

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|--|
| 7-22-86 | | B. Cotamp | | J. Middleton | | 6834 | | J.M. | | 7 | | 1 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | MADOUX -15' | | MONT. | | BLAINE | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| USC+6.5 | 5-280 | 1935 | 4-437.525 | x- | 2044.260 | | | | | 4095.0 | | | | | (Scale) y-437.525x-2044.260 4095.0 U.S.C.+G.S. Bm S-280 |
| | 3728 | 3726.9 | 163 54 12 | +16.5 | 7.4 | 88.36 | -91.1 | -83.72 | | | BS | +3727 | +26 | | |
| | 3728 | | | | +12.9 | 271 30 | -97.6 | -84.72 | -84.2 3400.8 | | BS | | -2 | | |
| X | 0 | | | | 5.1 | - | | -5.1 | | 4005.7 | X | 0 | 0 | 441,252 | 2,044,284 |
| 7F | 1571 | | 340 24 52 | - | 6.8 | 90 40 | -18.3 | -25.1 | | 3985.7 | | +1569 | -85 | 442,821 | 2,044,199 |
| 1 | 1543 | | 351 22 | - | 10.7 | 90 40 | -18.0 | -28.7 | | 3982.1 | | +1528 | +211 | 442,780 | 2,044,495 |
| 2 | 1589 | | 3 12 | - | 7.8 | 91 | -27.7 | -35.5 | | 3975.3 | | +1496 | +536 | 442,748 | 2,044,820 |
| 3 | 1768 | | 14 | - | 11.7 | 91 | -29.8 | -41.5 | | 3969.3 | | +1472 | +867 | 442,724 | 2,045,151 |
| 4 | 1928 | | 21 50 | - | 10.3 | 91 | -33.6 | -43.9 | | 3966.9 | | +1512 | +1196 | 442,764 | 2,045,480 |
| 5 | 2212 | | 26 25 | - | 9.1 | 91 | -38.6 | -47.7 | | 3963.1 | | +1620 | +1506 | 442,872 | 2,045,790 |
| 6 | 2515 | | 29 33 | +16.5 | 7.1 | 91 10 | -51.2 | -58.3 | | 3952.5 | | +1745 | +1811 | 442,997 | 2,046,095 |
| 7 | 2822 | 2821.4 | 32 16 | - | 8.1 | 91 10 | -57.5 | -65.6 | | 3945.2 | | +1863 | +2119 | 443,115 | 2,046,403 |
| 8 | 3135 | 3134.2 | 34 12 | - | 5.0 | 91 20 | -72.9 | -77.9 | | 3932.9 | | +1985 | +2425 | 443,237 | 2,046,709 |
| 9 | 3451 | 3450.2 | 35 48 | - | 8.8 | 91 14 | -74.3 | -83.1 | | 3927.7 | | +2110 | +2730 | 443,362 | 2,047,014 |
| 10 | 3771 | 3770.3 | 37 15 | - | 8.8 | 91 08 | -74.6 | -83.4 | | 3927.4 | | +2229 | +3041 | 443,481 | 2,047,325 |
| 11 | 4681 | | 38 43 | - | 8.2 | 90 52 | -61.7 | -69.9 | | 3940.9 | | +2328 | +3352 | 443,580 | 2,047,636 |
| 12 | 4346 | | 41 20 | - | 6.7 | 90 50 | -63.2 | -69.4 | | 3941.4 | | +2314 | +3679 | 443,566 | 2,047,963 |
| 13 | 4543 | 4542.4 | 44 40 | - | 8.8 | 90 56 | -74.6 | -82.8 | | 3928.0 | | +2191 | +3979 | 443,443 | 2,048,263 |
| 14 | 4676 | 4675.4 | 48 25 | - | 10.5 | 90 56 | -76.2 | -86.7 | | 3924.1 | | +1982 | +4234 | 443,234 | 2,048,518 |
| 15 | 4837 | 4836.4 | 51 55 | - | 10.4 | 90 56 | -78.8 | -89.2 | | 3921.6 | | +1779 | +4497 | 443,031 | 2,048,781 |
| 16 | 5037 | 5036.3 | 54 56 | - | 10.2 | 90 56 | -82.0 | -92.2 | | 3918.6 | | +1604 | +4774 | 442,856 | 2,049,058 |

MONTANA NORTH Zone

442,870x-2044,210

FT-Inter

B.O.L. Line #7

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|-----------|
| 7-22-86 | | B. C. Camp | | J. Middleton | | 6834 | | J.M. | | 7 | | 2 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | MADDOX-15 | | mont. | | BLAINE | | | | | | | | S. O. Jans | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 4010.8 | | | | | | |
| 17 | 5285 | 5284.3 | 57° 21' | +16.5 | 11.0 | 90° 56' | -86.1 | -97.1 | | 3913.7 | | +1470 | +5076 | 442,722 | 2,049,360 |
| 18 | 5574 | 5573.3 | 58° 59' | -- | 6.4 | 90° 56' | -90.8 | -97.2 | | 3913.6 | | +1397 | +5395 | 442,649 | 2,049,679 |
| 19 | 5889 | 5888.4 | 60° 00' 14" | -- | 9.2 | 90° 50' | -85.6 | -94.8 | 294.23 | 3916.6 | TP | +1374 | +5726 | 442,626 | 2,050,008 |
| 19 | 5889 | | | | 7.9 | 269° 10' | -85.6 | -93.5 | | | TP | | -2 | | |
| | 1977 | | 253° 03' | -- | +14.6 | 89° - | -34.5 | -19.9 | 2011.38965 | | BS | +16 | +1977 | | |
| | 1977 | | | | +14.1 | 271° - | -34.5 | -20.4 | | | BS | | -2 | | |
| 20 | 1648 | | 252° 30' | -- | 8.0 | 89° 10' | +24.0 | -16.0 | | 3880.5 | | -29 | -1648 | 442,613 | 2,050,335 |
| 21 | 1319 | | 252° - | -- | 17.4 | 89° 20' | +15.3 | -2.1 | | 3894.4 | | -35 | -1319 | 442,607 | 2,050,664 |
| 22 | 990 | | 250° 55' | -- | 10.2 | 89° 40' | +5.8 | -4.4 | | 3892.1 | | -45 | -989 | 442,597 | 2,050,994 |
| 23 | 660 | | 249° 45' | -- | 11.5 | 88° 40' | +15.4 | +3.9 | | 3900.4 | | -43 | -659 | 442,599 | 2,051,324 |
| 24 | 330 | | - | -- | 10.0 | 88° 40' | +7.7 | -2.3 | | 3894.2 | | -22 | -329 | 442,620 | 2,051,654 |
| 25 | 0 | | | | 5.1 | - | | -5.1 | | 3891.4 | X | 0 | 0 | 442,642 | 2,051,983 |
| 26 | 330 | | 68° 40' | +16.5 | 8.6 | 90° 20' | -1.9 | -10.5 | | 3886.0 | | +28 | +329 | 442,670 | 2,052,312 |
| 27 | 660 | | - | -- | 4.6 | 90° 20' | -3.8 | -8.4 | | 3888.1 | | +56 | +658 | 442,698 | 2,052,641 |
| 28 | 990 | | 68° 30' | -- | 11.0 | 90° 20' | -5.8 | -16.8 | | 3879.7 | | +86 | +986 | 442,728 | 2,052,969 |
| 29 | 1320 | | - | -- | 15.1 | 90° 30' | -11.5 | -26.6 | | 3869.9 | | +115 | +1315 | 442,757 | 2,053,298 |
| 30 | 1650 | | 68° 08' | -- | 8.7 | 90° 30' | -14.4 | -23.1 | | 3873.4 | | +154 | +1643 | 442,796 | 2,053,626 |
| 31 | 1980 | | 68° - | -- | 10.9 | 89° 50' | +5.8 | -5.1 | | 3891.4 | | +190 | +1971 | 442,832 | 2,053,954 |
| 32 | 2310 | | - | -- | 6.3 | 89° 28' | +21.5 | +15.2 | | 3911.7 | | +221 | +2299 | 442,863 | 2,054,282 |
| 1K | 2211 | | 67° 47' 10" | -- | 9.7 | 89° 28' | +20.6 | +10.9 | | 3907.4 | 1K | +220 | +2200 | 442,862 | 2,054,183 |

442,890 x -2,051,225
y-inter.

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|----------|-------------------------|-----------------------|---------------|---------|
| 7-2-86 | | B. Cotcamp | | J. Middleton | | 6834 | | F.M.I. | | 7 | | 3 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | MADDOX-15' | | MONT. | | Blaine | | | | | | | | S. B. Binn | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 3896.5 | | | | | | |
| 33 | 2640 | | 68 - | +16.5 | 7.3 | 89 28 | +24.6 | +17.3 | | 3913.8 | | +253 | +2628 | 442895 | 2054611 |
| 34 | 2968 | | 68 18 46 | -- | 13.3 | 89 34 | +22.4 | +9.1 | 49.33 | 3905.8 | TP | +268 | +2956 | 442910 | 2054937 |
| 34 | 2968 | | | | 12.8 | 270 26 | +22.4 | +9.6 | | | TP | | -2 | | |
| | 4829 | | 247 17 46 | +16.7 | 6.1 | 90 44 | +61.8 | +67.9 | 47.63 | 3973.4 | BS | +505 | +4802 | | |
| | 4829 | | | | +5.4 | 269 16 | +61.8 | +67.2 | | | BS | | -2 | | |
| 35 | 4499 | | 247 08 | -- | 9.0 | 90 50 | -65.4 | -74.4 | | 3899.0 | | -483 | -4473 | 442932 | 2055264 |
| 36 | 4170 | 4169.4 | 246 56 | -- | 10.0 | 90 56 | -67.9 | -77.9 | | 3895.5 | | -462 | -4144 | 442953 | 2055593 |
| 37 | 3840 | 3839.3 | 246 57 | -- | 8.9 | 91 06 | -73.7 | -82.6 | | 3890.8 | | -425 | -3816 | 442990 | 2055921 |
| 38 | 3511 | 3510.1 | 246 35 | -- | 9.0 | 91 16 | -77.6 | -86.6 | | 3886.8 | | -411 | -3484 | 443004 | 2056251 |
| 39 | 3181 | 3180.1 | 246 20 | -- | 10.0 | 91 20 | -74.0 | -84.0 | | 3889.4 | | -386 | -3157 | 443029 | 2056580 |
| 40 | 2852 | 2851.1 | 245 56 | -- | 9.2 | 91 24 | -69.7 | -78.9 | | 3894.5 | | -366 | -2828 | 443049 | 2056909 |
| 41 | 2523 | 2522.2 | 245 43 | +16.7 | 6.6 | 91 24 | -61.6 | -68.2 | | 3905.2 | | -333 | -2500 | 443082 | 2057237 |
| 42 | 2193 | 2192.4 | -- | -- | 7.2 | 91 20 | -51.0 | -58.2 | | 3915.2 | | -289 | -2174 | 443126 | 2057563 |
| 43 | 1863 | | -- | -- | 6.3 | 91 20 | -43.4 | -49.7 | | 3923.7 | | -246 | -1847 | 443169 | 2057890 |
| 44 | 1533 | | -- | -- | 8.3 | 91 20 | -35.7 | -44.0 | | 3929.4 | | -202 | -1520 | 443213 | 2058217 |
| 45 | 1203 | | 245 43 | -- | 9.2 | 91 20 | -28.0 | -37.2 | | 3936.2 | | -159 | -1192 | 443256 | 2058545 |
| 46 | 873 | | -- | -- | 8.7 | 91 20 | -20.3 | -29.0 | | 3944.4 | | -115 | -865 | 443300 | 2058872 |
| 47 | 543 | | -- | -- | 9.3 | 91 20 | -12.6 | -21.9 | | 3951.5 | | -72 | -538 | 443343 | 2059199 |
| 48 | 214 | | -- | -- | 7.8 | 91 20 | -5.0 | -12.8 | | 3960.6 | | -28 | -211 | 443387 | 2059526 |
| TK | 0 | | | | 5.1 | - | | -5.1 | | 3968.3 | TK | 0 | 0 | 443415 | 2059737 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

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| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|----------------------|--|
| 7-22-84 | | B. Cotcamp | | J. Middleton | | 6834 | | J.M. | | 7 | | 4 | | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | | |
| MONTANA | | MAADUX-15' | | MONT. | | BLAINE | | | | | | | | S. Binns | | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y | X |
| | | | | | | | | | 3973.4 | | | | | | | |
| 49 | 116 | | 50 50 | +16.7 | 5.8 | 89 30 | +1.0 | -4.8 | | 3968.6 | | +44 | +107 | 443.459 | 2059.844 | |
| 50 | 446 | | - - | -- | 6.2 | 89 30 | +3.9 | -2.3 | | 3971.1 | | +170 | +412 | 443.585 | 2060.149 | |
| 51 | 775 | | 52 10 57 | ~ | 9.0 | 89 50 | +2.3 | -6.7 | | 3966.7 | TP | +279 | +723 | 443.694 | 2060.458 | |
| 51 | 775 | | | | 8.9 | 270 10 | +2.3 | -6.6 | | | TP | | -2 | | | |
| | 3577 | 3573.4 | 223 08 15 | -- | +11.7 | 87 26 | -160.2 | -148.5 | 442.83 | 3817.9 | BS | +1795 | +3090 | | 87' 26' vert. B.C.C. | |
| | 3577 | | | | +11.0 | 272 34 | -160.2 | -149.2 | | | BS | | -2 | | | |
| 52 | 3258 | 3255.5 | 221 45' | -- | 7.5 | 87 44 | +128.9 | +121.4 | | 3939.3 | | -1703 | -2774 | 443.786 | 2060.772 | MAADUX-15' ↑ |
| 53 | 2938 | 2936.2 | 220 21' | -- | 6.0 | 88 - | +102.5 | +96.5 | | 3914.4 | | -1597 | -2464 | 443.892 | 2061.082 | Rattlesnake-15' ↓ |
| 54 | 2609 | 2607.8 | 220 47' | +16.7 | 8.0 | 88 16 | +78.9 | +70.9 | | 3888.8 | | -1402 | -2199 | 444.087 | 2061.347 | |
| 55 | 2287 | 2286.4 | 222 25' | -- | 8.1 | 88 40 | +53.2 | +45.1 | | 3863.0 | | -1174 | -1962 | 444.315 | 2061.584 | |
| 56 | 1967 | | 224 38' | -- | 8.1 | 88 40 | +45.8 | +37.7 | | 3855.6 | | -944 | -1726 | 444.545 | 2061.820 | |
| 57 | 1645 | | 226 45' | -- | 9.8 | 88 50 | +33.5 | +23.7 | | 3841.6 | | -735 | -1472 | 444.754 | 2062.074 | |
| 57 | 1474 | | 228 07 20 | ~ | 9.5 | 89 20 | +17.2 | +7.7 | | 3825.6 | TP | -627 | -1334 | 444.862 | 2062.212 | 444.820x-2062.200 IF T-Inter El. 3823.0 |
| 58 | 1319 | | 228 25' | -- | 10.4 | 89 34 | +10.0 | -0.4 | | 3817.5 | | -555 | -1197 | 444.934 | 2062.349 | |
| 59 | 990 | | 229 05' | -- | 7.0 | 89 34 | +7.5 | +0.5 | | 3818.4 | | -406 | -903 | 445.083 | 2062.643 | |
| 60 | 660 | | - - | -- | 10.8 | 89 - | +11.5 | +0.7 | | 3818.6 | | -270 | -602 | 445.219 | 2062.944 | |
| 61 | 330 | | - - | ~ | 5.8 | 89 - | +5.8 | 0.0 | | 3817.9 | | -135 | -301 | 445.354 | 2063.245 | |
| 62 | 0 | | | | 5.1 | - - | | -5.1 | | 3812.8 | TP | 0 | 0 | 445.489 | 2063.546 | |
| 63 | 330 | | 49 25' | -- | 8.3 | 93 - | -17.3 | -25.6 | | 3792.3 | | +134 | +302 | 445.623 | 2063.848 | |
| 64 | 660 | 659.1 | - - | -- | 4.7 | 93 - | -34.5 | -39.2 | | 3778.7 | | +267 | +603 | 445.756 | 2064.149 | |

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO | | PAGE | | | | | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|-------|---------------|----------|-------------|--|---------|--|
| 7-22-86 | | B. Cotamp | | J. Middleton | | 6834 | | J.M. | | 7 | | 5 | | | | | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | | | | | |
| MONTANA | | Rattlesnake - 15' | | MONT. | | BLAINE | | | | | | | | S. Binns | | | | | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | NORTH + SOUTH - | | EAST + WEST - | | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | LAT. | DEP. | Y | X | | | | |
| | | | | | | | | | 3817.9 | | | | | | | | | | |
| 65 | 990 | | 49° 30' | +16.7 | 7.7 | 91° 30' | -25.9 | -33.6 | | 3784.3 | | +400 | +906 | 445.889 | 2064.452 | | | | |
| 66 | 1319 | | 50° 35' | -- | 5.7 | 90° 20' | -7.7 | -13.4 | | 3804.5 | | +509 | +1217 | 445.978 | 2064.763 | | | | |
| 67 | 1639 | | 53° 10' | -- | 8.2 | 90° 10' | -4.8 | -13.0 | | 3804.9 | | +564 | +1539 | 446.053 | 2065.085 | | | | |
| 68 | 1962 | | 55° 15' | -- | 11.2 | 90° 10' | -5.7 | -16.9 | | 3801.0 | | +608 | +1865 | 446.097 | 2065.411 | | | | |
| 69 | 2279 | | 53° 39' 17" | -- | 8.0 | 90° 20' | -13.3 | -21.3 | -21.0 | 3796.9 | TP | +766 | +2146 | 446.255 | 2065.690 | | | | |
| 69 | 2279 | | | | 7.5 | 269° 40' | -13.3 | -20.8 | | | TP | | -2 | | | | | | |
| | 1515 | | 202° 08' 08" | +16.7 | 6.0 | - | | +6.0 | -59.3 | 3802.8 | BS | +1180 | +950 | | | | | | |
| | 1515 | | | | 5.7 | 270° - | | +5.7 | | | BS | | -2 | | | | | | |
| 70 | 1204 | | 206° 45' | -- | 8.4 | 90° 30' | -10.5 | -18.9 | | 3783.9 | | -874 | -828 | 446.561 | 2065.810 | | | | |
| 71 | 903 | | 213° 45' | -- | 8.3 | 92° - | -31.5 | -39.8 | | 3763.0 | | -575 | -696 | 446.860 | 2065.942 | | | | |
| 72 | 582 | 581.2 | 218° 50' | -- | 7.1 | 93° - | -30.5 | -37.6 | | 3765.2 | | -329 | -479 | 447.106 | 2066.159 | | | | |
| 73 | 252 | | -- | -- | 7.1 | 92° - | -8.8 | -15.9 | | 3786.9 | | -143 | -208 | 447.292 | 2066.430 | | | | |
| π | 0 | | | | 5.1 | - | | -5.1 | | 3797.7 | π | 0 | 0 | 447.435 | 2066.638 | | | | |
| 74 | 78 | | 39° 30' | -- | 3.7 | 92° - | -2.7 | -6.4 | | 3796.4 | | +43 | +65 | 447.478 | 2066.703 | | | | |
| 75 | 407 | | -- | -- | 7.2 | 93° - | -21.3 | -28.5 | | 3774.3 | | +226 | +338 | 447.661 | 2066.976 | | | | |
| 76 | 737 | 736.3 | -- | -- | 8.8 | 92° 30' | -32.1 | -40.9 | | 3761.9 | | +410 | +612 | 447.845 | 2067.250 | | | | |
| 77 | 1067 | 1066.0 | -- | -- | 8.2 | 92° 30' | -46.5 | -54.7 | | 3748.1 | | +593 | +886 | 448.028 | 2067.524 | | | | |
| 78 | 1396 | | -- | -- | 9.8 | 91° 40' | -40.6 | -50.4 | | 3752.4 | | +777 | +1160 | 448.212 | 2067.798 | | | | |
| 79 | 1721 | 1720.3 | 41° 40' | -- | 5.9 | 91° 40' | -50.1 | -56.0 | | 3746.8 | | +902 | +1465 | 448.337 | 2068.103 | | | | |
| 80 | 2028 | 2027.0 | 45° 10' | -- | 10.1 | 91° 50' | -64.9 | -75.0 | | 3727.8 | | +956 | +1788 | 448.391 | 2068.426 | | | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|-----------------|---------|--------------|--------------|--------|------------------|------|----------|---|------|---------------|----------|
| DATE | 7-22-86 | INSTRUMENT MAN | B. Stamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | F.M. | LINE NO. | 7 | PAGE | 6 | |
| AREA | MONTANA | TOPO MAP | Rattlesnake-15' | STATE | MONT. | COUNTY | BLAINE | TWP | | RANGE | | PPM | PARTY MANAGER | S. Binns |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS TP | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|----------|-------------------------|-----------------------|-------------------|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | 3802.8 | | | | | |
| 81 | 2326 | 2324.4 | 49° 04' | +16.7 | 8.9 | 92° 08' | -86.6 | -95.5 | | 3707.3 | | +954 | +2120 | 448,389 2,068,758 |
| 82 | 2597 | 2595.4 | 53° 20' | - | 11.1 | 92° - | -90.6 | -101.7 | | 3701.1 | | +886 | +2439 | 448,321 2,069,077 |
| 1/2 | 2660 | 2658.4 | 54° 10' 52" | - | 7.0 | 92° - | -92.8 | -99.8 | | 3703.0 | 1/2 | +871 | +2512 | 448,306 2,069,150 |
| 83 | 2834 | 2832.7 | 58° 10' | - | 8.8 | 91° 46' | -87.4 | -96.2 | | 3706.6 | | +740 | +2734 | 448,175 2,069,372 |
| 84 | 3102 | 3101.2 | 61° 50' | - | 10.1 | 91° 20' | -72.2 | -82.3 | | 3720.5 | | +617 | +3039 | 448,052 2,069,677 |
| 85 | 3422 | 3421.2 | 63° 08' | - | 8.8 | 91° 14' | -73.7 | -82.5 | | 3720.3 | | +604 | +3367 | 448,039 2,070,005 |
| 86 | 3749 | 3748.4 | 62° 32' | +16.7 | 7.0 | 91° - | -65.4 | -72.4 | | 3730.4 | | +700 | +3682 | 448,135 2,070,320 |
| 87 | 4064 | | 61° 05' | - | 7.0 | 90° 50' | -59.1 | -66.1 | | 3736.7 | | +860 | +3972 | 448,295 2,070,610 |
| 88 | 4380 | | 59° 50' | - | 9.0 | 90° 42' | -53.5 | -62.5 | | 3740.3 | | +1020 | +4260 | 448,455 2,070,898 |
| 89 | 4697 | | 58° 40' | - | 9.0 | 90° 34' | -46.5 | -55.5 | | 3747.3 | | +1187 | +4545 | 448,622 2,071,183 |
| 90 | 5013 | | 57° 31' 58" | - | 6.8 | 90° 34' | -49.6 | -56.4 | -56.13 | 3746.7 | TP | +1362 | +4824 | 448,797 2,071,460 |
| 90 | 5013 | | | | 6.3 | 269° 26' | -49.6 | -55.9 | | | TP | | -2 | |
| | 4048 | | 206° 03' 48" | +16.7 | 10.6 | 89° 30' | -35.3 | -24.7 | -25.0 | 3721.7 | BS | +2972 | +2748 | |
| | 4048 | | | | 9.9 | 270° 30' | -35.3 | -25.4 | | | BS | | -2 | |
| 91 | 3725 | | 205° 08' | - | 8.8 | 89° 44' | +17.3 | +8.5 | | 3730.2 | | -2775 | -2484 | 448,994 2,071,722 |
| 92 | 3399 | | 204° 20' | - | 12.1 | 89° 58' | +2.0 | -10.1 | | 3711.6 | | -2564 | -2231 | 449,205 2,071,975 |
| 93 | 3072 | | 203° 40' | - | 10.8 | 89° 56' | +3.6 | -7.2 | | 3714.5 | | -2341 | -1990 | 449,428 2,072,216 |
| 94 | 2743 | | 203° - | - | 6.1 | 89° 50' | +8.0 | +1.9 | | 3723.6 | | -2110 | -1752 | 449,659 2,072,454 |
| 95 | 2414 | | 202° 50' | - | 8.0 | 90° 10' | -7.0 | -15.0 | | 3706.7 | | -1862 | -1537 | 449,907 2,072,669 |
| 96 | 2085 | | 202° 10' | - | 11.0 | 90° 10' | -6.1 | -17.1 | | 3704.6 | | -1623 | -1308 | 450,146 2,072,898 |

y-448,290 x-2,069,150
T-Inter.

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|---|
| 7-22-86 | | B. Cotcamp | | J. Middleton | | 6834 | | F.M. | | 7 | | 7 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | Rattlesnake-15' | | MONT. | | Blaine | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 3721.7 | | | | | | |
| 97 | 1755 | | 201 50 | +16.7 | 6.2 | 96 30 | -15.3 | -21.5 | | 3700.2 | | -1373 | -1093 | 450.396 | 2,073.113 |
| 98 | 1427 | | 263 05 | -- | 7.2 | 91 10 | -29.1 | -36.3 | | 3685.4 | | -1097 | -713 | 450.672 | 2,073.293 |
| 99 | 1104 | 1103.2 | 206 - | -- | 11.8 | 92 10 | -41.7 | -53.5 | | 3668.2 | | -811 | -748 | 450.958 | 2,073.458 |
| TP | 1132 | 1131.2 | 206 19 38 | -- | 10.7 | 92 10 | -42.8 | -53.0 | | 3668.7 | TP | -827 | -772 | 450.942 | 2,073.434 1/2 450.915 X - 2,073.425 1/2 4 way enter |
| 100 | 787 | 785.7 | 211 10 | -- | 7.0 | 93 20 | -45.8 | -52.8 | | 3668.9 | | -527 | -583 | 451.242 | 2,073.623 |
| 101 | 483 | 481.2 | 223 04 | -- | 7.4 | 95 - | -42.1 | -49.5 | | 3672.2 | | -242 | -416 | 451.527 | 2,073.770 |
| 102 | 207 | 203.2 | 254 15 | -- | 7.0 | 101 - | -39.5 | -46.5 | | 3675.2 | | +3 | -203 | 451.772 | 2,074.003 |
| TP | 0 | | | | 5.1 | - | | -5.1 | | 3716.6 | TP | 0 | 0 | 451.769 | 2,074.206 |
| 103 | 184 | 180.6 | 13 23 | +16.7 | 9.3 | 101 - | -35.1 | -44.4 | | 3677.3 | | +156 | +91 | 451.925 | 2,074.297 |
| 104 | 482 | 480.5 | 39 50 | -- | 7.2 | 94 30 | -37.8 | -45.0 | | 3676.7 | | +265 | +401 | 452.034 | 2,074.607 |
| 105 | 805 | 804.3 | 45 30 | -- | 8.0 | 92 20 | -32.8 | -40.8 | | 3680.9 | | +375 | +711 | 452.144 | 2,074.917 |
| 106 | 1134 | | 47 10 | -- | 6.7 | 91 20 | -26.4 | -33.1 | | 3688.6 | | +499 | +1018 | 452.268 | 2,075.224 |
| 107 | 1456 | | 44 20 | -- | 9.0 | 90 50 | -21.2 | -30.2 | | 3691.5 | | +705 | +1274 | 452.474 | 2,075.480 |
| 108 | 1747 | | 38 40 | -- | 8.0 | 90 30 | -15.2 | -23.2 | | 3698.5 | | +993 | +1437 | 452.762 | 2,075.643 |
| 109 | 2003 | | 32 22 | -- | 8.8 | 89 50 | +5.8 | -3.0 | | 3718.7 | | +1308 | +1517 | 453.077 | 2,075.723 |
| 110 | 2225 | | 25 48 | -- | 22.0 | 89 - | +38.8 | +16.8 | | 3738.5 | | +1640 | +1503 | 453.409 | 2,075.709 |
| TP | 2304 | | 22 27 18 | +16.5 | 13.4 | 89 18 | +28.1 | +14.2 | 115.03 | 3736.7 | TP | +1792 | +1448 | 453.561 | 2,075.652 |
| TP | 2304 | | | | 12.9 | 270 42 | +28.1 | +15.2 | | | TP | | -2 | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 7-23-86 INSTRUMENT MAN B. Cotamp ROD MAN J. Middleton PARTY NUMBER 6834 NOTES CHECKED BY F.M. LINE NO. 7 PAGE 8
 AREA MONTANA TOPO MAP Rattlesnake-15' STATE MONT. COUNTY Blaine TWP RANGE PPM PART. MANAGER S. Binns

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | NORTH + SOUTH - | | EAST + WEST - | | COORDINATES | | REMARKS | |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|-----------------|-------|---------------|-----------|--------------------|--|---------|--|
| | | | | | | | | | | | | LAT. | DEP. | Y | X | | | | |
| | | | | | | | | | | 3736.7 | | | | | | | | | |
| | 838 | 837.0 | 168 39 16 | +16.5 | 14.6 | 87 10 | -41.4 | -26.8 | 26.9 } 3709.8 | | BS | +834 | +75 | | | | | | |
| | 838 | | | | 14.3 | 272 50 | -41.4 | -27.1 | | | BS | | | | | | | | |
| 111 | 655 | | 169 35 | -- | 9.3 | 87 30 | +28.6 | +19.3 | | 3729.1 | | -651 | -69 | 453.744 | 2,075.656 | | | | |
| 112 | 331 | | 175 42 | -- | 10.0 | 87 30 | +14.4 | +4.4 | | 3714.2 | | -324 | -70 | 454.071 | 2,075.655 | | | | |
| 113 | 0 | | | | 5.1 | - | | -5.1 | | 3704.7 | X | 0 | 0 | 454.395 | 2,075.725 | ACROSS STA. | | | |
| 114 | 331 | | 19 10 | -- | 11.4 | 90 30 | -2.9 | -14.3 | | 3695.5 | | +269 | +193 | 454.664 | 2,075.918 | | | | |
| 115 | 660 | | 21 18 | -- | 9.3 | 90 30 | -5.8 | -15.1 | | 3694.7 | | +522 | +405 | 454.917 | 2,076.130 | | | | |
| 116 | 990 | | 22 - | -- | 6.9 | - | | -6.9 | | 3702.9 | | +775 | +616 | 455.170 | 2,076.341 | | | | |
| 117 | 1320 | | 22 15 | -- | 11.6 | 90 14 | -5.4 | -17.0 | | 3692.8 | | +1029 | +826 | 455.424 | 2,076.551 | | | | |
| 118 | 1650 | | 23 - | -- | 20.2 | 90 14 | -6.7 | -26.9 | | 3682.9 | | +1273 | +1050 | 455.668 | 2,076.775 | | | | |
| TP | 1489 | | 21 24 18 | -- | 13.7 | 90 20 | -8.7 | -22.4 | | | TP | +1175 | +915 | 455.570 | 2,076.638 | | | | |
| TP | 1489 | | | | 13.6 | 269 40 | -8.7 | -22.3 | | 3687.5 | TP | | | | | | | | |
| | 1461 | | 231 01 30 | +16.5 | 7.3 | TP | -7.3 | +0.0 | 0.1 } 3687.4 | | BS | +559 | +1350 | | | | | | |
| | 1461 | | | | 7.0 | TP | -7.3 | -0.3 | | | BS | | | | | | | | |
| 119 | 987 | | 237 55 | -- | 7.2 | - | | -7.2 | | 3680.2 | | -265 | -951 | 455.864 | 2,077.035 | | | | |
| 120 | 660 | | 240 - | -- | 8.0 | - | | -8.0 | | 3679.4 | | -154 | -642 | 455.975 | 2,077.344 | | | | |
| 121 | 330 | | - - | -- | 5.8 | - | | -5.8 | | 3681.6 | | -77 | -321 | 456.052 | 2,077.665 | | | | |
| 122 | 0 | | | | 5.1 | - | | -5.1 | | 3682.3 | X | 0 | 0 | 456.129 | 2,077.986 | | | | |
| 123 | 330 | | 60 05 | -- | 10.5 | 92 - | -11.5 | -22.0 | | 3665.4 | | +77 | +321 | 456.206 | 2,078.307 | Rattlesnake -15' ↑ | | | |
| 124 | 660 | | - - | -- | 6.3 | 98 - | -34.5 | -40.8 | | 3646.6 | | +153 | +642 | 456.282 | 2,078.628 | CLEVELAND -15' ↓ | | | |

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|---|
| 7-23-86 | | B. Gcamp | | J. Middleton | | 6834 | | F.M.I | | 4 | | 9 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | CLEVELAND-15' | | MONT. | | BLAINE | | | | | | | | S. B. INNS | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 3687.4' | | | | | | |
| 125 | 990 | 989.3 | 60° 05' | +16.5 | 10.6 | 92° 10' | -37.4 | -48.0 | | 3639.4 | | +230 | +962 | 456.359 | 2078.948 |
| 126 | 1320 | | - - | -- | 6.8 | 91° 30' | -34.6 | -41.4 | | 3646.0 | | +306 | +1284 | 456.435 | 2079.270 |
| 127 | 1650 | 1649.4 | - - | -- | 9.0 | 91° 30' | -43.2 | -52.2 | | 3635.2 | | +383 | +1604 | 456.512 | 2079.590 |
| 128 | 1980 | 1979.2 | 60° 05' | -- | 10.1 | 91° 36' | -55.3 | -65.4 | | 3622.0 | | +459 | +1925 | 456.588 | 2079.911 |
| 129 | 2310 | 2309.2 | - - | -- | 7.2 | 91° 30' | -60.5 | -67.7 | | 3619.7 | | +536 | +2246 | 456.665 | 2080.232 |
| 130 | 2640 | 2639.1 | - - | +16.5 | 5.5 | 91° 30' | -69.1 | -74.6 | | 3612.8 | | +612 | +2567 | 456.741 | 2080.553 |
| 131 | 2923 | | 59° 55' 05" | -- | 3.1 | 91° 30' | -76.5 | -79.6 | | 3607.8 | 11 | +686 | +2840 | 456.815 | 2080.826 y-inter. $y = +56.810x - 2,080,800$ |
| 131 | 2970 | 2969.2 | 60° 04' | -- | 10.4 | 91° 20' | -69.1 | -79.5 | | 3607.9 | | +690 | +2888 | 456.819 | 2080.874 |
| 132 | 3300 | 3299.3 | - - | -- | 9.0 | 91° 10' | -67.2 | -76.2 | | 3611.2 | | +766 | +3209 | 456.895 | 2081.195 |
| 133 | 3628 | | 59° 50' | -- | 8.8 | 90° 50' | -52.8 | -61.6 | | 3625.8 | | +857 | +3525 | 456.986 | 2081.511 |
| 134 | 3952 | | 59° 02' 46" | -- | 12.9 | 90° 50' | -57.5 | -70.4 | | | TP | +986 | +3827 | 457.115 | 2081.811 |
| 134 | 3952 | | | | 12.6 | 269° 10' | -57.5 | -70.1 | 21.3 | 3595.9 | TP | | -2 | | |
| | 1942 | | 207° 20' 25" | +16.5 | 12.7 | 89° - | -33.9 | -21.2 | 21.3 | 3595.9 | BS | +1401 | +1345 | | |
| | 1942 | | | | 12.4 | 271° - | -33.9 | -21.5 | | | BS | +1 | -2 | | |
| 135 | 1627 | | 204° 10' | -- | 7.7 | 89° 40' | +9.5 | +1.8 | | 3597.7 | | -1234 | -1060 | 457.283 | 2082.094 |
| 136 | 1308 | | 201° - | -- | 9.1 | 90° 10' | -3.8 | -12.9 | | 3583.0 | | -1038 | -776 | 457.479 | 2082.358 |
| 137 | 985 | | 197° 30' | -- | 8.9 | 90° 30' | -8.6 | -17.5 | | 3578.4 | | -817 | -551 | 457.700 | 2082.603 |
| 138 | 659 | | 194° 25' | -- | 9.0 | 91° - | -11.5 | -20.5 | | 3575.4 | | -565 | -339 | 457.952 | 2082.815 |
| 139 | 330 | | 192° - | -- | 8.6 | 91° - | -5.8 | -14.4 | | 3581.5 | | -290 | -157 | 458.227 | 2082.997 |
| 140 | 0 | | | | 5.1 | - | -5.1 | | | 3590.8 | K | 0 | 0 | 458.517 | 2083.154 |

