

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

FIRST PAGE = PAGE 11 OF 73

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-14-82		B. Catcamp		D. Hamilton		6834		Dm		3		11			
AREA		TOPQ MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Scipio Lake-7 1/2'		UTAH		MILLARD								L.O. DAVIS	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5976.4						
46	486		212° 22'	+15.5	8.3	89° 10'	+7.1	-1.2		5975.2		-326	360	286,881	184,569
45	816		" "	" "	7.2	89° 10'	+11.9	+4.7		5981.1		347	605	286,660	184,324
44	1146		" "	" "	8.9	89° 10'	+16.7	+7.8		5984.2		-769	850	286,438	184,197
43	1476		" "	" "	7.1	89° 10'	+21.5	+14.4		5990.8		-990	1095	286,217	184,034
IF	2481		79° 12' 56"	" "	6.5	90°		-6.5		5970.3	±	-204.3	+2473	287,000	184,400
IF	2481			+15.5	5.9	270°		-5.9	-6.13		±		-2		

B.O.L LINE #3
y = -287,000 x - 1,844,400
T-INTERSECT EL.
HORIZ Y = -10' 5970.0
COORD. X = -6'

* NOTE - PAGE 11 IS THE FIRST PAGE OF NOTES. NO SURVEY NOTES BEFORE PAGE 11

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DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-14-82		B. Cotcamp		D. Hamilton		6834		Jm		3		12			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Scipio Lake - 7 1/2'		UTAH		MILLARD								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5999.8						
61	660		67° 55'	+15.2	7.3	87° 20'	+30.7	+23.4		6023.2		+79	+655	286,895	1,845,859
60	330		70° 36'	" "	4.7	87° 20'	+15.3	+10.6		6010.4		+24	+329	286,840	1,845,533
59	0				5.2	-		-5.2		5994.6	π	0	0	286,816	1,845,204
58	320		268° 13'	+15.2	6.0	92° 20'	-13.4	-19.4		5980.4		+77	321	286,893	1,844,983
57	660		268° 47'	" "	8.1	91° 40'	-19.2	-27.3		5972.5		+159	-640	286,975	1,844,644
π	825		267° 45' 20"	" "	5.4	91° 40'	-24.0	-29.4		5970.4	π	+185	-804	287,000	1,844,400
56	949		276° 52'	" "	8.2	91° 20'	-22.1	-30.3		5969.5		+357	-879	287,173	1,844,325
55	1226		286° 20'	" "	7.7	91° -	-21.4	-29.1		5970.7		+641	-1045	287,457	1,844,159
54	1536		284° 18'	" "	9.0	90° 50'	-22.3	-31.3		5968.5		+756	-1337	287,572	1,843,867
53 ^a	1856		281° 34' 44"	+15.5	5.9	90° 50'	-27.0	-32.9		5967.0	TP	+845	-1652	287,657	1,843,550
53	1856				5.6	269° 10'	-27.0	-32.6	32.8' } B.C.C.		TP				
	1680		59° 03' 31" +180	+15.5	89.6	90° -		+9.6	5976.4		BS	-447	-1619		
	1680				9.2	270° -		+9.2	5976.4		BS				
52	1420		51° 18'	+15.5	11.0	-		-11.0		5965.4		+359	+1305	287,766	1,843,234
51	1122		48° 57'	" "	9.1	-		-9.1		5967.3		+484	+1012	287,691	1,842,941
50	804		50° 40'	" "	9.0	-		-9.0		5967.4		+325	+735	287,532	1,842,664
49	497		41° 42'	" "	9.0	-		-9.0		5967.4		+269	+418	287,476	1,842,347
48	173		32° 49'	" "	7.0	-		-7.0		5969.4		+115	+129	287,322	1,842,058
π	0				5.2	-		-5.2		5971.2	π	0	0	287,207	1,841,929
47	156		212° 22'	+15.5	6.3	89° 10'	+2.3	-4.0		5972.4		+105	+116	287,102	1,841,813

y=287,000 x=1,844,400
π-T-INTERSECT EL. 5970.0
HORIZ. CORR. y=-59'
x=-11'

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DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
10-14-82		B. Coteamp		Di Hamilton		6834		D.H. dm		3	13				
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER				
Utah		Scipio Lake 7 1/2'		Utah		Millard					L.O. 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	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									6268.0						
73	330		241° 21'	+15.2	4.2	94° -	23.0	-27.2		6240.8		-77	321	287,260	1849,747
72	660		" "	" "	16.0	93° -	34.5	-44.5		6223.5		-754	-642	287,183	1849,406
71	990		" "	" "	10.0	93° -	51.7	-61.7		6206.3		-230	-963	287,107	1849,085
TP	1128		242° 50' 40"	" "	11.8	93° -	-59.0	-70.8		6197.3	TP	-233	-1102	287,102	1848,946
TP	1128				11.5	267° -	-59.0	-70.5	-70.7		TP				
	835		86° 49' 47" +180	+15.2	5.2	86° 20'	-53.4	-48.2	6149.0		BS	+174	-815		
	835				5.0	273° 40'	-53.4	-48.4	-48.3		BS				
70	657		87° 01'	+15.2	5.0	86° 23'	+41.4	+36.4		6185.4		-139	+642	287,135	1848,773
ff	395		83° 30' 29"	" "	5.7	86° 20'	+25.3	+19.6		6168.6		-60	+390	287,214	1849,521
69	330		80° 01'	" "	5.6	86° 20'	+21.1	+15.5		6164.5		-30	+329	287,244	1849,460
68	0				5.2	-		-5.2		6143.8	X	0	0	287,274	1848,131
67	330		245° 21'	+15.2	5.9	93° 20'	-19.2	-25.1		6123.9		-54	-326	287,220	1847,805
66	660		" "	" "	7.2	93° 20'	-38.3	-45.5		6103.5		-108	-651	287,166	1847,480
65	990		245° 19' 54"	" "	8.0	93° 20'	-57.6	-65.6		6083.5	TP	-163	-975	287,109	1847,156
65	990				7.8	266° 40'	-57.6	-65.4	-65.5		TP				
BS	1976		66° 19' 11" +180	+15.2	8.3	87° 20'	-91.9	-83.6	5999.8		BS	-291	-1952		
BS	1976				8.0	272° 40'	-91.9	-83.9	-83.7		BS				
64	1648		66° 32'	+15.2	10.4	87° 20'	+76.6	+66.2		6066.0		+237	+1631	287,053	1846,835
63	1318		66° 48'	" "	11.7	87° 20'	+61.2	+49.5		6049.3		+183	+1305	286,199	1846,509
62	989		67° 05'	" "	10.0	87° 20'	+46.0	+36.0		6035.8		+133	+980	286,949	1846,184

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10-14-82		B. Catecamp		D. Hamilton		6834		D.H. Jm		3		14			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		Scipio South 7 1/2		UTAM		M. HARD								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									6570.6						
85	0				5.2	-		-5.2		6565.4	T	0	0	289,581	1852,386
84 _{off}	327		196° 19'	+15.2	9.6	94°	-22.8	32.4		6538.2		-279	171	289,302	1852,215
84	329		165° 37'	"	5.3	-		-5.3		6565.3		-329	5	289,252	1852,381
TP	380		164° 35' 41"	"	11.2	-		-11.2		6559.4	TP	-380	+1	289,199	1852,386
TP	380				11.1	270°		-11.1			TP				
	881		15° 59' 43" +180	+15.2	6.1	83°	-107.4	-101.3	6458.0		BS	-748.2	753.1		
	881				+5.9	272°	-107.4	-101.5	101.4		BS				
83	658		26° 47'	+15.2	7.2	84° 40'	+60.9	+53.7		6511.7		+489	+440	288,938	1852,372
82	330		23° 30'	"	5.0	84° 40'	+30.5	+25.5		6483.5		+258	+206	288,707	1852,138
81	0				5.2	-		-5.2		6452.8	T	0	0	288,449	1851,932
80	330		202° 13'	+15.2	3.5	94° 40' 30"	-25.8	-29.3		6428.7		-262	-201	288,187	1851,731
79	660		200° 44'	"	8.2	94° 40' 30"	-51.6	-59.8		6398.2		534	387	287,915	1851,545
78	989		202° 49' 07"	"	5.7	94° 30'	-77.6	-83.3		6374.8	TP	-777.2	-607.1	287,670	1851,324
78	989				5.4	265° 30'	-77.6	-83.0	83.2		TP				
	1323		60° 15' 07" +180	+15.2	8.7	85°	-115.3	-106.6	6268.0		BS	-331.2	1276		
	1323				+8.4	275°	-115.3	-106.9	106.8		BS				
77	990		60° 57'	+15.2	11.8	85°	+86.0	+74.2		6342.2		+237	+961	287,574	1851,009
76	660		" "	"	8.0	85°	+57.3	+49.3		6317.3		+158	+641	287,495	1850,689
75	330		" "	"	6.9	85°	+28.7	+21.8		6289.8		+79	320	287,416	1850,368
74	0				5.2	-		-5.2		6262.8	T	0	0	287,337	1850,048

Back on ROAD Scipio South 7 1/2
Scipio Lake 7 1/2
ACROSS STA.
ACROSS STA.

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DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
10-14-82		B. Cotcamp		D. Hamilton		6834		D.H. Jm		3		15				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
UTAH		Scipio South 7 1/2		UTAH		MILLARD								L.O. DAVIS		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS
														Y	X	
										6772.6						
	448		18° 31' 19" +180°	+15.2	2.4	83° 30'	-50.7	-48.3	6724.3		BS	-370	-247			
	448			+2.3		276° 30'	-50.7	-48.4		BS						
89 ^{off.}	132		10° 55'	15.2	6.8	85° -	+11.5	+4.7		6729.0		+119	+58	290,599	1853,134	
89	149		351° 31'	" "	5.0	92° 18' 30"	-6.0	-11.0		6713.3		+148	+17	290,628	1853,093	CROSS COUNTRY
X	0				5.2	-		-5.2		6719.1	X	0	0	290,480	1853,076	ON ROAD
88	239		235° 58'	+15.2	8.8	94° 47'	-19.9	-28.7		6695.6	TP	-77	-226	290,403	1852,850	
88 ^{TP}	301		233° 58' 57"	" "	5.0	94° 58' 21"	-26.1	-31.1	6693.2		TP	-107	-280	290,371	1852,795	CROSS COUNTRY
TP	301				5.0	265° 02' 11"	-26.0	-31.0		TP						
	460		13° 18' 26" +180°	+15.2	8.8	82° 56' 39"	-57.3	-48.5	6644.7		BS	-401	-218			
	460			+8.8		277° 09' 49"	-57.4	-48.6		BS						
87	230		355° 32'	+15.2	5.0	94° 36' 18"	-18.5	-23.5		6621.2		+226	+43	290,194	1852,619	
X	0				5.2	-		-5.2		6639.5	X	0	0	289,968	1852,576	
87 ^{off.}	236		65° 55'	+15.2	5.0	81° 49'	+33.6	+28.6		6673.3		+86	+553	290,054	1853,129	
86 ^{off.}	103		240° 12'	" "	5.0	98° 32'	-15.1	-20.1		6624.6		-26	-700	289,942	1852,476	
86	117		219° 06'	" "	5.0	98° 15'	-16.8	-21.8		6622.9		-68	-95	289,900	1854,481	
TP	175		207° 10' 13"	" "	5.0	98° 17' 42"	-25.2	-30.2	6614.5		TP	-128	-117	289,838	1852,458	
TP	175				5.0	261° 43' 10"	-25.2	-30.2		TP						
	270		00° 26' 12" +180°	+15.2	10.7	78° 20'	-54.6	-43.9	6570.6		BS	-255	-71			
	270			+10.6		281° 40'	-54.6	-44.0		BS						

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10-14-82		B. Cotcamp		D. Hamilton		6834		D.H. CM		3	16				
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
UTAH		Scipio South 7 1/2	UTAH	Sanpete					L.O. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									6608.5						
97	830		260° 14'	+15.2	4.7	84° 20'	+81.6	+76.9		6685.4		+79	-826	291,549	1855,122
TP	910		259° 58' 30"	"	2.7	84° 20'	+89.9	+87.2			TP	+82.3	-902	291,549	1855,045
TP	910				2.6	275° 40'	+89.9	+87.3		6695.8	TP				
	450		123° 04' 06" +180	+15.2	12.7	96° 30'	+50.9	+63.6	6759.4		BS	+334.3	-298		
	450				11.4	96° 40'	+52.2	+63.6			BS				
96	190		117° 43'	+15.2	7.0	98° -	-26.2	-33.2		6726.2		-129	+139	291,751	1854,885
X	0				5.2	-		-5.2		6754.2	X	0	0	291,880	1854,746
95	166		224° 59'	+15.2	7.3	88° 30'	+4.3	3.0		6756.4		-83	-144	291,797	1854,602
94	496		" "	"	11.3	85° 50'	+35.9	+24.6		6784.0		-247	-430	291,633	1854,316
93	826		" "	"	2.5	85° 50'	+59.9	+57.4		6816.8		-411	-717	291,469	1854,029
TP	1071		224° 26' 38"	"	6.4	85° 50'	+77.8	+71.4		6830.9	TP	+340.3	-922	291,337	1853,823
TP	1071				6.2	274° 10'	+77.8	+71.6	6715.3		TP				
	418		08° 16' 18" +180	+15.2	10.7	84° 40'	-38.9	-28.2	6802.7		BS	-382.3	-166		
	418				10.6	275° 20'	-38.9	-28.3			BS				
92 _{OFF.}	316		07° 27'	+15.2	6.0	84° 20'	+31.1	+25.1		6827.8		+292	+122	291,244	1853,778
92	309		21° 23'	"	2.9	84° -	+32.1	+29.2		6831.9		+248	+184	291,200	1853,840
X	0				5.2	-		-5.2		6797.5	X	0	0	290,952	1853,656
91	28		242° 00'	+15.2	6.6	93° -	-1.5	-8.1		6794.6		-6	-27	290,946	1853,629
90	346		238° 23' 07"	"	5.0	94° 10'	-25.1	-30.1		6772.6	TP	-98.2	-331	290,852	1853,324
90	346				6.1	94° -	-24.1	-30.2			TP				LAST STA. ON ROAD

