

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA LOOKOUT RIDGE STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 1 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 13 DY 3 MO 80 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <input type="checkbox"/> $\Delta$<br><input type="checkbox"/> SS<br><input type="checkbox"/> $\odot$ | STATION     | VERTICAL   |       |                     |               |           |                      |           | HORIZONTAL |           | REMARKS |                               |           |
|------|--|-------------|--|-------|---------------------|---------------|-----------|----------------------|-----------|------------|-----------|---------|-------------------------------|-----------|
|      |  |             | DISTANCE   |       | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION |            | L/R OR DI |         | RIGHT TURNED HORIZONTAL ANGLE |           |
|      |  |             | SLOPE  | HORIZ |                     |               |           |                      | INST      | ROD        |           |         |                               |           |
|      |  |             | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS |       |                     |               |           |                      |           |            |           |         |                               |           |
| 1    |  |             |  |       |                     |               |           |                      |           |            |           | 1       |                               |           |
| 2    | $\odot$  | B17. 90 153 |  |       |                     |               |           |                      |           | 1099.4     |           |         | 2                             |           |
| 3    |  | SP. 100     |  |       |                     |               |           |                      |           |            |           |         | 3                             |           |
| 4    |  |             |  |       |                     |               |           |                      |           |            |           |         | 4                             |           |
| 5    | $\Delta$   |             | 615  |       | 00-05               | +2.9          | -12.6     | 1086.9               |           |            |           |         | 5                             |           |
| 6    | $\Delta$   |             | ✓  |       | 272-20              | +12.5         | -12.5 ✓   |                      |           |            |           | E       | 6                             |           |
| 7    |  |             | 0  |       | -                   | 5.2           |           |                      |           | 1081.7     |           | -       | 7                             |           |
| 8    |  | 99.         | 275  |       | 93-30               | 7.5           | -24.3     |                      |           | 1062.6     |           | W       | 8                             |           |
| 9    |  | 98.         | 1155   |       | 94-30               | 11.2          | -101.5    |                      |           | 985.4      |           |         | 9                             |           |
| 10   |  | 97.         | 2035   |       | 92-30               | 10.0          | -98.7     |                      |           | 988.2      |           |         | 10                            |           |
| 11   | $\odot$  |             | 2420   |       | 91-30               | 8.0           | -71.3     |                      |           | 1015.5     |           |         | 11                            |           |
| 12   | $\Delta$   |             | ✓  |       | 268-30-22           | 14.0          | -71.4 ✓   |                      |           |            |           |         | 12                            |           |
| 13   | $\Delta$   |             | 2255   |       | 88-20               | 75.7          | -59.7     | 955.7                |           |            |           |         | 13                            |           |
| 14   | $\Delta$   |             | ✓  |       | 271-50              | 72.4          | -59.7     |                      |           |            |           |         | 14                            |           |
| 15   |  | 96.         | 1760   |       | 270-50              | 72.5          | +13.1     |                      |           | 969.8      |           |         | 15                            |           |
| 16   |  | 95.         | 880  |       | 268-40              | 72.7          | -33.2     |                      |           | 922.5      |           | E       | 16                            |           |
| 17   |  | 94.         | 0  |       | -                   | 5.3           |           |                      |           | 950.4      |           | -       | 17                            | FIRST SP. |

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 SYMBOLS  $\Delta$  = BACKSIGHT  $\mathbb{A}$  = INSTRUMENT SET-UP SS = SIDESHOT  $\odot$  = FORESIGHT

WEST-END

TI-224715

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA \_\_\_\_\_ STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 2 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 13 DY 3 MO 80 YR  
 SURVEYOR L. L. MAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <input type="checkbox"/> $\Delta$<br><input type="checkbox"/> $\nearrow$<br><input type="checkbox"/> SS<br><input type="checkbox"/> $\odot$ | STATION       | VERTICAL |       |                     |               |           |                      |           | HORIZONTAL |           | REMARKS |                               |  |
|------|---|---------------|----------|-------|---------------------|---------------|-----------|----------------------|-----------|------------|-----------|---------|-------------------------------|--|
|      |   |               | DISTANCE |       | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION |            | L/R OR DI |         | RIGHT TURNED HORIZONTAL ANGLE |  |
|      |   |               | SLOPE    | HORIZ |                     |               |           |                      | INST      | ROD        |           |         |                               |  |
| 1    |   |               |          |       |                     |               |           |                      | 955.7     |            |           | 1       |                               |  |
| 2    | $\odot$   | TS. # 7 (87)  | 715      |       | 92-00               | 70.4          | + 88.1    |                      |           | 1043.8     |           |         | 2                             |  |
| 3    | $\Delta$  |               | 550      |       | 92-00               | 79.6          | + 28.8    |                      | 1072.6    |            |           |         | 3                             |  |
| 4    |   | TS. # 12 (82) | 0        |       | -                   | 3.3           |           |                      |           | 1067.3     |           |         | 4                             |  |
| 5    | $\odot$   | TS. # 24 (70) | 1320     |       | 87-42-25            | 74.2          | + 48.6    |                      |           | 1121.2     |           |         | 5                             |  |
| 6    | $\Delta$  |               | 550      |       | 92-36-56            | 74.2          | + 29.3    |                      | 1150.5    |            |           |         | 6                             |  |
| 7    |   | TS. # 29 (65) | 0        |       | -                   | 3.2           |           |                      |           | 1145.3     |           |         | 7                             |  |
| 8    | $\odot$   | TS. # 36 (58) | 770      |       | 90-30-10            | 74.2          | - 11.0    |                      |           | 1139.5     |           |         | 8                             |  |
| 9    | $\Delta$  |               | 0        |       | -                   | 5.2           | + 5.2     |                      | 1144.7    |            |           |         | 9                             |  |
| 10   |   |               |          |       |                     |               |           |                      |           |            |           |         | 10                            |  |
| 11   | $\odot$   | TS. # 40 (40) | 1320     |       | 92-44-10            | 74.2          | - 67.1    |                      |           | 1077.6     |           |         | 11                            |  |
| 12   |   |               |          |       |                     |               |           |                      |           |            |           |         | 12                            |  |
| 13   |   |               |          |       |                     |               |           |                      |           |            |           |         | 13                            |  |
| 14   |   |               |          |       |                     |               |           |                      |           |            |           |         | 14                            |  |
| 15   |   |               |          |       |                     |               |           |                      |           |            |           |         | 15                            |  |
| 16   |   |               |          |       |                     |               |           |                      |           |            |           |         | 16                            |  |
| 17   |   |               |          |       |                     |               |           |                      |           |            |           |         | 17                            |  |

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SYMBOLS  $\Delta$  = BACKSIGHT  $\nearrow$  = INSTRUMENT SET-UP SS = SIDESHOT  $\odot$  = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA LOOKOUT RIDGE STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 3 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 13 DY 3 MO 10 YR  
 SURVEYOR L. LTMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

3

| LINE | <br><br> | STATION    | VERTICAL  |  |                     |               |           |                      | ELEVATION |        | L/R OR DI | RIGHT TURNED HORIZONTAL ANGLE | LINE | REMARKS |  |
|------|----------|------------|-----------|--|---------------------|---------------|-----------|----------------------|-----------|--------|-----------|-------------------------------|------|---------|--|
|      |          |            | DISTANCE  | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | INST      | ROD    |           |                               |      |         |  |
|      |          |            | SLOPE<br> | HORIZ<br>  |                     |               |           |                      |           |        |           |                               |      |         |  |
| 1    |          |            |           |  |                     |               |           |                      |           |        |           |                               | 1    |         |  |
| 2    |          | BM. 80 153 |           |  |                     |               |           |                      |           |        | 1097.4    |                               |      | 2       |  |
| 3    |          | SP. 100    |           |  |                     |               |           |                      |           |        |           |                               |      | 3       |  |
| 4    |          |            |           |  |                     |               |           |                      |           |        |           |                               |      | 4       |  |
| 5    |          |            | 1760      |  |                     | 89-17-13      | 14.0      | - 7.7                |           | 1091.6 |           |                               |      | 5       |  |
| 6    |          |            | ✓         |  |                     | 270-42-27     | 14.0      | - 7.7                |           |        |           |                               |      | 6       |  |
| 7    |          | 101        | 800       |  |                     | 270-40        | 5.3       | + 4.9                |           | 1096.5 |           |                               | ✓    | 7       |  |
| 8    |          | 102        | 0         |  |                     | -             | 5.4       |                      |           | 1086.2 |           |                               | -    | 8       |  |
| 9    |          | 103        | 800       |  |                     | 90-50         | 10.8      | - 23.6               |           | 1068.0 |           |                               | E    | 9       |  |
| 10   |          | 104        | 1760      |  |                     | 90-50         | 8.6       | - 34.2               |           | 1057.4 |           |                               |      | 10      |  |
| 11   |          |            | 1925      |  |                     | 90-50         | 10.7      | - 38.7               | 38.8      | 1052.8 |           | 1153.1                        |      | 11      |  |
| 12   |          |            | ✓         |  |                     | 209-15-23     | 14.0      | - 39.0               |           |        |           |                               |      | 12      |  |
| 13   |          |            | 4235      |  |                     | 80-25-05      | 14.0      | - 102.9              |           | 950.2  |           | 949.8                         |      | 13      |  |
| 14   |          |            | ✓         |  |                     | 271-31-10     | 10.0      | - 102.3              |           |        |           |                               |      | 14      |  |
| 15   |          | 105        | 3520      |  |                     | 271-00        | 9.5       | + 51.9               |           | 1002.1 |           |                               |      | 15      |  |
| 16   |          | 106        | 2640      |  |                     | 269-50        | 9.4       | - 17.1               |           | 933.1  |           |                               |      | 16      |  |
| 17   |          |            |           |  |                     |               |           |                      |           |        |           |                               |      | 17      |  |

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SYMBOLS = BACKSIGHT   
 = INSTRUMENT SET-UP   
 = SIDESHOT   
 = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA \_\_\_\_\_ STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 4 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 13 DY \_\_\_\_\_ MO 80 YR \_\_\_\_\_  
 SURVEYOR L. CYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <br><br> | STATION | VERTICAL  |  |                     |               |           |                      | ELEVATION |        | L/R OR DI | RIGHT TURNED HORIZONTAL ANGLE | LINE           | REMARKS |
|------|----------|---------|-----------|--|---------------------|---------------|-----------|----------------------|-----------|--------|-----------|-------------------------------|----------------|---------|
|      |          |         | DISTANCE  | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | INST      | ROD    |           |                               |                |         |
|      |          |         | SLOPE<br> | HORIZ<br>  |                     |               |           |                      |           |        |           |                               |                |         |
| 1    |          |         |           |  |                     |               |           |                      | 950.2     |        |           | 1                             |                |         |
| 2    |          | 107     | 176.0     |  | 267.00              | 7.6           | -         | 96.6                 |           | 853.6  |           | 2                             | CRK. 165' EAST |         |
| 3    |          | 108     | 0.0       |  | 267.00              | 8.0           | -         | 54.0                 |           | 896.2  |           | 3                             | W              |         |
| 4    |          | 109     | 0         |  | -                   | 5.3           |           |                      |           | 944.9  |           | 4                             | -              |         |
| 5    |          | 110     | 0.0       |  | 26-40               | 7.0           | +         | 44.1                 |           | 994.3  |           | 5                             | E              |         |
| 6    |          | 111     | 176.0     |  | 26-20               | 7.6           | +         | 104.7                |           | 1054.9 |           | 6                             |                |         |
| 7    |          | 112     | 264.0     |  | 25-52-08            | 75.0          | +         | 174.7                |           | 1124.7 | 1125.3    | 7                             |                |         |
| 8    |          |         | ✓         |  | 274.07-16           | 75.0          | +         | 174.2                |           |        |           | 8                             |                |         |
| 9    |          |         | 715       |  | 91-20               | 74.4          | +         | 31.0                 | 1155.7    |        |           | 9                             |                |         |
| 10   |          |         | ✓         |  | 260-30              | 72.3          | +         | 31.0                 |           |        |           | 10                            | W              |         |
| 11   |          |         | 0         |  | -                   | 5.3           |           |                      |           | 1150.4 |           | 11                            | -              |         |
| 12   |          | 113     | 165       |  | -                   | 6.2           |           |                      |           | 1149.5 |           | 12                            | E              |         |
| 13   |          | 114     | 1045.     |  | 90-30               | 74.0          | -         | 23.1                 | ✓         | 1132.6 | 1133.3    | 13                            |                |         |
| 14   |          |         | ✓         |  | 269-20              | 71.0          | -         | 23.2                 |           |        |           | 14                            |                |         |
| 15   |          |         |           |  |                     |               |           |                      |           |        |           | 15                            |                |         |
| 16   |          |         |           |  |                     |               |           |                      |           |        |           | 16                            |                |         |
| 17   |          |         |           |  |                     |               |           |                      |           |        |           | 17                            |                |         |

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SYMBOLS = BACKSIGHT = INSTRUMENT SET-UP = SIDESHOT = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA \_\_\_\_\_ STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 5 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 13 DY 3 MO 80 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <br>SS<br> | STATION  | VERTICAL  |  |                     |               |           |                      | ELEVATION |        | LIR OR DIR | RIGHT TURNED HORIZONTAL ANGLE | LINE | REMARKS   |
|------|------------|----------|-----------|--|---------------------|---------------|-----------|----------------------|-----------|--------|------------|-------------------------------|------|-----------|
|      |            |          | DISTANCE  | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | INST      | ROD    |            |                               |      |           |
|      |            |          | SLOPE<br> | HORIZ<br>  |                     |               |           |                      |           |        |            |                               |      |           |
| 1    |            | 114.     |           |  |                     |               |           |                      |           | 1132.6 |            |                               | 1    |           |
| 2    |            |          | 2640      |  | 90-10               | 7.0           | +16.7     | 1149.4               |           |        |            |                               | 2    |           |
| 3    |            |          | ✓         |  | 269-51-16           | 74.0          | +16.7     |                      |           |        |            |                               | 3    |           |
| 4    |            | 115.     | 1760      |  | 267-20              | 71.0          | -31.5     |                      |           | 1117.9 |            |                               | 4    |           |
| 5    |            | 116.     | 880       |  | 269-05              | 73.6          | -29.0     |                      |           | 1120.4 |            | W                             | 5    |           |
| 6    |            | 117.     | 0         |  | -                   | 3.3           |           |                      |           | 1144.1 |            | -                             | 6    |           |
| 7    |            | 118.     | 880       |  | 88-50               | 3.5           | +14.4     |                      |           | 1163.8 |            | E                             | 7    |           |
| 8    |            | BM 80152 | 980       |  | 88-40               | 7.1           | +13.7     |                      |           | 1163.1 |            |                               | 8    | 118 + 92. |
| 9    |            |          | ✓         |  | 271-30              | 71.9          | +13.7     |                      |           |        |            |                               | 9    |           |
| 10   |            |          |           |  |                     |               |           |                      |           | 1163.7 |            |                               | 10   |           |
| 11   |            |          |           |  |                     |               |           |                      |           | -0.8   | VERTICAL   |                               | 11   | TIE.      |
| 12   |            |          | 2540      |  | 89-11-53            | 74.0          | -21.5     | 1142.5               |           |        |            |                               | 12   |           |
| 13   |            |          | ✓         |  | 270-40              | 78.3          | -21.3     |                      |           |        |            |                               | 13   |           |
| 14   |            | 119.     | 1760      |  | 270-40              | 74.1          | +16.4     |                      |           | 1158.9 |            |                               | 14   |           |
| 15   |            | 120.     | 880       |  | 270-40              | 75.8          | +4.4      |                      |           | 1146.7 |            | W                             | 15   |           |
| 16   |            | 121.     | 0         |  | -                   | 5.3           |           |                      |           | 1137.2 |            | -                             | 16   |           |
| 17   |            | 122.     | 880       |  | 89-30               | 75.0          | +2.7      |                      |           | 1145.2 |            | E                             | 17   |           |

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SYMBOLS = BACKSIGHT = INSTRUMENT SET-UP = SIDESHOT = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES.