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|-----------|
| 7-23-86 | | B. Stamp | | J. Middleton | | 6834 | | FM. | | 7 | | 10 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | CLEVELAND-15' | | MONT. | | BLAINE | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 3595.9 | | | | | | |
| 141 | 330 | | 4° 20' | +16.5 | 10.8 | 91 40 | -9.6 | -20.4 | | 3575.5 | | + 308 | +117 | 458,825 | 2,083,271 |
| 142 | 658 | | 359° 40' | -- | 11.0 | 92 - | -23.0 | -34.0 | | 3561.9 | | + 632 | +183 | 459,149 | 2,083,337 |
| 143 | 987 | 986.4 | 358° - | -- | 6.7 | 92 - | -34.4 | -41.1 | | 3554.8 | | + 955 | +247 | 459,472 | 2,083,401 |
| 144 | 1316 | 1315.3 | 357° 10' | -- | 6.1 | 91 50 | -42.1 | -48.2 | | 3547.7 | | +1278 | + 311 | 459,795 | 2,083,465 |
| 145 | 1645 | 1644.0 | 356° 40' | -- | 9.8 | 92 - | -57.4 | -67.2 | | 3528.7 | | +1601 | + 374 | 460,118 | 2,083,528 |
| 146 | 1975 | 1973.8 | 356° 25' | +16.5 | 7.3 | 92 - | -68.9 | -76.2 | | 3519.7 | | +1924 | +441 | 460,441 | 2,083,595 |
| 147 | 2305 | 2303.8 | 356° 20' | -- | 10.3 | 91 50 | -73.7 | -84.0 | | 3511.9 | | + 2246 | +512 | 460,763 | 2,083,666 |
| 148 | 2635 | 2633.7 | 356° 10' | -- | 5.3 | 91 50 | -84.3 | -89.6 | | 3506.3 | | + 2570 | + 578 | 461,087 | 2,083,732 |
| 149 | 2965 | 2963.7 | 356° 05' | -- | 7.7 | 91 40 | -86.2 | -93.9 | | 3502.0 | | +2893 | +646 | 461,410 | 2,083,800 |
| 150 | 3295 | 3293.8 | - | -- | 8.7 | 91 34 | -90.1 | -98.8 | | 3497.1 | | +3215 | + 718 | 461,732 | 2,083,872 |
| 151 | 3624 | 3622.8 | 355° 30' | -- | 7.0 | 91 30 | -94.9 | -101.9 | | 3494.0 | | + 3544 | + 753 | 462,061 | 2,083,907 |
| 152 | 3948 | 3946.8 | 354° 34' | -- | 7.6 | 91 24 | -96.5 | -104.1 | | 3491.8 | | +3873 | + 758 | 462,390 | 2,083,912 |
| 153 | 4273 | 4271.9 | 354° 15' | -- | 6.9 | 91 18 | -96.9 | -103.8 | | 3492.1 | | +4197 | + 797 | 462,714 | 2,083,951 |
| 154 | 4518 | 4517.1 | 357° 01' 47" | +16.8 | 10.6 | 91 10 | -92.0 | -102.6 | -102.3 | 3493.6 | TP | +4386 | +1080 | 462,904 | 2,084,232 |
| 154 | 4518 | | | | 10.1 | 268 50 | -92.0 | -102.18 | | | TP | +1 | -2 | | |
| | 1319 | | 224° 34' 52" | -- | + 2.8 | 91 30 | +34.5 | +37.3 | 3530.9 | | BS | +632 | +1157 | | |
| | 1319 | | | | + 2.7 | 268 30 | +34.5 | +37.2 | | | BS | +1 | -2 | | |
| 155 | 990 | | 224° 35' | -- | 9.4 | 91° 30' | -25.9 | -35.3 | | 3495.6 | | -474 | -869 | 463,063 | 2,084,518 |
| IF | 576 | | 225° 30' | -- | 11.3 | 91° 30' | -15.1 | -26.4 | | 3504.5 | IF | -268 | -510 | 463,269 | 2,084,877 |
| 156 | 660 | | 224° 35' | -- | 12.3 | 91° 30' | -17.3 | -29.6 | | 3501.3 | | -316 | -579 | 463,221 | 2,084,808 |

Y = 463,200 X = 2,084,830
T = 207° 15'

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | | | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|-------|---------------|----------|-------------|--|---------|---|
| 7-23-86 | | B. Cotcamp | | J. Middleton | | 6834 | | F.M. | | 7 | | 11 | | | | | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | | | | | |
| MONTANA | | CLEVELAND -15' | | MONT. | | BLAINE | | | | | | | | S. Binns | | | | | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | NORTH + SOUTH - | | EAST + WEST - | | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | LAT. | DEP. | Y | X | | | | |
| | | | | | | | | | 3530.9 | | | | | | | | | | |
| Bm | 494 | | 229° 05' 57" | +16.8 | 10.6 | 91° - | -8.4 | -19.2 | | 3511.7 | | -202 | -451 | 463.335 | 2084.936 | | | | 3511.686 |
| 157 | 330 | | 224° 35' | - | 9.7 | - | | -9.7 | | 3521.2 | | -158 | -290 | 463.379 | 2085.097 | | | | |
| 158 | 0 | | | | 5.1 | - | | -5.1 | | 3525.8 | X | 0 | 0 | 463.537 | 2085.387 | | | | |
| 159 | 330 | | 43° 40' | - | 10.5 | 91° 20' | -7.7 | -18.2 | | 3512.7 | | +163 | +287 | 463.700 | 2085.674 | | | | |
| 160 | 659 | | - - | - | 15.9 | 92° - | -23.0 | -38.9 | | 3492.0 | | +325 | +573 | 463.862 | 2085.960 | | | | |
| 161 | 988 | | - - | - | 6.7 | 91° - | -17.2 | -23.9 | | 3507.0 | | +487 | +860 | 464.024 | 2086.247 | | | | |
| 162 | 1318 | | - - | - | 12.1 | - | | -12.1 | | 3518.8 | | +650 | +1147 | 464.187 | 2086.534 | | | | |
| 163 | 1648 | | - - | - | 7.0 | 90° 30' | -14.4 | -21.4 | | 3509.5 | | +812 | +1434 | 464.349 | 2086.821 | | | | |
| 164 | 1977 | | - - | +16.8 | 8.1 | 90° 10' | -5.8 | -13.9 | | 3517.0 | | +975 | +1720 | 464.512 | 2087.107 | | | | |
| 165 | 2302 | | 42° 20' | - | 5.8 | 90° 20' | -13.4 | -19.2 | | 3511.7 | | +1181 | +1976 | 464.718 | 2087.363 | | | | |
| 166 | 2619 | | 46° 10' | - | 5.0 | 90° 20' | -15.2 | -20.2 | | 3510.7 | | +1428 | +2196 | 464.965 | 2087.583 | | | | |
| 167 | 2929 | | 37° 50' | - | 5.3 | 90° 20' | -17.0 | -22.3 | | 3508.6 | | +1695 | +2389 | 465.232 | 2087.776 | | | | |
| 168 | 3242 | | 36° - | - | 8.7 | 90° 10' | -9.4 | -18.1 | | 3512.8 | | +1960 | +2582 | 465.497 | 2087.969 | | | | |
| Bm | 3146 | | 36° 51' 39" | - | 5.3 | 90° 10' | -9.2 | -14.5 | | 3516.4 | Bm | +1864 | +2534 | 465.401 | 2087.921 | | | | +465.410 X - 2087.918 E 280 1935 4 SACS EL. 3517 |
| 169 | 3559 | | 34° 20' | +16.8 | 7.8 | 90° 18' | -18.6 | -26.4 | | 3504.5 | | +2233 | +2771 | 465.770 | 2088.158 | | | | |
| 170 | 3881 | | 33° 15' | - | 9.0 | 90° 18' | -20.3 | -29.3 | | 3501.6 | | +2492 | +2975 | 466.029 | 2088.362 | | | | |
| 171 | 4210 | | 33° - | - | 10.7 | 90° 22' | -26.9 | -37.6 | | 3493.3 | | +2717 | +3216 | 466.254 | 2088.603 | | | | |
| 172 | 4537 | | 33° 35' | - | 11.2 | 90° 22' | -29.0 | -40.2 | | 3490.7 | | +2893 | +3495 | 466.430 | 2088.882 | | | | |
| 173 | 4852 | | 34° 45' | - | 11.5 | 90° 14' | -19.8 | -31.3 | | 3499.6 | | +3017 | +3800 | 466.554 | 2089.187 | | | | |

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | | | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|-------|---------------|-----------|-------------|--|---------|--|
| 7-23-86 | | B. Cotcamp | | J. Middleton | | 6834 | | F.M. | | 7 | | 12 | | | | | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | | | | | |
| MONTANA | | CLEVELAND-15' | | Mont. | | Blaine | | | | | | | | S. Binns | | | | | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | NORTH + SOUTH - | | EAST + WEST - | | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | LAT. | DEP. | Y | X | | | | |
| | | | | | | | | | 3530.9 | | | | | | | | | | |
| 174 | 5170 | | 35 46 09 | +17.1 | 15.0 | 90 09 | -13.5 | -28.5 | 28.33 | 3502.6 | TP | +3121 | +4122 | 466,659 | 2,089,507 | Across STA. | | | |
| 174 | 5170 | | | | 14.7 | 269 51 | -13.5 | -28.28 | | | TP | +1 | -2 | | | | | | |
| | 1527 | | 234 33 40 | -- | +12.4 | - | | +12.4 | 412.33 | 3514.9 | BS | +480 | +1449 | | | | | | |
| | 1527 | | | | +12.1 | 270 - | | +12.1 | | | BS | +1 | -2 | | | | | | |
| 175 | 1196 | | 233 45' | -- | 8.3 | 90 40 | -13.9 | -22.2 | | 3492.7 | | -392 | -1130 | 466,748 | 2,089,824 | | | | |
| 176 | 866 | | - - | -- | 11.2 | 91 - | -15.1 | -26.3 | | 3488.6 | | -284 | -818 | 466,856 | 2,090,136 | | | | |
| 177 | 536 | | - - | -- | 11.2 | 91 - | -9.4 | -20.6 | | 3494.3 | | -176 | -506 | 466,964 | 2,090,448 | | | | |
| 178 | 206 | | - - | -- | 5.2 | 91 - | -3.6 | -8.8 | | 3506.1 | | -68 | -195 | 467,072 | 2,090,759 | | | | |
| Σ | 0 | | | | 5.1 | - | | -5.1 | | 3509.8 | Σ | 0 | 0 | 467,140 | 2,090,954 | | | | |
| 179 | 124 | | 53 15' | +17.1 | 6.3 | 92 - | -4.3 | -10.6 | | 3504.3 | | +42 | +117 | 467,182 | 2,091,071 | | | | |
| 180 | 454 | 453.4 | - - | -- | 6.9 | 93 - | -23.8 | -30.7 | | 3484.2 | | +152 | +427 | 467,292 | 2,091,381 | | | | |
| 181 | 778 | 777.4 | 49 22 | -- | 6.8 | 92 10 | -29.4 | -36.2 | | 3478.7 | | +310 | +713 | 467,450 | 2,091,667 | | | | |
| 182 | 1098 | 1097.4 | 44 42 | - | 6.3 | 91 50 | -35.1 | -41.4 | | 3473.5 | | +519 | +967 | 467,659 | 2,091,921 | | | | |
| 183 | 1421 | 1420.3 | 41 30 | -- | 7.8 | 91 50 | -45.5 | -53.3 | | 3461.6 | | +740 | +1212 | 467,880 | 2,092,166 | | | | |
| Bm | 1536 | | 41 52 06 | -- | 3.9 | 91 50 | -49.1 | -53.0 | | 3461.9 | Bm | +791 | +1316 | 467,931 | 2,092,270 | | | | |
| 184 | 1747 | 1746.1 | 39 38' | -- | 5.0 | 91 50 | -55.9 | -60.9 | | 3454.0 | | +958 | +1460 | 468,098 | 2,092,414 | | | | |
| 185 | 2073 | 2072.1 | 38 05 | -- | 5.4 | 91 40 | -60.3 | -65.7 | | 3449.2 | | +1183 | +1701 | 468,323 | 2,092,655 | | | | |
| 186 | 2400 | 2399.0 | 37 08 | - | 8.1 | 91 40 | -69.8 | -77.9 | | 3437.0 | | +1402 | +1947 | 468,542 | 2,092,901 | | | | |
| 187 | 2729 | 2727.8 | 36 35 | - | 6.0 | 91 40 | -77.4 | -85.4 | | 3429.5 | | +1616 | +2198 | 468,756 | 2,093,152 | | | | |
| 188 | 3056 | 3054.9 | 37 07 | - | 7.6 | 91 34 | -83.6 | -91.2 | | 3423.7 | | +1786 | +2478 | 468,926 | 2,093,432 | | | | |

y = 467890 x = 2,092,280
D = 280 1935 U.S. 165 EL. 3423.

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|----------|
| 7-23-86 | | B. Cotcamp | | J. Middleton | | 6834 | | JM | | 7 | | 13 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | CLEVELAND - 15' | | MONT. | | BLAINE | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 3514.9 | | | | | | |
| 189 | 3383 | 3381.7 | 37° 56' | +17.1 | 5.0 | 91° 34' | -92.5 | -97.5 | | 3417.4 | | +1938 | +2771 | 469.078 | 2093.725 |
| 190 | 3710 | 3708.7 | 38° 35' | -- | 6.5 | 91° 30' | -97.1 | -103.6 | | 3411.3 | | +2091 | +3063 | 469.231 | 2094.017 |
| 191 | 4038 | 4036.8 | 39° 15' | -- | 9.0 | 91° 24' | -98.7 | -107.7 | | 3407.2 | | +2237 | +3360 | 469.377 | 2094.314 |
| 192 | 4365 | 4363.9 | 39° 45' | -- | 7.4 | 91° 18' | -99.0 | -106.4 | | 3408.5 | | +2386 | +3654 | 469.526 | 2094.608 |
| TP | 4600 | 4599.2 | 40° 25' 15" | -- | 12.9 | 91° 06' | -88.3 | -101.2 | | | TP | +2470 | +3880 | 469.611 | 2094.832 |
| TP | 4600 | | | | 12.4 | 268° 54' | -88.3 | -100.7 | 100.9 | 3414.0 | TP | +1 | -2 | | |
| | 608 | | 264° 15' 38" | +16.7 | 14.5 | 90° 50' | +8.8 | +23.3 | | 3437.3 | BS | -116 | +597 | | |
| | 608 | | | | 14.4 | 269° 10' | +8.8 | +23.2 | | | BS | +1 | -2 | | |
| 193 | 513 | | 264° 45' | -- | 12.0 | 90° 50' | -7.5 | -19.5 | | 3417.8 | | +102 | -503 | 469.598 | 2094.924 |
| 194 | 188 | | 272° 50' | -- | 7.2 | 89° 50' | +0.5 | -6.7 | | 3430.6 | | +63 | -177 | 469.559 | 2095.250 |
| #π | 0 | | | | 5.1 | - | - | -5.1 | | 3432.2 | π | 0 | 0 | 469.496 | 2095.427 |
| 195 | 142 | | 87° 50' | +16.7 | 7.1 | 90° 30' | -1.2 | -8.3 | | 3429.0 | | -36 | +137 | 469.460 | 2095.564 |
| 196 | 469 | | 81° 20' | -- | 7.1 | 90° 30' | -4.1 | -11.2 | | 3426.1 | | -66 | +464 | 469.430 | 2095.891 |
| 197 | 798 | | 78° 05' | -- | 7.1 | 91° - | -13.9 | -21.0 | | 3416.3 | | -67 | +795 | 469.429 | 2096.222 |
| 198 | 1127 | | 77° - | -- | 7.9 | 91° 20' | -26.2 | -34.1 | | 3403.2 | | -73 | +1125 | 469.423 | 2096.552 |
| 199 | 1456 | | 76° 20' | -- | 7.4 | 91° - | -25.4 | -32.8 | | 3404.5 | | -77 | +1454 | 469.419 | 2096.881 |
| 200 | 1785 | | 77° - | -- | 6.0 | 90° 50' | -26.0 | -32.0 | | 3405.3 | | -115 | +1781 | 469.381 | 2097.208 |
| Bm | 1870 | | 74° 50' | -- | 4.4 | 90° 50' | -27.2 | -31.6 | | 3405.7 | Bm | -50 | +1869 | 469.446 | 2097.296 |
| 201 | 2098 | | 80° 08' | -- | 10.8 | 90° 20' | -12.2 | -23.0 | | 3414.3 | | -250 | +2083 | 469.246 | 2097.510 |
| 202 | 2409 | | 82° 46' | -- | 11.4 | - | - | -11.4 | | 3425.9 | | -396 | +2376 | 469.100 | 2097.803 |

5-469.425 x -2095.460
TL 4way Inter.

5-469.415 x -2097.340
C-280 1985 U.S.C. 465.E.L. 767

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|------------------------|----------------------|---------------|-----------|
| 7-26-86 | | B. Cotcamp | | J. Middleton | | 6834 | | J.M. | | 7 | | 14 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | CLEVELAND-15' | | MONT. | | BLAINE | | | | | | | | S. Dinns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH+ SOUTH - LAT. | EAST+ WEST - DEP. | | Y |
| | | | | | | | | | 3437.3 | | | | | | |
| 203 | 2729 | | 81° 18' | +16.7 | 8.2 | 89° 52' | +6.4 | -1.8 | | 3435.5 | | -380 | +2702 | 469,116 | 2,098,129 |
| TP | 2872 | | 79° 48' 21" | -- | 12.7 | 89° 42' | +15.0 | +2.3 | -2.53 | 3439.8 | TP | -325 | +2853 | 469,172 | 2,098,277 |
| TP | 2872 | | | | 12.4 | 270 18' | +15.0 | +2.6 | | | TP | +1 | -3 | | |
| | 4452 | 4451.1 | 221° 34' 46" | +16.3 | 9.5 | 88° 50' | -90.6 | -81.1 | -81.2 | 3358.6 | BS | +2367 | +3770 | | |
| | 4452 | | | | 9.2 | 271 10' | -90.6 | -81.4 | | | BS | +1 | -3 | | |
| 204 | 4283 | 4282.1 | 221° 40' | -- | 4.7 | 88° 50' | +87.2 | +82.5 | | 3441.1 | | -2271 | -3630 | 469,269 | 2,098,414 |
| 205 | 3954 | 3953.4 | 222° - | -- | 6.8 | 88° 58' | +71.3 | +64.5 | | 3423.1 | | -2077 | -3364 | 469,463 | 2,098,680 |
| 206 | 3626 | | 222° 30' | -- | 7.8 | 89° 08' | +54.8 | +47.0 | | 3405.6 | | -1878 | -3102 | 469,662 | 2,098,942 |
| 207 | 3298 | | 222° 53' | -- | 7.7 | 89° 20' | +38.4 | +30.7 | | 3389.3 | | -1690 | -2832 | 469,850 | 2,099,212 |
| 208 | 2968 | | 223° - | -- | 6.4 | 89° 20' | +34.5 | +28.1 | | 3386.7 | | -1515 | -2552 | 470,025 | 2,099,492 |
| 209 | 2640 | | - - | -- | 9.5 | 89° 10' | +38.4 | +28.9 | | 3382.5 | | -1348 | -2270 | 470,192 | 2,099,774 |
| 210 | 2310 | | - - | +16.3 | 11.6 | 89° 10' | +33.6 | +22.0 | | 3380.6 | | -1179 | -1986 | 470,361 | 2,100,058 |
| 211 | 1980 | | - - | -- | 6.7 | 89° 20' | +23.0 | +16.3 | | 3374.9 | | -1011 | -1703 | 470,529 | 2,100,341 |
| 212 | 1650 | | 223° - | -- | 6.3 | 89° 20' | +19.2 | +12.9 | | 3371.5 | | -842 | -1419 | 470,698 | 2,100,625 |
| 213 | 1320 | | - - | -- | 6.5 | 89° 20' | +15.4 | +8.9 | | 3367.5 | | -674 | -1135 | 470,866 | 2,100,909 |
| 214 | 990 | | - - | -- | 6.6 | 89° 20' | +11.5 | +4.9 | | 3363.5 | | -505 | -851 | 471,035 | 2,101,193 |
| 215 | 660 | | - - | -- | 9.8 | 89° 20' | +7.7 | -2.1 | | 3356.5 | | -337 | -568 | 471,203 | 2,101,476 |
| 216 | 330 | | - - | -- | 7.8 | 89° 20' | +3.8 | -4.0 | | 3354.6 | | -168 | -284 | 471,372 | 2,101,760 |
| 217 | 0 | | | | 5.1 | - | | -5.1 | | 3353.5 | X | 0 | 0 | 471,540 | 2,102,044 |

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|-------------|
| 7-24-86 | | B. Cotcamp | | J. Middleton | | 6834 | | J.M. | | 7 | | 15 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | CLEVELAND-15' | | MONT. | | BLAINE | | | | | | | | S. BINNS | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 3358.6 | | | | | | |
| 218 | 330 | | 43 10' | +16.3 | 9.0 | 90 20' | -1.9 | -10.9 | | 3347.7 | | +168 | +284 | 471.708 | 2102.328 |
| 219 | 660 | | - | -- | 9.3 | 90 20' | -3.8 | -13.1 | | 3345.5 | | +335 | +568 | 471.875 | 2102.612 |
| 220 | 990 | | - | -- | 9.9 | 90 20' | -5.8 | -15.7 | | 3342.9 | | +503 | +853 | 472.043 | 2102.897 |
| 221 | 1319 | | 42 - | -- | 9.2 | 90 20' | -7.7 | -16.9 | | 3341.7 | | +693 | +1122 | 472.233 | 2103.166 |
| 222 | 1641 | | 39 20' | -- | 11.0 | 90 20' | -9.5 | -20.5 | | 3338.1 | | +926 | +1355 | 472.466 | 2103.399 |
| 223 | 1964 | | 37 20' | -- | 9.0 | 90 20' | -11.4 | -20.4 | | 3338.2 | | +1165 | +1581 | 472.705 | 2103.625 |
| 224 | 2291 | | 36 - | +16.3 | 10.9 | 90 20' | -13.3 | -24.2 | | 3334.4 | | +1401 | +1813 | 472.941 | 2103.857 |
| 225 | 2618 | | 35 05' | -- | 8.0 | 90 26' | -19.8 | -27.8 | | 3330.8 | | +1634 | +2046 | 473.174 | 2104.090 |
| 226 | 2942 | | 36 10' | -- | 6.0 | 90 26' | -22.3 | -28.3 | | 3330.3 | | +1792 | +2333 | 473.332 | 2104.377 |
| 227 | 3262 | | 37 50 16 | -- | 14.3 | 90 18' | -17.1 | -31.4 | 31.23 | 3327.4 | TP | +1911 | +2644 | 473.452 | 2104.685 |
| 227 | 3262 | | | -- | 14.0 | 269 42' | -17.1 | -31.1 | | | TP | + | -3 | | ACROSS FLAG |
| | 1426 | 1423.8 | 264 59 58 | -- | +11.7 | 93 10' | +78.8 | +90.5 | 90.43 | 3417.8 | BS | -279 | +1396 | | |
| | 1426 | | | -- | +11.4 | 266 50 | +78.8 | +90.2 | | | BS | + | -3 | | |
| 228 | 1142 | 1139.2 | 272 27' | -- | 9.7 | 94 - | -79.7 | -89.4 | | 3328.4 | | +366 | -1679 | 473.540 | 2104.999 |
| 229 | 850 | 846.6 | 281 17' | -- | 10.8 | 95 10' | -76.5 | -87.3 | | 3330.5 | | +392 | -750 | 473.566 | 2105.328 |
| Bm | 878 | 874.4 | 283 52 16 | -- | 10.1 | 95 10' | -79.1 | -89.2 | | 3328.6 | Bm | +439 | -756 | 473.613 | 2105.322 |
| 230 | 568 | 564.0 | 295 16' | -- | 9.5 | 96 50' | -67.6 | -77.1 | | 3340.7 | | +373 | -423 | 473.547 | 2105.655 |
| 231 | 323 | 320.7 | 324 50' | -- | 6.5 | 96 50' | -38.4 | -44.9 | | 3372.9 | | +303 | -104 | 473.477 | 2105.974 |
| 232 | 174 | | 38 33' | -- | 5.8 | 93 20' | -10.1 | -15.9 | | 3401.9 | | +100 | +142 | 473.274 | 2106.220 |
| K | 0 | | | -- | 5.1 | - | | -5.1 | | 3412.7 | K | 0 | 0 | 473.174 | 2106.078 |

y=473.575 x - 2.105410
A=280 1935 U.S.C.T.S. 330

OFF ROAD

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|----------|
| 7-24-86 | | B. Cotcamp | | J. Middleton | | 6834 | | J.M. | | 7 | | 16 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | CLEVELAND-15' | | mont. | | BLAINE | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 3417.8 | | | | | | |
| 233 | 328 | | 112 25' | +16.3 | 5.0 | 90 20 | -1.9 | -6.9 | | 3410.9 | | -205 | +256 | 472,969 | 2106,334 |
| 234 | 624 | | 131 08' | -- | 6.3 | 90 20 | -3.6 | -9.9 | | 3407.9 | | -526 | +336 | 472,648 | 2106,414 |
| 235 | 953 | | 132 15' | -- | 6.8 | 90 20 | -5.5 | -12.3 | | 3405.5 | | -813 | +497 | 472,361 | 2106,575 |
| 236 | 1274 | | 128 37' | -- | 14.4 | 90 28 | -10.4 | -24.8 | | | TP | -1043 | +732 | 472,132 | 2106,807 |
| 236 | 1274 | | | | 14.2 | 269 32 | -10.4 | -24.6 | | 3393.2 | TP | +1 | -3 | | |
| | 2730 | | 269 28 25' | +16.0 | 12.8 | 89 50 | -7.9 | +4.9 | 4.83 | 3398.0 | BS | -728 | +2631 | | |
| | 2736 | | | | 12.5 | 270 10 | -7.9 | +4.6 | | | BS | +1 | -3 | | |
| 237 | 2421 | | 267 - | -- | 11.1 | - | | -11.1 | | 3386.9 | | +545 | -2359 | 471,950 | 2107,076 |
| 238 | 2093 | | 266 10' | -- | 8.8 | BH | -10.5 | -19.3 | | 3378.7 | | +441 | -2046 | 471,846 | 2107,389 |
| 239 | 1766 | | 267 16' | -- | 8.5 | BH | -8.8 | -17.3 | | 3380.7 | | +405 | -1719 | 471,810 | 2107,716 |
| 240 | 1441 | | 268 53' | -- | 10.4 | 90 30 | -12.6 | -23.0 | | 3375.0 | | +370 | -1393 | 471,775 | 2108,042 |
| 241 | 1113 | | 267 38' | -- | 9.7 | 90 40 | -13.0 | -22.7 | | 3375.3 | | +262 | -1082 | 471,667 | 2108,353 |
| 242 | 786 | | 265 - | -- | 11.1 | 90 40 | -9.1 | -20.2 | | 3377.8 | | +150 | -772 | 471,555 | 2108,663 |
| 243 | 464 | | 258 05' | -- | 10.3 | 91 10' | -9.4 | -19.7 | | 3378.3 | | +33 | -463 | 471,438 | 2108,972 |
| 244 | 165 | 144.3 | 228 05' | -- | 7.2 | 95 10 | -14.9 | -22.1 | | 3375.9 | | -72 | -148 | 471,333 | 2109,287 |
| Σ | 0 | | | | 5.1 | - | | -5.1 | | 3392.9 | Σ | 0 | 0 | 471,405 | 2109,435 |
| 245 | 213 | 212.1 | 106 35' | +16.0 | 10.1 | 95 10 | -19.2 | -29.3 | | 3368.7 | | -114 | +179 | 471,291 | 2109,614 |
| 246 | 529 | | 90 15' | -- | 6.5 | 92 - | -18.5 | -25.0 | | 3373.0 | | -148 | +508 | 471,257 | 2109,943 |
| 247 | 855 | | 86 30' | -- | 11.0 | - | | -11.0 | | 3387.0 | | -185 | +835 | 471,220 | 2110,270 |
| 248 | 1183 | | 84 50' | -- | 7.9 | BH | -5.9 | -13.8 | | 3384.2 | | -222 | +1162 | 471,183 | 2110,597 |

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|-----------------------|------------------------------------|
| 7-24-86 | | B. Cotcamp | | J. Middleton | | 6834 | | F.M. | | 7 | | 17 | | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | | |
| MONTANA | | CLEVELAND-15 | | MONT. | | Blaine | | | | | | | | S. Binns | | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y | X |
| | | | | | | | | | 3398.0 | | | | | | y=471,160 x=2,110,925 | |
| 249 | 1511 | | 83° 19' 22" | +16.0 | 13.4 | - | -13.4 | | 3384.6 | | TP | -245 | +1491 | 471,160 | 2,110,925 | y - Intersect Horiz ⁺¹³ |
| 250 | 1770 | | 76° 10' | -- | 6.5 | BH | -8.9 | -15.4 | 3382.6 | | | -67 | +1769 | 471,338 | 2,111,204 | corr. x=65 |
| 251 | 2053 | | 71° 06' | -- | 7.1 | BH | -10.3 | -17.4 | 3380.6 | | | +104 | +2050 | 471,509 | 2,111,485 | |
| 252 | 2351 | | 67° 30' | -- | 4.7 | BH | -11.8 | -16.5 | 3381.5 | | | +266 | +2336 | 471,671 | 2,111,771 | |
| 253 | 2656 | | 64° 35' | -- | 11.8 | - | - | -11.8 | 3386.2 | | | +435 | +2620 | 471,840 | 2,112,055 | |
| 254 | 2983 | | 64° 20' | -- | 11.4 | - | - | -11.4 | 3386.6 | | | +501 | +2941 | 471,906 | 2,112,376 | |
| TP | 3143 | | 63° 10' 52" | +15.7 | 12.7 | 89° 54' | +5.5 | -7.2 | | | TP | +606 | +3084 | 472,013 | 2,112,517 | |
| TP | 3143 | | | | 12.4 | 270° 06' | +5.5 | -6.9 | 3391.0 | | TP | +2 | -2 | | | |
| | 1811 | | 211° 43' 42" | -- | 7.8 | 89° 30' | -15.8 | -8.0 | 3383.0 | | BS | +1225 | +1334 | | | |
| | 1811 | | | | 7.7 | 270° 30' | -15.8 | -8.1 | | | BS | +2 | -2 | | | |
| 255 | 1674 | | 213° 50' | -- | 7.8 | 89° 30' | +14.6 | +6.8 | 3389.8 | | | -1086 | -1274 | 472,154 | 2,112,525 | |
| 256 | 1358 | | 216° - | -- | 5.7 | - | - | -5.7 | 3377.3 | | | -842 | -1066 | 472,398 | 2,112,783 | |
| 257 | 1029 | | 214° 45' | -- | 7.5 | BH | -5.1 | -12.6 | 3370.4 | | | -655 | -793 | 472,585 | 2,113,056 | |
| 258 | 701 | | 212° 50' | -- | 7.0 | 91° - | -12.2 | -19.2 | 3363.8 | | | -464 | -525 | 472,776 | 2,113,324 | |
| 259 | 377 | | 206° 10' | -- | 11.2 | 91° - | -16.6 | -17.8 | 3365.2 | | | -281 | -252 | 472,959 | 2,113,597 | |
| 260 | 105 | | 150° - | -- | 10.8 | 92° - | -3.7 | -14.5 | 3368.5 | | | -102 | +26 | 473,138 | 2,113,825 | |
| κ | 0 | | | | 5.1 | - | - | -5.1 | 3377.9 | | κ | 0 | 0 | 473,240 | 2,113,849 | |
| 261 | 262 | | 31° 10' | +15.7 | 4.7 | 92° - | -9.1 | -13.8 | 3369.2 | | | +179 | +191 | 473,419 | 2,114,040 | |
| 262 | 585 | | 21° 48' | -- | 9.4 | 92° - | -20.4 | -29.8 | 3353.2 | | | +464 | +356 | 473,704 | 2,114,205 | |
| 263 | 915 | | 20° 20' | -- | 7.1 | 91° 40' | -26.6 | -33.5 | 3349.3 | | | +740 | +538 | 473,980 | 2,114,387 | |

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|-----------|
| 7-24-86 | | B. Stamp | | J. Middleton | | 6834 | | J.M. | | 7 | | 18 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | CLEVELAND-15' | | MONT. | | BLAINE | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 3383.0 | | | | | | |
| 264 | 1246 | | 20 20' | +15.7 | 7.7 | 91 40' | -36.2 | -43.9 | | 3339.1 | | +1008 | +733 | 474.428 | 2,114,582 |
| 265 | 1576 | | - | -- | 6.5 | 91 30' | -41.3 | -47.8 | | 3335.2 | | +1274 | +927 | 474.514 | 2,114,776 |
| 266 | 1906 | 1905.4 | 20 32' | -- | 5.9 | 91 30' | -49.9 | -55.8 | | 3327.2 | | +1537 | +1126 | 474.777 | 2,114,925 |
| 267 | 2235 | 2234.2 | 20 50' | -- | 5.7 | 91 30' | -58.5 | -64.2 | | 3318.8 | | +1795 | +1330 | 475.035 | 2,115,129 |
| 268 | 2565 | 2564.1 | 21 - | -- | 7.8 | 91 30' | -67.1 | -74.9 | | 3308.1 | | +2056 | +1532 | 475.276 | 2,115,381 |
| 269 | 2894 | 2893.1 | 21 20' | -- | 8.3 | 91 24' | -73.7 | -79.0 | | 3304.0 | | +2310 | +1742 | 475.550 | 2,115,591 |
| 1# | 3214 | 3213.1 | 20 28 18" | -- | 11.8 | 91 20' | -74.8 | -86.6 | | 3296.4 | 1# | +2594 | +1896 | 475.834 | 2,115,245 |
| 270 | 3217 | 3216.1 | 21 05' | -- | 11.8 | 91 20' | -74.9 | -86.7 | | | TP | +2576 | +1926 | 475.818 | 2,115,223 |
| 270 | 3217 | | | | 11.5 | 268 40' | -74.9 | -86.4 | 86.5 | 3296.5 | TP | +2 | -2 | | |
| | 2309 | | 267 45 15' | +15.7 | 6.8 | TH | -11.5 | -4.7 | 4.8 | 3291.7 | BS | -545 | +2244 | | |
| | 2309 | | | | 6.5 | TH 270 | -11.5 | -5.0 | | | BS | +2 | -2 | | |
| 271 | 1980 | | 267 50' | -- | 11.3 | TH | +9.9 | +1.4 | | 3293.1 | | +470 | -1923 | 475.745 | 2,116,992 |
| 272 | 1650 | | - | -- | 9.8 | - | | -9.8 | | 3281.9 | | +392 | -1603 | 475.667 | 2,116,412 |
| 273 | 1320 | | - | -- | 11.6 | BM | -6.6 | -18.2 | | 3273.5 | | +313 | -1282 | 475.588 | 2,116,733 |
| 274 | 996 | | - | -- | 9.9 | 90 30' | -8.6 | -18.5 | | 3273.2 | | +235 | -962 | 475.510 | 2,117,053 |
| 275 | 660 | | - | -- | 6.3 | 90 30' | -5.8 | -12.1 | | 3279.6 | | +157 | -641 | 475.432 | 2,117,374 |
| 276 | 330 | | - | -- | 8.1 | 90 30' | -2.9 | -16.0 | | 3280.5 | | +78 | -321 | 475.353 | 2,117,694 |
| 277 | 0 | | | | 5.1 | - | | -5.1 | | 3286.6 | π | 0 | 0 | 475.275 | 2,118,015 |

