

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc. COCORP

PAGE 1 OF 126

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE		
4-15-82		B. Cotcamp		T. Patton		6834		Jm B.C.		1		1		
AREA		TOPO MAP		STATE		COUNTY		RANGE		PPM		PARTY MANAGER		
UTAH		Conger Range - 15'		UTAH		Millard						L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
K1	U.S.G.S BENCH MARK - T-74 1934									4881.0	K			SCALED - y-335,755 x-1,302,015 U.S.C.G.S. Bm. EL. 4881.0 T-74 1934
BS	2824		58° 16' 54" +18'	+17.0	+2.7	-	+12.5				BS	-717 <sub>+1</sub>	-2731 <sub>-1</sub>	
BS	2824				+9.5	90° 04'	+3.3	+12.6	4893.6		BS			
X	0				5.4	-	-5.4		4888.2		X	0	0	335039 1299283
TP	2968		250° 05' 48"	+17.0	8.5	TH	+15.0	+6.5	4900.1		TP	-150 <sub>+1</sub>	-2964 <sub>-1</sub>	334890 1296318
TP	2968				10.9	89° 40'	+17.4	+6.5			TP			
	1980		70° 54' 47" +18'	+17.0	+14.0	90° 20'	+11.5	+25.5	49256		BS	-72 <sub>+1</sub>	-1979 <sub>-1</sub>	
	1980				+11.7	90° 24'	+13.8	+25.5			BS			
X	0				5.4	-	-5.4		4920.2		X	0	0	334819 1294338
TP	1977		250° 20' 04"	+17.0	10.8	89° -	+34.5	+23.7			TP	-92 <sub>+1</sub>	-1975 <sub>-1</sub>	334728 1292362 across STA.
TP	1977				14.3	88° 54'	+37.9	+23.6	4949.2		TP			
	338		34° 07' 56" +18'	+17.0	+12.6	-	+12.6	+12.6	4961.8		BS	-212 <sub>+1</sub>	-263 <sub>-1</sub>	
	338				+10.9	04	+1.7	+12.6			BS			
X	0				5.4	-	-5.4		4956.4		X	0	0	334517 1292098
1	329		200° 38'	+17.0	1.3	-	-1.3		4960.5			-261	-201	334256 1291897
TP	331		204° 32' 12"	" "	2.0	89° 50'	+1.0	-1.0	4960.8		TP	-248	-219	334269 1291879 y-334310x-1291905 JNT.
TP	330		37° 04'	" "	13.0	-	-13.0				TP	+194 <sub>+1</sub>	+267 <sub>-1</sub>	334712 1292364
TP	330				11.4	04	-1.7	-13.1	4948.7		TP			
	1973		249° 45' 53" -18'	+17.0	+11.3	89° -	-34.4	-23.1	4925.6		BS	+111 <sub>+1</sub>	+1970 <sub>-1</sub>	
	1973				+5.7	89° 10'	-28.7	-23.0			BS			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 4-15-82	INSTRUMENT MAN B. Cotcamp	ROD MAN T. Patton	PARTY NUMBER 6834	NOTES CHECKED BY Jm B.C.	LINE NO. 1	PAGE 2
AREA UTAH	TOPO MAP Conger Range-15'	STATE UTAH	COUNTY MILLARD	TWP	RANGE	PPM
				PARTY MANAGER L. DAVIS		

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									4925.6					
4	1645		249° 54'	+17.0	10.2	89°	+28.7	+18.5		4944.1		-89	-1643	334735 1292690
5	1316		" "	" "	8.8	89°	+23.0	+14.2		4939.8		-71	-1314	334753 1293019
6	990		" "	" "	7.3	89°	+17.3	+10.0		4935.6		-54	-989	334770 1293344
7	660		" "	" "	7.6	89°	+11.5	+3.9		4929.5		-36	-659	334788 1293674
8	330		" "	" "	6.5	89°	+5.8	-0.7		4924.9		-18	-330	334806 1294008
9	0				5.4	-		-5.4		4920.2	TP	0	0	334824 1294333
10	330		70° 45'	+17.0	8.6	-		-8.6		4917.0		+13	+330	334837 1294663
11	660		" "	" "	13.0	-		-13.0		4912.6		+26	+659	334850 1294992
12	990		" "	" "	12.0	BH	-5.0	-17.0		4908.6		+39	+989	334863 1295322
13	1320		" "	" "	13.1	BH	-6.6	-19.7		4905.9		+52	+1319	334876 1295652
14	1650		" "	" "	9.0	90° 30'	-14.4	-23.4		4902.2		+65	+1649	334889 1295982
15	1979		70° 43' 54"	" "	7.9	90° 30'	-17.3	-25.2		4900.4	TP	+78	+1977	334903 1296309
15	1979				13.6	90° 20'	-11.5	-25.1			TP			
	2969		250° 12' 47" -180	+17.0	+11.0	89° 40'	-17.5	-6.5			BS	+144	+2965	
	2969				+14.3	89° 36'	-20.9	-6.6	4893.8		BS			
16	2640		250° 04'	+17.0	9.9	89° 40'	+15.5	+5.6		4899.4		-135	-2637	334913 1296636
17	2310		" "	" "	9.5	89° 40'	+13.4	+3.9		4897.7		-118	-2307	334930 1296966
18	1980		249° 47'	" "	11.8	89° 30'	+17.3	+5.5		4899.3		-111	-1977	334937 1297296
19	1650		249° 40'	" "	12.9	89° 30'	+14.4	+1.5		4895.3		-96	-1647	334952 1297626
20	1320		249° 25'	" "	12.8	89° 30'	+11.5	-1.3		4892.5		-83	-1317	334965 1297956

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-15-82		B. Cotcamp		T. Patton		6834		Jm B.C.		1		3			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Conger Range-15'		UTAH		Millard								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4893.8						
21	990		249° 10'	+17.0	9.6	89° 30'	+9.6	-1.0		4892.8		-66	-988	334982	1298285
22	660		248° 39'	" "	8.0	89° 30'	+5.8	-2.2		4891.6		-50	-658	334998	1298615
23	330		247° 08'	" "	6.8	89° 30'	+2.9	-3.9		4889.9		-34	-328	335014	1298945
24	0				5.4	-		-5.4		4888.4	π	0	0	335048	1299273
25	330		59° 18'	+17.0	8.7	89° 30'	+2.9	-5.8		4888.0		+78	+321	335126	1299594
26	660		" "	" "	12.5	89° 30'	+5.8	-6.7		4887.1		+156	+641	335204	1299914
27	990		" "	" "	7.8	-		-7.8		4886.0		+234	+962	335282	1300235
28	1320		" "	" "	9.5	-		-9.5		4884.3		+313	+1282	335361	1300555
29	1650		59° 18'	" "	10.9	-		-10.9		4882.9		+391	+1603	335439	1300876
30	1980		" "	+17.0	12.1	-		-12.1		4881.7		+469	+1924	335517	1301197
31	2310		" "	" "	12.7	-		-12.7		4881.1		+547	+2244	335595	1301517
32	2641		" "	" "	13.0	-		-13.0		4880.8		+625	+2566	335673	1301839
TP	2824		58° 15' 08"	" "	12.8	-		-12.8		4881.0	TP	+719	+2731	335768	1302003
TP	2824			" "	9.5	90° 04'	-3.1	-12.6			TP				
															E.P.M.
	2456		246° 21' 17" -180	+17.0	4.7	-		+4.7		4885.6	BS	+538	+2396		
	2456				11.6	89° 50'	-7.1	+4.5		4885.7	BS				
33	2309		239° 08'	+17.0	4.9	-		-4.9		4880.7		-553	-2242	335754	1302154
34	1980		" "	" "	10.3	89° 50'	+5.8	-4.5		4881.1		-475	-1922	335832	1302476
35	1650		" "	" "	9.0	89° 50'	+4.8	-4.2		4881.4		-395	-1602	335912	1302798

E.P.M.  
 J-335755 X-1302015  
 E.O.M. EL. 4881.0  
 U.S.C.G.S  
 B.M. T-74-1934

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE		
4-15-82		B. Cotcamp		T. Patton		6834		Jm B.C.		1		4		
AREA		TOPO MAP		STATE		COUNTY		RANGE		PPM		PARTY MANAGER		
UTAH		CONGER Range-15		UTAH		Millard						L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									4885.6					
36	1320		239° 08'	+17.0	8.6	89° 50' +3.9	-4.8		4880.8			-316	-1282	335991 1,303,116
37	990		" "	" "	7.9	89° 50' +2.9	-5.0		4880.6			-237	-961	336070 1,303,437
38	660		" "	" "	7.1	89° 50' +1.9	-5.2		4880.4			-158	-641	336149 1,303,757
39	330		" "	" "	6.0	89° 50' +1.0	-5.0		4880.6			-79	-320	336228 1,304,078
40	0				5.4	-	-5.4		4880.2	TP		0	0	336307 1,304,398
41	330		59° 24'	+17.0	5.2	-	-5.2		4880.4			+78	+321	336385 1,304,719
42	660		" "	" "	5.9	-	-5.9		4879.7			+155	+641	336462 1,305,039
43	990		" "	" "	7.9	-	-7.9		4877.7			+233	+962	336540 1,305,360
44	1320		" "	" "	8.8	-	-8.8		4876.8			+310	+1283	336617 1,305,681
45	1650		" "	" "	6.8	-	-6.8		4878.8			+388	+1604	336695 1,306,002
46	1980		" "	" "	6.0	-	-6.0		4879.6			+466	+1924	336773 1,306,322
47	2309		59° 18' 21"	+17.3	6.6	-	-6.6		4879.0	TP		+535	+2246	336842 1,306,643 E.D.M.
47	2309				13.1	89° 50' +6.7	-6.4				TP			
	2309		239° 27' 43" -180	+17.3	+13.0	TH -11.5	+1.5	4880.5			BS	+529	+2248	E.D.M.
	2309				+8.3	89° 50' -6.7	+1.6				BS			
48	1980		239° 21'	+17.3	12.7	TH +9.9	-2.8		4877.7			-457	-1927	336913 1,306,963
49	1650		" "	" "	12.1	TH +8.3	-3.8		4876.7			-381	-1605	336989 1,306,285
50	1320		" "	" "	10.8	TH +6.6	-4.2		4876.3			-305	-1284	337065 1,307,606
51	990		" "	" "	9.3	TH +5.0	-4.3		4876.2			-229	-963	337141 1,307,927
52	660		" "	" "	7.3	TH +3.3	-4.0		4876.5			-152	-642	337218 1,308,248

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-15-82		B. Cotcamp		T. Patton		6834		B.C.		1		5			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Conger Rang- 15'		UTAH		Millard								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4880.5						
53	330		239° 21'	+17.3	6.2	-		-6.2		4874.3		-76	-321	337294	1308,569
54	0				5.4	-		-5.4		4875.1	X	0	0	337,370	1308,890
55	330		59° 20'	+17.3	6.3	-		-6.3		4874.2		+76	+321	337446	1309,211
56	660		" "	" "	6.7	-		-6.7		4873.8		+153	+642	337523	1309,532
57	990		" "	" "	8.0	-		-8.0		4872.5		+229	+963	337599	1309,853
58	1320		" "	" "	8.6	-		-8.6		4871.9		+305	+1284	337675	1310,174
59	1650		" "	+17.3	7.7	-		-7.7		4872.8		+381	+1605	337750	1310,495
60	1980		" "	" "	7.8	-		-7.8		4872.7		+458	+1926	337828	1310,816
61	2311		59° 20'	" "	8.5	-		-8.5		4872.0	TP	+534	+2248	337904	1311,137 E.D.M.
61	2311				12.4	89 54'	+4.0	-8.4			TP				
	1980		239° 23' 35"-180	+17.3	+11.3	TH	-9.9	+1.4	4873.4		BS	+456	+1927		E.D.M.
	1980				+1.6	-		+1.6			BS				
62	1650		239° 24'	+17.3	12.0	TH	+8.3	-3.7		4869.7		-380	-1606	337989	1311,457
63	1320		" "	" "	10.6	TH	+6.6	-4.0		4869.4		-304	-1285	338056	1311,789
64	1132		237° 31' 35"	" "	5.1	-		-5.1		4868.3	Bm	-296	-1093	338064	1311,970 U.S.C.G.S Bm EL. 4867.0
64	990		239° 24'	" "	10.3	TH	+5.0	-5.3		4868.1		-228	-963	339132	1312100 5-74 1974
65	660		" "	+17.3	8.9	TH	+3.3	-5.6		4867.8		-152	-642	339208	1312421
66	330		" "	" "	7.1	TH	+1.7	-5.4		4868.0		-76	-321	339284	1312,742
67	0				5.4	-		-5.4		4868.0	X	0	0	338,360	1,313,063
68	330		59° 18'	+17.3	3.5	-		-3.5		4869.9		+76	+321	338436	1,313,384

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-15-82		B. Cotcamp		T. Patton		6834		Jm B.C.		1		6			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Conger Ramp-15'		UTAH		Millard								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4873.4						
69	660		59° 18'	+17.3	5.1	-		-5.1		4868.3		+153	+642	338513	1,313,705
70	990		" "	" "	5.6	-		-5.6		4867.8		+229	+963	338589	1,314,026
71	1320		" "	" "	5.2	-		-5.2		4868.2		+306	+1284	338666	1,314,347
72	1650		" "	" "	6.3	-		-6.3		4867.1		+382	+1605	338742	1,314,668
73	1980		59° 17' 35"	+17.0	7.4	-		-7.4		4866.0	TP	+469	+1924	338829	1,314,986 E.O.M.
73	1980				13.0	89° 50'	+5.8	-7.2			TP				
	2308		239° 24' 20" -180	+17.0	+14.3	TH	-11.5	+2.8	4868.8		BS	+542	+2243		E.O.M.
	2308				+19.7	89° 50'	-6.7	+3.0			BS				
74	1980		239° 20'	+17.0	12.7	TH	+9.9	-2.8		4866.0		-468	-1924	338903	1,315,304
75	1650		" "	" "	10.9	TH	+8.3	-2.6		4866.2		-390	-1603	338981	1,315,625
76	1320		" "	" "	9.1	TH	+6.6	-2.5		4866.3		-312	-1283	339059	1,315,945
77	990		" "	" "	8.6	TH	+5.0	-3.6		4865.2		-234	-962	339139	1,316,266
78	660		" "	" "	7.4	TH	+3.3	-4.1		4864.7		-156	-641	339215	1,316,587
79	330		" "	" "	4.8	-		-4.8		4864.0		-78	-321	339293	1,316,907
80	0				5.4	-		-5.4		4863.4	X	0	0	339371	1,317,228
81	330		59° 28'	+17.0	4.9	-		-4.9		4863.9		+77	+321	339448	1,317,549
82	660		" "	" "	5.1	-		-5.1		4863.7		+154	+642	339525	1,317,870
83	990		" "	" "	5.1	-		-5.1		4863.7		+232	+963	339603	1,318,191
84	1320		" "	" "	5.5	-		-5.5		4863.3		+309	+1283	339680	1,318,511
85	1650		" "	" "	5.7	-		-5.7		4863.1		+386	+1604	339757	1,318,832

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	4-15-82	INSTRUMENT MAN	B. Cotcamp	ROD MAN	T. Patton	PARTY NUMBER	6834	NOTES CHECKED BY	Jm	LINE NO.	1	PAGE	7	
AREA	UTAH	TOPO MAP	Congel Range - 15'	STATE	UTAH	COUNTY	MILLARD	TWP		RANGE		PPM		
													PARTY MANAGER	L. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									4868.8							
86	1981		59° 28' 12"	+17.0	6.1	-		-6.1		4862.7	TP	+463	+1926	339,834	1319,533	E.D.M.
86	1981				11.8	89° 50'	+5.8	-6.0			TP					
	2310		239 21 25 -180	+17.0	4.6	-		+4.6			BS	+545	+2245			E.D.M.
	2310				11.2	89° 50'	-6.7	+4.5	4867.2		BS					
87	1980		239 21	+17.0	4.3	-		-4.3		4862.9		-467	-1924	339,912	1,319,473	
88	1650		" "	" "	12.6	TH	+8.3	-4.3		4862.9		-389	-1603	339,990	1,319,794	
89	1320		" "	" "	11.1	TH	+6.6	-4.5		4862.7		-312	-1283	340,067	1,320,114	
90	990		" "	" "	9.4	TH	+5.0	-4.4		4862.8		-234	-962	340,145	1,320,435	
91	660		" "	" "	5.0	-		-5.0		4862.2		-156	-641	340,223	1,320,786	
92	330		" "	" "	5.0	-		-5.0		4862.2		-78	-321	340,301	1,321,076	
93	0				5.4	-		-5.4		4861.8	TP	0	0	340,379	1,321,397	
94	330		59 20'	+17.0	5.4	-		-5.4		4861.8		+78	+321	340,457	1,321,718	
95	660		" "	" "	6.2	-		-6.2		4861.0		+156	+641	340,535	1,322,038	340,620 - 1,322,240
96	865		56° 02' 23"	" "	5.5	-		-5.5		4861.7	B.M.	+252	+827	340,631	1,322,224	U.S.C. 65 B.M. EL. 4861.0
96	990		59° 20'	" "	5.8	-		-5.8		4861.4		+234	+962	340,613	1,322,359	R-74 1934
97	1320		" "	" "	5.1	-		-5.1		4862.1		+312	+1283	340,691	1,322,680	
98	1650		" "	" "	4.8	-		-4.8		4862.4		+390	+1603	340,769	1,323,000	
99	1980		59 19 57	" "	4.2	-		-4.2		4863.0	TP	+468	+1924	340,847	1,323,320	
99	1980				13.9	TH	+9.9	-4.0			TP					

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-15-82		B. Cotcamp		T. Patton		6834		Jm B.C.		1		8			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		Conger Range - 15'		UTAM		MILLARD								L. DAVIS	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4863.0						
	1979		239° 32' 59" - 180°	+17.0	+11.0	-		+11.0			BS	+460	+1925		E.D.M.
	1979				+14.3	89° 54'	-3.5	+10.8	4873.9		BS				
100	1650		239° 27'	+17.0	10.7	-		-10.7	4863.2			-387	-1604	340920	1323640
101	1320		" "	" "	9.2	-		-9.2	4864.7			-309	-1283	340998	1323961
102	990		" "	" "	8.0	-		-8.0	4865.9			-232	-962	341075	1324282
103	660		" "	" "	7.9	-		-7.9	4866.0			-155	-642	341152	1324602
104	330		" "	" "	6.6	-		-6.6	4867.3			-77	-321	341230	1324922
105	0				5.4	-		-5.4	4868.5	TP	0	0	341307	1325244	
106	330		59° 23'	+17.0	5.0	-		-5.0	4868.9			+78	+321	341385	1325565
107	660		" "	" "	4.1	-		-4.1	4869.8			+155	+641	341462	1325885
108	990		" "	" "	8.3	TH	+5.0	-3.3	4870.6			+233	+962	341540	1326206
109	1320		" "	" "	8.9	TH	+6.6	-2.3	4871.6			+311	+1283	341618	1326527
110	1650		" "	" "	9.5	TH	+8.3	-1.2	4872.7			+388	+1604	341695	1326848
111	1980		59° 22' 30"	" "	8.9	TH	+9.9	+1.0	4874.9		TP	+466	+1924	341773	1327167
111	1980		" "	" "	10.4	89° 40'	+11.5	+1.1			TP				
	1647		238° 44' 23" - 180°	+17.0	+5.1	04	+8.2	+13.3	4888.2		BS	+406	+1596		
	1647				+13.3	-		+13.3			BS				
112	1320		238° 27'	+17.0	12.7	-		-12.7	4875.5			-332	-1278	341847	1327484
113	990		238° 04'	" "	11.1	-		-11.1	4877.1			-255	-957	341924	1327805
114	660		237° 47'	" "	7.3	-		-7.3	4880.9			-173	-637	342006	1328125

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 4-15-82	INSTRUMENT MAN B. Cotcamp	ROD MAN T. Patton	PARTY NUMBER 6834	NOTES CHECKED BY Jm B.C.	LINE NO. 1	PAGE 9
AREA UTAH	TOPO MAP GANDY-15'	STATE UTAH	COUNTY Millard	TWP	RANGE	PPM
				PARTY MANAGER L. Davis		

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
									4888.2							
115	330		235° 14'	+17.0	6.6	-		-6.6		4881.6		-101	-314	342078	1328448	
11	14		254° 08' 53"	" "	5.3	-		-5.3		4882.9	11	-	-			
116	0				5.4	-		-5.4		4882.8	11	0	0	342179	1328762	
117	1330		36° 07'	+17.0	5.9	-		-5.9		4882.3		+198	+264	342377	1329026	↑
118	660		34° 33'	" "	6.6	-		-6.6		4881.6		+410	+517	342589	1329279	CONGER RANGE QUAD
119	990		33° 57'	" "	6.3	-		-6.3		4881.9		+624	+769	342803	1329531	GANDY QUAD
120	1320		33° 38'	" "	5.0	-		-5.0		4883.2		+837	+1021	343016	1329783	↓
121	1648		33° 10' 55"	" "	4.0	-		-4.0		4884.2	TP	+1055	+1266	343234	1330027	
	990				11.2	TH	+8.2	-4.0			TP					
	990		212° 38' 53" -180	+17.0	6.6	-		+6.6			BS	+641	+754			
	990				11.5	TH	-5.0	+6.5	4889.7		BS					
122	660		212° 39'	+17.0	6.7	-		-6.7		4884.0		-427	-503	343448	1330277	
123	330		" "	" "	7.2	TH	+1.7	-5.5		4885.2		-214	-251	343861	1330529	
124	0				5.4	-		-5.4		4885.3	11	0	0	343875	1330780	
125	330		32° 50'	+17.0	4.0	TH	+1.7	-2.3		4888.4		+213	+252	344088	1331032	
126	660		32° 50'	" "	7.8	89°	+11.5	+3.7		4894.4		+426	+504	344301	1331284	
TP	860		34° 55' 24"	" "	6.8	89° 10'	+12.5	+5.7			TP	+530	+677	344405	1331455	y=344405 x=1331455 U.S. GCS Bm EL. 4886.0
TP	860				9.4	89°	+15.0	+5.6		4896.3	TP					a-74 1934 Hoeiz CORRECTION y=11 x=27

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	4-19-82	INSTRUMENT MAN	B. Cotcamp	ROD MAN	T. Patton	PARTY NUMBER	6834	NOTES CHECKED BY	Jim TRP	LINE NO.	1	PAGE	10
AREA	UTAH	TOPO MAP	CANDY-15'	STATE	UTAH	COUNTY	Millard	TWP		RANGE		PPM	
												PARTY MANAGER	L. Davis

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	X
R1	U.S. C.G.S		Bench MARK							4896.0	R1			344,405	1,331,455	U.S.C.G.S BM EL. 4896.0
	2769		211° 29' 31"	-180°	+17.0	+12.7	90° 30'	+24.0	+36.7		BS	+1835	+2074			E.O.M
	2769				+9.4	90° 34'	+27.2	+36.6	4932.6		BS					
127	2640		212° 19'	+17.0	7.8	90° 30'	-23.0	-30.8		4901.8		-1721	-2002	344,518	1,331,525	E.O.M
128	2310		" "	" "	8.8	90° 30'	-20.2	-29.0		4903.6		-1506	-1752	344,733	1,331,775	
129	1980		" "	" "	9.2	90° 30'	-17.3	-26.5		4906.1		-1291	-1501	344,948	1,332,026	
130	1650		212° 19'	" "	8.5	90° 30'	-14.4	-22.9		4909.7		-1076	-1251	345,163	1,332,276	
131	1320		" "	+17.0	8.0	90° 30'	-11.5	-19.5		4913.1		-860	-1001	345,379	1,332,526	
132	990		" "	" "	7.7	90° 30'	-8.6	-16.3		4916.3		-645	-751	345,594	1,332,776	
133	660		" "	" "	7.3	90° 30'	-5.8	-13.1		4919.5		-430	-500	345,809	1,333,027	
134	330		" "	" "	6.0	90° 30'	-2.9	-8.9		4923.7		-215	-250	346,024	1,333,277	
135	0				5.4	-		-5.4		4927.2	TP	0	0	346,239	1,333,527	
136	330		32° 29'	+17.0	9.1	88° 30'	+8.6	-0.5		4932.1		+214	+251	346,453	1,333,778	
137	660		" "	" "	12.9	88° 30'	+17.3	+4.4		4937.0		+429	+502	346,668	1,334,029	
138	990		" "	" "	7.9	89° -	+17.3	+9.4		4942.0		+643	+753	346,882	1,334,280	
139	1320		" "	" "	8.4	89° -	+23.0	+4.6		4947.2		+858	+1003	347,097	1,334,530	
140	1650		" "	" "	9.1	89° -	+28.8	+9.7		4952.3		+1072	+1254	347,311	1,334,781	
141	1980		" "	+17.0	12.0	89° -	+34.6	+22.6		4955.2		+1286	+1505	347,525	1,335,032	
142	2309		32° 29'	" "	12.2	89° -	+40.3	+28.1		4960.7	TP	+1500	+1755	347,738	1,335,280	
142	2309				8.1	89° 06'	+36.3	+28.2			TP					

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-19-82		B. Cottramp		T. Patton		6834		Jm TJP		1		11			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		GANDY-15'		UTAH		Millard								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
										4960.7					
	658		220° 18' 47" - 180°	+17.0	+12.8	BH	+3.3	+16.1			BS	+355.1	+554.2		
	658				+10.3	90° 30'	+5.7	+16.0	4976.7		BS				
143	330		226° 45'	+17.0	7.7	90° 20'	-1.9	-9.6		4967.1		-146	-296	347,946   1,335,536	
144	0				5.4	-		-5.4		4971.3	X	0	0	348,092   1,335,832	
145	330		48° 51'	+17.0	5.6	88° 50'	+6.7	+1.1		4977.8		+135	+301	348,227   1,336,133	
146	660		" "	" "	10.1	88° 50'	+13.4	+3.3		4980.0		+270	+602	348,362   1,336,434	
147	990		48° 51' 04"	" "	11.1	88° 50'	+20.2	+9.1			TP	+405.1	+903.2	348,496   1,336,733	
147	990				8.3	89° -	+17.3	+9.0		4985.7	TP				
	2641		228° 55' 41" - 180°	+17.0	+7.8	80° 40'	+30.6	+38.4			BS	+1077.1	+2411.2		
	2641				+12.3	90° 34'	+26.0	+38.3	5024.0		BS				
148	2310		228° 56'	+17.0	13.0	90° 30'	-20.2	-33.2		4990.8		-942	-2109	348,630   1,337,033	
149	1980		" "	" "	11.0	90° 30'	-17.3	-28.3		4995.7		-807	-1808	348,765   1,337,334	
150	1650		" "	" "	10.9	90° 30'	-14.4	-25.3		4998.7		-673	-1507	348,899   1,337,635	
151	1320		" "	" "	12.2	90° 30'	11.5	23.7		5000.3		-538	-1205	349,034   1,337,937	
152	990		228° 56'	+17.0	11.2	90° 30'	-8.6	-19.8		5004.2		-404	-904	349,168   1,338,238	
153	660		" "	" "	11.0	90° 30'	-5.8	-16.8		5007.2		-269	-603	349,303   1,338,539	
154	330		" "	" "	8.4	90° 30'	-2.9	-11.3		5012.7		-135	-301	349,437   1,338,841	
154	180		230° 39' 13"	" "	7.3	90° 30'	-1.6	-8.9		5015.1	X	-68	-166	349,504   1,338,976	
155	0				5.4	-		-5.4		5018.6	X	0	0	349,592   1,339,142	

4-349,510  
T-ROAD x-1,339,010

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 4-19-82	INSTRUMENT MAN B. Cotcamp	ROD MAN T. Patton	PARTY NUMBER 6834	NOTES CHECKED BY dm TRP	LINE NO. 1	PAGE 12
AREA UTAH	TOPO MAP GANDY-15'	STATE UTAH	COUNTY MILLARD	TWP	RANGE	PPM
				PARTY MANAGER L. DAVIS		

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									5024.0							
Bm	81		10° 33' 54"	+17.0	5.0	-		-5.0		5019.0	Bm	+72	+37	349,644	1,339,179	3-349,695 X-1,339,220 4.S.C.G.S Bm p-74 1934 EL. 5019.0
156	330		49° 01'	"	6.0	89°	+5.8	-0.2		5023.8		+134	+302	349,706	1,339,444	
157	660		" "	"	7.1	89°	+11.5	+4.4		5028.4		+268	+603	349,840	1,339,745	
158	990		" "	"	7.0	89°	+17.3	+10.3		5034.3		+402	+905	349,974	1,340,047	
159	1320		" "	+17.0	6.5	89°	+23.0	+16.5		5040.5		+537	+1206	350,109	1,340,348	
160	1650		" "	"	7.8	88° 50'	+33.6	+25.8		5049.8		+671	+1508	350,243	1,340,650	
161	1980		" "	"	4.8	88° 50'	140.3	+35.5		5059.5		+805	+1809	350,377	1,340,951	
162	2310		" "	"	5.0	88° 50'	+47.0	+42.0		5066.0		+939	+2111	350,511	1,341,253	
163	2640		49° 01' 20"	+17.0	4.5	88° 50'	+53.9	+49.4		5073.4	TP	+1073	+2412	350,644	1,341,552	E.R.M.
163	2640				12.0	88° 40'	+61.6	+49.6			TP					
	1320		228 58 53-180	+17.0	8.5	91°	+23.0	+31.5	5104.9		BS	+537	+1206			
	1320				4.6	91° 10'	+26.9	+31.5			BS					
164	990		228 59	+17.0	8.6	91°	-17.3	-25.9		5079.0		-403	-904	350,777	1,341,852	
165	660		" "	"	9.3	90° 40'	-7.7	-17.0		5087.9		-269	-603	350,911	1,342,153	
166	330		" "	"	5.3	90° 40'	-3.8	-9.1		5095.8		-134	-301	351,046	1,342,455	
167	0			"	5.4	-		-5.4		5099.5	T	0	0	351,180	1,342,756	
168	330		49° 06'	+17.0	7.9	89° 20'	+3.8	-4.1		5100.8		+134	+302	351,314	1,343,058	
169	660		" "	"	5.0	89° 20'	+7.7	+2.7		5107.6		+267	+603	351,447	1,343,359	
IF	952		48° 44' 52"	"	4.3	89° 20'	+11.1	+6.8		5111.7	IF	-	-			
170	990		49° 06'	"	10.5	89°	+17.3	+6.8		5111.7		+401	+905	351,581	1,343,661	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE			
4-19-82		B. Cotcamp		T. Patton		6834		dm TRP		1	13			
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER			
UTAH		GANDY-15'		UTAH		MILLARD					L. Davis			
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									5104.9					
171	1320		49° 06'	+17.0	9.2	89° -	+23.0	+13.8		5118.7		+535	+1207	351,715 1,343,963
172	1650		" "	" "	8.7	89° -	28.8	+20.1		5125.0		+668	+1509	351,848 1,344,265
173	1980		49° 05' 41"	" "	4.5	89° -	+34.6	+30.1		5135.0	TP	+802	+1810	351,981 1,344,564
173	1980				10.2	88° 50'	+40.3	+30.1			TP			
	1320		230° 55' 49" -180	+17.0	+10.3	BH	+6.6	+16.9	5151.9		BS	+496	+1223	
	1320				+9.3	90° 20'	+7.7	+17.0			BS			
174	990		230° 56'	+17.0	8.0	90° 20'	-5.8	-13.8		5138.1		-372	-917	352,104 1,344,868
175	660		" "	" "	4.0	90° 20'	-3.8	-7.8		5144.1		-248	-612	352,228 1,345,173
176	330		" "	" "	5.0	90° 20'	-1.9	-6.9		5145.0		-124	-306	352,352 1,345,479
177	0				5.4	-		-5.4		5146.5	TP	0	0	352,476 1,345,785
178	330		50° 59'	+17.0	6.9	89° 40'	+1.9	-5.0		5146.9		+124	+306	352,600 1,346,091
179	660		" "	" "	10.0	89° 40'	+3.8	-6.2		5145.7		+247	+612	352,723 1,346,397
180	990		" "	" "	13.6	89° 40'	+5.8	-7.8		5144.1		+371	+918	352,847 1,346,703
181	1320		" "	" "	7.0	-		-7.0		5144.9		+495	+1224	352,971 1,347,009
182	1651		50° 58' 34"	" "	4.1	-		-4.1		5147.8	TP	+619	+531	353,094 1,347,314
182	1651				12.3	TH	+8.3	-4.0			TP			
	1980		230° 57' 36" -180	+17.0	+5.6	BH	+9.9	+15.5	5163.3		BS	+743	+1835	
	1980				+9.8	90° 10'	+5.8	+15.6			BS			
183	1650		230° 58'	+17.0	12.7	-		-12.7		5150.6		-619	-1529	353,217 1,347,618
184	1320		" "	" "	11.0	-		-11.0		5152.3		-495	-1224	353,341 1,347,923

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445'

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-19-82		B. Cotcamp		T. Patton		6834		Jm TRP		1		14			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		GANDY-15'		UTAH		M. HARR								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5163.3						
185	990		230° 58'	+17.0	12.2	B4	-5.0	-17.2		5146.1		-371	-918	353,465	1,348,229
186	660		" "	" "	12.5	B4	-3.3	-15.8		5147.5		-248	-612	353,588	1,348,535
Bm	366		223° 49' 46"	" "	3.6	-		-3.6		5159.7	Bm	-178	-320	353,658	1,348,827
187	330		230° 58'	" "	6.9	TH	+1.7	-5.3		5158.0		-124	-306	353,712	1,348,841
188	0				5.4	-		-5.4		5157.9	T	0	0	353,836	1,349,147
189	330		51° 02'	+17.0	5.0	-		-5.0		5158.3		+123	+306	353,959	1,349,453
190	660		" "	" "	5.6	-		-5.6		5157.7		+247	+612	354,083	1,349,759
191	990		" "	" "	6.0	-		-6.0		5157.3		+370	+918	354,206	1,350,065
192	1320		51° 02'	" "	5.5	-		-5.5		5157.8		+494	+1224	354,330	1,350,371
193	1650		" "	+17.0	6.4	TH	+8.3	+1.9		5165.2		+617	+1530	354,453	1,350,677
194	1980		" "	" "	9.4	89° 30'	+17.3	+7.9		5171.2		+741	+1836	354,577	1,350,983
195	2310		" "	" "	8.8	89° 20'	+26.9	+18.1		5181.4		+864	+2142	354,700	1,351,289
196	2640		51° 01' 55"	+16.8	5.5	89° 20'	+30.9	+25.4		5188.7	TP	+996	+2445	354,831	1,351,590
196	2640				12.9	89° 10'	+38.5	+25.6			TP				
	1980		230° 57' 36" -180	+16.8	+6.9	91° -	+34.6	+41.5	5230.2		BS	+749	+1882		
	1980				+12.6	90° 50'	+28.8	+41.4			BS				
197	1650		230° 58'	+16.8	10.1	90° 50'	-24.0	-34.1		5196.1		-624	-1527	354,955	1,351,893
198	1320		" "	" "	8.1	90° 50'	-19.2	-27.3		5202.9		-499	-1222	355,080	1,352,198
199	990		" "	" "	7.1	90° 50'	-14.4	-21.5		5208.7		-375	-916	355,204	1,352,504

4-353,640 x-1,348,865  
 U.S.C.G.S Bm  
 El. 5160.0  
 u-H 1114

E.A.M.

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-19-82		B. Cotcamp		T. Patton		6834		Jm B.C.		1		15			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		GANDY-15'		UTAH		MILLARD								L. DAVIS	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFER-ENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5230.2						
200	660		230° 58'	+16.8	6.3	90° 50'	-9.6	-15.9		5214.3		-250	-611	355,329	1,352,809
201	330		" "	" "	9.3	90° 50'	-4.8	-14.1		5216.1		-125	-305	355,454	1,353,115
202	0				5.4	-		-5.4		5224.8	TP	0	0	355,519	1,353,420
203	330		51° 03'	+16.8	7.7	89° -	+5.8	-1.9		5228.3		+124	+306	355,703	1,353,726
204	660		" "	" "	11.8	89° -	+11.5	-0.3		5229.9		+249	+611	355,828	1,354,031
205	990		" "	" "	7.7	89° 30'	+8.6	+0.9		5231.1		+373	+917	355,952	1,354,337
206	1320		51° 03'	" "	7.5	89° 30'	+11.5	+4.0		5234.2		+498	+1223	356,077	1,354,643
207	1650		" "	+16.8	11.6	89° 30'	+14.4	+2.8		5233.0		+622	+1528	356,201	1,354,948
208	1980		" "	" "	10.5	89° 40'	+11.5	+1.0		5231.2		+747	+1834	356,326	1,355,254
209	2310		51° 03' 00"	" "	4.6	89° 30'	+20.2	+15.6		5245.8	TP	+871 <sub>1</sub>	+2139 <sub>2</sub>	356,449	1,355,557 E.a.m.
209	2310		" "	" "	11.2	89° 20'	+26.9	+15.7			TP				
	1651	1650.	231° 04' 12" -180	+16.8	+9.3	92° -	+57.6	+66.9	5312.7		BS	+622 <sub>1</sub>	+1528 <sub>2</sub>		
	1651				+14.0	91° 50'	+52.8	+66.8			BS				
210	1320		231° 04'	+16.8	9.9	92° -	-46.0	-55.9		5256.8		-497	-1223	356,573	1,355,860
211	990		" "	" "	9.6	92° -	-34.5	-44.1		5268.6		-373	-917	356,697	1,356,166
212	660		" "	" "	7.9	92° -	-23.0	-30.9		5281.8		-249	-611	356,821	1,356,472
213	330		" "	+16.8	6.6	92° -	-11.5	-18.1		5294.6		-124	-306	356,946	1,356,777
214	0				5.4	-		-5.4		5307.3	TP	0	0	357,070	1,357,083
215	330		51° 13'	+16.8	8.2	87° 30'	+14.4	+6.2		5318.9		+124	+306	357,194	1,357,389
216	660		" "	" "	9.9	87° 30'	+28.8	+18.9		5331.6		+247	+612	357,317	1,357,695

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	4-19-82	INSTRUMENT MAN	B. Cotcamp	ROD MAN	T. Patton	PARTY NUMBER	6834	NOTES CHECKED BY	Am B.C.	LINE NO.	1	PAGE	16	
AREA	UTAH	TOPO MAP	Gandy-15'	STATE	UTAH	COUNTY	M <sup>1</sup> HARR	TWP		RANGE		PPM	PARTY MANAGER	L. DAVIS

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
									5312.7							
217	990		51° 13'	+16.8	12.4	87° 30'	+43.1	+30.7		5343.4		+371	+918	357,441	1,358,001	
1/2	1041		51° 06' 47"	"	6.9	87° 50'	+39.3	+32.4		5345.1	1/2	+391	+964	357,461	1,358,047	357,470 X - 1358,040
218	1315	1314	53° 58' 04"	"	9.7	87° 50'	+49.7	+40.0		5352.7	TP	+433	+1241	357,502	1,358,322	B.P.M. - ABANDON CORNER
218	1315				13.5	87° 46'	+53.5	+40.0			TP					
	332		260° 18' 34" - 180	+16.8	+14.0	BH	+1.7	+15.7	5368.4		BS	-41	+329			
	332				+9.9	91° -	+5.8	+15.7			BS					
219	0				5.4	-		-5.4		5363.0	T	0	0	357,460	1,358,649	
Bm	35		163° 01' 35"	+16.8	2.8	91° -	-0.6	-3.4		5365.0	Bm	-35	±0	357,425	1,358,649	4-357,435 X - 1358,670 B.S.C.'S Bench MARK M-74 1954 ELEV. 5365.0
220	330		66° 03'	"	7.0	90° 10'	-1.0	-8.0		5360.4		+41	+327	357,501	1,358,976	
221	651		66° 08' 4"	"	7.9	88° 10'	+20.8	+12.9		5381.3	TP	+80	+646	357,539	1,359,294	ABANDON CORNER
221	651				9.8	88° -	+22.7	+12.9			TP					
	990		262° 34' 06" - 180	+16.8	+9.2	91° 40'	+28.8	+38.0	5419.3		BS	-161	+976			
	990				+12.1	91° 30'	+25.9	+38.0			BS					
222	660		262° 25'	+16.8	9.9	91° 40'	-19.2	-29.1		5390.2		+106	-651			
1/2	480		263° 14' 21"	"	9.2	91° 40'	-14.0	-23.2		5396.1	1/2					
223	330		262° 25'	"	7.8	91° 40'	-9.6	-17.4		5401.9		+53	-326	357,430	1,359,943	
224	0				5.4	-		-5.4		5413.9	T	0	0	357,377	1,360,269	
225	330		83° 08'	+16.8	3.9	88° -	+11.5	+7.6		5426.9		-57	+325	357,320	1,360,594	
226	660		81° 46'	"	6.2	87° 40'	+26.8	+20.6		5439.9		-98	+653	357,279	1,360,922	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
4-19-82		B. Cotcamp		T. Patton		6834		Zon B.C.		1	17					
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER					
UTAM		GANDY-COWBOY PASS-15		UTAM		MILLARD										
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
									5419.3							
227	980		77° 08' 01"	+17.1°	8.6	87° 40'	+39.9	+31.3		5450.6	TP	-72 <sub>1</sub>	+977 <sub>1</sub>	357,304	1,361,245	AROUND CORNER
227	980				5.8	87° 50'	+37.0	+31.2			TP					
	1646		238° 47' 20" - 180	+17.1°	+11.4	91° 40'	+47.8	+59.2	5509.8		BS	+401 <sub>2</sub>	+1596 <sub>1</sub>			E.P.M.
	1646				+8.5	91° 46'	+50.7	+59.2			BS					
228	1320		237° 18'	+17.1°	10.1	91° 50'	-42.2	-52.3		5457.5		-355	-1271	357,348	1,361,569	
229	990		" "	" "	10.5	91° 50'	-31.7	-42.2		5467.6		-266	-954	357,437	1,361,886	
230	660		" "	" "	8.1	91° 50'	-21.1	-29.2		5480.6		-177	-636	357,526	1,362,204	
231	330		" "	" "	5.9	91° 50'	-10.6	-16.5		5493.3		-89	-318	357,614	1,362,522	
232	0				5.4	-	-5.4			5504.4	TP	0	0	357,703	1,362,840	
233	330		57° 42'	+17.1°	8.9	88° 10'	+10.6	+1.7		5511.5		+87	+318	357,790	1,363,158	
234	666		" "	" "	8.0	88° 10'	+21.1	+13.1		5522.9		+173	+637	357,876	1,363,477	
235	990		" "	" "	11.1	88° 20'	+26.8	+17.7		5527.5		+260	+955	357,963	1,363,795	
236	1319		58° 02' 13"	" "	9.7	88° -	+46.0	+36.3		5546.1	TP	+338 <sub>2</sub>	+1274 <sub>1</sub>	358,039	1,364,113	
236	1319				13.5	88° 50'	+49.8	+36.3			TP					
	659		242° 05' 47" - 180	+17.1°	+8.7	91° -	+11.5	+20.2	5566.3		BS	+124 <sub>3</sub>	+647 <sub>1</sub>			
	659				+6.8	91° 10'	+13.4	+20.2			BS					
237	330		238° 36'	+17.1°	10.9	90° 50'	-4.8	-15.7		5550.6		-82	-320	358,078	1,364,439	
238	0			" "	5.4	-	-5.4			5560.9	TP	0	0	358,160	1,364,759	
239	330		57° 50'	" "	8.3	88° 20'	+9.6	+1.3		5567.6		+86	+319	358,246	1,365,078	
240	657		50° 42'	" "	12.2	88° 20'	+19.1	+6.9		5573.2		+227	+617	358,387	1,365,376	

SURVEY NOTES-HIGH RESOLUTION DATA

IGEO-445

Geosource Inc.

