

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|---------------------|---------------------|---------------|---------|-------------|--|---------|--|
| 9/6/79 | | G. Co. Teamp | | R. Turner | | 6834 | | G.C. | | 3 | | 1-Experimental | | | | | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | | | | | |
| Wyoming | | Farthing | | Wyoming | | Laramie | | 19N | | 69W | | | | L.O. Davis | | | | | |
| 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 | | | | |
| BM | | | | | | | | | 6062.3 | | | | | | | | | | |
| | 1130 | | 70°54.6' +180° | +13.7° | +3.8 | - | | +3.8 | 6066.1 | | BS | -106 ₊₈ | -1125 ₊₈ | | | | | | 341,165 505,610 ele. 6062.3 U.S.G.S. T109 1954 |
| | 1130 | | | | +9.5 | TH | -5.7 | +3.8 | | | BS | | | | | | | | |
| X | 0 | | | | 5.4 | - | | -5.4 | 6060.7 | | X | 0 | 0 | 341,067 | 504,993 | | | | |
| 7 | 1750 | | 287°16.9' | +13.7° | 7.9 | TH | +8.8 | +0.9 | | | TP | +901 ₊₈ | -1500 ₊₈ | 341,976 | 503,001 | | | | |
| 7 | 1750 | | | | 14.5 | 89°30' | +15.3 | +0.8 | | 6066.9 | TP | | | | | | | | |
| | 880 | | 22°16.8' +180° | +13.7° | +9.8 | - | | +9.8 | 6076.7 | | ES | -712 ₊₈ | -517 ₊₈ | | | | | | |
| | 880 | | | | +14.2 | TH | -4.4 | +9.8 | | | ES | | | | | | | | Experimental roadside |
| 1 | 770 | | 22°16.8' | +13.7° | 9.2 | - | | -9.2 | 6067.5 | | | +623 | +452 | 341,895 | 502,994 | | | | study as requested |
| 4 | 660 | | " " | " | 8.9 | - | | -8.9 | 6067.8 | | | +534 | +388 | 341,806 | 502,880 | | | | by John Brewer 7/4/79. |
| 8 | 550 | | " " | " | 7.8 | - | | -7.8 | 6068.9 | | | +445 | +323 | 341,717 | 502,815 | | | | |
| 2 | 440 | | " " | " | 8.6 | - | | -8.6 | 6068.1 | | | +356 | +259 | 341,628 | 502,751 | | | | |
| 5 | 330 | | " " | " | 7.7 | - | | -7.7 | 6069.0 | | | +267 | +194 | 341,539 | 502,686 | | | | |
| 9 | 220 | | " " | " | 6.7 | - | | -6.7 | 6070.0 | | | +178 | +129 | 341,450 | 502,621 | | | | |
| 3 | 110 | | " " | " | 4.9 | - | | -4.9 | 6071.8 | | | +89 | +65 | 341,361 | 502,557 | | | | |
| 6 | 0 | | " " | " | 5.4 | - | | -5.4 | 6071.3 | | X | 0 | 0 | 341,272 | 502,492 | | | | |
| TP | 2000 | 1999 | 207°19.2' | +13.7° | 9.5 | 88°10' | +64.0 | +54.5 | | | TP | -1508 ₊₆ | -1312 ₊₄ | 339,770 | 501,184 | | | | |
| TP | 2000 | | | | 3.7 | 88°20' | +58.1 | +54.9 | | 6131.1 | TP | | | | | | | | |
| | 220 | | 354°26' -180° | +13.7° | +4.0 | - | | +4.0 | 6135.1 | | BS | -218 | -31 | | | | | | |
| BM | 2580 | | 155°12' | +13.7° | 12.3 | BH | -12.9 | -25.2 | | 6109.9 | | -2532 | +497 | 337,020 | 501,650 | | | | 337,020 + 501,650 (s) U.S.G.S. T109 1954 |
| BM | 2580 | | | | 2.7 | 90°30' | -22.5 | -25.2 | | | | | | | | | | | elev. 6109.9 (control data) notes |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc. Client-COCORP

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|---------------|-------------|---------|--|
| 8/21/79 | | G. Catcamp | | R. Turner | | 6834 | | Ransom Turner | | 3 | 1 of 58 | | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | |
| Wyoming | | Indian Hill 7 1/2 | | Wyoming | Laramie | | 18N | 65W | | L.O. Davis | | | | | | |
| 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 | | instrument - Wild T1A chaining - 330' steel chain + arrows |
| | | | | | | | | | | | | LAT. | DEP. | Y | X | |
| Δ | | | | | | | | | | 5,777.0 | | | | 321,495 | 630,167 | -control data notes |
| | 1270 | 1269 | 123°52.7' +180° | +13.1° | +14.8 | 88°- | -44.3 | -29.5 | 5,747.5 | | BS | +928 | -866 | | | Tri-station Model |
| | 1270 | | | | +13.4 | 88°4' | -42.8 | -29.4 | | | BS | | | | | (elev) 5777' |
| TF | 825 | | 77°40.7' | +13.1° | 15.0 | BH | -4.1 | -19.1 | | 5,728.4 | | -11 | +825 | 322,412 | 630,126 | Tri-intersect. (elev) 5728' |
| 1 | 660 | | 77°14' | +13.1° | 8.3 | 91°- | -11.5 | -19.8 | | 5,727.7 | | -4 | +660 | 322,419 | 629,961 | |
| 2 | 330 | | " " | " | 13.8 | - | | -13.8 | | 5,733.7 | | -2 | +330 | 322,421 | 629,631 | gravel road |
| 3 | 0 | | | | 5.4 | - | | -5.4 | | 5,742.1 | TP | 0 | 0 | 322,423 | 629,301 | ↓ |
| 4 | 330 | | 257°28.3' | +13.1° | 9.7 | - | | -9.7 | | 5,737.8 | | +3 | -330 | 322,426 | 628,971 | |
| 5 | 660 | | " " | " | 2.8 | - | | -2.8 | | 5,744.7 | | +7 | -660 | 322,430 | 628,641 | |
| 6 | 990 | | 257°28.3' | +13.1° | 3.1 | TH | +5.0 | +1.9 | | | TP | +10 | -990 | 322,433 | 628,313 | |
| 6 | 990 | | | | 4.0 | 89°40' | +5.8 | +1.8 | | 5,749.3 | TP | | | | | |
| | 2310 | 2309 | 77°24.6' +180° | +13.1° | +4.8 | 88°40' | -53.7 | -48.9 | 5,700.4 | | BS | +21 | -2309 | | | |
| | 2310 | | | | +6.2 | 88°38' | -55.1 | -48.9 | | | BS | | | | | |
| 7 | 1980 | | 77°24.6' | +13.1° | 3.7 | 89°- | +34.6 | +30.9 | | 5,731.3 | | -18 | +1980 | 322,435 | 627,986 | |
| 8 | 1650 | | " " | " | 2.7 | TH | +8.3 | +5.6 | | 5,706.0 | | -15 | +1650 | 322,439 | 627,656 | |
| 9 | 1320 | | " " | " | 10.9 | TH | +6.6 | -4.3 | | 5,696.1 | | -12 | +1320 | 322,442 | 627,326 | |
| 10 | 990 | | " " | " | 9.7 | TH | +5.0 | -4.7 | | 5,695.7 | | -9 | +990 | 322,445 | 626,996 | |
| 11 | 660 | | " " | " | 5.2 | TH | +3.3 | -1.9 | | 5,698.5 | | -6 | +660 | 322,448 | 626,666 | |
| 12 | 330 | | " " | " | 1.2 | TH | +1.7 | +0.5 | | 5,700.9 | | -3 | +330 | 322,451 | 626,336 | |
| 13 | 0 | | | | 5.4 | - | | -5.4 | | 5,695.0 | TP | 0 | 0 | 322,454 | 626,006 | |
| 14 | 330 | | 257°43.7' | +13.1° | 10.5 | 92°- | -11.5 | -22.0 | | 5,678.4 | | +5 | -330 | 322,457 | 625,676 | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|----------------------|--------------------|---------------|---------|
| 8/21/79 | | G. Cotcamp | | R. Turner | | 6837 | | Ransom Turner | | 3 | | 2 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| Wyoming | | Indian Hill | | Wyoming | | Laramie | | 18N | | 66W | | | | L.O. Davis | |
| 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 |
| | | | | | | | | | 5700.4 | | | | | | |
| 15 | 660 | 659 | 257° 43.7' | +13.1° | 7.0 | 93° | -34.5 | -41.5 | | 5,658.9 | | +10 | -659 | 322,464 | 625,397 |
| 16 | 990 | 989 | " " | | 14.3 | 93° | -51.7 | -66.0 | | 5,634.4 | | +14 | -989 | 322,468 | 625,017 |
| 17 | 1320 | 1318 | " " | | 12.1 | 93° | -69.0 | -81.1 | | 5,619.3 | | +19 | -1318 | 322,473 | 624,688 |
| 18 | 1650 | 1648 | " " | | 1.9 | 93° | -86.2 | -88.1 | | 5,612.3 | | +24 | -1648 | 322,478 | 624,358 |
| 19 | 1980 | 1978 | " " | | 8.0 | 92°20' | -80.5 | -88.5 | | 5,611.9 | | +29 | -1978 | 322,483 | 624,028 |
| 20 | 2310 | 2309 | 257° 43.7' | +13.1° | 6.6 | 92° | -80.6 | -87.2 (-87.3) | | 5,613.1 | TP | +33 | -2309 | 322,487 | 623,699 |
| 20 | 2310 | | | | 13.5 | 91°50' | -73.9 | -87.4) | | | TP | | | | |
| | 1320 | 1319 | 76° 53' +180° | +13.1° | 19.9 | 88° | -46.0 | -36.1) | 5,577.0 | | BS | 0 | -1319 | | |
| | 1320 | | | | +6.1 | 88°10' | -42.2 | -36.1) | | | BS | | | | |
| 21 | 990 | 989 | 76° 53' | +13.1° | 3.3 | 88° | +34.5 | +31.2 | | 5,608.2 | | 0 | +990 | 322,487 | 623,372 |
| 22 | 660 | | " " | | 4.7 | 88° | +23.0 | +18.3 | | 5,595.3 | | 0 | +660 | 322,487 | 623,092 |
| 23 | 330 | | " " | | 2.0 | 88° | +5.8 | +3.8 | | 5,580.8 | | 0 | +330 | 322,487 | 622,712 |
| 24 | 0 | | | | 5.4 | - | | -5.4 | | 5,571.6 | TP | 0 | 0 | 322,487 | 622,382 |
| 25 | 330 | | 257° 14' | +13.1° | 5.6 | - | | -5.6 | | 5,571.4 | | +2 | -330 | 322,489 | 622,052 |
| 26 | 660 | | " " | | 2.4 | TH | +3.3 | +0.9 | | 5,577.9 | | +4 | -660 | 322,491 | 621,722 |
| 27 | 990 | 989 | " " | | 11.7 | 88° | +34.5 | +22.8 | | 5,599.8 | | +6 | -989 | 322,493 | 621,393 |
| 27 | 1310 | 1309 | 256° 48' | +13.1° | 6.3 | 87°20' | +60.9 | +54.6 | | 5,631.6 | | -2 | -1309 | 322,485 | 621,073 |
| 28 | 1320 | 1319 | 257° 14' | +13.1° | 3.4 | 87°30' | +57.5 | +54.1) | | 5,631.1 | TP | +8 | -1319 | 322,495 | 621,065 |
| 28 | 1320 | | | | 5.7 | 87°24' | +59.8 | +54.1) | | | TP | | | | |

~~322,485 + 621,075(s)~~
US fence line

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | | LINE NO. | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|----------|-------------------------|-----------------------|---------|---------|
| 8/21/79 | | G. Cotcamp | | R. Turner | | 6834 | | RANSOM TURNER | | | 3 | 3 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | PPM | PARTY MANAGER | | | |
| Wyoming | | Indian Hill | | Wyoming | | Laramie | | 18N | | 66W | | L.O. Davis | | | |
| 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 |
| 28 | | | | | | | | | | 5,631.1 | | | | | |
| | 990 | | 77°10.7' +180° | +13.1° | +7.5 | - | | +7.5 | 5,638.6 | | BS | +5 | -990 | | |
| | 990 | | | | +12.5 | TH | -5.0 | +7.5 | | | BS | | | | |
| 29 | 660 | | 77°10.7' | +13.1° | 12.9 | - | | -12.9 | | 5,625.7 | | -3 | +660 | 322,997 | 620,737 |
| 30 | 330 | | " " | | 12.5 | - | | -12.5 | | 5,626.1 | | -2 | +330 | 322,998 | 620,407 |
| 31 | 0 | | | | 5.4 | - | | -5.4 | | 5,633.2 | TP | 0 | 0 | 322,500 | 620,077 |
| 32 | 330 | | 257°24.5' | +13.1° | 14.4 | 92°- | -11.5 | -25.9 | | 5,612.7 | | +3 | -330 | 322,503 | 619,747 |
| 33 | 660 | 65° | " " | | 9.3 | 93°30' | -40.2 | -49.5 | | 5,589.1 | | +6 | -659 | 322,506 | 619,918 |
| 34 | 990 | 988 | 257°24.5' | +13.2° | 11.2 | 93°30' | -60.3 | -71.5 | | 5,567.1 | TP | +10 | -988 | 322,510 | 619,089 |
| 34 | 990 | | | | 5.4 | 93°50' | -66.0 | -71.4 | | | TP | | | | |
| | 1650 | | 77°10'+180° | +13.2° | +8.7 | 89°- | -28.8 | -20.1 | 5,547.0 | | BS | +11 | -1650 | | |
| | 1650 | | | | +5.8 | 89°6' | -25.9 | -20.1 | | | BS | | | | |
| <u>77</u> | 1530 | | 77°34' | +13.2° | 10.2 | 89°- | +26.7 | +16.5 | | 5,563.5 | | -20 | +1530 | 322,501 | 618,969 |
| 35 | 1320 | | 77°10' | +13.2° | 10.9 | 89°- | +23.0 | +12.1 | | 5,559.1 | | -8 | +1320 | 322,513 | 618,759 |
| 36 | 990 | | " " | | 9.6 | 89°- | +17.3 | +7.7 | | 5,554.7 | | -6 | +990 | 322,515 | 618,429 |
| 37 | 660 | | " " | | 3.3 | - | | -3.3 | | 5,543.7 | | -4 | +660 | 322,517 | 618,099 |
| 38 | 330 | | " " | | 2.5 | - | | -2.5 | | 5,544.5 | | -2 | +330 | 322,519 | 617,769 |
| 39 | 0 | | | | 5.4 | - | | -5.4 | | 5,541.6 | TP | 0 | 0 | 322,521 | 617,439 |
| 40 | 330 | | 257°19' | +13.2° | 11.8 | - | | -11.8 | | 5,535.2 | | +3 | -330 | 322,524 | 617,109 |
| 41 | 660 | | " " | | 12.9 | 90°30' | -5.8 | -18.7 | | 5,528.3 | | +6 | -660 | 322,527 | 616,779 |
| 42 | 990 | | " " | | 11.4 | 90°30' | -8.6 | -20.0 | | 5,527.0 | | +9 | -990 | 322,530 | 616,449 |

322,510+618,980(s)
Trail (south) elev 5,561'

| DATE | | INSTRUMENT MAN | | | ROD MAN | | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | |
|---------------|----------------|---------------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|-------|----------------------|--------------------|---|
| 8/21/79 | | G. Cotcamp | | | R. Turner | | | 6834 | | Ransom Turner | | 3 | 4 | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | |
| Wyoming | | Indian Hill/Moffett Ranch | | Wyoming | Laramie | | 18N | 66W | | L.O. Davis | | | | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | Ranch 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. | |
| | | | | | | | | | 5,547.0 | | | | | |
| 43 | 1320 | | 257°19' | +13.2° | 13.1 | - | | -13.1 | | 5,533.9 | | +12 | -1320 | 322,533616,129 |
| 43 | 1640 | | 256°57.3' | +13.2° | 7.7 | - | | -7.7 | | 5,539.3 | | +4 | -1640 | 322,525615,799 <i>5 fence line</i> |
| 44 | 1650 | | 257°19' | +13.2° | 7.9 | - | | -7.9 | | 5,539.1 | TP | +15 | -1650 | 322,536615,789 |
| 44 | 1650 | | | | 5.0 | 90°6' | -2.9 | -7.9 | | | TP | | | |
| | 2310 | | 77°1.2'+180° | +13.2° | +8.2 | BH | +11.6 | +19.8 | | | BS | +9 | -2310 | |
| | 2310 | | | | 14.3 | 90°8' | +5.4 | +19.7 | 5,558.8 | | BS | | | |
| 45 | 1980 | | 77°1.2' | +13.2° | 10.1 | BH | -9.9 | -20.0 | | 5,538.8 | | -8 | +1980 | 322,537615,459 |
| 46 | 1650 | | " " | " | 14.3 | BH | -8.3 | -22.6 | | 5,536.2 | | -6 | +1650 | 322,539615,129 |
| 47 | 1320 | | " " | " | 14.0 | BH | -6.6 | -20.6 | | 5,538.2 | | -5 | +1320 | 322,540614,799 |
| 47 | 1297 | | 77°29.3' | +13.2° | 13.7 | BH | -6.5 | -20.2 | | 5,538.6 | | -16 | +1297 | 322,529614,776 <i>pipeline (elev)</i> |
| 48 | 990 | | 77°1.2' | +13.2° | 9.8 | BH | -5.0 | -14.8 | | 5,544.0 | | -4 | +990 | 322,541614,469 ↑ |
| 49 | 660 | | " " | " | 12.5 | - | | -12.5 | | 5,546.3 | | -3 | +660 | 322,542614,139 <i>Indian Hill Quad.</i> |
| 50 | 330 | | " " | " | 8.3 | - | | -8.3 | | 5,550.5 | | -1 | +330 | 322,544613,809 <i>Moffett Ranch</i> |
| 51 | 0 | | | | 5.4 | - | | -5.4 | | 5,553.4 | TP | 0 | 0 | 322,545613,479 ↓ |
| 52 | 330 | | 257°28' | +13.2° | 4.2 | - | | -4.2 | | 5,554.6 | | +4 | -330 | 322,549613,149 |
| 53 | 660 | | " " | " | 1.8 | - | | -1.8 | | 5,557.0 | | +8 | -660 | 322,553612,819 |
| 54 | 990 | | " " | " | 3.0 | TH | +5.0 | +2.0 | | 5,560.8 | | +12 | +990 | 322,557612,489 |
| 55 | 1320 | | " " | " | 2.1 | TH | +6.6 | +4.5 | | 5,563.3 | | +15 | -1320 | 322,560612,159 |
| 56 | 1650 | | " " | " | 2.0 | TH | +8.3 | +6.3 | | 5,565.1 | | +10 | -1650 | 322,564611,829 |
| 57 | 1980 | | " " | " | 1.9 | TH | +9.9 | +8.0 | | 5,566.8 | | +23 | -1980 | 322,568611,499 |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|--------------------|------------------|-------------|---------|---|--|
| 8/21/79 | | G. Cutcamp | | R. Turner | | 5834 | | RANSOM TURNER | | 3 | 5 | | | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | | |
| Wyoming | | | | Wyoming | Laramie | 18N | 66W | | L.O. Davis | | | | | | | | |
| 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 | | |
| | | | | | | | | | 5,558.8 | | | | | | | | |
| 58 | 2310 | | 257°28' | +13.2° | 1.2 | TH | +11.6 | +10.4 | | | TP | +27 | -2310 | 322,572 | 611,169 | | |
| 58 | 2310 | | | | 6.0 | 89°36' | +16.1 | +10.1 | | 5,568.9 | TP | | | | | | |
| | 2310 | | 77°49'+180° | +13.2° | 12.2 | OH | +11.6 | +23.8 | | | BS | +18 | -2310 | | | | |
| | 2310 | | | | +5.0 | 90°28' | +18.8 | +23.8 | 5,592.7 | | CC | | | | | | |
| 59 | 1980 | | 77°49' | +13.2° | 10.8 | BH | -9.9 | -20.7 | | 5,572.0 | | -15 | +1980 | 322,575 | 610,839 | | |
| 60 | 1650 | | " " | " | 9.2 | BH | -8.3 | -17.5 | | 5,575.2 | | -13 | +1650 | 322,577 | 610,509 | | |
| 61 | 1320 | | " " | " | 8.3 | BH | -6.6 | -14.9 | | 5,577.8 | | -10 | +1320 | 322,580 | 610,179 | | |
| 62 | 990 | | " " | " | 13.0 | - | | -13.0 | | 5,579.7 | | -8 | +990 | 322,582 | 609,849 | | |
| 63 | 660 | | " " | " | 10.9 | - | | -10.9 | | 5,581.8 | | -5 | +660 | 322,585 | 609,519 | | |
| 64 | 330 | | " " | " | 6.9 | - | | -6.4 | | 5,586.3 | | -3 | +330 | 322,587 | 609,189 | | |
| 65 | 0 | | | | 5.4 | - | | -5.4 | | 5,587.3 | TP | 0 | 0 | 322,590 | 608,859 | | |
| 66 | 330 | | 257°11' | +13.2° | 3.5 | - | | -3.5 | | 5,589.2 | | +2 | -330 | 322,592 | 608,529 | | |
| 67 | 330 | | " " | " | 0.6 | - | | -0.6 | | 5,592.1 | | +4 | -660 | 322,594 | 608,199 | | |
| 68 | 990 | | " " | " | 2.4 | TH | +5.0 | +2.6 | | 5,595.3 | | +7 | -990 | 322,597 | 607,869 | | |
| 69 | 1320 | | " " | " | 2.7 | TH | +6.6 | +3.9 | | 5,596.6 | | +9 | -1320 | 322,599 | 607,539 | | |
| 70 | 1440 | | 256°48' | +13.2° | 3.5 | TH | +7.2 | +3.7 | | 5,596.4 | | 0 | -1440 | 322,590 | 607,419 | 322,590 + 607,407 Trail (north) (elev) 5594' | |
| 70 | 1650 | | 257°11' | +13.2° | 8.5 | TH | +8.3 | -0.2 | | 5,592.5 | | +11 | -1650 | 322,601 | 607,209 | | |
| 71 | 1980 | | 256°55' | +13.2° | 13.8 | TH | +9.9 | -3.9 | | 5,588.8 | | +4 | -1980 | 322,594 | 606,879 | | |
| 72 | 2310 | | 256°49.5' | +13.2° | 14.4 | TH | +11.6 | -2.9 | | 5,589.8 | TP | -2 | -2310 | 322,588 | 606,549 | | |
| 72 | 2310 | | | | 15.0 | 89°42' | +12.1 | -2.9 | | | TP | | | | | | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|-----------------|
| 8/21/79 | | G. Sotcamp | | E. Turner | | 5827 | | RANSOM TURNER | | 3 | 6 | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | |
| Wyoming | | | | Wyoming | Laramie | | 18N | 66W | | L.O. Pauls | | | | |
| 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. | |
| 72 | | | | | | | | | | 5,589.8 | | | | |
| | 1980 | | 58°59A'+180° | +13.2° | +6.1 | BH | +9.9 | +16.0 | | | BS | -606 | -1885 | |
| | 1980 | | | | +19.8 | 90°2' | +1.1 | +15.9 | 5,605.7 | | BS | | | |
| 73 | 1650 | | 58°59A' | +13.2° | 11.7 | - | | -11.9 | | 5,593.8 | | +505 | +1571 | 322,487 606,235 |
| 74 | 1320 | | 59°22' | +13.2° | 8.1 | - | | -8.1 | | 5,597.6 | | +395 | +1320 | 322,377 605,984 |
| 75 | 990 | | " " | | 7.6 | - | | -7.6 | | 5,598.1 | | +297 | +945 | 322,279 605,609 |
| 76 | 660 | | " " | | 7.3 | - | | -7.3 | | 5,598.4 | | +198 | +630 | 322,180 605,294 |
| 77 | 330 | | " " | | 6.4 | - | | -6.4 | | 5,599.3 | | +99 | +315 | 322,081 604,979 |
| 78 | 0 | | " " | | 5.4 | - | | -5.4 | | 5,600.3 | π | 0 | 0 | 321,982 604,664 |
| 79 | 330 | | 239°2' | +13.2° | 3.4 | - | | -3.4 | | 5,602.3 | | -101 | -314 | 321,881 604,350 |
| 80 | 660 | | " " | | 1.1 | - | | -1.1 | | 5,604.6 | | -201 | -629 | 321,781 604,035 |
| 81 | 990 | | " " | | 4.0 | TH | +5.0 | +1.0 | | 5,606.7 | | -302 | -943 | 321,680 603,721 |
| 82 | 1320 | | " " | | 3.8 | TH | +6.6 | +2.8 | | 5,608.5 | | -403 | -1257 | 321,579 603,407 |
| 83 | 1650 | | " " | | 3.0 | TH | +8.3 | +5.3 | | 5,611.0 | | -503 | -1571 | 321,479 603,093 |
| 84 | 1980 | | " " | | 1.9 | TH | +9.9 | +8.0 | | 5,613.7 | | -604 | -1886 | 321,378 602,778 |
| 85 | 2310 | | 239°16.3' | +13.2° | 1.1 | TH | +11.6 | +10.5 | | 5,616.2 | TP | -696 | -2203 | 321,286 602,461 |
| 85 | 2310 | | | | 5.5 | 89°36' | +16.1 | +10.6 | | | TP | | | |
| | 1980 | | 73°28.9'+180° | +13.2° | +13.1 | BH | +9.9 | +23.0 | 5,639.2 | | BS | -115 | -1977 | |
| | 1980 | | | | +13.9 | 90°16' | +9.2 | +23.1 | | | BS | | | |
| 86 | 1650 | | 73°28.9' | +13.2 | 11.0 | BH | -8.3 | -19.3 | | 5,619.9 | | +96 | +1647 | 321,267 602,131 |
| 87 | 1320 | | " " | | 8.9 | BH | -6.6 | -15.5 | | 5,623.7 | | +76 | +1318 | 321,247 601,802 |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|---------|
| 8/21/79 | | G. Catcamp | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | 7 | | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| Wyoming | | | | Wyoming | | Laramie | | 18N | | 66W | | | | L.O. Davis | |
| 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 |
| | | | | | | | | | 5639.2 | | | | | | |
| 88 | 990 | | 73° 28.9' | +13.2° | 13.0 | - | | -13.0 | | 5626.2 | | +57 | +988 | 321,228 | 601,472 |
| 89 | 660 | | " " | " | 11.1 | - | | -11.1 | | 5628.1 | | +38 | +659 | 321,209 | 601,143 |
| 90 | 330 | | " " | " | 8.4 | - | | -8.4 | | 5630.8 | | +19 | +329 | 321,190 | 600,813 |
| 91 | 0 | | | | 5.4 | - | | -5.4 | | 5633.8 | π | 0 | 0 | 321,171 | 600,484 |
| 92 | 330 | | 253° 41.8' | +13.2° | 2.8 | - | | -2.8 | | 5636.4 | | -18 | -330 | 321,153 | 600,154 |
| 93 | 660 | | " " | " | 0.9 | - | | -0.9 | | 5638.3 | | -36 | -659 | 321,135 | 599,825 |
| 94 | 990 | | " " | " | 3.4 | TH | +5.0 | +1.6 | | 5640.8 | | -54 | -989 | 321,117 | 599,495 |
| 95 | 1320 | | " " | " | 2.2 | TH | +6.6 | +4.4 | | 5643.6 | | -71 | -1318 | 321,100 | 599,166 |
| 96 | 1650 | | " " | " | 0.7 | TH | +8.3 | +7.6 | | 5646.8 | | -89 | -1648 | 321,082 | 598,836 |
| 97 | 1980 | | 253° 41.8' | +13.2° | 7.4 | 89° 30' | +17.3 | +9.9 | | 5649.1 | TP | -107 | -1977 | 321,064 | 598,507 |
| 97 | 1990 | | | | 14.3 | 89° 18' | +24.2 | +9.9 | | | TP | | | | |
| | 2310 | | 73° 12.5' + 180° | +13.2° | +15.0 | 90° 18' | +12.1 | +27.1 | (27.2) | | BS | -145 | -2305.1 | | |
| | 2310 | | | | +7.1 | 90° 30' | +20.2 | +27.3 | 5676.3 | | BS | | | | |
| 98 | 1990 | | 73° 12.5' | +13.2° | 13.8 | BH | -9.9 | -23.7 | | 5652.6 | | +124 | +1976 | 321,043 | 598,179 |
| 98 | 1900 | | 73° 32.3' | +13.2° | 12.9 | BH | -9.0 | -21.9 | | 5654.4 | | +102 | +1797 | 321,021 | 598,000 |
| 99 | 1650 | | " " | " | 13.1 | BH | -8.3 | -21.4 | | 5654.9 | | +103 | +1647 | 321,022 | 597,850 |
| 100 | 1220 | | " " | " | 12.1 | BH | -6.6 | -18.7 | | 5657.6 | | +83 | +1317 | 321,002 | 597,520 |
| 100 | 1160 | | 73° 41.5' | +13.2° | 11.0 | BH | -5.8 | -16.8 | | 5659.5 | | +63 | +1158 | 320,982 | 597,361 |
| 101 | 990 | | 73° 12.5' | +13.2° | 10.2 | BH | -5.0 | -15.2 | | 5661.1 | | +62 | +988 | 320,981 | 597,191 |
| 102 | 660 | | | | 12.3 | - | | -12.3 | | 5664.0 | | +41 | +659 | 320,960 | 596,862 |

