 |
| | 7 | 6.9386543 | 14.4107392 | -1.0464449 | -.0008010 | .0002758 | .0004966 |
| | 8 | .2946238 | 15.2719631 | -1.0323656 | -.0008323 | .0000934 | .0007188 |
| 432 | 6 | 12.7779312 | 11.1157565 | -1.2318893 | -.0011987 | .0010270 | .0003445 |
| | 7 | 6.9385961 | 14.3774666 | -1.3769728 | -.0016838 | .0006032 | .0007380 |
| | 8 | .2946038 | 15.2323335 | -1.4261258 | -.0018139 | .0000607 | .0008054 |
| 441 | 6 | 12.4754345 | 11.5976563 | -1.1655304 | .0005836 | .0003595 | -.0023440 |
| | 7 | 6.6429632 | 14.8195484 | -1.1787211 | .0002085 | .0003335 | -.0016451 |
| | 8 | .0427876 | 15.4843147 | -1.1798901 | -.0000881 | .0002666 | -.0008302 |
| 442 | 6 | 12.4473243 | 11.6256188 | -.8834175 | -.0007387 | .0012573 | -.0016195 |
| | 7 | 6.6540206 | 14.8083674 | -1.2906252 | -.0012313 | .0007850 | -.0012041 |
| | 8 | .0862036 | 15.4408139 | -1.6172067 | -.0014189 | .0002078 | -.0006531 |
| 443 | 6 | 12.4185758 | 10.4871143 | -.9317162 | .0003282 | .0002144 | .0012913 |
| | 7 | 6.5347071 | 13.7401723 | -.9059883 | .0003324 | .0001630 | .0013217 |
| | 8 | -.0450604 | 14.7462095 | -.8971625 | .0003178 | .0000656 | .0010731 |
| 446 | 6 | 12.4188427 | 11.1333411 | -1.0658121 | .0002341 | -.0000146 | .0009573 |
| | 7 | 6.5348449 | 14.3985378 | -1.1262279 | .0001611 | -.0000059 | .0009884 |
| | 8 | -.0450745 | 15.2490719 | -1.1507898 | .0001045 | -.0000665 | .0007562 |
| 451 | 6 | 11.7293074 | 9.6490464 | -.8650037 | .0000761 | .0001339 | .0046789 |
| | 7 | 5.9157683 | 12.8493218 | -.8652093 | -.0002165 | .0000738 | .0040040 |
| | 8 | -.4584864 | 14.0077053 | -.8695129 | -.0004535 | -.0000043 | .0025381 |
| 452 | 6 | 11.7451610 | 9.6330745 | -.7049404 | -.0006099 | .0008175 | .0053662 |
| | 7 | 5.9712460 | 12.7937405 | -.3065274 | -.0010444 | .0003132 | .0049597 |
| | 8 | -.3702206 | 13.9193674 | .0189060 | -.0013174 | -.0002097 | .0032781 |

* * * Joint Deflection Report * * *

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|-----------|
| | | X | Y | Z | X | Y | Z |
| 461 | 6 | 11.8939625 | 10.4803939 | -.9715312 | -.0007560 | .0002625 | .0027799 |
| | 7 | 6.0466476 | 13.7471222 | -1.0054830 | -.0011183 | .0001263 | .0021783 |
| | 8 | -.3794383 | 14.7649398 | -1.0219357 | -.0012332 | -.0000442 | .0011733 |
| 462 | 6 | 11.8938847 | 10.4145131 | -.3168435 | -.0012674 | .0007079 | .0043333 |
| | 7 | 6.0466015 | 13.6639847 | -.1792740 | -.0017110 | .0003088 | .0035552 |
| | 8 | -.3794469 | 14.6747729 | -.1258283 | -.0018369 | -.0001225 | .0019302 |
| 463 | 6 | 12.2143223 | 10.7056391 | -.8428968 | .0006585 | .0007769 | .0013155 |
| | 7 | 6.3260668 | 13.9751490 | -.7824307 | .0006523 | .0008911 | .0012807 |
| | 8 | -.2072595 | 14.9422606 | -.7525559 | .0009599 | .0009032 | .0009489 |
| 464 | 6 | 12.2219914 | 10.9901208 | -.9850063 | .0007949 | .0004784 | .0012557 |
| | 7 | 6.3357094 | 14.2576077 | -.9881983 | .0009630 | .0006975 | .0011924 |
| | 8 | -.1972004 | 15.1511257 | -.9902050 | .0010185 | .0007735 | .0008516 |
| 465 | 6 | 11.9203547 | 10.8461838 | -.9807544 | -.0006648 | .0002962 | .0008007 |
| | 7 | 6.0671055 | 14.1144433 | -.9835562 | -.0009489 | .0004385 | .0008820 |
| | 8 | -.3683110 | 15.0447567 | -.9772335 | -.0010414 | .0005262 | .0006714 |
| 471 | 6 | 11.9305101 | 11.1153512 | -1.0831204 | -.0002261 | -.0000851 | .0029896 |
| | 7 | 6.0826920 | 14.3634577 | -1.1474881 | -.0003528 | -.0000484 | .0023028 |
| | 8 | -.3505662 | 15.2027050 | -1.1703819 | -.0003946 | -.0000404 | .0012869 |
| 472 | 6 | 11.9304337 | 11.0369669 | -.3038709 | -.0012367 | .0007234 | .0047301 |
| | 7 | 6.0826482 | 14.2690116 | -.2085594 | -.0016987 | .0003540 | .0036952 |
| | 8 | -.3505719 | 15.1043993 | -.1930742 | -.0018418 | -.0000626 | .0018544 |
| 481 | 6 | 11.9077065 | 11.5925717 | -1.1718767 | -.0010661 | .0005668 | .0028900 |
| | 7 | 6.0613032 | 14.8191646 | -1.2615922 | -.0013046 | .0004041 | .0015383 |
| | 8 | -.3684188 | 15.4895362 | -1.2911049 | -.0012455 | .0001743 | -.0003469 |
| 482 | 6 | 11.7833669 | 11.4682306 | .0789341 | -.0017743 | .0006920 | .0055446 |
| | 7 | 5.9443169 | 14.7021204 | -.0844564 | -.0020326 | .0004101 | .0039694 |
| | 8 | -.4627466 | 15.3951061 | -.3416834 | -.0018166 | .0001457 | .0009534 |
| 499 | 6 | 12.4594326 | 10.8682909 | -1.0760143 | .0008313 | .0006496 | .0012029 |
| | 7 | 6.5535941 | 14.1427632 | -1.0841264 | .0010844 | .0009128 | .0012210 |
| | 8 | -.0522746 | 15.0750458 | -1.0853505 | .0011938 | .0010396 | .0009296 |
| 500 | 6 | 12.4608530 | 10.8697012 | -.1400600 | -.0063533 | .0051781 | .0000000 |
| | 7 | 6.5543665 | 14.1446064 | -.1400600 | -.0070636 | .0028472 | .0000000 |
| | 8 | -.0522683 | 15.0770418 | -.1400600 | -.0076331 | .0000755 | .0000000 |
| 501 | 6 | 12.1672386 | 11.3917025 | -.8192550 | .0001155 | .0003496 | .0039859 |
| | 7 | 6.2591758 | 14.7803408 | -.8034016 | .0001314 | .0005686 | .0029526 |
| | 8 | -.2771075 | 15.6595644 | -.8073079 | .0001741 | .0006611 | .0013273 |
| 502 | 6 | 12.7906789 | 11.3320060 | -1.1961033 | -.0004253 | .0008330 | .0000883 |
| | 7 | 6.8710547 | 14.7354353 | -1.2612611 | -.0006803 | .0011121 | .0007363 |
| | 8 | .1485200 | 15.6233987 | -1.2916206 | -.0007416 | .0012059 | .0010062 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|-----------|
| | | X | Y | Z | X | Y | Z |
| 503 | 6 | 12.9407540 | 10.6856378 | -1.1519523 | -.0001193 | .0006847 | .0004257 |
| | 7 | 7.0445173 | 14.0526684 | -1.1755872 | -.0001680 | .0008795 | .0009892 |
| | 8 | .3244288 | 15.0842542 | -1.1782377 | -.0001269 | .0008965 | .0010877 |
| 504 | 6 | 12.1114515 | 10.6750432 | -.8141496 | -.0000445 | .0003295 | .0038858 |
| | 7 | 6.1910859 | 14.0365194 | -.7537776 | -.0001795 | .0005727 | .0029579 |
| | 8 | -.3459739 | 15.0717508 | -.7218746 | -.0002196 | .0007097 | .0013783 |
| 505 | 6 | 11.9627419 | 11.2240414 | -.9850740 | -.0005531 | -.0002236 | .0031108 |
| | 7 | 6.0766785 | 14.5344739 | -1.0166675 | -.0008508 | -.0003047 | .0022137 |
| | 8 | -.3999403 | 15.3957274 | -1.0300052 | -.0009478 | -.0003495 | .0009638 |
| 506 | 6 | 12.7636724 | 11.2955636 | -1.1138629 | -.0003604 | -.0004491 | .0000374 |
| | 7 | 6.8407525 | 14.6252569 | -1.1264392 | -.0005258 | -.0006707 | .0008192 |
| | 8 | .1195098 | 15.4894258 | -1.1315475 | -.0005523 | -.0008518 | .0011816 |
| 507 | 6 | 12.8333468 | 10.6385254 | -1.0289967 | -.0004376 | -.0001020 | .0003519 |
| | 7 | 6.9529480 | 13.9449592 | -1.0149538 | -.0006830 | -.0002184 | .0009977 |
| | 8 | .2658113 | 14.9611294 | -1.0105173 | -.0007677 | -.0003354 | .0011431 |
| 508 | 6 | 11.9860366 | 10.6280152 | -.9175881 | -.0003140 | -.0001979 | .0030741 |
| | 7 | 6.0640980 | 13.9539802 | -.9120383 | -.0004289 | -.0003550 | .0021849 |
| | 8 | -.4434531 | 14.9815166 | -.9062918 | -.0004277 | -.0004642 | .0008762 |
| 511 | 6 | 12.8645877 | 9.8145627 | -1.1002583 | .0000440 | .0001686 | .0005835 |
| | 7 | 6.9857684 | 13.1320553 | -1.0116344 | .0002606 | .0003869 | .0018375 |
| | 8 | .2938947 | 14.3369608 | -.9270989 | .0004924 | .0005376 | .0027144 |
| 512 | 6 | 13.0225264 | 9.8647028 | -1.5214370 | -.0000528 | .0002249 | .0009265 |
| | 7 | 7.1251268 | 13.1606508 | -1.3859165 | .0000129 | .0003671 | .0017505 |
| | 8 | .3944304 | 14.3390106 | -1.1738617 | .0001116 | .0004337 | .0021194 |
| 521 | 6 | 12.8213881 | 10.6811466 | -1.0940171 | -.0000806 | .0003133 | .0006161 |
| | 7 | 6.9204358 | 14.0297430 | -1.1024400 | -.0002270 | .0003682 | .0013249 |
| | 8 | .2172816 | 15.0603484 | -1.1042630 | -.0002718 | .0003263 | .0014629 |
| 522 | 6 | 13.0792613 | 10.6885011 | -1.2265799 | -.0000318 | .0000441 | .0002625 |
| | 7 | 7.1567394 | 14.0376730 | -1.3071929 | -.0001119 | .0001509 | .0006839 |
| | 8 | .3943736 | 15.0629255 | -1.3239029 | -.0001192 | .0002060 | .0007455 |
| 531 | 6 | 12.6697480 | 11.3033347 | -1.1385906 | .0001936 | -.0000197 | -.0000416 |
| | 7 | 6.7232587 | 14.6628536 | -1.1794568 | .0000364 | .0001831 | .0009052 |
| | 8 | -.0065887 | 15.5365224 | -1.2024853 | -.0000537 | .0003399 | .0014063 |
| 532 | 6 | 12.9556859 | 11.4100418 | -1.2724473 | -.0000678 | -.0000161 | .0004488 |
| | 7 | 7.0223749 | 14.8255560 | -1.3993593 | -.0001811 | .0000656 | .0007917 |
| | 8 | .2673815 | 15.7200695 | -1.4457452 | -.0002007 | .0001059 | .0008009 |
| 541 | 6 | 12.9330840 | 11.7419594 | -1.1474991 | .0000148 | .0002511 | -.0019314 |
| | 7 | 6.9772423 | 15.1500239 | -1.3151278 | -.0002017 | .0002230 | -.0013820 |
| | 8 | .1994721 | 15.8821458 | -1.4431064 | -.0003045 | .0001472 | -.0007081 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|-----------|
| | | X | Y | Z | X | Y | Z |
| 542 | 6 | 12.8509829 | 11.7483592 | -1.0178191 | .0003051 | .0000865 | -.0013980 |
| | 7 | 6.9364461 | 15.0856439 | -1.3655728 | .0001506 | .0001547 | -.0010029 |
| | 8 | .2113712 | 15.7774652 | -1.6422419 | .0000439 | .0001889 | -.0005049 |
| 551 | 6 | 12.2021356 | 10.0081548 | -.8703107 | .0001990 | .0000500 | .0050254 |
| | 7 | 6.2452936 | 13.3479066 | -.7170392 | .0000473 | -.0000155 | .0044913 |
| | 8 | -.3412752 | 14.5301387 | -.5944697 | -.0001004 | -.0000582 | .0029041 |
| 552 | 6 | 12.1417991 | 9.9258386 | -.7941118 | .0004218 | -.0001470 | .0051666 |
| | 7 | 6.2294120 | 13.2029463 | -.4579943 | .0003222 | -.0001121 | .0047805 |
| | 8 | -.3002538 | 14.3580972 | -.1837025 | .0001715 | -.0000271 | .0031475 |
| 561 | 6 | 11.9995809 | 10.6488512 | -.8805760 | .0000146 | -.0001474 | .0033653 |
| | 7 | 6.0595473 | 13.9859610 | -.8444602 | -.0000363 | .0000695 | .0022615 |
| | 8 | -.4698303 | 15.0124213 | -.8202285 | -.0000641 | .0002621 | .0007118 |
| 562 | 6 | 12.1783883 | 10.7328851 | -.5157077 | -.0000104 | -.0002357 | .0042390 |
| | 7 | 6.2345307 | 14.1081158 | -.3973441 | -.0000852 | -.0001172 | .0035126 |
| | 8 | -.3279994 | 15.1528305 | -.3485264 | -.0000961 | .0000225 | .0019447 |
| 571 | 6 | 12.0170929 | 11.3400502 | -.8967204 | -.0004793 | .0001585 | .0032860 |
| | 7 | 6.1071567 | 14.7076060 | -.8994169 | -.0006688 | .0002361 | .0022241 |
| | 8 | -.4004470 | 15.5846333 | -.9047606 | -.0007085 | .0002660 | .0007794 |
| 572 | 6 | 12.2338206 | 11.3819314 | -.5084734 | -.0000889 | -.0002726 | .0046305 |
| | 7 | 6.2953838 | 14.7556215 | -.4374841 | -.0001808 | -.0001103 | .0036488 |
| | 8 | -.2738984 | 15.6337022 | -.4291327 | -.0001951 | .0000605 | .0018667 |
| 581 | 6 | 12.0351134 | 11.7015847 | -.9021681 | -.0002116 | -.0000932 | .0038771 |
| | 7 | 6.1361002 | 15.0528633 | -1.0075486 | .0000036 | .0001642 | .0022877 |
| | 8 | -.3700400 | 15.7877542 | -1.0989615 | .0003134 | .0004240 | -.0001788 |
| 582 | 6 | 12.1431683 | 11.7332840 | -.2376318 | -.0004253 | -.0003379 | .0055766 |
| | 7 | 6.2241223 | 15.0713758 | -.3825229 | -.0003256 | -.0001270 | .0040863 |
| | 8 | -.3166013 | 15.7786069 | -.5995819 | -.0000328 | .0001408 | .0011312 |
| 611 | 6 | 13.0386533 | 9.8840538 | -1.3928751 | .0000255 | .0002029 | .0009149 |
| | 7 | 7.2033628 | 13.1642347 | -1.2806176 | .0001601 | .0004700 | .0017428 |
| | 8 | .5216807 | 14.3092987 | -1.1221776 | .0002565 | .0006594 | .0021190 |
| 612 | 6 | 13.0370061 | 9.8823813 | -1.4120155 | .0000597 | .0001266 | .0009251 |
| | 7 | 7.2019154 | 13.1627936 | -1.2975717 | .0001793 | .0003986 | .0017307 |
| | 8 | .5208146 | 14.3084771 | -1.1329754 | .0002612 | .0005986 | .0020879 |
| 621 | 6 | 13.0015825 | 10.5896503 | -1.2223576 | .0004951 | -.0002128 | .0002596 |
| | 7 | 7.1698820 | 13.9157174 | -1.2617573 | .0007373 | .0001875 | .0006659 |
| | 8 | .4940620 | 14.9234938 | -1.2638192 | .0008438 | .0005287 | .0007122 |
| 622 | 6 | 13.0016411 | 10.5892731 | -1.2281025 | .0003908 | -.0002364 | .0002906 |
| | 7 | 7.1699666 | 13.9148407 | -1.2719849 | .0005935 | .0001283 | .0006861 |
| | 8 | .4941604 | 14.9224636 | -1.2753321 | .0006862 | .0004399 | .0007222 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|-----------|
| | | X | Y | Z | X | Y | Z |
| 623 | 6 | 12.8383001 | 10.8462433 | -1.2485943 | .0010267 | -.0003494 | .0008137 |
| | 7 | 6.9766471 | 14.2158187 | -1.3002762 | .0013588 | -.0003515 | .0011420 |
| | 8 | .3130531 | 15.1958708 | -1.3047971 | .0014814 | -.0002510 | .0011325 |
| 624 | 6 | 12.8360628 | 11.1399112 | -1.1261356 | .0012122 | -.0007209 | .0010843 |
| | 7 | 6.9738239 | 14.5244317 | -1.1674877 | .0014587 | -.0006904 | .0014561 |
| | 8 | .3100387 | 15.4422076 | -1.1864474 | .0014785 | -.0005755 | .0014585 |
| 625 | 6 | 12.9635246 | 10.9923007 | -1.3432831 | .0010328 | -.0000777 | .0015946 |
| | 7 | 7.1177080 | 14.3695631 | -1.4209032 | .0013141 | -.0001320 | .0016052 |
| | 8 | .4339694 | 15.3186037 | -1.4458750 | .0014415 | -.0001474 | .0012812 |
| 626 | 6 | 12.8008863 | 10.8456911 | -1.1984468 | .0009751 | -.0003723 | .0009515 |
| | 7 | 6.9214392 | 14.2156158 | -1.2334501 | .0013213 | -.0003439 | .0012386 |
| | 8 | .2566280 | 15.1960419 | -1.2317518 | .0014531 | -.0002202 | .0011756 |
| 628 | 6 | 12.7835844 | 11.1402751 | -1.0667833 | .0011574 | -.0006979 | .0010902 |
| | 7 | 6.9006140 | 14.5243410 | -1.0962120 | .0013866 | -.0006273 | .0013872 |
| | 8 | .2346951 | 15.4416987 | -1.1144921 | .0013894 | -.0004809 | .0013262 |
| 631 | 6 | 12.9132642 | 11.3209915 | -1.2665355 | .0003847 | .0001698 | .0004087 |
| | 7 | 7.0636759 | 14.7141899 | -1.3578672 | .0006491 | .0005357 | .0007342 |
| | 8 | .3822974 | 15.5915635 | -1.3955593 | .0007606 | .0007966 | .0007318 |
| 632 | 6 | 12.9134258 | 11.3207261 | -1.2714127 | .0003552 | .0000740 | .0004397 |
| | 7 | 7.0638537 | 14.7134640 | -1.3670328 | .0005928 | .0004180 | .0007565 |
| | 8 | .3824673 | 15.5907212 | -1.4058721 | .0007006 | .0006707 | .0007444 |
| 641 | 6 | 12.7866750 | 11.6396815 | -1.1617673 | .0003611 | -.0008427 | -.0013945 |
| | 7 | 6.9507865 | 14.9547549 | -1.4138301 | .0006786 | -.0003990 | -.0009805 |
| | 8 | .2905221 | 15.6461162 | -1.6135848 | .0007534 | .0000332 | -.0004779 |
| 642 | 6 | 12.7853015 | 11.6409237 | -1.1524143 | .0002011 | -.0007264 | -.0013272 |
| | 7 | 6.9504704 | 14.9548986 | -1.4146115 | .0004356 | -.0003335 | -.0009256 |
| | 8 | .2910863 | 15.6454007 | -1.6226880 | .0004960 | .0000311 | -.0004439 |
| 643 | 6 | 12.6456726 | 10.5912672 | -1.1581197 | .0009668 | -.0002491 | .0011205 |
| | 7 | 6.7606135 | 13.9393520 | -1.1170305 | .0012259 | .0000726 | .0012931 |
| | 8 | .1300373 | 14.9603498 | -1.0837965 | .0013002 | .0002885 | .0012116 |
| 646 | 6 | 12.6426447 | 11.2849076 | -1.0695369 | .0010745 | .0004999 | .0004846 |
| | 7 | 6.7572847 | 14.6581321 | -1.1285762 | .0012673 | .0009162 | .0005880 |
| | 8 | .1264602 | 15.5243394 | -1.1820300 | .0012718 | .0011984 | .0005245 |
| 651 | 6 | 12.2206411 | 9.8311324 | -.8831203 | .0012236 | -.0004366 | .0051885 |
| | 7 | 6.3771314 | 13.0983857 | -.6412351 | .0013596 | -.0000001 | .0048089 |
| | 8 | -.1137221 | 14.2345282 | -.4444370 | .0013133 | .0004920 | .0031659 |
| 652 | 6 | 12.2212733 | 9.8303602 | -.8779791 | .0010676 | -.0003374 | .0050830 |
| | 7 | 6.3788347 | 13.0965621 | -.6258561 | .0011620 | .0000440 | .0047121 |
| | 8 | -.1111198 | 14.2318436 | -.4205714 | .0011093 | .0004655 | .0031030 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|----------|
| | | X | Y | Z | X | Y | Z |
| 661 | 6 | 12.2366884 | 10.5723237 | -.7498486 | .0008640 | -.0001613 | .0043476 |
| | 7 | 6.3741451 | 13.9354345 | -.6642693 | .0009823 | .0002254 | .0036235 |
| | 8 | -.1403668 | 14.9672870 | -.6249250 | .0010523 | .0005841 | .0020353 |
| 662 | 6 | 12.2367995 | 10.5700261 | -.7297539 | .0008560 | -.0001987 | .0042427 |
| | 7 | 6.3742656 | 13.9327457 | -.6401250 | .0009824 | .0001704 | .0035414 |
| | 8 | -.1402528 | 14.9644800 | -.5995407 | .0010541 | .0005173 | .0019942 |
| 663 | 6 | 12.4071750 | 10.8396494 | -.8918408 | .0011086 | -.0004046 | .0015831 |
| | 7 | 6.5367049 | 14.2134273 | -.8243221 | .0014535 | -.0003029 | .0012387 |
| | 8 | -.0262509 | 15.1973813 | -.7890494 | .0015470 | -.0001098 | .0006188 |
| 664 | 6 | 12.4085741 | 11.1389217 | -.7667581 | .0009355 | -.0007087 | .0016207 |
| | 7 | 6.5385938 | 14.5188152 | -.7282563 | .0012307 | -.0005331 | .0013060 |
| | 8 | -.0242412 | 15.4325502 | -.7391384 | .0013181 | -.0003042 | .0006927 |
| 665 | 6 | 12.2583078 | 10.9890701 | -.7841930 | .0005921 | -.0000965 | .0003213 |
| | 7 | 6.3966262 | 14.3661382 | -.6922210 | .0008814 | -.0000806 | .0005756 |
| | 8 | -.1231620 | 15.3151701 | -.6630919 | .0010236 | -.0000467 | .0006502 |
| 666 | 6 | 12.4862263 | 10.8399791 | -.9476626 | .0011675 | -.0004333 | .0015244 |
| | 7 | 6.5961065 | 14.2132130 | -.8972748 | .0015106 | -.0003238 | .0012745 |
| | 8 | .0004810 | 15.1967006 | -.8666237 | .0016013 | -.0001234 | .0007397 |
| 668 | 6 | 12.4906633 | 11.1384312 | -.8138645 | .0009875 | -.0006960 | .0014850 |
| | 7 | 6.6032481 | 14.5187659 | -.7897441 | .0012715 | -.0005171 | .0012377 |
| | 8 | .0083844 | 15.4329221 | -.8047684 | .0013515 | -.0002844 | .0007035 |
| 671 | 6 | 12.2681113 | 11.2302689 | -.7510865 | .0010280 | -.0003452 | .0047410 |
| | 7 | 6.4201781 | 14.5784613 | -.7203286 | .0012947 | .0001014 | .0037539 |
| | 8 | -.0929792 | 15.4318995 | -.7254149 | .0014573 | .0005211 | .0019465 |
| 672 | 6 | 12.2681860 | 11.2277077 | -.7289183 | .0009402 | -.0003644 | .0046213 |
| | 7 | 6.4202759 | 14.5754105 | -.6938086 | .0011686 | .0000534 | .0036652 |
| | 8 | -.0928766 | 15.4287026 | -.6977960 | .0013100 | .0004504 | .0019057 |
| 681 | 6 | 12.1940728 | 11.5732467 | -.6108260 | .0001280 | -.0006145 | .0057268 |
| | 7 | 6.3418096 | 14.8964789 | -.7347499 | .0003781 | -.0002614 | .0042232 |
| | 8 | -.1794434 | 15.5935425 | -.8996411 | .0007225 | .0001117 | .0012072 |
| 682 | 6 | 12.1902942 | 11.5694409 | -.5753273 | .0001573 | -.0006504 | .0056036 |
| | 7 | 6.3382012 | 14.8928547 | -.7010905 | .0003837 | -.0002960 | .0041404 |
| | 8 | -.1824780 | 15.5905110 | -.8720427 | .0006952 | .0000814 | .0011981 |
| 699 | 6 | 12.6616820 | 11.0150759 | -1.0329482 | .0010602 | -.0006313 | .0012841 |
| | 7 | 6.7653467 | 14.3991724 | -1.0290862 | .0013539 | -.0005890 | .0013313 |
| | 8 | .1222255 | 15.3504811 | -1.0287739 | .0014212 | -.0004376 | .0010448 |
| 700 | 6 | 12.6631367 | 11.0165338 | -.1518649 | .0106268 | -.0104502 | .0000000 |
| | 7 | 6.7661331 | 14.4010772 | -.1518649 | .0138147 | -.0055130 | .0000000 |
| | 8 | .1222240 | 15.3525416 | -.1518649 | .0149537 | .0002438 | .0000000 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (In) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|-----------|
| | | X | Y | Z | X | Y | Z |
| 712 | 6 | 13.0402200 | 9.8854272 | -1.4043661 | .0000506 | .0001356 | .0009251 |
| | 7 | 7.2109799 | 13.1646052 | -1.2915800 | .0001660 | .0004084 | .0017311 |
| | 8 | .5345977 | 14.3086237 | -1.1306252 | .0002425 | .0006081 | .0020889 |
| 722 | 6 | 12.9935066 | 10.5775463 | -1.2276946 | .0004133 | -.0002367 | .0002906 |
| | 7 | 7.1723685 | 13.8964709 | -1.2684066 | .0006321 | .0001377 | .0006852 |
| | 8 | .5064783 | 14.9010511 | -1.2706036 | .0007298 | .0004570 | .0007204 |
| 732 | 6 | 12.9155659 | 11.3103132 | -1.2708779 | .0003737 | .0001041 | .0004367 |
| | 7 | 7.0761002 | 14.6952613 | -1.3636031 | .0006356 | .0004596 | .0007523 |
| | 8 | .4027762 | 15.5690146 | -1.4016670 | .0007537 | .0007177 | .0007397 |
| 742 | 6 | 12.7647921 | 11.6397475 | -1.1643964 | .0001714 | -.0007536 | -.0013274 |
| | 7 | 6.9410300 | 14.9447473 | -1.4191007 | .0004307 | -.0003460 | -.0009248 |
| | 8 | .2916707 | 15.6319081 | -1.6213274 | .0005044 | .0000313 | -.0004431 |
| 752 | 6 | 12.2268305 | 9.8114388 | -.8852014 | .0010950 | -.0003275 | .0050813 |
| | 7 | 6.3952440 | 13.0737134 | -.6400916 | .0011976 | .0000707 | .0047112 |
| | 8 | -.0864305 | 14.2058504 | -.4405465 | .0011504 | .0005055 | .0031029 |
| 762 | 6 | 12.2447656 | 10.5423751 | -.7468699 | .0008994 | -.0001736 | .0042452 |
| | 7 | 6.3918625 | 13.9012064 | -.6596334 | .0010375 | .0002058 | .0035449 |
| | 8 | -.1165344 | 14.9306787 | -.6197812 | .0011151 | .0005579 | .0019983 |
| 772 | 6 | 12.2718019 | 11.1969399 | -.7468758 | .0010005 | -.0003490 | .0046229 |
| | 7 | 6.4343148 | 14.5371177 | -.7149455 | .0012483 | .0000783 | .0036676 |
| | 8 | -.0717398 | 15.3856919 | -.7201241 | .0013999 | .0004811 | .0019088 |
| 782 | 6 | 12.1884997 | 11.5474495 | -.6014029 | .0001669 | -.0006426 | .0056053 |
| | 7 | 6.3428283 | 14.8681833 | -.7257780 | .0003957 | -.0002871 | .0041425 |
| | 8 | -.1757098 | 15.5649548 | -.8933204 | .0007061 | .0000878 | .0011998 |
| 811 | 6 | 13.0403689 | 9.8870411 | -1.4091286 | .0001435 | -.0000067 | .0009391 |
| | 7 | 7.2182802 | 13.1656765 | -1.2970767 | .0002354 | .0002753 | .0017112 |
| | 8 | .5481119 | 14.3089656 | -1.1367972 | .0002848 | .0004906 | .0020408 |
| 821 | 6 | 12.9831427 | 10.5657348 | -1.2356150 | .0004545 | -.0002732 | .0003376 |
| | 7 | 7.1735028 | 13.8771308 | -1.2752490 | .0006572 | .0000790 | .0007127 |
| | 8 | .5184924 | 14.8783166 | -1.2767077 | .0007444 | .0003807 | .0007297 |
| 831 | 6 | 12.9164168 | 11.2976692 | -1.2769855 | .0004811 | .0000408 | .0004756 |
| | 7 | 7.0885715 | 14.6727464 | -1.3690867 | .0007700 | .0003961 | .0007746 |
| | 8 | .4246191 | 15.5418387 | -1.4071196 | .0009120 | .0006594 | .0007457 |
| 841 | 6 | 12.7432275 | 11.6461291 | -1.1792581 | .0000609 | -.0005174 | -.0012180 |
| | 7 | 6.9319436 | 14.9416088 | -1.4315824 | .0002709 | -.0001430 | -.0008308 |
| | 8 | .2930618 | 15.6241450 | -1.6321321 | .0003549 | .0001778 | -.0003825 |
| 851 | 6 | 12.2372789 | 9.7930657 | -.8929121 | .0009026 | -.0002419 | .0049102 |
| | 7 | 6.4179107 | 13.0512125 | -.6496021 | .0009721 | .0001237 | .0045556 |
| | 8 | -.0653098 | 14.1792003 | -.4514753 | .0009279 | .0004990 | .0030021 |