DATE 4-20-82	INSTRUMENT MAN B. Cotcamp	ROD MAN T. Patton	PARTY NUMBER 6834	NOTES CHECKED BY Jm B.C.	LINE NO. 1	PAGE 18
AREA	TOPO MAP Cowboy Pass -15'	STATE UTAH	COUNTY Millard	TWP	RANGE	PPM
PARTY MANAGER L. Davis						

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									5566.3								
#	662		51° 49' 54"	+17.1	12.2	88° 26'	+19.2	+7.0			TP	+238 <sub>3</sub>	+617 <sub>1</sub>	358,395	1,365,375	#4 WAY INT. EL. 5575.0	
#	662				16.2	88° 30'	+17.3	+7.1		5573.4	TP					HORIZONTAL y=30' CORRECTION x=41'	
	639		202° 17' 24" -180°		+5.3	-		+5.3	5578.7		BS					NOTE - STATIONS	
	639				12.1	B4	+3.2	+5.3			BS					241 to 314 were	
241	330		193° 58'		6.0	TH	+1.7	-4.3		5574.4				358,595	1,365,705	PRO-RATED ON THE	
242	0				5.4	-		-5.4		5573.3	T			358,940	1,365,870	TOPO THEN THE	
243	330		08° 28'		9.2	-		-9.2		5569.5				359,215	1,365,985	COORDINATES WERE	
244	660		05° 13'		11.9	-		-11.9		5566.8				359,505	1,366,090	SCALED OFF TO	
245	985		02° 19' 23"		12.2	-		-12.2		5566.5	TP			359,820	1,366,200	THE NEAREST 10"	
245	985				7.3	B4	-4.9	-12.2			TP					THIS WAS DO TO	
	1319		176° 11' 50" +180°		+12.2	-		+12.2	5578.7		BS					LOCAL MAGNETIC	
	1319				+5.6	B4	+6.6	+12.2			BS					SUBSTANCE.	
246	910		175° 22'		12.4	B4	-5.0	-17.4		5561.3				360,200	1,366,290		
247	660		" "		7.3	91°	-11.5	-18.8		5559.9				360,500	1,366,355		
248	330		" "		9.2	-		-9.2		5569.5				360,805	1,366,415		
249	0				5.4	-		-5.4		5573.3	T			361,150	1,366,505		
250	330		355° 22'		2.1	-		-2.1		5576.6				361,495	1,366,530		
Bm	529		359° 13' 55"		6.2	88°	+18.5	+12.3		5591.0	Bm					U.S.C.G.S. Elev. 5591.0	
251	660		355° 06'		8.1	88° 30'	+17.3	+9.2		5587.9						Bm L-74 1934	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	4-20-82	INSTRUMENT MAN	B. Cotcamp	ROD MAN	T. Patton	PARTY NUMBER	6834	NOTES CHECKED BY	dm B.C.	LINE NO.	1	PAGE	19	
AREA	TOPO MAP		Cowboy Pass-15	STATE	UTAH	COUNTY	Millard	TWP		RANGE		PPM	PARTY MANAGER	L. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									5578.7					
252	994		355° 28' 47"		15.0	88° 30'	+26.0	+11.0		5589.7	TP		362,110	1,366,695 ALROSSY STA.
262	994				12.1	88° 40'	+23.1	+11.0			TP		362,	
	988		212° 45' 47" -180°		+12.6	91° -	+17.2	+29.8	5619.5		BS			
	988				+9.7	91° 16'	+20.1	+29.8			BS			
253	660		214° 32'		9.9	91° 20'	-15.4	-25.3		5594.2			362,330	1,366,910
254	330		" "		9.7	91° 20'	-7.7	-17.4		5602.1			362,500	1,367,205
255	0				5.4	-		-5.4		5614.1			362,745	1,367,415
256	330		33° 45'		6.2	88° 30'	+8.6	+2.4		5621.9			362,960	1,367,680
257	660		35° 21'		4.9	88° 30'	+17.3	+12.4		5631.9			363,190	1,367,910
258	989		36° 13' 37"		9.6	88° 30'	+25.9	+16.3		5635.8	TP		363,400	1,368,170
258	989				6.7	88° 40'	+23.0	+16.3			TP			
	1650		216° 37' 01" -180°		+11.0	91° 26'	+38.4	+49.4	5685.2		BS			
	1650				46.2	91° 36'	+43.2	+49.4			BS			
259	1320		216° 37'		9.3	91° 20'	-30.7	-40.0		5645.2			363,630	1,368,410
260	990		" "		8.6	91° 20'	-23.0	-31.6		5653.6			363,870	1,368,695
261	660		" "		6.6	91° 20'	-15.4	-22.0		5663.2			364,095	1,368,930
262	330		" "		8.1	91° 20'	-7.7	-15.8		5669.4			364,295	1,369,185
263	0				5.4	-		-5.4		5679.8	TP		364,515	1,369,405
264	330		31° 21'		6.8	88° 20'	+9.6	+2.8		5688.0			364,740	1,369,670
265	660		" "		8.7	88° 20'	+19.2	+10.5		5695.7			364,995	1,369,905

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-20-82		B. Cotcamp		T. Patton		6834		Jm BC.		1		20			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
Cowboy Pass-15		UTAH		MILLARD										L. DAVIS	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5685.2						
266	990		31° 21'		11.1	88° 20'	+28.8	+17.7		5702.9				365,205	1,370,150
267	1321		30 18 29		11.4	88° 30'	+34.6	+23.2		5708.4	TP			365,310	1,370,405
267	1321				7.6	88° 46'	+30.7	+23.1			TP				
	591		268° 43' 24" -180°		+7.5	89° -	-10.3	-2.8	5705.6		BS				
	591		°		+9.2	8° 50'	-12.0	-2.8			BS				
268	261		211 24'		7.7	87° 58'	+9.9	+2.2		5707.9				365,640	1,370,605
X	0				5.4	-		-5.4		5700.2	X				
269	70		68° 13" "		7.8	-		-7.8		5697.8				365,810	1,370,915
270	398		45° 58' 43"		14.4	84	-2.0	-16.4		5689.2	TP			366,030	1,371,195
270	398		" " "		9.4	91° -	-6.9	-16.3			TP				
	989		213 39 05 -180		+14.5	87° 30'	-43.1	-28.6	5660.6		BS				
	989				+11.6	87° 40'	-40.2	-28.6			BS				
271	660		216° 56'		9.7	87° 40'	+26.8	+17.1		5677.7				366,235	1,371,485
272	330		209° 25'		4.3	87° 40'	+13.4	+9.1		5669.7				366,420	1,371,705
273	0				9.4	-		-5.4		5655.2	X			366,665	1,371,910
274	330		30° 28'		8.0	91° 20'	-7.7	-15.7		5644.9				366,895	1,372,160
275	660		" "		10.0	91° 20'	-15.4	-25.4		5635.2				367,110	1,372,405
276	990		" "		10.9	91° 20'	-23.0	-33.9		5626.7				367,330	1,372,590
277	1320		30° 27' 54"		7.3	91° 40'	-38.4	-45.7		5614.9	TP			367,520	1,372,925
277	1320				11.1	91° 30'	-34.5	-45.6			TP				

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-20-82		B. Cotcamp		T. Patton		6834		BC		1		21			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
Cowboy Pass - 15		UTAH		MILLARD								L. Davis			
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
	985		219° 45' 36" - 180		+9.1	88°	-34.4	-25.3	5589.6	5614.9	BS				
	985				+6.3	88° 10'	-31.5	-25.2			BS				
278	660		218° 30'		7.2	88°	+23.0	+15.8		5605.4			367,715	1,373,190	
279	330		212° 44'		8.1	88°	+11.5	+3.4		5593.0			367,860	1,373,465	
280	0				5.4	-		-5.4		5584.2	TP		368,025	1,373,730	
281	330		16° 45'		9.6	91°	-5.8	-15.4		5574.2			368,350	1,373,910	
282	660		15° 42'		12.1	91°	-11.5	-23.6		5566.0			368,600	1,374,040	
Bm	917		18° 28' 24"		14.6	91°	-16.0	-30.6		5559.0	Bm				
283	968		23° 25' 05"		14.4	91° 10'	-19.7	-34.1		5555.5	TP		368,815	1,374,320	
283	968				11.6	91° 20'	-22.5	-34.1			TP				
	988		218° 16' 15" - 180		+12.3	88°	-34.5	-22.2	5533.3		BS				
	988				+9.4	88° 10'	-31.6	-22.2			BS				
284	660		216° 07'		8.3	88° 10'	+21.1	+12.8		5546.1			369,010	1,374,630	
285	330		212° 33'		7.5	88° 10'	+10.6	+3.1		5536.4			369,180	1,374,900	
286	0				5.4	-		-5.4		5527.9	TP		369,390	1,375,145	
287	330		28° 20'		7.7	91° 50'	-10.6	-18.3		5515.0			369,635	1,375,365	
288	660		" " "		8.0	91° 50'	-21.1	-29.1		5504.2			369,830	1,375,595	
289	989		31° 59' 36"		8.3	91° 50'	-31.6	-39.9		5493.4	TP		370,000	1,375,850	
289	989				11.1	91° 40'	-28.8	-39.9			TP				

U.S.C.G.S Bm  
#741934 EL. 5559.0  
AROUND  
CORNER

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-20-82		B. Cotcamp		T. Patton		6834		dm TRP		1		22			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
		Cowboy Pass-15'		UTAH		Millard								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
										5493.4					
	661		229° 17' 23" - 180°		+12.2	88° -	-23.1	-10.9	5482.5		BS				
	661				+10.3	88° 10'	-21.1	-10.8			BS				
290	330		231° 49'		6.9	87° 40'	+13.4	+6.5		5489.0			370,135	1,376,135	
291	0				5.4	-		-5.4		5477.1	TP		370,250	1,376,450	ACROSS STA.
292	330		67° 05'		6.7	92° -	-11.5	-14.2		5464.3			370,300	1,376,790	
293	662		67° 23' 59"		6.2	92° -	-23.1	-29.3		5453.2	TP		370,310	1,377,125	
293	662				4.3	92° 10'	-25.0	-29.3			TP				
	1320		251° 18' 28" - 180°		+14.1	88° -	-46.0	-31.9	5421.3		BS				
	1320				+10.3	88° 10'	-42.2	-31.9			BS				
14	1063		251° 44'		8.8	88° 20'	+30.9	+22.1		5443.4	14				
294	990		251° 18'		7.6	88° 20'	+28.8	+21.2		5442.5			370,375	1,377,470	
295	660		" "		8.7	88° 20'	+19.2	+10.5		5431.8			370,380	1,377,800	
296	330		250° 17'		10.5	88° 20'	+9.6	-0.9		5420.4			370,395	1,378,180	
297	0				5.4	-		-5.4		5415.9	TP		370,400	1,378,470	
298	330		54° 23'		11.8	-		-11.8		5409.5			370,500	1,378,820	
299	660		" "		7.8	91° 10'	-13.4	-21.2		5400.1			370,640	1,379,140	
300	990		" "		10.0	91° 10'	-20.2	-30.2		5391.1			370,720	1,379,435	
301	1318		52° 00' 07"		13.0	91° 10'	-26.8	-39.8			TP		370,920	1,379,720	AROUND CORNER
301	1318				9.2	91° 20'	-30.7	-39.9		5381.4	TP				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-20-82		B. Cotcamp		T. Pattow		6834		B.C.		1		23			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
Cowboy PASS-15'		UTAM		Millard										L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
										5381.4					
	990		220° 28' 26" -180		+5.8	88° 30'	-25.9	-20.1	5361.3		BS				
	990				+8.7	88° 20'	-28.8	-20.1			BS				
302	660		220° 09'		10.3	88° 20'	+19.2	+8.9		5370.2			371,100	1,380,025	
303	330		" "		12.0	88° 20'	+9.6	-2.4		5358.9			371,215	1,380,320	
304	0				5.4	-		-5.4		5355.9	TP		371,455	1,380,580	
305	330		40° 01'		12.9	-		-12.9		5348.4			371,610	1,380,835	
306	660		" "		10.3	-		-10.3		5351.0			371,810	1,381,170	
307	990		" "		11.5	90° 30'	-8.6	-20.1		5341.2			371,995	1,381,445	
308	1318		40° 58'		10.3	BH	-6.6	-16.9		5344.4			372,135	1,381,700	
TP	1480		42° 18' 11"		10.0	-		-10.0			TP				
TP	1480				2.7	BH	-7.4	-10.1		5351.2	TP				
	1479		240° 24' 41" -180		+6.2	88° 30'	-38.7	-32.5	5318.7		BS				
	1479				+10.5	88° 20'	-43.0	-32.5			BS				
309	1398		241° 05' 48"		7.1	88° 30'	+36.6	+29.5		5348.2					
309	1314		240° 56'		8.1	88° 40'	+30.6	+22.5		5341.2			372,250	1,382,025	
310	988		242° 42'		8.3	89° 30'	+8.6	+0.3		5319.0			372,305	1,382,370	
311	660		244° 54'		8.0	90° 40'	-7.7	-15.7		5303.0			372,355	1,382,680	
312	330		244° 35'		13.1	90° 50'	-4.8	-17.9		5300.8			372,405	1,382,990	
313	0				5.4	-		-5.4		5313.3	TP		372,495	1,383,300	ACROSS STR.
314	330		71° 50'		12.9	90° 50'	-4.8	-17.7		5301.0			372,540	1,383,620	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	4-20-82	INSTRUMENT MAN	B. Cotcamp	ROD MAN	T. Patton	PARTY NUMBER	6834	NOTES CHECKED BY	dm TFP	LINE NO.	1	PAGE	24	
AREA	UTAH	TOPO MAP	Cowboy Pass-15	STATE	UTAH	COUNTY	MILLARD	TWP		RANGE		PPM	PARTY MANAGER	L. DAVIS

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
									5318.7							
TP	510		64° 09' 05"		7.1	90° 50'	-7.4	-14.5		5304.2	Bm					u.s.c.g.s EL. 5304.0 Bm J-741934
TP	510				5.6	91°	-8.9	-14.5			Bm					J-372,570 Horizy- X-1,383,785 CORR. X-
	2125		241° 26' 07" - 180	+16.8	+8.8	88° -	-74.1	-65.3	5238.9		BS	+433	+2079			E.O.M
	2125				+5.1	88° 06'	-70.4	-65.3			BS					
315	1980		240° 05'	" "	7.9	88° 10'	+63.3	+55.4		5294.3		-449	-1920	372,553	1,383,935	E.O.M.
316	1650		" "	" "	12.9	88° 10'	+52.8	+39.9		5278.8		-374	-1607	372,628	1,384,256	
317	1320		240° 25'	+16.8	10.9	88° 30'	+34.5	+23.6		5262.5		-292	-1287	372,710	1,384,576	
318	990		" "	" "	10.4	88° 30'	+25.9	+15.5		5254.4		-219	-965	372,783	1,384,898	
319	660		" "	" "	12.5	88° 30'	+17.3	+4.8		5243.7		-146	-644	372,856	1,385,219	
320	330		" "	" "	7.9	88° 30'	+8.6	+0.7		5239.6		-73	-322	372,929	1,385,541	
321	0				5.4	-		-5.4		5233.5	TP	0	0	373,002	1,385,863	
322	330		62° 21'	+16.8	7.9	92° 30'	-14.4	-22.3		5216.6		+62	+324	373,064	1,386,187	
323	660		" "	" "	9.3	91° 10'	-13.4	-22.7		5216.2		+124	+648	373,126	1,386,511	
324	990		61° 27'	+16.8	11.6	91° 10'	-20.2	-31.8		5207.1		+202	+969	373,204	1,386,832	
325	1320		" "	" "	13.3	91° 10'	-26.9	-40.2		5198.7		+269	+1292	373,271	1,387,155	
326	1650		" "	" "	7.7	91° 30'	-43.2	-50.9		5188.0		+336	+1615	373,338	1,387,478	
327	1981		61° 27' 20"	+16.8	11.0	91° 30'	-51.8	-62.8		5176.1	TP	+403	+1939	373,404	1,387,801	
327	1981				14.4	91° 24'	-48.4	-62.8			TP					
	1320		242° 08' 31" - 180	+16.8	+10.2	88° -	-46.0	-35.8			BS	+253	+1295			
	1320				+14.0	87° 50'	-49.9	-35.9	5140.2		BS					

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-22-82		B. Cotcamp		T. Patton		6834		Jm TRP		1		25			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Cowboy Pass - 15'		UTAH		M.illard								L. Davis	
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
									5140.2						
328	990		242° 35'	+16.8°	11.0	88° -	+34.5	+23.5		5163.7		-182	-973	373,474	1,388,122
329	660		242° 53'	" "	7.2	88° -	+23.0	+15.8		5156.0		-118	-649	373,538	1,388,446
330	330		244° 39'	" "	6.8	87° 20'	+15.3	+8.5		5148.7		-49	-326	373,607	1,388,769
331	0				5.4	-		-5.4		5134.8	X	0	0	373,656	1,389,095
332	330		66° 44'	+16.8°	6.5	90° 40'	-3.8	-10.3		5129.9		+37	+328	373,693	1,389,423
333	660		" "	" "	9.3	90° 40'	-7.7	-17.0		5123.2		+74	+656	373,736	1,389,751
334	990		" "	" "	7.4	91° 10'	-20.2	-27.6		5112.6		+112	+984	373,768	1,390,079
41	1052		66° 20' 04"	" "	6.7	91° 10'	-21.4	-28.1		5112.1	41				
335	1320		66° 43' 32"	+16.8°	8.3	91° 10'	-26.9	-35.2		5105.0	TP	+149	+1311	373,804	1,390,465
335	1320				12.0	91° -	-23.0	-35.0			TP				
	2641		246° 28' 24" - 180	+16.8°	+6.1	88° 30'	-69.3	-63.2	5041.8		BS	+309	+2622		
	2641				+13.8	88° 20'	-77.0	-63.2			BS				
336	1310		246° 28'	+16.8°	8.9	88° 30'	+60.5	+51.6		5093.4		-271	-2294	373,841	1,390,732
337	1980		" "	" "	10.0	88° 30'	+57.6	+47.6		5089.4		-232	-1966	373,880	1,391,060
338	1650		" "	" "	10.1	88° 20'	+48.0	+37.9		5079.7		-193	-1639	373,919	1,391,387
339	1320		246° 28'	+16.8°	8.3	88° 20'	+38.4	+30.1		5071.9		-155	-1311	373,957	1,391,715
340	990		" "	" "	6.9	88° 20'	+28.8	+21.9		5063.7		-116	-983	373,996	1,392,043
341	660		" "	" "	8.0	88° 20'	+19.2	+11.2		5053.0		-77	-655	374,035	1,392,371
342	330		" "	" "	9.3	88° 20'	+9.6	+0.3		5042.1		-39	-328	374,073	1,392,698
343	0				5.4	-		-5.4		5036.4	X	0	0	374,112	1,393,026

EL. 5171.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-22-82		B. Cotcamp		T. Patton		6834		dm TRP		1		26			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Cowboy Pass-15'		UTAH		Millard								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5041.8						
344	330		66° 30'	+16.8°	5.4	91° 30'	-8.6	-14.0		5027.8		+39	+328	374,151	1,393,354
345	660		" "	" "	4.9	91° 30'	-17.3	-22.2		5019.6		+77	+655	374,189	1,393,681
346	990		" "	" "	5.9	91° 30'	-25.9	-31.8		5010.0		+116	+983	374,228	1,394,009
347	1320		" "	" "	5.0	91° 30'	-34.5	-39.5		5002.3		+154	+1311	374,266	1,394,337
Bm	1562		67° 50' 52"	+16.8°	6.4	91° 20'	-36.3	-42.7		4999.1	Bm	+146	+1555	374,258	1,394,581
348	1650		66° 30'	" "	8.3	91° 20'	-38.4	-46.7		4995.1		+193	+1639	374,305	1,394,665
349	1980		" "	" "	10.9	91° 20'	-46.1	-57.0		4984.8		+231	+1966	374,343	1,394,992
350	2310		" "	" "	11.6	91° 20'	-53.7	-65.3		4976.5		+270	+2294	374,382	1,395,320
351	2641		66° 29' 41"	+16.8°	13.9	91° 20'	-61.3	-75.2		4966.6	TP	+308	+2622	374,419	1,395,647
351	2641		" "	" "	10.8	91° 24'	-64.4	-75.2			TP				
	990		246 21 68 -120	+16.8°	+7.8	88° 30'	-25.9	-18.1	4948.5		BS	+118	+983		
	990		" "	" "	+4.9	88° 40'	-23.0	-18.1			BS				
352	660		246 21	+16.8°	6.8	88° 30'	+17.3	+10.5		4959.0		-79	-655	374,457	1,395,974
353	330		" "	" "	4.1	88° 30'	+4.6	+4.5		4953.0		-39	-328	374,497	1,396,301
354	0		" "	" "	5.4	-		-5.4		4943.1	TP	0	0	374,536	1,396,629
355	330		66° 31'	+16.8°	8.0	92° -	-11.5	-19.5		4929.0		+38	+328	374,574	1,396,957
356	660		" "	" "	4.9	92° -	-23.0	-27.9		4920.6		+77	+656	374,613	1,397,285
357	979		70° 46' 08"	" "	4.9	92° -	-34.1	-39.0		4909.5	TP	+42	+978	374,577	1,397,606
357	979		" "	" "	7.7	91° 50'	-31.3	-39.0			TP				MOUND CORNER

U.S.C.G.S Bm  
M-74 1934 EL. 4998.0  
S-374,240 X-1,394,550

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE	4-22-82	INSTRUMENT MAN	B. Catcamp	ROD MAN	T. Patton	PARTY NUMBER	6834	NOTES CHECKED BY	TRP	LINE NO.	1	PAGE	27
AREA	UTAH	TOPO MAP	COWBOY PASS-15	STATE	UTAH	COUNTY	M: HARRD	RANGE		PPM		PARTY MANAGER	L. DAVIS

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
										4909.5								
	990		278° 17' 16" - 180	+16.8°	+7.7	89° -	-17.3	-9.6	4899.9		BS	-420	+896					
	990				+10.6	88° 50'	-20.2	-9.6			BS							
358	660		279° 16'	+16.8°	8.3	88° 40'	+15.4	+7.1		4907.0		+290	-593	374,446	1,397,908			
359	330		" "	" "	8.0	88° 40'	+7.7	-0.3		4899.6		+145	-296	374,301	1,398,205			
360	0				5.4	-		-5.4		4894.5	TP	0	0	374,156	1,398,501			
361	141		97° 41' 16"	+16.8°	5.8	90° 50'	-2.1	-7.9		4892.0	TP	-58	+128	374,098	1,398,629	IF TRD SOUTH		
361	330		102° 38'	" "	7.3	90° 50'	-4.4	-12.1		4887.8		-162	+287	373,994	1,398,788			
362	660		104° 06'	" "	7.3	90° 50'	-9.6	-16.9		4883.0		-339	+566	373,817	1,399,067			
363	990		104° 57' 20"	+17.0°	3.9	91° -	-17.3	-21.2		4878.7	TP	-524	+840	373,631	1,399,340			
363	990				6.8	90° 50'	-14.4	-21.2			TP							
	1981		289° 57' 49" - 180	+17.0°	+10.7	88° 50'	-40.3	-29.6			BS	-1191	+1583					
	1981				+4.9	89° -	-34.6	-29.7	4849.0		BS							
364	1650		289° 58'	+17.0°	7.9	89° -	+28.8	+20.9		4869.9		+992	-1318	373,431	1,399,604			
365	1320		" "	" "	7.5	89° -	+23.0	+15.5		4864.5		+794	-1055	373,233	1,399,867			
366	990		" "	" "	9.7	89° -	+17.3	+7.6		4856.6		+595	-791	373,034	1,400,131			
367	660		" "	" "	10.9	89° -	+11.5	+0.6		4849.6		+397	-529	372,836	1,400,395			
368	330		" "	" "	7.9	89° -	+5.8	-2.1		4846.9		+198	-264	372,637	1,400,658			
369	0				5.4	-		-5.4		4843.6	TP	0	0	372,439	1,400,922			
370	330		109° 59'	+17.0°	6.2	90° 30'	-2.9	-9.1		4839.9		-199	+264	372,240	1,401,186			
371	660		" "	" "	7.9	90° 30'	-5.8	-13.7		4835.3		-397	+527	372,042	1,401,449			

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-22-82		B. Cotcamp		T. Patton		6834		Jm TRP		1		28			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Cowboy Pass-15		UTAH		M. Haro								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4849.0						
372	990		109° 59'	+17.0°	9.9	90° 30'	-8.6	-18.5		4830.5		-596	+791	371,843	1,401,713
373	1320		" "	" "	9.0	90° 30'	-11.5	-20.5		4828.5		-794	+1054	371,645	1,401,976
374	1651		109° 59' 20"	" "	10.7	90° 40'	-19.2	-29.9		4819.1	TP	-993	+1319	371,445	1,402,240
374	1651				13.5	90° 34'	-16.3	-29.8			TP				
	1321		290° 36' 30" - 180°	+17.0°	+11.5	89° -	-23.1	-11.6	4807.5		BS	-806	+1046		
	1321				+7.7	89° 10'	-19.2	-11.5			BS				
375	990		290° 37'	+17.0°	6.0	89° -	+17.3	+11.3		4818.8		+604	-784	371,243	1,402,501
376	660		" "	" "	5.8	89° -	+11.5	+5.7		4813.2		+403	-523	371,042	1,402,762
377	330		" "	" "	5.6	89° -	+5.8	+0.2		4807.7		+201	-261	370,840	1,403,024
378	0				5.4	-		-5.4		4802.1	TP	0	0	370,639	1,403,285
379	330		112° 07'	+17.0°	8.3	-		-8.3		4799.2		-208	+256	370,431	1,403,541
Bm	345		102° 27' 55"	" "	8.9	-		-8.9		4798.6	Bm	-170	+300	370,469	1,403,585
380	660		112° 07'	" "	7.3	91° -	-11.5	-14.8		4788.7		-416	+512	370,223	1,403,797
381	990		113° 01'	" "	6.8	90° 50'	-14.4	-21.2		4786.3		-637	+758	370,062	1,404,043
382	1319		114° 23' 38"	+17.2°	9.5	90° 40'	-15.3	-24.8			TP	-876	+986	369,763	1,404,270
382	1319		" "		13.4	90° 30'	-11.5	-24.9		4782.6	TP				CORNER
	990		299° 39' 59" - 180°	+17.2°	+12.5	89° -	-17.3	-4.8	4777.8		BS	-722	+677		
	990				+9.7	89° 10'	-14.4	-4.7			BS				
383	660		299° 40'	+17.2°	7.1	89° -	+11.5	+4.4		4782.2		+482	-451	369,523	1,404,495
384	330		298° 28'	" "	5.7	89° -	+5.8	+0.1		4777.9		+236	-231	369,277	1,404,715

U.S. G.S. 5-370,475 x 1,404,600  
Bm G-74 1934 EL. 4778.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-22-82		B. Cotcamp		T. Patton		6834		Jm TRP		1		29			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Cowboy Pass-15'		UTAH		Millard								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4777.8						
385	0				5.4	-		-5.4		4772.4	TP	0	0	369,041	1,404,946
386	330		103° 07'	+17.2°	5.6	91° -	-5.8	-11.4		4766.4		-167	+285	368,874	1,405,231
387	660		100° 40'	" "	7.1	90° 40'	-7.7	-14.8		4763.0		-308	+583	368,733	1,405,529
388	990		99° 59'	" "	7.2	90° 40'	-11.5	-18.7		4759.1		-452	+881	368,589	1,405,827
389	1318		100° 27' 11"	" "	5.9	90° 40'	-15.3	-21.2		4756.6	TP	-612	+1167	368,429	1,406,112
389	1318				9.7	90° 30'	-11.5	-21.2			TP				ROUND CORNER
	990		289° 10' 23" -180	+17.2°	+9.7	89° 20'	-11.5	-1.8	4754.8		BS	-587	+797		
	990				+6.9	89° 30'	-8.6	-1.7			BS				
390	660		290° 07'	+17.2°	7.9	89° 20'	+7.7	-0.2		4754.6		+400	-525	368,242	1,406,383
391	330		" "	" "	7.0	89° 20'	+3.8	-3.2		4751.6		+200	-262	368,042	1,406,646
392	0				5.4	-		-5.4		4749.4	TP	0	0	367,842	1,406,908
393	330		107° 06'	+17.2°	7.5	90° 20'	-1.9	-9.4		4745.4		-186	+273	367,656	1,407,181
394	660		" "	" "	10.3	90° 20'	-3.8	-14.1		4740.7		-372	+545	367,470	1,407,453
395	989		108° 09' 10"	" "	8.9	90° 20'	-5.8	-14.7		4740.1	TP	-572	+807	367,270	1,407,715
395	989				6.1	90° 30'	-8.6	-14.7			TP				
	1981		290° 09' 32" -180	+17.2°	+11.1	89° 20'	-23.0	-11.9	4728.2		BS	-1202	+1574		
	1981				+14.6	89° 14'	-26.5	-11.9			BS				
396	1650		290° 10'	+17.2°	9.9	89° 20'	+19.2	+9.3		4737.5		+1001	-1311	367,069	1,407,978
397	1320		" "	" "	9.3	89° 20'	+15.4	+6.1		4734.3		+801	-1049	366,869	1,408,240
398	990		" "	" "	9.0	89° 20'	+11.5	+2.5		4730.7		+601	-787	366,669	1,408,502

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-22-82		B. Cotcamp		T. Patton		6834		m TRP		1		30			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Cowboy Pass - 15'		UTAH		MILLARD								L. Lewis	
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
									4728.2						
399	660		290° 10'	+17.2°	11.7	89° 20'	+7.7	-4.0		4724.2		+401	-525	366,469	1,408,764
400	330		" "	" "	5.9	89° 20'	+3.8	-2.1		4726.1		+200	-262	366,268	1,409,027
401	0				5.4	-		-5.4		4722.8	π	0	0	366,068	1,409,289
402	330		110° 09'	+17.2°	12.2	-		-12.2		4716.0		-200	+262	365,868	1,409,351
403	660		" "	" "	11.6	-		-11.6		4716.6		-400	+525	365,668	1,409,814
404	990		" "	" "	10.1	84	-5.0	-15.1		4713.1		-601	+787	365,467	1,410,076
405	1320		" "	" "	12.4	84	-6.6	-19.0		4709.2		-801	+1049	365,267	1,410,338
406	1650		" "	" "	8.1	90° 30'	-14.4	-22.5		4705.7		-1001	+1312	365,067	1,410,601
407	1982		116° 08' 41"	" "	6.4	90° 30'	-17.3	-23.7		4704.5	TP	-1202	+1576	364,866	1,410,865
407	1982		" "	" "	12.1	90° 20'	-11.5	-23.6			TP				
	330		290° 07' 32" - 180	+17.2°	+0.4	TP	-1.7	-1.3		4703.2	BS	-200	+262		
	330				+4.5	89° -	-5.8	-1.3			BS				
408					4										
408	230		291° 31' 29"	+17.2°	4.0	89° -	+4.0	0.0		4703.2	π	+144	-179	364,810	1,410,948 y=364,820 x=INT. x=1,410,960
408	0				5.4	-		-5.4		4697.8	π	0	0	364,666	1,411,127
409	330		110° 41'	+17.2°	8.2	-		-8.2		4695.0		-203	+260	364,463	1,411,387
TP	480		115° 31' 08"	" "	5.9	-		-5.9		4697.3	TP	-326	+353	364,340	1,411,480 u.s.g.s.g-364,340 B.F-74 1984 EL. 4697.0 x=1,411,480 HORIZ y=-12' CORR. x=17'
TP	480				8.3	TP	+2.4	-5.9			TP				
	2825		288° 56' 37" - 180	+16.8°	+7.6	89° 10'	-4.3	-33.7		3.8 4663.5	BS	-1650	+2293		e.o.m.
	2825				+13.8	89° 02'	-47.8	-34.0			BS	+2	-2		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-23-82		B. Cotcamp		T. Patton		6834		Jen TPP		1		31			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Cowboy Pass - 15'		UTAH		Millero									
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
			0						4663.5						
410	2641		289° 53'	+16.8°	7.8	89° 10'	+38.6	+30.8		4694.3		+1578	-2118	364,270	1,411,653
411	2310		" "	" "	8.9	89° 10'	+33.6	+24.7		4688.2		+1380	-1853	364,072	1,411,918
412	1980		" "	" "	9.1	89° 10'	+28.8	+19.7		4683.2		+1183	-1588	363,875	1,412,183
413	1650		289° 53'	+16.8°	6.3	89° 10'	+24.0	+17.7		4681.2		+986	-1323	363,678	1,412,448
414	1320		" "	" "	9.2	89° -	+23.0	+13.8		4677.3		+789	-1059	363,481	1,412,712
415	990		" "	" "	7.0	89° -	+17.3	+10.3		4673.8		+591	-794	363,283	1,412,977
416	660		" "	" "	8.3	89° -	+11.5	+3.2		4666.7		+394	-529	363,080	1,413,242
417	330		" "	" "	5.8	89° -	+5.8	0.0		4663.5		+197	-265	362,889	1,413,506
418	0				5.4	-		-5.4		4658.1	TP	0	0	362,692	1,413,771
419	330		109° 36'	+16.8°	5.2	91° -	-5.8	-11.0		4652.5		-196	+266	362,496	1,414,037
420	660		" "	" "	8.0	91° -	-11.5	-19.5		4644.0		-392	+531	362,300	1,414,302
421	990		" "	" "	7.1	91° -	-17.3	-24.4		4639.1		-587	+797	362,105	1,414,568
422	1320		" "	" "	7.0	91° -	-23.0	-30.0		4633.5		-783	+1062	361,909	1,414,833
423	1650		" "	" "	6.7	91° -	-28.8	-35.5		4628.0		-979	+1328	361,713	1,415,099
424	1980		" "	" "	10.8	90° 50'	-28.8	-39.6		4623.9		-1175	+1594	361,517	1,415,365
425	2310		" "	" "	12.7	90° 50'	-33.6	-46.3		4617.2		-1371	+1859	361,321	1,415,630
426	2642		109° 36' 29"	+16.8°	12.8	90° 50'	-38.3	-51.1		4612.4	TP	-1568	+2126	361,126	1,415,895 E.o.m.
426	2642		" "	" "	8.2	90° 56'	-42.9	-51.1			TP				
	2640		289° 37' 35" -180	+16.8°	+5.8	TH	-13.3	-7.5		4604.9	BS	-1568	+2124		E.o.m.
	2640				+8.1	89° 46'	-15.5	-7.4			BS				

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-23-82		B. Cotcamp		T. Patton		6834		Jm TRP		1		32			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Cowboy Pass-15'		UTAH										L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4604.9						
427	2310		289° 38'	+16.8°	5.0	TH	+11.6	+6.6		4611.5		+1372	-1859	360,932	1,416,158
428	1980		" "	" "	9.1	89° 40'	+11.5	+2.4		4607.3		+1176	-1593	360,736	1,416,424
429	1650		" "	" "	9.1	89° 40'	+9.6	+0.5		4605.4		+980	-1328	360,540	1,416,689
430	1320		" "	" "	8.9	89° 40'	+7.7	-1.2		4603.7		+784	-1062	360,344	1,416,955
431	990		289° 38'	+16.8°	10.4	89° 40'	+5.8	-4.6		4600.3		+588	-797	360,148	1,417,220
432	660		" "	" "	5.0	89° 40'	+3.8	-1.2		4603.7		+392	-531	359,952	1,417,486
433	330		" "	" "	4.8	89° 40'	+1.9	-2.9		4602.0		+196	-266	359,756	1,417,751
434	0				5.4	-		-5.4		4599.5	TP	0	0	359,560	1,418,017
435	330		109° 39'	+16.8°	10.1	89° 40'	+1.9	-8.2		4596.7		-196	+265	359,364	1,418,282
436	660		" "	" "	11.9	-		-11.9		4593.0		-392	+531	359,168	1,418,548
437	990		" "	" "	12.9	-		-12.9		4592.0		-588	+796	358,972	1,418,813
438	1320		" "	" "	11.8	BM	-6.6	-14.4		4586.5		-784	+1062	358,776	1,419,079
439	1650		110° 02'	" "	8.5	90° 30'	-14.4	-22.9		4582.0		-989	+1321	358,571	1,419,338
440	1980		110° 02'	+16.8°	8.9	90° 20'	-11.5	-20.4		4584.5		-1187	+1585	358,373	1,419,602
441	2310		109° 55"	" "	3.0	BM	-11.6	-14.6		4590.3		-1381	+1852	358,179	1,419,869
Bm	2433		108° 41' 42"	" "	13.0	-		-13.0		4591.9	Bm	-1413	+1981	358,147	1,419,998
442	2642		109° 38' 50"	+17.0	12.4	-		-12.4		4592.5	TP	-1577	+2120	357,985	1,420,135
442	2642				4.8	90° 10'	-7.5	-12.3			TP				
	989		285° 36' 53"-180	+17.0	+6.7	-		+6.7	4599.2		BS	-533.2	+833.2		
	989				+1.8	BM	+4.9	+6.7			BS				

y=358,200 x=1,419,990  
UTAH GEO-445  
E.I. 4591.0

E.P.M.