4 475.875 x = 2,115,740
1# T-Inter. EL. 3300.0

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|--|
| 7-24-86 | | B. Cotcamp | | J. Middleton | | 6834 | | F.M. | | 7 | | 19 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | CLEVELAND - 15' | | MONT. | | BLAINE | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 3291.7 | | | | | | |
| 278 | 330 | | 87° 50' | +15.9 | 10.2 | 91° 30' | -8.6 | -18.8 | | 3272.9 | | -78 | +321 | 475.1972 | 2,118,336 |
| 279 | 660 | | - | -- | 6.7 | 90° 30' | -5.8 | -12.5 | | 3279.2 | | -157 | +641 | 475.118 | 2,118,656 |
| 280 | 990 | | - | -- | 11.4 | 90° 30' | -8.6 | -20.0 | | 3271.7 | | -235 | +962 | 475.040 | 2,118,977 |
| 281 | 1320 | | - | -- | 10.7 | 90° 30' | -11.5 | -22.2 | | 3269.5 | | -313 | +1282 | 474.962 | 2,119,297 |
| 282 | 1650 | | - | -- | 10.0 | 90° 10' | -4.8 | -14.8 | | 3276.9 | | -392 | +1603 | 474.883 | 2,119,618 |
| 283 | 1980 | | 87° 50' | +15.9 | 10.0 | 90° 20' | -11.5 | -21.5 | | 3270.2 | | -470 | +1923 | 474.805 | 2,119,938 |
| 284 | 2310 | | - | -- | 9.0 | - | - | -9.0 | | 3282.7 | | -548 | +2244 | 474.727 | 2,120,259 |
| 285 | 2640 | | - | -- | 4.4 | - | - | -4.4 | | 3287.3 | | -627 | +2565 | 474.648 | 2,120,580 |
| 286 | 2970 | | - | -- | 5.7 | - | - | -5.7 | | 3286.0 | | -705 | +2885 | 474.570 | 2,120,900 |
| 287 | 3300 | | - | -- | 2.7 | - | - | -2.7 | | 3289.0 | | -783 | +3206 | 474.492 | 2,121,221 |
| 288 | 3629 | | 87° 55' 48" | - | 14.7 | 89° 50' | +10.6 | -4.1 | | | TP | -867 | +3524 | 474.410 | 2,121,532 CLEVELAND - 15' ↑ |
| 288 | 3629 | | | | 14.4 | 270° 10' | +10.6 | -3.8 | 3291.7 | 3287.8 | TP | +2 | -2 | | |
| | 1649 | | 267° 58' 44" | +15.9 | 12.8 | - | - | +12.8 | 3291.7 | 3300.5 | BS | -396 | +1601 | | |
| | 1649 | | | | 12.5 | 270° - | - | +12.5 | | | BS | +2 | -2 | | |
| 289 | 1320 | | 268° 05' | -- | 6.8 | 90° 20' | -7.7 | -14.5 | | 3286.0 | | +319 | -1281 | 474.335 | 2,121,855 NEW House Reservoir -75 ↓ |
| 290 | 990 | | - | -- | 7.5 | 90° 40' | -11.5 | -19.0 | | 3281.5 | | +239 | -961 | 474.255 | 2,122,175 |
| 291 | 660 | | - | -- | 8.3 | 91° 40' | -19.2 | -27.5 | | 3273.0 | | +159 | -640 | 474.175 | 2,122,496 |
| 292 | 330 | | - | -- | 6.7 | 91° 40' | -9.6 | -16.3 | | 3284.2 | | +80 | -320 | 474.096 | 2,122,816 |
| 293 | 0 | | | | 5.1 | - | - | -5.1 | | 3295.4 | TP | 0 | 0 | 474.016 | 2,123,136 |

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|---------------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|-----------|
| 7-25-86 | | B. Cotcamp | | J. Middleton | | 6834 | | F.M. | | 7 | | 20 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | New House Reservoir 7 1/2 | | MONT. | | BLAINE | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 3300.5 | | | | | | |
| 294 | 330 | | 106 - | +15.9 | 7.6 | 91 - | -5.8 | -13.4 | | 3287.1 | | -174 | +280 | 473.842 | 2,123,416 |
| 295 | 660 | | 107 - | -- | 5.3 | 91 - | -11.5 | -16.8 | | 3283.7 | | -359 | +554 | 473.657 | 2,123,690 |
| 296 | 988 | | 106 - | -- | 6.2 | 91 - | -17.2 | -23.4 | | 3277.1 | | -522 | +839 | 473.494 | 2,123,975 |
| 297 | 1299 | | 100 30 | -- | 6.3 | 90 40 | -15.1 | -21.4 | | 3279.1 | | -578 | +1164 | 473.438 | 2,124,300 |
| 298 | 1619 | | 97 25 | -- | 10.9 | 90 20 | -9.4 | -20.3 | | 3280.2 | | -641 | +1487 | 473.375 | 2,124,623 |
| 299 | 1944 | | 95 25 | -- | 11.4 | 90 20 | -11.3 | -22.7 | | 3277.8 | | -707 | +1811 | 473.309 | 2,124,947 |
| 300 | 2272 | | 94 38 | -- | 7.6 | 90 20 | -13.2 | -20.8 | | 3279.7 | | -797 | +2128 | 473.219 | 2,125,264 |
| 301 | 2602 | | - | -- | 7.4 | 90 20 | -15.1 | -22.5 | | 3278.0 | | -913 | +2437 | 473.103 | 2,125,523 |
| 302 | 2931 | | 94 58 | -- | 8.6 | 90 20 | -17.1 | -25.7 | | 3274.8 | | -1044 | +2739 | 472.972 | 2,125,875 |
| 303 | 3259 | | 95 23 42 | -- | 12.2 | 90 22 | -20.9 | -33.1 | | | TP | -1184 | +3036 | 472.833 | 2,126,171 |
| 303 | 3259 | | | | 11.5 | 269 38 | -20.9 | -32.4 | 330.7 | 3267.8 | TP | + | - | | |
| | 1643 | 1642.4 | 267 32 28 | +15.9 | 10.3 | 88 30 | -43.0 | -32.7 | 328.7 3235.0 | | BS | -382 | +1597 | | |
| | 1643 | | | | 10.0 | 271 30 | -43.0 | -33.0 | | | BS | + | - | | |
| 304 | 1315 | | 266 40 | -- | 7.9 | 88 50 | +26.8 | +18.9 | | 3253.9 | | +286 | -1284 | 472.738 | 2,126,483 |
| 305 | 986 | | 267 55 | -- | 8.8 | 88 50 | +20.1 | +11.3 | | 3246.3 | | +235 | -957 | 472.687 | 2,126,810 |
| 306 | 657 | | 269 40 | -- | 12.0 | 88 50 | +13.4 | +1.4 | | 3236.4 | | +176 | -633 | 472.628 | 2,127,134 |
| 307 | 329 | | 274 30 | -- | 7.0 | 88 50 | +6.7 | -0.3 | | 3234.7 | | +115 | -308 | 472.567 | 2,127,459 |
| 308 | 0 | | | | 5.1 | - | | -5.1 | | 3229.9 | X | 0 | 0 | 472.452 | 2,127,767 |
| 309 | 330 | | 108 30 | -- | 5.1 | 90 50 | -4.8 | -9.9 | | 3225.1 | | -186 | +272 | 472.266 | 2,128,039 |
| 310 | 660 | | 109 50 | -- | 10.2 | 90 50 | -9.6 | -19.8 | | 3215.2 | | -385 | +536 | 472.067 | 2,128,303 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|---------------------------|---------|--------------|--------------|--------|------------------|----|----------|---|------|---------------|----------|
| DATE | 7-25-86 | INSTRUMENT MAN | B. Camp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | BC | LINE NO. | 7 | PAGE | 21 | |
| AREA | MONTANA | TOPO MAP | NEWHOUSE Reservoir-7 1/2' | STATE | MONT. | COUNTY | BLAINE | TWP | | RANGE | | PPM | PARTY MANAGER | S. Binns |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS TP | NORTH + SOUTH - | | EAST + WEST - | | COORDINATES | | REMARKS | |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|----------|-----------------|-------|---------------|-----------|---------------------|--------|---------|------------------------|
| | | | | | | | | | | | | LAT. | DEP. | Y | X | | | | |
| | | | | | | | | | 32350 | | | | | | | | | | |
| 311 | 728 | | 109 23 24 | +15.9 | 10.3 | 90 50 | -10.6 | -20.9 | | 3214.1 | TP | -421 | +594 | 472.031 | 2,128,361 | 472.025 x 2,128,335 | | | 4-way inter. EL 3216.0 |
| 312 | 989 | | 110 55' | -- | 8.3 | 90 50 | -14.4 | -22.7 | | 3212.3 | | -593 | +792 | 471,859 | 2,128,559 | | | | |
| 313 | 1318 | | 112 05' | -- | 9.9 | 91 - | -23.0 | -32.9 | | 3202.1 | | -811 | +1039 | 471,641 | 2,128,806 | | | | |
| 314 | 1648 | | 112 10 | -- | 8.9 | 91 - | -28.8 | -37.7 | | 3197.3 | | -1016 | +1297 | 471,436 | 2,129,064 | | | | |
| 315 | 1975 | | 110 50 | -- | 6.8 | 90 50 | -28.7 | -35.5 | | 3199.5 | | -1181 | +1583 | 471,271 | 2,129,350 | | | | |
| 316 | 2300 | | 109 30 | -- | 5.5 | 90 40 | -26.8 | -32.3 | | 3202.7 | | -1332 | +1875 | 471,120 | 2,129,642 | | | | |
| 316 | 2627 | | 108 27 48 | -- | 11.1 | 90 36 | -27.5 | -38.6 | | | TP | -1483 | +2168 | 470,970 | 2,129,934 | | | | |
| | 2627 | | | | 10.8 | 269 24 | -27.5 | -38.3 | -38.4 | 3196.6 | TP | | | | | | | | |
| | 3078 | | 279 31 24 | +15.9 | 9.4 | 89 30 | -26.9 | -17.5 | 47.6 | 3179.0 | BS | -1321 | +2780 | | | | | | |
| | 3078 | | | | 9.1 | 270 30 | -26.9 | -17.8 | | | BS | | | | | | | | |
| 317 | 2748 | | 279 40 | -- | 5.6 | 89 40 | +16.0 | +8.2 | | 3187.2 | | +1186 | -2479 | 470,836 | 2,130,234 | 7.8 | 89 40' | 279 40' | |
| 318 | 2419 | | 279 22 | -- | 5.6 | 89 50 | +7.0 | +1.4 | | 3180.4 | | +1033 | -2188 | 470,683 | 2,130,525 | | | | |
| 319 | 2092 | | 278 10 | -- | 6.0 | 89 50 | +6.1 | +0.1 | | 3179.1 | | +853 | -1910 | 470,503 | 2,130,803 | | | | |
| 320 | 1769 | | 276 25 | -- | 7.8 | - | | -7.8 | | 3171.2 | | +672 | -1637 | 470,322 | 2,131,076 | | | | |
| 321 | 1444 | | 278 10 | -- | 9.0 | BH | -7.2 | -16.2 | | 3162.8 | | +589 | -1318 | 470,239 | 2,131,395 | | | | |
| 322 | 1114 | | 277 25 | -- | 7.9 | BH | -5.6 | -13.5 | | 3165.5 | | +450 | -1019 | 470,100 | 2,131,694 | | | | |
| 323 | 785 | | 276 40 | -- | 1.6 | - | | -11.6 | | 3167.4 | | +301 | -725 | 469,951 | 2,131,988 | | | | |
| 324 | 456 | | 275 30 | -- | 7.6 | - | | -9.6 | | 3169.4 | | +166 | -425 | 469,816 | 2,132,288 | | | | |
| 325 | 126 | | 274 10 | -- | 10.1 | - | | -10.1 | | 3168.9 | | +43 | -118 | 469,693 | 2,132,595 | | | | |
| Σ | 0 | | | | 5.1 | - | | -5.1 | | 3173.9 | Σ | 0 | 0 | 469,650 | 2,132,713 | | | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | |
|------|---------|----------------|--------------------------|---------|--------------|--------------|--------|------------------|------|----------|-----|---------------|----------|
| DATE | 7-29-86 | INSTRUMENT MAN | B. C. Camp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | B.C. | LINE NO. | 7 | PAGE | 22 |
| AREA | MONTANA | TOPO MAP | NEWhouse Reservoir-7 1/2 | STATE | MONT. | COUNTY | BLAINE | TWP | | RANGE | PPM | PARTY MANAGER | S. Binns |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | | |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------|-----------|--|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y | X |
| | | | | | | | | | 3179.0 | | | | | | | |
| # | 187 | | 92 33 30 | +15.9 | 10.0 | - | | -10.0 | | 3169.0 | # | -59 | +177 | 469,591 | 2,132,890 | 4-469,590 x -2,132,885 # Fence line #3170.0 |
| 326 | 204 | | 94 20 | -- | 10.8 | - | | -10.8 | | 3168.2 | | -71 | +191 | 469,579 | 2,132,904 | |
| 327 | 533 | | 99 20 | -- | 9.2 | 91 10 | -10.9 | -20.1 | | 3158.9 | | -227 | +482 | 469,423 | 2,133,195 | |
| 328 | 841 | | 107 50 | -- | 6.3 | 91 - | -14.7 | -21.0 | | 3158.0 | | -467 | +699 | 469,183 | 2,133,412 | |
| 329 | 1168 | | 108 55 | -- | 7.2 | 90 50 | -17.0 | -24.2 | | 3154.8 | | -667 | +959 | 468,983 | 2,133,672 | |
| 330 | 1497 | | 108 40 | -- | 9.8 | 90 50 | -21.8 | -31.6 | | 3142.4 | | -849 | +1233 | 468,801 | 2,133,946 | |
| 331 | 1823 | | 108 30 | +15.9 | 9.7 | 90 40 | -21.2 | -30.9 | | 3148.1 | | -1030 | +1504 | 468,620 | 2,134,217 | |
| 332 | 2098 | | 104 37 | -- | 9.2 | 90 40 | -24.4 | -33.6 | | 3145.4 | | -1065 | +1807 | 468,585 | 2,134,526 | |
| 333 | 2166 | | 95 50 | -- | 5.4 | 90 40 | -25.2 | -30.6 | | 3148.4 | | -802 | +2012 | 468,848 | 2,134,729 | |
| 334 | 2283 | | 87 52 | -- | 9.7 | 90 40 | -26.6 | -36.3 | | 3142.7 | | -543 | +2217 | 469,107 | 2,134,950 | |
| 335 | 2452 | | 81 03 | -- | 7.1 | 90 50 | -35.7 | -42.8 | | 3136.2 | | -297 | +2434 | 469,353 | 2,135,147 | |
| 336 | 2770 | | 79 30 | -- | 5.7 | 90 50 | -40.3 | -46.0 | | 3133.0 | | -261 | +2758 | 469,389 | 2,135,471 | |
| 337 | 3082 | | 79 20 | -- | 6.9 | 90 50 | -44.8 | -51.7 | | 3127.3 | | -281 | +3069 | 469,369 | 2,135,782 | |
| 338 | 3370 | | 76 30 | +15.9 | 7.0 | 90 56 | -54.9 | -61.9 | | 3117.1 | | -141 | +3367 | 469,509 | 2,136,080 | |
| 339 | 3696 | | 76 56 | -- | 7.6 | 90 56 | -60.2 | -67.8 | | 3111.2 | | -183 | +3691 | 469,467 | 2,136,404 | LAST ONE ON ROAD |
| 340 | 3928 | | 73 30 | -- | 9.6 | 90 56 | -63.9 | -73.5 | | 3105.5 | | +41 | +3928 | 469,691 | 2,136,641 | X-Country |
| 341 | 4159 | 4158.4 | 70 05 | -- | 5.0 | 91 - | -72.6 | -77.6 | | 3101.4 | | +291 | +4148 | 469,941 | 2,136,861 | - - |
| 342 | 4260 | | 66 28 | - | 9.2 | 90 28 | -34.7 | -43.9 | | 3135.1 | | +566 | +4222 | 470,216 | 2,136,935 | BACK ON ROAD |
| 343 | 4295 | | 62 05 | -- | 22.6 | 90 04 | -5.0 | -27.6 | | 3151.4 | | +894 | +4201 | 470,544 | 2,136,914 | |
| 344 | 4488 | | 58 40 | -- | 10.0 | 89 54 | +7.8 | -2.2 | | 3156.8 | | +1194 | +4326 | 470,844 | 2,137,039 | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|---------------------|---------|--------------|--------------|--------|------------------|------|----------|---|------|---------------|----------|
| DATE | 7-29-86 | INSTRUMENT MAN | B. Stcamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | B.C. | LINE NO. | 7 | PAGE | 23 | |
| AREA | MONTANA | TOPO MAP | New House Reservoir | STATE | MONT. | COUNTY | BLAINE | TWP | | RANGE | | PPM | PARTY MANAGER | S. Binns |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|--------------------------------|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | 3179.0 | | | | | |
| 345 | 4750 | | 59° 38' | +15.9 | 9.0 | 89° 36' | +33.2 | +24.2 | | 3203.2 | | +1187 | +4599 | 470.837 2,137.312 |
| 346 | 5077 | | 59° 30' | - | 4.4 | 89° 30' | +35.4 | +31.0 | | 3210.0 | | +1280 | +4913 | 470.930 2,137.626 |
| 347 | 5362 | | 57° 40' 34" | +15.6 | 14.3 | 89° 27' | +51.5 | +37.2 | | | TP | +1543 | +5135 | 471.194 2,137.847 |
| 347 | 5362 | | | | 13.8 | 270° 33' | +51.5 | +37.7 | +37.63 | 3216.6 | TP | " | - | |
| | 1305 | | 216° 21' 28" | - | 6.3 | 91° - | +22.8 | +29.1 | | 3245.7 | BS | +804 | +1028 | |
| | 1305 | | | | 6.2 | 269° - | +22.8 | +29.0 | | | BS | " | - | |
| 348 | 982 | | 219° 35' | - | 8.1 | 91° - | -12.1 | -25.2 | | 3220.5 | | -561 | -806 | 471.438 2,138.068 |
| 349 | 657 | | 223° - | - | 7.6 | 91° 30' | -12.2 | -24.8 | | 3220.9 | | -342 | -561 | 471.657 2,138.313 |
| 350 | 330 | | 225° 05' | - | 9.0 | 93° 30' | -20.1 | -29.1 | | 3216.6 | | -162 | -288 | 471.837 2,138.586 |
| 351 | 0 | | | | 5.1 | - | | -5.1 | | 3240.6 | X | 0 | 0 | 471.999 2,138.874 |
| 352 | 330 | | 47° 30' | +15.6 | 8.0 | 91° 30' | -8.6 | -16.6 | | 3229.1 | | +149 | +294 | 472.148 2,139.168 |
| # | 578 | | 45° 07' 35" | - | 7.5 | 90° 10' | -1.7 | -9.2 | | 3236.5 | # | +283 | +504 | 472.282 2,139.378 # fence line |
| 353 | 647 | | 48° 55' | - | 6.7 | 90° 10' | -1.9 | -8.6 | | 3232.1 | | +278 | +584 | 472.277 2,139.458 |
| 354 | 969 | | 54° - | - | 11.6 | 90° 10' | -2.8 | -14.4 | | 3231.3 | | +338 | +908 | 472.337 2,139.782 |
| 355 | 1297 | | 55° 05' | - | 8.7 | 90° 10' | -3.8 | -12.5 | | 3233.2 | | +429 | +1224 | 472.428 2,140.098 |
| 356 | 1622 | | 56° 31' 12" | - | 5.2 | - | | -5.2 | | | TP | +498 | +1544 | 472.498 2,140.417 |
| 356 | 1622 | | | | 5.1 | 270° - | | -5.1 | | 3240.6 | TP | " | - | |
| | 3073 | | 253° 38' 20" | - | 11.8 | 89° 30' | -26.8 | -15.0 | | 3225.6 | BS | +41 | +3073 | |
| | 3073 | | | | 11.5 | 270° 30' | -26.8 | -15.3 | | | BS | " | - | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | |
|------|---------|----------------|-------------------------|---------|--------------|--------------|--------|------------------|------|----------|-----|---------------|----------|
| DATE | 7-29-86 | INSTRUMENT MAN | B. Cotcamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | B.C. | LINE NO. | 7 | PAGE | 24 |
| AREA | MONTANA | TOPO MAP | NEW House Reservoir 74' | STATE | MONT. | COUNTY | BLAINE | TWP | | RANGE | PPM | PARTY MANAGER | S. Binns |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|-------------------|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | 3225.6 | | | | | |
| 357 | 2749 | | 252 40' | +15.6 | 9.3 | TH | +13.2 | +4.4 | | 3230.0 | | -83 | -2748 | 472,457 2,140,741 |
| 358 | 2429 | | 251 - | -- | 11.8 | TH | +12.1 | +0.3 | | 3225.9 | | -144 | -2425 | 472,396 2,141,064 |
| 359 | 2107 | | 249 10' | -- | 11.0 | 89 50 | +6.1 | -4.9 | | 3220.7 | | -192 | -2098 | 472,348 2,141,391 |
| 360 | 1782 | | 247 50' | -- | 10.1 | 89 50 | +5.2 | -4.9 | | 3220.7 | | -204 | -1770 | 472,336 2,141,719 |
| 361 | 1455 | | 248 55' | -- | 7.1 | 89 50 | +4.2 | -2.9 | | 3222.7 | | -139 | -1448 | 472,401 2,142,041 |
| 362 | 1135 | | 252 10' | -- | 6.3 | 89 50 | +3.3 | -3.0 | | 3222.6 | | -44 | -1134 | 472,496 2,142,355 |
| 363 | 807 | | 254 40' | -- | 9.7 | - | - | -9.7 | | 3215.9 | | +4 | -807 | 472,544 2,142,682 |
| 364 | 483 | | 260 - | -- | 11.8 | BH | -2.4 | -14.2 | | 3211.4 | | +47 | -481 | 472,587 2,143,008 |
| 365 | 172 | | 282 10' | -- | 10.3 | - | - | -10.3 | | 3215.3 | | +80 | -152 | 472,620 2,143,337 |
| Σ | 0 | | | | 5.1 | - | - | -5.1 | | 3220.5 | Σ | 0 | 0 | 472,540 2,143,489 |
| 366 | 182 | | 58 52' | +15.6 | 10.8 | 91 40' | -5.3 | -16.1 | | 3209.5 | | +49 | +175 | 472,589 2,143,664 |
| 367 | 507 | | 68 10' | -- | 8.3 | 91 - | -8.8 | -17.1 | | 3208.5 | | +55 | +504 | 472,595 2,143,993 |
| 368 | 831 | | 63 - | -- | 11.3 | 91 - | -14.5 | -25.8 | | 3199.8 | | +164 | +815 | 472,704 2,144,304 |
| 369 | 1158 | | 61 56' | -- | 5.7 | 91 - | -20.2 | -25.9 | | 3199.7 | | +250 | +1131 | 472,790 2,144,620 |
| 370 | 1482 | | 60 03' | -- | 8.2 | 90 40' | -17.2 | -25.4 | | 3200.2 | | +367 | +1436 | 472,907 2,144,925 |
| 371 | 1806 | | 59 46 - | - | 7.8 | 90 30' | -15.8 | -23.6 | | | TP | +456 | +1747 | 472,997 2,145,235 |
| 371 | 1806 | | | - | 7.5 | 269 30' | -15.8 | -23.3 | 23.4 | 3202.7 | TP | +1 | -1 | |
| | 1901 | | 255 32 51 | ~ | +7.1 | 89 30' | -16.6 | -9.5 | 3192.7 | | BS | -38 | +1901 | |
| | 1901 | | | | +7.0 | 270 30' | -16.6 | -9.6 | | | BS | +1 | -1 | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|-----------------------------|---------|--------------|--------------|--------|------------------|------|----------|---|------|---------------|----------|
| DATE | 7-29-86 | INSTRUMENT MAN | B. C. Camp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | B.C. | LINE NO. | 7 | PAGE | 25 | |
| AREA | MONTANA | TOPO MAP | NEWHOUSE Reservoir - 7 1/2' | STATE | MONT. | COUNTY | BLAINE | TWP | | RANGE | | PPM | PARTY MANAGER | S. Binns |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS |
|--------------------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | 3192.7 | | | | | |
| 372 | 1571 | | 255° 33' | +15.6 | 9.3 | 89° 30' | +13.7 | +4.4 | | 3192.1 | | +32 | -1571 | 472.992 2,145.564 |
| 373 | 1242 | | 255° 45' | -- | 7.6 | 89° 50' | +3.6 | -4.0 | | 3188.7 | | +29 | -1242 | 472.989 2,145.893 |
| 374 | 912 | | 256° -- | -- | 7.2 | 89° 50' | +2.7 | -4.5 | | 3188.2 | | +25 | -912 | 472.985 2,146.223 |
| 375 | 582 | | 255° 25' | -- | 7.8 | 90° 40' | -6.8 | -14.6 | | 3178.1 | | +10 | -582 | 472.970 2,146.553 |
| 376 | 253 | | 254° - | -- | 10.7 | 90° 40' | -2.9 | -13.6 | | 3179.1 | | -2 | -253 | 472.958 2,146.882 |
| K | 0 | | | | 5.1 | - | - | -5.1 | | 3182.6 | X | 0 | 0 | 472.960 2,147.135 |
| 377 | 77 | | 66° 40' | +15.6 | 9.9 | 90° 40' | -0.9 | -10.8 | | 3181.9 | | +10 | +76 | 472.970 2,147.211 |
| 378 | 405 | | 67° 40' | -- | 11.8 | 90° 40' | -4.7 | -16.5 | | 3176.2 | | +47 | +402 | 473.007 2,147.537 |
| 379 | 729 | | 74° 10' | -- | 7.8 | 91° 20' | -17.0 | -24.8 | | 3167.9 | | +3 | +729 | 472.963 2,147.864 |
| 380 | 1053 | | 77° 50' | -- | 8.9 | 91° - | -18.4 | -27.3 | | 3165.4 | | -63 | +1051 | 472.897 2,148.186 |
| 381 | 1382 | | 78° 10' | -- | 9.0 | 90° 40' | -16.1 | -25.1 | | 3167.6 | | -91 | +1379 | 472.869 2,148.514 wheat field |
| 382 | 1712 | | - - 1 | -- | 8.0 | 90° 40' | -19.9 | -27.9 | | 3164.8 | | -112 | +1708 | 472.848 2,148.843 |
| F ^{Sec. Corner} | 2232 | | 102° 27' 04" | -- | 9.7 | 90° 40' | -26.0 | -35.7 | | 3157.0 | F | -1050 | +1970 | 471.910 2,149.105 y = 471.910 x = 2,149.105 E.L. 3959.0 out of wh. + Sec. Corner. |
| 383 | 2028 | | 80° 56' 10" | +15.6 | 10.7 | 90° 34' | -20.1 | -30.8 | | 3164.1 | TP | -231 | +2015 | 472.729 2,149.150 Horizy +22 CORR. X-22 |
| 383 | 2028 | | | | 10.4 | 269° 26' | -20.1 | -30.5 | | | TP | | | |
| | 2454 | | 276° 23' 12" | -- | 10.2 | 89° 20' | -28.6 | -18.4 | | | BS | -919 | +2275 | ELEVATION CORRECTED TO SEC. CORNER |
| | 2454 | | | | 10.1 | 270° 40' | -28.6 | -18.5 | | 3145.6 | BS | | | |
| 384 | 2128 | | 275° 25' | -- | 11.4 | 89° 26' | +21.0 | +9.6 | | 3155.2 | | +763 | -1986 | 472.574 2,149.439 |
| 385 | 1800 | | 274° 05' | -- | 6.7 | 89° 26' | +17.8 | +11.1 | | 3156.7 | | +606 | -1695 | 472.417 2,149.730 |
| 386 | 1470 | | 274° - | -- | 7.7 | 89° 26' | +14.5 | +6.8 | | 3152.4 | | +493 | -1385 | 472.304 2,150.040 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | |
|-----------------|---------------------------------------|-------------------------|----------------------|----------------------------|---------------|------------|
| DATE 7-30-86 | INSTRUMENT MAN B. Cotcamp | ROD MAN J. Middleton | PARTY NUMBER 6834 | NOTES CHECKED BY B.C. | LINE NO. 7 | PAGE 26 |
| AREA MONTANA | TOPO MAP NEWHouse Reservoir-7 1/2' | STATE MONT. | COUNTY BLAINE | TWP | RANGE | PPM |
| | | | | PARTY MANAGER S. BIRNIS | | |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | NORTH + SOUTH - | EAST + WEST - | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|---------------|-------------|-----------|----------------------------------|
| | | | | | | | | | | | | LAT. | DEP. | Y | X | |
| | | | | | | | | | 3145.6 | | | | | | | |
| 387 | 1141 | | 275 20' | +15.6 | 7.4 | 89 26' | +11.3 | +3.9 | | 3149.5 | | + 408 | -1066 | 472,218 | 2,150,359 | |
| 388 | 816 | | 278 15' | -- | 9.7 | 89 26' | +8.1 | -1.6 | | 3144.0 | | + 330 | - 746 | 472,140 | 2,150,679 | |
| 389 | 486 | | -- | -- | 8.4 | 90 26' | -3.7 | -12.1 | | 3133.5 | | + 197 | - 444 | 472,007 | 2,150,981 | |
| 390 | 179 | | 301 15' | -- | 10.5 | 90 26' | -1.4 | -11.9 | | 3133.7 | | +131 | - 122 | 471,941 | 2,151,303 | |
| K | 0 | | | | 5.1 | -- | | -5.1 | | 3140.5 | K | 0 | 0 | 471,810 | 2,151,425 | |
| 391 | 187 | | 68 55' | +15.6 | 11.0 | 91 26' | -4.7 | -15.7 | | 3129.9 | | + 18 | +186 | 471,828 | 2,151,611 | |
| 392 | 506 | | 83 50' | -- | 7.3 | 91 -- | -8.8 | -16.1 | | 3129.5 | | - 83 | + 499 | 471,728 | 2,151,924 | NEWHouse Reservoir 7 1/2' |
| 393 | 834 | | 86 50' | -- | 9.1 | 91 -- | -14.6 | -23.7 | | 3121.9 | | -180 | + 814 | 471,631 | 2,152,239 | FORT BELKNAP Agency S.E. -7 1/2' |
| 394 | 1164 | | 88 -- | -- | 8.9 | 91 -- | -20.3 | -29.2 | | 3116.4 | | - 274 | +1131 | 471,537 | 2,152,556 | |
| 395 | 1489 | | 90 10' | -- | 6.1 | 90 50' | -21.7 | -27.8 | | 3117.8 | | - 405 | +1433 | 471,406 | 2,152,858 | |
| 396 | 1813 | | 89 25' | -- | 7.4 | 90 40' | -21.1 | -28.5 | | 3117.1 | | - 470 | +1751 | 471,341 | 2,153,176 | |
| 397 | 2132 | | 86 45' | +15.6 | 6.0 | 90 30' | -18.6 | -24.6 | | 3121.0 | | - 456 | + 2083 | 471,354 | 2,153,508 | |
| 398 | 2461 | | 86 25' | -- | 6.3 | 90 30' | -21.5 | -27.8 | | 3117.8 | | - 512 | +2407 | 471,298 | 2,153,832 | |
| 399 | 2791 | | 86 18' | -- | 8.2 | 90 30' | -24.4 | -32.6 | | 3113.0 | | - 575 | + 2731 | 471,235 | 2,154,156 | |
| 400 | 3121 | | 86 25' | -- | 8.4 | 90 30' | -27.2 | -35.6 | | 3110.0 | | - 650 | + 3052 | 471,161 | 2,154,478 | |
| 401 | 3449 | | 86 37' | -- | 6.7 | 90 30' | -30.1 | -36.8 | | 3108.8 | | - 730 | + 3371 | 471,081 | 2,154,796 | |
| 402 | 3778 | | 86 30' | -- | 9.0 | 90 30' | -33.0 | -42.0 | | 3103.6 | | - 792 | + 3694 | 471,019 | 2,155,119 | |
| 403 | 4104 | | 85 43 50 | -- | 9.6 | 90 30' | -35.8 | -45.4 | | | TP | - 806 | +4024 | 471,064 | 2,155,449 | |
| 403 | 4104 | | | | 9.7 | 269 30' | -35.8 | -45.5 | | 3100.1 | TP | | | | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|----------------------------|---------|--------------|--------------|--------|------------------|------|----------|---|------|---------------|----------|
| DATE | 7-30-86 | INSTRUMENT MAN | B. Cotcamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | B.C. | LINE NO. | 7 | PAGE | 27 | |
| AREA | MONTANA | TOPO MAP | FORT BELKNAP Agency SE-74' | STATE | MONT. | COUNTY | BLAINE | TWP | | RANGE | | PPM | PARTY MANAGER | S. Binns |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | | 3100.1 | | | | |
| | 3333 | | 247 39 54 | +15.6 | 13.5 | 89 34 | -25.2 | -11.7 | 3088.3 | | BS | +391 | +3310 | |
| | 3333 | | | | +13.4 | 270 26 | -25.2 | -11.8 | | BS | | | | |
| 403 | 3076 | | 247 58 22 | -- | 11.2 | 89 40 | +12.9 | +6.7 | | 3095.0 | | -344 | -3057 | 471,051 2,155,702 1/4 - 471,010 - 2,155,655 7/4 WAY INTER. E-3099.0 |
| 404 | 3008 | | 248 20 | -- | 11.2 | 89 40 | +17.5 | +6.3 | | 3094.6 | | -318 | -2991 | 471,077 2,155,768 |
| 405 | 2685 | | 249 25 | -- | 7.6 | 89 40 | +15.6 | +8.0 | | 3096.3 | | -233 | -2675 | 471,162 2,156,084 |
| 406 | 2364 | | 251 10 | -- | 8.7 | 89 40 | +13.8 | +5.1 | | 3093.4 | | -133 | -2360 | 471,262 2,156,399 |
| 407 | 2043 | | 253 10 | -- | 4.6 | 89 40 | +11.9 | +7.3 | | 3095.6 | | -44 | -2042 | 471,351 2,156,714 |
| 408 | 1734 | | 256 38 | +15.6 | 11.0 | 89 40 | +10.1 | -0.9 | | 3087.4 | | +68 | -1733 | 471,463 2,157,026 |
| 409 | 1436 | | 261 40 | -- | 5.9 | - | - | -5.9 | | 3082.4 | | +182 | -1424 | 471,577 2,157,334 |
| 410 | 1107 | | 261 - | -- | 8.1 | - | - | -8.1 | | 3080.2 | | +127 | -1100 | 471,522 2,157,659 |
| 411 | 777 | | - | -- | 7.8 | - | - | -7.8 | | 3080.5 | | +89 | -772 | 471,484 2,157,987 |
| 412 | 466 | | 270 40 | -- | 8.0 | - | - | -8.0 | | 3080.3 | | +131 | -447 | 471,526 2,158,312 |
| 413 | 226 | | 311 10 | -- | 9.2 | 92 - | -7.9 | -17.1 | | 3071.2 | | +189 | -124 | 471,584 2,158,635 |
| X | 0 | | | -- | 5.1 | - | - | -5.1 | | 3083.2 | X | 0 | 0 | 471,395 2,158,759 |
| 414 | 384 | | 9 23 | +15.6 | 11.2 | 93 10 | -21.2 | -32.4 | | 3055.9 | | +348 | +162 | 471,743 2,158,921 |
| 415 | 669 | | 27 20 | -- | 8.8 | 92 30 | -29.2 | -38.0 | | 3050.3 | | +489 | +455 | 471,884 2,159,214 |
| 416 | 911 | | 42 32 | -- | 7.9 | 91 30 | -23.8 | -31.7 | | 3056.6 | | +481 | +773 | 471,876 2,159,532 |
| 417 | 1147 | | 55 33 | -- | 7.9 | 91 10 | -23.4 | -31.3 | | 3057.0 | | +371 | +1085 | 471,766 2,159,844 |
| 418 | 1455 | | 60 35 | -- | 5.8 | 91 - | -25.4 | -31.2 | | 3057.1 | | +347 | +1413 | 471,742 2,160,172 |
| 419 | 1774 | | 63 05 | -- | 5.1 | 91 - | -31.0 | -36.1 | | 3052.2 | | +348 | +1741 | 471,743 2,160,500 |

