

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445'

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-20-86		B. Cotcamp		J. Middleton		6834		J.M.		8		1			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		0 JUEL LAKE-7 1/2		mont.		VALLEY								S. O. NNS	
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		MONTANA NORTH ZONE COORDINATE SYSTEM. REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
K. Fence line intersect			Elevation 2843. (scaled)		y-691.425	x-2.695.700				2843.0	K.				K. Fence line int. EL 2843
	4897		286 47 34	+12.6	12.5	90 44	+62.7	+25.2	2853.3	2918.3	BS	-2403	+4266		
	4897				12.8	269 16	+62.7	+25.5			BS				
1/2	4666		285 57 08	--	6.9	90 48	-65.1	-22.0		2846.3		+2230	-4099	691.252	2.695.867
1	4548		285 23	--	6.8	90 48	-63.5	-70.3		2848.0		+2134	-4016	691.156	2.695.950
2	4236		284 -	--	8.1	90 46	-56.7	-64.8		2853.5		+1897	-3788	690.919	2.696.178
3	3925		282 26	--	7.8	90 46	-52.5	-60.3		2858.0		+1661	-3556	690.683	2.696.410
4	3614		280 42	--	6.8	90 46	-48.4	-55.2		2863.1		+1430	-3319	690.452	2.696.647
5	3295		279 13	--	6.1	90 46	-44.1	-50.2		2868.1		+1225	-3059	690.247	2.696.907
6	2968		278 36	--	11.2	90 46	-39.7	-50.9		2867.4		+1073	-2767	690.095	2.697.199
7	2640		- -	+12.6	6.4	91 10	-53.8	-60.2		2858.1		+955	-2461	689.977	2.697.505
8	2310		- -	--	9.2	91 20	-53.8	-63.0		2855.3		+835	-2154	689.857	2.697.812
9	1980		- -	--	8.1	91 20	-46.4	-54.2		2864.1		+716	-1846	689.738	2.698.120
10	1650		- -	--	9.0	91 10	-33.6	-42.6		2875.7		+597	-1538	689.619	2.698.428
11	1320		- -	--	8.6	91 10	-26.9	-35.5		2882.8		+477	-1231	689.499	2.698.735
12	990		- -	--	10.1	91 10	-20.2	-30.3		2888.0		+358	-923	689.380	2.699.043
13	660		- -	--	9.9	91 10	-13.4	-23.3		2895.0		+239	-615	689.261	2.699.351
14	330		- -	--	7.7	91 10	-6.2	-14.4		2903.9		+119	-308	689.141	2.699.658
15	0		- -	--	5.1	-	-	-5.1		2913.2	X	0	0	689.022	2.699.966
16	330		98 33	--	5.3	88 40	+2.7	+2.4		2920.7		-119	+308	688.903	2.700.274
17	660		- -	--	8.9	88 40	+15.4	+6.5		2924.8		-238	+616	688.784	2.700.582

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445'

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-20-86		B. Cotcamp		J. Middleton		6834		J.M.		8		2			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		0' JUEL Lake-7 1/2'		MONT.		Valley								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									2918.3						
18	990		98° 33'	+12.6	9.9	88° 50'	+20.2	+10.3		2928.6		-357	+923	688,665	2700,889
19	1320		-	--	8.1	88° 50'	+26.9	+18.8		2937.1		-476	+1231	688,546	2701,197
20	1650		-	--	6.7	88° 50'	+33.6	+26.9		2945.2		-595	+1539	688,427	2701,505
21	1980		-	--	10.7	89° -	+34.6	+23.9		2942.2		-714	+1847	688,308	2701,813
22	2310		-	--	11.8	89° 02'	+39.0	+27.2		2945.5		-833	+2154	688,189	2702,120
23	2640	2639.3	-	--	10.9	88° 40'	+61.4	+50.5		2968.8		-952	+2462	688,070	2702,428
24	2970	2968.6	-	--	11.4	88° 14'	+91.6	+80.2		2998.5		-1071	+2769	687,951	2702,735
25	3300	3297.9	-	--	10.8	87° 56'	+119.0	+108.2		3026.5		-1190	+3076	687,832	2703,042
26	3630	3627.4	-	--	9.3	87° 50'	+137.2	+127.9		3046.2		-1309	+3383	687,713	2703,349
27	3960	3957.2	-	--	11.1	87° 50'	+149.7	+138.6		3056.9		-1428	+3691	687,594	2703,657
28	4290	4287.2	-	--	5.4	87° 56'	+154.7	+149.3		3067.6		-1547	+3998	687,475	2703,964
29	4620	4617.0	98° 24'	+12.6	6.0	87° 56'	+166.6	+160.6		3078.9		-1655	+4310	687,367	2704,276
30	4944	4940.6	97° 40' 58"	-	14.0	87° 53'	+182.6	+168.6			TP	-1713	+4634	687,309	2704,600
30	4944				14.1	272° 07'	+182.6	+168.5		3086.8	TP				
	1188		256° 04' 54"	--	+12.0	BH	+5.9	+12.9	3104.7		BS	+27	+1188		
	1188				+12.1	BH 270	+5.9	+18.0			BS				
31	858		255° 25'	--	11.0	-	-	-11.0		3093.7		-30	-857	687,306	2704,931
32	528		254° -	--	6.3	-	-	-6.3		3098.4		-31	-527	687,305	2705,261
1/7	269		252° 48' 30"	--	2.4	-	-	-2.4		3102.3	1/7	-22	-268	687,314	2705,520
33	199		249° 25'	~	7.9	88° 20'	+5.8	-2.1		3102.6		-28	-197	687,308	2705,591

4-687,300 x - 2,705,515
1/7 4way int. 3099.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-20-86	INSTRUMENT MAN	B. Cotamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	J.M.	LINE NO.	8	PAGE	3
AREA	MONTANA	TOPO MAP	0' Juel Lake-7 1/2'	STATE	MONT.	COUNTY	VALLEY	TWP		RANGE		PPM	
												PARTY MANAGER	S. Binns

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									3104.7					
π	0				5.1	-		-5.1		3099.6	π	0	0	687.336 2705.788
34	134		55 -	+12.6	6.7	90 20	-0.8	-7.5		3097.2		+51	+124	687.387 2705.912
35	464		52 15	--	7.7	91 20	-10.8	-18.5		3086.2		+197	+420	687.533 2706.208
36	794		51 15	--	7.0	91 10	-16.2	-23.2		3081.5		+350	+713	687.686 2706.501
37	1124		50 50	--	4.4	91 10	-22.9	-27.3		3077.4		+503	+1005	687.839 2706.793
38	1454		50 35	--	10.5	90 40	-16.9	-27.4		3077.3		+656	+1298	687.992 2707.086
39	1784		50 28	--	3.9	90 40	-20.8	-24.7		3080.0		+808	+1591	688.144 2707.379
40	2114		50 15	--	7.8	90 20	-12.3	-20.1		3084.6		+965	+1881	688.301 2707.669
41	2444		50 10	--	9.7	90 10	-7.1	-16.8		3087.9		+1118	+2173	688.454 2707.961
42	2774		50 05	--	13.3	-		-13.3		3091.4		+1273	+2465	688.609 2708.253
43	3104		- -	+12.6	9.9	-		-9.9		3094.8		+1424	+2758	688.760 2708.546
44	3434		- -	--	2.8	-		-2.8		3101.9		+1576	+3051	688.912 2708.839
45	3764		50 -	--	11.7	89 42	+19.7	+8.0		3112.7		+1732	+3342	689.068 2709.130
46	4094		50 -	--	9.7	89 36	+28.6	+18.9		3123.6		+1884	+3635	689.220 2709.423
47	4424		49 58	--	11.7	89 30	+38.6	+26.9		3131.6		+2038	+3927	689.374 2709.715
48	4754		- -	--	8.8	89 30	+41.5	+32.7		3137.4		+2190	+4219	689.526 2710.007
49	5084		- -	--	7.3	89 30	+44.4	+37.1		3141.8		+2342	+4512	689.678 2710.300
50	5414		- -	--	7.8	89 26	+53.5	+45.7		3150.4		+2494	+4805	689.830 2710.593
51	5744		- -	--	5.3	89 26	+56.8	+51.5		3156.2		+2646	+5098	689.982 2710.886
52	6074		- -	--	9.2	89 22	+67.1	+57.9		3162.6		+2798	+5391	690.134 2711.179

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445'

Geosource Inc.

DATE	8-20-86	INSTRUMENT MAN	B. Cotcamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	F.M.	LINE NO.	8	PAGE	4	
AREA	MONTANA	TOPO MAP	O'JUEL LAKE-7 1/2'	STATE	MONT.	COUNTY	Valley	TWP		RANGE		PPM	PARTY MANAGER	S. Binns

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									3104.7					
53	6403		49 57 38	+12.6	14.3	89 20	+74.5	+60.2	3104.7	3164.7	TP	+2950	+5682	690,286 2,711,470
53	6403				14.8	270 40	+74.5	+59.7			TP			
	5839		248 29 10	--	10.7	-		+10.7	3175.4		BS	+905	+5768	
	5839				10.8	270 -		+10.8			BS			
#1	5719		249 02 28	--	10.0	-		-10.0		3165.4	#1	-831	-5658	690,365 2,711,585 #1 T-Intersect.
54	5527		249 40'	--	10.0	-		-10.0		3165.4		-744	-5477	690,447 2,711,761
55	5219		250 56'	--	10.2	-		-10.2		3165.2		-588	-5186	690,603 2,712,052
56	4912		252 10'	--	7.7	90 06	-8.6	-16.3		3159.1		-448	-4892	690,743 2,712,346
57	4606		253 45'	--	7.9	90 14'	-18.8	-26.7		3148.7		-293	-4597	690,898 2,712,641
58	4285		254 50'	--	6.1	90 20'	-24.9	-31.0		3144.4		-192	-4281	690,999 2,712,957
59	3959		255 18'	+12.6	9.8	90 32'	-36.9	-46.7		3128.7		-145	-3956	691,046 2,713,282
60	3630		- -	--	7.2	90 48'	-50.7	-52.9		3112.5		-133	-3628	691,058 2,713,610
61	3300		- -	--	8.9	90 50'	-48.0	-56.9		3118.5		-121	-3298	691,070 2,713,940
62	2970		- -	--	9.7	90 50'	-43.2	-52.9		3122.5		-109	-2968	691,082 2,714,270
63	2640		- -	--	10.3	90 50'	-38.4	-48.7		3126.7		-97	-2638	691,094 2,714,600
64	2310		- -	--	11.6	90 50'	-33.6	-45.2		3130.2		-85	-2308	691,106 2,714,930
65	1980		- -	--	7.0	91 -	-34.6	-41.6		3133.8		-73	-1979	691,118 2,715,259
66	1650		- -	--	8.0	91 10'	-33.6	-41.6		3133.8		-60	-1649	691,131 2,715,589
#	1864		255 40 -	-	8.1	91 -	-32.5	-40.6		3134.8	#	-56	-1863	691,135 2,715,375 Way Int. El. 3133.0
67	1320		255 18'		9.0	91 44'	-39.9	-48.9		3126.5		-48	-1319	691,143 2,715,919

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DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE							
8-20-86		B. Cotamp		J. Middleton		6834		J.M.		8		5							
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER					
MONTANA		O'JUEL LAKE-7 1/2'		MONT.		Valley								S. Binns					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X				
									3175.4										
68	990		255 18'	+12.6	9.2	92 -	-34.6	-43.8		3131.6		-36	-989	691,155	2,716,249				
69	660		- -	--	6.0	92 -	-23.0	-29.0		3146.4		-24	-660	691,167	2,716,578				
70	330		- -	--	8.3	91 -	-5.8	-14.1		3161.3		-12	-330	691,179	2,716,908				
71	0				5.1	-		-5.1		3170.3	X	0	0	691,191	2,717,238				
72	330		75 18'	+12.6	10.0	91 -	-5.8	-15.8		3159.6		+12	+330	691,203	2,717,568				
73	660		- -	--	9.9	92 -	-23.0	-32.9		3142.5		+24	+660	691,215	2,717,898				
74	990		- -	--	3.6	92 -	-34.6	-38.2		3137.2		+36	+989	691,227	2,718,227				
75	1320		- -	--	8.9	91 -	-23.0	-31.9		3143.5		+48	+1319	691,239	2,718,557				
76	1650		- -	--	9.3	90 36'	-17.3	-26.6		3148.8		+60	+1649	691,251	2,718,887				
77	1980		- -	--	11.5	90 16'	-9.2	-20.7		3154.7		+73	+1979	691,264	2,719,217				
#	2021		75 01 40	--	10.4	90 16'	-9.4	-19.8		3155.6	#	+84	+2019	691,275	2,719,257				5-619,285 x 2-719,285 # creek, EL. 3157.0
78	2310		75 18'	+12.6	8.2	90 10'	-6.7	-14.9		3160.5		+85	+2308	691,276	2,719,546				
79	2640		- -	--	9.0	-		-9.0		3166.4		+97	+2638	691,288	2,719,876				
80	2970		- -	--	4.4	-		-4.4		3171.0		+109	+2968	691,300	2,720,206				
81	3300		- -	--	10.2	89 50'	+9.6	-0.6		3174.8		+121	+3298	691,312	2,720,536				
82	3630		- -	--	7.8	89 50'	+10.6	+2.8		3178.2		+133	+3628	691,324	2,720,866				
83	3960		- -	--	5.7	89 50'	+11.5	+5.8		3181.2		+145	+3957	691,336	2,721,195				
84	4290		- -	--	11.7	89 44'	+20.0	+8.8		3184.2		+157	+4287	691,348	2,721,525				
85	4620		- -	--	9.0	89 44'	+21.5	+12.5		3187.9		+169	+4617	691,360	2,721,855				O'JUEL LAKE - 7 1/2'
86	4950		- -	--	6.7	89 44'	+23.0	+16.3		3191.7		+181	+4947	691,372	2,722,185				OPHEIM - 7 1/2' ↓

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-20-86	INSTRUMENT MAN	B. C. Camp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	J.M.	LINE NO.	8	PAGE	6	
AREA	MONTANA	TOPO MAP	OPHEIM - 7 1/2'	STATE	MONT.	COUNTY	Valley	TWP		RANGE		PPM	PARTY MANAGER	S. Binns

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									3175.4					
87	5280		75 18	+12.6	11.4	89 36 30	+36.1	+24.2		3200.1		+193	+5276	691.384 2722.514
88	5610		- -	--	10.2	89 33	+44.1	+33.9		3209.3		+206	+5606	691.397 2722.844
89	5940		- -	--	10.7	89 29	+53.6	+42.9		3218.3		+218	+5936	691.409 2723.174
90	6270		- -	--	11.5	89 25	+63.8	+52.3		3227.7		+230	+6266	691.421 2723.504
91	6381		75 13 16	--	14.9	89 22	+70.5	+55.6		3231.0	-	+243	+6376	691.434 2723.614
91	6600		75 18	--	10.2	89 22	+73.0	+62.8		3238.2		+242	+6596	691.433 2723.834
92	6930	6929.4	- -	--	11.7	89 16	+88.7	+77.0		3252.4		+254	+6925	691.445 2724.163
93	7260	7259.3	- -	--	11.8	89 12	+101.4	+90.0		3265.4		+266	+7254	691.457 2724.492
94	7590	7589.2	75 19 58	--	14.0	89 10	+110.4	+96.4		3271.5	TP	+274	+7584	691.465 2724.822
94	7590				14.5	270 50	+110.4	+95.9		3271.5	TP			
	4950		255 25 10	+12.6	13.9	90 05	+7.2	+21.1	21.3	3292.8	BS	+171	+4947	
	4950				14.4	269 55	+7.2	+21.6			BS			
95	4620		255 25	--	12.0	90 06	-8.1	-20.1		3272.7		-160	-4617	691.476 2725.152
96	4290		- -	--	10.4	90 08	-10.0	-20.4		3272.4		-148	-4287	691.488 2725.482
97	3960		- -	--	10.1	90 08	-9.2	-19.3		3273.5		-137	-3958	691.499 2725.811
98	3630		- -	--	5.8	90 08	-8.4	-14.2		3278.6		-126	-3628	691.510 2726.141
99	3300		- -	--	5.1	90 08	-7.7	-12.8		3280.0		-114	-3298	691.522 2726.471
100	2970		- -	--	5.8	90 08	-6.9	-12.7		3280.1		-103	-2968	691.533 2726.801
101	2640		- -	--	6.5	90 08	-6.1	-12.6		3280.2		-91	-2638	691.545 2727.131
77	2582		255 39 30	--	6.6	90 08	-6.0	-12.6		3280.2	77	-78	-2581	691.558 2727.188

y - 691.425 x - 2.723,645
Fence Line EL. 3229.0

y - 691.555 x - 2.727,205
77 Hwy enter EL. 3280.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-20-86		B. Cotcamp		J. Middleton		6834		F.M.		8		2			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		OPHEIM-7 1/2'		MONT.		Valley								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH -	EAST + WEST -		Y
									3292.8						
102	2310		255 25	+12.6	7.1	90 08	-5.4	-12.5		3280.3		-80	-2309	691,556	2727,460
103	1980		-	--	8.9	90 08	-4.6	-13.5		3279.3		-69	-1979	691,567	2727,790
104	1650		-	--	8.6	90 08	-3.8	-12.4		3280.4		-57	-1649	691,579	2728,120
105	1320		-	--	9.2	90 08	-3.1	-12.3		3280.5		-46	-1319	691,590	2728,450
106	990		-	--	8.1	90 08	-2.3	-10.4		3282.4		-34	-989	691,602	2728,780
107	660		-	--	6.5	90 08	-1.5	-8.0		3284.8		-23	-660	691,613	2729,109
108	330		-	--	5.2	-	-	-5.2		3287.6		-11	-330	691,625	2729,439
109	0		-	--	5.1	-	-	-5.1		3287.7	X	0	0	691,636	2729,769
110	330		75 20	+12.6	6.0	-	-	-6.0		3286.8		+12	+330	691,648	2730,099
111	660		-	--	5.8	-	-	-5.8		3287.0		+24	+660	691,660	2730,429
112	990		-	--	7.0	-	-	-7.0		3285.8		+36	+989	691,672	2730,758
113	1320		-	--	7.9	-	-	-7.9		3284.9		+48	+1319	691,684	2731,088
114	1650		-	--	9.1	-	-	-9.1		3283.7		+60	+1649	691,696	2731,418
115	1980		-	--	2.8	BH	-9.9	-12.7		3280.1		+71	+1979	691,707	2731,748
116	2310		-	--	10.6	90 04	-2.7	-13.3		3279.5		+83	+2309	691,719	2732,078
117	2640		-	--	10.2	90 04	-3.1	-13.3		3279.5		+95	+2638	691,731	2732,407
47	2697		75 05 20	--	9.8	90 04	-3.1	-12.9		3279.9	47	+109	+2695	691,745	2732,464
118	2970		75 20	--	9.2	90 04	-3.5	-12.7		3280.1		+107	+2968	691,743	2732,737
119	3300		-	--	8.9	90 04	-3.8	-12.7		3280.1		+119	+3298	691,755	2733,067
120	3630		-	--	10.0	90 04	-4.2	-14.2		3278.6		+131	+3628	691,767	2733,397