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-23-82		B. Cotcamp		T. Patton		6834		Jm TRP		1		33			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Cowboy Pass-15'		UTAH		Millard								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTting DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4599.2						
443	660		284° 28'	+17.0°	6.8	-		-6.8		4592.4		+345	-563	357,799	1,420,403
444	330		" "	" "	5.8	-		-5.8		4593.4		+172	-281	357,626	1,420,685
445	0				5.4	-		-5.4		4593.8	TP	0	0	357,454	1,420,966
446	330		110° 58'	+17.0°	9.6	-		-9.6		4589.6		-203	+260	357,251	1,421,226
447	660		111° 58'	" "	12.0	-		-12.0		4587.2		-415	+513	357,039	1,421,479
448	987		113° 29' 35"	" "	14.6	84	-4.9	-19.5		4579.7	TP	-641	+751	356,815	1,421,715
448	987				10.9	90° 30'	-8.6	-19.5			TP				
	648		312° 55' 10" -180°	+17.0°	+7.1	89°	-11.3	-4.2	4575.5		BS	-561	+325		AROUND CORNER
	648				+5.2	89° 10'	-9.4	-4.2			BS				
449	330		322° 25'	+17.0°	6.2	89°	+5.8	-0.4		4575.1		+309	-116	356,565	1,421,922
450	0				5.4	-		-5.4		4570.1	TP	0	0	356,256	1,422,038
451	330		147° 53'	+17.0°	7.6	90° 40'	-3.8	-11.4		4564.1		-319	+86	355,937	1,422,124
TP 452	470		122° 42' 24"	" "	7.2	90° 40'	-5.5	-12.7		4562.8	TP	-358	+304	355,900	1,422,340
TP	470				8.5	90° 30'	-4.1	-12.6			TP				CORNER
	430		242° 26' 18" -180°	+17.0°	+3.2	89°	-7.5	-4.3	4558.5		BS	+79	+423		
	430				+4.5	88° 50'	-8.8	-4.3			BS				
452	330		244° 31'	+17.0°	6.8	88° 30'	+8.6	+1.8		4560.3		-49	-326	355,932	1,422,435
453	0				5.4	-		-5.4		4553.1	TP	0	0	355,981	1,422,761
454	332		100° 10' 33"	+17.0°	8.4	90° 30'	-2.9	-11.3		4547.2	TP	-152	+295	355,830	1,423,054
454	332				7.5	90° 40'	-3.9	-11.4			TP				ACROSS STA. ACROSS "

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	4-23-82	INSTRUMENT MAN	B. Cotcamp	ROD MAN	T. Patton	PARTY NUMBER	6834	NOTES CHECKED BY	Jm TRP	LINE NO.	1	PAGE	34	
AREA	UTAH	TOPO MAP	Cowboy Pass 15'	STATE	UTAH	COUNTY	Millard	TWP		RANGE		PPM	PARTY MANAGER	L. Davis

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 A TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
										4547.2								
	990		301° 44' 04" - 180°	+17.0°	+3.4	TK	-5.0	-1.6	4545.6		BS	-744	+653					
	990				+7.1	89° 30'	-8.6	-1.5			BS							
455	660		302° 16'	+17.0°	12.8	89° 10'	+9.6	-3.2		4542.4		+500	-431	355,587	1,423,275			
456	330		299° 26'	" "	8.5	89° 10'	+4.8	-3.7		4541.9		+239	-227	355,326	1,423,479			
457	0				5.4	-		-5.4		4540.2	TP	0	0	355,087	1,423,706			
458	330		117° 02'	+17.0°	8.3	91° 10'	-6.7	-15.0		4530.6		-229	+237	354,858	1,423,943			
459	660		114° 30' 50"	" "	12.1	91° 10'	-13.4	-25.5	4520.1		TP	-437	+494	354,651	1,424,199			
459	660				10.2	91° 20'	-15.4	-25.6			TP							
	2641		281° 49' 30" - 180°	+17.0°	+7.8	88° 40'	-61.6	-53.8	44466.3		BS	-1273	+2313					
	2641				+12.5	88° 34'	-66.2	-53.7			BS							
460	2310		281° 32'	+17.0°	5.1	88° 50'	+47.0	+41.9		4508.2		+1103	-2029	354,482	1,424,482			
461	1980		" "	" "	10.3	88° 40'	+46.1	+35.8		4502.1		+946	-1740	354,325	1,424,771			
462	1650		" "	" "	11.7	88° 40'	+38.4	+26.7		4493.0		+788	-1450	354,167	1,425,061			
463	1320		281° 32'	" "	12.2	88° 40'	+30.7	+18.5		4484.8		+631	-1160	354,010	1,425,351			
464	990		" "	" "	12.0	88° 40'	+23.0	+11.0		4477.3		+473	-870	353,852	1,425,641			
465	660		" "	" "	10.7	88° 40'	+15.4	+4.7		4471.0		+315	-580	353,694	1,425,931			
466	330		" "	+17.0°	8.1	88° 40'	+7.7	-0.4		4465.9		+158	-290	353,537	1,426,221			
467	0				5.4	-		-5.4		4460.9	TP	0	0	353,379	1,426,511			
468	330		101° 42'	+17.0°	8.1	-		-8.1		4458.2		-158	+289	353,221	1,426,800			
469	660		" "	" "	9.8	-		-9.8		4456.5		-317	+579	353,062	1,427,090			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-443

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
4-23-82		B. (OTLAMP)		T. PATTON		6834		JRM TJP		1	35					
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
UTAH		COWEN PASS 15'	UTAH	MILLARD					L. DAVIS							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
									4466.3							
470	990		101-42	+17.0°	10.2	-	-	-10.2		4456.1		-475	+868	352,904	1,427,379	
471	1320		" "	" "	11.0	-	-	-11.0		4455.3		-634	+1158	352,745	1,427,669	
472	1650		" "	" "	10.6	-	-	-10.6		4455.7		-792	+1447	352,587	1,427,958	
473	1980		" "	" "	10.8	-	-	-10.8		4455.5		-951	+1737	352,428	1,428,248	
BM <del>474</del>	2059		102-47-23	+17.0°	10.3	-	-	-10.3		4456.0	BM	-1023	+1787	352,356	1,428,298	USE 43 D-74 1934 SI. 4456'
474	2310		101-42	" "	10.9	-	-	-10.9		4455.4		-1109	+2026	352,270	1,428,537	
475	2642		101-42-26	" "	10.9	-	-	-10.9		4455.4	TP	-1269	+2317	352,111	1,428,827	
475	2642				6.4	90-06	-4.5 90-06	-10.9			TP					
	3302		281-35-25-180	+17.0°	9.9	89-56	-4.1	+5.8			BS	-1580	+2899			
	3302				73.9	89-52	-7.9	+6.0	4461.4		BS					
476	2970		281-35	+17.0°	6.1	-	-	-5.9		4455.5		+1421	-2608	351,953	1,429,117	
477	2640		" "	" "	5.6	-	-	-5.5		4455.9		+1263	-2318	351,795	1,429,407	
478	2310		" "	" "	5.0	-	-	-5.0		4456.4		+1105	-2028	351,637	1,429,697	
479	1980		" "	" "	5.1	-	-	-5.1		4456.3		+947	-1739	351,479	1,429,986	
480	1650		281-35	+17.0°	5.3	-	-	-5.3		4456.1		+789	-1449	351,321	1,430,276	
481	1320		" "	" "	11.0	TH	+6.6	-4.4		4457.0		+632	-1159	351,164	1,430,566	
482	990		" "	" "	9.0	TH	+5.0	-4.0		4457.4		+474	-869	351,006	1,430,856	
483	660		" "	" "	7.8	TH	+3.3	-4.5 -5.8		4456.9		+316	-580	350,848	1,431,145	
484	330		" "	" "	4.9	-	-	-4.9		4456.5		+158	-290	350,690	1,431,435	
485	0				5.4	-	-	-5.4		4456.0	K	0	0	350,532	1,431,725	

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-44B

Geosource Inc.

DATE	4-23-82	INSTRUMENT MAN	B. Cotcamp	ROD MAN	T. Patton	PARTY NUMBER	6834	NOTES CHECKED BY	Jm TRP	LINE NO.	1	PAGE	36	
AREA	UTAH	TOPO MAP	Cowboy Pass 15'	STATE	UTAH	COUNTY	Millard	TWP		RANGE		PPM		
			Swazey Peak SW 7 1/2'										PARTY MANAGER	L. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
									4461.4							
486	330		101° 44'	+17.0°	5.2	-		-5.2		4456.2		-159	+289	350,373	1,432,014	
487	660		" "	" "	6.0	-		-6.0		4455.4		-317	+579	350,215	1,432,304	
488	990		" "	" "	7.1	-		-7.1		4454.3		-476	+868	350,056	1,432,593	
489	1320		" "	" "	7.5	-		-7.5		4453.9		-635	+1157	349,897	1,432,882	
490	1650		101° 44'	+17.0°	7.3	-		-7.3		4454.1		-793	+1447	349,739	1,433,172	
491	1980		" "	" "	7.5	-		-7.5		4453.9		-952	+1736	349,580	1,433,461	
492	2310		" "	" "	7.6	-		-7.6		4453.8		-1110	+2026	349,422	1,433,751	
493	2640		" "	" "	5.0	-		-4.9		4456.5		-1269	+2315	349,263	1,434,040	Cowboy Pass 15'
494	2970		101° 44'	" "	4.9	-		-4.7		4456.7		-1428	+2604	349,104	1,434,329	Swazey Peak SW
495	3141		101° 35' 33"	" "	6.1	-		-5.9		4455.5	≠	-1503	+2758	349,029	1,434,483	TRP NORTH
495	3302		101° 44' 27"	+17.0°	6.2	-		-6.0		4455.4	TP	-1588	+2895	348,945	1,434,619	
495	3302				13.8	89° 52'	+7.9	-5.9			TP					
	1650		281° 42' 29" - 180°	+17.0°	+12.8	89° -	-28.8	-16.0	4439.4		BS	-792	+1447			
	1650				+8.0	89° 10'	-24.0	-16.0			BS					
496	1320		281° 33'	+17.0°	10.2	89° -	+23.0	+12.8		4452.2		+631	-1159	348,785	1,434,906	
497	990		" "	" "	4.8	TH	+5.0	+0.2		4439.6		+473	-870	348,627	1,435,159	
498	660		" "	" "	5.9	TH	+3.3	-2.6		4436.8		+315	-580	348,469	1,435,485	
499	330		" "	" "	5.6	TH	+1.7	-3.9		4435.5		+158	-290	348,312	1,435,775	
500	0				5.4	-		-5.4		4434.0	TP	0	0	348,154	1,436,065	
501	330		101° 47'	+17.0°	5.1	-		-5.1		4434.3		-159	+289	347,995	1,436,354	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445\*

Geosource Inc.

DATE 4-23-82	INSTRUMENT MAN T. PATTON	ROD MAN B. COLCAMP	PARTY NUMBER 6834	NOTES CHECKED BY TRP	LINE NO. 1	PAGE 87
AREA UTAH	TOPO MAP SWASEY PEAK SW 7 1/2	STATE UTAH	COUNTY MILLARD	TWP	RANGE	PPM
PARTY MANAGER L. DAVIS						

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									4439.4						"	
502	660		101-47	+17.0°	7.1	-		-7.1		4432.3		-318	+578	347,836	1,436,643	
503	990		101-47	" "	9.0	-		-9.0		4430.4		-477	+868	347,677	1,436,933	
BM	1183		99-18-11	" "	9.3	-		-9.3		4430.1	TP	-524	+1061	347,630	1,437,125	y-347,630x-1,437,125 BM USGS 1924 L-74 SL 4430 HORIZ CORR. X-28'
BM	1183				12.7	89-50	+3.4	-9.3			TP					
BM	2118		293-16-57	+16.5°	10.5 +15.0	TH	-10.6	-0.1	4430.0		BS	-1052	+1838			
BM	2118				12.2	89-40	-12.3	-0.1			BS					
504	1979		291-54	+16.5°	6.7	89-50	+5.8	-1.9		4429.1		+941	-1741	347,520	1,437,216	
505	1650		"	" "	6.7	89-50	+4.8	-1.9		4428.1		+785	-1451	347,364	1,437,506	
506	1320		"	" "	7.2	89-50	+3.8	-3.4		4426.6		+628	-1161	347,207	1,437,796	
507	990		"	" "	7.8	89-50	+2.9	-4.9		4425.1		+471	-871	347,050	1,438,086	
508	660		"	" "	7.7	89-50	+1.9	-5.8		4424.2		+314	-581	346,893	1,438,376	
509	330		"	+16.5°	6.8	89-50	+1.0	-5.8		4424.2		+157	-290	346,736	1,438,667	
510	0				5.4	-		-5.4		4424.6	X	0	0	346,579	1,438,957	
511	330		101-52	+16.5°	9.6	88-50	+6.7	-2.9		4427.1		-157	+290	346,422	1,439,247	
512	660		"	" "	8.6	89-30	+5.8	-2.8		4427.2		-314	+581	346,265	1,439,538	
513	990		"	" "	10.4	89-30	+8.6	-1.8		4428.2		-470	+871	346,109	1,439,828	
514	1320		"	" "	11.9	89-30	+11.5	-0.3		4429.7		-627	+1162	345,952	1,440,119	
515	1650		"	" "	12.2	89-30	+14.4	+2.2		4432.2		-784	+1452	345,795	1,440,409	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-25-82		T. PATTON		B. COLEMAN		6834		TRP		1		38			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		SWASEY PEAK SW 7 1/2'		UTAH		MILLARD								L. DAVIS	
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
									4430.0						
516	1980		101-51-39	+16.5°	14.2	89.30	+17.3	+3.1			TP	-941	+1742	345,639	1,440,693
516	1980				8.7	89.40	+11.5	+2.8		4432.8	TP				
516	2641		282-04-15-180	+16.5°	9.9	90-10	+7.7	+17.6	4450.4		BS	-1263	+2319		
516	2641		"	"	2.5	90-20	+15.2	+17.7			BS				
517	2310		"	"	9.8	90-10	-6.7	-16.5		4433.9		+1105	-2029	345,482	1,440,977
518	1980		"	"	8.8	90-10	-5.8	-14.6		4425.8		+947	-1739	345,324	1,441,267
519	1650		"	"	7.9	90-10	-4.8	-12.7		4437.7		+789	-1449	345,166	1,441,557
520	1320		"	+16.5°	7.0	90-10	-3.8	-10.8		4439.6		+631	-1159	345,008	1,441,847
521	990		"	"	6.5	90-10	-2.9	-9.4		4441.0		+473	-869	344,850	1,442,137
522	660		"	"	7.8	90-		-7.8		4442.6		+316	-580	344,693	1,442,426
523	330		"	"	6.3	90-		-6.3		4444.1		+158	-290	344,535	1,442,716
524	0				5.4	90-		-5.4		4445.0	TP	0	0	344,377	1,443,006
525	330		102-01-52	+16.5°	10.9	88-50	+6.7	-4.2		4446.2		-158	+290	344,219	1,443,296
526	660		"	"	8.8	89-20	+7.7	-1.1		4449.3		-315	+580	344,062	1,443,586
527	990		"	"	10.0	89-20	+11.5	+1.5		4451.9		-473	+870	343,904	1,443,876
528	1320		"	"	5.9	89-20	+15.4	+9.5		4459.9		-631	+1160	343,746	1,444,166
529	1650		"	"	9.4	89-10	+24.0	+14.6		4465.0		-788	+1450	343,589	1,444,456
530	1980		"	+16.5°	9.5	89-	+34.6	+25.1		4475.5		-946	+1740	343,431	1,444,746

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-26-82		T. Patton B. Cot		B. Cotcamp		6834		TRP		1		39			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		SWAPEY PEAK SW 7 1/2		UTAH		Millard				68N				L. DAVIS	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4450.4						
531	2311		102-02	+16.5°	5.8	89° -	+40.3	+34.5		4484.9		-1103	+2029	343,274	1,445,035
TP	2528		101-55-48	" "	10.2	88-50	+51.5	+41.3		4491.7	TP	-1203	+2223	343,174	1,445,229
Bm	2470		99-47-14	" "	9.7	88-50	+50.3	+40.6		4491.0	TP	-1094	+2214	343,285	1,445,215
Bm	2470				2.5	89° -	+43.1	+40.6			TP				
	1496		288 52 57 -180	+16.5	+10.8	92° -	+52.2	+63.0	4554.0		BS	-866	+1219		
	1496				16.5	92° 10'	+56.5	+63.0			BS				
532	1321		285° 40'	+16.5	8.7	92° 10'	-49.9	-58.6		4495.4		+703	-1118	343,119	1,445,317
533	990		286° 43'	" "	8.0	92° 10'	-37.4	-45.4		4508.6		+542	-828	342,958	1,445,607
534	660		288° 08'	" "	7.3	92° 10'	-24.9	-32.2		4521.8		+375	-543	342,791	1,445,892
535	330		288° 13'	" "	7.0	92° 10'	-12.5	-19.5		4534.5		+188	-271	342,604	1,446,164
Bm	178		273 55 53	" "	5.8	92° 10'	-6.7	-12.5		4541.5	Bm	+62	-167	342,478	1,446,268
536	0				5.4	-		-5.4		4548.6	X	0	0	342,416	1,446,435
537	330		104° 18'	+16.5	6.9	87° 10'	+16.3	+9.4		4563.4		-169	+283	342,247	1,446,718
538	660		102° 48'	" "	10.0	87° 10'	+32.6	+22.6		4576.6		-323	+576	342,093	1,447,011
539	990		102° 39'	" "	6.9	87° 30'	+43.1	+36.2		4590.2		-482	+865	341,934	1,447,300
540	1320		102° 14'	" "	6.1	87° 30'	+57.5	+51.4		4605.4		-635	+1157	341,781	1,447,592
541	1649		101 59 53	" "	5.6	87° 30'	+71.9	+66.3		4620.3	TP	-786	+1448	341,627	1,447,884
541	1649				10.4	87° 20'	+76.6	+66.2			TP				

Highway intersect  
 $y = 343,145$   $x = 1,445,220$   
 Parto. U.S.C.G.S  
 Bm. EL. 4491.0  
 $y = 343,285$   $x = 1,445,215$   
 Horiz COR.  $y = +5'$   
 $x = -23'$

B-74 1934 y=342,465  
 U.S.C.G.S Bm EL 4541.0  
 $x = 1,446,285$

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445'

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
4-27-82		B. Cotcamp		T. Paton		6834		TRP TRP		1	40					
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
UTAH		SWANSEY PEAK SW 7 1/2	UTAH	MILLARD					L. DAVIS							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
										4620.3						
	1979		280° 46' 13" - 180	+16.5°	+14.8	92° 30'	+86.2	+101.0			BS	-906.3	+1757.1			
	1979				+9.2	92° 40'	+92.0	+101.2	4721.5		BS					
542	1650		280° 35'	+16.5°	9.0	92° 40'	-76.7	-85.7		4635.8		+751	-1469	341,469	1,448,173	
543	1320		280° 31'	" "	8.1	92° 40'	-61.3	-69.4		4652.1		+600	-1176	341,318	1,448,466	
544	990		279° 51'	" "	7.8	92° 40'	-46.0	-53.8		4667.7		+439	-887	341,157	1,448,755	
545	660		279° 32'	" "	6.6	92° 40'	-30.7	-37.3		4684.2		+290	-593	341,008	1,449,049	
546	330		278° 29'	" "	6.8	92° 40'	-15.3	-22.1		4699.4		+139	-299	340,857	1,449,343	
547	0				5.4	-		-5.4		4716.1	X	0	0	340,718	1,449,642	
548	330		90° 54'	+16.5°	6.9	87° 30'	+14.4	+7.5		4729.0		-99	+315	340,619	1,449,957	
549	660		92° 27'	" "	6.0	87° 30'	+28.8	+22.8		4744.3		-214	+624	340,504	1,450,266	
550	990		93° 27'	" "	6.4	87° 20'	+46.0	+39.6		4761.1		-338	+931	340,380	1,450,573	
551	1319		93° 05'	" "	8.2	87° 10'	+65.1	+56.9		4778.4		-442	+1243	340,276	1,450,885	
552	1647		86° 29'	" "	6.9	87° 10'	+81.3	+74.4		4795.9	TP	-508.3	+1565.1	340,207	1,451,208	
552	1647				11.7	87° -	+86.1	+74.4			TP					
	985		275° 40' 41" - 180	+16.8°	+8.9	93° -	+51.5	+60.4	4856.3		BS	-376.3	+909.1			
	985				+6.1	93° 10'	+54.3	+60.4			BS					
553	660		278° 57'	+16.8°	7.0	93° -	-34.5	-41.5		4814.8		+287	-594	340,115	1,451,524	↑
554	330		279° 06'	" "	7.2	93° -	-17.2	-24.4		4831.9		+144	-297	339,972	1,451,821	SWANSEY PEAK SW 7 1/2
555	0				5.4	-		-5.4		4850.9	X	0	0	339,828	1,452,118	NOTCH PEAK 15'
556	330		93° 07'	+16.8°	7.0	86° 40'	+19.2	+12.2		4868.5		-112	+310	339,716	1,452,428	↓

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-27-82		B. Cotcamp		T. Patton		6834		Jm TRP		1		41			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		SWASEY PEAK SW 1/2		UTAH		M. ILLARD								L. Davis	
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
557	660		93° 07'		8.2	86° 40'	+38.3	+30.1	4856.3						
558	990		93° 06' 54"	" "	8.9	86° 40'	+57.5	+48.6		4886.4		-225	+621	339,603	1,452,739
558	990			" "	6.1	86° 50'	+54.6	+48.5		4904.9	TP	-337	+929	339,400	1,453,048
	1651		274° 06' 23" -180	+16.8°	+10.6	93° 10'	+91.1	+101.7	5006.6		BS	-588	+1540		
	1651				+5.8	93° 20'	+95.8	+101.6			BS				
559	1320		274° 18'	+16.8°	8.6	93° 10'	-72.8	-81.4		4925.2		+475	-1232	339,372	1,453,356
560	990		" "	" "	7.1	93° 10'	-54.6	-61.7		4944.9		+356	-924	339,253	1,453,664
561	660		" "	" "	7.5	93° 10'	36.4	-43.9		4962.7		+238	-616	339,135	1,453,972
562	330		" "	" "	8.4	93° 10'	-18.2	-26.6		4980.0		+119	-308	339,016	1,454,280
563	0				5.4	-		-5.4		5001.2	X	0	0	338,897	1,454,588
564	330		95° 31'	+16.8°	5.7	86° 40'	+19.2	+13.5		5020.1		-125	+305	338,772	1,454,893
565	660		" "	" "	5.9	86° 40'	+38.3	+32.4		5039.0		-251	+611	338,646	1,455,199
566	990		" "	" "	7.1	86° 40'	+57.5	+50.4		5057.0		-376	+916	338,521	1,455,504
567	1320		" "	" "	7.1	86° 40'	+76.6	+69.5		5076.1		-501	+1221	338,396	1,455,809
568	1651		" "	" "	7.1	86° 40'	+95.8	+88.7		5095.3		-627	+1526	338,270	1,456,114
TP	1683		97° 02' 26"	+16.8°	6.6	86° 40'	+97.7	+91.1		5097.7	Bm	-679	+1537	338,215	1,456,125
TP	1683				11.4	86° 30'	+102.5	+91.1			Bm				

A-74 1934  
 U.S.C.G.S. EV. 5098.0  
 Y-338,215  
 X-1,456,125  
 Horiz. y - 24'  
 CORR. X + 6'



SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
4-28-82		B. Cotcamp		T. Patton		6834		Jm B.C.		1		43				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
UTAH		NOTCH Peak-15'		UTAH		M. HARR								L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
										5351.1						
	754		331° 03' 34" -180	+16.8°	+14.9	92° 30'	+32.9	+47.8	5398.9		BS	-736.2	+158.1			
	754				+12.7	92° 40'	+35.0	+47.7			BS					
582	635		340° 56'	+16.8°	12.1	92° -	-22.1	-34.2		5364.7		+635	-25	337,662	1,460,567	CORNER
583	330		351° 11'	" "	6.6	92° -	-11.5	-18.1		5380.8		+327	+46	337,354	1,460,638	
584	0				5.4	-		-5.4		5393.5	X	0	0	337,027	1,460,592	
585	330		175° 30'	+16.8°	8.2	86° 20'	+21.1	+12.9		5411.8		-322	-70	336,705	1,460,522	
586	657		171° 53'	" "	8.3	86° 20'	+41.9	+33.6		5432.5		-649	-99	336,378	1,460,493	
TP	763		166° 49' 35"	" "	7.7	86° 20'	+48.7	+41.0		5439.9	TP	-760.2	-48.1	336,269	1,460,543	ACROSS CORNER
TP	763				5.5	86° 30'	+46.5	+41.0			TP					
	447		291° 26' 20" -180	+16.8°	+9.3	93° -	+23.4	+32.7	5472.6		BS	-276.1	+351.1			
	447				+13.2	92° 30'	+19.5	+32.7			BS					
587	250		279° 38'	+16.8°	7.2	93° -	-13.1	-20.3		5452.3		+111	-224	336,105	1,460,669	
X	0				5.4	-		-5.4		5467.2	X	0	0	335,994	1,460,893	AROUND
588	75		70° 07'	+16.8°	5.3	87° 10'	+3.7	-1.6		5471.0		+4	+75	335,998	1,460,968	CORNER
589	404		63° 48' 38"	" "	5.5	87° -	+21.1	+15.6		5488.2	TP	+66.1	+398.1	336,061	1,461,290	
589	404				12.6	86° -	+28.1	+15.5			TP					
	647		268° 15' 36" -180	+16.8°	+10.5	93° -	+33.8	+44.3	5532.5		BS	-168.1	+624.1			
	647				+8.6	93° 10'	+35.7	+44.3			BS					
590	325		276° 42'	+16.8°	8.7	93° 20'	-18.9	-27.6		5504.9		+130	-298	336,024	1,461,615	CORNER
591	0				5.4	-		-5.4		5527.1	X	0	0	335,894	1,461,913	ACROSS STR.

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-28-82		B. Catcamp		T. Patton		6834		Jm B.C.		1		44			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		NOTCH PEAK-15'		UTAH		MILLARD								L. DAVIS	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5532.5						
592	330		139° 35'	+16.8°	10.2	86° 40'	+19.2	+9.0		5541.5		-302	+132	335,592	1,462,045
593	660		143° 16'	" "	10.2	86° 40'	+38.3	+28.1		5560.6		-620	+225	335,274	1,462,138
TP	803		140° 58' 34"	" "	9.7	86° 40'	+46.6	+36.9			TP	-742	+303	335,153	1,462,215
TP	803		" "	" "	7.3	86° 50'	+44.3	+37.0		5569.5	TP				AROUND CORNER
	504		243° 39' 47" -180	+16.8°	+12.4	92° 30'	+22.0	+34.4	5603.9		BS	+83	+497		
	504		" "	" "	+11.0	92° 40'	+23.4	+34.4			BS				
594	327		246° 06'	+16.8°	9.8	92° 40'	-15.2	-25.0		5578.9		-40	-324	335,197	1,462,387
595	0		" "	" "	5.4	-	-	-5.4		5598.5	π	0	0	335,237	1,462,711
596	328		49° 16'	+16.8°	7.2	86° 30'	+20.0	+12.8		5616.7		+133	+300	335,370	1,463,611
TP	557		43° 12' 24"	" "	13.5	85° 30'	+43.6	+30.1			TP	+278	+481	335,516	1,463,191
TP	557		" "	" "	11.8	85° 40'	+42.0	+30.2		5634.1	TP				
	273		165° 40' 47" +180	+16.8°	+14.1	92° -	+9.5	+23.6	5657.7		BS	+273	+12		
	273		" "	" "	+13.3	92° 10'	+10.3	+23.6			BS				
597	180		165° 41"	+16.8°	7.9	93° 10'	-9.9	-17.8		5639.9		-180	-8	335,610	1,463,194
π	0		" "	" "	5.4	-	-	-5.4		5652.3	π	0	0	335,790	1,463,202
598	140		31° 06'	+16.8°	6.1	86° 40'	+8.1	+2.0		5659.7		+94	+104	335,884	1,463,306
599	800 470		" "	" "	10.9	86° 40'	+27.3	+16.4		5674.1		+315	+349	336,105	1,463,551
600	800		" "	" "	8.2	86° 40'	+46.4	+38.2		5695.9		+536	+594	336,326	1,463,796
TP	884		31° 20' 34"	" "	6.5	86° 40'	+51.3	+44.8		5702.5	TP	+589	+657	336,380	1,463,858
TP	884		" "	" "	9.1	86° 30'	+53.9	+44.8			TP				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-28-82		B. Catcamp		T. Patton		6834		Jm TRP		1		45			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		NOTCH Peak-15'		UTAH		Millard								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
										5702.5					
	258		257 28 50 -180	+16.8°	8.3	92°	+9.0	+17.3	5719.8		BS	-19 +1	+257.1		
	258				+7.6	92° 16'	+9.7	+17.3			BS				
Bm	250		236 07 18 "	+16.8°	6.4	92° 10'	-9.4	-15.8		5704.0	Bm	-73	-239	336,289	1,463,875
601	0				5.4	-		-5.4		5714.4	X	0	0	336,362	1,464,114
602	330		53° 16' "	+16.8°	3.8	86° -	+23.0	+19.2		5739.0		+113	+310	336,475	1,464,424
TP	409		58° 25 50	" "	8.1	86° -	+28.5	+20.4		5740.2	TP	+104 +1	+395 -1	336,467	1,464,508
TP	409				6.9	86° 10'	+27.3	+20.4			TP				AROUND CORNER
	572		308 37 29 -180	+16.8°	14.3	92°	+20.0	+34.3	5774.5		BS	-471 +1	+324 -1		
	572				+12.7	92° 10'	+21.6	+34.3			BS				
603	329		309° 15	+16.8°	9.0	92° 10'	-12.4	-21.4		57531		+273	-184	336,270	1,464,647
604	0				5.4	-		-5.4		5769.1	X	0	0	335,997	1,464,831
605	329		130° 10' "	+16.8°	3.7	88° 10'	+16.2	+12.5		5787.0		-276	+179	335,721	1,465,010
TP	481		119° 59 17 "	" "	7.5	86° 20'	+29.3	+21.8		5796.3	TP	-350 +1	+329 -1	335,648	1,465,159
TP	481				6.2	86° 40'	+27.9	+21.7			TP				AROUND CORNER
	484		248 54 24 -180	+16.8°	+10.7	92° 40'	+22.5	+33.2	5829.5		BS	+36 +1	+482 -1		
	484				+9.2	92° 50'	+23.9	+33.1			BS				
606	331		250° 35'	+16.8°	9.9	92° 50'	-16.3	-26.2		5803.3		-15	-331	335,670	1,465,309
607	0				5.4	-		-5.4		5824.1	X	0	0	335,685	1,465,640
608	331		91° 04'	+16.8°	3.9	86° 20'	+21.1	+17.2		5846.7		-102	+315	335,583	1,465,955

4-336,265 x-1463,835  
Z-38 USC 5 18 m  
E 1. 5705.0 1934

AROUND CORNER

ACROSS STA.

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445'

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE								
4-28-82		B. Cotcamp		T. Patton		6834		Jim TRP		1	46								
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER								
UTAH		NOTCH Peak-15'		UTAH		Millard													
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				
TP	519		89° 05' 01"	+16.8°	8.5	86° 20'	+33.1	+24.6	5829.5										
TP	519				7.0	86° 30'	+31.6	+24.6		5854.1	TP	-142 +1	+498	335,544	1,466,138				
	801		248 27 36 -180	+16.8°	+8.6	92° 20'	+32.6	+41.2	5895.3		BS	+66 +1	+798						
	801				+10.9	92° 10'	+30.3	+41.2			BS								
609	659		249 06	+16.8°	8.2	92° 20'	-26.8	-35.0		5860.3		-47	-657	335,564	1,466,279				
610	330		" "	" "	7.5	92° 20'	-13.4	-20.9		5874.4		-24	-329	335,587	1,466,667				
611	0				5.4	-		-5.4		5889.9	TP	0	0	335,611	1,466,936				
IF	335		67° 05' 50"	+16.8°	6.1	86° 50'	+18.5	+12.4		5907.7	IF	+36	+333	335,647	1,467,269			4-335,610 x = 1,467,245	
612	330		69° 27'	" "	7.2	86° 40'	+19.2	+12.0		5907.3		+22	+329	335,633	1,467,265			IF T-ED SOUTH	
613	653		65° 54' 29"	+16.5°	6.5	86° 40'	+37.9	+31.4		5926.7	TP	+86 +1	+646	335,698	1,467,582				
613	653				4.6	86° 50'	+36.0	+31.4			TP							around corner	
	987		205 08 11 -180	+16.5°	+13.3	91° 10'	+20.1	+33.4			BS	+738 +1	+656						
	987				+10.5	91° 20'	+23.0	+33.5	5960.2		BS								
614	660		203° 38'	+16.5°	9.4	90° 50'	-9.6	-19.0		5941.2		-505	-425	335,932	1,467,813				
615	330		" "	" "	8.4	91° 50'	-10.6	-19.0		5941.2		-252	-213	336,185	1,468,025				
616	0				5.4	-		-5.4		5954.8	TP	0	0	336,437	1,468,238				
617	330		22° 53'	+16.5°	10.0	86° 40'	+19.2	+9.2		5969.4		+255	+209	336,692	1,468,447				
618	660		" "	" "	9.6	86° 40'	+38.3	+28.7		5988.9		+510	+419	336,947	1,468,657				
619	989		21 30 54	" "	7.0	86° 40'	+57.4	+50.4		6010.6	TP	+778 +1	+608	337,216	1,468,846				
619	989				9.9	86° 30'	+60.3	+50.4			TP								

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445.

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
4-28-82		B. Cotcamp		T. Patton		6834		Jm TRP		1	47					
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
UTAH		NOTCH-PEAK-15	UTAH	M. HARR					L. Davis							
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	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
	547		192° 33' 19" -180	+16.5°	+7.0	92°	+19.1	+26.1	6036.7	6010.6	BS	+478.1	+265			
	547				+8.6	91° 50'	+17.5	+26.1			BS					
620	217		192° 33'	+16.5°	7.1	91° 50'	-6.9	-14.0		6022.7		-190	-105	337,505	1,469,006	
	0				5.4	-		-5.4		6031.3	X	0	0	337,695	1,469,111	ACROSS ROAD
621	117		43° 17'	+16.5°	6.8	87°	+6.1	-0.7		6036.0	TP	+59	+101	337,754	1,469,212	
622	446		41° 48' 49"	+16.3°	1.8	87°	+23.3	+21.5		6058.2	TP	+235.1	+378	337,931	1,469,189	
622	446				9.7	86°	+31.0	+21.3			TP					
	647		165° 19' 00" -180	+16.3°	+13.5	-		+13.5	6071.7		BS	+647.1	+18			
	647				+10.3	84	+3.2	+13.5			BS					
623	330		159° 42'	+16.3°	6.7	90° 20'	-1.9	-8.6		6063.1		-329	+23	338,250	1,469,530	
624	0				5.4	-		-5.4		6066.3	X	0	0	338,579	1,469,507	
625	330		22° 20'	+16.3°	7.2	87° 30'	+14.4	+7.2		6078.9		+258	+206	338,837	1,469,713	
626	660		21° 12'	" "	7.8	87° 10'	+32.6	+24.8		6096.5		+524	+402	339,103	1,469,909	↑ NOTCH Peak-15'
TP	885		21° 35' 12"	" "	4.7	87° 10'	+43.7	+39.0		6110.7	TP	+698.1	+543	339,278	1,470,050	
TP	885				7.3	87°	+46.3	+39.0			TP					
	1088		227° 53' 30" -180	+16.3°	+14.3	91° 30'	+28.5	+42.8	6153.5		BS	+474.1	+979			
	1088				+9.2	91° 46'	+33.5	+42.7			BS					
627	986		229° 12'	+16.3°	10.9	91° 50'	-31.5	-42.4		6111.1		-409	-897	339,344	1,470,132	MAJUM PASS-7 1/2'
628	660		229° 34'	" "	7.8	92° 30'	-28.8	-36.6		6116.9		-270	-602	339,483	1,470,427	↓
629	330		227° 55'	" "	8.0	91° 40'	-9.6	-17.6		6135.9		-144	-297	339,609	1,470,732	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE		
4-28-82		B. Cotcamp		T. Patton		6834		MPK		1		48		
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PARTY MANAGER		
UTAH		MARTIN Pass-T2		UTAH		Millard				PPM		L. Davis		
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.	
									6153.5					
630	0				5.4	-		-5.4		6148.1	TP	0	0	
631	330		35° 28'	+16.3°	7.3	87° 20'	+15.3	+8.0		6161.5	TP	+204	+259	ACROSS STA.
Power LINE	462		32° 37' 39"	" "	9.6	87° 20'	+21.5	+11.9		6165.4	Power LINE	+303	+348	y-340,050 x-1471,395
632	654		30° 46' 41"	" "	8.7	87° 30'	+28.5	+19.8		6173.3	TP	+445 +1	+478	ROAD TWT. H.
632	654				6.8	87° 40'	+26.6	+19.8			TP			
	237		192° 58' 26" -180	+16.3°	+10.0	92° -	+8.3	+18.3	6191.6		BS	+207 +1	+116	
	237				+9.3	92° 10'	+9.0	+18.3			BS			
TP	0				5.4	-		-5.4		6186.2	TP	0	0	
TP	42		302° 26' 17"	+16.3°	2.1	88° -	+1.5	-0.6		6191.0	TP	+32 +1	-28	USGS 1934 BM
TP	42				1.1	89° 20'	+0.5	-0.6			TP			y-38 E1. 6192.0'
														y-340,440 Horiz y-+38
														x-1471,595 CORR. x=-19
	390		197° 34' 48" -180	+16.7°	+11.5	91° -	+6.8	+18.3	6209.3		BS	+322 +1	+220 +1	
	390				+10.4	91° 10'	+7.9	+18.3			BS			
633	319		196° 59'	+16.7°	8.6	91° 50'	-10.2	-18.8		6190.5		-265	-177	340,498 1,471,639
TP	0				5.4	-		-5.4		6203.9	TP	0	0	340,763 1,471,816 ACROSS ROAD
634	51		113° 34'	+16.7°	3.3	91° 50'	-1.6	-4.9		6204.4		-33	+39	340,730 1,471,855
635	360		64° 19' 14"	" "	5.9	88° 20'	+10.5	+4.6		6213.9	TP	+56 +1	+355 +1	340,820 1,472,172
635	360				4.8	88° 30'	+9.4	+4.6			TP			
	652		251° 26' 29" -180	+16.7°	+12.1	91° -	+11.4	+23.5	6237.4		BS	+21 +1	+652 +1	
	652				+10.2	91° 10'	+13.3	+23.5			BS			



SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445\*

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE							
4-30-82		B. Cotcamp		T. Patton		6834		MPK Jm		1.		50							
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER					
UTAH		MAGNUM PASS. 7 1/2		UTAH		Millard								L. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X				
									6164.4										
648	647		88° 24' 07"	+16.7	5.6	92°	-22.6	-28.2		6136.2	TP	-168	+1624	340,843	1,476,365			AROUND ACROSS CORNER STA.	
648	647				3.7	92° 10'	-24.4	-28.1			TP								
	657		241° 15' 34" -180°	+16.7	+7.0	87° 40'	-26.7	-19.7	6116.5		BS	+137	+642					AROUND CORNER	
	657				+5.1	87° 50'	-24.8	-19.7			BS								
649	330		236° 41'	+16.7	6.8	87° 50'	+12.5	+5.7		6122.2		-94	-316	340,887	1,476,692				
650	0				5.4	-	-	-5.4		6111.1	X	0	0	340,981	1,477,008				
651	330		51° 50'	+16.7	6.6	91° 30'	-8.6	-15.2		6101.3		+121	+307	341,102	1,477,315				
652	660		50° 20'	" "	10.0	91° 30'	-17.3	-27.3		6089.2		+258	+608	341,239	1,477,616				
TP	858		52° 06' 56"	" "	8.9	91° 50'	-27.4	-36.3		6080.2	TP	+310	+800	341,291	1,477,808			AROUND CORNER	
TP	858				11.3	91° 40'	-24.9	-36.2			TP								
	459		253° 09' 16" -180°	+16.7	+2.8	-	-	+2.8	6083.0		BS	+1	+459						
	459				+5.1	TH	-2.3	+2.8			BS								
653	330		253° 58'	+16.7	2.2	-	-	-2.2		6080.8		+4	-330	341,296	1,477,937				
654	0				5.4	-	-	-5.4		6077.6	X	0	0	341,292	1,478,267				
655	330		67° 53'	" "	12.2	-	-	-12.2		6070.8		+31	+329	341,323	1,478,596				
656	660		66° 22' 29"	" "	12.0	BS	-3.3	-15.3		6067.7	TP	+80	+655	341,372	1,478,922				
656	660				9.6	90° 30'	-5.8	-15.4			TP								
	1499		243° 50' 14" -180°	+16.7	+7.2	88° 40'	-34.9	-27.7	6040.0		BS	+246	+1478						
	1499				+11.6	88° 30'	-39.2	-27.6			BS								
657	1170		243° 59'	+16.7	7.2	88° 50'	+23.8	+16.6		6056.6		-189	-1155	341,429	1,479,245				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO+445

Geosource Inc.