321,021 + 597,987
Trail (south)

N-S fence line

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------|---------------|
| 8/22/70 | | G. Cotcamp | | R. Turner | | 6834 | | RANSONI TURNER | | 3 | 8 | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | TWP | RANGE | PPM | PARTY MANAGER | | | | | | |
| Wyoming | | Moffett Ranch | | Wyoming | Laramie | 18N | 66W/67W | | L.O. Cavis | | | | | | |
| 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 |
| | | | | | | | | | 5676.3 | | | | | | |
| 103 | 330 | | 73°12.5' | +13.2° | 9.2 | - | | -9.2 | | 5,667.1 | | +21 | +329 | 320,940 | 596,532 |
| 104 | 0 | | | | 5.4 | - | | -5.4 | | 5,670.9 | X | 0 | 0 | 320,919 | 596,203 |
| 105 | 330 | | 255°49' | +13.2° | 1.7 | - | | -1.7 | | 5,674.6 | | -6 | -330 | 320,913 | 595,873 |
| 106 | 660 | | " " | " | 2.2 | TH | +3.3 | +1.1 | | 5,677.4 | | -11 | -660 | 320,908 | 595,543 |
| 107 | 990 | | " " | " | 11.2 | 89°- | +17.3 | +6.1 | | 5,682.4 | | -17 | -990 | 320,902 | 595,213 |
| 108 | 1320 | | " " | " | 12.3 | 89°- | +23.0 | +10.7 | | 5,687.0 | | -23 | -1320 | 320,896 | 594,883 |
| 109 | 1650 | | " " | " | 8.1 | 89°20' | +19.2 | +11.1 | | 5,687.4 | | -28 | -1650 | 320,891 | 594,553 |
| 110 | 1980 | | 255°49' | +13.2° | 10.2 | 89°20' | +23.0 | +12.8 | | 5,689.1 | TP | -34 | -1980 | 320,885 | 594,225 |
| 110 | 1980 | | | | 14.8 | 89°12' | +27.6 | +12.8 | | | TP | | | | |
| | 1650 | | 75°22.7'+180° | +13.2° | +12.3 | BH | +8.3 | +20.6 | 5,709.7 | | BS | -41 | -1649.2 | | |
| | 1650 | | | | +13.8 | 90°19' | +6.7 | +20.5 | | | BS | | | | |
| 111 | 1320 | | 75°22.7' | +13.2° | 10.1 | BH | -6.6 | -16.7 | | 5,693.0 | | +33 | +1319 | 320,877 | 593,897 |
| 112 | 990 | | " " | " | 13.2 | - | | -13.2 | | 5,696.5 | | +25 | +990 | 320,869 | 593,568 R.66W |
| 113 | 660 | | " " | " | 9.7 | - | | -9.7 | | 5,700.0 | | +16 | +660 | 320,860 | 593,238 R.67W |
| 114 | 330 | | " " | " | 8.1 | - | | -8.1 | | 5,701.6 | | +8 | +330 | 320,852 | 592,908 |
| 115 | 0 | | | | 5.4 | - | | -5.4 | | 5,704.3 | X | 0 | 0 | 320,844 | 592,578 |
| 116 | 330 | | 255°15' | +13.2° | 0.9 | - | | -0.9 | | 5,708.8 | | -9 | -330 | 320,835 | 592,248 |
| 117 | 660 | | " " | " | 1.4 | TH | +3.3 | +1.9 | | 5,711.6 | | -18 | -660 | 320,826 | 591,918 |
| 118 | 990 | | " " | " | 0.6 | TH | +5.0 | +4.4 | | 5,714.1 | | -27 | -990 | 320,817 | 591,588 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|----------------------|--------------------|---------|---------|
| 2/20/10 | | S. Camp | | K. Turner | | 6834 | | RANSOM TURNER | | 3 | 9 | | | | |
| AREA | | TOPO MAP | STATE | COUNTY | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | |
| Madison | | Moffett Ranch | Illinois | Laramie | 18N | 67W | | L.O. Davis | | | | | | | |
| 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 |
| | | | | | | | | | 5,709.7 | | | | | | |
| 119 | 1320 | | 256°16.7' | +13.2° | 5.1 | 89°20' | +15.4 | +10.3 | | 5720.0 | TP | -12 | -1320+2 | 320,832 | 591,260 |
| 119 | 1320 | | | | 12.8 | 89°- | +23.0 | +10.2 | | | TP | | | | |
| | 1320 | | 87°45'+180° | +13.5° | +1.1 | 90°40' | +15.4 | +24.5 | 5,744.5 | | BS | +258 | -1295+2 | | |
| | 1320 | | | | +5.2 | 90°30' | +19.2 | +24.4 | | | BS | | | | |
| 120 | 990 | | 87°45' | +13.5° | 11.4 | 90°30' | -8.6 | -20.0 | | 5,724.5 | | -193 | +971 | 320,897 | 590,938 |
| 121 | 660 | | " " | " | 11.5 | 90°30' | -5.8 | -17.3 | | 5,727.2 | | -129 | +647 | 320,961 | 590,614 |
| 122 | 330 | | " " | " | 11.5 | - | | -11.5 | | 5,733.0 | | -64 | +324 | 321,026 | 590,291 |
| 123 | 0 | | | | 5.7 | - | | -5.4 | | 5,739.1 | T | 0 | 0 | 321,090 | 589,967 |
| 124 | 230 | | 279°52.5' | +13.5° | 0.3 | - | | -0.3 | | 5,744.2 | | +131 | -303 | 321,221 | 589,664 |
| 125 | 530 | | " " | " | 8.0 | 89°- | +11.5 | +3.5 | | 5,748.0 | | +262 | -606 | 321,352 | 589,361 |
| 125 | 990 | | " " | " | 12.1 | 89°- | +17.3 | +5.2 | | 5,749.7 | | +393 | -909 | 321,483 | 589,058 |
| 127 | 1320 | | 279°52.5' | +13.5° | 8.6 | 89°20' | +15.4 | +6.8 | 6.9 | 5,751.4 | TP | +524 | -1212+2 | 321,614 | 588,757 |
| 127 | 1320 | | | | 4.5 | 89°30' | +11.5 | +7.0 | | | TP | | | | |
| | 1320 | | 96°12.4'+180° | +13.5° | +14.6 | 90°20' | -7.7 | +22.3 | 5,773.7 | | BS | +445 | -1243+3 | | |
| | 1320 | | | | +6.9 | 90°40' | +15.4 | +22.3 | | | BS | | | | |
| 128 | 990 | | 96°12.4' | +13.5° | 13.7 | 84° | -5.0 | -18.7 | | 5,755.0 | | -334 | +932 | 321,725 | 588,449 |
| 129 | 660 | | " " | " | 13.7 | - | | -13.7 | | 5,760.0 | | -223 | +621 | 321,836 | 588,138 |
| 130 | 330 | | " " | " | 8.1 | - | | -8.1 | | 5,765.6 | | -111 | +311 | 321,948 | 587,828 |
| 131 | 0 | | | | 5.4 | - | | -5.4 | | 5,768.3 | T | 0 | 0 | 322,059 | 587,517 |
| 132 | 330 | | 274°1' | +13.5° | 1.9 | - | | -1.9 | | 5,771.8 | | +99 | -315 | 322,158 | 587,202 |

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------|---------|
| 8/22/79 | | G. Cotcamp | | R. Turner | | 6834 | | RANSOM TILNER | | 3 | 10 | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | |
| Wyoming | | Moffett Ranch | | Wyoming | Laramie | | 18N | 67W | | L.O. Davis | | | | | |
| 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 A TP | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | NORTH + SOUTH - LAT. | EAST + WEST - DEP. | | Y |
| | | | | | | | | | 5,773.7 | | | | | | |
| 133 | 660 | | 274° 1' | +13.5° | 11.7 | 88° - | +23.0 | +11.3 | | 5,785.0 | | +199 | -629 | 322,258 | 586,888 |
| 134 | 990 | 989 | 279° 1' | +13.5° | 6.3 | 88° - | +34.5 | +28.2 | | | TP | +298 | -943.2 | 322,357 | 586,576 |
| 134 | 990 | | | | 3.4 | 88° 10' | +31.7 | +28.3 | | 5,802.0 | TP | | | | |
| | 1980 | | 100° 16.4' + 180° | +13.5° | +10.3 | - | | +10.3 | | | BS | +798 | -1812.2 | | |
| | 1980 | | | | +15.0 | 89° 52' | -4.6 | +10.4 | 5,812.4 | | BS | | | | |
| 135 | 1650 | | 100° 16.4' | +13.5° | 4.7 | - | -4.7 | | | 5,807.7 | | -665 | +1510 | 322,490 | 586,276 |
| 136 | 1320 | | " " | " | 3.2 | - | -3.2 | | | 5,809.2 | | -532 | +1208 | 322,623 | 585,974 |
| 137 | 990 | | 101° - | +13.5° | 1.5 | - | -1.5 | | | 5,810.9 | | -411 | +901 | 322,744 | 585,667 |
| ≡ | 870 | | 101° 36' | +13.5° | 1.7 | - | -1.7 | | | 5,810.7 | | -369 | +788 | 322,786 | 585,554 |
| 138 | 660 | | 101° - | +13.5° | 5.4 | - | -5.4 | | | 5,807.0 | | -274 | +601 | 322,881 | 585,367 |
| 139 | 330 | | " " | " | 7.2 | - | -7.2 | | | 5,805.2 | | -137 | +300 | 323,018 | 585,066 |
| 140 | 0 | | | | 5.4 | - | -5.4 | | | 5,807.0 | π | 0 | 0 | 323,155 | 584,766 |
| 141 | 330 | | 288° - | +13.5° | 1.3 | - | -1.3 | | | 5,811.1 | | +172 | -281 | 323,327 | 584,485 |
| 142 | 660 | | 291° 25' | +13.5° | 7.8 | 89° - | +11.5 | +3.7 | | 5,816.1 | | +378 | -541 | 323,533 | 584,225 |
| 143 | 990 | | 293° 25' | +13.5° | 10.0 | 89° - | +17.3 | +7.3 | | 5,819.7 | | +595 | -792 | 323,750 | 583,974 |
| 144 | 1315 | | 294° - | +13.5° | 13.3 | 89° - | +22.9 | +9.6 | | 5,822.0 | | +801 | -1043 | 323,956 | 583,723 |
| 145 | 1645 | | 294° 33' | +13.5° | 14.0 | 89° - | +28.7 | +14.7 | | 5,827.1 | | +1013 | -1294 | 324,168 | 583,472 |
| 146 | 1970 | | 295° 3' | +13.5° | 11.0 | 89° - | +34.4 | +23.4 | | 5,835.8 | | +1228 | -1541 | 324,383 | 583,225 |
| 147 | 2300 | | 295° 16.6' | +13.5° | 6.1 | 89° - | +40.1 | +34.0 | | | TP | +1440 | -1793 | 324,595 | 582,973 |
| 147 | 2300 | | | | 12.8 | 88° 50' | +46.8 | +34.0 | | 5,846.4 | TP | | | | |

322,780 + 585,630
+ curve line (elev) 5811

curve

Geosource Inc.

| DATE | | INSTRUMENT MAN | | | ROD MAN | | | PARTY NUMBER | | NOTES CHECKED BY | | | LINE NO. | PAGE | | |
|-------------|----------------|-----------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|--------------------|------------------|-------------|---------|--|
| 8/22/79 | | G. Cotcamp | | | R. Turner | | | 6834 | | RANSOM TURNER | | | 3 | 11 | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | | TWP | RANGE | PPM | PARTY MANAGER | | | | | |
| Wyoming | | Moffett Ranch/Bristol | | Wyoming | Laramie | | | 18N | 67W | | L. O. Davis | | | | | |
| STATION NO. | SLOPE DISTANCE | PLOTTING DISTANCE | AZIMUTH FROM MAGNETIC NORTH | Ridge 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 | |
| 147 | | | | | | | | | | 5846.4 | | | | | | |
| | 1305 | | 97°20.6' +180° | +13.5° | +10.0 | - | | +10.0 | 5856.4 | | BS | +46A | -1219 | | | curve |
| | 1305 | | | | +8.4 | 90°4' | +1.5 | +9.9 | | | BS | | | | | |
| | 1110 | | 94°24' | +13.5° | 6.8 | - | | -6.8 | 5849.6 | | | -341 | +1056 | 324,718 | 582,810 | barrier line |
| 148 | 990 | | 92°40' | +13.5° | 8.0 | - | | -8.0 | 5848.4 | | | -276 | +951 | 324,783 | 582,705 | |
| 149 | 660 | | " " | " | 7.5 | - | | -7.5 | 5848.9 | | | -184 | +634 | 324,875 | 582,388 | |
| 150 | 330 | | " " | " | 6.6 | - | | -6.6 | 5849.8 | | | -92 | +317 | 324,967 | 582,071 | |
| 151 | 0 | | | | 5.4 | - | | -5.4 | 5851.0 | | T | 0 | 0 | 325,059 | 581,754 | |
| 152 | 330 | | 272°59' | +13.5° | 1.9 | - | | -1.9 | 5854.5 | | | +94 | -316 | 325,153 | 581,438 | |
| 153 | 660 | | " " | " | 3.3 | - | | -3.3 | 5853.1 | | | +187 | -633 | 325,246 | 581,121 | |
| 154 | 990 | | " " | " | 4.1 | - | | -4.1 | 5852.3 | | | +281 | -949 | 325,340 | 580,805 | |
| | 1280 | | 272°41.3' | +13.5° | 2.5 | - | | -2.5 | 5853.9 | | | +357 | -1229 | 325,416 | 580,525 | 225,410 + 580,525 (s), Y-intersect (elev) 5854' |
| 155 | 1310 | | 271°41.5' | +13.5° | 3.1 | - | | -3.1 | 5853.3 | | TP | +343 | -1264.5 | 325,402 | 580,485 | curve - paved road |
| 155 | 1310 | | | | 9.6 | TH | +6.6 | -3.1 | | | TP | | | | | ↓ |
| | 985 | | 44°46.8' +180° | +13.5° | +10.6 | - | | +10.6 | 5863.9 | | BS | -518.2 | -838.5 | | | curve |
| | 985 | | | | 5.7 | BH | +4.9 | +10.6 | | | BS | | | | | ↓ |
| 156 | 658 | | 47°50' | +13.5° | 6.1 | - | | -6.1 | 5857.8 | | | +316 | +577 | 325,198 | 580,219 | |
| 157 | 330 | | 52°7' | +13.5 | 6.0 | - | | -6.0 | 5857.9 | | | +136 | +301 | 325,018 | 579,943 | |
| 158 | 0 | | | | 5.4 | - | | -5.4 | 5858.5 | | T | 0 | 0 | 324,882 | 579,642 | |
| 159 | 330 | | 232°13.1' | | 4.2 | - | | -4.2 | 5859.7 | | | -136 | -301 | 324,746 | 579,341 | |
| | 420 | | 216°24' | +13.5° | 1.7 | - | | -1.7 | 5862.2 | | | -271 | -321 | 324,611 | 579,321 | windmill |

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | |
|-------------|----------------|-------------------|-----------------------------|----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|----------------------------|
| 8/23/79 | | G. Cotcamp | | R Turner | | 6834 | | RANSOM TURNER | | 3 | 12 | | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| Wyoming | | Bristol Ridge | | Wyoming | | Laramie | | 18N | | 67W | | | | L.O. Davis | |
| 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 |
| | | | | | | | | | 5863.9 | | | | | | |
| 160 | 660 | | 232°13.1' | +13.5° | 0.8 | - | | -0.8 | | 5863.1 | | -271 | -602 | 324,611 | 579,040 paved road. |
| 161 | 990 | | | | 1.7 | TH | +5.0 | +3.3 | | 5867.2 | | -407 | -902 | 324,475 | 578,740 |
| 162 | 1320 | | | | 13.7 | 89°- | +23.0 | +9.3 | | 5873.2 | | -543 | -1203 | 324,339 | 578,439 |
| 163 | 1650 | | 232°13.1' | +13.5° | 7.1 | 89°- | +28.8 | +21.7 | | 5885.6 | TP | -679 ₂ | -1504 ₂ | 324,201 | 578,135 |
| 163 | 1650 | | | | 5.2 | 89°4' | +26.9 | +21.7 | | | TP | | | | |
| | 653 | | 53°35.5'+180° | +13.5° | 8.5 | TH | -3.3 | +5.2 | | | ES | -254 ₂ | -601 ₂ | | Curve |
| | 653 | | | | +11.0 | 89°30' | -5.7 | +5.3 | 5890.9 | | ES | | | | |
| 164 | 330 | | 56°13' | +13.5° | 1.1 | - | | -1.1 | | 5889.8 | | +114 | +310 | 324,059 | 577,842; last sta. on road |
| 165 | 0 | | | | 5.4 | - | | -5.4 | | 5885.5 | X | 0 | 0 | 323,945 | 577,532 in field |
| 166 | 272 | | 254°13' | +13.5° | 1.8 | - | | -1.8 | | 5889.1 | | -11 | -272 | 323,934 | 577,260 I-25(north) |
| 166 | 330 | | 256°7' | +13.5° | 6.2 | - | | -6.2 | | 5884.7 | | -2 | -330 | 323,943 | 577,202 median |
| 167 | 422 | | 257°2' | +13.5° | 3.4 | - | | -3.4 | | 5887.5 | | +4 | -422 | 323,949 | 577,110 I-25(south) |
| 167 | 650 | | 261°16' | +13.5° | 7.2 | - | | -7.2 | | 5883.7 | TP | +54 ₂ | -648 ₃ | 323,997 | 576,881 |
| 167 | 650 | | | | 10.5 | TH | +3.3 | -7.3 | | | TP | | | | |
| | 495 | | 106°43.2'+180° | +13.5° | +11.1 | 91°- | +8.6 | +19.7 | 5923.4 | | BS | +249 ₂ | -428 ₂ | | |
| | 495 | | | | +5.4 | 91°40' | +14.4 | +19.8 | | | BS | | | | |
| 168 | 165 | | 100°13' | +13.5° | 14.0 | 91°- | -2.9 | -16.9 | | 5886.5 | | -66 | +151 | 324,178 | 576,602 |
| 168 | 0 | | | | 5.4 | - | | -5.4 | | 5898.0 | X | 0 | 0 | 324,244 | 576,451 pit sta. - hill |
| 169 | 155 | | 256°55.4' | +13.5° | 11.8 | - | | -11.8 | | 5891.6 | | +1 | -155 | 324,245 | 576,296 |
| 170 | 485 | | | | 13.8 | BH | -2.4 | -16.2 | | 5887.2 | | +4 | -485 | 324,248 | 575,966 |

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | |
|-------------|----------------|-------------------|-----------------------------|------------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------|---------|
| 8/23/79 | | G. C. Camp | | L. Burgess | | 3234 | | RANSOM TURNER | | 3 | 13 | | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | |
| Wyoming | | Bristol Ridge | | Wyoming | | Laramie | | 18N | 6W | | L.O. Davis | | | | |
| 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 |
| | | | | | | | | | 5903.4 | | | | | | |
| 171 | 815 | | 256°55.4' | +13.5° | 13.4 | - | | -13.4 | | 5890.0 | TP | +6-1 | -815-3 | 324,249 | 575,633 |
| 171 | 815 | | | | 9.3 | 84° | -4.1 | -13.4 | | | TP | | | | |
| | 312 | 311 | 87°51.6'+180° | +13.5° | +5.5 | 86° | -21.7 | -16.2 | 5873.8 | | BS | +61 | -305+2 | | curve |
| | 312 | | | | +3.7 | 86°20' | -19.9 | -16.2 | | | BS | | | | |
| 172 | 0 | | | | 5.4 | - | | -5.4 | | 5868.4 | X | 0 | 0 | 324,310 | 575,326 |
| 173 | 330 | | 309°38' | +13.5° | 13.3 | 91° | -5.8 | -19.1 | | 5854.7 | | +264 | -198 | 324,574 | 575,128 |
| | 610 | | 306°53.2' | +13.5° | 12.0 | - | | -12.0 | | 5861.8 | | +470 | -389 | 324,780 | 574,937 |
| 174 | 645 | | 303°48.4' | +13.5° | 10.7 | - | | -10.7 | | 5853.1 | TP | +474.1 | -437.2 | 324,783 | 574,887 |
| 174 | 645 | | | | 13.9 | TH | +3.2 | -10.7 | | | TP | | | | curve |
| | 985 | | 74°35.4'+180° | +13.5° | +9.8 | 92° | +34.4 | +39.2 | (39.0) | | BS | -33-1 | -984 | | |
| | 985 | | | | +14.4 | 91°26' | +24.6 | +39.0 | 5902.2 | | BS | | | | |
| 175 | 653 | | 73°6' | +13.5° | 10.0 | 92° | -22.8 | -32.8 | | 5859.4 | | +39 | +652 | 324,788 | 574,555 |
| 176 | 328 | | 68°49' | +13.5° | 11.9 | 91° | -5.7 | -17.6 | | 5884.6 | | +44 | +325 | 324,793 | 574,238 |
| 177 | 0 | | | | 5.4 | - | | -5.4 | | 5896.8 | X | 0 | 0 | 324,749 | 573,903 |
| 178 | 330 | | 256°23' | +13.5° | 1.9 | - | | -1.9 | | 5900.3 | | -1 | -330 | 324,748 | 573,573 |
| 179 | 657 | | 260°23' | +13.5° | 5.4 | 88° | +22.9 | +17.5 | | 5919.7 | | +44 | -655 | 324,793 | 573,248 |
| 180 | 984 | | 256°55.4' | +13.5° | 3.8 | 88° | +34.3 | +30.5 | | | TP | +7-1 | -984 | 324,755 | 572,919 |
| 180 | 984 | 983 | | | 5.6 | 87°54' | +36.0 | +30.4 | | 5,932.6 | TP | | | | S-curve |
| | 1650 | | 71°22.6'+180° | +13.5° | +13.2 | 89° | -28.8 | -15.0 | | | BS | -147-1 | -1643 | | |
| | 1650 | | | | +10.2 | 89°6' | -25.9 | -15.7 | 5916.9 | | BS | | | | |