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DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
10-13-82		B. Cotcamp		D. Hamilton		6834		D.H. M		3		17				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
UTAH		Hayes Redmond Canyon 7 1/2		UTAH		Sanpete								L. O. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS
														Y	X	
									6349.7							
110	2268		271° 14' 40"	+15.2	6.8	88° 20'	+66.0	+59.2	6409.2	TP	+642	-2174	291,597	1859,385		
110	2268				6.2	271° 40'	+66.0	+59.8							TP	
	990		77° 02' 23" +180	+15.2	5.5	92° 30'	+43.2	+48.7	6457.8	BS	+39	-988				
	990				5.3	267° 30'	+43.2	+48.5							BS	
109	660		77° 02'	+15.2	8.4	92° 20'	-26.8	-35.2		6422.6		-26	+660	291,607	1859,056	
108	330		" "	" "	7.6	92° 20'	-13.4	-21.0		6436.8		-13	+330	291,620	1859,726	
107	0				5.2	-		-5.2		6452.6	π	0	0	291,633	1858,396	
106	330		257° 19'	+15.2	8.1	87°	+17.2	+9.1		6466.9		+17	-330	291,647	1858,066	
105	660		" "	" "	8.1	87°	+34.5	+26.4		6484.2		+29	-659	291,662	1857,737	Hayes Redmond Canyon ↑
104	990		" "	" "	5.2	87°	+51.7	+46.5		6504.3		+43	-989	291,676	1857,407	SCIPIO SOUTH-7 1/2
103	1320		257° 07' 54"	" "	2.7	87°	+69.1	+66.4	6524.4	TP	+54	-1317	291,684	1857,078		
103	1320				2.4	273°	+69.1	+66.7							TP	
	1151		64° 13' 53" +180	+15.2	3.9	94°	+80.3	+84.2	6608.5	BS	-211	-1129				
	1151				3.7	266°	+80.3	+84.0							BS	
102	821		63° 20'	+15.2	6.7	94°	-57.1	-63.8		6544.7		+163	+805	291,633	1856,753	
101	491		" "	" "	6.7	94°	-34.2	-40.9		6567.6		+98	+481	291,568	1856,429	
100	161		60° 27'	" "	6.0	94°	-11.2	-17.2		6591.3		+40	+156	291,510	1856,104	
π	0				5.2	-		-5.2		6603.3	π	0	0	291,470	1855,948	across STA.
99	172		260° 05'	+15.2	5.6	84° 20'	+16.9	+11.3		6619.8		+16	-171	291,486	1855,777	
98	502		261° 39'	" "	7.5	84° 20'	+49.3	+41.8		6650.3		+60	-498	291,530	1855,450	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
10-13-82		B. Cotcamp		D. Hamilton		6834		D.H. Jm		3	18						
AREA		TOP MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER								
UTAH		Redwood Canyon 7 1/2	UTAH	Sanpete					L.O. Davis								
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									6256.7								
126	1066		287° 39'	+5.2	10.7	88° 40'	+24.8	+14.1		6270.8		+578	-896	289,230	1863,966		
125	1796		" "		4.3	88° 40'	+32.5	+28.2		6284.9		+757	-1173	289,409	1863,689		
124	1724		287° 55' 36"	+5.2	8.4	88° 10'	+55.2	+46.8		6303.7	TP	+942 ₃	-1443 ₁	289,591	1863,418		
124	1724				8.0	271° 50'	+55.2	+47.2	+47.0		TP						
	2308		111 12 44 +180	+5.2	12.6	90° 50'	+33.6	+46.2	6349.7		BS	+1370 ₃	-1857 ₁				
	2308				+12.1	269° 10'	+33.6	+45.7	+46.0		BS						
123	1980		111° 13'	+5.2	13.4	91° -	-34.6	-48.0		6301.7		-1175	+7593	289,783	1863,153		
122	1650		" "	" "	13.3	91° -	-28.8	-42.1		6307.6		-980	+1328	289,978	1862,888		
121	1320		" "	" "	6.8	91° -	-23.0	-29.8		6319.9		-784	+1062	290,174	1862,622		
120	990		" "	" "	6.0	91° -	-17.3	-23.3		6326.4		-588	+797	290,370	1862,357		
119	660		" "	" "	3.5	91° -	-11.5	-15.0		6334.7		-392	+531	290,566	1862,091		
118	330		" "	" "	9.0	-	-	-9.0		6340.7		-196	+266	290,762	1861,826		
117	224		112° 33' 01"	" "	7.0	-	-	-7.0		6342.7	11	-137	+177	290,821	186,737		
117	0				5.2	-	-	-5.2		6344.5	π	0	0	290,958	1861,560		
116	330		288° 57'	+5.2	4.6	89° -	+5.8	+1.2		6350.9		+185	-273	291,143	1861,287		
115	654		283° 22'	" "	7.4	88° 30'	+17.1	+9.7		6359.4		+313	-574	291,271	1860,986	Around corner	
114	982		279° 59'	" "	4.2	88° 20'	+28.5	+24.3		6374.0		+418	-889	291,376	1860,671	" "	
113	1308		278° 20'	" "	10.0	88° 20'	+38.0	+28.0		6377.7		+522	-1199	291,480	1860,361	" "	
112	1631		276° 44'	" "	8.9	88° 20'	+47.4	+38.5		6388.2		+609	-7513	291,567	1860,047	" "	
111	1946		273° 29'	" "	8.9	88° 20'	+56.6	+47.7		6397.4		+623	-7843	291,581	1859,717	" "	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 10-13-82	INSTRUMENT MAN B. Cotcamp	ROD MAN D. Hamilton	PARTY NUMBER 6834	NOTES CHECKED BY DH, JM	LINE NO. 3	PAGE 19
AREA UTAH	TOPO MAP Redmond Canyon-7 1/2	STATE UTAH	COUNTY Sanpete	TWP	RANGE	PPM
				PARTY MANAGER L.O. Davis		

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
										6142.3								
BS	386		69° 02' 24" +180	+15.2	10.3	92°	+13.5	+23.8	6166.1		BS	-39	-384					
BS	386				10.2	268°	+13.5	+23.7			BS							
138	330		67° 36'	+15.2	9.6	92°	-11.5	-21.1		6145.0		+41	+327	287,775	1867,277			
137	0				5.2	-		-5.2		6160.9	TP	0	0	287,734	1866,950		ACROSS STA. AROUND CORNER	
136	331		318° 40'	+15.2	6.5	87° 20'	+15.4	+8.9		6175.0		+297	-146	288,031	1866,804			
135	660		" "	" "	8.0	87° 30'	+28.8	+20.8		6186.9		+593	-291	288,327	1866,659			
TP	880		316° 43' 22"	" "	7.2	87° 30'	+38.4	+31.2		6197.3	TP	+776	-414	288,502	1866,531			
TP	880				9.8	87° 20'	+40.9	+31.1			TP							
	1672		80° 12' 54" +180	+15.2	11.0	91° 40'	+48.6	+59.6	6256.7		BS	+158	-1664					
	1672				10.6	268° 20'	+48.6	+59.2	6254.3		BS							
134	1566		79° 11'	+15.2	9.0	91° 50'	-50.1	-59.1		6197.6		-120	+1561	288,532	1866,423			
133	1250		78° 37'	" "	13.6	92° 06'	-45.8	-59.4		6197.3		-83	+1247	288,569	1866,109			
132	918		80° 09'	" "	6.0	91° 50'	-29.4	-35.4		6221.3		-86	+914	288,566	1865,776			
131	591		80° 57'	" "	10.2	91° 50'	-18.9	-29.1		6227.6		-63	+588	288,589	1865,450			
130	261		82° 59'	" "	7.2	93° 30'	-75.9	-23.1		6233.6		-37	+258	288,615	1865,120			
TP	0				5.2	-		-5.2		6251.5	TP	0	0	288,652	1864,862		ACROSS ROAD	
129	75		294° 14'	+15.2	4.5	89°	+1.3	-3.2		6253.5		+48	-58	288,700	1864,804		REDMOND CANYON-7 1/2	
128	406		287° 39'	" "	7.7	89°	+7.1	-0.6		6256.1		+220	-341	288,872	1864,521		HAYES CANYON-7 1/2	
127	736		" "	" "	12.7	88° 40'	+17.1	+4.4		6261.1		+399	-618	289,051	1864,244			
HI	785		287° 16' 23"	" "	12.7	88° 40'	+18.3	+5.6		6262.3	HI	+421	-662	289,065	1864,195		ROAD SOUTH CORNER	

289,065 x 1864,195
HORIZ. = 78
VERT. = 45

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
10-13-82		B. Cotcamp		D. Hamilton		6834		D.N. JM		3	20						
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER								
UTAH		Redmond Canyon-7 1/2	UTAH	Sanpete					L.O. Davis								
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									5991.1								
148	848		327° 25'	+15.2	8.3	87° 30'	+37.0	+28.7		6019.8		+809	-253	286,662	1870,137		
TP	1090		321° 02' 48"	+15.2	9.2	87° 30'	+47.6	+38.4		6029.6	TP	+997	-439	286,841	1869,948	ALONG 45°	
TP	1090				9.0	272° 30'	+47.6	+38.6	+38.5		TP					CORNER	
	704		92° 41' 30" +180	+15.2	+14.5	91° 30'	+18.4	+32.9	6062.5		BS	+216	-670				
	704				+14.4	268° 30'	+18.4	+32.8			BS						
147	660		92° 26'	+15.2	11.7	91° 46'	+20.3	-32.0		6030.5		200	+629	286,849	1869,902		
146	330		92° 49'	"	7.7	92° 40'	-15.3	-23.0		6039.5		102	+314	286,947	1865,587		
145	0				5.2	-	-	-5.2		6057.3	TP	0	0	287,049	1869,273	ACROSS STA.	
144	330		296° 09'	+15.2	6.3	87° 50'	+12.5	+6.2		6068.7		+218	-248	287,267	1869,025		
143	657		298° 39'	"	24.9	86° 10'	+43.8	+18.9		6081.4		+455	-474	287,504	1868,799	THROUGH	
142	974		293° 06' 48"	"	10.5	87° -	+51.0	+40.5		6103.1	TP	+603	-763	287,644	1868,505	CORNER	
142	974				10.3	273° -	+51.0	+40.7	+40.6		TP						
	765		98° 52' 59" +180	+15.2	+9.2	91° 30'	+20.0	+29.2	6132.2		BS	+312	-698				
	765				+9.0	268° 30'	+20.0	+29.0	+29.1		BS						
141	435		99° 05'	+15.2	9.1	91° -	-7.6	-16.7		6115.5		-179	+397	287,769	1868,199		
140	112		83° 33'	"	7.5	90° 20'	-0.7	-8.2		6124.0		-17	+111	287,931	1867,113		
TP	0				5.2	-	-	-5.2		6127.0	TP	0	0	287,948	1867,802	INSIDE OF CORNER	
139	209		239° 47'	+15.2	6.5	88° 10'	+6.7	+0.2		6132.4		-54	-202	287,894	1867,600		
TP	485		235° 41' 53"	"	2.7	88° 30'	+12.7	+10.0			TP	-159	-458	287,781	1867,339		
TP	485				2.6	271° 30'	+12.7	+10.1		6142.3	TP						