DATE 4-30-82	INSTRUMENT MAN B. Cotcamp	ROD MAN T. Patton	PARTY NUMBER 6834	NOTES CHECKED BY MPK	LINE NO. 1	PAGE 51
AREA UTAM	TOPO MAP MARTIN PASS-7 1/2'	STATE UTAM	COUNTY Millard	TWP	RANGE	PPM
			PARTY MANAGER L. Davis			

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS
														Y	X	
									6040.0							
658	840		243° 59'	+16.7	9.1	89° 10'	+12.2	+3.1		6043.1		-136	-829	341,482	1,479,571	
659	510		" "	" "	7.7	89° 10'	+7.4	-0.3		6039.7		-83	-503	341,535	1,479,897	
660	180		" "	" "	8.2	89° 10'	+2.6	-5.6		6034.4		-29	-178	341,589	1,480,222	
π	0				5.4	-		-5.4		6034.6	π	0	0	341,618	1,480,400	middle of road.
661	151		80° 51'	+16.7	2.1	90° 40'	-1.8	-3.9		6036.1		-20	+150	341,598	1,480,550	
662	481		82° 47'	" "	7.0	90° 40'	-5.6	-12.6		6027.4		-79	+474	341,539	1,480,874	
663	810		81° 11'	" "	5.6	90° 30'	-7.1	-12.7		6027.3		-111	+802	341,507	1,481,202	AROUND
664	1134		82° 52' 57"	" "	6.8	90° 40'	-13.2	-20.0		6020.0	TP	-189	+1118	341,430	1,481,518	CORNER
664	1134		" "	" "	10.1	90° 30'	-9.9	-20.0			TP					
	643		268° 38' 22" -180	+16.7	+11.4	88° -	-22.4	-11.0	6009.0		BS	-170	+620			
	643				+9.5	88° 10'	-20.6	-11.1			BS					AROUND
Bm	466		268° 47' 23"	+16.7	3.9	88° 10'	+14.9	+11.0		6020.0	Bm	+124	-449	341,385	1,481,689	CORNER U.S.C.G.S. 341400 2-1481695 V-36 1939 BM EL. 6020.0
665	330		255° 31'	+16.7	5.4	88° 10'	+10.6	+5.2		6014.2		+13	-330	341,274	1,481,808	
666	0				5.4	-		-5.4		6003.6	π	0	0	341,261	1,482,138	
667	330		74° 52'	+16.7	4.1	-		-4.1		6004.9		-9	+330	341,252	1,482,468	
668	660		" "	" "	9.3	-		-9.3		5999.7		-18	+660	341,243	1,482,798	
π	672		74° 19' 29"	" "	9.4	-		-9.4		5999.6	π	-12	+672	341,249	1,482,810	π-341,210 TRD NORTH x-14822800
669	989		74° 51' 52"	" "	12.6	-		-12.6		5996.4	TP	-27	+989	341,234	1,483,127	
669	989				7.7	BH	-4.9	-12.6			TP					

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO 445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE			
4-30-82		B. Cotcamp		T. Patton		6834		MPK Jm		1	52			
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER			
UTAH		MARJUM Pass-7 1/2'		UTAH		MILLARD					L. Davis			
STATION NO.	SLOPE DISTANCE	PLOTting DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
										5996.4				
	1980		254° 51' 56" -130	+16.7	+9.2	88° 20'	-57.6	-48.4	5948.0		BS	-54	+1978	
	1980				+13.8	88° 12'	-62.2	-48.4			BS			
670	1650		254° 52'	+16.7	9.0	88° 20'	+48.0	+39.0		5987.0		+45	-1649	341,225 1,483,456
671	1320		" "	" "	8.2	88° 10'	+42.2	+34.0		5982.0		+36	-1320	341,216 1,483,785
672	990		" "	" "	7.0	88° 10'	+31.7	+24.7		5972.7		+27	-990	341,207 1,484,115
673	660		" "	" "	10.1	88° 10'	+21.1	+11.0		5959.0		+18	-660	341,198 1,484,445
674	330		" "	" "	9.1	88° 10'	+10.6	+1.5		5949.5		+9	-330	341,189 1,484,775
675	0				5.4	-		-5.4		5942.6	X	0	0	341,180 1,485,105
676	330		74° 52'	+16.7	8.2	91° 10'	-6.7	-14.9		5933.1		-9	+330	341,171 1,485,435
677	660		" "	" "	12.1	91° 10'	-13.4	-25.5		5922.5		-18	+660	341,162 1,485,765
678	990		" "	" "	9.0	91° 40'	-28.8	-37.8		5910.2		-27	+990	341,153 1,486,095
679	1320		" "	" "	9.7	91° 40'	-38.4	-48.1		5899.9		-36	+1320	341,144 1,486,425
Y1	1408		74° 32' 22"	" "	10.1	91° 40'	-40.9	-51.0		5897.0	Y1			ROAD NORTH
680	1650		74° 37' 25"	" "	12.8	91° 40'	-48.0	-60.8		5887.2	TP	-38	+1649	341,142 1,486,754
680	1650				8.1	91° 50'	-52.8	-60.9			TP			
	1650		252° 52' 14" -180	+16.7	+10.7	87° 50'	-62.3	-51.6	5835.6		BS	+12	+1649	
	1650			" "	+5.9	88° -	-57.6	-51.7			BS			
681	1320		253° 02'	" "	8.7	88° -	+46.0	+37.3		5872.9		-6	-1320	341,148 1,487,083
682	990		253° 05'	" "	8.7	87° 40'	+40.3	+31.6		5867.2		-4	-990	341,150 1,487,413
683	660		253° 29'	" "	6.7	87° 40'	+26.8	+20.1		5855.7		+2	-660	341,156 1,487,743

SURVEY NOTES-HIGH RESOLUTION DATA

GSO#445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY			LINE NO.		PAGE				
4-30-82		B. Cotcamp		T. Patton		6834		Jm			1		53				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER			
UTAH		MARTIN PASS - 7 1/2		UTAH		MILLARD								L. DAVIS			
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS	
														Y	X		
									5835.6								
684	330		254° 09'	+16.7	5.9	87° 40'	+13.4	+7.5		5843.1		+5	-330	341,159	1,488,073		
685	0				5.4	-		-5.4		5830.2	X	0	0	341,154	1,488,403		
686	330		77° 34'	+16.7	6.0	91° 40'	-9.6	-15.6		5820.0		-25	+329	341,129	1,488,732		
687	660		" "	" "	9.7	91° 40'	-19.2	-28.9		5806.7		-49	+658	341,105	1,489,061		
688	990		" "	" "	10.8	91° 40'	-28.8	-39.6		5796.0		-74	+987	341,080	1,489,390		
689	1320		" "	" "	7.6	91° 40'	-38.4	-46.0		5789.6		-98	+1316	341,056	1,489,719		
690	1649		77° 34' 20"	" "	7.2	91° 40'	-47.9	-55.1		5780.5	TP	-123	+1614	341,031	1,490,047		
690	1649				12.0	91° 30'	-43.2	-55.2			TP						
	990		257° 23' 35" -180	+16.7	+6.9	88° -	-34.5	-27.6	5752.9		BS	-71	+987				
	990				+4.0	88° 10'	-31.7	-27.7			BS						
691	660		257° 24'	+16.7	6.6	88° -	+23.0	+16.4		5769.3		+47	-658	341,007	1,490,376		
692	330		" "	" "	6.1	88° -	+11.5	+5.4		5758.3		+24	-329	340,984	1,490,705		
693	0				5.4	-		-5.4		5747.5	X	0	0	340,960	1,491,034		
694	330		79° 26'	+16.7	9.3	91° -	-5.8	-15.1		5737.8		-35	+328	340,925	1,491,362		
695	660		" "	" "	13.2	91° -	-11.5	-24.7		5728.2		-71	+656	340,889	1,491,690		
696	990		80° 31'	" "	10.7	91° 20'	-23.0	-33.7		5719.2		-124	+982	340,836	1,492,016		
TP	989		82° 36' 07"	" "	5.4	91° 30'	-25.9	-31.3		5771.6	Bm	-160	+976	340,800	1,492,010		
TP	989				8.3	91° 20'	-23.0	-31.3			Bm						

Y=340,800 X=1,492,010  
 U.S.C.G.S Bm EL 5722.  
 Horiz y=111'  
 CORR. x=19'

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
5-3-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1	54					
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER					
UTAM		MARTIN PASS-7 1/2		UTAM		MILLARD					L. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
										5721.6				340,800	1,492,010	
	2310	2309.0	261° 46' 55" -180	+16.4	+9.8	88° 20'	-67.2	-57.4	5664.2		BS	-329	+2286			
	2310				+3.1	88° 30'	-60.5	-57.4		BS				-3		
697	1980		262° 35'	+16.4	11.8	88° 20'	+57.6	+45.8		5710.0		+309	-1956	340,781	1,492,337	
698	1650		" "	" "	9.9	88° 20'	+480	+38.1		5702.3		+258	-1630	340,730	1,492,663	
699	1320		" "	" "	13.1	88° 20'	+38.4	+25.3		5689.5		+206	-1304	340,678	1,492,989	
700	996		262° 35'	" "	11.1	88° 20'	+28.8	+17.7		5681.9		+155	-978	340,627	1,493,315	
701	660		" "	" "	8.5	88° 20'	+19.2	+10.7		5674.9		+103	-652	340,575	1,493,641	
702	330		" "	" "	6.7	88° 20'	+9.6	+2.9		5667.1		+52	-326	340,524	1,493,967	
703	0				5.4	-		-5.4		5658.8	TP	0	0	340,472	1,494,293	
704	330		92° 01'	+16.4	9.0	91° 30'	-8.6	-17.6		5646.6		-104	+313	340,368	1,494,606	
705	660		93° 37'	" "	10.3	91° 30'	-17.3	-27.6		5636.6		-226	+620	340,246	1,494,913	
706	996		93° 59'	" "	10.0	91° 30'	-25.9	-35.9		5628.3		-345	+928	340,127	1,495,221	
707	1320		94° 16'	" "	8.5	91° 30'	-34.5	-43.0		5621.2		-466	+1235	340,006	1,495,528	
708	1650		" "	" "	5.9	91° 30'	-43.2	-49.1		5615.1		-582	+1544	339,890	1,495,837	
709	1980		94° 15' 50"	" "	6.4	91° 10'	-40.3	-46.7	5617.5		TP	-699	+1852	339,774	1,496,142	
709	1980		" "	" "	12.2	91° -	-34.6	-46.8		TP				-3		
	2635		277° 03' 01" -180	+16.4	+13.9	88° 30'	-69.1	-55.2	5562.3		BS	-1048	+2417			
	2635				+6.2	88° 40'	-61.5	-55.3		BS				-3		
710	2305		277° 17'	+16.4	7.0	88° 40'	+53.6	+46.6		5608.9		+926	-2111	339,653	1,496,445	
711	1975		277° 22'	" "	10.1	88° 40'	+45.9	+35.8		5598.1		+796	-1808	339,523	1,496,748	

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE	5-3-82	INSTRUMENT MAN	B. Cotcamp	ROD MAN	M. KNAPP	PARTY NUMBER	6834	NOTES CHECKED BY	MPK dm	LINE NO.	1	PAGE	55	
AREA	UTAH	TOPO MAP	MARTIN PASS/NOTCH PEAK	STATE	UTAH	COUNTY	MILLARD	TWP		RANGE		PPM	PARTY MANAGER	L. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									5562.3					
712	1645		277° 01'	+16.4	9.4	88° 30'	+43.0	+33.6		5595.9		+654	-1510	339,381 1,497,046
713	1317		276° 13'	" "	9.2	88° 30'	+34.5	+25.3		5587.6		+506	-1216	339,233 1,497,340
714	988		275° 09'	" "	8.1	88° 30'	+25.9	+17.8		5580.1		+363	-919	339,090 1,497,637
715	660		272° 47'	" "	6.6	88° 30'	+17.3	+10.7		5573.0		+217	-623	338,944 1,497,933
716	330		267° 55'	" "	6.0	88° 30'	+8.6	+2.6		5564.9		+82	-320	338,809 1,498,236
717	0				5.4	-	-	-5.4		5556.9	TP	0	0	338,727 1,498,556
718	330		81° 51'	+16.4	7.5	90° 50'	-4.8	-12.3		5550.0		-47	+327	338,680 1,498,883
719	660		" "	" "	9.1	90° 50'	-9.6	-18.7		5543.6		-95	+653	338,632 1,499,209
720	990		" "	" "	8.3	91° -	-17.3	-25.6		5536.7		-142	+980	338,585 1,499,536
721	1320		81° 51'	" "	9.9	91° -	-23.0	-32.9		5529.4		-189	+1306	338,538 1,499,862
722	1650		" "	+16.4	11.3	91° -	-28.8	-40.1		5522.2		-237	+1633	338,490 1,500,189
723	1980		" "	" "	13.0	91° -	-34.6	-47.6		5514.7		-284	+1960	338,443 1,500,516
724	2310		" "	" "	7.6	91° 10'	-47.0	-54.6		5507.7		-331	+2286	338,396 1,500,842
725	2640		81° 51' 13"	" "	6.8	91° 10'	-53.6	-60.4		5501.9	TP	-379	+2612	338,349 1,501,165
725	2640		" "	" "	14.5	91° -	-45.9	-60.4			TP			
	1320		261 39 56 -180	+16.4	+10.3	88° 30'	-34.5	-24.2	5477.7		BS	-185	+1306	
	1320		" "	+6.4		88° 40'	-30.7	-24.3			BS			
726	990		261 40'	+16.4	9.8	88° 30'	+25.9	+16.1		5493.8		+139	-980	338,304 1,501,489
727	660		" "	" "	7.9	88° 30'	+17.3	+9.4		5487.1		+93	-653	338,258 1,501,816
Bm	536		266 39 13"	" "	7.2	88° 30'	+14.0	+6.8		5484.5	Bm	+121	-522	338,286 1,501,947

y-338,295x-1,501,900  
U.S.C.G.S Bm EL. 5484.

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE					
4-4-82		B. Catcamp		M. Knapp		6834		UPK Jm		1		56					
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER			
UTAH		NOTCH Peak-15'		UTAH		Millard								L. Davis			
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	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS	
														Y	X		
									5477.7								
728	330		261° 40'	+16.4	6.1	88° 30'	+8.6	+2.5		5480.2		+46	-327	338,211	1,502,142		
729	0				5.4	-		-5.4		5472.3	TP	0	0	338,165	1,502,469		
1K	160		68° 51' 01"	+16.4	7.1	90° 30'	-1.4	-8.5		5469.2	1K						
730	330		70° 06'	" "	8.2	90° 30'	-2.9	-11.1		5466.6		+20	+329	338,185	1,502,798		
731	656		63° 32'	" "	16.2	90° 30'	-5.7	-15.9		5461.8		+115	+646	338,280	1,503,115		
732	981		58° 28'	" "	7.7	91° -	-17.1	-24.8		5452.9		+256	+947	338,421	1,503,416		
733	1305		56° 24' 32"	+16.8	8.5	91° -	-22.8	-31.3		5446.4	TP	+377	+1249	338,542	1,503,716	around corner	
733	1305				12.3	90° 50'	-19.0	-31.3			TP						
	990		251° 38' 07" -180	+16.8	+5.3	88° 40'	-23.0	-17.7	5428.7		BS	+27	+989				
	990				+8.2	88° 30'	-25.9	-17.7			BS						
734	660		251° 39'	+16.8	7.9	88° 30'	+17.3	+9.4		5438.1		-18	-660	338,551	1,504,043	↑	
735	330		" "	" "	7.9	88° 30'	+8.6	+0.7		5429.4		-9	-330	338,560	1,504,373	NOTCH Peak-15'	
736	0				5.4	-		-5.4		5423.3	TP	0	0	338,569	1,504,703	LONG RIDGE Reservoir	
737	330		64° 34'	+16.8	7.9	90° 40'	-3.8	-11.7		5417.0		+50	+326	338,619	1,505,029	↓	
738	660		" "	" "	5.0	90° 40'	-7.7	-12.7		5416.0		+99	+653	338,668	1,505,356		
41	720		63° 58' 26"	" "	4.5	90° 40'	-8.4	-12.9		5415.8	41	-	-			↑	
739	990		64° 34' 20"	" "	7.3	90° 40'	-11.5	-18.8			TP	+148	+979	338,717	1,505,680	LONG RIDGE Reservoir	
739	990				4.3	90° 50'	-14.4	-18.7		5410.0	TP						
	2310		244° 16' 37" -180	+16.8	+10.7	89° -	-40.3	-29.6			BS	+358	+2282			WHIRLWIND VALLEY S.W. - 7 1/2	
	2310			" "	+6.8	89° 06'	-36.3	-29.5	5380.5		BS						

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
5-4-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1		57				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
UTAM		WHIRLWIND VALLEY SW.		UTAH		MILLARD								L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									5380.5							
740	1980		244° 01'	+16.8	9.0	89° -	+34.6	+25.6		5406.1		-316	+955	338,759	1,506,005	WHIRL WIND VALLEY
741	1650		" "	" "	6.7	89° -	+28.8	+22.1		5402.6		-263	-1629	338,812	1,506,331	S.W. 7 1/2
747	1320		243° 46'	" "	9.2	88° 50'	+26.9	+17.7		5398.2		-216	-1302	338,859	1,506,658	
743	990		243° 18'	" "	7.4	88° 50'	+20.2	+12.8		5393.3		-170	-975	338,905	1,506,985	
744	660		242° 51'	" "	7.8	88° 40'	+15.4	+7.6		5388.1		-119	-649	338,956	1,507,311	
745	330		" "	" "	6.3	88° 40'	+7.7	+1.4		5381.9		-59	-325	339,016	1,507,635	
746	0				5.4	-		-5.4		5375.1	T	0	0	339,075	1,507,960	
747	330		60° 32'	+16.8	12.9	91° 10'	-6.7	-19.6		5360.9		+72	+322	339,147	1,508,282	
748	660		" "	" "	11.0	91° 10'	-13.4	-24.4		5356.1		+145	+644	339,220	1,508,604	
749	990		" "	" "	7.9	91° -	-17.3	-25.2		5355.3		+217	+966	339,292	1,508,926	
750	1320		60° 32'	" "	7.3	91° -	-23.0	-30.3		5350.2		+289	+1288	339,364	1,509,248	
751	1650		" "	" "	10.0	91° 10'	-33.6	-43.6		5336.9		+362	+1610	339,437	1,509,570	
752	1980		" "	" "	10.1	90° 50'	-28.8	-38.9		5341.6		+434	+1932	339,509	1,509,892	
±1	2071		60° 23' 04"	" "	10.2	90° 50'	-30.1	-40.3		5340.2	±1	+459	+2019	339,534	1,509,979	±1 - 339,510 x - 1,509,920
753	2309		60° 31' 41"	" "	9.8	90° 50'	-33.6	-43.4		5337.1	TP	+506	+2253	339,581	1,510,211	±1 T-RD NORTH EL. 53400
753	2309		" "	" "	5.8	90° 56'	-37.6	-43.4			TP					
	5282		240 37 59 - 180	+16.6	+9.9	89° -	-92.8	-82.9			BS	+1167	+5151			
	5282		" "		+13.0	271 02	-95.8	-82.8	5254.3		BS					
754	4950		240 38	+16.6	9.6	89° -	+86.9	+77.3		5331.6		-1094	-4828	339,654	1,510,532	
755	4620		" "	" "	10.0	89° -	+81.1	+71.1		5325.4		-1021	-4506	339,727	1,510,854	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 5-4-82	INSTRUMENT MAN B. Cotcamp	ROD MAN M. KNAPP	PARTY NUMBER 6834	NOTES CHECKED BY MPK dm	LINE NO. 1	PAGE 58
AREA UTAH	TOPO MAP WHIRLWIND VALLEY S.W.	STATE UTAH	COUNTY MILLARD	TWP	RANGE	PPM
				PARTY MANAGER L. Davis		

STATION NO.	SLOPE DISTANCE	PLOTting DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
									5254.3									
756	4290		240° 38'	+16.6	9.9	89° -	+75.2	+65.3		5319.6		-948	-4184	339,800	1,511,176			
757	3960		" "	" "	10.0	89° -	+69.4	+59.4		5313.7		-875	-3862	339,873	1,511,498			
758	3630		" "	" "	11.9	89° -	+63.6	+51.7		5306.0		-802	-3540	339,946	1,511,820			
759	3300		" "	" "	11.3	89° -	+57.8	+46.5		5300.8		-729	-3218	340,019	1,512,142			
B.M.	3276		239° 45' 37"	" "	11.1	89° -	+57.4	+46.3		5300.6	B.M.	-772	-3183	339,976	1,512,177		y=339,990 x=1,512,195 U.S.C.G.S B.M. EL. 5300.0	
760	2970		240° 38'	+16.6	10.7	89° -	+52.0	+41.3		5295.6		-656	-2897	340,092	1,512,463			
761	2640		" "	" "	10.8	89° -	+46.2	+35.4		5289.7		-583	-2575	340,165	1,512,785			
762	2310		" "	" "	11.0	89° -	+40.3	+29.3		5283.6		-510	-2253	340,238	1,513,107			
763	1980		240° 38'	" "	12.0	89° -	+34.6	+22.6		5276.9		-438	-1931	340,310	1,513,429			
764	1650		" "	" "	11.8	89° -	+28.8	+17.0		5271.3		-365	-1609	340,383	1,513,751			
765	1650 1370		" "	" "	12.0	89° -	+23.0	+11.0		5265.3		-292	-1287	340,456	1,514,073			
766	990		" "	+16.6	12.5	89° -	+17.3	+4.8		5259.1		-219	-966	340,529	1,514,394			
767	660		240° 38'	" "	9.2	89° -	+11.5	+2.3		5256.6		-146	-644	340,602	1,514,716			
768	330		" "	" "	6.3	89° -	+5.8	-0.5		5253.8		-73	-322	340,675	1,515,038			
769	0				5.4	-		-5.4		5248.9	T	0	0	340,748	1,515,360			
770	330		60° 39'	+16.6	6.8	90° 30'	-2.9	-9.7		5244.6		+73	+322	340,821	1,515,682			
771	660		" "	" "	9.5	90° 30'	-5.8	-15.3		5239.0		+146	+644	340,894	1,516,004			
772	990		" "	" "	10.8	90° 30'	-8.6	-19.4		5234.9		+218	+966	340,966	1,516,326			
773	1320		" "	" "	10.9	90° 30'	-11.5	-22.4		5231.9		+291	+1287	341,039	1,516,647			
774	1650		" "	" "	10.3	90° 30'	-14.4	-24.7		5229.6		+364	+1609	341,112	1,516,969			

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE 5-4-82	INSTRUMENT MAN B. Cotcamp	ROD MAN M. Kwapp	PARTY NUMBER 6834	NOTES CHECKED BY MKK Jm	LINE NO. 1	PAGE 59
AREA UTAH	TOPO MAP WHIRLWIND VALLEY S.W.	STATE UTAH	COUNTY MILLARD	TWP	RANGE	PPM
				PARTY MANAGER L. Davis		

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									5254.3							
Bm	1833		62° 57' 17"	+16.6	9.8	90° 30'	-16.0	-25.8		5228.5	Bm	+332	+1803	341,080	1,517,163	9-341,100 X-1517,145 N.S.C.G.S Bm EL52280
775	1980		60° 39'	" "	6.2	90° 40'	-23.0	-29.2		5225.1		+437	+1931	341,185	1,517,291	
776	2310		" "	" "	9.3	90° 40'	-26.9	-36.2		5218.1		+510	+2253	341,258	1,517,613	
777	2640		" "	" "	7.6	90° 40'	-30.6	-38.2		5216.1		+583	+2575	341,331	1,517,935	
778	2970		" "	+16.6	9.6	90° 40'	-34.4	-44.0		5210.3		+655	+2897	341,403	1,518,257	
779	3300		60° 39'	" "	11.9	90° 40'	-38.2	-50.1		5204.2		+728	+3219	341,476	1,518,579	
<del>780</del>	3630		" "	" "	12.7	90° 40'	-42.0	-54.7		5199.6		+801	+3540	341,549	1,518,900	
781	3960		" "	" "	8.0	90° 46'	-52.7	-60.7		5193.6		+874	+3862	341,622	1,519,222	
782	4292		60° 38' 41"	+16.4	14.6	90° 40'	-49.6	-64.2		5190.1	TP	+962	+4182	341,710	1,519,540	
782	4292				12.2	269° 18'	-52.1	-64.3			TP					
	1320		240° 48' 25" - 180	+16.4	+9.3	89° -	-23.0	-13.7	5176.4		BS	+292	+1287			
	1320				+5.4	89° 10'	-19.2	-13.8			BS					
783	990		240° 48'	+16.4	7.3	89° -	+17.3	+10.0		5186.4		-219	-965	341,783	1,519,860	
784	660		" "	" "	5.5	89° -	+11.5	+6.0		5182.4		-146	-644	341,856	1,520,181	
785	330		" "	" "	9.0	88° -	+11.5	+2.5		5178.9		-73	-322	341,929	1,520,503	
786	0				5.4	-		-5.4		5171.0	X	0	0	342,002	1,520,825	
787	330		60° 41'	+16.4	6.9	90° 30'	-2.9	-9.8		5166.6		+74	+322	342,076	1,521,147	
788	660		" "	" "	9.0	90° 30'	-5.8	-14.8		5161.6		+148	+643	342,150	1,521,468	
789	990		" "	" "	10.5	90° 30'	-8.6	-19.1		5157.3		+221	+965	342,223	1,521,790	
790	1321		" "	" "	10.8	90° 30'	-11.5	-22.3		5154.1		+295	+1287	342,297	1,522,112	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	5-4-82	INSTRUMENT MAN	B. Cotcamp	ROD MAN	M. Knapp	PARTY NUMBER	6834	NOTES CHECKED BY	MLK Lm	LINE NO.	1	PAGE	60	
AREA	UTAH	TOPO MAP	WHIRLWIND VALLEY 3.W	STATE	UTAH	COUNTY	M. HAZO	TWP		RANGE		PPM	PARTY MANAGER	L. DAVIS

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									5176.4							
FF	1405		60° 15' 11"	+16.4	10.5	90° 30'	-12.3	-22.8		5153.6	FF	+324	+1367	342,326	1,522,192	FF 4 way INT.
Bm	1507		62° 11' 04"	" "	10.8	90° 30'	-13.2	-24.0		5152.4	TP	+298	+1477	342,300	1,522,300	y=342,300 x=1,522,300 U.S.C.G.S BM EL. 5153.0
Bm	1507				6.4	90° 40'	-17.5	-23.9			TP					Horiz CORR. y+5 x-32
	3112		239° 53' 08" -180	+16.2	+12.9	89° 10'	-45.5	-32.6			BS	+748	+3020			
	3112				+11.2	89° 12'	-43.6	-32.4	5120.0		BS					
791	2967		240° 34'	+16.2	13.6	89° 10'	+43.3	+29.7		5149.7		-679	-2888	342,364	1,522,478	
792	2638		" "	" "	6.6	89° 20'	+30.8	+24.2		5144.2		-604	-2568	342,439	1,522,748	
793	2308		" "	" "	7.7	89° 20'	+26.8	+19.1		5139.1		-528	-2247	342,515	1,523,069	
794	1980		" "	" "	7.0	89° 20'	+23.0	+16.0		5136.0		-453	-1927	342,590	1,523,389	
795	1650		240° 34'	" "	8.9	89° 20'	+19.2	+10.3		5130.3		-378	-1606	342,665	1,523,710	
796	1320		" "	+16.2	6.2	89° 20'	+15.4	+9.2		5129.2		-302	-1285	342,741	1,524,031	
797	990		" "	" "	8.0	89° -	+17.3	+9.3		5129.3		-227	-964	342,816	1,524,352	
798	660		" "	" "	7.1	89° -	+11.5	+4.4		5124.4		-151	-642	342,892	1,524,674	
799	330		" "	" "	10.0	89° -	+5.8	-4.2		5115.8		-76	-321	342,967	1,524,995	
800	0				5.4	-		-5.4		5114.6	A	0	0	343,043	1,525,316	
801	330		60° 43'	+16.2	8.2	91° -	-5.8	-14.0		5106.0		+75	+321	343,118	1,525,637	
802	660		" "	" "	8.2	91° -	-11.5	-19.7		5100.3		+149	+643	343,192	1,525,959	
803	990		" "	" "	12.0	90° 30'	-8.6	-20.6		5099.4		+224	+964	343,267	1,526,280	
804	1320		" "	" "	9.9	90° 30'	-11.5	-21.4		5098.6		+299	+1286	343,342	1,526,602	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-5-82		B. Cotcamp		M. Knapp		6834		MKR		1		61			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		WHEELING VALLEY S.W. 7 1/2		UTAH		M. ILLARD								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5120.0						
805	1650		60° 43'	+16.2	12.8	90° 30'	-14.4	-27.2		5092.8		+374	+1607	343,417	1,526,923
806	1980		" "	" "	8.9	90° 40'	-23.0	-31.9		5088.1		+448	+1929	343,491	1,527,245
807	2310		" "	" "	6.8	90° 40'	-26.9	-33.7		5086.3		+523	+2250	343,566	1,527,566
Bm	2483		63° 14' 35"	" "	2.1	90° 40'	-28.9	-31.0		5089.0	Bm	+455	+2441	343,498	1,527,757
808	2640		60° 43'	+16.2	9.3	90° 30'	-22.9	-32.2		5087.8		+598	+2571	343,641	1,527,887
809	2970		" "	" "	6.8	90° 30'	-25.7	-32.5		5087.5		+672	+2893	343,715	1,528,209
810	3296		60° 37' 14"	" "	3.7	90° 30'	-28.5	-32.2		5087.8	TP	+751.5	+3209.4	343,789	1,528,521
810	3296				13.3	90° 20'	-19.0	-32.3			TP				
	1453		241° 00' 18" - 180°	+16.2	+5.7	89° -	-25.4	-19.7	5068.1		BS	+322.5	+1417.4		
	1453				+10.0	88° 50'	-29.6	-19.6			BS				
811	1123		241° 00'	+16.2	3.2	89° -	+19.6	+16.4		5084.5		-249	-1095	343,857	1,528,839
812	793		" "	" "	7.2	89° -	+13.8	+6.6		5074.7		-176	-773	343,930	1,529,161
813	463		" "	" "	10.7	89° -	+8.1	-2.6		5065.5		-103	-451	344,003	1,529,483
Fence line	209		242° 55' 04"	" "	8.2	89° -	+3.6	-4.6		5063.5	Fence line	-39	-205	344,067	1,529,729
814	133		241° 00'	" "	5.4	89° 30'	+1.2	-4.2		5063.9		-29	-130	344,077	1,529,804
π	0				5.4	-	-	-5.4		5062.7	π	0	0	344,106	1,529,934
815	205		33° 42'	+16.2	8.4	-	-	-8.4		5059.7		+132	+157	344,238	1,530,091
816	535		" "	" "	9.7	-	-	-9.7		5058.4		+345	+409	344,451	1,530,313
817	865		" "	" "	12.1	-	-	-12.1		5056.0		+557	+662	344,663	1,530,516
818	1195		" "	" "	11.3	84	-6.0	-17.3		5050.8		+770	+914	344,876	1,530,838

y-343,495 x-1,527,730  
EL 5089.0

y-344,070 x-1,529,715  
SEC LINE + RD. INTER. 50640

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
5-5-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1	62						
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER								
UTAH		Whirlwind Valley S.W.	UTAM	MILLARD					L. Davis								
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									5068.1								
819	1525		34° 14' 23"	+16.5	9.2	90° 40'	-17.7	-26.9	5041.2	TP	TP	+965.5	+1181.4	345,066	1,531,111		
819	1525				13.6	90° 30'	-13.3	-26.9									
	660		230° 36' 11" -180°	+16.5	+10.2	89° -	-11.5	-1.3	5039.9	BS	BS	+257.4	+608.4				
	660				+8.3	89° 10'	-9.6	-1.3									
820	330		230° 36'	+16.5	7.1	88° 40'	+7.7	+0.6	5040.5			-128	-304	345,191	1,531,411		
821	0				5.4	-		-5.4	5034.5	TP	TP	0	0	345,319	1,531,715		
822	370		52° 23"	+16.5	8.7	89° 40'	+1.9	-6.8	5033.1			+119	+308	345,438	1,532,023		
Bm	404		44° 35' 48"	"	17.3	89° 40'	+2.4	-9.9	5030.0	TP	TP	+195.4	+354.4	345,510	1,532,065	y=345,510 x=1,532,065 Bm Horiz CORR = 24' EL. 50300	
	404				10.0	-		-10.0									
	2905		242° 52' 42" -120°	+16.5	+7.4	89° 10'	-47.4	-35.0	4995.0	BS	BS	+535.4	+2855.4				
	2905				+14.1	89° 02'	-49.2	-35.1									
823	2638		242° 09'	+16.5	8.0	89° 10'	+38.5	+30.5	5025.5			-519	-2586	345,527	1,532,335		
824	2310		" "	" "	10.3	89° 10'	+33.6	+23.3	5018.3			-455	-2265	345,591	1,532,656		
825	1980		" "	" "	11.4	89° 10'	+28.8	+17.4	5012.4			-390	-1941	345,656	1,532,980		
826	1650		" "	" "	10.1	89° 10'	+24.0	+13.9	5008.9			-325	-1618	345,721	1,533,303		
827	1320		242° 09'	+16.5	13.1	89° 10'	+19.2	+6.1	5001.1			-260	-1294	345,786	1,533,627		
828	990		" "	" "	12.5	89° 10'	+14.4	+1.9	4996.9			-195	-971	345,851	1,533,950		
829	660		" "	" "	11.2	89° 10'	+9.6	-1.6	4993.4			-130	-647	345,916	1,534,247		
830	330		" "	" "	7.8	89° 10'	+4.8	-3.0	4992.0			-65	-324	345,981	1,534,597		
831	0				5.4	-		-5.4	4989.6	TP	TP	0	0	346,046	1,534,921		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-6-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1		63			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		Whirlwind Valley S.W. 7 1/2		UTAM		M. Haro								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4995.0						
832	330		62° 25'	+16.5°	8.1	-		-8.1		4986.9		+63	+324	346,109	1,535,245
833	660		" "	" "	13.0	-		-13.0		4982.0		+127	+648	346,173	1,535,569
834	990		" "	" "	6.4	90° 50'	-14.4	-20.8		4974.2		+190	+972	346,236	1,535,893
835	1320		" "	" "	6.0	90° 50'	-19.2	-25.2		4969.8		+254	+1295	346,300	1,536,216
836	1650		62° 25'	+16.5°	4.6	90° 50'	-24.0	-28.6		4966.4		+317	+1619	346,363	1,536,540
837	1980		" "	" "	7.3	90° 50'	-28.8	-36.1		4958.9		+381	+1943	346,427	1,536,864
838	2308		62° 38' 27"	" "	7.1	90° 40'	-26.8	-33.9		4961.1	TP	+435	+2267	346,482	1,537,189
838	2308		" "	" "	13.8	90° 30'	-20.1	-33.9			TP	+1	+1		
	1314		241° 07' 18" -180	+16.5°	+1.0	TH	-6.6	-5.6	4955.5		BS	+282	+1283		
	1314		" "	" "	+5.9	89° 30'	-11.5	-5.6			BS	+1	+1		
839	986		239° 04'	+16.5°	7.0	89° 30'	+8.6	+1.6		4957.1		-246	-955	346,519	1,537,518
840	658		236° 38'	" "	8.0	89° 30'	+5.7	-2.3		4953.2		-191	-630	346,574	1,537,843
841	330		232° 57'	" "	5.1	89° 30'	+2.9	-2.2		4953.3		-116	-309	346,649	1,538,164
842	0		" "	" "	5.4	-		-5.4		4950.1	TP	0	0	346,765	1,538,473
843	330		52° 35'	+16.5°	8.9	-		-8.9		4946.6		+118	+308	346,883	1,538,781
844	660		" "	" "	13.2	-		-13.2		4942.3		+236	+617	347,001	1,539,090
845	990		" "	" "	12.6	84	-5.0	-17.6		4937.9		+353	+925	347,118	1,539,398
846	1320		" "	" "	9.2	90° 30'	-11.5	-20.7		4934.8		+471	+1233	347,236	1,539,706
847	1649		52° 34' 55"	" "	9.6	90° 30'	-14.4	-24.0		4931.5	TP	+589	+1540	347,359	1,540,014
847	1649		" "	" "	4.9	90° 40'	-19.2	-24.1			TP	+1	+1		