*** Joint Deflection Report ***

| Joint Number | Load Cond | Deflections (in) | | | Rotations (Rad) | | |
|--------------|-----------|------------------|------------|------------|-----------------|-----------|----------|
| | | X | Y | Z | X | Y | Z |
| 861 | 6 | 12.2538892 | 10.5070609 | -.7593360 | .0008842 | -.0001715 | .0040919 |
| | 7 | 6.4121855 | 13.8600962 | -.6723542 | .0010653 | .0002105 | .0034292 |
| | 8 | -.0891240 | 14.8864254 | -.6324584 | .0011628 | .0005613 | .0019465 |
| 871 | 6 | 12.2760467 | 11.1596509 | -.7581701 | .0009362 | -.0003361 | .0044449 |
| | 7 | 6.4500777 | 14.4910307 | -.7274206 | .0011766 | .0000707 | .0035395 |
| | 8 | -.0481024 | 15.3342198 | -.7334685 | .0013203 | .0004586 | .0018553 |
| 881 | 6 | 12.1835135 | 11.5190713 | -.6161025 | .0000976 | -.0005307 | .0054237 |
| | 7 | 6.3455777 | 14.8373994 | -.7398633 | .0003054 | -.0001723 | .0040237 |
| | 8 | -.1699213 | 15.5345609 | -.9069370 | .0005731 | .0002024 | .0011929 |
| 900 | 6 | 11.4827200 | 9.8157440 | -.1520318 | .0103698 | -.0101933 | .0000000 |
| | 7 | 6.1437544 | 12.8402225 | -.1520318 | .0134791 | -.0053739 | .0000000 |
| | 8 | .1503584 | 13.6629415 | -.1520318 | .0145909 | .0002438 | .0000000 |
| Max. Def. | | 13.1647743 | 15.8821458 | -2.1587302 | .0149537 | -.0104502 | .0065789 |
| Joint No. | | 63 | 541 | 181 | 700 | 700 | 152 |
| Load Case | | 6 | 8 | 7 | 8 | 6 | 6 |

*** Group Summary Report ***

| Group ID | THREE MOST RESTRICTIVE MEMBERS | | | | | | | | | Total | Number Of Members In Group | | | |
|----------|--------------------------------|------|----|---------------|------|----|--------------|------|----|-------|----------------------------|--------------|--------------|--------------|
| | First Member | | | Second Member | | | Third Member | | | | With UC>1.33 | With UC>1.00 | With UC>0.50 | With UC<0.50 |
| | UC | LC | UC | LC | UC | LC | UC | LC | LC | | | | | |
| 165 | 561- 651 | .76 | 6 | 581- 671 | .61 | 6 | 571- 661 | .47 | 6 | 6 | 0 | 0 | 2 | 4 |
| 185 | 421- 511 | .80 | 6 | 441- 531 | .79 | 6 | 371- 461 | .77 | 6 | 8 | 0 | 0 | 3 | 5 |
| 203 | 361- 451 | .90 | 6 | 331- 441 | .48 | 6 | 0- 0 | .00 | 0 | 2 | 0 | 0 | 1 | 1 |
| 205 | 471- 531 | 1.15 | 8 | 451- 511 | 1.00 | 8 | 581- 641 | .83 | 7 | 14 | 0 | 2 | 4 | 8 |
| 243 | 381- 441 | 1.71 | 8 | 146- 231 | 1.65 | 8 | 155- 221 | 1.61 | 8 | 18 | 3 | 2 | 7 | 6 |
| 245 | 361- 301 | .59 | 8 | 304- 471 | .55 | 8 | 301- 421 | .52 | 8 | 10 | 0 | 0 | 3 | 7 |
| 263 | 161- 251 | .80 | 6 | 131- 241 | .50 | 6 | 0- 0 | .00 | 0 | 2 | 0 | 0 | 1 | 1 |
| 265 | 181- 271 | 1.00 | 6 | 251- 311 | .80 | 8 | 171- 261 | .79 | 6 | 10 | 0 | 0 | 5 | 5 |
| J08 | 146- 164 | .42 | 8 | 155- 163 | .39 | 8 | 124- 146 | .35 | 8 | 6 | 0 | 0 | 0 | 6 |
| J11 | 123- 101 | .22 | 7 | 164- 104 | .21 | 7 | 124- 102 | .21 | 8 | 4 | 0 | 0 | 0 | 4 |
| J12 | 163- 164 | .25 | 6 | 123- 124 | .21 | 6 | 0- 0 | .00 | 0 | 2 | 0 | 0 | 0 | 2 |
| J16 | 121- 123 | .33 | 6 | 164- 171 | .31 | 6 | 165- 164 | .27 | 6 | 8 | 0 | 0 | 0 | 8 |
| J20 | 135- 141 | .24 | 6 | 125- 131 | .21 | 6 | 159- 161 | .21 | 6 | 16 | 0 | 0 | 0 | 16 |
| J24 | 141- 148 | .28 | 8 | 146- 171 | .28 | 7 | 148- 181 | .28 | 8 | 8 | 0 | 0 | 0 | 8 |
| J25 | 148- 131 | .13 | 6 | 121- 145 | .12 | 7 | 145- 161 | .10 | 6 | 4 | 0 | 0 | 0 | 4 |
| K08 | 224- 255 | .21 | 8 | 223- 254 | .18 | 7 | 254- 263 | .17 | 8 | 6 | 0 | 0 | 0 | 6 |
| K11 | 225- 231 | .18 | 6 | 261- 265 | .12 | 6 | 221- 225 | .10 | 7 | 4 | 0 | 0 | 0 | 4 |
| K12 | 263- 264 | .10 | 8 | 223- 224 | .07 | 8 | 0- 0 | .00 | 0 | 2 | 0 | 0 | 0 | 2 |
| K13 | 261- 263 | .41 | 8 | 223- 225 | .30 | 6 | 263- 265 | .29 | 6 | 12 | 0 | 0 | 0 | 12 |
| K18 | 211- 221 | .27 | 6 | 271- 281 | .17 | 6 | 0- 0 | .00 | 0 | 2 | 0 | 0 | 0 | 2 |
| K20 | 223- 243 | .11 | 7 | 243- 263 | .11 | 7 | 224- 244 | .09 | 7 | 4 | 0 | 0 | 0 | 4 |
| K24 | 241- 281 | .52 | 8 | 221- 251 | .37 | 8 | 211- 251 | .32 | 8 | 9 | 0 | 0 | 1 | 8 |
| L20 | 346- 371 | .28 | 8 | 331- 346 | .10 | 6 | 0- 0 | .00 | 0 | 2 | 0 | 0 | 0 | 2 |
| L24 | 331- 381 | .36 | 6 | 311- 361 | .20 | 6 | 0- 0 | .00 | 0 | 2 | 0 | 0 | 0 | 2 |
| L25 | 343- 361 | .15 | 6 | 321- 343 | .11 | 6 | 0- 0 | .00 | 0 | 2 | 0 | 0 | 0 | 2 |

*** Group Summary Report ***

| Group ID | THREE MOST RESTRICTIVE MEMBERS | | | | | | | | | Total | Number Of Members In Group | | | |
|----------|--------------------------------|------|----|----------|------|----|----------|-----|----|-------|----------------------------|--------------|--------------|--------------|
| | First | | | Second | | | Third | | | | With UC>1.33 | With UC>1.00 | With UC>0.50 | With UC<0.50 |
| | Member | UC | LC | Member | UC | LC | Member | UC | LC | | | | | |
| LG2 | 511- 611 | .94 | 6 | 581- 681 | .89 | 6 | 311- 411 | .78 | 6 | 14 | 0 | 0 | 8 | 6 |
| LG3 | 441- 541 | .74 | 8 | 531- 502 | .69 | 8 | 571- 501 | .67 | 8 | 20 | 0 | 0 | 11 | 9 |
| LG4 | 503- 621 | .75 | 8 | 502- 631 | .75 | 8 | 504- 661 | .70 | 8 | 20 | 0 | 0 | 10 | 10 |
| LG7 | 641- 742 | .47 | 8 | 681- 782 | .45 | 6 | 651- 752 | .40 | 8 | 14 | 0 | 0 | 0 | 14 |
| MO8 | 424- 446 | .26 | 8 | 443- 423 | .26 | 7 | 443- 463 | .20 | 8 | 4 | 0 | 0 | 0 | 4 |
| MO9 | 463- 508 | .18 | 7 | 424- 506 | .17 | 7 | 423- 507 | .14 | 8 | 4 | 0 | 0 | 0 | 4 |
| M10 | 464- 471 | .53 | 6 | 421- 423 | .35 | 6 | 461- 463 | .34 | 8 | 8 | 0 | 0 | 1 | 7 |
| M11 | 421- 425 | .24 | 7 | 425- 431 | .22 | 6 | 465- 471 | .20 | 6 | 4 | 0 | 0 | 0 | 4 |
| M12 | 423- 424 | .09 | 8 | 463- 464 | .07 | 8 | 0- 0 | .00 | 0 | 2 | 0 | 0 | 0 | 2 |
| M14 | 471- 481 | .29 | 6 | 411- 421 | .18 | 8 | 0- 0 | .00 | 0 | 2 | 0 | 0 | 0 | 2 |
| M18 | 446- 471 | .19 | 8 | 421- 443 | .18 | 8 | 411- 451 | .12 | 8 | 6 | 0 | 0 | 0 | 6 |
| M20 | 441- 471 | .41 | 6 | 421- 451 | .30 | 8 | 0- 0 | .00 | 0 | 2 | 0 | 0 | 0 | 2 |
| M21 | 463- 423 | .06 | 6 | 464- 424 | .06 | 8 | 0- 0 | .00 | 0 | 2 | 0 | 0 | 0 | 2 |
| N16 | 521- 561 | .28 | 6 | 531- 571 | .24 | 6 | 0- 0 | .00 | 0 | 2 | 0 | 0 | 0 | 2 |
| N20 | 531- 581 | .40 | 6 | 511- 561 | .24 | 8 | 0- 0 | .00 | 0 | 2 | 0 | 0 | 0 | 2 |
| PO8 | 626- 643 | .36 | 7 | 628- 646 | .36 | 8 | 646- 668 | .31 | 8 | 4 | 0 | 0 | 0 | 4 |
| P10 | 668- 671 | .85 | 6 | 666- 661 | .39 | 8 | 621- 626 | .33 | 6 | 12 | 0 | 0 | 1 | 11 |
| P12 | 671- 681 | .73 | 6 | 631- 641 | .72 | 6 | 621- 625 | .41 | 8 | 8 | 0 | 0 | 2 | 6 |
| P14 | 646- 671 | .53 | 7 | 611- 651 | .42 | 8 | 631- 646 | .35 | 8 | 6 | 0 | 0 | 1 | 5 |
| P16 | 626- 628 | .18 | 8 | 666- 668 | .11 | 8 | 663- 664 | .10 | 8 | 4 | 0 | 0 | 0 | 4 |
| P18 | 621- 651 | .61 | 7 | 641- 671 | .35 | 6 | 0- 0 | .00 | 0 | 2 | 0 | 0 | 1 | 1 |
| P21 | 666- 663 | .10 | 8 | 624- 628 | .10 | 8 | 623- 626 | .09 | 6 | 6 | 0 | 0 | 0 | 6 |
| PL2 | 182- 282 | 1.26 | 6 | 172- 272 | 1.02 | 8 | 162- 262 | .98 | 8 | 8 | 0 | 2 | 6 | 0 |
| PL3 | 282- 382 | 1.03 | 6 | 272- 372 | .79 | 8 | 262- 362 | .76 | 8 | 8 | 0 | 1 | 4 | 3 |
| PL4 | 382- 482 | .93 | 6 | 372- 472 | .71 | 8 | 362- 462 | .68 | 8 | 8 | 0 | 0 | 4 | 4 |

*** Group Summary Report ***

| Group ID | THREE MOST RESTRICTIVE MEMBERS | | | | | | | | | Total | Number Of Members In Group | | | |
|----------------------------|--------------------------------|-----|----|----------|-----|----|----------|-----|----|-------|----------------------------|--------------|--------------|--------------|
| | First | | | Second | | | Third | | | | With UC>1.33 | With UC>1.00 | With UC>0.50 | With UC<0.50 |
| | Member | UC | LC | Member | UC | LC | Member | UC | LC | | | | | |
| PL5 | 482- 582 | .91 | 6 | 472- 572 | .70 | 8 | 462- 562 | .67 | 8 | 8 | 0 | 0 | 4 | 4 |
| PL6 | 582- 682 | .85 | 6 | 572- 672 | .68 | 8 | 562- 662 | .63 | 8 | 8 | 0 | 0 | 4 | 4 |
| PL7 | 682- 782 | .77 | 6 | 672- 772 | .64 | 8 | 662- 762 | .59 | 8 | 8 | 0 | 0 | 4 | 4 |
| PL8 | 742- 841 | .47 | 6 | 782- 881 | .43 | 8 | 732- 831 | .33 | 8 | 8 | 0 | 0 | 0 | 8 |
| SIM | 199- 164 | .32 | 6 | 123- 199 | .31 | 6 | 699- 668 | .25 | 6 | 16 | 0 | 0 | 0 | 16 |
| CN2 | 300- 500 | .62 | 6 | 500- 700 | .61 | 6 | 700- 900 | .11 | 7 | 3 | 0 | 0 | 2 | 1 |
| CN1 | 200- 300 | .49 | 6 | 0- 0 | .00 | 0 | 0- 0 | .00 | 0 | 1 | 0 | 0 | 0 | 1 |
| IL1 | 841- 4 | .56 | 6 | 881- 8 | .51 | 8 | 831- 3 | .39 | 8 | 8 | 0 | 0 | 2 | 6 |
| IL2 | 4- 13 | .53 | 6 | 8- 17 | .47 | 8 | 80- 89 | .38 | 7 | 20 | 0 | 0 | 1 | 19 |
| IL3 | 17- 26 | .43 | 7 | 13- 21 | .42 | 6 | 26- 80 | .37 | 7 | 16 | 0 | 0 | 0 | 16 |
| Total Active Steel Members | | | | | | | | | | 431 | 3 | 7 | 93 | 328 |

*** Report Of Element Stress At Maximum Unity Check ***

| Member JA -JB | Group ID | Maximum Combined Unity CK | /--- Unity Check ---/ | | | Load Case No. | Dist From End(Ft) | Force Fx (Kips) | /----- Critical Member Loads -----/ | | | Next Two Highest Cases | | | |
|------------------|-------------|---------------------------------|-----------------------|--------|--------|---------------------|-------------------------|-----------------------|-------------------------------------|--------------|--------------|------------------------|----------|----------------------|----------|
| | | | Axial | Y-Axis | Z-Axis | | | | Torsion Mx | Moment My | Moment Mz | Combined Unity CK | LD CN | Combined Unity CK | LD CN |
| 511- 621 | 165 | .431 | .112 | .223 | .228 | 6 | .00 | 78.41 | 2.72 | -734.22 | 749.31 | .382 | 8 | .376 | 7 |
| 521- 631 | 165 | .389 | .062 | .049 | .324 | 8 | .00 | -19.84 | 8.84 | -161.47 | 1064.93 | .327 | 7 | .261 | 6 |
| 531- 641 | 165 | .463 | .171 | .081 | .281 | 8 | .00 | -60.90 | -19.40 | -259.58 | 904.62 | .364 | 6 | .327 | 7 |
| 561- 651 | 165 | .762 | .344 | .201 | .366 | 6 | .00 | -122.38 | 10.37 | 517.57 | -940.89 | .489 | 7 | .370 | 8 |
| 571- 661 | 165 | .466 | .101 | .216 | .295 | 6 | .00 | -32.55 | -8.19 | 708.72 | -969.34 | .419 | 7 | .340 | 8 |
| 581- 671 | 165 | .607 | .167 | .280 | .339 | 6 | .00 | -54.82 | -9.24 | 904.05 | -1094.55 | .435 | 7 | .410 | 8 |
| 321- 431 | 185 | .396 | .262 | .066 | .116 | 6 | .00 | 207.20 | -3.94 | -278.23 | 488.74 | .281 | 7 | .178 | 8 |
| 451- 561 | 185 | .425 | .176 | .059 | .242 | 6 | 62.07 | 139.04 | -29.69 | -246.67 | 1016.74 | .322 | 8 | .318 | 7 |
| 461- 571 | 185 | .345 | .127 | .044 | .214 | 6 | 59.67 | 100.11 | 19.01 | -183.64 | 898.52 | .311 | 7 | .235 | 8 |
| 471- 581 | 185 | .447 | .235 | .005 | .213 | 6 | 59.06 | 185.19 | 21.87 | -20.75 | 894.45 | .337 | 7 | .195 | 8 |
| 371- 461 | 185 | .772 | .521 | .161 | .193 | 6 | .00 | -188.36 | 2.18 | 383.68 | -458.76 | .402 | 7 | .146 | 8 |
| 421- 511 | 185 | .799 | .518 | .072 | .271 | 6 | 59.06 | -209.53 | 1.72 | 177.56 | -666.67 | .540 | 7 | .250 | 8 |
| 431- 521 | 185 | .461 | .244 | .096 | .194 | 6 | 59.67 | -97.21 | 4.34 | 362.90 | -731.51 | .366 | 7 | .221 | 8 |
| 441- 531 | 185 | .795 | .433 | .170 | .319 | 6 | 62.07 | -162.02 | 59.14 | 480.04 | -899.18 | .474 | 7 | .232 | 8 |
| 331- 441 | 203 | .482 | .318 | .018 | .163 | 6 | .00 | 210.97 | -14.35 | -70.53 | 629.48 | .328 | 7 | .260 | 8 |
| 361- 451 | 203 | .903 | .531 | .196 | .317 | 6 | .00 | -183.03 | 35.00 | 435.69 | -702.00 | .421 | 7 | .286 | 8 |
| 253- 201 | 205 | .140 | .005 | .135 | .012 | 8 | .00 | -3.67 | 39.03 | -705.76 | 60.28 | .136 | 7 | .119 | 6 |
| 311- 421 | 205 | .364 | .225 | .088 | .108 | 6 | .00 | 197.81 | -24.86 | -460.89 | 563.23 | .244 | 7 | .163 | 8 |
| 231- 321 | 205 | .808 | .647 | .075 | .143 | 6 | 67.08 | -283.40 | -17.13 | 167.63 | -320.97 | .470 | 7 | .101 | 8 |
| 346- 304 | 205 | .205 | .016 | .189 | .010 | 8 | .00 | -12.60 | -3.54 | 986.55 | 49.89 | .185 | 7 | .133 | 6 |
| 261- 371 | 205 | .346 | .270 | .001 | .075 | 6 | 67.08 | 237.65 | 12.82 | 7.54 | 394.93 | .216 | 7 | .097 | 8 |
| 421- 561 | 205 | .425 | .358 | .059 | .032 | 8 | 69.00 | 315.17 | 5.90 | -308.59 | -165.45 | .403 | 7 | .346 | 6 |
| 441- 581 | 205 | .474 | .363 | .068 | .059 | 8 | .00 | 337.35 | 20.07 | -355.96 | 310.37 | .435 | 7 | .377 | 6 |
| 451- 511 | 205 | 1.000 | .659 | .240 | .243 | 8 | 69.12 | -274.95 | -10.98 | 511.42 | 517.08 | .999 | 7 | .811 | 6 |
| 381- 471 | 205 | .702 | .424 | .194 | .199 | 6 | .00 | -177.94 | 1.03 | 693.32 | -709.25 | .379 | 7 | .161 | 8 |

*** Report Of Element Stress At Maximum Unity Check ***

| Member JA -JB | Group ID | Maximum Combined Unity CK | /--- Unity Check ---/ | | | Load Case No. | Dist From End(Ft) | Force Fx (Kips) | /----- Critical Member Loads -----/ | | | Next Two Highest Cases | | | | |
|------------------|-------------|---------------------------------|-----------------------|--------|--------|---------------------|-------------------------|-----------------------|-------------------------------------|--------------|--------------|------------------------|----------|----------------------|----------|---|
| | | | Axial | Y-Axis | Z-Axis | | | | Torsion Tx | Moment My | Moment Mz | Combined Unity CK | LD CN | Combined Unity CK | LD CN | |
| 471- | 531 | 205 | 1.153 | .744 | .376 | .161 | 8 | 69.00 | -311.63 | -9.47 | 605.04 | 259.21 | 1.086 | 7 | .793 | 6 |
| 511- | 651 | 205 | .422 | .215 | .140 | .152 | 7 | .00 | 189.06 | 73.27 | -735.04 | -793.29 | .413 | 6 | .380 | 8 |
| 531- | 671 | 205 | .440 | .235 | .049 | .200 | 6 | .00 | 206.44 | 124.39 | -257.90 | -1045.06 | .426 | 7 | .370 | 8 |
| 561- | 621 | 205 | .672 | .462 | .169 | .125 | 7 | .00 | -236.18 | -50.11 | 608.53 | 449.02 | .666 | 8 | .593 | 6 |
| 581- | 641 | 205 | .829 | .509 | .292 | .133 | 7 | .00 | -259.34 | -73.89 | 973.24 | 442.98 | .818 | 8 | .657 | 6 |
| 145- | 251 | 243 | .510 | .441 | .055 | .042 | 8 | 69.55 | 352.52 | 48.87 | 297.99 | 231.01 | .473 | 7 | .376 | 6 |
| 146- | 231 | 243 | 1.652 | .968 | .684 | .024 | 8 | .00 | -464.22 | 21.09 | 733.18 | 25.25 | 1.428 | 7 | .968 | 6 |
| 146- | 271 | 243 | .648 | .568 | .075 | .027 | 8 | 69.31 | 454.34 | -2.70 | 407.61 | 147.84 | .613 | 7 | .480 | 6 |
| 155- | 221 | 243 | 1.609 | .947 | .662 | .026 | 8 | .00 | -454.35 | 2.32 | 784.30 | -30.99 | 1.365 | 7 | .918 | 6 |
| 155- | 261 | 243 | .598 | .556 | .038 | .019 | 8 | 69.31 | 444.31 | -17.11 | 204.49 | 105.12 | .570 | 7 | .459 | 6 |
| 201- | 321 | 243 | .120 | .080 | .039 | .006 | 8 | 40.85 | -51.61 | -44.57 | 213.83 | 31.64 | .102 | 7 | .080 | 6 |
| 145- | 211 | 243 | 1.066 | .771 | .285 | .071 | 8 | .00 | -368.92 | 19.63 | 609.62 | 152.22 | .927 | 7 | .663 | 6 |
| 231- | 204 | 243 | .101 | .045 | .018 | .052 | 6 | .00 | 36.34 | 56.25 | 96.38 | -283.84 | .096 | 8 | .095 | 7 |
| 148- | 241 | 243 | 1.284 | .830 | .437 | .126 | 8 | .00 | -396.87 | -18.26 | 792.06 | -228.31 | 1.160 | 7 | .825 | 6 |
| 148- | 281 | 243 | .525 | .475 | .038 | .033 | 8 | 69.55 | 379.79 | -54.52 | 207.79 | -178.08 | .494 | 7 | .383 | 6 |
| 251- | 361 | 243 | .362 | .230 | .039 | .126 | 6 | 76.08 | 183.60 | -11.47 | 212.20 | 687.91 | .260 | 8 | .213 | 7 |
| 304- | 431 | 243 | .133 | .070 | .050 | .039 | 8 | 35.87 | -46.79 | 79.04 | 271.01 | -209.56 | .130 | 7 | .125 | 6 |
| 221- | 311 | 243 | .730 | .551 | .120 | .133 | 6 | 72.39 | -252.80 | -.44 | 387.09 | -430.66 | .435 | 7 | .120 | 8 |
| 311- | 451 | 243 | .503 | .403 | .046 | .090 | 8 | 79.18 | 322.08 | -6.35 | 248.11 | 487.49 | .472 | 7 | .406 | 6 |
| 321- | 301 | 243 | .095 | .025 | .005 | .070 | 6 | .00 | 19.66 | 104.81 | -26.47 | -381.33 | .071 | 7 | .063 | 8 |
| 241- | 331 | 243 | .822 | .527 | .206 | .211 | 6 | 76.08 | -228.77 | 62.13 | 664.93 | -681.28 | .451 | 7 | .145 | 8 |
| 271- | 381 | 243 | .430 | .300 | .059 | .116 | 6 | 72.39 | 239.73 | -7.25 | 321.52 | 628.27 | .282 | 7 | .146 | 8 |
| 381- | 441 | 243 | 1.711 | .873 | .740 | .394 | 8 | 79.18 | -359.60 | -5.20 | 749.47 | -399.48 | 1.542 | 7 | 1.026 | 6 |
| 201- | 343 | 245 | .036 | .012 | .010 | .022 | 8 | 25.88 | 12.30 | 6.16 | 78.60 | -167.89 | .033 | 7 | .026 | 6 |
| 202- | 201 | 245 | .112 | .045 | .067 | .011 | 8 | .00 | 47.35 | -10.01 | 499.40 | 82.08 | .094 | 7 | .067 | 6 |

*** Report Of Element Stress At Maximum Unity Check ***

| Member JA -JB | Group ID | Maximum Combined Unity CK | --- Unity Check --- | | | Load Case No. | Dist From End(Ft) | ----- Critical Member Loads ----- | | | | Next Two Highest Cases | | | |
|------------------|-------------|---------------------------------|---------------------|--------|--------|---------------------|-------------------------|-----------------------------------|---------------|---------------------------|--------------|------------------------|----------|----------------------|----------|
| | | | Axial | Y-Axis | Z-Axis | | | Force Fx (Kips) | Torsion Mx | Moment My (In-Kips) | Moment Mz | Combined Unity CK | LD CN | Combined Unity CK | LD CN |
| 203- 204 | 245 | .094 | .042 | .037 | .036 | 6 | .00 | -36.18 | 51.61 | 279.62 | -272.37 | .092 | 7 | .086 | 8 |
| 301- 343 | 245 | .067 | .007 | .057 | .020 | 8 | 23.37 | 7.45 | 3.24 | -424.61 | 146.39 | .067 | 7 | .058 | 6 |
| 301- 421 | 245 | .524 | .487 | .011 | .036 | 8 | 39.52 | -423.31 | 26.81 | 78.19 | -256.17 | .491 | 7 | .409 | 6 |
| 302- 301 | 245 | .112 | .049 | .061 | .016 | 8 | .00 | -44.22 | .77 | 456.55 | 117.20 | .097 | 7 | .078 | 6 |
| 303- 304 | 245 | .114 | .042 | .068 | .023 | 7 | .00 | 44.90 | -72.50 | 511.49 | -170.47 | .114 | 8 | .112 | 6 |
| 331- 304 | 245 | .479 | .403 | .001 | .076 | 7 | .00 | 427.64 | 62.87 | -9.65 | -566.57 | .466 | 8 | .423 | 6 |
| 304- 471 | 245 | .546 | .441 | .104 | .009 | 8 | .00 | 467.86 | -52.03 | 778.83 | 64.87 | .532 | 7 | .457 | 6 |
| 361- 301 | 245 | .588 | .515 | .073 | .002 | 8 | 39.52 | -448.01 | 23.07 | 516.10 | -12.73 | .567 | 7 | .487 | 6 |
| 131- 241 | 263 | .498 | .382 | .072 | .091 | 6 | .00 | 330.89 | -43.32 | 452.26 | 575.11 | .316 | 7 | .213 | 8 |
| 161- 251 | 263 | .798 | .592 | .198 | .059 | 6 | 79.95 | -287.22 | 59.72 | 678.40 | 203.51 | .349 | 7 | .212 | 8 |
| 111- 221 | 265 | .456 | .396 | .059 | .012 | 6 | 84.02 | 455.12 | -30.77 | 513.27 | -106.06 | .274 | 7 | .075 | 8 |
| 121- 231 | 265 | .556 | .471 | .084 | .012 | 6 | 71.43 | 541.90 | -34.00 | 733.31 | -102.91 | .332 | 7 | .060 | 8 |
| 171- 261 | 265 | .793 | .612 | .178 | .025 | 6 | .00 | -443.55 | -7.25 | 909.05 | -125.92 | .372 | 7 | .099 | 8 |
| 181- 271 | 265 | .995 | .696 | .271 | .126 | 6 | .00 | -423.71 | 20.06 | 930.21 | -433.39 | .512 | 7 | .092 | 8 |
| 271- 204 | 265 | .561 | .459 | .102 | .002 | 8 | 44.96 | -426.47 | -27.37 | 847.83 | 15.79 | .531 | 7 | .428 | 6 |
| 204- 331 | 265 | .499 | .444 | .055 | .002 | 8 | .00 | -412.94 | -69.23 | 456.49 | -15.23 | .466 | 7 | .360 | 6 |
| 221- 201 | 265 | .369 | .342 | .003 | .026 | 8 | .00 | 394.08 | 5.30 | 28.87 | 227.94 | .330 | 7 | .263 | 6 |
| 201- 361 | 265 | .432 | .351 | .081 | .008 | 8 | .00 | 403.80 | 53.82 | 705.38 | 66.52 | .399 | 7 | .319 | 6 |
| 241- 381 | 265 | .384 | .307 | .049 | .059 | 8 | 90.08 | 352.93 | 18.20 | 431.85 | -518.60 | .358 | 7 | .298 | 6 |
| 251- 311 | 265 | .796 | .573 | .189 | .120 | 8 | 90.08 | -314.23 | -3.08 | 837.40 | 532.80 | .733 | 7 | .563 | 6 |
| 200- 300 | CN1 | .486 | .022 | .307 | .348 | 6 | .00 | -372.31 | .00 | -38903.87 | -44089.82 | .451 | 7 | .442 | 8 |
| 300- 500 | CN2 | .621 | .047 | .402 | .411 | 6 | 98.00 | -110.40 | .00 | 16052.52 | 16413.26 | .618 | 7 | .616 | 8 |
| 500- 700 | CN2 | .610 | .035 | .402 | .411 | 6 | .00 | -110.40 | .00 | 16052.52 | 16413.26 | .606 | 7 | .604 | 8 |
| 700- 900 | CN2 | .114 | .003 | .103 | .043 | 7 | .00 | -14.49 | .00 | 4103.18 | 1699.59 | .114 | 6 | .114 | 8 |
| 123- 155 | J08 | .341 | .189 | .152 | .015 | 8 | 18.89 | 69.22 | 14.45 | -133.67 | 12.98 | .318 | 7 | .280 | 6 |