GSI AREA \_\_\_\_\_ STATE/COUNTY AK. BOOK NO. \_\_\_\_\_ PAGE 6 OF \_\_\_\_\_  
 LINE/LOOP NO. 731. TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY. DATE 13 DY 3 MO 90 YR  
 SURVEYOR L. LYMAN. INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186.

| LINE | <br><br> | STATION | VERTICAL  |  |                     |               |           |                      | ELEVATION |     | L/R OR DI | RIGHT TURNED HORIZONTAL ANGLE | LINE       | REMARKS |
|------|----------|---------|-----------|--|---------------------|---------------|-----------|----------------------|-----------|-----|-----------|-------------------------------|------------|---------|
|      |          |         | DISTANCE  | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | INST      | ROD |           |                               |            |         |
|      |          |         | SLOPE<br> | HORIZ<br>  |                     |               |           |                      |           |     |           |                               |            |         |
| 1    |          |         |           |  |                     |               |           |                      | 1142.5    |     |           | 1                             |            |         |
| 2    |          | 123.    | 1760      |  | 88-40               | 7.8           | + 33.1    |                      | 1175.6    |     | 1172.5 E. | 2                             |            |         |
| 3    |          |         | ✓         |  | 271-30              | 13.0          | + 33.1    |                      |           |     |           | 3                             |            |         |
| 4    |          |         | 1760      |  | 89-40               | 7.4           | - 1.0     |                      | 1173.9    |     |           | 4                             |            |         |
| 5    |          |         | ✓         |  | 270-30              | 13.8          | - 1.6     |                      |           |     |           | 5                             |            |         |
| 6    |          | 124.    | 880       |  | -                   | 4.7           |           |                      | 1169.2    |     | ✓         | 6                             |            |         |
| 7    |          | 125.    | 0         |  | -                   | 5.3           |           |                      | 1168.6    |     | -         | 7                             |            |         |
| 8    |          | 126.    | 880       |  | 89-10               | 5.5           | + 7.3     |                      | 1181.2    |     | E.        | 8                             |            |         |
| 9    |          | TP.     | 1595      |  | 89-00               | 8.4           | + 19.2 ✓  |                      | 1193.1    |     | 1193.0    | 9                             | 126 + 715. |         |
| 10   |          |         | ✓         |  | 271-10              | 13.4          | + 19.1    |                      |           |     |           | 10                            |            |         |
| 11   |          |         | 1925.     |  | 89-30               | 9.8           | - 7.0     |                      | 1186.2    |     |           | 11                            |            |         |
| 12   |          |         | ✓         |  | 270-37-16           | 14.0          | - 1.9 ✓   |                      |           |     |           | 12                            |            |         |
| 13   |          | 127.    | 1760      |  | 270-30              | 8.0           | + 7.4     |                      | 1173.6    |     |           | 13                            |            |         |
| 14   |          | 128.    | 880       |  | -                   | 2.4           |           |                      | 1188.8    |     | ✓         | 14                            |            |         |
| 15   |          | 129.    | 0         |  | -                   | 5.2           |           |                      | 1181.0    |     | -         | 15                            |            |         |
| 16   |          | 130.    | 880       |  | -                   | 72.0          |           |                      | 1173.6    |     | E.        | 16                            |            |         |
| 17   |          |         |           |  |                     |               |           |                      |           |     |           | 17                            |            |         |

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SYMBOLS = BACKSIGHT = INSTRUMENT SET-UP = SIDESHOT = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA \_\_\_\_\_ STATE/COUNTY AK. BOOK NO. \_\_\_\_\_ PAGE 7 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 13 DY 3 MO 80 YR  
 SURVEYOR L. LAMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <input type="checkbox"/> $\Delta$<br><input type="checkbox"/> SS<br><input type="checkbox"/> $\odot$ | STATION | VERTICAL     |  |                     |               |           |                      |           | HORIZONTAL |          | LINE | REMARKS |                               |
|------|--|---------|--------------|--|---------------------|---------------|-----------|----------------------|-----------|------------|----------|------|---------|-------------------------------|
|      |  |         | DISTANCE     | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION |            | LR OR DI |      |         | RIGHT TURNED HORIZONTAL ANGLE |
|      |  |         |              | SLOPE  |                     |               |           |                      | HORIZ     | INST       |          |      |         |                               |
| 1    |  |         |              |  |                     |               |           |                      | 1186.2    |            |          | 1    |         |                               |
| 2    | $\odot$  | 131.    | 1760         |  | 90-20               | 14.7          | - 24.9    |                      |           | 1161.3     | 1161.1   | 2    |         |                               |
| 3    | $\checkmark$   |         | $\checkmark$ |  | 269-30              | 9.5           | - 24.9    |                      |           |            |          | 3    |         |                               |
| 4    | $\Delta$   |         | 2915         |  | 89-31-10            | 14.0          | - 10.4    |                      | 1151.1    |            |          | 4    |         |                               |
| 5    | $\checkmark$   |         | $\checkmark$ |  | 270-23-36           | 10.0          | - 10.0    |                      |           |            |          | 5    |         |                               |
| 6    |  | 132.    | 2035         |  | 270-10              | 5.2           | + 0.1     |                      |           | 1151.2     |          | 6    |         |                               |
| 7    |  | 133.    | 1155         |  | -                   | 10.0          |           |                      |           | 1140.3     |          | 7    |         |                               |
| 8    |  | 134.    | 275          |  | -                   | 9.7           |           |                      |           | 1141.4     |          | 8    | W       |                               |
| 9    |  |         | 0            |  | -                   | 5.3           |           |                      |           | 1145.8     |          | 9    | -       |                               |
| 10   |  | 135.    | 665          |  | -                   | 11.2          |           |                      |           | 1139.9     |          | 10   | E       |                               |
| 11   |  | 136.    | 1485         |  | 90-30               | 11.4          | - 24.4    |                      |           | 1126.7     |          | 11   |         |                               |
| 12   | $\odot$  | 137     | 2365         |  | 90-20               | 13.9          | - 27.7    |                      |           | 1123.4     | 1123.1   | 12   |         |                               |
| 13   | $\checkmark$   |         | $\checkmark$ |  | 269-30              | 7.1           | - 27.7    |                      |           |            |          | 13   |         |                               |
| 14   |  |         |              |  |                     |               |           |                      |           |            |          | 14   |         |                               |
| 15   |  |         |              |  |                     |               |           |                      |           |            |          | 15   |         |                               |
| 16   |  |         |              |  |                     |               |           |                      |           |            |          | 16   |         |                               |
| 17   |  |         |              |  |                     |               |           |                      |           |            |          | 17   |         |                               |

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SYMBOLS  $\Delta$  = BACKSIGHT  $\nabla$  = INSTRUMENT SET-UP SS = SIDESHOT  $\odot$  = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA \_\_\_\_\_ STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 8 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 13 DY 3 MO 80 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <br><br> | STATION | VERTICAL  |  |                     |               |           |                      | ELEVATION |     | L/R OR DI | RIGHT TURNED HORIZONTAL ANGLE | LINE | REMARKS |
|------|----------|---------|-----------|--|---------------------|---------------|-----------|----------------------|-----------|-----|-----------|-------------------------------|------|---------|
|      |          |         | DISTANCE  | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | INST      | ROD |           |                               |      |         |
|      |          |         | SLOPE<br> | HORIZ<br>  |                     |               |           |                      |           |     |           |                               |      |         |
| 1    |          | 137     |           |  |                     |               |           |                      | 1123.4    |     |           | 1                             |      |         |
| 2    |          |         | 1760      |  | 89-50               | 5.6           | +0.5      | 1124.0               |           |     |           | 2                             |      |         |
| 3    |          |         | ✓         |  | 270-20              | 10.9          | +0.7      |                      |           |     |           | 3                             |      |         |
| 4    |          | 130     | 000       |  | -                   | 2.7           |           |                      | 1117.3    |     | W         | 4                             |      |         |
| 5    |          | 139     | 0         |  | -                   | 5.3           |           |                      | 1118.7    |     | -         | 5                             |      |         |
| 6    |          | 140     | 000       |  | 89-00               | 3.0           | +2.4      |                      | 1132.4    |     | E         | 6                             |      |         |
| 7    |          | 141     | 1760      |  | 89-00               | 2.9           | +21.8     |                      | 1145.8    |     |           | 7                             |      |         |
| 8    |          | 142     | 2640      |  | 89-00               | 10.3          | +35.8     | ✓                    | 1159.8    |     | 1159.6    | 8                             |      |         |
| 9    |          |         | ✓         |  | 271-05              | 14.0          | +35.9     |                      |           |     |           | 9                             |      |         |
| 10   |          |         | 2640      |  | 90-10               | 14.2          | +21.9     | ✓                    | 1121.7    |     |           | 10                            |      |         |
| 11   |          |         | ✓         |  | 269-40              | 2.6           | +22.0     |                      |           |     |           | 11                            |      |         |
| 12   |          | 143     | 1760      |  | 269-40              | 12.4          | -22.6     |                      | 1159.1    |     |           | 12                            |      |         |
| 13   |          | 144     | 000       |  | 269-20              | 2.2           | -18.4     |                      | 1163.3    |     | ✓         | 13                            |      |         |
| 14   |          | 145     | 0         |  | -                   | 3.3           |           |                      | 1176.4    |     | -         | 14                            |      |         |
| 15   |          | 146     | 000       |  | 89-30               | 2.0           | +1.7      | ✓                    | 1183.4    |     | 1183.1    | E                             | TP.  |         |
| 16   |          |         | ✓         |  | 271-00              | 13.7          | +1.7      |                      |           |     |           | 16                            |      |         |
| 17   |          |         |           |  |                     |               |           |                      |           |     |           | 17                            |      |         |

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA \_\_\_\_\_ STATE/COUNTY AK. BOOK NO. \_\_\_\_\_ PAGE 9 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 13 DY 3 MO 80 YR  
 SURVEYOR L. L. MAN. INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <br><br> | STATION | VERTICAL                        |  |                     |               |           |                      | ELEVATION |        | L/R OR D/I | RIGHT TURNED HORIZONTAL ANGLE | LINE | REMARKS |
|------|----------|---------|---------------------------------|--|---------------------|---------------|-----------|----------------------|-----------|--------|------------|-------------------------------|------|---------|
|      |          |         | DISTANCE                        | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | INST      | ROD    |            |                               |      |         |
|      |          |         |                                 | SLOPE  |                     |               |           |                      |           |        |            |                               |      |         |
| 1    |          | 146     |                                 |  |                     |               |           |                      | 1183.4    |        |            | 1                             |      |         |
| 2    |          |         | 1760                            |  | 22°-36'-17"         | +14.0         | -         | 28.8                 | 1154.8    |        |            | 2                             |      |         |
| 3    |          |         | ✓                               |  | 271-22-50           | +14.0         | -         | 28.4                 |           |        |            | 3                             |      |         |
| 4    |          | 147     | 000                             |  | 271-20              | 7.2           | +         | 14.3                 | 1169.1    |        | W          | 4                             |      |         |
| 5    |          | 148     | 0                               |  | -                   | 5.3           |           |                      | 1149.5    |        | -          | 5                             |      |         |
| 6    |          | 149     | 000                             |  | 91-00               | 7.0           | -         | 22.4                 | 1132.4    |        | E          | 6                             |      |         |
| 7    |          | 150     | 1760                            |  | 91-00               | 70.2          | -         | 40.9                 | 1113.9    |        |            | 7                             |      |         |
| 8    |          | 2255    | <del>2035</del> <del>2145</del> |  | 91-00               | 74.0          | -         | 54.1                 | 1100.7    | 1100.4 |            | 8                             |      |         |
| 9    |          | 2255    | ✓                               |  | 269-00              | 74.7          | -         | 54.0                 |           |        |            | 9                             |      |         |
| 10   |          |         | 1760                            |  | 90-20               | +11.0         | +         | 21.8                 | 1122.5    |        |            | 10                            |      |         |
| 11   |          |         | ✓                               |  | 269-30              | +6.4          | +         | 21.8                 |           |        |            | 11                            |      |         |
| 12   |          | 151     | 1375                            |  | 268-20              | 73.9          | -         | 53.9                 | 1068.6    |        |            | 12                            |      |         |
| 13   |          | 152     | 495                             |  | 269-20              | 71.0          | -         | 17.6                 | 1104.9    |        | W          | 13                            |      |         |
| 14   |          |         | 0                               |  | -                   | 5.3           |           |                      | 1117.2    |        | -          | 14                            |      |         |
| 15   |          | 153     | 385                             |  | 89-30               | 75.0          | -         | 1.6                  | 1120.9    |        | E          | 15                            |      |         |
| 16   |          | 154     | 1265                            |  | 89-30               | 70.0          | +         | 1.0                  | 1123.5    |        |            | 16                            |      |         |
| 17   |          |         |                                 |  |                     |               |           |                      |           |        |            | 17                            |      |         |