324,780 + 574,915 =
T rd (north)

narrow trail

S-curve

175-176 walk only

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|---------------|-------------|---------|-----------------------------------|--|
| 8/23/79 | | G. Co. Camp | | R. Turner | | 6839 | | RANSOM TURNER | | 3 | 14 | | | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | |
| Wyoming | | Bristol Ridge | | Wyoming | Laramie | | 811 | 67N | | L.O. Davis | | | | | | | |
| 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 | | |
| | | | | | | | | | 5916.9 | | | | | | | | |
| 181 | 1320 | | 71°228' | +13.5° | 10.5 | 89°- | +23.0 | +12.5 | | 5924.4 | | +118 | +1315 | 324,725 | 572,591 | | |
| 182 | 990 | | 72°32' | +13.5° | 4.9 | - | - | -4.9 | | 5912.0 | | +68 | +988 | 324,675 | 572,264 | | |
| 183 | 660 | | " | | 8.7 | - | - | -8.7 | | 5908.2 | | +46 | +658 | 324,653 | 571,934 | | |
| 184 | 330 | | " | | 7.1 | - | - | -7.1 | | 5909.8 | | +23 | +329 | 324,630 | 571,605 | | |
| 185 | 0 | | | | 5.4 | - | - | -5.4 | | 5911.5 | π | 0 | 0 | 324,607 | 571,276 | | |
| 186 | 330 | | 252°28' | +13.5° | 3.2 | - | - | -3.2 | | 5913.7 | | -23 | -329 | 324,584 | 570,947 | | |
| 187 | 660 | | " | | 1.5 | - | - | -1.5 | | 5915.4 | | -46 | -658 | 324,561 | 570,618 | | |
| 188 | 990 | | " | | 9.9 | TH | +5.0 | -5.0 | | 5911.9 | | -70 | -988 | 324,537 | 570,288 | | |
| 189 | 1320 | | 253°36.2' | +13.5° | 13.1 | TH | +6.6 | -6.5 | | | TP | -67.1 | -1318 | 324,539 | 569,958 | | |
| | 300 | | | | 14.3 | 89°40' | +7.7 | -6.6 | | 5910.3 | TP | | | | | | |
| | 300 | | 107°17.3'+180° | +13.5° | +6.1 | - | - | +6.1 | | | BS | +154.1 | -258 | | | | |
| | 300 | | | | +7.6 | TH | -1.5 | +6.1 | 5916.4 | | BS | | | | | curve | |
| 190 | 0 | | | | 5.4 | - | - | -5.4 | | 5911.0 | π | 0 | 0 | 324,692 | 569,700 | horizont. correct. y=-17' | |
| 191 | 328 | | 330°2' | +13.5° | 1.0 | 88°- | +11.4 | +10.4 | | 5926.8 | | +315 | -93 | 325,007 | 569,607 | x=-27' | |
| 191 | 446 | 445 | 332°58' | +13.5° | 6.0 | 86°- | +31.0 | +25.0 | | 5941.4 | TP | +433 | -109 | 325,125 | 569,596 | 325,125 + 569,600 trail (east) | |
| 191 | 446 | | | | 2.2 | 86°30' | +27.2 | +25.0 | | | TP | | | | | steep hill | |
| | 208 | | 167°25.7'+180° | +13.5° | +6.2 | - | - | +6.2 | 5947.6 | | BS | +208 | +3 | | | | |
| | 208 | | | | +7.2 | TH | -1.0 | +6.2 | | | BS | | | | | | |
| 192 | 0 | | | | 5.4 | - | - | -5.4 | | 5942.2 | π | 0 | 0 | 325,333 | 569,599 | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|---------------|-------------|---------|---------|--|
| 8/23/79 | | G. Cotcamp | | R. Turner | | 6839 | | RANSOM TURNER | | 3 | 15 | | | | | | |
| AREA | | TOPO MAP | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | | |
| Wyoming | | Bristol Ridge | Wyoming | Laramie | | 18N | 67W | | L.O. Davis | | | | | | | | |
| 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 | | |
| | | | | | | | | | 5947.6 | | | | | | | | |
| 193 | 297 | | 313°16.4' | +13.5° | 14.6 | 91° | -5.2 | -19.8 | | 5927.8 | TP | +248 | -163 | 325,581 | 567,436 | | |
| 193 | 297 | | | | 7.7 | 92°20' | -12.1 | -19.8 | | | TP | | | | | | |
| | 1320 | | 82°2' +180° | +13.5° | +11.6 | - | | +11.6 | 5939.4 | | BS | +127 | -1314 | | | | |
| | 1320 | | | | +5.0 | 84 | +6.6 | +11.6 | | | BS | | | | | | |
| 194 | 990 | | 82°2' | +13.5° | 11.8 | - | | -11.8 | | 5927.6 | | -95 | +985 | 325,613 | 567,107 | | |
| 195 | 660 | | " " | " | 10.7 | - | | -10.7 | | 5928.7 | | -64 | +657 | 325,644 | 568,779 | | |
| 196 | 330 | | " " | " | 8.9 | - | | -8.9 | | 5930.5 | | -32 | +328 | 325,676 | 568,450 | | |
| 197 | 0 | | | | 5.4 | - | | -5.4 | | 5934.0 | π | 0 | 0 | 325,708 | 568,122 | | |
| 198 | 330 | | 261°11.3' | +13.5° | 1.9 | - | | -1.9 | | 5937.5 | | +27 | -329 | 325,735 | 567,793 | | |
| 199 | 660 | | " " | " | 2.2 | TH | +3.3 | +1.1 | | 5940.5 | | +54 | -658 | 325,762 | 567,464 | | |
| 200 | 990 | | 261°11.3' | +13.5° | 10.5 | 89°- | +17.3 | +6.8 | | 5946.2 | TP | +81 | -987 | 325,789 | 567,135 | | |
| 200 | 990 | | | | 4.8 | 89°20' | +11.5 | +6.7 | | | TP | | | | | | |
| | 981 | | 63°29.2' +180° | +13.5° | +13.5 | 91°- | +17.1 | +30.6 | 5976.8 | | BS | -221 | -956 | | | curve | |
| | 981 | | | | +5.0 | 91°30' | +25.7 | +30.7 | | | BS | | | | | | |
| 201 | 660 | | 59°28' | +13.5° | 12.2 | 91°- | -11.5 | -23.7 | | 5953.1 | | +193 | +631 | 325,761 | 566,810 | | |
| 202 | 330 | | " " | " | 13.1 | - | | -13.1 | | 5963.7 | | +97 | +316 | 325,665 | 566,495 | | |
| 203 | 0 | | | | 5.4 | - | | -5.4 | | 5971.4 | π | 0 | 0 | 325,568 | 566,179 | | |
| 204 | 330 | | 245°38' | +13.5° | 0.7 | - | | -0.7 | | 5976.1 | | -62 | -324 | 325,506 | 565,855 | | |
| 205 | 660 | | " " | " | 7.2 | 89°- | +11.5 | +4.3 | | 5981.1 | | -124 | -698 | 325,444 | 565,531 | | |
| 206 | 990 | | " " | " | 10.6 | 89°- | +17.3 | +6.7 | | 5983.5 | | -187 | -972 | 325,381 | 565,207 | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|---|
| 8/24/79 | | G. Cotcamp | | R. Turner | | 5834 | | RANSOM TURNER | | 3 | | 16 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| Wyoming | | Bristol Ridge | | Wyoming | | Lincoln | | 18N | | 67W/68W | | | | L.O. Davis | |
| 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 |
| | | | | | | | | | 5976.8 | | | | | | 325,375+564,870 |
| BM | 1330 | | 247°35' | +13.5° | 12.4 | 89°- | +23.2 | +10.8 | | 5987.6 | | -206 | -134 | 325,362 | 564,865 el. 5987. U.S.G.S. 7 REG 1961 |
| 207 | 1320 | | 244°11.9' | +13.5° | 13.6 | 89°- | +23.0 | +9.4 | | 5986.2 | TP | -281 | -1290 | 325,287 | 564,889 |
| 207 | 1320 | | | | 6.0 | 89°20' | +15.4 | +9.4 | | | TP | | | | |
| | 990 | | 15°14.3'+180° | +13.5° | +5.1 | - | +5.1 | | 5991.3 | | BS | -868 | -476 | | |
| | 770 | | | | +10.1 | TH | -5.0 | +5.1 | | | BS | | | | |
| 208 | 552 | | 13°3' | +13.5° | 10.7 | - | -10.7 | | 5980.6 | | | +590 | +295 | 325,009 | 564,708 |
| 209 | 330 | | " " | " | 4.3 | - | -4.3 | | 5987.0 | | | +295 | +198 | 324,714 | 564,561 |
| 210 | 0 | | | | 5.4 | - | -5.4 | | 5985.9 | π | 0 | 0 | 0 | 324,919 | 564,413 |
| 211 | 325 | | 226°1' | +13.5° | 0.6 | TH | +1.6 | +1.0 | | 5,992.3 | | -165 | -280 | 324,254 | 564,133 |
| 212 | 640 | | 227°50.5' | +13.5° | 5.4 | 89°20' | +7.4 | +2.0 | | 5,993.3 | TP | -307.3 | -562 | 324,115 | 563,851 curve |
| 212 | 640 | | | | 9.1 | 89°- | +11.2 | +2.1 | | | TP | | | | |
| | 1970 | | 70°32.6'+180° | +13.5° | +14.6 | 91°- | +34.4 | +49.0 | 40.9. | | BS | -204.3 | -1959 | | Summed |
| | 1970 | | | | +5.3 | 91°16' | +43.5 | +48.8 | 6,042.2 | | BS | | | | |
| 213 | 1643 | | 69°29' | +13.5° | 12.0 | 91°10' | -33.5 | -45.5 | | 5,996.7 | | +196 | +1631 | 324,110 | 563,523 |
| 214 | 1315 | | 68°26' | +13.5° | 11.3 | 91°20' | -30.6 | -41.9 | | 6,000.3 | | +185 | +1302 | 324,099 | 563,194 |
| 215 | 998 | | 67°2' | +13.5° | 11.2 | 91°40' | -28.7 | -39.9 | | 6,002.3 | | +163 | +975 | 324,077 | 562,867 |
| 216 | 660 | 659 | " | " | 6.9 | 92°40' | -30.7 | -37.6 | | 6,004.6 | | +108 | +650 | 324,022 | 562,542 |
| 217 | 330 | | 70°21' | +13.5° | 9.2 | 92°- | -11.5 | -20.7 | | 6,021.5 | | +35 | +328 | 323,949 | 562,220 |
| 218 | 0 | | | | 5.4 | - | -5.4 | | 6,036.8 | π | 0 | 0 | 0 | 323,914 | 561,892 R. 67W |
| 219 | 330 | | 259°50' | +13.7° | 4.8 | - | -4.8 | | 6,037.4 | | | -8 | -330 | 323,906 | 561,562 R. 68W |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | |
|-------------|----------------|----------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------|---------|---------------------------------|
| 8/24/79 | | G. C. Camp | | R. Turner | | 834 | | RANSOM TURNER | | 3 | 17 | | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | |
| Wyoming | | Bristol Ridge 7 1/2' | | Wyoming | Laramie | | 8N | 68W | | L.D. Davis | | | | | | |
| 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 |
| | | | | | | | | | 6092.2 | | | | | | | |
| 220 | 445 | | 241°31' | +13.7° | 9.1 | - | | -9.1 | | 6,033.1 | | -114 | -430 | 323,800 | 561,962 | 323,775 + 561,430(S) Trail 'S'. |
| 221 | 650 | | 234°48' | +13.7° | 2.7 | TH | +3.3 | +1.0 | | 6,043.2 | | -238 | -605 | 323,576 | 561,287 | |
| 222 | 970 | | 237°29' | +13.7° | 1.4 | TH | +4.9 | +3.5 | | 6,045.7 | | -313 | -918 | 323,601 | 560,977 | |
| 222 | 1270 | | 239°41' | +13.7° | 1.8 | 89°30' | +11.1 | +9.3 | | 6,051.5 | TP | -363+3 | -1217+4 | 323,554 | 560,679 | shooting thru S-curve |
| 222 | 1270 | | | | 5.4 | 89°20' | +14.8 | +9.4 | | | TP | | | | | |
| | 1300 | | 69°53.2' +180° | +13.7° | +14.6 | 90°20' | +7.6 | +22.2 | 6,073.7 | | BS | -145+3 | -1292+4 | | | S-curve |
| | 1300 | | | | +7.2 | 90°40' | +15.1 | +22.3 | | | BS | | | | | |
| 223 | 983 | | 69°53.2' | +13.7° | 11.7 | 90°30' | -8.6 | -20.3 | | 6,053.4 | | +110 | +977 | 323,522 | 560,368 | |
| 224 | 655 | | 74°45' | +13.7° | 13.3 | - | | -13.3 | | 6,060.4 | | +18 | +655 | 323,430 | 560,046 | |
| 225 | 330 | | 83°36' | +13.7° | 9.3 | - | | -9.3 | | 6,064.4 | | -42 | +327 | 323,370 | 559,718 | |
| 226 | 0 | | | | 5.4 | - | | -5.4 | | 6,068.3 | TP | 0 | 0 | 323,412 | 559,391 | |
| 227 | 330 | | 257°5' | +13.7° | 12.5 | - | | -12.5 | | 6,061.2 | | +5 | -330 | 323,917 | 559,061 | |
| 228 | 655 | | " " | " | 7.9 | - | | -7.9 | | 6,065.8 | | +9 | -655 | 323,421 | 558,736 | |
| 229 | 985 | | 259°56' | +13.7° | 4.9 | 89°30' | +8.6 | +3.7 | | 6,077.4 | | +62 | -983 | 323,474 | 558,908 | |
| 230 | 1313 | | 260°58' | +13.7° | 2.0 | 89°30' | +11.5 | +9.5 | | 6,083.2 | | +107 | -1309 | 323,519 | 558,082 | |
| 231 | 1635 | | " " | " | 5.7 | 89°10' | +23.8 | +18.1 | | 6,091.8 | | +133 | -1630 | 323,545 | 557,761 | |
| 232 | 1960 | | 259°57' | +13.7° | 8.1 | 89°- | +34.2 | +26.1 | | 6,099.8 | TP | +125+3 | -1956+4 | 323,540 | 557,439 | S-curve |
| 232 | 1960 | | | | 4.6 | 89°6' | +30.8 | +26.2 | | | TP | | | | | |
| | 980 | | 77°39' +180° | +13.7° | +11.6 | - | | +11.6 | | | BS | +27+3 | -980+4 | | | |
| | 980 | | | | +2.7 | 0" | +4.9 | +11.6 | 6,111.4 | | BS | | | | | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------|---|
| 8/24/79 | | G Cotcamp | | R. Turner | | 5829 | | RANSOM TURNER | | 3 | 18 | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | |
| Wyoming | | Footh Ridge | | Wyoming | Laramie | | 18N | 68W | | L.O. Davis | | | | | |
| 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 |
| | | | | | | | | | 6111.4 | | | | | | |
| 233 | 66.0 | | 75°37' | +13.9° | 11.7 | - | | -11.7 | | 6,099.7 | | +6 | +660 | 323,576 | 555,712.3 |
| 234 | 33.0 | | 70° - | +13.9° | 8.4 | - | | -8.4 | | 6,103.0 | | +35 | +328 | 323,605 | 556,791 |
| 235 | 0 | | | | 5.4 | - | | -5.4 | | 6,106.0 | π | 0 | 0 | 323,570 | 556,413 |
| 235 | 113 | | 255°33' | +13.9° | 4.8 | - | | -4.8 | | 6,106.6 | | -1 | -113 | 323,569 | 556,350 N-S fence |
| 236 | 32.5 | | 246°31' | +13.9° | 12.0 | - | | -12.0 | | 6,099.4 | | -54 | -320 | 323,516 | 556,143 |
| 237 | 65.0 | | 239°37.5' | +13.9° | 13.3 | - | | -13.3 | | 6,098.1 | TP | -184+4 | -623+4 | 323,390 | 555,844 curve |
| 237 | 65.0 | | | | 10.0 | BH | -3.3 | -13.3 | | | TP | | | | |
| | 131.0 | | 66°50.3'+180° | +13.9° | +11.8 | BH | +6.6 | +18.4 | | | BS | -211+4 | -1293+2 | | curve |
| | 131.0 | | | | +6.9 | 90°30' | +11.4 | +18.3 | 6116.4 | | BS | | | | |
| 238 | 99.0 | | 65°27' | +13.9° | 10.9 | BH | -5.0 | -15.9 | | 6,100.5 | | +183 | +973 | 323,366 | 555,526 |
| 239 | 66.0 | | 63°52' | +13.9° | 7.9 | - | | -7.9 | | 6,108.5 | | +140 | +645 | 323,323 | 555,198 |
| 240 | 33.0 | | " " | " | 6.9 | - | | -6.9 | | 6,109.5 | | +70 | +323 | 323,253 | 554,876 |
| 241 | 0 | | | | 5.4 | - | | -5.4 | | 6,111.0 | π | 0 | 0 | 323,183 | 554,553 |
| 242 | 33.0 | | 254°52' | +13.9° | 3.5 | - | | -3.5 | | 6,112.9 | | -7 | -330 | 323,176 | 554,223 |
| 243 | 66.0 | | " " | " | 2.3 | - | | -2.3 | | 6,114.1 | | -14 | -660 | 323,169 | 553,893 |
| 243 | 84.0 | | 255°54' | +13.9° | 1.8 | - | | -1.8 | | 6,114.6 | | -3 | -840 | 323,180 | 553,713 |
| BM | 79.0 | | 227°29' | +13.9° | 12.5 | - | | -12.5 | | 6,103.9 | | -378 | -693 | 322,805 | 553,860 Trans (North) 322,805 + 553,860 (lev) 6103' U.S.G.S 6 REG 1961 |
| 244 | 99.0 | | 256°16.6' | +13.8° | 3.8 | TH | +5.0 | +1.2 | | 6,117.6 | TP | +1-3 | -990 | 323,181 | 553,563 horiz. corr. y=+26' x=+22' |
| 244 | 99.0 | | | | 4.6 | 89°40' | +5.8 | +1.2 | | | TP | | | | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | |
|----------------------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|---------------|-------------|---------|---|---------|
| 8/27/79 | | G. Cotcamp | | R. Turner | | 5837 | | RANSOM TURNER | | 3 | 19 | | | | | | |
| AREA | | TOPO MAP | STATE | COUNTY | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | | | |
| Wyoming | | Bristol Ridge | Wyoming | Laramie | 1871 | 68W | | L.O. Davis | | | | | | | | | |
| 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 | | |
| 244 | | | | | | | | | | 6117.6 | | | | | | | |
| | 1320 | | 63°58' +180° | +13.8° | +11.7 | - | | +11.7 | | | BS | -299.3 | -1286 | | | | |
| | 1320 | | | | +5.1 | 84 | +6.6 | +11.7 | 6,129.3 | | BS | | | | | | |
| 245 | 990 | | 61°52' | +13.8° | 3.2 | 84 | +5.0 | +1.8 | | 6,131.1 | | +245 | +959 | 323,124 | 553,236 | | |
| 246 | 660 | | 59°36' | +13.8° | 9.2 | - | | -9.2 | | 6,120.1 | | +189 | +632 | 323,068 | 552,909 | last sta. on road | |
| 247 | 330 | | " " | " | 10.0 | - | | -10.0 | | 6,119.3 | | +94 | +316 | 322,973 | 552,593 | in field | |
| 248 | 0 | | | | 5.4 | - | | -5.4 | | 6,123.9 | TP | 0 | 0 | 322,879 | 552,277 | along line (same as 247) | |
| 249 | 330 | | 257°19' | +13.8° | 3.2 | - | | -3.2 | | 6,126.1 | | +6 | -330 | 322,885 | 551,947 | | |
| 250 | 660 | | " " | " | 6.5 | - | | -6.5 | | 6,122.8 | | +13 | -660 | 322,892 | 551,617 | | |
| 251 | 990 | | " " | " | 7.6 | - | | -7.6 | | 6,121.7 | | +19 | -990 | 322,898 | 551,287 | | |
| <u>312</u> <u>10111</u> | 1200 | | 257°32.6' | +13.8° | 8.3 | - | | -8.3 | | 6,121.0 | | +28 | -1200 | 322,907 | 551,077 | 322,900 + 551,080 (w) sec. corner el. 6120.0 | |
| 252 | 1310 | | 255°51' | +13.8° | 5.7 | - | | -5.7 | | 6,123.6 | TP | -8.3 | -1310 | 322,868 | 550,967 | True ranch trail | |
| 252 | 1310 | | | | 12.3 | TH | +6.6 | -5.7 | | | TP | | | | | (no vibs - nudging at trail) | |
| | 1600 | 1599 | 65°28.8' +180° | +13.8° | +2.9 | 92° | +55.8 | +58.7 | 6,182.4 | | BS | -297.3 | -1571 | | | | |
| | 1600 | | | | +4.3 | 91°36' | +44.7 | +57.0 | | | BS | | | | | | S-curve |
| 253 | 1280 | 1279 | 65°36' | +13.8° | 9.5 | 92° | -44.6 | -54.1 | | 6,128.3 | | +228 | +1259 | 322,796 | 550,655 | | |
| 254 | 970 | 969 | 61°15' | +13.8° | 11.0 | 92° | -33.8 | -44.8 | | 6,137.6 | | +250 | +936 | 322,818 | 550,332 | | |
| 255 | 645 | | 62°53' | +13.8° | 12.8 | 92° | -22.5 | -35.3 | | 6,147.1 | | +149 | +628 | 322,717 | 550,024 | | |
| 256 | 330 | | 71°22' | +13.8° | 7.9 | - | | -7.9 | | 6,174.5 | | +28 | +329 | 322,596 | 549,725 | | |
| 257 | 0 | | | | 5.4 | - | | -5.4 | | 6,177.0 | TP | 0 | 0 | 322,568 | 549,396 | | |
| 258 | 330 | | 260°53' | +13.8° | 0.9 | TH | +1.7 | +0.8 | | 6,183.2 | | +27 | -329 | 322,595 | 549,067 | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | |
|-------------|----------------|----------------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------|----------------------------------|
| 8/27/79 | | G. C. Camp | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | 20 | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | |
| Wyoming | | Bristol Ridge/Hirsig Ranch | | Wyoming | Laramie | | 18N | 68W | | L.O. Davis | | | | | |
| 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 |
| | | | | | | | | | 6,182.4 | | | | | | |
| 259 | 360 | | 257°40' | +138° | 2.6 | 89°- | +11.5 | +8.9 | | 6,191.3 | | +17 | -660 | 322,585 | 548,736 |
| 260 | 980 | | 253°5' | +138° | 3.9 | 89°- | +17.1 | +13.2 | | 6,195.6 | | -53 | -979 | 322,515 | 548,417 S-curve |
| 261 | 1300 | | 252°26.8' | +138° | 9.7 | 89°- | +22.7 | +13.0 (2.7) | | 6,195.1 | TP | -85.3 | -1297 | 322,480 | 548,099 |
| 261 | 1300 | | | | 14.8 | 88°48' | +27.2 | +12.4 | | | TP | | | | |
| | 990 | | 75°31.1'+180° | +138° | +3.6 | 91°- | +17.3 | +20.9 | | 6,216.0 | BS | -12 | -990 | | |
| | 990 | | | | +14.6 | 90°22' | +6.3 | +20.9 | | | BS | | | | |
| 262 | 660 | | 75°52' | +138° | 13.3 | 84 | -3.3 | -16.6 | | 6,199.4 | | +4 | +660 | 322,472 | 547,769 |
| 263 | 330 | | " | " | 10.5 | - | - | -10.5 | | 6,205.5 | | +2 | +330 | 322,470 | 547,439 |
| 264 | 0 | | | | 5.4 | - | - | -5.4 | | 6,210.6 | X | 0 | 0 | 322,468 | 547,109 |
| 265 | 330 | | 267°18' | +138° | 2.7 | - | - | -2.7 | | 6,213.3 | | +63 | -324 | 322,531 | 546,785 |
| 266 | 660 | | " | " | 0.3 | - | - | -0.3 | | 6,215.7 | | +127 | -648 | 322,595 | 546,461 |
| 267 | 990 | | " | " | 10.8 | 89°- | +17.3 | +6.5 | | 6,222.5 | | +190 | -971 | 322,658 | 546,138 ↑ |
| 268 | 1316 | | 266°58' | +138° | 11.7 | 89°- | +23.0 | +11.3 | | 6,227.3 | TP | +246 | -1293 | 322,714 | 545,816 curve Bristol Ridge Quad |
| 268 | 1316 | | | | 5.6 | 89°16' | +16.8 | +11.2 | | | TP | | | | |
| | 1602 | | 71°38.6'+90° | +138° | +14.3 | 90°24' | +11.2 | +25.5 | | 6,252.8 | BS | -127 | -1597 | | curve ↓ |
| | 1602 | | | | +5.9 | 90°42' | +19.6 | +25.5 | | | BS | | | | |
| 269 | 1285 | | 67°46' | +138° | 7.9 | 90°40' | -14.9 | -22.8 | | 6,235.0 | | +188 | +1271 | 322,775 | 545,490 Hirsig Ranch Quad |
| 270 | 968 | | 63°27' | +138° | 6.7 | 91°30' | -25.3 | -32.0 | | 6,220.8 | | +214 | +999 | 322,801 | 545,163 ↓ |
| 271 | 655 | | 55°56' | +138° | 8.7 | 91°30' | -17.1 | -25.8 | | 6,227.0 | | +227 | +614 | 322,814 | 544,833 |
| 272 | 330 | | 50°- | +138° | 12.1 | 91°- | -5.8 | -17.9 | | 6,239.9 | | +146 | +296 | 322,733 | 544,515 |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|---------------|-------------|---------|--------------|--|
| 2/27/79 | | J. Lottcamp | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | 21 | | | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | |
| Wyoming | | Hirsig Ranch | | Wyoming | Laramie | | 18N | 68W | | L.O. Davis | | | | | | | |
| 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 | | |
| | | | | | | | | | 6252.8 | | | | | | | | |
| 273 | 0 | | | | 5.4 | - | | -5.4 | | 6,247.4 | X | 0 | 0 | 322,587 | 544,219 | | |
| 274 | 330 | | 228° 9' | +13.8° | 1.3 | - | | -1.3 | | 6,251.5 | | -155 | -291 | 322,432 | 543,928 | | |
| 275 | 660 | | 223° 44' | +13.8° | 3.4 | 89° 20' | +7.7 | +4.3 | | 6,257.1 | | -354 | -557 | 322,233 | 543,662 | | |
| 276 | 990 | | 222° 9' | +13.8° | 8.6 | 89° - | +17.3 | +8.7 | | 6,261.5 | | -554 | -820 | 322,033 | 543,399 | | |
| 277 | 1305 | | 226° 26.3' | +13.8° | 12.6 | 89° - | +22.8 | +10.2 | | | TP | -648 | -1133 | 321,939 | 543,086 | S-curve | |
| 277 | 1305 | | | | 5.8 | 89° 18' | +15.9 | +10.1 | | 6,262.9 | TP | | | | | | |
| | 1650 | | 67° 7' +180° | +13.8° | +15.0 | 90° 30' | +14.4 | +29.4 | | | BS | -260 | -1629 | | | | |
| | 1650 | | | | +5.3 | 90° 30' | +24.0 | +29.3 | 6,242.2 | | BS | | | | | | |
| 278 | 1320 | | 67° 7' | +13.8° | 10.4 | 91° - | -23.0 | -33.4 | | 6,258.8 | | +208 | +1303 | 321,887 | 542,760 | | |
| 279 | 990 | | " " | " | 9.8 | 91° - | -17.3 | -27.1 | | 6,265.1 | | +156 | +978 | 321,835 | 542,435 | MS face line | |
| 280 | 660 | | " " | " | 8.8 | 91° - | -11.5 | -20.3 | | 6,271.9 | | +104 | +652 | 321,783 | 542,109 | | |
| 281 | 330 | | " " | " | 11.0 | - | | -11.0 | | 6,281.2 | | +52 | +326 | 321,731 | 541,783 | | |
| 282 | 0 | | | | 5.4 | - | | -5.4 | | 6,286.8 | X | 0 | 0 | 321,679 | 541,457 | | |
| 283 | 330 | | 232° 23' | +13.7° | 3.9 | TH | +1.7 | -2.3 | | 6,289.9 | | -134 | -302 | 321,545 | 541,155 | | |
| 284 | 650 | | 225° 7' | +13.7° | 2.7 | 88° 40' | +15.1 | +12.4 | | 6,304.6 | | -337 | -556 | 321,392 | 540,901 | | |
| 285 | 981 | 980 | 224° 43.6' | +13.7° | 6.0 | 88° - | +34.2 | +28.2 | | 6,320.4 | TP | -513 | -835 | 321,166 | 540,622 | S-curve | |
| 285 | 981 | | | | 1.4 | 88° 16' | +29.7 | +28.3 | | | TP | | | | | | |
| | 960 | | 23° 16.7' +180° | +13.7° | +14.4 | 90° 30' | +8.4 | +22.8 | 6,343.5 | | BS | -767 | -577 | | | curve | |
| | 960 | | | | +5.0 | 91° 06' | +18.4 | +23.4 | +231 | | BS | | | | | | |
| 286 | 655 | | 14° 40' | +13.7° | 11.3 | 91° - | -11.4 | -22.7 | | 6,320.8 | | +576 | +311 | 320,975 | 540,356 | | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|-------------|---------|-----------|--|
| 8/27/79 | | J. Coaf | | R. Turner | | 5837 | | RANSOM TURNER | | 3 | 22 | | | | | | |
| AREA | | TOPO MAP | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | | |
| Wyoming | | | Wyoming | Laramie | | 18N | 68W | | L.O. Davis | | | | | | | | |
| 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 | | |
| | | | | | | | | | 6343.5 | | | | | | | | |
| 287 | 330 | | 19°18' | +13.7° | 13.8 | BH | -1.7 | -15.5 | | 6328.0 | | +277 | +180 | 320,676 | 540,225 | | |
| 288 | 0 | | | | 5.4 | - | | -5.4 | | 6338.1 | X | 0 | 0 | 320,399 | 540,045 | | |
| 289 | 330 | | 193°55' | +13.7° | 5.8 | 89°- | +5.8 | +0.0 | | 6343.5 | | -292 | -153 | 320,107 | 539,892 | | |
| 290 | 640 | | 207°4' | +13.7° | 10.1 | 89°- | +11.2 | +1.1 | | 6344.6 | | -485 | -418 | 329,914 | 539,627 | Curve | |
| 291 | 969 | | 210°41.2' | +13.7° | 5.2 | 89°- | +16.9 | +11.7 | | 6355.2 | TP | -692 | -678 | 319,707 | 539,367 | v | |
| 291 | 969 | | | | 2.4 | 89°10' | +14.1 | +11.7 | | | TP | | | | | | |
| | 964 | | 26°35.3'+180° | +13.7° | +10.6 | BH | +4.8 | +15.4 | 6370.6 | | BS | -735 | -623 | | | S-curve | |
| | 964 | | | | +5.3 | 90°36' | +10.1 | +15.4 | | | BS | | | | | | |
| 292 | 648 | | 21°10.5' | +13.7° | 13.2 | BH | -3.2 | -16.4 | | 6354.2 | | +532 | +371 | 319,504 | 539,115 | | |
| 293 | 325 | | 29°51' | +13.7° | 13.3 | - | | -13.3 | | 6357.3 | | +236 | +224 | 319,208 | 538,968 | | |
| | 50 | | 68°54.6' | +13.7° | 5.1 | - | | -5.1 | | 6365.5 | | +6 | +50 | 318,978 | 538,794 | Intersect | |
| 294 | 0 | | | | 5.4 | - | | -5.4 | | 6365.2 | X | 0 | 0 | 318,972 | 538,744 | | |
| 295 | 330 | | 243°39' | +13.6° | 2.2 | 89°- | +5.8 | +3.6 | | 6374.2 | | -73 | -322 | 318,899 | 538,422 | | |
| 296 | 660 | | 241°20' | +13.6° | 1.4 | 88°- | +23.0 | +21.6 | | 6392.2 | | -172 | -637 | 318,800 | 538,107 | | |
| 297 | 985 | 984 | 238°11' | +13.6° | 7.5 | 87°- | +51.5 | +44.0 | | 6414.6 | | -308 | -935 | 318,664 | 537,809 | | |
| 298 | 1295 | 1294 | 242°55' | +13.6° | 12.4 | 87°- | +67.7 | +55.3 | | 6425.9 | TP | -302.3 | -1258 | 318,667 | 537,486 | | |
| 298 | 1295 | | | | 4.9 | 87°20' | +60.2 | +55.3 | | | TP | | | | | | |
| | 980 | | 56°35.5'+180° | +13.6° | +12.7 | BH | +4.9 | +17.6 | 6443.5 | | BS | -332.2 | -922 | | | Curve | |
| | 980 | | | | +5.7 | 90°42' | +12.0 | +17.7 | | | BS | | | | | | |
| 299 | 653 | | 57°49' | +13.6° | 13.7 | - | | -13.7 | | 6429.8 | | +208 | +619 | 318,541 | 537,183 | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|-----------------|---------------|-------------|---------|------------------------------------|--|
| 8/22/77 | | S. Cotcamp | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | 02 | | | | | | |
| AREA | | TOPO MAP | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | | |
| Hiram Co | | Hirsig Ranch | Wyoming | Taramie | | 18N | 68W | | L.O. Davis | | | | | | | | |
| 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 | | |
| | | | | | | | | | 6443.5 | | | | | | | | |
| 300 | 330 | | 64°28' | +13.6° | 8.8 | - | | -8.8 | | 6434.7 | | +68 | +323 | 318,401 | 536,887 | | |
| 301 | 0 | | | | 5.4 | - | | -5.4 | | 6438.1 | π | 0 | 0 | 318,333 | 536,567 | | |
| 302 | 330 | | 245°23' | +13.6° | 3.2 | - | | -3.2 | | 6440.3 | | -63 | -324 | 318,270 | 536,240 | | |
| 303 | 660 | | 251°18' | +13.6° | 2.9 | TH | +3.3 | +0.9 | | 6443.9 | | -59 | -657 | 318,274 | 535,907 | S-curve | |
| 304 | 980 | | 252°42' | +13.6° | 3.8 | 89°30' | +8.6 | +4.8 | | 6448.3 | | -63 | -978 | 318,270 | 535,586 | horiz. correct. y = -20' x = 0' | |
| 305 | 1249 | | 249°35.3' | +13.6° | 6.0 | 89°20' | +14.5 | +8.5 | | 6452.0 | | -148 | -1240 | 318,185 | 535,324 | 318,185 + 535,330(S) N.S. fence | |
| 305 | 1295 | | 251°22.7' | +13.6° | 11.5 | 89°20' | +15.1 | +3.6 | | 6447.1 | TP | -113 | -1290+3 | 318,220 | 535,277 | curve | |
| 305 | 1295 | | | | 7.7 | 89°30' | +11.3 | +3.6 | | | TP | | | | | | |
| | 972 | 969 | 142°49.4' + 180° | +13.6° | -2.1 | 86°- | -67.6 | -65.5 | 6321.6 | | BS | +888 | -387+3 | | | S-curve | |
| | 972 | | | | +5.6 | 85°48' | -71.0 | -65.4 | | | BS | | | | | | |
| 306 | 650 | 649 | 144°43' | +13.6° | 5.9 | 87°- | +34.0 | +28.1 | | 6409.7 | | -603 | +240 | 318,505 | 535,133 | | |
| 307 | 330 | | 149°21' | +13.6° | 4.9 | 87°- | +17.2 | +12.3 | | 6392.9 | | -315 | +97 | 318,793 | 534,990 | | |
| 308 | 0 | | | | 5.4 | - | | -5.4 | | 6376.2 | π | 0 | 0 | 319,108 | 534,893 | | |
| 309 | 330 | | 341°38' | +13.6° | 9.1 | 91°- | -5.8 | -14.9 | | 6366.7 | | +329 | -27 | 319,437 | 534,866 | | |
| 310 | 639 | | 348°46.3' | +13.6° | 5.9 | - | | -5.9 | | 6375.7 | TP | +638 | +26+3 | 319,746 | 534,922 | sharp curve | |
| 310 | 639 | | | | 9.1 | TH | +3.2 | -5.9 | | | TP | | | | | | |
| | 982 | 981 | 121°49.7' + 180° | +13.6° | +7.8 | 93°- | +51.3 | +59.1 | 6434.8 | | BS | +699 | -688+3 | | | | |
| | 982 | 981 | | | +14.6 | 92°36' | +44.5 | +59.1 | | | BS | | | | | | |
| 311 | 657 | | 118°30' | +13.6° | 10.3 | 92°30' | -28.6 | -38.9 | | 6395.9 | | -440 | +487 | 320,025 | 534,724 | | |
| 312 | 330 | | 115°3' | +13.6° | 13.8 | 91°- | -5.8 | -19.6 | | 6415.2 | | -206 | +258 | 320,239 | 534,495 | | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | | | |
|-------------|----------------|-------------------|-----------------------------|----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|---------|---------------|---------|-------------|--|---------|--|
| 8/28/79 | | G. Cotcamp | | R Turner | | 6834 | | RANSOM TURNER | | 3 | 24 | | | | | | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | | | | | |
| Wyoming | | Hirsig Ranch | | Wyoming | | Laramie | | 18N | | 68W | | | | L.O. Davis | | | | | |
| 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 | | | | |
| | | | | | | | | | 6434.8 | | | | | | | | | | |
| 313 | 0 | | | | 54 | - | | -54 | | 6429.4 | T | 0 | 0 | 320,445 | 534,237 | | | | |
| 314 | 326 | | 282° 24.1' | +13.6° | 4.9 | TH | +1.6 | -3.3 | | 6431.5 | TP | +143 | -293+3 | 320,588 | 533,947 | | | | |
| 314 | 326 | | | | 6.2 | 89° 30' | +2.8 | -3.4 | | | TP | | | | | | | | |
| | 660 | | 95° 28' +180° | +13.6° | +13.7 | 89° 10' | -9.6 | +4.1 | 6435.6 | | BS | +216 | -624+3 | | | | | | |
| | 660 | | | | +9.9 | 89° 30' | -5.8 | +4.1 | | | BS | | | | | | | | |
| 315 | 330 | | 95° 25' | +13.6° | 10.9 | 89° 30' | -2.9 | -8.0 | | 6427.6 | | -108 | +312 | 320,696 | 533,638 | | | | |
| 316 | 0 | | | | 54 | - | | -54 | | 6430.2 | T | 0 | 0 | 320,804 | 533,326 | | | | |
| 317 | 330 | | 255° 51.7' | +13.6° | 5.0 | - | | -5.0 | | 6430.6 | | -3 | -330 | 320,801 | 532,996 | | | | |
| BM | 550 | | 248° - | +13.6° | 1.1 | 89° - | +9.6 | +8.5 | | 6444.1 | | -80 | -544 | 320,724 | 532,782 | | | | 6443 elev. 320,715+532 U.S.G.S. + REG 1241745 |
| 318 | 660 | | 255° 51.7' | +13.6° | 2.2 | - | | -2.2 | | 6,433.4 | TP | -6 | -660+3 | 320,798 | 532,669 | | | | |
| 318 | 660 | | | | 5.5 | TH | +3.3 | -2.2 | | | TP | | | | | | | | |
| | 1640 | | 57° 21.8' +180° | +13.6° | +15.0 | 91° - | +28.6 | +43.6 | 6477.0 | | BS | -535 | -1550+3 | | | | | | curve |
| | 1640 | | | | +5.5 | 91° 20' | +38.1 | +43.6 | | | BS | | | | | | | | |
| | 1585 | | 57° 12' | +13.6° | 6.4 | 91° 20' | -36.9 | -43.3 | | 6,433.7 | | +521 | +1497 | 320,784 | 532,519 | | | | 320,785 + 532,660(s) Y-intersect. |
| 319 | 1312 | | " " | " | 14.9 | 91° - | -22.9 | -37.8 | | 6,439.2 | | +431 | +1239 | 320,699 | 532,361 | | | | |
| 320 | 975 | | 57° 17' | +13.6° | 11.0 | 91° 20' | -22.7 | -33.7 | | 6,443.3 | | +319 | +921 | 320,582 | 532,043 | | | | |
| 321 | 657 | | 55° 3' | +13.6° | 11.4 | 91° 20' | -15.3 | -26.7 | | 6,450.3 | | +239 | +612 | 320,502 | 531,734 | | | | |
| 322 | 330 | | 57° 1' | +13.6° | 11.9 | 91° - | -5.8 | -17.7 | | 6,459.3 | | +110 | +311 | 320,323 | 531,433 | | | | |
| 323 | 0 | | | | 5.4 | - | | -5.4 | | 6,471.6 | T | 0 | 0 | 320,263 | 531,122 | | | | |
| 324 | 330 | | 247° 36' | +13.6° | 3.0 | - | | -3.0 | | 6,474.0 | | -50 | -326 | 320,213 | 530,796 | | | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|---------------|-------------|---------|---------|--|
| 8/28/79 | | G. Cotcamp | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | 25 | | | | | | |
| AREA | | TOPO MAP | STATE | COUNTY | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | | | |
| Wyoming | | Hirsig Ranch | Wyoming | Laramie | 8N | 68W/69W | | L.O. Davis | | | | | | | | | |
| 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 | | |
| | | | | | | | | | 6477.0 | | | | | | | | |
| 325 | 660 | | 244° 3' | +13.6° | 38 | 89° | +11.5 | +7.7 | | 6484.7 | | -141 | -645 | 320,122 | 530,977 | ↑ | |
| 326 | 980 | 979 | 240° 30' | +13.6° | 124 | 88° | +34.2 | +21.8 | | 6498.8 | | -268 | -942 | 319,995 | 530,180 | R.68W | |
| 327 | 1300 | 1299 | 237° 47.6' | +13.6° | 14.1 | 88° 12' | +40.8 | +26.7 | | 6503.7 | TP | -414 | -1231+3 | 319,849 | 529,894 | curve | |
| 327 | 1300 | | | | 13.3 | 88° 14' | +40.1 | +26.8 | | | TP | | | | | R.69W | |
| | 1965 | 1962 | 80° 25.3' +180° | +13.6° | +12.2 | 92° 40' | +91.3 | +103.5 | 6607.2 | | BS | +138 | -1957+3 | | | ↓ | |
| | 1965 | | | | +6.5 | 92° 50' | +97.0 | +103.5 | | | BS | | | | | | |
| 328 | 1640 | 1638 | 82° 36' | +13.6° | 9.1 | 93° | -85.7 | -94.8 | | 6512.4 | | -177 | +1628 | 319,810 | 529,568 | | |
| 329 | 1316 | 1314 | 83° 46' | +13.6° | 14.5 | 93° | -68.8 | -83.3 | | 6523.9 | | -168 | +1303 | 319,819 | 529,243 | | |
| 330 | 990 | 988 | 89° 27' | +13.6° | 11.3 | 93° 20' | -57.5 | -68.8 | | 6538.4 | | -138 | +978 | 319,849 | 528,918 | | |
| 331 | 660 | 659 | " " | " | 14.9 | 93° 20' | -38.3 | -53.2 | | 6554.0 | | -92 | +653 | 319,895 | 528,593 | | |
| 332 | 330 | | " " | " | 13.4 | 92° 20' | -13.4 | -26.8 | | 6580.4 | | -46 | +327 | 319,941 | 528,267 | | |
| 333 | 0 | | " | " | 5.4 | - | | -5.4 | | 6601.8 | π | 0 | 0 | 319,987 | 527,940 | | |
| 334 | 330 | | 252° 19' | +13.6° | 1.7 | TH | +1.7 | ±0.0 | | 6607.2 | | -23 | -329 | 319,964 | 527,611 | | |
| 335 | 660 | | 248° 26' | +13.6° | 8.5 | 89° | +11.5 | +3.0 | | 6610.2 | | -91 | -654 | 319,896 | 527,286 | | |
| 336 | 987 | | 246° 2' | +13.6° | 11.7 | 89° | +17.2 | +5.5 | | 6612.7 | | -178 | -971 | 319,809 | 526,969 | | |
| 337 | 1300 | | 249° 53.8' | +13.6° | 13.5 | 89° | +22.7 | +9.2 | | | TP | -147+2 | -1292+3 | 319,842 | 526,651 | | |
| 337 | 1300 | | | | 6.0 | 89° 20' | +15.1 | +9.1 | | 6616.3 | TP | | | | | | |
| | 980 | | 103° 34.3' +180° | +13.6° | +13.6 | 91° | +17.1 | +30.7 | | | BS | +448+2 | -872+3 | | | | |
| | 980 | | | | +5.0 | 91° 30' | +25.6 | +30.6 | 6646.9 | | BS | | | | | | |
| 338 | 653 | | 103° 34.3' | +13.6° | 7.5 | 91° | -11.4 | -18.9 | | 6628.0 | | -298 | +581 | 319,994 | 526,363 | | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | | | |
|-------------|----------------|-------------------|-----------------------------|----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|-----------------|--------|---------------|---------|-------------|--|---------|---------------------------------|
| 8/28/79 | | G. CoCamp | | R Turner | | 6834 | | RANSOM TURNER | | 3 | 26 | | | | | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | | | |
| Wyoming | | Hirsig Ranch | | Wyoming | Laramie | | 8N | 69W | | L.O. Davis | | | | | | | | | |
| 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 | | | | |
| | | | | | | | | | 6646.9 | | | | | | | | | | |
| 339 | 325 | | 101° 6' | +136° | 13.1 | - | | -13.1 | | 6,633.8 | | -136 | +295 | 320,156 | 526,077 | | | | |
| 340 | 0 | | | | 5.4 | - | | -5.4 | | 6,641.5 | π | 0 | 0 | 320,292 | 525,782 | | | | |
| 341 | 330 | | 247° 49' | +138° | 7.5 | 88°- | +11.5 | +4.0 | | 6,650.9 | | -48 | -326 | 320,244 | 525,456 | | | | |
| 342 | 660 | | " " | " | 14.3 | 88°- | +23.0 | +8.7 | | 6,655.6 | | -96 | -653 | 320,196 | 525,129 | | | | |
| ≡ | 960 | | 246° 54' | +138° | 6.0 | 88°30' | +25.1 | +19.1 | | 6,666.0 | | -155 | -947 | 320,137 | 524,825 | | | | 320,135+524,880(s) 1/4 fence |
| 343 | 990 | | 247° 15.8' | +138° | 9.8 | 88°20' | +28.8 | +19.0 | -18.9 | 6,665.8 | TP | -154+2 | -978+3 | 320,140 | 524,807 | | | | |
| 343 | 990 | | | | 4.2 | 88°40' | +23.0 | +18.8 | | | TP | | | | | | | | |
| | 978 | | 19° 22.5' +180° | +138° | 7.1 | 89°- | -17.1 | -10.0 | 6,655.8 | | BS | -818+2 | -535+3 | | | | | | curve |
| | 978 | | | | +4.3 | 89°10' | -14.2 | -9.9 | | | BS | | | | | | | | |
| 344 | 655 | | 19° 22.5' | +138° | 7.5 | 89°- | +11.4 | +3.9 | | 6,659.7 | | +548 | +358 | 319,872 | 524,633 | | | | |
| 345 | 327 | | " " | " | 3.0 | 89°- | +5.7 | +2.7 | | 6,658.5 | | +274 | +179 | 319,598 | 524,954 | | | | |
| 346 | 0 | | | | 5.4 | - | | -5.4 | | 6,650.4 | π | 0 | 0 | 319,324 | 524,225 | | | | |
| 347 | 330 | | 229° 18' | +138° | 3.7 | - | | -3.7 | | 6,652.1 | | -149 | -294 | 319,125 | 523,781 | | | | |
| 348 | 630 | | 242° 29.3' | +138° | 2.5 | - | | -2.5 | | 6,653.3 | TP | -147+2 | -612+3 | 319,177 | 523,666 | | | | sharp curve |
| 348 | 630 | | | | 5.6 | TH | +3.2 | -2.5 | | | TP | | | | | | | | |
| | 330 | | 101° 52.3' +180° | +138° | +9.3 | - | | +9.3 | 6,662.6 | | BS | +143+2 | -297+2 | | | | | | |
| | 330 | | | | +7.6 | 8H | +1.7 | +9.3 | | | BS | | | | | | | | |
| 349 | 0 | | | | 5.4 | - | | -5.4 | | 6,657.2 | π | 0 | 0 | 319,322 | 523,371 | | | | |
| 350 | 330 | | 213° 44' | +138° | 13.5 | 91° | -5.8 | -19.3 | | 6,643.3 | | +278 | -177 | 319,600 | 523,194 | | | | |
| 351 | 655 | | 309° 35' | +138° | 11.3 | 92°- | -22.8 | -34.1 | | 6,628.5 | | +526 | -391 | 319,848 | 522,980 | | | | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|----------------------------|--------------------------|---------|---------|-------|
| 8/28/79 | | G. Cotcamp | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | 27 | | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | |
| Wyoming | | rsig Ranch | | Wyoming | Laramie | | 18N | 69W | | L.O. Davis | | | | | | |
| 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 |
| | | | | | | | | | 6662.6 | | | | | | | |
| 352 | 977 | 976 | 304°25' | +138° | 14.4 | 92°- | -34.1 | -48.5 | | 6,614.1 | TP | +728+2 | -650 | 320,052 | 522,721 | curve |
| 352 | 977 | | | | 13.3 | 92°4' | -35.2 | -48.5 | | | TP | | | | | |
| | 652 | 650 | 60°6.6'+180° | +138° | +7.0 | 86°- | -45.4 | -38.4 | 6,575.7 | | BS | -180+2 | -624 | | | curve |
| | 652 | | | | +5.1 | 86°10' | -43.5 | -38.4 | | | BS | | | | | |
| 353 | 326 | 325 | 60°6.6' | +138° | 11.7 | 86°- | +22.7 | +11.0 | | 6,586.7 | | +90 | +312 | 319,964 | 522,409 | |
| 354 | 0 | | | | 54 | - | | -5.4 | | 6,570.3 | X | 0 | 0 | 319,874 | 522,097 | |
| 355 | 330 | | 265°19' | +138° | 14.3 | 91°- | -5.8 | -20.1 | | 6,555.6 | | +52 | -326 | 319,926 | 524,771 | |
| 356 | 656 | 654 | 268°6.3° | +138° | 10.2 | 92°- | -22.8 | -33.0 | | 6,542.7 | TP | +135 | -640 | 320,009 | 521,457 | curve |
| 356 | 656 | | | | 5.6 | 92°24' | -27.4 | -33.0 | | | TP | | | | | |
| | 655 | | 111°4'+180° | +138° | +7.0 | 88°- | -22.8 | -15.8 | | | BS | +374 | -537 | | | |
| | 655 | | | | +5.8 | 88°6' | -21.7 | -15.9 | 6,526.8 | | BS | | | | | |
| 357 | 330 | | 119°35' | +138° | 6.0 | 88°- | +11.5 | +5.5 | | 6,532.3 | | -205 | +259 | 320,178 | 521,179 | |
| 358 | 0 | | | | 54 | - | | -5.4 | | 6,521.4 | X | 0 | 0 | 320,383 | 520,920 | |
| 359 | 330 | | 280°5' | +138° | 4.2 | - | | -4.2 | | 6,522.6 | | +134 | -302 | 320,517 | 520,618 | |
| 360 | 650 | | 281°52.7' | +138° | 3.0 | 89°- | +11.3 | +8.3 | | 6,535.1 | TP | +282 | -586 | 320,665 | 520,374 | curve |
| 360 | 650 | | | | 4.9 | 88°50' | +13.2 | +8.3 | | | TP | | | | | |
| | 970 | | 128°6.8'+180° | +138° | +7.7 | 88°50' | -19.7 | -12.0 | 6,523.1 | | BS | +763 | -598 | | | curve |
| | 970 | | | | +6.1 | 88°56' | -18.1 | -12.0 | | | BS | | | | | |
| 361 | 650 | | 124°- | +138° | 9.3 | - | | -9.3 | | 6,513.8 | | -482 | +437 | 320,946 | 520,173 | |
| 362 | 330 | | 113°- | +138° | 14.2 | - | | -14.2 | | 6,508.9 | | -198 | +264 | 321,230 | 520,000 | |