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
10-13-82		B. Cotcamp		D. Hamilton		6834		D.H. Jm		3	21						
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER								
UTAH		REMOND CANYON-7 1/2	UTAH	Sanpete					L.O. Davis								
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS	
														Y	X		
									5906.1								
161	989		67° 14'	15.6	12.1	92° 36'	-44.8	-56.9		5849.2		+123	+981	284,429	1,873,179		
160	660		67° 52'	"	9.3	92° 30'	-28.8	-38.1		5868.0		+75	+656	284,381	1,872,854		
11	388		70° 33' 55"	"	8.0	92° 30'	-16.9	-24.9		5881.2	11	+26	+387	284,332	1,872,585	y=284,295 x=1,872,585 11-T-TRAIL SOUTH EL. 5883	
159	330		70° 11'	"	8.1	92° 30'	-14.4	-22.5		5883.6		+24	+329	284,330	1,872,527		
158	0				5.2	-		-5.2		5900.9	π	0	0	284,306	1,872,198	err	
157	330		272° 30'	15.6	6.5	88° 50'	+6.7	+0.2		5906.3		+103	-314	284,409	1,871,884	Through corner	
156	658		275° 48'	"	6.7	87° 50'	+24.9	+18.2		5924.3		+240	-613	284,546	1,871,585	" "	
155	962		283° 57'	"	4.9	87° 40'	+39.1	+34.2		5940.3		+474	-837	284,780	1,871,361	" "	
154	1268		290° 28'	"	8.4	87° 20'	+58.9	+50.5		5956.6		+747	-1025	285,053	1,871,173	" "	
153	1582		294° 27'	"	6.3	87° 20'	+73.5	+67.2		5973.3		+1018	-1211	285,324	1,870,987	" "	
TP	1740		294° 45' 09"	"	10.3	87° 20'	+81.0	+70.7		5977.0	TP	+1125	-1325	285,429	1,870,872		
TP	1740				9.9	87° 20'	+81.0	+71.1	+70.9		TP	-2	-1				
	641		116° 02' 30" +180	15.6	14.2	-		+14.2	5991.1		BS	+426	-479				
	641				14.0	270°		+14.0	4113		BS						
152	470		115° 42'	15.6	12.3	84	-2.4	-14.7		5976.4		-310	+353	285,543	1,870,745		
151	143		122° 26'	"	7.8	-		-7.8		5983.3		-106	+96	285,747	1,870,488		
π	0				5.2	-		-5.2		5985.9	π	0	0	285,853	1,870,392		
150	189		327° 25'	15.2	2.3	-		-2.3		5988.8		+180	-56	286,033	1,870,336		
14	317		325° 14' 58"	"	7.9	89°	+5.5	-2.4		5988.7	14	+299	-106	286,150	1,870,285	y=286,150 x=1,870,285 14-CORREL CROSSING HORIZ Y=-33 CORR X=-20	
149	518		327° 25'	"	6.2	88°	+18.1	+11.9		6003.0		+494	-155	286,347	1,870,237		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-13-82		B. Cottramp		D. Hamilton		6834		D.H.		3		22			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		REDMOND CANYON-7 1/2		UTAH		SANPETE								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS A TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
										5687.6					
	566		55° 49' 07" +180	+15.6	+5.3	92° -	+19.8	+25.1	5712.7		BS	-180 ₂	-536 ₁		
	566				+6.9	91° 50'	+18.1	+25.0			BS				
170	330		55° 50'	+15.6	7.1	91° 30'	-8.6	-75.7		5697.0		+105	+313	283,969 1,875,762	
169	0				5.2	-		-5.2		5707.5	X	0	0	283,864 1,875,449 ACROSS STA.	
168	330		258° 33'	+15.6	2.6	88° -	+11.5	+8.9		5721.6		+24	-329	283,888 1,875,120	
TP	486		266° 09' 29"	"	4.0	87° 40'	+19.5	+15.5		5728.2	TP	+48 ₂	-477 ₁	283,910 1,874,971	
TP	480				3.9	272° 20'	+19.5	+15.6			TP				
	795		129° 48' 42" +180	+15.6	+9.8	94° 20'	+60.1	+69.9	5798.0		BS	+653 ₂	-450 ₁		
	795				+9.6	265° 40'	+60.1	+69.7	5798.0		BS				
167	608		131° 22'	+15.6	11.1	94° 40'	-49.3	-60.4		5737.6		-510	+331	284,051 1,874,851	
166	444		130° 24' 54"	"	9.4	96° 10'	-47.4	-56.8		5741.2	TP	-366	+247	284,195 1,874,767	
166	292		119° 54'	"	11.1	96° 10'	-31.2	-42.3		5755.7		-208	+205	284,353 1,874,725	
X	0				5.2	-		-5.2		5792.8	X	0	0	284,561 1,874,520 EDGE OF RED ROCK OUTCROP	
165	34		250° 03'	+15.6	8.3	88° 10'	+1.1	-7.2		5790.8		-3	-34	284,558 1,874,486	
164	361		245° 04'	"	7.4	87° -	+18.9	+11.5		5809.5		-59	-356	284,502 1,874,164	
163	690		248° 19'	"	12.2	87° -	+36.1	+23.9		5821.9		-73	-686	284,488 1,873,834	
162	1019		248° 32' 42"	"	12.8	87° 20'	+47.4	+34.6		5832.7	TP	-104 ₂	-1013 ₁	284,455 1,873,506 ACROSS STA.	
162	1019				12.6	272° 40'	+47.4	+34.8	-34.75		TP				
	1317		67° 59' 01" +180	+15.6	+12.2	92° 40'	+61.3	+73.5	5906.1		BS	-147 ₂	-1307 ₁		
	1317				+11.9	267° 20'	+61.3	+73.2	5906.1		BS				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
10-13-82		B. Cotcamp		D. Hamilton		6834		O.N., Jm		3	23						
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER								
UTAH		Redmond Canyon-7 1/2	UTAH	Sanpete					L.O. Davis								
STATION NO.	SLOPE DISTANCE	PLOTting DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									5590.0								
182	798		42° 24'	+15.6	8.8	91°	-73.9	-22.7		5563.7		+423	+677	284,634	1,879,386		
181	470		37° 34'	" "	8.7	92°	-16.4	-25.1		5564.9		+282	+376	284,493	1,879,085		
180	145		26° 44'	" "	9.2	92°	-5.1	-14.3		5575.7		+107	+98	284,318	1,878,807		
T	0				5.2	-		-5.2		5584.8	T	0	0	284,211	1,878,709	ACROSS ROAD	
179	189		231° 46'	+15.6	6.0	88° 20'	+5.5	-0.5		5589.5		-73	-174	284,138	1,878,535		
178	513		224° 36'	" "	7.0	88° 20'	+14.9	+7.9		5597.9		-255	-445	283,956	1,878,264		
TP	761		224° 29' 19"	" "	6.8	88° 20'	+22.1	+15.3		5605.3	TP	-379	-659	283,829	1,878,048	AROUND 90° CORNER	
TP	761				4.6	88° 30'	+19.9	+15.3			TP						
	752		84° 40' 35" +180	+15.6	7.2	92° 20'	+30.6	+37.8	5643.1		BS	+134.3	-739.2				
	752				7.2	267° 40'	+30.6	+37.8			BS						
177	659		85° 28'	+15.6	8.8	92° 20'	-26.8	-35.6		5607.5		-127	+647	283,833	1,877,991		
176	330		" "		7.4	92° 20'	-13.4	-20.8		5622.3		-63	+324	283,897	1,877,631		
175	0				5.2	-		-5.2		5637.9	T	0	0	283,960	1,877,307	ACROSS ST.	
174	330		282° 16'	+15.6	6.7	87° 40'	+13.4	+6.7		5649.8		+154	-292	284,114	1,877,015		
173	659		280° 26'	" "	8.2	87° 40'	+26.8	+18.6		5661.7		+289	-592	284,249	1,876,715		
172	938		268° 16'	" "	8.8	88°	+32.7	+23.9		5667.0		+225	-911	284,185	1,876,396	AROUND CORNER	
171	1236		260° 07'	" "	5.8	88°	+43.1	+37.3		5680.4		+123	-230	284,083	1,876,077	" "	
TP	1323		258° 14' 17"	" "	5.5	87° 50'	+50.0	+44.5		5687.6	TP	+88.2	-1319.2	284,046	1,875,986	" "	
TP	1323				5.4	272° 10'	+50.0	+44.6			TP						

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
10-11-82		B. Cotcamp		D. Hamilton		6834		D.H. R.		3	24					
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
UTAH		Redmond Canyon-7 1/2	UTAH	Sanpete					L.O. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
									5405.8							
194	0			+15.45	5.2	-		-5.2		5400.6	T	0	0	286,703	1,882,769	
193	330		222° 17'	"	5.6	87° 40'	+13.4	+7.8		5413.6		-176	-279	286,527	1,882,490	
192	660		" "	"	4.0	87° 40'	+26.8	+22.8		5429.6		-352	-558	286,351	1,882,211	
41	909		221° 38' 32"	+15.45	3.0	87° 40'	+37.0	+34.0		5439.8	41	-493	-763	286,205	1,882,005	4-286,205 x 1,882,005
41	909				5.6	87° 30'	+39.6	+34.0			41					1-TRD South & L. 54780 HORIZ Y--44' CORR. X--8'
	1730		42° 25' 26" +180°	+15.6	6.4	93° -	+90.5	+96.9		5536.6	BS	-915	-1465			
	1730			+6.2	267° -	+90.5	+96.7	+96.8			BS					
191	1650		42° 10'	+15.6	6.9	93° -	-86.2	-93.1		5443.5		+880	+1396	286,167	1,881,934	
190	1320		" "	"	7.8	93° -	-69.0	-76.8		5459.8		+704	+1117	285,991	1,881,655	
189	990		" "	"	9.1	93° -	-51.7	-60.8		5475.8		+528	+837	285,815	1,881,375	
188	660		" "	"	8.1	93° -	-34.5	-42.6		5494.0		+352	+558	285,639	1,881,096	
187	330		" "	"	6.4	93° -	-17.2	-23.6		5513.0		+176	+279	285,463	1,880,817	
186	0				5.2	-		-5.2		5531.4	T	0	0	285,287	1,880,538	
185	330		222° 31'	+15.6	4.8	88° -	+11.5	+6.7		5543.3		-174	-280	285,113	1,880,258	
184	660		" "	"	5.8	88° -	+23.0	+17.2		5553.8		-349	-560	284,938	1,879,978	
183	991		222° 18' 36"	"	6.6	88° -	+34.6	+28.0		5564.6	TP	-526	-839	284,758	1,879,697	
183	991				6.5	272° -	+34.6	+28.1			TP					
	1126		45° 29' 26" +180°	+15.6	5.8	91° -	+19.7	+25.5		5590.0	BS	-544	-986			
	1126			+5.6	269° -	+19.7	+25.3	+25.4			BS					

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE								
10-11-82		B. Cotcamp		O. Hamilton		6834		D.H. / J.M.		3	25								
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER										
UTAH		Redmond Canyon-T4	UTAH	Sanpete					L.O. Davis										
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X				
									5301.3										
208	658		324° 00'	15.45	5.7	-		-5.7		5295.6		+616	-231	285,249	1,885,940				
207	988		322° 02'	"	6.1	-		-6.1		5295.2		+913	-378	285,546	1,885,793				
206	1315		321° 37'	"	6.1	-		-6.1		5295.2		+1211	-512	285,844	1,885,659				Through a
205	1633		324° 52'	"	7.1	-		-7.1		5294.2		+1538	-550	286,171	1,885,621				corner
204	1960		325° 22' 23"	"	7.5	-		-7.5		5294.0	TP	+1851	-644	286,476	1,885,526				" "
204	1960				7.1	270 -		-7.1	-7.3		TP								" "
	853		123° 32' 35" +180	15.45+	12.4	90° 30'	+7.4	+19.8	5313.8		BS	+644	-560						
	853				7.5	90° 50'	+12.4	+19.9			BS								
203	578		109° 18'	15.45	9.3	90° 50'	-8.4	-17.7		5296.1		-329	+475	286,786	1,885,440				
202	330		79° 48'	"	7.5	92° 10'	-12.5	-20.0		5293.8		-30	+329	287,085	1,885,294				LAST STA. ON ROAD
201	0				5.2	-		-5.2		5308.6	X	0	0	287,115	1,884,965				CROSS country
200	330		263° 21'	15.45	5.9	88° 30'	+8.6	+2.7		5316.5		+50	-326	287,165	1,884,639				" "
199	655		263° 22'	"	10.9	88° 30'	+17.1	+6.2		5320.0		+100	-647	287,215	1,884,318				" "
198	967		258° 34' 14"	"	5.7	88° 10'	+30.9	+25.2		5339.0	TP	+68	-964	287,178	1,884,000				FIRST STA. BACK
198	967				5.6	271° 50'	+30.9	+25.3			TP								on ROAD.
	1318		53° 28' 36" +180	15.45+	9.4	92° 30'	+57.4	+66.8	5405.8		BS	-470	-1230						
	1318				5.6	92° 40'	+61.2	+66.8			BS								
197	990		53° 29'	15.45	7.2	92° 30'	+73.1	+50.3		5355.5		+356	+924	287,059	1,883,693				
196	660		53° 05'	"	6.0	92° 30'	-28.8	-34.8		5371.0		+242	+614	286,945	1,883,383				
195	330		51° 21'	"	4.0	92° 30'	-74.4	-78.4		5387.4		+130	+303	286,833	1,883,072				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-11-82		B. Cotcamp		D. Hamilton		6834		D.H. Am		3		26			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		REDMOND CANYON-7 1/2		UTAH		SAMPETE								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5311.8						
223	657		122° 05'	+15.45	11.3	-		-11.3		5300.5		+485	+444	281,123	1,888,071
222	330		123° 12'	"	6.7	-		-6.7		5305.1		+248	+218	281,360	1,887,845
221	0				5.2	-		-5.2		5306.6	TP	0	0	281,608	1,887,627
220	329		293° 49'	+15.45	9.1	-		-9.1		5302.7		+208	+255	281,816	1,887,372
219	647		304° 02'	"	12.0	-		-12.0		5299.8		+492	+420	282,100	1,887,207
218	975		302° 52'	"	10.6	BH	-4.9	+5.5		5296.3		+728	+648	282,336	1,886,979
217	1294		300° 02'	"	7.4	BH	-6.5	+3.9		5297.9		+923	+907	282,531	1,886,720
216	1613		301° 08'	+15.45	7.7	BH	-8.1	+5.8		5296.0		+1172	+1109	282,780	1,886,518
215	1641		300° 55' 14"	"	7.4	BH	-8.2	+5.6		5296.2	TP	+1188	-1132	282,796	1,886,495
215	1881		306° 11' 09"	"	15.0	90° -		-15.0		5297.0	TP	+1475	-1167	283,075	1,886,458
215	1881				14.5	270° -		-14.5	-14.8		TP				
	1592		154° 12' 23"	+15.45	12.6	TH	+8.0	+4.6	5301.3		BS	+1566	-286		
	1592				12.1	TH 270°	-8.0	+4.1	5301.3		BS				
214	1283		149° 42'	+15.45	12.5	TH	+6.4	-6.1		5295.2		+1240	+329	283,393	1,886,500
213	988		142° 28'	"	6.6	-		-6.6		5294.7		+916	+371	283,717	1,886,542
212	659		143° 38'	"	6.8	-		-6.8		5294.5		+616	+235	284,017	1,886,406
211	330		145° 47'	"	5.9	-		-5.9		5295.4		+312	+106	284,321	1,886,277
210	0				5.2	-		-5.2		5296.1	TP	0	0	284,633	1,886,171
209	330		321° 14'	+15.45	5.5	-		-5.5		5295.8		+303	+131	284,936	1,886,040

creek crossing
 y=282,795 x=1,886,495
 creek crossing
 Horiz. correction
 around 45 corner