4-691,790 x 2,732,495
 47 4 way int. 3280.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 8-20-86	INSTRUMENT MAN B. Cotcamp	ROD MAN S. Binns	PARTY NUMBER 6834	NOTES CHECKED BY J.M.	LINE NO. 8	PAGE 8
AREA MONTANA	TOPO MAP OPHEIM-7 1/2'	STATE MONT.	COUNTY Valley	TWP	RANGE	PPM
				PARTY MANAGER S. Binns		

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
									3292.8									
121	3960		75 20	+12.6	10.7	90 04	-4.6	-15.3		3277.5		+143	+3957	691.779	2733.726			
122	4290		- -	--	11.2	90 04	-5.0	-16.2		3276.6		+155	+4287	691.791	2734.056			
123	4620		75 23 04	+12.3	14.8	90 02	-2.7	-17.5			TP	+187	+4616	691.823	2734.385			
123	4620				14.9	269 58	-2.7	-17.6		3275.2	TP							
	4620		255 30 34	--	+14.7	89 42	-24.2	-9.5	3265.8		BS	+177	+4617					
	4620				+15.0	270 18	-24.2	-9.2			BS							
124	4290		255 30	--	11.1	89 44	+20.0	+8.9		3274.7		-165	-4287	691.835	2734.715			
125	3960		- -	--	10.4	89 44	+18.4	+8.0		3273.8		-152	-3957	691.848	2735.045			
126	3630		- -	--	11.6	89 44	+16.9	+5.3		3271.1		-139	-3627	691.861	2735.375			
127	3300		- -	--	8.6	89 44	+15.4	+6.8		3272.6		-127	-3298	691.873	2735.704			
128	2970		- -	--	8.4	89 44	+13.8	+5.4		3271.2		-114	-2968	691.886	2736.034			
129	2640		255 30	+12.3	9.7	89 44	+12.3	+2.6		3268.4		-101	-2638	691.899	2736.364			
130	2310		- -	--	7.0	89 44	+10.8	+3.8		3269.6		-89	-2308	691.911	2736.694			
131	1980		- -	--	6.0	89 44	+9.2	+3.2		3269.0		-76	-1979	691.924	2737.023			
132	1650		- -	--	8.1	89 44	+7.7	-0.4		3265.4		-63	-1649	691.937	2737.353			
133	1320		- -	--	8.1	89 44	+6.1	-2.0		3263.8		-51	-1319	691.949	2737.683			
134	1260		256 08 18	--	8.0	89 44	+5.9	-2.1		3263.7	TI	-34	-1260	691.966	2737.742	by -691.990 x -2737.790 HT - enter. 3261.0		
134	990		255 30	--	9.0	89 44	+4.6	-4.4		3261.4		-38	-989	691.962	2738.013			
135	660		- -	--	6.7	89 44	+3.1	-3.6		3262.2		-25	-660	691.975	2738.342			
136	330		- -	--	6.0	89 -	+5.8	-0.2		3265.6		-13	-330	691.987	2738.672			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-20-86	INSTRUMENT MAN	B. Cotcamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	J.M.	LINE NO	8	PAGE	9	
AREA	MONTANA	TOPO MAP	OPHEIM-7 1/2'	STATE	MONT.	COUNTY	Valley	TWP		RANGE		PPM	PARTY MANAGER	S. Binns

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									3265.8					
137	0				5.1	-		-5.1		3260.7	TP	0	0	692.000 2739.002
138	330		75° 33'	+12.3	9.9	-		-9.9		3255.9		+12	+330	692.012 2739.332
139	660		- -	--	11.8	BH	-3.3	-15.1		3250.7		+25	+660	692.025 2739.662
140	990		- -	--	11.0	90° 30'	-8.6	-19.6		3246.2		+37	+989	692.037 2739.991
141	1320		- -	--	6.9	90° 30'	-11.5	-18.4		3242.4		+50	+1319	692.050 2740.321
142	1650		- -	--	9.0	BH	-8.3	-17.3		3248.5		+62	+1649	692.062 2740.651
143	1980		- -	--	12.3	-		-12.3		3253.5		+74	+1979	692.074 2740.981
144	2310		- -	+12.3	9.7	-		-9.7		3256.1		+87	+2308	692.087 2741.310
145	2640		- -	--	7.8	-		-7.8		3258.0		+99	+2638	692.099 2741.640
146	2970		- -	--	8.1	-		-8.1		3252.7		+111	+2968	692.111 2741.970
147	3300		- -	--	9.3	-		-9.3		3256.5		+124	+3298	692.124 2742.300
148	3630		- -	--	8.1	-		-8.1		3252.7		+136	+3627	692.136 2742.629
149	3960		- -	--	7.8	-		-7.8		3258.0		+149	+3957	692.149 2742.959
150	4409		96° 23' 05"	-	7.5	-		-7.5		3258.3	TP	-1412	+4177	690.588 2743.179
150	4538		92° 57' 32"	-	6.2	-		-6.2			TP	-1194	+4378	690.806 2743.380
150	4538				6.7	270°		-6.7	6.5	3259.3	TP			
	2639		254° 27' 51"	--	+14.7	TH	-13.2	+1.0			BS	+149	+2635	
	2639				+14.1	TH 270°	-13.2	+0.9	3260.2		BS			
151	2310		255° 06'	--	9.5	89° 50'	+6.7	-2.8		3257.4		-105	-2308	690.850 2743.707
152	1980		- -	--	11.1	89° 50'	+5.8	-5.3		3254.9		-90	-1978	690.865 2744.037

NOTE # - 1520 offset
South 149-150
y = 690.600 x = 2743.205
y - Inter.

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-20-86	INSTRUMENT MAN	B. Cotcamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	J.M.	LINE NO.	8	PAGE	10	
AREA	MONTANA	TOPO MAP	OPHEIM-7 1/2'	STATE	MONT.	COUNTY	Valley	TWP		RANGE		PPM	PARTY MANAGER	S. Binns

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									3260.2					
153	1650		255 06	+12.3	9.9	89 50	+4.8	-5.1		3255.1		-75	-1648	690.880 2744.367
154	1320		- -	--	6.0	89 50	+3.8	-2.2		3258.0		-60	-1319	690.895 2744.696
155	990		- -	--	8.2	89 40	+5.8	-2.4		3257.8		-45	-989	690.910 2745.026
156	660		- -	--	7.4	89 46	+3.8	-3.6		3256.6		-30	-659	690.925 2745.356
157	330		- -	--	6.0	89 40	+1.9	-4.1		3256.1		-15	-330	690.940 2745.685
158	0				5.1	-		-5.1		3255.1	TP	0	0	690.955 2746.015
159	330		75 27	+12.3	6.3	-		-6.3		3253.9		+13	+330	690.968 2746.345
160	660		- -	--	8.2	-		-8.2		3252.0		+26	+659	690.981 2746.674
161	990		- -	--	10.7	-		-10.7		3249.5		+39	+989	690.994 2747.004
162	1320		- -	--	6.3	BH	-6.6	-12.9		3247.3		+52	+1319	691.007 2747.334
163	1650		- -	--	6.9	BH	-8.3	-15.2		3245.0		+65	+1649	691.020 2747.664
164	1980		- -	--	8.7	BH	-9.9	-18.6		3241.6		+78	+1978	691.033 2747.993
165	2310		- -	--	11.5	BH	-11.6	-23.1		3237.1		+91	+2308	691.046 2748.323
166	2640		- -	--	10.9	90 22	-16.9	-27.8		3232.4		+104	+2638	691.059 2748.653
167	2970		- -	--	10.2	90 22	-19.0	-29.2		3231.0		+117	+2968	691.072 2748.983
168	3300		- -	--	9.7	90 22	-21.1	-30.8		3229.4		+130	+3297	691.085 2749.312
169	3630		75 29 04	+11.9	14.4	90 17	-18.0	-32.4			TP	+166	+3626	691.121 2749.641
169	3630				14.7	269 43	-18.0	-32.7	3263	3227.6	TP			
	3300		255 30 10	-	14.3	89 52	-7.7	+6.6	3267 3234.3		BS	+150	+3297	
	3300				14.6	270 08	-7.7	+6.9			BS			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO		PAGE			
8-20-86		B. Cotcamp		J. Middleton		6834		R. 7		8		11			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		OPHEIM-7 1/2'		MONT.		Valley								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH -	EAST + WEST -		Y
									3234.3						
170	2970		255 30	+11.9	7.4	-	-7.4		3226.9			-135	-2967	691.136	2749.971
171	2640		-	--	8.6	-	-8.6		3225.7			-120	-2637	691.151	2750.301
172	2310		-	--	9.2	-	-9.2		3225.1			-105	-2308	691.166	2750.630
71	2223		255 58 43	--	9.1	-	-9.1		3225.2	71		-82	-2221	691.189	2750.717
173	1980		255 30	--	8.2	-	-8.2		3226.1			-90	-1978	691.181	2750.960
174	1650		-	--	6.9	-	-6.9		3227.4			-75	-1648	691.196	2751.290
175	1320		-	--	5.3	-	-5.3		3229.0			-60	-1319	691.211	2751.619
176	990		-	--	4.0	-	-4.0		3230.3			-45	-989	691.226	2751.949
177	660		-	--	3.7	-	-3.7		3230.6			-30	-659	691.241	2752.279
178	330		-	--	4.1	-	-4.1		3230.2			-15	-330	691.256	2752.608
179	0				5.1	-	-5.1		3229.2		71	0	0	691.271	2752.938
180	330		75 26		5.2	-	-5.2		3229.1			+15	+330	691.286	2753.268
71	618		73 46 24	+11.9	5.7	-	-5.7		3228.6	71		+47	+616	691.318	2753.554
181	660		75 26	--	6.1	-	-6.1		3228.2			+31	+659	691.302	2753.597
182	990		-	--	7.6	-	-7.6		3226.7			+46	+989	691.317	2753.927
183	1320		-	--	8.9	-	-8.9		3225.4			+61	+1319	691.332	2754.257
184	1650		-	--	10.6	-	-10.6		3223.7			+77	+1648	691.348	2754.586
185	1980		-	--	12.0	-	-12.0		3222.3			+92	+1978	691.363	2754.916
186	2310		-	--	8.2	90 08	-5.4	-13.6	3220.7			+107	+2308	691.378	2755.246
187	2640		-	--	7.9	90 08	-6.1	-14.0	3220.3			+123	+2637	691.394	2755.575

Y-691.170 X-2750.765
T-Inter. EL. 3224.6

OPHEIM-7 1/2'
GLENTANA West-7 1/2'

Y-691.300 X-2753.570
T-Inter. EL. 3228.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-20-82	INSTRUMENT MAN	B. Cotcamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	F.M.	LINE NO.	8	PAGE	12	
AREA	MONTANA	TOPO MAP	GLENTANA West - 7 1/2'	STATE	MONT.	COUNTY	Valley	TWP		RANGE		PPM	PARTY MANAGER	S. B. INNS

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
									3234.3									
188	2970		75° 30'	+11.9	6.7	90° 08'	-6.9	-13.6		3220.7		+135	+2967	691.406	2755.905			
189	3300		- -	--	7.7	90° 08'	-7.7	-15.4		3218.9		+150	+3297	691.421	2756.235			
190	3630		75° 32' 45"	-	14.6	90° 06'	-6.3	-20.9			TP	+162	+3626	691.433	2756.564			
190	3630				14.9	269° 54'	-6.3	-21.2	-21.13	3213.2	TP							
	5281		255° 58' 46"	+11.9	11.9	TH	-26.4	-14.5	-14.3	3198.8	BS	+195	+5277					
	5281			+12.2		TH 270°	-26.4	-14.2			BS							
191	4950		255° 55'	--	10.7	89° 48'	+17.3	+6.6		3205.4		-189	-4946	691.439	2756.895			
192	4620		- -	--	14.6	89° 50'	+13.4	-1.2		3197.6		-176	-4617	691.452	2757.224			
193	4290		- -	--	17.4	89° 50'	+12.5	-4.9		3193.9		-163	-4287	691.465	2757.554			
194	3960		- -	--	16.9	89° 50'	+11.5	-5.4		3193.4		-151	-3957	691.477	2757.884			
195	3630		- -	--	11.0	89° 52'	+8.4	-2.6		3196.2		-138	-3627	691.490	2758.214			
196	3360		255° 41'	+11.9	6.8	89° 50'	+9.6	+2.8		3201.6		-139	-3297	691.489	2758.544			
197	2970		- -	--	11.1	89° 40'	+17.3	+6.2		3205.0		-125	-2967	691.503	2758.874			
198	2640		- -	--	9.3	89° 40'	+15.4	+6.1		3204.9		-111	-2638	691.517	2759.203			
199	2310		- -	--	10.2	89° 40'	+13.4	+3.2		3202.0		-97	-2308	691.531	2759.533			
200	1980		- -	--	11.2	89° 40'	+11.5	+0.3		3199.1		-83	-1978	691.545	2759.863			
1K	1710		256° 10' 09"	-	10.9	89° 40'	+9.9	-1.0		3197.8	1K	-58	-1709	691.570	2760.132		g-691,600 x -2760,165 1/2 T-Inter. EL. 3196.0	
201	1650		255° 41'	-	9.8	TH	+8.3	-1.5		3192.3		-70	-1649	691.558	2760.192			
202	1320		- -	-	8.7	TH	+6.6	-2.1		3196.7		-56	-1319	691.572	2760.522			
203	990		- -	-	7.7	TH	+5.0	-2.7		3196.1		-42	-989	691.586	2760.852			

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-21-86		B. Cotamp		J. Middleton		6834		R. D		8		13			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		GLENTANA West-7 1/2'		MONT.		Valley								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									3198.8'						
204	660		255 41'	+11.9	6.8	TH	+3.3	-3.5'		3195.3		-28	-659	691.600	2761.182
205	330		- -	--	5.8	TH	+1.7	-4.1'		3194.7		-14	-330	691.614	2761.511
206	0				5.1	-		-5.1'		3193.7	TP	0	0	691.628	2761.841
207	330		75 35'	--	5.1	-		-5.1'		3193.7		+14	+330	691.642	2762.171
208	660		- -	--	5.0	-		-5.0'		3193.8		+29	+659	691.657	2762.500
209	990		- -	--	5.0	-		-5.0'		3193.8		+43	+989	691.671	2762.830
210	1320		- -	--	6.0	-		-6.0'		3192.8		+58	+1319	691.686	2763.160
211	1650		- -	--	8.5	-		-8.5'		3190.3		+72	+1648	691.700	2763.489
212	1980		- -	+11.9	9.9	-		-9.9'		3188.9		+87	+1978	691.715	2763.819
213	2310		- -	--	8.9	-		-8.9'		3189.9		+101	+2308	691.729	2764.149
214	2640		- -	--	7.3	-		-7.3'		3191.5		+116	+2637	691.744	2764.478
215	2970		- -	--	5.9	-		-5.9'		3192.9		+130	+2967	691.758	2764.808
216	3300		- -	--	5.0	-		-5.0'		3193.8		+145	+3297	691.773	2765.138
217	3630		- -	--	5.1	-		-5.1'		3193.7		+159	+3627	691.787	2765.468
218	3960		- -	--	6.6	-		-6.6'		3192.2		+174	+3956	691.802	2765.797
219	4290		- -	--	8.8	-		-8.8'		3190.0		+188	+4286	691.816	2766.127
220	4620		75 37.14'	--	15.0	89 58	+2.7	-12.3'		3186.5	TP	+200	+4616	691.828	2766.457
220	4620				15.1	270 02	+2.7	-12.4'			TP				
	4619		255 36 37	+11.9	14.7	89 28	-43.0	-28.3'			BS	+201	+4614		
	4619				+15.0	270 32	-43.0	-28.0'	28.1	3158.4	BS				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-21-86	INSTRUMENT MAN	B. Cotcamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	J.M.	LINE NO.	8	PAGE	14	
AREA	MONTANA	TOPO MAP	GLENTANA West-7 1/2'	STATE	MONT.	COUNTY	valley	TWP		RANGE		PPM	PARTY MANAGER	S. Binns