| DATE | | INSTRUMENT MAN | | | ROD MAN | | | PARTY NUMBER | | NOTES CHECKED BY | | | LINE NO. | PAGE | | | |
|----------------|----------------|-------------------|-----------------------------|---------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|---------------|-------------|---------|---------------------------------------|--|
| 8/28/79 | | C. Cotcamp | | | R. Turner | | | 6834 | | Ransom Turner | | | 3 | 28 | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | |
| Wyoming | | Hirsig Ranch | | Wyoming | Laramie | | | 18N | 69W | | L.O. Davis | | | | | | |
| 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 | | |
| | | | | | | | | | 6523.1 | | | | | | | | |
| 363 | 0 | | | | 54 | - | | -5.4 | | 6517.7 | TP | 0 | 0 | 321,428 | 519,736 | unable to locate BM | |
| 364 | 317 | | 256°55' | +13.8° | 1.7 | - | | -1.7 | | 6521.4 | TP | +4 | -317 | 321,432 | 519,919 | Hirsig Ranch yard | |
| 364 | 317 | | | | 3.3 | TH | +1.6 | -1.7 | | | TP | | | | | | |
| | 985 | | 85°163'+180° | +13.8° | +13.6 | 90°50' | +14.3 | +27.9 | 6549.3 | | BS | +155 | -973 | | | curve | |
| | 985 | | | | +14.7 | 90°46' | +13.2 | +27.9 | | | BS | | | | | | |
| 365 | 660 | | 82°45' | +13.8° | 8.7 | 91°- | -11.5 | -20.2 | | 6529.1 | | -75 | +656 | 321,512 | 519,102 | | |
| 365 | 660 | | 83°47' | +13.8° | 8.6 | 91°- | -11.5 | -20.1 | | 6529.2 | | -87 | +654 | 321,500 | 519,100 | 321,500 + 519,100 (s) T-rd (north) | |
| 366 | 330 | | 82°45' | +13.8° | 13.4 | - | | -13.4 | | 6535.9 | | -38 | +328 | 321,549 | 518,774 | horiz. correct. $y=74'$ $x=+97'$ | |
| 367 | 0 | | | | 5.4 | - | | -5.4 | | 6543.9 | TP | 0 | 0 | 321,587 | 518,446 | | |
| 368 | 330 | 329 | 285°41' | +13.6° | 4.3 | 86°- | +23.0 | +18.7 | | 6568.0 | | +161 | -287 | 321,748 | 518,159 | | |
| 369 | 650 | 648 | 293°24.3' | +13.6° | 10.9 | 84°54' | +57.5 | +46.7 | | 6596.0 | TP | +390+2 | -517-3 | 321,979 | 517,926 | Curve + bill | |
| 369 | 650 | | | | 13.5 | 84°40' | +60.2 | +46.7 | | | TP | | | | | | |
| | 648 | | 90°1.4'+180° | +13.6° | +5.0 | 92°- | +22.6 | +27.6 | 6623.6 | | BS | +153+2 | -630-3 | | | curve | |
| | 648 | | | | +14.5 | 91°10' | +13.2 | +27.7 | | | BS | | | | | | |
| 370 | 330 | | 79°17' | +13.6° | 13.7 | - | | -13.7 | | 6609.9 | | -17 | +330 | 322,117 | 517,623 | | |
| 371 | 0 | | | | 54 | - | | -5.4 | | 6618.2 | TP | 0 | 0 | 322,134 | 517,293 | | |
| 372 | 330 | | 274°35' | +13.6° | 3.3 | 89°- | +5.8 | +2.5 | | 6626.1 | | +103 | -314 | 322,237 | 516,979 | | |
| 373 | 660 | | 275°29' | +13.6° | 1.8 | 89°- | +11.5 | +9.7 | | 6633.3 | TP | +216+2 | -624-3 | 322,352 | 516,666 | | |
| 373 | 660 | | | | 5.7 | 88°40' | +15.4 | +9.7 | | | TP | | | | | | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|--------------------|------------------|-------------|---------|---------|---------|
| 8/29/79 | | G. Cotcamp | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | 29 | | | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | |
| Wyoming | | Hirsig Ranch | | Wyoming | Laramie | | 18N | 5 th | | L.O. Davis | | | | | | | |
| 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 | | |
| 373 | | | | | | | | | | 6,633.3 | | | | | | | |
| | 990 | | 85°11' +180° | +136° | +8.7 | 91°- | +17.3 | +26.0 | 6,659.3 | | BS | +151+2 | -978-3 | | | | |
| | 990 | | | | +5.8 | 91°10' | +20.2 | +26.0 | | | BS | | | | | | |
| 374 | 660 | | 85°11' | +136° | 14.1 | BH | -3.3 | -17.4 | | 6,641.9 | | -101 | +652 | 322,404 | 516,337 | | |
| 375 | 330 | | " " | " | 13.2 | BH | -1.7 | -14.9 | | 6,644.4 | | -50 | +326 | 322,455 | 516,011 | | |
| 376 | 0 | | | | 54 | - | | -5.4 | | 6,653.9 | π | 0 | 0 | 322,505 | 515,685 | | |
| 377 | 330 | | 259°54' | +136° | 3.0 | 89°- | +5.8 | +2.8 | | 6,662.1 | | +20 | -329 | 322,525 | 515,356 | | |
| 378 | 660 | | 257°8' | +136° | 1.5 | 89°- | +11.5 | +10.0 | | 6,669.3 | | +8 | -660 | 322,513 | 515,025 | | |
| 379 | 990 | | 257°47.4' | +136° | 5.4 | 88°40' | +23.0 | +17.6 | | 6,676.9 | TP | -28+2 | -990-3 | 322,479 | 514,692 | | |
| 379 | 990 | | | | 8.2 | 88°30' | +25.9 | +17.7 | | | TP | | | | | | |
| | 1318 | | 63°10.2' +180° | +136° | +8.5 | 91°- | +23.0 | +31.5 | 6,708.4 | | BS | -302+2 | -1283-3 | | | | curve |
| | 1318 | | | | +5.4 | 91°8' | +26.1 | +31.5 | | | BS | | | | | | |
| 380 | 990 | | 62°10' | +136° | 6.8 | 91°- | -17.3 | -24.1 | | 6,684.3 | | +243 | +960 | 322,422 | 514,366 | | |
| 381 | 660 | | 62°54' | +136° | 13.3 | BH | -3.3 | -16.6 | | 6,691.8 | | +154 | +692 | 322,333 | 514,048 | | |
| 382 | 330 | | " " | " | 10.7 | - | | -10.7 | | 6,697.7 | | +77 | +321 | 322,256 | 513,727 | | |
| 383 | 0 | | | | 54 | - | | -5.4 | | 6,703.0 | π | 0 | 0 | 322,179 | 513,406 | | |
| 384 | 330 | | 241°3' | +136° | 4.9 | - | | -4.9 | | 6,703.5 | | -87 | -318 | 322,092 | 513,088 | | |
| 385 | 663 | | 231°26' | +136° | 0.3 | - | | -0.3 | | 6,708.1 | | -276 | -592 | 321,903 | 512,814 | | |
| 386 | 980 | | 228°40' | +136° | 5.1 | 89°- | +17.1 | +12.0 | | 6,720.4 | | -456 | -867 | 321,723 | 512,539 | | |
| 387 | 1305 | | 230°41' | +136° | 8.1 | 89°- | +22.8 | +14.7 | | | TP | -566 | -1176-3 | 321,613 | 512,227 | | S-curve |
| 387 | 1305 | | | | 5.1 | 89°8' | +19.7 | +14.6 | | 6,723.0 | TP | | | | | | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | |
|-------------|----------------|-----------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|---------|---------|-------------|---------|---------|-----------------------|
| 8/28/79 | | G. Cotcamp | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | 30 | | | | | | |
| AREA | | TOPO MAP | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | | |
| Wyoming | | Hirsig Ranch/Farthing | Wyoming | Laramie | | 18N | 69W | | L.O. Davis | | | | | | | | |
| 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 + | EAST + | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | SOUTH - | WEST - | Y | X | | |
| | | | | | | | | | | | | LAT. | DEP. | | | | |
| 387 | | | | | | | | | | 6723.0 | | | | | | | |
| | 1642 | | 71°30.6'+180° | +13.6° | +5.5 | 91°- | +28.7 | +34.2 | 6,757.2 | | BS | -140 | -1636-3 | | | | |
| | 1642 | | | | +14.2 | 90°42' | +20.1 | +34.3 | | | BS | | | | | | |
| 388 | 1320 | | 72°44' | +13.6° | 15.0 | 90°30' | -11.5 | -26.5 | | 6,730.7 | | +84 | +1317 | 321,557 | 511,905 | | ↑ |
| 389 | 990 | | " " | " | 13.5 | 90°30' | -8.6 | -22.1 | | 6,735.1 | | +63 | +988 | 321,536 | 511,576 | | Hirsig Ranch Quad. |
| 390 | 660 | | " " | " | 11.9 | 90°30' | -5.8 | -17.7 | | 6,739.5 | | +42 | +659 | 321,515 | 511,247 | | Farthing Quad. |
| 391 | 330 | | " " | " | 9.9 | - | - | -9.9 | | 6,747.3 | | +21 | +329 | 321,494 | 510,917 | | ↓ |
| 392 | 0 | | | | 54 | - | - | -5.4 | | 6,751.8 | π | 0 | 0 | 321,473 | 510,588 | | |
| 393 | 330 | | 255°10' | +13.6° | 4.3 | - | - | -4.3 | | 6,752.9 | | -7 | -330 | 321,466 | 510,258 | | |
| 394 | 660 | | " " | " | 1.5 | - | - | -1.5 | | 6,755.7 | | -14 | -660 | 321,459 | 509,928 | | |
| 395 | 986 | | 259°23.9' | +13.6° | 3.3 | 89°30' | +8.6 | +5.3 | | 6,762.5 | TP | +52 | -985-3 | 321,525 | 509,600 | | curve |
| 395 | 986 | | | | 11.8 | 89°- | +17.2 | +5.4 | | | TP | | | | | | |
| | 1310 | | 73°23.5'+180° | +13.6° | +10.9 | 89° | +6.6 | +17.5 | | | BS | -69 | -1308-3 | | | | S-curve |
| | 1310 | | | | +6.1 | 90°30' | +11.4 | +17.5 | 6,780.0 | | BS | | | | | | unable to locate B.M. |
| 396 | 985 | | 71°37' | +13.6° | 12.7 | 89° | -4.9 | -17.6 | | 6,762.4 | | +82 | +982 | 321,538 | 509,271 | | |
| 397 | 660 | | 74°- | +13.6° | 14.7 | - | - | -14.7 | | 6,765.3 | | +28 | +659 | 321,484 | 508,948 | | |
| 398 | 330 | | 80°50' | +13.6° | 10.0 | - | - | -10.0 | | 6,770.0 | | -26 | +329 | 321,430 | 508,618 | | |
| 399 | 0 | | | | 54 | - | - | -5.4 | | 6,774.6 | π | 0 | 0 | 321,456 | 508,289 | | |
| 400 | 330 | | 271°25' | +13.6° | 04 | TH | +1.7 | +1.3 | | 6,781.3 | | +86 | -319 | 321,542 | 507,970 | | |
| 401 | 660 | | " " | " | 54 | 89°- | +11.5 | +6.1 | | 6,786.1 | | +171 | -637 | 321,627 | 507,652 | | |
| 402 | 990 | | " " | " | 51 | 89°- | +17.3 | +12.2 | | 6,792.2 | | +257 | -956 | 321,713 | 507,333 | | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|-----------------|---------------|---------------|---------|
| 8/28/79 | | G. Cotcamp | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | | 31 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| Wyoming | | Farthing | | Wyoming | | Laramie | | 18N | | 69W | | | | L.O. Davis | |
| 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 |
| | | | | | | | | | 6780.0 | | | | | | |
| 403 | 1320 | | 272°55' | +13.6° | 1.3 | 89°- | +23.0 | +21.7 | | 6801.7 | | +375 | -1266 | 321,831 | 507,023 |
| 404 | 1650 | | 274°9.7' | +13.6° | 6.0 | 88°40' | +38.4 | +32.4 | | 6,812.4 | TP | +503 | -1571.3 | 321,959 | 506,715 |
| 404 | 1650 | | | | 10.8 | 88°30' | +43.2 | +32.4 | | | TP | | | | |
| | 1640 | | 79°11.2'+180° | +13.6° | +13.7 | 90°26' | +12.4 | +26.2 | (26.2) | | GS | +80 | -1638.3 | | S-curve |
| | 1640 | | | | +5.3 | 90°44' | +21.0 | +26.3 | 6,838.5 | | GS | | | | |
| 405 | 1315 | | 76°45' | +13.6° | 12.0 | 90°30' | -11.5 | -23.5 | | 6,815.1 | | -8 | +1315 | 322,031 | 506,389 |
| 406 | 988 | | 76°13' | +13.6° | 3.0 | 91°- | -17.2 | -20.2 | | 6,818.4 | | +3 | +988 | 322,042 | 506,062 |
| 407 | 660 | | 78°9' | +13.6° | 12.5 | BH | -3.3 | -15.8 | | 6,822.8 | | -20 | +660 | 322,019 | 505,734 |
| 408 | 330 | | " " | " | 12.4 | - | | -12.4 | | 6,826.2 | | -10 | +330 | 322,029 | 505,404 |
| 409 | 0 | | | | 5.4 | - | | -5.4 | | 6,833.2 | TP | 0 | 0 | 322,039 | 505,074 |
| 410 | 330 | | 269°37' | +13.6° | 1.1 | - | | -1.1 | | 6,837.5 | | +75 | -321 | 322,114 | 504,753 |
| 411 | 660 | | " " | " | 3.1 | 89°- | +11.5 | +8.4 | | 6,847.0 | | +151 | -643 | 322,190 | 504,431 |
| 412 | 990 | | " " | " | 4.8 | 89°- | +17.3 | +12.5 | | 6,851.1 | | +226 | -964 | 322,265 | 504,110 |
| 413 | 1310 | | 272°44.4' | +13.6° | 7.2 | 88°40' | +30.5 | +23.3 | | 6,861.9 | TP | +369 | -1257.1 | 322,408 | 503,816 |
| 413 | 1310 | | | | 5.7 | 88°44' | +29.0 | +23.3 | | | TP | | | | |
| | 1320 | | 86°37.3'+180° | +13.6° | +5.7 | 90°50' | +19.2 | +24.9 | 6,886.8 | | GS | +234 | -1299 | | |
| | 1320 | | | | +9.5 | 90°40' | +15.4 | +24.9 | | | GS | | | | |
| ≠ | 1240 | | 86°49.2' | +13.6° | 1.4 | 90°30' | -10.8 | -22.2 | | 6,864.6 | | -224 | +1220 | 322,418 | 503,737 |
| 414 | 990 | | 86°37.3' | +13.6° | 12.7 | BH | -5.0 | -17.7 | | 6,869.1 | | -176 | +974 | 322,466 | 503,491 |
| 415 | 660 | | 89°24' | +13.6° | 12.1 | BH | -3.3 | -15.4 | | 6,871.4 | | -148 | +643 | 322,494 | 503,160 |