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
10-11-82		B. Cotcamp		D. Hamilton		6834		D.H. Jm		3	27					
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
UTAH		Reedmond Canyon-7 1/2	UTAH	Sanpete					L.O. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
										5197.0						
BS	1713		72° 10' 27" +180°	+15.45	13.5	91° 30'	+44.8	+58.3	5255.1		BS	-71.2	-1711.1			
BS	1713				13.1	268° 30'	+44.8	+57.9		+58.1	BS					
237	1641		71° 59'	+15.45	12.7	91° 30'	-42.9	-55.6		5199.5		+73	+1639	280,240	1,892,200	
236	1317		74° 34'	" "	9.3	91° 30'	-34.5	-43.8		5211.3		0	+1317	280,167	1,891,878	
235	988		74° 49'	" "	8.8	91° 30'	-25.9	-37.7		5220.4		+5	+988	280,162	1,891,549	
234	660		74° 08'	" "	8.8	91° 30'	-17.3	-26.1		5229.0		+5	+660	280,172	1,891,221	
233	330		" "	" "	8.0	91° 30'	-8.6	-16.6		5238.5		+2	+330	280,169	1,890,891	
232	0				5.2	-		-5.2		5249.9	X	0	0	280,167	1,890,561	
231	327		259° 14'	+15.45	6.7	88° -	+11.4	+4.7		5259.8		+27	-326	280,194	1,890,235	
230	650		257° 34'	" "	8.1	88° -	+22.7	+14.6		5269.7		+34	-649	280,201	1,889,912	
229	980		256° 17'	" "	9.0	88° -	+34.2	+25.2		5280.3		+30	-980	280,197	1,889,581	
228	1309		256° 10'	" "	10.8	88° -	+45.7	+34.9		5290.0		+37	-1308	280,204	1,889,253	
IC	1507		254° 44' 49"	" "	9.9	88° -	+52.6	+42.7		5297.8	IC	+5	-1506	280,172	1,889,055	IC Bridge
227	1617		255° 30' 50"	" "	12.0	88° -	+56.4	+44.4	+44.6	5299.7	TP	+27.2	-1616	280,192	1,888,945	
227	1617				11.6	272° -	+56.4	+44.8		TP						
	1936		121° 39' 31" +180°	+15.45	12.3	-		+12.3	5311.8		BS	+1418.2	-1318			Through corners
	1936				12.0	270° -		+12.0		+12.1	BS					
226	1614		119° 26'	+15.45	5.4	BH	-8.1	-13.5		5298.3		-1139	+1144	280,469	1,888,771	" "
225	1287		118° 22'	" "	6.7	BH	-6.4	-13.1		5298.7		-891	+929	280,717	1,888,556	CROSS COUNTRY
224	984		123° 56'	" "	9.0	BH	-4.9	-13.9		5297.9		-747	+641	280,861	1,888,268	" "

SURVEY NOTES-HIGH RESOLUTION DATA
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Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-11-82		B. Cotcamp		D. Hamilton		6834		D.H. Jm		3		28			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		Redmond-7 1/2'		UTAM		Sanpete								L. O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5090.3						
JL	823		73° 44' 42"	75.45	8.9	91° 32'	-22.0	30.9		5059.4	JL	+12	+823	281,306	1,895,978 y=281,345 x=1,896,000 bridge topo EL. 5057.0
249	646		70° 36'	" "	11.7	91° 20'	-15.0	26.7		5063.6		+45	+644	281,339	1,895,799
248	326		60° 58'	" "	6.7	91° 20'	-7.6	14.3		5076.0		+77	+317	281,371	1,895,472
247	0				5.2	-		-5.2		5085.1	X	0	0	281,294	1,895,155
246	329		220° 43'	75.45	7.4	87° 50'	+12.4	5.0		5095.3		-183	-273	281,111	1,894,882
245	653		212° 31'	" "	8.3	87° 50'	+24.7	+16.4		5106.7		-437	-485	280,857	1,894,670 THROUGH
244	980		211° 46' 27"	" "	11.6	87° 50'	+37.0	+25.4		5115.7	TP	-665	-719	280,627	1,894,435 CORNER
244	980				11.5	272° 16'	+37.0	+25.5			TP				
	983		53° 07' 24" +180	75.45+	12.2	92° 30'	+42.8	+55.0	5170.6		BS	-359	-914		AROUND
	983			+	12.0	267° 30'	+42.8	54.8	5154.9		BS				CORNER
243	655		55° 53'	75.45	14.6	92° 30'	+28.5	43.1		5127.5		+210	+621	280,476	1,894,141
242	328		60° 40'	" "	7.0	92° 30'	-14.3	21.3		5149.3		+79	+318	280,345	1,893,838
241	0				5.2	-		-5.2		5165.4	X	0	0	280,266	1,893,520 REDMOND-7 1/2'
240	330		252° 42'	75.45	7.5	89° -	+5.8	11.7		5168.9		-11	-330	280,255	1,893,190 REDMOND CANYON-7 1/2'
239	660		253° 20'	" "	9.8	89° -	+11.5	+1.7		5172.3		-18	-660	280,248	1,892,860 ↓
238	990		253° 31'	" "	6.3	88° 30'	+25.9	+19.6		5190.2		-18	-990	280,248	1,892,530
#	1247		253° 27' 08"	" "	6.3	88° 30'	+32.6	+26.3		5197.0	TP	-24	-1246	280,240	1,892,273 y=280,265 x=1,892,275 4 way topo EL. 5197.0
#	1247				6.1	271° 30'	+32.6	+26.5	+26.4		TP				

SURVEY NOTES-HIGH RESOLUTION DATA

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DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE			
10-11-82		B. Cotcamp		D. Hamilton		6834		B.H. Jm		3	29			
AREA		TOPO MAP		STATE		COUNTY		TWP		PARTY MANAGER				
UTAH		REOMOND-7 1/2'		UTAH		SAMPETE				L.O. Davis				
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
										5064.9				
BS	1979		74° 41' 43" +180	+15.45	10.4	TH	-9.9	+0.5	5065.2		BS	+5.2	-1979	
BS	1979			+10.1	270 TH	-9.9	+0.2	+0.3		BS				
264	1650		74° 42'	+15.45	9.7	TH	+8.3	-1.4		5063.8		-4	+1650	281,573 1,900,662
263	1320		" "	" "	8.7	TH	+6.6	-2.1		5063.1		-3	+1320	281,574 1,900,332
262	990		" "	" "	7.6	TH	+5.0	-2.6		5062.6		-3	+990	281,574 1,900,002
261	660		" "	" "	6.0	TH	+3.3	-2.7		5062.5		-2	+660	281,575 1,899,672
260	330		" "	" "	5.3	TH	+1.7	-3.6		5061.6		-1	+330	281,576 1,899,342
259	0				5.2	-		-5.2		5060.0	TP	0	0	281,577 1,899,012
258	330		255° 02'	+15.45	5.4	-		-5.4		5059.8		+3	-330	281,580 1,898,682
257	660		" "	" "	5.8	-		-5.8		5059.4		+6	-660	281,583 1,898,352
256	990		" "	" "	5.8	-		-5.8		5059.4		+8	-990	281,585 1,898,022
255	1320		" "	" "	11.9	-		-11.9		5053.3		+11	-1320	281,588 1,897,692
254	1648		" "	" "	11.0	-		-11.0		5054.2		+14	-1648	281,591 1,897,364
253	1970		254° 31' 30"	+15.45	10.7	-		-10.7		5054.6	TP	-1.2	-1970	281,574 1,897,041
253	1970				10.5	270°		-10.5	-10.6		TP			THrough 9 CORNER E.M.
	1906		66° 10' 20" +180	" "	+2.6	91°	+33.3	+35.9	5090.3		BS	-278	-1885	THrough E.M.
	1906			" "	+2.2	269°	+33.3	+35.5		+35.7	BS			
252	1603		70° 27'	+15.45	7.5	91°	-28.0	-35.5		5054.8		+115	+1599	281,409 1,896,754
251	1304		75° 26'	" "	20.0	90° 40'	-15.2	-35.2		5055.1		-20	+1304	281,274 1,896,459
250	974		74° 12'	" "	23.6	90° 30'	-8.5	-32.1		5058.2		+6	+974	281,300 1,896,129

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-11-82		G. Cotcamp		D. Hamilton		6834		D.H. Am		3		30			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
NO. UTAH		REOMOND-7 1/2'		UTAH		SANPETE								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5079.2						
277	660		75° 38'	+15.45	6.7	TH	+3.3	-3.4		5075.8		-12	+660	282,364	1,904,637
276	330		" "	" "	6.6	TH	+1.7	-4.9		5074.3		-6	+330	282,370	1,904,307
275	0				5.2	-		-5.2		5074.0	X	0	0	282,376	1,903,977
274	127		258° 01' 20"	+15.45	6.0	-		-6.0		5073.2	TP	+8	-127	282,384	1,903,850
274	300		299° 31'	" "	6.3	-		-6.3		5072.9		+212	-212	282,588	1,903,765
273	616		310° 16'	" "	7.9	-		-7.9		5071.3		+509	-347	282,885	1,903,630
272	852		292° 28'	" "	8.7	-		-8.7		5070.5		+524	-672	282,900	1,903,305
271	1135		282° 25'	" "	8.8	-		-8.8		5070.4		+531	-1003	282,907	1,902,974
270	1435		276° 10' 30"	+15.45	10.0	-		-10.0		5069.3	TP	+529	-733	282,903	1,902,642
270	1435				9.8	270-		-9.8	-9.9		TP				
	1585		74° 47' 43" +180	+15.45	2.2	90-		+2.2	5071.3		BS	+17	-1585		
	1585			+1.9		270-		+1.9	+2.0		BS				
269	1256		74° 48'	+15.45	9.1	TH	+6.3	-2.8		5068.5		-5	+1256	282,903	1,902,312
268	926		" "	" "	8.3	TH	+4.6	-3.7		5067.6		-4	+926	282,904	1,901,982
267	596		" "	" "	7.9	TH	+3.0	-4.9		5066.4		-3	+596	282,905	1,901,652
266	266		" "	" "	7.0	TH	+1.3	-5.7		5065.6		-1	+266	282,907	1,901,322
266	0				5.2	-		-5.2		5066.1	X	0	0	282,908	1,901,056
265	1334		164° 30' 07"	+15.45	4.7	-		-4.7		5066.6	IF	-733	+1	281,574	1,901,057
265	1333		167° 16' 13"	" "	6.5	-		-6.5		5064.9	TP	-1332	-63	281,574	1,900,992
265	1333				6.3	270-		-6.3	-6.4		TP				

Y-282,420 X-1,903,820
AROUND EL. 5073.0

LAST STA. BEFORE OFFSET.
1584' - F.O.M. JL
OFFSET SOUTH TP
281,600 - 1,901,050
FT-RO WEST, EL. 5067.0

FIRST STA. AFTER OFF.