*** Report Of Element Stress At Maximum Unity Check ***

| Member JA -JB | Group ID | Maximum Combined Unity CK | /--- Unity Check ---/ | | | Load Case | Dist From End(Ft) | /----- Critical Member Loads -----/ | | | | Next Two Highest Cases | | | | |
|------------------|-------------|---------------------------------|-----------------------|--------|--------|--------------|-------------------------|-------------------------------------|---------------|---------------------------|--------------|------------------------|----------|----------------------|----------|--|
| | | | Component Values | | | | | Force Fx (Kips) | Torsion Mx | Moment My (In-Kips) | Moment Mz | Combined Unity CK | LD CN | Combined Unity CK | LD CN | |
| | | | Axial | Y-Axis | Z-Axis | No. | | | | | | | | | | |
| 124- 146 | J08 | .354 | .193 | .160 | .019 | 8 | 18.89 | 70.84 | -8.13 | -140.63 | -16.52 | .301 | 7 | .203 | 6 | |
| 144- 146 | J08 | .217 | .015 | .199 | .037 | 6 | .00 | 5.38 | -35.89 | -175.00 | 32.95 | .141 | 7 | .064 | 8 | |
| 146- 164 | J08 | .415 | .267 | .147 | .018 | 8 | .00 | -70.22 | -18.57 | 126.10 | 15.54 | .412 | 7 | .344 | 6 | |
| 155- 143 | J08 | .212 | .017 | .192 | .034 | 6 | 12.92 | -5.29 | 32.94 | 168.77 | 29.97 | .142 | 7 | .067 | 8 | |
| 155- 163 | J08 | .388 | .263 | .124 | .016 | 8 | .00 | -69.23 | 7.93 | 106.39 | -13.87 | .328 | 7 | .218 | 6 | |
| 123- 101 | J11 | .220 | .093 | .126 | .012 | 7 | .00 | -20.74 | -6.32 | 257.03 | 24.73 | .218 | 6 | .210 | 8 | |
| 124- 102 | J11 | .207 | .074 | .117 | .065 | 8 | .00 | -16.45 | -18.76 | 238.47 | 131.46 | .182 | 7 | .152 | 6 | |
| 163- 103 | J11 | .165 | .031 | .119 | .063 | 8 | .00 | 16.98 | 16.45 | -241.59 | -128.85 | .160 | 7 | .154 | 6 | |
| 164- 104 | J11 | .209 | .049 | .160 | .020 | 7 | .00 | 26.88 | 8.42 | -324.99 | -40.34 | .205 | 6 | .201 | 8 | |
| 123- 124 | J12 | .213 | .074 | .140 | .006 | 6 | .00 | 55.04 | 21.04 | 373.88 | -15.19 | .188 | 7 | .136 | 8 | |
| 163- 164 | J12 | .247 | .087 | .161 | .007 | 6 | 19.17 | -53.94 | -11.09 | -430.05 | -19.12 | .233 | 7 | .181 | 8 | |
| 121- 123 | J16 | .329 | .129 | .197 | .036 | 6 | 34.99 | -65.52 | -28.74 | 648.63 | -117.55 | .264 | 7 | .207 | 8 | |
| 123- 125 | J16 | .225 | .080 | .141 | .033 | 6 | .00 | 55.92 | -61.05 | 463.89 | 108.16 | .207 | 7 | .182 | 8 | |
| 124- 131 | J16 | .175 | .001 | .174 | .016 | 8 | .00 | .35 | -73.56 | 570.07 | -53.14 | .169 | 7 | .143 | 6 | |
| 125- 124 | J16 | .201 | .106 | .094 | .015 | 6 | 33.90 | -55.12 | -17.15 | 307.58 | -49.69 | .193 | 7 | .186 | 8 | |
| 161- 163 | J16 | .176 | .064 | .112 | .003 | 7 | 34.99 | -32.44 | 116.32 | -367.65 | 9.21 | .170 | 6 | .168 | 8 | |
| 163- 165 | J16 | .173 | .041 | .132 | .001 | 7 | .00 | 28.91 | -14.69 | -433.81 | -3.17 | .170 | 8 | .168 | 6 | |
| 164- 171 | J16 | .307 | .096 | .207 | .041 | 6 | .00 | 67.42 | 30.80 | -679.85 | -134.25 | .274 | 7 | .220 | 8 | |
| 165- 164 | J16 | .270 | .114 | .153 | .032 | 6 | 33.90 | -58.80 | 76.14 | -502.82 | 104.41 | .243 | 7 | .189 | 8 | |
| 111- 115 | J20 | .095 | .080 | .015 | .002 | 6 | .00 | -91.50 | 10.62 | -117.81 | 16.60 | .063 | 7 | .028 | 8 | |
| 115- 121 | J20 | .094 | .078 | .013 | .008 | 6 | 30.41 | -91.50 | 10.62 | -108.10 | 64.81 | .072 | 7 | .042 | 8 | |
| 121- 125 | J20 | .190 | .169 | .021 | .005 | 6 | 22.50 | -210.89 | -116.83 | 189.40 | -44.72 | .132 | 7 | .051 | 8 | |
| 123- 143 | J20 | .159 | .021 | .137 | .015 | 7 | .00 | 30.04 | -1.72 | 1108.24 | -125.60 | .158 | 6 | .145 | 8 | |
| 124- 144 | J20 | .154 | .007 | .148 | .001 | 8 | .00 | 9.60 | 36.66 | 1195.61 | -7.02 | .149 | 7 | .139 | 6 | |
| 125- 131 | J20 | .214 | .144 | .070 | .009 | 6 | 22.50 | -179.56 | 121.37 | -568.28 | 71.90 | .154 | 7 | .069 | 8 | |

*** Report Of Element Stress At Maximum Unity Check ***

| Member | Group | ID | Unity Check | | | Load Case | Dist From | Critical Member Loads | | | | Next Two Highest Cases | | | |
|---------|-------|------|---------------------------|-------|--------|-----------|-----------|-----------------------|-----------------|------------|---------------------|------------------------|-------------------|-------|---|
| | | | Maximum Combined Unity CK | Axial | V-Axis | | | Z-Axis | Force Fx (Kips) | Torsion Mx | Moment My (In-Kips) | Moment Mz | Combined Unity CK | LD CN | |
| 131-135 | J20 | .205 | .167 | .031 | .024 | 6 | .00 | -195.35 | -41.55 | 274.36 | 211.45 | .124 | 7 | .025 | 8 |
| 135-141 | J20 | .238 | .171 | .060 | .027 | 6 | 33.40 | -195.35 | -41.55 | -536.31 | -242.78 | .137 | 7 | .025 | 8 |
| 143-163 | J20 | .137 | .021 | .114 | .020 | 7 | 13.78 | 29.39 | -111.02 | -926.64 | -163.48 | .136 | 8 | .128 | 6 |
| 144-164 | J20 | .167 | .020 | .146 | .017 | 7 | 13.78 | -26.62 | -35.43 | -1183.36 | -135.98 | .166 | 6 | .158 | 8 |
| 151-159 | J20 | .190 | .132 | .051 | .027 | 6 | .00 | 185.30 | -10.77 | 414.61 | -221.67 | .086 | 7 | .033 | 8 |
| 159-161 | J20 | .212 | .132 | .076 | .026 | 6 | 30.41 | 185.30 | -10.77 | -618.35 | 211.84 | .124 | 7 | .052 | 8 |
| 161-165 | J20 | .212 | .130 | .082 | .006 | 6 | .00 | 182.48 | -143.73 | 667.73 | 46.35 | .151 | 7 | .074 | 8 |
| 165-171 | J20 | .192 | .153 | .026 | .029 | 6 | 22.50 | 215.26 | 65.86 | -213.01 | 237.22 | .119 | 7 | .040 | 8 |
| 171-175 | J20 | .102 | .091 | .007 | .008 | 6 | 30.41 | 127.53 | 20.56 | 60.01 | -68.09 | .075 | 7 | .039 | 8 |
| 175-181 | J20 | .124 | .091 | .031 | .011 | 6 | 33.40 | 127.53 | 20.56 | -253.02 | 91.64 | .090 | 7 | .047 | 8 |
| 111-145 | J24 | .257 | .152 | .089 | .055 | 8 | .00 | 219.82 | -114.61 | 915.13 | -560.85 | .223 | 7 | .155 | 6 |
| 121-155 | J24 | .232 | .142 | .090 | .001 | 8 | .00 | 205.75 | 21.06 | 922.71 | 12.36 | .224 | 7 | .186 | 6 |
| 131-146 | J24 | .261 | .157 | .102 | .014 | 8 | .00 | 227.61 | 16.63 | 1047.34 | -140.12 | .210 | 7 | .128 | 6 |
| 141-148 | J24 | .283 | .163 | .111 | .045 | 8 | .00 | 235.01 | 162.41 | 1139.72 | 456.98 | .271 | 7 | .219 | 6 |
| 145-151 | J24 | .248 | .178 | .059 | .038 | 8 | 46.30 | -198.82 | 77.23 | -646.07 | 411.75 | .236 | 7 | .188 | 6 |
| 146-171 | J24 | .279 | .204 | .072 | .021 | 7 | 46.30 | -227.85 | -123.83 | -781.67 | 227.49 | .260 | 8 | .254 | 6 |
| 148-181 | J24 | .279 | .194 | .071 | .048 | 8 | 46.30 | -216.36 | -66.16 | -765.72 | -523.46 | .252 | 7 | .190 | 6 |
| 155-161 | J24 | .267 | .188 | .077 | .013 | 8 | 46.30 | -210.54 | 31.29 | -840.59 | -136.88 | .221 | 7 | .148 | 6 |
| 121-145 | J25 | .124 | .022 | .095 | .038 | 7 | .00 | -12.26 | -73.13 | 709.20 | -282.63 | .117 | 6 | .116 | 8 |
| 145-161 | J25 | .100 | .011 | .088 | .003 | 6 | .00 | 12.11 | -8.04 | 660.77 | 24.04 | .084 | 7 | .064 | 8 |
| 148-131 | J25 | .129 | .002 | .126 | .002 | 6 | 78.83 | -1.30 | 67.34 | 947.33 | 16.17 | .125 | 7 | .116 | 8 |
| 171-148 | J25 | .094 | .010 | .076 | .036 | 6 | .00 | 10.90 | 10.09 | 565.51 | 267.66 | .072 | 7 | .064 | 8 |
| 223-254 | K08 | .178 | .121 | .052 | .022 | 7 | 18.89 | -21.25 | 3.03 | -31.16 | -13.31 | .176 | 8 | .150 | 6 |
| 224-255 | K08 | .214 | .098 | .115 | .007 | 8 | 18.89 | -17.23 | -9.69 | -69.60 | 4.13 | .198 | 7 | .160 | 6 |
| 244-255 | K08 | .159 | .008 | .151 | .006 | 8 | .00 | -1.68 | -15.57 | 91.02 | -3.86 | .146 | 7 | .134 | 6 |

*** Report Of Element Stress At Maximum Unity Check ***

| Member JA -JB | Group ID | Maximum Combined Unity CK | /--- Unity Check ---/ | | | Load Case No. | Dist From End(Ft) | /----- Critical Member Loads -----/ | | | | Next Two Highest Cases | | | |
|------------------|-------------|---------------------------------|-----------------------|--------|--------|---------------------|-------------------------|-------------------------------------|---------------|---------------------------|--------------|------------------------|----------|----------------------|----------|
| | | | Axial | Y-Axis | Z-Axis | | | Force Fx (Kips) | Torsion Mx | Moment My (In-Kips) | Moment Mz | Combined Unity CK | LD CN | Combined Unity CK | LD CN |
| 254- 243 | K08 | .088 | .008 | .080 | .009 | 8 | 12.92 | 1.89 | 19.65 | -48.33 | -5.18 | .077 | 7 | .077 | 6 |
| 254- 263 | K08 | .174 | .073 | .101 | .010 | 8 | .00 | 17.62 | 13.22 | 60.84 | 5.80 | .171 | 7 | .140 | 6 |
| 255- 264 | K08 | .126 | .080 | .046 | .001 | 8 | 18.89 | 19.29 | 2.30 | 28.07 | -.68 | .121 | 7 | .113 | 6 |
| 221- 225 | K11 | .105 | .046 | .040 | .042 | 7 | .00 | -20.33 | -15.73 | -82.45 | 86.20 | .103 | 8 | .101 | 6 |
| 225- 231 | K11 | .181 | .141 | .032 | .024 | 6 | 22.50 | -62.26 | 14.63 | -65.53 | -48.50 | .164 | 7 | .126 | 8 |
| 261- 265 | K11 | .118 | .082 | .034 | .013 | 6 | 22.50 | 45.51 | -17.01 | -68.41 | 26.70 | .100 | 7 | .071 | 8 |
| 265- 271 | K11 | .086 | .011 | .068 | .033 | 8 | 22.50 | -4.76 | 32.13 | 138.05 | 68.04 | .081 | 6 | .078 | 7 |
| 223- 224 | K12 | .065 | .044 | .020 | .008 | 8 | 19.17 | -27.20 | -11.71 | 54.29 | 20.41 | .062 | 6 | .057 | 7 |
| 263- 264 | K12 | .099 | .035 | .064 | .003 | 8 | 19.17 | 25.85 | -24.09 | 171.52 | 8.37 | .078 | 7 | .048 | 6 |
| 221- 223 | K13 | .231 | .130 | .100 | .014 | 6 | 29.77 | 54.51 | 6.61 | 156.73 | 22.38 | .200 | 7 | .135 | 8 |
| 223- 205 | K13 | .161 | .024 | .108 | .084 | 8 | .00 | -5.43 | 13.48 | 170.06 | -132.18 | .148 | 7 | .121 | 6 |
| 223- 225 | K13 | .299 | .219 | .079 | .014 | 6 | .00 | -66.17 | -8.41 | 125.73 | -22.10 | .260 | 7 | .190 | 8 |
| 224- 206 | K13 | .123 | .026 | .095 | .017 | 8 | .00 | -5.86 | -6.03 | 149.83 | 27.02 | .119 | 7 | .106 | 6 |
| 224- 231 | K13 | .263 | .141 | .121 | .020 | 8 | .00 | 58.85 | -8.11 | 190.96 | -30.77 | .175 | 7 | .104 | 6 |
| 225- 224 | K13 | .224 | .157 | .062 | .026 | 6 | 28.48 | 65.88 | 4.83 | 96.92 | 40.99 | .203 | 7 | .154 | 8 |
| 261- 263 | K13 | .409 | .236 | .172 | .017 | 8 | 29.77 | -69.53 | .97 | -266.94 | -25.83 | .289 | 7 | .122 | 6 |
| 263- 207 | K13 | .162 | .032 | .130 | .009 | 8 | .00 | 13.41 | 2.80 | -204.22 | -13.57 | .153 | 7 | .127 | 6 |
| 263- 265 | K13 | .287 | .205 | .078 | .023 | 6 | .00 | -61.97 | -14.44 | -125.98 | 36.48 | .262 | 7 | .210 | 8 |
| 264- 208 | K13 | .106 | .008 | .061 | .076 | 8 | .00 | 3.30 | -12.23 | -96.15 | 120.09 | .092 | 7 | .079 | 6 |
| 264- 271 | K13 | .259 | .170 | .088 | .011 | 6 | .00 | -50.15 | -9.13 | -143.79 | 18.68 | .215 | 7 | .142 | 8 |
| 265- 264 | K13 | .202 | .148 | .052 | .013 | 6 | 28.48 | 62.03 | 17.63 | -81.87 | -20.89 | .179 | 7 | .130 | 8 |
| 211- 221 | K18 | .270 | .181 | .059 | .067 | 6 | .00 | -74.84 | -14.38 | 239.97 | 272.01 | .163 | 7 | .040 | 8 |
| 271- 281 | K18 | .168 | .079 | .009 | .089 | 6 | 58.10 | 62.07 | -4.85 | -37.07 | 373.55 | .106 | 7 | .103 | 8 |
| 223- 243 | K20 | .111 | .050 | .059 | .014 | 7 | .00 | -66.78 | -7.37 | 474.62 | 111.07 | .105 | 6 | .099 | 8 |
| 224- 244 | K20 | .091 | .046 | .043 | .013 | 7 | .00 | 64.09 | 39.92 | 350.67 | 101.55 | .090 | 6 | .076 | 8 |

*** Report Of Element Stress At Maximum Unity Check ***

| Member | Group | Maximum Combined Unity CK | Unity Check | | | Load Case No. | Dist From End(Ft) | Force Fx (Kips) | Torsion Tx | Critical Member Loads | | Next Two Highest Cases | | | |
|----------|-------|---------------------------------|-------------|--------|--------|---------------------|-------------------------|-----------------------|---------------|---------------------------|--------------|------------------------|----------|----------------------|----------|
| | | | Axial | Y-Axis | Z-Axis | | | | | Moment My (In-Kips) | Moment Mz | Combined Unity CK | LD CN | Combined Unity CK | LD CN |
| 243- 263 | K20 | .108 | .051 | .056 | .013 | 7 | 13.78 | -66.86 | 32.78 | -450.97 | 104.66 | .102 | 6 | .096 | 8 |
| 244- 264 | K20 | .085 | .046 | .037 | .013 | 7 | 13.78 | 64.00 | 121.19 | -301.99 | 106.85 | .085 | 6 | .071 | 8 |
| 211- 251 | K24 | .318 | .170 | .139 | .053 | 8 | .00 | 135.76 | -17.70 | 755.84 | -285.79 | .297 | 7 | .245 | 6 |
| 221- 251 | K24 | .368 | .153 | .209 | .046 | 8 | .00 | -41.20 | -9.23 | 1134.51 | -246.49 | .298 | 7 | .230 | 6 |
| 221- 253 | K24 | .233 | .169 | .064 | .001 | 7 | .00 | -115.06 | -22.67 | 391.44 | -4.21 | .220 | 6 | .212 | 8 |
| 231- 255 | K24 | .285 | .179 | .106 | .006 | 7 | .00 | 142.82 | -45.45 | 576.08 | -33.90 | .277 | 6 | .259 | 8 |
| 241- 271 | K24 | .292 | .058 | .200 | .122 | 6 | 99.85 | -15.47 | 9.04 | 1087.36 | -661.66 | .216 | 8 | .215 | 7 |
| 241- 281 | K24 | .521 | .357 | .153 | .060 | 8 | .00 | -141.65 | -10.85 | 635.93 | 249.34 | .489 | 7 | .398 | 6 |
| 253- 254 | K24 | .262 | .149 | .111 | .021 | 7 | .00 | -119.13 | -85.71 | 605.94 | 113.48 | .254 | 8 | .249 | 6 |
| 254- 261 | K24 | .261 | .228 | .032 | .007 | 7 | .00 | -147.13 | -38.84 | 184.75 | 40.79 | .244 | 8 | .237 | 6 |
| 255- 271 | K24 | .214 | .146 | .067 | .010 | 7 | 40.60 | 117.03 | 57.70 | 365.62 | 51.91 | .213 | 6 | .192 | 8 |
| 331- 346 | L20 | .102 | .023 | .019 | .076 | 6 | 43.00 | 20.61 | 53.14 | 101.66 | 396.08 | .078 | 7 | .068 | 8 |
| 346- 371 | L20 | .282 | .019 | .263 | .014 | 8 | 27.90 | 16.57 | -20.30 | -1373.54 | 72.69 | .249 | 7 | .181 | 6 |
| 311- 361 | L24 | .201 | .065 | .136 | .005 | 6 | .00 | 52.09 | 19.49 | 737.68 | -25.26 | .191 | 7 | .176 | 8 |
| 331- 381 | L24 | .360 | .175 | .185 | .003 | 6 | .00 | -59.84 | -8.53 | 977.67 | 16.04 | .334 | 7 | .286 | 8 |
| 321- 343 | L25 | .107 | .018 | .021 | .086 | 6 | 35.45 | -15.88 | 75.45 | 157.80 | 647.58 | .068 | 7 | .038 | 8 |
| 343- 361 | L25 | .146 | .022 | .066 | .106 | 6 | .00 | -19.47 | -41.13 | 490.85 | 792.86 | .122 | 7 | .109 | 8 |
| 111- 211 | LG2 | .341 | .209 | .095 | .091 | 6 | 5.00 | -351.23 | -99.83 | -2693.68 | -2587.25 | .211 | 7 | .068 | 8 |
| 141- 241 | LG2 | .159 | .008 | .127 | .082 | 8 | 52.57 | -13.41 | -302.91 | 3194.56 | 2072.39 | .139 | 7 | .132 | 6 |
| 151- 251 | LG2 | .095 | .004 | .038 | .082 | 6 | 52.57 | 7.76 | 662.93 | 966.14 | -2070.92 | .078 | 7 | .077 | 8 |
| 181- 281 | LG2 | .263 | .157 | .071 | .079 | 6 | 5.00 | 322.49 | 423.20 | 1775.98 | 1988.85 | .152 | 7 | .056 | 8 |
| 211- 311 | LG2 | .409 | .311 | .003 | .098 | 6 | 5.00 | -532.17 | -196.35 | -81.01 | 2746.42 | .375 | 7 | .302 | 8 |
| 281- 381 | LG2 | .341 | .263 | .018 | .076 | 6 | 5.00 | 539.62 | 389.37 | -451.07 | -1912.90 | .313 | 7 | .268 | 8 |
| 311- 411 | LG2 | .780 | .630 | .143 | .044 | 6 | 5.00 | -1094.22 | -166.78 | -3832.88 | -1178.37 | .682 | 7 | .479 | 8 |
| 361- 461 | LG2 | .508 | .396 | .062 | .093 | 8 | 41.73 | 813.16 | 468.67 | -1556.28 | -2350.51 | .499 | 7 | .408 | 6 |

*** Report Of Element Stress At Maximum Unity Check ***

| Member | Group | Maximum Combined Unity CK | Unity Check | | | Load Case No. | Dist From End(Ft) | Force Fx (Kips) | Critical Member Loads | | | Next Two Highest Cases | | | |
|----------|-------|---------------------------------|-------------|--------|--------|---------------------|-------------------------|-----------------------|-----------------------|--------------|--------------|------------------------|----------|----------------------|----------|
| | | | Axial | Y-Axis | Z-Axis | | | | Torsion Tx | Moment My | Moment Mz | Combined Unity CK | LD CN | Combined Unity CK | LD CN |
| 371- 471 | LG2 | .507 | .338 | .071 | .153 | 6 | 41.73 | 693.95 | 624.93 | -1791.02 | -3862.33 | .500 | 7 | .415 | 8 |
| 381- 481 | LG2 | .653 | .547 | .093 | .051 | 6 | 5.00 | 1123.08 | 750.54 | 2335.09 | 1295.45 | .573 | 7 | .416 | 8 |
| 411- 511 | LG2 | .716 | .616 | .097 | .023 | 6 | 5.00 | -1083.32 | -23.31 | 2666.22 | 622.44 | .632 | 7 | .473 | 8 |
| 481- 581 | LG2 | .648 | .553 | .091 | .028 | 6 | 5.00 | 1134.95 | 924.09 | -2301.93 | -704.20 | .597 | 7 | .485 | 8 |
| 511- 611 | LG2 | .940 | .823 | .113 | .029 | 6 | 5.00 | -1468.73 | 375.43 | -3100.97 | -787.04 | .857 | 7 | .619 | 8 |
| 581- 681 | LG2 | .889 | .769 | .120 | .012 | 6 | 31.24 | 1578.14 | 2105.83 | -3022.91 | -312.95 | .824 | 7 | .614 | 8 |
| 121- 101 | LG3 | .358 | .208 | .052 | .141 | 6 | 5.00 | -371.91 | -443.84 | -1509.47 | -4102.47 | .212 | 7 | .065 | 8 |
| 131- 102 | LG3 | .286 | .116 | .054 | .161 | 6 | 5.00 | -206.68 | -495.09 | -1363.35 | -4063.20 | .174 | 7 | .082 | 8 |
| 161- 103 | LG3 | .209 | .107 | .023 | .100 | 6 | 35.17 | 219.07 | 528.64 | -591.52 | -2506.36 | .127 | 7 | .070 | 8 |
| 171- 104 | LG3 | .323 | .178 | .018 | .143 | 6 | 5.00 | 366.36 | 584.38 | -441.92 | 3605.72 | .151 | 7 | .044 | 8 |
| 241- 341 | LG3 | .499 | .352 | .121 | .084 | 8 | 5.00 | -602.62 | -284.16 | -3354.56 | -2320.02 | .340 | 7 | .163 | 6 |
| 251- 351 | LG3 | .355 | .280 | .038 | .065 | 8 | 5.00 | 574.38 | 385.58 | 954.01 | 1637.71 | .245 | 7 | .129 | 6 |
| 261- 227 | LG3 | .254 | .186 | .065 | .020 | 8 | 5.00 | 382.16 | -258.73 | 1624.32 | -493.70 | .164 | 7 | .127 | 6 |
| 271- 208 | LG3 | .349 | .284 | .064 | .009 | 8 | 5.00 | 583.95 | -274.59 | 1614.39 | -225.55 | .301 | 7 | .221 | 6 |
| 321- 302 | LG3 | .471 | .349 | .040 | .115 | 6 | 5.00 | -641.07 | -277.79 | -1167.23 | -3363.49 | .453 | 7 | .358 | 8 |
| 331- 303 | LG3 | .533 | .364 | .107 | .131 | 8 | 5.00 | -667.26 | -184.52 | -3138.18 | -3829.60 | .522 | 7 | .436 | 6 |
| 421- 507 | LG3 | .559 | .470 | .044 | .078 | 8 | 5.00 | -865.26 | 812.92 | -1270.53 | 2259.82 | .506 | 7 | .392 | 6 |
| 431- 506 | LG3 | .512 | .369 | .020 | .141 | 8 | 5.00 | -679.14 | 665.50 | -575.62 | 4128.34 | .399 | 7 | .239 | 6 |
| 441- 541 | LG3 | .737 | .591 | .111 | .095 | 8 | 5.00 | -1040.29 | 118.19 | -3049.51 | -2612.20 | .487 | 7 | .191 | 6 |
| 451- 551 | LG3 | .619 | .494 | .097 | .080 | 8 | 5.00 | 1013.31 | 364.59 | 2451.04 | 2008.43 | .407 | 7 | .143 | 6 |
| 461- 508 | LG3 | .507 | .400 | .076 | .076 | 8 | 5.00 | 821.12 | -460.96 | -1906.42 | -1912.50 | .395 | 7 | .222 | 6 |
| 471- 505 | LG3 | .631 | .515 | .093 | .069 | 8 | 5.00 | 1058.19 | -527.84 | 2341.17 | -1737.37 | .580 | 7 | .428 | 6 |
| 521- 503 | LG3 | .550 | .454 | .021 | .093 | 7 | 5.00 | -843.87 | -698.17 | 618.35 | -2744.19 | .550 | 8 | .454 | 6 |
| 531- 502 | LG3 | .689 | .516 | .102 | .140 | 8 | 5.00 | -957.97 | -769.15 | -2979.48 | -4100.46 | .668 | 7 | .526 | 6 |
| 561- 504 | LG3 | .650 | .535 | .083 | .079 | 8 | 5.00 | 1098.74 | 1525.78 | 2079.91 | 1991.17 | .623 | 7 | .487 | 6 |

*** Report Of Element Stress At Maximum Unity Check ***

| Member JA -JB | Group ID | Maximum Combined Unity CK | /--- Unity Check ---/ | | | Load Case No. | Dist From End(Ft) | /----- Critical Member Loads -----/ | | | | Next Two Highest Cases | | | | |
|------------------|-------------|---------------------------------|-----------------------|--------|--------|---------------------|-------------------------|-------------------------------------|---------------|---------------------------|--------------|------------------------|----------|----------------------|----------|---|
| | | | Axial | Y-Axis | Z-Axis | | | Force Fx (Kips) | Torsion Tx | Moment My (In-Kips) | Moment Mz | Combined Unity CK | LD CH | Combined Unity CK | LD CN | |
| 571- | 501 | LG3 | .674 | .522 | .150 | .019 | 8 | 16.92 | 1071.96 | 1247.67 | -3781.47 | 486.84 | .652 | 7 | .532 | 6 |
| 101- | 221 | LG4 | .341 | .164 | .101 | .146 | 6 | 17.11 | -337.25 | -571.91 | 2532.60 | 3669.78 | .242 | 7 | .123 | 8 |
| 102- | 231 | LG4 | .306 | .096 | .048 | .205 | 6 | 17.11 | -175.66 | -640.74 | 1217.27 | 5150.98 | .206 | 7 | .141 | 8 |
| 103- | 261 | LG4 | .301 | .110 | .038 | .188 | 6 | 17.11 | 225.08 | 620.31 | -955.02 | -4733.03 | .182 | 7 | .096 | 8 |
| 104- | 271 | LG4 | .421 | .192 | .128 | .190 | 6 | 17.11 | 394.10 | 665.10 | -3214.25 | -4776.96 | .310 | 7 | .174 | 8 |
| 207- | 361 | LG4 | .368 | .195 | .131 | .113 | 8 | 16.61 | 399.77 | -298.26 | -3297.53 | 2847.42 | .247 | 7 | .138 | 6 |
| 208- | 371 | LG4 | .359 | .290 | .017 | .067 | 8 | 16.61 | 594.93 | -301.10 | -437.61 | 1695.03 | .287 | 7 | .186 | 6 |
| 302- | 421 | LG4 | .479 | .327 | .113 | .101 | 7 | 18.37 | -600.47 | -279.33 | 3311.58 | 2954.45 | .463 | 6 | .420 | 8 |
| 303- | 431 | LG4 | .496 | .349 | .009 | .146 | 8 | 18.37 | -640.39 | -160.42 | -266.16 | 4274.29 | .486 | 7 | .397 | 6 |
| 341- | 441 | LG4 | .395 | .341 | .042 | .033 | 8 | .00 | -592.78 | -284.16 | 1192.10 | 915.92 | .243 | 7 | .064 | 6 |
| 351- | 451 | LG4 | .342 | .285 | .039 | .041 | 8 | .00 | 584.21 | 385.58 | -990.15 | -1039.38 | .210 | 7 | .059 | 6 |
| 501- | 671 | LG4 | .682 | .524 | .157 | .019 | 8 | .00 | 1076.53 | 1346.85 | -3946.07 | 468.45 | .661 | 7 | .542 | 6 |
| 502- | 631 | LG4 | .750 | .596 | .136 | .070 | 8 | 14.15 | -1102.90 | -670.79 | 3978.96 | 2050.77 | .699 | 7 | .515 | 6 |
| 503- | 621 | LG4 | .753 | .567 | .183 | .028 | 8 | .00 | -1049.54 | -876.89 | 5353.15 | -807.72 | .725 | 7 | .567 | 6 |
| 504- | 661 | LG4 | .702 | .540 | .158 | .034 | 8 | 14.15 | 1108.00 | 1424.10 | -3987.28 | -845.77 | .655 | 7 | .505 | 6 |
| 505- | 571 | LG4 | .614 | .520 | .037 | .087 | 8 | 14.60 | 1068.40 | -509.64 | -918.93 | 2182.22 | .577 | 7 | .442 | 6 |
| 506- | 531 | LG4 | .524 | .359 | .031 | .162 | 8 | 14.60 | -663.47 | 712.36 | 910.99 | -4759.85 | .407 | 7 | .248 | 6 |
| 507- | 521 | LG4 | .546 | .454 | .035 | .085 | 8 | 14.60 | -840.03 | 799.53 | 1011.87 | -2481.16 | .518 | 7 | .403 | 6 |
| 508- | 561 | LG4 | .522 | .406 | .018 | .114 | 8 | 14.60 | 833.84 | -491.02 | -460.70 | 2873.54 | .402 | 7 | .223 | 6 |
| 541- | 641 | LG4 | .673 | .579 | .065 | .068 | 8 | .00 | -1032.57 | 118.37 | 1824.82 | 1904.70 | .421 | 7 | .130 | 6 |
| 551- | 651 | LG4 | .618 | .497 | .095 | .074 | 8 | .00 | 1021.04 | 364.42 | -2399.04 | -1872.86 | .394 | 7 | .121 | 6 |
| 202- | 205 | LG7 | .202 | .129 | .074 | .005 | 8 | .00 | -518.77 | 389.14 | 4057.63 | -251.16 | .176 | 7 | .124 | 6 |
| 205- | 321 | LG7 | .195 | .133 | .061 | .011 | 8 | .00 | -520.92 | 420.88 | 3386.30 | -625.53 | .171 | 7 | .121 | 6 |
| 203- | 206 | LG7 | .143 | .079 | .063 | .015 | 8 | .00 | -317.66 | 342.21 | -3454.10 | -849.21 | .092 | 7 | .084 | 6 |
| 206- | 331 | LG7 | .205 | .080 | .098 | .079 | 8 | 21.61 | -311.25 | 378.08 | 5403.21 | -4368.07 | .145 | 7 | .130 | 6 |