322,370+503,770
N-S fence

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|--------------------|------------------|-------------|---------|-----------------------------|--|
| 8/28/79 | | G. Sotcamp | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | 32 | | | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | |
| Wyoming | | Fortiing | | Wyoming | Laramie | | 18N | 6°W | | L.O. Davis | | | | | | | |
| 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 | | |
| | | | | | | | | | 6886.8 | | | | | | | | |
| 416 | 330 | | 92°50' | +13.6° | 7.7 | - | | -7.7 | | 6879.1 | | -16 | +330 | 322,626 | 502,847 | | |
| 417 | 0 | | | | 5.4 | - | | -5.4 | | 6881.4 | X | 0 | 0 | 322,642 | 502,517 | | |
| 418 | 330 | | 280°37' | +13.6° | 9.3 | - | | -9.3 | | 6877.5 | | +135 | -301 | 322,777 | 502,216 | | |
| 419 | 440 | | 279°7' | +13.6° | 11.7 | - | | -11.7 | | 6875.1 | | +170 | -406 | 322,812 | 502,111 | Tran (North) | |
| BM | 622 | | 280°55.3' | +13.6° | 12.9 | - | | -12.9 | | 6873.9 | | +258 | -566 | 322,900 | 501,951 | U.S.G.S. REG. 1 (lev) 6871' | |
| 419 | 650 | | 279°25.6' | +13.6° | 14.3 | 91° | -11.3 | -25.6 | | 6861.2 | TP | +201 | -618 | 322,843 | 501,899 | curve | |
| 419 | 650 | | | | 12.0 | 91°12' | -13.6 | -25.6 | | | TP | | | | | | |
| | 988 | 984 | 70°38.4'+180° | +13.6° | +4.4 | 85° | -85.8 | -81.4 | 6779.8 | | BS | -99 | -979 | | | | |
| | 988 | | | | +7.3 | 89°50' | -88.6 | -81.3 | | | BS | | | | | | |
| 420 | 660 | 658 | 74°30' | +13.6° | 4.5 | 86° | +45.9 | +41.4 | | 6821.2 | | +22 | +658 | 322,766 | 501,578 | | |
| 421 | 330 | | " " | " | 1.1 | 87° | +17.2 | +16.1 | | 6795.9 | | +11 | +330 | 322,755 | 501,250 | | |
| 422 | 0 | | | | 5.4 | - | | -5.4 | | 6774.4 | X | 0 | 0 | 322,744 | 500,920 | | |
| 423 | 327 | | 291°39.4' | +13.6° | 11.8 | 92° | -11.4 | -23.2 | | 6756.6 | TP | -83 | -316 | 322,661 | 500,604 | | |
| 423 | 327 | | | | 6.1 | 93° | -17.1 | -23.2 | | | TP | | | | | curve | |
| | 988 | 986 | 45°59.4'+180° | +13.6° | +6.1 | 86°36' | -58.5 | -52.4 | 6704.2 | | BS | -499 | -850 | | | curve | |
| | 988 | | | | +7.9 | 86°30' | -60.2 | -52.3 | | | BS | | | | | | |
| 424 | 660 | 659 | 48°31' | +13.6° | 5.7 | 87° | +34.5 | +28.8 | | 6733.0 | | +308 | +582 | 322,470 | 500,336 | | |
| 425 | 330 | | 50°21' | +13.6° | 2.0 | 88° | +11.5 | +9.5 | | 6713.7 | | +145 | +296 | 322,307 | 500,050 | | |
| 426 | 0 | | | | 5.4 | - | | -5.4 | | 6698.8 | X | 0 | 0 | 322,162 | 499,754 | | |
| 427 | 330 | | 239°49' | +13.6° | 9.3 | 93° | -17.2 | -26.5 | | 6677.7 | | -94 | -316 | 322,068 | 499,438 | | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|--------------------|------------------|-------------|---------|--------------|--|
| 8/28/79 | | G. Cotcamp | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | 33 | | | | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | |
| Wyoming | | Farthing | | Wyoming | | Laramie | | 18N | 69W/70W | | L.O. Davis | | | | | | |
| 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 | | |
| | | | | | | | | | 6704.2 | | | | | | | | |
| 428 | 660 | 659 | 239°49' | +13.6° | 118 | 93° | -34.5 | -46.3 | | 6657.9 | | -188 | -632 | 321,974 | 499,122 | ↑ | |
| 429 | 980 | 978 | 244°13.4' | +13.6° | 5.3 | 93°50' | -65.4 | -70.7 | | 6,633.5 | TP | -206 | -956 | 321,956 | 498,798 | curve R.69W. | |
| 429 | 980 | | | | 11.0 | 93°30' | -59.7 | -70.7 | | | TP | | | | | | |
| | 640 | 639 | 73°18.2'+180° | +13.6° | +6.9 | 87° | -33.4 | -26.5 | 6607.0 | | BS | -34 | -638 | | | sharp curve | |
| | 640 | | | | +10.6 | 86°40' | -37.2 | -26.6 | | | BS | | | | | | |
| 430 | 330 | | 60°32' | +13.6° | 0.1 | 87° | +17.2 | +17.1 | | 6624.1 | | +90 | +317 | 322,012 | 498,477 | R.70W. | |
| 431 | 0 | | | | 5.9 | - | - | -5.4 | | 6,601.6 | TP | 0 | 0 | 321,922 | 498,160 | ↓ | |
| 432 | 330 | | 239°5' | +13.6° | 3.0 | 93° | -17.2 | -20.2 | | 6,586.8 | | -98 | -315 | 321,824 | 497,845 | | |
| 433 | 660 | 659 | " | " | 4.5 | 93° | -34.5 | -39.0 | | 6,568.0 | | -196 | -629 | 321,726 | 497,531 | | |
| 434 | 990 | 989 | " | " | 2.9 | 93° | -51.7 | -54.6 | | 6,552.4 | | -294 | -944 | 321,628 | 497,216 | | |
| 435 | 1312 | 1310 | 243°6.2' | +13.6° | 4.1 | 93° | -68.6 | -72.7 | | 6,534.3 | TP | -301 | -1275 | 321,621 | 496,885 | curve | |
| 435 | 1312 | | | | 7.9 | 92°50' | -64.8 | -72.7 | | | TP | | | | | | |
| | 660 | 659 | 63°14.9'+180° | +13.6° | +5.5 | 87°26' | -29.5 | -24.0 | 6,510.3 | | BS | -150 | -642 | | | | |
| | 660 | | | | +2.8 | 87°40' | -26.8 | -24.0 | | | BS | | | | | | |
| 436 | 330 | | 63°14.9' | +13.6° | 3.7 | 88° | +11.5 | +7.8 | | 6,518.1 | | +75 | +321 | 321,546 | 496,564 | | |
| 437 | 0 | | | | 5.4 | - | - | -5.4 | | 6,504.9 | TP | 0 | 0 | 321,471 | 496,243 | | |
| 438 | 330 | | 230°22' | +13.6° | 4.9 | 93° | -17.2 | -22.1 | | 6,488.2 | | -195 | -297 | 321,326 | 495,946 | | |
| 439 | 654 | | 223°32.5' | +13.6° | 3.9 | 92° | -22.8 | -26.7 | | 6,483.6 | TP | -355 | -549 | 321,116 | 495,694 | curve | |
| 439 | 654 | | | | 13.4 | 91°10' | -13.3 | -26.7 | | | TP | | | | | | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|---------|
| 8/29/79 | | G. Cotcamp | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | | 34 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| Wyoming | | Farthing | | Wyoming | | Laramie | | 18N | | 70W | | | | L.O. Davis | |
| 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 |
| 439 | | | | | | | | | | 6483.6 | | | | | |
| | 984 | | 63°35.7' + 180° | +13.6° | +11.7 | 88° - | -34.3 | -22.6 | 6461.0 | | BS | -218 | -960 | | Curve |
| | 984 | | | | +5.5 | 88°22' | -28.0 | -22.5 | | | BS | | | | |
| 440 | 660 | | 67°34' | +13.6° | 10.7 | 88° - | +23.0 | +12.3 | | 6473.3 | | +101 | +652 | 320,999 | 495,386 |
| 441 | 330 | | " " | " | 3.7 | 89° - | +5.8 | +2.1 | | 6463.1 | | +51 | +326 | 320,949 | 495,060 |
| 442 | 0 | | | | 5.4 | - | | -5.4 | | 6455.6 | π | 0 | 0 | 320,898 | 494,734 |
| | 164 | | 253°15' | +13.6° | 10.2 | - | | -10.2 | | 6450.8 | | -9 | -164 | 320,889 | 494,570 |
| 443 | 330 | | 258°48' | +13.8° | 14.5 | 84 | -1.7 | -16.2 | | 6444.8 | | -15 | -330 | 320,883 | 494,404 |
| | 597 | | 261°13.5' | +13.8° | 13.4 | 91° - | -10.4 | -23.8 | | 6437.2 | | +52 | -595 | 320,950 | 494,139 |
| 444 | 660 | | 262°36' | +13.8° | 8.2 | 91°30' | -17.3 | -25.5 | | 6435.5 | | +74 | -656 | 320,972 | 494,078 |
| 445 | 985 | | 264°55' | +13.8° | 9.2 | 91°30' | -25.8 | -35.0 | | 6426.0 | | +199 | -974 | 321,047 | 493,760 |
| 446 | 1312 | | 266°29.2' | +13.8° | 9.2 | 91°30' | -34.3 | -43.5 | | 6417.5 | TP | +234+1 | -1291+4 | 321,133 | 493,447 |
| 446 | 1312 | | | | 5.4 | 91°40' | -38.1 | -43.5 | | | TP | | | | |
| | 990 | | 82°59.7' + 180° | +13.8° | +13.6 | 88° - | -34.5 | -20.9 | 6396.6 | | BS | +117+1 | -983+4 | | |
| | 990 | | | | +5.0 | 88°30' | -25.9 | -20.9 | | | BS | | | | |
| 447 | 660 | | 80°20' | +13.8° | 10.4 | 88° - | +23.0 | +12.6 | | 6409.2 | | -48 | +658 | 321,203 | 493,126 |
| 448 | 330 | | 77°20' | +13.8° | 2.2 | 89° - | +5.8 | +3.6 | | 6400.2 | | -7 | +330 | 321,244 | 492,798 |
| 449 | 0 | | | | 5.4 | - | | -5.4 | | 6391.2 | π | 0 | 0 | 321,251 | 492,468 |
| 450 | 330 | | 252°42' | +13.8° | 12.8 | - | | -12.8 | | 6383.8 | | -20 | -329 | 321,231 | 492,139 |
| 451 | 660 | | " " | " | 8.0 | 91° - | -11.5 | -19.5 | | 6377.1 | | -40 | -659 | 321,211 | 491,809 |
| 452 | 990 | | " " | " | 6.1 | 91° - | -17.3 | -23.4 | | 6373.2 | | -60 | -988 | 321,191 | 491,480 |

horiz correct. y = +12'
x = -37'

320,890 + 494,570 (a)
Trail (north)

Trail (south)