WHIRLWIND VALLEY S.W.  
RED KNOLLS - 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							
5-6-82		B. Cotcamp		M. Knapp		6834		MAX Ln		1		64							
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER					
UTAM		Red Knolls-7 1/2		UTAH		Millard								E. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X				
										4931.5									
	1976		232° 37' 06" - 180°	+16.5°	+9.3	89° -	-34.5	-25.2	4906.3		BS	+704	+1846						
	1976				+3.5	89° 10'	-28.7	-25.2		BS									
848	1646		232° 28'	+16.5°	8.8	89° -	+28.7	+19.9		4926.2		-591	-1536	347,469	1,540,324			ACROSS	
849	1317		232° 32'	" "	9.2	89° -	+23.0	+13.8		4920.1		-471	-1230	347,589	1,540,630			CORNER	
850	990		232° 41'	" "	7.9	89° -	+17.3	+9.4		4915.7		-352	-925	347,708	1,540,935				
851	660		233° 13'	" "	5.8	89° -	+11.5	+5.7		4912.0		-229	-619	347,831	1,541,241				
852	330		234° 46'	" "	8.9	89° -	+5.8	-3.1		4903.2		-106	-313	347,954	1,541,547				
853	0				5.4	-		-5.4		4900.9	X	0	0	348,060	1,541,860				
Bm	236		97° 06' 13"	+16.5°	8.2	89° -	+4.1	-4.1		4902.2	Bm	-94	+216	347,966	1,542,076			4-347,995 X-1,542,100 4-242 Bm	
TP	290		68° 03' 13"	" "	3.2	-		-3.2		4903.1	TP	+28	+289	348,088	1,542,149			4-242 EL. 4903.0 T-RO NORTH	
854	330		69° 48'	" "	7.7	89° 10'	+4.8	-2.9		4903.4		+21	+329	348,081	1,542,189				
855	660		" "	" "	9.5	89° 10'	+9.6	+0.1		4906.4		+43	+659	348,103	1,542,519				
856	990		" "	+16.5°	6.8	89° 10'	+14.4	+7.6		4913.9		+64	+988	348,124	1,542,848				
857	1320		" "	" "	8.6	89° -	+23.0	+14.4		4920.7		+85	+1317	348,145	1,543,177				
858	1649		69° 32' 14"	" "	9.5	89° -	+28.8	+19.3	4925.6		TP	+114	+1645	348,175	1,543,505				
858	1649				4.7	89° 10'	+24.0	+19.3		TP									
	2307		249° 47' 04" - 180°	+16.5°	+12.6	TM	-11.5	+1.1	4926.7		BS	+150	+2302						
	2307				+7.8	89° 50'	-6.7	+1.1		BS									
859	1980		249° 47'	+16.5°	9.0	89° 50'	+5.8	-3.2		4923.5		-128	-1976	348,198	1,543,831				
860	1650		" "	" "	9.5	-		-9.5		4917.2		-107	-1647	348,219	1,544,160				

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-6-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1		65			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		RED Knolls-7 1/2'		UTAH		Millards								L. Quis	
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
									4926.7						
861	1320		249° 47'	+16.5°	9.2	TH	+6.6	-2.6		4924.1		-86	-1317	348,240	1,544,490
862	990		" "	" "	5.8	TH	+5.0	-0.8		4925.9		-64	-988	348,262	1,544,819
863	660		" "	" "	7.2	89° 30'	+5.8	-1.4		4925.3		-43	-659	348,283	1,545,148
864	330		" "	" "	5.8	89° 20'	+2.9	-2.9		4923.8		-21	-329	348,305	1,545,478
865	0				5.4	-		-5.4		4921.3	X	0	0	348,326	1,545,807
Bm	165		116° 06' 41"	+16.5°	3.9	-		-3.9		4922.8	Bm	-112	+121	348,214	1,545,928
866	330		69° 46'	" "	7.4	-		-7.4		4919.3		+21	+329	348,347	1,546,136
867	660		" "	" "	11.2	-		-11.2		4915.5		+43	+659	348,369	1,546,466
868	990		" "	" "	9.0	BH	-5.0	-14.0		4912.7		+64	+988	348,390	1,546,795
869	1320		" "	" "	8.9	BH	-6.6	-15.5		4911.2		+86	+1317	348,412	1,547,124
870	1650		69° 46'	+16.5°	8.4	Bm	-8.3	-16.7		4910.0		+107	+1647	348,433	1,547,454
871	1980		" "	" "	8.7	BH	-9.9	-18.6		4908.1		+129	+1976	348,455	1,547,783
872	2310		" "	" "	9.4	BH	-11.6	-21.0		4905.7		+150	+2305	348,476	1,548,112
873	2638		69° 39' 25"	" "	10.0	Bm	-13.1	-23.1		4903.6	TP	+177	+2632	348,504	1,548,439
873	2638		" "	" "	7.9	90° 20'	-15.2	-23.1			TP				
	3296		249° 30' 04" -180	+16.5°	+8.3	89° 20'	-38.6	-30.3	4873.3		BS	+230	+3288		
	3296				+14.0	270 46'	-44.3	-30.3			BS				
874	2970		249° 30'	+16.5°	7.0	89° 20'	+34.7	+27.7		4901.0		-207	-2963	348,528	1,548,764
875	2640		" "	" "	8.0	89° 20'	+30.9	+22.9		4896.2		-184	-2634	348,551	1,549,093
876	2310		" "	" "	10.5	89° 20'	+26.9	+16.4		4889.7		-161	-2304	348,574	1,549,423

X-1846 905  
S-65 Y-348,235  
S-LRC 1972 EL. 4923.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-6-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1		66			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Rep Knolls-7 1/2		UTAH		Millard								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4873.3						
877	1980		249° 30'	+16.5°	9.0	89° 20'	+23.0	+14.0		4887.3		-138	-1975	348,597	1,549,752
878	1650		" "	" "	9.1	89° 20'	+14.2	+10.1		4885.4		-115	-1646	348,620	1,550,081
879	1320		" "	" "	8.2	89° 20'	+15.4	+7.2		4880.5		-92	-1317	348,643	1,550,410
880	990		249° 30'	+16.5°	7.2	89° 20'	+11.5	+4.3		4877.6		-69	-988	348,666	1,550,739
881	660		" "	" "	6.2	89° 20'	+7.7	+1.5		4874.8		-46	-658	348,689	1,551,069
882	330		" "	" "	5.9	89° 20'	+3.8	-2.1		4871.2		-23	-329	348,712	1,551,398
883	0				5.4	-		-5.4		4867.9	TP	0	0	348,735	1,551,727
884	330		69° 30'	+16.5°	7.9	-		-7.9		4865.4		+23	+329	348,758	1,552,056
Bm	351		61° 01' 07"	" "	7.2	-		-7.2		4866.1	Bm	+76	+343	348,811	1,552,070
885	660		69° 30'	" "	12.3	-		-12.3		4861.0		+46	+658	348,781	1,552,385
886	990		" "	" "	12.7	Bm	-5.0	-17.7		4855.6		+69	+988	348,804	1,552,715
887	1320		" "	" "	11.1	90° 30'	-11.5	-22.6		4850.7		+92	+1317	348,827	1,553,044
888	1650		" "	" "	11.2	90° 30'	-14.4	-25.6		4847.7		+115	+1646	348,850	1,553,373
889	1980		69° 30'	+16.5°	8.9	90° 30'	-17.3	-26.2		4847.1		+138	+1975	348,873	1,553,702
890	2310		" "	" "	8.1	90° 30'	-20.2	-28.3		4845.0		+161	+2304	348,896	1,554,031
891	2640		" "	" "	13.2	90° 30'	-22.9	-36.1		4837.2		+184	+2634	348,919	1,554,361
892	2970		" "	" "	9.9	90° 30'	-25.7	-35.6		4837.7		+207	+2963	348,942	1,554,690
893	3297		69° 30' 12"	" "	1.1	90° 30'	-28.5	-29.6		4843.7	TP	+230	+3289	348,966	1,555,016
893	3297				10.6	269° 40'	-19.0	-29.6			TP				

4-348,840  
X-1,552,110 EL. 4867.0

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
5-6-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1	67					
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
UTAH		RED KNOLLS - 7 1/2'	UTAH	MILLARD					L. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
										4843.7						
	3626		249° 27' 25" - 180	+16.5°	+10.0	TH	-18.4	-8.4	4835.3		BS	+256	+3617			
	3626				+12.8	270° 20'	-21.4	-8.6			BS	+1				
894	3300		249° 27'	+16.5°	10.2	TH	+16.7	+6.5		4841.8		-233	-3292	348,990	1,555,341	
895	2970		" "	" "	10.0	TH	+15.1	+5.1		4840.4		-210	-2963	349,013	1,555,670	
44	2862		249° 35' 61"	" "	9.4	TH	+14.5	+5.1		4840.4	44	-195	-2855	349,028	1,555,778	Y-349,025 X-1,555,760 H-WAY INT. EL 48425
896	2640		249° 27'	+16.5°	10.7	TH	+13.3	+2.6		4837.9		-186	-2633	349,037	1,556,000	
897	2310		" "	" "	9.7	TH	+11.6	+1.9		4837.2		-163	-2304	349,060	1,556,329	
898	1980		" "	" "	9.6	TH	+9.9	+0.3		4835.6		-140	-1975	349,083	1,556,658	
899	1650		" "	" "	9.0	TH	+8.3	-0.7		4834.6		-117	-1646	349,106	1,556,987	
900	1320		" "	" "	8.3	TH	+6.6	-1.7		4833.6		-93	-1317	349,130	1,557,316	
901	990		249° 27'	+16.5°	8.4	TH	+5.0	-3.4		4831.9		-70	-988	349,153	1,557,645	
902	660		" "	" "	8.6	TH	+3.3	-5.3		4830.0		-47	-658	349,176	1,557,975	
903	330		" "	" "	5.3	-		-5.3		4830.0		-23	-329	349,200	1,558,304	
904	0				5.4	-		-5.4		4829.9	X	0	0	349,223	1,558,633	
905	330		69° 31'	+16.5°	7.3	-		-7.3		4828.0		+23	+329	349,246	1,558,962	
906	660		" "	" "	6.9	-		-6.9		4828.4		+46	+658	349,269	1,559,291	
907	990		" "	" "	6.8	-		-6.8		4828.5		+69	+988	349,292	1,559,621	
908	1320		" "	" "	9.0	-		-9.0		4826.3		+92	+1317	349,315	1,559,950	
~Hm.	1615		69° 21' 26"	" "	14.8	-		-14.8		4820.5		+117	+1611	349,340	1,560,279	Y-349,350 X-1,560,260 WASHOUT
909	1650		69° 31'	+16.5°	6.6	BY	-8.3	-14.9		4820.4		+115	+1646	349,338	1,560,279	

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-6-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1		68			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Red Knolls-7 1/2		UTAH		Millard								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4835.3						
910	1980		69° 31'	+16.5°	7.0	BH	-9.9	-16.9		4818.4		+138	+1975	349,361	1,560,608
911	2310		" "	" "	4.6	BH	-11.6	-16.2		4819.1		+160	+2304	349,383	1,560,937
912	2640		" "	" "	4.0	BH	-13.3	-17.3		4818.0		+183	+2634	349,406	1,561,267
913	2970		" "	" "	3.0	BH	-15.1	-18.1		4817.2		+206	+2963	349,429	1,561,596
914	3296		69° 13' 53"	+16.5°	14.9	90° 05'	-4.6	-19.5		4815.8	TP	+245	+3287	349,468	1,561,920
914	3296				15.1	269° 55'	-4.6	-19.7			TP				
	330		246° 13' 41" -180	+16.5°	+1.9	-		+1.9	4817.7		BS	+42	+327		
	330				+0.2	BH	+1.7	+1.9			BS				
915	0				5.4	-		-5.4		4812.3	X	0	0	349,510	1,562,247
916	330		65° 40'	+16.5°	6.1	-		-6.1		4811.6		+45	+327	349,555	1,562,574
Bm	459		58° 21' 23"	+16.5°	4.8	-		-4.8		4812.9	TP	+120	+443	349,630	1,562,690
Bm	459				7.1	TH	+2.3	-4.8			TP				
K1	u.s.c.g.s	Bench MARK	P-38	1934	Elevation	4814.0			4814.0		K1				
	1834		224° 29' 47" -180	+16.2°	+8.1	-		+8.1	4822.1		BS	+898	+1599		
	1834				+13.4	89° 50'	-5.3	+8.1			BS				
17	1647		222° 03'	+16.2°	8.8	-		-8.8		4813.3		-867	-1401	349,661	1,562,866
18	1320		" "	" "	10.8	-		-10.8		4811.3		-695	-1122	349,833	1,563,165
19	990		223° 03'	" "	12.0	-		-12.0		4810.1		-506	-851	350,022	1,563,436
20	660		224° 42'	" "	11.4	-		-11.4		4810.7		-321	-577	350,207	1,563,710
21	330		" "	" "	10.2	-		-10.2		4811.9		-160	-288	350,368	1,563,999

y-349,630 x-1,562,690  
P-38 1934  
u.s.c.g.s Bn EL 4814.0  
HORIZ y +11'  
CORR. x +41'

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-13-82		B. Cotcamp		M. KNAPP		6834		MPK Jm		1		69			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		Rep. Knolls - 7 1/2'		UTAM		MILLARD								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4822.1						
922	0				5.4	-		-5.4		4816.7	π	0	0	350,528	1,564,287
923	330		45° 24'	+16.2°	9.3	91° 10'	-6.7	-16.0		4806.1		+157	+290	350,685	1,564,577
924	660		43° 40'	" "	5.7	91° 10'	-13.4	-19.1		4803.0		+331	+571	350,839	1,564,858
925	986		38° 51'	" "	7.3	90° 50'	-14.3	-21.6		4800.5		+565	+808	351,093	1,565,095
926	1314		36° 34'	" "	7.9	90° 50'	-19.1	-27.0		4795.1		+795	+1046	351,323	1,565,393
927	1641		34° 55'	" "	6.6	90° 50'	-23.9	-30.5		4791.6	TP	+1030	+1277	351,558	1,565,562
927	1641				11.4	90° 40'	-19.1	-30.5			TP				
	1649		207° 52' 44" - 180°	+16.2°	+9.9	TH	-8.2	+1.7		4793.3	BS	+1185	+1147		
	1649				+6.4	89° 50'	-4.8	+1.6			BS				
928	1320		207° 13'	+16.2°	8.1	89° 50'	+3.8	-4.3		4789.0		-959	-907	351,784	1,565,800
929	990		206° 13'	" "	8.4	89° 50'	+2.9	-5.5		4787.8		-731	-668	352,012	1,566,039
930	660		204° 27'	" "	7.7	89° 50'	+1.9	-5.8		4787.5		-501	-430	352,242	1,566,277
931	330		201° 27'	" "	7.4	89° 10'	+4.8	-2.6		4790.7		-261	-202	352,482	1,566,505
932	0				5.4	-		-5.4		4787.9	π	0	0	352,743	1,566,707
933	330		21° 08'	+16.2°	8.7	-		-8.7		4784.6		+262	+200	353,005	1,566,907
934	660		" "	" "	11.3	-		-11.3		4782.0		+525	+400	353,268	1,567,107
935	990		20° 01'	" "	12.1	-		-12.1		4781.2		+799	+585	353,512	1,567,292
936	1320		19° 02'	" "	13.0	-		-13.0		4780.3		+1078	+762	353,821	1,567,469
937	1650		18° 33'	" "	5.2	84	-8.3	-13.5		4779.8		+1356	+940	354,099	1,567,647

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-13-82		B. Cottramp		M. Knapp		6834		MPK Jm		1		70			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		Red Knolls-7 1/2'		UTAM		Millard								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4793.3						
938	1980		17° 18' 22"	+16.2°	15.0	-		-15.0		4778.3	TP	+1651	+1093.2	354,394	1,567,798
938	1980				5.1	BH	-9.9	-15.0			TP				
	2027		183° 16' -180°	+16.2°	+1.3	-		+1.3	4779.6		BS	+1911	+676.2		
	2027				+11.4	TH	-10.1	+1.3			BS				
939	1697		183° 02'	+16.2°	9.4	TH	+8.5	-0.9		4778.7		-1602	-559	354,703	1,567,913
940	1367		" "	" "	9.1	TH	+6.8	-2.3		4777.3		-1291	-450	355,014	1,568,022
941	1037.		" "	" "	8.9	TH	+5.2	-3.7		4775.9		-979	-342	355,326	1,568,130
942	707		" "	" "	5.3	-		-5.3		4774.3		-668	-233	355,637	1,568,239
943	377		" "	" "	6.2	TH	+1.9	-4.3		4775.3		-356	-124	355,949	1,568,348
944	52		157° 06'	" "	7.1	-		-7.1		4772.5		-52	+6	356,253	1,568,478
X	0				5.4	-		-5.4		4774.2	X	0	0	356,305	1,568,472
945	312		60° 36'	+16.2°	9.2	-		-9.2		4770.4		+71	+304	356,376	1,568,776
946	642		" "	" "	10.2	-		-10.2		4769.4		+147	+625	356,452	1,569,097
947	972		" "	" "	12.0	-		-12.0		4767.6		+222	+946	356,527	1,569,418
948	1302		" "	" "	8.8	BH	-6.5	-15.3		4764.3		+297	+1268	356,602	1,569,740
#1	1554		60° 26' 06"	" "	7.7	BH	-7.8	-15.5		4764.1	#1	+359	+1512	356,664	1,569,984
949	1632		60° 36'	+16.2°	7.8	BH	-8.2	-16.0		4763.6		+373	+1589	356,678	1,570,061
950	1962		" "	" "	7.3	BH	-9.8	-17.1		4762.5		+448	+1910	356,753	1,570,382
951	2292		60° 27' 29"	" "	7.1	BH	-11.5	-18.6		4761.0	TP	+529	+2230.2	356,834	1,570,700
951	2292				11.9	90° 10'	-6.7	-18.6			TP				

y=356,650 x=1,569,980  
T-RD NORTH

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-13-82		B. Cotcamp		M. Knapp		6834		MPK dm		1		71			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Reo Knolls - 7 1/2		UTAH		Millard								L. Oquis	
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
										4761.0					
	1651		236° 18' 01" - 180	+16.2°	+4.3	89° 20'	-19.2	-14.9	4746.1		BS	+496	+1574.2		
	1651				+9.1	89° 10'	-24.0	-14.9			BS				
952	1320		236° 10'	+16.2°	8.5	89° 30'	+11.5	+3.0		4749.1		-400	-1258	356,930	1,571,014
953	990		" "	" "	7.8	89° 30'	+8.6	+0.8		4746.9		-300	-943	357,030	1,571,329
954	660		" "	" "	9.3	89° 30'	+5.8	-3.5		4742.6		-200	-629	357,130	1,571,643
955	330		" "	" "	8.4	89° 30'	+2.9	-5.5		4740.6		-100	-314	357,230	1,571,958
956	0				5.4	-	-	-5.4		4740.7	TP	0	0	357,330	1,572,272
957	330		67° 42'	+16.2°	6.0	-	-	-6.0		4740.1		+35	+328	357,365	1,572,600
958	660		" "	" "	7.1	-	-	-7.1		4739.0		+70	+656	357,400	1,572,928
959	990		66° 34'	" "	8.9	-	-	-8.9		4737.2		+125	+982	357,455	1,573,254
960	1320		65° 58'	" "	10.2	-	-	-10.2		4735.9		+180	+1308	357,510	1,573,580
961	1651		63° 23' 05"	" "	12.5	-	-	-12.5			TP	+298	+1624.2	357,628	1,573,894
961	1651				4.3	84	-8.3	-12.6		4733.5	TP				
	5282		244° 16' 32" - 180	+16.2°	+6.0	TH	-27.0	-21.0			BS	+874	+5209.2		
	5282				+10.7	270° 20'	-31.3	-20.6	4712.7		BS				
962	4950		244° 17'	+16.2°	12.3	89° 40'	+29.3	+17.0		4729.7		-818	-4882	357,684	1,574,219
963	4620		" "	" "	13.0	89° 40'	+27.3	+14.3		4727.0		-764	-4556	357,738	1,574,545
964	4290		" "	" "	13.2	89° 40'	+25.3	+12.1		4724.8		-709	-4231	357,793	1,574,870
965	3960		" "	" "	13.0	89° 40'	+23.4	+10.4		4723.1		-655	-3906	357,847	1,575,195
966	3630		" "	" "	11.8	89° 40'	+21.4	+9.6		4722.3		-600	-3580	357,902	1,575,521

↑  
Reo Knolls - 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				
5-13-82		B. Cotcamp		M. Kwapp		6834		MPK Jm		1		72				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
UTAM		CLAY Knolls-7 1/2		UTAH		MILLARD								L. Davis		
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	X
									4712.7							
967	3300		244° 17'	+16.2°	11.0	89° 40'	+19.4	+8.4		4721.1		-546	-3255	357,956	1,575,846	CLAY KNOLLS-7 1/2'
968	2970		" "	" "	10.4	89° 40'	+17.5	+7.1		4719.8		-491	-2929	358,011	1,576,172	↓
14	2918		244° 23' 06"	" "	10.5	89° 40'	+17.2	+6.7		4719.4	14	-	-			T-RO NORTH EL. 4719.4
969	2640		244° 17'	" "	10.9	89° 40'	+15.5	+4.6		4717.3		-436	-2604	358,066	1,576,497	
970	2310		" "	" "	10.3	89° 40'	+13.4	+3.1		4715.8		-382	-2278	358,120	1,576,823	
971	1980		" "	" "	10.7	89° 40'	+11.5	+0.8		4713.5		-327	-1953	358,175	1,577,148	
972	1650		" "	" "	10.0	89° 40'	+9.6	-0.4		4712.3		-273	-1627	358,229	1,577,474	
973	1320		244° 17'	+16.2°	9.3	89° 40'	+7.7	-1.6		4711.1		-218	-1302	358,284	1,577,799	
974	990		" "	" "	8.5	89° 40'	+5.8	-2.7		4710.0		-164	-976	358,338	1,578,125	
975	660		" "	" "	8.9	89° 40'	+3.8	-5.1		4707.6		-109	-651	358,393	1,578,450	
976	330		" "	" "	8.3	89° 40'	+1.9	-6.4		4706.3		-55	-325	358,447	1,578,776	
977	0				5.4	-		-5.4		4707.3	π	0	0	358,502	1,579,101	
71	169		62° 46' 49"	+16.2°	5.9	-		-5.9		4706.8	71	+32	+160	358,534	1,579,267	4-358,490 x-1,579,305 T-RO NORTH EL. 4707.0
978	330		64° 03'	" "	5.9	-		-5.9		4706.8		+56	+325	358,558	1,579,426	
979	660		" "	" "	9.1	-		-9.1		4703.6		+112	+650	358,614	1,579,751	
980	990		" "	" "	12.2	84		-5.0	-17.2	4695.5		+168	+976	358,670	1,580,077	
981	1320		64° 03'	+16.2°	9.8	90° 40'		-15.4	-25.2	4687.5		+224	+1301	358,726	1,580,402	
982	1650		" "	" "	7.0	90° 40'		-19.2	-26.2	4686.5		+279	+1626	358,781	1,580,727	
983	1980		" "	" "	5.2	90° 40'		-23.0	-28.2	4684.5		+335	+1951	358,837	1,581,052	
984	2310		" "	" "	8.8	90° 30'		-20.2	-29.0	4683.7		+391	+2277	358,893	1,581,378	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445\*

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
5-13-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1	73						
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER								
UTAM		CLAY Knolls-7 1/2	UTAM	MILLARD					L. Davis								
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									4712.7								
985	2640		64° 03'	+16.2	8.2	90° 30'	-22.9	-31.1		4681.6		+447	+2602	358,949	1,581,703		
986	2970		" "	" "	8.9	90° 30'	-25.7	-34.6		4678.1		+503	+2927	359,005	1,582,008		
987	3300		" "	" "	7.1	90° 30'	-28.6	-35.7		4677.0		+559	+3252	359,061	1,582,353		
988	3630		" "	" "	7.3	90° 30'	-31.4	-38.7		4674.0		+615	+3578	359,117	1,582,679		
989	3960		64° 03'	+16.2	7.0	90° 30'	-34.2	-41.2		4671.5		+671	+3903	359,173	1,583,004		
990	4290		" "	" "	7.8	90° 30'	-37.1	-44.9		4667.8		+727	+4228	359,229	1,583,329		
991	4620		" "	" "	7.3	90° 30'	-39.9	-47.2		4665.5		+782	+4553	359,284	1,583,654		
992	4950		" "	" "	6.8	90° 30'	-42.7	-49.5		4663.2		+838	+4879	359,340	1,583,980		
993	5284		64° 00' 01"	+16.4	8.7	90° 30'	-45.5	-54.2	44.53	4658.4	TP	+881	+5210	359,383	1,584,309		
993	5284		" "	" "	8.9	89° 30'	-45.5	-54.4			TP						
	4292		243° 39' 08" -180	+16.4	+6.3	89° 30'	-37.8	-31.5			BS	+741	+4227				
	4292				+13.7	89° 24'	-45.3	-31.6	4626.8		BS	-1					
994	3960		243° 39'	+16.4	6.3	89° 30'	+34.9	+28.6		4655.4		-684	-3900	359,439	1,584,634		
995	3630		" "	" "	6.2	89° 30'	+31.9	+25.7		4652.5		-627	-3575	359,496	1,584,959		
996	3300		" "	" "	6.3	89° 30'	+29.0	+22.7		4649.5		-570	-3250	359,553	1,585,284		
997	2970		" "	" "	6.2	89° 30'	+26.1	+19.9		4646.7		-513	-2925	359,610	1,585,609		
998	2640		243° 39'	+16.4	6.4	89° 30'	+23.2	+16.8		4643.6		-456	-2600	359,667	1,585,934		
999	2310		" "	" "	6.7	89° 30'	+20.2	+13.5		4640.3		-399	-2275	359,724	1,586,259		
1000	1980		" "	" "	6.4	89° 30'	+17.3	+10.9		4637.1		-342	-1950	359,781	1,586,584		
1001	1650		" "	" "	6.2	89° 30'	+14.4	+8.2		4635.0		-285	-1625	359,838	1,586,909		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
5-13-82		B. Cutcamp		M. Knapp		6834		MPK Jm		1	74					
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
UTAM		CLAY Knolls-7 1/2		UTAH	MILLARD					L. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
									4626.8							
1002	1320		243° 39'	+16.4°	6.0	89° 30'	+11.5	+5.5		4632.3		-228	-1300	359,895	1,587,234	
1003	990		" "	"	5.5	89° 30'	+8.6	+3.1		4629.9		-171	-975	359,952	1,587,569	
1004	660		" "	"	5.6	89° 30'	+5.8	+0.2		4627.0		-114	-650	360,009	1,587,884	
1005	330		" "	"	5.2	89° 30'	+2.9	-2.3		4624.5		-57	-325	360,066	1,588,209	
1006	0				5.4	-		-5.4		4621.4	TP	0	0	360,123	1,588,534	
1007	330		63° 39'	+16.4°	7.7	-		-7.7		4619.1		+57	+325	360,180	1,588,859	
1008	660		" "	"	9.7	-		-9.7		4617.1		+114	+650	360,237	1,589,184	
1009	990		" "	"	12.0	-		-12.0		4614.8		+171	+975	360,294	1,589,509	
1010	1320		" "	"	7.3	BH	-6.6	-13.9		4612.9		+228	+1300	360,351	1,589,834	
1011	1650		" "	"	7.9	BH	-8.3	-16.2		4610.6		+285	+1625	360,408	1,590,159	
1012	1980		" "	"	8.0	BH	-9.9	-17.9		4608.9		+342	+1950	360,465	1,590,484	
1013	2310		" "	"	8.0	BH	-11.6	-19.6		4607.2		+399	+2275	360,522	1,590,809	
1014	2640		63° 18'	+16.4°	9.2	BH	-13.1	-22.3		4604.5		+472	+2597	360,595	1,591,131	
1015	2970		63° 15'	"	10.8	BH	-14.7	-25.5		4601.3		+534	+2922	360,657	1,591,456	
1016	3300		" "	"	10.2	BH	-16.3	-26.5		4600.3		+593	+3246	360,716	1,591,780	
1017	3630		63° 18'	"	10.0	BH	-17.9	-27.9		4598.9		+649	+3572	360,772	1,592,106	
1018	3960		63° 13' 23"	"	9.9	BH	-19.5	-29.4		4597.4	TP	+713	+3895	360,835	1,592,427	
1018	3960		" "	"	6.7	90° 20'	-22.7	-29.4			TP					
	2971		243 37 30 -180	+16.4°	+2.6	TH	-15.1	-12.5	4584.9		BS	+515	+2926			
	2971				+5.0	89° 40'	-17.5	-12.5			BS					

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-13-82		B. Cotcamp		M. Knapp		6834		MPK <i>dm</i>		1		75			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		CLAY Knolls-7 1/2'		UTAH		MILLARD								L. Davis	
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 TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4584.9						
1019	2640		243° 34'	+16.4°	6.5	89° 40'	+15.5	+9.0		4593.9		-460	-2600	360,889	1,592,751
1020	2310		" "	"	5.8	89° 40'	+13.4	+7.6		4592.5		-402	-2275	360,947	1,593,076
1021	1980		" "	"	5.0	89° 40'	+11.5	+6.5		4591.4		-345	-1950	360,004	1,593,401
1022	1650		" "	"	5.2	89° 40'	+9.6	+4.4		4589.3		-287	-1625	361,062	1,593,726
1023	1320		" "	"	8.8	89° 40'	+7.7	-1.1		4583.8		-230	-1300	361,119	1,594,051
1024	990		" "	"	8.9	89° 40'	+5.8	-3.1		4581.8		-172	-975	361,177	1,594,376
SEC. CORN.	908		252° 54' 13"	+16.4°	8.2	89° 40'	+5.3	-2.9		4582.0	SEC. CORN.	-11	-908	361,338	1,594,443
1025	660		243° 34'	"	7.2	89° 40'	+3.8	-3.4		4581.5		-115	-650	361,234	1,594,701
1026	330		" "	"	5.2	89° 40'	+1.9	-3.3		4581.6		-57	-325	361,292	1,595,026
1027	0				5.4	-		-5.4		4579.5	TP	0	0	361,349	1,595,351
	68		67° 42' 49"	+16.4°	5.8	-		-5.8		4579.1		+7	+68	361,356	1,595,419
1028	330		74° 09'	"	9.9	-		-9.9		4576.0		-3	+330	361,346	1,595,681
1029	660		" "	"	10.7	-		-10.7		4574.2		-6	+660	361,343	1,596,011
1030	990		" "	"	11.7	-		-11.7		4573.2		-10	+990	361,339	1,596,341
1031	1320		" "	"	7.1	B4	-6.6	-13.7		4571.2		-13	+1320	361,336	1,596,671
1032	1650		74° 09'	+16.4°	6.8	B4	-8.3	-15.1		4569.8		-16	+1650	361,333	1,597,001
1033	1980		" "	"	5.8	B4	-9.9	-15.7		4569.2		-19	+1980	361,330	1,597,331
1034	2310		" "	"	4.7	B4	-11.6	-16.3		4568.6		-22	+2310	361,327	1,597,661
1035	2641		74° 08' 31"	"	2.8	B4	-13.1	-15.9		4569.1	TP	-25	+2641	361,323	1,597,985
1035	2641				8.2	90° 10'	-7.5	-15.7	-15.9	4569.1	TP				

1-361305 X-1,594,480  
GENERAL LAND OFFICE  
T-17 SAN EL. 4582.0

IN CORNER.  
|| Y-  
|| T-20 NORTH X-

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
5-13-82		B. Cotcamp		M. Knapp		6834		MPK Jim		1	76					
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER					
UTAM		CLAY Knolls-7 1/2		UTAM		MILLARD					L. Van's					
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	
	1320		254° 12' 54" -180°	+16.4°	+1.1	-		+1.1		4569.1	BS	-14	+1320			
	1320				+7.6	TH	-6.6	+1.0	4570.1		BS	-1	-7			
1036	990		254° 13'	+16.4°	7.0	TH	+5.0	-2.0		4568.1		+11	-990	361,319	1,598,308	
1037	660		" "	" "	6.5	TH	+3.3	-3.2		4566.9		+7	-660	361,315	1,598,638	
1038	330		" "	" "	6.0	TH	+1.7	-4.3		4565.8		+4	-330	361,312	1,598,968	
1039	0				5.4	-		-5.4		4564.7	TP	0	0	361,308	1,599,298	
1040	330		74° 07'	+16.4°	5.3	-		-5.3		4564.8		-3	+330	361,305	1,599,628	
Sec. COEN.	421		82° 49' 56"	" "	4.7	-		-4.7		4565.4	Sec. COEN	-68	+416	361,240	1,599,714	y-361,240 x-1,599,710 1934 T773 Geol. Land Off. Surv. EL. 4566.8
1041	660		74° 07'	" "	6.0	-		-6.0		4564.1		-6	+660	361,302	1,599,958	
1042	990		" "	" "	7.0	-		-7.0		4563.1		-9	+990	361,299	1,600,288	
Bm	1011		71° 11'	+16.4°	6.1	-		-6.1		4564.0	TP	+43	+1010	361,350	1,600,300	y-361,350 x-1,600,300 1935 1934 Geol. Coast & Geo. EL. 4564.0 HOB. 4-6 CORR. x-48
Bm	1011				11.2	TH	+5.1	-6.1			TP	-1	-8			
	3615		255° 36' 15" -180°	+16.4°	+1.7	-		+1.4	4565.4		BS	-126	+3613			
	3615				+12.2	89° 50'	-10.8	+1.4			BS		+5			
1043	3300		254° 49'	+16.4	12.8	89° 50'	+9.8	-3.0		4562.4		+70	-3299	361,294	1,600,619	
1044	2970		" "	" "	12.8	89° 50'	+8.8	-4.0		4561.4		+63	-2969	361,287	1,600,949	
1045	2640		" "	" "	12.1	89° 50'	+7.8	-4.3		4561.1		+56	-2639	361,280	1,601,279	
1046	2310		" "	" "	11.9	89° 50'	+6.7	-5.2		4560.2		+49	-2309	361,273	1,601,609	
1047	1980		" "	" "	11.4	89° 50'	+5.8	-5.6		4559.8		+42	-1980	361,266	1,601,938	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-15-82		B. Cotcamp		M. KWAPP		6834		MPK Jim		1		77			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		CLAY KNOLS - 7 1/2'		UTAM		M. Haro									
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
									4565.4						
1048	1650		254° 49'	+16.4	10.4	89° 50'	+4.8	-5.6		4559.8		+35	-1650	361,259	1,602,268
1049	1320		" "	" "	9.5	89° 50'	+3.8	-5.7		4559.7		+28	-1320	361,252	1,602,598
1050	990		" "	" "	8.7	89° 50'	+2.9	-5.8		4559.6		+21	-990	361,245	1,602,928
1051	660		" "	" "	7.9	89° 50'	+1.9	-6.0		4559.4		+14	-660	361,238	1,603,258
1052	330		254° 49'	" "	6.8	89° 50'	+1.0	-5.8		4559.6		+7	-330	361,231	1,603,588
IF	104		258° 39' 27"	+16.4	5.6	89° 50'	+0.3	-5.3		4560.1	IF	+9	-104	361,233	1,603,814
1053	0				5.4	-		-5.4		4560.0	X	0	0	361,224	1,603,918
1054	330		75° 15'	+16.4	6.6	90° 10'	-1.0	-7.6		4557.8		-10	+330	361,214	1,604,248
1055	660		" "	" "	5.1	90° 10'	-1.9	-7.0		4558.4		-19	+660	361,205	1,604,578
1056	990		75° 15'	" "	5.7	90° 10'	-2.9	-8.6		4556.8		-29	+990	361,195	1,604,908
1056	1700	DRAINAGE DITCH	74° 55' 48"	" "	6.1	90° 10'	-3.5	-9.6		4555.8	DRAIN DITCH	-28	+1202	361,196	1,605,120
1057	1320		75° 15'	+16.4	6.4	90° 10'	-3.8	-10.2		4555.2		-38	+1319	361,186	1,605,237
1058	1650		" "	" "	6.4	90° 10'	-4.8	-11.2		4554.2		-48	+1649	361,176	1,605,567
1059	1980		" "	" "	6.7	90° 10'	-5.8	-12.5		4552.9		-57	+1979	361,167	1,605,897
1060	2310		" "	" "	6.1	90° 10'	-6.7	-12.8		4552.6		-67	+2309	361,157	1,606,227
1061	2640		" "	+16.4	5.8	90° 10'	-7.5	-13.3		4552.1		-76	+2639	361,148	1,606,557
1062	2970		" "	" "	12.4	-		-12.2		4553.2		-86	+2969	361,138	1,606,887
1063	3301		75° 15' 06"	" "	13.3	-		-13.12	4552.3		TP	-95	+3300	361,129	1,607,223
1063	3301			" "	3.8	90° 10'	-9.4	-13.2			TP				

Y=361,235 X=1,603,835  
FT=20 SOUTH ELEV. 4560

Y=361,215 X=1,605,115  
DRAINAGE DITCH ELEV 4556

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-14-82		M. Knapp		B. Cotcamp		6834		MPK Jm		1		78			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		CLAY KNOOLS - CRAFTS LAKE - 7 1/2'		UTAH		MILLARD								L. Davis	
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 TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4552.3						
	3962		255° 19' 33" - 180°	+16.1°	+3.4	-		+3.17			BS	-99	+3961		
	3962				+8.2	89° 36'	-4.9	+13.3	4555.6		BS				
1064	3630		255° 20'	+16.1°	9.5	89° 56'	+4.5	-5.0	4550.6			+91	-3629	361,121	1,607,560
1065	3300		" "	" "	9.7	89° 56'	+4.1	-5.6	4550.0			+83	-3299	361,113	1,607,890
1066	2970		" "	" "	9.0	89° 56'	+3.6	-5.4	4550.2			+74	-2969	361,104	1,608,220
1067	2640		" "	" "	8.2	89° 56'	+3.2	-5.0	4550.6			+66	-2639	361,096	1,608,550
1068	2310		" "	" "	7.0	89° 56'	+2.7	-4.3	4551.3			+58	-2309	361,088	1,608,880
1069	1980		255° 20'	+16.1°	7.4	89° 56'	+2.3	-5.1	4550.5			+50	-1979	361,080	1,609,210
1070	1650		" "	" "	6.7	89° 56'	+1.9	-4.8	4550.8			+41	-1649	361,071	1,609,540
1071	1320		" "	" "	12.0	89° 40'	+7.7	-4.3	4551.3			+33	-1320	361,063	1,609,869
1072	990		" "	" "	9.4	89° 40'	+5.8	-3.6	4552.0			+25	-990	361,055	1,610,199
BM	746		252° 12' 08"	" "	9.1	89° 40'	+4.3	-4.8	4550.8		BM	-22	-744	361,008	1,610,445
1073	660		255° 20'	+16.1°	8.1	89° 40'	+3.8	-4.3	4551.3			+17	-660	361,047	1,610,529
1074	330		" "	" "	6.7	89° 40'	+1.9	-4.8	4550.8			+8	-330	361,038	1,610,859
1075	0				5.4	-		-5.4	4550.2		T	0	0	361,030	1,611,189
1076	330		75° 24'	+16.1°	7.8	89° 40'	+1.9	-5.9	4549.7			-9	+330	361,021	1,611,519
1077	660		" "	" "	10.2	89° 40'	+3.8	-6.4	4549.2			-17	+660	361,013	1,611,849
1078	990		" "	" "	12.4	89° 40'	+5.8	-6.6	4549.0			-26	+990	361,004	1,612,179
1079	1320		" "	" "	13.6	89° 40'	+7.7	-5.9	4549.7			-35	+1320	360,995	1,612,509