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-448

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
10-11-82		B. Cotcamp		D. Hamilton		6834		D.H., Jm		3	31						
AREA		TOPO MAP	STATE	COUNTY		TWP		RANGE	PPM	PARTY MANAGER							
UTAH		REDMOND-7 1/2'	UTAH	SANDPETE						L.O. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
K	T-INTERSECT - ELEVATION 5108.0															T-INTERSECT EL 5108.0	
BS	2061		35° 27' 12" +180	15.45+	9.9	89° 30'	18.0	8.1	5099.8		TP	1300	1599				SCALED - 1545' OFFSET SOUTH
BS	2061			+	9.7	270° 30'	18.0	8.3	-8.2		TP						J-282,245 X-1909,500
TP	1569		76° 03' 33"	+15.45	1.8	89° 30'	+13.7	+11.9		5111.7	TP	-41	+1568	282,250	1909,505		T-INTERSECT.
291	1320		75° 59'	" "	7.0	89° 20'	+15.4	+8.4		5108.2		-33	+1320	282,258	1909,257		FIRST STA. AFTER OFFSET.
290	990		" "	" "	6.3	89° 20'	+11.5	+5.2		5105.0		-25	+990	282,266	1908,927		
289	660		" "	" "	5.9	89° 20'	+7.7	+1.8		5101.6		-17	+660	282,274	1908,597		
288	330		" "	" "	4.6	89° 20'	+3.8	0.8		5099.0		-8	+330	282,283	1908,267		
287	0			" "	5.2	-		-5.2		5094.6	X	0	0	282,291	1907,937		
286	330		255° 55'	+15.45	7.3	90° 20'	-1.9	-9.2		5090.6		+8	-330	282,299	1907,607		
285	660		" "	" "	8.0	90° 20'	-3.8	-11.8		5088.0		+16	-660	282,307	1907,277		
284	990		" "	" "	8.3	90° 20'	-5.8	-14.1		5085.7		+24	-990	282,315	1906,947		
283	1320		" "	" "	9.0	90° 20'	-7.7	-16.7		5083.1		+31	-1320	282,322	1906,617		
282	1650		255° 55'	+15.45	8.1	90° 20'	-9.6	-17.7		5082.1		+39	-1650	282,330	1906,287		
281	1980		" "	" "	8.1	90° 20'	-11.5	-19.6		5080.2		+47	-1979	282,338	1905,958		
280	2310		255° 55' 26"	" "	7.5	90° 20'	-13.4	-20.9		5079.0	TP	+55	-2309	282,344	1905,627		
280	2310			" "	7.3	269° 40'	-13.4	-20.7	-20.8		TP	-2					
	1649		75° 44' 02" +180	15.45+	0.3	90° -		+0.3	5079.2		BS	+34	-1649				
	1649			+	0.1	270°		+0.1	-0.2		BS						
279	1320		75° 40'	+15.45	7.7	TH	+6.6	-1.1		5078.1		-26	+1320	282,350	1905,297		
278	990		" "	" "	7.3	TH	+5.0	-2.3		5076.9		-19	+990	282,357	1904,967		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 10-18-82	INSTRUMENT MAN B. Cotcamp	ROD MAN D. Hamilton	PARTY NUMBER 6834	NOTES CHECKED BY D.H. gm	LINE NO. 3	PAGE 32
AREA UTAH	TOPO MAP REDMOND-7 1/2'	STATE UTAH	COUNTY Sanpete	TWP RANGE	PPM	PARTY MANAGER L.O. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
302	660		252° 57' 43"	15.45	10.1	-		-10.1		5142.6	TP	78	660	283,677	1,912,916	
302	660				10.0	270	-	70.0			TP	-2	-1			
BS	1649		72° 40' 12"	15.45	8.0	89° 20'	19.2	11.2	5131.3		BS	54	7648			
BS	1649			+7.8	270	40	19.2	11.4	11.3		BS	-2	-1			
301	1320		72° 40'	15.45	7.4	89° 20'	15.4	+8.0		5139.3		+43	+1319	283,664	1,912,586	
300	990		" "	" "	6.6	89° 20'	11.5	+4.9		5136.2		+33	+989	283,654	1,912,256	
299	660		" "	" "	7.1	89° 20'	7.7	+0.6		5131.9		+22	+660	283,643	1,911,927	
298	330		" "	" "	6.8	89° 20'	3.8	-3.0		5128.3		+11	+330	283,632	1,911,597	
297	0				5.2	-		-5.2		5126.1	X	0	0	283,621	1,911,267	ft bridge
296	330		253° 55'	15.45	7.8	90° 30'	2.9	10.7		5120.6		-4	-330	283,617	1,910,937	
295	660		" "	" "	7.7	90° 30'	5.8	13.5		5117.8		-7	-660	283,614	1,910,607	
294	990		" "	" "	7.8	90° 30'	8.6	16.4		5114.9		-11	-990	283,610	1,910,277	
293	1320		" "	" "	7.9	90° 30'	11.5	19.4		5111.9		-15	-1320	283,606	1,909,947	
292	1649		" "	" "	8.0	90° 30'	14.4	22.4		5108.9		-18	-1649	283,603	1,909,618	OFFSET SOUTH
TT	1729		253° 40' 42"	" "	7.6	90° 30'	15.1	22.7		5108.8	TT	26	1729	283,593	1,909,537	TT - INTERSECT EL. 5108.0
TT	1729				7.2	269° 30'	15.1	22.3			TT	-2	-1			Y-283,645 X-1,909,505

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
10-9-82		B. Cotcamp		D. Hamilton		6834		D.H. dm		3	33				
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER				
UTAH		Redmond-7 1/2'		UTAH		SANPETE					L.O. Davis				
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5153.9						
316	660		26° 43'	+15.35	7.4	90° 10'	-1.9	-9.3		5144.6		+490	+442	286,515	1916,009
315	330		26° 23'	" "	6.7	90° 10'	-1.0	-7.7		5146.2		+246	+220	286,271	1915,787
314	0				5.2	-		-5.2		5148.7	X	0	0	286,025	1915,567
313	330		203° 31'	+15.35	5.5	90° 10'	-1.0	-6.5		5147.4		+257	-207	285,768	1915,360
312	660		202° 33'	" "	8.7	-		-8.7		5145.2		-521	-405	285,504	1915,162
311	989		201° 40'	" "	8.7	-		-8.7		5145.2		-790	-596	285,235	1914,971
310	1317		200° 34'	" "	8.8	-		-8.8		5145.1		-1067	-773	284,958	1914,794
309	1647		199° 23'	" "	9.0	-		-9.0		5144.9		-1354	-938	284,671	1914,629
308	1975		198° 19'	" "	6.2	-		-6.2		5147.7		-1644	-1095	284,381	1914,472
307	2300		197° 12'	+15.35	3.8	-		-3.8		5150.1		-1939	-1237	284,086	1914,330
306	2629		196° 08'	" "	9.1	89° 50'	+7.7	-7.4		5152.5		-2242	-1373	283,782	1914,194
TP	2782		195° 41' 29"	+15.35	9.8	89° 50'	+8.1	-1.7		5152.5	TP	2384	1435	283,645	1914,130
TP	2782				9.2	20° 10'	+8.1	-1.1	-1.4		TP				
			80° 07' 51" +180	+15.45	10.0	89° 00'	-9.7	+0.3			BS	+54	552		
	555				9.9	271° 00'	-9.7	+0.2	5152.7		BS	-2			
305	330		74° 36'	+15.45	7.4	89° 00'	+5.8	-7.6		5151.1		±0	+330	283,697	1913,907
304	0				5.2	-		-5.2		5147.5	X	0	0	283,697	1913,577
303	330		252° 13'	+15.45	6.1	-		-6.1		5146.6		+13	-330	283,684	1913,247
302															

U.S.C.G. B-37 1934 BM
 EL. 5152.0
 283,645 Horiz Y = 717,
 X = 1914,130 COR. X = 14

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
10-9-82		B. Cotcamp		D. Hamilton		6834		D.H.		3	34				
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER				
UTAH		GUNNISON-7 1/2'		UTAH		SANPETE					L.O. Davis				
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5178.2						
333	660		31° 02'	+15.35	5.9	89° 30'	+5.8	0.1		5178.1		+455	+478	290,373	1920079
332	330		" "	" "	4.7	89° 30'	+2.9	-1.8		5176.4		+228	+239	290,146	1919,840
331	0				5.2	-		-5.2		5173.0	X	0	0	289,918	1919,601
330	330		211° 03'	+15.35	6.4	90° 30'	+2.9	-9.3		5168.9		+228	-239	289,690	1919,362
329	660		" "	" "	8.6	90° 30'	+5.8	-14.9		5163.8		-455	-478	289,463	1919,23
328	990		" "	" "	9.8	90° 30'	-8.6	-18.4		5159.8		-683	-717	289,235	1918,884
327	1320		" "	" "	10.2	90° 30'	-11.5	-21.7		5156.5		-910	-956	289,008	1918,645
326	1650		211° 03'	" "	10.9	90° 30'	+74.4	-25.3		5152.9		-1138	-1195	288,780	1918,406
325	1980		" "	+15.35	11.0	90° 30'	+17.3	-28.3		5149.9		-1365	-1434	288,533	1918,167
324	2310		" "	" "	12.2	90° 30'	+20.2	-32.4		5145.8		-1593	-1673	288,325	1917,928
323	2639		211° 03' 20"	" "	11.9	90° 30'	+23.0	-34.9		5143.5	TP	-1820	-1911	288,101	1917,687
323	2639				11.4	269° 30'	+23.0	-34.4	-34.4		TP				
	2968		30° 08' 43" +180°	+15.35	10.7	-		+10.7	5153.9		BS	-2080	-2117		
	2968				10.1	270°		+10.1	5144.3		BS				
322	2640		30° 03'	+15.35	11.3	-		-11.3		5142.6		+1854	+1880	287,879	1,917,447
321	2310		29° 53'	" "	7.1	90° 10'	+6.7	-13.8		5140.1		+1627	+1640	287,652	1,917,207
320	1980		29° 44'	" "	9.5	90° 10'	+5.8	-15.3		5138.6		+1398	+1402	287,423	1,916,969
319	1650		29° 19'	" "	9.3	90° 10'	+4.8	-14.1		5139.8		+1173	+1160	287,198	1,916,727
318	1320		28° 48'	" "	7.2	90° 10'	+3.8	-11.0		5142.9		+947	+919	286,972	1,916,486
317	990		28° 01'	" "	8.1	90° 10'	+2.9	-11.0		5142.9		+720	+680	286,745	1,916,247

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-9-82		B. Cotcamp		D. Hamilton		6834		D.H. Br		3		35			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Gunnison-7 1/2'		UTAH		Sanpete								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5202.8						
349	660		30° 01'	15.15	5.3	89° 20'	+7.7	+2.4		5205.2		+465	+468	293,972	1923877
348	330		29° 11'	" "	5.6	89° 20'	+3.8	-1.8		5201.0		+236	+231	293,743	1923640
347	0			+15.35	5.2	-		-5.2		5197.6	X	0	0	293,507	1923409
346	330		206° 49'	" "	8.7	-		-8.7		5194.1		-245	-221	293,262	1923188
345	653		212° 19'	" "	10.3	BH	-3.3	-13.6		5189.2		-441	-481	293,066	1922928 LAST STA. ON AVENUE.
344	980		213° 23'	" "	9.8	90° 30'	-8.6	-18.4		5184.4		-649	-734	292,858	1922675
343	1308		211° 22'	" "	7.3	90° 30'	-11.4	-18.7		5184.1		-900	-949	292,607	1922460
342	1632		209° 14'	+15.35	6.6	BH	-8.2	-14.8		5188.0		-1166	-1142	292,341	1922267
341	1961		208° 18'	" "	4.0	BH	-9.8	-13.8		5189.0		-1424	-1349	292,083	1922060
340	2884		209° 14'	" "	3.0	BH	-11.4	-14.4		5188.4		-1632	-1598	291,875	1921811
Bm	2323		213° 55' 42"	" "	4.8	BH	-11.6	-16.4		5186.4	Bm	-1515	-1761	291,992	1921648 U.S.C.S. 1-22-005 x 1-22-66 Bm A-37 1934 EL 5186.0
339	2594		211° 28' 05"	" "	7.8	90° 10'	-7.5	-15.3		5187.6	TP	-1775	-1892	291,735	1921514 E.O.O.
339	2594				7.5	269° 50'	-7.5	-15.0	-15.2		TP				
	2638		31° 02' 07" +180	+15.35	13.8	89° 30'	-23.0	-9.2	5178.2		BS	-1820	-1910		
	2638			+	13.4	270° 30'	-23.0	-9.6	9.4		BS				
338	2310		31° 02'	+15.35	11.9	89° 30'	+20.2	+8.3		5186.5		+1594	+1672	291,512	1921273
337	1980		" "	" "	9.8	89° 30'	+17.3	+7.5		5185.7		+1366	+1433	291,284	1921034
336	1650		" "	" "	8.1	89° 30'	+14.4	+6.3		5184.5		+1138	+1195	291,056	1920796
335	1320		" "	" "	6.0	89° 30'	+11.5	+5.5		5183.7		+911	+956	290,829	1920557
334	990		" "	" "	5.8	89° 30'	+8.6	+2.8		5181.0		+683	+717	290,601	1920318