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|---------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|-----------|
| 7-30-86 | | B. Cotcamp | | J. Middleton | | 6834 | | B.C. | | 7 | | 28 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | FORT BELKNAP Agency | | MONT. | | BLAINE | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 3088.3 | | | | | | |
| 420 | 2101 | | 64° 30' | +15.6 | 7.0 | 90° 40' | -24.4 | -31.4 | | 3056.9 | | +361 | +2070 | 471,756 | 2,160,828 |
| 421 | 2424 | | 62° 50' | -- | 5.1 | 90° 40' | -28.2 | -33.3 | | 3055.0 | | +486 | +2375 | 471,881 | 2,161,133 |
| 422 | 2754 | | 62° 40' | -- | 4.6 | 90° 40' | -32.0 | -36.6 | | 3051.7 | | +560 | +2696 | 471,955 | 2,161,455 |
| 423 | 3072 | | 64° 20' | -- | 10.0 | 90° 30' | -26.8 | -36.8 | | 3051.5 | | +537 | +3025 | 471,932 | 2,161,783 |
| 424 | 3395 | | 65° 27' | -- | 9.1 | 90° 30' | -29.6 | -38.7 | | 3049.6 | | +528 | +3354 | 471,923 | 2,162,112 |
| 425 | 3710 | | 67° 04' | -- | 7.3 | 90° 24' | -25.9 | -33.2 | | 3055.1 | | +474 | +3680 | 471,869 | 2,162,438 |
| 426 | 4039 | | 66° 30' | +15.6 | 11.6 | 90° 26' | -30.5 | -42.1 | | 3046.2 | | +555 | +4001 | 471,950 | 2,162,759 |
| 427 | 4366 | | 66° 15' | -- | 8.3 | 90° 24' | -30.5 | -38.8 | | 3049.5 | | +619 | +4322 | 472,014 | 2,163,081 |
| 428 | 4674 | | 66° 35' | -- | 10.0 | 90° 26' | -35.5 | -45.5 | | 3042.8 | | +638 | +4650 | 472,033 | 2,163,409 |
| 429 | 5020 | | 67° 08 50 | -- | 15.0 | 90° 21' | -30.7 | -45.7 | } 45.5 | 3042.8 | TP | +634 | +4980 | 472,029 | 2,163,739 |
| 429 | 5020 | | | | 14.7 | 269° 39' | -30.7 | -45.4 | | | | TP | | | |
| | 2965 | 2964.4 | 253° 44' 10 | -- | +11.0 | 88° 50' | -60.4 | -49.4 | } 49.5 | 2993.3 | BS | +34 | +2964 | | |
| | 2965 | | | | +10.7 | 271° 10' | -60.4 | -49.7 | | | | BS | | | |
| 430 | 2635 | | 253° 50' | -- | 8.8 | 89° 12' | +36.8 | +28.0 | | 3021.3 | | -26 | -2635 | 472,037 | 2,164,068 |
| 431 | 2306 | | -- | -- | 14.8 | 89° 16' | +29.5 | +14.7 | | 3008.0 | | -23 | -2306 | 472,040 | 2,164,397 |
| 432 | 1976 | | -- | -- | 5.7 | 89° 10' | +28.7 | +23.0 | | 3016.3 | | -20 | -1976 | 472,044 | 2,164,727 |
| 433 | 1646 | | -- | -- | 9.2 | 89° 16' | +23.9 | +14.7 | | 3008.0 | | -16 | -1646 | 472,047 | 2,165,057 |
| + | 1626 | | 253° 38' 36 | -- | 9.6 | 89° 10' | +23.6 | +14.0 | | 3007.3 | + | -21 | -1626 | 472,042 | 2,165,077 |
| 434 | 1317 | | 253° 50' | -- | 14.7 | 89° 28' | +12.3 | -2.4 | | 2990.9 | | -13 | -1317 | 472,050 | 2,165,386 |
| 435 | 988 | | -- | -- | 10.6 | 89° 10' | +14.4 | +3.8 | | 2997.1 | | -10 | -988 | 472,053 | 2,165,715 |

y=472,015 x=2,165,065
Section corner

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|---------------------|---------|---------------|--------------|--------|------------------|------|----------|---|------|---------------|----------|
| DATE | 7-30-86 | INSTRUMENT MAN | B. Cotcamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | B.C. | LINE NO. | 7 | PAGE | 29 | |
| AREA | MONTANA | TOPO MAP | FORT BELKNAP Agency | STATE | SE. 74' MONT. | COUNTY | BLAINE | TWP | | RANGE | | PPM | PARTY MANAGER | S. Binns |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|-------------------------|-----------------------|--|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | 2993.3 | | | | | |
| 436 | 659 | | 253 50' | +15.6 | 9.1 | 89 10' | +9.6 | +0.5 | | 2993.8 | | -7 | -659 | 472,057 2,166,044 |
| 437 | 330 | | -- | -- | 6.6 | 92 10' | -12.5 | -19.1 | | 2974.2 | | -3 | -330 | 472,060 2,166,373 |
| 438 | 0 | | | | 5.1 | -- | -- | -5.1 | | 2988.2 | π | 0 | 0 | 472,063 2,166,703 |
| 439 | 330 | | 73 53' | -- | 10.6 | 92 -- | -11.5 | -22.1 | | 2971.2 | | +3 | +330 | 472,066 2,167,033 |
| 440 | 660 | | -- | -- | 6.3 | 92 -- | -23.0 | -29.3 | | 2964.0 | | +6 | +660 | 472,069 2,167,362 |
| 441 | 990 | | -- | -- | 5.2 | 92 -- | -34.6 | -39.8 | | 2953.5 | | +9 | +989 | 472,072 2,167,692 |
| 442 | 1320 | | -- | -- | 7.2 | 91 30' | -34.6 | -41.8 | | 2951.5 | | +12 | +1319 | 472,075 2,168,022 |
| 443 | 1650 | | 73 53' | +15.6 | 10.4 | 91 30' | -43.2 | -53.6 | | 2939.7 | | +15 | +1649 | 472,078 2,168,352 |
| 444 | 1980 | | -- | -- | 8.7 | 91 30' | -51.8 | -60.5 | | 2932.8 | | +18 | +1979 | 472,081 2,168,682 |
| 445 | 2310 | | -- | -- | 8.1 | 91 30' | -60.5 | -68.6 | | 2924.7 | | +21 | +2309 | 472,084 2,169,012 |
| 446 | 2640 | | -- | -- | 19.2 | 91 35' | -72.9 | -92.1 | | 2901.2 | | +24 | +2639 | 472,087 2,169,342 |
| 447 | 2970 | | -- | -- | 23.9 | 91 33' | -80.3 | -104.2 | | 2889.1 | | +27 | +2969 | 472,090 2,169,672 |
| 448 | 3300 | | -- | -- | 16.7 | 91 32' | -88.3 | -105.0 | | 2888.3 | | +30 | +3299 | 472,093 2,170,001 |
| 449 | 3627 | | -- | -- | 11.0 | 91 34' | -99.2 | -110.2 | | 2883.1 | | +33 | +3626 | 472,096 2,170,328 |
| + | 3649 | 3647.8 | 73 57 22' | +15.6 | 14.5 | 91 30' | -95.5 | -110.0 | | 2883.3 | + | +28 | +3648 | 472,091 2,170,350 + 472,065 x -2,170,325 Sec. Corner 2883.0 |
| 450 | 3956 | | 73 53' | -- | 7.1 | 91 30' | -103.6 | -110.7 | | 2882.6 | | +36 | +3954 | 472,099 2,170,657 |
| 451 | 4286 | | -- | -- | 1.5 | 91 30' | -112.2 | -113.7 | | 2879.6 | | +39 | +4284 | 472,102 2,170,987 |
| 452 # | 4615 | | -- | -- | 14.7 | 91 23' | -111.4 | -126.1 | | 2867.2 | Creek | +42 | +4613 | 472,105 2,171,316 |
| 453 | 4944 | | -- | -- | 9.0 | 90 58' | -83.4 | -92.4 | | 2900.9 | | +45 | +4943 | 472,108 2,171,646 |
| 454 | 5274 | | -- | -- | 10.6 | 90 38' | -58.3 | -68.9 | | 2924.4 | | +48 | +5273 | 472,111 2,171,976 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|----------------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|-----------|
| 7-30-86 | | B. Cotcamp | | J. Middleton | | 6834 | | B.C. | | 7 | | 30 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | FORT BELKNAP Agency SE 1/4 | | MONT. | | BLAINE | | | | | | | | S. Biann | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 2993.3 | | | | | | |
| 455 | 5602 | | 73° 53' | +15.6 | 7.7 | 90° 34' | -55.4 | -63.1 | | 2930.2 | | +51 | +5602 | 472,114 | 2,172,304 |
| 456 | 5932 | | 73° 54' 36" | - | 14.9 | 90° 26' | -44.9 | -59.8 | -59.6 | 2933.7 | TP | +51 | +5932 | 472,114 | 2,172,634 |
| 456 | 5932 | | | | 14.4 | 282° 34' | -44.9 | -59.3 | | | | | | | |
| | 2968 | | 253° 51' 42" | - | 7.4 | 89° 30' | -25.9 | -18.5 | | | | | | | |
| | 2968 | | | | +7.3 | 270° 30' | -25.9 | -18.6 | 2915.1 | | BS | +28 | +2968 | | |
| 457 | 2640 | | 253° 56' | - | 11.4 | 89° 30' | +23.6 | +11.6 | | 2926.7 | | -22 | -2640 | 472,120 | 2,172,962 |
| 458 | 2316 | | - - | - | 8.3 | 89° 30' | +20.2 | +11.9 | | 2927.0 | | -19 | -2310 | 472,123 | 2,173,292 |
| 459 | 1980 | | - - | - | 11.1 | 89° 50' | +5.8 | -5.3 | | 2909.8 | | -16 | -1980 | 472,126 | 2,173,622 |
| 460 | 1650 | | - - | - | 12.3 | 89° 50' | +4.8 | -7.5 | | 2907.6 | | -13 | -1650 | 472,128 | 2,173,952 |
| 461 | 1320 | | 253° 56' | +15.6 | 10.3 | 89° 50' | +3.8 | -6.5 | | 2908.6 | | -11 | -1320 | 472,131 | 2,174,282 |
| 462 | 990 | | - - | - | 10.1 | 89° 30' | +8.6 | -1.5 | | 2913.6 | | -8 | -990 | 472,134 | 2,174,612 |
| 463 | 660 | | - - | - | 8.3 | 89° 30' | +5.8 | -2.5 | | 2912.6 | | -5 | -660 | 472,136 | 2,174,942 |
| 464 | 330 | | - - | - | 5.8 | 89° 30' | +2.9 | -2.9 | | 2912.2 | | -3 | -330 | 472,139 | 2,175,272 |
| + | 20 | | 245° 30' | - | 5.2 | 89° 30' | +0.2 | -5.0 | | 2910.1 | + | -3 | -20 | 472,139 | 2,175,582 |
| 465 | 0 | | | | 5.1 | - | | -5.1 | | 2910.0 | π | 0 | 0 | 472,142 | 2,175,602 |
| 466 | 330 | | 108° 30' | +15.6 | 7.6 | 90° 30' | -2.9 | -10.5 | | 2904.6 | | -185 | +273 | 471,957 | 2,175,875 |
| 467 | 659 | | 112° 30' | - | 7.8 | 90° 30' | -5.8 | -13.6 | | 2901.5 | | -407 | +519 | 471,735 | 2,176,121 |
| 468 | 985 | | 114° 10' | - | 13.8 | 90° 48' | -13.8 | -27.6 | | 2887.5 | | -630 | +757 | 471,512 | 2,176,359 |
| 469 | 1311 | | 116° 15' | - | 10.0 | 90° 48' | -18.3 | -28.3 | | 2886.8 | | -875 | +976 | 471,267 | 2,176,579 |
| 470 | 1616 | | 111° 50' | - | 10.1 | - | | -10.1 | | 2905.0 | | -982 | +1283 | 471,160 | 2,176,885 |

472,125 x 2,175,560
+ section corner.

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|---------------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|-----------------|---------------|---------------|-----------|
| 7-30-86 | | B. Cotcamp | | J. Middleton | | 6834 | | B.C. | | 7 | | 31 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | FORT BELKNAP Agency - 74' | | MONT. | | BLAINE | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - | EAST + WEST - | | Y |
| | | | | | | | | | 2915.1 | | | | | | |
| 471 | 1940 | | 110 - | +15.6 | 9.2 | - | -9.2 | | 2905.9 | | | -1129 | +1577 | 471,012 | 2,177,180 |
| 472 | 2268 | | 109 - | -- | 10.0 | - | -10.0 | | 2905.1 | | | -1288 | +1867 | 470,854 | 2,177,469 |
| 473 | 2589 | | 107 05 | -- | 5.7 | - | -5.7 | | 2909.4 | | | -1398 | +2179 | 470,744 | 2,177,781 |
| 474 | 2907 | | 108 25 36 | -- | 5.6 | - | -5.6 | -5.5 | 2909.6 | | TP | -1627 | +2409 | 470,515 | 2,178,011 |
| 474 | 2907 | | | | 5.3 | 270 - | -5.3 | | | | TP | | | | |
| | 2483 | | 268 35 04 | +15.6 | 13.8 | - | +13.8 | +13.6 | 2923.2 | | BS | -608 | +2407 | | |
| | 2483 | | | | +13.5 | 270 - | +13.5 | | | | BS | | | | |
| 475 | 2220 | | 263 50 | -- | 10.0 | 90 10' | -6.5 | -16.5 | 2906.7 | | | +364 | -2190 | 470,270 | 2,178,229 |
| 476 | 1893 | | 263 05 | -- | 11.8 | 90 10' | -5.5 | -17.3 | 2905.9 | | | +286 | -1871 | 470,192 | 2,178,547 |
| 477 | 1566 | | 262 35 | -- | 8.9 | 90 30' | -13.7 | -22.6 | 2900.6 | | | +223 | -1550 | 470,130 | 2,178,869 |
| 478 | 1237 | | 263 25 | -- | 10.8 | 90 30' | -10.8 | -21.6 | 2901.6 | | | +194 | -1222 | 470,101 | 2,179,197 |
| 479 | 914 | | 267 10 | -- | 11.0 | 90 30' | -8.0 | -19.0 | 2904.2 | | | +202 | -891 | 470,109 | 2,179,527 |
| 480 | 589 | | 271 10 | -- | 10.5 | 90 30' | -5.1 | -15.6 | 2907.6 | | | +170 | -564 | 470,077 | 2,179,855 |
| 481 | 264 | | 279 - | -- | 6.2 | - | -6.2 | | 2917.0 | | | +110 | -240 | 470,617 | 2,180,179 |
| κ | 0 | | | | 5.1 | - | -5.1 | | 2918.1 | | κ | 0 | 0 | 469,907 | 2,180,419 |
| 482 | 84 | | 54 05 | +15.6 | 9.2 | - | -9.2 | | 2914.0 | | | +29 | +79 | 469,936 | 2,180,497 |
| 483 | 406 | | 78 15 | -- | 9.1 | 90 30' | -3.5 | -12.6 | 2910.6 | | | -27 | +405 | 469,879 | 2,180,824 |
| 484 | 736 | | 78 10 | -- | 9.9 | 91 - | -12.8 | -22.7 | 2900.5 | | | -48 | +734 | 469,858 | 2,181,153 |
| 485 | 1065 | | 78 - | -- | 11.9 | 91 - | -18.6 | -30.5 | 2892.7 | | | -67 | +1063 | 469,840 | 2,181,481 |
| 486 | 1394 | | 78 15 | -- | 11.7 | 91 20' | -32.4 | -44.1 | 2879.1 | | | -94 | +1390 | 469,813 | 2,181,809 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|---------------------|---------|--------------|--------------|--------|------------------|------|----------|---|------|---------------|----------|
| DATE | 7-31-86 | INSTRUMENT MAN | B. Gtamp | ROD-MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | J.M. | LINE NO. | 7 | PAGE | 32 | |
| AREA | MONTANA | TOPO MAP | FORT BELKNAP Agency | STATE | MONT. | COUNTY | BLAINE | TWP | | RANGE | | PPM | | |
| | | | S.E. 74' | | | | | | | | | | PARTY MANAGER | S. Drans |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|--|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | 2923.2 | | | | | |
| 487 | 1724 | | 78 - | +15.6 | 7.7 | 91 20' | -40.1 | -47.8 | | 2875.4 | | -108 | +1720 | 469,798 2,182,139 |
| 488 | 2054 | | 77 58' | - | 9.9 | 91 06' | -39.4 | -49.3 | | 2873.9 | | -128 | +2050 | 469,779 2,182,468 FORT BELKNAP Agency S.E. ↑ |
| 489 | 2381 | | 77 - | - | 8.0 | 91 - | -41.6 | -49.6 | | 2873.6 | | -108 | +2378 | 469,799 2,182,797 Wild Horse Butte-74' ↓ |
| 490 | 2709 | | 77 50 | - | 8.0 | 90 54' | -42.6 | -50.6 | | 2872.6 | | -162 | +2704 | 469,744 2,183,123 |
| 491 | 3038 | | 78 - | - | 6.8 | 90 54' | -47.7 | -54.5 | | 2868.7 | | -191 | +3032 | 469,716 2,183,450 |
| 492 | 3368 | | 78 20 | - | 5.0 | 90 54' | -52.9 | -57.9 | | 2865.3 | | -231 | +3360 | 469,676 2,183,778 |
| 493 | 3696 | | 78 50 | - | 8.2 | 90 48' | -51.6 | -59.8 | | 2863.4 | | -286 | +3685 | 469,621 2,184,103 |
| 494 | 4016 | | 86 01 34 | +15.3 | 15.1 | 90 44' | -51.4 | -66.5 | -66.4 | 2856.8 | TP | -373 | +3998 | 469,534 2,184,417 |
| 494 | 4016 | | | | 14.8 | 269 16' | -51.4 | -66.2 | | | TP | | | |
| | 4016 | | 280 54 24 | - | +13.9 | 89 12' | -56.1 | -42.2 | -42.5 | 2814.3 | BS | -1773 | +3603 | |
| | 4016 | | | | +13.4 | 270 48' | -56.1 | -42.7 | | | BS | | | |
| 495 | 3689 | | 280 17 | - | 11.0 | 89 15' | +48.3 | +37.3 | | 2851.6 | | +1593 | -3327 | 469,353 2,184,693 |
| 496 | 3360 | | 280 - | - | 14.8 | 89 15' | +44.0 | +29.2 | | 2843.5 | | +1436 | -3037 | 469,196 2,184,982 |
| 497 | 3032 | | 279 25 | - | 10.6 | 89 15' | +39.7 | +29.1 | | 2843.4 | | +1268 | -2754 | 469,028 2,185,266 |
| 498 | 2703 | | 279 - | - | 9.8 | 89 15' | +35.4 | +25.6 | | 2839.9 | | +1112 | -2463 | 468,873 2,185,557 |
| 499 | 2373 | | - - | - | 6.0 | 89 15' | +31.1 | +25.1 | | 2839.4 | | +976 | -2163 | 468,737 2,185,857 |
| 500 | 2057 | | 281 15 | +15.3 | 7.7 | 89 10' | +29.9 | +22.2 | | 2836.5 | | +919 | -1840 | 468,680 2,186,180 |
| 501 | 1755 | | 285 15 | - | 10.9 | 89 10' | +25.5 | +14.6 | | 2828.9 | | +892 | -1511 | 468,653 2,186,509 |
| 502 | 1443 | | 288 35 | - | 7.7 | - | | -7.7 | | 2806.6 | | +804 | -1198 | 468,565 2,186,822 |
| 503 | 1118 | | 287 25 | - | 9.7 | 91 44' | -33.8 | -43.5 | | 2770.8 | | +604 | -940 | 468,365 2,187,080 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|----------------------|---------|--------------|--------------|--------|------------------|------|----------|---|------|---------------|------------|
| DATE | 7-31-86 | INSTRUMENT MAN | B. Cotcamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | J.M. | LINE NO. | 7 | PAGE | 33 | |
| AREA | MONTANA | TOPO MAP | Wild Horse Butte-76' | STATE | MONT. | COUNTY | BLAINE | TWP | | RANGE | | PPM | PARTY MANAGER | S. B. INNS |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|-------------------|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | 2814.3 | | | | | |
| 504 | 820 | | 280 - | +15.3 | 9.7 | 94 - | -57.2 | -66.9 | | 2747.4 | | +350 | -740 | 468,110 2,187,280 |
| # | 721 | 718.8 | 279 43 05 | -- | 10.1 | 94 30' | -56.6 | -66.7 | | 2747.6 | # | +304 | -651 | 468,065 2,187,369 |
| 505 | 525 | | 268 35' | -- | 11.2 | 95 30' | -50.3 | -61.5 | | 2752.8 | | +125 | -507 | 467,886 2,187,513 |
| 506 | 288 | | 238 20 | -- | 8.1 | 94 30' | -22.6 | -30.7 | | 2783.6 | | -81 | -275 | 467,680 2,187,744 |
| π | 0 | | | | 5.1 | - | | -5.1 | | 2809.2 | π | 0 | 0 | 467,761 2,188,020 |
| 507 | 80 | | 127 40' | +15.3 | 6.3 | 89 - | +1.4 | -4.9 | | 2809.4 | | -64 | +48 | 467,697 2,188,068 |
| 508 | 360 | | 66 12' | -- | 6.8 | - | | -6.8 | | 2807.5 | | +53 | +356 | 467,814 2,188,376 |
| 509 | 684 | | 59 20' | -- | 8.2 | TH | +3.4 | -4.8 | | 2809.5 | | +181 | +660 | 467,942 2,188,679 |
| 510 | 1012 | | 57 15' | -- | 7.6 | 89 20' | +11.8 | +4.2 | | 2818.5 | | +303 | +965 | 468,064 2,188,985 |
| 511 | 1342 | | 56 15' | -- | 7.2 | 89 10' | +19.5 | +12.3 | | 2826.6 | | +425 | +1273 | 468,185 2,189,293 |
| 512 | 1672 | | 56 25' | -- | 10.7 | 89 10' | +24.3 | +13.6 | | 2827.9 | | +524 | +1587 | 468,285 2,189,607 |
| 513 | 1997 | | 57 55' | -- | 10.0 | 89 10' | +29.0 | +19.0 | | 2833.3 | | +577 | +1912 | 468,337 2,189,932 |
| 514 | 2326 | | 58 14' | -- | 10.9 | 89 14' | +31.1 | +20.2 | | 2834.5 | | +659 | +2230 | 468,420 2,190,250 |
| 515 | 2656 | | 57 57 14' | +15.0 | 14.9 | 89 17' | +33.2 | +18.3 | 2843 | 2832.7 | TP | +779 | +2539 | 468,539 2,190,559 |
| 515 | 2656 | | | | 14.6 | 27 43' | +33.2 | +18.6 | | | TP | | | |
| | 2391 | | 266 21 32 | -- | +13.8 | 90 24' | +16.7 | +30.5 | | | BS | -471 | +2344 | |
| | 2391 | | | | +13.5 | 269 36' | +16.7 | +30.2 | +30.3 | 2863.0 | BS | | | |
| 516 | 2117 | | 271 03' | -- | 9.7 | 90 30' | -18.5 | -28.2 | | 2834.8 | | +585 | -2034 | 468,653 2,190,869 |
| 517 | 1886 | | 277 40' | -- | 8.3 | 90 30' | -16.5 | -24.8 | | 2838.2 | | +727 | -1740 | 468,795 2,191,163 |
| 3/4 | 1675 | | 284 48 30 | -- | 8.3 | 90 20 18" | -9.9 | -18.2 | | 2844.8 | 3/4 | +833 | -1453 | 468,901 2,191,450 |

468,000 x - 2,187,335
creek crossing

468,895 x - 2,191,470
Highway Inter. EL. 2844.0

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|---------------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|----------------------|--------------------|---------------|-----------|
| 7-31-86 | | B. Cotcamp | | J. Middleton | | 6834 | | J.M. | | 7 | | 34 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | WILD HORSE BUTTE - 7 1/2' | | MONT. | | BLAINE | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 2863.0 | | | | | | |
| 518 | 1648 | | 284 37' | +15.0 | 9.4 | 90° 20' | -9.6 | -19.0 | | 2844.0 | | +814 | -1433 | 468,883 | 2,191,470 |
| 519 | 1320 | | 284 10' | -- | 7.8 | 90° 20' | -7.7 | -15.5 | | 2847.5 | | +643 | -1153 | 468,711 | 2,191,750 |
| 520 | 990 | | -- | -- | 7.1 | 90° 20' | -5.8 | -12.9 | | 2850.1 | | +482 | -864 | 468,551 | 2,192,039 |
| 521 | 660 | | -- | -- | 7.7 | 90° 20' | -3.8 | -11.5 | | 2851.5 | | +322 | -576 | 468,390 | 2,192,327 |
| 522 | 330 | | -- | -- | 6.3 | 90° 20' | -1.9 | -8.2 | | 2854.8 | | +161 | -288 | 468,229 | 2,192,615 |
| 523 | 0 | | | | 5.1 | -- | | -5.1 | | 2857.9 | X | 0 | 0 | 468,068 | 2,192,903 |
| 524 | 330 | | 104 47' | +15.0 | 5.3 | -- | | -5.3 | | 2857.7 | | -164 | +286 | 467,904 | 2,193,190 |
| 525 | 660 | | -- | -- | 6.3 | -- | | -6.3 | | 2856.7 | | -328 | +573 | 467,740 | 2,193,476 |
| 526 | 990 | | -- | -- | 8.8 | TH | +5.0 | -3.8 | | 2859.2 | | -492 | +859 | 467,576 | 2,193,762 |
| 527 | 1320 | | -- | -- | 5.3 | -- | | -5.3 | | 2857.7 | | -656 | +1146 | 467,413 | 2,194,049 |
| 528 | 1650 | | -- | -- | 10.4 | -- | | -10.4 | | 2852.6 | | -820 | +1432 | 467,249 | 2,194,335 |
| 529 | 1980 | | 104 23 52 | -- | 15.2 | 89° 46' | +8.1 | -7.1 | 7.0'± | 2856.0 | TP | -972 | +1725 | 467,096 | 2,194,628 |
| 529 | 1980 | | | | 14.9 | 270° 14' | +8.1 | -6.8 | | | TP | | | | |
| | 2295 | | 256 54 36 | +14.7 | +11.5 | 89° 30' | -20.0 | -8.5 | | | BS | -64 | +2294 | | |
| | 2295 | | | | +11.2 | 270° 30' | -20.0 | -8.8 | 8.7'± | 2847.3 | BS | | | | |
| 530 | 1980 | | 254 36 | -- | 6.2 | 89° 48' | +6.9 | +0.7 | | 2848.0 | | -24 | -1980 | 467,008 | 2,194,942 |
| 531 | 1650 | | -- | -- | 8.2 | 90° 10' | -4.8 | -13.0 | | 2834.3 | | -20 | -1650 | 467,012 | 2,195,272 |
| 532 | 1320 | | -- | -- | 6.4 | 90° 10' | -3.8 | -10.2 | | 2837.1 | | -16 | -1320 | 467,016 | 2,195,602 |
| 533 | 990 | | -- | -- | 8.0 | -- | | -8.0 | | 2839.3 | | -12 | -990 | 467,020 | 2,195,932 |
| 534 | 660 | | -- | -- | 10.4 | -- | | -10.4 | | 2836.9 | | -8 | -660 | 467,024 | 2,196,262 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO.-445

Geosource Inc.