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------|----------|
| 8/30/79 | | G. Cotcamp | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | 35 | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | |
| Wyoming | | Farthing | | Wyoming | Laramie | | 18N | 70W | | L.O. Davis | | | | | |
| 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 |
| | | | | | | | | | 6,396.6 | | | | | | |
| 453 | 1320 | | 252°53.5' | +138° | 4.8 | 91° | -23.0 | -27.8 | | | TP | -76+1 | -1318+4 | 321,176 | 491,154 |
| 453 | 1320 | | | | 12.5 | 90°40' | -15.4 | -27.9 | | 6,368.7 | TP | | | | |
| | 987 | | 72°27.9'+180° | +138° | +10.4 | 89° | -17.2 | -6.8 | | | BS | -64+1 | -985+4 | | curve |
| | 987 | | | | +4.7 | 89°20' | -11.5 | -6.8 | 6,361.9 | | BS | | | | |
| 454 | 660 | | 70°24' | +138° | 7.5 | 89° | +11.5 | +4.0 | | 6,365.9 | | +67 | +657 | 321,180 | 490,830 |
| | 510 | | 69°8' | +138° | 0.1 | TH | +2.6 | +2.5 | | 6,364.4 | | +63 | +506 | 321,176 | 490,679 |
| 455 | 330 | | 68°1' | +138° | 1.8 | - | - | -1.8 | | 6,360.1 | | +47 | +327 | 321,160 | 490,500 |
| 456 | 0 | | | | 5.4 | - | - | -5.4 | | 6,356.5 | π | 0 | 0 | 321,113 | 490,173 |
| 457 | 328 | | 273°2' | +14.0° | 10.4 | - | - | -10.4 | | 6,351.5 | | +96 | -314 | 321,209 | 489,859 |
| 458 | 654 | | 276°39' | +14.0° | 14.1 | 0H | -3.3 | -17.4 | | 6,344.5 | TP | +231+1 | -612+4 | 321,345 | 489,565 |
| 458 | 654 | | | | 5.9 | 91° | -11.4 | -17.3 | | | TP | | | | S-curve |
| | 330 | | 67°50'+180° | +14.0° | +4.0 | 89° | -5.8 | -1.8 | 6,342.7 | | BS | -47+1 | -327+4 | | |
| | 330 | | | | +1.1 | 89°30' | -2.9 | -1.8 | | | BS | | | | |
| 459 | 0 | | | | 5.4 | - | - | -5.4 | | 6,337.3 | π | 0 | 0 | 321,299 | 489,242 |
| IF | 30 | | 214°20' | +14.0° | 5.1 | - | - | -5.1 | | 6,337.6 | | -20 | -22 | 321,279 | 489,220 |
| 460 | 287 | | 160°40' | +14.0° | 2.0 | - | - | -2.0 | | 6,340.7 | | -286 | +27 | 321,013 | 489,269 |
| 461 | 617 | | 155°30.3' | +14.0° | 1.5 | TH | +3.1 | +1.6 | | 6,344.3 | TP | -607+1 | +112+4 | 320,693 | 489,358 |
| 461 | 617 | | | | 5.6 | 89°20' | +7.2 | +1.6 | | | TP | | | | 90° bend |
| | 606 | | 58°18'+180° | +14.0° | +13.7 | 89° | -10.6 | +3.1 | | | BS | -184+1 | -577+4 | | 90° bend |
| | 606 | | | | +10.2 | 89°20' | -7.0 | +3.1 | 6,347.4 | | BS | | | | |

paved road (near)
90° bend

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|---------------|-------------|---------|---------------------|--|
| 8/30/79 | | G. Cotcamp | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | 36 | | | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | |
| Wyoming | | Farthing | | Wyoming | Laramie | | 18N | 70W | | L.O. Davis | | | | | | | |
| 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 | | |
| | | | | | | | | | 6,347.4 | | | | | | | | |
| 461 | 620 | | 65°38.5' | +14.0° | 12.7 | 89° | +10.8 | -1.9 | | 6,345.5 | | +111 | +610 | 320,621 | 489,395 | T-intersect | |
| 462 | 330 | | " " | +14.0° | 3.2 | 89° | +5.8 | +2.6 | | 6,350.0 | | +59 | +325 | 320,569 | 489,110 | 462-465 (old trail) | |
| 463 | 0 | | | | 5.4 | - | | -5.4 | | 6,342.0 | X | 0 | 0 | 320,510 | 488,785 | | |
| 464 | 330 | | 247°9' | +14.0° | 13.4 | BH | -1.7 | -15.1 | | 6,332.3 | | -51 | -326 | 320,459 | 488,459 | | |
| 465 | 660 | | " " | | 14.6 | BH | -3.3 | -17.9 | | 6,329.5 | | -102 | -652 | 320,408 | 488,139 | | |
| 466 | 990 | | 248°29' | +14.0° | 5.3 | 91° | -17.3 | -22.6 | | 6,324.8 | | -130 | -981 | 320,380 | 487,804 | | |
| 467 | 1316 | | 250°31.5' | +14.0° | 4.6 | 91° | -23.0 | -27.6 | | | TP | -126+1 | -1310+4 | 320,385 | 487,479 | | |
| 467 | 1316 | | | | 12.4 | 90°40' | -15.3 | -27.7 | | 6,319.7 | TP | | | | | | |
| | 650 | | 99°12.6'+180° | +14.0° | +10.9 | - | | +10.9 | 6,330.6 | | BS | +256+1 | -597+4 | | | curve | |
| | 650 | | | | +7.7 | BH | +3.3 | +11.0 | | | BS | | | | | | |
| 468 | 330 | | 107°36' | +14.0° | 7.3 | - | | -7.3 | | 6,323.3 | | -173 | +281 | 320,469 | 487,167 | | |
| # | 102 | | 105°8' | +14.0° | 4.0 | - | | -4.0 | | 6,326.6 | | -50 | +89 | 320,592 | 486,975 | | |
| BM | 137 | | 161°16.7' | +14.0° | 3.2 | - | | -3.2 | | 6,327.4 | | -137 | +11 | 320,585 | 486,897 | U.S.G.S. 3WEW 1953 | |
| 469 | 0 | | | | 5.4 | - | | -5.4 | | 6,325.2 | X | 0 | 0 | 320,692 | 486,886 | T-intersect | |
| 470 | 310 | | 205°11' | +14.0° | 4.0 | - | | -4.0 | | 6,326.6 | | -240 | -196 | 320,402 | 486,690 | Farthing | |
| 471 | 630 | | 194°27' | +14.0° | 5.4 | TH | +3.2 | -2.3 | | 6,328.3 | | -554 | -300 | 320,088 | 486,586 | | |
| 472 | 950 | | 191°12' | +14.0° | 3.1 | TH | +4.8 | +1.7 | | 6,332.3 | | -860 | -404 | 319,782 | 486,482 | S-curve | |
| 473 | 1290 | | 190°9' | +14.0° | 9.1 | 89° | +22.5 | +13.4 | | 6,344.0 | | -1177 | -528 | 319,465 | 486,358 | | |
| 474 | 1485 | | 199°41.6' | +14.0° | 6.2 | 88°40' | +34.5 | +28.3 | | | TP | -1236+1 | -824+4 | 319,407 | 486,066 | sharp curve | |
| 474 | 1485 | | | | 10.6 | 88°30' | +38.9 | +28.3 | | 6,358.9 | TP | | | | | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | |
|--------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|---------------|-------------|---------|---------|---|
| 8/30/79 | | G. Co'tcamp | | R. Turner | | 6834 | | GwC | | 3 | 37 | | | | | | |
| AREA | | TOPO MAP | STATE | COUNTY | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | | | |
| Wyoming | | Farthing | Wyoming | Laramie | 18N | 70W | | L.O. Davis | | | | | | | | | |
| 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 | | |
| 474 | | | | | | | | | | 6,358.9 | | | | | | | |
| | 638 | | 38°12' +180° | +14.0° | +9.4 | 91°- | +11.1 | +20.5 | | | BS | -391+2 | -504+4 | | | | curve |
| | 638 | | | | +15.0 | 90°30' | +5.6 | +20.6 | 6,379.5 | | BS | | | | | | |
| 475 | 330 | | 31°3' | +14.0° | 13.2 | 91°- | -5.8 | -19.0 | | 6,360.5 | | +233 | +234 | 319,251 | 485,800 | | |
| 476 | 0 | | | | 54 | - | | -5.4 | | 6,374.1 | π | 0 | 0 | 319,018 | 485,566 | | |
| 477 | 330 | | 207°50' | +14.0° | 1.1 | TH | +1.7 | +0.6 | | 6,380.1 | | -246 | -220 | 318,772 | 485,346 | | |
| 478 | 660 | | 207°50' | +14.0° | 7.6 | TH | +3.3 | -4.3 | | 6,375.2 | TP | -492+2 | -440+4 | 318,528 | 485,130 | | |
| 478 | 660 | | | | 10.1 | 89°30' | +5.8 | -4.3 | | | TP | | | | | | |
| | 1300 | | 63°14.9' +180° | +14.0° | +3.3 | 91°- | +22.7 | +26.0 | 6,401.2 | | BS | -287+2 | -1268+4 | | | | |
| | 1300 | | | | +14.7 | 90°30' | +11.3 | +26.0 | | | BS | | | | | | |
| 479 | 990 | | 67°49' | +14.0° | 6.9 | 91°- | -17.3 | -24.2 | | 6,377.0 | | +141 | +980 | 318,384 | 484,846 | | |
| 480 | 660 | | " " | " | 10.8 | 91°- | -11.5 | -22.3 | | 6,378.9 | | +94 | +653 | 318,337 | 484,519 | | |
| 481 | 330 | | " " | " | 10.8 | 91°- | -5.8 | -16.6 | | 6,384.6 | | +47 | +327 | 318,290 | 484,193 | | |
| 482 | 0 | | | | 54 | - | | -5.4 | | 6,395.8 | π | 0 | 0 | 318,243 | 483,866 | | |
| 483 | 330 | | 256°35.4' | +14.0° | 6.9 | 88°- | +11.5 | +4.6 | | 6,405.8 | | +3 | -330 | 318,246 | 483,536 | | |
| 484 | 660 | 659 | " " | " | 10.7 | 87°- | +34.5 | +23.8 | | 6,425.0 | | +7 | -659 | 318,250 | 483,207 | | |
| 485 | 990 | 989 | 256°35.4' | +14.0° | 4.4 | 87°30' | +43.1 | +38.7 | | | TP | +10+1 | -989+4 | 318,254 | 482,881 | | |
| 485 | 990 | | | | 10.1 | 87°10' | +48.9 | +38.8 | | 6,440.0 | TP | | | | | | |
| | 1980 | | 76°11.2' +180° | +14.0° | +4.8 | - | | +4.8 | | | BS | +6+1 | -1980+3 | | | | |
| | 1980 | | | | +14.1 | 89°44' | -9.2 | +4.9 | 6,449 | | BS | | | | | | |
| 9110 1015 | 1900 | | 77°26.2' | +14.0° | 8.4 | TH | +9.5 | +1.1 | | 6,446.0 | | -48 | +1899 | 318,213 | 482,803 | | 318,25+482,800(S) sect. corner (elev) 6444 |

Geosource Inc.

DATE: 8/30/79
 AREA: Wyoming
 INSTRUMENT MAN: G. Cojcamp
 TOPO MAP: Farthing
 STATE: Wyoming
 COUNTY: Laramie
 ROD MAN: R. Turner
 PARTY NUMBER: 6834
 TWP: 18N
 RANGE: 70W
 NOTES CHECKED BY: G.W.C.
 PPM:
 LINE NO.: 3
 PARTY MANAGER: L.O. Davis
 PAGE: 38

| 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 | | | | |
| | | | | | | | | | 6,444.9 | | | | | | | | | | |
| 486 | 1650 | | 76°11.2' | +14.0° | 9.6 | - | | -9.6 | | 6,435.3 | | -5 | +1650 | 318,256 | 482,554 | | | | |
| 487 | 1320 | | " " | " | 12.6 | 0H | -6.6 | -19.2 | | 6,425.7 | | -4 | +1320 | 318,257 | 482,224 | | | | |
| 488 | 990 | | " " | " | 13.1 | 0H | -5.0 | -18.1 | | 6,426.8 | | -3 | +990 | 318,258 | 481,894 | | | | |
| 489 | 660 | | " " | " | 13.2 | 0H | -3.3 | -16.5 | | 6,428.4 | | -2 | +660 | 318,259 | 481,564 | | | | |
| 490 | 330 | | " " | " | 14.3 | - | | -14.3 | | 6,430.6 | | -1 | +330 | 318,260 | 481,234 | | | | |
| 491 | 0 | | | | 5.4 | - | | -5.4 | | 6,439.5 | π | 0 | 0 | 318,261 | 480,904 | | | | |
| 492 | 325 | | 269°22' | +14.0° | 10.8 | - | | -10.8 | | 6,434.1 | | +75 | -316 | 318,336 | 480,588 | | | | |
| 493 | 655 | | 273°16' | +14.0° | 12.2 | 0H | -3.3 | -15.5 | | 6,429.4 | | +194 | -625 | 318,455 | 480,279 | | | | |
| 494 | 960 | | 277°17' | +14.0° | 11.3 | 91° | -16.8 | -28.1 | | | TP | +348+1 | -895+3 | 318,610 | 480,012 | | | curve | |
| | 330 | | 130°38'+180° | +14.0° | +3.2 | 88° | -11.5 | -8.3 | 6,408.6 | | BS | +269+1 | -191+3 | | | | | | |
| | 330 | | | | +6.1 | 87°36' | -14.4 | -8.3 | | | BS | | | | | | | | |
| 495 | 0 | | | | 5.4 | - | | -5.4 | | 6,403.2 | π | 0 | 0 | 318,880 | 479,824 | | | | |
| 496 | 265 | | 263°13' | +14.0° | 10.4 | - | | -10.4 | | 6,398.2 | TP | +33+1 | -263+3 | 318,914 | 479,564 | | | sharp bend | |
| 496 | 265 | | | | 11.7 | TH | +1.3 | -10.4 | | | TP | | | | | | | | |
| | 475 | | 33°39.7'+180° | +14.0° | +14.9 | - | | +14.9 | 6,413.1 | | BS | -320+1 | -351+3 | | | | | | |
| | 475 | | | | +12.5 | 0H | +2.4 | +14.9 | | | BS | | | | | | | | |
| 497 | 150 | | 26°9' | +14.0° | 8.4 | - | | -8.4 | | 6,404.7 | | +115 | +97 | 318,710 | 479,313 | | | | |
| π | 0 | | | | 5.4 | - | | -5.4 | | 6,407.7 | π | 0 | 0 | 318,595 | 479,216 | | | | |
| π | 180 | | 243°16' | +14.0° | 1.3 | 89° | +3.1 | +1.8 | | 6,414.9 | | -40 | -176 | 318,555 | 479,040 | | | split sta. - house + curve 318,555+479,040(s) Trail (south) (elev) 6415 | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | |
|-------------|----------------|------------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|------------------|----------------|---------|---------|---------------------|
| 8/30/79 | | G. Coitcamp | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | 39 | | | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | PPM | PARTY MANAGER | | | | |
| Wyoming | | Farthing/Goat Mountain | | Wyoming | | Laramie | | 18W | | 70W | | L.O. Davis | | | | |
| 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 | X |
| | | | | | | | | | 6413.1 | | | | | | | |
| 498 | 188 | | 246°41' | +14.0° | 1.3 | 89° | +3.3 | +2.0 | | 6415.1 | | -30 | -186 | 318,565 | 479,030 | Farthing Ranch |
| 499 | 512 | | 249°12.4' | +14.0° | 10.7 | 88°50' | +10.4 | -0.3 | | 6,412.8 | TP | -61 | -508 | 318,534 | 478,708 | |
| 499 | 512 | | | | 12.2 | 88°40' | +11.9 | -0.3 | | | TP | | | | | |
| | 650 | | 56°20'+180° | +14.0° | +3.3 | 89°- | -11.3 | -8.0 | 6404.8 | | BS | -219 | -612 | | | |
| | 650 | | | | +5.3 | 88°50' | -13.2 | -7.9 | | | BS | | | | | |
| 500 | 330 | | 62°40' | +14.0° | 3.9 | - | | -3.9 | | 6,400.9 | | +76 | +321 | 318,391 | 478,917 | |
| 501 | 0 | | | | 5.4 | - | | -5.4 | | 6,399.4 | TP | 0 | 0 | 318,315 | 478,096 | |
| 502 | 330 | | 260°49.3' | +14.0° | 4.8 | - | | -4.8 | | 6,400.0 | | +28 | -329 | 318,343 | 477,767 | |
| | 610 | | 261°20' | +14.0° | 5.7 | 89° | +10.6 | +4.9 | | 6409.7 | | +57 | -607 | 318,372 | 477,987 | N-S fence |
| 503 | 660 | | 260°49.3' | +14.0° | 5.3 | 89°- | +11.5 | +6.2 | | 6411.0 | | +55 | -658 | 318,370 | 477,938 | Farthing Quad. |
| 504 | 990 | | " | " | 8.7 | 88°30' | +25.9 | +17.2 | | 6,422.0 | | +83 | -986 | 318,398 | 477,110 | Goat Mountain Quad. |
| 505 | 1320 | | 260°49.3' | +14.3° | 7.3 | 88°30' | +34.5 | +27.2 | | 6,432.0 | TP | +118+4 | -1315+3 | 318,437 | 476,784 | ↓ |
| 505 | 1320 | | | | 3.5 | 88°40' | +30.7 | +27.2 | | | TP | | | | | |
| | 1262 | 1260 | 67°38'+180° | +14.3° | +5.6 | 93° | +67.0 | +71.6 | 6503.6 | | BS | -177+4 | -1248+3 | | | S-curve |
| | 1262 | | | | +13.0 | 92°40' | +58.6 | +71.6 | | | BS | | | | | |
| 506 | 945 | 944 | 66°24' | +14.3° | 11.2 | 93°- | -49.4 | -60.6 | | 6,443.0 | | +153 | +932 | 318,917 | 476,971 | |
| | 640 | 639 | 73°54' | +14.3° | 14.8 | 93°- | -33.4 | -48.2 | | 6,455.4 | | +20 | +639 | 318,284 | 476,178 | E-W fence |
| 507 | 624 | 623 | 74°42' | +14.3° | 14.8 | 93°- | -32.6 | -47.4 | | 6,456.2 | | +11 | +623 | 318,275 | 476,162 | |
| 508 | 330 | | 89°41' | +14.3° | 12.7 | 93°- | -17.2 | -29.9 | | 6,473.7 | | -80 | +320 | 318,184 | 475,859 | |
| 509 | 0 | | | | 5.4 | - | | -5.4 | | 6,498.2 | TP | 0 | 0 | 318,264 | 475,539 | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|---------------|-------------|---------|---------|--|
| 8/31/79 | | G. Cotcamp | | R. Turner | | 6834 | | GWC. | | 3 | 40 | | | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | |
| Wyoming | | Great Mountain | | Wyoming | Laramie | | 18N | 70W | | L.O. Davis | | | | | | | |
| 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 | | |
| | | | | | | | | | 6,503.6 | | | | | | | | |
| 510 | 330 | | 255°6' | +14.5° | 2.4 | - | | -2.4 | | 6,501.2 | | -2 | -330 | 318,262 | 475,209 | | |
| 511 | 660 | | " " | " | 5.2 | 89°- | +11.5 | +6.3 | | 6,509.9 | | -5 | -660 | 318,259 | 474,879 | | |
| 512 | 985 | | 251°45.2' | +14.5° | 6.2 | 89°- | +17.2 | +11.0 | | 6,514.6 | TP | -64.4 | -983.3 | 318,204 | 474,559 | curve | |
| 512 | 985 | | | | 14.9 | 88°30' | +25.8 | +10.9 | | | TP | | | | | | |
| | 660 | | 44°48.3'+180° | +14.5° | +12.6 | 0H | +3.3 | +15.9 | 6,530.5 | | BS | -337.4 | -567.3 | | | | |
| | 660 | | | | +12.1 | 90°20' | +3.8 | +15.9 | | | BS | | | | | | |
| 513 | 330 | | 44°48.3' | +14.5° | 7.2 | - | | -7.2 | | 6,523.3 | | +168 | +284 | 318,039 | 474,279 | | |
| 514 | 0 | | | | 6.4 | - | | -5.4 | | 6,525.1 | π | 0 | 0 | 317,871 | 473,995 | | |
| 515 | 330 | | 237°41' | +14.5° | 2.9 | 89°- | +5.8 | +2.9 | | 6,533.4 | | -101 | -314 | 317,770 | 473,681 | | |
| 516 | 660 | | 241° - | +14.5° | 5.9 | 88°30' | +17.3 | +11.4 | | 6,541.9 | TP | -165.4 | -639.3 | 317,710 | 473,359 | | |
| 516 | 660 | | | | 7.8 | 88°20' | +19.2 | +11.4 | | | TP | | | | | | |
| | 1300 | | 46°44.2'+180° | +14.7° | +13.9 | 0H | +6.5 | +19.9 | 6,561.8 | | BS | -621.4 | -1192.3 | | | S-curve | |
| | 1300 | | | | +14.6 | 90°14' | +5.3 | +19.9 | | | BS | | | | | | |
| 517 | 980 | | 48°33' | +14.7° | 10.7 | 0H | -4.9 | -15.6 | | 6,546.2 | | +441 | +875 | 317,534 | 473,095 | | |
| 518 | 660 | | 54°2' | +14.7° | 13.0 | - | | -13.0 | | 6,548.8 | | +239 | +615 | 317,332 | 472,835 | | |
| 519 | 330 | | " " | " | 9.0 | - | | -9.0 | | 6,552.8 | | +120 | +308 | 317,213 | 472,528 | | |
| 520 | 0 | | | | 5.4 | - | | -5.4 | | 6,556.4 | π | 0 | 0 | 317,093 | 472,220 | | |
| 521 | 330 | | 220° 34.3' | +14.7° | 3.2 | - | | -3.2 | | 6,558.6 | | -188 | -271 | 316,905 | 471,949 | | |
| 522 | 660 | | " " | " | 9.1 | 89°- | +11.5 | +2.4 | | 6,564.2 | | -376 | -592 | 316,717 | 471,678 | | |
| 523 | 990 | | " " | " | 12.6 | 89°- | +17.3 | +4.7 | | 6,566.5 | | -564 | -814 | 316,529 | 471,406 | | |

Geosource Inc.