*** Report Of Element Stress At Maximum Unity Check ***

| Member JA -JB | Group ID | Maximum Combined Unity CK | /--- Unity Check ---/ Component Values | | | Load Case No. | Dist From End(Ft) | /----- Critical Member Loads -----/ Force Torsion Moment Moment | | | | Next Two Highest Cases | | | |
|------------------|-------------|---------------------------------|---|--------|--------|---------------------|-------------------------|--|----------|-----------------|----------|------------------------|----------|----------------------|----------|
| | | | Axial | V-Axis | Z-Axis | | | Fx (Kips) | Hx | My (In-Kips) | Hx | Combined Unity CK | LD CM | Combined Unity CK | LD CN |
| 221- 202 | LG7 | .272 | .144 | .123 | .038 | 8 | .00 | -558.63 | 469.57 | -6771.13 | 2100.77 | .217 | 7 | .144 | 6 |
| 231- 203 | LG7 | .150 | .096 | .040 | .037 | 8 | .00 | -371.34 | 298.32 | -2229.71 | 2038.91 | .079 | 7 | .055 | 6 |
| 611- 712 | LG7 | .400 | .353 | .044 | .016 | 6 | 2.64 | -1433.38 | 154.43 | 2417.51 | 874.15 | .360 | 7 | .259 | 8 |
| 621- 722 | LG7 | .390 | .288 | .090 | .049 | 8 | .00 | -1169.06 | 28.57 | -4974.57 | 2682.33 | .364 | 7 | .279 | 6 |
| 631- 732 | LG7 | .324 | .267 | .019 | .054 | 8 | .00 | -1082.90 | 1.80 | -1022.17 | 2981.71 | .300 | 7 | .222 | 6 |
| 641- 742 | LG7 | .474 | .293 | .141 | .113 | 8 | .00 | -1189.34 | 1543.85 | -7797.72 | -6263.43 | .345 | 7 | .157 | 6 |
| 651- 752 | LG7 | .400 | .299 | .064 | .078 | 8 | .00 | 1215.88 | -2093.79 | 3519.37 | 4280.60 | .278 | 7 | .119 | 6 |
| 661- 762 | LG7 | .334 | .280 | .049 | .021 | 8 | .00 | 1139.17 | -900.45 | -2729.20 | -1143.61 | .305 | 7 | .226 | 6 |
| 671- 772 | LG7 | .359 | .316 | .037 | .022 | 8 | 2.63 | 1283.84 | -884.77 | 2047.97 | -1223.89 | .339 | 7 | .263 | 6 |
| 681- 782 | LG7 | .447 | .396 | .051 | .007 | 6 | .00 | 1608.82 | -3180.67 | -2798.77 | -394.61 | .410 | 7 | .308 | 8 |
| 424- 446 | M08 | .262 | .192 | .064 | .030 | 8 | 18.89 | -33.59 | -6.11 | -39.91 | 18.80 | .239 | 7 | .191 | 6 |
| 443- 423 | M08 | .262 | .204 | .028 | .051 | 7 | .00 | -35.72 | -2.25 | -17.58 | 31.41 | .249 | 8 | .235 | 6 |
| 443- 463 | M08 | .199 | .143 | .046 | .033 | 8 | .00 | 34.52 | 7.79 | 27.61 | 19.70 | .175 | 7 | .128 | 6 |
| 446- 464 | M08 | .195 | .149 | .018 | .042 | 7 | .00 | 35.85 | -2.26 | 11.04 | -25.63 | .190 | 6 | .181 | 8 |
| 423- 507 | M09 | .141 | .004 | .064 | .121 | 8 | .00 | -1.95 | 15.89 | 70.18 | -133.27 | .106 | 7 | .067 | 6 |
| 424- 506 | M09 | .166 | .017 | .103 | .108 | 7 | .00 | -3.63 | -1.40 | 113.75 | 118.71 | .163 | 8 | .155 | 6 |
| 463- 508 | M09 | .176 | .021 | .110 | .109 | 7 | .00 | 7.41 | 6.57 | -121.02 | -120.42 | .170 | 6 | .169 | 8 |
| 464- 505 | M09 | .122 | .013 | .047 | .098 | 8 | .00 | 4.43 | -14.47 | -51.61 | 108.20 | .080 | 7 | .073 | 6 |
| 421- 423 | M10 | .350 | .254 | .028 | .092 | 6 | .00 | 87.02 | 17.80 | -29.95 | 98.50 | .316 | 7 | .255 | 8 |
| 423- 425 | M10 | .192 | .115 | .002 | .077 | 6 | 19.53 | -31.12 | -3.44 | -2.54 | 82.20 | .102 | 7 | .099 | 8 |
| 424- 431 | M10 | .259 | .105 | .153 | .020 | 8 | .00 | 35.76 | -7.71 | 163.99 | 21.13 | .216 | 6 | .155 | 7 |
| 425- 424 | M10 | .141 | .087 | .051 | .018 | 6 | 19.53 | 29.67 | 11.44 | 54.67 | 19.58 | .140 | 8 | .098 | 7 |
| 461- 463 | M10 | .341 | .192 | .147 | .023 | 8 | 21.37 | -50.06 | 8.31 | -166.87 | 25.97 | .211 | 7 | .178 | 6 |
| 463- 465 | M10 | .176 | .119 | .052 | .023 | 6 | .00 | -32.05 | -16.99 | -56.26 | 24.64 | .133 | 8 | .111 | 7 |
| 464- 471 | M10 | .532 | .395 | .047 | .129 | 6 | 21.37 | -102.96 | -15.50 | 46.45 | 128.52 | .472 | 7 | .365 | 8 |

*** Report Of Element Stress At Maximum Unity Check ***

| Member JA -JB | Group ID | Maximum Combined Unity CK | /--- Unity Check ---/ | | | Load Case No. | Dist From End(Ft) | /----- Critical Member Loads -----/ | | | | Next Two Highest Cases | | | |
|------------------|-------------|---------------------------------|-----------------------|--------|--------|------------------|----------------------|-------------------------------------|---------------|---------------------------|--------------|------------------------|----------|----------------------|----------|
| | | | Axial | V-Axis | Z-Axis | | | Force Fx (Kips) | Torsion Mx | Moment My (In-Kips) | Moment Mz | Combined Unity CK | LD CN | Combined Unity CK | LD CN |
| 465- 464 | M10 | .183 | .097 | .006 | .085 | 6 | .00 | 33.23 | 8.87 | 6.96 | 91.73 | .108 | 8 | .088 | 7 |
| 421- 425 | M11 | .241 | .120 | .060 | .105 | 7 | .00 | -52.94 | -8.38 | -121.64 | 213.94 | .240 | 8 | .216 | 6 |
| 425- 431 | M11 | .222 | .155 | .043 | .051 | 6 | 22.50 | -68.19 | 6.58 | -96.34 | -113.72 | .199 | 7 | .172 | 8 |
| 461- 465 | M11 | .175 | .099 | .027 | .071 | 6 | .00 | 54.55 | 2.83 | 54.92 | -145.40 | .124 | 7 | .093 | 8 |
| 465- 471 | M11 | .201 | .038 | .041 | .158 | 6 | 22.50 | 20.99 | 13.63 | 83.34 | 321.85 | .199 | 7 | .175 | 8 |
| 423- 424 | M12 | .091 | .059 | .028 | .015 | 8 | 19.17 | -36.88 | -6.40 | 75.36 | 40.28 | .076 | 7 | .061 | 6 |
| 463- 464 | M12 | .074 | .044 | .027 | .013 | 8 | 19.17 | 33.02 | 2.81 | 70.95 | 35.29 | .062 | 7 | .047 | 6 |
| 411- 421 | M14 | .179 | .016 | .008 | .163 | 8 | 48.30 | 7.54 | 3.99 | -15.35 | 311.39 | .164 | 6 | .161 | 7 |
| 471- 481 | M14 | .287 | .084 | .051 | .196 | 6 | 48.30 | -18.31 | -12.53 | 97.21 | 375.73 | .268 | 7 | .211 | 8 |
| 411- 451 | M18 | .122 | .024 | .048 | .085 | 8 | .00 | -8.93 | -11.42 | 202.76 | -358.59 | .101 | 7 | .099 | 6 |
| 421- 443 | M18 | .179 | .117 | .053 | .031 | 8 | .00 | 92.51 | -4.27 | 222.37 | 132.16 | .154 | 7 | .110 | 6 |
| 431- 446 | M18 | .110 | .077 | .024 | .022 | 8 | .00 | -49.37 | -10.57 | 100.36 | 91.50 | .096 | 7 | .079 | 6 |
| 441- 481 | M18 | .083 | .007 | .023 | .072 | 8 | .00 | 5.63 | -3.05 | 95.02 | 302.56 | .068 | 6 | .065 | 7 |
| 443- 461 | M18 | .110 | .023 | .030 | .082 | 6 | 30.80 | -14.49 | 3.18 | -127.52 | 344.58 | .101 | 8 | .091 | 7 |
| 446- 471 | M18 | .191 | .157 | .016 | .030 | 8 | 30.80 | -100.00 | 1.72 | -72.50 | 138.95 | .187 | 7 | .158 | 6 |
| 421- 451 | M20 | .305 | .145 | .109 | .117 | 8 | .00 | -36.30 | -10.11 | 420.50 | -451.38 | .304 | 6 | .269 | 7 |
| 441- 471 | M20 | .411 | .123 | .159 | .239 | 6 | 78.28 | -30.92 | 4.12 | 616.10 | -923.66 | .273 | 7 | .160 | 8 |
| 463- 423 | M21 | .059 | .034 | .024 | .005 | 6 | .00 | -41.09 | -1.59 | -198.45 | 36.92 | .046 | 8 | .041 | 7 |
| 464- 424 | M21 | .056 | .020 | .036 | .001 | 8 | 27.56 | -24.58 | 35.00 | 288.71 | -4.36 | .053 | 6 | .039 | 7 |
| 521- 561 | M16 | .276 | .101 | .027 | .173 | 6 | .00 | -26.95 | -9.39 | 67.15 | -435.80 | .217 | 7 | .208 | 8 |
| 531- 571 | M16 | .243 | .058 | .085 | .165 | 6 | .00 | 30.64 | 3.63 | 214.24 | -414.41 | .172 | 7 | .148 | 8 |
| 511- 561 | N20 | .240 | .040 | .073 | .186 | 8 | 69.21 | 26.64 | -17.64 | 283.17 | 718.65 | .166 | 6 | .164 | 7 |
| 531- 581 | N20 | .399 | .249 | .116 | .095 | 6 | 69.21 | -79.22 | -9.80 | 395.97 | 324.38 | .334 | 7 | .280 | 8 |
| 626- 643 | P08 | .363 | .276 | .001 | .087 | 7 | 16.25 | -51.84 | 2.85 | .82 | -53.24 | .342 | 8 | .315 | 6 |
| 628- 646 | P08 | .358 | .234 | .123 | .006 | 8 | .00 | -44.01 | 8.04 | -77.36 | -3.54 | .329 | 7 | .258 | 6 |

*** Report Of Element Stress At Maximum Unity Check ***

| Member JA -JB | Group ID | Maximum Unity CK | Unity Check | | | Load Case No. | Dist From End(Ft) | Force Fx (Kips) | Critical Member Loads | | | Next Two Highest Cases | | | |
|------------------|-------------|---------------------|-------------|--------|--------|------------------|-------------------------|-----------------------|-----------------------|--------------|--------------|------------------------|----------|----------------------|----------|
| | | | Axial | Y-Axis | Z-Axis | | | | Torsion Tx | Moment My | Moment Mz | Combined Unity CK | LD CN | Combined Unity CK | LD CN |
| 643- 666 | P08 | .290 | .215 | .033 | .067 | 8 | .00 | 51.97 | -.11 | 20.09 | 40.52 | .244 | 7 | .161 | 6 |
| 646- 668 | P08 | .307 | .190 | .108 | .045 | 8 | 16.25 | 45.83 | -8.37 | -64.98 | -27.19 | .305 | 7 | .263 | 6 |
| 621- 626 | P10 | .333 | .194 | .080 | .113 | 6 | .00 | 66.52 | 3.73 | -85.50 | 121.53 | .321 | 7 | .260 | 8 |
| 623- 625 | P10 | .114 | .061 | .021 | .049 | 6 | .00 | -18.20 | -4.21 | -22.98 | 52.45 | .064 | 8 | .059 | 7 |
| 625- 624 | P10 | .136 | .051 | .059 | .061 | 8 | 13.19 | -15.20 | -6.25 | -63.30 | 65.54 | .110 | 6 | .071 | 7 |
| 626- 503 | P10 | .184 | .036 | .107 | .103 | 8 | 27.44 | -8.09 | 2.15 | -115.06 | -110.10 | .175 | 7 | .172 | 6 |
| 628- 502 | P10 | .231 | .070 | .028 | .158 | 7 | 27.44 | -15.91 | -16.65 | -30.37 | 169.78 | .222 | 6 | .218 | 8 |
| 631- 628 | P10 | .310 | .220 | .067 | .060 | 6 | 18.37 | -60.72 | -19.65 | -77.16 | -69.19 | .209 | 7 | .094 | 8 |
| 663- 665 | P10 | .144 | .048 | .009 | .095 | 6 | 13.19 | -14.43 | -4.02 | -9.78 | -102.01 | .139 | 8 | .091 | 7 |
| 665- 664 | P10 | .181 | .048 | .059 | .119 | 6 | .00 | 16.54 | 15.67 | 63.19 | 127.41 | .123 | 8 | .113 | 7 |
| 666- 504 | P10 | .197 | .030 | .113 | .121 | 8 | 27.44 | -6.87 | 9.82 | 121.84 | -130.31 | .183 | 6 | .173 | 7 |
| 666- 661 | P10 | .393 | .368 | .001 | .025 | 8 | 18.37 | -101.67 | 15.09 | -1.56 | 26.37 | .344 | 7 | .256 | 6 |
| 668- 501 | P10 | .233 | .040 | .161 | .108 | 7 | 27.44 | -8.95 | -12.78 | 172.51 | 115.92 | .229 | 6 | .217 | 8 |
| 668- 671 | P10 | .855 | .511 | .086 | .333 | 6 | 18.37 | -140.94 | 4.77 | 85.48 | 330.63 | .769 | 7 | .583 | 8 |
| 611- 621 | P12 | .281 | .146 | .065 | .118 | 6 | .00 | -42.50 | 8.09 | -131.83 | 240.64 | .279 | 7 | .278 | 8 |
| 621- 625 | P12 | .405 | .282 | .061 | .107 | 8 | .00 | -124.20 | 18.57 | -128.10 | 223.50 | .381 | 7 | .312 | 6 |
| 625- 631 | P12 | .341 | .243 | .092 | .034 | 8 | 22.50 | -106.79 | -21.15 | -197.27 | 71.95 | .331 | 7 | .296 | 6 |
| 631- 641 | P12 | .719 | .499 | .054 | .213 | 6 | .00 | -145.12 | -.41 | -68.03 | 266.53 | .677 | 7 | .558 | 8 |
| 651- 661 | P12 | .312 | .033 | .058 | .272 | 6 | 40.56 | 18.40 | -6.20 | -119.12 | 554.73 | .308 | 8 | .289 | 7 |
| 661- 665 | P12 | .229 | .081 | .043 | .142 | 6 | .00 | 44.68 | -8.45 | -86.78 | -289.16 | .160 | 7 | .090 | 8 |
| 665- 671 | P12 | .342 | .088 | .003 | .254 | 7 | 22.50 | 48.68 | 12.84 | 7.06 | 517.13 | .329 | 6 | .280 | 8 |
| 671- 681 | P12 | .729 | .292 | .019 | .437 | 6 | 40.56 | -84.88 | -15.51 | 32.30 | 753.60 | .712 | 7 | .613 | 8 |
| 611- 651 | P14 | .421 | .271 | .092 | .118 | 8 | 46.13 | -83.07 | -3.40 | -198.12 | 252.79 | .398 | 7 | .354 | 6 |
| 621- 643 | P14 | .215 | .134 | .060 | .053 | 8 | .00 | 81.89 | -9.74 | -149.85 | 130.90 | .179 | 7 | .104 | 6 |
| 631- 646 | P14 | .348 | .300 | .037 | .030 | 8 | .00 | -149.37 | 16.29 | -94.22 | 78.01 | .312 | 7 | .239 | 6 |

*** Report Of Element Stress At Maximum Unity Check ***

| Member | Group | Maximum Combined Unity CK | Unity Check | | | Load Case No. | Dist From End(Ft) | Force Fx (Kips) | Torsion Fx | Critical Member Loads | | Next Two Highest Cases | | | |
|---------|-------|---------------------------|-------------|--------|--------|---------------|-------------------|-----------------|------------|-----------------------|-----------|------------------------|-------|-------------------|-------|
| | | | Axial | Y-Axis | Z-Axis | | | | | Moment My (In-Kips) | Moment Mz | Combined Unity CK | LD CN | Combined Unity CK | LD CN |
| 641-681 | P14 | .341 | .241 | .038 | .092 | 6 | .00 | -73.81 | 4.63 | 85.50 | -205.91 | .315 | 7 | .294 | 8 |
| 643-661 | P14 | .297 | .085 | .085 | .195 | 6 | 23.06 | -42.09 | 3.56 | -211.54 | 482.76 | .205 | 7 | .148 | 8 |
| 646-671 | P14 | .529 | .356 | .034 | .169 | 7 | 23.06 | -177.03 | -33.04 | -85.28 | 424.12 | .509 | 8 | .448 | 6 |
| 623-624 | P16 | .091 | .015 | .018 | .074 | 8 | 19.29 | -9.19 | -.21 | -57.86 | 243.04 | .084 | 6 | .052 | 7 |
| 626-628 | P16 | .177 | .109 | .028 | .062 | 8 | 19.29 | -66.89 | -4.67 | -91.46 | 205.09 | .144 | 6 | .138 | 7 |
| 663-664 | P16 | .096 | .009 | .002 | .087 | 8 | .00 | 6.13 | -16.79 | 7.87 | 286.76 | .072 | 6 | .041 | 7 |
| 666-668 | P16 | .110 | .034 | .009 | .074 | 8 | .00 | 24.10 | -18.32 | 30.91 | 244.76 | .067 | 6 | .064 | 7 |
| 621-651 | P18 | .610 | .254 | .131 | .332 | 7 | .00 | -73.74 | -14.01 | -365.45 | -925.40 | .560 | 8 | .525 | 6 |
| 641-671 | P18 | .347 | .048 | .047 | .296 | 6 | .00 | 28.59 | -1.77 | 147.20 | -934.08 | .340 | 7 | .276 | 8 |
| 623-626 | P21 | .093 | .011 | .014 | .080 | 6 | 4.13 | -15.83 | -24.23 | -117.07 | 651.80 | .056 | 7 | .020 | 8 |
| 624-628 | P21 | .095 | .011 | .024 | .081 | 8 | 4.13 | -14.59 | 100.00 | -194.60 | -658.39 | .045 | 7 | .028 | 6 |
| 626-666 | P21 | .055 | .027 | .006 | .027 | 6 | .00 | -33.99 | -13.39 | -50.52 | 222.33 | .040 | 8 | .033 | 7 |
| 628-668 | P21 | .083 | .041 | .025 | .034 | 8 | .00 | -52.23 | 43.13 | -200.27 | -274.49 | .055 | 7 | .029 | 6 |
| 666-663 | P21 | .099 | .014 | .012 | .084 | 8 | .00 | 19.52 | 14.42 | -100.90 | -678.40 | .039 | 6 | .039 | 7 |
| 668-664 | P21 | .082 | .010 | .013 | .070 | 6 | .00 | 14.07 | -13.45 | -107.72 | 569.64 | .030 | 7 | .030 | 8 |
| 112-212 | PL2 | .808 | .136 | .658 | .136 | 6 | .00 | 863.67 | .00 | 50529.76 | 10464.04 | .702 | 7 | .624 | 8 |
| 122-222 | PL2 | .743 | .036 | .418 | .571 | 6 | .00 | -192.42 | .00 | 32057.26 | 43873.03 | .641 | 7 | .624 | 8 |
| 132-232 | PL2 | .757 | .030 | .462 | .562 | 6 | .00 | -161.94 | .00 | 35434.30 | 43127.14 | .671 | 7 | .642 | 8 |
| 142-242 | PL2 | .957 | .200 | .043 | .756 | 6 | .00 | -1274.30 | .00 | -3292.00 | 58019.21 | .810 | 7 | .661 | 8 |
| 152-252 | PL2 | .888 | .342 | .416 | .353 | 8 | .00 | -1840.43 | .00 | -33570.58 | -28485.62 | .780 | 7 | .764 | 6 |
| 162-262 | PL2 | .982 | .387 | .591 | .063 | 8 | .00 | -2088.37 | .00 | -46958.30 | 4973.34 | .974 | 6 | .974 | 7 |
| 172-272 | PL2 | 1.022 | .413 | .606 | .062 | 8 | .00 | -2225.66 | .00 | -47742.03 | 4909.97 | 1.011 | 7 | .999 | 6 |
| 182-282 | PL2 | 1.265 | .532 | .732 | .002 | 6 | .00 | -2866.76 | .01 | -55102.41 | -119.70 | 1.197 | 7 | 1.095 | 8 |
| 212-312 | PL3 | .391 | .243 | .147 | .019 | 6 | 4.80 | 899.68 | .00 | -6800.73 | -886.99 | .343 | 7 | .235 | 8 |
| 222-322 | PL3 | .193 | .048 | .085 | .117 | 6 | 4.80 | -156.48 | .00 | -3930.49 | -5407.22 | .185 | 8 | .165 | 7 |

*** Report Of Element Stress At Maximum Unity Check ***

| Member | Group | ID | Maximum Unity CK | /--- Unity Check ---/ | | | Load Case No. | Dist From End(Ft) | Force Fx (Kips) | /----- Critical Member Loads -----/ | | | Next Two Highest Cases | | | |
|--------|-------|-----|---------------------|-----------------------|--------|--------|------------------|-------------------------|-----------------------|-------------------------------------|--------------|--------------|------------------------|----------|-------------------|----------|
| | | | | Axial | Y-Axis | Z-Axis | | | | Torsion Mx | Moment My | Moment Mz | Combined Unity | LD CK | Combined Unity | LD CK |
| 232- | 332 | PL3 | .196 | .039 | .109 | .114 | 6 | 4.80 | -126.01 | .00 | -5022.04 | -5285.85 | .187 | 8 | .181 | 7 |
| 242- | 342 | PL3 | .531 | .381 | .002 | .150 | 6 | 4.80 | -1238.38 | .00 | 88.16 | -7426.06 | .315 | 7 | .158 | 8 |
| 252- | 352 | PL3 | .661 | .556 | .074 | .075 | 8 | 4.80 | -1804.56 | .00 | 3523.55 | 3549.19 | .499 | 7 | .314 | 6 |
| 262- | 362 | PL3 | .758 | .631 | .126 | .012 | 8 | 4.80 | -2052.36 | .00 | 5880.98 | -568.09 | .741 | 7 | .675 | 6 |
| 272- | 372 | PL3 | .790 | .674 | .115 | .012 | 8 | 4.80 | -2189.65 | .00 | 5308.30 | -541.87 | .765 | 7 | .689 | 6 |
| 282- | 382 | PL3 | 1.028 | .872 | .156 | .009 | 6 | 4.80 | -2830.92 | .00 | 6757.82 | -405.32 | .988 | 7 | .865 | 8 |
| 312- | 412 | PL4 | .312 | .253 | .059 | .000 | 6 | 46.96 | 935.20 | .00 | 2734.78 | 19.04 | .277 | 7 | .176 | 8 |
| 322- | 422 | PL4 | .126 | .074 | .052 | .004 | 8 | 46.73 | 273.85 | .00 | 2392.03 | 174.40 | .103 | 7 | .099 | 6 |
| 332- | 432 | PL4 | .117 | .056 | .060 | .010 | 8 | 46.73 | 208.69 | .00 | 2767.62 | 442.85 | .110 | 7 | .099 | 6 |
| 342- | 442 | PL4 | .430 | .364 | .001 | .065 | 6 | 46.96 | -1202.86 | .00 | 49.95 | 3303.52 | .229 | 7 | .072 | 8 |
| 352- | 452 | PL4 | .596 | .536 | .046 | .040 | 8 | 46.96 | -1769.05 | .00 | -2224.21 | -1929.84 | .431 | 7 | .232 | 6 |
| 362- | 462 | PL4 | .680 | .610 | .070 | .003 | 8 | 46.73 | -2016.86 | .00 | -3338.29 | -132.49 | .663 | 7 | .590 | 6 |
| 372- | 472 | PL4 | .710 | .652 | .058 | .002 | 8 | 46.73 | -2154.14 | .00 | -2767.09 | -83.12 | .687 | 7 | .603 | 6 |
| 382- | 482 | PL4 | .930 | .846 | .084 | .008 | 6 | 46.96 | -2795.41 | .00 | -3801.76 | 360.00 | .896 | 7 | .777 | 8 |
| 412- | 512 | PL5 | .312 | .253 | .059 | .000 | 6 | .00 | 935.19 | .00 | 2734.78 | 19.04 | .277 | 7 | .176 | 8 |
| 422- | 522 | PL5 | .126 | .074 | .052 | .004 | 8 | .00 | 273.86 | .00 | 2392.03 | 174.40 | .103 | 7 | .099 | 6 |
| 432- | 532 | PL5 | .117 | .056 | .060 | .010 | 8 | .00 | 208.70 | -.01 | 2767.62 | 442.85 | .110 | 7 | .099 | 6 |
| 442- | 542 | PL5 | .423 | .358 | .001 | .064 | 6 | .00 | -1202.86 | -.11 | 49.95 | 3303.52 | .226 | 7 | .072 | 8 |
| 452- | 552 | PL5 | .586 | .527 | .045 | .039 | 8 | .00 | -1769.04 | .07 | -2224.21 | -1929.84 | .424 | 7 | .229 | 6 |
| 462- | 562 | PL5 | .668 | .600 | .068 | .003 | 8 | .00 | -2016.86 | .01 | -3338.29 | -132.49 | .651 | 7 | .580 | 6 |
| 472- | 572 | PL5 | .698 | .641 | .057 | .002 | 8 | .00 | -2154.15 | .00 | -2767.09 | -83.12 | .675 | 7 | .593 | 6 |
| 482- | 582 | PL5 | .913 | .833 | .080 | .008 | 6 | .00 | -2795.39 | -.01 | -3801.76 | 360.00 | .880 | 7 | .763 | 8 |
| 512- | 612 | PL6 | .284 | .257 | .027 | .000 | 6 | .00 | 951.00 | .00 | 1267.97 | -7.11 | .247 | 7 | .142 | 8 |
| 522- | 622 | PL6 | .120 | .078 | .042 | .005 | 8 | .00 | 289.66 | -.02 | 1927.96 | -245.06 | .090 | 7 | .066 | 6 |
| 532- | 632 | PL6 | .109 | .061 | .047 | .013 | 8 | .00 | 224.50 | -.05 | 2163.44 | -585.41 | .090 | 7 | .054 | 6 |

*** Report Of Element Stress At Maximum Unity Check ***

| Member JA -JB | Group ID | Maximum Combined Unity CK | --- Unity Check --- Component Values | | | Load Case | Dist From End(Ft) | Force Fx (Kips) | ----- Critical Member Loads ----- Torsion Moment Moment | | | Next Two Highest Cases | | | |
|------------------|-------------|---------------------------------|---|--------|--------|--------------|-------------------------|------------------------|--|-----------------|----------|------------------------|----------|----------------------|----------|
| | | | Axial | Y-Axis | Z-Axis | | | | Hx | My (In-Kips) | Mz | Combined Unity CK | LD CN | Combined Unity CK | LD CN |
| 542- 642 | PL6 | .381 | .343 | .038 | .004 | 6 | 36.24 | -1172.85 | .04 | -1967.12 | 192.98 | .191 | 7 | .041 | 8 |
| 552- 652 | PL6 | .551 | .509 | .042 | .003 | 8 | 36.24 | -1739.02 | -.02 | -2142.17 | -165.00 | .389 | 7 | .198 | 6 |
| 562- 662 | PL6 | .632 | .585 | .045 | .012 | 8 | .00 | -2001.06 | .04 | -2256.81 | 589.95 | .609 | 7 | .533 | 6 |
| 572- 672 | PL6 | .684 | .621 | .060 | .019 | 8 | 36.06 | -2124.13 | .03 | -3031.26 | 950.84 | .652 | 7 | .556 | 6 |
| 582- 682 | PL6 | .848 | .814 | .033 | .007 | 6 | .00 | -2779.59 | .03 | -1639.08 | 351.87 | .816 | 7 | .704 | 8 |
| 612- 712 | PL7 | .280 | .261 | .019 | .001 | 6 | .00 | 965.25 | .01 | -873.24 | -29.74 | .244 | 7 | .141 | 8 |
| 622- 722 | PL7 | .111 | .082 | .028 | .005 | 8 | 2.63 | 305.01 | .12 | 1275.86 | -252.12 | .082 | 7 | .044 | 6 |
| 632- 732 | PL7 | .105 | .065 | .035 | .019 | 8 | 2.63 | 239.85 | .29 | 1639.81 | -879.90 | .085 | 7 | .038 | 6 |
| 642- 742 | PL7 | .360 | .317 | .043 | .004 | 6 | .00 | -1172.77 | -.02 | -1967.12 | 192.97 | .170 | 7 | .095 | 8 |
| 652- 752 | PL7 | .516 | .470 | .046 | .004 | 8 | .00 | -1738.97 | .03 | -2142.17 | -165.01 | .363 | 7 | .178 | 6 |
| 662- 762 | PL7 | .588 | .537 | .044 | .026 | 8 | .00 | -1986.86 | -.24 | -2019.02 | 1214.63 | .568 | 7 | .496 | 6 |
| 672- 772 | PL7 | .643 | .574 | .066 | .021 | 8 | .00 | -2124.15 | -.19 | -3031.26 | 950.84 | .612 | 7 | .521 | 6 |
| 682- 782 | PL7 | .766 | .750 | .015 | .006 | 6 | .00 | -2765.32 | -.09 | -790.25 | 344.89 | .735 | 7 | .632 | 8 |
| 712- 811 | PL8 | .225 | .126 | .098 | .014 | 6 | 3.03 | -465.64 | 153.84 | 4511.55 | 663.47 | .218 | 7 | .209 | 8 |
| 722- 821 | PL8 | .310 | .253 | .054 | .019 | 6 | 3.02 | -935.05 | 748.40 | 2491.54 | 868.50 | .298 | 7 | .285 | 8 |
| 732- 831 | PL8 | .331 | .227 | .101 | .026 | 8 | 3.02 | -840.44 | 1.45 | 4660.85 | 1186.40 | .309 | 7 | .286 | 6 |
| 742- 841 | PL8 | .469 | .331 | .102 | .093 | 6 | 3.03 | -1224.65 | 2468.58 | 4727.62 | -4280.52 | .463 | 7 | .446 | 8 |
| 752- 851 | PL8 | .249 | .141 | .093 | .055 | 8 | 3.03 | -519.34 | -2095.97 | 4295.40 | 2564.08 | .240 | 7 | .225 | 6 |
| 762- 861 | PL8 | .285 | .247 | .037 | .008 | 6 | 3.02 | -914.68 | -2652.09 | 1728.47 | -360.34 | .282 | 7 | .281 | 8 |
| 772- 871 | PL8 | .290 | .226 | .062 | .012 | 8 | 3.02 | -837.82 | -884.65 | 2863.08 | -570.28 | .276 | 7 | .263 | 6 |
| 782- 881 | PL8 | .435 | .306 | .129 | .003 | 8 | 3.03 | -1132.23 | -85.89 | 5958.93 | -126.13 | .426 | 7 | .422 | 6 |
| 123- 199 | SIM | .306 | .210 | .096 | .009 | 6 | .00 | -135.23 | -27.56 | 283.69 | 25.85 | .252 | 7 | .171 | 8 |
| 124- 199 | SIM | .174 | .121 | .052 | .009 | 8 | .00 | -78.11 | -45.22 | 138.83 | 24.87 | .092 | 6 | .074 | 7 |
| 199- 163 | SIM | .173 | .106 | .067 | .009 | 8 | 16.79 | 79.02 | 48.17 | -178.98 | 25.25 | .096 | 6 | .067 | 7 |
| 199- 164 | SIM | .321 | .184 | .137 | .009 | 6 | 16.79 | 137.62 | 24.79 | -366.93 | 23.63 | .280 | 7 | .195 | 8 |