| | | | | | | | | | | | | | |
|------|---------|----------------|-------------------------|---------|--------------|--------------|--------|------------------|------|---------------|----------|------|----|
| DATE | 7-31-86 | INSTRUMENT MAN | B. Cotcamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | B.C. | LINE NO. | 7 | PAGE | 35 |
| AREA | MONTANA | TOPO MAP | WILDHORSE Butte - 7 1/2 | STATE | MONT. | COUNTY | BLAINE | TWP | | PARTY MANAGER | S. Binns | | |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|-------------------|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | 2847.3 | | | | | |
| 535 | 330 | | 254 36 | +14.7 | 5.7 | - | | -5.7 | | 2841.6 | | -4 | -330 | 467,028 2,196,592 |
| 536 | 0 | | | | 5.1 | - | | -5.1 | | 2842.2 | X | 0 | 0 | 467,032 2,196,922 |
| 537 | 330 | | 74 46 | | 5.9 | 91- | -5.8 | -11.7 | | 2835.6 | | +3 | +330 | 467,035 2,197,252 |
| 538 | 660 | | - - | | 12.0 | 92- | -23.0 | -35.0 | | 2812.3 | | +6 | +660 | 467,038 2,197,582 |
| 539 | 990 | | - - | | 19.2 | 92- | -34.6 | -53.8 | | 2793.5 | | +9 | +989 | 467,041 2,197,911 |
| 540 | 1320 | | - - | | 21.1 | 92- | -46.1 | -67.2 | | 2780.1 | | +12 | +1319 | 467,044 2,198,241 |
| 541 | 1650 | | 74 46 | +14.7 | 14.1 | 92- | -57.6 | -71.7 | | 2775.6 | | +15 | +1649 | 467,047 2,198,571 |
| 542 | 1980 | | - - | | 9.2 | 91 48 | -62.2 | -71.4 | | 2775.9 | | +18 | +1979 | 467,050 2,198,901 |
| 543 | 2310 | | - - | | 8.0 | 91 40 | -67.2 | -75.2 | | 2772.1 | | +21 | +2309 | 467,053 2,199,231 |
| 544 | 2637 | | 74 12 | | 8.1 | 91 40 | -76.7 | -84.8 | | 2762.5 | | +51 | +2635 | 467,082 2,199,558 |
| 545 | 2966 | | 74 18 | | 6.2 | 91 40 | -86.3 | -92.5 | | 2754.8 | | +52 | +2964 | 467,083 2,199,886 |
| 546 | 3295 | | 74 45 | | 8.1 | 91 30 | -86.3 | -94.4 | | 2752.9 | | +32 | +3294 | 467,063 2,200,216 |
| 547 | 3625 | 3624.1 | 74 47 16 | | 13.9 | 91 18 | -82.2 | -96.1 | 2859.3 | 2751.4 | TP | +32 | +3624 | 467,064 2,200,546 |
| 547 | 3625 | | | | 13.4 | 268 42 | -82.2 | -95.6 | | | TP | | | |
| | 2969 | | 254 57 03 | +14.7 | 14.3 | 89 18 | -36.3 | -22.0 | | | BS | +18 | +2969 | |
| | 2969 | | | | 14.0 | 270 42 | -36.3 | -22.3 | 22232729.2 | | BS | | | |
| 548 | 2640 | | 254 57 | | 8.9 | 89 24 | +27.6 | +18.7 | | 2747.9 | | -16 | -2640 | 467,066 2,200,875 |
| 549 | 2310 | | - - | | 9.6 | 89 24 | +24.2 | +14.6 | | 2743.8 | | -14 | -2310 | 467,068 2,201,205 |
| 550 | 1980 | | - - | | 10.4 | 89 24 | +20.7 | +10.3 | | 2739.5 | | -12 | -1980 | 467,070 2,201,535 |
| 551 | 1650 | | - - | | 10.6 | 89 24 | +17.3 | +6.7 | | 2735.9 | | -10 | -1650 | 467,072 2,201,865 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | |
|-----------------|---------------------------------|-------------------------|----------------------|---------------------------|---------------|------------|
| DATE 7-31-86 | INSTRUMENT MAN B. Cotcamp | ROD MAN J. Middleton | PARTY NUMBER 6834 | NOTES CHECKED BY F.M. | LINE NO. 7 | PAGE 36 |
| AREA MONTANA | TOPO MAP WILD HORSE Butte-74 | STATE MONT. | COUNTY BLAINE | TWP | RANGE | PPM |
| | | | | PARTY MANAGER S. Binns | | |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | | |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------|-----------|---|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y | X |
| | | | | | | | | | 2729.2 | | | | | | | |
| # | 1446 | | 255 15 58 | +14.7 | 9.4 | 89 24 | +15.1 | +5.7 | | 2734.9 | | -1 | -1446 | 467,081 | 2202,069 | y=467,100 x=2202,070 # Section line 2734.0 |
| 552 | 1320 | | 255 - | -- | 10.0 | 89 24 | +13.8 | +3.8 | | 2733.0 | | -7 | -1320 | 467,075 | 2,202,195 | |
| 553 | 990 | | - - | -- | 7.1 | 89 24 | +10.4 | +3.3 | | 2732.5 | | -5 | -990 | 467,077 | 2,202,525 | |
| 554 | 660 | | - - | -- | 7.8 | 89 24 | +6.9 | -0.9 | | 2728.3 | | -3 | -660 | 467,079 | 2,202,855 | |
| 555 | 330 | | - - | -- | 8.0 | 89 24 | +3.5 | -4.5 | | 2724.7 | | -2 | -330 | 467,080 | 2,203,185 | |
| 556 | 0 | | | | 5.1 | - | | -5.1 | | 2724.1 | TP | 0 | 0 | 467,082 | 2,203,515 | |
| 557 | 330 | | 74 57 | +14.7 | 9.0 | 91 10 | -6.7 | -15.7 | | 2713.5 | | +2 | +330 | 467,084 | 2,203,845 | |
| 558 | 660 | | - - | -- | 11.8 | 91 10 | -13.4 | -25.2 | | 2704.0 | | +4 | +660 | 467,086 | 2,204,175 | |
| 559 | 990 | | - - | -- | 10.0 | 91 10 | -20.2 | -30.2 | | 2699.0 | | +6 | +990 | 467,088 | 2,204,505 | |
| 560 | 1320 | | - - | -- | 7.0 | 91 10 | -26.9 | -33.9 | | 2695.3 | | +8 | +1320 | 467,090 | 2,204,835 | |
| 561 | 1650 | | 74 57 | +14.7 | 7.7 | 91 10 | -33.6 | -41.3 | | 2687.9 | | +10 | +1650 | 467,092 | 2,205,165 | |
| 562 | 1980 | | - - | -- | 8.0 | 91 10 | -40.3 | -48.3 | | 2680.9 | | +12 | +1980 | 467,094 | 2,205,495 | |
| 563 | 2310 | | - - | -- | 11.0 | 91 15 | -50.4 | -61.4 | | 2667.8 | | +14 | +2310 | 467,096 | 2,205,825 | |
| 564 | 2640 | | - - | -- | 11.3 | 91 18 | -59.9 | -71.2 | | 2658.0 | | +16 | +2640 | 467,098 | 2,206,155 | |
| 565 | 2970 | | - - | -- | 11.5 | 91 16 | -65.7 | -77.2 | | 2652.0 | | +18 | +2970 | 467,100 | 2,206,485 | |
| 566 | 3298 | 3297.3 | 74 57 04 | +14.4 | 14.2 | 91 10 | -67.2 | -81.4 | | | TP | +37 | +3297 | 467,119 | 2,206,812 | |
| 566 | 3298 | | | | 13.9 | 268 50 | -67.2 | -81.1 | 281.23 | 2648.0 | TP | | | | | |
| | 4948 | | 255 08 45 | -- | +9.9 | 90 06 | +8.6 | +18.5 | 2618.43 | 2666.4 | BS | +39 | +4948 | | | |
| | 4948 | | | | +9.6 | 269 54 | +8.6 | +18.2 | | | BS | | | | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|---------------------|---------|--------------|--------------|--------|------------------|------|----------|---|------|---------------|----------|
| DATE | 8-4-86 | INSTRUMENT MAN | B. Cotcamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | J.M. | LINE NO. | 7 | PAGE | 37 | |
| AREA | MONTANA | TOPO MAP | Wild Horse Butte-74 | STATE | MONT. | COUNTY | BLAINE | TWP | | RANGE | | PPM | PARTY MANAGER | S. Binns |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|-------------------------|-----------------------|---------------------------------|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | 2666.4 | | | | | |
| 567 | 4620 | | 255 08 | +14.4 | 5.3 | 90 08 | -10.8 | -16.1 | | 2650.3 | | -38 | -4620 | 467,120 2,207,140 |
| 568 | 4290 | | - - | -- | 8.8 | 90 08 | -10.0 | -18.8 | | 2647.6 | | -35 | -4290 | 467,123 2,207,470 |
| 569 | 3960 | | - - | -- | 10.8 | 90 10 | -11.5 | -22.3 | | 2644.1 | | -32 | -3960 | 467,126 2,207,800 |
| 570 | 3630 | | - - | -- | 8.2 | 90 16 | -16.9 | -25.1 | | 2641.3 | | -30 | -3630 | 467,128 2,208,130 |
| 571 | 3300 | | - - | -- | 12.1 | 90 16 | -15.4 | -27.5 | | 2638.9 | | -27 | -3300 | 467,131 2,208,460 |
| 572 | 2970 | | 255 08 | +14.4 | 12.9 | 90 18 | -15.6 | -28.5 | | 2637.9 | | -24 | -2970 | 467,134 2,208,790 |
| 573 | 2640 | | - - | -- | 9.1 | 90 18 | -13.8 | -22.9 | | 2643.5 | | -22 | -2640 | 467,136 2,209,120 |
| 574 | 2310 | | - - | -- | 8.7 | 90 18 | -12.1 | -20.8 | | 2645.6 | | -19 | -2310 | 467,139 2,209,450 |
| 575 | 1980 | | - - | -- | 12.0 | - | - | -12.0 | | 2654.4 | | -16 | -1980 | 467,142 2,209,780 |
| 576 | 1650 | | 255 08 | -- | 5.8 | BH | -8.3 | -14.1 | | 2652.3 | | -13 | -1650 | 467,145 2,210,110 |
| 577 | 1320 | | - - | -- | 6.3 | BH | -6.6 | -12.9 | | 2653.5 | | -11 | -1320 | 467,147 2,210,440 |
| 578 | 990 | | - - | -- | 11.0 | - | - | -11.0 | | 2655.4 | | -8 | -990 | 467,150 2,210,770 |
| 579 | 660 | | - - | -- | 11.4 | - | - | -11.4 | | 2655.0 | | -5 | -660 | 467,153 2,211,100 |
| 580 | 330 | | - - | -- | 10.1 | 91 - | -5.8 | -15.9 | | 2650.5 | | -3 | -330 | 467,155 2,211,430 |
| 581 | 0 | | | | 5.1 | - | - | -5.1 | | 2661.3 | + | 0 | 0 | 467,158 2,211,760 |
| 582 | 330 | | 76 43 | +14.4 | 7.3 | 90 30 | -2.9 | -10.2 | | 2656.2 | | -6 | +330 | 467,152 2,212,090 76 43 Horiz |
| 583 | 660 | | - - | -- | 10.0 | 90 30 | -5.8 | -15.8 | | 2650.6 | | -13 | +660 | 467,145 2,212,420 |
| + | 800 | | 74 47 28 | - | 14.7 | 90 30 | -7.0 | -21.7 | | 2644.7 | + | +11 | +800 | 467,169 2,212,560 +Sec. Corner. |
| 584 | 990 | | 76 40 | -- | 12.0 | 90 46 30 | -13.4 | -25.4 | | 2641.0 | | -18 | +990 | 467,140 2,212,750 |
| 585 | 1320 | | - - | -- | 13.8 | 90 46 30 | -17.9 | -31.7 | | 2634.7 | | -25 | +1320 | 467,133 2,213,080 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|---------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|-------------------------|-----------------------|---------------|-----------|
| 8-4-86 | | B. Cotcamp | | J. Middleton | | 6834 | | J.M. | | 7 | | 38 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | Bigby Lake - 7 1/2' | | MONT. | | BLAINE | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 2666.4 | | | | | | |
| 586 | 1650 | | 76 15' | +14.4 | 17.6 | 90 46' | -22.1 | -39.7 | | 2626.7 | | -19 | +1650 | 467,139 | 2,213,410 |
| 587 | 1980 | | 75 58' | -- | 22.9 | 90 50' | -28.8 | -51.7 | | 2614.7 | | -13 | +1980 | 467,145 | 2,213,740 |
| 588 | 2310 | | 75 48' | -- | 18.8 | 90 50' | -33.6 | -52.4 | | 2614.0 | | -8 | +2310 | 467,150 | 2,214,070 |
| 589 | 2638 | | 75 42' | -- | 6.9 | 90 40' | -30.7 | -37.6 | | 2628.8 | | -5 | +2638 | 467,153 | 2,214,398 |
| 590 | 2968 | | -- | -- | 6.3 | 90 20' | -17.3 | -23.6 | | 2642.8 | | -5 | +2968 | 467,153 | 2,214,728 |
| 591 | 3297 | | 75 45 12" | -- | 8.6 | 90 10' | -9.6 | -18.2 | -18.03 | 2648.4 | TP | -9 | +3297 | 467,149 | 2,215,057 |
| 591 | 3297 | | | | 8.3 | 269 50' | -9.6 | -17.9 | | | TP | | | | |
| | 2308 | | 255 05 32" | +14.4 | 5.9 | - | | +5.9 | 2583 2654.2 | | BS | +20 | +2308 | | |
| | 2308 | | | | 5.6 | 270 - | | +5.6 | | | BS | | | | |
| 592 | 1980 | | 255 10 | -- | 11.3 | 90 30' | -17.3 | -28.6 | | 2625.6 | | -15 | -1980 | 467,154 | 2,215,385 |
| 593 | 1650 | | -- | -- | 10.8 | 90 34' | -16.3 | -27.1 | | 2627.1 | | -12 | -1650 | 467,157 | 2,215,715 |
| 594 | 1320 | | -- | -- | 7.9 | 90 34' | -13.1 | -21.0 | | 2633.2 | | -10 | -1320 | 467,159 | 2,216,045 |
| 595 | 990 | | -- | -- | 6.3 | 90 30' | -8.6 | -14.9 | | 2639.3 | | -7 | -990 | 467,162 | 2,216,375 |
| 596 | 660 | | -- | -- | 10.2 | - | | -10.2 | | 2644.0 | | -5 | -660 | 467,164 | 2,216,705 |
| 597 | 330 | | -- | -- | 7.4 | - | | -7.4 | | 2646.8 | | -3 | -330 | 467,166 | 2,217,035 |
| 598 | 0 | | | | 5.1 | - | | -5.1 | | 2649.1 | X | 0 | 0 | 467,169 | 2,217,365 |
| X | 157 | | 72 41 30" | +14.4 | 6.7 | - | | -6.7 | | 2647.5 | X | +8 | +157 | 467,177 | 2,217,522 |
| #599 | 330 | | 82 50' | -- | 5.7 | - | | -5.7 | | 2648.5 | | -40 | +327 | 467,127 | 2,217,692 |
| 600 | 656 | | 84 30' | -- | 7.2 | TH | +3.3 | -3.9 | | 2650.3 | | -101 | +648 | 467,068 | 2,218,013 |
| 601 | 985 | | 83 40' | -- | 7.0 | TH | +4.9 | -2.1 | | 2652.1 | | -138 | +975 | 467,031 | 2,218,340 |

467,215 x=2,217,540
x check on elev. sl. 2648.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-448

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|------------------|---------|--------------|--------------|--------|------------------|------|----------|---|------|---------------|-----------|
| DATE | 8-4-86 | INSTRUMENT MAN | B. Cotcamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | F.M. | LINE NO. | 7 | PAGE | 39 | |
| AREA | MONTANA | TOPO MAP | Bigby Lake - 74' | STATE | MONT. | COUNTY | BLAINE | TWP | | RANGE | | PPM | PARTY MANAGER | S.B. INNS |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|-------------------------|-----------------------|-------------------|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | 2654.2 | | | | | |
| 602 | 1315 | | 83 30 | +14.4 | 5.4 | TH | +6.6 | +1.2 | | 2655.4 | | -181 | +1303 | 466,988 2,218,668 |
| 603 | 1644 | | 82 55 | -- | 6.6 | TH | +8.2 | +1.6 | | 2655.8 | | -209 | +1631 | 466,960 2,218,996 |
| 604 | 1967 | | 84 50 | -- | 5.7 | TH | +9.8 | +4.1 | | 2658.3 | | -316 | +1942 | 466,853 2,219,307 |
| 605 | 2288 | | 86 50 | -- | 7.2 | TH | +11.4 | +4.2 | | 2658.4 | | -446 | +2244 | 466,723 2,219,609 |
| 606 | 2603 | | 89 06 21 | +14.1 | 12.6 | TH | +13.0 | +0.4 | 260.63 | 2654.8 | TP | -595 | +2534 | 466,574 2,219,899 |
| 606 | 2603 | | | | 12.3 | TH 20 | +13.0 | +0.7 | | | TP | | | |
| | 3618 | | 306 00 06 | -- | +14.6 | 89 32 | -29.5 | -14.9 | | | BS | -2776 | +2321 | |
| | 3618 | | | | +14.2 | 270 28 | -29.5 | -15.3 | 15.11 | 2639.7 | BS | | | |
| 607 | 3299 | | 307 10 | -- | 10.2 | 89 36 | +23.0 | +12.8 | | 2652.5 | | +2573 | -2064 | 466,371 2,220,156 |
| 608 | 2970 | | - - | -- | 11.2 | 89 36 | +20.7 | +9.5 | | 2649.2 | | +2317 | -1858 | 466,115 2,220,362 |
| 609 | 2640 | | - - | -- | 9.1 | 89 40 | +15.4 | +6.3 | | 2646.0 | | +2059 | -1652 | 465,857 2,220,568 |
| 610 | 2310 | | - - | -- | 8.7 | 89 40 | +13.4 | +4.7 | | 2644.4 | | +1802 | -1445 | 465,600 2,220,775 |
| 611 | 1980 | | 307 10 | +14.1 | 9.0 | 89 40 | +11.5 | +2.5 | | 2642.2 | | +1545 | -1239 | 465,343 2,220,981 |
| 612 | 1650 | | - - | -- | 7.2 | 89 40 | +9.6 | +2.4 | | 2642.1 | | +1287 | -1032 | 465,085 2,221,188 |
| 613 | 1320 | | - - | -- | 8.0 | 89 30 | +11.5 | +3.5 | | 2643.2 | | +1030 | -826 | 464,828 2,221,394 |
| 614 | 990 | | - - | -- | 7.6 | 89 30 | +8.6 | +1.0 | | 2640.7 | | +772 | -619 | 464,570 2,221,601 |
| 615 | 660 | | - - | -- | 5.7 | 89 30 | +5.8 | +0.1 | | 2639.8 | | +515 | -413 | 464,313 2,221,807 |
| 616 | 330 | | - - | -- | 4.8 | 89 30 | +2.9 | -1.9 | | 2637.8 | | +257 | -206 | 464,055 2,222,014 |
| 617 | 0 | | - - | -- | 5.1 | - | - | -5.1 | | 2634.6 | TP | 0 | 0 | 463,798 2,222,220 |
| VI | 134 | | 123 42 40 | -- | 6.1 | - | - | -6.1 | | 2633.6 | | -99 | +90 | 463,699 2,222,310 |

463,685 x - 2,222,360
 1/4 - Inter. EL 2634.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|---------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|-----------|
| 8-4-86 | | B. Cotcamp | | J. Middleton | | 6834 | | J.Mi | | 7 | | 40 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | Bigby LAKE - 7 1/2' | | MONT. | | BLAINE | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 2639.7 | | | | | | |
| 618 | 328 | | 117 - | +14.1 | 8.0 | - | -8.0 | | 2631.7 | | | -216 | +247 | 463,582 | 2,222,467 |
| 619 | 646 | | 106 05 | -- | 9.7 | - | -9.7 | | 2630.0 | | | -325 | +558 | 463,473 | 2,222,278 |
| 620 | 936 | | 95 - | -- | 10.7 | - | -10.7 | | 2629.0 | | | -306 | +884 | 463,492 | 2,223,104 |
| 621 | 1255 | | 90 20 | -- | 6.2 | BH | -6.3 | -12.5 | 2627.2 | | | -313 | +1215 | 463,485 | 2,223,435 |
| 622 | 1576 | | 87 15 | -- | 7.2 | BH | -7.9 | -15.1 | 2624.6 | | | -310 | +1545 | 463,488 | 2,223,265 |
| 623 | 1884 | | 83 20 | +14.1 | 8.4 | BH | -9.4 | -17.8 | 2621.9 | | | -244 | +1868 | 463,554 | 2,224,088 |
| 624 | 2204 | | 81 18 | -- | 11.1 | 90 20 | -12.8 | -23.9 | 2615.8 | | | -207 | +2194 | 463,591 | 2,224,414 |
| 625 | 2526 | | 79 30 | -- | 6.3 | 90 20 | -14.7 | -21.0 | 2618.7 | | | -158 | +2521 | 463,640 | 2,224,741 |
| 626 | 2850 | | 78 17 | -- | 6.2 | 90 20 | -16.6 | -22.8 | 2616.9 | | | -119 | +2848 | 463,679 | 2,225,068 |
| 627 | 3176 | | 77 15 58 | -- | 15.0 | 90 12 | -11.1 | -26.1 | | | TP | -76 | +3175 | 463,722 | 2,225,395 |
| 627 | 3176 | | | -- | 14.7 | 269 48 | -11.1 | -25.8 | | 2613.8 | TP | | | | |
| | 2537 | | 259 01 36 | +14.1 | 13.1 | - | +13.1 | +13.0 | 2626.8 | | BS | -138 | +2533 | | |
| | 2537 | | | -- | 12.8 | 270 - | +12.8 | | | | BS | | | | |
| 628 | 2212 | | 260 25 | -- | 8.9 | BH | -11.1 | -20.0 | 2606.8 | | | +174 | -2205 | 463,758 | 2,225,223 |
| 629 | 1884 | | 261 - | -- | 8.7 | 90 30 | -16.4 | -25.1 | 2601.7 | | | +167 | -1877 | 463,751 | 2,226,051 |
| 630 | 1554 | | 260 45 | -- | 6.9 | 90 30 | -13.6 | -20.5 | 2606.3 | | | +131 | -1548 | 463,715 | 2,226,380 |
| 631 | 1225 | | 261 10 | -- | 8.4 | 90 30 | -10.7 | -19.1 | 2607.7 | | | +112 | -1220 | 463,696 | 2,226,708 |
| 632 | 897 | | 263 10 | -- | 7.3 | 90 30 | -7.8 | -15.1 | 2611.7 | | | +113 | -890 | 463,697 | 2,227,038 |
| 633 | 968 | | 264 25 | -- | 6.3 | 90 30 | -5.0 | -11.3 | 2615.5 | | | +84 | -562 | 463,668 | 2,227,366 |
| 634 | 238 | | 266 40 | -- | 6.7 | - | -6.7 | | 2620.1 | | | +44 | -234 | 463,628 | 2,227,694 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|-----------------|---------|--------------|--------------|--------|------------------|------|----------|---|------|---------------|----------|
| DATE | 8-4-86 | INSTRUMENT MAN | B. Cotamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | J.M. | LINE NO. | 7 | PAGE | 41 | |
| AREA | MONTANA | TOPO MAP | Bigby LAKE - 7k | STATE | MONT. | COUNTY | BLAINE | TWP | | RANGE | | PPM | PARTY MANAGER | S. Binns |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | | |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------|-----------|--|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y | X |
| π | 0 | | | | 5.1 | - | | -5.1 | 2626.8 | 2621.7 | π | 0 | 0 | 463,584 | 2,227,928 | |
| 635 | 91 | | 89.05 | +14.1 | 6.5 | - | | -6.5 | | 2620.3 | | -21 | +89 | 463,563 | 2,228,017 | |
| 636 | 420 | | 89.55 | -- | 7.3 | - | | -7.3 | | 2619.5 | | -102 | +407 | 463,482 | 2,228,335 | |
| # | 553 | | 88.50 40 | -- | 8.8 | - | | -8.8 | | 2618.0 | # | -124 | +539 | 463,460 | 2,228,467 | y=463,490 x=2,228,430 Fence line 2/19 |
| 637 | 748 | | 86.45 | -- | 9.7 | - | | -9.7 | | 2617.1 | | -141 | +735 | 463,443 | 2,228,663 | |
| 638 | 1074 | | 83.37 | -- | 9.2 | - | | -9.2 | | 2617.6 | | -144 | +1064 | 463,440 | 2,228,992 | |
| 639 | 1399 | | 80.52 39 | ~ | 12.3 | 90 16 | -4.1 | -16.4 | | | TP | -121 | +1394 | 463,463 | 2,229,322 | |
| 639 | 1399 | | | | 12.1 | 269 50 | -4.1 | -16.2 | -16.3 | 2610.5 | TP | | | | | |
| | 1212 | | 249 37 03 | +14.1 | 12.0 | - | | +12.0 | | 2622.5 | BS | +133 | +1205 | | | |
| | 1212 | | | | 11.9 | 270 | | +11.9 | | | BS | | | | | |
| 640 | 885 | | 247.50 | -- | 10.9 | 91 - | -15.4 | -26.3 | | 2596.2 | | -124 | -876 | 463,472 | 2,229,651 | |
| 641 | 555 | | - - | - | 11.5 | 91 40 | -16.1 | -27.6 | | 2594.9 | | -78 | -550 | 463,518 | 2,229,977 | |
| 642 | 226 | | - - | ~ | 8.2 | 91 40 | -6.6 | -14.8 | | 2607.7 | | -32 | -224 | 463,564 | 2,230,303 | |
| π | 0 | | | | 5.1 | - | | -5.1 | | 2617.4 | π | 0 | 0 | 463,596 | 2,230,527 | |
| 643 | 104 | | 73.20 | +14.1 | 6.0 | 89 40 | +0.6 | -5.4 | | 2617.1 | | +5 | +104 | 463,601 | 2,230,631 | |
| 644 | 417 | | 55.35 | - | 7.8 | 89 40 | +2.4 | -5.4 | | 2617.1 | | +145 | +391 | 463,741 | 2,230,918 | |
| 645 | 739 | | 48.10 | - | 9.1 | 89 40 | +4.3 | -4.8 | | 2617.7 | | +344 | +654 | 463,940 | 2,231,181 | |
| 646 | 1066 | | 45.20 | - | 7.0 | 89 40 | +6.2 | -0.8 | | 2621.7 | | +542 | +918 | 464,138 | 2,231,445 | |
| 647 | 1396 | | 44.25 | - | 9.7 | 89 20 | +16.2 | +6.5 | | 2629.0 | | +729 | +1191 | 464,325 | 2,231,718 | |
| 648 | 1720 | | 46.06 46 | - | 10.9 | 89 34 | +13.0 | +2.1 | 2.22 | 2624.7 | TP | +854 | +1493 | 464,450 | 2,232,020 | |
| 648 | 1720 | | | | 10.6 | 270 26 | +13.0 | +2.4 | | | TP | | | | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|------------------|---------|--------------|--------------|--------|------------------|------|----------|---|------|---------------|----------|
| DATE | 8-4-86 | INSTRUMENT MAN | B. Cotcamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | J.M. | LINE NO. | 7 | PAGE | 42 | |
| AREA | MONTANA | TOPO MAP | Bigby Lake - 74' | STATE | MONT. | COUNTY | BLAINE | TWP | | RANGE | | PPM | | |
| | | | | | | | | | | | | | PARTY MANAGER | S. BURNS |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|-------------------------|-----------------------|--|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | | 2624.7 | | | | |
| | 1302 | | 262 47 12 | +14.1 | 9.7 | 89 20 | -15.1 | -5.4 | 2619.3 | | BS | -156 | +1293 | |
| | 1302 | | | | 9.7 | 270 40 | -15.1 | -5.4 | | | BS | | | |
| 649 | 979 | | 266 05 | -- | 10.1 | TK | +4.9 | -5.2 | | 2614.1 | | +173 | -964 | 464,467 2,232,349 |
| 650 | 656 | | 270 10 | -- | 11.9 | - | - | -11.9 | | 2607.4 | | +162 | -636 | 464,456 2,233,677 |
| 651 | 330 | | 275 50 | -- | 8.4 | - | - | -8.4 | | 2610.9 | | +113 | -310 | 464,407 2,233,003 |
| 652 | 0 | | | | 5.1 | - | - | -5.1 | | 2614.2 | π | 0 | 0 | 464,294 2,233,313 |
| 653 | 329 | | 99 45 | -- | 6.0 | 91 40 | -9.6 | -15.6 | | 2603.7 | | -133 | +301 | 464,161 2,233,614 |
| 654 | 657 | | 163 33 | -- | 11.1 | 92 - | -22.9 | -34.0 | | 2585.3 | | -305 | +582 | 463,989 2,233,895 |
| 655 | 970 | | 98 30 | -- | 9.6 | 92 - | -33.9 | -43.5 | | 2575.8 | | -373 | +896 | 463,921 2,234,209 |
| 656 | 1228 | | 87 57 | +14.1 | 5.7 | 91 30 | -32.1 | -37.8 | | 2581.5 | | -256 | +1201 | 464,038 2,234,514 |
| 657 | 1530 | | 83 - | -- | 6.8 | 91 18 | -34.7 | -41.5 | | 2577.8 | | -189 | +1518 | 464,105 2,234,831 |
| # | 1691 | | 79 24 38 | -- | 8.2 | 91 20 | -39.3 | -47.5 | | 2579.8 | # | -104 | +1688 | 464,190 2,235,001 2515.0 |
| 658 | 1819 | | 77 57 | -- | 10.8 | 91 - | -31.7 | -42.5 | | 2576.8 | | -65 | +1818 | 464,229 2,235,131 |
| 659 | 2129 | | 75 50 | -- | 9.8 | 90 50 | -31.0 | -40.8 | | 2578.5 | | +2 | +2129 | 464,296 2,235,442 |
| 660 | 2442 | | 78 26 | -- | 9.7 | 90 40 | -28.4 | -38.1 | | 2581.2 | | -108 | +2440 | 464,186 2,235,253 |
| 661 | 2762 | | 80 08 | -- | 10.3 | 90 32 | -25.7 | -36.0 | | 2583.3 | | -204 | +2754 | 464,090 2,236,067 |
| 662 | 3077 | | 82 - | -- | 7.2 | 90 32 | -28.6 | -35.8 | | 2583.5 | | -327 | +3060 | 463,967 2,236,373 |
| 663 | 3399 | | 83 12 | -- | 8.8 | 90 26 | -25.7 | -34.5 | | 2584.8 | π | -432 | +3371 | 463,862 2,236,684 |
| # | 3447 | | 83 14, 32 | ✓ | 8.6 | 90 26 | -26.1 | -34.7 | | 2584.6 | # | -441 | +3419 | 463,853 2,236,732 #1 - Inter. EL. 2584.0 |
| 664 | 3713 | | 84 45 08 | ✓ | 13.1 | 90 20 | -21.6 | -34.7 | | 2584.6 | TP | -571 | +3669 | 463,723 2,236,782 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | |
|---------------|---------|----------------|---------------------|---------|--------------|--------------|--------|------------------|------|----------|---|------|----|
| DATE | 8-5-86 | INSTRUMENT MAN | B. Cotamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | J.M. | LINE NO. | 7 | PAGE | 43 |
| AREA | MONTANA | TOPO MAP | Bigby Lake - 7 1/2' | STATE | MONT. | COUNTY | BLAINE | TWP | | RANGE | | PPM | |
| PARTY MANAGER | | | | | | | | | | | | | |
| S. Binns | | | | | | | | | | | | | |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|-------------------|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | | 2584.6 | | | | |
| | 3062 | | 279 23 39 | +14.0 | 11.8 | 89 50 | -8.9 | +2.9 | 2587.4 | | BS | -1216 | +2810 | |
| | 3062 | | | | +11.5 | 270 10 | -8.9 | +2.6 | | | BS | | | |
| 665 | 2734 | | 278 42 | - | 9.8 | 89 52 | +6.4 | -3.4 | | 2584.0 | | +1055 | -2522 | 463,562 2,237,270 |
| 666 | 2406 | | 278 18 | - | 11.5 | 89 56 | +2.8 | -8.7 | | 2578.7 | | +913 | -2226 | 463,426 2,237,566 |
| 667 | 2077 | | 277 43 | - | 11.0 | 89 56 | +2.4 | -8.6 | | 2578.8 | | +769 | -1930 | 463,276 2,237,862 |
| 668 | 1748 | | 276 55 | - | 10.9 | 89 50 | +5.1 | -5.8 | | 2581.6 | | +624 | -1633 | 463,131 2,238,159 |
| 669 | 1423 | | 274 45 | - | 8.8 | 89 50 | +4.1 | -4.7 | | 2582.7 | | +457 | -1347 | 462,964 2,238,445 |
| 670 | 1093 | | 274 10 | +14.0 | 5.9 | 89 50 | +3.2 | -2.7 | | 2584.7 | | +341 | -1039 | 462,848 2,238,753 |
| 671 | 778 | | 268 12 | - | 8.6 | 89 50 | +2.3 | -6.3 | | 2581.1 | | +164 | -760 | 462,671 2,239,032 |
| 672 | 470 | | 257 - | - | 6.1 | 89 50 | +1.4 | -4.7 | | 2582.7 | | +8 | -470 | 462,515 2,239,322 |
| 673 | 141 | | 258 10 | - | 7.0 | 89 50 | +0.4 | -6.6 | | 2580.8 | | +5 | -141 | 462,512 2,239,651 |
| π | 0 | | | | 5.1 | - | | -5.1 | | 2582.3 | π | 0 | 0 | 462,507 2,239,792 |
| 674 | 189 | | 74 25 | +14.0 | 6.6 | - | | -6.6 | | 2580.8 | | +5 | +189 | 462,512 2,239,981 |
| 675 | 518 | | 71 - | - | 10.2 | - | | -10.2 | | 2577.2 | | +45 | +516 | 462,552 2,240,308 |
| 676 | 848 | | 69 - | - | 11.8 | - | | -11.8 | | 2575.6 | | +103 | +842 | 462,610 2,240,634 |
| 677 | 1177 | | 68 10 | - | 10.7 | - | | -10.7 | | 2576.7 | | +160 | +1166 | 462,667 2,240,958 |
| 678 | 1507 | | 68 - | - | 7.0 | - | | -7.0 | | 2580.4 | | +210 | +1492 | 462,717 2,241,284 |
| 679 | 1836 | | 68 51 22 | - | 11.8 | - | | -11.8 | | 2575.6 | π | +228 | +1822 | 462,735 2,241,614 |
| 680 | 2149 | | 71 57 17 | - | 12.3 | 90 08 | -5.0 | -17.3 | 2570.2 | | TP | +152 | +2144 | 462,659 2,241,936 |
| 680 | 2149 | | | | 12.0 | 269 52 | -5.0 | -17.0 | | | TP | | | |

y=462,720 x=2,241,580
fly-inter. el. 2576.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|---------------------|---------|--------------|--------------|--------|------------------|------|----------|---|------|---------------|----------|
| DATE | 8-5-86 | INSTRUMENT MAN | B. Cotcamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | F.M. | LINE NO. | 7 | PAGE | 44 | |
| AREA | MONTANA | TOPO MAP | Bigby LAKE - 7 1/2' | STATE | MONT. | COUNTY | BLAINE | TWP | | RANGE | | PPM | PARTY MANAGER | S. Binns |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | NORTH + SOUTH - | EAST + WEST - | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|---------------|-------------|-----------|-----------------------|
| | | | | | | | | | | | | LAT. | DEP. | Y | X | |
| | | | | | | | | | | 2570.2 | | | | | | |
| | 3954 | | 262 12 52 | +14.0 | 13.0 | 89 48 | -13.8 | -0.8 | 2569.3 | | BS | -428 | +3931 | | | |
| | 3954 | | | | 12.7 | 270 12 | -13.8 | -1.1 | | | BS | | | | | |
| 681 | 3625 | | 262 05 | -- | 10.1 | 89 56 | +4.2 | -5.9 | | 2563.4 | | +384 | -3605 | 462,615 | 2,242,262 | |
| 682 | 3295 | | 261 55 | -- | 10.9 | 89 56 | +3.8 | -7.1 | | 2562.2 | | +340 | -3277 | 462,571 | 2,242,590 | |
| 683 | 2966 | | 261 40 | -- | 11.3 | 89 56 | +3.5 | -7.8 | | 2561.5 | | +293 | -2952 | 462,524 | 2,242,915 | |
| 684 | 2637 | | 261 05 | -- | 9.1 | - | - | -9.1 | | 2560.2 | | +234 | -2627 | 462,465 | 2,243,240 | |
| 685 | 2308 | | 260 50 | -- | 12.4 | - | - | -12.4 | | 2556.9 | | +194 | -2300 | 462,425 | 2,243,567 | Bigby LAKE - 7 1/2' ↑ |
| 686 | 1978 | | 259 50 | +14.0 | 9.2 | - | - | -9.2 | | 2560.1 | | +132 | -1974 | 462,363 | 2,243,893 | Weigano Reservoir ↓ |
| 687 | 1649 | | 259 30 | -- | 9.1 | - | - | -9.1 | | 2560.2 | | +101 | -1646 | 462,332 | 2,244,221 | |
| 688 | 1319 | | 260 10 | -- | 8.9 | - | - | -8.9 | | 2560.4 | | +96 | -1316 | 462,327 | 2,244,551 | |
| 689 | 990 | | 261 05 | -- | 9.0 | - | - | -9.0 | | 2560.3 | | +88 | -986 | 462,319 | 2,244,881 | |
| 690 | 660 | | 261 12 | -- | 7.3 | - | - | -7.3 | | 2562.0 | | +60 | -657 | 462,291 | 2,245,210 | |
| 691 | 330 | | 262 45 | -- | 5.6 | TM | +1.7 | -3.9 | | 2565.4 | | +39 | -328 | 462,270 | 2,245,539 | |
| 692 | 0 | | | -- | 5.1 | - | - | -5.1 | | 2564.2 | X | 0 | 0 | 462,231 | 2,245,867 | |
| 693 | 312 | | 44 - | +14.0 | 7.7 | - | - | -7.7 | | 2561.6 | | +165 | +265 | 462,396 | 2,246,132 | |
| 694 | 635 | | 36 10 | -- | 11.7 | - | - | -11.7 | | 2557.6 | | +407 | +488 | 462,638 | 2,246,355 | |
| 695 | 963 | | 33 35 | -- | 7.9 | BH | -4.8 | -12.7 | | 2556.6 | | +650 | +711 | 462,881 | 2,246,578 | |
| 696 | 1291 | | 31 50 | -- | 9.7 | BH | -6.5 | -16.2 | | 2553.1 | | +900 | +926 | 463,131 | 2,246,793 | |
| 697 | 1619 | | 30 03 | -- | 8.0 | BH | -8.1 | -16.1 | | 2553.2 | | +1164 | +1126 | 463,395 | 2,246,993 | |
| 698 | 1941 | | 27 55 | -- | 10.0 | BH | -9.7 | -19.7 | | 2549.6 | | +1444 | +1297 | 463,675 | 2,247,141 | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 8-5-86 INSTRUMENT MAN B. Cotcamp ROD MAN J. Middleton PARTY NUMBER 6834 NOTES CHECKED BY J.M.I. LINE NO. 7 PAGE 45
 AREA MONTANA TOPO MAP WEIGAND Reservoir STATE MONT. COUNTY BLAINE TWP RANGE PPM PARTY MANAGER S. Binns

| STATION NO. | SLOPE DISTANCE | PLOT DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS TP | COORDINATES | | REMARKS |
|-------------|----------------|---------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|----------|-------------------------|-----------------------|------------------|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | 2569.3 | | | | | |
| 699 | 2266 | | 26 15' | +14.0 | 9.2 | BH | -11.3 | -20.5 | | 2548.8 | | +1729 | +1464 | 463.960 2247.331 |
| 700 | 2593 | | 25 32 | -- | 5.4 | BH | -13.0 | -18.4 | | 2550.9 | | +2000 | +1651 | 464.231 2247.518 |
| 701 | 2923 | | -- | -- | 9.5 | 90 06 | -5.1 | -14.6 | | 2554.7 | | +2254 | +1861 | 464.485 2247.728 |
| 702 | 3251 | | 25 08 | -- | 9.1 | 90 06 | -5.7 | -14.8 | | 2554.5 | | +2522 | +2052 | 464.753 2247.919 |
| 703 | 3581 | | 24 55 | -- | 10.8 | 90 06 | -6.3 | -17.1 | | 2552.2 | | +2786 | +2256 | 465.017 2248.117 |
| 704 | 3910 | | 24 25 | -- | 11.5 | 90 06 | -6.8 | -18.3 | | 2551.0 | | +3064 | +2430 | 465.295 2248.297 |
| # | 4192 | | 24 36 08 | -- | 14.0 | 90 04 | -4.9 | -18.9 | | 2550.4 | # | +3276 | +2615 | 465.507 2248.482 |
| 705 | 4237 | | 24 51 52 | +14.3 | 14.3 | 90 04 | -4.9 | -19.2 | -19.13 | 2550.2 | TP | +3285 | +2676 | 465.516 2248.543 |
| 705 | 4237 | | | | 14.0 | 269 56 | -4.9 | -18.9 | | | TP | | | |
| | 2560 | | 213 51 06 | -- | +12.8 | TH | -12.8 | +0.0 | | | BS | +1708 | +1907 | |
| | 2560 | | | | +12.6 | TH 270 | -12.8 | -0.2 | +0.3 | 2550.1 | BS | | | |
| 706 | 2231 | | 213 15 | -- | 8.0 | 89 50 | +6.5 | -1.5 | | 2548.6 | | -1506 | -1646 | 465.718 2248.804 |
| 707 | 1902 | | 212 40 | -- | 7.7 | 89 50 | +5.5 | -2.2 | | 2547.9 | | -1298 | -1390 | 465.926 2249.060 |
| 708 | 1573 | | 211 50 | -- | 6.8 | 89 50 | +4.6 | -2.2 | | 2547.9 | | -1090 | -1134 | 466.134 2249.316 |
| 709 | 1245 | | 210 10 | -- | 5.3 | 89 50 | +3.6 | -1.7 | | 2548.4 | | -889 | -872 | 466.335 2249.578 |
| 710 | 925 | | 205 50 | -- | 5.4 | 89 50 | +2.7 | -2.7 | | 2547.4 | | -707 | -596 | 466.517 2249.854 |
| 711 | 622 | | 195 56 | -- | 5.7 | 89 50 | +1.8 | -3.9 | | 2546.2 | | -537 | -313 | 466.687 2250.137 |
| 712 | 329 | | 178 20 | -- | 6.2 | 89 50 | +1.0 | -5.2 | | 2544.9 | | -321 | -72 | 466.903 2250.378 |
| 713 | 0 | | | | 5.1 | - | - | -5.1 | | 2545.0 | π | 0 | 0 | 467.224 2250.450 |

5-465470 X-2248.435
 always enter Elevation 2551

SURVEY NOTES-HIGH RESOLUTION DATA

Geosource Inc.