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									3158.4						
220	4344		255° 51' 10"	+11.9	12.8	89° 30'	+37.9	+25.1		3183.5		-170	-4340	691,859 2,766,731	if 691,860 x -2,766,800 4 way enter EL. 3184.0
221	4290		255° 36'	--	10.8	89° 32'	+34.9	+24.1		3182.5		-187	-4286	691,842 2,766,785	
222	3960		- -	--	12.3	89° 32'	+32.3	+20.0		3178.4		-173	-3956	691,856 2,767,115	
223	3630		- -	--	11.7	89° 32'	+29.6	+17.9		3176.3		-158	-3627	691,871 2,767,444	
224	3300		- -	--	10.1	89° 32'	+26.9	+16.8		3175.2		-144	-3297	691,885 2,767,774	
225	2970		- -	--	8.2	89° 32'	+24.2	+16.0		3174.4		-130	-2967	691,899 2,768,104	
226	2640		- -	+11.9	6.8	89° 32'	+21.5	+14.7		3173.1		-115	-2637	691,914 2,768,434	
227	2310		- -	--	6.6	89° 30'	+20.9	+13.6		3172.0		-101	-2308	691,928 2,768,763	
228	1980		- -	--	5.4	89° 30'	+17.3	+11.9		3170.3		-86	-1978	691,943 2,769,093	
229	1650		- -	--	8.7	89° 20'	+19.2	+10.5		3168.9		-72	-1648	691,957 2,769,423	
230	1320		- -	--	6.7	89° 20'	+15.4	+8.7		3167.1		-58	-1319	691,971 2,769,752	
231	990		- -	--	5.8	89° 20'	+11.5	+5.7		3164.1		-43	-989	691,986 2,770,082	
232	660		- -	--	5.8	89° 20'	+7.7	+1.9		3160.3		-29	-659	692,000 2,770,412	
233	330		- -	--	5.7	89° 20'	+3.8	-1.9		3156.5		-14	-330	692,015 2,770,741	
234	0				5.1	-		-5.1		3153.3	X	0	0	692,029 2,771,071	
235	330		75° 36'	+11.9	4.8	90° 20'	-1.9	-6.7		3151.7		+14	+330	692,043 2,771,401	
236	660		- -	--	6.3	90° 10'	-1.9	-8.2		3150.2		+29	+659	692,058 2,771,730	
237	990		- -	--	7.1	90° 10'	-2.9	-10.0		3148.4		+43	+989	692,072 2,772,060	
238	1320		- -	--	8.0	90° 10'	-3.8	-11.8		3146.6		+58	+1319	692,087 2,772,390	
239	1650		- -	--	9.0	90° 10'	-4.8	-13.8		3144.6		+72	+1648	692,101 2,772,719	

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

DATE 8-21-86	INSTRUMENT MAN. B. Cotcamp	ROD MAN J. Middleton	PARTY NUMBER 6834	NOTES CHECKED BY R. J.	LINE NO. 8	PAGE 15
AREA MONTANA	TOPO MAP GLONTANA West-7 1/2'	STATE MONT.	COUNTY Valley	TWP	RANGE	PPM
				PARTY MANAGER S. Binns		

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
									3158.4									
240	1980		75 36	+11.9	10.1	90 10	-5.8	-15.9		3142.5		+ 86	+1978	692,115	2773,049			
241	2310		- -	--	11.1	90 10	-6.7	-12.8		3140.6		+ 101	+2308	692,130	2773,379			
242	2640		- -	--	7.4	90 16	-12.3	-19.7		3138.7		+ 115	+2637	692,144	2773,708			
243	2970		- -	--	8.1	90 16	-13.8	-21.9		3136.5		+ 130	+2967	692,159	2774,038			
244	3300		- -	--	10.2	90 16	-15.4	-25.6		3132.8		+ 144	+3297	692,173	2774,368			
245	3573		75 21 51	+11.9	13.1	90 16	-16.6	-29.7		3128.7		+171	+3569	692,200	2774,640	AL - 692,195 x - 2,774,660 7' 4" WAY Int. EL. 3131.0		
245	3630		75 36	--	9.8	90 20	-21.1	-30.9		3127.5		+ 158	+3627	692,187	2774,698			
246	3960		- -	--	10.3	90 22	-25.3	-35.6		3122.8		+ 173	+3956	692,202	2775,027			
247	4290		75 38 25	--	14.7	90 20	-25.0	-39.7	3118.3	3118.6	TP	+184	+4286	692,213	2775,357			
247	4290				15.0	269 40	-25.0	-40.0			TP							
	4620		255 21 50	--	14.6	TH	-23.1	-8.5			BS	+221	+4615					
	4620				14.9	TH 270	-23.1	-8.2	3110.3		BS							
248	4290		255 20	--	6.6	89 50	+12.5	+5.9		3116.2		-207	-4285	692,227	2775,687			
249	3960		- -	--	9.0	89 50	+11.5	+2.5		3112.8		- 191	-3955	692,243	2776,017			
250	3630		- -	--	11.0	89 50	+10.6	-0.4		3109.9		- 175	-3626	692,259	2776,346			
251	3300		255 15	--	7.5	89 56	+3.8	-3.7		3106.6		- 164	-3296	692,270	2776,676			
252	2970		- -	--	10.2	89 56	+3.5	-6.7		3103.6		- 148	-2966	692,286	2777,006			
253	2640		- -	--	10.1	-	-	-10.1		3100.2		- 131	-2637	692,303	2777,335			
254	2310		255 05	--	11.0	-	-	-11.0		3099.3		- 122	-2307	692,312	2777,665			
255	1980		- -	--	9.0	-	-	-9.0		3101.3		- 104	-1977	692,330	2777,995			

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-21-86		B. Cotcamp		J. Middleton		6834		B.C.		8		16			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		GLENTANA West-7 1/2		MONT.		Valley								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									3110.3						
256	1650		254 56	+11.9	5.8	-	-5.8			3104.5		-91	-1647	692,343	2778,325
257	1320		254 50	--	10.0	TH	+6.6	-3.4		3106.9		-75	-1318	692,359	2778,654
258	990		254 45	--	7.0	TH	+5.0	-2.0		3108.3		-58	-988	692,376	2778,984
259	660		-	--	5.6	TH	+3.3	-2.3		3108.0		-39	-659	692,395	2779,313
260	330		-	--	5.0	TH	+1.7	-3.3		3107.0		-19	-329	692,415	2779,643
261	306		257 -	--	3.2	-	-3.2			3107.1		-6	-306	692,428	2779,666
261	0				5.1	-	-5.1			3105.2	TP	0	0	692,434	2779,972
262	330		74 -	+11.9	6.2	-	-6.2			3104.1		+24	+329	692,458	2780,301
263	660		-	--	7.8	-	-7.8			3102.5		+47	+658	692,481	2780,630
264	990		74 10	--	9.4	-	-9.4			3100.9		+68	+988	692,502	2780,960
265	1320		74 30	--	11.7	-	-11.7			3098.6		+83	+1317	692,517	2781,289
266	1650		74 50	--	7.3	BH	-8.3	-15.6		3094.7		+94	+1647	692,528	2781,619
267	1980		75 -	--	10.7	BH	-9.9	-20.6		3089.7		+107	+1977	692,541	2781,949
268	2310		75 05	--	10.4	90 24	-16.1	-26.5		3083.8		+122	+2307	692,556	2782,279
269	2640		75 10	--	11.0	90 28	-21.5	-32.5		3077.8		+135	+2637	692,569	2782,609
270	2970		-	--	11.7	90 31	-26.8	-38.5		3071.8		+152	+2966	692,586	2782,938
271	3300		-	--	14.2	90 30	-28.8	-43.0		3067.3		+169	+3296	692,603	2783,268
272	3630		75 75	--	8.9	90 30	-31.7	-40.6		3069.7		+180	+3626	692,614	2783,598
273	3960		75 20	--	8.8	90 24	-27.6	-36.4		3073.9		+191	+3955	692,625	2783,927
274	4290		-	--	9.9	90 20	-25.0	-34.9		3075.4		+207	+4285	692,641	2784,257

5-692,400 x-2,779,700
HWY INTER. ELEV. 3106

GLENTANA West-7 1/2
GLENTANA East-7 1/2

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 8-21-86	INSTRUMENT MAN B. Cotcamp	ROD MAN J. Middleton	PARTY NUMBER 6834	NOTES CHECKED BY B.C.	LINE NO. 8	PAGE 17
AREA MONTANA	TOPO MAP GLENTANA EAST-7 1/2'	STATE MONT.	COUNTY Valley	TWP	RANGE	PPM
				PARTY MANAGER S. Binns		

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									3110.3					
275	4620		75 23 46	+11.9	14.8	90° 16'	-21.5	-36.3		3074.0	TP	+218	+4615	692,652 2784,587
275	4620				14.9	269 44'	-21.5	-36.4			TP			
	3301		256 04 36	--	+10.6	TH	-16.5	-5.9			BS	+117	+3299	
	3301				+10.7	TM 270°	-16.5	-5.8	3068.2		BS			
276	2970		256 06	--	10.8	TH	+14.9	+4.1		3072.3		-104	-2968	692,665 2,784,918
277	2640		- -	--	11.0	TH	+13.2	+2.2		3070.4		-92	-2638	692,677 2,785,248
278	2310		- -	--	10.3	TH	+11.6	+1.3		3069.5		-81	-2309	692,688 2,785,577
279	1980		- -	--	9.1	TH	+9.9	+0.8		3069.0		-69	-1979	692,700 2,785,907
280	1650		- -	--	7.9	TH	+8.3	+0.4		3068.6		-58	-1649	692,711 2,786,237
41	1624		256 31 36	+11.9	7.6	TH	+8.1	+0.5		3068.7	41	-45	-1623	692,724 2,786,263 9-692,675 x -2,786,265 T-Inter. EL. 3069.0
281	1320		256 06	--	6.5	TH	+6.6	+0.1		3068.3		-46	-1319	692,723 2,786,567
282	990		- -	--	5.5	TH	+5.0	-0.5		3067.7		-35	-989	692,734 2,786,897
283	660		- -	--	6.5	89 30'	+5.8	-0.7		3067.5		-23	-660	692,746 2,787,226
284	330		- -	--	7.3	89 -	+5.8	-1.5		3066.7		-12	-330	692,757 2,787,556
285	0				5.1	-		-5.1		3063.1	X	0	0	692,769 2,787,886
286	330		76 75 48	--	10.1	-		-10.1		3058.1		+13	+330	692,782 2,788,216
287	660		- -	--	7.3	91 -	-11.5	-18.8		3049.4		+26	+659	692,795 2,788,545
288	990		- -	--	10.9	91 -	-17.3	-28.2		3040.0		+40	+989	692,809 2,788,875
289	1320		- -	--	8.2	91 -	-23.0	-31.2		3037.0		+53	+1319	692,822 2,789,205
290	1650		- -	--	11.0	90 36'	-17.3	-28.3		3039.9		+66	+1649	692,835 2,789,535

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

DATE 8-21-86	INSTRUMENT MAN B. Cotcamp	ROD MAN J. Middleton	PARTY NUMBER 6834	NOTES CHECKED BY B.C.	LINE NO. 8	PAGE 18
AREA MONTANA	TOPO MAP GLONTANA EAST-7 1/2'	STATE MONT.	COUNTY valley	TWP	RANGE	PPM
				PARTY MANAGER S. Binns		

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									3068.2					
291	1980		75 48'	+11.9	9.2	BH	-9.9	-19.1		3049.1		+79	+1978	692.848 2789.864
292	2310		--	--	10.0	-		-10.0		3058.2		+93	+2308	692.862 2790.194
293	2640		--	--	4.2	-		-4.2		3064.0		+106	+2638	692.875 2790.524
294	2970		--	--	9.9	89 50	+8.6	-1.3		3066.9		+119	+2968	692.888 2790.854
295	3300		--	--	11.5	89 50	+9.6	-1.9		3066.3		+132	+3297	692.901 2791.183
296	3630		--	--	10.3	89 56	+4.2	-6.1		3062.1		+146	+3627	692.915 2791.513
297	3960		--	+11.9	11.1	89 58	+2.3	-8.8		3059.4		+159	+3957	692.928 2791.843
298	4290		--	--	9.5	89 58	+2.5	-7.0		3061.2		+172	+4287	692.941 2792.173
299	4620		--	--	9.8	89 54	+8.1	-1.2		3066.5		+185	+4616	692.954 2792.502
300	4950		--	--	5.2	89 54	+8.6	+3.4		3071.6		+199	+4946	692.968 2792.832
301	5280		--	--	7.3	89 50	+15.4	+8.1		3076.3		+212	+5276	692.981 2793.162
302	5610		--	--	5.8	89 50	+16.3	+10.5		3078.7		+225	+5605	692.994 2793.491
303	5940		--	--	6.0	89 50	+17.3	+11.3		3079.5		+238	+5935	693.007 2793.821
304	6272		75 51 05	--	14.6	89 45 30	+26.5	+11.9	+11.8	3080.0	TP	+246	+6267	693.015 2794.153
304	6272			--	14.9	270 14 30	+26.5	+11.6			TP			
	3961		255 55 59	+11.9	13.2	89 46	-16.1	-2.9	+27.3	3077.3	BS	+150	+3958	
	3961				13.5	270 14	-16.1	-2.6			BS			
305	3630		255 56	--	10.0	89 46	+14.8	+4.8		3082.1		-137	-3627	693.028 2794.484
306	3300		--	--	8.0	89 46	+13.4	+5.4		3082.7		-125	-3298	693.040 2794.813
307	2970		--	--	8.7	89 46	+12.1	+3.9		3081.2		-112	-2968	693.053 2795.143

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-21-86		B. Cotcamp		J. Middleton		6834		R. F. B.C.		8		19			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		GLENTANA EAST-7 1/2'		MONT.		Valley								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									3077.3						
308	2640		255 56'	+11.9	10.8	89 46	+10.8	+0.0		3072.3		-100	-2638	693.065	2795.473
1/4	2351		256 21 40	--	3.4	-		-3.4		3073.9	1/4	-71	-2350	693.094	2795.761
309	2310		255 56	--	3.7	-		-3.7		3073.6		-87	-2308	693.078	2795.803
310	1980		--	--	6.3	-		-6.3		3071.0		-75	-1979	693.090	2796.132
311	1650		--	--	8.3	-		-8.3		3069.0		-62	-1649	693.103	2796.462
312	1320		--	--	9.7	-		-9.7		3067.6		-50	-1319	693.115	2796.792
313	990		--	--	9.6	-		-9.6		3067.5		-37	-989	693.128	2797.122
314	660		--	--	8.1	-		-8.1		3069.2		-25	-660	693.140	2797.451
315	330		--	--	6.2	-		-6.2		3071.1		-12	-330	693.153	2797.781
316	0				5.1	-		-5.1		3072.2	τ	0	0	693.165	2798.111
317	330		75 58'	+11.9	5.3	-		-5.3		3072.0		+12	+330	693.177	2798.441
318	660		--	--	7.2	-		-7.2		3070.1		+25	+660	693.190	2798.771
319	990		--	--	9.1	-		-9.1		3068.2		+37	+989	693.202	2799.100
320	1320		--	--	10.7	-		-10.7		3066.6		+49	+1319	693.214	2799.430
321	1650		--	--	4.5	BH	-8.3	-12.8		3064.5		+61	+1649	693.226	2799.760
322	1980		--	--	4.6	BH	-9.9	-14.5		3062.8		+74	+1979	693.239	2800.090
323	2310		--	--	3.9	BH	-11.6	-15.5		3061.8		+86	+2308	693.251	2800.419
324	2640		--	--	11.4	-		-11.4		3065.9		+98	+2638	693.263	2800.749
325	2970		--	--	8.3	-		-8.3		3069.0		+111	+2968	693.276	2801.079
326	3300		--	--	7.4	-		-7.4		3069.9		+123	+3298	693.288	2801.409

Y=693.045 X=2795.800
T=Inter. IEL. 3075.