*** Report Of Element Stress At Maximum Unity Check ***

| Member JA -JB | Group ID | Maximum Combined Unity CK | /--- Unity Check ---/ | | | Load Case No. | Dist From End(Ft) | /----- Critical Member Loads -----/ | | | | Next Two Highest Cases | | | | |
|------------------|-------------|---------------------------------|-----------------------|--------|--------|---------------------|-------------------------|-------------------------------------|---------------|---------------------------|--------------|------------------------|----------|----------------------|----------|---|
| | | | Axial | Y-Axis | Z-Axis | | | Force Fx (Kips) | Torsion Mx | Moment My (In-Kips) | Moment Mz | Combined Unity CK | LD CN | Combined Unity CK | LD CN | |
| 223- | 299 | SIM | .143 | .120 | .018 | .014 | 6 | .00 | 89.77 | 2.04 | 48.31 | -38.30 | .115 | 7 | .073 | 8 |
| 224- | 299 | SIM | .095 | .069 | .023 | .013 | 8 | .00 | 51.68 | 10.34 | 60.68 | -34.00 | .067 | 6 | .056 | 7 |
| 299- | 263 | SIM | .140 | .081 | .057 | .013 | 8 | 16.79 | -52.48 | 7.40 | -152.54 | -35.31 | .086 | 7 | .066 | 6 |
| 299- | 264 | SIM | .169 | .134 | .031 | .016 | 6 | 16.79 | -86.45 | -15.41 | -83.47 | -42.35 | .140 | 7 | .097 | 8 |
| 423- | 499 | SIM | .185 | .168 | .010 | .013 | 6 | 16.79 | 125.98 | 1.70 | 25.36 | 34.62 | .158 | 7 | .118 | 8 |
| 424- | 499 | SIM | .122 | .096 | .021 | .015 | 8 | .00 | 72.00 | 4.87 | 55.21 | -38.99 | .076 | 6 | .069 | 7 |
| 463- | 499 | SIM | .164 | .120 | .042 | .014 | 8 | .00 | -76.97 | 1.18 | -111.79 | 37.91 | .092 | 7 | .079 | 6 |
| 499- | 464 | SIM | .226 | .207 | .016 | .011 | 6 | 16.79 | -133.20 | -8.83 | -47.74 | -31.63 | .191 | 7 | .139 | 8 |
| 626- | 699 | SIM | .199 | .152 | .015 | .045 | 6 | .00 | 113.62 | -8.34 | -39.80 | 120.35 | .178 | 7 | .133 | 8 |
| 628- | 699 | SIM | .161 | .080 | .036 | .073 | 8 | .00 | 59.49 | .55 | -95.39 | -194.61 | .095 | 7 | .076 | 6 |
| 699- | 666 | SIM | .236 | .177 | .009 | .058 | 8 | 13.85 | -117.96 | 6.68 | -26.71 | -177.69 | .160 | 7 | .051 | 6 |
| 699- | 668 | SIM | .248 | .212 | .025 | .026 | 6 | 13.85 | -141.51 | -6.47 | -76.11 | 78.61 | .217 | 7 | .169 | 8 |
| 811- | 1 | IL1 | .270 | .149 | .076 | .095 | 6 | 2.25 | -467.04 | 245.81 | -2550.33 | -3186.42 | .263 | 7 | .252 | 8 |
| 821- | 2 | IL1 | .369 | .297 | .069 | .022 | 6 | 2.25 | -938.15 | 831.63 | -2305.28 | -728.10 | .355 | 7 | .341 | 8 |
| 831- | 3 | IL1 | .394 | .267 | .124 | .031 | 8 | 2.25 | -841.93 | 120.28 | -4161.08 | -1052.39 | .369 | 7 | .342 | 6 |
| 841- | 4 | IL1 | .557 | .390 | .010 | .166 | 6 | 2.25 | -1233.20 | 1840.63 | -351.24 | 5579.73 | .535 | 7 | .505 | 8 |
| 1- | 9 | IL2 | .254 | .148 | .069 | .081 | 6 | .00 | -466.20 | 245.81 | -2335.53 | -2709.47 | .250 | 7 | .241 | 8 |
| 2- | 10 | IL2 | .362 | .297 | .062 | .019 | 6 | .00 | -937.31 | 831.63 | -2088.53 | -636.54 | .350 | 7 | .335 | 8 |
| 3- | 11 | IL2 | .377 | .266 | .108 | .028 | 8 | .00 | -841.09 | 120.28 | -3616.44 | -924.50 | .354 | 7 | .330 | 6 |
| 4- | 13 | IL2 | .528 | .390 | .017 | .137 | 6 | .00 | -1232.36 | 1840.63 | -571.80 | 4604.25 | .508 | 7 | .484 | 8 |
| 9- | 18 | IL3 | .179 | .124 | .013 | .054 | 8 | 7.13 | -478.14 | -840.56 | -526.61 | 2204.37 | .178 | 6 | .177 | 7 |
| 18- | 73 | IL3 | .134 | .091 | .005 | .043 | 6 | .00 | -352.54 | 23.40 | 223.62 | 1758.83 | .130 | 7 | .126 | 8 |
| 73- | 81 | IL2 | .130 | .112 | .004 | .018 | 6 | .00 | -348.83 | 23.40 | 132.55 | 603.10 | .129 | 7 | .128 | 8 |
| 10- | 19 | IL3 | .276 | .237 | .024 | .030 | 6 | 7.13 | -928.62 | 831.63 | 998.04 | 1253.75 | .262 | 7 | .248 | 8 |
| 19- | 74 | IL3 | .140 | .118 | .013 | .018 | 6 | .00 | -455.63 | 366.43 | 540.49 | 730.38 | .139 | 8 | .138 | 7 |

*** Report Of Element Stress At Maximum Unity Check ***

| Member | Group | ID | Maximum Combined Unity CK | /--- Unity Check ---/ | | | Load Case No. | Dist From End(Ft) | /----- Critical Member Loads -----/ | | | | Next Two Highest Cases | | | |
|--------|-------|-----|---------------------------------|-----------------------|--------|--------|---------------------|-------------------------|-------------------------------------|---------------|---------------------------|--------------|------------------------|----------|----------------------|----------|
| | | | | Axial | Y-Axis | Z-Axis | | | Force Fx (Kips) | Torsion Tx | Moment My (In-Kips) | Moment Mz | Combined Unity CK | LD CN | Combined Unity CK | LD CN |
| 74- | 83 | IL2 | .168 | .145 | .019 | .015 | 6 | .00 | -451.91 | 366.43 | 631.46 | 490.68 | .165 | 7 | .163 | 8 |
| 11- | 20 | IL3 | .288 | .212 | .076 | .007 | 8 | 7.13 | -832.40 | 120.28 | 3111.47 | 297.60 | .263 | 7 | .241 | 6 |
| 20- | 75 | IL3 | .145 | .095 | .050 | .004 | 8 | .00 | -367.48 | 124.73 | 2046.46 | 177.50 | .132 | 7 | .119 | 6 |
| 75- | 84 | IL2 | .150 | .116 | .033 | .004 | 8 | .00 | -363.77 | 124.73 | 1103.79 | -145.16 | .142 | 7 | .134 | 6 |
| 13- | 21 | IL3 | .424 | .312 | .050 | .100 | 6 | 7.13 | -1223.67 | 1840.63 | -2076.78 | -4114.40 | .419 | 7 | .398 | 8 |
| 21- | 76 | IL3 | .346 | .267 | .047 | .063 | 7 | .00 | -1046.47 | 797.33 | -1945.21 | -2588.73 | .343 | 6 | .336 | 8 |
| 76- | 85 | IL2 | .364 | .330 | .030 | .016 | 7 | .00 | -1042.76 | 797.33 | -1011.19 | -532.68 | .362 | 8 | .361 | 6 |
| 851- | 5 | IL1 | .289 | .164 | .122 | .026 | 8 | 2.25 | -519.43 | -1713.66 | 4101.92 | -880.29 | .282 | 7 | .265 | 6 |
| 861- | 6 | IL1 | .331 | .290 | .041 | .005 | 6 | 2.25 | -916.89 | -2674.84 | 1362.40 | -168.61 | .296 | 7 | .275 | 8 |
| 871- | 7 | IL1 | .336 | .266 | .069 | .013 | 8 | 2.25 | -838.99 | -937.32 | 2328.54 | -429.27 | .319 | 7 | .306 | 6 |
| 881- | 8 | IL1 | .505 | .360 | .100 | .105 | 8 | 2.25 | -1136.89 | -102.81 | 3374.82 | 3530.20 | .496 | 7 | .494 | 6 |
| 5- | 14 | IL2 | .252 | .164 | .095 | .022 | 8 | .00 | -518.59 | -1713.66 | 3206.62 | -727.16 | .255 | 7 | .242 | 6 |
| 6- | 15 | IL2 | .326 | .299 | .026 | .005 | 6 | .00 | -916.05 | -2674.84 | 1029.10 | -211.57 | .297 | 7 | .287 | 8 |
| 7- | 16 | IL2 | .321 | .274 | .047 | .010 | 8 | .00 | -838.14 | -937.32 | 1837.97 | -379.74 | .306 | 7 | .294 | 6 |
| 8- | 17 | IL2 | .474 | .360 | .074 | .087 | 8 | .00 | -1136.05 | -102.81 | 2500.23 | 2926.55 | .469 | 6 | .469 | 7 |
| 14- | 23 | IL3 | .239 | .132 | .105 | .018 | 8 | 7.13 | -509.90 | -1713.66 | -4336.41 | 736.08 | .225 | 7 | .203 | 6 |
| 23- | 77 | IL3 | .170 | .092 | .077 | .006 | 8 | .00 | -356.15 | -846.99 | -3173.47 | 251.78 | .160 | 7 | .144 | 6 |
| 77- | 86 | IL2 | .156 | .113 | .043 | .004 | 8 | .00 | -352.44 | -846.99 | -1452.78 | 125.01 | .151 | 7 | .143 | 6 |
| 15- | 24 | IL3 | .261 | .231 | .027 | .010 | 6 | 7.13 | -907.36 | -2674.84 | -1123.46 | 410.26 | .238 | 7 | .231 | 8 |
| 24- | 78 | IL3 | .140 | .118 | .022 | .007 | 6 | .00 | -453.96 | -1287.41 | -889.37 | 300.77 | .127 | 7 | .122 | 8 |
| 78- | 87 | IL2 | .163 | .144 | .017 | .009 | 6 | .00 | -450.24 | -1287.41 | -572.09 | 295.89 | .155 | 7 | .155 | 8 |
| 16- | 25 | IL3 | .256 | .212 | .045 | .002 | 8 | 7.13 | -829.46 | -937.32 | -1837.71 | 93.55 | .251 | 7 | .243 | 6 |
| 25- | 79 | IL3 | .115 | .088 | .027 | .006 | 8 | .00 | -339.72 | -347.89 | -1098.09 | 239.04 | .114 | 7 | .109 | 6 |
| 79- | 88 | IL2 | .128 | .108 | .020 | .005 | 8 | .00 | -336.01 | -347.89 | -667.50 | -169.11 | .127 | 7 | .126 | 6 |
| 17- | 26 | IL3 | .426 | .291 | .119 | .064 | 7 | 7.13 | -1140.51 | -2037.61 | -4876.75 | -2640.73 | .424 | 8 | .420 | 6 |

*** Report Of Element Stress At Maximum Unity Check ***

| Member | Group | Maximum Combined Unity CK | /--- Unity Check ---/ | | | Load Case | Dist From End(Ft) | Force Fx (Kips) | /----- Critical Member Loads -----/ | | | Next Two Highest Cases | | | | |
|--------|-------|---------------------------------|-----------------------|--------|--------|--------------|-------------------------|------------------------|-------------------------------------|--------------|--------------|------------------------|----------|----------------------|----------|---|
| | | | Axial | Y-Axis | Z-Axis | | | | Torsion Mx | Moment My | Moment Mz | Combined Unity CK | LD CN | Combined Unity CK | LD CN | |
| 26- | 80 | IL3 | .373 | .257 | .097 | .041 | 7 | .00 | -1048.64 | -1223.04 | -3993.52 | -1676.41 | .370 | 8 | .369 | 6 |
| 80- | 89 | ILZ | .379 | .331 | .047 | .007 | 7 | .00 | -1044.92 | -1223.04 | -1591.64 | -225.92 | .377 | 6 | .376 | 8 |
| 83- | 140 | IL2 | .015 | .009 | .006 | .001 | 6 | 2.38 | 27.00 | -40.27 | -215.67 | -50.23 | .014 | 7 | .013 | 8 |
| 87- | 147 | IL2 | .031 | .009 | .016 | .002 | 6 | .00 | 28.10 | -580.81 | 526.46 | -69.11 | .028 | 7 | .019 | 8 |
| 84- | 149 | ILZ | .022 | .006 | .016 | .000 | 8 | 2.38 | 20.26 | 24.14 | -529.26 | -16.22 | .020 | 7 | .018 | 6 |
| 88- | 150 | ILZ | .023 | .006 | .017 | .001 | 8 | .00 | 19.40 | -112.41 | 574.37 | 38.91 | .019 | 7 | .017 | 6 |

*** Member Group Summary Report ***

Group I - Unity Checks Greater Than 1.33

| Member JA-JB | Group ID | Maximum Load Dist | | Axial Stress /---- (| Bending Stress | | Shear Force | | KLV/RV | KLZ/RZ | Second-Highest | | Third-Highest | | | |
|-----------------|-------------|-------------------|-------|----------------------------|-----------------|--------|-------------|-------|--------|--------|----------------|-------|---------------|-------|-------|---|
| | | Unity | Case | | From End(Ft) | Y | Z | Fy | | | Fz | Unity | Load | Unity | Load | |
| 146- | 231 | 243 | 1.652 | 8 | .0 | -16.68 | -4.53 | .16 | -.16 | -3.98 | 99.6 | 99.6 | 1.428 | 7 | .968 | 6 |
| 155- | 221 | 243 | 1.609 | 8 | .0 | -16.32 | -4.85 | -.19 | .02 | -4.08 | 99.6 | 99.6 | 1.365 | 7 | .918 | 6 |
| 381- | 441 | 243 | 1.711 | 8 | 79.2 | -12.92 | -4.63 | -2.47 | -.97 | 5.18 | 113.7 | 113.7 | 1.542 | 7 | 1.026 | 6 |

*** Member Group Summary Report ***

Group II - Unity Checks Greater Than 1.00 And Less Than 1.33

| Member | Group | Maximum Combined Unity | Load Case | Dist From End (Ft) | Axial Stress | Bending Stress | Y | Z | Shear Force | Fy | Fz | KLY/RV | KLZ/RZ | Second-Highest Unity Check | Load Case | Third-Highest Unity Check | Load Case |
|--------|-------|------------------------|-----------|--------------------|----------------|----------------|-------|-------|-----------------|-------|-------|--------|--------|----------------------------|-----------|---------------------------|-----------|
| JA -JB | ID | CK | NO. | | /(---) (KSI) | /(---) (KSI) | | | /(---) (Kips) | | | | | | | | |
| 451- | 511 | 205 | 1.000 | 8 | 69.1 | -8.98 | -3.51 | 3.55 | 1.52 | 4.16 | 120.3 | 120.3 | .999 | 7 | .811 | 6 | |
| 471- | 531 | 205 | 1.153 | 8 | 69.0 | -10.17 | -4.15 | 1.78 | .59 | 4.31 | 120.1 | 120.1 | 1.086 | 7 | .793 | 6 | |
| 145- | 211 | 243 | 1.066 | 8 | .0 | -13.25 | -3.77 | .94 | -.32 | -3.75 | 99.9 | 99.9 | .927 | 7 | .663 | 6 | |
| 148- | 241 | 243 | 1.284 | 8 | .0 | -14.26 | -4.89 | -1.41 | .56 | -4.27 | 99.9 | 99.9 | 1.160 | 7 | .825 | 6 | |
| 172- | 272 | PL2 | 1.022 | 8 | .0 | -10.06 | 22.33 | 2.30 | -7.97 | 79.40 | 50.3 | 50.3 | 1.011 | 7 | .999 | 6 | |
| 182- | 282 | PL2 | 1.265 | 6 | .0 | -12.95 | 25.77 | -.06 | -.47 | 92.63 | 50.6 | 50.6 | 1.197 | 7 | 1.095 | 8 | |
| 282- | 382 | PL3 | 1.028 | 6 | 4.8 | -21.98 | -5.24 | -.31 | .68 | -6.83 | 42.8 | 42.8 | .988 | 7 | .865 | 8 | |

*** Member Group Summary Report ***

Group III - Unity Checks Greater Than .00 And Less Than .50

| Member | Group | Maximum Combined Unity | Load Case NO. | Dist From End (Ft) | Axial Stress /---- (KSI) | Bending Stress Y Z | Shear Force Fy Fz /-- (Kips) --/ | KLY/RV | KLZ/RZ | Second-Highest Unity Check | Load Case | Third-Highest Unity Check | Load Case | | | |
|--------|-------|------------------------|---------------|--------------------|----------------------------|--------------------|----------------------------------|--------|--------|----------------------------|-----------|---------------------------|-----------|---|------|---|
| JA -JB | ID | CK | | | | | | | | | | | | | | |
| 511- | 621 | 165 | .431 | 6 | .0 | 3.22 | 8.02 | 8.19 | -5.54 | 6.13 | 120.9 | 120.9 | .382 | 8 | .376 | 7 |
| 521- | 631 | 165 | .389 | 8 | .0 | -.81 | 1.76 | 11.64 | -9.37 | 1.28 | 122.3 | 122.3 | .327 | 7 | .261 | 6 |
| 531- | 641 | 165 | .463 | 8 | .0 | -2.50 | 2.84 | 9.89 | -8.78 | 1.69 | 115.0 | 115.0 | .364 | 6 | .327 | 7 |
| 571- | 661 | 165 | .466 | 6 | .0 | -1.34 | -7.75 | -10.59 | 6.58 | -6.01 | 122.3 | 122.3 | .419 | 7 | .340 | 8 |
| 321- | 431 | 185 | .396 | 6 | .0 | 7.54 | 2.38 | 4.18 | -2.52 | 1.83 | 122.7 | 122.7 | .281 | 7 | .178 | 8 |
| 451- | 561 | 185 | .425 | 6 | 62.1 | 5.06 | 2.11 | 8.69 | 6.46 | -2.37 | 120.3 | 120.3 | .322 | 8 | .318 | 7 |
| 461- | 571 | 185 | .345 | 6 | 59.7 | 3.64 | 1.57 | 7.68 | 5.46 | -1.27 | 115.7 | 115.7 | .311 | 7 | .235 | 8 |
| 471- | 581 | 185 | .447 | 6 | 59.1 | 6.74 | .18 | 7.64 | 4.70 | -.09 | 114.5 | 114.5 | .337 | 7 | .195 | 8 |
| 431- | 521 | 185 | .461 | 6 | 59.7 | -3.54 | -3.10 | -6.25 | -5.70 | 2.69 | 115.7 | 115.7 | .366 | 7 | .221 | 8 |
| 331- | 441 | 203 | .482 | 6 | .0 | 9.12 | .63 | 5.65 | -3.17 | .44 | 113.3 | 113.3 | .328 | 7 | .260 | 8 |
| 253- | 201 | 205 | .140 | 8 | .0 | -.12 | 4.84 | .41 | -.57 | 5.02 | 45.6 | 45.6 | .136 | 7 | .119 | 6 |
| 311- | 421 | 205 | .364 | 6 | .0 | 6.46 | 3.16 | 3.87 | -2.79 | 2.26 | 119.9 | 119.9 | .244 | 7 | .163 | 8 |
| 346- | 304 | 205 | .205 | 8 | .0 | -.41 | -6.77 | .34 | -.10 | -7.24 | 44.0 | 44.0 | .185 | 7 | .133 | 6 |
| 261- | 371 | 205 | .346 | 6 | 67.1 | 7.76 | -.05 | 2.71 | 2.18 | -.03 | 116.7 | 116.7 | .216 | 7 | .097 | 8 |
| 421- | 561 | 205 | .425 | 8 | 69.0 | 10.29 | 2.12 | -1.14 | -.40 | -1.92 | 120.1 | 120.1 | .403 | 7 | .346 | 6 |
| 441- | 581 | 205 | .474 | 8 | .0 | 11.01 | 2.44 | 2.13 | -.48 | 2.36 | 120.3 | 120.3 | .435 | 7 | .377 | 6 |
| 511- | 651 | 205 | .422 | 7 | .0 | 6.17 | 5.05 | -5.45 | 4.33 | 6.02 | 103.6 | 103.6 | .413 | 6 | .380 | 8 |
| 531- | 671 | 205 | .440 | 6 | .0 | 6.74 | 1.77 | -7.17 | 7.64 | 2.36 | 103.4 | 103.4 | .426 | 7 | .370 | 8 |
| 201- | 321 | 243 | .120 | 8 | 40.8 | -1.85 | -1.32 | .20 | .08 | 2.48 | 58.7 | 58.7 | .102 | 7 | .080 | 6 |
| 231- | 204 | 243 | .101 | 6 | .0 | 1.31 | -.60 | -1.75 | 1.67 | -1.29 | 70.8 | 70.8 | .096 | 8 | .095 | 7 |
| 251- | 361 | 243 | .362 | 6 | 76.1 | 6.60 | -1.31 | 4.25 | 3.39 | 1.42 | 109.3 | 109.3 | .260 | 8 | .213 | 7 |
| 304- | 431 | 243 | .133 | 8 | 35.9 | -1.68 | -1.67 | -1.29 | -.68 | 3.00 | 51.5 | 51.5 | .130 | 7 | .125 | 6 |
| 321- | 301 | 243 | .095 | 6 | .0 | .71 | .16 | -2.36 | 2.59 | -.30 | 62.3 | 62.3 | .071 | 7 | .063 | 8 |
| 271- | 381 | 243 | .430 | 6 | 72.4 | 8.61 | -1.99 | 3.88 | 2.67 | 2.09 | 104.0 | 104.0 | .282 | 7 | .146 | 8 |

*** Member Group Summary Report ***

Group III - Unity Checks Greater Than .00 And Less Than .50

| Member JA -JB | Group ID | Maximum Combined Unity CK | Load Case NO. | Dist From End(Ft) | Axial Stress /---- (| Bending Stress Y Z) ---/ | Shear Force Fy Fz /--- (Kips) --/ | KLY/RV | KLZ/RZ | Second-Highest Unity Check | Load Case | Third-Highest Unity Check | Load Case | | |
|------------------|-------------|---------------------------------|---------------------|-------------------------|----------------------------|---------------------------------|---|--------|--------|----------------------------------|--------------|---------------------------------|--------------|------|---|
| 201- | 343 245 | .036 | 8 | 25.9 | .33 | -.37 | -.79 | -.27 | -1.06 | 37.4 | 37.4 | .033 | 7 | .026 | 6 |
| 202- | 201 245 | .112 | 8 | .0 | 1.28 | -2.35 | .39 | -.11 | -2.80 | 51.2 | 51.2 | .094 | 7 | .067 | 6 |
| 203- | 204 245 | .094 | 6 | .0 | -.98 | -1.32 | -1.28 | 2.11 | -1.72 | 58.6 | 58.6 | .092 | 7 | .086 | 8 |
| 301- | 343 245 | .067 | 8 | 23.4 | .20 | 2.00 | .69 | .48 | -3.96 | 33.7 | 33.7 | .067 | 7 | .058 | 6 |
| 302- | 301 245 | .112 | 8 | .0 | -1.20 | -2.15 | .55 | -.28 | -2.33 | 51.2 | 51.2 | .097 | 7 | .078 | 6 |
| 303- | 304 245 | .114 | 7 | .0 | 1.22 | -2.41 | -.80 | 1.28 | -2.85 | 44.5 | 44.5 | .114 | 8 | .112 | 6 |
| 331- | 304 245 | .479 | 7 | .0 | 11.58 | .05 | -2.67 | 2.48 | .42 | 57.1 | 57.1 | .466 | 8 | .423 | 6 |
| 131- | 241 263 | .498 | 6 | .0 | 10.96 | -2.37 | 3.02 | -2.44 | -2.55 | 105.9 | 105.9 | .316 | 7 | .213 | 8 |
| 111- | 221 265 | .456 | 6 | 84.0 | 11.36 | -2.05 | -.42 | .92 | 2.14 | 111.8 | 111.8 | .274 | 7 | .075 | 8 |
| 204- | 331 265 | .499 | 8 | .0 | -10.31 | -1.82 | -.06 | .46 | -3.05 | 59.8 | 59.8 | .466 | 7 | .360 | 6 |
| 221- | 201 265 | .369 | 8 | .0 | 9.84 | -.12 | .91 | -.43 | -.63 | 59.8 | 59.8 | .330 | 7 | .263 | 6 |
| 201- | 361 265 | .432 | 8 | .0 | 10.08 | -2.82 | .27 | -.76 | -3.06 | 59.8 | 59.8 | .399 | 7 | .319 | 6 |
| 241- | 381 265 | .384 | 8 | 90.1 | 8.81 | -1.72 | -2.07 | -1.01 | 2.26 | 119.9 | 119.9 | .358 | 7 | .298 | 6 |
| 200- | 300 CH1 | .486 | 6 | .0 | -.44 | 11.03 | -12.50 | 60.04 | 53.39 | 82.9 | 82.9 | .451 | 7 | .442 | 8 |
| 700- | 900 CH2 | .114 | 7 | .0 | -.08 | -3.69 | 1.53 | -28.70 | -69.28 | 11.8 | 11.8 | .114 | 6 | .114 | 8 |
| 123- | 155 J08 | .341 | 8 | 18.9 | 5.42 | 5.45 | .53 | .04 | -1.17 | 78.8 | 78.8 | .318 | 7 | .280 | 6 |
| 124- | 146 J08 | .354 | 8 | 18.9 | 5.55 | 5.74 | -.67 | -.07 | -1.13 | 78.8 | 78.8 | .301 | 7 | .293 | 6 |
| 144- | 146 J08 | .217 | 6 | .0 | .42 | 7.14 | 1.34 | -.50 | 1.51 | 53.9 | 53.9 | .141 | 7 | .064 | 8 |
| 146- | 164 J08 | .415 | 8 | .0 | -5.50 | -5.14 | .63 | -.06 | -.88 | 78.8 | 78.8 | .412 | 7 | .344 | 6 |
| 155- | 143 J08 | .212 | 6 | 12.9 | -.41 | -6.88 | 1.22 | .45 | 1.31 | 53.9 | 53.9 | .142 | 7 | .067 | 8 |
| 155- | 163 J08 | .388 | 8 | .0 | -5.42 | -4.34 | -.57 | .05 | -.61 | 78.8 | 78.8 | .328 | 7 | .218 | 6 |
| 123- | 101 J11 | .220 | 7 | .0 | -1.08 | -4.53 | .44 | -.08 | -.88 | 130.9 | 130.9 | .218 | 6 | .210 | 8 |
| 124- | 102 J11 | .207 | 8 | .0 | -.86 | -4.20 | 2.32 | -.54 | -.84 | 130.9 | 130.9 | .182 | 7 | .152 | 6 |
| 163- | 103 J11 | .165 | 8 | .0 | .88 | 4.26 | -2.27 | .54 | 1.02 | 130.9 | 130.9 | .160 | 7 | .154 | 6 |

*** Member Group Summary Report ***

Group III - Unity Checks Greater Than .00 And Less Than .50

| Member | Group | Maximum | Load | Dist | Axial | Bending | Stress | Shear | Force | | | Second-Highest | Third-Highest | | |
|----------|-------|---------|------|---------|---------|---------|--------|------------|-------|--------|--------|----------------|---------------|------|---|
| JA -JB | ID | Unity | Case | From | Stress | Y | Z | Fy | Fz | KLY/RV | KLZ/RZ | Unity | Load | | |
| | | CK | NO. | End(Ft) | /---- (| KSI |) ---/ | --- (Kips) | -/ | | | Check | Case | | |
| 164- 104 | J11 | .209 | 7 | .0 | 1.40 | 5.73 | -.71 | .15 | 1.27 | 130.9 | 130.9 | .205 | 6 | .201 | 8 |
| 123- 124 | J12 | .213 | 6 | .0 | 2.11 | -5.02 | -.20 | .09 | -2.90 | 53.8 | 53.8 | .188 | 7 | .136 | 8 |
| 163- 164 | J12 | .247 | 6 | 19.2 | -2.07 | 5.77 | -.26 | -.12 | -3.95 | 53.8 | 53.8 | .233 | 7 | .181 | 8 |
| 121- 123 | J16 | .329 | 6 | 35.0 | -2.69 | -7.09 | -1.28 | -.64 | 2.70 | 76.6 | 76.6 | .264 | 7 | .207 | 8 |
| 123- 125 | J16 | .225 | 6 | .0 | 2.30 | -5.07 | 1.18 | -.84 | -1.90 | 74.2 | 74.2 | .207 | 7 | .182 | 8 |
| 124- 131 | J16 | .175 | 8 | .0 | .01 | -6.23 | -.58 | .21 | -2.08 | 76.6 | 76.6 | .169 | 7 | .143 | 6 |
| 125- 124 | J16 | .201 | 6 | 33.9 | -2.26 | -3.36 | -.54 | -.35 | .87 | 74.2 | 74.2 | .193 | 7 | .186 | 8 |
| 161- 163 | J16 | .176 | 7 | 35.0 | -1.33 | 4.02 | .10 | .28 | -1.17 | 76.6 | 76.6 | .170 | 6 | .168 | 8 |
| 163- 165 | J16 | .173 | 7 | .0 | 1.19 | 4.74 | -.03 | .04 | 1.04 | 74.2 | 74.2 | .170 | 8 | .168 | 6 |
| 164- 171 | J16 | .307 | 6 | .0 | 2.77 | 7.43 | -1.47 | .76 | 2.46 | 76.6 | 76.6 | .274 | 7 | .220 | 8 |
| 165- 164 | J16 | .270 | 6 | 33.9 | -2.42 | 5.50 | 1.14 | .81 | -1.80 | 74.2 | 74.2 | .243 | 7 | .189 | 8 |
| 111- 115 | J20 | .095 | 6 | .0 | -1.87 | .52 | .07 | -.39 | .86 | 59.0 | 59.0 | .063 | 7 | .028 | 8 |
| 115- 121 | J20 | .094 | 6 | 30.4 | -1.87 | .48 | .29 | .61 | -.83 | 53.7 | 53.7 | .072 | 7 | .042 | 8 |
| 121- 125 | J20 | .190 | 6 | 22.5 | -4.31 | -.84 | -.20 | -.37 | .35 | 39.8 | 39.8 | .132 | 7 | .051 | 8 |
| 123- 143 | J20 | .159 | 7 | .0 | .61 | -4.91 | -.56 | 1.19 | -6.34 | 24.4 | 24.4 | .158 | 6 | .145 | 8 |
| 124- 144 | J20 | .154 | 8 | .0 | .20 | -5.30 | -.03 | .13 | -7.02 | 24.4 | 24.4 | .149 | 7 | .139 | 6 |
| 125- 131 | J20 | .214 | 6 | 22.5 | -3.67 | 2.52 | .32 | .95 | -2.55 | 39.8 | 39.8 | .154 | 7 | .069 | 8 |
| 131- 135 | J20 | .205 | 6 | .0 | -3.99 | -1.22 | .94 | -1.34 | -.21 | 53.7 | 53.7 | .124 | 7 | .025 | 8 |
| 135- 141 | J20 | .238 | 6 | 33.4 | -3.99 | 2.38 | -1.08 | .16 | -1.90 | 59.0 | 59.0 | .137 | 7 | .025 | 8 |
| 143- 163 | J20 | .137 | 7 | 13.8 | .60 | 4.11 | -.72 | -1.68 | -6.23 | 24.4 | 24.4 | .136 | 8 | .128 | 6 |
| 144- 164 | J20 | .167 | 7 | 13.8 | -.54 | 5.24 | -.60 | -1.25 | -7.70 | 24.4 | 24.4 | .166 | 6 | .158 | 8 |
| 151- 159 | J20 | .190 | 6 | .0 | 3.79 | -1.84 | -.98 | -.17 | -.50 | 59.0 | 59.0 | .086 | 7 | .033 | 8 |
| 159- 161 | J20 | .212 | 6 | 30.4 | 3.79 | 2.74 | .94 | 1.32 | -2.19 | 53.7 | 53.7 | .124 | 7 | .052 | 8 |
| 161- 165 | J20 | .212 | 6 | .0 | 3.73 | -2.96 | .21 | -.92 | -2.09 | 39.8 | 39.8 | .151 | 7 | .074 | 8 |