GEO-445

| | | | | | | | | | | | | | | |
|------|---------|----------------|--------------------------|---------|--------------|--------------|--------|------------------|------|----------|---|------|---------------|----------|
| DATE | 8-5-86 | INSTRUMENT MAN | B. Cotcamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | F.M. | LINE NO. | 7 | PAGE | 46 | |
| AREA | MONTANA | TOPO MAP | WEIGAND Reservoir-7 1/2' | STATE | MONT. | COUNTY | BLAINE | TWP | | RANGE | | PPM | PARTY MANAGER | S. Binns |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|------------------|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | 2550.1 | | | | | |
| 714 | 330 | | 10° 40' | +14.3 | 9.3 | 89° 50' | +1.0 | -8.3 | | 2541.8 | | +299 | +139 | 467.523 2250.589 |
| 715 | 659 | | 11° 55' | -- | 10.9 | - | | -10.9 | | 2539.2 | | +591 | +291 | 467.815 2250.741 |
| 716 | 985 | | 14° 10' | -- | 5.7 | - | | -5.7 | | 2544.4 | | +866 | +470 | 468.090 2250.920 |
| 717 | 1312 | | 16° 15' | -- | 5.1 | - | | -5.1 | | 2545.0 | | +1130 | +667 | 468.354 2251.117 |
| 718 | 1641 | | 17° 15' | -- | 7.3 | TH | +8.2 | +0.9 | | 2551.0 | | +1398 | +859 | 468.622 2251.309 |
| 719 | 1968 | | 18° 40' | -- | 8.6 | TH | +9.8 | +1.2 | | 2551.3 | | +1651 | +1071 | 468.875 2251.521 |
| 720 | 2284 | | 21° 08' | +14.3 | 8.5 | TH | +11.4 | +2.9 | | 2553.0 | | +1861 | +1324 | 469.085 2251.774 |
| 721 | 2599 | | 23° 22' | -- | 9.0 | TH | +13.0 | +4.0 | | 2554.1 | | +2057 | +1588 | 469.281 2252.038 |
| 722 | 2886 | | 20° 30' | -- | 8.9 | 89° 32' | +23.5 | +14.6 | | 2564.7 | | +2370 | +1647 | 469.594 2252.097 |
| 723 | 3163 | | 17° 03' | -- | 10.2 | 89° 32' | +25.8 | +15.6 | | 2565.7 | | +2701 | +1646 | 469.925 2252.096 |
| 724 | 3445 | | 14° 05' 30" | -- | 15.2 | 89° 30' | +30.1 | +14.9 | +15.1 | 2565.2 | TP | +3031 | +1638 | 470.255 2252.088 |
| 724 | 3445 | | | | 14.7 | 270° 30' | +30.1 | +15.4 | | | TP | | | |
| | 2352 | | 236° 27' 14" | -- | 13.4 | TH | -11.8 | +1.6 | | | BS | +775 | +2221 | |
| | 2352 | | | | 13.1 | 270° TH | -11.8 | +1.3 | +14.3 | 2566.6 | BS | | | |
| 725 | 2264 | | 244° 25' | -- | 7.8 | 89° 50' | +6.6 | -1.2 | | 2565.4 | | -443 | -2220 | 470.587 2252.089 |
| 726 | 2254 | | 252° 49' | -- | 3.9 | 89° 50' | +6.6 | +2.7 | | 2569.3 | | -115 | -2251 | 470.915 2252.058 |
| 727 | 1986 | | 255° 09' | -- | 9.0 | 89° 50' | +5.8 | -3.2 | | 2563.4 | | -19 | -1980 | 471.011 2252.329 |
| 728 | 1650 | | -- | -- | 7.3 | 89° 50' | +4.8 | -2.5 | | 2564.1 | | -16 | -1650 | 471.014 2252.659 |
| 729 | 1320 | | -- | -- | 7.7 | 89° 50' | +3.8 | -3.9 | | 2562.7 | | -13 | -1320 | 471.017 2252.989 |
| 736 | 990 | | -- | -- | 7.9 | 89° 50' | +2.9 | -5.0 | | 2561.6 | | -10 | -990 | 471.020 2253.319 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | |
|-------------|----------------|--------------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|----------------------|--------------------|---------|----------|
| 8-5-86 | | B. Cotnam | | J. Middleton | | 6834 | | F.M. | | 7 | 47 | | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | |
| MONTANA | | WEIGAND Reservoir, R. 24 | | MONT. | | BLAINE | | | | | S. Binns | | | | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 2566.6 | | | | | | |
| 731 | 660 | | 255 09 | +14.3 | 8.3 | 89 50 | +1.9 | -6.4 | | 2560.2 | | -6 | -660 | 471,024 | 2254,649 |
| 732 | 330 | | --- | -- | 7.0 | 89 50 | +1.0 | -6.0 | | 2560.6 | | -3 | -330 | 471,027 | 2254,979 |
| 733 | 0 | | | | 5.1 | - | | -5.1 | | 2561.5 | TP | 0 | 0 | 471,030 | 2254,309 |
| 734 | 330 | | 75 08 | -- | 9.1 | 89 50 | +1.0 | -8.1 | | 2558.5 | | +3 | +330 | 471,033 | 2254,639 |
| # | 426 | | 75 50 | -- | 10.2 | 89 50 | +1.2 | -9.0 | | 2557.6 | | -1 | +420 | 471,029 | 2254,729 |
| 735 | 660 | | 75 33 | -- | 10.1 | 89 50 | +1.9 | -8.2 | | 2558.4 | | +2 | +660 | 471,032 | 2254,969 |
| 736 | 990 | | --- | -- | 7.0 | 89 47 | +3.7 | -3.3 | | 2563.3 | | +3 | +990 | 471,033 | 2255,299 |
| 737 | 1319 | | 75 10 | -- | 6.7 | 89 50 | +3.8 | -2.9 | | 2563.7 | | +12 | +1319 | 471,042 | 2255,628 |
| 738 | 1649 | | 74 45 | -- | 7.9 | 89 40 | +9.6 | +1.7 | | 2568.3 | | +27 | +1649 | 471,057 | 2255,958 |
| 739 | 1978 | | 74 30 | -- | 10.9 | 89 40 | +11.5 | +0.6 | | 2567.2 | | +41 | +1978 | 471,071 | 2256,287 |
| 740 | 2308 | | 74 11 21 | -- | 11.3 | 89 50 | +6.7 | -4.6 | | 2562.0 | TP | +61 | +2307 | 471,091 | 2256,616 |
| 740 | 2308 | | | | 14.8 | 89 45 | +10.1 | -4.7 | | | TP | | | | |
| | 1265 | | 241 48 51 | +14.3 | 2.5 | - | | +2.5 | | | BS | +304 | +1228 | | |
| | 1265 | | | | +2.4 | 270 - | | +2.4 | 2564.4 | | BS | | | | |
| 741 | 944 | | 238 - | -- | 9.0 | - | | -9.0 | | 2555.4 | | -287 | -899 | 471,108 | 2256,945 |
| 742 | 647 | | 227 .27 | -- | 10.3 | - | | -10.3 | | 2554.1 | | -306 | -570 | 471,089 | 2257,274 |
| 743 | 330 | | 226 - | -- | 5.7 | - | | -5.7 | | 2558.7 | | -164 | -287 | 471,231 | 2257,557 |
| 744 | 0 | | | | 5.1 | - | | -5.1 | | 2559.3 | TP | 0 | 0 | 471,395 | 2257,844 |
| 745 | 330 | | 48 - | -- | 10.6 | BM | -1.7 | -12.3 | | 2552.1 | | +153 | +292 | 471,548 | 2258,136 |
| 746 | 659 | | 50 40 | - | 9.1 | 90 36 | -6.9 | -16.0 | | 2548.4 | | +279 | +597 | 471,674 | 2258,441 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|---------------------------|---------|--------------|--------------|--------|------------------|--------|----------|---|------|---------------|----------|
| DATE | 8-5-86 | INSTRUMENT MAN | B. Cotcamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | F.M.I. | LINE NO. | 7 | PAGE | 48 | |
| AREA | MONTANA | TOPO MAP | WEIGAND Reservoir - 7 1/2 | STATE | MONT. | COUNTY | BLAINE | TWP | | RANGE | | PPM | PARTY MANAGER | S. Binns |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|-------------------|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | 2564.4 | | | | | |
| 747 | 988 | | 50 - | +14.3 | 7.8 | 90 20 | -5.7 | -13.5 | | 2550.9 | | +428 | +890 | 471,823 2,258,734 |
| 748 | 1318 | | 49 30 | - | 7.1 | 90 20 | -7.7 | -14.8 | | 2549.6 | | +582 | +1183 | 471,977 2,259,027 |
| 749 | 1648 | | 49 35 | - | 8.5 | 90 20 | -9.6 | -18.1 | | 2546.3 | | +725 | +1480 | 472,120 2,259,324 |
| 750 | 1977 | | 49 52 | - | 5.9 | 90 20 | -11.5 | -17.4 | | 2547.0 | | +861 | +1779 | 472,256 2,259,623 |
| 751 | 2307 | | 50 15 | - | 5.1 | 90 20 | -13.4 | -18.5 | | 2545.9 | | +991 | +2083 | 472,386 2,259,927 |
| 752 | 2517 | | 44 45 - | ~ | 14.9 | 90 10 | -7.3 | -22.2 | -22.1 1/3 | 2542.3 | TP | +1294 | +2159 | 472,689 2,260,003 |
| 752 | 2517 | | | | 14.6 | 269 50 | -7.3 | -21.9 | | | TP | | | |
| | 2086 | | 243 27 36 | +14.3 | 2.5 | TH | -10.4 | -7.9 | | 2534.4 | BS | +442 | +2039 | |
| | 2086 | | | | 2.4 | TH 270 | -10.4 | -8.0 | | | BS | | | |
| 753 | 2053 | | 252 30 | ~ | 11.6 | TH | +10.3 | -1.3 | | 2533.1 | | -115 | -2050 | 473,016 2,259,992 |
| + | 2049 | | 254 18 54 | - | 8.6 | TH | +10.2 | +1.6 | | 2536.0 | + | -50 | -2048 | 473,081 2,259,994 |
| 754 | 1780 | | 254 50 | ~ | 5.1 | TH | +8.9 | +3.8 | | 2538.2 | | -27 | -1780 | 473,104 2,260,262 |
| 755 | 1450 | | - - | - | 5.9 | TH | +7.3 | +1.4 | | 2535.8 | | -22 | -1450 | 473,109 2,260,592 |
| 756 | 1120 | | - - | - | 9.8 | TH | +5.6 | -4.2 | | 2530.2 | | -17 | -1120 | 473,114 2,260,922 |
| 757 | 790 | | - - | - | 8.0 | - | | -8.0 | | 2526.4 | | -12 | -790 | 473,119 2,261,252 |
| 758 | 685 | | 277 58 | - | 11.6 | - | | -11.6 | | 2522.8 | | +260 | -634 | 473,391 2,261,408 |
| 759 | 376 | | 270 - | - | 5.4 | TH | +1.9 | -3.5 | | 2530.9 | | +93 | -364 | 473,224 2,261,678 |
| 760 | 50 | | 254 50 | ~ | 7.2 | - | | -7.2 | | 2527.2 | | -1 | -50 | 473,130 2,261,992 |
| X | 0 | | | | 5.1 | - | | -5.1 | | 2529.3 | X | 0 | 0 | 473,131 2,262,012 |
| 761 | 280 | | 75 10 | - | 9.8 | - | | -9.8 | | 2524.6 | | +3 | +280 | 473,134 2,262,322 |

473,080 x 2,259,950
Sec. CORNER EL. 2536'

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|----------------------|---------|--------------|--------------|-----------------|------------------|--------|----------|---|------|---------------|----------|
| DATE | 8-6-86 | INSTRUMENT MAN | B. Cotcamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | J.M.I. | LINE NO. | 7 | PAGE | 49 | |
| AREA | MONTANA | TOPO MAP | WEIGAND Reservoir-76 | STATE | MONT. | COUNTY | BLAINE/PHILLIPS | TWP | | RANGE | | PPM | PARTY MANAGER | S. Binns |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS TP | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|----------|-------------------------|-----------------------|------------------------------------|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | 2534.4 | | | | | |
| TP | 449 | | 77° 11' 30" | +14.3 | 13.3 | 91 - | -7.8 | -21.1 | | 2513.3 | TP | -12 | +449 | 473.119 2262.491 |
| TP | 449 | | | | 13.3 | 269 - | -7.8 | -21.1 | | | TP | | | |
| | 1883 | | 260 52 10 | -- | +5.4 | 90 40 | +21.9 | +27.3 | 2540.6 | | BS | -170 | +1875 | |
| | 1883 | | | | +5.5 | 269 20 | +21.9 | +27.4 | | | BS | | | |
| 762 | 1726 | | 260 15 | -- | 8.7 | 91 10' | -35.1 | -43.8 | | 2496.8 | | +137 | -1721 | 473.086 2262.645 |
| 763 | 1403 | 1401.3 | 260 45 | -- | 8.6 | 92 50 | -69.4 | -78.0 | | 2462.6 | | +123 | -1396 | 473.072 2262.970 |
| 764 | 1305 | 1303.0 | 274 05 | -- | 9.2 | 93 10 | -72.1 | -81.3 | | 2459.3 | | +411 | -1237 | 473.360 2263.129 |
| 765 | 1078 | 1076.4 | 282 40 | -- | 9.2 | 93 10' | -59.5 | -68.7 | | 2471.9 | | +488 | -960 | 473.437 2263.406 |
| 766 | 762 | 759.8 | 287.33 | -- | 9.8 | 94 20 | -57.6 | -67.4 | | 2473.2 | | +401 | -645 | 473.350 2263.721 |
| 767 | 447 | 445.6 | 280 27 | -- | 11.1 | 94 30 | -35.1 | -46.2 | | 2494.4 | | +187 | -405 | 473.136 2263.961 |
| 768 | 119 | | 273 10 | -- | 7.7 | 93 30 | -7.3 | -15.0 | | 2525.6 | | +36 | -114 | 472.985 2264.252 |
| Σ | 0 | | | | 5.1 | - | - | -5.1 | | 2535.5 | Σ | 0 | 0 | 472.949 2264.366 |
| 769 | 210 | | 96 40 | +14.3 | 6.2 | 90 30 | -1.8 | -8.0 | | 2532.6 | | -75 | +196 | 472.874 2264.562 |
| 770 | 539 | | 99 10 | -- | 10.2 | 90 30 | -4.7 | -14.9 | | 2525.7 | | -215 | +494 | 472.734 2264.860 |
| 771 | 868 | | 97 40 | -- | 9.0 | 91 - | -15.1 | -24.1 | | 2516.5 | | -325 | +805 | 472.624 2265.171 Blaine County ↑ |
| 772 | 1102 | | 85 10 | -- | 6.1 | 90 36 | -11.5 | -17.6 | | 2523.0 | | -181 | +1087 | 472.768 2265.453 Phillips County ↓ |
| 773 | 1421 | | 81 36 | -- | 11.2 | 90 36 | -14.9 | -26.1 | | 2514.5 | | -146 | +1413 | 472.803 2265.779 |
| 774 | 1720 | | 76 40 | -- | 6.8 | 90 20 | -10.0 | -16.8 | | 2523.8 | | -29 | +1720 | 472.920 2266.086 |
| 775 | 2036 | | 73 50 | -- | 6.7 | 90 10 | -5.9 | -12.6 | | 2528.0 | | +66 | +2035 | 473.015 2266.401 |
| 776 | 2345 | | 71 05 | -- | 7.0 | 89 40 | +13.6 | +6.6 | | 2547.2 | | +189 | +2337 | 473.138 2266.703 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE: 8-6-86 INSTRUMENT MAN: B. Cotcamp ROD MAN: J. Middleton PARTY NUMBER: 6834 NOTES CHECKED BY: J.M. LINE NO.: 7 PAGE: 50
 AREA: MONTANA TOPO MAP: Weigano Reservoir STATE: MONT. COUNTY: Phillips TWP: RANGE: PPM: PARTY MANAGER: S. Binns

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS TP | COORDINATES | | REMARKS | |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|----------|-------------------------|-----------------------|---------|----------|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 2540.6' | | | | | | |
| 777 | 2671 | | 72° 15' | +14.3 | 8.8 | 89° 34' | +20.2 | +11.4 | | 2552.0 | | +161 | +2666 | 473.110 | 2267.032 |
| 778 | 3000 | | 71° 36' | -- | 11.8 | 89° 34' | +22.7 | +10.9 | | 2551.5 | | +214 | +2992 | 473.163 | 2267.358 |
| 779 | 3329 | | 72° - | -- | 8.3 | 89° 38' | +21.3 | +13.0 | | 2553.6 | | +215 | +3322 | 473.164 | 2267.688 |
| 780 | 3659 | | 72° 04' 52" | -- | 12.0 | 89° 38' | +23.4 | +11.4 | | 2552.0 | TP | +231 | +3652 | 473.180 | 2268.018 |
| 780 | 3659 | | | | 15.2 | 270° 25' | +26.6 | +11.4 | | | TP | | | | |
| | 2307 | | 254° 44' 40" | +14.3 | 2.0 | - | | +2.0 | +1.1 | | BS | +38 | +2307 | | |
| | 2307 | | | | 11.2 | 270° 14' | -9.4 | +1.8 | | 2553.9 | BS | | | | |
| 781 | 1980 | | 254° 45' | -- | 8.4 | 89° 50' | +5.8 | -2.6 | | 2551.3 | | -33 | -1980 | 473.185 | 2268.345 |
| 782 | 1650 | | -- | -- | 8.0 | 89° 50' | +4.8 | -3.2 | | 2550.7 | | -27 | -1650 | 473.191 | 2268.675 |
| 783 | 1320 | | -- | -- | 6.6 | 89° 50' | +3.8 | -2.8 | | 2551.1 | | -22 | -1320 | 473.196 | 2269.005 |
| 784 | 990 | | -- | -- | 6.9 | 89° 50' | +2.9 | -4.0 | | 2549.9 | | -16 | -990 | 473.202 | 2269.335 |
| 785 | 660 | | -- | -- | 6.3 | 89° 50' | +1.9 | -4.4 | | 2549.5 | | -11 | -660 | 473.207 | 2269.665 |
| 786 | 330 | | -- | -- | 9.0 | 89° 50' | +1.0 | -8.0 | | 2545.9 | | -5 | -330 | 473.213 | 2269.995 |
| 787 | 0 | | | | 5.1 | - | | -5.1 | | 2548.8 | K | 0 | 0 | 473.218 | 2270.325 |
| + | 212 | | 77° 39' 46" | +14.3 | 3.9 | - | | -3.9 | | 2550.0 | + | -7 | +212 | 473.211 | 2270.537 |
| 788 | 325 | | 59° 05' | -- | 6.3 | - | | -6.3 | | 2547.6 | | +93 | +311 | 473.311 | 2270.636 |
| 789 | 612 | | 64° 20' | -- | 10.7 | - | | -10.7 | | 2543.7 | | +121 | +600 | 473.339 | 2270.925 |
| 790 | 851 | | 82° 05' | -- | 10.1 | - | | -10.1 | | 2543.8 | | -95 | +846 | 473.123 | 2271.171 |
| 791 | 1146 | | 79° 50' | -- | 8.2 | - | | -8.2 | | 2545.0 | | -83 | +1143 | 473.135 | 2271.468 |

473.210 x 2270.505
 + section corner 2650.

note # offset south

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | |
|-----------------|----------------------------------|-------------------------|---------------------------|-------------------------------|---------------|------------|
| DATE 8-6-86 | INSTRUMENT MAN B. Cotcamp | ROD MAN J. Middleton | PARTY NUMBER 6834 | NOTES CHECKED BY F.M. J.M. | LINE NO. 7 | PAGE 51 |
| AREA MONTANA | TOPO MAP Weigand Reservoir-Tk | STATE MONT. | COUNTY PHILLIPS | TWP | RANGE | PPM |
| | | | PARTY MANAGER S. Binns | | | |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS TP | COORDINATES | | REMARKS | |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|----------|-------------------------|-----------------------|---------|-----------------------------------|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 2553.9 | | | | | | |
| TP | 2204 | | 131 12' 44" | +14.3 | 13.5 | 89 40' | +12.8 | -0.7 | | | TP | -1817 | +1248 | 471.401 | 2,277,573 |
| TP | 2204 | | | | 13.4 | 270 20' | +12.8 | -0.6 | | 2553.3 | TP | | | | |
| | 3855 | | 267 23 52 | -- | +10.8 | - | | +10.8 | +10.7 | 2564.0 | BS | -782 | +3775 | | |
| | 3855 | | | | +10.5 | 270 - | | +10.5 | | | BS | | | | |
| 792 | 3504 | | 255 15 | -- | 8.7 | - | | -8.7 | | 2555.3 | | -28 | -3504 | 470.591 | 2,277,844 |
| 793 | 3175 | | - - | -- | 3.6 | - | | -3.6 | | 2560.4 | | -25 | -3175 | 470.594 | 2,277,173 |
| 794 | 2845 | | - - | -- | 4.7 | - | | -4.7 | | 2559.3 | | -22 | -2845 | 470.597 | 2,277,503 |
| 795 | 2515 | | - - | -- | 8.9 | 90 10' | -7.3 | -16.2 | | 2547.8 | | -20 | -2515 | 470.599 | 2,277,833 |
| 796 | 2185 | | 255 15 | +14.3 | 7.2 | 90 10' | -6.4 | -13.6 | | 2550.4 | | -17 | -2185 | 470.602 | 2,277,163 |
| 797 | 1855 | | - - | -- | 11.4 | 90 10' | -5.4 | -16.8 | | 2547.2 | | -15 | -1855 | 470.604 | 2,277,493 |
| 798 | 1525 | | - - | -- | 8.8 | 90 20' | -8.9 | -17.7 | | 2546.3 | | -12 | -1525 | 470.607 | 2,277,823 WEIGAND Reservoir-Tk |
| 799 | 1195 | | - - | -- | 11.7 | 90 20' | -7.0 | -18.7 | | 2545.3 | | -9 | -1195 | 470.610 | 2,274,153 CoBurg S.E. - 7 1/2 |
| 800 | 865 | | - - | -- | 10.9 | 90 20' | -5.0 | -15.9 | | 2548.1 | | -7 | -865 | 470.612 | 2,274,483 |
| 801 | 535 | | - - | -- | 9.0 | 90 20' | -3.1 | -12.1 | | 2551.9 | | -4 | -535 | 470.615 | 2,274,813 |
| 802 | 205 | | - - | -- | 10.1 | 90 20' | -1.2 | -11.3 | | 2552.7 | | -2 | -205 | 470.617 | 2,275,143 |
| K | 0 | | | | 5.1 | - | | -5.1 | | 2558.9 | K | 0 | 0 | 470.619 | 2,275,348 |
| 803 | 124 | | 75 25 | +14.3 | 6.2 | 92 20' | -5.0 | -11.2 | | 2552.8 | | +1 | +124 | 470.620 | 2,275,422 |
| 804 | 454 | | - - | -- | 4.6 | 92 20' | -18.5 | -23.1 | | 2540.9 | | +2 | +454 | 470.621 | 2,275,802 y. 470,620 x. 2,275,800 |
| # | 505 | | 76 20 46 | - | 2.1 | 92 20' | -20.6 | -22.7 | | 2541.3 | # | -6 | +505 | 470.613 | 2,275,853 # section line inter. |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|----------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|----------|-------------------------|-----------------------|---------------|-----------|
| 8-6-86 | | B. Cotamp | | J. Middleton | | 6834 | | FM | | 7 | | 52 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | COBURG S.E. - 7 1/2' | | MONT. | | PHILLIPS | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 2564.0 | | | | | | |
| 805 | 777 | | 79° 05' | +14.2 | 7.4 | 91° - | -13.6 | -21.0 | | 2543.0 | | -45 | +776 | 470.574 | 2,276,124 |
| 806 | 1106 | | 78° 13' 18" | -- | 6.5 | 90° 40' | -12.9 | -19.4 | | | TP | -47 | +1105 | 470.570 | 2,276,453 |
| 806 | 1106 | | | | 6.4 | 269° 20' | -12.9 | -19.3 | | 2544.7 | TP | | | | |
| | 4617 | | 254° 58' 46" | -- | 9.2 | 89° 34' | -34.9 | -25.7 | 25.2 | 2518.9 | BS | +66 | +4616 | | |
| | 4617 | | | | 8.9 | 270° 26' | -34.9 | -26.0 | | | BS | | | | |
| 807 | 4290 | | 254° 59' | -- | 11.1 | 89° 34' | +32.4 | +21.3 | | 2540.2 | | -61 | -4290 | 470.577 | 2,276,729 |
| 808 | 3960 | | -- | -- | 10.8 | 89° 34' | +30.0 | +19.2 | | 2538.1 | | -56 | -3960 | 470.582 | 2,277,109 |
| 809 | 3630 | | -- | -- | 11.2 | 89° 36' | +25.3 | +14.1 | | 2533.0 | | -52 | -3630 | 470.586 | 2,277,439 |
| 810 | 3300 | | -- | -- | 10.1 | 89° 36' | +23.0 | +12.9 | | 2531.8 | | -47 | -3300 | 470.591 | 2,277,769 |
| 811 | 2970 | | -- | -- | 7.9 | 89° 36' | +20.7 | +12.8 | | 2531.7 | | -42 | -2970 | 470.596 | 2,278,099 |
| 812 | 2640 | | -- | -- | 9.0 | 89° 30' | +23.0 | +14.0 | | 2532.9 | | -38 | -2640 | 470.600 | 2,278,429 |
| 813 | 2310 | | 254° 59' | +14.2 | 8.8 | 89° 30' | +20.2 | +11.4 | | 2530.3 | | -33 | -2310 | 470.605 | 2,278,759 |
| 814 | 1980 | | -- | -- | 6.2 | 89° 30' | +17.3 | +11.1 | | 2530.0 | | -28 | -1980 | 470.610 | 2,279,089 |
| 815 | 1650 | | -- | -- | 9.4 | 89° 30' | +14.4 | +5.0 | | 2523.9 | | -24 | -1650 | 470.614 | 2,279,419 |
| 816 | 1320 | | -- | -- | 12.3 | 89° 30' | +11.5 | -0.8 | | 2518.1 | | -19 | -1320 | 470.619 | 2,279,749 |
| 817 | 990 | | -- | -- | 11.3 | 89° 30' | +8.6 | -2.7 | | 2516.2 | | -14 | -990 | 470.624 | 2,280,079 |
| 818 | 660 | | -- | -- | 9.1 | 89° 30' | +5.8 | -3.3 | | 2515.6 | | -9 | -660 | 470.629 | 2,280,409 |
| 819 | 330 | | -- | -- | 7.6 | 89° 30' | +2.9 | -4.7 | | 2514.2 | | -5 | -330 | 470.633 | 2,280,739 |
| 820 | 0 | | | | 5.1 | - | | -5.1 | | 2513.8 | K | 0 | 0 | 470.638 | 2,281,069 |
| 821 | 330 | | 74° 55' | +14.2 | 6.3 | 90° 30' | -2.9 | -9.2 | | 2509.7 | | +5 | +330 | 470.643 | 2,281,399 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|-----------|
| 8-8-86 | | B. Cotcamp | | J. Middleton | | 6834 | | J.M. | | 7 | | 53 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| mont. | | CoBurg S.E.-7E' | | Mont. | | Phillips | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 2518.9 | | | | | | |
| 822 | 660 | | 74' 55' | +14.2 | 10.0 | 90 30 | -5.8 | -15.8 | | 2503.1 | | +10 | +660 | 470.648 | 2,281,229 |
| 823 | 990 | | -- | -- | 6.8 | 90 30 | -8.6 | -15.4 | | 2503.5 | | +15 | +990 | 470.653 | 2,282,059 |
| 824 | 1320 | | -- | -- | 6.4 | 90 20 | -7.7 | -14.1 | | 2504.8 | | +20 | +1320 | 470.658 | 2,282,389 |
| 825 | 1650 | | -- | -- | 11.6 | 90 20 | -9.6 | -21.2 | | 2497.7 | | +25 | +1650 | 470.663 | 2,282,719 |
| 826 | 1980 | | 74' 55' | -- | 9.7 | 90 20 | -11.5 | -21.2 | | 2497.7 | | +31 | +1980 | 470.669 | 2,283,049 |
| 827 | 2310 | | -- | -- | 10.8 | 90 28 | -18.8 | -29.6 | | 2489.3 | | +36 | +2310 | 470.674 | 2,283,379 |
| 828 | 2640 | | -- | -- | 9.8 | 90 28 | -21.5 | -31.3 | | 2487.6 | TP | +41 | +2640 | 470.679 | 2,283,709 |
| 829 | 2970 | | -- | -- | 9.1 | 90 20 | -17.3 | -26.4 | | 2492.5 | | +46 | +2970 | 470.684 | 2,284,039 |
| 830 | 3300 | | -- | -- | 4.2 | 90 20 | -19.2 | -23.4 | | 2495.5 | | +51 | +3300 | 470.689 | 2,284,369 |
| 831 | 3630 | | -- | -- | 6.4 | 90 20 | -21.1 | -27.5 | | 2491.4 | | +56 | +3630 | 470.694 | 2,284,699 |
| 832 | 3960 | | -- | -- | 10.6 | 90 22 | -25.3 | -35.9 | | 2483.0 | | +61 | +3960 | 470.699 | 2,285,029 |
| 833 | 4290 | | -- | -- | 10.1 | 90 22 | -27.5 | -37.6 | | 2481.3 | | +66 | +4289 | 470.704 | 2,285,358 |
| 834 | 4620 | | -- | -- | 6.0 | 90 22 | -29.6 | -35.6 | | 2483.3 | | +71 | +4619 | 470.709 | 2,285,688 |
| 835 | 4945 | | 75' 15' 10" | -- | 12.7 | 90 12 | -17.3 | -30.0 | 29.8 | 2489.1 | TP | +47 | +4945 | 470.685 | 2,286,013 |
| 835 | 4945 | | | | 12.4 | 269 48 | -17.3 | -29.7 | | | TP | | | | |
| | 2821 | | 257' 00' 18" | +14.2 | 5.9 | BH | +14.1 | +20.0 | 19.8 | 2508.9 | BS | -59 | +2820 | | |
| | 2821 | | | | 5.4 | BH 210 | +14.1 | +19.5 | | | BS | | | | |
| 836 | 2511 | | 254' 40" | -- | 10.3 | BH | -12.6 | -22.9 | | 2486.0 | | -50 | -2511 | 470.576 | 2,286,321 |
| 837 | 2206 | | 251' 34" | -- | 8.0 | 90 24 | -15.4 | -23.4 | | 2485.5 | | -163 | -2200 | 470.463 | 2,286,632 |
| 838 | 1907 | | 247' 40" | -- | 9.2 | 90 24 | -13.3 | -22.5 | | 2486.4 | | -270 | -1888 | 470.356 | 2,286,944 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|--------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|-------|----------------------|--------------------|---------------|----------------------------|
| 8-8-86 | | B. Cotcamp | | J. Middleton | | 6834 | | F.M. | | 7 | | 54 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | COBURG S.E.-7 1/2' | | MONT. | | Phillips | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTting DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 2508.9 | | | | | | |
| 839 | 1619 | | 242 28' | +14.2 | 11.0 | 90 30 | -14.1 | -25.1 | - | 2483.8 | | -373 | -1575 | 470.253 | 2,287,257 |
| 840 | 1345 | | 235 20' | -- | 9.0 | 90 40 | -15.6 | -24.6 | | 2484.3 | | -470 | -1260 | 470.156 | 2,287,572 |
| 841 | 1041 | | 229 20' | -- | 9.7 | 91 20 | -24.2 | -33.9 | | 2475.0 | | -464 | -932 | 470.162 | 2,287,900 |
| # | 790 | | 222 44 18 | -- | 10.3 | 91 40 | -23.0 | -33.3 | | 2475.6 | # | -431 | -662 | 470.195 | 2,288,170 # creek crossing |
| 842 | 741 | | 220 22' | -- | 8.6 | 91 30 | -19.4 | -28.0 | | 2480.9 | | -430 | -604 | 470.196 | 2,288,228 |
| 843 | 413 | | 219 10' | -- | 10.9 | 91 30 | -10.8 | -21.7 | | 2487.2 | | -246 | -331 | 470.380 | 2,288,501 |
| 844 | 83 | | - | -- | 5.8 | 90 30 | -0.7 | -6.5 | | 2502.4 | | -50 | -67 | 470.576 | 2,288,765 |
| Σ | 0 | | | | 5.1 | - | | -5.1 | | 2503.8 | Σ | 0 | 0 | 470.626 | 2,288,832 |
| 845 | 246 | | 40 40' | +14.2 | 4.8 | - | | -4.8 | | 2504.1 | | +142 | +201 | 470.768 | 2,289,033 |
| 846 | 569 | | 40 02' | -- | 10.0 | - | | -10.0 | | 2498.9 | | +333 | +462 | 470.959 | 2,289,294 |
| 847 | 898 | | 42 40' | -- | 7.8 | BH | -4.5 | -12.3 | | 2496.6 | | +491 | +752 | 471.117 | 2,289,584 |
| 848 | 1227 | | 43 50' | -- | 7.2 | BH | -6.1 | -13.3 | | 2495.6 | | +650 | +1041 | 471.276 | 2,289,873 |
| 849 | 1556 | | 44 26' | -- | 11.2 | - | | -11.2 | | 2492.7 | | +810 | +1329 | 471.436 | 2,290,161 |
| 850 | 1886 | | 44 32' | -- | 9.7 | - | | -9.7 | | 2499.2 | | +979 | +1612 | 471.605 | 2,290,444 |
| 851 | 2216 | | - | -- | 10.6 | - | | -10.6 | | 2498.3 | | +1150 | +1894 | 471.776 | 2,290,726 |
| 852 | 2546 | | - | -- | 9.2 | - | | -9.2 | | 2499.7 | | +1321 | +2176 | 471.947 | 2,291,008 |
| 853 | 2876 | | - | -- | 7.8 | - | | -7.8 | | 2501.1 | | +1493 | +2458 | 472.119 | 2,291,290 |
| 854 | 3206 | | - | -- | 9.9 | - | | -9.9 | | 2499.0 | | +1664 | +2740 | 472.290 | 2,291,572 |
| 855 | 3534 | | 44 08' | -- | 11.2 | - | | -11.2 | | 2497.7 | | +1855 | +3008 | 472.481 | 2,291,840 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|----------------------|---------|--------------|--------------|----------|------------------|------|----------|---|------|---------------|----------|
| DATE | 8-8-86 | INSTRUMENT MAN | B. Cotcamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | F.M. | LINE NO. | 7 | PAGE | 55 | |
| AREA | MONTANA | TOPO MAP | COBURG S.E. - 7 1/2' | STATE | MONT. | COUNTY | Phillips | TWP | | RANGE | | PPM | PARTY MANAGER | S. BURNS |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | COORDINATES | | REMARKS | |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|-------------|-----------|------------------------|--|
| | | | | | | | | | | | | | | Y | X | | |
| | | | | | | | | | 2508.9 | | | | | | | | |
| 856 | 3849 | | 42 43 18 | +14.2 | 12.5 | - | | -12.5 | | | TP | +2101 | +3225 | 472.726 | 2,292.056 | | |
| 856 | 3849 | | | | 12.2 | 270 - | | -12.2 | 12.33 | 2496.6 | TP | - | - | | | | |
| | 5287 | | 246 05 52 | -- | +13.3 | 90 04 | +6.2 | +19.5 | +19.23 | 2515.8 | BS | +891 | +5211 | | | | |
| | 5287 | | | | +12.6 | 269 56 | +6.2 | +18.8 | | | BS | - | - | | | | |
| 857 | 5056 | | 248 42 | -- | 11.0 | 90 06 | -8.8 | -19.8 | | 2496.0 | | -625 | -5017 | 472.991 | 2,292,249 | | |
| 858 | 4841 | | 251 37 | -- | 8.8 | 70 06 | -8.4 | -17.2 | | 2498.6 | | -353 | -4828 | 473.263 | 2,292,438 | | |
| 859 | 4611 | | 254 23 | -- | 10.8 | 90 06 | -8.0 | -18.8 | | 2497.0 | | -114 | -4610 | 473.502 | 2,292,656 | | |
| 860 | 4288 | | 255 02 | -- | 6.4 | 90 20 | -24.9 | -31.3 | | 2484.5 | | -57 | -4288 | 473.559 | 2,292,978 | | |
| 861 | 3960 | | - - | +14.2 | 9.1 | 90 20 | -23.0 | -32.1 | | 2483.7 | | -53 | -3960 | 473.563 | 2,293,306 | | |
| 862 | 3630 | | - - | -- | 9.1 | 90 20 | -21.1 | -30.2 | | 2485.6 | | -49 | -3630 | 473.567 | 2,293,636 | | |
| 863 | 3300 | | - - | -- | 6.7 | 90 20 | -19.2 | -25.9 | | 2489.9 | | -44 | -3300 | 473.572 | 2,293,966 | | |
| 864 | 2970 | | - - 1 | -- | 12.3 | 90 20 | -17.3 | -29.6 | | 2486.2 | | -40 | -2970 | 473.576 | 2,294,296 | 4-473.600x-2,294,305 | |
| 11- | 2959 | | 255 04 51 | -- | 12.0 | 90 20 | -17.2 | -29.2 | | 2486.6 | 11- | -37 | -2959 | 473.579 | 2,294,307 | 11- fence north 2487.0 | |
| 865 | 2646 | | 255 02 | -- | 9.1 | 90 20 | -15.4 | -24.5 | | 2491.3 | | -35 | -2640 | 473.581 | 2,294,626 | | |
| 866 | 2310 | | - - | -- | 7.3 | 90 20 | -13.4 | -20.7 | | 2495.1 | | -31 | -2310 | 473.585 | 2,294,956 | | |
| 867 | 1980 | | - - | -- | 9.5 | 90 20 | -11.5 | -21.0 | | 2494.8 | | -26 | -1980 | 473.590 | 2,295,286 | | |
| 868 | 1650 | | - - | -- | 10.0 | 90 20 | -9.6 | -19.6 | | 2496.2 | | -22 | -1650 | 473.594 | 2,295,616 | | |
| 869 | 1320 | | - - | -- | 11.0 | 90 20 | -7.7 | -18.7 | | 2497.1 | | -18 | -1320 | 473.598 | 2,295,946 | | |
| 870 | 990 | | - - | -- | 9.8 | 90 30 | -8.6 | -18.4 | | 2497.4 | | -13 | -990 | 473.603 | 2,296,276 | | |
| 871 | 660 | | - - | -- | 11.7 | 90 30 | -5.8 | -17.5 | | 2498.3 | | -9 | -660 | 473.607 | 2,296,606 | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | |
|-----------------|--------------------------------|-------------------------|----------------------|-----------------------------|---------------|------------|
| DATE 8-8-86 | INSTRUMENT MAN B. Cotcamp | ROD MAN J. Middleton | PARTY NUMBER 6834 | NOTES CHECKED BY J.M. | LINE NO. 7 | PAGE 56 |
| AREA MONTANA | TOPO MAP COBURG S.E. 7 1/2' | STATE MONT. | COUNTY PHILLIPS | TWP | RANGE | PPM |
| | | | | PARTY MANAGER S. B. WINS | | |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|-------------------|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | 2515.8 | | | | | |
| 872 | 330 | | 255° 02' | +14.2 | 11.0 | 90° 30' | -2.9 | -13.9 | | 2501.9 | | -4 | -330 | 473.612 2,296,936 |
| 873 | 0 | | | | 5.1 | - | | -5.1 | | 2510.7 | TP | 0 | 0 | 473.616 2,297,266 |
| 874 | 330 | | 75° 10' | -- | 6.8 | 89° 40' | +1.9 | -4.9 | | 2510.9 | | +4 | +330 | 473.620 2,297,596 |
| 875 | 660 | | -- | -- | 9.4 | 89° 40' | +3.8 | -5.6 | | 2510.2 | | +7 | +660 | 473.623 2,297,926 |
| 876 | 990 | | -- | -- | 7.3 | 89° 30' | +8.6 | +1.3 | | 2517.1 | | +11 | +990 | 473.627 2,298,256 |
| 877 | 1320 | | -- | -- | 7.0 | 89° 30' | +11.5 | +4.5 | | 2520.3 | | +15 | +1320 | 473.631 2,298,586 |
| 878 | 1650 | | -- | -- | 8.2 | 89° 30' | +14.4 | +6.2 | | 2522.0 | | +18 | +1650 | 473.634 2,298,916 |
| 879 | 1980 | | 75° 10' | +14.2 | 6.7 | 89° 30' | +17.3 | +10.6 | | 2526.4 | | +22 | +1980 | 473.638 2,299,246 |
| 880 | 2310 | | -- | -- | 6.1 | 89° 30' | +20.2 | +14.1 | | 2529.9 | | +26 | +2310 | 473.642 2,299,576 |
| 881 | 2640 | | -- | -- | 11.2 | 89° 20' | +30.7 | +19.5 | | 2535.3 | | +29 | +2640 | 473.645 2,299,906 |
| 882 | 2970 | | -- | -- | 9.8 | 89° 24' | +31.1 | +21.3 | | 2537.1 | | +33 | +2970 | 473.649 2,300,236 |
| 883 | 3300 | | -- | -- | 8.8 | 89° 24' | +34.6 | +25.8 | | 2541.6 | | +36 | +3300 | 473.652 2,300,566 |
| 884 | 3629 | | 75° 12' 42" | -- | 15.3 | 89° 20' | +42.2 | +26.9 | | | TP | +37 | +3629 | 473.652 2,300,894 |
| 884 | 3629 | | | | 15.0 | 270° 40' | +42.2 | +27.2 | +27.1 | 2542.9 | TP | - | - | |
| | 4289 | | 255° 05' 02" | +13.9 | 13.3 | 90° 32' | +39.9 | +53.2 | +53.0 | 2545.9 | BS | +76 | +4288 | |
| | 4289 | | | | 12.8 | 269° 28' | +39.9 | +52.7 | | | BS | - | - | |
| 885 | 3960 | | 255° 05' | -- | 9.0 | 90° 40' | -46.1 | -55.1 | | 2540.8 | | -70 | -3959 | 473.657 2,301,222 |
| 886 | 3630 | | -- | -- | 10.0 | 90° 44' | -46.5 | -56.5 | | 2539.4 | | -64 | -3629 | 473.663 2,301,552 |
| 887 | 3300 | | -- | -- | 9.3 | 90° 48' | -46.1 | -55.4 | | 2540.5 | | -59 | -3299 | 473.668 2,301,882 |
| 888 | 2970 | | 255° 11' 15" | -- | 8.6 | 90° 48' | -41.7 | -50.1 | | 2545.8 | TP | -47 | -2969 | 473.680 2,302,212 |