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-21-86		B. Cotcamp		J. Middleton		6834		B.C.		8		20			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		GLENTANA EAST-7 1/2'		MONT.		VALLEY / DANIELS								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									3077.3						
327	3630		75 58	+11.9	8.9	-	-8.9		3068.4			+ 135	+3627	693.300	2801.738
328	3960		- -	--	11.9	-	-11.9		3065.4			+ 147	+3957	693.312	2802.068
329	4291		76 02 32	+11.5	13.8	90 04	-5.0	-18.8	3058.4		TP	+184	+4287	693.349	2802.398
329	4291				14.1	269 56	-5.0	-19.1			TP				
	3821	3820.3	270 46 12	--	12.6	88 54	-73.4	-60.8			BS	-812	+3733		
	3821				12.7	271 06	-73.4	-60.7	2997.7		BS				
330	3502		272 08	--	6.7	89 -	+61.1	+54.4	3052.1			+ 825	-3403	693.362	2802.728
331	3187		273 52	--	8.0	89 -	+55.6	+47.6	3045.3			+ 845	-3073	693.382	2803.058
332	2868		275 55	--	9.0	89 -	+50.1	+41.1	3038.8			+ 858	-2737	693.395	2803.394
333	2567		278 16	+11.5	6.2	89 -	+44.8	+38.6	3036.3			+ 868	-2416	693.405	2803.715
334	2263		281 20	--	4.8	89 -	+39.5	+34.7	3032.4			+ 878	-2086	693.415	2804.045
335	1960		285 -	--	6.3	89 -	+34.2	+27.9	3025.6			+ 875	-1754	693.412	2804.377
336	1646		288 -	--	7.0	89 -	+28.7	+21.7	3019.4			+ 811	-1433	693.348	2804.698
337	1320		290 10	--	6.3	89 -	+23.0	+16.7	3014.4			+ 693	-1123	693.236	2805.008
338	990		291 -	--	5.5	89 -	+17.3	+11.8	3009.5			+ 532	-835	693.069	2805.296
339	660		- -	--	4.8	89 -	+11.5	+6.7	3004.4			+ 355	-557	692.892	2805.574
340	330		- -	--	3.8	89 -	+5.8	+2.0	2999.7			+ 177	-278	692.714	2805.853
341	0				5.1	-	-5.1		2992.6		TP	0	0	692.537	2806.131
342	330		110 35	--	6.8	90 40	-7.8	-10.6	2987.1			-175	+280	692.362	2806.411
343	660		- -	--	8.1	90 40	-7.7	-15.8	2981.9			-351	+559	692.186	2806.690

Valley County ↑
DANIELS County ↓

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-21-86		B. Cotamp		J. Middleton		6834		BC		8		21			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		GLENTANA EAST-7 1/2		MONT.		DANIELS								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									2997.7						
344	990		110 35	+11.5	8.8	90 40	-11.5	-20.3		2977.4		-526	+839	692.011	2806.970
345	1320		- -		16.4	90 40	-15.4	-25.8		2971.9		-701	+1118	691.836	2807.249
346	1458		110 06 10	--	9.7	90 40	-17.0	-26.7		2971.0	34	-764	+1242	691.773	2807.373
347	1650		110 35	--	10.3	90 40	-19.2	-29.5		2968.2		-876	+1398	691.661	2807.529
348	1980		- -	--	10.2	90 40	-23.0	-33.2		2964.5		-1052	+1678	691.485	2807.809
349	2310		- -	--	9.4	90 40	-26.9	-36.3		2961.4		-1227	+1957	691.310	2808.088
349	2639		110 25	+11.5	6.8	90 40	-30.7	-37.5		2960.2		-1395	+2240	691.142	2808.371
350	2964		109 13	--	5.5	90 40	-34.5	-40.0		2957.7		-1514	+2548	691.023	2808.679
351	3277		107 28	--	3.9	90 40	-38.1	-42.0		2955.7		-1587	+2867	690.950	2808.978
352	3597		105 55	--	4.9	90 40	-41.9	-46.8		2950.9		-1656	+3193	690.881	2809.324
353	3915		104 37	--	4.8	90 40	-45.6	-50.4		2947.3		-1723	+3515	690.814	2809.646
354	4236		103 32	--	9.0	90 34	-41.9	-50.9		2946.8		-1792	+3838	690.745	2809.969
355	4559		102 36 04		14.2	90 31	-41.1	-55.3		2942.4	TP	-1862	+4161	690.675	2810.292
355	4559				14.3	269 29	-41.1	-55.4			TP				
	2972		270 26 15	--	12.0	89 20	-34.6	-22.6			BS	-615	+2908		
	2972				12.1	270 40	-34.6	-22.5	2919.9		BS				
356	2640		270 36	--	8.8	89 20	+30.7	+21.9		2941.8		+553	-2581	690.613	2810.619
357	2310		- -	-	8.0	89 20	+26.9	+18.9		2938.8		+484	-2259	690.544	2810.941
358	1980		- -	-	8.4	89 20	+23.0	+14.6		2934.5		+415	-1936	690.475	2811.264
359	1680		- -	-	11.7	89 20	+19.2	+7.5		2927.4		+346	-1613	690.406	2811.587

3-691.735 x 2807.445
11 T-inter. el. 2971.

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-21-86		B. Cotcamp		J. Middleton		6834		B.C.		8		24			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		GLENDALE EAST-7 1/2'		MONT.		DANIELS								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									2919.9						
360	1320		270 36'	+11.5	10.0	89 40	+7.7	-2.3		2917.6		+277	-1291	690.337	2811.909
361	990		--	--	10.6	-		-10.6		2909.3		+208	-968	690.268	2812.232
362	660		--	--	8.2	-		-8.2		2911.0		+138	-645	690.198	2812.555
363	330		--	--	7.4	89 -	+5.8	+6		2918.3		+69	-323	690.129	2812.877
364	0				5.1	-		-5.1		2914.8	X	0	0	690.060	2813.200
365	330		90 33'	+11.5	9.2	91 -	-5.8	-15.3		2904.6		-69	+323	689.991	2813.523
366	660		--	--	10.4	91 40	-19.2	-29.6		2890.3		-138	+645	689.922	2813.845
367	990		--	--	10.0	91 40	-28.8	-38.8		2881.1		-207	+968	689.853	2814.168
368	1320		--	--	6.0	91 40	-38.4	-44.4		2875.5		-276	+1291	689.784	2814.491
369	1650		--	--	7.4	91 30	-43.2	-50.6		2869.3		-344	+1614	689.716	2814.814
370	1980		--	--	9.9	91 12	-41.5	-51.4		2868.5		-413	+1936	689.647	2815.136
371	2310		--	+11.5	7.3	91 12	-48.4	-55.7		2864.2		-482	+2259	689.578	2815.459
372	2640		--	--	9.8	91 12	-55.3	-65.1		2854.8		-551	+2582	689.509	2815.782
373	2970		--	--	9.0	91 12	-62.2	-71.2		2848.7		-620	+2905	689.440	2816.105
374	3300		--	--	4.9	91 12	-69.1	-74.0		2845.9		-689	+3227	689.371	2816.427
375	3630		--	--	9.0	91 12	-76.0	-85.0		2834.9		-758	+3550	689.302	2816.750
376	3960		--	--	11.0	91 15	-86.4	-97.4		2822.5		-827	+3873	689.233	2817.073
377	4290		--	--	8.7	91 15	-93.6	-102.3		2817.6		-896	+4195	689.164	2817.395
378	4622	4621.1	90 37 21	--	14.7	91 09	-92.8	-107.5	107.6	2812.3	TP	-970	+4518	689.090	2817.718
378	4622			--	15.0	268 51	-92.8	-107.8			TP				

GLENDALE EAST-7 1/2'
RICHMOND - 7 1/2' ↓

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-21-86		B. Cotcamp		J. Middleton		6834		B.P.		8		23			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		RICHLAND-7 1/2'		MONT.		DANIELS								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
										2812.3					
	2643		270 13 40	+11.5	12.5	89 04'	-43.1	-30.6			BS	-537	+2587		
	2643				12.6	270 56'	-43.1	-30.5	2781.8		BS				
379	2310		270 28'	--	7.7	89 10'	+33.6	+25.9		2807.7		+479	-2260	689.032 2818.045	
380	1980		--	--	8.7	89 10'	+28.8	+20.1		2801.9		+411	-1937	688.964 2818.368	
381	1650		--	--	9.9	89 10'	+24.0	+14.1		2795.9		+342	-1614	688.895 2818.691	
382	1320		--	--	8.3	89 10'	+19.2	+10.9		2792.7		+274	-1291	688.827 2819.014	
383	990		--	--	8.0	89 -	+17.3	+9.3		2791.1		+205	-968	688.758 2819.337	
384	660		--	--	6.3	89 -	+11.5	+5.2		2787.0		+137	-646	688.690 2819.659	
385	330		--	--	4.6	89 -	+5.8	+1.2		2783.0		+68	-323	688.621 2819.982	
386	0				5.1	-	-5.1			2776.7	X	0	0	688.553 2820.305	
387	330		90 28'	+11.5	10.7	91 -	-5.8	-16.5		2765.3		-68	+323	688.485 2820.628	
388	660		--	--	6.8	92 -	-23.0	-29.8		2752.0		-137	+646	688.416 2820.951	
389	990		--	--	9.1	91 22'	-23.6	-32.7		2749.1		-205	+968	688.348 2821.273	
390	1320		--	--	11.0	91 -	-23.0	-34.0		2747.8		-274	+1291	688.279 2821.596	
391	1650		--	--	7.1	91 -	-28.8	-35.9		2745.9		-342	+1614	688.211 2821.919	
392	1980		--	--	8.9	90 50'	-28.8	-32.7		2744.1		-411	+1937	688.142 2822.242	
393	2310		--	--	5.5	90 50'	-33.6	-39.1		2742.7	#	-479	+2260	688.074 2822.565 # creek crossing	
394	2640		--	--	10.1	90 40'	-30.7	-40.8		2741.0		-547	+2583	688.006 2822.888	
395	2970		--	--	8.4	90 40'	-34.6	-43.0		2738.8		-616	+2905	687.937 2823.210	
396	3300		--	--	5.2	90 40'	-38.4	-43.6		2738.2		-684	+3228	687.869 2823.533	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-21-86		B. Cotcamp		J. Middleton		6834		B.C.		8		24			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		RICHLAND - 7 1/2'		MONT.		DANIELS								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									2781.8						
397	3630		90 28	+11.5	9.3	90 32	-33.8	-43.1		2738.7		-753	+3551	687.800 2823.856	
398	3960		- -	--	8.9	90 22	-25.3	-34.2		2747.6		-821	+3874	687.732 2824.179	
399	4290		- -	--	11.7	90 08	-10.0	-21.7		2760.1		-890	+4197	687.663 2824.502	
400	4620		- -	--	7.5	90 04	-5.4	-12.9		2768.9		-958	+4520	687.595 2824.825	
401	4440 4950		90 50 34	-	13.8	90 03	-4.3	-18.1	18.2	2763.6	TP	-1058	+4836	687.495 2825.141	
401	4440 4950				14.1	269 57	-4.3	-18.4			TP				
	3621		292 50 24	+11.5	13.3	89 20	-42.1	-28.8			BS	-2042	+2990		
	3621				13.6	270 46	-42.1	-28.5	28.6	2735.0	BS				
402	3299		294 -	--	8.1	89 26	+32.6	+24.5		2759.5		+1916	-2686	687.369 2825.445	
403	2970		294 45	-	10.0	89 26	+29.4	+19.4		2754.4		+1756	-2395	687.209 2825.736	
404	2640		- -	-	10.1	89 30	+23.0	+12.9		2747.9		+1561	-2129	687.014 2826.002	
405	2310		- -	-	11.1	89 30	+20.2	+9.1		2744.1		+1366	-1863	686.819 2826.268	
406	1980		- -	-	9.6	89 30	+17.3	+7.7		2742.7		+1171	-1597	686.624 2826.534	
407	1650		- -	-	10.2	89 30	+14.4	+4.2		2739.2		+976	-1331	686.429 2826.800	
408	1320		- -	-	11.1	89 30	+11.5	+0.4		2735.4		+781	-1065	686.234 2827.066	
409	990		- -	-	7.7	89 30	+8.6	+0.9		2735.9		+585	-798	686.038 2827.333	
410	660		- -	-	6.1	89 30	+5.8	-0.3		2734.7		+390	-532	685.843 2827.599	
411	330		- -	-	5.1	89 30	+2.9	-2.2		2732.8		+195	-266	685.648 2827.865	
412	0				5.1	-		-5.1		2729.9	K	0	0	685.453 2828.131	
413	330		114 52	-	6.6	90 50	-4.8	-11.4		2723.6		-196	+266	685.257 2828.397	

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

DATE	8-21-86	INSTRUMENT MAN	B. Cotcamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	B.C.	LINE NO.	8	PAGE	25
AREA	MONTANA	TORO MAP	RICHLAND-7 1/2'	STATE	Mont.	COUNTY	DANIELS	TWP		RANGE	PPM	PARTY MANAGER	S. Binns

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
									2735.0									
414	660		114 52'	+11.5	7.6	90 50'	-9.6	-17.2		2717.8		-391	+531	685.062	2828.662			
415	990		--	--	11.5	90 50'	-14.4	-25.9		2709.1		-587	+797	684.866	2828.928			
416	1320		--	--	11.5	90 50'	-19.2	-30.7		2704.3		-783	+1063	684.670	2829.194			
417	1650		--	--	11.0	90 50'	-24.0	-35.0		2700.0		-978	+1329	684.475	2829.460			
418	1980		--	--	9.6	90 50'	-28.8	-38.4		2696.6		-1174	+1594	684.279	2829.725			
419	2310		--	--	8.0	90 50'	-33.6	-41.6		2693.4		-1370	+1860	684.083	2829.991			
420	2640		--	--	5.7	90 50'	-38.4	-44.1		2690.9		-1565	+2126	683.888	2830.257			
421	2970		114 40'	--	8.8	90 42'	-36.3	-45.1		2689.9		-1753	+2398	683.700	2830.529			
422	3292		112 50'	--	6.1	90 42'	-40.2	-46.3		2688.7		-1857	+2718	683.596	2830.849			
423	3575		110 13 42	--	11.0	90 36'	-37.4	-48.4		2686.6	TP	-1880	+3041	683.573	2831.174			
423	3575			--	11.1	269 24'	-37.4	-48.5			TP		+2					
	3302		242 46 52	+11.5	+8.0	-		+8.0			BS	+895	+3179					
	3302				+8.1	270 -		+8.1	2694.7		BS		+2					
424	2970		242 40'	--	9.8	-		-9.8		2684.9		-810	-2857	683.658	2831.498			
425	2640		--	--	10.3	-		-10.3		2684.4		-720	-2540	683.748	2831.815			
426	2310		--	--	10.7	-		-10.7		2684.0		-630	-2222	683.838	2832.133			
427	1980		--	--	10.8	-		-10.8		2683.9		-540	-1905	683.928	2832.450			
428	1650		--	--	9.6	-		-9.6		2685.1		-450	-1587	684.018	2832.768			
429	1320		--	--	10.5	-		-10.5		2684.2		-360	-1270	684.108	2833.085			
430	990		--	--	9.8	-		-9.8		2684.9		-270	-952	684.198	2833.403			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-21-86		B. Cotcamp		J. Middleton		6834		B.C.		8		26			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		Richland - 7 1/2'		MONT.		DANIELS								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									2694.7						
431	660		242° 46'	+11.5	10.1	-	-10.1			2684.6		-179	-635	684.289	2833.720
432	330		-	--	9.0	-	-9.0			2685.7		-89	-318	684.379	2834.037
IF	33		261° 25' 25"	--	4.9	-	-4.9			2689.8 2692.0	IF	+2	-33	684.470	2834.322
433	0				-5.1	-	-5.1			2689.6	TP	0	0	684.468	2834.355
434	330		72° 10'	+11.5	5.4	89° 20'	+3.8	-1.8		2692.9		+36	+328	684.504	2834.683
435	656		78° 15'	--	6.4	89° 20'	+7.6	+1.2		2695.9		+3	+656	684.469	2835.011
436	972		84° 58'	--	8.2	89° 20'	+11.3	+3.1		2697.8		-109	+966	684.359	2835.321
437	1284 1274		91° 28'	--	8.8	89° 20'	+14.8	+6.0		2700.7		-286	+1242	684.182	2835.597
438	1571		97° 20'	--	10.2	89° 20'	+18.3	+8.1		2702.8		-507	+1487	683.961	2835.842
439	1875		101° 30'	--	8.0	89° 30'	+16.4	+8.4		2703.1		-733	+1726	683.735	2836.081
440	2192		104° 30'	-	7.8	89° 40'	+12.8	+5.0		2699.7		-961	+1970	683.507	2836.325
441	2507		106° 38'	--	11.7	89° 40'	+14.6	+2.9		2697.6		-1182	+2211	683.286	2836.566
442	2827		108° 24' 45"	--	7.9	89° 50'	+8.2	+0.3		2697.2	TP	-1410	+2450	683.058	2836.806
442	2827				8.0	270° 10'	+8.2	+0.2			TP		+1		1st sta. with corrected ELEVATION *
	5277		299° 44' 40"	+11.5	6.6	89° 50'	-15.4	-8.8		2688.7	BS	-3479	+3968		
	5277				7.1	270° 10'	-15.4	-8.3			BS		+1		
443	4948		299° 45'	-	7.5	89° 50'	+14.4	+6.9		2695.6		+3262	-3720	682.841	2837.055
444	4618		-	-	9.8	89° 50'	+13.4	+3.6		2692.3		+3045	-3472	682.624	2837.303
445	4288		299° 40'	-	9.1	89° 50'	+12.5	+3.4		2692.1		+2823	-3228	682.402	2837.547
446	3958		-	-	8.0	89° 50'	+11.5	+3.5		2692.2		+2605	-2980	682.184	2837.795

y - 684.510 x - 2.834,370
 FT - Inter.
 EL. 2692.0
 corrected ELEVATION + 2.2

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-22-86		B. Cotamp		J. Middleton		6834		B.C.		8		27			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		RICHLAND-7 1/2'		MONT.		DANIELS								S. BIRNS	
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
									2688.7						
447	3628		299° 30'	+11.5	8.0	89° 50'	+10.6	+2.6		2691.3		+12380	-2738	681,959	2838,037
448	3298		299° 20'	--	8.0	89° 50'	+9.6	+1.6		2690.3		+2156	-2495	681,735	2838,280
449	2968		299° 10'	--	7.6	89° 50'	+8.6	+1.0		2689.7		+1934	-2251	681,513	2838,524
450	2638		298° 55'	--	7.6	89° 50'	+7.7	+0.1		2688.8		+1710	-2008	681,289	2838,767
451	2308		298° 45'	--	8.6	89° 50'	+6.7	-1.9		2686.8		+1491	-1762	681,070	2839,013
452	1979		298° 20'	--	10.3	89° 50'	+5.8	-4.5		2684.2		+1268	-1520	680,849	2839,255
453	1649		297° 45'	--	11.3	89° 50'	+4.8	-6.5		2682.2		+1043	-1277	680,622	2839,498
454	1319		296° 50'	--	11.0	89° 50'	+3.8	-7.2		2681.5		+818	-1035	680,397	2839,740
455	989		295° 40'	--	9.0	89° 50'	+2.9	-6.1		2682.6		+597	-788	680,176	2839,987
456	660		293° -	--	6.7	89° 50'	+1.9	-4.8		2683.9		+374	-544	679,953	2840,231
457	330		290° 30'	--	5.8	89° 50'	+1.0	-4.8		2683.9		+175	-280	679,754	2840,495
458	0				5.1	-		-5.1		2683.6	+	0	0	679,579	2840,775
459	330		102° 35'	+11.5	5.7	89° 30'	+2.9	-2.8		2685.9		-135	+301	679,444	2841,076
460	659		99° 45'	--	4.9	89° 30'	+5.8	+0.9		2689.6		-239	+614	679,340	2841,389
461	988		96° 30'	--	6.5	89° 20'	+11.5	+5.0		2693.7		-305	+940	679,274	2841,715
462	1309		93° 17'	--	6.4	89° 20'	+15.2	+8.8		2697.5		-334	+1266	679,245	2842,041
463	1629		90° 10'	--	7.2	89° 20'	+19.0	+11.8		2700.5		-329	+1595	679,250	2842,370
464	1951		87° 35'	--	8.4	89° 20'	+22.7	+14.3		2703.0		-308	+1927	679,271	2842,702
465	2277		86° -	--	10.6	89° 20'	+26.5	+15.9		2704.6		-297	+2258	679,282	2843,033
466	2600		84° 32'	--	8.8	89° 26'	+25.7	+16.9		2705.6		-273	+2586	679,306	2843,361