*** Member Group Summary Report ***

Group III - Unity Checks Greater Than .00 And Less Than .50

| Member | Group | Maximum | Load | Dist | Axial | Bending Stress | | Shear Force | | KLY/RX | KLZ/RZ | Second-Highest | Third-Highest | | | |
|--------|-------|---------|------|---------|---------|----------------|-------|-------------|-------|--------|--------|----------------|---------------|---|------|---|
| JA -JB | ID | Unity | Case | From | Stress | Y | Z | Fy | Fz | | | Unity | Load | | | |
| | | CK | NO. | End(Ft) | /---- (| KSI) | ---/ | /-- (Kips) | -/ | | | Check | Case | | | |
| | | | | | | | | | | | | Check | Case | | | |
| 165- | 171 | J20 | .192 | 6 | 22.5 | 4.40 | .94 | 1.05 | 1.39 | -.55 | 39.8 | 39.8 | .119 | 7 | .040 | 8 |
| 171- | 175 | J20 | .102 | 6 | 30.4 | 2.61 | -.27 | -.30 | .09 | -.34 | 53.7 | 53.7 | .075 | 7 | .039 | 8 |
| 175- | 181 | J20 | .124 | 6 | 33.4 | 2.61 | 1.12 | .41 | .69 | -1.22 | 59.0 | 59.0 | .090 | 7 | .047 | 8 |
| 111- | 145 | J24 | .257 | 8 | .0 | 4.37 | -3.21 | -1.97 | 1.52 | -3.05 | 67.4 | 67.4 | .223 | 7 | .155 | 6 |
| 121- | 155 | J24 | .232 | 8 | .0 | 4.09 | -3.24 | .04 | -.03 | -2.72 | 67.4 | 67.4 | .224 | 7 | .186 | 6 |
| 131- | 146 | J24 | .261 | 8 | .0 | 4.52 | -3.67 | -.49 | .39 | -3.24 | 67.4 | 67.4 | .210 | 7 | .128 | 6 |
| 141- | 148 | J24 | .283 | 8 | .0 | 4.67 | -4.00 | 1.60 | -1.30 | -3.42 | 67.4 | 67.4 | .271 | 7 | .219 | 6 |
| 145- | 151 | J24 | .248 | 8 | 46.3 | -3.95 | 2.27 | 1.44 | 1.15 | -.99 | 67.4 | 67.4 | .236 | 7 | .188 | 6 |
| 146- | 171 | J24 | .279 | 7 | 46.3 | -4.53 | 2.74 | .80 | .56 | -1.25 | 67.4 | 67.4 | .260 | 8 | .254 | 6 |
| 148- | 181 | J24 | .279 | 8 | 46.3 | -4.30 | 2.69 | -1.84 | -1.45 | -1.53 | 67.4 | 67.4 | .252 | 7 | .190 | 6 |
| 155- | 161 | J24 | .267 | 8 | 46.3 | -4.18 | 2.95 | -.48 | -.41 | -1.63 | 67.4 | 67.4 | .221 | 7 | .148 | 6 |
| 121- | 145 | J25 | .124 | 7 | .0 | -.33 | -3.34 | -1.33 | 1.79 | -3.44 | 113.8 | 113.8 | .117 | 6 | .116 | 8 |
| 145- | 161 | J25 | .100 | 6 | .0 | .33 | -3.11 | .11 | -.08 | -3.61 | 113.8 | 113.8 | .084 | 7 | .064 | 8 |
| 148- | 131 | J25 | .129 | 6 | 78.8 | -.04 | -4.46 | .08 | -.04 | 4.08 | 113.8 | 113.8 | .125 | 7 | .116 | 8 |
| 171- | 148 | J25 | .094 | 6 | .0 | .30 | -2.66 | 1.26 | -1.87 | -3.50 | 113.8 | 113.8 | .072 | 7 | .064 | 8 |
| 223- | 254 | K08 | .178 | 7 | 18.9 | -2.53 | 1.85 | -.79 | -.31 | -.22 | 77.2 | 77.2 | .176 | 8 | .150 | 6 |
| 224- | 255 | K08 | .214 | 8 | 18.9 | -2.05 | 4.14 | .25 | .14 | -.62 | 77.2 | 77.2 | .198 | 7 | .150 | 6 |
| 244- | 255 | K08 | .159 | 8 | .0 | -.20 | -5.41 | -.23 | -.11 | -.99 | 52.8 | 52.8 | .146 | 7 | .134 | 6 |
| 254- | 243 | K08 | .088 | 8 | 12.9 | .22 | 2.88 | -.31 | .08 | -.45 | 52.8 | 52.8 | .077 | 7 | .077 | 6 |
| 254- | 263 | K08 | .174 | 8 | .0 | 2.10 | -3.62 | .35 | -.15 | -.51 | 77.2 | 77.2 | .171 | 7 | .140 | 6 |
| 255- | 264 | K08 | .126 | 8 | 18.9 | 2.30 | -1.67 | -.04 | -.11 | .09 | 77.2 | 77.2 | .121 | 7 | .113 | 6 |
| 221- | 225 | K11 | .105 | 7 | .0 | -1.06 | 1.45 | 1.52 | -.88 | .80 | 62.3 | 62.3 | .103 | 8 | .101 | 6 |
| 225- | 231 | K11 | .181 | 6 | 22.5 | -3.24 | 1.16 | -.86 | -.07 | -.61 | 62.3 | 62.3 | .164 | 7 | .126 | 8 |
| 261- | 265 | K11 | .118 | 6 | 22.5 | 2.37 | 1.21 | .47 | .44 | -.39 | 62.3 | 62.3 | .100 | 7 | .071 | 8 |

*** Member Group Summary Report ***

Group III - Unity Checks Greater Than .00 And Less Than .50

| Member JA -JB | Group ID | Maximum Combined Unity CK | Load Case NO. | Dist From End(Ft) | Axial Stress /---- (| Bending Stress Y Z KSI) ---/ | Shear Force Fy Fz /--- (Kips) --/ | KLX/RX | KLY/RX | KLZ/RZ | Second-Highest Unity Check | Load Case | Third-Highest Unity Check | Load Case | | |
|------------------|-------------|---------------------------------|---------------------|-------------------------|----------------------------|-------------------------------------|---|--------|--------|--------|----------------------------------|--------------|---------------------------------|--------------|------|---|
| 265- | Z71 | K11 | .086 | 8 | 22.5 | -.25 | -2.43 | 1.20 | .79 | .72 | 62.3 | 62.3 | .081 | 6 | .078 | 7 |
| 223- | Z24 | K12 | .065 | 8 | 19.2 | -1.04 | -.73 | .27 | .49 | -.09 | 53.8 | 53.8 | .062 | 6 | .057 | 7 |
| 263- | Z64 | K12 | .099 | 8 | 19.2 | .99 | -2.30 | .11 | .38 | 1.18 | 53.8 | 53.8 | .078 | 7 | .048 | 6 |
| 221- | Z23 | K13 | .231 | 6 | 29.8 | 3.74 | -3.58 | .51 | -.02 | .70 | 81.6 | 81.6 | .200 | 7 | .135 | 8 |
| 223- | Z05 | K13 | .161 | 8 | .0 | -.37 | -3.88 | -3.02 | .71 | -.97 | 110.8 | 110.8 | .148 | 7 | .121 | 6 |
| 223- | Z25 | K13 | .299 | 6 | .0 | -4.54 | -2.87 | -.50 | -.27 | -.51 | 78.1 | 78.1 | .260 | 7 | .190 | 8 |
| 224- | Z06 | K13 | .123 | 8 | .0 | -.40 | -3.42 | .62 | -.31 | -.83 | 110.8 | 110.8 | .119 | 7 | .106 | 6 |
| 224- | Z31 | K13 | .263 | 8 | .0 | 4.04 | -4.36 | -.70 | .08 | -.91 | 81.6 | 81.6 | .175 | 7 | .104 | 6 |
| Z25- | Z24 | K13 | .224 | 6 | 28.5 | 4.52 | -2.21 | .94 | .12 | .36 | 78.1 | 78.1 | .203 | 7 | .154 | 8 |
| 261- | Z63 | K13 | .409 | 8 | 29.8 | -4.77 | 6.09 | -.59 | -.04 | -1.09 | 81.6 | 81.6 | .289 | 7 | .122 | 6 |
| 263- | Z07 | K13 | .162 | 8 | .0 | .92 | 4.66 | -.31 | .25 | .87 | 110.8 | 110.8 | .153 | 7 | .127 | 6 |
| 263- | Z65 | K13 | .287 | 6 | .0 | -4.25 | 2.88 | .83 | -.09 | .38 | 78.1 | 78.1 | .262 | 7 | .210 | 8 |
| 264- | Z08 | K13 | .106 | 8 | .0 | .23 | 2.19 | 2.74 | -.63 | .51 | 110.8 | 110.8 | .092 | 7 | .079 | 6 |
| 264- | Z71 | K13 | .259 | 6 | .0 | -3.44 | 3.28 | .43 | .06 | .58 | 81.6 | 81.6 | .215 | 7 | .142 | 8 |
| 265- | Z64 | K13 | .202 | 6 | 28.5 | 4.25 | 1.87 | -.48 | .27 | -.15 | 78.1 | 78.1 | .179 | 7 | .130 | 8 |
| 211- | Z21 | K18 | .270 | 6 | .0 | -2.72 | -2.05 | 2.32 | -1.29 | -.78 | 112.6 | 112.6 | .163 | 7 | .040 | 8 |
| 271- | Z81 | K18 | .168 | 6 | 58.1 | 2.26 | .32 | 3.19 | 1.62 | .50 | 112.6 | 112.6 | .106 | 7 | .103 | 8 |
| 223- | Z43 | K20 | .111 | 7 | .0 | -1.36 | -2.10 | .49 | -1.06 | -2.18 | 24.4 | 24.4 | .105 | 6 | .099 | 8 |
| 224- | Z44 | K20 | .091 | 7 | .0 | 1.31 | -1.55 | .45 | -1.02 | -2.05 | 24.4 | 24.4 | .090 | 6 | .076 | 8 |
| 243- | Z63 | K20 | .108 | 7 | 13.8 | -1.37 | 2.00 | .46 | 1.04 | -3.52 | 24.4 | 24.4 | .102 | 6 | .096 | 8 |
| 244- | Z64 | K20 | .085 | 7 | 13.8 | 1.31 | 1.34 | .47 | 1.02 | -1.98 | 24.4 | 24.4 | .085 | 6 | .071 | 8 |
| 211- | Z51 | K24 | .318 | 8 | .0 | 4.88 | -4.67 | -1.77 | .56 | -4.25 | 116.6 | 116.6 | .297 | 7 | .245 | 6 |
| 221- | Z51 | K24 | .368 | 8 | .0 | -1.48 | -7.01 | -1.52 | 1.32 | -5.17 | 143.4 | 143.4 | .298 | 7 | .230 | 6 |
| 221- | Z53 | K24 | .233 | 7 | .0 | -4.13 | -2.42 | -.03 | .47 | -2.79 | 47.6 | 47.6 | .220 | 6 | .212 | 8 |

*** Member Group Summary Report ***

Group III - Unity Checks Greater Than .00 And Less Than .50

| Member | Group | Maximum Combined Unity | Load Case NO. | Dist From End (Ft) | Axial Stress /---- (KSI) | Bending Stress Y Z /---/ | Shear Force Fy Fz /-- (Kips) --/ | KLY/RY | KLZ/RZ | Second-Highest Unity Check | Load Case | Third-Highest Unity Check | Load Case | | | |
|--------|-------|------------------------|---------------|--------------------|----------------------------|--------------------------|----------------------------------|--------|--------|----------------------------|-----------|---------------------------|-----------|---|------|---|
| JA -JB | ID | CK | | | | | | | | Check | Case | Check | Case | | | |
| 231- | 255 | K24 | .285 | 7 | .0 | 5.13 | -3.56 | -.21 | .42 | -3.36 | 58.3 | 58.3 | .277 | 6 | .259 | 8 |
| 241- | 271 | K24 | .292 | 6 | 99.8 | -.56 | -6.72 | -4.09 | -3.75 | 5.58 | 143.4 | 143.4 | .216 | 8 | .215 | 7 |
| 253- | 254 | K24 | .262 | 7 | .0 | -4.28 | -3.74 | .70 | -.50 | -4.01 | 10.7 | 10.7 | .254 | 8 | .249 | 6 |
| 254- | 261 | K24 | .261 | 7 | .0 | -5.29 | -1.14 | .25 | .12 | -2.58 | 58.3 | 58.3 | .244 | 8 | .237 | 6 |
| 255- | 271 | K24 | .214 | 7 | 40.6 | 4.20 | -2.26 | .32 | -.94 | 3.18 | 58.3 | 58.3 | .213 | 6 | .192 | 8 |
| 331- | 346 | L20 | .102 | 6 | 43.0 | .67 | -.70 | 2.72 | .32 | .74 | 74.8 | 74.8 | .078 | 7 | .068 | 8 |
| 346- | 371 | L20 | .282 | 8 | 27.9 | .54 | 9.43 | .50 | .16 | -7.20 | 48.5 | 48.5 | .249 | 7 | .181 | 6 |
| 311- | 361 | L24 | .201 | 6 | .0 | 1.87 | -4.56 | -.16 | .30 | -3.88 | 127.1 | 127.1 | .191 | 7 | .176 | 8 |
| 331- | 381 | L24 | .360 | 6 | .0 | -2.15 | -6.04 | .10 | .32 | -4.62 | 127.1 | 127.1 | .334 | 7 | .286 | 8 |
| 321- | 343 | L25 | .107 | 6 | 35.5 | -.43 | -.74 | 3.05 | 1.37 | 1.41 | 51.2 | 51.2 | .068 | 7 | .038 | 8 |
| 343- | 361 | L25 | .146 | 6 | .0 | -.53 | -2.31 | 3.73 | -2.03 | -3.10 | 51.2 | 51.2 | .122 | 7 | .109 | 8 |
| 111- | 211 | LG2 | .341 | 6 | 5.0 | -4.91 | 3.35 | -3.22 | 5.23 | 10.30 | 42.7 | 42.7 | .211 | 7 | .068 | 8 |
| 141- | 241 | LG2 | .159 | 8 | 52.6 | -.19 | -3.97 | 2.58 | 2.54 | 3.67 | 42.7 | 42.7 | .139 | 7 | .132 | 6 |
| 151- | 251 | LG2 | .095 | 6 | 52.6 | .11 | -1.20 | -2.57 | -1.34 | .92 | 42.7 | 42.7 | .078 | 7 | .077 | 8 |
| 181- | 281 | LG2 | .263 | 6 | 5.0 | 4.51 | -2.21 | 2.47 | -4.47 | -7.81 | 42.7 | 42.7 | .152 | 7 | .056 | 8 |
| 211- | 311 | LG2 | .409 | 6 | 5.0 | -7.45 | .10 | 3.41 | -7.80 | 6.03 | 38.6 | 38.6 | .375 | 7 | .302 | 8 |
| 281- | 381 | LG2 | .341 | 6 | 5.0 | 7.55 | .56 | -2.38 | 5.62 | -1.91 | 38.6 | 38.6 | .313 | 7 | .268 | 8 |
| 121- | 101 | LG3 | .358 | 6 | 5.0 | -5.20 | 1.88 | -5.10 | 14.11 | 7.06 | 26.0 | 26.0 | .212 | 7 | .065 | 8 |
| 131- | 102 | LG3 | .286 | 6 | 5.0 | -2.89 | 1.70 | -5.05 | 19.29 | 8.80 | 26.0 | 26.0 | .174 | 7 | .082 | 8 |
| 161- | 103 | LG3 | .209 | 6 | 35.2 | 3.07 | .74 | -3.12 | -12.43 | -.30 | 26.0 | 26.0 | .127 | 7 | .070 | 8 |
| 171- | 104 | LG3 | .323 | 6 | 5.0 | 5.13 | .55 | 4.48 | -13.97 | .26 | 26.0 | 26.0 | .151 | 7 | .044 | 8 |
| 241- | 341 | LG3 | .499 | 8 | 5.0 | -8.43 | 4.17 | -2.88 | 8.24 | 11.41 | 38.6 | 38.6 | .340 | 7 | .163 | 6 |
| 251- | 351 | LG3 | .355 | 8 | 5.0 | 8.04 | -1.19 | 2.04 | -7.64 | -5.61 | 38.6 | 38.6 | .245 | 7 | .129 | 6 |
| 261- | 207 | LG3 | .254 | 8 | 5.0 | 5.35 | -2.02 | -.61 | 4.70 | -9.45 | 22.3 | 22.3 | .164 | 7 | .127 | 6 |

*** Member Group Summary Report ***

Group III - Unity Checks Greater Than .00 And Less Than .50

| Member JA -JB | Group ID | Maximum Unity | Load CK | Dist NO. | Dist End(Ft) | Axial Stress /---- (| Bending Stress Y Z ----/ (| Shear Force Fy Fz /-- (Kips) --/ | KLY/RV | KLZ/RZ | Second-Highest Unity Check | Load Case | Third-Highest Unity Check | Load Case | |
|------------------|-------------|------------------|------------|-------------|-----------------|----------------------------|-------------------------------------|--|--------|--------|----------------------------------|--------------|---------------------------------|--------------|---|
| 271- | 208 | .349 | 8 | 5.0 | 8.17 | -2.01 | -.28 | 4.20 | -6.45 | 22.3 | 22.3 | .301 | 7 | .221 | 6 |
| 321- | 302 | .471 | 6 | 5.0 | -8.97 | 1.45 | -4.18 | 21.79 | 6.60 | 17.1 | 17.1 | .453 | 7 | .358 | 8 |
| 101- | 221 | .341 | 6 | 17.1 | -4.72 | -3.15 | 4.56 | 14.16 | 14.01 | 16.2 | 16.2 | .242 | 7 | .123 | 8 |
| 102- | 231 | .306 | 6 | 17.1 | -2.46 | -1.51 | 6.40 | 12.52 | 1.93 | 16.2 | 16.2 | .206 | 7 | .141 | 8 |
| 103- | 261 | .301 | 6 | 17.1 | 3.15 | 1.19 | -5.89 | -9.84 | -1.10 | 16.2 | 16.2 | .182 | 7 | .096 | 8 |
| 104- | 271 | .421 | 6 | 17.1 | 5.51 | 4.00 | -5.94 | -17.24 | -14.69 | 16.2 | 16.2 | .310 | 7 | .174 | 8 |
| 207- | 361 | .368 | 8 | 16.6 | 5.59 | 4.10 | 3.54 | 9.35 | -11.43 | 15.8 | 15.8 | .247 | 7 | .138 | 6 |
| 208- | 371 | .359 | 8 | 16.6 | 8.32 | .54 | 2.11 | 3.23 | -1.73 | 15.8 | 15.8 | .287 | 7 | .186 | 6 |
| 302- | 421 | .479 | 7 | 18.4 | -8.40 | -4.12 | 3.67 | 9.19 | 22.13 | 17.1 | 17.1 | .463 | 6 | .420 | 8 |
| 303- | 431 | .496 | 8 | 18.4 | -8.96 | .33 | 5.31 | 18.51 | -21.38 | 17.1 | 17.1 | .486 | 7 | .397 | 6 |
| 341- | 441 | .395 | 8 | .0 | -8.29 | -1.48 | 1.14 | 2.84 | 4.28 | 34.8 | 34.8 | .243 | 7 | .064 | 6 |
| 351- | 451 | .342 | 8 | .0 | 8.17 | 1.23 | -1.29 | -1.46 | -.89 | 34.8 | 34.8 | .210 | 7 | .059 | 6 |
| 202- | 205 | .202 | 8 | .0 | -3.67 | -2.61 | -.16 | -7.43 | -13.41 | 3.2 | 3.2 | .176 | 7 | .124 | 6 |
| 205- | 321 | .195 | 8 | .0 | -3.68 | -2.18 | -.40 | -5.63 | -10.65 | 16.3 | 16.3 | .171 | 7 | .121 | 6 |
| 203- | 206 | .143 | 8 | .0 | -2.25 | 2.22 | -.55 | -9.36 | 28.39 | 3.2 | 3.2 | .092 | 7 | .084 | 6 |
| 206- | 331 | .205 | 8 | 21.6 | -2.20 | -3.47 | -2.81 | -11.61 | 26.21 | 16.3 | 16.3 | .145 | 7 | .130 | 6 |
| 221- | 202 | .272 | 8 | .0 | -3.95 | 4.35 | 1.35 | -7.53 | 42.12 | 19.5 | 19.5 | .217 | 7 | .144 | 6 |
| 231- | 203 | .150 | 8 | .0 | -2.63 | 1.43 | 1.31 | -9.32 | 3.23 | 19.5 | 19.5 | .079 | 7 | .055 | 6 |
| 611- | 712 | .400 | 6 | 2.6 | -10.14 | -1.55 | .56 | -9.03 | 16.74 | 2.0 | 2.0 | .360 | 7 | .259 | 8 |
| 621- | 722 | .390 | 8 | .0 | -8.27 | 3.20 | 1.72 | -19.47 | 78.21 | 2.0 | 2.0 | .364 | 7 | .279 | 6 |
| 631- | 732 | .324 | 8 | .0 | -7.66 | .66 | 1.92 | -23.59 | 51.18 | 2.0 | 2.0 | .300 | 7 | .222 | 6 |
| 641- | 742 | .474 | 8 | .0 | -8.41 | 5.01 | -4.02 | 48.20 | 125.86 | 2.0 | 2.0 | .345 | 7 | .157 | 6 |
| 651- | 752 | .400 | 8 | .0 | 8.60 | -2.26 | 2.75 | -33.56 | -4.20 | 2.0 | 2.0 | .278 | 7 | .119 | 6 |
| 661- | 762 | .334 | 8 | .0 | 8.06 | 1.75 | -.73 | 10.38 | 41.33 | 2.0 | 2.0 | .305 | 7 | .226 | 6 |

*** Member Group Summary Report ***

Group III - Unity Checks Greater Than .00 And Less Than .50

| Member | Group | Maximum Combined | Load Case | Dist From | Axial Stress | Bending Stress | Y | Z | Shear Force | Fy | Fx | KLY/RX | KLZ/RZ | Second-Highest Unity Check | Load Case | Third-Highest Unity Check | Load Case |
|--------|-------|------------------|-----------|-----------|--------------|----------------|-------|------|----------------|-------|-------|--------|--------|----------------------------|-----------|---------------------------|-----------|
| JA -JB | ID | Unity CK | NO. | End(Ft) | /---- (| KSI) | ---/ | ---/ | /-- (Kips) --/ | | | | | | | | |
| 671- | 772 | .359 | 8 | 2.6 | 9.08 | -1.32 | -1.32 | -.79 | 13.95 | 10.72 | 2.0 | 2.0 | .339 | 7 | .263 | 6 | |
| 681- | 782 | .447 | 6 | .0 | 11.38 | 1.80 | 1.80 | -.25 | 5.27 | 78.02 | 2.0 | 2.0 | .410 | 7 | .308 | 8 | |
| 424- | 446 | .262 | 8 | 18.9 | -4.00 | 2.37 | 2.37 | 1.12 | .45 | -.36 | 77.2 | 77.2 | .239 | 7 | .191 | 6 | |
| 443- | 423 | .262 | 7 | .0 | -4.25 | 1.05 | 1.05 | 1.87 | -.76 | .11 | 77.2 | 77.2 | .249 | 8 | .235 | 6 | |
| 443- | 463 | .199 | 8 | .0 | 4.11 | -1.64 | 1.17 | 1.17 | -.45 | -.26 | 77.2 | 77.2 | .175 | 7 | .128 | 6 | |
| 446- | 464 | .195 | 7 | .0 | 4.27 | -.66 | -1.52 | 1.52 | .71 | -.06 | 77.2 | 77.2 | .190 | 6 | .181 | 8 | |
| 423- | 507 | .141 | 8 | .0 | -.08 | -2.29 | -4.35 | 4.35 | 1.34 | -.90 | 96.5 | 96.5 | .106 | 7 | .067 | 6 | |
| 424- | 506 | .166 | 7 | .0 | -.30 | -3.71 | 3.87 | 3.87 | -1.75 | -.88 | 96.5 | 96.5 | .163 | 8 | .155 | 6 | |
| 463- | 508 | .176 | 7 | .0 | .61 | 3.95 | -3.93 | 3.93 | 1.68 | .81 | 96.5 | 96.5 | .170 | 6 | .169 | 8 | |
| 464- | 505 | .122 | 8 | .0 | .36 | 1.68 | 3.53 | 3.53 | -1.05 | .64 | 96.5 | 96.5 | .080 | 7 | .073 | 6 | |
| 421- | 423 | .350 | 6 | .0 | 7.31 | 1.00 | 3.29 | 3.29 | -.57 | .38 | 69.8 | 69.8 | .316 | 7 | .255 | 8 | |
| 423- | 425 | .192 | 6 | 19.5 | -2.61 | .08 | 2.75 | 2.75 | 1.29 | -.32 | 63.8 | 63.8 | .102 | 7 | .099 | 8 | |
| 424- | 431 | .259 | 8 | .0 | 3.00 | -5.48 | .71 | .71 | -.47 | -1.02 | 69.8 | 69.8 | .216 | 6 | .155 | 7 | |
| 425- | 424 | .141 | 6 | 19.5 | 2.49 | -1.83 | .65 | .65 | .18 | .26 | 63.8 | 63.8 | .140 | 8 | .098 | 7 | |
| 461- | 463 | .341 | 8 | 21.4 | -4.20 | 5.58 | .87 | .87 | .52 | -.91 | 69.8 | 69.8 | .211 | 7 | .178 | 6 | |
| 463- | 465 | .176 | 6 | .0 | -2.69 | 1.88 | .82 | .82 | -.23 | .33 | 63.8 | 63.8 | .133 | 8 | .111 | 7 | |
| 465- | 464 | .183 | 6 | .0 | 2.79 | -.23 | 3.07 | 3.07 | -1.32 | -.42 | 63.8 | 63.8 | .108 | 8 | .088 | 7 | |
| 421- | 425 | .241 | 7 | .0 | -2.75 | 2.14 | 3.77 | 3.77 | -2.06 | 1.07 | 62.3 | 62.3 | .240 | 8 | .216 | 6 | |
| 425- | 431 | .222 | 6 | 22.5 | -3.54 | 1.70 | -2.01 | 2.01 | .07 | -.78 | 62.3 | 62.3 | .199 | 7 | .172 | 8 | |
| 461- | 465 | .175 | 6 | .0 | 2.83 | -.97 | -2.56 | 2.56 | .04 | -.41 | 62.3 | 62.3 | .124 | 7 | .093 | 8 | |
| 465- | 471 | .201 | 6 | 22.5 | 1.09 | -1.47 | 5.68 | 5.68 | 2.21 | .60 | 62.3 | 62.3 | .199 | 7 | .175 | 8 | |
| 423- | 424 | .091 | 8 | 19.2 | -1.42 | -1.01 | .54 | .54 | 1.18 | .17 | 53.8 | 53.8 | .076 | 7 | .061 | 6 | |
| 463- | 464 | .074 | 8 | 19.2 | 1.27 | -.95 | .47 | .47 | 1.12 | .45 | 53.8 | 53.8 | .062 | 7 | .047 | 6 | |
| 411- | 421 | .179 | 8 | 48.3 | .47 | .29 | 5.85 | 5.85 | 3.28 | -.19 | 120.3 | 120.3 | .164 | 6 | .161 | 7 | |

*** Member Group Summary Report ***

Group III - Unity Checks Greater Than .00 And Less Than .50

| Member | Group | Maximum Combined | Load Case | Dist From | Axial Stress | Bending Stress | Shear Force | | | | | Second-Highest | Third-Highest |
|--------|-------|------------------|-----------|-----------|--------------|----------------|-------------|--------|--------|-------------|-----------|----------------|---------------|
| JA -JB | ID | Unity CK | NO. | End(Ft) | /--- (KSI) | Y Z | Fy Fz | KLX/RX | KLZ/RZ | Unity Check | Load Case | Unity Check | Load Case |
| 471- | 481 | .287 | 6 | 48.3 | -1.14 | -1.83 7.06 | 2.25 1.25 | 120.3 | 120.3 | .268 | 7 | .211 | 8 |
| 411- | 451 | .122 | 8 | .0 | -.33 | -1.73 -3.06 | .97 -.52 | 119.4 | 119.4 | .101 | 7 | .099 | 6 |
| 421- | 443 | .179 | 8 | .0 | 3.37 | -1.90 1.13 | -.52 -.68 | 59.7 | 59.7 | .154 | 7 | .110 | 6 |
| 431- | 446 | .110 | 8 | .0 | -1.80 | -.86 .78 | -.48 -.14 | 59.7 | 59.7 | .096 | 7 | .079 | 6 |
| 441- | 481 | .083 | 8 | .0 | .20 | -.81 2.59 | -.76 -.43 | 119.4 | 119.4 | .068 | 6 | .065 | 7 |
| 443- | 461 | .110 | 6 | 30.8 | -.53 | 1.09 2.94 | .34 -.03 | 59.7 | 59.7 | .101 | 8 | .091 | 7 |
| 446- | 471 | .191 | 8 | 30.8 | -3.64 | .62 1.19 | .51 .00 | 59.7 | 59.7 | .187 | 7 | .158 | 6 |
| 421- | 451 | .305 | 8 | .0 | -1.57 | -3.78 -4.05 | 2.87 -2.00 | 135.4 | 135.4 | .304 | 6 | .269 | 7 |
| 441- | 471 | .411 | 6 | 78.3 | -1.34 | -5.53 -8.30 | -6.65 4.05 | 135.4 | 135.4 | .273 | 7 | .160 | 8 |
| 463- | 423 | .059 | 6 | .0 | -.84 | .88 .16 | -1.28 1.60 | 48.7 | 48.7 | .046 | 8 | .041 | 7 |
| 464- | 424 | .056 | 8 | 27.6 | -.50 | -1.28 -.02 | -.10 .88 | 48.7 | 48.7 | .053 | 6 | .039 | 7 |
| 521- | 561 | .276 | 6 | .0 | -1.46 | -.96 -6.20 | 4.05 -.10 | 115.8 | 115.8 | .217 | 7 | .208 | 8 |
| 531- | 571 | .243 | 6 | .0 | 1.66 | -3.05 -5.90 | 4.11 -1.51 | 115.8 | 115.8 | .172 | 7 | .148 | 8 |
| 511- | 561 | .240 | 8 | 69.2 | 1.15 | -2.54 6.45 | 5.25 2.69 | 119.7 | 119.7 | .166 | 6 | .164 | 7 |
| 531- | 581 | .399 | 6 | 69.2 | -3.43 | -3.56 2.91 | .07 3.72 | 119.7 | 119.7 | .334 | 7 | .280 | 8 |
| 626- | 643 | .363 | 7 | 16.2 | -6.17 | -.05 -3.17 | -1.19 -.16 | 66.4 | 66.4 | .342 | 8 | .315 | 6 |
| 628- | 646 | .358 | 8 | .0 | -5.24 | 4.60 -.21 | -.48 .78 | 66.4 | 66.4 | .329 | 7 | .258 | 6 |
| 643- | 666 | .290 | 8 | .0 | 6.19 | -1.20 2.41 | -.90 -.06 | 66.4 | 66.4 | .244 | 7 | .161 | 6 |
| 646- | 668 | .307 | 8 | 16.2 | 5.46 | 3.87 -1.62 | -.73 -.61 | 66.4 | 66.4 | .305 | 7 | .263 | 6 |
| 621- | 626 | .333 | 6 | .0 | 5.59 | 2.86 4.06 | -.97 1.18 | 60.0 | 60.0 | .321 | 7 | .260 | 8 |
| 623- | 625 | .114 | 6 | .0 | -1.53 | .77 1.75 | -1.06 .42 | 43.1 | 43.1 | .064 | 8 | .059 | 7 |
| 625- | 624 | .136 | 8 | 13.2 | -1.28 | 2.12 2.19 | 1.13 -1.14 | 43.1 | 43.1 | .110 | 6 | .071 | 7 |
| 626- | 503 | .184 | 8 | 27.4 | -.68 | 3.85 -3.68 | -2.06 -2.14 | 89.6 | 89.6 | .175 | 7 | .172 | 6 |
| 628- | 502 | .231 | 7 | 27.4 | -1.34 | 1.02 5.68 | 3.34 -.99 | 89.6 | 89.6 | .222 | 6 | .218 | 8 |