W 95 1934 C 36  
 Y 361,030 X 1,610,460  
 ELEV. 4551.0

↑  
 CLAY KNOOLS  
 CRAFTS LAKE  
 ↓

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5/15/82		M. KWAPP		B. COLAMP		6834		MPK Jm		1		79			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		CRAFTS LAKE 1/2'		UTAH		MILLARD								L. DAVIS	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4555.6						
1080	1650		75° 24'	+16.1	5.0	-		-5.0		4550.6		-43	+1649	360,987	1,612,838
1081	1980		" "	" "	6.7	89° 56'	+2.3	-4.4		4551.2		-52	+1979	360,978	1,613,168
1082	2310		" "	" "	9.0	89° 56'	+2.7	-6.3		4549.3		-60	+2309	360,970	1,613,498
1083	2640		" "	" "	9.5	89° 56'	+3.2	-6.3		4549.3		-69	+2639	360,961	1,613,828
1084	2970		75° 24'	" "	7.1	89° 56'	+3.6	-3.5		4552.1		-78	+2969	360,952	1,614,158
1085	3300		" "	" "	8.0	89° 56'	+4.1	-3.9		4551.7		-86	+3299	360,944	1,614,488
1086	3630		" "	" "	8.5	89° 56'	+4.5	-4.0		4551.6		-95	+3629	360,935	1,614,818
1087	3958		75° 23' 42"	+15.9	1.8	90° 02'	-2.0	-3.8		4551.8	TP	-89	+3957	360,941	1,615,151
1087	3958				4.3	-		-4.0			TP				
	2970		254° 32' 31" -180	+15.9	+9.3	-		+9.1			BS	-23	+2970		
	2970				+12.8	89° 56'	-3.6	+9.2	4561.0		BS				
1088	2640		254° 33'	+15.9	11.1	89° 56'	+3.2	-7.9		4553.1		+21	-2640	360,939	1,615,486
1089	2310		" "	" "	9.9	89° 56'	+2.7	-7.2		4553.8		+18	-2310	360,936	1,615,816
1090	1980		" "	" "	6.5	89° 56'	+2.3	-4.2		4556.8		+16	-1980	360,934	1,616,146
1091	1650		" "	" "	9.3	89° 56'	+1.9	-7.4		4553.6		+13	-1650	360,931	1,616,476
1092	1320		" "	+15.9	9.4	89° 56'	+1.5	-7.9		4553.1		+10	-1320	360,928	1,616,806
1093	990		254° 33'	" "	9.0	89° 56'	+1.1	-7.9		4553.1		+8	-990	360,926	1,617,136
1094	660		" "	" "	8.1	89° 56'	+0.8	-7.3		4553.7		+5	-660	360,923	1,617,466
1095	330		" "	" "	7.5	89° 20'	+3.8	-3.7		4557.3		+3	-330	360,921	1,617,796

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-15-82		M. Knapp		B. Cotcamp		6834		MPK dm		1		80			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		CRAFTS LAKE - 7 1/2'		UTAH		MILLARD								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4561.0						
1096	0				5.4	-		-5.4		4555.6	TP	0	0	360,918	1,618,126
1097	330		74°24'	+15.9	10.4	89°20'	+3.8	-6.6		4554.4		-2	+330	360,916	1,618,456
1098	660		" "	" "	13.5	89°20'	+7.7	-5.8		4555.2		-3	+660	360,915	1,618,786
1099	990		" "	" "	6.2	-		-6.2		4554.8		-5	+990	360,913	1,619,116
1100	1320		" "	" "	6.1	-		-6.1		4554.9		-7	+1320	360,911	1,619,446
1101	1650		" "	+15.9	6.0	-		-6.0		4555.0		-9	+1650	360,909	1,619,776
1102	1980		74°24'	" "	6.1	-		-6.1		4554.9		-10	+1980	360,908	1,620,106
1103	2310		" "	" "	5.5	-		-5.5		4555.5		-12	+2310	360,906	1,620,436
1104	2640		" "	" "	6.5	89°56'	+3.2	-3.3		4557.7		-14	+2640	360,904	1,620,766
1105	2970		" "	" "	10.0	89°56'	+3.6	-6.4		4554.6		-16	+2970	360,902	1,621,096
1106	3300		" "	+15.9	10.8	89°56'	+4.1	-6.7		4554.3		-17	+3300	360,901	1,621,426
1107	3629		74°24'06"	" "	10.6	89°56'	+4.5	-6.1		4554.9		-19	+3630	360,899	1,621,756
TP	3780		73°33'24"	" "	15.0	89°53'	+8.0	-7.02		4554.0	TP	+36 <sub>-1</sub>	+3780 <sub>+4</sub>	360,955	1,621,910
TP	3780			" "	9.0	89°54'	+1.7	-7.3			TP				
R1	U.S.C.G.S Bench MARK - X-35			1934		Elevation - 4555.0				4555.0	R1				X-35 1934 U.S.C.G.S. BM ELEV. 4555.0
	4140		255 42 17 - 16	+16.2	+13.8	-		+13.4		4568.6	BS	-138	+4138		
	4140				+14.3	270 -		+13.9			BS				
1108	3959		254 48	+16.2	13.3	-		-13.0		4555.6		+69	-3958	360,886	1,622,091
1109	3630		" "	" "	13.4	-		-13.1		4555.5		+63	-3629	360,880	1,622,420
1110	3300		" "	" "	13.3	-		-13.1		4555.5		+58	-3300	360,875	1,622,749

X-35 1934 U.S.C.G.S.  
BM ELEV. 4555.0  
Y-360,955 X-1,621,910  
HORIZ CORR. Y-+1  
X-+29  
U.S.C.G.S BM ELEV. 4555.0

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-17-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1		81			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		CRAFTS LAKE-7 1/2'		UTAH		M. ILLINO								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS A TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4568.6						
1111	2970		254° 48'	+16.2°	13.2	-		-13.0		4555.6		+52	-2970	360,869	1,623,079
1112	2640		" "	" "	12.3	-		-12.2		4556.4		+46	-2640	360,863	1,623,409
1113	2310		" "	" "	11.8	-		-11.8		4556.8		+40	-2310	360,857	1,623,799
1114	1980		" "	" "	10.7	-		-10.7		4557.9		+35	-1980	360,852	1,624,069
1115	1650		" "	" "	10.0	-		-10.0		4558.6		+29	-1650	360,846	1,624,399
1116	1320		254° 48'	+16.2°	8.9	-		-8.9		4559.7		+23	-1320	360,840	1,624,729
1117	990		" "	" "	9.7	TH	+5.0	-4.7		4563.9		+17	-990	360,834	1,625,059
1118	660		" "	" "	6.2	TH	+3.3	-2.9		4565.7		+12	-660	360,829	1,625,389
1119	330		" "	" "	5.0	TH	+1.7	-3.3		4565.3		+6	-330	360,823	1,625,719
1120	0				5.4	-		-5.4		4563.2	π	0	0	360,817	1,626,049
1121	330		74° 46'	+16.2°	8.0	-		-8.0		4560.6		-6	+330	360,811	1,626,379
1122	660		" "	" "	8.5	-		-8.5		4560.1		-11	+660	360,806	1,626,709
1123	990		" "	" "	8.3	-		-8.3		4560.3		-17	+990	360,800	1,627,039
1124	1320		" "	" "	8.8	-		-8.8		4559.8		-22	+1320	360,795	1,627,369
1125	1650		74° 46'	+16.2°	8.1	-		-8.1		4560.5		-28	+1650	360,789	1,627,699
1126	1980		" "	" "	8.2	-		-8.2		4560.4		-33	+1980	360,784	1,628,029
1127	2310		" "	" "	7.3	-		-7.3		4561.3		-39	+2310	360,778	1,628,359
1128	2640		" "	" "	5.9	-		-5.8		4562.8		-45	+2640	360,772	1,628,689
1129	2970		" "	" "	6.0	-		-5.8		4562.8		-50	+2970	360,767	1,629,019
1130	3300		" "	" "	6.9	-		-6.7		4561.9		-56	+3300	360,761	1,629,349

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
5-17-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1	82						
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER								
UTAH		CRAFTS LAKE-7 1/2	UTAH	MILLARD					L. Davis								
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									4568.6								
1131	3629		74° 46' 23"	+16.2°	7.7	-		-7.4		4561.2	TP	-62	+3628	360,755	1,629,678		
1131	3629				13.9	89° 54'	+6.6	-7.3			TP						
	3301		254° 43' 31" - 180	+16.2°	+12.0	-		+11.8	4573.0		BS	-53	+3301				
	3301				+8.2	90° 04'	+3.6	+11.8			BS						
1132	2970		254° 42'	+16.2°	12.5	-		-12.3		4560.7		+47	-2970	360,749	1,630,010		
1133	2640		" "	" "	12.4	-		-12.3		4560.7		+41	-2640	360,743	1,630,340		
1134	2310		" "	" "	12.1	-		-12.1		4560.9		+36	-2310	360,738	1,630,670		
1135	1980		" "	" "	12.1	-		-12.1		4560.9		+31	-1980	360,733	1,631,000		
1136	1650		254° 42'	+16.2°	12.1	-		-12.1		4560.9		+26	-1650	360,728	1,631,330		
1137	1320		" "	" "	11.8	-		-11.8		4561.2		+21	-1320	360,723	1,631,660		
1138	990		" "	" "	11.7	-		-11.7		4561.3		+16	-990	360,718	1,631,990		
1139	660		" "	" "	10.8	-		-10.8		4562.2		+10	-660	360,712	1,632,320		
1140	330		" "	" "	5.9	-		-5.9		4567.1		+5	-330	360,707	1,632,650		
1141	159		254° 57' 11"	+16.2°	4.2	-		-4.2		4568.8							
1141	0				5.4	-		-5.4		4567.6	TP	0	0	360,702	1,632,980		
1142	330		74° 48'	+16.2°	4.6	-		-4.6		4568.4		-6	+330	360,696	1,633,310		
1143	660		" "	" "	5.8	-		-5.8		4567.2		-12	+660	360,690	1,633,640		
1144	990		" "	" "	8.8	-		-8.8		4564.2		-17	+990	360,685	1,633,970		
1145	1320		" "	" "	7.2	-		-7.2		4565.8		-23	+1320	360,679	1,634,300		
1146	1650		" "	" "	6.2	-		-6.2		4566.8		-29	+1650	360,673	1,634,630		

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
5-17-82		B. Cotcamp		M. Knapp		6834		MPK dm		1	83						
AREA		TOPO MAP	STATE	COUNTY	TWP	RANGE	PPM	PARTY MANAGER									
UTAH		CRAFTS LAKE-7 1/2	UTAH	MILLARD				L. Davis									
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									4573.0								
1147	1980		74° 48'	+16.2	8.6	-		-8.6		4564.4		-35	+1980	360,667	1,634,960		
1148	2310		" "	" "	9.9	-		-9.9		4563.1		-40	+2310	360,662	1,635,290		
1149	2640		74° 44'	+16.2	10.3	-		-10.2		4562.8		-46	+2640	360,656	1,635,620		
1150	2970		" "	" "	10.0	-		-9.8		4563.2		-52	+2970	360,650	1,635,950		
1151	3233		74° 31' 41"		10.8	-		-10.6		4562.4	11	-41	+3233	360,661	1,636,213	y-360,625x-1,636,200 y-ROAD NORTH EL 4563	
1151	3298		74° 34' 42"	+16.3	10.8	-		-10.6		4562.4	TP	-51	+3298	360,650	1,636,219		
1151	3298				14.7	89° 56'	+4.1	-10.6			TP	-1					
	2639		254° 13' 25" -180	+16.3	+5.4	-		+5.3	4567.7		OS	-24	+2639				
	2639				+13.1	89° 50'	-7.8	+5.3			OS	-1					
1152	2310		254° 13'	+16.3	5.6	-		-5.6		4562.1		+21	-2310	360,646	1,636,609		
1153	1980		" "	" "	4.8	-		-4.8		4562.9		+18	-1980	360,643	1,636,939		
1154	1650		" "	" "	12.1	TK	+8.3	+3.8		4563.9		+15	-1650	360,640	1,637,269		
1155	1320		" "	" "	5.0	-		-5.0		4562.7		+12	-1320	360,637	1,637,599		
1156	990		" "	" "	4.9	-		-4.9		4562.8		+9	-990	360,634	1,637,929		
1157	660		" "	" "	4.7	-		-4.7		4563.0		+6	-660	360,631	1,638,259	LAST STA. BEFORE WATER	
0m	399		265° 43' 12"	+16.3	4.9	-		-4.9		4562.8	0m	+83	-390	360,708	1,638,529	U.S.G.S ST 415 1970 EL. 4563.0 y-360,700x-1,638,500	
1158	330		254° 13'	" "	5.9	TK	+1.7	-4.2		4563.5	r	+3	-330	360,628	1,638,889	FIRST STA. AFTER WATER	
1159	0				5.4	-		-5.4		4562.3	π	0	0	360,625	1,638,919		
1160	330		73° 44'	+16.3	5.4	-		-5.4		4562.3		±0	+330	360,625	1,639,249		
1161	660		" "	" "	5.1	-		-5.1		4562.6		±0	+660	360,625	1,639,579		

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE 5-17-82	INSTRUMENT MAN B. Cotcamp	ROD MAN M. Knapp	PARTY NUMBER 6834	NOTES CHECKED BY MPK Jon	LINE NO. 1	PAGE 84
AREA UTAH	TOPO MAP CRAFTS LAKE-7 1/2'	STATE UTAH	COUNTY MILLARD	TWP	RANGE	PPM
				PARTY MANAGER L. Davis		

STATION NO.	SLOPE DISTANCE	PLOTting DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4567.7						
1162	990		73° 44'	+16.3	5.0	-		-5.0		4562.7	-1	+990	360,624	1,639,909	
1163	1320		" "	" "	5.0	-		-5.0		4562.7	-1	+1320	360,624	1,640,239	
1164	1650		" "	" "	5.0	-		-5.0		4562.7	-1	+1650	360,624	1,640,569	
1165	1980		" "	" "	4.8	-		-4.8		4562.9	-1	+1980	360,624	1,640,899	
1166	2310		" "	" "	3.9	-		-3.9		4563.8	-1	+2310	360,624	1,641,229	
1167	2640		73° 44' 17"	+16.3°	3.3	-		-3.2		4564.5	TP	-2	+2640	360,622	1,641,560
1167	2640				10.9	89° 50'	+7.8	-3.1			TP	-1			
	2638		254° 07' 08" - 180	+16.3°	+14.6	89° 52'	-6.3	+8.3	4572.8		BS	-19	+2638		
	2638				+11.5	89° 56'	-3.2	+8.3			BS	-1			
1168	2310		254° 07'	+16.3°	11.4	89° 54'	+4.0	-7.4		4565.4		+17	-2310	360,619	1,641,889
1169	1980		" "	" "	11.0	89° 52'	+4.6	-6.4		4566.4		+14	-1980	360,616	1,642,219
Bm	1688		256° 24' 17"	" "	8.3	89° 52'	+3.9	-4.4		4568.4	Bm	+80	-1686	360,682	1,642,513
1170	1650		254° 18'	+16.3°	12.5	TM	+8.3	-4.2		4568.6		+17	-1650	360,619	1,642,519
1171	1320		" "	" "	7.0	TM	+6.6	-0.4		4572.4		+14	-1320	360,616	1,642,879
1172	990		" "	" "	6.2	TM	+5.0	-1.2		4571.6		+10	-990	360,612	1,643,209
1173	660		" "	" "	6.3	TM	+3.3	-3.0		4569.8		+7	-660	360,609	1,643,539
1174	330		" "	" "	5.3	-		-5.3		4567.5		+3	-330	360,605	1,643,869
1175	0				5.4	-		-5.4		4567.4	X	0	0	360,602	1,644,199
1176	330		74° 27'	+16.3°	5.0	-		-5.0		4567.8		-4	+330	360,598	1,644,529
1177	660		" "	" "	4.9	-		-4.9		4567.9		-9	+660	360,593	1,644,859

Y-360,695 X-1,644,900  
4.5.8.63  
T-35 1984 EL. 4568.0

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
5-17-82		B. Cotcamp		M. Knapp		6834		MPK <i>Ln</i>		1	85					
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
UTAH		CRAFTS LAKE- <sup>7 1/2</sup> Delta-16	UTAH	Millard					L. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH +	EAST +	COORDINATES		REMARKS
												SOUTH -	WEST -	Y	X	
												LAT.	DEP.			
1178	990		74° 27'	+16.3°	5.9	-		-5.9	4572.8	4566.9		-13	+990	360,589	1,645,189	
1179	1320		" "	" "	4.0	-		-4.0		4568.8		-17	+1320	360,585	1,645,519	
1180	1650		" "	" "	10.9	TH	+8.3	-2.6		4570.2		-22	+1650	360,580	1,645,849	
1181	1980		" "	" "	4.0	-		-4.0		4568.8		-26	+1980	360,576	1,646,179	
1182	2310		" "	+16.3°	5.8	-		-5.8		4567.0		-30	+2310	360,572	1,646,509	
1183	2638		" "	" "	5.9	-		-5.8		4567.0		-35	+2638	360,567	1,646,839	
<del>1184</del>	2736		74° 21' 31"	" "	14.3	89° 46'	+11.3	-3.0		4569.8	<del>TP</del>	-31	+2736	360,571	1,646,935	114-360,525 4567 36 hrs X-1646,905
Bm	2677		71° 58' 01"	+16.3°	10.2	89° 54'	+4.8	-5.4		4567.4	TP	+104	+2675	360,705	1,646,875	4-5.65 Bm
Bm	2677				13.3	89° 50'	+7.9	-5.4			TP					
	2606		257° 34' 17" -180	+16.3	+7.3	-		+7.2			BS	-176	+2600			96 HRS E.L. 4567.0
	2606				+14.8	89° 50'	-7.7	+7.1	4574.5		BS					
1184	2309		254° 26'	+16.3°	7.9	-		-7.9		4566.6		+30	-2309	360,558	1,647,167	
1185	1980		" "	" "	7.7	-		-7.7		4566.8		+25	-1980	360,553	1,647,496	
1186	1650		" "	" "	7.1	-		-7.1		4567.4		+21	-1650	360,549	1,647,826	
1187	1320		" "	" "	6.9	-		-6.9		4567.6		+17	-1320	360,545	1,648,156	
1188	990		254° 26'	+16.3°	6.7	-		-6.7		4567.8		+13	-990	360,541	1,648,486	
1189	660		" "	" "	5.2	-		-5.2		4569.3		+8	-660	360,536	1,648,816	
1190	330		" "	" "	6.2	TH	+1.7	-4.5		4570.0		+4	-330	360,532	1,649,146	
1191	0				5.4	-		-5.4		4569.1	<del>TP</del>	0	0	360,528	1,649,476	
1192	330		74° 35'	+16.3°	4.0	-		-4.0		4570.5		-5	+330	360,523	1,649,806	

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-18-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1		86			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Delta - 15'		UTAH		Millard								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4574.5						
1193	660		74° 35'	+16.3°	6.2	-	-6.2		4568.3			-10	+660	360,518	1,650,136
1194	990		" "	" "	7.1	-	-7.1		4567.4			-15	+990	360,513	1,650,466
1195	1320		" "	" "	6.3	-	-6.3		4568.2			-20	+1320	360,508	1,650,796
1196	1650		" "	" "	6.7	-	-6.7		4567.8			-25	+1650	360,503	1,651,126
1197	1980		74° 35'	+16.3°	6.2	-	-6.2		4568.3			-31	+1980	360,497	1,651,456
1198	2310		" "	" "	5.8	-	-5.8		4568.7			-36	+2310	360,492	1,651,786
1199	2640		74° 47' 13"	" "	5.0	-	-4.9		4569.6		TP	-50	+2640	360,477	1,652,117
1199	2640				12.6	89° 50'	+7.8	-4.8				TP			
	3960		255° 04' 02" -180°	+16.3°	+7.7	-	+7.4				BS	-94	+3959		
	3960				+12.8	270° 04'	-4.9	+7.9	4577.2		BS				
1200	3630		254° 51'	+16.3°	6.4	-	-6.1		4571.1			+73	-3629	360,455	1,652,448
1201	3300		" "	" "	4.9	-	-4.7		4572.5			+66	-3299	360,448	1,652,778
1202	2970		" "	" "	6.3	-	-6.1		4571.1			+60	-2969	360,442	1,653,108
Bm	2930		253° 54' 50"	" "	12.9	89° 50'	+8.7	-4.2	4573.0		Bm	+11	-2930	360,393	1,653,147
1203	2640		254° 46'	+16.3°	6.2	-	-6.1		4571.1			+49	-2640	360,431	1,653,437
1204	2310		" "	" "	4.9	-	-4.9		4572.3			+43	-2310	360,425	1,653,767
1205	1980		" "	" "	4.2	-	-4.2		4573.0			+37	-1980	360,419	1,654,097
1206	1650		" "	" "	12.5	TH	+8.3	-4.2	4573.0			+31	-1650	360,413	1,654,427
1207	1320		254° 37'	+16.3°	4.8	-	-4.8		4572.4			+21	-1320	360,403	1,654,757
1208	990		" "	" "	4.8	-	-4.8		4572.4			+16	-990	360,398	1,655,087

y=360,360 x-1,653,140  
U.S.C. 655-25 m/EL. 4573.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE							
5-18-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1		87							
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER					
UTAM		Delta-15'		UTAM		M. Haro								L. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X				
									4577.2										
1209	660		254° 37'	+16.3°	7.2	TH	+3.3	-3.9		4573.3		+11	-660	360,393	1,655,417				
1210	330		" "	" "	6.2	TH	+1.7	-4.5		4572.7		+5	-330	360,387	1,655,747				
1211	0				5.4	-		-5.4		4571.8	X	0	0	360,382	1,656,077				
1212	330		74° 50'	+16.3°	4.2	-		-4.2		4573.0		-7	+330	360,375	1,656,407				
1213	660		" "	" "	3.3	-		-3.3		4573.9		-13	+660	360,369	1,656,737				
1214	990		" "	" "	7.1	TH	+5.0	-2.1		4575.1		-20	+990	360,362	1,657,067				
1215	1320		74° 50'	+16.3°	9.3	TH	+6.6	-2.7		4574.5		-26	+1320	360,356	1,657,397				
1216	1650		" "	" "	3.2	-		-3.2		4574.0		-33	+1650	360,349	1,657,727				
1217	1980		" "	" "	12.7	TH	+9.9	-2.8		4574.4		-39	+1980	360,343	1,658,057				
≠	2189		74° 40' 49"	" "	1.3	-		-1.3		4575.9	≠	-37	+2189	360,345	1,658,266				y-360,345 x-1,658,296 TRD NORTH EL. 4575.0
1218	2310		74° 50'	+16.3°	13.4	TH	+11.6	-1.8		4575.4		-46	+2310	360,336	1,658,387				
1219	2640		" "	" "	8.4	89° 50'	+7.8	-0.6		4576.6		-52	+2639	360,330	1,658,716				
1220	2970		" "	" "	8.9	89° 50'	+8.8	-0.1		4577.1		-59	+2969	360,323	1,659,046				
1221	3300		" "	" "	10.0	89° 50'	+9.8	-0.2		4577.0		-65	+3259	360,317	1,659,376				
1222	3630		" "	" "	10.1	89° 50'	+10.8	+0.7		4577.9		-72	+3629	360,310	1,659,706				
1223	3961		74° 49' 55"	+16.3°	11.9	89° 50'	+11.8	-0.1		4577.1	TP	-78	+3960	360,303	1,660,038				
1223	3961				5.0	89° 56'	+4.9	-0.1			TP								
	1650		254° 47' 54" - 180	+16.3°	+8.3	-		+8.3	4585.4		BS	-32	+1650						
	1650				+3.5	90° 10'	+4.8	+8.3			BS								
1224	1320		254° 48'	+16.3°	6.6	-		-6.6		4578.8		+25	-1320	360,295	1,660,369				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-18-82		B. Cotcamp		M. Knapp		6834		MPK <i>Jon</i>		1		88			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Delta-15'		UTAH		M. ILLARO								L. Ogus	
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
									4585.4						
1225	990		254° 48'	+16.3°	5.7	-		-5.7		4579.7		+19	-990	360,289	1,660,699
1226	660		" "	" "	6.0	-		-6.0		4579.4		+13	-660	360,283	1,661,029
1227	330		" "	" "	6.0	-		-6.0		4579.4		+6	-330	360,276	1,661,359
1228	0				5.4	-		-5.4		4580.0	X	0	0	360,270	1,661,689
1229	330		74° 54'	+16.3°	4.8	-		-4.8		4580.6		-7	+330	360,263	1,662,019
1230	660		" "	" "	4.8	-		-4.8		4580.6		-14	+660	360,256	1,662,349
1231	990		" "	" "	3.8	-		-3.8		4581.6		-21	+990	360,249	1,662,679
1232	1320		" "	" "	3.0	-		-3.0		4582.4		-28	+1320	360,242	1,663,009
1233	1650		" "	" "	3.0	-		-3.0		4582.4		-35	+1650	360,235	1,663,339
Bm	1871		73° 52' 01"	" "	11.8	TH	+9.4	-2.4		4583.0	Bm	-5	+1871	360,265	1,663,560
TP	1900		74° 35' 19"	+16.3°	2.5	-		-2.5		4582.9	TP	-29	+1900	360,240	1,663,590
TP	1900				12.0	TH	+9.5	-2.5			TP	-1			
	3167		345° 08' 15" - 180°	+16.3°	+1.9	-		+1.7			BS	-3166	-79		
	3167				+10.9	89° 50'	-9.4	+1.5	4584.4		BS				
X	0				5.4	-		-5.4		4579.0	X	0	0	357,074	1,663,511
TP	2130		166° 31' 18"	+16.3°	3.5	-		-3.5		4580.9	TP	-2127	-105	354,947	1,663,406
TP	2130				14.2	TH	+10.7	-3.5			TP				
	2715		255° 33' 58" - 180°	+15.9°	+7.6	-		+7.4	4588.3		BS	-69	+2714		
	2715				+13.9	89° 52'	-6.5	+7.4			BS				
1234	2640		254° 54'	+15.9°	8.2	-		-8.1		4580.2		+37	-2640	354,915	1,663,480

OFFSET SOUTH  
 Y=360,300 X=1,663,525  
 2.5225  
 R-35 1934 EL. 4582.0  
 TP 4 WAY X=1,663,590  
 Horiz CORR - Y=-11  
 X=+14

TRAVERSE  
 to OFFSET.

Y=354,995 X=1,663,425  
 4-way 1934

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
5-18-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1	89						
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER								
UTAH		Delta-15'	UTAH	M. ILLARD					L. Davis								
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									4588.3								
1235	2310		254° 54'	+15.9°	9.1	-		-9.1		4579.2		+32	-2310	354,910	1,663,810		
1236	1980		" "	" "	9.6	-		-9.6		4578.7		+28	-1980	354,906	1,664,140		
1237	1650		" "	" "	10.0	-		-10.0		4578.3		+23	-1650	354,901	1,664,470		
1238	1320		" "	" "	8.8	-		-8.8		4579.5		+18	-1320	354,896	1,664,800		
1239	990		254° 54'	+15.9°	7.3	-		-7.3		4581.0		+14	-990	354,892	1,665,130		
1240	660		" "	" "	7.5	-		-7.5		4580.8		+9	-660	354,887	1,665,460		
1241	330		" "	" "	6.9	-		-6.9		4581.4		+5	-330	354,883	1,665,790		
1242	0				5.4	-		-5.4		4582.9	π	0	0	354,878	1,666,120		
1243	330		74° 57'	+15.9°	7.3	-		-7.3		4581.0		-5	+330	354,873	1,666,450		
1244	660		" "	" "	7.5	-		-7.5		4580.8		-10	+660	354,868	1,666,780		
1245	990		" "	" "	7.3	-		-7.3		4581.0		-15	+990	354,863	1,667,110		
1246	1320		" "	" "	8.1	-		-8.1		4580.2		-20	+1320	354,858	1,667,440		
1247	1650		74° 57'	+15.9°	3.9	-		-3.9		4584.4		-24	+1650	354,854	1,667,770		
1248	1980		" "	" "	10.9	TH	+9.9	-1.0		4587.3		-29	+1980	354,849	1,668,100		
1249	2311		" "	" "	3.3	-		-3.3		4585.0		-34	+2310	354,844	1,668,430		
±TP	2648		74° 51' 59"	" "	5.6	-		-5.5		4582.8	±	-35	+2648	354,843	1,668,768	Y=354,875 X=1,668,830 TRO NORTH EL. 4582.0	
TP	2648				13.3	89° 50'	+7.8	-5.5			±						
2299			254° 31' 49" -180°	+15.9°	5.7	-		+5.7	4588.5		BS	-17	+2299				
2299					+12.4	89° 50'	-6.7	+5.7			BS						

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-20-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1		90			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		Delta-15'		UTAM		MILLARD								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4588.5						
1250	2307		254° 07'	+15.9°	6.1	-	-6.1		4582.4	+1	-2307	354,827	1,668,760		
1251	1980		254° 01'	" "	6.0	-	-6.0		4582.5	-3	-1980	354,823	1,669,087		
1252	1650		253° 48'	" "	7.1	-	-7.1		4581.4	-9	-1650	354,817	1,669,417		
1253	1370		253° 31'	" "	9.9	TH	+6.6	-3.3	4585.2	-13	-1320	354,813	1,669,747		
1254	990		253° 00'	" "	9.2	TH	+5.0	-4.2	4584.3	-19	-990	354,807	1,670,077		
1255	660		252° 06'	+15.9°	7.7	TH	+3.3	-4.4	4584.1	-23	-660	354,803	1,670,407		
1256	330		249° 14'	" "	5.0	-	-5.0		4583.5	-28	-329	354,798	1,670,738		
1257	0				5.4	-	-5.4		4583.1	TP	0	354,826	1,671,067	ALROSS STA.	
1258	330		75° 02'	+15.9°	3.7	-	-3.7		4584.8	-5	+330	354,821	1,671,397		
1259	660		" "	" "	4.7	-	-4.7		4583.8	-11	+660	354,815	1,671,727		
1260	990		" "	" "	4.3	-	-4.3		4584.2	-16	+990	354,810	1,672,057		
1261	1320		" "	" "	3.7	-	-3.7		4584.8	-22	+1320	354,804	1,672,387		
1262	1650		75° 02'	+15.9°	11.9	TH	+8.3	-3.6	4584.9	-27	+1650	354,799	1,672,717		
1263	1980		" "	" "	3.8	-	-3.8		4584.7	-32	+1980	354,794	1,673,047		
1264	2310		" "	" "	3.2	-	-3.2		4585.3	-38	+2310	354,788	1,673,377		
1265	2640		" "	" "	3.0	-	-2.9		4585.6	-43	+2640	354,783	1,673,707		
1266	2971		" "	" "	10.1	89° 50'	+8.8	-1.3	4587.2	-48	+2970	354,778	1,674,037		
#	3017		74° 50' 58"	+15.9°	0.7	-	-0.5		4588.0	TP	-39	+3017	354,787	1,674,084	Y-354,785 X-1,674,095 #4-WAY INT. EL. 4586.0
#	3017				9.3	89° 50'	+9.0	-0.3		TP					

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-20-82		B. Cotcamp		M. KNAPP		6834		MPK Jor		1		91			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		Delta - 15'		UTAM		MILLARD								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4588.0						
	2922		255° 07' 35" - 180°	+15.9°	+8.8	-		+8.8	4596.8		BS	-52	+2922		
	2922				+3.7	90° 06'	+5.1	+8.8			BS				
1267	2639		254° 56'	+15.9°	10.6	-		-10.5		4586.3		+38	-2639	354,773	1,674,367
1268	2310		" "	" "	10.0	-		-10.0		4586.8		+34	-2310	354,769	1,674,696
1269	1980		" "	" "	9.8	-		-9.8		4587.0		+29	-1980	354,764	1,675,026
1270	1650		" "	" "	8.9	-		-8.9		4587.9		+24	-1650	354,759	1,675,356
1271	1320		254° 56'	+15.9°	7.7	-		-7.7		4589.1		+19	-1320	354,754	1,675,686
1272	990		" "	" "	7.1	-		-7.1		4589.7		+14	-990	354,749	1,676,016
1273	660		" "	" "	6.6	-		-6.6		4590.2		+10	-660	354,745	1,676,346
1274	330		" "	" "	5.8	-		-5.8		4591.0		+5	-330	354,740	1,676,676
1275	0				5.4	-		-5.4		4591.4	π	0	0	354,735	1,677,006
1276	330		75° 34'	+15.9°	2.3	-		-2.3		4594.5		-8	+330	354,727	1,677,336
1277	660		" "	" "	6.7	TM	+3.3	-3.4		4593.4		-17	+660	354,718	1,677,666
1278	990		" "	" "	3.6	-		-3.6		4593.2		-25	+990	354,710	1,677,996
71	1036		74° 36' 36"	+15.9°	4.0	-		-4.0		4592.8	71	-9	+1036	354,726	1,678,042
1279	1320		75° 58'	" "	8.2	TM	+6.6	-1.6		4595.2		-43	+1319	354,692	1,678,325
1280	1650		" "	" "	12.6	TM	+8.3	-4.3		4592.5		-54	+1649	354,681	1,678,655
1281	1986		" "	" "	4.2	-		-4.2		4592.6		-65	+1979	354,670	1,678,985
1282	2310		75° 38'	" "	10.0	89° 56'	+2.7	-7.3		4589.5		-62	+2309	354,673	1,679,315
SEC. CORN.	2367		75° 27' 50"	+15.9°	12.3	89° 50'	+6.9	-5.4		4591.4	SEC. CORN.	-56	+2366	354,679	1,679,372

Y=354,725 X=1,678,045  
90 CORNER EL. 4593.0

Y=354,675 X=1,679,340  
ELEVATED BY MILLARD 28127  
COUNTY 133154  
LS-1623 1982

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
5-20-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1	92					
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER					
UTAH		Delta-15'		UTAH		MILLARD					L. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									4596.8							
1283	2637		75° 45'	+15.9°	11.3	89° 50'	+7.8	-3.5		4593.3		-76	+2636	354,659	1,679,642	LAST STATION ON WEST SIDE OF RIVER. FIRST STATION ON EAST SIDE OF RIVER.
1284	2970		75° 16'	+15.9°	9.9	89° 54'	+5.4	-4.5		4592.3		-60	+2969	354,675	1,679,975	
1285	3300		75° 17'	+15.9°	10.4	89° 54'	+6.0	-4.4		4592.4		-68	+3299	354,667	1,680,305	
1286	3627		75° 16' 30"	+16.2°	10.9	89° 54'	+6.6	-4.3		4592.5	TP	-93	+3626	354,642	1,680,632	
1286	3627				15.0	89° 50'	+10.8	-4.2			TP					
	1319		256° 17' 40" -180°	+16.2°	+7.1	-		+7.1	4599.6		BS	-57	+1318			
	1319				+13.7	TH	-6.6	+7.1			BS					
1287	990		255° 54'	+16.2°	9.8	-		-9.8		4589.8		+36	-989	354,621	1,680,961	
1288	660		" "	" "	6.3	-		-6.3		4593.3		+24	-660	354,609	1,681,290	
1289	330		" "	" "	6.2	-		-6.2		4593.4		+12	-330	354,597	1,681,620	
1290	0				5.4	-		-5.4		4594.2	X	0	0	354,585	1,681,950	
1291	330		68° 42'	+16.2°	5.2	TH	+1.7	-3.5		4596.1		+29	+329	354,614	1,682,279	
1292	659		70° 03' 54"	" "	6.9	TH	+3.3	-3.6		4596.0	TP	+43	+658	354,628	1,682,608	
1292	659				9.3	89° 30'	+5.8	-3.5			TP					
	989		255° 25' 56" -180°	+16.2°	+8.1	TH	-4.9	+3.2			BS	-28	+989			
	989				+8.9	89° 40'	-5.8	+3.1	4599.1		BS					
1293	660		253° 49'	+16.2°	5.7	89° 50'	+1.9	-3.8		4595.3		±0	-660	354,600	1,682,937	
1294	330		254° 14'	" "	4.9	89° 50'	+1.0	-3.9		4595.2		+3	-330	354,603	1,683,267	
1295	0				5.4	-		-5.4		4593.7	X	0	0	354,600	1,683,597	
1296	330		75° 18'		6.4	89° 50'	+1.0	-5.4		4593.7		-9	+330	354,591	1,683,927	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-20-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1		93			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Delta - 15'		UTAH		Millard								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4599.1						
1297	660		75° 18'	+16.2°	5.9	-		-5.9		4593.2		-17	+660	354,583	1,684,257
1298	990		" "		5.3	-		-5.3		4593.8		-26	+990	354,574	1,684,587
≠	1077		74° 09' 12"	+16.2°	4.4	-		-4.4		4594.7	TP	-7	+1077	354,593	1,684,674
≠	1077				9.7	TH	+5.4	-4.3			TP				
	2551		254° 54' 24" -180°	+16.2°	7.8	-		+7.8	4602.5		BS	-49	+2551		
	2551				+13.7	89° 52'	-5.9	+7.8			BS				
1299	2309		254° 39'	+16.2°	4.7	90° 04'	-2.7	-7.4		4595.1		+34	-2309	354,579	1,684,915
1300	1980		" "	" "	6.3	-		-6.3		4596.2		+29	-1980	354,574	1,685,244
1301	1650		" "	" "	6.8	-		-6.8		4595.7		+24	-1650	354,569	1,685,574
1302	1320		254° 39'	+16.2°	6.4	-		-6.4		4596.7		+20	-1320	354,565	1,685,904
1303	990		" "	" "	6.1	-		-6.1		4596.4		+15	-990	354,560	1,686,234
1304	660		" "	" "	5.8	-		-5.8		4596.7		+10	-660	354,555	1,686,564
1305	330		" "	" "	5.9	-		-5.9		4596.6		+5	-330	354,550	1,686,894
1306	0				5.4	-		-5.4		4597.1	π	0	0	354,545	1,687,224
≠	62		70° 50' 53"	+16.2°	4.8	-		-4.8		4597.7	≠	+3	+62	354,548	1,687,286
1307	330		74° 48'	" "	5.3	-		-5.3		4597.2		-6	+330	354,539	1,687,564
1308	660		" "	" "	5.2	-		-5.2		4597.3		-12	+660	354,533	1,687,884
1309	990		" "	" "	5.1	-		-5.1		4597.4		-17	+990	354,528	1,688,214
1310	1320		" "	" "	5.8	-		-5.8		4596.7		-23	+1320	354,522	1,688,544

Y-354,520 X-1,687,215  
T-RO NORTH

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-20-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1		94			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Delta, -15		UTAH		Millard								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4602.5						
1311	1650		74° 48'	+16.2°	5.2	90° 04'	-1.9	-7.1		4595.4		-29	+1650	354,516	1,688,874
1312	1980		" "	" "	5.9	90° 04'	-2.3	-8.2		4594.3		-35	+1980	354,510	1,689,204
1313	2310		" "	" "	6.1	90° 04'	-2.7	-8.8		4593.7		-40	+2310	354,505	1,689,534
1314	2639		" "	" "	7.6	-		-7.5		4595.0		-46	+2639	354,499	1,689,863
TP	2777		74° 33' 10"	+16.2°	6.3	-		-6.2		4596.4	TP	-36	+2777	354,510	1,690,000
TP	2777				14.3	89° 50'	+8.2	-6.1			TP				
	1512		255° 28' 11" - 180°	+16.2°	5.9	-		+5.9	4602.3		BS	-44	+1511		
	1512				+10.3	89° 50'	+4.4	+5.9			BS				
1315	1320		254° 46'	+16.2°	6.8	-		-6.8		4595.5		+22	-1320	354,489	1,690,191
1316	990		" "	" "	6.3	-		-6.3		4596.0		+17	-990	354,484	1,690,521
1317	660		" "	" "	6.0	-		-6.0		4596.3		+11	-660	354,478	1,690,851
1318	330		" "	" "	5.5	-		-5.5		4596.8		+6	-330	354,473	1,691,181
1319	0				5.4	-		-5.4		4596.9		0	0	354,467	1,691,511
SS	159		75° 04' 24"	+16.2°	4.7	-		-4.7		4597.6	SS	-	-		
1320	330		68° 49'	" "	5.1	-		-5.1		4597.2		+29	+329	354,496	1,691,840
1321	660		72° 17'	" "	8.0	TH	+3.3	-4.7		4597.6		+17	+660	354,484	1,692,171
1322	988		72° 57'	" "	10.4	TH	+4.9	-5.5		4596.8		+15	+988	354,482	1,692,499
1323	1313		73° 42' 05"	" "	11.1	TH	+6.6	-4.5		4597.8	TP	+2	+1313	354,470	1,692,823
1323	1313				12.2	89° 40'	+7.6	-4.6			TP				