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# HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA LOOKOUT RIDGE STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 10 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 13 DY 3 MO 80 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1196

| LINE | <br><br> | STATION   | VERTICAL  |  |                     |               |           |                      | ELEVATION |     | L/R OR D/F    | RIGHT TURNED HORIZONTAL ANGLE | LINE       | REMARKS |
|------|----------|-----------|-----------|--|---------------------|---------------|-----------|----------------------|-----------|-----|---------------|-------------------------------|------------|---------|
|      |          |           | DISTANCE  | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | INST      | ROD |               |                               |            |         |
|      |          |           | SLOPE<br> | HORIZ<br>  |                     |               |           |                      |           |     |               |                               |            |         |
| 1    |          |           |           |  |                     |               |           |                      | 1122.5    |     |               | 1                             |            |         |
| 2    |          | 155       | 2145      |  | 29-30               | 7.0           | +11.7     |                      | 1134.1    |     | 1133.8 E      | 2                             |            |         |
| 3    |          |           | ✓         |  | 270-40              | 73.5          | +11.5     |                      |           |     |               | 3                             |            |         |
| 4    |          |           | 1760      |  | 90-20               | 70.3          | +20.5     |                      | 1154.7    |     |               | 4                             |            |         |
| 5    |          |           | ✓         |  | 269-30              | 75.4          | +20.8     |                      |           |     |               | 5                             |            |         |
| 6    |          | 156       | 880       |  | 269-30              | 79.7          | -16.4     |                      | 1138.3    |     | W             | 6                             |            |         |
| 7    |          | 157       | 0         |  | -                   | 75.3          |           |                      | 1149.4    |     | -             | 7                             |            |         |
| 8    |          | BM. 20151 | 760       |  | 29-20               | 71.1          | -2.3 ✓    |                      | 1152.4    |     | E             | 8                             | 157 + 759. |         |
| 9    |          |           | ✓         |  | 270-30              | 79.0          | -2.4      |                      |           |     |               | 9                             |            |         |
| 10   |          |           |           |  |                     |               |           |                      | 1152.1    |     |               | 10                            |            |         |
| 11   |          |           |           |  |                     |               |           |                      | +0.3      |     | VERTICAL TIE. | 11                            |            |         |
| 12   |          |           |           |  |                     |               |           |                      |           |     |               | 12                            |            |         |
| 13   |          |           |           |  |                     |               |           |                      |           |     |               | 13                            |            |         |
| 14   |          |           |           |  |                     |               |           |                      |           |     |               | 14                            |            |         |
| 15   |          |           |           |  |                     |               |           |                      |           |     |               | 15                            |            |         |
| 16   |          |           |           |  |                     |               |           |                      |           |     |               | 16                            |            |         |
| 17   |          |           |           |  |                     |               |           |                      |           |     |               | 17                            |            |         |

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 SYMBOLS = BACKSIGHT = INSTRUMENT SET-UP = SIDESHOT = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA LOOKOUT RIDGE STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 11 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 14 DY 3 MO 90 YR  
 SURVEYOR L. L. MAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1126

| LINE | <br><br> | STATION     | VERTICAL  |  |                     |               |           |                      | ELEVATION |        | L/R OR D/I | RIGHT TURNED HORIZONTAL ANGLE | LINE   | REMARKS |
|------|----------|-------------|-----------|--|---------------------|---------------|-----------|----------------------|-----------|--------|------------|-------------------------------|--------|---------|
|      |          |             | DISTANCE  | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | INST      | ROD    |            |                               |        |         |
|      |          |             | SLOPE<br> | HORIZ<br>  |                     |               |           |                      |           |        |            |                               |        |         |
| 1    |          |             |           |  |                     |               |           |                      |           |        |            | 1                             |        |         |
| 2    |          | BM. 50 151. |           |  |                     |               |           |                      |           | 1152.1 |            | 2                             |        |         |
| 3    |          |             |           |  |                     |               |           |                      |           |        |            | 3                             |        |         |
| 4    |          |             | 2760      |  | 89-13-27            | +14.0         | -23.4     | 23.1                 | 1129.0    |        |            | 4                             |        |         |
| 5    | CK       |             | ✓         |  | 270-45-50           | +14.0         | -22.8     |                      |           |        |            | 5                             |        |         |
| 6    |          | 158         | 2640      |  | 270-40              | 0.0           | +22.7     |                      | 1151.7    |        |            | 6                             |        |         |
| 7    |          | 159         | 1710      |  | 270-40              | 7.0           | +13.5     |                      | 1142.5    |        |            | 7                             |        |         |
| 8    |          | 160         | 000       |  | 270-40              | 5.6           | +4.6      |                      | 1133.6    |        |            | 8                             | W      |         |
| 9    |          | 161         | 0         |  | -                   | 5.3           |           |                      | 1123.7    |        |            | 9                             |        |         |
| 10   |          | 162         | 000       |  | 91-20               | 11.2          | -31.7     |                      | 1097.3    | 1097.2 | E          | 10                            |        |         |
| 11   | CK       |             | ✓         |  | 268-50              | -13.8         | -31.7     |                      |           |        |            | 11                            |        |         |
| 12   |          |             | 2440      |  | 89-30               | +7.7          | -15.3     | ✓                    | 1082.0    |        |            | 12                            |        |         |
| 13   | CK       |             | ✓         |  | 270-38              | +14.0         | -15.2     |                      |           |        |            | 13                            |        |         |
| 14   |          | 163         | 1760      |  | 268-40              | 12.0          | -52.9     |                      | 1029.1    |        |            | 14                            |        |         |
| 15   |          | 164         | 000       |  | 268-00              | 10.0          | -41.5     |                      | 1040.5    |        |            | 15                            | GULLEY |         |
| 16   |          | 165         | 0         |  | -                   | 5.3           |           |                      | 1076.7    |        |            | 16                            | ✓      |         |
| 17   |          |             |           |  |                     |               |           |                      |           |        |            | 17                            |        |         |

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 SYMBOLS = BACKSIGHT = INSTRUMENT SET-UP = SIDESHOT = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA \_\_\_\_\_ STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 12 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 14 DY 3 MO 90 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1196

| LINE | <br><br> | STATION | VERTICAL |  |                     |               |           |                      | ELEVATION |        | HORIZONTAL |                               | REMARKS |      |
|------|----------|---------|----------|--|---------------------|---------------|-----------|----------------------|-----------|--------|------------|-------------------------------|---------|------|
|      |          |         | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | INST      | ROD    | L/R OR DI  | RIGHT TURNED HORIZONTAL ANGLE |         | LINE |
|      |          |         |          | SLOPE<br>  |                     |               |           |                      |           |        |            |                               |         |      |
| 1    |          |         |          |  |                     |               |           |                      | 1092.0    |        |            | 1                             |         |      |
| 2    |          | 166     | 500      |  | 88-20               | 74.9          | +10.7     |                      | 1092.6    | 1092.6 | E          | 2                             |         |      |
| 3    |          |         | ✓        |  | 271-40              | 75.0          | +10.6     |                      |           |        |            | 3                             |         |      |
| 4    |          |         | 1760     |  | 89-30               | 72.0          | -3.4      | 1089.4               |           |        |            | 4                             |         |      |
| 5    |          |         | ✓        |  | 270-33-10           | 74.0          | -3.0      |                      |           |        |            | 5                             |         |      |
| 6    |          | 167     | 800      |  | -                   | 71.3          |           |                      | 1078.1    |        | W          | 6                             |         |      |
| 7    |          | 168     | 0        |  | -                   | 5.3           |           |                      | 1084.1    |        | -          | 7                             |         |      |
| 8    |          | 169     | 800      |  | 89-20               | 70.4          | +1.8      |                      | 1091.2    |        | E          | 8                             |         |      |
| 9    |          | 170     | 1760     |  | 89-20               | 7.2           | +14.3     |                      | 1103.7    |        |            | 9                             |         |      |
| 10   |          |         | 2255     |  | 89-17-40            | 74.0          | +13.8     |                      | 1103.0    | 1102.8 |            | 10                            |         |      |
| 11   |          |         | ✓        |  | 270-43-24           | 75.0          | +13.5     |                      |           |        |            | 11                            |         |      |
| 12   |          |         | 660      |  | 89-05               | 72.0          | -4.7      | 1098.3               |           |        |            | 12                            |         |      |
| 13   |          |         | ✓        |  | 271-20              | 70.7          | -4.7      |                      |           |        |            | 13                            |         |      |
| 14   |          | 171     | 275      |  | 271-05              | 5.3           | -0.5      |                      | 1097.8    |        | W          | 14                            |         |      |
| 15   |          |         | 0        |  | -                   | 5.3           |           |                      | 1093.0    |        | -          | 15                            |         |      |
| 16   |          | 172     | 605      |  | 92-05               | 71.5          | -32.6     |                      | 1065.7    | 1065.5 | E          | 16                            |         |      |
| 17   |          |         | ✓        |  | 268-10              | 73.3          | -32.6     |                      |           |        |            | 17                            |         |      |

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SYMBOLS = BACKSIGHT = INSTRUMENT SET-UP = SIDESHOT = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

13

GSI AREA \_\_\_\_\_ STATE/COUNTY AK. BOOK NO. \_\_\_\_\_ PAGE 13 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 14 DY 3 MO 80 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <input type="checkbox"/> $\Delta$<br><input type="checkbox"/> SS<br><input type="checkbox"/> $\odot$ | STATION | VERTICAL |  |                     |               |           |                      | ELEVATION |        | L/R OR DI | HORIZONTAL<br>RIGHT TURNED<br>HORIZONTAL<br>ANGLE | LINE   | REMARKS |
|------|--|---------|----------|--|---------------------|---------------|-----------|----------------------|-----------|--------|-----------|---|--------|---------|
|      |  |         | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | INST      | ROD    |           |   |        |         |
|      |  |         |          | SLOPE  |                     |               |           |                      |           |        |           |   |        |         |
| 1    | $\odot$  | 172     |          |  |                     |               |           |                      | 1065.7    |        |           | 1   |        |         |
| 2    | $\Delta$   |         | 2250     |  | 89-10               | 72.6          | - 20.1    | 1045.8               |           |        |           | 2   |        |         |
| 3    | $\checkmark$   |         |          |  | 270-51-30           | 74.0          | - 19.7    |                      |           |        |           | 3   |        |         |
| 4    |  | 173     | 1375     |  | 268-40              | 79.6          | - 41.6    | 1004.2               |           |        |           | 4   |        |         |
| 5    |  | 174     | 495      |  | 267-20              | 72.1          | - 35.1    | 1010.7               |           |        | W         | 5   |        |         |
| 6    |  |         | 0        |  | -                   | 3.3           |           | 1040.5               |           |        | -         | 6   |        |         |
| 7    | $\odot$  | 175     | 385      |  | 93-05               | 7.6           | - 27.7    | 1018.0               |           | 1017.7 | E         | 7   |        |         |
| 8    | $\checkmark$   |         |          |  | 267-20              | 9.9           | - 27.9    |                      |           |        |           | 8   |        |         |
| 9    | $\Delta$   |         | 1740     |  | 90-10               | 72.5          | + 17.6    | 1035.7               |           |        |           | 9   |        |         |
| 10   | $\checkmark$   |         |          |  | 269-40              | 7.7           | + 17.8    |                      |           |        |           | 10  |        |         |
| 11   |  | 176     | 870      |  | 264-05              | 73.7          | - 104.1   | 931.6                |           |        | W         | 11  | RAVINE |         |
| 12   |  | 177     | 0        |  | -                   | 5.2           |           | 1030.5               |           |        | -         | 12  |        |         |
| 13   | $\odot$  |         | 385      |  | 85-05               | 7.7           | + 25.7    | 1061.4               |           | 1061   | E         | 13  |        |         |
| 14   | $\checkmark$   |         |          |  | 275-20              | 10.0          | + 25.6    |                      |           |        |           | 14  |        |         |
| 15   |  |         |          |  |                     |               |           |                      |           |        |           | 15  |        |         |
| 16   |  |         |          |  |                     |               |           |                      |           |        |           | 16  |        |         |
| 17   |  |         |          |  |                     |               |           |                      |           |        |           | 17  |        |         |

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SYMBOLS  $\Delta$  = BACKSIGHT  $\mathcal{A}$  = INSTRUMENT SET-UP SS = SIDESHOT  $\odot$  = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA \_\_\_\_\_ STATE/COUNTY AK. BOOK NO. \_\_\_\_\_ PAGE 14 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT Husky DATE 14 DY 3 MO 80 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <br><br> | STATION | VERTICAL |  |                     |               |           |                      | HORIZONTAL |      |           | REMARKS |                               |      |
|------|----------|---------|----------|--|---------------------|---------------|-----------|----------------------|------------|------|-----------|---------|-------------------------------|------|
|      |          |         | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION  |      | L/R OR DI |         | RIGHT TURNED HORIZONTAL ANGLE | LINE |
|      |          |         |          | SLOPE<br>  |                     |               |           |                      | HORIZ      | INST |           |         |                               |      |
| 1    |          |         |          |  |                     |               |           |                      | 1061.4     |      |           | 1       |                               |      |
| 2    |          |         | 2255     |  | 90-50               | +14.2         | +47.0     | 1108.6               |            |      |           | 2       |                               |      |
| 3    | CK       |         | ✓        |  | 269-10-37           | +75.0         | +47.4     |                      |            |      |           | 3       |                               |      |
| 4    |          | 178     | 1760     |  | 269-10              | -9.7          | -35.3     |                      | 1073.3     |      |           | 4       |                               |      |
| 5    |          | 179     | 880      |  | 269-30              | -9.4          | -17.1     |                      | 1091.5     |      |           | 5       | W                             |      |
| 6    |          | 180     | 0        |  | -                   | -5.2          |           |                      | 1103.4     |      |           | 6       | -                             |      |
| 7    |          | 181     | 880      |  | 29-30               | -2.5          | +1.2      |                      | 1109.7     |      | 1109.2 E. | 7       |                               |      |
| 8    | CK       |         | ✓        |  | 270-40              | -9.2          | +1.0      |                      |            |      |           | 8       |                               |      |
| 9    |          |         | 4400     |  | 90-12-32            | +14.0         | +30.0     | 1140.1               |            |      |           | 9       |                               |      |
| 10   | CK       |         | ✓        |  | 269-43-48           | +10.0         | +30.7     |                      |            |      |           | 10      |                               |      |
| 11   |          | 182     | 3520     |  | 269-30              | -5.3          | -36.0     |                      | 1104.1     |      |           | 11      |                               |      |
| 12   |          | 183     | 2640     |  | 269-20              | -9.5          | -40.2     |                      | 1099.9     |      |           | 12      |                               |      |
| 13   |          | 184     | 1760     |  | 269-26              | -14.1         | -31.5     |                      | 1108.6     |      |           | 13      |                               |      |
| 14   |          | 185     | 880      |  | -                   | -14.3         |           |                      | 1125.8     |      |           | 14      | W                             |      |
| 15   |          | 186     | 0        |  | -                   | -5.3          |           |                      | 1134.8     |      |           | 15      | -                             |      |
| 16   |          | 187     | 880      |  | -                   | -13.6         |           |                      | 1126.5     |      |           | 16      | E                             |      |
| 17   |          | 188     | 1760     |  | -                   | -10.6         |           |                      | 1129.5     |      |           | 17      |                               |      |