*** Member Group Summary Report ***

Group III - Unity Checks Greater Than .00 And Less Than .50

| Member | Group | Maximum Combined | Load Case | Dist From | Axial Stress | Bending Stress | Shear Force | | | | | Second-Highest | Third-Highest | | |
|----------|-------|------------------|-----------|-----------|--------------|----------------|---------------|--------|--------|-------------|-----------|----------------|---------------|--|--|
| JA -JB | ID | Unity CK | NO. | End(Ft) | /---- (| Y Z | Fy Fx | KLX/RY | KLZ/RZ | Unity Check | Load Case | Unity Check | Load Case | | |
| | | | | | KSI) |) | /-- (Kips) -/ | | | | | | | | |
| 631- 628 | P10 | .310 | 6 | 18.4 | -5.10 | 2.58 -2.31 | -1.72 -.85 | 60.0 | 60.0 | .209 | 7 | .094 | 8 | | |
| 663- 665 | P10 | .144 | 6 | 13.2 | -1.21 | .33 -3.41 | -.81 -.08 | 43.1 | 43.1 | .139 | 8 | .091 | 7 | | |
| 665- 664 | P10 | .181 | 6 | .0 | 1.39 | -2.11 4.26 | -1.79 -.70 | 43.1 | 43.1 | .123 | 8 | .113 | 7 | | |
| 666- 504 | P10 | .197 | 8 | 27.4 | -.58 | -4.07 -4.36 | -2.44 2.46 | 89.6 | 89.6 | .183 | 6 | .173 | 7 | | |
| 666- 661 | P10 | .393 | 8 | 18.4 | -8.54 | .05 .88 | -.49 -.12 | 60.0 | 60.0 | .344 | 7 | .256 | 6 | | |
| 668- 501 | P10 | .233 | 7 | 27.4 | -.75 | -5.77 3.88 | 1.27 3.11 | 89.6 | 89.6 | .229 | 6 | .217 | 8 | | |
| 611- 621 | P12 | .281 | 6 | .0 | -2.21 | 2.32 4.24 | -2.21 2.16 | 112.3 | 112.3 | .279 | 7 | .278 | 8 | | |
| 621- 625 | P12 | .405 | 8 | .0 | -6.45 | 2.26 3.94 | -2.89 1.79 | 62.3 | 62.3 | .381 | 7 | .312 | 6 | | |
| 625- 631 | P12 | .341 | 8 | 22.5 | -5.55 | 3.48 1.27 | 2.09 -1.83 | 62.3 | 62.3 | .331 | 7 | .296 | 6 | | |
| 651- 661 | P12 | .312 | 6 | 40.6 | .96 | 2.10 9.78 | 3.64 -1.36 | 112.3 | 112.3 | .308 | 8 | .289 | 7 | | |
| 661- 665 | P12 | .229 | 6 | .0 | 2.32 | 1.53 -5.10 | .26 1.02 | 62.3 | 62.3 | .160 | 7 | .090 | 8 | | |
| 665- 671 | P12 | .342 | 7 | 22.5 | 2.53 | -.12 9.12 | 4.06 .01 | 62.3 | 62.3 | .329 | 6 | .280 | 8 | | |
| 611- 651 | P14 | .421 | 8 | 46.1 | -3.92 | 2.87 3.66 | .82 -1.89 | 115.9 | 115.9 | .398 | 7 | .354 | 6 | | |
| 621- 643 | P14 | .215 | 8 | .0 | 3.86 | 2.17 1.89 | -.76 1.94 | 57.9 | 57.9 | .179 | 7 | .104 | 6 | | |
| 631- 646 | P14 | .348 | 8 | .0 | -7.04 | 1.36 1.13 | -.64 1.56 | 57.9 | 57.9 | .312 | 7 | .239 | 6 | | |
| 641- 681 | P14 | .341 | 6 | .0 | -3.48 | -1.24 -2.98 | 3.01 -.07 | 115.9 | 115.9 | .315 | 7 | .294 | 8 | | |
| 643- 661 | P14 | .297 | 6 | 23.1 | -1.98 | 3.06 6.99 | 1.49 -2.03 | 57.9 | 57.9 | .205 | 7 | .148 | 8 | | |
| 623- 624 | P16 | .091 | 8 | 19.3 | -.38 | .63 2.66 | 3.40 -1.37 | 42.2 | 42.2 | .084 | 6 | .052 | 7 | | |
| 626- 628 | P16 | .177 | 8 | 19.3 | -2.75 | 1.00 2.24 | 3.21 -1.56 | 42.2 | 42.2 | .144 | 6 | .138 | 7 | | |
| 663- 664 | P16 | .096 | 8 | .0 | .25 | -.09 3.13 | -3.94 .34 | 42.2 | 42.2 | .072 | 6 | .041 | 7 | | |
| 666- 668 | P16 | .110 | 8 | .0 | .99 | -.34 2.68 | -3.68 .16 | 42.2 | 42.2 | .067 | 6 | .064 | 7 | | |
| 641- 671 | P18 | .347 | 6 | .0 | 1.38 | -1.64 -10.42 | 8.40 -.52 | 118.3 | 118.3 | .340 | 7 | .276 | 8 | | |
| 623- 626 | P21 | .093 | 6 | 4.1 | -.32 | .52 2.89 | 18.76 -2.24 | 7.3 | 7.3 | .056 | 7 | .020 | 8 | | |
| 624- 628 | P21 | .095 | 8 | 4.1 | -.30 | .86 -2.92 | -19.54 -3.38 | 7.3 | 7.3 | .045 | 7 | .028 | 6 | | |

*** Member Group Summary Report ***

Group III - Unity Checks Greater Than .00 And Less Than .50

| Member JA -JB | Group ID | Maximum Combined Unity CK | Load Case NO. | Dist From End(Ft) | Axial Stress /---- (| Bending Stress Y Z)---/ (| Shear Force Fy Fz /--- (Kips) -/ | KLV/RV | KLZ/RZ | Second-Highest Unity Check | Load Case | Third-Highest Unity Check | Load Case | | | |
|------------------|-------------|---------------------------------|---------------------|-------------------------|----------------------------|-------------------------------------|--|--------|--------|----------------------------------|--------------|---------------------------------|--------------|---|------|---|
| 626- | 666 | P21 | .055 | 6 | .0 | -.69 | .22 | .99 | .50 | 2.10 | 35.1 | 35.1 | .040 | 8 | .033 | 7 |
| 628- | 668 | P21 | .083 | 8 | .0 | -1.07 | .89 | -1.22 | .87 | 2.90 | 35.1 | 35.1 | .055 | 7 | .029 | 6 |
| 666- | 663 | P21 | .099 | 8 | .0 | .40 | .45 | -3.01 | 20.95 | 1.43 | 7.3 | 7.3 | .039 | 6 | .039 | 7 |
| 668- | 664 | P21 | .082 | 6 | .0 | .29 | .48 | 2.52 | -15.54 | 1.77 | 7.3 | 7.3 | .030 | 7 | .030 | 8 |
| 212- | 312 | PL3 | .391 | 6 | 4.8 | 6.98 | 5.27 | -.69 | .80 | 10.95 | 42.8 | 42.8 | .343 | 7 | .235 | 8 |
| 222- | 322 | PL3 | .193 | 6 | 4.8 | -1.21 | 3.05 | -4.19 | 6.95 | 6.70 | 42.6 | 42.6 | .185 | 8 | .165 | 7 |
| 232- | 332 | PL3 | .196 | 6 | 4.8 | -.98 | 3.89 | -4.10 | 7.03 | 8.08 | 42.6 | 42.6 | .187 | 8 | .181 | 7 |
| 312- | 412 | PL4 | .312 | 6 | 47.0 | 7.26 | -2.12 | .01 | .80 | 5.93 | 38.9 | 38.9 | .277 | 7 | .176 | 8 |
| 322- | 422 | PL4 | .126 | 8 | 46.7 | 2.13 | -1.85 | .14 | .09 | 5.32 | 38.7 | 38.7 | .103 | 7 | .099 | 6 |
| 332- | 432 | PL4 | .117 | 8 | 46.7 | 1.62 | -2.15 | .34 | .42 | 6.44 | 38.7 | 38.7 | .110 | 7 | .099 | 6 |
| 342- | 442 | PL4 | .430 | 6 | 47.0 | -9.34 | -.04 | 2.56 | 9.49 | -2.54 | 38.9 | 38.9 | .229 | 7 | .072 | 8 |
| 412- | 512 | PL5 | .312 | 6 | .0 | 7.26 | -2.12 | .01 | -.05 | -1.80 | 34.7 | 34.7 | .277 | 7 | .176 | 8 |
| 422- | 522 | PL5 | .126 | 8 | .0 | 2.13 | -1.85 | .14 | -.84 | -.14 | 34.5 | 34.5 | .103 | 7 | .099 | 6 |
| 432- | 532 | PL5 | .117 | 8 | .0 | 1.62 | -2.15 | .34 | -2.05 | -.42 | 34.5 | 34.5 | .110 | 7 | .099 | 6 |
| 442- | 542 | PL5 | .423 | 6 | .0 | -9.34 | -.04 | 2.56 | -3.32 | -.01 | 34.7 | 34.7 | .226 | 7 | .072 | 8 |
| 512- | 612 | PL6 | .284 | 6 | .0 | 7.38 | -.98 | -.01 | -.05 | -3.95 | 30.0 | 30.0 | .247 | 7 | .142 | 8 |
| 522- | 622 | PL6 | .120 | 8 | .0 | 2.25 | -1.50 | -.19 | -.84 | -1.70 | 29.8 | 29.8 | .090 | 7 | .066 | 6 |
| 532- | 632 | PL6 | .109 | 8 | .0 | 1.74 | -1.68 | -.45 | -2.05 | -1.98 | 29.8 | 29.8 | .090 | 7 | .054 | 6 |
| 542- | 642 | PL6 | .381 | 6 | 36.2 | -9.11 | 1.53 | .15 | -3.32 | -4.36 | 30.0 | 30.0 | .191 | 7 | .041 | 8 |
| 612- | 712 | PL7 | .280 | 6 | .0 | 7.49 | .68 | -.02 | 2.16 | 35.18 | 2.2 | 2.2 | .244 | 7 | .141 | 8 |
| 622- | 722 | PL7 | .111 | 8 | 2.6 | 2.37 | -.99 | -.20 | 11.28 | 12.05 | 2.2 | 2.2 | .082 | 7 | .044 | 6 |
| 632- | 732 | PL7 | .105 | 8 | 2.6 | 1.86 | -1.27 | -.68 | 18.86 | 20.02 | 2.2 | 2.2 | .085 | 7 | .038 | 6 |
| 642- | 742 | PL7 | .360 | 6 | .0 | -9.10 | 1.53 | .15 | -14.92 | 61.35 | 2.2 | 2.2 | .170 | 7 | .035 | 8 |
| 712- | 811 | PL8 | .225 | 6 | 3.0 | -3.62 | -3.50 | .51 | -6.87 | 49.93 | 2.5 | 2.5 | .218 | 7 | .209 | 8 |

*** Member Group Summary Report ***

Group III - Unity Checks Greater Than .00 And Less Than .50

| Member | Group | Maximum Combined Unity CK | Load Case NO. | Dist From End(Ft) | Axial Stress /---- (| Bending Stress Y Z (KSI) | Shear Force Fy Fz (Kips) | | | | | Second-Highest Unity Check | Load Case | Third-Highest Unity Check | Load Case |
|--------|-------|---------------------------------|---------------------|-------------------------|----------------------------|----------------------------------|---------------------------------|--------|--------|------|------|----------------------------------|--------------|---------------------------------|--------------|
| JA -JB | ID | | | | | | | KLV/RV | KLZ/RZ | | | | | | |
| 722- | 821 | .310 | 6 | 3.0 | -7.26 | -1.93 | .67 | -1.66 | 87.79 | 2.5 | 2.5 | .298 | 7 | .285 | 8 |
| 732- | 831 | .331 | 8 | 3.0 | -6.52 | -3.61 | .92 | -4.74 | 66.89 | 2.5 | 2.5 | .309 | 7 | .286 | 6 |
| 742- | 841 | .469 | 6 | 3.0 | -9.51 | -3.67 | -3.32 | 33.76 | 154.38 | 2.5 | 2.5 | .463 | 7 | .446 | 8 |
| 752- | 851 | .249 | 8 | 3.0 | -4.03 | -3.33 | 1.99 | -21.20 | 44.42 | 2.5 | 2.5 | .240 | 7 | .225 | 6 |
| 762- | 861 | .285 | 6 | 3.0 | -7.10 | -1.34 | -.28 | -3.45 | 77.80 | 2.5 | 2.5 | .282 | 7 | .281 | 8 |
| 772- | 871 | .290 | 8 | 3.0 | -6.50 | -2.22 | -.44 | 1.83 | 63.57 | 2.5 | 2.5 | .276 | 7 | .263 | 6 |
| 782- | 881 | .435 | 8 | 3.0 | -8.79 | -4.62 | -.10 | 8.86 | 120.30 | 2.5 | 2.5 | .426 | 7 | .422 | 6 |
| 123- | 199 | .306 | 6 | .0 | -5.19 | -3.81 | .35 | -.31 | -1.37 | 47.2 | 47.2 | .252 | 7 | .171 | 8 |
| 124- | 199 | .174 | 8 | .0 | -3.00 | -1.86 | .33 | -.24 | -.46 | 47.2 | 47.2 | .092 | 6 | .074 | 7 |
| 199- | 163 | .173 | 8 | 16.8 | 3.04 | 2.40 | .34 | .25 | -1.24 | 47.2 | 47.2 | .096 | 6 | .067 | 7 |
| 199- | 164 | .321 | 6 | 16.8 | 5.29 | 4.92 | .32 | .29 | -2.79 | 47.2 | 47.2 | .280 | 7 | .195 | 8 |
| 223- | 299 | .143 | 6 | .0 | 3.45 | -.65 | -.51 | .42 | .03 | 47.2 | 47.2 | .115 | 7 | .073 | 8 |
| 224- | 299 | .095 | 8 | .0 | 1.99 | -.81 | -.46 | .46 | .28 | 47.2 | 47.2 | .067 | 6 | .056 | 7 |
| 299- | 263 | .140 | 8 | 16.8 | -2.02 | 2.05 | -.47 | -.47 | -1.60 | 47.2 | 47.2 | .086 | 7 | .066 | 6 |
| 299- | 264 | .169 | 6 | 16.8 | -3.32 | 1.12 | -.57 | -.45 | -.74 | 47.2 | 47.2 | .140 | 7 | .097 | 8 |
| 423- | 499 | .185 | 6 | 16.8 | 4.84 | -.35 | .46 | .27 | -.15 | 47.2 | 47.2 | .158 | 7 | .118 | 8 |
| 424- | 499 | .122 | 8 | .0 | 2.77 | -.74 | -.52 | .63 | .16 | 47.2 | 47.2 | .076 | 6 | .069 | 7 |
| 463- | 499 | .164 | 8 | .0 | -2.96 | 1.50 | .51 | -.62 | 1.08 | 47.2 | 47.2 | .092 | 7 | .079 | 6 |
| 499- | 464 | .226 | 6 | 16.8 | -5.12 | .64 | -.42 | -.39 | -.71 | 47.2 | 47.2 | .191 | 7 | .139 | 8 |
| 626- | 699 | .199 | 6 | .0 | 4.36 | .53 | 1.61 | -1.12 | 1.19 | 38.9 | 38.9 | .178 | 7 | .133 | 8 |
| 628- | 699 | .161 | 8 | .0 | 2.28 | 1.28 | -2.61 | 2.49 | 1.62 | 38.9 | 38.9 | .095 | 7 | .076 | 6 |
| 699- | 666 | .236 | 8 | 13.8 | -4.53 | .36 | -2.38 | -2.27 | -1.01 | 38.9 | 38.9 | .160 | 7 | .051 | 6 |
| 699- | 668 | .248 | 6 | 13.8 | -5.44 | 1.02 | 1.05 | .74 | -1.33 | 38.9 | 38.9 | .217 | 7 | .169 | 8 |
| 811- | 1 | .270 | 6 | 2.3 | -4.25 | 2.72 | -3.40 | 17.25 | 7.54 | 3.9 | 3.9 | .263 | 7 | .252 | 8 |

*** Member Group Summary Report ***

Group III - Unity Checks Greater Than .00 And Less Than .50

| Member | Group | Maximum | Load | Dist | Axial | Bending | Stress | Shear | Force | | | Second-Highest | Third-Highest | | | |
|--------|-------|---------|------|---------|--------|---------|--------|------------|--------|--------|--------|----------------|---------------|---|------|---|
| JA -JB | ID | Unity | Case | From | Stress | Y | Z | Fy | Fx | KLX/RX | KLZ/RZ | Unity | Load | | | |
| | | CK | NO. | End(Ft) | /---- | (KSI) | ---/ | /-- (Kips) | --/ | | | Check | Case | | | |
| | | | | | | | | | | | | Check | Case | | | |
| 821- | 2 | TL1 | .369 | 6 | 2.3 | -8.53 | 2.46 | -.78 | 2.87 | 7.50 | 3.9 | 3.9 | .355 | 7 | .341 | 8 |
| 831- | 3 | TL1 | .394 | 8 | 2.3 | -7.66 | 4.44 | -1.12 | 4.74 | 19.40 | 3.9 | 3.9 | .369 | 7 | .342 | 6 |
| 1- | 9 | TL2 | .254 | 6 | .0 | -4.24 | 2.49 | -2.89 | 18.09 | 8.38 | 13.9 | 13.9 | .250 | 7 | .241 | 8 |
| 2- | 10 | TL2 | .362 | 6 | .0 | -8.52 | 2.23 | -.68 | 3.92 | 8.56 | 13.9 | 13.9 | .350 | 7 | .335 | 8 |
| 3- | 11 | TL2 | .377 | 8 | .0 | -7.65 | 3.86 | -.99 | 4.74 | 20.95 | 13.9 | 13.9 | .354 | 7 | .330 | 6 |
| 9- | 18 | TL3 | .179 | 8 | 7.1 | -3.50 | .46 | 1.92 | 16.98 | 6.84 | 7.0 | 7.0 | .178 | 6 | .177 | 7 |
| 18- | 73 | TL3 | .134 | 6 | .0 | -2.58 | -.20 | 1.53 | -12.04 | -.95 | 7.8 | 7.8 | .130 | 7 | .125 | 8 |
| 73- | 81 | TL2 | .130 | 6 | .0 | -3.17 | -.14 | .64 | -12.04 | -.95 | 5.8 | 5.8 | .129 | 7 | .128 | 8 |
| 10- | 19 | TL3 | .276 | 6 | 7.1 | -6.80 | -.87 | 1.09 | 8.16 | 12.79 | 7.0 | 7.0 | .262 | 7 | .248 | 8 |
| 19- | 74 | TL3 | .140 | 6 | .0 | -3.34 | -.47 | .64 | -2.50 | .95 | 7.8 | 7.8 | .139 | 8 | .138 | 7 |
| 74- | 83 | TL2 | .168 | 6 | .0 | -4.11 | -.67 | .52 | -2.50 | .95 | 5.8 | 5.8 | .165 | 7 | .163 | 8 |
| 11- | 20 | TL3 | .288 | 8 | 7.1 | -6.10 | -2.72 | .26 | 4.74 | 27.38 | 7.0 | 7.0 | .263 | 7 | .241 | 6 |
| 20- | 75 | TL3 | .145 | 8 | .0 | -2.69 | -1.79 | .15 | -3.36 | -9.82 | 7.8 | 7.8 | .132 | 7 | .119 | 6 |
| 75- | 84 | TL2 | .150 | 8 | .0 | -3.31 | -1.18 | -.16 | -3.36 | -9.82 | 5.8 | 5.8 | .142 | 7 | .134 | 6 |
| 13- | 21 | TL3 | .424 | 6 | 7.1 | -8.97 | 1.81 | -3.59 | -33.60 | -5.64 | 7.0 | 7.0 | .419 | 7 | .398 | 8 |
| 21- | 76 | TL3 | .346 | 7 | .0 | -7.67 | 1.70 | -2.26 | 21.42 | 9.73 | 7.8 | 7.8 | .343 | 6 | .336 | 8 |
| 76- | 85 | TL2 | .364 | 7 | .0 | -9.48 | 1.08 | -.57 | 21.42 | 9.73 | 5.8 | 5.8 | .362 | 8 | .361 | 6 |
| 851- | 5 | TL1 | .289 | 8 | 2.3 | -4.72 | -4.38 | -.94 | 5.67 | -33.91 | 3.9 | 3.9 | .282 | 7 | .265 | 6 |
| 861- | 6 | TL1 | .331 | 6 | 2.3 | -8.34 | -1.46 | -.18 | -2.15 | -12.90 | 3.9 | 3.9 | .296 | 7 | .275 | 8 |
| 871- | 7 | TL1 | .336 | 8 | 2.3 | -7.63 | -2.49 | -.46 | 1.83 | -18.92 | 3.9 | 3.9 | .319 | 7 | .306 | 6 |
| 5- | 14 | TL2 | .262 | 8 | .0 | -4.72 | -3.43 | -.78 | 5.67 | -32.40 | 13.9 | 13.9 | .255 | 7 | .242 | 6 |
| 6- | 15 | TL2 | .326 | 6 | .0 | -8.33 | -1.10 | -.23 | -1.02 | -11.78 | 13.9 | 13.9 | .297 | 7 | .287 | 8 |
| 7- | 16 | TL2 | .321 | 8 | .0 | -7.62 | -1.96 | -.41 | 1.83 | -17.41 | 13.9 | 13.9 | .306 | 7 | .294 | 6 |
| 8- | 17 | TL2 | .474 | 8 | .0 | -10.33 | -2.67 | 3.13 | -22.36 | -31.64 | 13.9 | 13.9 | .469 | 6 | .469 | 7 |

*** Member Group Summary Report ***

Group III - Unity Checks Greater Than .00 And Less Than .50

| Member JA -JB | Group ID | Maximum Unity | Load Case | Dist From End(Ft) | Axial Stress /---- (| Bending Stress | | Shear Force | | KLV/RV | KLZ/RZ | Second-Highest | | Third-Highest | | |
|------------------|-------------|------------------|--------------|-------------------------|----------------------------|----------------|------|-------------|--------|--------|--------|----------------|-------|---------------|------|---|
| | | | | | | Y | Z | Fy | Fx | | | Unity | Load | Unity | Load | |
| | | CK | NO. | | KSI) | ---/ | ---/ | (Kips) -/ | | | Check | Case | Check | Case | | |
| 14- | 23 | IL3 | .239 | 8 | 7.1 | -3.74 | 3.78 | .64 | 5.67 | -28.81 | 7.0 | 7.0 | .225 | 7 | .203 | 6 |
| 23- | 77 | IL3 | .170 | 8 | .0 | -2.61 | 2.77 | .22 | -1.32 | 17.92 | 7.8 | 7.8 | .160 | 7 | .144 | 6 |
| 77- | 86 | IL2 | .156 | 8 | .0 | -3.21 | 1.55 | .13 | -1.32 | 17.92 | 5.8 | 5.8 | .151 | 7 | .143 | 6 |
| 15- | 24 | IL3 | .261 | 6 | 7.1 | -6.65 | .98 | .96 | 3.18 | -7.57 | 7.0 | 7.0 | .238 | 7 | .231 | 8 |
| 24- | 78 | IL3 | .140 | 6 | .0 | -3.33 | .78 | .26 | -.05 | 3.30 | 7.8 | 7.8 | .127 | 7 | .122 | 8 |
| 78- | 87 | IL2 | .163 | 6 | .0 | -4.09 | .61 | .32 | -.05 | 3.30 | 5.8 | 5.8 | .155 | 7 | .155 | 8 |
| 16- | 25 | IL3 | .256 | 8 | 7.1 | -6.08 | 1.60 | .06 | 1.83 | -13.82 | 7.0 | 7.0 | .251 | 7 | .243 | 6 |
| 25- | 79 | IL3 | .115 | 8 | .0 | -2.49 | .96 | .21 | -4.25 | 4.49 | 7.8 | 7.8 | .114 | 7 | .109 | 6 |
| 79- | 88 | IL2 | .128 | 8 | .0 | -3.06 | .71 | -.18 | -4.25 | 4.49 | 5.8 | 5.8 | .127 | 7 | .126 | 6 |
| 17- | 26 | IL3 | .426 | 7 | 7.1 | -8.36 | 4.26 | -2.30 | -21.46 | -26.63 | 7.0 | 7.0 | .424 | 8 | .420 | 6 |
| 26- | 80 | IL3 | .373 | 7 | .0 | -7.68 | 3.49 | -1.46 | 15.11 | 25.02 | 7.8 | 7.8 | .370 | 8 | .369 | 6 |
| 80- | 89 | IL2 | .379 | 7 | .0 | -9.50 | 1.70 | -.24 | 15.11 | 25.02 | 5.8 | 5.8 | .377 | 6 | .376 | 8 |
| 83- | 140 | IL2 | .015 | 6 | 2.4 | .25 | .23 | -.05 | -1.35 | -.14 | 2.3 | 2.3 | .014 | 7 | .013 | 8 |
| 87- | 147 | IL2 | .031 | 6 | .0 | .26 | -.56 | -.07 | 1.11 | -15.38 | 2.3 | 2.3 | .028 | 7 | .019 | 8 |
| 84- | 149 | IL2 | .022 | 8 | 2.4 | .18 | .57 | -.02 | -.06 | -.26 | 2.3 | 2.3 | .020 | 7 | .018 | 6 |
| 88- | 150 | IL2 | .023 | 8 | .0 | .18 | -.61 | .04 | .33 | -10.24 | 2.3 | 2.3 | .019 | 7 | .017 | 6 |

*** Global Equilibrium Check ***

| Load Case | Total Force(X) (Kips) | Total Force(Y) (Kips) | Total Force(Z) (Kips) | Total Moment(X) (In-Kips) | Total Moment(Y) (In-Kips) | Total Moment(Z) (In-Kips) |
|-----------------|---------------------------|---------------------------|---------------------------|------------------------------|------------------------------|------------------------------|
| 6-Loads | 1579.506 | 1578.766 | -8262.207 | 1045273.000 | -186162.000 | 88047.130 |
| Reactions | -1579.508 | -1578.707 | 8271.116 | -1045085.000 | 186150.900 | -88114.800 |
| Difference | -.002 | .060 | 8.909 | 187.625 | -11.156 | -67.672 |
| 7-Loads | 868.687 | 2095.718 | -8267.258 | 1380005.000 | 372028.800 | 81149.600 |
| Reactions | -868.718 | -2095.651 | 8276.171 | -1379792.000 | -371943.600 | -81111.890 |
| Difference | -.030 | .066 | 8.913 | 213.125 | 85.188 | 37.711 |
| 8-Loads | 30.273 | 2251.021 | -8277.491 | 1504892.000 | 994534.600 | 51448.210 |
| Reactions | -30.359 | -2250.994 | 8286.401 | -1504803.000 | -994276.100 | -51444.740 |
| Difference | -.086 | .027 | 8.910 | 88.375 | 258.500 | 3.469 |
| Max. Difference | -.086 | .066 | 8.913 | 213.125 | 258.500 | -67.672 |
| Load Case No. | 8 | 7 | 7 | 7 | 8 | 6 |

Friday 7/22/94 19:25: 9

Input File Name:\STRUCAD\WD103d1\WD103DL
Output File Name:\STRUCAD\WD103d1\WD103DL.OT3

| | | |
|------------------------|---|---------|
| Time For PREP Module | = | 0: 4: 1 |
| Time For LOAD Module | = | 0:28:29 |
| Time For SOLVE Module | = | 1: 6:39 |
| Time For STRESS Module | = | 0:10:21 |
| ----- | | |
| Total Processing Time | = | 1:49:32 |

*** Equation Parameters ***

| | | |
|----------------------------|-------|------|
| Total Number Of Equations | | 1896 |
| Number Of Stiffness Blocks | ... | 40 |
| Number Of Load Blocks | | 1 |

*** Problem Description ***

| | | |
|----------------------------|-------|-----|
| Number Of Joints | | 316 |
| Number Of Beams (Steel) | | 672 |
| Number Of Piles | | 9 |
| Number Of Plates | | 16 |
| No. Of Basic Load Cases | | 5 |
| No. Of Combined Load Cases | ... | 3 |



8.1.4 WD103DL.OT4

Tubular Can Analysis pp. 1 - 3
(Not Printed pp. 4 - 83)
Joint Can Summary pp. 84 - 87
End Page p. 88

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*****
*          STRUCAD=3D          *
*  STRUCTURAL SOFTWARE INC.  *
*    HOUSTON TEXAS          *
*  VERSION 3.50-E JAN 1994  *
*****

```

Friday 7/22/94 19:25:13

*** Tubular Joint Can Analysis ***

```

Selected Code      *
Type Of Analysis  * Punching Shear
Minimum Gap Allowed (In) = -100.00
Maximum Gap Allowed (In) = 1000.00
Brace Stresses at Member End Used for Analysis

```

Local Coordinate System Convention:

```

Chord: X Axis - Positive From Common Joint To Chord Joint
      Y Axis - Positive towards Brace Joint
      Z Axis - Defined By Right Hand Rule

```

```

Brace: X Axis - Positive From Common Joint To Brace Joint
      Z Axis - Same as Chord Z Axis
      Y Axis - Defined By Right Hand Rule

```