Y-354,510 X-1,690,000  
4 WAY INST. ELEV. 4596.0  
HORIZ. CORR. Y+2 X-2

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-21-82		B. Cotcamp		M. Kwapp		6834		MPK Jn		1		95			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Delta-15		UTAH		Millard								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS A TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
										4597.8					
	1979		255° 50' 32" - 180°	+16.2°	+6.8	-		+6.8	4604.6		BS	-71	+1978		
	1979				+12.6	89° 50'	-5.8	+6.8		BS			-1		
1324	1650		255° 56'	+16.2	5.6	-		-5.6		4599.0		+61	-1649	354,461 1,693,151	
1325	1320		254° 40'	" "	6.0	-		-6.0		4598.6		+20	-1320	354,420 1,693,480	
1326	990		" "	" "	5.3	-		-5.3		4599.3		+15	-990	354,415 1,693,810	
1327	660		" "	" "	7.8	TH	+3.3	-4.5		4600.1		+10	-660	354,410 1,694,140	
1328	330		" "	" "	6.0	TH	+1.7	-4.3		4600.3		+5	-330	354,405 1,694,470	
1329	0				5.4	-		-5.4		4599.2	TP	0	0	354,400 1,694,800	
1330	330		73° 48'	+16.2°	4.2	-		-4.2		4600.4		±0	+330	354,400 1,695,130	
±	501		73° 36' 27"	" "	2.6	-		-2.6		4602.0	±	+2	+501	354,402 1,695,301 ± 4 way INT. EL. 4601.0	
1331	660		73° 48'	" "	3.8	-		-3.8		4600.8		±0	+660	354,400 1,695,460	
1332	990		" "	" "	8.5	TH	+5.0	-3.5		4601.1		±0	+990	354,400 1,695,790	
1333	1320		" "	" "	9.2	TH	+6.6	-2.6		4602.0		±0	+1320	354,400 1,696,120	
1334	1650		" "	" "	10.0	TH	+8.3	-1.7		4602.9		±0	+1650	354,400 1,696,450	
1335	1980		73° 47' 30"	+16.0	12.0	TH	+9.9	-2.1		4602.5	TP	+7	+1980	354,408 1,696,779	
1335	1980				2.2	-		-2.2			TP				
	3960		253° 49' 59" - 180°	+16.0	+8.5	-		+8.2	4610.7		BS	+12	+3960		
	3960				+3.8	269° 56'	+4.3	+8.1		BS					
1336	3630		253° 50'	+16.0	7.8	-		-7.5		4603.2		-11	-3630	354,410 1,697,108	
1337	3300		" "	" "	7.1	-		-6.9		4603.8		-10	-3300	354,411 1,697,438	

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-22-82		B. Cotcamp		M. Knapp		6834		MKL Jm		1		96			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Delta - 15'		UTAH		MILLARD								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4610.7						
1338	2970		253° 50'	+16.0	7.2	-		-7.0		4603.7		-9	-2970	354,412	1,697,768
1339	2640		" "	" "	6.0	-		-5.9		4604.8		-8	-2640	354,413	1,698,098
1340	2310		" "	" "	7.0	-		-7.0		4603.7		-7	-2310	354,414	1,698,428
1341	1980		" "	" "	7.7	-		-7.7		4603.0		-6	-1980	354,415	1,698,758
1342	1650		253° 50'	+16.0	8.2	-		-8.2		4602.5		-5	-1650	354,416	1,699,088
1343	1320		" "	" "	8.3	-		-8.3		4602.4		-4	-1320	354,417	1,699,418
1344	990		" "	" "	9.3	-		-9.3		4601.4		-3	-990	354,418	1,699,748
1345	660		" "	" "	8.0	-		-8.0		4602.7		-2	-660	354,419	1,700,078
1346	330		" "	" "	6.1	-		-6.1		4604.6		-1	-330	354,420	1,700,408
1347	0				5.4	-		-5.4		4605.3	π	0	0	354,421	1,700,738
≠	65		68° 07' 36"	+16.0	4.3	-		-4.3		4606.4	≠	+7	+65	354,428	1,700,803
1348	330		73° 54'	" "	3.7	-		-3.7		4607.0		+1	+330	354,422	1,701,068
1349	660		" "	" "	6.4	TH	+3.3	-3.1		4607.6		+1	+660	354,422	1,701,398
1350	990		" "	" "	4.6	-		-4.6		4606.1		+2	+990	354,423	1,701,728
1351	1320		" "	" "	5.9	-		-5.9		4604.8		+2	+1320	354,423	1,702,058
1352	1650		73° 54'	+16.0	4.9	-		-4.9		4605.8		+3	+1650	354,424	1,702,388
1353	1980		" "	" "	4.0	-		-4.0		4606.7		+3	+1980	354,424	1,702,718
1354	2310		" "	" "	3.1	-		-3.1		4607.6		+4	+2310	354,425	1,703,048
1355	2640		" "	" "	2.9	-		-2.8		4607.9		+5	+2640	354,426	1,703,378
1356	2970		" "	" "	10.8	89° 50'	+8.8	-2.0		4608.7		+5	+2970	354,426	1,703,708

114-354,450 X=1,700,755  
117 4WAY INT. EL. 4606.0

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE	5-22-82	INSTRUMENT MAN	B. Cotcamp	ROD MAN	M. Knapp	PARTY NUMBER	6834	NOTES CHECKED BY	MPK Jm	LINE NO.	1	PAGE	97	
AREA	UTAH	TOPO MAP	Delta-15	STATE	UTAH	COUNTY	Millard	TWP		RANGE		PPM		
													PARTY MANAGER	L. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
									4610.7							
1357	3300		73° 54'	+16.0	10.9	89° 50'	+9.8	-1.1		4609.6		+6	+3300	354,427	1,704,038	
1358	3630		" "	" "	11.0	89° 50'	+10.8	-0.2		4610.5		+6	+3630	354,427	1,704,368	
1359	3960		73° 53' 59"	" "	13.3	89° 50'	+11.8	-1.5		4609.2	TP	+7	+3960	354,429	1,704,697	
1359	3960				8.7	270° 06'	+7.2	-1.5			TP					
	2969		253° 44' 48" -180	+16.0	+11.6	TM	-15.0	-3.4			BS	+13	+2969			
	2969				+5.6	89° 50'	-8.8	-3.2	4606.0		BS	+1				
1360	2640		253° 45'	+16.0	10.9	TM	+13.3	+2.4		4608.4		-12	-2640	354,431	1,705,025	
1361	2310		" "	" "	10.1	TM	+11.6	+1.5		4607.5		-10	-2310	354,433	1,705,355	
1362	1980		" "	" "	11.2	TM	+9.9	-1.3		4604.7		-9	-1980	354,434	1,705,685	
1363	1650		" "	" "	11.3	TM	+8.3	-3.0		4603.0		-7	-1650	354,436	1,706,015	
#1	1565		254° 05' 37"	" "	3.7	-	-	-3.7		4602.3	#1	+3	-1565	354,446	1,706,100	y=354,435 x=1,706,065 TRD SOUTH
1364	1320		253° 45'	+16.0	11.2	TM	+6.6	-4.6		4601.4		-6	-1320	354,437	1,706,345	
1365	990		" "	" "	5.0	-	-	-5.0		4601.0		-4	-990	354,439	1,706,675	
1366	660		" "	" "	7.9	TM	+3.3	-4.6		4601.4		-3	-660	354,440	1,707,005	
1367	330		" "	" "	4.8	-	-	-4.8		4601.2		-1	-330	354,442	1,707,335	
1368	0				5.4	-	-	-5.4		4600.6	X	0	0	354,443	1,707,665	
1369	330		74° 05'	+16.0	5.2	-	-	-5.2		4600.8		±0	+330	354,443	1,707,995	
1370	660		" "	" "	5.2	-	-	-5.2		4600.8		-1	+660	354,442	1,708,325	
1371	990		" "	" "	4.8	-	-	-4.8		4601.2		-1	+990	354,442	1,708,655	
#1	1093		74° 00' 39"	" "	3.2	-	-	-3.2		4602.8	#1	±0	+1093	354,443	1,708,758	JL y=354,420 x=1,708,730 T 4 way INT. EL. 4603.0

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
5-22-82		B. Cotcamp		M. Knapp		6834		MPK Jor		1	98					
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
UTAH		DeHa-15	UTAH	Millard					L. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH +	EAST +	COORDINATES		REMARKS
												SOUTH -	WEST -	Y	X	
												LAT.	DEP.			
									4600.0							
1372	1320		74° 05'	+16.0	11.0	TH	+6.6	-4.4		4601.6		-2	+1320	354,441	1,708,985	
1373	1650		" "	" "	5.8	-		-5.8		4600.2		-2	+1650	354,441	1,709,315	
1374	1980		" "	" "	5.0	-		-5.0		4601.0		-3	+1980	354,440	1,709,645	
1375	2310		" "	" "	4.2	-		-4.2		4601.8		-3	+2310	354,440	1,709,975	
1376	2640		" "	" "	4.3	-		-4.2		4601.8		-4	+2640	354,439	1,710,305	
1377	2970		74° 04' 53"	" "	4.2	-		-4.0			TP	-4	+2970	354,440	1,710,634	
1377	2970				12.7	89° 50'	+8.8	-3.9		4602.1	TP		-1			
	1648		254° 23' 56" - 180°	+16.0	+4.5	-		+4.5			BS	-11	+1648			
	1648				+12.8	TH	-8.2	+4.6	4606.7		BS	+1	-1			
1378	1320		254° 10'	+16.0	10.3	TH	+6.6	-3.7		4603.0		+4	-1320	354,434	1,710,961	
1379	990		" "	" "	9.0	TH	+5.0	-4.0		4602.7		+3	-990	354,433	1,711,291	
1380	660		" "	" "	7.5	TH	+3.3	-4.2		4602.5		+2	-660	354,432	1,711,621	
1381	330		" "	" "	4.8	-		-4.8		4601.9		+1	-330	354,431	1,711,951	
1382	0				5.4	-		-5.4		4601.3	π	0	0	354,430	1,712,281	
1383	330		73° 58'	+16.0	5.1	-		-5.1		4601.6		±0	+330	354,430	1,712,611	
1384	660		" "	" "	7.4	TH	+3.3	-4.1		4602.6		±0	+660	354,430	1,712,941	
1385	990		" "	" "	8.3	TH	+5.0	-3.3		4603.4		+1	+990	354,431	1,713,271	
1386	1320		" "	" "	10.0	TH	+6.6	-3.4		4603.3		+1	+1320	354,431	1,713,601	
1387	1651		" "	" "	4.9	-		-4.9		4601.8		+1	+1651	354,431	1,713,932	

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
5-22-82		B. Cotcamp		M. Knapp		6834		MPC Jon		1		99				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
UTAM		Delta-15'		UTAM		Millard								L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									4606.7							
1F	1760		73° 38' 02"	+16.0	4.4	-	-4.4		4602.3		TP	+11	+1760	349,442	1,714,040	FT-RD SOUTH y-349,440 x-1,714,020
1F	1760				13.2	TH	+8.8	-4.4			TP	+1	-			
	2769		344° 52' 08" -180	+16.0	+13.4	TH	-14.0	-0.6	4601.7		BS	-2769	-42			5213' OFFSET SOUTH.
	2769				+7.6	89° 50'	-8.2	-0.6			BS	+1	-			
π	0				5.4	-	-5.4		4596.3		π	0	0	349,674	1,713,997	
π	2503		165° 06' 20"	+16.0	13.3	89° 50'	+7.3	-6.0	4595.7			-2503	-48	349,171	1,713,949	LL y-349,185 x-1,713,925 T-INT.
TP	2444		164° 36' 23"	"	8.0	-	-8.0		4593.7		Bm	-2444	-26	349,231	1,713,970	4-12' 1931 U.S.G.S. EL. 4595.0 y-349,260 x-1,713,995
TP	2444				15.1	89° 50'	+7.1	-8.0			Bm	+1	-			
	2508		255° 06' 50" -180	+16.0	+5.9	-	+5.9		4591.6		BS	-49	+2508			
	2508				+13.0	89° 50'	-7.3	+5.7			BS	+1	-			
1388	2310		253° 34'	+16.0	4.8	-	-4.8		4594.8			-17	-2310	349,200	1,714,167	
1389	1980		" "	"	5.4	-	-5.4		4594.2			-15	-1980	349,198	1,714,497	
1390	1650		" "	"	6.3	-	-6.3		4593.3			-12	-1650	349,195	1,714,827	
1391	1320		" "	"	6.3	-	-6.3		4593.3			-10	-1320	349,193	1,715,157	
1392	990		253° 34'	"	6.2	-	-6.2		4593.4			-7	-990	349,190	1,715,487	
1393	660		" "	+16.0	6.1	-	-6.1		4593.5			-5	-660	349,188	1,715,817	
1394	330		" "	"	5.7	-	-5.7		4593.9			-3	-330	349,186	1,716,147	
1395	0				5.4	-	-5.4		4594.2		π	0	0	349,183	1,716,477	↑
1396	330		72° 44'	+16.0	4.3	-	-4.3		4595.3			+7	+330	349,190	1,716,207	Delta-15' quad

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
5-22-82		B. Cotcamp		M. Knapp		6834		MKC Jm		1		100				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
UTAH		Delta, - 15-OAK CITY		UTAH		MILLARD								L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									4599.6							
1397	660		72° 44'	+16.0	4.2	-		-4.2		4595.4		+15	+660	349,198	1,717,137	OAK CITY-15' QUAD
1398	990		" "	" "	3.6	-		-3.6		4596.0		+22	+990	349,205	1,717,467	↓
1399	1320		" "	" "	3.2	-		-3.2		4596.4		+29	+1320	349,212	1,717,797	
1400	1650		72° 44'	" "	3.0	-		-3.0		4596.6		+36	+1650	349,219	1,718,127	
1401	1980		" "	" "	11.7	TH	+9.9	-1.8		4597.8		+44	+1980	349,227	1,718,457	
1402	2310		" "	" "	11.5	TH	+11.6	+0.1		4599.7		+51	+2309	349,234	1,718,786	
1403	2640		72° 44' 05"	+16.0	11.2	TH	+13.3	+2.1	}	4601.7	TP	+58	+2639	349,242	1,719,115	
1403	2640		" "	" "	5.8	89° 50'	+7.8	+2.0			TP					
	3629		252° 40' 26"-180°	+16.0	+5.8	90° 30'	+31.4	+37.2	}	4638.9	BS	+84	+3628			
	3629		" "	" "	+14.0	90° 22'	+23.0	+37.0			BS					
1404	3300		252° 40'	+16.0	6.8	90° 30'	-28.6	-35.4		4603.5		-77	-3299	349,250	1,719,443	
1405	2970		" "	" "	8.0	90° 30'	-25.7	-33.7		4605.2		-69	-2969	349,258	1,719,773	
1406	2640		" "	" "	10.1	90° 30'	-22.9	-33.0		4605.9		-61	-2639	349,266	1,720,103	
1407	2310		" "	" "	12.1	90° 30'	-20.2	-32.3		4606.6		-54	-2309	349,273	1,720,433	
1408	1980		252° 40'	+16.0	8.9	90° 40'	-23.0	-31.9		4607.0		-46	-1979	349,281	1,720,763	
1409	1650		" "	" "	11.0	90° 40'	-19.2	-30.2		4608.7		-38	-1650	349,289	1,721,092	
1410	1320		" "	" "	11.1	90° 40'	-15.4	-26.5		4612.4		-31	-1320	349,296	1,721,422	
1411	990		" "	" "	9.1	90° 40'	-11.5	-20.6		4618.3		-23	-990	349,304	1,721,752	
1412	660		" "	" "	6.8	90° 40'	-7.7	-14.5		4624.4		-15	-660	349,312	1,722,082	
1413	330		" "	" "	5.2	90° 40'	-3.8	-9.0		4629.9		-8	-330	349,319	1,722,412	

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE							
5-22-82		B. Cotcamp		M. Knapp		6834		MK Jm		1		101							
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER					
UTAH		OAK CITY-15'		UTAH		Millard								L. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X				
									4638.9										
1414	0				5.4	-		-5.4		4633.5	X	0	0	349,327	1,722,742				
1415	330		72° 44'	+16.0	3.6	-		-3.6		4635.3		+7	+330	349,334	1,723,072				
1416	660		" "	" "	4.8	TH	+3.3	-1.5		4637.4		+15	+660	349,342	1,723,402				
1417	990		" "	" "	5.0	TH	+5.0	±0.0		4638.9		+22	+990	349,349	1,723,732				
1418	1320		" "	" "	5.4	TH	+6.6	+1.2		4640.1		+29	+1320	349,356	1,724,062				
1419	1650		72° 44'	+16.0	6.1	TH	+8.3	+2.2		4641.1		+36	+1650	349,363	1,724,392				
1420	1980		" "	" "	6.5	TH	+9.9	+3.4		4642.3		+44	+1980	349,371	1,724,722				
1421	2310		" "	" "	5.6	TH	+11.6	+6.0		4644.9		+51	+2309	349,378	1,725,051				
1422	2640		" "	" "	4.7	TH	+13.3	+8.6		4647.5		+58	+2639	349,385	1,725,381				
1423	2970		" "	" "	5.1	TH	+15.1	+10.0		4648.9		+66	+2969	349,393	1,725,711				
1424	3300		72° 43' 33"	+16.0	6.2	TH	+16.7	+10.5			TP	+73	+3299	349,401	1,726,040				
1424	3300				12.6	89° 36'	+23.3	+10.7		4649.6	TP	+1	-1						
	660		252° 32' 58" - 180	+16.0	+6.9	-		+6.9	4656.5		BS	+17	+660						
	660				+10.2	TH	-3.3	+6.9			BS	+2	-1						
1425	330		252° 33'	+16.0	7.4	TH	+1.7	-5.7		4650.8		-8	-330	349,412	1,726,369				
1426	0				5.4	-		-5.4		4651.1	X	0	0	349,420	1,726,699				
1427	330		73° 09'	+16.0	5.8	-		-5.8		4650.7		+5	+330	349,425	1,727,029				
Sec	597		72° 15' 58"	" "	7.2	-		-7.2		4649.3	TP	+18	+597	349,440	1,727,295				
Corner	597				10.2	TH	+3.0	-7.2			TP	+2	-1						

Y=349,440 X=1,727,295  
SECTION CORNER EL. 4650.0  
HARR. Y = +20  
COR. X = -17

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
5-24-82		B. COICAMP		M. KWAAP		6834		MPK Jm		1	102				
AREA		TOPO MAP	STATE	COUNTY	TWP	RANGE	PPM	PARTY MANAGER							
UTAH		OAK CITY -15'	UTAH	MILLARD				L. DAVIS							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
R <sub>1</sub>	Section	Corner	$361\frac{31}{16}$ ELEVATION		4650.0					4650.0	R <sub>1</sub>				SECTION CORNER EL. 46500 y-349,446 x-1,727,295
	3358		255°55'00"-188	+15.7°	+11.7	90°20'	+19.3	+31.0	4681.0		BS	-95.2	+3357.1		
	3358				+7.8	90°24'	+23.2	+31.0		BS					
1428	3295		256°09'32"	+15.7°	12.4	90°20'	-18.9	-31.3		4649.7		+107	-3293	349,450	1,727,358
1429	2970		256°16'51"	" "	8.2	90°26'	-22.3	-30.5		4650.5		+103	-2968	349,446	1,727,683
1430	2640		256°02'50"	" "	14.7	90°20'	-15.2	-29.9		4651.1		+80	-2629	349,423	1,728,012
1431	2310		255°28'48"	" "	10.7	90°24'	-16.1	-26.8		4654.2		+48	-2310	349,391	1,728,341
1432	1980		255°34'	" "	7.2	90°30'	-17.3	-24.5		4656.5		+44	-1980	349,387	1,728,671
1433	1650		255°17'	+15.7°	7.3	90°30'	-14.4	-21.7		4659.3		+28	-1650	349,371	1,729,001
1434	1320		" "	" "	7.4	90°30'	-11.5	-18.9		4662.1		+23	-1320	349,366	1,729,331
1435	990		" "	" "	8.1	90°30'	-8.6	-16.7		4664.3		+17	-990	349,360	1,729,661
1436	660		" "	" "	7.1	90°30'	-5.8	-13.5		4667.5		+11	-660	349,354	1,729,991
1437	330		" "	" "	7.3	90°10'	-1.0	-8.3		4672.7		+6	-330	349,349	1,730,321
1438	0				5.4	-		-5.4		4675.6	T	0	0	349,343	1,730,651
1439	330		75°43'	+15.7°	6.7	89°40'	+1.9	-4.8		4676.2		-8	+330	349,335	1,730,981
1440	660		" "	" "	7.7	89°40'	+3.8	-3.9		4677.1		-16	+660	349,327	1,731,311
1441	990		" "	" "	8.6	89°40'	+5.8	-2.8		4678.2		-24	+990	349,319	1,731,641
1442	1320		" "	" "	7.8	89°40'	+7.7	-0.1		4680.9		-33	+1320	349,310	1,731,971
1443	1650		" "	" "	5.0	89°40'	+9.6	+4.6		4685.6		-41	+1650	349,302	1,732,301
1444	1980		75°43'	+15.7°	7.7	89°30'	+17.3	+9.6		4690.6		-49	+1979	349,294	1,732,630
1445	2310		" "	" "	8.4	89°24'	+24.2	+15.8		4696.8		-57	+2309	349,286	1,732,960

SURVEY NOTES-HIGH RESOLUTION DATA

GEQ-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-24-82		T. Patton		M. Knapp		6834		MPK Jm		1		103			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		OAKCITY-15		UTAH		MILLARD								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4681.0						
1446	2640		75° 43'	+157	9.4	89° 24'	+27.8	+18.4		4699.4		-65	+2639	349276	1,733,290
1447	2970		" "	"	7.2	89° 24'	+31.3	+24.1		4705.1		-73	+2969	349270	1,733,620
1448	3299		75° 22' 09"	"	6.3	89° 24'	+34.8	+28.5		4709.5	TP	-62.2	+3298	349279	1,733,948
1448	3299			"	10.4	89° 20'	+38.6	+28.2			TP	-	-		
	1979		255.04.06 <sup>-150</sup>	"	+11.5	90° 20'	+11.5	+23.0	4732.5		BS	-27.2	+1979		
	1979		" "	"	+5.7	90° 30'	+17.3	+23.05			BS	-	-		
1449	1650		" "	"	+12.3	90 20	-9.6	-21.9		4710.6		+22	-1650	349272	1,734,276
1450	1320		" "	"	+12.0	90 20	-7.7	+19.7		4712.8		+18	-1320	349268	1,734,606
1451	990		" "	"	9.9	90 20	-5.8	-15.7		4716.8		+13	-990	349263	1,734,936
1452	660		" "	"	10.4	90 20	-3.8	-14.2		4718.3		+9	-660	349259	1,735,266
1453	330		" "	"	9.3	90 20	-1.9	-11.2		4721.3		+4	-330	349254	1,735,596
1454	0		" "	"	5.4 4.4	90 20		-5.4		4727.1	X	0	0	349250	1,735,926
1455	330		74-52-48	"	8.4	88 20	+9.6	+1.2		4733.7		-3	+330	349247	1,736,256
1456	660		" "	"	11.4	88 20	+19.2	+1.8		4740.3		-7	+660	349243	1,736,586
1457	990		" "	"	11.2	88 20	+28.8	+17.6		4750.1		-10	+990	349240	1,736,916
1458	1320		" "	"	10.4	88 40	+30.7	+20.3		4752.8		-13	+1320	349237	1,737,246
1459	1650		" "	"	12.1	88 40	+38.4	+26.3		4758.8		-17	+1650	349233	1,737,576
1460	1981		74 52 48	"	14.7	88 40	+46.1	+31.4		4763.9	TP	-20.2	+1980	349228	1,737,905
	1981		" "	"	8.9	88 50	+40.3	+31.4			TP	-	-		

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-24-82		T. PATTON		M. KNAPP		6834		MPK Jm		1		104			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		OAK CITY - 15'		UTAH		MILLARD								L. DAVIS	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4763.9						
1460	2303		244° 46' 42" - 180°	+15.7°	9.0	91° 10'	+46.9	+55.9	4819.8		BS	+381.2	+2271.1		
	2303				+2.3	91° 20'	+53.6	+55.9			BS				
1461	1980		244° 56' 24"	+15.7°	6.7	91° 20'	-46.1	-52.8		4767.0		-322	-1954	349,285 1,738,221	
1462	1650		245° 18' 33"	" "	10.9	91° 10'	-33.6	-44.5		4775.3		-258	-1630	349,349 1,738,845	
1463	1320		245° 50' 04"	" "	9.4	91° 10'	-26.9	-36.3		4783.5		-194	-1306	349,413 1,738,869	
1464	990		246° 38' 06"	" "	9.5	91° 10'	-20.2	-29.7		4790.1		-132	-981	349,475 1,739,194	
1465	660		248° 34' 03"	" "	8.7	91° 10'	-13.4	-22.1		4797.7		-66	-657	349,541 1,739,518	
1466	330		255° 31' 06"	+15.7°	6.9	91° 10'	-6.7	-13.6		4806.2		+8	-330	349,615 1,739,845	
1467	0				5.4	-		-5.4		4814.4	TP	0	0	349,607 1,740,175	
1468	330		78° 22' 21"	+15.7°	7.2	88° 20'	+9.6	+2.4		4822.2		-23	+329	349,584 1,740,504	
1469	660		" " "	" "	11.0	88° 20'	+19.2	+8.2		4828.0		-47	+658	349,560 1,740,833	
1470	990		" " "	" "	11.5	88° 30'	+25.9	+14.4		4834.2		-70	+988	349,537 1,741,163	
1471	1320		" " "	" "	9.8	88° 40'	+30.7	+20.9		4840.7		-94	+1317	349,513 1,741,492	
1472	1650		78° 22' 21"	+15.7°	9.2	88° 40'	+38.4	+29.2		4849.0		-117	+1646	349,490 1,741,821	
1473	1980		" " "	" "	8.1	88° 40'	+46.1	+38.0		4857.8		-141	+1975	349,466 1,742,150	
1474	2310		" " "	" "	7.0	88° 40'	+53.7	+46.7		4866.5		-164	+2364	349,443 1,742,479	
1475	2640		" " "	" "	6.0	88° 40'	+61.5	+55.5		4875.3		-187	+2633	349,420 1,742,808	
1476	2969		78° 22' 21"	+15.7°	5.8	88° 40'	+69.1	+63.3		4883.1	TP	-211.2	+2961.1	349,394 1,743,135	
1476	2969				14.5	88° 30'	+77.7	+63.2			TP				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-24-82		T. PATTON		M. KNAPP		8534		MPK JDN		1		105			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		OAK CITY 15'		UTAH		MILLARD								L. DAVIS	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS A TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
										4883.1					
1476	1650		250.22.20 <sup>-18°</sup>	+15.7	+12.3	91.30	+43.2	+55.5	4938.6		BS	+113.2	+1646		
	1650			"	+7.4	91.40	+48.0	+55.4		BS					
1477	1320		249.41.54	"	9.0	91.40	-38.4	-47.4		4891.2		-106	-1316	349399 1,743,464	
1478	990		248.40.18	"	8.8	91.40	-28.8	-37.6		4901.0		-97	-985	349408 1,743,795	
1479	660		247.26.06	"	11.4	91.40	-19.2	-30.6		4908.0		-79	-655	349426 1,744,125	
1480	330		246.20.00	"	7.5	91.40	-9.6	-17.1		4921.5		-46	-327	349459 1,744,453	
1481	0			"	5.4	-	-	-5.4		4933.2	K	0	0	349505 1,744,780	
1482	330		62.57.38	"	8.0	88.10	+10.6	+2.6		4941.2		+65	+324	349570 1,745,104	
1483	660		" " "	"	10.1	88.10	+21.1	+11.0		4949.6		+130	+647	349635 1,745,427	
1484	990		" " "	"	9.7	88.10	+31.7	+22.0		4960.6		+195	+971	349700 1,745,751	
1485	1320		62.57.39	"	10.5	88.10	+42.2	+31.7		4970.3		+260	+1294	349768 1,746,074	
1486	1650		62.41.32	"	8.5	88.20	+48.0	+39.5		4978.1		+332	+1616	349837 1,746,396	
1487	1982		" " "	"	7.7	88.20	+57.6	+49.9		4988.5		+399	+1941	349901 1,746,721	
1487	2021		62.14.29	"	7.4	88.20	+58.8	+51.4	5038.5		TP	+422.2	+1976	349925 1,746,755	
	2021			"	1.5	88.30	+52.9	+51.4		TP					
1487	1531		242.04.43 <sup>-18°</sup>	+15.7	8.4	91.30	+40.1	+48.5			BS	+324	+1496		
	1531			"	12.9	91.20	+35.6	+48.5			BS				
1488	1242		241.47	+15.7	10.2	91.30	-32.5	-42.7		4995.8		-269	-1212	349980 1,747,039	
1489	912		" "	"	10.1	91.30	-23.9	-34.6		5004.5		-198	-890	350051 1,747,361	
1490	582		" "	"	8.5	91.30	-15.2	-23.7		5014.8		-126	-568	350123 1,747,683	

4-WAY INTERSECT  
 EL. 4988'  
 Y - 349,925 HORIZ-COR.  
 X - 1746755 y. -16'  
 x - 8'

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-25-82		B. COLCAMP		M. KNAPP		6834		MPK Jm		1		106			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		OAK CITY 15'		UTAH		MILLARD								L. DAVIS	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5038.5						
1491	251		236-31	+15.7°	6.9	91-30	-6.6	-13.5		5025.0		-77	-239	350172	1748012
<del>1492</del>	0				5.4	-		-5.4		5033.1	X	0	0	350249	1748251
1492	149		134-45	+15.7°	4.1	89-50	+0.4	-3.7		5034.8		-130	+73	350119	1748324
1493	471		115-36	" "	4.8	88-50	+9.6	+4.8		5043.3		-311	+354	349938	1748605
1494	801		114-31	" "	7.8	88-40	+18.6	+10.8		5049.3		-517	+612	349732	1748863
1495	1131		" "	" "	10.3	88-50	+23.0	+12.7		5051.2		-730	+864	349519	1749115
1496	1461		" "	" "	10.9	89-	+25.5	+14.6		5053.1		-943	+1116	349306	1749367
1497	1789		114-30-45	+15.7°	5.5	89-	+31.2	+25.7		5064.2	TP	-1155	+1366	349094	1749617
	1789				0.3	89-10	+26.0	+25.7			TP				
BS	990		294-48-29 <sup>-180</sup>	+15.7°	+11.3	91-30	+25.9	+37.2	5101.4		BS	-643	+752		
BS	990				+9.4	91-40	+28.8	+37.2			BS				
1498	660		294-48	+15.7°	10.0	91-30	-17.3	-27.3		5074.1		+429	-502	348880	1749867
1499	330		" "	" "	8.1	91-30	-8.6	-16.7		5084.7		+214	-251	348665	1750118
1500	0		" "	" "	5.4	-		-5.4		5096.0	X	0	0	348451	1750369 <small>Setup across station</small>
1501	330		133-47	" "	7.6	88-20	+9.6	+2.0		5103.4		-284	+168	348167	1750537
1502	660		135-02	" "	8.0	88-20	+19.2	+11.2		5112.6		-576	+323	347875	1750692
1503	991		136-38-20	+15.7°	9.7	88-40	+23.1	+13.4		5114.8	TP	-878	+460	347573	1750829 <small>AROUND CORNER</small>
	991				12.6	88-30	+25.9	+13.3			TP				
BS	655		333 33 45-180	+15.7°	+14.1	89 40'	-3.8	+10.3	5125.1		BS	-644	+122		
BS	655				+12.2	89 50'	-1.9	+10.3			BS				

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
5-25-82		B. Cotcamp		M. Knapp		6834		MPK gm		1	107					
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
UTAH		OAK CITY - 15'	UTAH	Millard					L. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH +	EAST +	COORDINATES		REMARKS
												SOUTH -	WEST -	Y	X	
												LAT.	DEP.			
									5125.1							
1504	330		339° 34'	+15.7°	7.0	89° 40'	+1.9	-5.1		5120.0		+329	-27	347258	1750924	
1505	0				5.4	-		-5.4		5119.7	X	0	0	346929	1750951	
1506	330		164° 52'	+15.7°	7.0	90° 10'	-1.0	-8.0		5117.1		-330	-3	346599	1750948	
1507	649		162° 21' 08"	+16.1°	10.4	90° 30'	-5.7	-16.1	}	5109.0	TP	-649	+18.2	346280	1750967	
1507	649				8.6	90° 40'	-7.5	-16.1		TP						
	987		296° 20' 30" - 180°	+16.1°	+4.3	91° -	+17.2	+21.5	}	5130.5	BS	-666	+128.2			
	987				+7.1	90° 50'	+14.4	+21.5		BS						
1508	660		294° 43'	+16.1°	9.0	90° 40'	-7.7	-16.7		5113.8		+431	-499	346045	1751194	
1509	66330		295° 23'	" "	7.1	90° 40'	-3.8	-10.9		5119.6		+219	-247	345833	1751446	
1510	0				5.4	-		-5.4		5125.1	X	0	0	345614	1751693	
IF	279		123-29-07	+16.1°	3.0	90-40	-3.2	-6.2		5124.3		-212	+181	345402	1751874	T-RA SEVEN WEST
1511	330		126-09	" "	6.4	-		-6.4		5124.1		-261	+202	345353	1751895	
1512	660		126-42	" "	6.9	-		-6.9		5123.6		-526	+399	345088	1752092	
IF	830		126-51-50	" "	11.8	-		-11.8		5118.7		-663	+500	344951	1752193	
1513	990		128-04-47	+16.1	11.6	-		-11.6	}	5118.9	TP	-803	+579.2	344811	1752270	
	990				6.6	BH	-5.0	-11.6		TP						
BS	1275		294-29-11 <sup>-180</sup>	+16.1°	+14.8	BH	+6.4	+21.2	}	5140.1	BS	-830	+968.2			
BS	1275				+10.1	90-30	+11.1	+21.2		BS						
1514	947		293-13	+16.1°	7.8	90-30	-8.3	-16.1		5124.0		+600	-733	344581	1752503	
1515	621		289-55	" "	7.3	90-30	-5.4	-12.7		5127.4		+365	-502	344346	1752734	

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
5-25-82		B. LUTAMP		M. KNAPP		6834		MPK Jm		1	108						
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER								
UTAH		OAK CITY-15'	UTAH	MILLARD					L. PAULS								
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH +	EAST +	COORDINATES		REMARKS	
												SOUTH -	WEST -	Y	X		
									5140.1								
1516	296		282-05	+16.1°	9.2	90.30	-2.6	-11.8		5128.3		+140	-261	344121	1752975		
X	0				5.4	-		-5.4		5134.7	X	0	0	343981	1753236		
1517	36		121-25	+16.1°	7.1	90.30	-0.3	-7.4		5132.7		-27	+24	343954	1753260		
1518	366		127-37	" "	4.8	TH	+1.8	-3.0		5137.1		-295	+217	343686	1753453		
1519	696		127-15	" "	7.2	TH	+3.5	-3.7		5136.4		-558	+415	343423	1753651		
1520	1026		" "	" "	4.9	-		-4.9		5135.2	TP	-823	+612	343158	1753848		
1521	1356		127-15-23	" "	4.6	-		-4.6		5135.5	TP	-1088	+809	342893	1754043		
	1356				8.5	89-50	+3.9	-4.6			TP						
BS	988		311-52-30 <sup>-180</sup>	+16.1°	+12.2	-		+12.2	5147.7		BS	-838	+524 <sub>2</sub>				
BS	988				+7.2	BH	+4.9	+12.1			BS						
1522	660		312-12	+16.1°	7.0	-		-7.0		5140.7		+562	-347	342617	1754218		
1523	330		" "	" "	7.1	-		-7.1		5140.6		+281	-173	342336	1754392		
1524	0				5.4	-		-5.4		5142.3	X	0	0	342055	1754585		
1525	330		136-53	+16.1°	7.7	-		-7.7		5140.0		-294	+150	341761	1754715		
1526	660		136-53	" "	8.9	-		-8.9		5138.8		-588	+300	341467	1754865		
1527	990		136-53	" "	8.3	-		-8.3		5139.4		-882	+450	341173	1755015		
1528	1320		136-22-42	" "	2.8	-		-2.8		5144.9	TP	-1171	+610 <sub>2</sub>	340884	1755173		
	1320				6.6	89-50	+3.8	-2.8			TP						
BS	1319		310-50-17 <sup>-180</sup>	+16.1°	+7.1	-		+7.1			BS	-1105	+720 <sub>2</sub>				
BS	1319				+0.6	BH	+6.6	+7.2	5152.1		BS						

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-25-82		R. COCLAMP		M. KNAPP		6834		MKK Jm		1		109			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		OAK CITY-15'		UTAH		MILLARD								L. DAVIS	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5152.1						
1529	990		310.50	+16.1°	7.1	-	-7.1		5145.0		+830	-540	340609	1755351	
1530	660		310.04	" "	8.2	-	-8.2		5143.9		+548	-367	340327	1755524	
1531	330		" "	" "	6.0	-	-6.0		5146.1		+274	-184	340053	1755707	
1532	0		-		5.4	-	-5.4		5146.7	π	0	0	339779	1755891	
1533	330		129° 39'	+16.1°	4.9	-	-4.9		5147.2		-273	+186	339506	1756077	
1534	660		" "	" "	6.7	TH	+3.3	-3.4	5148.7		-546	+371	339233	1756262	
1535	<del>989</del> 991		129.38.53	" "	1.7	TH	+5.0	+3.3	5155.4	TP	-819	+558.2	338960	1756447	
	<del>989</del> 989				5.4	89-30	+8.7	+3.3		TP					
BS	989		303.23.49	+16.1°	+13.1	BH	+4.9	+18.0		BS	-752	+642.2			
BS	989				+12.3	90-20	+5.8	+18.1	5173.5	BS					
1536	660		303.14	+16.1°	12.2	BH	-3.3	-15.5	5158.0		+561	-430	338709	1756657	
1537	330		" "	" "	7.1	-	-7.1		5166.4		+250	-215	338458	1756872	
1538	0				5.4	-	-5.4		5168.1	π	0	0	338208	1757087	SETUP ACROSS STATION
+539			129.43												
TI	96		131.36.59	+16.1°	2.3	-	-2.3		5171.2	TI	-81	+51	338127	1757138	y=338,095 TPO EAST, X=1,757,185 4565 72 308 1948 21.5177' y=338,070 X=1,757,250
BM	140		116.12.25	" "	2.9	88-	+4.9	+2.0	5175.5	BM	-94	+103	338114	1757190	
1539	330		129.43	" "	8.9	89-	+5.8	-3.1	5170.4		-273	+185	337935	1757272	
1540	660		125.44	" "	9.3	89-10	+9.6	+0.3	5173.8		-519	+408	337689	1757495	5' H. Rod
1541	985		128.21.42	" "	8.8	89-10	+14.3	+5.5	5179.0	TP	-801	+572.2	337407	1757657	AROUND CORNER
	985				8.9	89-20	+11.5	+5.6		TP					

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 5-25-82	INSTRUMENT MAN B. CUTCAMP	ROD MAN M. KNAPP	PARTY NUMBER 6834	NOTES CHECKED BY Jm TRP	LINE NO. 1	PAGE 110
AREA UTAH	TOPO MAP OAK CITY-15 Holden-15	STATE UTAH	COUNTY MILLARD	TWP	RANGE	PPM
PARTY MANAGER L. DAVIS						