| DATE | | INSTRUMENT MAN | | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | | LINE NO. | PAGE | | | | |
|-------------|----------------|-------------------|-----------------------------|---------|----------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|----------|---------|-------------|---------|-------------|--|
| 8/31/79 | | G. Catcamp | | | R. Turner | | 6834 | | G.W.C. | | | 3 | 41 | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | |
| Wyoming | | Goat Mountain | | Wyoming | Laramie/Albany | | 18N | 70W | | L.O. Davis | | | | | | | |
| 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 + | EAST + | COORDINATES | | REMARKS | |
| | | | | | | | | | | | | SOUTH - | WEST - | Y | X | | |
| | | | | | | | | | | | | LAT. | DEP. | Y | X | | |
| | | | | | | | | | 6561.8 | | | | | | | | |
| 524 | 1320 | | 220° 34.3' | +14.7° | 9.2 | 89°- | +23.0 | +13.8 | | 6,575.6 | TP | -752+4 | -1085+3 | 316,345 | 471,138 | | |
| 524 | 1320 | | | | 5.3 | 89°10' | +19.2 | +13.9 | | | TP | | | | | | |
| | 1970 | | 69° 56.8' +180° | +14.9° | +7.2 | 91°- | +34.4 | +41.6 | 6617.2 | | BS | -347+4 | -1939+3 | | | | |
| | 1970 | | | | +14.2 | 90° 48' | +27.5 | +41.7 | | | BS | | | | | | |
| | 1700 | | 67° 12.5' | +14.9° | 4.9 | 91°- | -29.7 | -34.6 | | 6,582.6 | | +233 | +1684 | 316,235 | 470,886 | N.S. fence | |
| 525 | 1650 | | 67° 16' | +14.9° | 6.0 | 91°- | -28.8 | -34.8 | | 6,582.4 | | +225 | +1635 | 316,227 | 470,837 | | |
| 526 | 1320 | | " | " | 6.2 | 91°- | -23.0 | -29.2 | | 6,588.0 | | +180 | +1308 | 316,182 | 470,510 | | |
| 527 | 990 | | " | " | 6.8 | 91°- | -17.3 | -24.1 | | 6,593.1 | | +135 | +981 | 316,137 | 470,183 | ↑ | |
| 528 | 660 | | " | " | 12.3 | 90° 30' | -5.8 | -18.1 | | 6,599.1 | | +90 | +654 | 316,092 | 469,856 | Laramie Co. | |
| 529 | 330 | | " | " | 10.3 | - | | -10.3 | | 6,606.9 | | +45 | +327 | 316,047 | 469,529 | Albany Co. | |
| 530 | 0 | | | | 5.4 | - | | -5.4 | | 6,611.8 | X | 0 | 0 | 316,002 | 469,202 | ↓ | |
| 531 | 330 | | 257° 10' | +14.9° | 0.9 | TP | +1.7 | +0.8 | | 6,618.0 | | +12 | -330 | 316,014 | 468,872 | | |
| 532 | 660 | | " | " | 3.5 | 89°- | +11.5 | +8.0 | | 6,625.2 | | +24 | -660 | 316,026 | 468,542 | | |
| 533 | 990 | | 258° 47' | +14.9° | 6.0 | 88° 40' | +23.0 | +17.0 | | 6,634.2 | | +64 | -988 | 316,066 | 468,214 | | |
| 534 | 1310 | | 259° 52.2' | +14.9° | 12.3 | 88° 40' | +30.5 | +18.2 | | 6,635.4 | TP | +109+4 | -1305+3 | 316,115 | 467,900 | curve | |
| 534 | 1310 | | | | 6.2 | 88° 56' | +24.4 | +18.2 | | | TP | | | | | | |
| | 1650 | | 85° 25.7' +180° | +14.9° | +7.5 | 91°- | +28.8 | +36.3 | 6671.7 | | BS | +296+4 | -1623+3 | | | | |
| | 1650 | | | | +14.3 | 90° 46' | +22.1 | +36.4 | | | BS | | | | | | |
| 535 | 1320 | | 85° 25.7' | +14.9° | 3.0 | 92°- | -46.0 | -49.0 | | 6,622.7 | | -237 | +1299 | 316,178 | 467,579 | | |
| 536 | 990 | | " | " | 11.7 | 92°- | -34.5 | -46.2 | | 6,625.5 | | -177 | +974 | 316,238 | 467,254 | | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------|---------|-----------|
| 8/31/79 | | G. Cotcamp | | R. Turner | | 6834 | | G.W.C. | | 3 | 42 | | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | |
| Wyoming | | Goat Mountain | | Wyoming | Albany | | 18N | 71W | | L.O. Davis | | | | | | |
| 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 |
| | | | | | | | | | 6671.7 | | | | | | | |
| | 690 | | 86°10' | +14.9° | 136 | 92°- | -24.1 | -37.7 | | 6,634.0 | | -132 | +677 | 316,283 | 466,957 | N-S fence |
| 537 | 660 | | " " | " | 14.0 | 92°- | -23.0 | -37.0 | | 6,634.7 | | -127 | +648 | 316,288 | 466,928 | |
| 538 | 330 | | " " | " | 11.2 | 91°- | -5.8 | -17.0 | | 6,654.7 | | -63 | +324 | 316,352 | 466,604 | |
| 539 | 0 | | | | 5.4 | - | | -5.4 | | 6,666.3 | TP | 0 | 0 | 316,415 | 466,280 | |
| 540 | 330 | | 281°29' | +15.1° | 13.0 | - | | -13.0 | | 6,658.7 | | +148 | -295 | 316,563 | 465,985 | |
| 541 | 660 | | " " | " | 9.5 | - | | -9.5 | | 6,662.2 | | +295 | -590 | 316,710 | 465,690 | |
| 542 | 990 | | " " | " | 13.3 | - | | -13.3 | | 6,658.4 | | +443 | -885 | 316,858 | 465,395 | |
| 543 | 1307 | | 278°94' | +15.1° | 4.8 | - | | -4.8 | | 6,666.9 | TP | +516+4 | -1201+3 | 316,935 | 465,082 | curve |
| 543 | 1307 | | | | 11.3 | TH | +6.5 | -4.8 | | | TP | | | | | |
| | 990 | | 89°9.7'+180° | +15.1° | +14.1 | 91°20' | +23.0 | +37.1 | 6,704.0 | | BS | +244+4 | -959+3 | | | |
| | 990 | | | | +5.5 | 91°50' | +31.7 | +37.2 | | | BS | | | | | |
| 544 | 660 | | 89°9.7' | +15.1° | 12.7 | 91°20' | -15.4 | -28.1 | | 6,675.9 | | -163 | +640 | 317,020 | 464,766 | |
| 545 | 330 | | " " | " | 12.0 | 91°- | -5.8 | -17.8 | | 6,686.2 | | -81 | +320 | 317,102 | 464,446 | |
| 546 | 0 | | | | 5.4 | - | | -5.4 | | 6,698.6 | TP | 0 | 0 | 317,183 | 464,126 | |
| 547 | 330 | | 292°18.8 | +15.3° | 2.0 | 88°- | +11.5 | +9.5 | | 6,713.5 | | +201 | -261 | 317,384 | 463,865 | |
| 548 | 660 | 659 | " " | " | 5.3 | 87°30' | +28.8 | +23.5 | | 6,727.5 | | +402 | -522 | 317,585 | 463,604 | |
| 549 | 990 | 989 | 292°18.8' | +15.3° | 5.2 | 87°40' | +40.3 | +35.1 | | 6,739.1 | TP | +604+4 | -783+3 | 317,791 | 463,346 | |
| 549 | 990 | | | | 8.0 | 87°30' | +43.1 | +35.1 | | | TP | | | | | |
| | 982 | 981 | 78°22'+180° | +15.3° | +2.7 | 93°- | +51.3 | +54.0 | 6,793.1 | | BS | +57+3 | -979+1 | | | curve |
| | 982 | | | | +14.2 | 92°20' | +39.9 | +54.1 | | | BS | | | | | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|---------------|-------------|---------|------------------------|---------------------------|
| 8/31/79 | | G. Catcamp | | R. Turner | | 6834 | | G.W.C. | | 3 | 44 | | | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | |
| Wyoming | | Great Mountain | | Wyoming | Albany | | 18N | 71W | | L.O. Davis | | | | | | | |
| 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 | | |
| | | | | | | | | | 6965.4 | | | | | | | | |
| 560 | 298 | 296 | 226°46.2' | +153° | 5.6 | 82°40' | +37.7 | +32.2 | -2 | 6997.4 | TP | -139 | -262 | 318,536 | 469,122 | sharp curve | |
| 560 | 298 | | | | 4.6 | 82°50' | +36.9 | +32.3 | | | TP | | | | | | |
| | 250 | 247 | 77°10'+180° | +153° | +54 | 99°30' | +40.7 | +46.1 | 7043.5 | | BS | +11-3 | -247 | | | | |
| | 250 | | | | +19.2 | 97°30' | +32.4 | +46.5 | | | BS | | | | | | sharp curve (switch back) |
| 561 | 0 | | | | 54 | - | | -5.4 | | 7038.1 | TP | 0 | 0 | 318,544 | 459,875 | | |
| 562 | 330 | 328 | 340°52' | +153° | 4.7 | 89°30' | +31.5 | +26.8 | | | TP | +327-3 | -22 | 318,868 | 459,853 | | |
| 562 | 330 | | | | 7.6 | 89°- | +34.3 | +26.7 | -2 | 7070.0 | TP | | | | | | |
| | 608 | 602 | 119°23'+180° | +15.3° | +7.5 | 98°- | +83.8 | +91.3 | 7161.3 | | BS | +423-3 | -428 | | | | S-curve |
| | 608 | | | | +19.6 | 97°20' | +77.0 | +91.6 | | | BS | | | | | | |
| 563 | 320 | 319 | 111°1' | +15.3° | 25.0 | 95°30' | -30.5 | -55.5 | | 7105.8 | | -189 | +257 | 319,099 | 459,682 | | |
| 564 | 0 | | | | 54 | - | | -5.4 | | 7155.9 | TP | 0 | 0 | 319,288 | 459,925 | st-up opposite station | |
| 565 | 330 | 329 | 330°16.5' | +15.3° | 5.1 | 89°40' | +30.5 | +25.4 | -2 | 7186.5 | TP | +319-3 | -82 | 319,604 | 459,343 | | |
| 565 | 330 | | | | 4.1 | 89°50' | +29.6 | +25.5 | | | TP | | | | | | |
| | 658 | | 139°10.3'+180° | +15.3° | +13.8 | 93°- | +34.4 | +48.2 | 7234.7 | | BS | +593-3 | -283+2 | | | | |
| | 658 | 657 | | | +10.0 | 93°20' | +38.2 | +48.2 | | | BS | | | | | | |
| 566 | 330 | | 139°10.3' | +15.3° | 11.8 | 92°- | -11.5 | -23.3 | | 7211.4 | | -2°8 | +142 | 319,896 | 459,204 | | |
| 567 | 0 | | | | 54 | - | | -5.4 | | 7229.3 | TP | 0 | 0 | 320,194 | 459,062 | | |
| 568 | 330 | | 316°35' | +15.3° | 12.1 | - | | -12.1 | | 7222.6 | | +291 | -156 | 320,485 | 458,906 | | |
| 569 | 648 | | 305°15.3' | +15.3° | 6.2 | 89°10' | +9.4 | +3.2 | -2 | 7237.7 | TP | +500 | -412+2 | 320,694 | 458,652 | curve | |
| 569 | 648 | | | | 2.5 | 89°30' | +5.7 | +3.2 | | | TP | | | | | | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | |
|-------------|----------------|-------------------|-----------------------------|----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|---------------|-------------|---------|---------|------------|
| 9/4/79 | | G. Cotcamp | | R Turner | | 6834 | | Gwl. | | 3 | 45 | | | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | |
| Wyoming | | Goat Mountain | | Wyoming | Albany | | 18N | 71W | | L.O. Davis | | | | | | | |
| 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 | | |
| 569 | | | | | | | | | | 7237.7 | | | | | | | |
| | 323 | | 83° 38.7' +180° | +15.3° | +14.8 | 91° - | +5.6 | +20.4 | 7258.1 | | BS | +50 | -319+2 | | | | curve |
| | 323 | | | | +7.3 | 92° 20' | +13.1 | +20.4 | | | BS | | | | | | |
| 570 | 0 | | | | 5.4 | - | | -5.4 | | 7252.7 | π | 0 | 0 | 320,744 | 458,335 | | |
| 571 | 330 | | 266° 37' | | 2.1 | 88° - | +11.5 | +9.4 | | 7267.5 | | +68 | -323 | 320,812 | 458,012 | | |
| 572 | 660 | | 269° 47' | | 9.2 | 87° - | +34.5 | +25.3 | -2 | 7283.2 | TP | +171 | -636+2 | 320,915 | 457,701 | | |
| 572 | 660 | 659 | | | 5.4 | 87° 20' | +30.7 | +25.3 | | | TP | | | | | | |
| | 325 | 324 | 112° 15.8' +180° | | +5.4 | 94° - | +22.6 | +28.0 | 7311.2 | | BS | +197 | -257+2 | | | | curve |
| | 325 | | | | +11.0 | 93° - | +17.0 | +28.0 | | | BS | | | | | | |
| 573 | 0 | | | | 5.4 | - | | -5.4 | | 7305.8 | π | 0 | 0 | 321,112 | 457,996 | | |
| 574 | 325 | 324 | 275° - | | 2.4 | 85° - | +28.2 | +25.8 | | 7337.0 | | +112 | -304 | 321,224 | 457,192 | | |
| 575 | 645 | 691 | 269° 57' | | 8.0 | 84° - | +67.1 | +59.1 | | | TP | +169 | -618+2 | 321,281 | 456,830 | | loop curve |
| 575 | 645 | | | | 9.9 | 83° 50' | +68.9 | +59.0 | -2 | 7370.0 | TP | | | | | | |
| | 328 | 327 | 64° 4.7' +180° | | +14.2 | 86° 40' | -19.0 | -4.8 | | | BS | -60 | -321+2 | | | | curve |
| | 328 | | | | +13.8 | 86° 44' | -18.7 | -4.9 | 7365.1 | | BS | | | | | | |
| 576 | 0 | | | | 5.4 | - | | -5.4 | | 7359.7 | π | 0 | 0 | 321,221 | 456,511 | | |
| 577 | 330 | | 238° 37' | | 7.6 | 92° - | -11.5 | -19.1 | | 7346.0 | | -91 | -317 | 321,130 | 456,194 | | |
| 578 | 640 | | 248° 38' | | 13.0 | - | | -13.0 | -2 | 7352.3 | TP | -68 | -636+2 | 321,153 | 455,877 | | loop curve |
| 578 | 640 | | | | 9.8 | 84 | -3.2 | -13.0 | | | TP | | | | | | |
| | 660 | | 107° 53.7' +180° | | +14.9 | - | | +14.9 | 7367.2 | | BS | +361 | -552+2 | | | | |
| | 660 | | | | +11.6 | 84 | +3.3 | +14.9 | | | BS | | | | | | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | | LINE NO. | PAGE | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|-----------------|
| 9/4/79 | | G. Cotcamp | | R. Turner | | 6834 | | G.W.C. | | | 3 | 46 | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | PPM | PARTY MANAGER | | |
| Wyoming | | Goat Mountain | | Wyoming | | Albany | | 18 N | | 71 W | | L.O. Davis | | |
| 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. | |
| | | | | | | | | | 7367.2 | | | | | |
| 579 | 330 | | 107°53.7' | +15.3° | 12.0 | 92°- | -11.5 | -23.5 | | 7343.7 | | -181 | +276 | 321,333 455,603 |
| 580 | 0 | | | | 5.4 | - | | -5.4 | | 7361.8 | X | 0 | 0 | 321,514 455,327 |
| 581 | 330 | | 280°29' | +15.3° | 5.0 | TH | +1.7 | -3.3 | | 7363.9 | | +144 | -297 | 321,658 455,030 |
| 582 | 660 | | 280°29' | | 1.5 | 89°- | +11.5 | +10.0 | -2 | 7377.0 | TP | +287 | -594+2 | 321,801 454,735 |
| 582 | 660 | | | | 5.4 | 88°40' | +15.4 | +10.0 | | | TP | | | |
| | 638 | 637 | 99°59'+180° | +15.3° | +12.8 | 86°44' | -36.3 | -23.5 | | 7353.5 | BS | +272 | -576+2 | Curve |
| | 638 | | | | +13.6 | 86°40' | -37.0 | -23.4 | | | BS | | | |
| 583 | 320 | | 87°36' | +15.3° | 5.4 | 88°- | +11.2 | +5.8 | | 7359.3 | | -71 | +312 | 322,002 454,473 |
| 584 | 0 | | | | 5.4 | - | | -5.4 | | 7348.1 | X | 0 | 0 | 322,073 454,161 |
| 585 | 330 | | 235°37' | +15.3° | 6.4 | - | | -6.4 | | 7347.1 | | -108 | -312 | 321,965 453,849 |
| 586 | 658 | | 239°1' | +15.3° | 4.9 | 89°- | +11.5 | +6.6 | | 7360.1 | TP | -178 | -634+2 | 321,895 453,527 |
| 586 | 658 | | | | 6.8 | 88°50' | +13.4 | +6.6 | | | TP | | | |
| | 982 | | 68°54.7'+180° | +15.3° | +13.0 | - | | +13.0 | | 7373.1 | BS | -99 | -977+2 | Curve |
| | 982 | | | | +8.1 | BH | +4.9 | +13.0 | | | BS | | | |
| 587 | 660 | | 68°54.7' | +15.3° | 13.7 | BH | -3.3 | -17.0 | | 7356.1 | | +67 | +657 | 321,863 453,211 |
| 588 | 330 | | 72°14' | +15.3° | 14.4 | BH | -1.7 | -16.1 | | 7357.0 | | +14 | +330 | 321,810 452,884 |
| 589 | 0 | | | | 5.4 | - | | -5.4 | | 7367.7 | X | 0 | 0 | 321,796 452,554 |
| 590 | 330 | | 279°25' | +15.3° | 6.4 | 88°- | +11.5 | +5.1 | | 7378.2 | | +138 | -300 | 321,934 452,254 |
| 591 | 660 | 659 | " " | " | 7.5 | 87°- | +34.5 | +27.0 | | 7400.1 | | +276 | -599 | 322,072 451,955 |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|
| 9/4/79 | | G. Cotcamp | | R. Turner | | 6834 | | R. Turner | | 3 | 47 | | | |
| AREA | | TOPO MAP | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | |
| Wyoming | | Goat Mountain | Wyoming | Albany | | 18 N | 71 W | | L.O. Davis | | | | | |
| 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. | |
| | | | | | | | | | 7373.1 | | | | | |
| 592 | 982 | 981 | 282° 15.3' | +15.3° | 9.6 | 86° 50' | +54.2 | +44.6 | 7373.1 | 7417.5 | TP | +454 | -870+2 | 322250 451686 |
| 592 | 982 | | | | 10.7 | 86° 46' | +55.3 | +44.6 | | | TP | | | |
| | 660 | | 90° 30' +180° | +15.3° | 8.7 | 92° - | +23.0 | +31.7 | 7449.2 | | BS | +180 | -635+2 | |
| | 660 | | | | +5.6 | 92° 16' | +26.1 | +31.7 | | | BS | | | |
| 593 | 330 | | 90° 30' | +15.3° | 12.0 | 92° - | -11.5 | -23.5 | | 7425.7 | | -90 | +318 | 322340 451371 |
| | 22 | | 111° 38' | +15.3° | 5.8 | - | - | -5.8 | | 7443.4 | | -13 | +18 | 322417 451071 |
| 594 | 0 | | | | 5.4 | - | - | -5.4 | | 7443.8 | X | 0 | 0 | 322430 451053 |
| 595 | 322 | | 314° 59' | +15.3° | 13.6 | 84° - | -1.6 | -15.2 | 7433.9 | | TP | +280 | -160+2 | 322710 450895 |
| 595 | 322 | | | | 9.6 | 91° - | -5.6 | -15.2 | | | TP | | | curve |
| | 982 | 981 | 100° 6.9' +180° | +15.3° | +7.8 | 87° 40' | -39.9 | -32.1 | 7401.8 | | BS | +421 | -886+2 | S-curve |
| | 982 | | | | 10.7 | 87° 30' | -42.8 | -32.1 | | | BS | | | |
| 596 | 655 | 654 | 100° 51' | +15.3° | 9.2 | 87° 30' | +28.5 | +19.3 | | 7421.1 | | -288 | +587 | 322843 450598 |
| 597 | 330 | | 104° 52' | +15.3° | 1.0 | 88° - | +11.5 | +10.5 | | 7412.3 | | -166 | +285 | 322965 450296 |
| 598 | 0 | | | | 5.4 | - | - | -5.4 | | 7396.4 | X | 0 | 0 | 323131 450011 |
| 599 | 330 | | 260° 16' | +15.3° | 10.2 | 92° - | -11.5 | -21.7 | | 7380.1 | | +32 | -328 | 323163 449683 |
| 600 | 652 | | 249° 4.8' | +15.3° | 14.2 | 91° 6' | -12.5 | -26.7 | | | TP | -64 | -649+2 | 323067 449364 |
| 600 | 652 | | | | 11.6 | 91° 20' | -15.2 | -26.8 | | 7375.0 | TP | | | curve |
| | 327 | | 45° 59.3' +180° | +15.3° | +8.9 | - | - | +8.9 | 7383.9 | | BS | -157 | -287+2 | |
| | 327 | | | | +10.5 | TH | -1.6 | +8.9 | | | BS | | | |
| 601 | 0 | | | | 5.4 | - | - | -5.4 | | 7378.5 | X | 0 | 0 | 322910 449079 |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|----------|-------------------------|-----------------------|-------------|---------|-------------------------|
| 9/9/79 | | G. Cotcamp | | R. Turner | | 6834 | | Ransom Turner | | 3 | 48 | | | | | |
| AREA | | TOPO MAP | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | |
| Wyoming | | Goat Mountain | Wyoming | Albany | | 18 N | 71 W | | L.O. Davis | | | | | | | |
| 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 - LAT. | EAST + WEST - DEP. | COORDINATES | | REMARKS |
| | | | | | | | | | | | | | | Y | X | |
| | | | | | | | | | 7383.9 | | | | | | | |
| 602 | 330 | | 250° 48.6' | +15.3° | 1.3 | TH | +1.7 | +0.4 | | 7384.3 | TP | -22 | -329+2 | 322,888 | 448,752 | |
| 602 | 330 | | | | 2.5 | 89° 30' | +2.9 | +0.4 | | | TP | | | | | |
| | 330 | | 82° 10' +180° | +15.3° | +7.1 | - | | +7.1 | 7391.4 | | BS | +43 | -327+2 | | | |
| | 330 | | | | 8.8 | TH | -1.7 | +7.1 | | | BS | | | | | |
| 603 | 0 | | | | 5.7 | - | | -5.4 | | 7386.0 | TP | 0 | 0 | 322,931 | 448,427 | |
| | 163 | | 274° 29' | +15.3° | 3.6 | - | | -3.6 | | 7387.8 | | +55 | -153 | 322,986 | 448,279 | Intersect. |
| | 298 | | 290° 51' | +15.3° | 11.3 | 88° - | +10.4 | -0.9 | | 7390.5 | | +176 | -241 | 323,107 | 448,185 | bridge |
| 604 | 305 | | 292° 13' | +15.3° | 11.5 | 88° - | +10.6 | -0.9 | | 7390.5 | | +186 | -242 | 323,117 | 448,185 | curve |
| 605 | 610 | | 283° 54.6' | +15.3° | 4.5 | 88° - | +21.3 | +16.8 | | 7408.2 | TP | +298 | -532+2 | 23,229 | 447,897 | S-curve |
| 605 | 610 | | | | 0.9 | 88° 20' | +17.7 | +16.8 | | | TP | | | | | |
| | 655 | | 55° 30' +180° | +15.3° | +11.6 | 91° 54' | +21.7 | +33.3 | 7441.5 | | BS | -215 | -619+2 | | | curve |
| | 655 | | | | +14.3 | 91° 40' | +19.0 | +33.3 | | | BS | | | | | |
| 606 | 330 | | 54° 14' | +15.3° | 14.1 | 84 | -1.7 | -15.8 | | 7425.7 | | +115 | +309 | 323,129 | 447,589 | |
| 607 | 0 | | | | 5.4 | - | | -5.4 | | 7436.1 | TP | 0 | 0 | 323,014 | 447,280 | set-up opposite station |
| 608 | 330 | | 250° 1' | | 2.9 | - | | -2.9 | | 7438.6 | | -27 | -329 | 22,987 | 446,951 | |
| 609 | 650 | | 240° 15.7' | +14.9° | 6.4 | 89° - | +11.3 | +4.9 | | 7446.4 | TP | -166 | -628+2 | 22,848 | 446,654 | curve |
| 609 | 650 | | | | 4.5 | 89° 10' | +9.5 | +5.0 | | | TP | | | | | |
| | 1320 | 1319 | 43° 19.1' +180° | +14.9° | +14.9 | 92° - | +46.0 | +60.9 | 7507.3 | | BS | -695 | -1121+2 | | | |
| | 1320 | | | | +5.8 | 92° 24' | +55.2 | +61.0 | | | BS | | | | | |
| 610 | 990 | | 42° - | +14.9° | 13.8 | 92° 10' | -37.4 | -51.2 | | 7456.1 | | +541 | +829 | 322,694 | 446,364 | |

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | | |
|-------------|----------------|----------------------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|---------------|-------------|---------|-------------------------|--|
| 9/4/79 | | G. Cotcamp | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | 49 of 58 | | | | | | |
| AREA | | TOPO MAP | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | | |
| Wyoming | | Baldy Mountain Goat Mountain/ | Wyoming | Albany | | 18N | 71W | | L.O. Davis | | | | | | | | |
| 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 | | |
| | | | | | | | | | 7507.3 | | | | | | | | |
| 611 | 660 | | 43°48' | +14.9° | 14.5 | 92°0' | -24.9 | -39.4 | | 7467.9 | | +343 | +564 | 322,496 | 446,099 | | |
| 612 | 330 | | " " | | 12.9 | 92°- | -11.5 | -24.4 | | 7482.9 | | +171 | +282 | 322,324 | 445,817 | | |
| 613 | 292 | | 42°34' | +14.9° | 11.2 | 92°- | -10.2 | -21.4 | | 7485.9 | | +157 | +246 | 322,310 | 445,781 | N-S fence | |
| 613 | 0 | | | | 5.4 | - | | -5.4 | | 7501.9 | π | 0 | 0 | 322,153 | 445,535 | | |
| 614 | 327 | | 235°2' | +14.9° | 7.1 | - | | -7.1 | | 7500.2 | | -112 | -307 | 322,041 | 445,228 | | |
| 615 | 650 | | 243°25' | +14.9° | 10.8 | 89°- | +11.3 | +0.5 | | 7507.8 | | -132 | -637 | 322,021 | 444,898 | | |
| 616 | 978 | | 244°18.6' | +14.9° | 5.4 | 89°- | +17.1 | +11.7 | | 7519.0 | TP | -183 | -961+2 | 321,970 | 444,576 | | |
| 616 | 978 | | | | 11.0 | 88°40' | +22.7 | +11.7 | | | TP | | | | | | |
| | 656 | | 39°59.2'+180° | +14.9° | +10.7 | 92°- | +22.9 | +33.6 | 7552.6 | | BS | -377 | -537+2 | | | Curve | |
| | 656 | | | | +14.5 | 91°40' | +19.1 | +33.6 | | | BS | | | | | | |
| 617 | 330 | | 37°7' | +14.9° | 14.3 | 91°- | -5.8 | -20.1 | | 7532.5 | | +203 | +260 | 321,796 | 449,301 | | |
| 618 | 0 | | | | 5.4 | - | | -5.4 | | 7547.2 | π | 0 | 0 | 321,593 | 449,041 | | |
| 619 | 330 | | 216°31' | +14.9° | 11.6 | - | | -11.6 | | 7541.0 | | -206 | -258 | 321,387 | 443,783 | | |
| 620 | 660 | | " " | | 14.6 | BH | -3.3 | -17.9 | | 7534.7 | | -412 | -516 | 321,181 | 443,525 | | |
| 621 | 986 | | 220°35.6' | +14.9° | 6.5 | 89°- | +17.2 | +10.7 | | 7563.3 | TP | -559 | -812+2 | 321,034 | 443,231 | Goat Mountain Quad. | |
| 621 | 986 | | | | 3.6 | 89°10' | +14.3 | +10.7 | | | TP | | | | | | |
| | 960 | | 86°26'+180° | +14.9° | +11.1 | - | | +11.1 | 7574.4 | | BS | +189 | -941+2 | | | S-curve | |
| | 960 | | | | +6.3 | BH | +4.8 | +11.1 | | | BS | | | | | | |
| 622 | 640 | | 90°47' | +14.9° | 9.9 | - | | -9.9 | | 7569.5 | | -173 | +616 | 321,050 | 442,908 | Baldy Mountain Quad. | |
| 623 | 325 | | 79°40' | +14.9° | 8.8 | - | | -8.8 | | 7565.6 | | -26 | +324 | 321,197 | 442,616 | abandoned iron ore mine | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------------|---------|-------------|
| 9/5/79 | | G. Catano | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | 50 | | | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | | |
| Wyoming | | Baldy Mountain | | Wyoming | | Albany | | 18 N | | 71 W | | | | L.O. Davis | | |
| 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 |
| | | | | | | | | | 7574.4 | | | | | | | |
| 624 | 0 | | | | 5.4 | - | | -5.4 | | 7569.0 | T | 0 | 0 | 321,223 | 442,292 | |
| 625 | 320 | | 258°58' | +14.9° | 5.8 | - | | -5.8 | | 7568.6 | | +22 | -319 | 321,245 | 441,973 | sharp curve |
| 626 | 625 | | 241°39' | +14.9° | 4.7 | 89° | +10.9 | +6.2 | | 7580.6 | | -145 | -608 | 321,078 | 441,684 | |
| 627 | 942 | | 238°41' | +14.7° | 1.5 | 89° | +16.4 | +14.9 | | 7589.3 | TP | -269 | -903 | 320,954 | 441,391 | |
| 627 | 942 | | | | 7.0 | 88°40' | +21.9 | +14.9 | | | TP | | | | | |
| | 330 | | 87°2'+180° | +14.7° | +11.5 | 92° | +11.5 | +23.0 | 7612.3 | | BS | +67 | -323 | | | |
| | 330 | | | | +5.8 | 93° | +17.2 | +23.0 | | | BS | | | | | |
| 628 | 0 | | | | 5.4 | - | | -5.4 | | 7606.9 | T | 0 | 0 | 321,021 | 440,070 | |
| 629 | 320 | 319 | 224°32.5' | +14.7° | 3.9 | 86° | +22.3 | +18.4 | | 7630.7 | TP | -163 | -274 | 320,858 | 440,798 | curve |
| 629 | 320 | | | | 2.0 | 86°20' | +20.4 | +18.4 | | | TP | | | | | |
| | 615 | | 98°58'+180° | +14.7° | +14.5 | 90°10' | +1.8 | +16.3 | 7647.0 | | BS | +247 | -563 | | | sharp curve |
| | 615 | | | | +14.9 | 90°8' | +1.4 | +16.3 | | | BS | | | | | |
| ≠ | 337 | | 119°- | +14.7° | 7.0 | - | | -7.0 | | 7640.0 | | -233 | +244 | 320,872 | 440,482 | N-S fence |
| 630 | 330 | | 118°20' | +14.7° | 7.1 | - | | -7.1 | | 7639.9 | | -225 | +241 | 320,880 | 440,479 | |
| 631 | 0 | | | | 5.4 | - | | -5.4 | | 7641.6 | T | 0 | 0 | 321,105 | 440,238 | |
| 632 | 325 | | 241°- | +14.7° | 1.9 | TH | +1.6 | -0.3 | | 7646.7 | | -80 | -315 | 321,025 | 439,923 | |
| 633 | 650 | | 239°5.2' | +14.7° | 1.4 | TH | +3.3 | +1.9 | | 7648.9 | TP | -181 | -624 | 320,924 | 439,617 | curve |
| 633 | 650 | | | | 5.7 | 89°20' | +7.6 | +1.9 | | | TP | | | | | |
| | 982 | | 100°- +180° | +14.7° | +11.9 | - | | +11.9 | 7660.8 | | BS | +410 | -892 | | | curve |
| | 982 | | | | +14.8 | 89°50' | -2.9 | +11.9 | | | BS | | | | | |