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 SYMBOLS = BACKSIGHT = INSTRUMENT SET-UP = SIDESHOT = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA LOOKOUT RIDGE STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 15 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 14 DY 3 MO 8 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 118

| LINE | <br>SS<br> | STATION  | VERTICAL  |  |                     |               |           |                      | ELEVATION |     | L/R OR DI | RIGHT TURNED HORIZONTAL ANGLE | LINE      | REMARKS |
|------|------------|----------|-----------|--|---------------------|---------------|-----------|----------------------|-----------|-----|-----------|-------------------------------|-----------|---------|
|      |            |          | DISTANCE  | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | INST      | ROD |           |                               |           |         |
|      |            |          | SLOPE<br> | HORIZ<br>  |                     |               |           |                      |           |     |           |                               |           |         |
| 1    |            |          |           |  |                     |               |           |                      | 1140.1    |     |           | 1                             |           |         |
| 2    |            | 189      | 2640      |  | 89-30               | 75.0          | +8.0      |                      | 1148.1    |     |           | 2                             | E         |         |
| 3    |            | 190      | 3520      |  | 89-30               | 4.5           | +26.2     |                      | 1166.3    |     |           | 3                             |           |         |
| 4    |            | BM 80150 | 3757      |  | 89-30               | 7.5           | +25.3     |                      | 1165.2    |     |           | 4                             | 190 + 237 |         |
| 5    |            |          | ✓         |  | 270-35-35           | 14.0          | +24.7     |                      |           |     |           | 5                             |           |         |
| 6    |            |          |           |  |                     |               |           |                      | 1164.5    |     |           | 6                             |           |         |
| 7    |            |          |           |  |                     |               |           |                      | +0.7      |     | VERTICAL  | 7                             |           |         |
| 8    |            |          |           |  |                     |               |           |                      |           |     | TIE       | 8                             |           |         |
| 9    |            |          |           |  |                     |               |           |                      |           |     |           | 9                             |           |         |
| 10   |            |          |           |  |                     |               |           |                      |           |     |           | 10                            |           |         |
| 11   |            |          |           |  |                     |               |           |                      |           |     |           | 11                            |           |         |
| 12   |            |          |           |  |                     |               |           |                      |           |     |           | 12                            |           |         |
| 13   |            |          |           |  |                     |               |           |                      |           |     |           | 13                            |           |         |
| 14   |            |          |           |  |                     |               |           |                      |           |     |           | 14                            |           |         |
| 15   |            |          |           |  |                     |               |           |                      |           |     |           | 15                            |           |         |
| 16   |            |          |           |  |                     |               |           |                      |           |     |           | 16                            |           |         |
| 17   |            |          |           |  |                     |               |           |                      |           |     |           | 17                            |           |         |

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SYMBOLS = BACKSIGHT   
 = INSTRUMENT SET-UP   
 = SIDESHOT   
 = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA \_\_\_\_\_ STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 11 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 15 DY 3 MO 80 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <input type="checkbox"/> Δ<br><input type="checkbox"/> SS<br><input type="checkbox"/> ⊙ | STATION    | VERTICAL |  |                     |               |           |                      |           | HORIZONTAL |            | REMARKS |                               |     |
|------|---|------------|----------|--|---------------------|---------------|-----------|----------------------|-----------|------------|------------|---------|-------------------------------|-----|
|      |   |            | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION |            | L/R OR D/I |         | RIGHT TURNED HORIZONTAL ANGLE |     |
|      |   |            |          | SLOPE  |                     |               |           |                      | HORIZ     | INST       |            |         |                               | ROD |
| 1    |   |            |          |  |                     |               |           |                      |           |            |            | 1       |                               |     |
| 2    | ⊙   | BM. 30-150 |          |  |                     |               |           |                      |           |            |            |         | 2                             |     |
| 3    |   |            |          |  |                     |               |           |                      |           |            |            |         | 3                             |     |
| 4    | Δ   |            | 645      |  | 09-05               | +8.0          | -         | 3.3                  | 1161.3    |            |            |         | 4                             |     |
| 5    | CK  |            | ✓        |  | 271-10              | +9.9          | -         | 3.2                  |           |            |            | ✓       | 5                             |     |
| 6    |   | 191.       | 0        |  | -                   | -5.3          |           |                      |           |            |            | -       | 6                             |     |
| 7    |   | 192.       | 000      |  | -                   | -12.3         |           |                      |           |            |            | E       | 7                             |     |
| 8    |   | 193.       | 1760     |  | 09-30               | -9.0          | +6.4      |                      | 1167.7    |            |            |         | 8                             |     |
| 9    |   | 194.       | 2640     |  | 09-20               | -2.5          | +28.2     |                      | 1189.5    |            |            |         | 9                             |     |
| 10   | ⊙   | 195.       | 3520     |  | 09-07-22            | -14.0         | +39.9     |                      | 1201.2    |            | 1201.4     |         | 10                            |     |
| 11   | CK  |            | ✓        |  | 270-53-36           | -15.0         | +39.9     |                      |           |            |            |         | 11                            |     |
| 12   | Δ   |            | 2640     |  | 09-10               | +10.1         | -28.3     | 1173.0               |           |            |            |         | 12                            |     |
| 13   | CK  |            | ✓        |  | 270-54-40           | +14.0         | -28.1     |                      |           |            |            |         | 13                            |     |
| 14   |   | 196.       | 1760     |  | 270-40              | -6.0          | +14.5     |                      | 1187.5    |            |            |         | 14                            |     |
| 15   |   | 197.       | 000      |  | -                   | -2.4          |           |                      | 1170.6    |            |            | ✓       | 15                            |     |
| 16   |   | 198.       | 0        |  | -                   | -5.3          |           |                      | 1167.7    |            |            | -       | 16                            |     |
| 17   |   | 199.       | 000      |  | 09-40               | -5.5          | -0.4      |                      | 1172.6    |            |            | E       | 17                            |     |

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 SYMBOLS    Δ = BACKSIGHT    ⊠ = INSTRUMENT SET-UP    SS = SIDESHOT    ⊙ = FORESIGHT



# HORIZONTAL AND VERTICAL SURVEY NOTES

17

GSI AREA \_\_\_\_\_ STATE/COUNTY AK. BOOK NO. \_\_\_\_\_ PAGE 17 OF \_\_\_\_\_  
 LINE/LOOP NO. 731. TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY. DATE 15 DY 3 MO 80 YR  
 SURVEYOR L. LYMAN. INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186.

| LINE | <br><br> | STATION | VERTICAL  |  |                     |               |           |                      | ELEVATION |     | L/R OR DJI | RIGHT TURNED HORIZONTAL ANGLE | LINE | REMARKS |
|------|----------|---------|-----------|--|---------------------|---------------|-----------|----------------------|-----------|-----|------------|-------------------------------|------|---------|
|      |          |         | DISTANCE  | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD ROD OR HI | ELEV DIFF | FINAL ELEVATION DIFF | INST      | ROD |            |                               |      |         |
|      |          |         | SLOPE<br> | HORIZ<br>  |                     |               |           |                      |           |     |            |                               |      |         |
| 1    |          |         |           |  |                     |               |           |                      |           |     |            |                               | 1    |         |
| 2    |          | 200     | 1760      |  | 89-10               | 14.0          | + 11.6    |                      | 1173.0    |     |            |                               | 2    | E       |
| 3    |          | 201     | 2640      |  | 89-10               | 7.2           | + 29.2    |                      |           |     |            | 1202.1                        | 3    | 1202.4  |
| 4    |          |         | ✓         |  | 270-56-03           | 14.0          | + 29.0    |                      |           |     |            |                               | 4    |         |
| 5    |          |         | 3135      |  | 90-16-40            | 14.0          | + 29.2    |                      | 1231.5    |     |            |                               | 5    |         |
| 6    |          |         | ✓         |  | 269-30-26           | 10.0          | + 29.7    |                      |           |     |            |                               | 6    |         |
| 7    |          | 202     | 2255      |  | 269-30              | 13.3          | - 33.0    |                      |           |     |            | 1198.5                        | 7    |         |
| 8    |          | 203     | 1375      |  | 269-20              | 13.1          | - 29.1    |                      |           |     |            | 1202.4                        | 8    |         |
| 9    |          | 204     | 495       |  | -                   | 2.6           |           |                      |           |     |            | 1222.9                        | 9    | W       |
| 10   |          |         | 0         |  | -                   | 5.3           |           |                      |           |     |            | 1226.2                        | 10   | -       |
| 11   |          | 205     | 305       |  | -                   | 10.6          |           |                      |           |     |            | 1220.9                        | 11   | E       |
| 12   |          | 206     | 1265      |  | 91-10               | 11.9          | - 37.7    |                      |           |     |            | 1193.8                        | 12   | 1193.9  |
| 13   |          |         | ✓         |  | 268-55-20           | 14.0          | - 37.8    |                      |           |     |            |                               | 13   |         |
| 14   |          |         | 1760      |  | 88-50               | 7.9           | - 27.9    |                      | 1166.0    |     |            |                               | 14   |         |
| 15   |          |         | ✓         |  | 271-20              | 13.2          | - 27.7    |                      |           |     |            |                               | 15   |         |
| 16   |          | 207     | 880       |  | 270-20              | 3.4           | + 1.7     |                      |           |     |            | 1167.7                        | 16   | W       |
| 17   |          | 208     | 0         |  | -                   | 3.3           |           |                      |           |     |            | 1160.7                        | 17   | -       |

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# HORIZONTAL AND VERTICAL SURVEY NOTES

18

GSI AREA \_\_\_\_\_ STATE/COUNTY AK. BOOK NO. \_\_\_\_\_ PAGE 18 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 15 DAY 3 MO 80 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <br><br> | STATION | VERTICAL |  |                     |               |           |                      |           | HORIZONTAL |            | REMARKS |                               |
|------|----------|---------|----------|--|---------------------|---------------|-----------|----------------------|-----------|------------|------------|---------|-------------------------------|
|      |          |         | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION |            | L/R OR D/I |         | RIGHT TURNED HORIZONTAL ANGLE |
|      |          |         |          | SLOPE  |                     |               |           |                      | HORIZ     | INST       |            |         |                               |
| 1    |          |         |          |  |                     |               |           |                      | 1166.0    |            |            | 1       |                               |
| 2    |          | 209     | 000      |  | 29-40               | 3.5           | + 1.6     |                      | 1167.6    |            | E.         | 2       |                               |
| 3    |          | 210     | 1760     |  | 09-40               | 7.7           | + 2.5     |                      | 1168.5    |            |            | 3       |                               |
| 4    |          | 211     | 2140     |  | 09-10               | 7.7           | + 30.7    |                      | 1196.7    |            |            | 4       |                               |
| 5    |          |         | 3355     |  | 09-07               | 10.0          | + 41.7    | ✓                    | 1207.7    |            | 1208.0     | 5       |                               |
| 6    |          |         | ✓        |  | 270-57              | 14.0          | + 41.6    |                      |           |            |            | 6       |                               |
| 7    |          |         | 2005     |  | 90-20               | 13.7          | + 30.0    |                      | 1237.8    |            |            | 7       |                               |
| 8    |          |         | ✓        |  | 269-30              | 15.0          | + 30.3    |                      |           |            |            | 8       |                               |
| 9    |          | 212     | 2640     |  | 269-30              | 9.0           | - 32.0    |                      | 1205.8    |            |            | 9       |                               |
| 10   |          | 213     | 1760     |  | 269-00              | 10.3          | - 41.0    |                      | 1196.8    |            |            | 10      |                               |
| 11   |          | 214     | 000      |  | 269-00              | 13.4          | - 28.8    |                      | 1209.0    |            | W          | 11      |                               |
| 12   |          | 215     | 0        |  | -                   | 3.4           |           |                      | 1232.4    |            | -          | 12      |                               |
| 13   |          | 216     | 000      |  | 00-50               | 3.6           | + 14.3    |                      | 1252.1    |            | E.         | 13      |                               |
| 14   |          | 217     | 1760     |  | 00-50               | 6.0           | + 29.0    |                      | 1266.7    |            | 1267.0     | 14      |                               |
| 15   |          |         | ✓        |  | 271-20              | 12.1          | + 28.8    |                      |           |            |            | 15      |                               |
| 16   |          |         |          |  |                     |               |           |                      |           |            |            | 16      |                               |
| 17   |          |         |          |  |                     |               |           |                      |           |            |            | 17      |                               |

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**SYMBOLS**    = BACKSIGHT    = INSTRUMENT SET-UP    = SIDESHOT    = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES











GSI AREA \_\_\_\_\_ STATE/COUNTY AK. BOOK NO. \_\_\_\_\_ PAGE 19 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 15 DAY 3 MO 80 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <input type="checkbox"/> Δ<br><input type="checkbox"/> SS<br><input type="checkbox"/> ⊙ | STATION | VERTICAL |  |       |                     |               |           |                      | HORIZONTAL |     | REMARKS |          |                               |
|------|---|---------|----------|--|-------|---------------------|---------------|-----------|----------------------|------------|-----|---------|----------|-------------------------------|
|      |   |         | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS |       | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION  |     |         | LR OR DR | RIGHT TURNED HORIZONTAL ANGLE |
|      |   |         |          | SLOPE  | HORIZ |                     |               |           |                      | INST       | ROD |         |          |                               |
| 1    |   |         |          |  |       |                     |               |           |                      |            |     |         | 1        |                               |
| 2    | ○   | 217     |          |  |       |                     |               |           |                      |            |     |         | 2        |                               |
| 3    | Δ   |         | ○○○      |  |       | -                   | +13.7         | +13.7     | 1280.4               |            |     |         | 3        |                               |
| 4    | CK  |         | ✓        |  |       | 269-30              | +6.1          | +13.8     |                      |            |     |         | 4        | ✓                             |
| 5    |   | 218     | ○        |  |       | -                   | 5.3           |           |                      |            |     |         | 5        | TP                            |
| 6    |   | 219     | ○○○      |  |       | -                   | 9.5           |           |                      |            |     |         | 6        | E                             |
| 7    |   | 220     | 1760     |  |       | 90-10               | 10.4          | -15.5     |                      |            |     |         | 7        |                               |
| 8    | ○   | 221     | 2640     |  |       | 90-20               | 7.8           | -23.2     |                      |            |     | 1257.6  | 8        |                               |
| 9    | CK  |         | ✓        |  |       | 269-47.55           | 74.0          | -23.3     |                      |            |     |         | 9        |                               |
| 10   | Δ   |         | 2640     |  |       | 89-40               | +12.6         | -2.8      | 1254.4               |            |     |         | 10       |                               |
| 11   | CK  |         | ✓        |  |       | 270-10              | +4.8          | -2.9      |                      |            |     |         | 11       |                               |
| 12   |   | 222     | 1760     |  |       | -                   | 9.3           |           |                      |            |     |         | 12       |                               |
| 13   |   | 223     | ○○○      |  |       | 269- <del>00</del>  | 72.6          | -28.0     |                      |            |     |         | 13       | ✓                             |
| 14   |   | 224     | ○        |  |       | -                   | 5.3           |           |                      |            |     |         | 14       | -                             |
| 15   | ○   |         | 610      |  |       | 89-00               | 8.2           | +2.4      |                      |            |     | 1257.1  | 15       | E                             |
| 16   | CK  |         | ✓        |  |       | 270-40              | +4.6          | +2.5      |                      |            |     |         | 16       |                               |
| 17   |   |         |          |  |       |                     |               |           |                      |            |     |         | 17       |                               |