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
10-9-82		B. Cotcamp		D. Hamilton		6834		D.H.		3	36					
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
UTAH		GUNNISON-7 1/2	UTAH	Sanpete					L.O. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
										5282.7						
	1315		70° 18' 36" +180	+15.15	9.5	88° 10'	-42.1	-32.6	5250.0		BS	704	1310			
	1315			+9.3		271° 50'	-42.1	-32.8	5227.3		BS	"	"			
363	990		72° 45'	+15.15	5.0	88° 25'	+27.3	+22.3		5272.3		+36	+989	295,615	1927,909	
362	660		74° 30'	"	6.3	88° 20'	+19.2	+12.9		5262.9		+4	+660	295,583	1927,529	
361	330		" "	"	5.9	88° 20'	+9.6	+3.7		5253.7		+2	+330	295,581	1927,249	
360	0				5.2	-		-5.2		5244.8	X	0	0	295,579	1926,919	
359	330		254° 12'	+15.15	6.8	91° -	-5.8	-12.6		5237.4		-4	-330	295,575	1926,589	
358	660		" "	"	7.9	91° -	-11.5	-19.4		5230.6		-7	-660	295,572	1926,259	AROUND
357	989		253° 42'	"	8.8	91° -	-17.3	-26.1		5223.9		-20	-989	295,559	1925,930	CORNER
356	1308		250° 02'	"	10.0	91° -	-22.8	-32.8		5217.2		-110	-1303	295,469	1925,616	" "
355	1623		245° 56' 00"	"	6.9	91° -	-28.3	-35.2		5214.8	TP	252	1603	295,328	1925,317	" "
355	1623				6.7	269° -	-28.3	-35.0			TP	"	"			
	2639		31° 11' 08" +180	+15.15	11.1	89° 30'	-23.0	-11.9	5202.8		BS	7822	1909			
	2639				10.9	270° 30'	-23.0	-12.1	5212.8		BS	"	"			
354	2310		30° 46'	+15.15	10.2	89° 30'	+20.2	+10.0		5212.8		+1607	+1659	295,114	1925,268	
Bm	2179		27° 51' 16"	"	13.4	89° 30'	+19.0	+5.6		5208.4	Bm	1593	+1486	295,100	1924,895	u.s.g.s. 25,100 x 1,924,895 Bm EL. 5208.0 HOEIZ COR. - 4' 32" x 2 3/4"
353	1980		30° 45'	"	9.1	89° 30'	+17.3	+8.2		5211.0		+1378	+1422	294,885	1924,831	
352	1650		" "	"	7.8	89° 30'	+14.4	+6.6		5209.4		+1148	+1185	294,655	1924,594	
351	1320		30° 27'	"	5.7	89° 30'	+11.5	+5.8		5208.6		+924	+943	294,431	1924,352	
350	990		30° 24'	"	6.7	89° 20'	+11.5	+4.8		5207.6		+693	+707	294,200	1924,116	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 10-8-82	INSTRUMENT MAN B. Cotcamp	ROD MAN D. Hamilton	PARTY NUMBER 6834	NOTES CHECKED BY D.H. Zm	LINE NO. 3	PAGE 37
AREA UTAM	TOPO MAP STERLING - 7 1/2	STATE UTAM	COUNTY Sanpete	TWP RANGE	PPM	PARTY MANAGER L.O. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + EAST + SOUTH - WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
										5375.0						
	1968		66° 17' 42" +180	+15.15	5.3	88° 30'	51.5	46.2			BS	-293	+1945			
	1968				5.2	211° 30'	51.5	46.3	5328.7		BS	+	+			
376	1647		63° 43'	+15.15	9.2	88° 46'	38.3	+29.1		5357.8		+318	+1616	296,480	1932,102	
375	1320		62° 53'	" "	9.3	88° 50'	+26.9	+17.6		5346.3		+274	+1291	296,436	1931,777	
JK	1091		63° 27' 47"	" "	2.1	89° 20'	+12.7	+10.6		5339.3	JK	+215	+1070	296,377	1931,556	
374	990		62° 53'	" "	7.5	89° 10'	+14.4	+6.9		5335.6		+205	+968	296,367	1931,454	
373	660		" "	" "	7.3	89° 40'	+3.8	3.5		5325.2		+137	+646	296,299	1931,132	
372	330		" "	" "	6.8	89° 40'	+1.9	4.9		5323.8		+68	+323	296,230	1930,809	
371	0				5.2	-		-5.2		5323.5	T	0	0	296,162	1930,486	
370	330		242° 50'	+15.15	5.5	91° 40'	9.6	15.1		5313.6		-69	-323	296,093	1930,163	
369	660		" "	" "	11.3	91° 40'	19.2	30.5		5298.2		-137	-646	296,025	1929,840	
368	990		" "	" "	10.3	91° 40'	28.8	39.1		5289.6		-206	-968	295,956	1929,518	
367	1320		" "	" "	11.0	91° 10'	26.9	37.9		5290.8		-275	-1291	295,887	1929,195	↑ STERLING - 7 1/2' GUNNISON - 7 1/2'
366	1650		" "	" "	4.5	91° 10'	33.6	38.1		5290.6		-344	-1614	295,818	1928,872	↓ 2-295,746 x 1.928,551 3-295,695 x 1.928,235
365	1980		" "	" "	4.1	91° -	34.6	38.7		5290.0	T8m	-412	-1937	295,750	1928,549	T8m. FROM TRAVERSE TO 8.0.4.
TI	2299		242° 35' 18"	+15.15	5.5	91° -	40.1	45.6		5283.1	TI	-488	2246	295,674	1928,240	TI T-RO Elev 5281.0
364	2310		242° 49' 51"	" "	5.9	91° -	40.3	46.2	AVG	5282.7	TP	-481	2259	295,682	1928,228	4-295,695 x 1.928,235
364	2310				5.5	269° -	40.3	45.8	-46.0		TP					

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
10-8-82		B. Cotcamp		D. Hamilton		6834		D.H. J.S.		3	38						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
UTAM		STERLING -7 1/2		UTAM	SANPETE					L.O. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									5454.1								
390	660		323° 29'	+15.15	9.1	91° -	-11.5	-20.6		5433.5		+615	-240	293,026	1934,777		
389	990		" "	" "	9.0	91° 20'	-23.0	-32.0		5422.1		+922	-361	293,333	1934,656		
388	1320		" "	" "	11.8	91° 20'	-30.7	-42.5		5411.6		+1229	-481	293,640	1934,536		
387	1650		" "	" "	6.4	91° 20'	-38.4	-44.8		5409.3		+1537	-601	293,948	1934,416		
386	1977		322° 19'	" "	6.7	91° 10'	-40.3	-47.0		5407.1		+1826	-758	294,237	1934,259		
385	2305		321° 35' 36"	+15.15	6.8	91° 10'	-46.9	-53.7		5400.4	TP	+2117	-910	294,529	1934,098		
385	2305				6.6	268° 50'	-46.9	-53.5			TP						
	1724		134° 12' 41" +180	+15.15	9.7	BH	+8.6	+18.3	5418.6		BS	+1483	-879				
	1724			+	9.5	BH 270	+8.6	+18.1	5418.2		BS						
384	1394		134° 41'	+15.15	11.8	90° 10'	-4.1	-15.9		5402.7		-1205	+701	294,808	1933,931		
383	1064		" "	" "	11.4	90° 20'	-6.2	-17.6		5401.0		-920	+535	295,093	1933,765		
382	734		" "	" "	12.7	90° 20'	-4.3	-17.0		5401.6		-635	+369	295,318	1933,599		
TP ₂	650		134° 25' 06"	+15.15	11.3	90° 20'	-3.8	-15.1		5403.5	TP ₂	-560	+329	295,453	1933,559	TP ₂ From previous survey El. 5403.3	
381	404		134° 41'	" "	5.2	90° 20'	-2.4	-7.6		5411.0		-349	+203	295,664	1933,403		
380	78		146° 08'	" "	3.5	90° 20'	-0.5	-4.0		5414.6		-74	+25	295,939	1933,255		
X	0				5.2	-		-5.2		5413.4	X	0	0	296,013	1933,230	OFF ROAD	
379381	262		291° 53'	+15.15	6.3	91° 30'	-6.9	-13.2		5405.4		+158	-209	296,171	1933,021		
379380	589		288° 30'	" "	7.0	92° -	-20.5	-27.5		5391.1		+326	-490	296,339	1932,740		
377	914		283° 37' 26"	" "	11.7	92° -	-31.9	-43.6		5375.0	TP	+440	-801	296,454	1934,430		
377	914				11.6	268° -	-31.9	-43.5			TP						

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
10-8-82		B. Cotcamp		D. Hamilton		6834		D.H. Jm		3	39				
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER				
UTAM		STERLING-7 1/2'		UTAM		SANPETE					L.O. Davis				
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5499.0						
405	330		105° 51'	+15.0	8.5	-		-8.5		5490.5		-169	+283	288,829	1937,161
404	0				5.2	-		-5.2		5493.8	X	0	0	288,998	1936,878
403	330		292° 41'	+15.0	3.5	TH	+1.7	-1.8		5497.2		+202	-261	289,200	1936,617
IP	590		293° 49' 54"	" "	0.5	TH	+3.0	+2.5		5501.5	IP	+370	-460	289,368	1936,418
402	659		295° 49'	" "	6.0	89° 10'	+9.6	+3.6		5502.6		+431	-499	289,429	1936,379
401	988		299° 06'	" "	5.7	89° 0'	+17.2	+11.5		5510.5		+688	-710	289,626	1936,168
TP	1228		300° 17' 30"	+15.15	8.8	89° 0'	+21.4	+12.6		5511.6	TP	+875	-861	289,874	1936,018
TP	1228				8.7	271° 20'	+21.4	+12.7			TP				
	2728		143° 17' 06" +180	+15.15	6.1	88° 00' 00"	-63.5	-57.4			BS	+2536	-1002		
	2728				6.0	271° 20'	-63.5	-57.5	5454.1		BS				
400	2638		143° 10'	+15.15	5.8	88° 40'	+61.4	+55.6		5509.7		-2451	+975	289,960	1935,992
399	2310		143° 40'	" "	7.9	88° 40'	+53.7	+45.8		5499.9		-2154	+835	290,257	1935,852
398	1980		" "	" "	11.3	88° 40'	+46.1	+34.8		5488.9		-1846	+715	290,565	1935,732
397	1650		" "	" "	7.8	88° 50'	+33.6	+25.8		5479.9		-1539	+596	290,872	1935,613
396	1320		143° 40'	+15.15	7.2	88° 50'	+26.9	+19.7		5473.8		-1231	+477	291,180	1935,494
395	990		" "	" "	6.5	88° 50'	+20.2	+13.7		5467.8		-923	+358	291,488	1935,375
394	660		" "	" "	5.9	88° 50'	+13.4	+7.5		5461.6		-615	+238	291,796	1935,255
393	330		" "	" "	6.3	88° 50'	+6.7	+0.4		5454.5		-308	+119	292,103	1935,136
392	0				5.2	-		-5.2		5448.9	X	0	0	292,411	1935,017
391	330		823° 29'	+15.15	4.0	91° 0'	-5.8	-9.8		5444.3		+307	-120	292,718	1934,897

3-289,345 X-1,936,435
E4-2000 NORTH

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
10-8-82		B. Cotcamp		D. Hamilton		6834		D.H. Jm		3		40				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
UTAM		MAYFIELD-7 1/2		UTAM		Sanpete								L.O. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									5546.5							
417	658		303° 54' 36"	+15.0	7.0	91° 30'	17.2	-24.2		5522.3	IF	+496	-432	286,193	1939,946	Y-286,175 X-1939,960 Y-ROAD NORTH
416	988		304° 55'	" "	7.0	91° 30'	17.2	-24.2		5522.3	TP	+503	-424	286,200	1939,954	
416	988		305° 02' 08"	" "	3.5	91° 30'	25.9	-29.4		5517.1	TP	+757	-634	286,455	1939,745	
	1646		132° 51' 49" +180	+15.0	1.6	89° 30'	14.4	-12.8			BS	+1393	-877			
	1646			+1.5	270° 30'	14.4	12.9		5504.2		BS					
415	1317		133° 25'	+15.0	9.9	89° 10'	+19.1	+9.2		5513.4		-1122	+690	286,727	1939,559	
414	988		132° 57'	" "	8.8	89° 10'	+14.4	+5.6		5509.8		-837	+524	287,012	1939,393	
413	659		131° 29'	" "	8.4	89° 10'	+9.6	+1.2		5505.4		-549	+364	287,300	1939,233	
412	330		128° 06'	" "	7.2	89° 10'	+4.8	-2.4		5501.8		-264	+198	287,585	1939,067	
411	0				5.2	-		-5.2		5499.0	T	0	0	287,849	1938,869	
410	328		294° 13' 17"	+15.0	10.5	89° 10'	+3.9	-6.6		5497.6	IF	+170	-208	288,019	1938,661	Y-288,000 X-1938,685 Y-T-ROAD NORTH
409	655		295° 23'	" "	8.9	89° 30'	+2.9	-6.0		5498.2		+213	-250	288,062	1938,619	
408	982		289° 58'	" "	5.0	89° 30'	+5.7	+0.7		5504.9		+375	-537	288,224	1938,332	
408	982		287° 18' 18"	" "	5.0	89° 20'	+11.4	+6.4		5510.6	TP	+525	-830	288,375	1938,040	MAYFIELD-7 1/2
	1319		103° 09' 12" +180	+15.0	3.8	89° 20'	15.3	11.5			BS	+622	-1163			
	1319			+3.7	270° 40'	15.3	11.6		5499.0		BS					
407	990		103° 32'	+15.0	6.8	89° 10'	+14.4	+7.6		5506.6		-473	+870	288,525	1937,748	STERLING-7 1/2
406	660		104° 01'	" "	12.7	89° 10'	+9.6	-3.1		5495.9		-320	+577	288,678	1937,455	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-8-82		B. Cotcamp		D. Hamilton		6834		A.H. [Signature]		3		41			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		MAYFIELD-7 1/2'		UTAH		SANPETE								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5582.4						
428	257		278° 26'	+15.0	6.9	91° -	-4.5	-11.4		5571.0		+102	-236	284,710	1942,707
TP	492		274° 33' 37"	" "	10.1	90° 30'	-4.3	-14.4		5568.0	TP	+165	-464	284,774	1942,481
TP	492				10.1	269° 30'	-4.3	-14.4			TP	+1	+2		
	896		93° 20' 06" +180	" "+"	7.0	-		+7.0			BS	+282	-851		
	896			" "	6.9	270		+6.9	5574.9		BS	+1	+2		
427	809		92° 49'	+15.0	9.3	-		-9.3		5565.6		-248	+770	284,809	1942,402
426	481		90° 05'	" "	12.3	84	-2.4	-14.7		5560.2		-125	+464	284,932	1942,096
425	165		105° 19'	" "	6.3	87° 30'	+7.2	+0.9		5575.8		-83	+142	284,974	1941,774
π	0				5.2	-		-5.2		5569.7	π	0	0	285,057	1941,632
424	173		253° 38'	+15.0	4.7	90° 20'	-1.0	-5.7		5569.2		-4	-173	285,053	1941,459
423	503		254° 00'	" "	9.8	90° 20'	-2.9	-12.7		5562.2		-9	-503	285,048	1941,129
422	832		254° 59'	" "	8.8	90° 40'	-9.7	-18.5		5556.4		+0	-832	285,057	1940,800
421	1161		255° 35' 32"	" "	12.0	90° 40'	-13.5	-25.5		5549.4	TP	+12	-1161	285,070	1940,472
421	1161				11.8	269° 20'	-13.5	-25.3			TP	+1	+1		APPROX 90 CORNER
	633		156° 19' 35" +180	+15.0	8.2	89° -	-11.0	-2.8			BS	+626	-95		" "
	633			" "	8.1	271° -	-11.0	-2.9	5546.5		BS	+1			" "
420	325		155° 32'	" "	3.9	89° 30'	+2.8	-1.1		5545.4		-321	+53	285,376	1940,431
419	0				5.2	-		-5.2		5541.3	π	0	0	285,697	1940,378
418	330		305° 47'	" "	7.1	91° 30'	-8.6	-15.7		5530.8		+256	-209	285,953	1940,169

SURVEY NOTES-HIGH RESOLUTION DATA

Geosource Inc.