RICHLAND-7 1/2' ↑
HORSESHOE BASIN-7 1/2'

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-22-86	INSTRUMENT MAN	B. Cotcamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	B.C.	LINE NO.	8	PAGE	28
AREA	MONTANA	TOPO MAP	HORSESHOE BASIN 7 1/2'	STATE	MONT.	COUNTY	DANIELS	TWP		RANGE	PPM	PARTY MANAGER	S. Bluns

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.	
									2688.7					
467	2924		83° 30'	+11.5°	9.0	89° 26'	+28.9	+19.9		2708.6		-255	+2913	679.324 2843.688
468	3254		84° 50'	--	14.9	89° 14'	+43.5	+28.6		2717.3		-359	+3234	679.226 2844.009
469	3582		82° 10'	--	9.7	89° 10'	+52.1	+42.4		2731.1		-229	+3575	679.350 2844.350
1/4	3723		81° 37' 35"	--	3.9	89° 10'	+54.1	+50.2		2738.9	1/4	-203	+3717	679.376 2844.492
470	3966		81° 36'	--	8.7	89°	+68.2	+59.5		2748.2		-211	+3900	679.368 2844.675
471	4235		81° 05'	--	9.9	88° 50'	+86.2	+76.3		2765.0		-191	+4231	679.388 2845.006
472	4564		80° 45'	--	6.9	88° 50'	+92.9	+86.0		2774.7		-179	+4560	679.400 2845.335
473	4896	4895.0	80° 27' 52"	+11.9°	14.4	88° 51'	+98.3	+83.9	+83.8	2772.5	TP	-202	+4891	679.377 2845.667
473	4896				14.7	271° 09'	+98.3	+83.6			TP			
	3301		255° 11' 21"	--	+4.6	89° 20'	-38.4	-33.8	+33.6	2738.9	BS	+168	+3297	
	3301				+4.9	270° 40'	-38.4	-33.5			BS			
474	2970		255° 18'	--	7.6	89° 22'	+32.8	+25.2		2764.1		-145	-2966	679.400 2845.999
475	2640		--	--	6.5	89° 35'	+19.2	+12.7		2751.6		-129	-2637	679.416 2846.328
476	2310		--	--	6.8	89° 50'	+6.7	-0.1		2738.8		-113	-2307	679.432 2846.658
477	1980		--	--	6.0	90° 10'	-5.8	-11.8		2727.1		-97	-1978	679.448 2846.987
478	1650		--	--	9.3	90° 20'	-9.6	-18.9		2720.0		-81	-1648	679.464 2847.317
479	1320		--	--	9.8	90° 30'	-11.5	-21.3		2717.6		-64	-1318	679.481 2847.647
480	990		--	--	9.5	90° 30'	-8.6	-18.1		2720.8		-48	-989	679.497 2847.976
481	660		--	--	4.8	90° 30'	-5.8	-10.6		2728.3		-32	-659	679.513 2848.306
482	330		--	--	6.6	89° 30'	+2.9	-3.7		2735.2		-16	-330	679.529 2848.635

1/4 y = 679.376 x = 2844.500
E.L. 2735.

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-22-86	INSTRUMENT MAN	B. Cotcamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	B.C.	LINE NO.	8	PAGE	29
AREA	MONTANA	TOPO MAP	HORSESHOE Basin-7 1/2	STATE	MONT.	COUNTY	DANIELS	TWP		RANGE	PPM	PARTY MANAGER	S. Binns

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									2738.9							
71	335		258 25 48	+11.9	6.4	89 30	+2.9	-3.5		2735.4	71	+2	-335	679.547	2848.630	g-679,575 x -2,848,640 71 - Inter. EL. 2736.0
483	0				5.1	-		-5.1		2733.8	X	0	0	679.545	2848.965	
484	330		75 21	--	5.4	91 20	-7.7	-13.1		2725.8		+16	+330	679.561	2849.295	
485	660		-	--	8.2	91 20	-15.4	-23.6		2715.3		+32	+659	679.577	2849.624	
486	990		-	--	11.1	91 20	-23.0	-34.1		2704.8		+48	+989	679.593	2849.954	
487	1320		-	--	12.1	91 20	-30.7	-42.8		2696.1		+63	+1318	679.608	2850.283	
488	1650		-	--	9.6	91 20	-38.4	-48.0		2690.9		+79	+1648	679.624	2850.613	
489	1980		-	+11.9	11.2	91 06	-38.0	-49.2		2689.7		+95	+1978	679.640	2850.943	
490	2310		-	--	6.0	91 06	-44.3	-50.3		2688.6		+111	+2307	679.656	2851.272	
491	2640		-	--	10.0	90 54	-41.5	-51.5		2687.4		+127	+2637	679.672	2851.602	
492	2970		-	--	6.9	90 54	-46.7	-53.6		2685.3		+143	+2967	679.688	2851.932	
493	3300		-	--	8.0	90 50	-48.0	-56.0		2682.9		+158	+3296	679.703	2852.261	
494	3630		-	--	5.9	90 50	-52.8	-58.7		2680.2		+174	+3626	679.719	2852.591	
495	3960		-	--	10.3	90 44	-50.7	-61.0		2677.9		+190	+3955	679.735	2852.920	
496	4290		-	--	8.0	90 44	-54.9	-62.9		2676.0		+206	+4285	679.751	2853.250	
497	4620		-	--	9.2	90 40	-53.8	-63.0		2675.9		+222	+4615	679.767	2853.580	
498	4950		-	--	5.6	90 40	-57.6	-63.2		2675.7		+237	+4944	679.782	2853.909	
71	4931		75 08 50	-	5.3	90 40	-57.4	-62.7		2676.2	71	+254	+4924	679.799	2853.889	71 - 679,800 x -2,853,900 71 - WA Inter. EL. 2678
499	5280		75 21	-	10.1	90 34	-52.2	-62.3		2676.6		+253	+5274	679.798	2854.239	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-22-86	INSTRUMENT MAN	B. C. Stamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	B.C.	LINE NO.	8	PAGE	30
AREA	MONTANA	TOPO MAP	HORSESHOE BASIN-7 1/2	STATE	MONT.	COUNTY	DANIELS	TWP		RANGE	PPM	PARTY MANAGER	S. Binns

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									2738.9					
500	5612		75 22 22	+11.9	13.9	90 30	-49.0	-62.9	2631.3	2675.8	TP	+267	+5605	679,812 3,854,571
500	5612				14.4	269 30	-49.0	-63.4			TP		"	
	6272		255 00 54	+12.3	14.8	90 32	+58.4	+73.2			BS	+294	+6265	
	6272				+15.1	269 28	+58.4	+73.5	2734.3	2749.2	BS		"	
501	5940		255 02	--	7.1	90 38	-65.7	-72.8		2676.4		-276	-5934	679,830 2,854,903
502	5610		- -	--	11.3	90 38	-62.0	-73.3		2675.9		-261	-5604	679,845 2,855,233
503	5280		- -	--	7.3	90 44	-67.6	-74.9		2674.3		-246	-5274	679,860 2,855,563
504	4950		- -	--	7.0	90 48	-69.1	-76.1		2673.1		-230	-4945	679,876 2,855,892
505	4620		- -	--	11.6	90 48	-64.5	-76.1		2673.1		-215	-4615	679,891 2,856,222
506	4290		- -	--	11.9	90 48	-59.9	-71.8		2677.4		-200	-4285	679,906 2,856,552
507	3960		- -	--	7.2	90 48	-55.3	-62.5		2686.7		-184	-3956	679,922 2,856,881
508	3630		- -	--	7.0	90 44	-46.5	-53.5		2695.7		-169	-3626	679,937 2,857,211
509	3300		- -	--	6.0	90 44	-42.2	-48.2		2701.0		-154	-3296	679,952 2,857,541
510	2970		- -	--	9.2	90 44	-38.0	-47.2		2702.0		-138	-2967	679,968 2,857,870
511	2640		- -	--	7.3	90 54	-41.5	-48.8		2700.4		-123	-2637	679,983 2,858,200
512	2310		- -	--	10.2	91 -	-40.3	-50.5		2698.7		-107	-2308	679,999 2,858,529
513	1980		- -	--	6.7	91 18	-44.9	-51.6		2697.6		-92	-1978	680,014 2,858,859
514	1650		- -	--	12.0	91 18	-37.4	-49.4		2699.8		-77	-1648	680,029 2,859,189
11-	1659		255 40 09	-	11.5	91 18	-37.6	-49.1		2700.1	11-	-59	-1658	680,047 2,859,179
515	1320		255 02'	-	12.3	91 20	-30.7	-43.0		2706.2		-61	-1319	680,045 2,859,518

4-680,045 x 2,859,210
Section Line El. 2700.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO		PAGE			
8-22-86		B. Cotcamp		J. Middleton		6834		B.C.		8		31			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		HORSESHOE BASIN-7 1/2'		MONT.		DANIELS								S. BINNS	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									2749.2						
516	990		255° 02'	+12.3	10.3	91° 20'	-23.0	-33.3		2715.9		-46	-989	680.060	2859.848
517	660		-	--	11.1	90° 50'	-9.6	-20.7		2728.5		-31	-659	680.075	2860.178
518	330		-	--	5.6	90° 50'	-4.8	-10.4		2738.8		-15	-330	680.091	2860.507
519	0				5.1	-		-5.1		2744.1	TP	0	0	680.106	2860.837
520	330		75° -	+12.3	5.4	89° 34'	+2.5	-2.9		2746.3		+16	+330	680.122	2861.167
521	660		-	--	8.8	89° 34'	+5.0	-3.8		2745.4		+31	+659	680.137	2861.496
522	990		-	--	8.5	89° 48'	+3.5	-5.0		2744.2		+47	+989	680.153	2861.826
523	1320		-	--	10.2	89° 48'	+4.6	-5.6		2743.6		+62	+1319	680.168	2862.156
524	1650		-	--	10.9	89° 48'	+5.8	-5.1		2744.1		+78	+1648	680.184	2862.485
525	1980		-	--	10.9	89° 48'	+6.9	-4.0		2745.2		+93	+1978	680.199	2862.815
526	2310		-	--	11.4	89° 48'	+8.1	-3.3		2745.9		+109	+2307	680.215	2863.144
527	2640		-	--	9.2	89° 55'	+3.8	-5.4		2743.8		+124	+2637	680.230	2863.474
528	2970		-	--	10.0	-		-10.0		2739.2		+140	+2967	680.246	2863.804
529	3302		74° 56' 14"	--	13.7	90° 02'	-1.9	-15.6	} 15.23	2733.5	TP	+159	+3298	680.265	2864.136
529	3302				14.0	269° 58'	-1.9	-15.9		TP			+1		
	5283		254° 44' 12"	+12.5	8.8	89° 50'	-15.4	-6.6	} 6.43	2727.1	BS	+255	+5277		
	5283				9.1	270° 10'	-15.4	-6.3			BS			+1	
530	4950		254° 46'	--	6.7	89° 54'	+8.6	+1.9		2729.0		-236	-4944	680.284	2864.470
31	4970		254° 56' 52"	--	6.0	89° 54'	+8.7	+2.7		2729.8	31	-221	-4965	680.299	2864.449

3-680,290 X-2,864,435
T-Inter. E1.2128

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-22-86		B. Cotcamp		J. Middleton		6834		B.C.		8		32			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		HORSESHOE BASIN-74		MONT.		DANIELS								S. BINNS	
STATION NO.	SLOPE DISTANCE	PLOT DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									2727.1						
531	4620		254° 46'	+12.5	7.0	-		-7.0		2720.1		-220	-4615	680,300	2864.799
532	4290		- -	-	6.6	90° 10'	-12.5	-19.1		2708.0		-205	-4285	680,315	2865.129
533	3960		- -	-	12.5	90° 10'	-11.5	-24.0		2703.1		-189	-3955	680,331	2865.459
534	3630		- -	-	6.8	90° 10'	-10.6	-17.4		2709.7		-173	-3626	680,347	2865.788
535	3300		- -	-	3.7	90° 10'	-9.6	-13.3		2713.8		-157	-3296	680,363	2866.118
536	2970		- -	-	5.3	90° 10'	-8.6	-13.9		2713.2		-142	-2967	680,378	2866.447
537	2640		- -	-	7.2	90° 10'	-7.7	-14.9		2712.2		-126	-2637	680,394	2866.777
538	2310		- -	-	9.3	90° 10'	-6.7	-16.0		2711.1		-110	-2307	680,410	2867.107
539	1980		- -	+12.5	11.3	90° 10'	-5.8	-17.1		2710.0		-94	-1978	680,426	2867.436
540	1650		- -	-	8.8	90° 20'	-9.6	-18.4		2708.7		-79	-1648	680,441	2867.766
541	1320		- -	-	11.1	90° 20'	-7.7	-18.8		2708.3		-63	-1319	680,457	2868.095
542	990		- -	-	10.1	90° 30'	-8.6	-18.7		2708.4		-47	-989	680,473	2868.425
543	660		- -	-	11.0	90° 30'	-5.8	-16.8		2710.3		-31	-659	680,489	2868.755
544	330		- -	-	8.7	90° 30'	-2.9	-11.6		2715.5		-16	-330	680,504	2869.084
545	0				5.1	-		-5.1		2722.0	π	0	0	680,520	2869.414
546	330		74° 46'	-	5.2	89° 10'	+4.8	-0.4		2726.7	4#	+16	+330	680,536	2869.744
547	316		71° 29' 46"	-	5.0	89° 10'	+4.6	-0.4		2726.7	4#	+33	+314	680,553	2869.728
547	660		74° 46'	-	7.9	89° 10'	+9.6	+1.7		2728.8		+31	+659	680,551	2870.073
548	990		- -	-	11.0	89° 10'	+14.4	+3.4		2730.5		+47	+989	680,567	2870.403
549	1320		- -	-	10.8	89° 10'	+19.2	+8.4		2735.5		+63	+1319	680,583	2870.733

u-680,525 x-2,869,676
Section Line 61,2728.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-22-86	INSTRUMENT MAN	B. Cotcamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	BC	LINE NO.	8	PAGE	33
AREA	MONTANA	TOPO MAP	HORSESHOE BASIN-7 1/2	STATE	MONT.	COUNTY	DANIELS	TWP		RANGE	PPM	PARTY MANAGER	S. Binns

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									2727.1					
550	1650		74 46	+12.5	8.0	89 10	+24.0	+16.0		2743.1		+79	+1648	680.599 2871.062
551	1980		- -	--	9.3	89 -	+34.6	+25.3		2752.4		+94	+1978	680.614 2871.392
552	2310		- -	--	5.8	89 -	+40.3	+34.5		2761.6		+110	+2307	680.630 2871.721
553	2640		- -	--	9.8	88 50	+53.8	+44.0		2771.1		+126	+2637	680.646 2872.051
554	2970		- -	--	8.3	88 50	+60.5	+52.2		2779.3		+142	+2967	680.662 2872.381
555	3300		- -	--	10.5	88 50	+67.2	+56.7		2783.8		+157	+3296	680.677 2872.710
556	3630		- -	--	5.0	89 -	+63.4	+58.4		2785.5		+173	+3626	680.693 2873.040 Horseshoe Basin-7 1/2
557	3960	3959.4	- -	--	4.6	89 -	+69.1	+64.5		2791.6		+189	+3955	680.709 2873.369 Peerless-7 1/2' J
558	4290	4289.1	- -	--	8.6	88 50	+87.3	+78.7		2805.8		+205	+4284	680.725 2873.698
559	4620	4618.8	- -	--	11.0	88 40	+107.5	+96.5		2823.6		+220	+4614	680.740 2874.028
560	4950	4948.7	- -	--	1.0	88 40	+115.2	+114.2		2841.3		+236	+4943	680.756 2874.357
561	5280	5278.0	- -	--	11.7	88 26	+144.4	+132.7		2859.8		+252	+5272	680.772 2874.686
562	5610	5607.7	- -	--	9.1	88 22	+159.9	+150.8		2877.9		+267	+5601	680.787 2875.015
563	5940	5937.3	- -	--	10.7	88 16	+179.7	+169.0		2896.1		+283	+5931	680.803 2875.345
564	6270	6266.9	- -	--	10.0	88 12	+196.9	+186.9		2914.0		+299	+6260	680.819 2875.674
565	6600	6596.5	- -	--	10.1	88 08	+215.0	+204.9		2932.0		+315	+6589	680.835 2876.003
566	6930	6926.3	- -	--	7.2	88 08	+225.7	+218.5		2945.6		+330	+6918	680.850 2876.332
567	7260	7256.2	- -	--	8.7	88 08	+236.5	+227.8		2954.9		+346	+7248	680.866 2876.662
568	7594 ¹⁰³³	7590.0	74 45 38	--	14.5	88 08 30	+246.3	+231.8	+231.6	2958.7	TP	+363	+7581	680.883 2876.996
568	7594			--	15.0	271 51 30	+246.3	+231.3			TP			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-22-86	INSTRUMENT MAN	B. Cotcamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY		LINE NO.	8	PAGE	34
AREA	MONTANA	TOPO MAP	Peerless - 7 1/2'	STATE	MONT.	COUNTY	DANIELS	TWP		RANGE	PPM	PARTY MANAGER	S. Binns