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
										5179.0						
BS	1319		309.08.13 <sup>-180</sup>	+16.1°	+3.7	91-	+23.0	+26.7	5205.7		BS	-1083	+752 <sub>2</sub>			
BS	1319				+7.6	90.50	+19.2	+26.8			BS					
1542	990		308.15	+16.1°	9.0	90.40	-11.5	-20.5		5185.2		+804	-577	337128	1757830	
1543	660		" "	" "	10.8	90.40	-7.7	-18.5		5187.2		+536	-385	336860	1758022	
1544	330		" "	" "	10.0	90.40	-3.8	-13.8		5191.9		+268	-192	336592	1758215	
1545	0		-		5.4	-	-	-5.4		5200.3	X	0	0	336324	1758407	ACROSS STATION
1546	330		131.41	+16.1°	7.9	89.40	+1.9	-6.0		5199.7		-279	+176	336045	1758583	
1547	660		130.51	" "	8.1	89.40	+3.8	-4.3		5201.4		+553	+360	335771	1758767	
1548	989		131.41.22	" "	3.6	89.40	+5.8	+2.2		5207.9	TP	-837	+527 <sub>2</sub>	335487	1758932	
	989				6.5	89.30	+8.6	+2.1			TP					
BS	1978		313.49.50 <sup>-180</sup>	+16.1°	+8.9	BH	+9.9	+18.8	5226.7		BS	-1712	+991 <sub>2</sub>			
BS	1978				+13.0	90.10	+5.8	+18.8			BS					
1549	1650		313.20	+16.1°	8.9	BH	-8.3	-17.2		5209.5		+1421	-839	335196	1759082	↑
1550	1320		" "	" "	11.0	-	-	-11.0		5215.7		+1137	-671	334912	1759250	OAK CITY-15'
1551	990		" "	" "	12.4	-	-	-12.4		5214.3		+852	-503	334627	1759418	HOLDEN-15'
1552	660		" "	" "	8.7	-	-	-8.7		5218.0		+568	-336	334343	1759585	↓
1553	330		" "	" "	6.2	-	-	-6.2		5220.5		+284	-168	334059	1759753	
1554	0		-		5.4	-	-	-5.4		5221.3	X	0	0	333775	1759921	
1555	330		135.01	+16.1°	7.6	-	-	-7.6		5219.1		-289	+159	333486	1760080	
71	569		133.43.49	" "	14.9	-	-	-14.9		5211.8	71	-492	+286	333283	1760207	y=333.295 TPO WEST, X=1760.240

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-25-82		B. COLCAMP		M. KNAPP		6834		Jm TRP		1		111			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		HOLDEN-15'		UTAH		MILLARD								L. DAVIS	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5226.7						
1556	660		135.01	+16.1°	12.7	-	-12.7		5214.0			-578	+319	333197	1760240
1557	990		135.01	" "	12.7	-	-12.7		5214.0			-867	+478	332908	1760399
1558	1320		" "	" "	11.1	90.30	-11.5	-22.6	5204.1			-1156	+638	332619	1760559
1559	1650		" "	" "	7.5	90.30	-14.4	-21.9	5204.8			-1445	+797	332230	1760718
1560	1980		134.58.36	+15.7°	8.0	90.30	-17.3	-25.3	5201.4	TP		-1726	+970	332049	1760889
	1980				13.6	90.20	-11.5	-25.1		TP					
BS	1980		312.52.54 <sup>-180</sup>	+15.7°	10.9	89.20	-23.0	-12.1	5189.3	BS		-1690	+1032		
BS	1980				14.3	89.14	-26.5	-12.2		BS					
1561	1650		312.34	+15.7°	11.3	89.28	+15.4	+4.1	5193.4			+1403	-868	331762	1761051
1562	1320		" "	" "	9.2	89.20	+15.4	+6.2	5195.5			+1123	-694	331482	1761225
1563	990		" "	" "	9.0	89 -	+17.3	+8.3	5197.6			+842	-521	331201	1761398
1564	660		" "	" "	7.3	89 -	+11.5	+4.2	5193.5			+561	-347	330920	1761572
1565	330		" "	" "	5.3	89	+5.8	+0.5	5189.8			+281	-174	330640	1761745
1566	0		-		5.4	-		-5.4	5183.9	π		0	0	330359	1761919
71	235		131.17.17	+15.7°	4.8	-		-4.8	5184.5	71		-197	+128	330162	1762047
1567	330		131.59	" "	5.1	-		-5.1	5184.2			-279	+176	330080	1762095
1568	660		" "	" "	7.8	-		-7.8	5181.5			-558	+353	329801	1762272
1569	990		" "	" "	9.8	-		-9.8	5179.5			-837	+529	329522	1762448
1570	1320		" "	" "	8.9	BH	-6.6	-15.5	5173.8			-1116	+706	329243	1762625
1571	1650		" "	" "	11.7	BH	-8.3	-20.0	5169.3			-1394	+882	328965	1762801

3-330,205  
TRD EAST X-1,762,080

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
5-25-82		B. COTCAMP		M. KNAPP		6834		Jm TRP		1		112				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
UTAH		HOLDEN-15'		UTAH		MILLARD								L. DAVIS		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									5189.3							
1571	1895		131.40.40	+15.7°	10.2	BH	-9.5	-19.7		5169.6	TP	-1596	+1022	328763	1762941	HL 4-328,740 TP 4-way X-1762,985
1572	1980		131.59	" "	6.0	90.20	-11.5	-17.5		5171.8		-1673	+1659	328686	1762978	
1573	2310		131.52.58	" "	2.8	90.20	-13.4	-16.2		5173.1	TP	-1950	+1238	328409	1763155	
	2310				4.8	BH	-11.6	-16.4			TP					
135	1318		314.08.21	+15.7°	7.1	-		+7.1	5180.2		BS	-1140	+662			
135	1314				13.7	TH	-6.6	+7.1			BS					
1574	990		314.22	+15.7°	7.3	-		-7.3	5172.9			+858	-494	328127	1763321	
1525	660		313.50	" "	11.3	-		-11.3	5168.9			+569	-335	327838	1763480	
1576	330		313.02	" "	7.1	-		-7.1	5173.1			+282	-171	327551	1763644	
1577	122		314.48.42	" "	7.1	-		-7.1	5173.1			+106	-60	327375	1763755	
1577	0				5.4	-		-5.4	5174.8		X	0	0	327269	1763815	
1578	330		134.06	+15.7°	4.8	-		-4.8	5175.4			-285	+166	326984	1763981	
1579	660		" "	" "	5.0	-		-5.0	5175.2			-570	+332	326699	1764147	
1580	990		" "	" "	7.0	TH	+5.0	-2.0	5178.2			-856	+498	326413	1764313	
1581	1320		133.47	" "	4.8	TH	+6.6	+1.8	5182.0			-1137	+670	326132	1764485	
1582	1649		133.26.25	+15.9°	8.7	TH	+8.2	-0.5	5179.7		TP	-1418	+841	325851	1764654	
	1649				5.2	89.50	+4.8	-0.4			TP					
BS	1978		313.42.04	+15.9°	4.6	-		+4.6	5184.3		BS	-1706	+1006			
BS	1978				14.3	TH	-9.9	+4.4			BS					
1583	1650		313.34	+15.9°	11.1	TH	+8.3	-2.8	5181.5			+1421	-838	325586	1764815	

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-25-82		B. Cotcamp		m. Knapp		6834		Bm TRP		1		113			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Holden-15'		UTAH		Millard								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5184.3						
1584	1320		313° 34'	+15.9°	8.0	-	-8.0		5176.3			+1137	-671	325282	1764982
1585	990		" "	" "	5.9	TM	+5.0	-0.9	5183.4			+853	-503	324998	1765150
1586	660		" "	" "	5.1	-	-5.1		5179.2			+568	-335	324713	1765318
1587	330		312° 48'	" "	10.0	-	-10.0		5174.3			+282	-171	324422	1765482
1588	0				5.4	-	-5.4		5178.9	TP		0	0	324145	1765653
1589	330		132° 28'	+15.9°	4.0	-	-4.0		5180.3			-281	+173	323864	1765826
1590	660		" "	" "	6.8	-	-6.8		5177.5			-562	+346	323583	1766009
1591	810		132° 16' 41"	" "	6.8	-	-6.8		5177.5			-688	+427	323457	1766080
1591	990		132° 28'	" "	9.1	-	-9.1		5175.2			-843	+519	323302	1766172
1592	1320		" "	" "	6.3	B4	-6.6	-12.9	5171.4			-1124	+692	323621	1766345
1593	1650		132° 15'	" "	11.2	B4	-8.3	-19.5	5164.8			-1402	+871	322743	1766524
1594	1979		132° 32' 43"	+15.9°	11.8	B4	-9.9	-21.7			TP	-1686	+1036	322458	1766687
1594	1979				10.1	90° 20'	-11.5	-21.6	5162.7						
	901		321° 25' 15" - 180°	+15.9°	+7.9	89° -	-15.7	-7.8			BS	-831	+347		
	901				+10.6	88° 30'	-18.3	-7.7	5155.0		BS				
1595	574		322° 59'	+15.9°	22.0	87° 20'	+26.7	+4.7	5159.7			+535	-207	322161	1766825
1596	244		329° 49'	" "	6.9	88° 40'	+5.7	-1.2	5153.8			+236	-60	321862	1766972
1596	71		74° 26' 44"	" "	1.9	88° 40'	+1.7	-0.2	5154.8	TP		±0	+71	321626	1767103
TP	0				5.4	-	-5.4		5149.6	TP		0	0	321626	1767032

159-321,600x-1767160  
TP 4 way INT.

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
5-26-82		B. Cotcamp		T. Patton		6834		Jm TRP		1		114				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
UTAH		Holden-15'		UTAH		MILLARD								L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH+ SOUTH-	EAST+ WEST-		Y	X
									5155.0							
1F	33/6		255° 02' 41"	+15.7°	14.3	91° 08'	-65.6	-79.9		5075.0	1F	+55	-3315	321680	1763715	y=321,680 x=1,763,715
1F	33/6				12.6	91° 10'	-67.5	-80.1	80.0		1F					1/2 T-ROAD NORTH
	3201		255° 03' 08" -180	+15.6°	+12.1	91° 10'	+65.2	+77.3			BS	-36	+3200			EL. 5075.0 CORR. X=46
	3201				+4.6	91° 18'	+72.6	+77.2	5152.2		BS					
X	0				5.4	-		-5.4		5146.8	X	0	0	321644	1,766,915	
1597	242		79° 31'	+15.6°	3.9	88° 30'	+6.3	+2.4		5154.6		-22	+241	321622	1,767,156	
1598	572		76° 13'	" "	7.3	88° 30'	+15.0	+7.7		5159.9		-18	+572	321626	1,767,487	
1599	900		75° 49'	" "	10.7	88° 40'	+20.9	+10.2		5162.4		-22	+900	321622	1,767,815	
1600	1229		76° 14' 35"	" "	8.4	88° 40'	+28.6	+20.2		5172.4	TP	-40	+1228	321604	1,768,143	
1600	1229				12.0	88° 30'	+32.2	+20.2			TP					
	988		253° 52' 56" -180	+15.6°	+14.9	91° -	+17.2	+32.1	5204.5		BS	+9	+988			
	988				+12.1	91° 10'	+20.1	+32.2			BS					
1601	660		251° 24'	+15.6°	7.9	91° 20'	-15.4	-23.3		5181.2		-35	-659	321578	1,768,472	
1602	330		248° 48'	" "	6.7	91° 20'	-7.7	-14.4		5190.1		-32	-328	321581	1,768,803	
SEC. CORN	162		255° 24' 28"	" "	5.6	91° 20'	-3.8	-9.4		5195.1	SEC. CORN	+3	-162	321616	1,768,969	y=321,600 x=1,769,035
1603	0				5.4	-		-5.4		5199.1	X	0	0	321613	1,769,131	
1604	330		75° 22'	+15.6°	6.2	89° 10'	+4.8	-1.4		5203.1		-6	+330	321607	1,769,461	
1605	660		" "	" "	5.2	89° 10'	+9.6	+4.4		5208.9		-11	+660	321602	1,769,791	
1606	990		75° 52'	" "	6.1	89° -	+17.3	+11.2		5215.7		-25	+990	321588	1,770,121	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
5-26-82		B. Cotcamp		T. Patton		6834		Jm TRP		1		115				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
UTAH		Holden - 15'		UTAH		Millard								L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS A TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									5204.5							
1607	1306		72° 31' 30"	+15.6°	3.4	89° -	+22.8	+19.4	}	5223.9	TP	+43	+1305	321655	1,770,436	ACROSS STA. AND AROUND CORNER.
1607	1306				7.3	88° 50'	+26.6	+19.3		TP						
	621		254° 35' 25" - 180°	+15.6°	+8.6	-		+8.6	}	5232.5	BS	-2	+621			
	621				+5.5	04	+3.1	+8.6		BS						
1608	292		253° 26'	+15.6°	11.3	04	-1.5	-12.8		5219.7		-5	-292	321648	1,770,765	
	π	0			5.4	-		-5.4		5227.1		0	0	321653	1,771,057	
1609	38		68° 21'	+15.6°	4.3	-		-4.3		5228.2		+4	+38	321657	1,771,095	
1610	367		70° 28'	" "	7.3	89° -	+6.4	-0.9		5231.6		+25	+366	321678	1,771,423	
1611	680		71° 05' 18"	" "	7.0	89° -	+11.9	+4.9	}	5237.4	TP	+39	+679	321692	1,771,736?	
1611	680				9.0	88° 50'	+13.8	+4.8		TP						
	980		259° 43' 35" - 180°	+15.6°	+5.9	91° 30'	+25.6	+31.5	}	5268.9	BS	-91	+975			
	980				+8.7	91° 20'	+22.8	+31.5		BS						
1612	655		257° 06'	+15.6°	7.8	91° 30'	-17.1	-24.9		5244.0		+31	-654	321632	1,772,057	
1613	330		253° 01'	" "	6.6	91° 30'	-8.6	-15.2		5253.7		-8	-330	321593	1,772,381	
1614	0				5.4	-		-5.4		5263.5	π	0	0	321601	1,772,711	
1615	330		75° 14'	+15.6°	7.5	74	+1.7	-5.8		5263.1		-5	+330	321596	1,773,041	
1616	656		86° 18'	" "	3.5	87° -	+11.4	+7.9		5276.8		-67	+653	321534	1,773,364	
1616	973		79° 21' 44"	" "	4.2	88° 40'	+22.6	+18.4	}	5287.3	TP	-84	+969	321517	1,773,680	
1617	973				7.0	88° 30'	+25.5	+18.5		TP						

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
5-26-82		B. Cotcamp		M. Kwapp		6834		Jm TRP		1	116					
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
UTAH		Holden-15'	UTAH	M. Ilaeo					L. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
										5287.3						
	559		257° 41' 17" - 180°	+15.6	+12.0	91° -	+9.8	+21.8	5309.1		BS	-32	+558			
	559			"	+10.4	91° 10'	+11.4	+21.8			BS					
1618	229		259° 12'	"	8.6	91° 10'	-4.7	-13.3		5295.8		+19	-228	321504	1,774,016	
π	0			"	5.4	-		-5.4		5303.7	π	0	0	321485	1,774,238	
sec. corner	151		18° 39' 59"	"	4.0	91° -	-2.6	-6.6		5302.5	sec. corner	+125	+85	321610	1,774,323	dept ENT - 321,580 T-185 E 4 W 177 X - 1,774,400
1619	102		98° 32'	"	4.4	88° -	+3.6	-0.8		5308.3		-42	+93	321443	1,774,331	East Sta. in National Forest.
1620	430		101° 30'	"	3.8	88° -	+15.0	+11.2		5320.3		-196	+383	321289	1,774,621	
1621	759		99° 38'	"	7.2	87° 40'	+30.9	+23.7		5332.8		-324	+687	321161	1,774,925	
TP	830		99° 45' 48"	"	10.9	87° 40'	+33.8	+22.9		5332.0	TP	-355	+749	321130	1,774,987	
TP	830			"	8.5	87° 50'	+31.4	+22.9			TP					
	555		252° 52' 54" - 180°	"	+10.0	92° -	+19.4	+29.4	5361.4		BS	+15	+554			
	555			"	+8.4	92° 10'	+21.0	+29.4			BS					
1622	330		252° 32'	"	10.8	92° -	-11.5	-22.3		5339.1		-11	-330	321134	1,775,211	
1623	0			"	5.4	-		-5.4		5356.0	π	0	0	321145	1,775,541	
1624	330		90° 21'	"	6.0	88° -	+11.5	+5.5		5366.9		-91	+317	321054	1,775,858	
1625	650		87° 57' 17"	"	11.8	88° 20'	+18.9	+7.1		5368.5	TP	-152	+632	320993	1,776,173	REC-DO CORNER.
1625	650			"	13.7	88° 10'	+20.8	+7.1			TP					
	326		227° 34' 48" - 180°	"	+12.4	04	+1.6	+14.0	5382.5		BS	+147	+291			
	326			"	+8.4	91° -	+5.7	+14.1			BS					
1626	0			"	5.4	-		-5.4		5377.1	π	0	0	321140	1,776,464	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-26-82		B. Cotcamp		M. Knapp		6834		Jm TRP		1		117			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Holden - 15'		UTAH		Millard								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5382.5						
1627	330		66° 22'	156°	7.5	88° 40'	+7.7	+0.2		5382.7		+46	+327	321186	1,776,791
1628	661		68° 26' 24"	"	3.8	88° 40'	+15.4	+11.6		5394.1	TP	+69	+657	321209	1,777,121
1628	661			"	5.7	88° 30'	+17.3	+11.6			TP				
	446		262° 25' 14" -180	"	+13.5	91° -	+7.8	+21.3	5415.4		BS	-62	+442		
	446			"	+12.2	91° 10'	+9.1	+21.3			BS				
1629	122		245° 44'	"	5.4	91° 30'	-3.2	-8.6		5406.8		-18	-121	321129	1,777,442
π	0			"	5.4	-		-5.4		5410.0	π	0	0	321147	1,777,563
1630	209		67° 50'	"	3.8	88° 20'	+6.1	+2.3		5417.7		+24	+208	321171	1,777,771
1631	539		67° 36'	"	4.8	88° 20'	+15.7	+10.9		5426.3		+64	+535	321211	1,778,098
1632	868		66° 45' 08"	"	4.9	88° 20'	+25.2	+20.3		5435.7	TP	+115	+860	321262	1,778,423
1632	868			"	7.4	88° 10'	+27.8	+20.4			TP				
	365		252° 03' 14" -180	"	+11.9	91° -	+6.4	+18.3	5454.0		BS	+15	+365		
	365			"	+10.9	91° 10'	+7.4	+18.3			BS				
1633	330		253° 59' 50"	"	12.2	91° 10'	-6.7	-18.9		5435.1					
1633	48		214° 06'	"	7.6	91° 30'	-1.3	-8.9		5445.1		-31	-37	321246	1,778,751
π	0			"	5.4	-		-5.4		5448.6	π	0	0	321277	1,778,788
1634	290		68° 00'	"	5.3	-		-5.3		5448.7		+32	+288	321309	1,779,076
1635	620		67° 41'	"	7.1	89° -	+10.8	+3.7		5457.7		+73	+616	321350	1,779,404
TP	811		67° 34' 53"	"	4.1	89° -	+14.2	+10.1		5464.1	TP	+96	+805	321373	1,779,593
TP	811			"	6.5	88° 50'	+16.5	+10.0			TP				

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-26-82		B. Lotcamp		M. Knapp		6834		Jm TRP				118			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Holden - 15'		UTAH		M. Ilaeo								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
										5464.1					
	801		267° 33' 24" - 180	15.6	+9.5	92°	+27.9	+37.4	5501.5		BS	-182	+780		
	801		"	"	+7.1	92° 10'	+30.3	+37.4			BS				
1636	660		266° 20'	"	8.8	92°	-23.0	-31.8		5469.7		+136	-646	321327, 1779, 727	
1637	330		" "	"	6.8	91° 50'	-10.6	-17.4		5484.1		+68	-323	321259, 1780, 050	
1638	0		"	"	5.4	-		-5.4		5496.1	TP	0	0	321191, 1780, 373	
1639	325		90° 21'	"	3.8	88° 20'	+9.4	+5.6		5507.1		-89	+312	321102, 1780, 685 <i>AROUND C.</i>	
1640	656		88° 02' 43"	"	7.5	87°	+34.3	+26.8		5528.3	TP	-155	+637	321036, 1781, 010 <i>ACROSS STR.</i>	
1640	656		"	"	9.4	86° 50'	+36.2	+26.8			TP				
	660		265° 45' 40" - 180	"	+9.8	91° 30'	+17.3	+27.1	5555.4		BS	-130	+647		
	660		"	"	+11.7	91° 20'	+15.4	+27.1			BS				
1641	330		267° 04'	"	6.2	91° 40'	-9.6	-15.8		5539.6		+72	-322	320978, 1781, 335	
1642	0		"	"	5.4	-		-5.4		5550.0	TP	0	0	320906, 1781, 657 <i>ACROSS STR.</i>	
1643	330		99° 15'	"	5.2	88° 20'	+9.6	+4.4		5559.8		-139	+299	320767, 1781, 956	
1644	660		96° 20'	"	10.1	87° 50'	+24.9	+14.8		5570.2		-247	+612	320659, 1782, 265	
1645	978		96° 34' 11"	"	9.1	88° 10'	+31.3	+22.2		5577.6	TP	-369	+905	320537, 1782, 562 <i>AROUND CORNER.</i>	
1645	978		"	"	6.3	88° 20'	+28.4	+22.1			TP				
	660		261° 02' 36" - 180	"	+13.6	84	+3.3	+16.9	5594.5		BS	-76	+656		
	660		"	"	+5.4	91°	+11.5	+16.9			BS				
1646	330		257° 55'	"	8.9	91°	-5.8	-14.7		5579.8		+20	-329	320461, 1782, 889	
1646	127		265° 00' 41"	"	8.6	91°	-2.2	-10.8		5583.7		-	-		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
5-26-82		B. Cotamp		M. Knapp		6874		MPK Jm		1		119				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
UTAH		Holoen - 15' scpi		UTAH		M. ILLARO								L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									5594.5							
1647	0			75.6°	5.4	-		-5.4		5589.1	T	0	0	320461	1,783,218	ACROSS STR.
1648	330		98° 33'	"	6.1	87° 20'	+15.3	+9.2		5603.7		-135	+301	320326	1,783,519	
1649	660		96° 21' 08"	"	9.2	87° 20'	+30.7	+21.5		5616.0	TP	-246	+611	320215	1,783,829	
1649	660		"	"	7.3	87° 30'	+28.8	+21.5			TP					
	329		270 10 24 -180	"	+13.8	84	+1.6	+15.4	5631.4		BS	-89	+317			
	329			"	+13.5	90° 20'	+1.9	+15.4			BS					
1650	0			"	5.4	-		-5.4		5626.0	T	0	0	320126	1,784,146	
1651	330		81° 56'	"	5.4	89° -	+5.8	+0.4		5631.8		-43	+327	320083	1,784,473	
1652	659		82° 18' 02"	"	8.1	89° -	+11.5	+3.4		5634.8	TP	-91	+653	320035	1,784,799	
1652	659		"	"	10.0	88° 56'	+13.4	+3.4			TP					
	989		262° 55' 24" -180	"	+4.4	91° -	+17.3	+21.7	5656.5		BS	-147	+978			
	989			"	+10.2	90° 40'	+11.5	+21.7			BS					
1653	660		262° 35'	"	6.9	90° 40'	-7.7	-14.6		5641.9		+94	-653	319982	1,785,124	
1654	330		261° 52'	"	6.6	90° 40'	-3.8	-10.4		5646.1		+43	-327	319931	1,785,450	
1655	0			"	5.4	-		-5.4		5651.1	T	0	0	319888	1,785,777	
1656	330		82° 17'	"	4.9	88° 30'	+8.6	+3.7		5660.2		-45	+327	319843	1,786,104	
1657	660		82° 53'	"	6.9	88° -	+23.0	+16.1		5672.6		-97	+653	319791	1,786,430	
1658	990		81° 49' 32"	"	9.5	88° -	+34.5	+25.0		5681.5	TP	-128	+981	319760	1,786,758	
1658	990			"	6.6	88° 10'	+31.7	+25.1			TP					

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE							
5-26-82		B. Cotcamp		M. Knapp		6834		MPK Jm		1	120							
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER									
UTAH		Holden-Scipio Pass	UTAH	Millard					L. Davis									
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
										5681.5								
	985		269° 30' 25" - 180°	+15.6°	+3.3	91° -	+17.2	+20.5	5702.0		BS	-257	+951					
	985			"	+11.8	90° 30'	+8.6	+20.4			BS							
1659	660		272° 28'	"	8.9	90° 40'	-7.7	-16.6		5685.4		+205	-627	319708	1,787,082		Holden - 15'	
1660	330		271° 41'	"	8.0	90° 40'	-3.8	-11.8		5690.2		+98	-315	319601	1,787,394		Scipio Pass - 7 1/2'	
1661	0			"	5.4	-		-5.4		5696.6	TP	0	0	319503	1,787,709			
1662	330		85° 16'	"	5.6	88° 20'	+9.6	+4.0		5706.0		-62	+324	319441	1,788,033			
1663	660		84° 24'	"	5.0	88° 20'	+19.2	+14.2		5716.2		-115	+650	319388	1,788,359			
1664	939		96° 49' 53"	"	5.5	87° 50'	+35.5	+30.0		5732.0	TP	-358	+867	319145	1,788,576		Around 90° corner.	
1664	939			"	8.2	87° 40'	+38.2	+30.0			TP							
	979		269° 04' 05" - 180°	"	+8.1	90° 50'	+14.2	+22.3	5754.3		BS	-248	+947					Around corner.
	979			"	+10.9	90° 40'	+11.4	+22.3			BS							
1665	653		264° 35'	"	5.9	90° 50'	-9.5	-15.4		5738.9		+115	-643	319012	1,788,880			
1666	330		261° 18'	"	8.2	90° 50'	-4.8	-13.0		5741.3		+40	-328	318937	1,789,195			
1667	0			"	5.4	-		-5.4		5748.9	TP	0	0	318897	1,789,523			
1668	330		93° 54'	"	4.8	88° -	+11.5	+6.7		5761.0		-110	+311	318787	1,789,834			
1669	660		96° 27'	"	5.2	88° -	+23.0	+17.8		5772.1		-248	+612	318649	1,790,135			
1670	989		96° 59' 49"	"	10.3	88° -	+34.5	+24.2		5778.5	TP	-380	+913	318518	1,790,436		McGee's Station	
1670	989			"	13.1	87° 50'	+37.4	+24.3			TP							
	330		294° 12' 08" - 180°	"	+5.2	92° -	+11.5	+16.7	5795.2		BS	-211	+253					
	830			"	+6.1	91° 50'	+10.6	+16.7			BS							

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
5-26-82		B. Cotcamp		M. Knapp		6834		MPK Jon		1		121				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
UTAH		Scipio Pass-7 1/2'		UTAH		Millard								L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									5795.2							
1671	0			+15.6°	5.4	-		-5.4		5789.8	X	0	0	318308	1,790,689	ACROSS STA.
1672	330		119° 23'	"	6.9	88° 30'	+8.6	+1.7		5796.9		-233	+233	318075	1,790,922	
1673	661		118° 56' 19"	"	5.1	88° 30'	+17.3	+12.2		5807.4	TP	-463	+471	317846	1,791,160	
1673	661			"	7.1	88° 20'	+19.2	+12.1			TP		+			
	660		297° 13' 41" - 180°	"	+13.8	-		+13.8		5821.2	BS	-449	+484			
	660			"	+10.5	Bu	+3.3	+13.8			BS		+			
1674	330		297° 14'	"	7.7	90° 20'	-1.9	-9.6		5811.6		+224	-242	317622	1,791,402	
1675	0			"	5.4	-		-5.4		5815.8	X	0	0	317398	1,791,644	
1676	330		115° 19'	"	6.1	-		-6.1		5815.1		-216	+249	317182	1,791,893	
1677	656		117° 20' 50"	"	13.2	-		-13.2		5808.0	TP	-447	+480	316952	1,792,124	
1677	656			"	11.3	90° 10'	-1.9	-13.2			TP		+			
	559		306° 00' 26" - 180°	"	+6.2	88° 30'	-14.6	-8.4		5799.6	BS	-438	+347			around corner
	559			"	+4.6	88° 40'	-13.0	-8.4			BS		+			
1678	525		306° 24' 01"	"	6.3	88° 30'	+13.7	+7.4		5807.0		+414	-323	316929	1,792,148	
1678	232		297° 02'	"	4.7	88° 30'	+6.1	+1.4		5801.0		+157	-171	316672	1,792,300	
X	0			"	5.4	-		-5.4		5794.2	X	0	0	316515	1,792,471	
1679	97		114° 24'	"	5.0	90° 30'	-0.8	-5.8		5793.8		-62	+74	316453	1,792,545	
TP	311		104° 54' 33"	"	11.0	90° 10'	-0.9	-11.9		5787.7	TP	-158	+268	316358	1,792,739	ACROSS ROAD
TP	311			"	10.1	90° 20'	-1.8	-11.9			TP		+			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-26-82		B. Cotcamp		M. Knapp		6834		Brr TRP		1		122			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		SCIPHO PASS-7 1/2'		UTAM		MILLARD								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS T TP	COORDINATES		REMARKS	
												NORTH+ SOUTH - LAT.	EAST+ WEST - DEP.		Y
										5787.7					
	770		307° 32' 35" -180	+15.6	+5.0	89° -	-13.4	-8.4	5779.3		BS	-616	+462		
	770			"	+7.3	88° 50'	-15.7	-8.4			BS	+			
1680	660		306° 35'	"	8.7	88° 40'	+15.4	+6.7		5786.0		+521	-405	316264	1,792,796
1681	330		305° 05'	"	7.9	88° 40'	+7.7	-0.2		5779.1		+255	-209	315998	1,792,992
1682	0			"	5.4	-		-5.4		5773.9	T	0	0	315743	1,793,201
1683	330		103° 52'	"	6.9	91° 30'	-8.6	-15.5		5763.8		-162	+287	315581	1,793,488
1684	660		102° 49'	"	4.9	91° 20'	-15.4	-20.3		5759.0		-314	+580	315429	1,793,781
TP	761		102° 53' 57"	"	8.2	91° -	-13.3	-21.5		5757.8	TP	-363	+669	315381	1,793,870 In corner.
TP	761			"	6.1	91° 10'	-15.5	-21.6			TP	+			
	430		299° 06' 25" -180	"	+4.8	89° -	-7.5	-2.7	5755.1		BS	-302	+306		
	430			"	+6.0	88° 50'	-8.8	-2.8			BS	+			
1685	205		291° 16'	"	4.9	88° 50'	+4.2	-0.7		5754.4		+123	-164	315203	1,794,012
T	0			"	5.4	-		-5.4		5749.7	T	0	0	315080	1,794,176 Across STA.
1686	125		168° 28'	"	7.5	-		-7.5		5747.6		-70	+104	315010	1,794,280
1687	453		111° 39' 18"	"	12.8	-		-12.8		5742.3	TP	-274	+361	314807	1,794,537 Across STA.
1687	453			"	10.5	BH	-2.3	-12.8			TP	+			
	411		301° 32' 41" -180	"	+1.5	TH	-2.1	-0.6	5741.7		BS	-301	+280		
	411			"	+6.6	89° -	-7.2	-0.6			BS	+			
1688	80		295° 10'	"	6.7	89° -	+1.4	-5.3		5736.4		+52	-61	314559	1,794,756
T	0			"	5.4	-		-5.4		5736.3	T	0	0	314507	1,794,817

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
5-26-82		B. Catcamp		M. Knapp		6834		m TRP		1	123						
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
UTAH		Scipio Pass - 7 1/2'		UTAH		Millard					L. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									5741.7								
1689	250		129° 48' 42"	+15.6°	10.9	92° -	-8.7	-19.6		5722.1	TP	-206	+142	314302	1,794,959		
1689	250			"	11.6	91° 50'	-8.0	-19.6			TP						
	651		290° 30' 35" -180	"	+4.8	89° 30'	-5.7	-0.9	5721.2		BS	-384	+526			Around corner	
	651			"	+8.6	89° 10'	-9.5	-0.9			BS						
1690	330		296° 54'	"	9.9	89° 10'	+4.8	-5.1		5716.1		+223	-243	314142	1,795,242		
1691	0			"	5.4	-		-5.4		5715.8	X	0	0	313919	1,795,485	Above stn.	
1692	330		90° 18'	"	12.3	-		-12.3		5708.9		-90	+317	313829	1,795,802		
TP	555		89° 23' 29"	"	11.4	90° 30'	-4.8	-16.2		5705.0	TP	-144	+536	313776	1,796,021	Around corner	
TP	555			"	14.7	90° 10'	-1.6	-16.3			TP						
	430		266° 10' 01" -180	"	+7.7	88° 20'	-12.5	-4.8	5700.2		BS	-88	+421				
	430			"	+6.4	88° 30'	-11.3	-4.9			BS						
1693	330		263° 17'	"	7.6	88° 30'	+8.6	+1.0		5701.2		+51	-326	313740	1,796,116		
1694	0			"	5.4	-		-5.4		5694.8	X	0	0	313689	1,796,442		
1695	330		93° 59'	"	9.2	90° 20'	-1.9	-11.1		5689.1		-111	+311	313578	1,796,753		
TP	536		92° 49' 20"	"	12.5	84	-2.7	-15.2		5685.0	TP	-169	+509	313521	1,796,951	ACROSS ROAD	
TP	536			"	10.6	90° 30'	-4.7	-15.3			TP						
	454		293° 05' 07" -180	"	+13.6	84	+2.3	+15.9	5700.9		BS	-284	+354				
	454			"	+7.9	91° -	+7.9	+15.8			BS						
1696	329		294° 36'	"	10.5	91° -	-5.7	-16.2		5684.7		+212	-251	313450	1,797,054		
1697	0			"	5.4	-		-5.4		5695.5	X	0	0	313239	1,797,305		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-26-82		B. Cotcamp		M. Knapp		6834		KAPK Jan		1		124			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		SCIPPIO PASS-7 1/2'		UTAH		MILLARD								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5700.9						
1698	330		108° 55' 06"	+15.6	8.5	87° 40'	+13.4	+4.9		5705.8	TP	-187	+272	313052	1,797,577
1698	330			"	10.4	87° 20'	+15.3	+4.9			TP				
	270		263° 00' 28" -180	"	+7.6	-		+7.6	5713.4		BS	-40	+267		
	270			"	+6.2	BH	+1.4	+7.6			BS				S
π	0			"	5.4	-		-5.4		5708.0	π	0	0	313013	1,797,844 cueve.
1699	61		117° 03'	"	7.2	92° -	-2.1	-9.3		5704.1		-41	+45	312972	1,797,889
TP	203		100° 03' 38"	"	13.5	92° -	-7.1	-20.6		5692.8	TP	-88	+183	312926	1,798,027
TP	203			"	12.9	92° 10'	-7.7	-20.6			TP				
	562		260° 11' 27" -180	"	+4.6	86° 20'	-35.9	-31.3	5661.5		BS	-57	+558		
	562			"	+7.9	86° -	-39.1	-31.2			BS				
1700	385		257° 38'	"	11.1	86° -	+26.8	+15.7		5677.2		+22	-384	312892	1,798,201
1701	52		267° 23'	"	6.9	86° -	+3.6	-3.3		5658.2		+12	-51	312882	1,798,524
π	0			"	5.4	-		-5.4		5656.1	π	0	0	312870	1,798,585
1702	279		93° 55'	"	3.4	92° 40'	-13.0	-16.4		5645.1		-93	+263	312777	1,798,848
TP	460		95° 55' 56"	"	11.8	92° 40'	-21.4	-33.2		5628.3	TP	-169	+427	317702	1,799,012
TP	460			"	13.1	92° 30'	-20.0	-33.1			TP				
	430		272° 42' 29" -180	"	+11.2	-		+11.2	5639.5		BS	-135	+408		
	430			"	+9.0	BH	+2.2	+11.2			BS				
1703	282		266° 45'	"	12.8	91° 20'	-6.6	-19.4		5620.1		+60	-275	312628	1,799,145

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	5-26-82	INSTRUMENT MAN	B. Cotcamp	ROD MAN	M. Knapp	PARTY NUMBER	6834	NOTES CHECKED BY	Bm TRP	LINE NO.	1	PAGE	125	
AREA	UTAH	TOPQ MAP	SCIPIO PASS - 7 1/2'	STATE	UTAH	COUNTY	Millard	TWP		RANGE		PPM	PARTY MANAGER	L. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5639.5						
H <sup>+</sup>	203		259° 01' 05"	+15.6°	9.0	93° 50'	-13.5	-22.5		5617.0	H <sup>+</sup>	+16	-202	312584 1799,218	115-312,595 X-1,799,200 H <sup>+</sup> creek crossing
1704	119		164° 25'	"	13.3	93° 50'	-7.9	-21.2		5618.3		-119	±0	312449 1,799,420	
π	0			"	5.4	-		-5.4		5634.1	π	0	0	312568 1,799,420	
Forest Boundary	163		118° 46'	"	8.2	92° -	-5.7	-13.9		5625.6	Forest Boundary	-114	+116	312454 1,799,536	3-312,485 Forest Boundary X-1,799,505
1705	373		120° 14'	"	6.4	90° 30'	-3.3	-9.7		5629.8		-268	+260	312300 1,799,680	
TP	465		117° 59' 46"	"	7.2	-		-7.2		5632.3	TP	-321	+337	312248 1,799,757	
TP	465			"	9.7	74	+2.3	-7.4			TP	+			
	569		311° 39' 41" -180°	"	+7.1	88° 40'	-13.2	-6.1	5626.2		BS	-478	+308		
	569			"	+8.8	88° 30'	-14.9	-6.1			BS	+	+		
1706	330		310° 44'	"	8.4	88° 40'	+7.7	-0.7		5625.5		+275	-183	312046 1,799,883	
1707	0			"	5.4	-		-5.4		5620.8	π	0	0	311771 1,800,060	
1708	330		135° 51'	"	7.9	90° 40'	-3.8	-11.7		5614.5		-290	+158	311481 1,800,224	AROUND CORNER
1709	654		141° 49' 50"	"	6.0	90° 40'	-7.6	-13.6		5612.6	TP	-604	+251	311168 1,800,318	E.A.L. Line #1
FF1709	654			"	10.0	90° 20'	-3.8	-13.8			TP	+			
	3154		104° 33' 48" +180	"	+12.8	92° 20'	+128.2	+141.0	5753.6		BS	+1583	-2725		TRAVERSE
	3154			"	+9.0	267° 36'	+131.9	+140.9			BS	+	+		TO ELEVATION
π	0			"	5.4	-		-5.4		5748.2	π	0	0	312752 1,797,594	Tie
TP	4378		283° 10' 53"	"	5.8	89° 40'	+25.9	+20.1		5773.6	TP	+2108	-3837	314861 1,793,758	
TP	4378			"	13.7	270° 26'	+33.5	+19.8	42003		TP	+	+		

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE			
5-26-82		B. Cotcamp		M. Knapp		6834		Jm		1	126			
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER			
UTAH		SCIPIO		PASS-7 1/2		UTAH		Millard			L. Davis			
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS T TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
										5773.6				
	2644		106° 04' 31" +180°	+16.6	+10.1	91° 40'	+76.8	+86.9			BS	+1388	-2249	
	2644			"	+2.4	91° 50'	+84.4	+86.8	5860.4		BS	+	+	
T	0			"	5.4	-		-5.4		5855.0	T	0	0	316250, 1791,510
TP	1017		261° 58' 19"	"	8.0	88° 20'	+29.6	+21.6		5882.0	TP	+134	-1008	316385, 1790,509
TP	1017			"	10.9	88° 10'	+32.5	+21.6			TP	+	+	
	362		13° 23' 29" +180°	"	+11.3	-		+11.3	5893.3		BS	-317	-175	
	362			"	+9.5	BH	+1.8	+11.3			BS	+	+	
T	0			"	5.4	-		-5.4		5887.9	T	0	0	316069, 1790,329
SECTION	161		194° 15' 35"	"	3.8	87° 40'	+6.5	+2.7		5896.0	SEC.	-140	-80	315930, 1790,250 SECTION
CORNER	161			"	5.2	87° 10'	+7.9	+2.7			CORNER	+	+	CORNER T-18, T-19 GENERAL LAND OFFICE SURVEY. ELEV. 5896.0 Y-315,930 X-1790,250 HORIZ. CORR. Y-+13 X-+8