GEO-445

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
10-8-82		B. Lotcamp		D. Hamilton		6834		D.H. Jm		3	42					
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER					
UTAH		MAYFIELD -7 1/2'		UTAH		SANPETE					L.O. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH+ SOUTH - LAT.	EAST+ WEST - DEP.	COORDINATES		REMARKS
										5689.9				Y	X	
BS	567		102° 38' 38" -180°	+15.0	5.6	88°	-19.8	-14.2	5675.0		BS	+263	-502			
BS	567				5.5	272°	-19.8	-14.3	5675.6		BS	+2	+2			
437	240		95° 33'	+15.0	4.8	88° 26'	+7.0	+2.2		5677.8		-84	+225	283,601	1945,411	
TP	0				5.2	-		-5.2		5670.4	TP	0	0	283,685	1945,186	
TPM	1165		272° 37' 59"	+15.0	10.3	91° 20'	+27.1	+37.4		5638.2	TPM	+353	-1110	284,038	1944,076	FROM SURVEY PREVIOUS EL. 5638.9 OFF. PAVEMENT DOWN DIRT TWO TRACK
438	85		298° 07'	" "	4.7	95°	-7.4	-12.1		5663.5		+58	-62	283,743	1945,124	
435	422		294° 08' 07"	" "	9.9	97°	-51.0	-60.9		5614.7	TP	+264	-325	283,950	1944,863	
435	422				9.8	263°	-51.0	-60.8			TP					
	658		91° 14' 40" +180	+15.0	9.6	88° 30'	+17.2	-7.6			BS	+184	-632			
	658				9.5	271° 30'	+17.2	-7.7	5607.0		BS	+1	+2			
434	330		94° 49'	" "	5.7	88° 30'	+8.6	+2.9		5609.9		-112	+310	284,023	1944,543	
433	0				5.2	-		-5.2		5601.8	TP	0	0	284,135	1944,233	
432	330		273° 01'	" "	9.9	-		-9.9		5597.1		+102	-314	284,237	1943,919	
431	656		271° 37'	+15.0	11.2	BM	-3.3	-14.5		5592.5		+188	-629	284,323	1943,604	
430	989		271° 35' 40"	" "	9.3	BM	-4.9	-14.2		5592.8	TP	+282	-948	284,418	1943,287	
430	989				9.1	BM	-4.9	-14.0			TP					
	395		103° 39' 24" +180	+15.0	3.5	88°	-13.8	-10.3			BS	+189	-346			
	395				3.4	272°	-13.8	-10.4	5582.4		BS					
429	71		107° 59'	" "	6.4	88°	+2.5	-3.9		5578.5		-39	+60	284,569	1943,003	
TP	0				5.2	-		-5.2		5577.2	TP	0	0	284,608	1942,943	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE		
10-8-82		B. Cotcamp		D. Hamilton		6834		D.H.		3		43		
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PARTY MANAGER		
ATAM		MAYFIELD - 7 1/2'		UTAM		SANPETE						L.O. Davis		
STATION NO.	SLOPE DISTANCE	PLOTting DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC.	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
K1	T-ROAD SOUTH	EL.	5855.0 FROM PREVIOUS SURVEY							5855.0	K1			1/2 T-ROAD SOUTH EL. 5855.0 N-281,845 X-1,949,305
BS	1340		101° 25' 17" +180	15.0°	10.2	86° 30'	81.6	71.4	5783.4		BS	+595	1198	
BS	1340			+	9.9	273° 30'	81.6	71.7	71.6		BS	+2	+2	
450	1319		101° 18'	15.0	9.4	86° 30'	80.4	71.0		5854.4		-584	+1182	281,858 1949,291
449	990		102° 08'	"	6.2	86° 20'	63.2	57.0		5840.4		-452	+881	281,990 1948,990
448	660		" "	"	8.4	86° 20'	42.1	33.7		5817.1		-301	+587	282,141 1948,696
447	330		" "	"	8.5	86° 20'	21.1	12.6		5796.0		-151	+294	282,291 1948,403
446	0			"	5.2	-		-5.2		5778.2	T	0	0	282,442 1948,109
445	330		282° 31'	15.0	8.2	92° -	11.5	19.7		5763.7		+152	-293	282,594 1947,816
444	660		" "	"	12.1	91° -	11.5	23.6		5759.8		+305	-585	282,747 1947,524
443	990		" "	"	10.2	91° -	17.3	27.5		5755.9		+457	-878	282,899 1947,231
442	1319		282° 22' 20"	"	7.9	91° 30'	34.5	42.4		5741.1	TP	+606	1171	283,050 1946,940
442	1319		" "	"	7.6	268° 30'	34.5	42.1	42.3		TP			
	658		93° 21' 24" +180	15.0°	1.9	88° -	23.0	21.1	5719.9		BS	+207	624	4000
	658		" "	+	1.7	272° -	23.0	21.3	21.2		BS			
K1	537		93° 24' 20"	"	2.2	88° -	18.7	16.5		5736.4	JK	-169	+509	283,090 1946,927 B.R. 028
447	330		90° 50'	"	6.4	87° 40'	13.4	7.0		5726.9		-90	+317	283,169 1946,635
440	0			"	5.2	-		-5.2		5714.7	T	0	0	283,259 1946,318
439	330		265°	15.0	5.8	92° 30'	14.4	20.2		5699.7		+61	-324	283,320 1945,944
438	654		269° 08' 02"	"	7.2	92° -	22.8	30.0		5689.9	TP	+159	634	283,420 1945,886
438	654		" "	"	7.1	268° -	22.8	29.9			TP			

SRVEY NOTES-HIGH RESOLUTION DATA

EO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
9-25-82		B. Cotcamp		D. Hamilton		6834		D.H. Jm		3	44					
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE	PPM	PARTY MANAGER				
UTAH		Gunnison - 7 1/2'		UTAH		SANPETE						L.O. Davis				
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
K ₁	U.S.G.S.	BENCH MARK	Q-43	1934	ELEVATION	5227.0				5227.0	K ₁		SCALED	297,616	1,927,675	Q 43 1934 U.S.G.S. BM. EL. 5227.0 Y=297,616 SCALED X=1,927,675
BS ₁	2062		318° 18' 40" - 180°	+16.5°	13.6	91° 30'	+53.9	+67.5	5294.4		BS	-1865	+877			
BS ₂	2062				+13.4	268° 30'	+53.9	+67.3	5294.4		BS					TRAVERSE TO
X ₁	0				5.2	-		-5.2	5289.2		X	0	0	295,746	1,928,551	STA. 448
TP ₁	4308		66° 06' 56"	+16.5°	13.6	88° 30'	+113.1	+99.5	5394.2		TP	+554	+4271	296,301	1,932,821	STERLING - 7 1/2'
TP ₂	4308				13.0	271° 30'	+113.1	+100.1	5394.2		TP					↓
																TRAVERSE TO
BS ₃	630		294° 30' 45" - 180°	+16.5°	9.2	91° 30'	+16.5	+25.7	5419.9		BS	-413	+475			B.O.L.
BS ₄	630				+7.4	91° 40'	+18.3	+25.7	5419.9		BS					" "
X ₂	0				5.2	-		-5.2	5414.7		X	0	0	295,889	1,933,295	" "
TP ₃	517		131° 53' 50"	+16.5°	7.7	91° -	-9.0	-16.7	5403.3		TP	-440	+271	295,450	1,933,565	↓
TP ₄	517				7.6	269° -	-9.0	-16.6	5403.3		TP					
BS ₅	2604		316° 28' 12" - 180°	+16.5°	8.6	90° 30'	+22.6	+31.2	5434.3		BS	-2319	+1183			
BS ₆	2604				+8.2	269° 30'	+22.6	+30.8	5434.3		BS					
X ₃	0				5.2	-		-5.2	5429.1		X	0	0	293,132	1,934,147	
TP ₅	3501		141° 58' 12"	+16.5°	4.7	88° 40'	+81.7	+77.0	5511.6		TP	-3256	+1284	289,877	1,936,031	
TP ₆	3501				4.2	271° 20'	+81.7	+77.5	5511.6		TP					
BS ₇	2432		290° 22' 59"	+16.5°	10.5	89° 50'	-7.2	+3.3	5514.7		BS	-1460	+1945			
BS ₈	2432				+10.1	270° 10'	-7.2	+2.9	5514.7		BS					

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
9-25-82		B. Cotcamp		D. Hamilton		6834		DH JM		3	45				
AREA		TOPO MAP		STATE		COUNTY		TWP		PARTY MANAGER					
UTAM		STERLING-7 1/2'		UTAM		SANPETE				L.O. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
X	0				5.2	-		-5.2		5509.5	X	0	0	288,418 1937,976	STERLING-7 1/2'
TP ₄	965.16 (7525.16)		109° 05' 00"	+16.5	8.6	89° -	+132.5	+123.9		5639.0	TP	-4378	+6119	284,041 1944,095	MAYFIELD-7 1/2'
TP ₄	965.12 (7525.12) (7525.14)				7.8	271° -	+132.5	+124.7	+124.3		TP				↓
E.D.M. Rollover															
BS _s	1413		271° 52' 45" - 186°	+16.3	7.3	91° 30'	+37.0	+44.3		5683.3	BS	-441	+1342		
BS _s	1413				7.2	268° 30'	+37.0	+44.2			BS				
X	0				5.2	-		-5.2		5678.1	X	0	0	283,601 1995,937	
TP _s	1864		93° 47' 18"	+16.3	12.0	87° 30'	+81.4	+69.4		5752.9	TP	-640	+1749	282,961 1947,186	
TP _s	1864				11.7	272° 30'	+81.4	+69.7	+69.6		TP				
CONTINUED ON PAGE.															

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE			
9-22-82		B. Cotcamp		D. Hamilton		6834		D.H. Jm		3	46			
AREA		TOPGRAPHIC FIELD		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER			
UTAH		SEEKING - 7 1/2'		UTAH		SAN PETE					L.O. Davis			
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
BS	2405		281° 06' 40" - 180	+16.3	2.8	92° 30'	+104.8	+107.6	5860.5		BS	-1106	+2133	
BS	2405			+	2.7	267° 30'	+104.8	+107.5			BS			
448	662		279° 51'	+16.3	8.4	93° -	34.6	43.0	5817.5			+292	-594	282,147 1948,725 ON Line
449	330		277° 55'	"	5.8	92° 20'	13.4	19.2	5841.3			+135	-301	281,990 1949,018
450	0				5.2	-		-5.2	5855.3		T	0	0	281,855 1949,319
IF	17		29° 05' 18"	+16.3	6.1	-		-6.1	5854.4		IF	+12	+12	281,867 1949,331
IF	202		133° 46' 08"	"	2.0	88° -	+7.0	+5.0	5865.5		IF	-175	+101	281,680 1949,420
451	332		60° 51'	"	6.4	89° 30'	+2.9	-3.5	5857.0			+74	+324	281,929 1949,643
452	662		60° 08'	"	6.7	89° 30'	+5.8	-0.9	5859.6			+155	+644	282,010 1949,963
453	991		59° 59'	+16.3	9.0	89° 30'	+8.7	0.3	5860.2			+235	+963	282,090 1950,282
454	1321		59° 40'	"	9.8	89° 30'	+11.5	+1.7	5862.2			+320	+1282	282,175 1950,601
455	1653		" "	"	3.7	89° 30'	+14.4	+10.7	5871.2			+401	+1604	282,256 1950,923
TP	1844		60° 49' 02"	+16.0	4.2	89° 30'	+16.1	+11.9	5872.6		TP	+421	+1795	282,276 1951,114
TP	1844				3.9	270° 30'	+16.1	+12.2			TP			
BS	1132		269° 25' 02" - 180	+16.0	6.0	87° 30'	49.3	43.3	5829.3		BS	-301	+1090	
BS	1132			+	5.9	272° 30'	49.3	43.4			BS			
456	990		269° 49'	+16.0	6.3	87° 20'	+46.0	+39.7	5869.0			+270	-953	282,245 1951,251
457	660		267° 41'	"	7.7	87° 50'	+24.9	+17.2	5846.5			+156	-641	282,131 1951,563
458	330		266° 45'	"	7.1	87° 50'	+12.5	+5.4	5834.7			+73	-322	282,048 1951,882