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
										2958.7								
	4622	4620.8	254 39 35	+12.5	12.4	88 40	-107.5	-95.1	2949.2	2863.8	BS	+229	+4615					
	4622				+12.8	271 20	-107.5	-94.7			BS		+1					
569	4290		254 40	--	10.2	88 35	+106.1	+95.9		2959.7		-212	-4285	680,900	2877,327			
570	3960		- -	--	6.6	88 35	+97.9	+91.3		2955.1		-196	-3955	680,916	2877,657			
571	3630		- -	--	7.2	88 35	+89.7	+82.5		2946.3		-179	-3626	680,933	2877,986			
572	3300		- -	--	10.7	88 35	+81.6	+70.9		2934.7		-163	-3296	680,949	2878,316			
573	2970		- -	--	10.1	88 40	+69.1	+59.0		2922.8		-147	-2966	680,965	2878,646			
574	2640		- -	--	6.3	88 50	+53.8	+47.5		2911.3		-131	-2637	680,981	2878,975			
575	2310		- -	--	9.3	88 50	+47.0	+37.7		2901.5		-114	-2307	680,998	2879,305			
576	1980		- -	--	9.7	88 50	+40.3	+30.6		2894.4		-98	-1978	681,014	2879,634			
577	1650		- -	--	8.7	88 50	+33.6	+24.9		2888.7		-82	-1648	681,030	2879,964			
#1	1436		255 22, 50	+12.5	8.1	88 50	+29.2	+21.1		2884.9	#1	-53	-1435	681,059	2880,177	y = 681,010 x - 2,880,205 if 4 way inter. 2880		
578	1320		254 40	--	7.9	88 50	+26.9	+19.0		2882.8		-65	-1318	681,047	2880,294			
579	990		- -	--	7.0	88 50	+20.2	+13.2		2877.0		-49	-989	681,063	2880,623			
580	660		- -	--	6.1	88 50	+13.4	+7.3		2871.1		-33	-659	681,079	2880,953			
581	330		- -	--	5.6	88 50	+6.7	+1.1		2864.9		-16	-330	681,096	2881,282			
582	0				5.1	-		-5.1		2858.7	K	0	0	681,112	2881,612			
583	330		74 38	--	11.4	89 10	+4.8	-6.6		2857.2		+17	+330	681,129	2881,942			
584	660		- -	--	11.4	89 20	+7.7	-3.7		2860.1		+33	+659	681,145	2882,271			
585	990		- -	--	7.6	89 20	+11.5	+3.9		2867.7		+50	+989	681,162	2882,601			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-22-86	INSTRUMENT MAN	B. Cotcamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	T.B.C.	LINE NO.	8	PAGE	35
AREA	MONTANA	TOPO MAP	Peerless - 7 1/2'	STATE	MONT.	COUNTY	Daniels	TWP		RANGE	PPM	PARTY MANAGER	S. Binns

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
									2863.8									
586	1320		74 38	+12.5	7.9	89 10'	+19.2	+11.3		2875.1		+66	+1318	681.178	2882.930			
587	1650		- -	--	9.1	89 10'	+24.0	+14.9		2878.7		+83	+1648	681.195	2883.260			
588	1980		- -	--	12.3	89 10'	+28.8	+16.5		2880.3		+99	+1978	681.211	2883.590			
589	2310		- -	--	10.7	89 10'	+33.6	+22.9		2886.5		+116	+2307	681.228	2883.919			
590	2640		- -	--	9.6	89 -	+46.1	+36.5		2900.3		+132	+2637	681.244	2884.249			
591	2970		- -	--	4.3	89 -	+51.8	+47.5		2911.3		+149	+2966	681.261	2884.578			
592	3300		- -	--	9.7	88 52	+65.3	+55.6		2919.4		+165	+3296	681.277	2884.908			
593	3630		- -	--	11.0	88 52	+71.8	+60.8		2924.6		+182	+3625	681.294	2885.237			
TP	3860		74 22 03	--	13.9	88 50	+78.6	+64.7		2928.5	TP	+211	+3854	681.323	2885.466			v-681,265 x-2,885,495 4 way cont. el. 2926.0
594	3960		74 38	--	9.7	88 54	+76.0	+66.3		2930.1		+198	+3955	681.310	2885.567			
595	4290		- -	--	10.9	88 54	+82.4	+71.5		2935.3		+215	+4285	681.327	2885.897			
596	4621		74 38 39	+123	14.1	88 57	+84.7	+70.6	+70.5	2934.3	TP	+246	+4614	681.358	2886.227			
596	4621				14.4	271 03	+84.7	+70.3			TP		"					
	7258 ^{cal} 646	7257.1	255 07 40	--	12.9	89 07'	-111.9	-99.0			BS	+326	+7250					
	7258				13.4	270 53	-111.9	-98.5	+98.7	2835.6	BS		"					
597	6930		255 08	--	9.0	89 10'	+100.8	+91.8		2927.4		-310	-6923	681.374	2886.555			
598	6600		- -	--	8.0	89 15'	+86.4	+78.4		2914.0		-296	-6593	681.388	2886.885			
599	6270		- -	--	8.3	89 20'	+73.0	+64.7		2900.3		-281	-6264	681.403	2887.214			
600	5940		- -	--	8.7	89 26'	+58.5	+50.0		2885.6		-266	-5934	681.418	2887.544			
601	5610		- -	--	9.3	89 32'	+45.7	+36.4		2872.0		-251	-5604	681.433	2887.874			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-22-86	INSTRUMENT MAN	B. Cotcamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	B.C.	LINE NO.	8	PAGE	36
AREA	MONTANA	TOPO MAP	Peerless-7 1/2'	STATE	MONT.	COUNTY	DANIELS	TWP		RANGE	PPM	PARTY MANAGER	S. Binns

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
									2835.6									
602	5280		255° 08'	+12.3	6.3	89° 40'	+30.7	+24.4		2860.0		-236	-5275	681.448	2888.203			
603	4950		-	--	8.2	89° 44'	+23.0	+14.8		2850.4		-222	-4945	681.462	2888.533			
604	4620		-	--	6.3	89° 50'	+13.4	+7.1		2842.7		-207	-4615	681.477	2888.863			
605	4290		-	--	11.7	89° 50'	+12.5	+0.8		2836.4		-192	-4286	681.492	2889.192			
606	3960		-	--	5.1	-		-5.1		2830.5		-177	-3956	681.507	2889.522			
607	3630		-	--	8.0	-		-8.0		2827.6		-163	-3626	681.521	2889.852			
608	3300		-	--	10.9	-		-10.9		2824.7		-148	-3297	681.536	2890.181			
609	2970		-	--	8.7	90° 06'	-5.2	-13.9		2821.7		-133	-2967	681.551	2890.511			
71	2883		255° 28' 05"	--	9.0	90° 06'	-5.0	-14.0		2821.6		-112	-2881	681.572	2890.597	4-681.505 X-2890.605 71-T-intel. EL. 2825.		
610	2640		255° 08'	+12.3	9.1	90° 10'	-7.7	-16.8		2818.8		-118	-2637	681.566	2890.841			
611	2310		-	--	11.0	90° 13'	-8.7	-19.7		2815.9		-103	-2307	681.581	2891.171			
612	1980		-	--	10.9	90° 13'	-7.5	-18.4		2817.2		-89	-1978	681.595	2891.500			
613	1650		-	--	10.5	90° 10'	-4.8	-15.3		2820.3		-74	-1648	681.610	2891.830			
614	1320		-	--	8.9	90° 10'	-3.8	-12.7		2822.9		-59	-1319	681.625	2892.159			
615	990		-	--	6.4	90° 10'	-2.9	-9.3		2826.3		-44	-989	681.640	2892.489			
616	660		-	--	5.1	90° 10'	-1.9	-7.0		2828.6		-30	-659	681.654	2892.819			
617	330		-	--	6.2	-		-6.2		2829.4		-15	-330	681.669	2893.148			
618	0				5.1	-		-5.1		2830.5	π	0	0	681.684	2893.478			
619	330		75° 09'	--	9.3	-		-9.3		2826.3		+15	+330	681.699	2893.808			
620	660		-	--	11.7	91° -	-11.5	-23.2		2812.4		+29	+659	681.713	2894.137			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-22-86		B. Cotcamp		J. Middleton		6834		B.C.		8		37			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		Peerless-76'		MONT.		DANIELS								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									2835.6'						
621	990		75° 09'	+12.3	13.5	91° 34'	-27.1	-40.6		2795.0		+44	+989	681.728	2894.467
622	1320		-	-	18.7	91° 34'	-36.1	-54.8		2780.8		+59	+1319	681.743	2894.797
623	1650		-	-	17.0	91° 34'	-45.1	-62.1		2773.5		+73	+1648	681.757	2895.126
624	1980		-	-	13.2	91° 34'	-54.1	-67.3		2768.3		+88	+1978	681.772	2895.456
625	2310		-	-	11.6	91° 30'	-60.5	-72.1		2763.5		+103	+2308	681.787	2895.786
626	2504		74° 45' 54"	-	9.4	91° 30'	-65.5	-74.9		2760.7'	TP	+128	+2504	681.812	2895.978
															y=681.755 x=2895.995 40000 Int. EL. 2763.0
626	2640		75° 09'	+12.3	8.0	91° 30'	-69.1	-77.1		2758.5		+117	+2637	681.801	2896.115
627	2970		-	-	11.1	91° 20'	-69.1	-80.2		2755.4		+132	+2967	681.816	2896.445
628	3300		-	-	5.9	91° 20'	-76.8	-82.7		2752.9		+147	+3297	681.831	2896.775
629	3630		-	-	7.2	91° 14'	-78.1	-85.3		2750.3		+162	+3626	681.846	2897.104
630	3960		-	-	7.1	91° 14'	-85.2	-92.3		2743.3		+176	+3956	681.860	2897.434
631	4290		-	-	10.1	91° 14'	-92.3	-102.4		2733.2		+191	+4286	681.875	2897.764
632	4620		-	-	7.0	91° 14'	-99.4	-106.4		2729.2		+206	+4615	681.890	2898.093
633	4951	4950.1	75° 08' 08"	+11.9	13.8	91° 04'	-92.2	-106.0	106.2'	2729.4'	TP	+256	+4944	681.940	2898.423
633	4951				14.2	268° 56'	-92.2	-106.4			TP				
	4949		256° 00' 18"	+11.6	+10.9	04	+24.7	+35.6			BS	+207	+4945		
	4949				+11.2	04 270	+24.7	+35.9	35.8'	2765.2'	BS				
634	4620		256° -	-	9.3	90° 20'	-26.9	-36.2		2729.0		-193	-4616	681.954	2898.753
635	4290		-	-	5.1	90° 30'	-37.4	-42.5		2722.7		-180	-4286	681.967	2899.083
636	3960		-	-	7.3	90° 37'	-42.6	-49.9		2715.3		-166	-3957	681.981	2899.412

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-22-86		B. G. Stamp		J. Middleton		6834		B.C.		8		38			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		Peerless-7 1/2'		MONT.		DANIELS								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									2765.2	'					
637	3630		256 -	+11.6	7.9	90 44'	-46.5	-54.4		2710.8		-152	-3627	681.995	2899.742
638	3300		- -	--	10.7	90 44'	-42.2	-52.9		2712.3		-138	-3297	682.009	2900.072
639	2970		- -	--	8.2	90 50'	-43.2	-51.4		2713.8		-124	-2967	682.023	2900.402
640	2640		- -	--	10.4	90 50'	-38.4	-48.8		2716.4		-111	-2638	682.036	2900.731
641	2310		- -	--	11.1	90 50'	-33.6	-44.7		2720.5		-97	-2308	682.050	2901.061
	2110		256 - 27 30	--	10.7	90 50'	-30.7	-41.4		2723.8		-71	-2109	682.076	2901.260 y-682.015 x-2901.265 4 way inter. El. 2726.0
642	1980		256 -	--	10.9	90 50'	-28.8	-39.7		2725.5		-83	-1978	682.064	2901.391
643	1650		- -	+11.6	10.3	90 50'	-24.0	-34.3		2730.9		-69	-1649	682.078	2901.720
644	1320		- -	--	12.0	90 50'	-19.2	-31.2		2734.0		-55	-1319	682.092	2902.050
645	990		- -	--	9.1	91 10'	-20.2	-29.3		2735.9		-41	-989	682.106	2902.380
646	660		- -	--	8.8	91 10'	-13.4	-22.2		2743.0		-28	-659	682.119	2902.710
647	330		- -	--	9.7	90 10'	-1.0	-10.7		2754.5		-14	-330	682.133	2903.039 Peerless-7 1/2' ↑
648	0				5.1	-		-5.1		2760.1	K	0	0	682.147	2903.369 Killenbeck Reservoir ↓
649	330		76 -	--	9.6	90 10'	-1.0	-10.6		2754.6		+14	+330	682.161	2903.699
650	660		- -	--	11.4	91 -	-11.5	-22.9		2742.3		+28	+659	682.175	2904.028
IF	384		73 22 57	--	7.1	90 44'	-4.9	-12.0		2753.2	IF	+34	+383	682.181	2903.752 y-682.135 x-2903.745 T-inter. El. 2753.0
651	990		76 -	--	11.4	91 18'	-22.5	-33.9		2731.3		+41	+989	682.188	2904.358
652	1320		- -	--	7.4	91 18'	-29.9	-37.3		2727.9		+55	+1319	682.202	2904.688
653	1650		- -	--	9.4	90 54'	-25.9	-35.3		2729.9		+69	+1649	682.216	2905.018
654	1980		- -	--	10.3	90 40'	-23.0	-33.3		2731.9		+83	+1978	682.230	2905.347

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-25-86		B. Cotamp		J. Middleton		6834		B.C.		8		39			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		Killenbeck Reservoir-7 1/2		MONT.		DANIELS								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									2765.2	-					
655	2310		75 59	+11.6	4.6	90 40	-26.9	-31.5		2733.7		+97	+2308	682,244	2905,677
656	2640		-	--	7.0	90 32	-24.6	-31.6		2733.6		+111	+2638	682,258	2906,007
657	2970		-	--	9.0	90 32	-27.6	-36.6		2728.6		+125	+2967	682,272	2906,336
IF	3041		75 40 27	--	9.2	90 32	-28.3	-37.5		2727.7	IF	+145	+3038	682,292	2906,407
658	3299		75 59 14	+11.2	11.8	90 32	-30.7	-42.5	42.63	2722.6	TP	+162	+3295	682,309	2906,665
658	3299				12.1	269 28	-30.7	-42.8			TP		+		
	3628		256 28 55	+10.9	11.9	TH	-18.1	-6.2			BS	+166	+3624		
	3628			+12.0	TH	270	-18.1	-6.1	2716.5	-	BS		+		
659	3300		256 28	--	6.8	89 50	+9.6	+2.8		2719.3		-152	-3297	682,323	2906,993
660	2970		-	--	8.8	89 50	+8.6	-0.2		2716.3		-136	-2967	682,339	2907,323
661	2640		-	--	9.8	89 50	+7.0	-2.1		2714.4		-121	-2637	682,354	2907,653
662	2310		-	--	7.3	-		-7.3		2709.2		-106	-2308	682,369	2907,982
663	1980		-	--	4.2	BH	-9.9	-14.1		2702.4		-91	-1978	682,384	2908,312
664	1650		-	--	9.3	BH	-8.3	-17.6		2698.9		-76	-1648	682,399	2908,642
665	1320		-	--	12.2	90 20	-7.7	-19.9		2696.6		-61	-1319	682,414	2908,971
666	990		-	--	11.0	90 40	-11.5	-22.5		2694.0		-45	-989	682,430	2909,301
667	660		-	--	10.0	91 -	-11.5	-21.5		2695.0		-30	-659	682,445	2909,631
668	330		-	--	7.7	91 -	-5.8	-13.5		2703.0		-15	-330	682,460	2909,960
669	0				5.1	-		-5.1		2711.4	π	0	0	682,475	2910,290

y-682,280 x-2906,405
IF T-Inter. EL. 2731.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-25-86	INSTRUMENT MAN	B. Cotnam	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	J.M.	LINE NO.	8	PAGE	40	
AREA	MONTANA	TOPO MAP	Kiuenbeck Reservoir	STATE	MONT.	COUNTY	DANIELS	TWP		RANGE		PPM	PARTY MANAGER	S. Binns