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------|---------|
| 9/5/79 | | G. Cotcamp | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | 51 | | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | RANGE | | PARTY MANAGER | | | | | |
| Wyoming | | Goat Mountain | | Wyoming | | Albany | | 71N | | L.O. Davis | | | | | |
| 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 |
| | | | | | | | | | 7660.8 | | | | | | |
| 634 | 660 | | 98°54' | +14.7° | 7.7 | - | | -7.7 | | 7653.1 | | -264 | +605 | 321,070 | 439,333 |
| 635 | 330 | | " " | | 34 | - | | -3.4 | | 7657.4 | | -132 | +302 | 321,202 | 439,030 |
| 636 | 0 | | | | 5.4 | - | | -5.4 | | 7655.4 | π | 0 | 0 | 321,334 | 438,728 |
| 637 | 330 | | 274°20.8' | +14.7° | 8.1 | - | | -8.1 | | 7652.7 | | +108 | -312 | 321,442 | 438,416 |
| 638 | 660 | | " " | | 7.3 | - | | -7.3 | | 7653.5 | | +215 | -624 | 321,549 | 438,104 |
| 639 | 986 | | 274°20.8' | +14.7° | 4.4 | TH | +4.9 | +0.5 | | 7661.3 | TP | +322 | -932 | 321,656 | 437,799 |
| 639 | 986 | | | | 5.2 | 89°40' | +5.7 | +0.5 | | | TP | | | | |
| | 330 | | 105°22.6'+180° | +14.7° | +4.2 | - | | +4.2 | 7665.5 | | BS | +165 | -286 | | |
| | 330 | | | | +5.9 | TH | -1.7 | +4.2 | | | BS | | | | |
| 640 | 0 | | | | 5.4 | - | | -5.4 | | 7660.1 | π | 0 | 0 | 321,821 | 437,516 |
| 641 | 330 | | 269°40' | +14.7° | 5.1 | - | | -5.1 | | 7660.4 | | +82 | -320 | 321,903 | 437,196 |
| 642 | 660 | | " " | | 2.2 | - | | -2.2 | | 7663.3 | | +164 | -639 | 321,985 | 436,877 |
| ⊥ | 765 | | 269°- | +14.7° | 3.2 | TH | +3.8 | +0.6 | | 7666.1 | | +181 | -743 | 322,002 | 436,773 |
| BM | 825 | | 271°52' | +14.7° | 7.1 | 89°- | +14.4 | +7.3 | | 7672.8 | | +235 | -791 | 322,056 | 436,725 |
| 643 | 990 | | 268°29.3' | +13.9° | 11.7 | 89°- | +17.3 | +5.6 | | | TP | +212 | -967.4 | 322,033 | 436,553 |
| 643 | 990 | | | | 6.0 | 89°20' | +11.5 | +5.5 | | 7671.0 | TP | | | | |
| | 660 | | 74°49.2'+180° | +13.9° | +9.9 | 91°- | +11.5 | +21.4 | 7692.4 | | BS | -16 | -660 | | |
| | 660 | | | | +6.1 | 91°20' | +15.4 | +21.5 | | | BS | | | | |
| 644 | 330 | | 70°29' | +13.9° | 11.6 | 91°- | -5.8 | -17.4 | | 7675.0 | | +32 | +328 | 322,049 | 436,226 |
| 645 | 0 | | | | 5.4 | - | | -5.4 | | 7687.0 | π | 0 | 0 | 322,017 | 435,898 |

Y-intersect (n.e.)
 322,060 + 436,725 s)
 U.S.G.S. (elev) 7670
 horiz. correct. y = +15'
 x = +69'

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | |
|-------------|----------------|-------------------|-----------------------------|----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|----------------------|--------------------|---------|---------------------------------|
| 9/5/79 | | G. Cotcamp | | R Turner | | 6834 | | Ransom Turner | | 3 | 52 | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | |
| Wyoming | | Great Mountain | | Wyoming | Albany | | 18N | 72w/71w | | L.O. Davis | | | | | |
| 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 |
| | | | | | | | | | 7692.4 | | | | | | |
| 646 | 330 | | 231°49' | +134° | 2.2 | 89°- | +5.8 | +3.6 | | 7696.0 | | -138 | -300 | 321,879 | 435,598 |
| 647 | 660 | | 228°50' | +134° | 3.2 | 88°- | +23.0 | +19.8 | | 7712.2 | | -307 | -584 | 321,710 | 435,314 |
| 648 | 990 | | " " | " | 4.0 | 86°30' | +60.3 | +56.3 | | 7748.7 | | -461 | -876 | 321,556 | 435,022 old road bed |
| TP | 1200 | 1196 | 232°37' | +134° | 6.5 | 85°30' | +94.0 | +87.5 | -2 | 7779.7 | TP | -487-3 | -1093+4 | 321,527 | 434,809 split sta. - steep hill |
| TP | 1200 | | | | 3.1 | 85°40' | +90.6 | +87.5 | | | TP | | | | |
| | 766 | | 76°53'+180° | +134° | +5.2 | 88°16' | -23.2 | -18.0 | | 7761.7 | BS | +4-2 | -766+5 | | |
| | 766 | | | | +2.1 | 88°30' | -20.0 | -17.9 | | | BS | | | | |
| 649 | 660 | | 77°3' | +134° | 9.8 | 88°30' | +17.3 | +7.5 | | 7769.2 | | -5 | +660 | 321,524 | 434,708 old road bed |
| 650 | 330 | | 74°37' | +134° | 2.4 | 89°30' | +2.7 | +0.5 | | 7762.2 | | +11 | +330 | 321,540 | 434,378 |
| 651 | 0 | | | | 5.4 | - | | -5.4 | | 7756.3 | X | 0 | 0 | 321,529 | 434,048 |
| 652 | 320 | | 251°39' | +12.9° | 9.2 | - | | -9.2 | | 7752.5 | | -30 | -319 | 321,499 | 433,729 |
| 653 | 630 | | 258°3.7' | +12.9° | 14.4 | BH | -3.2 | -17.6 | | | TP | +11-3 | -630+4 | 321,537 | 433,922 sharp curve |
| 653 | 630 | | | | 6.7 | 91°- | -11.0 | -17.7 | -2 | 7743.8 | TP | | | | |
| | 650 | | 62°50.5'+180° | +12.9° | +12.1 | TH | -3.3 | +8.8 | | 7752.6 | BS | -160-3 | -630+5 | | curve |
| | 650 | | | | 12.7 | 89°40' | -3.8 | +8.9 | | | BS | | | | |
| 654 | 325 | | 58°38' | +12.9° | 7.1 | TH | +1.6 | -5.5 | | 7747.1 | | +103 | +308 | 321,477 | 433,105 |
| 655 | 0 | | | | 5.4 | - | | -5.4 | | 7747.2 | X | 0 | 0 | 321,374 | 432,797 |
| 656 | 330 | | 261°38' | +12.9° | 0.1 | TH | +1.7 | +1.6 | | 7754.2 | | +26 | -329 | 321,400 | 432,468 |
| 657 | 646 | | 249°32.3' | +12.9° | 3.5 | 87°40' | +26.3 | +22.8 | -2 | 7775.2 | TP | -85-3 | -639+4 | 321,286 | 432,162 sharp curve |
| 657 | 646 | | | | 5.3 | 87°30' | +28.2 | +22.9 | | | TP | | | | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | | LINE NO. | | PAGE | | |
|-------------|----------------|-------------------|-----------------------------|----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|----------------------------|--------------------------|---------------|---------|
| 9/6/79 | | Cotcamp | | R Turner | | 6834 | | RANSOP, TURNER | | | 3 | | 53 | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| Wyoming | | | | Wyoming | | Albany | | 18 N | | 72 W | | | | L. O. Davis | |
| 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 |
| 657 | | | | | | | | | | 7775.2 | | | | | |
| | 654 | | 44°39.7' +180° | +12.9° | +12.9 | BH | +3.3 | +16.2 | 7791.4 | | BS | -351 | -552+4 | | curve |
| | 654 | | | | +4.8 | 91° | +11.4 | +16.2 | | | BS | | | | |
| 658 | 330 | | 43°10' | +12.9° | 10.4 | - | | -10.4 | | 7781.0 | | +184 | +279 | 321,119 | 431,888 |
| 659 | 0 | | | | 5.4 | - | | -5.4 | | 7786.0 | X | 0 | 0 | 320,935 | 431,614 |
| 660 | 325 | | 223°6' | +12.6° | 0.9 | TH | +1.6 | +0.7 | | 7792.1 | | -183 | -268 | 320,752 | 431,346 |
| 661 | 650 | | 230°0.3' | +12.6° | 1.5 | 89°- | +11.3 | +9.8 | -2' | | TP | -299 | -577+5 | 320,633 | 431,042 |
| 661 | 650 | | | | 5.4 | 88°40' | +15.1 | +9.7 | | | 7800.9 | TP | | | |
| | 645 | | 42°23.7' +180° | +12.6° | +14.7 | 90°20' | +3.8 | +78.5 | 7819.4 | | BS | -370 | -528+4 | | |
| | 645 | | | | +11.7 | 90°40' | +7.5 | +18.6 | | | BS | | | | |
| 662 | 330 | | 55°52' | +12.6° | 9.1 | - | | -9.1 | | 7810.3 | | +121 | +307 | 320,381 | 430,825 |
| 663 | 0 | | | | 5.4 | - | | -5.4 | | 7814.0 | X | 0 | 0 | 320,260 | 430,518 |
| 664 | 330 | | 238°58' | +12.3° | 4.8 | - | | -4.8 | | 7814.6 | | -106 | -313 | 320,154 | 430,205 |
| 665 | 646 | | 250°54.3' | +12.3° | 3.2 | TH | +3.2 | +0.0 | } | | TP | -76 | -641+3 | 320,181 | 429,880 |
| 665 | 646 | | | | 5.6 | 89°30' | +5.6 | +0.0 | | | 7819.4 | TP | | | |
| | 986 | | 70°3.2' +180° | +12.3° | +14.7 | 90°20' | +5.7 | +20.4 | 7839.8 | | BS | -131 | -977 | | curve |
| | 986 | | | | +3.2 | 91° | +17.2 | +20.4 | | | BS | | | | |
| 666 | 660 | | 69°22' | +12.3° | 12.9 | BH | -3.3 | -16.2 | | 7823.6 | | +96 | +653 | 320,143 | 429,556 |
| 667 | 330 | | " " | " " | 12.9 | - | | -12.9 | | 7826.9 | | +48 | +327 | 320,095 | 429,230 |
| 668 | 0 | | | | 5.4 | - | | -5.4 | | 7834.4 | X | 0 | 0 | 320,047 | 428,903 |
| BM | 233 | | 243°5' | +12.3° | 2.6 | 89°- | +4.1 | +1.5 | | 7841.3 | | -59 | -225 | 319,988 | 428,678 |

320,000 + 428,695 (S)
U.S.G.S. el. 7841.0
Vertical correct. -3.1

Geosource Inc.

| DATE | | INSTRUMENT MAN | | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | | LINE NO. | PAGE | | | | |
|-------------|----------------|-------------------|-----------------------------|---------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-----------------|---------------|-------------|---------|-----------|--|
| 9/5/79 | | G. Cotcamp | | | R. Turner | | 6834 | | RANSOM TURNER | | | 3 | 54 | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | |
| Wyoming | | Baldy Mountain | | Wyoming | Albany | | | 13N | 72W | | L.O. Davis | | | | | | |
| 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 | | |
| | | | | | | | | | 7,839.8 | | | | | | | | |
| 669 | 260 | | 250°46' | +11.9° | 1.9 | 89°- | +4.5 | +2.6 | | 7,842.4 | | -33 | -258 | 320,014 | 428,645 | N-S fence | |
| 670 | 330 | | 251°42' | +11.9° | 5.4 | 89°- | +5.8 | +0.4 | | 7,840.2 | | -37 | -328 | 320,010 | 428,575 | | |
| 671 | 660 | | " " | " | 5.8 | 89°- | +11.5 | +5.7 | | 7,845.5 | | -74 | -656 | 319,973 | 428,247 | | |
| 671 | 990 | | 251°39.3' | +11.9° | 1.8 | 89°- | +17.3 | +15.5 | | 7,855.3 | TP | -111 | -984 | 319,936 | 427,919 | | |
| 671 | 990 | | | | 4.7 | 88°50' | +20.2 | +15.5 | | | TP | | | | | | |
| | 980 | 979 | 72°34.8'+180° | +11.9° | +7.4 | 92°- | +34.2 | +41.6 | 7,896.9 | | BS | -94 | -974 | | | Curve | |
| | 980 | | | | +14.9 | 91°34' | +26.8 | +41.7 | | | BS | | | | | | |
| 672 | 652 | | 73°17' | +11.9° | 11.6 | 91°30' | -17.1 | -28.7 | | 7,868.2 | | +55 | +650 | 319,897 | 427,595 | | |
| 673 | 330 | | 68°28' | +11.9° | 11.9 | 91°- | -5.8 | -17.7 | | 7,879.2 | | +55 | +325 | 319,897 | 427,270 | | |
| 674 | 0 | | | | 5.4 | - | | -5.4 | | 7,891.5 | X | 0 | 0 | 319,892 | 426,945 | | |
| 675 | 330 | | 243°52' | +11.3° | 1.0 | - | | -1.0 | | 7,895.9 | | -84 | -319 | 319,758 | 426,626 | | |
| 676 | 650 | | 237°53' | +11.3° | 10.9 | 89°- | +11.3 | +0.4 | | 7,897.3 | | -231 | -608 | 319,611 | 426,337 | | |
| 677 | 980 | | 238°- | +11.3° | 14.2 | 89°- | +17.1 | +2.9 | | 7,899.8 | | -346 | -917 | 319,996 | 426,028 | | |
| 678 | 1300 | | 241°39.2' | +11.3° | 14.4 | 89°- | +22.7 | +8.3 | | 7,905.2 | TP | -381 | -1243 | 319,461 | 425,702 | S-curve | |
| 678 | 1300 | | | | 6.8 | 89°20' | +15.1 | +8.3 | | | TP | | | | | | |
| | 660 | | 76°36.4'+180° | +11.3° | +9.6 | 91°- | +11.5 | +21.0 | 7,926.2 | | BS | -24 | -660 | | | | |
| | 660 | | | | +5.7 | 91°20' | +15.4 | +21.0 | | | BS | | | | | | |
| 679 | 330 | | 71°59' | +11.3° | 13.6 | BH | -1.7 | -15.3 | | 7,910.9 | | +39 | +328 | 319,476 | 425,370 | | |
| 680 | 0 | | | | 5.4 | - | | -5.4 | | 7,920.8 | X | 0 | 0 | 319,437 | 425,042 | intersect | |
| 681 | 330 | | 225°- | +11.3° | 12.1 | 91°- | -5.8 | -17.9 | | 7,908.3 | | -183 | -275 | 319,254 | 424,767 | field | |

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | LINE NO. | PAGE | | | | |
|--------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------|-------------------------|-----------------------|---------------|--|
| 9/17/79 | | G. Colcamp | | R. Turner | | 6834 | | RANSOM TURNER | | 3 | 55 | | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | | PARTY MANAGER | |
| Wyoming | | Baldy Mountain | | Wyoming | | Albany | | 8 N | | 72 W | | | | L.O. Davis | |
| 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 |
| | | | | | | | | | 7926.2 | | | | | | |
| 682 | 658 | | 224° - | +11.3° | 5.2 | 92° - | -23.0 | -28.2 | | 7,898.0 | | -375 | -591 | 319,062 | 429,501 in field |
| 683 | 986 | | 223° 39' | +11.3° | 10.7 | 91° 30' | -25.8 | -36.5 | | 7,889.7 | | -566 | -807 | 318,871 | 424,235 |
| X | 960 | | 248° 43.6' | +11.3° | 11.8 | 84 | -4.8 | -16.6 | | 7,909.6 | | -166 | -995 | 319,271 | 424,097 ^{319,305 + 424,120} _{W.E. elev. 7908} |
| fence corner | 1270 | | 223° 37' | +11.3° | 7.6 | 91° - | -22.2 | -29.8 | | 7,896.4 | | -741 | -1032 | 318,676 | 424,010 |
| 684 | 1313 | | 224° 23.9' | +10.7° | 4.9 | 91° - | -22.9 | -27.8 | | | TP | -751 | -1077 | 318,682 | 423,965 trail along E-W fence |
| 684 | 1313 | | | | 15.0 | 90° 34' | -13.0 | -28.0 | | 7,898.2 | TP | | | | ↓ |
| | 990 | | 77° 28.4' + 180° | +10.7° | 78.5 | 91° 30' | +25.9 | +34.4 | 7,932.6 | | BS | -32 | -989 | | |
| | 990 | | | | +14.2 | 91° 10' | +20.2 | +34.4 | | | BS | | | | |
| 685 | 660 | | 77° 28.4' | +10.7° | 10.6 | 91° - | -11.5 | -22.1 | | 7,910.5 | | +21 | +660 | 318,667 | 423,636 |
| TL | 343 | | 76° 3' | +10.7° | 13.5 | - | | -13.5 | | 7,919.7 | | +19 | +342 | 318,665 | 423,318 Way Intersect. (line 79) |
| 686 | 330 | | 77° 28.4' | +10.7° | 13.8 | - | | -13.8 | | 7,918.8 | | +10 | +330 | 318,656 | 423,306 |
| 687 | 0 | | | | 5.4 | - | | -5.4 | | 7,927.2 | TP | 0 | 0 | 318,646 | 422,976 |
| 688 | 330 | | 257° 43.4' | +10.2° | 1.8 | - | | -1.8 | | 7,930.8 | | -12 | -330 | 318,634 | 422,646 |
| 689 | 660 | | " " | " | 6.2 | 89° - | +11.5 | +5.3 | | 7,937.9 | | -24 | -660 | 318,622 | 422,316 |
| 690 | 990 | | 257° 43.4' | +10.2° | 2.6 | 89° - | +17.3 | +14.7 | | | TP | -36 | -989 | 318,606 | 421,987 |
| 690 | 990 | | | | 11.3 | 88° 30' | +25.9 | +14.6 | | 7,947.2 | TP | | | | |
| | 1320 | 1319 | 85° 33.2' + 180° | +10.2° | +2.9 | 92° - | +46.0 | +48.9 | 7,996.1 | | BS | +132 | -1312 + 1 | | |
| | 1320 | | | | +14.4 | 91° 30' | +34.5 | +48.9 | | | BS | | | | |
| 691 | 990 | 989 | 85° 33.2' | +10.2° | 10.0 | 92° - | -34.5 | -44.5 | | 7,951.6 | | -99 | +984 | 318,635 | 421,660 |
| 692 | 660 | | " " | " | 7.0 | 92° - | -23.0 | -30.0 | | 7,966.1 | | -66 | +657 | 318,668 | 421,333 |

Geosource Inc.

| DATE | | INSTRUMENT MAN | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | | LINE NO. | PAGE | | | |
|-------------|----------------|-------------------|-----------------------------|-----------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|-------------------------|-----------------------|---------|---------|
| 9/7/79 | | G. Catcamp | | R. Turner | | 6834 | | RANSOM TURNER | | | 3 | 56 | | | |
| AREA | | TOPO MAP | | STATE | | COUNTY | | TWP | | RANGE | | PPM | PARTY MANAGER | | |
| Wyoming | | Baldy Mountain | | Wyoming | | Albany | | 18 N | | 72 W | | | L.O. Davis | | |
| 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 |
| | | | | | | | | | 7996.1 | | | | | | |
| 693 | 330 | | 85°33.2' | +10.2° | 10.3 | 92°- | -11.5 | -21.8 | | 7974.3 | | -33 | +328 | 318,701 | 421,004 |
| 694 | 0 | | | | 5.9 | - | | -5.4 | | 7990.7 | X | 0 | 0 | 318,734 | 420,676 |
| 695 | 330 | | 265°36.1' | +9.8° | 1.5 | - | | -1.5 | | 7994.6 | | +31 | -329 | 318,765 | 420,347 |
| 696 | 660 | | | " | 10.4 | 88°- | +23.0 | +12.6 | | 8,008.7 | | +62 | -657 | 318,796 | 420,019 |
| 697 | 990 | 989 | 265°36.1' | +9.8° | 6.3 | 88°- | +34.5 | +28.2 | | 8,024.3 | TP | +93 | -985 | 318,823 | 419,694 |
| 697 | 990 | | | | 3.4 | 88°10' | +31.7 | +28.3 | | | TP | | | | |
| | 660 | | 77°41.3'+180° | +9.8° | +13.0 | - | | +13.0 | 8,037.3 | | BS | -29 | -659 | | |
| | 660 | | | | +9.7 | 04 | +3.3 | +13.0 | | | BS | | | | |
| | 460 | | 76°11' | +9.8° | 15.0 | 04 | -2.3 | -17.3 | | 8,020.0 | | +32 | +459 | 318,822 | 419,494 |
| 698 | 330 | | 77°41.3' | +9.8° | 13.3 | - | | -13.3 | | 8,024.0 | | +14 | +330 | 318,804 | 419,365 |
| 699 | 0 | | | | 5.4 | - | | -5.4 | | 8,031.9 | X | 0 | 0 | 318,790 | 419,035 |
| 700 | 330 | | 256°12' | +10.3° | 11.0 | - | | -11.0 | | 8,026.3 | | -20 | -329 | 318,770 | 418,706 |
| 701 | 650 | | 249°17' | +10.3° | 9.3 | - | | -9.3 | | 8,028.0 | | -118 | -639 | 318,672 | 418,396 |
| 702 | 980 | | 252°20' | +10.3° | 12.5 | - | | -12.5 | | 8,024.8 | | -126 | -972 | 318,664 | 418,063 |
| 703 | 1305 | | 254°43' | +10.3° | 8.9 | - | | -8.9 | | 8,028.4 | | -113 | -1300 | 318,677 | 417,735 |
| 704 | 1630 | | 256°01' | +10.3° | 6.9 | TH | +8.2 | +1.3 | | | TP | -105 | -1627 | 318,685 | 417,408 |
| 704 | 1630 | | | | 5.6 | 89°46' | +6.6 | +1.0 | | 8,038.3 | TP | | | | |
| | 653 | | 61°21'+180° | +10.3° | +12.6 | 04 | +3.3 | +15.9 | 8,054.2 | | BS | -205 | -620 | | curve |
| | 653 | | | | +4.5 | 91°- | +11.4 | +15.9 | | | BS | | | | |
| 705 | 330 | | 65°38' | +10.3° | 11.2 | - | | -11.2 | | 8,043.0 | | +80 | +320 | 318,560 | 417,108 |

horiz. correct. y = +48'
x = +47'

318,820 + 419,470(s)
fence post (east) elev. 8018

| DATE | | INSTRUMENT MAN | | | ROD MAN | | PARTY NUMBER | | NOTES CHECKED BY | | | LINE NO. | PAGE | | | | |
|-------------|----------------|-------------------|-----------------------------|---------|-------------|----------------|-----------------|-------------------------|-------------------------|----------------------|---------------|--------------------|------------------|-------------|---------|---------|--|
| 9/7/79 | | G. Cotcamp | | | R. Turner | | 6834 | | RANSOM TURNER | | | 3 | 57 | | | | |
| AREA | | TOPO MAP | | STATE | COUNTY | | TWP | RANGE | PPM | PARTY MANAGER | | | | | | | |
| Wyoming | | Baldy Mountain | | Wyoming | Albany | | 18N | 72W | | L.O. Davis | | | | | | | |
| 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 | | |
| | | | | | | | | | 8054.2 | | | | | | | | |
| 706 | 0 | | | | 54 | - | | -5.4 | | 8048.8 | T | 0 | 0 | 318,480 | 416,788 | | |
| 707 | 330 | | 254° 28.3' | +10.6° | 2.3 | - | | -2.3 | | 8,051.9 | | -28 | -329 | 318,452 | 416,959 | | |
| 708 | 660 | | 254° 28.3' | +10.6° | 4.8 | 89°- | +11.5 | +6.7 | | 8,060.9 | TP | -57 | -658 | 318,423 | 416,130 | | |
| 708 | 660 | | | | 8.7 | 88°40' | +15.4 | +6.7 | | | TP | | | | | | |
| | 985 | | 56°47' +180° | +10.6° | +9.5 | 92°30' | +42.9 | +52.4 | 8,113.3 | | BS | -378 | -908 | | | Curve | |
| | 985 | 984 | | | +5.6 | 92°44' | +46.9 | +52.5 | | | BS | | | | | | |
| 709 | 658 | 657 | 55° 8' | +10.6° | 10.3 | 93°- | -34.4 | -44.7 | | 8,068.6 | | +270 | +599 | 318,315 | 415,821 | | |
| 710 | 330 | 329 | 50° - | +10.6° | 14.0 | 94°- | -23.0 | -37.0 | | 8,076.3 | | +162 | +287 | 318,207 | 415,509 | | |
| 711 | 0 | | | | 5.4 | - | | -5.4 | | 8,107.9 | T | 0 | 0 | 318,095 | 415,222 | | |
| 712 | 326 | | 237° 26' | +10.6° | 9.1 | 88°- | +11.4 | +2.3 | | | TP | -122 | -302 | 317,923 | 414,920 | Curve | |
| 712 | 326 | | | | 5.4 | 88°40' | +7.6 | +2.2 | | 8,115.5 | TP | | | | | | |
| | 655 | | 62°43.9' +180° | +10.9° | +11.0 | - | | +11.0 | | | BS | -185 | -628 | | | | |
| | 655 | | | | +7.7 | 04 | +3.3 | +11.0 | 8,126.5 | | BS | | | | | | |
| 713 | 330 | | 69° - | +10.9° | 11.2 | 91°- | -5.8 | -17.0 | | 8109.5 | | +58 | +325 | 317,796 | 414,617 | | |
| 714 | 0 | | | | 5.4 | - | | -5.4 | | 8121.1 | T | 0 | 0 | 317,738 | 414,292 | | |
| 715 | 330 | | 255° 56' | +10.9° | 3.5 | 88°- | +11.5 | +8.0 | | 8134.5 | | -18 | -329 | 317,720 | 413,963 | Curve | |
| 716 | 635 | | 256° 29.3' | +10.9° | 6.5 | 88°- | +22.2 | +15.6 | | | TP | -29 | -635 | 317,709 | 413,657 | S-curve | |
| 716 | 636 | | | | 4.7 | 88°10' | +20.3 | +15.6 | | 8,142.1 | TP | | | | | EOL. #3 | |
| | 568 | | 228° 9' -180° | +10.9° | +11.0 | 88°30' | -14.9 | -3.9 | | | BS | +293 | +987 | | | | |
| | 568 | | | | +4.2 | 88°10' | -18.2 | -4.0 | 8,138.1 | | BS | | | | | | |