473.700 x = 2,302,195
if way out. El. 2546.1

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | |
|-----------------|----------------------------------|-------------------------|----------------------------|-------------------------|---------------|------------|
| DATE 8-8-86 | INSTRUMENT MAN B. Cotcamp | ROD MAN J. Middleton | PARTY NUMBER 6834 | NOTES CHECKED BY JMI | LINE NO. 7 | PAGE 57 |
| AREA MONTANA | TOPO MAP COBURG S.E. - 7 1/2' | STATE MONT. | COUNTY Phillips | TWP | RANGE | PPM |
| | | | PARTY MANAGER S. O'INNS | | | |

| STATION NO. | SLOPE DISTANCE | PLOT DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS TP | COORDINATES | | REMARKS |
|-------------|----------------|---------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|-------|-------------------------|-----------------------|--|
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | |
| | | | | | | | | | 2595.9 | | | | | |
| 889 | 2640 | | 255° 05' | +13.9 | 10.7 | 90 50 | -38.4 | -49.1 | | 2546.8 | | -47 | -2640 | 473.680 2,302,541 |
| 890 | 2310 | | - - | -- | 11.3 | 90 50 | -33.6 | -44.9 | | 2551.0 | | -41 | -2310 | 473.686 2,302,821 |
| 891 | 1980 | | - - | -- | 10.5 | 90 50 | -28.8 | -39.3 | | 2556.6 | | -35 | -1980 | 473.692 2,303,201 |
| 892 | 1650 | | - - | -- | 9.0 | 90 50 | -24.0 | -33.0 | | 2562.9 | | -29 | -1650 | 473.698 2,303,531 |
| 893 | 1320 | | - - | -- | 8.0 | 90 50 | -19.2 | -27.2 | | 2568.7 | | -23 | -1320 | 473.704 2,303,861 |
| 894 | 990 | | - - | -- | 4.8 | 90 50 | -14.4 | -19.2 | | 2576.7 | | -18 | -990 | 473.709 2,304,191 COBURG S.E. - 7 1/2' |
| 895 | 660 | | - - | -- | 7.0 | 90 50 | -9.6 | -16.6 | | 2579.3 | | -12 | -660 | 473.715 2,304,521 Cow Creek - 7 1/2' |
| 896 | 330 | | - - | -- | 8.8 | 89 50 | +1.0 | -7.8 | | 2588.1 | | -6 | -330 | 473.721 2,304,851 |
| 897 | 0 | | | | 5.1 | - | - | -5.1 | | 2590.8 | X | 0 | 0 | 473.727 2,305,181 |
| 898 | 330 | | 75° 10' | +13.9 | 8.6 | 89 50 | +1.0 | -7.6 | | 2588.3 | | +5 | +330 | 473.732 2,305,511 |
| 899 | 660 | | - - | -- | 11.3 | 89 50 | +1.9 | -9.4 | | 2586.5 | | +11 | +660 | 473.738 2,305,841 |
| 900 | 990 | | - - | -- | 10.1 | - | - | -10.1 | | 2585.8 | | +16 | +990 | 473.743 2,306,171 |
| 901 | 1320 | | - - | -- | 9.2 | - | - | -9.2 | | 2586.7 | | +22 | +1320 | 473.749 2,306,501 |
| 902 | 1650 | | - - | -- | 9.8 | - | - | -9.8 | | 2586.1 | | +27 | +1650 | 473.754 2,306,831 |
| 903 | 1980 | | - - | -- | 9.1 | - | - | -9.1 | | 2586.8 | | +32 | +1980 | 473.759 2,307,161 |
| 904 | 2312 | | 74° 56' 12" | -- | 8.7 | - | - | -8.7 | | 2587.2 | 1/4 | +47 | +2312 | 473.774 2,307,493 # 4 way. 473.785 x -2,307,495 2587.0 |
| 905 | 2640 | | 75° 10' | -- | 8.1 | - | - | -8.1 | | 2587.8 | | +43 | +2640 | 473.770 2,307,821 |
| 906 | 2970 | | - - | -- | 10.2 | - | - | -10.2 | | 2585.7 | | +48 | +2970 | 473.775 2,308,151 |
| 907 | 3300 | | - - | -- | 9.2 | - | - | -9.2 | | 2586.7 | | +54 | +3300 | 473.781 2,308,481 |
| 908 | 3630 | | - - | -- | 9.8 | - | - | -9.8 | | 2586.1 | | +59 | +3630 | 473.786 2,308,811 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | |
|------|---------|----------------|------------------|---------|--------------|--------------|----------|------------------|------|---------------|----------|------|----|
| DATE | 8-8-86 | INSTRUMENT MAN | B. Gtcamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | J.M. | LINE NO. | 7 | PAGE | 58 |
| AREA | MONTANA | TOPO MAP | Cow Creek-7 1/2' | STATE | MONT. | COUNTY | PHILLIPS | TWP | | PARTY MANAGER | S. Binns | | |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | NORTH + SOUTH - | EAST + WEST - | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|---------------|-------------|-----------|-------------------------------------|
| | | | | | | | | | | | | LAT. | DEP. | Y | X | |
| | | | | | | | | | 2595.9 | | | | | | | |
| 909 | 3960 | | 75° 10' | +13.9 | 9.8 | - | | -9.8 | | 2586.1 | | +65 | +3960 | 473.792 | 2,309,141 | |
| 910 | 4289 | | 75° 15 50 | -- | 14.7 | 89 58 | +2.5 | -12.2 | 120 1/2 | 2583.9 | TP | +63 | +4289 | 473.789 | 2,309,469 | |
| 910 | 4289 | | | | 14.3 | 270 02 | +2.5 | -11.8 | | | TP | - | - | | | |
| | 3628 | | 255 16 54 | -- | +3.5 | - | | +2.5 | 134 1/2 | 2587.3 | BS | +52 | +3628 | | | |
| | 3628 | | | | +3.2 | 270 - | | +3.2 | | | BS | - | - | | | |
| 911 | 3300 | | 255 17' | -- | 7.0 | - | | -7.0 | | 2580.3 | | -47 | -3300 | 473.793 | 2,309,796 | |
| 912 | 2970 | | -- | -- | 6.7 | - | | -6.7 | | 2580.6 | | -42 | -2970 | 473.798 | 2,310,126 | |
| 913 | 2640 | | -- | -- | 8.9 | - | | -8.9 | | 2578.4 | | -38 | -2640 | 473.802 | 2,310,456 | |
| 914 | 2310 | | -- | -- | 9.0 | - | | -9.0 | | 2578.3 | | -33 | -2310 | 473.807 | 2,310,786 | |
| 915 | 1980 | | 255 17 | +13.9 | 7.0 | 90 10 | -5.8 | -12.8 | | 2574.5 | | -28 | -1980 | 473.812 | 2,311,116 | |
| 916 | 1650 | | -- | -- | 10.3 | 90 10 | -4.8 | -15.1 | | 2572.2 | | -24 | -1650 | 473.816 | 2,311,446 | |
| 917 | 1320 | | -- | -- | 9.0 | 90 40 | -15.4 | -24.4 | | 2562.9 | | -19 | -1320 | 473.821 | 2,311,776 | |
| 918 | 990 | | -- | -- | 10.7 | 90 40 | -11.5 | -22.2 | | 2565.1 | | -14 | -990 | 473.826 | 2,312,106 | |
| 919 | 660 | | -- | -- | 5.3 | 90 40 | -7.7 | -13.0 | | 2574.3 | | -9 | -660 | 473.831 | 2,312,436 | |
| 920 | 330 | | -- | -- | 5.9 | 90 40 | -3.8 | -9.7 | | 2577.6 | | -5 | -330 | 473.835 | 2,312,766 | |
| 920 | 313 | | 256 23 24 | -- | 5.8 | 90 40 | -3.6 | -9.4 | | 2577.9 | TP | +2 | -313 | 473.842 | 2,312,783 | 473.870 x 2,312.750 4 way 2578.0 |
| 921 | 0 | | | | 5.1 | - | | -5.1 | | 2582.2 | X | 0 | 0 | 473.840 | 2,313,096 | |
| 922 | 330 | | 75 19' | -- | 7.0 | - | | -7.0 | | 2580.3 | | +5 | +330 | 473.845 | 2,313,426 | |
| 923 | 660 | | -- | -- | 9.6 | - | | -9.6 | | 2577.7 | | +9 | +660 | 473.849 | 2,313,756 | |
| 924 | 990 | | -- | -- | 10.6 | - | | -10.6 | | 2576.7 | | +14 | +990 | 473.854 | 2,314,086 | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|-------------------------|-----------------------|---------------|-----------|
| 8-8-86 | | B. Cotcamp | | J. Middleton | | 2834 | | F.M. | | 7 | | 59 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | Cow Creek-7 1/2' | | MONT. | | Phillips | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOT DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 2587.3 | | | | | | |
| 925 | 1320 | | 75° 19' | +13.9 | 6.2 | BH | -6.6 | -12.8 | | 2574.5 | | +18 | +1320 | 473.858 | 2,314,416 |
| 926 | 1650 | | - | -- | 6.9 | BH | -8.3 | -15.2 | | 2572.1 | | +23 | +1650 | 473.863 | 2,314,746 |
| 927 | 1980 | | - | -- | 8.3 | BH | -9.9 | -18.2 | | 2569.1 | | +27 | +1980 | 473.867 | 2,315,076 |
| 928 | 2310 | | - | -- | 7.0 | BH | -11.6 | -18.6 | | 2568.7 | | +32 | +2310 | 473.872 | 2,315,406 |
| 929 | 2640 | | - | -- | 12.4 | - | - | -12.4 | | 2574.9 | | +36 | +2640 | 473.876 | 2,315,736 |
| 930 | 2969 | | 75 34 18 | -- | 14.1 | 90° 02' | -1.7 | -15.8 | 15.6 | 2571.7 | TP | +27 | +2969 | 473.866 | 2,316,064 |
| 930 | 2969 | | | | 13.8 | 269° 58' | -1.7 | -15.5 | | | TP | - | - | | |
| | 3959 | | 255 03 35 | +13.9 | 5.2 | - | - | +5.2 | 15.1 | 2576.8 | BS | +72 | +3958 | | |
| | 3959 | | | | 4.9 | 270° | - | +4.9 | | | BS | - | - | | |
| 931 | 3630 | | 255 10 | -- | 10.0 | - | - | -10.0 | | 2566.8 | | -59 | -3630 | 473.878 | 2,316,392 |
| 932 | 3300 | | - | -- | 8.6 | - | - | -8.6 | | 2568.2 | | -54 | -3300 | 473.883 | 2,316,722 |
| 933 | 2970 | | - | -- | 10.0 | - | - | -10.0 | | 2566.8 | | -48 | -2970 | 473.889 | 2,317,052 |
| 934 | 2640 | | - | -- | 7.0 | - | - | -7.0 | | 2569.8 | | -43 | -2640 | 473.894 | 2,317,382 |
| 935 | 2310 | | - | -- | 5.0 | - | - | -5.0 | | 2571.8 | | -38 | -2310 | 473.899 | 2,317,712 |
| 936 | 1980 | | - | -- | 5.3 | - | - | -5.3 | | 2571.5 | | -32 | -1980 | 473.905 | 2,318,042 |
| 936 | 1885 | | 255 14 14 | +13.9 | 5.0 | - | - | -5.0 | | 2571.8 | TP | -28 | -1885 | 473.909 | 2,318,137 |
| 937 | 1650 | | 255 10 | -- | 5.7 | - | - | -5.7 | | 2571.1 | | -27 | -1650 | 473.910 | 2,318,372 |
| 938 | 1320 | | - | -- | 7.8 | - | - | -7.8 | | 2569.0 | | -22 | -1320 | 473.915 | 2,318,702 |
| 939 | 990 | | - | -- | 6.5 | - | - | -6.5 | | 2570.3 | | -16 | -990 | 473.921 | 2,319,032 |
| 940 | 660 | | - | -- | 6.4 | TH | +3.3 | -3.1 | | 2573.7 | | -11 | -660 | 473.926 | 2,319,362 |

g-473,930 x-2,318,125
4 way Inter. EL. 2592.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | |
|-----------------|------------------------------|-------------------------|----------------------|---------------------------|---------------|------------|
| DATE 8-8-86 | INSTRUMENT MAN B. Cotcamp | ROD MAN J. Middleter | PARTY NUMBER 6834 | NOTES CHECKED BY J.M. | LINE NO. 7 | PAGE 60 |
| AREA MONTANA | TOPO MAP Cow Creek-7k' | STATE MONT. | COUNTY PHILLIPS | TWP | RANGE | PPM |
| | | | | PARTY MANAGER S. Binns | | |

| STATION NO. | SLOPE DISTANCE | PLOTting DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | NORTH + SOUTH - | | EAST + WEST - | | COORDINATES | | REMARKS | |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|-------|---------------|-----------|-------------|--|---------|---|
| | | | | | | | | | | | | LAT. | DEP. | Y | X | | | | |
| | | | | | | | | | 2576.8 | | | | | | | | | | |
| 941 | 330 | | 255 10 | +13.9 | 4.8 | - | | -4.8 | | 2572.0 | | -5 | -330 | 473.932 | 2,319,692 | | | | |
| 942 | 0 | | | | 5.1 | - | | -5.1 | | 2571.7 | TP | 0 | 0 | 473.937 | 2,320,022 | | | | |
| 943 | 330 | | 75 17 | -- | 7.0 | - | | -7.0 | | 2569.8 | | +5 | +330 | 473.942 | 2,320,352 | | | | |
| 944 | 660 | | -- | -- | 10.7 | - | | -10.7 | | 2566.1 | | +9 | +660 | 473.946 | 2,320,682 | | | | |
| 945 | 990 | | -- | -- | 10.7 | BH | -5.0 | -15.7 | | 2561.1 | | +14 | +990 | 473.951 | 2,321,012 | | | | |
| 946 | 1320 | | -- | -- | 8.1 | 90 30 | -11.5 | -19.6 | | 2557.2 | | +19 | +1320 | 473.956 | 2,321,342 | | | | |
| 947 | 1650 | | 75 17 | -- | 11.0 | 90 30 | -14.4 | -25.4 | | 2551.4 | | +24 | +1650 | 473.961 | 2,321,672 | | | | |
| 948 | 1980 | | -- | -- | 9.2 | 90 30 | -17.3 | -26.5 | | 2550.3 | | +28 | +1980 | 473.965 | 2,322,002 | | | | |
| 949 | 2310 | | -- | -- | 9.9 | 90 36 | -24.2 | -34.1 | | 2542.7 | | +33 | +2310 | 473.970 | 2,322,332 | | | | |
| 950 | 2640 | | -- | -- | 11.0 | 90 36 | -27.6 | -38.6 | | 2538.2 | | +38 | +2640 | 473.975 | 2,322,662 | | | | |
| 951 | 2970 | | -- | -- | 11.0 | 90 36 | -31.1 | -42.1 | | 2534.7 | | +42 | +2970 | 473.979 | 2,322,992 | | | | |
| 952 | 3300 | | -- | -- | 10.8 | 90 38 | -36.5 | -47.3 | | 2529.5 | | +47 | +3300 | 473.984 | 2,323,322 | | | | |
| | 3415 | | 75 05 58 | -- | 12.9 | 90 36 | -35.8 | -48.7 | | 2528.1 | | +60 | +3414 | 473.997 | 2,323,436 | | | | 474.005 x 2,323,425 T-ROAD EL. 2529. |
| 953 | 3629 | | 75 18 21 | -- | 14.6 | 90 36 | -38.0 | -52.6 | -52.4 | 2524.4 | TP | +50 | +3628 | 473.986 | 2,323,650 | | | | |
| 953 | 3629 | | | | 14.2 | 269 24 | -38.0 | -52.2 | | | TP | - | | | | | | | |
| | 3959 | | 255 36 27 | +13.9 | 14.0 | 89 21 | -38.0 | -24.0 | -24.1 | 2500.3 | BS | +34 | +3959 | | | | | | |
| | 3959 | | | | 13.7 | 270 33 | -38.0 | -24.3 | | | BS | - | | | | | | | |
| 954 | 3630 | | 255 36 | -- | 9.4 | 89 30 | +31.7 | +22.3 | | 2522.6 | | -32 | -3630 | 473.987 | 2,323,979 | | | | |
| 955 | 3300 | | -- | -- | 7.9 | 89 30 | +28.8 | +20.9 | | 2521.2 | | -29 | -3300 | 473.990 | 2,324,309 | | | | |
| 956 | 2970 | | -- | -- | 8.4 | 89 30 | +25.9 | +17.5 | | 2517.8 | | -26 | -2970 | 473.993 | 2,324,639 | | | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | |
|-----------------|--------------------------------|-------------------------|----------------------|---------------------------|---------------|------------|
| DATE 8-8-86 | INSTRUMENT MAN B. Cotcamp | ROD MAN J. Middleton | PARTY NUMBER 6834 | NOTES CHECKED BY F.M. | LINE NO. 7 | PAGE 61 |
| AREA MONTANA | TOPO MAP Cow Creek - 7 1/2' | STATE MONT. | COUNTY PHILLIPS | TWP | RANGE | PPM |
| | | | | PARTY MANAGER S. Binns | | |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | NORTH + SOUTH - | | EAST + WEST - | | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|-----------------|-------|---------------|-----------|-------------|--|---------|
| | | | | | | | | | | | | LAT. | DEP. | Y | X | | | |
| | | | | | | | | | 2500.3 | | | | | | | | | |
| 957 | 2640 | | 255° 36' | +139 | 7.7 | 89° 30' | +23.0 | +15.3 | | 2515.6 | | -23 | -2640 | 473.996 | 2,324,969 | | | |
| 958 | 2310 | | - - | -- | 8.4 | 89° 30' | +20.2 | +11.8 | | 2512.1 | | -20 | -2310 | 473.999 | 2,325,299 | | | |
| 959 | 1980 | | - - | -- | 11.0 | 89° 30' | +17.3 | +6.3 | | 2506.6 | | -17 | -1980 | 474.002 | 2,325,629 | | | |
| 960 | 1650 | | - - | -- | 8.8 | 89° 40' | +9.6 | +0.8 | | 2501.1 | | -14 | -1650 | 474.005 | 2,325,959 | | | |
| 961 | 1320 | | 255° 36' | -- | 7.3 | 89° 40' | +7.7 | +0.4 | | 2500.7 | | -12 | -1320 | 474.007 | 2,326,289 | | | |
| 962 | 990 | | - - | -- | 6.2 | 89° 30' | +8.6 | +2.4 | | 2502.7 | | -9 | -990 | 474.010 | 2,326,619 | | | |
| 963 | 660 | | - - | -- | 9.8 | 89° 30' | +5.8 | -4.0 | | 2496.3 | | -6 | -660 | 474.013 | 2,326,949 | | | |
| 964 | 330 | | - - | -- | 6.7 | 89° 30' | +2.9 | -3.8 | | 2496.5 | | -3 | -330 | 474.016 | 2,327,279 | | | |
| 965 | 0 | | - - | -- | 5.1 | - | - | -5.1 | | 2495.2 | X | 0 | 0 | 474.019 | 2,327,609 | | | |
| 966 | 330 | | 74° 41' | +139 | 8.1 | - | - | -8.1 | | 2492.2 | | +8 | +330 | 474.027 | 2,327,939 | | | |
| 967 | 660 | | - - | -- | 11.4 | - | - | -11.4 | | 2488.9 | | +16 | +660 | 474.035 | 2,328,269 | | | |
| 968 | 990 | | - - | -- | 8.7 | 90° 30' | -8.6 | -17.3 | | 2483.0 | | +24 | +990 | 474.043 | 2,328,599 | | | |
| 1F | 1087 | | 74° 42' 02" | -- | 9.1 | 90° 30' | -9.5 | -18.6 | | 2481.7 | 1F | +27 | +1087 | 474.046 | 2,328,676 | 1F | 474.076 x -2328.700 T-Inter. 2482.0 | |
| 969 | 1320 | | 74° 41' | -- | 9.7 | 90° 30' | -11.5 | -21.2 | | 2479.1 | | +33 | +1320 | 474.052 | 2,328,929 | | | |
| 970 | 1650 | | - - | -- | 11.3 | 90° 30' | -14.4 | -25.7 | | 2474.6 | | +41 | +1650 | 474.060 | 2,329,259 | | | |
| 971 | 1980 | | - - | -- | 11.8 | 90° 30' | -17.3 | -29.1 | | 2471.2 | | +49 | +1979 | 474.068 | 2,329,588 | | | |
| 972 | 2310 | | - - | -- | 11.0 | 90° 30' | -20.2 | -31.2 | | 2469.1 | | +57 | +2309 | 474.076 | 2,329,918 | | | |
| 973 | 2640 | | - - | -- | 10.1 | 90° 30' | -23.0 | -33.1 | | 2467.2 | | +65 | +2639 | 474.084 | 2,330,248 | | | |
| 974 | 2970 | | - - | -- | 11.1 | 90° 30' | -25.9 | -37.0 | | 2463.3 | | +73 | +2969 | 474.092 | 2,330,578 | | | |
| 975 | 3300 | | - - | -- | 10.8 | 90° 32' | -30.7 | -41.5 | | 2458.8 | | +82 | +3299 | 474.101 | 2,330,908 | | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | | LINE NO. | | PAGE | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|----------|-------------------------|-----------------------|---------------|-----------|
| 8-8-86 | | B. Cotamp | | J. Middleton | | 6834 | | J.M. | | | 7 | | 62 | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | Cow Creek-7 1/2' | | MONT. | | Co. Phillips | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 2500.3 | | | | | | |
| 976 | 3630 | | 74 41 | +13.9 | 7.4 | 90 32 | -33.8 | -41.9 | | 2459.1 | | +90 | +3629 | 474.109 | 2,331,238 |
| 977 | 3960 | | - - | - | 7.1 | 90 30 | -34.6 | -41.7 | | 2458.6 | | +98 | +3959 | 474.117 | 2,331,568 |
| 978 | 4290 | | - - | - | 9.1 | 90 14 | -17.5 | -26.6 | | 2473.7 | | +106 | +4289 | 474.125 | 2,331,898 |
| 979 | 4618 | | 74 38 22 | - | 13.9 | 90 08 | -10.7 | -24.6 | 24.4 | 2475.9 | TP | +118 | +4616 | 474.136 | 2,332,225 |
| 979 | 4618 | | | | 13.6 | 269 52 | -10.7 | -24.3 | | | TP | - | | | |
| | 2638 | | 254 25 02 | +13.9 | 4.2 | TM | -13.2 | -9.0 | 24.3 | 2466.8 | BS | +77 | +2637 | | |
| | 2638 | | | | 10.8 | 89 34 | -20.0 | -9.2 | | | BS | - | | | |
| 980 | 2310 | | 254 32 | - | 7.2 | TM | +11.6 | +4.4 | | 2471.2 | | -63 | -2309 | 474.149 | 2,332,553 |
| 981 | 1980 | | - - | - | 3.2 | - | | -3.2 | | 2463.6 | | -54 | -1979 | 474.158 | 2,332,883 |
| 982 | 1650 | | - - | - | 6.6 | BM | -8.3 | -14.9 | | 2451.9 | | -45 | -1649 | 474.167 | 2,333,213 |
| 983 | 1320 | | - - | - | 8.3 | 91 - | -23.0 | -31.3 | | 2435.5 | | -36 | -1320 | 474.176 | 2,333,542 |
| 984 | 990 | | - - | - | 14.3 | 91 - | -17.3 | -31.6 | | 2435.2 | | -27 | -990 | 474.185 | 2,333,872 |
| IF | 803 | | 255 14 30 | - | 7.0 | 90 50 | -11.7 | -18.7 | | 2448.1 | IF | -12 | -803 | 474.200 | 2,334,059 |
| 985 | 660 | | 254 32 | - | 9.8 | 90 10 | -1.9 | -11.7 | | 2455.1 | | -18 | -660 | 474.194 | 2,334,202 |
| 986 | 330 | | - - | - | 9.2 | 90 10 | -1.0 | -10.2 | | 2456.6 | | -9 | -330 | 474.203 | 2,334,532 |
| 987 | 0 | | - - | - | 5.1 | - | | -5.1 | | 2461.7 | IF | 0 | 0 | 474.212 | 2,334,862 |
| 988 | 330 | | 74 50 | +13.9 | 10.8 | 89 30 | +2.9 | -7.9 | | 2458.9 | | +7 | +330 | 474.219 | 2,335,192 |
| 989 | 660 | | - - | - | 11.3 | 89 30 | +5.8 | -5.5 | | 2461.3 | | +15 | +660 | 474.227 | 2,335,522 |
| 990 | 990 | | - - | - | 6.0 | 89 30 | +8.6 | +2.6 | | 2469.4 | | +22 | +990 | 474.234 | 2,335,852 |
| 991 | 1320 | | - - | - | 6.5 | 89 30 | +11.5 | +5.0 | | 2471.8 | | +29 | +1320 | 474.241 | 2,336,182 |

474.215 x 2,334,005
IF T-Inter. 2447.0

Cow Creek - 7 1/2' ↑
Wagner - 7 1/2' ↓

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|----------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|----------|-------------------------|-----------------------|---------------|-----------|
| 8-8-86 | | B. Cotcamp | | J. Middleton | | 6834 | | F.M. | | 7 | | 63 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | Wagner-7 1/2' | | MONT. | | Phillips | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOT DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 2466.8 | | | | | | |
| 992 | 1650 | | 74 50' | +13.9 | 5.3 | 89 30' | +14.4 | +9.1 | | 2475.9 | | +36 | +1650 | 474.248 | 2,336,512 |
| 993 | 1980 | | -- | -- | 9.2 | 89 10' | +28.8 | +19.6 | | 2486.4 | | +44 | +1980 | 474.256 | 2,336,842 |
| 994 | 2310 | | -- | -- | 9.3 | 89 10' | +33.6 | +24.3 | | 2491.1 | | +51 | +2309 | 474.263 | 2,337,121 |
| 995 | 2640 | | -- | -- | 7.4 | 89 10' | +38.4 | +31.0 | | 2497.8 | | +58 | +2639 | 474.270 | 2,337,501 |
| 996 | 2970 | | -- | -- | 6.2 | 89 10' | +43.2 | +37.0 | | 2503.8 | | +66 | +2969 | 474.278 | 2,337,831 |
| 997 | 3300 | | -- | -- | 11.1 | 89 10' | +48.0 | +36.9 | | 2503.7 | | +73 | +3299 | 474.285 | 2,338,161 |
| 998 | 3630 | | -- | -- | 9.8 | 89 14' | +48.6 | +38.8 | | 2505.6 | | +80 | +3629 | 474.292 | 2,338,491 |
| 999 | 3959 | | 74 54 48 | -- | 13.6 | 89 14' | +53.0 | +39.4 | +39.6 1/2 | 2506.4 | TP | +82 | +3958 | 474.293 | 2,338,820 |
| 999 | 3959 | | | | 13.3 | 270 46' | +53.0 | +39.7 | | | TP | -1 | | | |
| | 4949 | | 255 13 25 | +14.1 | 14.0 | 90 13' | +18.7 | +32.7 | +32.5 1/2 | 2538.9 | BS | +58 | +4949 | | |
| | 4949 | | | | 13.5 | 269 47' | +18.7 | +32.2 | | | BS | -1 | | | |
| 1000 | 4620 | | 255 12' | -- | 11.4 | 90 13' | -17.5 | -28.9 | | 2510.0 | | -56 | -4620 | 474.294 | 2,339,149 |
| 1000 | 4426 | | 255 21 20 | -- | 5.3 | 90 16' | -20.6 | -25.9 | | 2513.0 | TP | -42 | -4426 | 474.308 | 2,339,343 |
| 1001 | 4290 | | 255 12' | -- | 5.0 | 90 16' | -20.0 | -25.0 | | 2513.9 | | -52 | -4290 | 474.298 | 2,339,479 |
| 1002 | 3960 | | -- | -- | 10.1 | 90 16' | -18.4 | -28.5 | | 2510.4 | | -48 | -3960 | 474.302 | 2,339,809 |
| 1003 | 3630 | | -- | -- | 10.8 | 90 20' | -21.1 | -31.9 | | 2507.0 | | -44 | -3630 | 474.306 | 2,340,139 |
| 1004 | 3300 | | -- | -- | 8.7 | 90 30' | -28.8 | -37.5 | | 2501.4 | | -40 | -3300 | 474.310 | 2,340,469 |
| 1005 | 2970 | | -- | -- | 10.8 | 90 30' | -25.9 | -36.7 | | 2502.2 | | -36 | -2970 | 474.314 | 2,340,799 |
| 1006 | 2640 | | -- | -- | 8.7 | 90 30' | -23.0 | -31.7 | | 2507.2 | | -32 | -2640 | 474.318 | 2,341,129 |
| 1007 | 2310 | | -- | -- | 7.0 | 90 30' | -20.2 | -27.2 | | 2511.7 | | -28 | -2310 | 474.322 | 2,341,459 |

474.310 x - 2,339,310
4 way. EL. 2514.