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 SYMBOLS    Δ = BACKSIGHT    ⊠ = INSTRUMENT SET-UP    SS = SIDESHOT    ⊙ = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA LOOKOUT RIDGE. STATE/COUNTY AK. BOOK NO. \_\_\_\_\_ PAGE 20 OF \_\_\_\_\_  
 LINE/LOOP NO. 731. TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY. DATE 15 DY 3 MO 80 YR  
 SURVEYOR L. LTMAN. INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186.

| LINE |  | STATION | VERTICAL |  |                     |               |           |                      |           | HORIZONTAL |           | REMARKS |                               |     |   |
|------|---|---------|----------|--|---------------------|---------------|-----------|----------------------|-----------|------------|-----------|---------|-------------------------------|-----|---|
|      |   |         | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION |            | L/R OR DJ |         | RIGHT TURNED HORIZONTAL ANGLE |     |   |
|      |   |         |          | SLOPE  |                     |               |           |                      | HORIZ     | INST       |           |         |                               | ROD |   |
| 1    |  |         |          |  |                     |               |           |                      |           |            |           | 1256.9  |                               | 1   |   |
| 2    |  |         | 1150     |  | 00-20               | 7.7           | - 25.7    | 1231.2               |           |            |           |         |                               | 2   |   |
| 3    |  |         | ✓        |  | 272-00              | 74.4          | - 25.7    |                      |           |            |           |         |                               | 3   |   |
| 4    |   | 225     | 000      |  | 272-00              | 10.0          | + 20.7    |                      |           |            |           | 1251.9  |                               | 4   | W |
| 5    |   | 226     | 0        |  | -                   | 5.3           |           |                      |           |            |           | 1225.9  |                               | 5   | - |
| 6    |   | 227     | 000      |  | 91-30               | 9.0           | - 32.0    |                      |           |            |           | 1199.2  |                               | 6   | E |
| 7    |   | 228     | 1760     |  | 91-10               | 9.1           | - 44.9    |                      |           |            |           | 1186.3  |                               | 7   |   |
| 8    |  | 229     | 2640     |  | 90-50               | 7.5           | - 45.9    |                      |           |            |           | 1185.3  | 1185.7                        | 8   |   |
| 9    |  |         | ✓        |  | 269-18-34           | 14.0          | - 45.8    |                      |           |            |           |         |                               | 9   |   |
| 10   |  |         | 2640     |  | 90-20               | 12.7          | + 28.1    | 1213.5               |           |            |           |         |                               | 10  |   |
| 11   |  |         | ✓        |  | 269-30              | 15.4          | + 28.4    |                      |           |            |           |         |                               | 11  |   |
| 12   |   | 230     | 1760     |  | 269-30              | 13.0          | - 28.4    |                      |           |            |           | 1185.1  |                               | 12  |   |
| 13   |   | 231     | 000      |  | 269-00              | 0.0           | - 23.4    |                      |           |            |           | 1190.1  |                               | 13  | W |
| 14   |   | 232     | 0        |  | -                   | 5.3           |           |                      |           |            |           | 1208.2  |                               | 14  | - |
| 15   |   | 233     | 000      |  | 89-30               | 5.3           | + 2.4     |                      |           |            |           | 1215.9  |                               | 15  | E |
| 16   |  | 234     | 1760     |  | 89-30               | 3.2           | + 12.2    |                      |           |            |           | 1225.6  | 1226.0                        | 16  |   |
| 17   |  |         | ✓        |  | 270-40              | 0.4           | + 12.1    |                      |           |            |           |         |                               | 17  |   |

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SYMBOLS  = BACKSIGHT   
  = INSTRUMENT SET-UP   
  = SIDESHOT   
  = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

21

GSI AREA LOOKOUT RIDGE STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 21 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 17 DY 3 MO 80 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <br><br> | STATION     | VERTICAL |  |                     |               |           |                      |           | HORIZONTAL |               | REMARKS |                               |      |
|------|----------|-------------|----------|--|---------------------|---------------|-----------|----------------------|-----------|------------|---------------|---------|-------------------------------|------|
|      |          |             | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION |            | L/R OR D/I    |         | RIGHT TURNED HORIZONTAL ANGLE | LINE |
|      |          |             |          | SLOPE  |                     |               |           |                      | HORIZ     | INST       |               |         |                               |      |
| 1    |          | 234.        |          |  |                     |               |           |                      | 1225.6    |            |               | 1       |                               |      |
| 2    |          |             | 3520     |  | 90-34-05            | 14.0          | + 48.7    | 1274.6               |           |            |               | 2       |                               |      |
| 3    |          |             | ✓        |  | 269-25-40           | 14.0          | + 49.2    |                      |           |            |               | 3       |                               |      |
| 4    |          | 235.        | 2640     |  | 269-20              | 3.3           | - 39.0    | 1235.6               |           |            |               | 4       |                               |      |
| 5    |          | 236.        | 1760     |  | 269-00              | 10.6          | - 41.3    | 1233.3               |           |            |               | 5       |                               |      |
| 6    |          | 237.        | 880      |  | 269-00              | 18.0          | - 29.2    | 1245.4               |           |            | W             | 6       |                               |      |
| 7    |          | 238.        | 0        |  | -                   | 5.3           |           | 1269.3               |           |            | -             | 7       |                               |      |
| 8    |          |             |          |  |                     |               |           |                      |           |            |               | 8       |                               |      |
| 9    |          | BM. S. 148. | 1420     |  | -                   | 6.7           | - 6.7     | 1267.9               |           |            | NW            | 9       |                               |      |
| 10   |          |             | ✓        |  | 270-10              | 10.9          | - 6.8     |                      |           |            |               | 10      |                               |      |
| 11   |          |             |          |  |                     |               |           | 1268.1               |           |            |               | 11      |                               |      |
| 12   |          |             |          |  |                     |               |           | -0.2                 |           |            | VERTICAL TIE. | 12      |                               |      |
| 13   |          |             |          |  |                     |               |           |                      |           |            |               | 13      |                               |      |
| 14   |          |             |          |  |                     |               |           |                      |           |            |               | 14      |                               |      |
| 15   |          |             |          |  |                     |               |           |                      |           |            |               | 15      |                               |      |
| 16   |          |             |          |  |                     |               |           |                      |           |            |               | 16      |                               |      |
| 17   |          |             |          |  |                     |               |           |                      |           |            |               | 17      |                               |      |

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 SYMBOLS = BACKSIGHT = INSTRUMENT SET-UP = SIDESHOT = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA LOOKOUT RIDGE STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 22 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 17 DY 3 MO 80 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <input type="checkbox"/> Δ<br><input type="checkbox"/> SS<br><input type="checkbox"/> ○ | STATION  | VERTICAL |  |       |                     |               |           |                      | HORIZONTAL |     |           | REMARKS |                               |      |
|------|---|----------|----------|--|-------|---------------------|---------------|-----------|----------------------|------------|-----|-----------|---------|-------------------------------|------|
|      |   |          | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS |       | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION  |     | L/R OR DI |         | RIGHT TURNED HORIZONTAL ANGLE | LINE |
|      |   |          |          | SLOPE  | HORIZ |                     |               |           |                      | INST       | ROD |           |         |                               |      |
| 1    | ○   | BM-80148 |          |  |       |                     |               |           |                      | 1268.1     |     |           | 1       |                               |      |
| 2    |   |          |          |  |       |                     |               |           |                      |            |     |           | 2       |                               |      |
| 3    | Δ   |          | 1420     |  |       | -                   | +6.7          | +6.7      | 1274.8               |            |     |           | 3       |                               |      |
| 4    | CK  |          | ✓        |  |       | 270-10              | +10.9         | +6.8      |                      |            |     |           | 4       | NW                            |      |
| 5    |   | 230      | 0        |  |       | -                   | 5.3           |           |                      | 1269.5     |     |           | 5       | -                             |      |
| 6    |   | 239      | 330      |  |       | 00-50               | 7.4           | +10.5     |                      | 1295.3     |     |           | 6       | E                             |      |
| 7    |   | 240      | 1760     |  |       | 00-50               | 3.7           | +32.1     |                      | 1306.9     |     |           | 7       |                               |      |
| 8    | ○   |          | 2145     |  |       | 00-40               | 14.7          | +35.2     |                      | 1309.9     |     | 1310.1    | 8       |                               |      |
| 9    | CK  |          | ✓        |  |       | 271-20              | 749           | +35.0     |                      |            |     |           | 9       |                               |      |
| 10   | Δ   |          | 495      |  |       | -                   | 3.5           | +3.5      | 1313.4               |            |     |           | 10      |                               |      |
| 11   | CK  |          | ✓        |  |       | 270-20              | +6.4          | +3.5      |                      |            |     |           | 11      |                               |      |
| 12   |   | 241      | 0        |  |       | -                   | 3.3           |           |                      | 1308.1     |     |           | 12      | TP                            |      |
| 13   | ○   | 242      | 000      |  |       | 12-00               | 5.5           | -39.2     |                      | 1274.2     |     | 1274.4    | 13      |                               |      |
| 14   | CK  |          | ✓        |  |       | 268-20              | 13.7          | -39.3     |                      |            |     |           | 14      |                               |      |
| 15   |   |          |          |  |       |                     |               |           |                      |            |     |           | 15      |                               |      |
| 16   |   |          |          |  |       |                     |               |           |                      |            |     |           | 16      |                               |      |
| 17   |   |          |          |  |       |                     |               |           |                      |            |     |           | 17      |                               |      |

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**SYMBOLS**    Δ = BACKSIGHT     = INSTRUMENT SET-UP    SS = SIDESHOT    ○ = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA \_\_\_\_\_ STATE/COUNTY AK. BOOK NO. \_\_\_\_\_ PAGE 23 OF \_\_\_\_\_  
 LINE/LOOP NO. 731. TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY. DATE 17 DY 3 MO 80 YR  
 SURVEYOR L. LYMAN. INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1184.

| LINE |  | STATION    | VERTICAL |  |                     |               |           |                      | ELEVATION |     | L/R OR D/I | HORIZONTAL                    |            | REMARKS |
|------|--|------------|----------|--|---------------------|---------------|-----------|----------------------|-----------|-----|------------|-------------------------------|------------|---------|
|      |  |            | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | INST      | ROD |            | RIGHT TURNED HORIZONTAL ANGLE | LINE       |         |
|      |  |            |          | SLOPE  |                     |               |           |                      |           |     |            |                               |            |         |
| 1    |  | 242        |          |  |                     |               |           |                      | 1274.2    |     |            | 1                             |            |         |
| 2    |  |            | 2640     |  | 27-50               | +7.8          | -91.9     | 1182.3               |           |     |            | 2                             |            |         |
| 3    |  |            | ✓        |  | 272-18-02           | +14.0         | -91.9     |                      |           |     |            | 3                             |            |         |
| 4    |  | 243        | 1760     |  | 272-00              | 10.8          | +50.6     |                      | 1232.9    |     |            | 4                             |            |         |
| 5    |  | 244        | 000      |  | 272-00              | 10.5          | +20.2     |                      | 1202.5    |     |            | 5                             | ✓          |         |
| 6    |  | 245        | 0        |  | -                   | 3.3           |           |                      | 1177.0    |     |            | 6                             | -          |         |
| 7    |  | 246        | 000      |  | 91-30               | 0.2           | -31.7     |                      | 1150.6    |     |            | 7                             | E.         |         |
| 8    |  | 247        | 1760     |  | -                   | 6.7           | -6.7      |                      | 1175.6    |     | 1175.8     | 8                             |            |         |
| 9    |  |            | ✓        |  | 270-10              | 11.8          | -6.7      |                      |           |     |            | 9                             |            |         |
| 10   |  |            | 2640     |  | 91-05-40            | 14.0          | +14.4     | 1240.3               |           |     |            | 10                            |            |         |
| 11   |  |            | ✓        |  | 268-53-40           | 14.0          | +14.7     |                      |           |     |            | 11                            |            |         |
| 12   |  | 248        | 1760     |  | 260-20              | 73.9          | -65.0     |                      | 1175.3    |     |            | 12                            |            |         |
| 13   |  | 249        | 000      |  | 269-00              | 14.5          | -29.9     |                      | 1210.4    |     |            | 13                            | ✓          |         |
| 14   |  | 250        | 0        |  | -                   | 5.4           |           |                      | 1234.9    |     |            | 14                            | -          |         |
| 15   |  | 251        | 000      |  | 09-00               | 3.3           | +10.1     |                      | 1250.4    |     |            | 15                            | E.         |         |
| 16   |  | BM. 80 147 | 1200     |  | 09-00               | 7.4           | +13.5     |                      | 1253.8    |     |            | 16                            | 251 + 316' |         |
| 17   |  |            | CK       |  | 271-10              | 10.9          | +13.5     |                      | 1253.9    |     |            | 17                            |            |         |

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 SYMBOLS = BACKSIGHT = INSTRUMENT SET-UP = SIDESHOT = FORESIGHT

- 0.1 VERTICAL TIE.

# HORIZONTAL AND VERTICAL SURVEY NOTES

24

GSI AREA \_\_\_\_\_ STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 24 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 17 DY 3 MO 80 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <input type="checkbox"/> Δ<br><input type="checkbox"/> SS<br><input type="checkbox"/> ○ | STATION   | VERTICAL |  |           |                     |               |           |                      | HORIZONTAL |        | REMARKS |            |                               |
|------|---|-----------|----------|--|-----------|---------------------|---------------|-----------|----------------------|------------|--------|---------|------------|-------------------------------|
|      |   |           | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS |           | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION  |        |         | L/R OR DIR | RIGHT TURNED HORIZONTAL ANGLE |
|      |   |           |          | SLOPE  | HORIZ     |                     |               |           |                      | INST       | ROD    |         |            |                               |
| 1    |   |           |          |  |           |                     |               |           |                      | 1253.9     |        |         | 1          |                               |
| 2    | ○   | 87.80 147 |          |  |           |                     |               |           |                      |            |        |         | 2          |                               |
| 3    |   |           |          |  |           |                     |               |           |                      |            |        |         | 3          |                               |
| 4    | Δ   |           | 1440     |  | 87-40     | 19.6                | - 49.0        | 1204.9    |                      |            |        |         | 4          |                               |
| 5    | CK  |           | ✓        |  | 272-30    | 13.8                | - 41.0        |           |                      |            |        |         | 5          |                               |
| 6    |   | 252       | 880      |  | 272-30    | 6.0                 | + 32.3        | 1237.2    |                      |            |        | W       | 6          |                               |
| 7    |   | 253       | 0        |  | -         | 3.4                 |               | 1199.5    |                      |            |        | -       | 7          |                               |
| 8    |   | 254       | 000      |  | 91-40     | 12.0                | - 37.6        | 1167.3    |                      |            |        | F       | 8          |                               |
| 9    |   | 255       | 1760     |  | 91-40     | 7.0                 | - 58.2        | 1146.7    |                      |            |        |         | 9          |                               |
| 10   | ○   | 256       | 2640     |  | 91-40     | 72.1                | - 89.9        | 1116.0    |                      |            | 1116.7 |         | 10         |                               |
| 11   | CK  |           | ✓        |  | 268-22-27 | 74.0                | - 88.9        |           |                      |            |        |         | 11         |                               |
| 12   | Δ   |           | 3520     |  | 87-43-07  | 14.0                | - 3.3 ✓       | 1112.7    |                      |            |        |         | 12         |                               |
| 13   | CK  |           | ✓        |  | 270-16-50 | 14.0                | - 3.2         |           |                      |            |        |         | 13         |                               |
| 14   |   | 257       | 2640     |  | 269-50    | 12.3                | - 20.0        | 1092.7    |                      |            |        |         | 14         |                               |
| 15   |   | 258       | 1760     |  | 269-20    | 10.0                | - 31.3        | 1081.4    |                      |            |        |         | 15         |                               |
| 16   |   | 259       | 000      |  | 269-20    | 11.5                | - 21.7        | 1091.0    |                      |            |        | W       | 16         |                               |
| 17   |   | 260       | 0        |  | -         | 3.4                 |               | 1107.3    |                      |            |        | -       | 17         |                               |