```

In Plane      Force Fy      Moment Mz
Out of Plane  Force Fz      Moment My

```

*** Units Definition ***

* Description * * Input Units * * Output Units *

A. Joint Information

| | | |
|----------------------------|----|----|
| 1. Joint Coordinates | Ft | Ft |
| 2. Joint Settlements | In | In |
| Joint Translations | | |

B. Structure Description

| | | |
|-------------------------------------|-----------------|-----------------|
| 3. All Lengths, Heights & Depths .. | Ft | Ft |
| Joint Thickness, Area Centroids | | |
| 4. Projected Areas | Ft ² | Ft ² |
| 5. Volumes | Ft ³ | Ft ³ |

C. Element Properties

| | | |
|-------------------------------------|-----------------|-----------------|
| 6. Element Offsets | In | In |
| 7. Element Dimensions | In | In |
| Rebar Area and Spacing | | |
| Marine Growth Thickness | | |
| 8. Element Cross Section Areas | In ² | In ² |
| 9. Element Moment of Inertia | In ⁴ | In ⁴ |

D. Material Properties & Stresses

| | | |
|-------------------------------|---------|---------|
| 10. Steel E & G Modulus | 1000KSI | 1000KSI |
| 11. All Stresses | KSI | KSI |
| Steel And Concrete Strength | | |
| 12. Material Density | PCF | PCF |

E. Spring Constants

| | | |
|--------------------------------------|-------------|-------------|
| 13. Rotational Spring Constant | In-Kips/Rad | In-Kips/Rad |
| 14. Translational Spring Constant .. | Kips/In | Kips/In |

F. Load Data

| | | |
|--------------------------------------|----------------------|----------------------|
| 15. Concentrated Loads & Weights ... | Kips | Kips |
| 16. Uniform Loads & Weights | Kips/Ft | Kips/Ft |
| 17. Concentrated Moments | In-Kips | In-Kips |
| 18. Uniform Moments | In-Kips/Ft | In-Kips/Ft |
| 19. Weight Moment of Inertia | Kips-Ft ² | Kips-Ft ² |
| 20. Load Distances | Ft | Ft |
| 21. Pressures | PSF | PSF |
| 22. Wind & Current Velocity | Knots | Knots |
| 23. Wave Velocity | Ft/Sec | Ft/Sec |
| 24. Wave Acceleration | Ft/Sec ² | Ft/Sec ² |
| 25. Kinematic Viscosity | Ft ² /Sec | Ft ² /Sec |
| 26. Response Curve Acceleration | G's | G's |
| 27. Response Curve Velocities | In/Sec | In/Sec |
| 28. Response Curve Displacements ... | In | In |

G. Soil Data And Pile Forces

| | | |
|-------------------------------------|------------|------------|
| 29. Soil Friction, Soil Force | Kips/In | Kips/In |
| 30. Soil Moments | In-Kips/In | In-Kips/In |
| 31. Undrained Shear Strength | KSF | KSF |

*** List Of Input Data ***

1 1 2 2 3 3 4 4 5 5 6 6 7 7 8
Line 1...5...0...5...0...5...0...5...0...5...0...5...0...5...0

- 1 LDCASE 6 7 8
- 2 AMOD 6 1.33 7 1.33 8 1.33
- 3 END

*** Joint Can Summary ***

| /----- Joints -----/ | | | | /----- Chord -----/ | | | /----- Brace -----/ | | | /50% Eff. Strength/ | | |
|----------------------|-------|-------|------|---------------------|-------------------|---------------------|---------------------|-------------------|---------------------|---------------------|----------------|----------------|
| Comm. | Chord | Brace | Case | Diameter (In) | Thickness (In) | Yld Strs (KSI) | Diameter (In) | Thickness (In) | Yld Strs (KSI) | Unity Check | Brace Joint | Unity Check |
| 101 | 121 | 123 | 6 | 46.000 | .500 | 36.000 | 12.750 | .500 | 36.000 | .358 | 123 | 2.066 |
| 102 | 131 | 124 | 8 | 46.000 | .500 | 36.000 | 12.750 | .500 | 36.000 | .284 | 124 | 2.066 |
| 103 | 161 | 163 | 8 | 46.000 | .500 | 36.000 | 12.750 | .500 | 36.000 | .276 | 163 | 2.066 |
| 104 | 171 | 164 | 6 | 46.000 | .500 | 36.000 | 12.750 | .500 | 36.000 | .443 | 164 | 2.066 |
| 111 | 211 | 145 | 8 | 46.000 | 1.000 | 36.000 | 24.000 | .687 | 36.000 | .696 | 115 | 1.286 |
| 121 | 101 | 231 | 6 | 46.000 | 1.000 | 36.000 | 26.000 | .500 | 36.000 | .699 | 115 | 1.292 |
| 123 | 143 | 124 | 7 | 20.000 | .812 | 36.000 | 12.750 | .687 | 36.000 | .382 | 124 | .780 |
| 124 | 144 | 123 | 7 | 20.000 | .812 | 36.000 | 12.750 | .687 | 36.000 | .371 | 123 | .780 |
| 125 | 121 | 123 | 6 | 20.000 | .812 | 36.000 | 16.000 | .500 | 36.000 | .150 | 123 | .565 |
| 125 | 131 | 124 | 6 | 20.000 | .812 | 36.000 | 16.000 | .500 | 36.000 | .087 | 123 | .565 |
| 131 | 102 | 135 | 6 | 46.000 | 1.000 | 36.000 | 20.000 | .812 | 36.000 | .761 | 125 | 1.292 |
| 141 | 241 | 135 | 6 | 46.000 | 1.000 | 36.000 | 20.000 | .812 | 36.000 | .819 | 135 | 1.286 |
| 143 | 123 | 155 | 6 | 20.000 | .812 | 36.000 | 8.625 | .500 | 36.000 | .171 | 155 | .524 |
| 143 | 163 | 155 | 6 | 20.000 | .812 | 36.000 | 8.625 | .500 | 36.000 | .171 | 155 | .524 |
| 144 | 124 | 146 | 6 | 20.000 | .812 | 36.000 | 8.625 | .500 | 36.000 | .177 | 146 | .524 |
| 144 | 164 | 146 | 6 | 20.000 | .812 | 36.000 | 8.625 | .500 | 36.000 | .177 | 146 | .524 |
| 145 | 151 | 251 | 8 | 24.000 | .687 | 36.000 | 24.000 | .375 | 36.000 | .440 | 121 | .823 |
| 145 | 111 | 211 | 8 | 24.000 | .687 | 36.000 | 24.000 | .375 | 36.000 | .505 | 121 | .823 |
| 146 | 131 | 231 | 8 | 24.000 | .687 | 36.000 | 24.000 | .375 | 36.000 | .649 | 144 | .838 |
| 146 | 171 | 271 | 8 | 24.000 | .687 | 36.000 | 24.000 | .375 | 36.000 | .597 | 144 | .838 |
| 148 | 141 | 241 | 8 | 24.000 | .687 | 36.000 | 24.000 | .375 | 36.000 | .556 | 131 | .823 |
| 148 | 181 | 281 | 8 | 24.000 | .687 | 36.000 | 24.000 | .375 | 36.000 | .469 | 131 | .823 |
| 151 | 251 | 145 | 7 | 46.000 | 1.000 | 36.000 | 24.000 | .687 | 36.000 | .647 | 159 | 1.286 |
| 155 | 121 | 221 | 8 | 24.000 | .687 | 36.000 | 24.000 | .375 | 36.000 | .642 | 143 | .838 |
| 155 | 161 | 261 | 8 | 24.000 | .687 | 36.000 | 24.000 | .375 | 36.000 | .570 | 143 | .838 |
| 161 | 103 | 155 | 8 | 46.000 | 1.000 | 36.000 | 24.000 | .687 | 36.000 | .668 | 159 | 1.292 |
| 163 | 143 | 164 | 7 | 20.000 | .812 | 36.000 | 12.750 | .687 | 36.000 | .418 | 164 | .780 |
| 164 | 144 | 163 | 7 | 20.000 | .812 | 36.000 | 12.750 | .687 | 36.000 | .413 | 163 | .780 |
| 165 | 161 | 163 | 6 | 20.000 | .812 | 36.000 | 16.000 | .500 | 36.000 | .094 | 163 | .565 |
| 165 | 171 | 164 | 6 | 20.000 | .812 | 36.000 | 16.000 | .500 | 36.000 | .158 | 163 | .565 |
| 171 | 104 | 146 | 7 | 46.000 | 1.000 | 36.000 | 24.000 | .687 | 36.000 | .727 | 165 | 1.292 |
| 181 | 281 | 148 | 8 | 46.000 | 1.000 | 36.000 | 24.000 | .687 | 36.000 | .690 | 175 | 1.286 |
| 199 | 123 | 124 | 8 | 12.750 | .687 | 36.000 | 12.750 | .687 | 36.000 | .270 | 124 | .696 |
| 199 | 164 | 163 | 8 | 12.750 | .687 | 36.000 | 12.750 | .687 | 36.000 | .274 | 124 | .696 |
| 201 | 221 | 253 | 8 | 26.000 | .500 | 36.000 | 20.000 | .500 | 36.000 | .174 | 343 | 1.563 |
| 201 | 361 | 343 | 8 | 26.000 | .500 | 36.000 | 24.000 | .500 | 36.000 | .074 | 343 | 1.563 |
| 202 | 205 | 201 | 8 | 46.000 | 1.000 | 36.000 | 24.000 | .500 | 36.000 | .172 | 201 | .825 |
| 203 | 206 | 204 | 6 | 46.000 | 1.000 | 36.000 | 24.000 | .500 | 36.000 | .146 | 204 | .825 |
| 204 | 331 | 203 | 6 | 26.000 | .500 | 36.000 | 24.000 | .500 | 36.000 | .163 | 231 | 1.416 |
| 205 | 202 | 223 | 7 | 46.000 | 1.000 | 36.000 | 12.750 | .375 | 36.000 | .031 | 223 | .385 |
| 206 | 203 | 224 | 8 | 46.000 | 1.000 | 36.000 | 12.750 | .375 | 36.000 | .035 | 224 | .385 |
| 207 | 261 | 263 | 8 | 46.000 | .500 | 36.000 | 12.750 | .375 | 36.000 | .237 | 263 | 1.542 |
| 208 | 271 | 264 | 7 | 46.000 | .500 | 36.000 | 12.750 | .375 | 36.000 | .073 | 264 | 1.542 |
| 211 | 111 | 145 | 8 | 46.000 | 1.000 | 36.000 | 24.000 | .375 | 36.000 | .314 | 221 | .771 |
| 211 | 311 | 251 | 8 | 46.000 | 1.000 | 36.000 | 24.000 | .375 | 36.000 | .370 | 221 | .771 |
| 221 | 101 | 155 | 6 | 46.000 | 1.000 | 36.000 | 24.000 | .375 | 36.000 | .619 | 211 | .775 |
| 221 | 202 | 201 | 8 | 46.000 | 1.000 | 36.000 | 26.000 | .500 | 36.000 | .642 | 211 | .775 |
| 223 | 243 | 299 | 6 | 20.000 | .812 | 36.000 | 12.750 | .687 | 36.000 | .197 | 224 | .780 |
| 224 | 244 | 231 | 8 | 20.000 | .812 | 36.000 | 12.750 | .375 | 36.000 | .124 | 223 | .780 |

*** Joint Can Summary ***

| /---/ | Joints | | | Load Case | Chord | | | Brace | | | /50% Eff. Strength/ | | |
|-------|--------|-------|-------|-----------|---------------|----------------|------------------|---------------|----------------|------------------|---------------------|-------------|-------------|
| | Conn. | Chord | Brace | | Diameter (In) | Thickness (In) | Yld Strs (KSI) | Diameter (In) | Thickness (In) | Yld Strs (KSI) | Unity Check | Brace Joint | Unity Check |
| | 225 | 221 | 223 | 6 | 12.750 | .500 | 36.000 | 12.750 | .375 | 36.000 | .239 | 223 | .720 |
| | 225 | 231 | 224 | 6 | 12.750 | .500 | 36.000 | 12.750 | .375 | 36.000 | .220 | 223 | .720 |
| | 231 | 203 | 321 | 6 | 46.000 | 1.000 | 36.000 | 20.000 | .500 | 36.000 | .501 | 225 | .701 |
| | 231 | 102 | 146 | 6 | 46.000 | 1.000 | 36.000 | 24.000 | .375 | 36.000 | .607 | 225 | .701 |
| | 241 | 141 | 131 | 6 | 46.000 | 1.000 | 36.000 | 26.000 | .375 | 36.000 | .619 | 381 | .638 |
| | 241 | 341 | 381 | 8 | 46.000 | 1.000 | 36.000 | 26.000 | .500 | 36.000 | .600 | 381 | .638 |
| | 243 | 223 | 254 | 8 | 20.000 | .812 | 36.000 | 8.625 | .322 | 36.000 | .047 | 254 | .337 |
| | 243 | 263 | 254 | 8 | 20.000 | .812 | 36.000 | 8.625 | .322 | 36.000 | .047 | 254 | .337 |
| | 244 | 224 | 255 | 8 | 20.000 | .812 | 36.000 | 8.625 | .322 | 36.000 | .080 | 255 | .337 |
| | 244 | 264 | 255 | 8 | 20.000 | .812 | 36.000 | 8.625 | .322 | 36.000 | .080 | 255 | .337 |
| | 251 | 151 | 161 | 6 | 46.000 | 1.000 | 36.000 | 26.000 | .375 | 36.000 | .501 | 311 | .638 |
| | 251 | 351 | 311 | 8 | 46.000 | 1.000 | 36.000 | 26.000 | .500 | 36.000 | .532 | 311 | .638 |
| | 253 | 254 | 201 | 8 | 24.000 | .375 | 36.000 | 20.000 | .500 | 36.000 | .458 | 201 | 3.275 |
| | 254 | 253 | 223 | 7 | 24.000 | .375 | 36.000 | 8.625 | .322 | 36.000 | .459 | 243 | 1.811 |
| | 254 | 261 | 263 | 8 | 24.000 | .375 | 36.000 | 8.625 | .322 | 36.000 | .481 | 243 | 1.811 |
| | 255 | 231 | 224 | 8 | 24.000 | .375 | 36.000 | 8.625 | .322 | 36.000 | .487 | 244 | 1.811 |
| | 255 | 271 | 264 | 7 | 24.000 | .375 | 36.000 | 8.625 | .322 | 36.000 | .349 | 244 | 1.811 |
| | 261 | 207 | 371 | 6 | 46.000 | 1.000 | 36.000 | 20.000 | .500 | 36.000 | .421 | 265 | .701 |
| | 261 | 103 | 155 | 6 | 46.000 | 1.000 | 36.000 | 24.000 | .375 | 36.000 | .516 | 265 | .701 |
| | 263 | 243 | 261 | 8 | 20.000 | .812 | 36.000 | 12.750 | .375 | 36.000 | .157 | 264 | .780 |
| | 264 | 244 | 299 | 6 | 20.000 | .812 | 36.000 | 12.750 | .687 | 36.000 | .199 | 263 | .780 |
| | 265 | 261 | 263 | 6 | 12.750 | .500 | 36.000 | 12.750 | .375 | 36.000 | .214 | 263 | .720 |
| | 265 | 271 | 264 | 6 | 12.750 | .500 | 36.000 | 12.750 | .375 | 36.000 | .222 | 263 | .720 |
| | 271 | 104 | 146 | 6 | 46.000 | 1.000 | 36.000 | 24.000 | .375 | 36.000 | .601 | 281 | .775 |
| | 271 | 208 | 204 | 8 | 46.000 | 1.000 | 36.000 | 26.000 | .500 | 36.000 | .673 | 281 | .775 |
| | 281 | 181 | 148 | 8 | 46.000 | 1.000 | 36.000 | 24.000 | .375 | 36.000 | .338 | 271 | .771 |
| | 281 | 381 | 241 | 8 | 46.000 | 1.000 | 36.000 | 24.000 | .375 | 36.000 | .370 | 271 | .771 |
| | 299 | 223 | 224 | 8 | 12.750 | .687 | 36.000 | 12.750 | .687 | 36.000 | .195 | 224 | .696 |
| | 299 | 264 | 263 | 8 | 12.750 | .687 | 36.000 | 12.750 | .687 | 36.000 | .219 | 224 | .696 |
| | 301 | 421 | 321 | 8 | 24.000 | .500 | 36.000 | 24.000 | .375 | 36.000 | .100 | 343 | 1.657 |
| | 301 | 361 | 343 | 8 | 24.000 | .500 | 36.000 | 24.000 | .500 | 36.000 | .098 | 343 | 1.657 |
| | 302 | 421 | 301 | 8 | 46.000 | .500 | 36.000 | 24.000 | .500 | 36.000 | .720 | 301 | 3.299 |
| | 303 | 431 | 304 | 8 | 46.000 | .500 | 36.000 | 24.000 | .500 | 36.000 | .819 | 304 | 3.299 |
| | 304 | 331 | 346 | 8 | 24.000 | .500 | 36.000 | 20.000 | .500 | 36.000 | .333 | 346 | 1.827 |
| | 311 | 411 | 421 | 6 | 46.000 | 1.000 | 36.000 | 20.000 | .500 | 36.000 | .464 | 251 | .734 |
| | 311 | 211 | 251 | 6 | 46.000 | 1.000 | 36.000 | 26.000 | .500 | 36.000 | .470 | 251 | .734 |
| | 321 | 302 | 431 | 6 | 46.000 | 1.000 | 36.000 | 18.000 | .500 | 36.000 | .303 | 343 | .825 |
| | 321 | 205 | 231 | 6 | 46.000 | 1.000 | 36.000 | 20.000 | .500 | 36.000 | .309 | 343 | .825 |
| | 331 | 303 | 441 | 6 | 46.000 | 1.000 | 36.000 | 20.000 | .375 | 36.000 | .493 | 346 | .792 |
| | 331 | 206 | 204 | 6 | 46.000 | 1.000 | 36.000 | 26.000 | .500 | 36.000 | .532 | 346 | .792 |
| | 343 | 201 | 321 | 6 | 24.000 | .500 | 36.000 | 24.000 | .500 | 36.000 | .239 | 361 | 1.910 |
| | 343 | 301 | 361 | 6 | 24.000 | .500 | 36.000 | 24.000 | .500 | 36.000 | .322 | 361 | 1.910 |
| | 346 | 331 | 304 | 8 | 20.000 | .500 | 36.000 | 20.000 | .500 | 36.000 | .306 | 304 | 1.473 |
| | 361 | 461 | 451 | 6 | 46.000 | 1.000 | 36.000 | 20.000 | .375 | 36.000 | .450 | 343 | .825 |
| | 361 | 207 | 201 | 8 | 46.000 | 1.000 | 36.000 | 26.000 | .500 | 36.000 | .356 | 343 | .825 |
| | 371 | 471 | 461 | 6 | 46.000 | 1.000 | 36.000 | 18.000 | .500 | 36.000 | .282 | 346 | .792 |
| | 371 | 208 | 261 | 6 | 46.000 | 1.000 | 36.000 | 20.000 | .500 | 36.000 | .278 | 346 | .792 |
| | 381 | 481 | 471 | 6 | 46.000 | 1.000 | 36.000 | 20.000 | .500 | 36.000 | .433 | 241 | .734 |
| | 381 | 281 | 241 | 6 | 46.000 | 1.000 | 36.000 | 26.000 | .500 | 36.000 | .520 | 241 | .734 |

*** Joint Can Summary ***

| /----- Joints -----/ | | | | /----- Chord -----/ | | | /----- Brace -----/ | | | /50% Eff. Strength/ | | |
|----------------------|-------|-------|------|---------------------|-------------------|---------------------|---------------------|-------------------|---------------------|---------------------|----------------|----------------|
| Comm. | Chord | Brace | Case | Diameter (In) | Thickness (in) | Yld Strs (KSI) | Diameter (In) | Thickness (in) | Yld Strs (KSI) | Unity Check | Brace Joint | Unity Check |
| 411 | 511 | 421 | 6 | 46.000 | 1.000 | 36.000 | 14.000 | .375 | 36.000 | .153 | 451 | .771 |
| 421 | 507 | 423 | 6 | 46.000 | 1.000 | 36.000 | 10.750 | .365 | 36.000 | .453 | 443 | .771 |
| 421 | 302 | 423 | 6 | 46.000 | 1.000 | 36.000 | 10.750 | .365 | 36.000 | .455 | 443 | .771 |
| 423 | 463 | 499 | 6 | 20.000 | .812 | 36.000 | 12.750 | .687 | 36.000 | .262 | 424 | .780 |
| 424 | 464 | 499 | 8 | 20.000 | .812 | 36.000 | 12.750 | .687 | 36.000 | .163 | 423 | .780 |
| 425 | 421 | 423 | 6 | 12.750 | .500 | 36.000 | 10.750 | .365 | 36.000 | .173 | 423 | .635 |
| 425 | 431 | 424 | 6 | 12.750 | .500 | 36.000 | 10.750 | .365 | 36.000 | .139 | 423 | .635 |
| 431 | 303 | 425 | 6 | 46.000 | 1.000 | 36.000 | 12.750 | .500 | 36.000 | .344 | 446 | .771 |
| 431 | 506 | 425 | 6 | 46.000 | 1.000 | 36.000 | 12.750 | .500 | 36.000 | .340 | 446 | .771 |
| 441 | 541 | 581 | 8 | 46.000 | 1.000 | 36.000 | 20.000 | .500 | 36.000 | .339 | 481 | .771 |
| 441 | 341 | 381 | 7 | 46.000 | 1.000 | 36.000 | 24.000 | .375 | 36.000 | .408 | 481 | .771 |
| 443 | 421 | 423 | 7 | 18.000 | .500 | 36.000 | 8.625 | .322 | 36.000 | .315 | 423 | .561 |
| 443 | 461 | 463 | 8 | 18.000 | .500 | 36.000 | 8.625 | .322 | 36.000 | .310 | 423 | .561 |
| 446 | 431 | 424 | 8 | 18.000 | .500 | 36.000 | 8.625 | .322 | 36.000 | .319 | 424 | .561 |
| 446 | 471 | 464 | 7 | 18.000 | .500 | 36.000 | 8.625 | .322 | 36.000 | .308 | 424 | .561 |
| 451 | 551 | 511 | 7 | 46.000 | 1.000 | 36.000 | 20.000 | .500 | 36.000 | .564 | 411 | .771 |
| 451 | 351 | 311 | 8 | 46.000 | 1.000 | 36.000 | 24.000 | .375 | 36.000 | .366 | 411 | .771 |
| 461 | 508 | 463 | 8 | 46.000 | 1.000 | 36.000 | 10.750 | .365 | 36.000 | .264 | 443 | .771 |
| 461 | 361 | 463 | 8 | 46.000 | 1.000 | 36.000 | 10.750 | .365 | 36.000 | .264 | 443 | .771 |
| 463 | 423 | 499 | 8 | 20.000 | .812 | 36.000 | 12.750 | .687 | 36.000 | .186 | 464 | .780 |
| 464 | 424 | 499 | 6 | 20.000 | .812 | 36.000 | 12.750 | .687 | 36.000 | .284 | 463 | .780 |
| 465 | 461 | 463 | 6 | 12.750 | .500 | 36.000 | 10.750 | .365 | 36.000 | .155 | 463 | .635 |
| 465 | 471 | 464 | 6 | 12.750 | .500 | 36.000 | 10.750 | .365 | 36.000 | .188 | 463 | .635 |
| 471 | 505 | 464 | 6 | 46.000 | 1.000 | 36.000 | 10.750 | .365 | 36.000 | .535 | 446 | .771 |
| 471 | 371 | 464 | 6 | 46.000 | 1.000 | 36.000 | 10.750 | .365 | 36.000 | .535 | 446 | .771 |
| 481 | 581 | 471 | 6 | 46.000 | 1.000 | 36.000 | 14.000 | .375 | 36.000 | .210 | 441 | .771 |
| 499 | 423 | 424 | 8 | 12.750 | .687 | 36.000 | 12.750 | .687 | 36.000 | .244 | 424 | .696 |
| 499 | 464 | 463 | 8 | 12.750 | .687 | 36.000 | 12.750 | .687 | 36.000 | .274 | 424 | .696 |
| 501 | 671 | 668 | 7 | 46.000 | .500 | 36.000 | 10.750 | .365 | 36.000 | .351 | 668 | 1.288 |
| 502 | 631 | 628 | 8 | 46.000 | .500 | 36.000 | 10.750 | .365 | 36.000 | .717 | 628 | 1.288 |
| 503 | 621 | 626 | 8 | 46.000 | .500 | 36.000 | 10.750 | .365 | 36.000 | .565 | 626 | 1.288 |
| 504 | 661 | 666 | 8 | 46.000 | .500 | 36.000 | 10.750 | .365 | 36.000 | .311 | 666 | 1.288 |
| 505 | 471 | 464 | 6 | 46.000 | .500 | 36.000 | 10.750 | .375 | 36.000 | .141 | 464 | 1.430 |
| 506 | 431 | 424 | 8 | 46.000 | .500 | 36.000 | 10.750 | .375 | 36.000 | .178 | 424 | 1.430 |
| 507 | 421 | 423 | 8 | 46.000 | .500 | 36.000 | 10.750 | .375 | 36.000 | .102 | 423 | 1.430 |
| 508 | 461 | 463 | 8 | 46.000 | .500 | 36.000 | 10.750 | .375 | 36.000 | .175 | 463 | 1.430 |
| 511 | 611 | 621 | 6 | 46.000 | 1.000 | 36.000 | 16.000 | .500 | 36.000 | .411 | 451 | .679 |
| 511 | 411 | 451 | 6 | 46.000 | 1.000 | 36.000 | 20.000 | .500 | 36.000 | .671 | 451 | .679 |
| 521 | 503 | 631 | 8 | 46.000 | 1.000 | 36.000 | 16.000 | .500 | 36.000 | .316 | 631 | .574 |
| 521 | 507 | 431 | 6 | 46.000 | 1.000 | 36.000 | 18.000 | .500 | 36.000 | .288 | 631 | .574 |
| 531 | 502 | 641 | 6 | 46.000 | 1.000 | 36.000 | 16.000 | .500 | 36.000 | .401 | 471 | .680 |
| 531 | 506 | 471 | 6 | 46.000 | 1.000 | 36.000 | 20.000 | .500 | 36.000 | .613 | 471 | .680 |
| 561 | 504 | 651 | 6 | 46.000 | 1.000 | 36.000 | 16.000 | .500 | 36.000 | .526 | 421 | .680 |
| 561 | 508 | 451 | 6 | 46.000 | 1.000 | 36.000 | 18.000 | .500 | 36.000 | .491 | 421 | .680 |
| 571 | 501 | 661 | 6 | 46.000 | 1.000 | 36.000 | 16.000 | .500 | 36.000 | .347 | 661 | .574 |
| 571 | 505 | 461 | 6 | 46.000 | 1.000 | 36.000 | 18.000 | .500 | 36.000 | .287 | 661 | .574 |
| 581 | 681 | 671 | 6 | 46.000 | 1.000 | 36.000 | 16.000 | .500 | 36.000 | .402 | 441 | .679 |
| 581 | 481 | 441 | 8 | 46.000 | 1.000 | 36.000 | 20.000 | .500 | 36.000 | .449 | 441 | .679 |
| 611 | 712 | 651 | 8 | 46.000 | 1.000 | 36.000 | 14.000 | .500 | 36.000 | .412 | 651 | .718 |

*** Joint Can Summary ***

| ----- Joints ----- | | | | ----- Chord ----- | | | ----- Brace ----- | | | ----- 50% Eff. Strength ----- | | |
|--------------------|-------|-------|------|-------------------|-------------------|---------------------|-------------------|-------------------|---------------------|-------------------------------|----------------|----------------|
| Conn. | Chord | Brace | Case | Diameter (In) | Thickness (In) | Yld Strs (KSI) | Diameter (In) | Thickness (In) | Yld Strs (KSI) | Unity Check | Brace Joint | Unity Check |
| 621 | 503 | 625 | 8 | 46.000 | 1.000 | 36.000 | 12.750 | .500 | 36.000 | .646 | 643 | .718 |
| 621 | 722 | 625 | 8 | 46.000 | 1.000 | 36.000 | 12.750 | .500 | 36.000 | .658 | 643 | .718 |
| 623 | 626 | 625 | 6 | 20.000 | .812 | 36.000 | 10.750 | .365 | 36.000 | .079 | 624 | .589 |
| 624 | 628 | 623 | 8 | 20.000 | .812 | 36.000 | 16.000 | .500 | 36.000 | .087 | 623 | .589 |
| 625 | 621 | 623 | 6 | 12.750 | .500 | 36.000 | 10.750 | .365 | 36.000 | .094 | 623 | .497 |
| 625 | 631 | 624 | 8 | 12.750 | .500 | 36.000 | 10.750 | .365 | 36.000 | .106 | 623 | .497 |
| 626 | 666 | 699 | 6 | 20.000 | .812 | 36.000 | 12.750 | .687 | 36.000 | .212 | 628 | .589 |
| 626 | 623 | 621 | 6 | 20.000 | .812 | 36.000 | 10.750 | .365 | 36.000 | .217 | 628 | .589 |
| 628 | 668 | 626 | 8 | 20.000 | .812 | 36.000 | 16.000 | .500 | 36.000 | .238 | 626 | .589 |
| 628 | 624 | 631 | 6 | 20.000 | .812 | 36.000 | 10.750 | .365 | 36.000 | .260 | 626 | .589 |
| 631 | 502 | 641 | 6 | 46.000 | 1.000 | 36.000 | 12.750 | .500 | 36.000 | .752 | 646 | .718 |
| 631 | 732 | 641 | 6 | 46.000 | 1.000 | 36.000 | 12.750 | .500 | 36.000 | .749 | 646 | .718 |
| 641 | 541 | 581 | 6 | 46.000 | 1.000 | 36.000 | 20.000 | .500 | 36.000 | .630 | 681 | .718 |
| 641 | 742 | 631 | 7 | 46.000 | 1.000 | 36.000 | 12.750 | .500 | 36.000 | .635 | 681 | .718 |
| 643 | 621 | 626 | 7 | 14.000 | .500 | 36.000 | 8.625 | .322 | 36.000 | .339 | 626 | .531 |
| 643 | 661 | 666 | 8 | 14.000 | .500 | 36.000 | 8.625 | .322 | 36.000 | .322 | 626 | .531 |
| 646 | 631 | 628 | 8 | 14.000 | .500 | 36.000 | 8.625 | .322 | 36.000 | .293 | 628 | .531 |
| 646 | 671 | 668 | 7 | 14.000 | .500 | 36.000 | 8.625 | .322 | 36.000 | .311 | 628 | .531 |
| 651 | 551 | 511 | 7 | 46.000 | 1.000 | 36.000 | 20.000 | .500 | 36.000 | .434 | 611 | .718 |
| 651 | 752 | 611 | 8 | 46.000 | 1.000 | 36.000 | 14.000 | .500 | 36.000 | .413 | 611 | .718 |
| 661 | 504 | 666 | 8 | 46.000 | 1.000 | 36.000 | 10.750 | .365 | 36.000 | .472 | 643 | .718 |
| 661 | 762 | 666 | 8 | 46.000 | 1.000 | 36.000 | 10.750 | .365 | 36.000 | .472 | 643 | .718 |
| 663 | 666 | 665 | 8 | 20.000 | .812 | 36.000 | 10.750 | .365 | 36.000 | .093 | 664 | .589 |
| 664 | 668 | 665 | 6 | 20.000 | .812 | 36.000 | 10.750 | .365 | 36.000 | .069 | 663 | .589 |
| 665 | 661 | 663 | 6 | 12.750 | .500 | 36.000 | 10.750 | .365 | 36.000 | .105 | 663 | .497 |
| 665 | 671 | 664 | 6 | 12.750 | .500 | 36.000 | 10.750 | .365 | 36.000 | .142 | 663 | .497 |
| 666 | 626 | 699 | 8 | 20.000 | .812 | 36.000 | 12.750 | .687 | 36.000 | .266 | 668 | .589 |
| 666 | 663 | 661 | 8 | 20.000 | .812 | 36.000 | 10.750 | .365 | 36.000 | .289 | 668 | .589 |
| 668 | 628 | 699 | 6 | 20.000 | .812 | 36.000 | 12.750 | .687 | 36.000 | .383 | 666 | .589 |
| 668 | 664 | 671 | 6 | 20.000 | .812 | 36.000 | 10.750 | .365 | 36.000 | .487 | 666 | .589 |
| 671 | 501 | 668 | 6 | 46.000 | 1.000 | 36.000 | 10.750 | .365 | 36.000 | .838 | 646 | .718 |
| 671 | 772 | 668 | 6 | 46.000 | 1.000 | 36.000 | 10.750 | .365 | 36.000 | .838 | 646 | .718 |
| 681 | 782 | 671 | 6 | 46.000 | 1.000 | 36.000 | 12.750 | .500 | 36.000 | .683 | 641 | .718 |
| 699 | 626 | 666 | 8 | 12.750 | .687 | 36.000 | 12.750 | .687 | 36.000 | .453 | 628 | .742 |
| 699 | 668 | 666 | 8 | 12.750 | .687 | 36.000 | 12.750 | .687 | 36.000 | .455 | 628 | .742 |

Friday 7/22/94 19:32:37

Input File Name:\STRUCAD\WD103d1\WD103DL

Output File Name:\STRUCAD\WD103d1\WD103DL.014

*** Problem Description ***

| | | |
|---------------------------------|---|-----|
| Number Of Joints | = | 316 |
| Number Of Beams | = | 672 |
| Number Of Plates | = | 16 |
| No. Of NOAH Basic Load Cases | = | 5 |
| No. Of NOAH Combined Load Cases | = | 3 |
| No. Of JCAN Combined Load Cases | = | 0 |

Total Solution Time = 0: 7:23