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|-----------------|---------|--------------|--------------|----------|------------------|--------|----------|---|------|---------------|----------|
| DATE | 8-8-86 | INSTRUMENT MAN | B. Cotcamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | J.M.I. | LINE NO. | 7 | PAGE | 64 | |
| AREA | MONTANA | TOPO MAP | Wagner - 7 1/2' | STATE | Mont. | COUNTY | Phillips | TWP | | RANGE | | PPM | PARTY MANAGER | S. Binns |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | NORTH + SOUTH - | | EAST + WEST - | | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|-------|---------------|-----------|-------------|---|---------|
| | | | | | | | | | | | | LAT. | DEP. | Y | X | | | |
| | | | | | | | | | 2538.9 | | | | | | | | | |
| 1008 | 1980 | | 255 12' | +14.1 | 9.8 | 90 20 | -11.5 | -21.3 | | 2517.6 | | -24 | -1980 | 474.326 | 2,341,789 | | | |
| 1009 | 1650 | | - - | -- | 10.1 | 90 20 | -9.6 | -19.7 | | 2519.2 | | -20 | -1650 | 474.330 | 2,342,119 | | | |
| 1010 | 1320 | | - - | -- | 11.0 | 90 20 | -7.7 | -18.7 | | 2520.2 | | -16 | -1320 | 474.334 | 2,342,449 | | | |
| 1011 | 990 | | - - | -- | 10.2 | 90 20 | -5.8 | -16.0 | | 2522.9 | | -12 | -990 | 474.338 | 2,342,779 | | | |
| 1012 | 660 | | - - | -- | 10.3 | 90 20 | -3.8 | -14.1 | | 2524.8 | | -8 | -660 | 474.342 | 2,343,109 | | | |
| 1013 | 330 | | - - | -- | 6.9 | 90 20 | -1.9 | -8.8 | | 2530.1 | | -4 | -330 | 474.346 | 2,343,439 | | | |
| 1014 | 0 | | | | 5.1 | - | | -5.1 | | 2533.8 | π | 0 | 0 | 474.350 | 2,343,769 | | | |
| 1015 | 330 | | 74 40' | +14.1 | 6.0 | 89 20 | +3.8 | -2.2 | | 2536.7 | | +7 | +330 | 474.357 | 2,344,099 | | | |
| 1016 | 660 | | 74 40' | -- | 7.0 | 89 40 | +3.8 | -3.2 | | 2535.7 | | +14 | +660 | 474.364 | 2,344,429 | | | |
| IF | 854 | | 74 35 45 | -- | 9.9 | 89 40 | +5.0 | -4.9 | | 2534.0 | IF | +19 | +854 | 474.369 | 2,344,623 | | y=474.405 x=2,344,605 IF T - Enter. 2535.0 | |
| 1017 | 990 | | 74 40' | -- | 12.0 | 89 50 | +2.9 | -9.1 | | 2529.8 | | +21 | +990 | 474.371 | 2,344,759 | | | |
| 1018 | 1320 | | - - | -- | 10.9 | 90 06 | -2.3 | -13.2 | | 2525.7 | | +28 | +1320 | 474.378 | 2,345,089 | | | |
| 1019 | 1650 | | - - | -- | 11.4 | 90 06 | -2.9 | -14.3 | | 2524.6 | | +36 | +1650 | 474.386 | 2,345,419 | | | |
| 1020 | 1980 | | - - | -- | 11.0 | 90 06 | -3.5 | -14.5 | | 2524.4 | | +43 | +1980 | 474.393 | 2,345,749 | | | |
| 1021 | 2310 | | - - | -- | 10.2 | 90 06 | -4.0 | -14.2 | | 2524.7 | | +50 | +2309 | 474.400 | 2,346,078 | | | |
| 1022 | 2640 | | - - | -- | 7.3 | 90 06 | -4.6 | -11.9 | | 2527.0 | | +57 | +2639 | 474.407 | 2,346,408 | | | |
| 1023 | 2970 | | - - | -- | 9.1 | - | | -9.1 | | 2529.8 | | +64 | +2969 | 474.414 | 2,346,738 | | | |
| 1024 | 3300 | | - - | -- | 6.3 | - | | -6.3 | | 2532.6 | | +71 | +3299 | 474.421 | 2,347,068 | | | |
| 1025 | 3630 | | - - | -- | 11.7 | 89 50 | +10.6 | -1.1 | | 2537.8 | | +78 | +3629 | 474.428 | 2,347,398 | | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | | | | | |
|---------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|-------|---------------|-----------|---------------|-----------------------|---------|--------|
| 8-8-86 | | B. Cotcamp | | J. Middleton | | 6834 | | JMI | | 7 | | 65 | | | | | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | | | | | |
| MONTANA | | Wagner - 7 1/2' | | Mont. | | Phillips | | | | | | | | S. Binns | | | | | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS TP | NORTH + SOUTH - | | EAST + WEST - | | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | LAT. | DEP. | Y | X | | | | |
| | | | | | | | | | 2538.9 | | | | | | | | | | |
| 1026 | 3960 | | 74 44 54 | +14.1 | 14.5 | 89 49 | +12.7 | -1.8 | 2538.9 | | TP | +80 | +3959 | 474.429 | 2,347.728 | | | | |
| 1026 | 3960 | | | | 14.2 | 270 11 | +12.7 | -1.5 | 2538.9 | 2537.3 | TP | -1 | | | | | | | |
| | 2136 | | 254 17 50 | -- | 10.2 | TH | -10.7 | -0.5 | 2536.8 | | BS | +60 | +2135 | | | | | | |
| | 2136 | | | | 10.1 | TH 270 | -10.7 | -0.6 | | | BS | -1 | | | | | | | |
| 1027 | 1807 | | 254 30 | -- | 9.1 | - | | -9.1 | | 2527.7 | | -44 | -1806 | 474.444 | 2,348,257 | | | | |
| 1028 | 1477 | | - | -- | 8.6 | - | | -8.6 | | 2528.2 | | -36 | -1477 | 474.452 | 2,348,386 | | | | |
| 1029 | 1147 | | - | -- | 10.1 | TH | +5.7 | -4.4 | | 2532.4 | | -28 | -1147 | 474.460 | 2,348,716 | | | | |
| 1030 | 817 | | - | -- | 7.0 | TH | +4.1 | -2.9 | | 2533.9 | | -20 | -817 | 474.468 | 2,349,046 | | | | |
| 1031 | 487 | | - | -- | 9.1 | 89 - | +8.5 | -0.6 | | 2536.2 | | -12 | -487 | 474.476 | 2,349,376 | | | | |
| 1032 | 157 | | - | -- | 4.7 | 89 - | +2.7 | -2.0 | | 2534.8 | | -4 | -157 | 474.484 | 2,349,706 | | | | |
| \bar{x} | 0 | | | | 5.1 | - | | -5.1 | | 2531.7 | \bar{x} | 0 | 0 | 474.488 | 2,349,863 | | | | |
| $\frac{1}{n}$ | 41 | | 63 06 18 | +14.1 | 5.2 | - | | -5.2 | | 2531.6 | $\frac{1}{n}$ | +9 | +40 | 474.497 | 2,349,903 | $\frac{1}{n}$ | 474,500 X - 2,349,905 | 4 WAY | 2532.0 |
| 1033 | 172 | | 74 47 | -- | 6.8 | - | | -6.8 | | 2530.0 | | +3 | +172 | 474.491 | 2,350,035 | | | | |
| 1034 | 502 | | - | -- | 10.7 | BH | -2.5 | -13.2 | | 2523.6 | | +10 | +502 | 474.498 | 2,350,365 | | | | |
| 1035 | 832 | | - | -- | 10.8 | 90 30 | -7.3 | -18.1 | | 2518.7 | | +16 | +832 | 474.504 | 2,350,695 | | | | |
| 1036 | 1162 | | - | -- | 10.4 | 90 36 | -12.2 | -22.6 | | 2514.2 | | +23 | +1162 | 474.511 | 2,351,025 | | | | |
| 1037 | 1492 | | - | -- | 10.6 | 90 30 | -13.0 | -23.6 | | 2513.2 | | +27 | +1492 | 474.517 | 2,351,355 | | | | |
| 1038 | 1822 | | - | -- | 7.1 | 90 30 | -15.9 | -23.0 | | 2513.8 | | +36 | +1822 | 474.524 | 2,351,685 | | | | |
| 1039 | 2152 | | - | -- | 10.2 | 90 20 | -12.5 | -22.7 | | 2514.1 | | +42 | +2152 | 474.530 | 2,352,015 | | | | |
| 1040 | 2482 | | - | -- | 7.6 | 90 20 | -14.4 | -22.0 | | 2514.8 | | +48 | +2482 | 474.536 | 2,352,345 | | | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|-----------|
| 8-8-86 | | B. Cotcamp | | J. Middleton | | 6834 | | FM | | 7 | | 66 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | Wagner - 7 1/2' | | Mont. | | Phillips | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 2536.8 | | | | | | |
| 1041 | 2812 | | 74 47' | +14.1° | 8.0 | 90 20' | -16.4 | -24.4 | | 2512.4 | | +55 | +2811 | 474,543 | 2,352,674 |
| 1042 | 3142 | | - - | - | 7.5 | 90 20' | -18.3 | -25.8 | | 2511.0 | | +61 | +3141 | 474,549 | 2,353,004 |
| 1043 | 3472 | | - - | - | 10.7 | 90 20' | -20.2 | -30.9 | | 2505.9 | | +68 | +3471 | 474,556 | 2,353,334 |
| 1044 | 3802 | | - - | - | 10.7 | 90 27' | -29.9 | -40.6 | | 2496.2 | | +74 | +3801 | 474,562 | 2,353,664 |
| 1045 | 4132 | | 74 47 10 | - | 13.7 | 90 24' | -28.8 | -42.5 | -42.3 | 2494.5 | TP | +80 | +4131 | 474,567 | 2,353,994 |
| 1045 | 4132 | | | | 13.4 | 269 36' | -28.8 | -42.2 | | | TP | - | | | |
| | 4041 | | 254 48 12 | - | +7.9 | - | | +7.9 | -47.8 | 2502.3 | BS | +77 | +4040 | | |
| | 4041 | | | | +7.6 | 270 - | | +7.6 | | | BS | - | | | |
| 1046 | 3712 | | 254 52' | - | 8.9 | 90 04' | -4.3 | -13.2 | | 2489.1 | | -67 | -3711 | 474,576 | 2,354,323 |
| 1047 | 3382 | | - - | - | 8.7 | 90 08' | -7.9 | -16.6 | | 2485.7 | | -61 | -3381 | 474,582 | 2,354,653 |
| 1048 | 3052 | | - - | - | 9.0 | 90 08' | -7.1 | -16.1 | | 2486.2 | | -55 | -3052 | 474,588 | 2,354,982 |
| 1/4 | 2844 | | 255 01 58 | - | 9.1 | 90 10' | -8.3 | -17.4 | | 2484.9 | 1/4 | -43 | -2844 | 474,600 | 2,355,190 |
| 1049 | 2722 | | 254 52' | +14.1° | 10.3 | 90 10' | -7.9 | -18.2 | | 2484.1 | | -49 | -2722 | 474,594 | 2,355,312 |
| 1050 | 2392 | | - - | - | 10.7 | 90 22' | -15.3 | -26.0 | | 2476.3 | | -43 | -2392 | 474,600 | 2,355,642 |
| 1051 | 2062 | | - - | - | 11.0 | 90 22' | -13.2 | -24.2 | | 2478.1 | | -37 | -2062 | 474,606 | 2,355,972 |
| 1052 | 1732 | | - - | - | 8.8 | 90 30' | -15.1 | -23.9 | | 2478.4 | | -31 | -1732 | 474,612 | 2,356,302 |
| 1053 | 1402 | | - - | - | 4.9 | 91 - | -24.5 | -29.4 | | 2472.9 | | -25 | -1402 | 474,618 | 2,356,632 |
| 1054 | 1072 | | - - | - | 11.2 | 91 - | -18.5 | -29.9 | | 2472.4 | | -19 | -1072 | 474,624 | 2,356,962 |
| 1055 | 742 | | - - | - | 8.7 | 91 20' | -17.3 | -26.0 | | 2476.3 | | -13 | -742 | 474,630 | 2,357,292 |
| 1056 | 412 | | - - | - | 10.2 | 90 20' | -2.4 | -12.6 | | 2489.7 | | -7 | -412 | 474,636 | 2,357,622 |

y=474,600 x=2,355,190
1/4 Hwy Inter. 2485.0
Horiz 5'-18"
Corr. x=-9

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | |
|-------------|----------------|-----------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------|-----------|
| 8-11-86 | | B. Cotcamp | | J. Middleton | | 6834 | | J.M. | | 7 | 68 | | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | |
| MONTANA | | Wagner - 7 1/2' | | MONT. | | PHILLIPS | | | | | S. Binns | | | | |
| STATION NO. | SLOPE DISTANCE | PLOT DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 2376.0 | | | | | | |
| 1072 | 3610 | 3608.0 | 226° 06' | +14.4 | 8.7 | 88° 06' | +119.7 | +111.0 | | 2487.0 | | -1777 | -3140 | 476.659 | 2,361,210 |
| 1073 | 3287 | 3285.3 | 227° 12' | -- | 10.5 | 88° 10' | +105.2 | +94.7 | | 2470.7 | | -1563 | -2890 | 476.873 | 2,361,460 |
| 1074 | 2966 | 2964.7 | 228° 30' | -- | 9.8 | 88° 18' | +88.0 | +78.2 | | 2454.2 | | -1351 | -2639 | 477.085 | 2,361,711 |
| 1075 | 2639 | 2638.0 | 229° 09' | -- | 7.1 | 88° 24' | +73.7 | +66.6 | | 2442.6 | | -1175 | -2362 | 477.261 | 2,361,988 |
| 1076 | 2310 | 2309.1 | - - | -- | 9.1 | 88° 24' | +64.5 | +55.4 | | 2431.4 | | -1029 | -2067 | 477.407 | 2,362,283 |
| 1077 | 1980 | 1979.3 | - - | -- | 8.1 | 88° 30' | +51.8 | +43.7 | | 2419.7 | | -882 | -1772 | 477.554 | 2,362,578 |
| 1078 | 1650 | | - - | -- | 9.3 | 88° 40' | +38.4 | +29.1 | | 2405.1 | | -735 | -1477 | 477.701 | 2,362,873 |
| 1079 | 1320 | | - - | -- | 11.8 | 88° 40' | +30.7 | +18.9 | | 2394.9 | | -588 | -1182 | 477.848 | 2,363,168 |
| 1080 | 990 | | - - | -- | 8.1 | 88° 50' | +20.2 | +12.1 | | 2388.1 | | -441 | -886 | 477.995 | 2,363,464 |
| 1081 | 660 | | - - | -- | 5.8 | 88° 50' | +13.4 | +7.6 | | 2383.6 | | -294 | -591 | 478.142 | 2,363,759 |
| 1082 | 330 | | - - | -- | 7.0 | 88° 20' | +9.6 | +2.6 | | 2378.6 | | -147 | -295 | 478.289 | 2,364,055 |
| 1083 | 0 | | | | 5.1 | - | | -5.1 | | 2370.9 | TP | 0 | 0 | 478.436 | 2,364,350 |
| 1084 | 330 | | 33° - | +14.4 | 11.6 | 92° 40' | -15.4 | -27.0 | | 2349.0 | | +223 | +243 | 478.659 | 2,364,593 |
| 1085 | 660 | | - - | -- | 6.0 | 92° 40' | -30.7 | -36.7 | | 2339.3 | | +447 | +486 | 478.883 | 2,364,836 |
| 1086 | 990 | | - - | -- | 8.9 | 92° 20' | -40.3 | -49.2 | | 2326.8 | | +670 | +729 | 479.106 | 2,365,079 |
| 1087 | 1320 | | - - | -- | 8.1 | 91° 50' | -42.2 | -50.3 | | 2325.7 | | +893 | +972 | 479.329 | 2,365,322 |
| 1088 | 1650 | | - - | -- | 8.6 | 91° 40' | -48.0 | -56.6 | | 2319.4 | | +1117 | +1215 | 479.553 | 2,365,565 |
| 1089 | 1978 | | 33° 20' | - | 9.0 | 91° 30' | -51.8 | -60.8 | | 2315.2 | | +1330 | +1464 | 479.766 | 2,365,814 |
| 1090 | 2297 | 2296.2 | 35° 28' 18" | - | 9.5 | 91° 30' | -60.1 | -69.6 | | | TP | +1480 | +1756 | 479.916 | 2,366,106 |
| 1090 | 2297 | | | | 9.4 | 268° 30' | -60.1 | -69.5 | | 2306.5 | TP | | | | |

Wagner - 7 1/2' ↑
MALTA west - 7 1/2' ↓

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|----------------------|--------------------|---------------|--|
| 8-11-86 | | B. G. Camp | | J. Middleton | | 6834 | | J.M.1 | | 7 | | 69 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | MALTA West-7 1/2 | | MONT. | | PHILLIPS | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 2306.5 | | | | | | |
| | 4873 | | 203 43 46 | +14.4 | 12.0 | - | | +12.0 | 2238.4 | | BS | +3833 | +3009 | | |
| | 4873 | | | | 11.7 | 270 | | +11.7 | | | BS | | | | |
| 1091 | 4568 | | 202 12 | -- | 10.4 | 90 14 | -18.6 | -29.0 | | 2289.4 | | -3667 | -2723 | 480.082 | 2366.392 |
| 1092 | 4264 | | 200 30 | -- | 10.1 | 90 24 | -29.8 | -39.9 | | 2278.5 | | -3497 | -2440 | 480.252 | 2366.675 |
| 1093 | 3963 | | 198 40 | -- | 8.0 | 90 32 | -36.9 | -44.9 | | 2273.5 | | -3321 | -2162 | 480.428 | 2366.953 |
| 1094 | 3663 | | 196 35 | -- | 7.8 | 90 40 | -42.6 | -50.4 | | 2268.0 | | -3140 | -1886 | 480.609 | 2367.229 |
| JK | 3375 | | 196 57 06 | -- | 7.6 | 90 46 | -45.2 | -52.8 | | 2265.6 | JK | -2882 | -1756 | 480.867 | 2367.359 y-480.845 x-2367.325 y-Inter. 2266.0 |
| 1095 | 3349 | | 196 55 | -- | 8.0 | 90 46 | -44.8 | -52.8 | | 2265.6 | | -2861 | -1741 | 480.888 | 2367.374 |
| 1096 | 3078 | | 200 23 | +14.4 | 8.7 | 90 50 | -44.8 | -53.5 | | 2264.9 | | -2528 | -1756 | 481.221 | 2367.359 |
| 1097 | 2818 | | 204 20 | -- | 11.8 | 90 50 | -41.0 | -52.8 | | 2265.6 | | -2198 | -1763 | 481.551 | 2367.352 |
| 1098 | 2555 | | 208 35 | -- | 9.8 | 91 - | -44.6 | -54.4 | | 2264.0 | | -1869 | -1742 | 481.880 | 2367.373 |
| 1099 | 2255 | | 211 46 | -- | 6.9 | 91 12 | -47.2 | -54.1 | | 2264.3 | | -1562 | -1627 | 482.187 | 2367.488 |
| 1100 | 1932 | | 213 38 | -- | 7.1 | 91 24 | -47.2 | -54.3 | | 2264.1 | | -1292 | -1437 | 482.457 | 2367.678 |
| 1101 | 1609 | | 214 17 | -- | 8.8 | 91 40 | -46.8 | -55.6 | | 2262.8 | | -1062 | -1208 | 482.687 | 2367.907 |
| JK | 1415 | | 211 09 58 | -- | 8.9 | 91 50 | -45.3 | -54.2 | | 2264.2 | JK | -990 | -1010 | 482.759 | 2368.105 y-482.730 x-2368.100 JK BRIDGE 2263.0 |
| 1102 | 1319 | | 208 12 | -- | 11.7 | 91 50 | -42.2 | -53.9 | | 2264.5 | | -971 | -893 | 482.778 | 2368.222 |
| 1103 | 990 | | 267 50 | -- | 8.2 | 92 30 | -43.2 | -51.4 | | 2267.0 | | -733 | -665 | 483.016 | 2368.450 |
| 1104 | 660 | | - | -- | 9.0 | 92 30 | -28.8 | -37.8 | | 2280.6 | | -489 | -444 | 483.260 | 2368.671 |
| 1105 | 330 | | - | -- | 8.2 | 91 30 | -8.6 | -16.8 | | 2301.6 | | -244 | -222 | 483.505 | 2368.893 |
| 1106 | 0 | | | -- | 5.1 | - | | -5.1 | | 2313.3 | K | 0 | 0 | 483.749 | 2369.115 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|-------------------------|-----------------------|---------------|----------|
| 8-11-86 | | B. Cotamp | | J. Middleton | | 6834 | | J.M. | | 7 | | 70 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | MALTA west-7 1/2' | | MONT. | | Phillips | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS X TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 2318.4' | | | | | | |
| 1107 | 330 | | 27 50 | +14.4 | 6.1 | 90 30 | -2.9 | -9.0 | | 2309.4 | | +244 | +222 | 483.993 | 2369.337 |
| 1108 | 660 | | - - | -- | 11.0 | 91 25 | -16.3 | -27.3 | | 2291.1 | | +489 | +444 | 484.238 | 2369.559 |
| 1109 | 990 | | - - | -- | 6.0 | 91 25 | -24.5 | -30.5 | | 2282.9 | | +733 | +665 | 484.482 | 2369.780 |
| 1110 | 1320 | | - - | -- | 9.8 | 91 - | -23.0 | -32.8 | | 2285.6 | | +977 | +887 | 484.726 | 2370.002 |
| 1111 | 1650 | | - - | -- | 6.1 | 91 - | -28.8 | -34.9 | | 2283.5 | | +1222 | +1109 | 484.971 | 2370.224 |
| 1112 | 1980 | | - - | -- | 5.9 | 90 50 | -28.8 | -34.7 | | 2283.7 | | +1466 | +1331 | 485.215 | 2370.446 |
| 1113 | 2310 | | - - | -- | 10.0 | 90 50 | -33.6 | -43.6 | | 2274.8 | | +1710 | +1553 | 485.459 | 2370.668 |
| 1114 | 2640 | | - - | +14.4 | 8.0 | 90 50 | -38.4 | -46.4 | | 2272.0 | | +1955 | +1774 | 485.704 | 2370.889 |
| 1115 | 2963 | | 29 20 | -- | 9.2 | 90 44 | -37.9 | -47.1 | | 2271.3 | | +2141 | +2048 | 485.890 | 2371.163 |
| 1116 | 3271 | | 31 30 | -- | 9.0 | 90 38 | -36.2 | -45.2 | | 2273.2 | | +2276 | +2349 | 486.025 | 2371.464 |
| 1117 | 3577 | | 33 33 | -- | 8.5 | 90 32 | -33.3 | -41.8 | | 2276.6 | | +2396 | +2656 | 486.145 | 2371.771 |
| 1118 | 3887 | | 35 18 16 | -- | 8.8 | 90 26 | -29.4 | -38.2 | | | TP | +2514 | +2965 | 486.263 | 2372.080 |
| 1118 | 3887 | | | | 8.5 | 269 34 | -29.4 | -37.9 | 38.03 | 2280.4 | TP | | | | |
| | 3285 | | 239 21 54 | +14.4 | 6.7 | - | | +6.7 | | 2287.1 | BS | +918 | +3154 | | |
| | 3285 | | | | 6.6 | 270 - | | +6.6 | | 2293.7 | BS | | | | |
| 1118 | 2989 | | 240 - | -- | 6.8 | - | | -6.8 | | 2280.3 | 14 | -804 | -2879 | 486.377 | 2372.355 |
| 1119 | 2956 | | 239 52 | -- | 7.7 | - | | -7.2 | | 2279.9 | | -802 | -2845 | 486.379 | 2372.389 |
| 1120 | 2628 | | 240 30 | -- | 10.2 | - | | -10.2 | | 2276.9 | | -685 | -2537 | 486.496 | 2372.697 |
| 1121 | 2300 | | 241 18 | -- | 1.3 | BH | -11.5 | -12.8 | | 2274.3 | | -568 | -2229 | 486.613 | 2373.005 |
| 1122 | 1973 | | 242 20 | -- | 5.8 | BH | -9.9 | -15.7 | | 2271.4 | | -453 | -1920 | 486.728 | 2373.314 |

x-486.360 x-2372.320
y-Inter. EL. 2280.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-448

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|---------------------|---------|--------------|--------------|----------|------------------|------|----------|---|------|---------------|----------|
| DATE | 8-11-86 | INSTRUMENT MAN | B. Cotcamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | J.M. | LINE NO. | 7 | PAGE | 71 | |
| AREA | MONTANA | TOPO MAP | MALTA West - 7 1/2' | STATE | MONT. | COUNTY | Phillips | TWP | | RANGE | | PPM | PARTY MANAGER | S. Binns |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS & TP | NORTH + SOUTH - | EAST + WEST - | COORDINATES | | REMARKS | |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|-----------------|---------------|-------------|----------|--|--|
| | | | | | | | | | | | | LAT. | DEP. | Y | X | | |
| | | | | | | | | | 2287.1 | | | | | | | | |
| 1123 | 1646 | | 243° 55' | +14.4 | 8.8 | BH | -8.2 | -17.0 | | 2270.1 | | -333 | -1612 | 486.848 | 2373.622 | | |
| 1124 | 1317 | | 245° 15' | -- | 11.0 | BH | -6.6 | -17.6 | | 2269.5 | | -237 | -1296 | 486.944 | 2373.938 | | |
| 1125 | 989 | | 246° 40' | -- | 10.0 | 90° 30' | -8.6 | -18.6 | | 2268.5 | | -154 | -977 | 487.027 | 2374.257 | | |
| 1126 | 660 | | 248° 25' | -- | 10.3 | 90° 30' | -5.8 | -16.1 | | 2271.0 | | -83 | -655 | 487.098 | 2374.579 | | |
| 1127 | 330 | | 249° 45' | -- | 5.9 | 90° 30' | -2.9 | -8.8 | | 2278.3 | | -34 | -328 | 487.147 | 2374.906 | | |
| 1128 | 0 | | | | 5.1 | - | | -5.1 | | 2282.0 | TP | 0 | 0 | 487.181 | 2375.234 | | |
| 1129 | 330 | | 71° 50' | +14.4 | 5.0 | - | | -5.0 | | 2282.1 | | +22 | +329 | 487.203 | 2375.563 | | |
| 1130 | 660 | | -- | -- | 5.8 | - | | -5.8 | | 2281.3 | | +43 | +659 | 487.224 | 2375.893 | | |
| 1131 | 990 | | -- | -- | 9.4 | TH | +5.0 | -4.4 | | 2282.7 | | +65 | +988 | 487.246 | 2376.222 | | |
| 1132 | 1320 | | -- | -- | 9.2 | TH | +6.6 | -2.6 | | 2284.5 | | +87 | +1317 | 487.268 | 2376.551 | | |
| 1133 | 1650 | | -- | -- | 11.3 | TH | +8.3 | -3.0 | | 2284.1 | | +108 | +1646 | 487.289 | 2376.880 | | |
| 1134 | 1980 | | -- | -- | 3.1 | - | | -3.1 | | 2284.0 | | +130 | +1976 | 487.311 | 2377.210 | | |
| 1135 | 2310 | | -- | -- | 2.8 | - | | -2.8 | | 2284.3 | | +152 | +2305 | 487.333 | 2377.539 | | |
| 1136 | 2640 | | -- | -- | 7.2 | 89° 52' | +6.1 | -1.1 | | 2286.0 | | +173 | +2634 | 487.354 | 2377.868 | | |
| 1137 | 2920 | | -- | -- | 5.1 | 89° 52' | +6.9 | +1.8 | | 2288.9 | | +195 | +2964 | 487.376 | 2378.198 | | |
| 1138 | 3300 | | -- | -- | 9.8 | 89° 42' | +17.3 | +7.5 | | 2294.6 | | +217 | +3293 | 487.398 | 2378.527 | | |
| 1139 | 3630 | | -- | -- | 7.0 | 89° 42' | +19.0 | +12.0 | | 2299.1 | | +238 | +3622 | 487.419 | 2378.856 | | |
| 1140 | 3956 | | 71° - | -- | 10.8 | 89° 42' | +20.7 | +9.9 | | 2297.0 | | +317 | +3943 | 487.498 | 2379.177 | | |
| IF | 4114 | | 69° 26' 51" | -- | 9.8 | 89° 46' | +16.8 | +7.0 | | 2294.1 | IF | +441 | +4090 | 487.622 | 2379.324 | 3-487,610 x 2,379,316 FT-ROAD EL. 2295. | |
| TP | 4166 | | 69° 03' | +14.6 | 13.7 | 89° 44' | +19.4 | +5.7 | | 2292.8 | TP | +461 | +4140 | 487.642 | 2379.374 | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|---------------------|-----------------------------|--------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|----------|-------------------------|-----------------------|---------------|----------|
| 8-11-86 | | B. Cotcamp | | J. Middleton | | 6834 | | F.M. | | 7 | | 72 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| MONTANA | | MALTA West - 7 1/2' | | MONT. | | PHILLIPS | | | | | | | | S. Binns | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 2292.8 | | | | | | |
| | 1232 | | 204° 56' 30" | +14.6 | 10.0 | 89° - | -21.5 | -11.5 | 2281.3 | | BS | +950 | +784 | | |
| | 1232 | | | | +9.9 | 271° - | -21.5 | -11.6 | | | BS | | | | |
| 1141 | 1156 | | 205° 30' | -- | 9.0 | 89° - | +20.2 | +11.2 | | 2292.5 | | -884 | -745 | 487.708 | 2379.413 |
| 1142 | 826 | | - | -- | 6.2 | 89° - | +14.4 | +8.2 | | 2289.5 | | -632 | -532 | 487.960 | 2379.626 |
| 1143 | 496 | | 206° 10' | -- | 8.0 | 88° 30' | +13.0 | +5.0 | | 2286.3 | | -376 | -324 | 488.216 | 2379.834 |
| 1144 | 166 | | 207° 30' | -- | 5.8 | 88° 30' | +4.3 | -1.5 | | 2279.8 | | -123 | -111 | 488.469 | 2380.047 |
| TP | 0 | | | | 5.1 | - | | -5.1 | | 2276.2 | TP | 0 | 0 | 488.592 | 2380.158 |
| 1145 | 170 | | 52° 10' | +14.6 | 7.4 | 89° 50' | +0.5 | -6.9 | | 2274.4 | | +67 | +156 | 488.659 | 2380.314 |
| 1146 | 497 | | 57° 30' | -- | 7.1 | 89° 50' | +1.4 | -5.7 | | 2275.6 | | +153 | +473 | 488.745 | 2380.631 |
| 1147 | 819 | | 63° 45' | -- | 5.6 | 89° 50' | +2.4 | -3.2 | | 2278.1 | | +165 | +802 | 488.757 | 2380.960 |
| 1148 | 1146 | | 66° 32' 58" | - | 10.8 | 89° 30' | +10.0 | -0.8 | | | TP | +176 | +1132 | 488.768 | 2381.270 |
| 1148 | 1146 | | | | 10.7 | 270° 30' | +10.0 | -0.7 | | 2280.6 | TP | | | | |
| | 1980 | | 253° 48' 09" | +14.6 | 14.8 | - | | +14.8 | 2295.4 | | BS | +55 | +1979 | | |
| | 1980 | | | | +14.7 | 270° - | | +14.7 | | | BS | | | | |
| 1149 | 1650 | | 254° - | - | 8.1 | 90° 10' | -4.8 | -12.9 | | 2282.5 | | -40 | -1650 | 488.783 | 2381.649 |
| 1150 | 1320 | | - | - | 11.0 | 90° 10' | -3.8 | -14.8 | | 2280.6 | | -32 | -1320 | 488.791 | 2381.949 |
| 1151 | 990 | | - | - | 9.7 | 90° 20' | -5.8 | -15.5 | | 2279.9 | | -24 | -990 | 488.799 | 2382.279 |
| 1152 | 660 | | - | - | 10.5 | 90° 20' | -3.8 | -14.3 | | 2281.1 | | -16 | -660 | 488.807 | 2382.609 |
| 1153 | 330 | | - | - | 7.6 | 90° 20' | -1.9 | -9.5 | | 2285.9 | | -8 | -330 | 488.815 | 2382.939 |
| 1154 | 0 | | | | 5.1 | - | | -5.1 | | 2290.3 | TP | 0 | 0 | 488.823 | 2383.269 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| | | | | | | | | | | | | | | |
|------|---------|----------------|----------------|---------|--------------|--------------|----------|------------------|-----|----------|---|------|---------------|----------|
| DATE | 8-11-86 | INSTRUMENT MAN | B. Cotcamp | ROD MAN | J. Middleton | PARTY NUMBER | 6834 | NOTES CHECKED BY | #M. | LINE NO. | 7 | PAGE | 73 | |
| AREA | MONTANA | TOPO MAP | MALTA West-74' | STATE | MONT. | COUNTY | PHILLIPS | TWP | | RANGE | | PPM | PARTY MANAGER | S. Burns |

| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | DEC | ROD READING | VERTICAL ANGLE | VERTICAL CHANGE | DIFFERENCE IN ELEVATION | ELEVATION OF INSTRUMENT | ELEVATION OF STATION | BS & TP | NORTH + SOUTH - | EAST + WEST - | COORDINATES | | REMARKS |
|-------------|----------------|-------------------|-----------------------------|-------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|-----------------|---------------|-------------|-----------|--|
| | | | | | | | | | | | | LAT. | DEP. | Y | X | |
| | | | | | | | | | 2295.4 | | | | | | | |
| 1155 | 330 | | 74° - | +14.6 | 6.0 | - | | -6.0 | | 2289.4 | | +8 | +330 | 488.831 | 2,383.599 | |
| 1156 | 660 | | - - | -- | 7.3 | - | | -7.3 | | 2288.1 | | +16 | +660 | 488.839 | 2,383.929 | |
| 1157 | 990 | | - - | -- | 8.0 | - | | -8.0 | | 2287.4 | | +24 | +990 | 488.847 | 2,384.259 | |
| 1158 | 1320 | | - - | -- | 7.3 | - | | -7.3 | | 2288.1 | | +32 | +1320 | 488.855 | 2,384.589 | |
| 1159 | 1649 | | 74° 16' | - | 5.2 | - | | -5.2 | | 2290.2 | | +33 | +1649 | 488.856 | 2,384.918 | E.O.L. Line #7 |
| Y | 1789 | | 74° 40' 34" | - | 2.4 | - | | -2.4 | | | TP | +23 | +1789 | 488.846 | 2,385.058 | |
| Y | 1789 | | | | 2.3 | 270 - | | -2.3 | | 2293.1 | TP | | | | | Y - Inter 488,815 x - 2,385,116 E4 22960 |