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SYMBOLS    Δ = BACKSIGHT     = INSTRUMENT SET-UP    SS = SIDESHOT    ○ = FORESIGHT



# HORIZONTAL AND VERTICAL SURVEY NOTES

25

GSI AREA \_\_\_\_\_ STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 25 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 17 DY 3 MO 80 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <input type="checkbox"/> Δ<br><input type="checkbox"/> SS<br><input type="checkbox"/> ⊙ | STATION | VERTICAL |  |                     |               |           |                      |           | HORIZONTAL |            | REMARKS |                               |
|------|---|---------|----------|--|---------------------|---------------|-----------|----------------------|-----------|------------|------------|---------|-------------------------------|
|      |   |         | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION |            | L/R OR D/I |         | RIGHT TURNED HORIZONTAL ANGLE |
|      |   |         |          | SLOPE  |                     |               |           |                      | HORIZ     | INST       |            |         |                               |
| 1    |   |         |          |  |                     |               |           |                      | 1112.7    |            |            | 1       |                               |
| 2    | ⊙   | 261.    | 080      |  | 29-30               | 3.0           | + 2.7 ✓   |                      | 1115.4    |            | 1115.9 E   | 2       |                               |
| 3    | CK  |         | ✓        |  | 270-40              | 7.6           | + 2.6     |                      |           |            |            | 3       |                               |
| 4    | Δ   |         | 3520     |  | 89-06-50            | 74.0          | - 40.4    | 1075.1               |           |            |            | 4       |                               |
| 5    | CK  |         | ✓        |  | 270-53-00           | 74.0          | - 40.3 ✓  |                      |           |            |            | 5       |                               |
| 6    |   | 262.    | 2640     |  | 270-40              | 3.0           | + 26.9    | 1102.0               |           |            |            | 6       |                               |
| 7    |   | 263.    | 1760     |  | 270-10              | 3.2           | - 0.1     | 1075.0               |           |            |            | 7       |                               |
| 8    |   | 264.    | 080      |  | -                   | 71.5          |           | 1063.6               |           |            | W          | 8       |                               |
| 9    |   | 265.    | 0        |  | -                   | 3.4           |           | 1069.7               |           |            | -          | 9       |                               |
| 10   |   | 266.    | 880      |  | 90-20               | 8.7           | - 13.8    | 1061.3               |           |            | E          | 10      |                               |
| 11   |   | 267.    | 1760     |  | 90-40               | 8.0           | - 28.5    | 1046.6               |           |            |            | 11      |                               |
| 12   | ⊙   | 268.    | 2640     |  | 90-34               | 74.0          | - 40.1    | 1035.1               |           |            | 1035.6     | 12      |                               |
| 13   | CK  |         | ✓        |  | 269-27-30           | 75.0          | - 40.0 ✓  |                      |           |            |            | 13      |                               |
| 14   |   |         |          |  |                     |               |           |                      |           |            |            | 14      |                               |
| 15   |   |         |          |  |                     |               |           |                      |           |            |            | 15      |                               |
| 16   |   |         |          |  |                     |               |           |                      |           |            |            | 16      |                               |
| 17   |   |         |          |  |                     |               |           |                      |           |            |            | 17      |                               |

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SYMBOLS    Δ = BACKSIGHT    ⊠ = INSTRUMENT SET-UP    SS = SIDESHOT    ⊙ = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

26

GSI AREA \_\_\_\_\_ STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 26 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 17 DY 3 MO 80 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1126

| LINE | <input type="checkbox"/> Δ<br><input type="checkbox"/> SS<br><input type="checkbox"/> ⊙ | STATION | VERTICAL |  |                     |               |           |                      |           | HORIZONTAL |            | REMARKS |                               |
|------|---|---------|----------|--|---------------------|---------------|-----------|----------------------|-----------|------------|------------|---------|-------------------------------|
|      |   |         | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION |            | L/R OR DJI |         | RIGHT TURNED HORIZONTAL ANGLE |
|      |   |         |          | SLOPE  |                     |               |           |                      | HORIZ     | INST       |            |         |                               |
| 1    | ⊙   | 268     |          |  |                     |               |           |                      | 1035.1    |            |            | 1       |                               |
| 2    | Δ   |         | 1760     |  | 89-00               | 6.2           | - 24.5    | +                    | 1010.7    |            |            | 2       |                               |
| 3    | CK  |         | ✓        |  | 271-10              | 11.5          | - 24.3    | +                    |           |            |            | 3       |                               |
| 4    |   | 269     | 000      |  | 271-00              | 8.1           | + 7.3     |                      | 1018.0    |            | W          | 4       |                               |
| 5    |   | 270     | 0        |  | -                   | 5.3           |           |                      | 1005.4    |            | -          | 5       |                               |
| 6    |   | CREEK   | 640      |  | 94-00               | 9.0           | - 53.5    |                      | 957.2     |            | E          | 6       |                               |
| 7    |   | 271     | 000      |  | 92-00               | 7.6           | - 40.3    |                      | 970.4     |            |            | 7       |                               |
| 8    |   | 272     | 1760     |  | -                   | 4.0           |           |                      | 1006.7    |            |            | 8       |                               |
| 9    | ⊙   | 273     | 2140     |  | 89-20               | 9.9           | + 20.8    | ✓                    | 1031.5    |            | 1032.1     | 9       |                               |
| 10   | CK  |         | ✓        |  | 270-45-12           | 14.0          | + 20.7    |                      |           |            |            | 10      |                               |
| 11   | Δ   |         | 000      |  | 90-20               | 12.2          | + 17.3    | ✓                    | 1048.8    |            |            | 11      |                               |
| 12   | CK  |         | ✓        |  | 269-30              | 19.7          | + 17.4    |                      |           |            | W          | 12      |                               |
| 13   |   | 274     | 0        |  | -                   | 5.3           |           |                      | 1043.5    |            | -          | 13      |                               |
| 14   |   | 275     | 880      |  | 89-30               | 9.0           | - 1.3     |                      | 1047.5    |            | E          | 14      |                               |
| 15   |   | 276     | 1760     |  | 89-30               | 7.7           | + 7.7     |                      | 1056.5    |            |            | 15      |                               |
| 16   |   | 277     | 2640     |  | 99-30               | 10.0          | + 13.0    |                      | 1061.8    |            |            | 16      |                               |
| 17   |   |         |          |  |                     |               |           |                      |           |            |            | 17      |                               |

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SYMBOLS    Δ = BACKSIGHT    ⊠ = INSTRUMENT SET-UP    SS = SIDESHOT    ⊙ = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

27

GSI AREA LOOKOUT RIDGE STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 27 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 17 DY 3 MO 10 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <br><br> | STATION   | VERTICAL |  |       |                     |               |           |                      | HORIZONTAL |               | REMARKS |   |      |
|------|----------|-----------|----------|--|-------|---------------------|---------------|-----------|----------------------|------------|---------------|---------|---|------|
|      |          |           | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS |       | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION  |               |         | RIGHT TURNED HORIZONTAL ANGLE<br>LR OR DR | LINE |
|      |          |           |          | SLOPE  | HORIZ |                     |               |           |                      | INST       | ROD           |         |   |      |
| 1    |          |           |          |  |       |                     |               |           |                      |            |               | 1       |   |      |
| 2    |          | BM. 80146 | 2871     |  |       | 99-31-00            | 14.0          | +10.2     | ✓                    | 1059.0     |               | 2       | 277 + 231.                                |      |
| 3    |          |           | ✓        |  |       | 270-28-55           | 14.0          | +10.1     |                      |            |               | 3       |   |      |
| 4    |          |           |          |  |       |                     |               |           |                      | 1060.0     |               | 4       |   |      |
| 5    |          |           |          |  |       |                     |               |           |                      | -1.0       | VERTICAL TIE. | 5       |   |      |
| 6    |          |           | 2410     |  |       | 89-30               | 19.2          | -12.8     | +                    | 1047.3     |               | 6       |   |      |
| 7    |          |           | ✓        |  |       | 270-30              | 14.0          | -12.6     |                      |            |               | 7       |   |      |
| 8    |          | 278       | 1760     |  |       | 270-30              | 9.0           | +6.4      |                      | 1053.7     |               | 8       |   |      |
| 9    |          | 279       | 870      |  |       | 270-30              | 8.1           | -0.4      |                      | 1046.9     |               | 9       | W   |      |
| 10   |          | 280       | 0        |  |       | -                   | 5.3           |           |                      | 1042.0     |               | 10      | -   |      |
| 11   |          | 281       | 880      |  |       | 91-10               | 12.9          | -30.8     |                      | 1016.5     | 1015.0 E.     | 11      |   |      |
| 12   |          |           | ✓        |  |       | 268-54-20           | 14.0          | -30.8     |                      |            |               | 12      |   |      |
| 13   |          |           | 2140     |  |       | 89-30               | 12.2          | -10.8     |                      | 1005.8     |               | 13      |   |      |
| 14   |          |           | ✓        |  |       | 270-20              | 4.7           | -10.7     | ✓                    |            |               | 14      |   |      |
| 15   |          | 282       | 1760     |  |       | 269-00              | 14.3          | -45.0     |                      | 960.8      |               | 15      |   |      |
| 16   |          | 283       | 880      |  |       | 217-30              | 9.6           | -47.9     |                      | 957.9      |               | 16      | W CRK. 150' WEST.                         |      |
| 17   |          | 284       | 0        |  |       | -                   | 5.3           |           |                      | 1000.5     |               | 17      | -   |      |

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SYMBOLS = BACKSIGHT   
 = INSTRUMENT SET-UP   
 = SIDESHOT   
 = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

28

GSI AREA \_\_\_\_\_ STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 28 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 17 DY 3 MO 80 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <br><br> | STATION | VERTICAL |  |                     |               |           |                      |           | HORIZONTAL |           | REMARKS         |                               |
|------|----------|---------|----------|--|---------------------|---------------|-----------|----------------------|-----------|------------|-----------|-----------------|-------------------------------|
|      |          |         | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION |            | LR OR DJ  |                 | RIGHT TURNED HORIZONTAL ANGLE |
|      |          |         |          | SLOPE  |                     |               |           |                      | HORIZ     | INST       |           |                 |                               |
| 1    |          |         |          |  |                     |               |           |                      |           |            |           |                 |                               |
| 2    |          | 2845    | 280      |  | 89-05               | 7.5           | + 5.9     |                      | 1011.6    |            | 1009.9 E. |                 |                               |
| 3    |          |         | ✓        |  | 271-20              | 14.7          | + 5.8 ✓   |                      |           |            |           |                 |                               |
| 4    |          |         | 1925     |  | 89-05               | +4.7          | - 28.9    | 922.8                |           |            |           |                 |                               |
| 5    |          |         | ✓        |  | 271-10              | +10.4         | - 28.2 ✓  |                      |           |            |           |                 |                               |
| 6    |          | 286     | 1045     |  | -                   | 4.3           |           |                      | 978.5     |            |           | CRK. 495' EAST. |                               |
| 7    |          | 2867    | 165      |  | 267-00              | 11.0          | - 19.6    |                      | 963.2     |            | W         |                 |                               |
| 8    |          |         | 0        |  | -                   | 5.3           |           |                      | 977.5     |            | -         |                 |                               |
| 9    |          | 2878    | 715      |  | -                   | 9.3           |           |                      | 973.5     |            | E         |                 |                               |
| 10   |          | 2887    | 1595     |  | 89-00               | 7.0           | + 20.8    |                      | 1003.6    |            |           |                 |                               |
| 11   |          | 28990   | 2475     |  | 88-50               | 8.0           | + 42.4    |                      | 1025.2    |            | 1023.3    |                 |                               |
| 12   |          |         | ✓        |  | 271-18-22           | 14.0          | + 42.4    |                      |           |            |           |                 |                               |
| 13   |          |         | 1760     |  | 90-40               | 10.9          | + 31.4    | 1056.6               |           |            |           |                 |                               |
| 14   |          |         | ✓        |  | 269-10              | 15.8          | + 31.4    |                      |           |            |           |                 |                               |
| 15   |          | 2901    | 880      |  | 269-50              | 14.4          | - 17.0    |                      | 1039.6    |            | W         |                 |                               |
| 16   |          | 2912    | 0        |  | -                   | 5.3           |           |                      | 1051.3    |            | -         |                 |                               |
| 17   |          | 2923    | 880      |  | -                   | 9.2           |           |                      | 1047.4    |            | E         |                 |                               |

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# HORIZONTAL AND VERTICAL SURVEY NOTES

29

GSI AREA \_\_\_\_\_ STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 27 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 17-DY 3 MO 70 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <input type="checkbox"/> Δ<br><input type="checkbox"/> SS<br><input type="checkbox"/> ⊙ | STATION | VERTICAL  |  |                     |               |           |                      | ELEVATION |        | L/R OR DI | RIGHT TURNED HORIZONTAL ANGLE | LINE | REMARKS |
|------|---|---------|-----------|--|---------------------|---------------|-----------|----------------------|-----------|--------|-----------|-------------------------------|------|---------|
|      |   |         | DISTANCE  | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | INST      | ROD    |           |                               |      |         |
|      |   |         | SLOPE<br> | HORIZ<br>  |                     |               |           |                      |           |        |           |                               |      |         |
| 1    |   |         |           |  |                     |               |           |                      | 1056.6    |        |           | 1                             |      |         |
| 2    |   | 294     | 1760      |  |                     | 90-23         | 14.0      | - 25.8               |           | 1030.8 |           | 2                             |      |         |
| 3    | ⊙   | 295     | 2640      |  |                     | 90-29-20      | 14.0      | - 36.5               |           | 1020.1 | 1018.0    | 3                             |      |         |
| 4    | CK  |         | ✓         |  |                     | 269-32        | 15.0      | - 36.5               |           |        |           | 4                             |      |         |
| 5    | Δ   |         | 1760      |  |                     | 90-40         | 19.6      | + 30.1               | ✓         | 1050.2 |           | 5                             |      |         |
| 6    | CK  |         | ✓         |  |                     | 269-30        | 14.9      | + 30.2               |           |        |           | 6                             |      |         |
| 7    |   | 296     | 880       |  |                     | 269-30        | 13.1      | - 20.8               |           | 1029.4 |           | 7                             | ✓    |         |
| 8    |   | 297     | 0         |  |                     | -             | 5.3       |                      |           | 1044.9 |           | 8                             | -    |         |
| 9    |   | 298     | 880       |  |                     | -             | 3.1       |                      |           | 1047.1 |           | 9                             | E    |         |
| 10   |   | 299     | 1760      |  |                     | 89-40         | 8.0       | + 2.2                |           | 1052.4 |           | 10                            |      |         |
| 11   | ⊙   | 300     | 2640      |  |                     | 89-30         | 9.7       | + 13.3               |           | 1063.4 | 1061.3    | 11                            |      |         |
| 12   | CK  |         | ✓         |  |                     | 270-35-15     | 14.0      | + 13.1               |           |        |           | 12                            |      |         |
| 13   |   |         |           |  |                     |               |           |                      |           |        |           | 13                            |      |         |
| 14   |   |         |           |  |                     |               |           |                      |           |        |           | 14                            |      |         |
| 15   |   |         |           |  |                     |               |           |                      |           |        |           | 15                            |      |         |
| 16   |   |         |           |  |                     |               |           |                      |           |        |           | 16                            |      |         |
| 17   |   |         |           |  |                     |               |           |                      |           |        |           | 17                            |      |         |