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X				
									2716.5	'									
670	330		76 20	+10.9	5.7	-		-5.7		2710.8		+16	+330	682,491	2910,620				
671	660		-	--	10.1	BH	-3.3	-13.4		2703.1		+32	+659	682,507	2910,949				
672	990		-	--	10.6	90 40	-11.5	-22.1		2694.4		+48	+989	682,523	2911,279				
673	1320		-	--	12.0	90 49	-18.8	-30.8		2685.7		+64	+1318	682,539	2911,608				
IF	1378		75 37 38	--	12.4	90 48	-19.2	-31.6		2684.9	IF	+83	+1375	682,558	2911,665			Y-682,525 X-2911,690 IF T-Inter. EL. 2684.0	
674	1650		76 20	+10.9	12.1	90 48	-23.0	-35.1		2681.4		+80	+1648	682,555	2911,938				
675	1980		-	--	10.1	90 38	-21.9	-32.0		2684.5		+96	+1978	682,571	2912,268				
676	2310		-	--	7.1	90 30	-20.2	-27.3		2689.2		+112	+2307	682,587	2912,597				
677	2640		-	--	9.8	90 20	-15.4	-25.2		2691.3		+127	+2637	682,602	2912,927				
678	2970		-	--	6.8	90 20	-17.3	-24.1		2692.4		+143	+2967	682,618	2913,257				
679	3300		-	--	5.0	90 20	-19.2	-24.2		2692.3		+159	+3296	682,634	2913,586				
680	3630		-	--	9.0	90 20	-21.1	-30.1		2686.4		+175	+3626	682,650	2913,916				
TP	3867		76 18 06	--	14.6	90 22	-24.7	-39.3	-39.4	2677.1	TP	+189	+3862	682,663	2914,153				
TP	3867				14.9	269 38	-24.7	-39.6			TP	-	+						
	5377		256 42 40	+10.5	11.1	89 12	-75.1	-64.0			BS	+262	+5370						
	5377				11.4	270 48	-75.1	-63.7	-63.8	2613.3	BS	-	+						
681	5283		256 42	--	8.9	89 16	+67.6	+58.7		2672.0		-258	-5277	682,666	2914,247				
682	4950		-	--	16.3	89 18	+60.5	+44.2		2657.5		-242	-4944	682,682	2914,580				
683	4620		-	--	19.0	89 19	+55.1	+36.1		2649.4		-226	-4614	682,698	2914,910				
684	4290		-	--	17.5	89 19	+51.2	+33.7		2647.0		-210	-4285	682,714	2915,239				

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-25-86		B. Cotcamp		J. Middleton		6834		J.M.		8		41			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		Killeen Beck Reservoir-76		MONT.		DANIELS								S.O. NNS	
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
									2613.3						
685	3960		256 42'	+10.5	15.4	89 19	+47.2	+31.8		2645.1		-193	-3955	682.731	2915.569
686	3630		--	--	13.6	89 19	+43.3	+29.7		2643.0		-177	-3626	682.747	2915.898
687	3300		--	--	11.2	89 19	+39.4	+28.2		2641.5		-161	-3296	682.763	2916.228
688	2970		--	--	11.4	89 14	+39.7	+28.3		2641.6		-145	-2966	682.779	2916.558
689	2640		--	--	7.7	89 14	+35.3	+27.6		2640.9		-129	-2637	682.795	2916.887
71	2578		257 04 16	--	6.7	89 14	+34.5	+27.8		2641.1	71	-109	-2575	682.815	2916.949
690	2310		256 42'	+10.5	4.7	89 14	+30.9	+26.2		2639.5		-113	-2307	682.811	2917.217
691	1980		--	--	7.7	89 14	+26.5	+18.8		2632.1		-97	-1978	682.827	2917.546
692	1650		--	--	7.3	89 30	+14.4	+7.1		2620.4		-81	-1648	682.843	2917.876
693	1320		--	--	10.8	TH	+6.6	-4.2		2609.1		-64	-1318	682.860	2918.206
694	990		--	--	9.7	--	--	-9.7		2603.6		-48	-989	682.876	2918.535
695	660		--	--	10.4	--	--	-10.4		2602.9		-32	-659	682.892	2918.865
696	330		--	--	7.2	--	--	-7.2		2606.1		-16	-330	682.908	2919.194
697	0		--	--	5.1	--	--	-5.1		2608.2	71	0	0	682.924	2919.524
698	330		76 44'	+10.5	8.2	--	--	-8.2		2605.1		+16	+330	682.940	2919.854
699	660		--	--	6.9	91 -	-11.5	-18.4		2594.9		+32	+659	682.956	2920.183
700	990		--	--	11.1	91 -	-17.3	-28.4		2584.9		+48	+989	682.972	2920.513
701	1320		--	--	9.0	91 -	-23.0	-32.0		2581.3		+64	+1318	682.988	2920.842
702	1650		--	--	6.0	91 -	-28.8	-34.8		2578.5		+80	+1648	683.004	2921.172
703	1980		--	--	7.7	91 -	-34.6	-42.3		2571.0		+96	+1978	683.020	2921.502

682.810 x - 2,916.975
T-Inter. EL. 2639.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-25-86	INSTRUMENT MAN	B. Cotcamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	J.M.	LINE NO.	8	PAGE	42	
AREA	MONTANA	TOPO MAP	KluenBeck Reservoir-74	STATE	MONT.	COUNTY	Daniels	TWP		RANGE		PPM	PARTY MANAGER	S. Binns

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
									2613.3									
704	2310		76 44	+10.5	9.3	91 -	-40.3	-49.6		2563.7		+112	+2307	683.036	2921.831			
705	2640		- -	--	6.7	91 -	-46.1	-52.8		2560.5		+127	+2637	683.051	2922.161			
1F	2679		76 21 35	--	5.9	91 -	-46.8	-52.7		2560.6	1F	+147	+2675	683.071	2922.199			Y=683.080 X=2922.205 1F T-enter. EL.2559.0
706	2970		76 44	--	10.1	90 50	-43.2	-53.3		2560.0		+143	+2967	683.067	2922.491			
707	3300		- -	--	6.0	90 50	-48.0	-54.0		2559.3		+159	+3296	683.083	2922.820			
708	3630		- -	--	8.4	90 44	-46.5	-54.9		2558.4		+175	+3626	683.099	2923.150			
709	3960		- -	--	4.9	90 44	-50.7	-55.6		2557.7		+191	+3955	683.115	2923.479			
710	4290		- -	--	8.1	90 40	-49.9	-58.0		2555.3		+207	+4285	683.131	2923.809			
711	4621		76 43 10	-	11.3	90 40	-53.8	-65.1	2552.3	2548.1	TP	+224	+4615	683.147	2924.140			
711	4621		7		11.6	269 20	-53.8	-65.4			TP	-	+					
	2311		256 34 -	+10.5	+11.9	89 30	-20.2	-8.3			BS	+118	+2308					
	2311				+12.0	270 36	-20.2	-8.2	2539.9		BS	-	+					
712	1980		256 34	--	10.9	89 40	+11.5	+0.6		2540.5		-101	-1977	683.163	2924.472			
713	1650		- -	--	16.8	89 40	+9.6	-2.2		2532.7		-84	-1648	683.180	2924.801			
714	1320		- -	--	17.2	89 40	+7.7	-9.5		2530.4		-68	-1318	683.196	2925.131			
715	990		- -	--	9.7	89 40	+5.8	-3.9		2536.0		-51	-989	683.213	2925.460			
716	660		- -	--	8.1	89 10	+9.6	+1.5		2541.4		-34	-659	683.230	2925.790			
717	330		- -	--	3.7	89 10	+4.8	+1.1		2541.0		-17	-330	683.247	2926.119			
718	0				5.1	-		-5.1		2534.8	K	0	0	683.264	2926.449			
719	330		76 32	--	6.4	90 50	-4.8	-11.2		2528.7		+17	+330	683.281	2926.779			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-25-86	INSTRUMENT MAN	B. Cotcamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	J.M.	LINE NO.	8	PAGE	43	
AREA	MONTANA	TOPO MAP	Killenbeck Reservoir - 7 1/2'	STATE	MONT.	COUNTY	DANIELS	TWP		RANGE		PPM	PARTY MANAGER	S. B. NNS

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				
									2539.9										
720	66°		76 32	+10.5	9.0	90 50	-9.6	-18.6		2521.3		+ 34	+659	683.298	2 927.108				
721	99°		-	--	11.2	91 -	-17.3	-28.5		2511.4		+ 51	+989	683.315	2 927.438				
1/2	1059		75 39 06	--	11.8	91 -	-18.5	-30.3		2509.6	1/2	+ 71	+1056	683.335	2 927.505				683,360 x -2,927,505 T-Inter. EL. 2508.0
722	132°		76 32'	--	10.2	91 12	-27.6	-37.8		2502.1		+ 68	+1318	683.332	2 927.767				
723	165°		-	--	12.1	91 12	-34.6	-46.7		2493.2		+ 85	+1648	683.349	2 928.097				
724	198°		-	+10.5	7.0	91 12	-41.5	-48.5		2491.4		+ 102	+1977	683.366	2 928.426				
725	231°		-	--	9.8	91 -	-40.3	-50.1		2489.8		+ 120	+2307	683.384	2 928.756				
726	264°		-	--	7.1	91 -	-46.1	-53.2		2486.7		+ 137	+2636	683.401	2 929.085				
727	297°		-	--	4.8	91 -	-51.8	-56.6		2483.3		+ 154	+2966	683.418	2 929.415				
728	330°		-	--	9.3	90 48	-46.1	-55.4		2484.5		+ 171	+3296	683.435	2 929.745				
729	363°		-	--	10.3	90 38	-40.1	-50.4		2489.5		+ 188	+3625	683.452	2 930.074				
730	396°		-	--	11.7	90 30	-34.6	-46.3		2493.6		+ 205	+3955	683.469	2 930.404				
731	429°		-	--	5.0	90 30	-37.4	-42.4		2492.5		+ 222	+4284	683.486	2 930.733				
732	462°		76 33 11	--	2.3	90 30	-40.4	-42.7		2497.2	TP	+ 238	+4620	683.501	2 931.070				
732	462°			--	2.4	269 30	-40.4	-42.8			TP	-1	-1						
	3963		256 23 51	+10.5	14.5	89 34	-30.0	-15.5			BS	+214	+3957						
	3963			+14.8	20 20	-30.0	-15.2	-15.3	2481.9		BS	-1	+2						
733	363°		256 24	-	10.7	89 36	+25.3	+14.6		2496.5		-196	-3625	683.518	2 931.404				
734	330°		-	--	9.3	89 36	+23.0	+13.7		2495.6		-178	-3295	683.536	2 931.731				
785	297°		-	-	8.0	89 36	+20.7	+12.7		2494.6		-161	-2966	683.553	2 932.063				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-25-86	INSTRUMENT MAN	B. Cotcamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	F.M.	LINE NO.	8	PAGE	44	
AREA	MONTANA	TOPO MAP	Killenbeck Reservoir 7 1/2'	STATE	MONT.	COUNTY	Daniels	TWP		RANGE		PPM	PARTY MANAGER	S. Binns

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
									2481.9									
736	2640		256 24'	+10.5	6.3	89 36	+18.4	+12.1		2494.0		-143	-2636	683.571	2932.393			
737	2310		- -	--	9.0	89 30	+20.2	+11.2		2493.1		-125	-2307	683.589	2932.722			
738	2263		256 44 04	--	8.5	89 30	+19.7	+11.2		2493.1	7/8	-109	-2260	683.605	2932.769			y=683,615 x=2932,175 7/8 4 way enter EL. 2491.0
738	1980		256 24'	--	5.8	89 30	+17.3	+11.5		2493.4		-107	-1977	683.607	2933.052			↑
739	1650		- -	--	4.8	89 30	+14.4	+9.6		2491.5		-89	-1648	683.625	2933.381			Killenbeck Reservoir 7 1/2'
740	1320		- -	--	5.3	89 30	+11.5	+6.2		2488.1		-71	-1318	683.643	2933.711			Four Buttes 7 1/2'
741	990		- -	--	6.0	89 30	+8.6	+2.6		2484.5		-54	-989	683.660	2934.040			
742	660		- -	--	6.8	89 30	+5.8	-1.0		2480.9		-36	-659	683.678	2934.370			
743	330		- -	--	6.5	89 30	+2.9	-3.6		2478.3		-18	-330	683.696	2934.699			
744	0				5.1	-		-5.1		2476.8	X	0	0	683.714	2935.029			
745	330		76 23'	+10.5	6.2	89 30	+2.9	-3.3		2478.6		+18	+330	683.732	2935.359			
746	660		- -	--	9.0	89 30	+5.8	-3.2		2478.7		+36	+659	683.750	2935.688			
747	990		- -	--	10.3	89 40	+5.8	-4.5		2477.4		+54	+989	683.768	2936.018			
748	6320		- -	--	12.3	89 40	+7.7	-4.6		2477.3		+72	+1318	683.786	2936.347			
749	1650		- -	--	8.7	89 50	+4.8	-3.9		2478.0		+90	+1648	683.804	2936.677			
750	1980		- -	--	8.5	89 50	+5.8	-2.7		2479.2		+108	+1977	683.822	2937.006			
751	2310		- -	--	8.6	89 50	+6.7	-1.9		2480.0		+126	+2307	683.840	2937.336			
752	2640		- -	--	8.6	89 50	+7.7	-0.9		2481.0		+144	+2636	683.858	2937.665			
753	2970		- -	--	8.5	89 50	+8.6	+0.1		2482.0		+161	+2966	683.875	2937.995			
753	3076		76 07 33	-	8.3	89 50	+8.9	+0.6		2482.5	7/8	+181	+3071	683.895	2938.100			Horiz. 4-6, 12 Cook 27 y=683,875 x=2,938,100 7/8 4 way enter EL. 2488.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-25-86		B. Cotcamp		J. Middleton		6834		J.M.		8		45			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		Four Buttes-7 1/2'		MONT.		Daniels								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									2481.9						
754	3300		76 24'	+10.5	8.5	89 50	+9.6	+1.1		2483.0		+179	+3295	683.893	2938.324
755	3630		- -	--	11.4	89 50	+10.6	-0.8		2481.1		+196	+3625	683.910	2938.654
756	3960		- -	--	7.1	89 56	+4.6	-2.5		2479.4		+214	+3954	683.928	2938.783
757	4290		- -	--	9.6	89 56	+5.0	-4.6		2477.3		+232	+4284	683.946	2939.313
758	4622		76 19 32	~	14.8	89 53	+9.4	-5.4	255 1/2	2476.4	TP	+256	+4615	683.970	2939.644
758	4622				15.1	270 07	+9.4	-5.7			TP				
	4622		256 44 48	+10.5	13.0	TH	-23.1	-10.1			BS	+222	+4617		
	4622				13.3	TH 270	-23.1	-9.8	246.5		BS				
759	4290		256 40	~	11.3	TH	+21.5	+10.2		2476.7		-212	-4285	683.980	2939.976
760	3960		- -	--	9.3	TH	+19.8	+10.5		2477.0		-196	-3955	683.996	2940.306
761	3630		- -	--	8.8	TH	+18.2	+9.4		2475.9		-179	-3626	684.013	2940.635
762	3300		- -	--	9.9	TH	+16.5	+6.6		2473.1		-163	-3296	684.029	2940.965
763	2970		- -	--	11.9	TH	+14.9	+3.0		2469.5		-147	-2966	684.045	2941.295
764	2640		- -	--	7.4	89 50	+7.7	+0.3		2466.8		-131	-2637	684.061	2941.624
Bm	2411		255 25 05	--	14.7	89 40	+14.0	-0.7		2465.8	Bm	-172	-2405	684.020	2941.856
765	2310		256 40	~	12.0	89 40	+13.4	+1.4		2467.9		-114	-2307	684.078	2941.954
766	1980		- -	--	8.6	89 40	+11.5	+2.9		2469.4		-98	-1978	684.094	2942.283
767	1650		- -	--	6.4	89 40	+9.6	+3.2		2469.7		-82	-1648	684.110	2942.613
768	1320		- -	--	7.0	89 40	+7.7	+0.7		2467.2		-65	-1318	684.127	2942.943
769	990		- -	--	6.1	89 40	+5.8	-0.3		2466.2		-49	-989	684.143	2943.272

9-684.025 x 2941.866
Bm. U.S.C. & G.S. EL. 2466.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO		PAGE			
8-25-86		B. Gotcamp		J. Middleton		6834		J.M.		8		46			
AREA		T.O.P.O. MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		Four Buttes - 7 1/2'		MONT.		DANIELS								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOT DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									2466.5						
770	660		256 40'	+10.5	4.7	89 40'	+3.8	-0.9		2465.6		-33	-659	684,159	2943602
771	330		- -	--	4.2	89 40'	+1.9	-2.3		2464.2		-16	-330	684,176	2943931
772	0				5.1	-		-5.1		2461.4	TP	0	0	684,192	2944261
773	330		76 41'	--	5.1	-		-5.1		2461.4		+16	+330	684,208	2944591
774	660		- -	--	5.6	-		-5.6		2460.9		+32	+659	684,224	2944920
775	990		- -	--	8.1	-		-8.1		2458.4		+49	+989	684,241	2945250
776	1320		- -	--	10.0	-		-10.0		2456.5		+65	+1318	684,257	2945579
777	1650		- -	--	11.0	-		-11.0		2455.5		+81	+1648	684,273	2945909
778	1980		- -	--	9.2	90 06'	-3.5	-12.7		2453.8		+97	+1978	684,289	2946239
IF	1859		76 17 15'	+10.5	11.7	-		-11.7		2454.8	IF	+104	+1856	684,296	2946117
779	2310		76 41'	--	10.9	90 06'	-4.0	-14.9		2451.6		+114	+2307	684,306	2946568
780	2640		- -	--	9.6	90 10'	-7.7	-17.3		2449.2		+130	+2637	684,322	2946898
781	2970		- -	--	10.8	90 10'	-8.6	-19.4		2447.1		+146	+2966	684,338	2947227
782	3300		- -	--	11.8	90 10'	-9.6	-21.4		2445.1		+162	+3296	684,354	2947557
783	3630		- -	--	11.0	90 12'	-12.7	-23.7		2442.8		+178	+3626	684,370	2947887
784	3964		76 41 45'	+10.3	14.9	90 10 30'	-12.1	-27.0		2439.5	TP	+208	+3959	684,400	2948220
784	3964				15.0	269 49 30'	-12.1	-27.1			TP				
	2640		256 43 43'	--	9.9	89 50'	-7.7	+2.2			BS	+137	+2636		
	2640				10.0	270 10'	-7.7	+2.3		2441.8	BS				