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# HORIZONTAL AND VERTICAL SURVEY NOTES

30

GSI AREA \_\_\_\_\_ STATE/COUNTY AK. BOOK NO. \_\_\_\_\_ PAGE 30 OF \_\_\_\_\_  
 LINE/LOOP NO. 731. TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY. DATE 18 DAY 3 MO 80 YR.  
 SURVEYOR L. LTMAN. INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <br><br> | STATION | VERTICAL |  |           |                     |               |           | ELEVATION            |        | L/R OR DI | RIGHT TURNED HORIZONTAL ANGLE | LINE | REMARKS |     |
|------|----------|---------|----------|--|-----------|---------------------|---------------|-----------|----------------------|--------|-----------|-------------------------------|------|---------|-----|
|      |          |         | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS |           | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | INST   |           |                               |      |         | ROD |
|      |          |         |          | SLOPE<br>  | HORIZ<br> |                     |               |           |                      |        |           |                               |      |         |     |
| 1    |          | 300     |          |  |           |                     |               |           |                      | 1063.4 |           |                               | 1    |         |     |
| 2    |          |         | 1710     |  | 91-00     | 13.6                | + 44.3        | 1107.8    |                      |        |           |                               | 2    |         |     |
| 3    |          |         | ✓        |  | 268-50    | +0.6                | + 44.4        |           |                      |        |           |                               | 3    |         |     |
| 4    |          | 301     | 000      |  | 267-00    | 13.8                | - 29.2        |           |                      | 1078.6 |           |                               | W 4  |         |     |
| 5    |          | 302     | 0        |  | -         | 3.3                 |               |           |                      | 1102.5 |           |                               | - 5  |         |     |
| 6    |          | 303     | 000      |  | -         | 12.8                |               |           |                      | 1095.0 |           |                               | E 6  |         |     |
| 7    |          | 304     | 1760     |  | 89-50     | 4.5                 | + 0.6         |           |                      | 1108.4 |           |                               | 7    |         |     |
| 8    |          | 305     | 2640     |  | 89-00     | 10.0                | + 36.1        |           |                      | 1143.9 |           |                               | 8    |         |     |
| 9    |          | 306     | 3520     |  | 88-40     | 9.8                 | + 72.1        |           |                      | 1179.9 |           |                               | 9    |         |     |
| 10   |          | 307     | 4400     |  | 88-26-55  | 15.0                | + 104.1       |           |                      | 1211.9 |           |                               | 10   |         |     |
| 11   |          |         | 4729     |  | 88-30-47  | 15.0                | + 107.7       |           |                      | 1215.2 | 1213.1    |                               | 11   | TP.     |     |
| 12   |          |         | ✓        |  | 271-28-50 | 15.0                | + 107.1       |           |                      |        |           |                               | 12   |         |     |
| 13   |          |         | 550      |  | 89-30     | 18.5                | + 3.7         | 1219.9    |                      |        |           |                               | 13   |         |     |
| 14   |          |         | ✓        |  | 271-00    | 13.3                | + 3.7         |           |                      |        |           |                               | W 14 |         |     |
| 15   |          | 308     | 0        |  | -         | 5.3                 |               |           |                      | 1213.6 |           |                               | - 15 |         |     |
| 16   |          | 309     | 000      |  | 91-00     | 10.7                | - 26.2        |           |                      | 1192.7 | 1190.6    | E                             | 16   |         |     |
| 17   |          |         | ✓        |  | 268-40    | 5.7                 | - 26.2        |           |                      | 1192.7 |           |                               | 17   |         |     |

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# HORIZONTAL AND VERTICAL SURVEY NOTES

31

GSI AREA \_\_\_\_\_ STATE/COUNTY AK. BOOK NO. \_\_\_\_\_ PAGE 31 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY. DATE 18 DY 3 MO 80 YR  
 SURVEYOR L. LAMAN. INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186.

| LINE |  | STATION   | VERTICAL |  |                     |               |           |                      |           | HORIZONTAL |                               | REMARKS |      |
|------|--|-----------|----------|--|---------------------|---------------|-----------|----------------------|-----------|------------|-------------------------------|---------|------|
|      |  |           | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION |            | RIGHT TURNED HORIZONTAL ANGLE |         | LINE |
|      |  |           |          | SLOPE  |                     |               |           |                      | HORIZ     | INST       |                               |         |      |
| 1    |  | 309.      |          |  |                     |               |           |                      | 1192.7    |            |                               | 1       |      |
| 2    |  |           | 2640     |  | 89-30               | 5.4           | - 17.6    | 1175.2               |           |            |                               | 2       |      |
| 3    |  |           | ✓        |  | 270-40              | 7.3           | - 17.4    |                      |           |            |                               | 3       |      |
| 4    |  | 310       | 1760     |  | 249-00              | 7.4           | - 32.1    |                      | 1143.1    |            |                               | 4       |      |
| 5    |  | 311       | 880      |  | 266-00              | 2.0           | - 67.2    |                      | 1108.0    |            |                               | 5       |      |
| 6    |  | 312       | 0        |  | -                   | 5.3           |           |                      | 1169.9    |            |                               | 6       |      |
| 7    |  | 313       | 820      |  | 86-30               | 3.3           | + 48.3    |                      | 1223.5    |            |                               | 7       |      |
| 8    |  | 314       | 1760     |  | 86-30               | 2.0           | + 101.2   |                      | 1276.3    | 1274.0     |                               | 8       |      |
| 9    |  |           | ✓        |  | 273-40              | 7.3           | + 101.0   |                      |           |            |                               | 9       |      |
| 10   |  |           | 880      |  | 92-30               | 7.3           | + 48.6    |                      |           |            |                               | 10      |      |
| 11   |  |           | ✓        |  | 267-20              | 7.8           | + 48.7    | 1325.0               |           |            |                               | 11      |      |
| 12   |  | 315       | 0        |  | -                   | 3.3           |           |                      | 1319.7    |            |                               | 12      |      |
| 13   |  | RM. 80145 | 1200     |  | 87-50               | 8.1           | + 37.2    |                      | 1362.1    |            |                               | 13      |      |
| 14   |  |           | ✓        |  | 272-20              | 11.8          | + 37.0    |                      |           |            |                               | 14      |      |
| 15   |  |           |          |  |                     |               |           |                      | 1359.7    |            |                               | 15      |      |
| 16   |  |           |          |  |                     |               |           |                      |           |            |                               | 16      |      |
| 17   |  |           |          |  |                     |               |           |                      | + 2.4     | VERTICAL   |                               | 17      |      |

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 SYMBOLS = BACKSIGHT = INSTRUMENT SET-UP = SIDESHOT = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

32

GSI AREA LOOKOUT RIDGE STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 32 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 18 DY 3 MO 80 YR  
 SURVEYOR C. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <input type="checkbox"/> Δ<br><input type="checkbox"/> SS<br><input type="checkbox"/> ○ | STATION  | VERTICAL |  |                     |               |           |                      |           | HORIZONTAL |           | REMARKS |                               |
|------|---|----------|----------|--|---------------------|---------------|-----------|----------------------|-----------|------------|-----------|---------|-------------------------------|
|      |   |          | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION |            | L/R OR DI |         | RIGHT TURNED HORIZONTAL ANGLE |
|      |   |          |          | SLOPE  |                     |               |           |                      | HORIZ     | INST       |           |         |                               |
| 1    |   |          |          |  |                     |               |           |                      |           |            |           | 1       |                               |
| 2    | ○   | BM 80145 |          |  |                     |               |           |                      |           |            |           | 2       |                               |
| 3    |   |          |          |  |                     |               |           |                      |           |            |           | 3       |                               |
| 4    | Δ   |          | 1200     |  |                     | 97-50         | +8.1      | -                    | 37.2      | 1322.6     |           | 4       |                               |
| 5    | CK  |          | ✓        |  |                     | 272-20        | +11.8     | -                    | 37.0      |            |           | 5       | SE                            |
| 6    |   | 315.     | 0        |  |                     | -             | 3.3       |                      |           | 1317.3     |           | 6       | -                             |
| 7    | ○   |          | 610      |  |                     | 89-20         | 70.2      | -                    | 3.8       | 1318.8     |           | 7       | E                             |
| 8    | CK  |          | ✓        |  |                     | 270-30        | 7.1       | -                    | 3.8       |            |           | 8       |                               |
| 9    | Δ   |          | 2035     |  |                     | 87-40         | 71.7      | -                    | 71.1      | 1247.8     |           | 9       |                               |
| 10   | CK  |          | ✓        |  |                     | 272-23-36     | 74.0      | -                    | 70.9      |            |           | 10      |                               |
| 11   |   | 316.     | 1760     |  |                     | 232-10        | 3.0       | +                    | 63.5      | 1311.3     |           | 11      |                               |
| 12   |   | 317.     | 880      |  |                     | 272-00        | 2.5       | +                    | 28.2      | 1276.0     |           | 12      | W                             |
| 13   |   | 318.     | 0        |  |                     | -             | 3.3       |                      |           | 1242.5     |           | 13      | -                             |
| 14   |   | 319.     | 880      |  |                     | 93-00         | 3.7       | -                    | 51.7      | 1196.1     |           | 14      | E                             |
| 15   |   | 320.     | 1760     |  |                     | 92-40         | 70.0      | -                    | 91.8      | 1156.0     |           | 15      |                               |
| 16   | ○   | 321      | 2640     |  |                     | 90-30         | 74.2      | -                    | 37.2      | 1210.6     |           | 16      |                               |
| 17   | CK  |          | ✓        |  |                     | 269-24-36     | 70.0      | -                    | 37.2      |            |           | 17      |                               |

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# HORIZONTAL AND VERTICAL SURVEY NOTES

33

GSI AREA \_\_\_\_\_ STATE/COUNTY AK. BOOK NO. \_\_\_\_\_ PAGE 33 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 11 DY 3 MO 80 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <input type="checkbox"/> Δ<br><input type="checkbox"/> SS<br><input type="checkbox"/> ○ | STATION | VERTICAL |  |                     |               |           |                      |           | HORIZONTAL |           | REMARKS |                               |
|------|---|---------|----------|--|---------------------|---------------|-----------|----------------------|-----------|------------|-----------|---------|-------------------------------|
|      |   |         | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION |            | L/R OR DJ |         | RIGHT TURNED HORIZONTAL ANGLE |
|      |   |         |          | SLOPE  |                     |               |           |                      | HORIZ     | INST       |           |         |                               |
| 1    | ○   | 321     |          |  |                     |               |           |                      | 1210.6    |            |           | 1       |                               |
| 2    | Δ   |         | 2640     |  | 93-21-23            | ↑14.0         | +168.3    | 1379.0               |           |            |           | 2       |                               |
| 3    | CK  |         | ✓        |  | 266-38-15           | ↑14.0         | +168.6    |                      |           |            |           | 3       |                               |
| 4    |   | 322     | 1760     |  | 266-30              | ↑2.0          | -113.2    | 1265.8               |           |            |           | 4       |                               |
| 5    |   | 323     | 880      |  | 216-30              | ↑2.2          | -59.8     | 1319.2               |           |            | W         | 5       |                               |
| 6    |   | 324     | 0        |  | -                   | ↑3.3          |           | 1373.7               |           |            | -         | 6       |                               |
| 7    | ○   | 325     | 880      |  | 86-30               | ↑3.6          | +50.0     | 1429.0               |           |            | E         | 7       |                               |
| 8    | CK  |         | ✓        |  | 273-40              | ↑2.2          | +50.0     |                      |           |            |           | 8       |                               |
| 9    | Δ   |         | 715      |  | 91-05               | ↑14.7         | +27.2     | 1456.2               |           |            |           | 9       |                               |
| 10   | CK  |         | ✓        |  | 268-30              | ↑8.5          | +27.2     |                      |           |            | W         | 10      |                               |
| 11   |   |         | 0        |  | -                   | ↑3.3          |           | 1450.9               |           |            | -         | 11      |                               |
| 12   |   | 326     | 165      |  | -                   | ↑3.5          |           | 1450.7               |           |            | E         | 12      |                               |
| 13   | ○   | 327     | 1045     |  | 91-05               | ↑2.6          | -30.8     | 1425.3               |           |            |           | 13      |                               |
| 14   | CK  |         | ✓        |  | 269-04.24           | ↑14.0         | -30.9     |                      |           |            |           | 14      |                               |
| 15   |   |         |          |  |                     |               |           |                      |           |            |           | 15      |                               |
| 16   |   |         |          |  |                     |               |           |                      |           |            |           | 16      |                               |
| 17   |   |         |          |  |                     |               |           |                      |           |            |           | 17      |                               |

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SYMBOLS    Δ = BACKSIGHT     = INSTRUMENT SET-UP    SS = SIDESHOT    ○ = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

34

GSI AREA \_\_\_\_\_ STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 34 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 19 DY 3 MO 80 YR  
 SURVEYOR L. LAMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <input type="checkbox"/> Δ<br><input type="checkbox"/> SS<br><input type="checkbox"/> ⊙ | STATION | VERTICAL |  |                     |               |           |                      |           | HORIZONTAL |           | REMARKS |                               |
|------|---|---------|----------|--|---------------------|---------------|-----------|----------------------|-----------|------------|-----------|---------|-------------------------------|
|      |   |         | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION |            | L/R OR DI |         | RIGHT TURNED HORIZONTAL ANGLE |
|      |   |         |          | SLOPE  |                     |               |           |                      | HORIZ     | INST       |           |         |                               |
| 1    | ⊙   | 327     |          |  |                     |               |           |                      | 1425.3    |            |           | 1       |                               |
| 2    | Δ   |         | 1760     |  | 86-40               | +12.1         | -70.1     | 1335.3               |           |            |           | 2       |                               |
| 3    | AK  |         | ✓        |  | 273-23-26           | +14.0         | -89.9     |                      |           |            |           | 3       |                               |
| 4    |   | 328     | 880      |  | 273-20              | -5.3          | +45.8     | 1381.1               |           |            | W         | 4       |                               |
| 5    |   | 329     | 0        |  | -                   | 5.3           |           | 1330.0               |           |            | -         | 5       |                               |
| 6    |   | 330     | 880      |  | 93-00               | -4.1          | -50.1     | 1285.2               |           |            | E         | 6       |                               |
| 7    |   | 331     | 1760     |  | 93-00               | 7.5           | -106.5    | 1228.7               |           |            |           | 7       |                               |
| 8    | ⊙   | 332     | 2640     |  | 91-10               | 73.9          | -67.6     | 1267.6               |           |            |           | 8       |                               |
| 9    | AK  |         | ✓        |  | 268-40              | -6.4          | -67.8     |                      |           |            |           | 9       |                               |
| 10   | Δ   |         | 1595     |  | 93-20               | +8.5          | +101.1    | 1368.8               |           |            |           | 10      |                               |
| 11   | AK  |         | ✓        |  | 266-50              | +13.3         | +101.3    |                      |           |            |           | 11      |                               |
| 12   |   | 333     | 715      |  | 267-00              | 8.1           | -45.5     | 1323.3               |           |            | W         | 12      |                               |
| 13   |   |         | 0        |  | -                   | 5.3           |           | 1363.5               |           |            | -         | 13      |                               |
| 14   |   | 334     | 165      |  | 87-20               | -7.1          | +0.6      | 1369.4               |           |            | E         | 14      |                               |
| 15   |   | 335     | 1045     |  | 88-00               | -5.3          | +31.1     | 1399.9               |           |            |           | 15      |                               |
| 16   |   |         |          |  |                     |               |           |                      |           |            |           | 16      |                               |
| 17   |   |         |          |  |                     |               |           |                      |           |            |           | 17      |                               |

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 SYMBOLS    Δ = BACKSIGHT    ⊠ = INSTRUMENT SET-UP    SS = SIDESHOT    ⊙ = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA \_\_\_\_\_ STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 35 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 18 DY 3 MO 90 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <br>SS | STATION | VERTICAL  |  |                     |               |           |                      |           | ELEVATION |  | L/R OR DI | RIGHT TURNED HORIZONTAL ANGLE | LINE | REMARKS     |
|------|--------|---------|-----------|--|---------------------|---------------|-----------|----------------------|-----------|-----------|--|-----------|-------------------------------|------|-------------|
|      |        |         | DISTANCE  | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION |           |  |           |                               |      |             |
|      |        |         | SLOPE<br> | HORIZ  |                     |               |           |                      | INST      | ROD       |  |           |                               |      |             |
| 1    |        |         |           |  |                     |               |           |                      |           | 1318.8    |  |           |                               | 1    |             |
| 2    |        | 336     | 1925      |  |                     | 87-20         | 4.6       | +84.9                |           | 1453.7    |  |           | E                             | 2    |             |
| 3    |        | 337     | 2805      |  |                     | 87-00         | 7.2       | +139.4               |           | 1508.2    |  |           |                               | 3    |             |
| 4    | o      |         | 2970      |  |                     | 87-00         | 12.1      | +143.1               | 43.0      | 1511.8    |  |           |                               | 4    | TP.         |
| 5    | CK     |         | ✓         |  |                     | 273-01-50     | 14.0      | +142.8               |           |           |  |           |                               | 5    | 337 + 165'  |
| 6    | Δ      |         | 720       |  |                     | 86-20         | 7.9       | -36.1                |           | 1475.8    |  |           |                               | 6    |             |
| 7    | CK     |         | ✓         |  |                     | 274-00        | 14.1      | -36.0                |           |           |  |           | W                             | 7    |             |
| 8    |        | 338     | 0         |  |                     | -             | 5.3       |                      |           | 1490.5    |  |           | -                             | 8    |             |
| 9    |        | 339     | 880       |  |                     | 94-20         | 2.0       | -72.3                |           | 1403.5    |  |           | E                             | 9    |             |
| 10   |        | 340     | 1760      |  |                     | 93-30         | 9.0       | -116.2               |           | 1359.6    |  |           |                               | 10   |             |
| 11   | o      | 341     | 2640      |  |                     | 93-00         | 12.6      | -150.6               |           | 1325.1    |  |           |                               | 11   |             |
| 12   | CK     |         | ✓         |  |                     | 266-50        | 5.2       | -150.8               |           |           |  |           |                               | 12   |             |
| 13   | Δ      |         | 3520      |  |                     | 90-02-30      | 14.0      | +16.6                | ✓         | 1341.7    |  |           |                               | 13   |             |
| 14   | CK     |         | ✓         |  |                     | 269-53-40     | 10.0      | +16.7                |           |           |  |           |                               | 14   |             |
| 15   |        | 342     | 2640      |  |                     | 268-50        | 14.4      | -68.1                |           | 1273.6    |  |           |                               | 15   |             |
| 16   |        | 343     | 1760      |  |                     | 266-46-55     | 14.0      | -117.6               |           | 1224.1    |  |           |                               | 16   | + 5. Boost. |
| 17   |        | 344     | 880       |  |                     | 267-00        | 5.7       | -51.7                |           | 1290.0    |  |           | W                             | 17   |             |

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# HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA \_\_\_\_\_ STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 31 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 18 DY 3 MO 80 YR  
 SURVEYOR L. LYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1181

| LINE | <input type="checkbox"/> Δ<br><input type="checkbox"/> SS<br><input type="checkbox"/> ○ | STATION | VERTICAL |  |       |                     |               |           |                      | HORIZONTAL |     | REMARKS |           |                               |      |
|------|---|---------|----------|--|-------|---------------------|---------------|-----------|----------------------|------------|-----|---------|-----------|-------------------------------|------|
|      |   |         | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS |       | VERTICAL ANGLE OBS. | ROD ROD OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION  |     |         | L/R OR DI | RIGHT TURNED HORIZONTAL ANGLE | LINE |
|      |   |         |          | SLOPE  | HORIZ |                     |               |           |                      | INST       | ROD |         |           |                               |      |
| 1    |   |         |          |  |       |                     |               |           | 1341.7               |            |     | W       | 1         |                               |      |
| 2    |   | 345     | 0        |  |       | 5.4                 |               |           |                      | 1336.3     |     |         | -         | 2                             |      |
| 3    |   | 346     | 220      |  |       | 4.3                 | + 26.4        |           |                      | 1368.1     |     |         | E         | 3                             |      |
| 4    |   | 347     | 1760     |  |       | 7.8                 | + 61.8        |           |                      | 1403.5     |     |         |           | 4                             |      |
| 5    |   | 348     | 2640     |  |       | 2.3                 | + 105.1       |           |                      | 1446.8     |     |         |           | 5                             |      |
| 6    | ○   | 349     | 3520     |  |       | 3.9                 | + 149.7       |           |                      | 1491.3     |     |         |           | 6                             |      |
| 7    | CK  |         | ✓        |  |       | 14.0                | + 149.6       |           |                      |            |     |         |           | 7                             |      |
| 8    | Δ   |         | 880      |  |       | 11.6                | + 47.4        | 1538.7    |                      |            |     |         |           | 8                             |      |
| 9    | CK  |         | ✓        |  |       | 7.1                 | + 47.4        |           |                      |            |     | W       |           | 9                             |      |
| 10   |   | 350     | 0        |  |       | 5.3                 |               |           |                      | 1533.4     |     |         | -         | 10                            |      |
| 11   | ○   |         | 495      |  |       | 5.6                 | - 5.6         |           |                      | 1533.1     |     |         | E         | 11                            |      |
| 12   | CK  |         | ✓        |  |       | 7.1                 | - 5.7         |           |                      |            |     |         |           | 12                            |      |
| 13   | Δ   |         | 385      |  |       | 16.8                | - 8.9         | 1524.3    |                      |            |     |         |           | 13                            |      |
| 14   | CK  |         | ✓        |  |       | 4.6                 | - 8.8         |           |                      |            |     | W       |           | 14                            |      |
| 15   |   | 351     | 0        |  |       | 5.3                 |               |           |                      | 1519.0     |     |         | -         | 15                            |      |
| 16   |   | 352     | 880      |  |       | 7.6                 | - 61.2        |           |                      | 1463.1     |     |         | E         | 16                            |      |
| 17   |   |         |          |  |       |                     |               |           |                      |            |     |         |           | 17                            |      |

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# HORIZONTAL AND VERTICAL SURVEY NOTES

37

GSI AREA LOOKOUT RIDGE STATE/COUNTY AK BOOK NO. \_\_\_\_\_ PAGE 37 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 18 DY 3 MO 80 YR  
 SURVEYOR L. CTAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <br><small>SS</small> | STATION             | VERTICAL |  |                     |                     |                |                      |           | HORIZONTAL |           | REMARKS |                               |      |
|------|-----------------------|---------------------|----------|--|---------------------|---------------------|----------------|----------------------|-----------|------------|-----------|---------|-------------------------------|------|
|      |                       |                     | DISTANCE | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS | VERTICAL ANGLE OBS. | ROD RDG OR HI       | ELEV DIFF      | FINAL ELEVATION DIFF | ELEVATION |            | L/R OR DJ |         | RIGHT TURNED HORIZONTAL ANGLE | LINE |
|      |                       |                     |          | SLOPE  |                     |                     |                |                      | HORIZ     | INST       |           |         |                               |      |
| 1    |                       |                     |          |  |                     |                     |                |                      | 1524.3    |            |           | 1       |                               |      |
| 2    |                       | 353                 | 1760     |  |                     | 93-30               | 12.0           | -                    | 119.2     |            |           | E 2     | LAST SP.                      |      |
| 3    |                       |                     | ✓        |  |                     | 266-20              | 7.1            | -                    | 119.4     |            |           |         | 3                             | EAST |
| 4    |                       |                     |          |  |                     |                     |                |                      |           |            |           |         | 4                             |      |
| 5    |                       |                     |          |  |                     |                     |                |                      |           |            |           |         | 5                             |      |
| 6    |                       | TS. # 12 (365)      | 3025     |  |                     | 93-30-30            | 4.5            | -                    | 189.3     |            |           | E 6     |                               |      |
| 7    |                       | <del>TS. # 24</del> |          |  |                     | <del>91-35-55</del> | <del>4.5</del> |                      |           |            |           |         | 7                             |      |
| 8    |                       | TS. # 24 (377)      | 4345     |  |                     | 92-32-10            | 4.5            | -                    | 196.6     |            |           | E 8     |                               |      |
| 9    |                       |                     |          |  |                     |                     |                |                      |           |            |           |         | 9                             |      |
| 10   |                       | TS. # 34 (389)      | 5665     |  |                     | 91-36-00            | 5.0            | -                    | 163.1     |            |           | E 10    |                               |      |
| 11   |                       |                     |          |  |                     |                     |                |                      |           |            |           |         | 11                            |      |
| 12   |                       | TS. # 48 (401)      | 6985     |  |                     | 91-07-50            | 5.0            | -                    | 142.8     |            |           | E 12    |                               |      |
| 13   |                       |                     |          |  |                     |                     |                |                      |           |            |           |         | 13                            |      |
| 14   |                       |                     |          |  |                     |                     |                |                      |           |            |           |         | 14                            |      |
| 15   |                       |                     |          |  |                     |                     |                |                      |           |            |           |         | 15                            |      |
| 16   |                       |                     |          |  |                     |                     |                |                      |           |            |           |         | 16                            |      |
| 17   |                       |                     |          |  |                     |                     |                |                      |           |            |           |         | 17                            |      |

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# HORIZONTAL AND VERTICAL SURVEY NOTES

38

GSI AREA LOOKOUT ROAD STATE/COUNTY AK. BOOK NO. \_\_\_\_\_ PAGE 38 OF \_\_\_\_\_  
 LINE/LOOP NO. 731 TYPE SURVEY \_\_\_\_\_ CLIENT HUSKY DATE 18 DY 3 MO 80 YR  
 SURVEYOR L. CYMAN INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1186

| LINE | <input type="checkbox"/> Δ<br><input type="checkbox"/> SS<br><input type="checkbox"/> ⊙ | STATION  | VERTICAL |   |                     |               |           |                      |           | HORIZONTAL |             | REMARKS |                               |
|------|---|----------|----------|---|---------------------|---------------|-----------|----------------------|-----------|------------|-------------|---------|-------------------------------|
|      |   |          | DISTANCE |   | VERTICAL ANGLE OBS. | ROD RDG OR HI | ELEV DIFF | FINAL ELEVATION DIFF | ELEVATION |            | L/R OR DI   |         | RIGHT TURNED HORIZONTAL ANGLE |
|      |   |          | SLOPE    | <input type="checkbox"/> FEET<br><input type="checkbox"/> METERS<br>HORIZ |                     |               |           |                      | INST      | ROD        |             |         |                               |
| 1    | ⊙   | 349      |          |   | TAKE                | 0.0           |           |                      | 1491.3    |            | RL: PAGE 36 | 1       | LINE 731                      |
| 2    |   |          |          |   |                     |               |           |                      |           |            |             | 2       |                               |
| 3    | Δ   |          | 730      |   | 94-10               | 72.0          | +64.9     | 1586.2               |           |            |             | 3       |                               |
| 4    | CK  |          | ✓        |   | 265-40              | 77            | +64.9     |                      |           |            |             | 4       |                               |
| 5    |   |          |          |   |                     |               |           |                      |           |            |             | 5       |                               |
| 6    | ⊙   | BM 80143 | 425      |   | 87-00               | 6.3           | +15.9     | 1572.1               |           |            |             | 6       |                               |
| 7    | CK  |          | ✓        |   | 273-30              | 10.0          | +15.9     |                      |           |            |             | 7       |                               |
| 8    |   |          |          |   |                     |               |           | 1572.3               |           |            |             | 8       |                               |
| 9    |   |          |          |   |                     |               |           | -0.2                 |           |            | VERTICAL    | 9       |                               |
| 10   |   |          |          |   |                     |               |           |                      |           |            | TIE         | 10      |                               |
| 11   |   |          |          |   |                     |               |           |                      |           |            |             | 11      |                               |
| 12   |   |          |          |   |                     |               |           |                      |           |            |             | 12      |                               |
| 13   |   |          |          |   |                     |               |           |                      |           |            |             | 13      |                               |
| 14   |   |          |          |   |                     |               |           |                      |           |            |             | 14      |                               |
| 15   |   |          |          |   |                     |               |           |                      |           |            |             | 15      |                               |
| 16   |   |          |          |   |                     |               |           |                      |           |            |             | 16      |                               |
| 17   |   |          |          |   |                     |               |           |                      |           |            |             | 17      |                               |

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**SYMBOLS**    Δ = BACKSIGHT    ⊕ = INSTRUMENT SET-UP    SS = SIDESHOT    ⊙ = FORESIGHT