Y=684,310 X=2,946,125
T-Inter EL. 2456.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-25-86	INSTRUMENT MAN	B. Cotcamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	J.M.	LINE NO.	8	PAGE	47	
AREA	MONTANA	TOPO MAP	Four Buttes - 7 1/2'	STATE	MONT.	COUNTY	DANIELS	TWP		RANGE		PPM	PARTY MANAGER	S. Binns

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X				
									2441.8										
785	2310		256 44'	+10.3	11.7	89 50	+6.7	-5.0		2436.8		-120	-2307	684.417	2948.549				
1k	2238		257 05 51	--	12.1	89 50	+6.5	-5.6		2436.2	1k	-102	-2236	684.435	2948.620				684.470 x - 2948.625 T-Inter. EL. 2437.0
786	1980		256 44'	--	10.8	89 54	+3.5	-7.3		2434.5		-102	-1977	684.435	2948.879				
787	1650		- -	--	10.2	89 54	+2.9	-7.3		2434.5		-85	-1648	684.452	2949.208				
788	1320		- -	--	8.0	89 50	+3.8	-4.2		2437.6		-68	-1318	684.469	2949.538				
789	990		- -	--	9.7	89 30	+8.6	-1.1		2440.7		-51	-989	684.486	2949.867				
790	660		- -	--	7.2	89 30	+5.8	-1.4		2440.4		-34	-659	684.503	2950.197				
791	330		- -	--	5.6	89 30	+2.9	-2.7		2439.1		-17	-330	684.520	2950.526				
792	0				5.1	-		-5.1		2436.7	X	0	0	684.537	2950.850				
793	330		76 42'	+10.3	8.3	-		-8.3		2433.5		+17	+330	684.554	2951.186				
794	660		- -	--	11.8	-		-11.8		2430.0		+35	+659	684.572	2951.515				
795	990		- -	--	11.6	-		-11.6		2430.2		+52	+989	684.589	2951.845				
796	1320		- -	--	11.1	-		-11.1		2430.7		+69	+1318	684.606	2952.174				
Bm	1570		78 39 16	--	14.8	-		-14.8		2427.0	Bm	+29	+1570	684.566	2952.426				4-684.600 x - 2952.410 U-62 1934 U.S.C. & G.S. 2428.0
797	1650		76 42	--	5.9	BH	-8.3	-14.2		2427.6		+86	+1648	684.623	2952.504				
798	1980		- -	--	7.3	BH	-9.9	-17.2		2424.6		+104	+1977	684.641	2952.833				
799	2310		- -	--	8.9	BH	-11.6	-20.5		2421.3		+121	+2307	684.658	2953.163				
800	2640		- -	--	4.7	BH	-13.2	-17.9		2423.9		+138	+2636	684.675	2953.492				
801	2970		- -	--	8.6	90 08	-6.9	-15.5		2426.3		+155	+2966	684.692	2953.822				
802	3300		- -	--	9.9	90 08	-7.7	-17.6		2424.2		+173	+3295	684.710	2954.151				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	8-25-86	INSTRUMENT MAN	B. Cotcamp	ROD MAN	J. Middleton	PARTY NUMBER	6834	NOTES CHECKED BY	J.M.	LINE NO.	8	PAGE	48
AREA	MONTANA	TOPO MAP	Four Buttes-7 1/2'	STATE	MONT.	COUNTY	DANIELS	TWP		RANGE		PPM	
												PARTY MANAGER	S. Binns

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									2441.8					
803	3631		76 41 18	+10.3	13.6	90 10	-10.6	-24.2		2417.6	TP	+191	+3626	684.728 2954.482
803	3631				13.7	269 50	-10.6	-24.3			TP			
	1955		269 11 40	--	+1.0	-		+1.0		2418.6	BS	-322	+1928	
	1955				+1.1	270 -		+1.1			BS			
804	1633		271 55'	--	6.3	-		-6.3		2412.3		+346	-1596	684.752 2954.814
805	1314		274 55'	--	7.3	-		-7.3		2411.3		+345	-1268	684.751 2955.142
806	989		277 50	--	5.0	-		-5.0		2413.6		+308	-940	684.714 2955.470
807	660		280 30	--	6.5	TH	+3.3	-3.2		2415.4		+234	-617	684.640 2955.793
808	330		280 55	-	3.7	-		-3.7		2414.9		+119	-308	684.525 2956.102
809	0				5.1	-		-5.1		2413.5	X	0	0	684.406 2956.410
14	147		95 11 21	+10.3	5.1	-		-5.1		2413.5	14	-39	+142	684.367 2956.552
810	330		100 41	--	5.7	-		-5.7		2412.9		-118	+308	684.288 2956.718
811	660		- -	--	7.6	-		-7.6		2411.0		-236	+616	684.170 2957.026
812	990		- -	--	10.3	-		-10.3		2408.3		-355	+924	684.051 2957.334
813	1320		- -	--	8.3	BH	-6.6	-14.9		2403.7		-473	+1232	683.933 2957.642
814	1650		- -	--	11.2	BH	-8.3	-19.5		2399.1		-591	+1541	683.815 2957.951
815	1980		- -	--	10.4	90 24	-13.8	-24.2		2394.4		-709	+1849	683.697 2958.259
816	2310		- -	--	10.3	90 30	-20.2	-30.5		2388.1		-827	+2157	683.579 2958.567
817	2640		- -	--	7.6	90 30	-23.0	-30.6		2388.0		-945	+2465	683.461 2958.875
818	2970		- -	--	9.1	90 20	-17.3	-26.4		2392.2		-1064	+2773	683.342 2959.183

14 y = 684.400 x = 2956.552
T-ROAD South

2413.

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
8-25-86		B. Cotcamp		J. Middleton		6834		J.M.		8		49				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
MONTANA		Four Buttes-7 1/2'		MONT.		DANIELS								S. Binns		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									2418.6							
K	3060		100 22' 30"	+10.3	13.7	90 14'	-12.5	-26.2		2392.4		-1080	+2863	683.326	2959.273	5-683,360 x 2959,300 T-Inter. EL. 2392.0
819	3300		100 41'	-	11.4	90 18'	-17.3	-28.7		2389.9		-1182	+3081	683.224	2959.491	
820	3634		100 46 13"	-	14.4	90 19'	-20.1	-34.5	234.6	2384.0	TP	-1301	+3393	683.105	2959.803	
820	3634				14.7	269 41'	-20.1	-34.8			TP					
	3952		277 02 58"	+10.3	14.4	89 24'	-41.4	-27.0	26.8	2357.2	BS	-1178	+3772			
	3952				14.7	270 36'	-41.4	-26.7			BS					
821	3621		276 43'	-	6.9	89 30'	+31.6	+24.7		2381.9		+1060	-3462	682987	2960.113	
822	3290		276 25'	-	6.7	89 30'	+28.7	+22.0		2379.2		+946	-3151	682873	2960.424	
823	2960		275 52'	-	6.0	89 30'	+25.8	+19.8		2377.0		+824	-2843	682751	2960.732	
824	2632		275 25'	-	5.8	89 30'	+23.0	+17.2		2374.4		+713	-2534	682640	2961.041	
825	2304		274 35'	-	6.3	89 30'	+20.1	+13.8		2371.0		+592	-2227	682519	2961.348	
826	1972		273 32'	+10.3	11.0	89 30'	+17.2	+6.2		2363.4		+472	-1915	682399	2961.660	
827	1648		272 10'	-	9.1	89 40'	+9.6	+0.5		2357.7		+356	-1609	682283	2961.966	
828	1318		270 35'	-	9.1	89 40'	+7.7	-1.4		2355.8		+249	-1294	682176	2962.281	
829	988		268 50'	-	8.0	89 40'	+5.7	-2.3		2354.9		+157	-975	682084	2962.600	
830	659		267 10'	-	7.0	89 40'	+3.8	-3.2		2354.0		+86	-653	682013	2962.922	
831	330		265 40'	-	5.8	89 40'	+1.9	-3.9		2353.3		+34	-328	681961	2963.247	
832	0				5.1	-	-	-5.1		2352.1	TP	0	0	681927	2963.575	Four Buttes-7 1/2' ↑
833	330		79 52'	-	6.1	-	-	-6.1		2351.1		-1	+330	681926	2963.905	Scobey-7 1/2' ↓
834	660		-	-	7.8	-	-	-7.8		2349.4		-2	+660	681925	2964.235	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-25-86		B. Cotcamp		J. Middleton		6834		F.M.		8		50			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		Scobey-7 1/2'		MONT.		DANIELS								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									2357.2						
835	990		79 52'	+10.3	8.5	-	-8.5			2348.7		-3	+990	681.924	2964.565
836	1320		--	--	9.1	-	-9.1			2348.1		-4	+1320	681.923	2964.895
837	1650		--	--	9.1	-	-9.1			2348.1		-5	+1650	681.922	2965.225
838	1980		--	--	9.7	-	-9.7			2347.5		-6	+1980	681.921	2965.555
839	2310		--	--	11.3	-	-11.3			2345.9		-7	+2310	681.920	2965.885
840	2640		--	+10.3	12.1	-	-12.1			2345.1		-8	+2640	681.919	2966.215
841	2970		--	--	9.0	90 04	-3.5	-12.5		2344.7		-9	+2970	681.918	2966.545
842	3300		--	--	8.8	90 04	-3.8	-12.6		2344.6		-10	+3300	681.917	2966.875
843	3630		--	--	8.1	90 04	-4.2	-12.3		2344.9		-11	+3630	681.916	2967.205
844	3960		--	--	8.1	90 04	-4.6	-12.7		2344.5		-12	+3960	681.915	2967.535
845	4290		79 57 46	--	10.8	-	-10.8			2346.4	TP	-20	+4290	681.907	2967.865
845	4290				10.9	270 -	-10.9				TP				
	4953		259 56 40	+10.3	12.4	90 20	+28.8	+41.2			BS	-21	+4953		
	4953				12.9	269 40	+28.8	+41.7	41.5	2387.9	BS				
846	4620		259 58'	--	7.6	90 24	-32.3	-39.9		2348.0		+22	-4620	681.908	2968.198
847	4290		--	--	10.0	90 24	-30.0	-40.0		2347.9		+20	-4290	681.906	2968.528
848	3960		--	--	6.8	90 30	-34.6	-41.4		2346.5		+18	-3960	681.904	2968.858
849	3630		--	--	6.6	90 36	-38.0	-44.6		2343.3		+17	-3630	681.903	2969.188
850	3300		--	--	11.5	90 36	-34.6	-46.1		2341.8		+15	-3300	681.901	2969.518
851	2970		--	--	8.9	90 44	-38.0	-46.9		2341.0		+14	-2970	681.900	2969.848

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
8-25-86		B. Cotcamp		J. Middleton		6834		J.M.I.		8		51				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
MONTANA		SCOBEY - 7 1/2'		MONT.		DANIELS								S. Binns		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									2387.9							
4 1/2	3037		260 22 04	+10.3	7.6	90 44	-38.9	-46.5		2341.4	4 1/2	+35	-3037	681.921	2969.781	5-681.910 X-2, 969.790 4-way Inter. EL. 2341.0
852	2640		260 -	--	9.1	90 50	-38.4	-47.5		2340.4		+14	-2640	681.900	2970.178	
853	2310		- -	--	7.6	91 -	-40.3	-47.9		2340.0		+12	-2310	681.898	2970.508	
854	1980		- -	--	11.1	91 -	-34.6	-45.7		2342.2		+10	-1980	681.896	2970.838	
855	1650		- -	--	10.2	91 06	-31.7	-41.9		2346.0		+9	-1650	681.895	2971.168	
856	1320		260 15	--	12.3	91 06	-25.3	-37.6		2350.3		+13	-1320	681.899	2971.498	
857	990		- -	--	10.7	91 06	-19.0	-29.7		2358.2		+10	-990	681.896	2971.828	
858	660		- -	--	4.0	91 06	-12.7	-16.7		2371.2		+6	-660	681.892	2972.158	
859	330		- -	--	7.3	90 06	-0.6	-7.9		2380.0		+3	-330	681.889	2972.488	
860	0				5.1	-		-5.1		2382.8	X	0	0	681.886	2972.818	
861	330		92 20	+10.3	7.4	89 30	+2.9	-4.5		2383.4		-72	+322	681.814	2973.140	
862	660		- -	--	6.4	89 30	+5.8	-0.6		2387.3		-144	+644	681.742	2973.462	
863	990		94 -	--	8.0	89 10	+14.4	+6.4		2394.3		-245	+959	681.641	2973.777	
864	1320		94 55	--	5.6	89 10	+19.2	+13.6		2401.5		-346	+1274	681.540	2974.092	
865	1649		95 15	-	4.7	89 10	+24.0	+19.3		2407.2		-442	+1589	681.444	2974.407	
866	1980		95 38	-	6.2	89 10	+28.8	+22.6		2410.5		-544	+1904	681.342	2974.722	
867	2311		96 -	-	9.3	89 10	+33.6	+24.3		2412.2		-649	+2218	681.237	2975.036	
868	2640		96 10	-	12.1	89 10	+38.4	+26.3		2414.2		-748	+2532	681.138	2975.350	
1 1/2	2888		95 58 39	-	12.2	89 10	+42.0	+29.8		2417.7	1 1/2	-809	+2772	681.077	2975.590	5-681.105 X-2, 2975.600 1 1/2 T-Inter. CL. 2417.0

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY			LINE NO.		PAGE		
8-25-86		B. Cotcamp		J. Middleton		6834		F.M.			8		52		
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		Scobey-7 1/2'		MONT.		DANIELS								S. Binns	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									2387.9						
869	2971		96 12'	+10.3	12.3	89 10'	+43.2	+30.9		2418.8		-844	+2849	681.042	2975.667
870	3301		96 20	--	11.3	89 10'	+48.0	+36.7		2424.6		-945	+3163	680.941	2975.981
871	3631		- -	--	10.8	89 10'	+52.8	+42.0		2429.9		-1039	+3479	680.847	2976.297
872	3961		- -	--	11.6	89 10'	+57.6	+46.0		2433.9		-1134	+3795	680.752	2976.613
873	4291		95 52 22	-	14.7	89 10'	+62.4	+47.7	247.63	2435.5	TP	-1195	+4121	680.691	2976.939
873	4291				15.0	270 50	+62.4	+47.4			TP				
	2644		257 16 58	+10.3	9.4	-		+9.4			BS	+112	+2642		
	2644				9.5	270 -		+9.5	2445.0		BS				
874	2310		256 40'	--	5.9	-		-5.9		2439.1		-122	-2307	680.681	2977.274
875	1980		- -	--	6.4	-		-6.4		2438.6		-105	-1977	680.698	2977.604
876	1650		- -	--	7.7	-		-7.7		2437.3		-87	-1648	680.716	2977.933
877	1320		- -	--	8.7	-		-8.7		2436.3		-70	-1318	680.733	2978.263
878	990		- -	--	9.6	-		-9.6		2435.4		-52	-989	680.751	2978.592
879	660		- -	--	10.7	-		-10.7		2434.3		-35	-659	680.768	2978.922
880	330		- -	--	9.1	-		-9.1		2435.9		-17	-330	680.786	2979.251
881	0				5.1	-		-5.1		2439.9	X	0	0	680.803	2979.581
882	330		76 40'	+10.3	5.3	TH	+1.7	-3.6		2441.4		+17	+330	680.820	2979.911
883	660		- -	--	6.7	TH	+3.3	-3.4		2441.6		+35	+659	680.838	2980.240
IF	800		75 40 10	--	3.0	-		-3.0		2442.0	IF	+56	+798	680.859	2980.379
884	990		76 40'	-	7.1	TH	+5.0	-2.1		2442.9		+52	+989	680.855	2980.570

IF - 680.885 x = 2980.375
IF T - ROAD South 2442.

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

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AREA		TOPO MAP		STATE	COUNTY	TWP	RANGE	PPM	PARTY MANAGER						
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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
									2445.0						
885	1320		76° 40'	+10.3	8.2	TH	+16.6	-1.6		2443.4		+70	+1318	680.873	2980.899
886	1650		--	--	8.1	TH	+8.3	+0.2		2445.2		+87	+1648	680.890	2981.229
887	1980		--	--	8.9	TH	+9.9	+1.0		2446.0		+105	+1977	680.908	2981.558
888	2310		--	--	9.0	TH	+11.6	+2.6		2447.6		+122	+2307	680.925	2981.888
889	2640		--	--	10.1	TH	+13.2	+3.1		2448.1		+140	+2636	680.943	2982.217
890	2971		--	--	11.3	TH	+14.9	+3.6		2448.6		+157	+2966	680.960	2982.547 E.O.L. Line #8