ACROSS STA.
 3-281,845 E-1,949,315
 1 FT-20 SOUTH
 4-281,680 E-1,949,405
 1/2 SEC LINE

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-22-82		B. Cotcamp		D. Hamilton		6834		D.H. dm		3		47			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		MAYFIELD - 7 1/2		UTAH		SANPETE								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5829.3						
459	0			+16.0	5.2	-		-5.2		5824.1	T	0	0	281,975	1952,204
460	328		91° 26'	"	10.8	91° -	5.7	16.5		5812.8		-98	+313	281,877	1952,517
461	570		90° 53' 01"	"	12.7	91° 30'	-14.9	-27.6		5801.7	X	-166	+545	281,809	1952,749
461	658		90° 30'	"	11.6	91° -	-11.5	-23.1		5806.2		-187	+631	281,788	1952,835
462	980		92° 47'	"	7.3	89° 46'	+5.7	1.6		5827.7		-316	+928	281,659	1953,132
TP	999		93° 34' 04"	"	9.2	89° 30'	+8.7	0.5			X	-335	+94	281,640	1,953,145
TP	999			"	9.1	210° 30'	+8.7	0.4		5828.9	X				Horiz y = +9' CORR. x = -5'
BS	637		297° 40' 38" - 180	+16.0	7.5	91° 30'	+16.7	+24.2			BS	-440	+461		
BS	637				7.6	268° 30'	+16.7	+24.3	5853.2		BS				
463	330		303° 18'	+16.0	7.3	91° 30'	-8.6	75.9		5837.3		+250	-215	281,450	1953,391
464	0				5.2	-		-5.2		5848.0	T	0	0	281,200	1,953,606
465	330		136° 29'	+16.0	5.7	89° -	+5.8	+0.1		5853.3		-293	+152	280,907	1,953,758
466	660		139° 12'	"	5.3	88° 40'	+15.4	+10.1		5863.3		-599	+277	280,601	1,953,883
467	986		140° 28'	"	6.5	88° 40'	+22.9	+16.4		5869.6		-904	+394	280,996	1,954,000
TP	1278		139° 39' 42"	"	11.2	88° 30'	+33.4	+22.2		5875.6	TP	-1164	+529	280,036	1,954,133
TP	1278			"	10.9	271° 30'	+33.4	+22.5	(+22.4)		TP				
BS	497		298° 13' 40" - 180	+16.0	6.2	92° -	+17.3	+23.5			BS	-346	+356		
BS	497				6.3	268° -	+17.3	+23.6	5899.2		BS				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9-22-82		B. Cotcamp		D. Hamilton		6834		D.H. Jm		3	48						
AREA		TOPO MAP	STATE	COUNTY	TWP	RANGE	PPM	PARTY MANAGER									
UTAH		MAYFIELD	UTAH	SANPETE				L.O. Davis									
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									5899.2								
468	457		298° 07'	+16.0	6.0	92°	-15.9	-21.9		5877.3		+318	-328	280,008	1,954,161		
469	125		301° 46'	" "	4.9	92°	-4.4	-9.3		5889.9		+93	-84	279,783	1,954,405		
π	0				5.2	-		-5.2		5894.0	π	0	0	279,690	1,954,489	ACROSS ROAD 10'	
470	218		84° 50'	+16.0	4.2	88°	+7.6	+3.4		5902.6		-41	+214	279,649	1,954,703	FROM CATTLE 94499	
471	549		83° 16' 08"	" "	5.3	87° 30'	+23.9	+18.6			TP	-88	+541	279,602	1,955,030	ACROSS STA.	
471	549				5.2	272° 30'	+23.9	+18.7		5917.9	TP						
BS	482		241° 48' 40" - 180	+16.0	11.8	92°	+16.8	+28.6	5946.5		BS	+102	+471				
BS	482			+	3.3	93°	+25.2	+28.5			BS						
472	150		240 25	+16.0	7.1	91°	-2.6	9.7		5936.8		-35	-146	279,669	1,955,355		
π	0				5.2	-		-5.2		5941.3	π	0	0	279,704	1,955,501		
473	180		42° 25'	+16.0	5.1	88°	+6.3	+1.2		5947.7		+94	+153	279,798	1,955,654		
474	510		45° 17'	" "	5.0	88°	+17.8	+12.8		5959.3		+245	+447	279,949	1,955,948		
TP	666		48° 01' 45"	" "	6.4	88°	+23.2	+16.8		5963.3	TP	+291	+598	279,995	1,956,099		
TP	666				6.5	272°	+23.2	+16.7			TP						
BS	818		249 52 37 - 180	+16.0	7.3	92°	+28.5	+35.8			BS	+59	+815				
BS	818			+	9.8	91° 50'	+26.2	+36.0	5999.3		BS						
475	650		252 18	+16.0	10.2	92°	-22.7	32.9		5966.4		-19	-650	280,035	1,956,264		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
9-22-82		B. Cotcamp		D. Hamilton		6834		D.H. dm		3	49				
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
UTAH		MAP FIELD-7 1/2'	UTAH	SANPETE					L.O. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5999.3						
476	330		262° 23'	+16.0	9.8	92°	-71.5	-21.3		5978.0		+48	-326	280,102	1,956,588
477	0				5.2	-		-5.2		5994.1	X	0	0	280,054	1,956,914
478	330		85° 19'	" "	11.0	89°	+5.8	5.2		5994.1		-65	+324	279,989	1,957,238
479	660		" "	+16.0	12.9	89°	+11.5	7.4		5997.9		-130	+647	279,924	1,957,561
480	990		" "	" "	12.7	89°	+17.3	+4.6		6003.9		-194	+971	279,860	1,957,883
481	1320		" "	" "	13.1	89°	+23.0	+9.9		6009.2		-259	+1294	279,795	1,958,208
482	1650		85° 41'	" "	8.4	89° 10'	+24.0	75.6		6014.9		-334	+1616	279,720	1,958,530
483	1980		85° 31'	" "	8.3	88° 50'	+40.3	32.0		6031.3		-395	+1940	279,659	1,958,854
484	2310		85° 19'	" "	6.0	88° 30'	+60.5	54.5		6053.8		-453	+2265	279,601	1,959,179
485	2639		85° 16'	" "	1.2	88° 20'	+76.7	75.5		6074.8		-516	+2588	279,538	1,959,502
TP	2697	2695.6	85° 16' 40"	" "	12.9	88° 10'	+86.3	+74.1		6073.6	TP	-527	+2644	279,527	1,959,558
TP	2697				11.9	271° 50'	+86.3	+74.4	+74.3		TP				
BS	939		234° 50' 02" - 180	+16.0	11.2	91°	+16.4	+27.6			BS	+308	+887		
BS	939				11.3	269°	+16.4	+27.7	6101.3		BS				
486	660		234° 50'	+16.0	8.9	91° 50'	-21.1	-30.0		6071.3		-217	-623	279,618	1,959,822
487	330		235° 36'	" "	9.2	91° 50'	-70.6	-19.8		6081.5		-102	-314	279,733	1,960,131
488	0		0	" "	5.2	-		-5.2		6096.1	X	0	0	279,835	1,960,445
489	330		49° 12'	" "	5.7	91° 50'	-70.6	-16.3		6085.0		+138	+300	279,973	1,960,745

ACROSS STA.

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9-22-82		B. Cotcamp		D. Hamilton		6834		D.H. Jm		3	50						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER.							
UTAH		MAYFIELD-7 1/2		UTAH	SANPETE					L.O. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									6101.3								
490	665		50° 59'	+160	8.4	-		-8.4		6092.9		+258	+607	280,093	1,961,052		
491	990		51° 13' 35"	"	4.0	89° 30'	+8.6	+4.6			TP	+383	+913	280,218	1,961,358		
491	990				3.8	210° 30'	+8.6	+4.8		6106.1	TP						
BS	547		243° 37' 39" -180	+160	10.2	92° -	+9.1	+29.3	6135.4		BS	+98	+538				
BS	547				10.2	268° -	+9.1	+29.3			BS						
492	218		247° 52'	+160	5.2	92° 30'	9.5	14.7		6120.7		-23	-217	280,293	1,961,679		
X	0				5.2	-		-5.2		6130.2	X	0	0	280,316	1,961,896		
493	110		69° 58'	+160	6.5	88° 30'	+2.9	3.6		6131.8		+8	+110	280,324	1,962,006	+280,375 X -1,962,315	
HF	400		68° 33' 45"	"	8.7	88° 30'	+10.5	+1.8		6137.2	HF	+38	+398	280,354	1,962,294	HF-TRAIL NORTH	
494	440		66° 58'	"	7.7	88° 30'	+11.5	+3.8		6139.2		+54	+431	280,370	1,962,333		
TP	550		67° 17' 20"	"	3.6	88° 20'	+16.0	+12.4		6147.8	TP	+64	+546	280,380	1,962,442		
TP	550				6.8	88° -	+19.2	+12.4			TP						
BS	679		225° 43' 58" -180	+160	6.6	92° 30'	+29.6	+36.2			BS	+321	+597				
BS	679				4.7	92° 40'	+31.6	+36.3	6184.1		BS						
495	451		226° 61'	"	6.8	92° 20'	18.3	25.1		6159.0		-212	-398	280,489	1,962,641		
496	121		" "	"	6.9	92° 20'	4.9	11.8		6172.3		-57	-107	280,644	1,962,932		
X	0				5.2	-		-5.2		6178.9	X	0	0	280,701	1,963,039	+280,820 X -1,963,175	
HF	132		29° 00' 20"	+157	3.9	89° -	+2.3	-1.6		6182.5	HF	+94	+93	280,795	1,963,132	BRIDGE	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9-23-82		B. Cotcamp		D. Hamilton		6834		D.H. Jm		3	51						
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER								
UTAH		MAYFIELD-WOODS LAKE	UTAH	SANPETE					L.O. Davis								
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
			0						6184.1								
497	209		27° 26'	+15.7	7.3	89°	+3.6	-3.7		6180.4		+153	+143	289,854	1,963,182		
sec. line.	348		29° 05' 40"	" "	8.1	-		-8.1		6176.0		+241	+245	280,948	1,963,284		
498	540		31° 28' 10"	" "	4.4	89° 30'	+4.7	+0.3			TP	+367	+396	281,068	1,963,435		
498	540				4.2	270° 30'	+4.7	+0.5		6184.6	TP						
BS	1206		240° 37' 37" -180	+15.7	12.8	92° 50'	+59.5	+72.3	6256.9		BS	+285	+1170				
BS	1206			+	12.6	267° 10'	+59.5	+72.1			BS						
499	880		240° 57'	+15.7	14.2	92° 30'	38.4	-52.6		6204.3		-203	-856	281,150	1,963,749		
500	550		241° 32'	" "	9.3	92° 50'	27.2	36.5		6220.4		-122	-536	281,231	1,964,069	↑	
501	220		242° 53'	" "	12.3	92° 50'	70.9	23.2		6233.7		-44	-216	281,309	1,964,389	MAYFIELD - 7 1/2'	
TP					5.2	-		-5.2		6251.7	TP	0	0	281,353	1,964,605	WOODS LAKE - 7 1/2'	
502	109		55° 57'	+15.7	5.1	89° 30'	+1.0	-4.1		6252.8		+34	+103	281,387	1,964,708	↓	
503	439		58° 36'	" "	9.6	89° 20'	+5.1	-4.5		6252.4		+119	+423	281,472	1,965,028		
504	769		59° 21'	" "	7.3	88°	+26.8	+19.5		6276.4		+198	+743	281,551	1,965,348		
TP	1083		59° 06' 10"	" "	6.4	88°	+37.8	+31.4		6288.5	TP	+284	+1044	281,637	1,965,649		
TP	1083			" "	6.1	272°	+37.8	+31.7	+31.6		TP						
BS	561		206° 29' 45" -180	+15.7	8.8	91° 50'	+17.9	+26.7	6315.2		BS	+415	+377				
BS	561			+	8.7	268° 10'	+17.9	+26.6			BS						

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9-23-82		B. Cotcamp		D. Hamilton		6834		Jm B.C.		3	52						
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
UTAM		WOODS LAKE-7 1/2		UTAM		SANPETE					L.O. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									6315.2								
505	550		207° 06'	+15.7	3.5	92° 30'	-24.0	-27.5		6287.7		-404	-374	281,648	1,965,652		
506	220		204° 42'	" "	6.6	92° 30'	-9.6	-16.2		6299.0		-168	-143	281,884	1,965,883		
TP	0				5.2	-		-5.2		6310.0	TP	0	0	282,052	1,966,026		
507	113		23° 11'	+15.7	3.4	92° 30'	-4.9	-8.3		6306.9		+88	+71	282,840	1,966,097		
508	440		32° 37' 25"	" "	3.3	88° 40'	+10.2	+6.9			TP	+292	+329	282,344	1,966,355		
508	440				3.1	271° 20'	+10.2	+7.1		6322.3	TP						
BS	664		234° 29' 58" -180	+15.7	6.4	94° 0'	+46.2	+52.6			BS	+224	+623				
BS	664				6.5	266° -	+46.2	+52.7	6375.0		BS						
509	332		235° 39'	+15.7	7.6	93° 30'	-20.2	-27.8		6347.2		-106	-315	282,462	1,966,663		
IF	41		199° 43' 40"	" "	6.5	93° 30'	-2.5	-9.0		6366.0	IF	-33	-24	282,535	1,966,954	IF -282,585 x -1,966,945 FT-RO. NORTH	
510	0				5.2	-		-5.2		6369.8	TP	0	0	282,568	1,966,978		
BRIDGE	238		86° 26' 25"	+15.7	8.7	91° 50'	-7.6	-16.3		6358.7	IF	-50	+233	282,518	1,967,211	IF -282,580 x -1,967,190 BRIDGE	
511	331		85° 39'	" "	5.3	91° 30'	-8.7	-14.0		6361.0		-65	+325	282,503	1,967,303		
512	661		86° 51'	" "	8.8	-		-8.8		6366.2		-144	+645	282,424	1,967,623		
TP	750		87° 07' 10"	" "	7.3	-		-7.3			TP	-166	+731	282,402	1,967,709		
TP	750				7.2	270°		-7.2		6367.8	TP						
BS	498		275° 56' 42" -180	+15.7	7.1	94° 0'	+34.7	+41.8			BS	-183	+462				
BS	498				7.2	266° -	+34.7	+41.9	6409.7		BS						

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9-23-82		B. Cotcamp		D. Hamilton		6834		ym B.C.		3	53						
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
UTAH		WOODS LAKE-7 1/2'		UTAH		SANPETE					L.O. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									6409.7								
513	253		275° 31'	+15.7°	7.0	95°	-22.0	-29.0		6380.7		+92	-236	282,311	1,967,935		
X	0				5.2	-		-5.2		6404.5	X	0	0	282,219	1,968,171		
514	75		85° 11'	+15.7°	5.1	85° 30'	+5.9	+0.8		6410.5		-14	+74	282,205	1,968,245		
515	405		78° 12'	" "	5.1	85°	+35.2	+30.1		6439.8		-28	+404	282,191	1,968,575		
TP	540		79° 21' 18"	" "	1.8	85°	+46.9	+45.1			TP	-47	+536	282,172	1,968,707		
TP	540				1.7	275°	+46.9	+45.2		6454.9	TP						
BS	520		275° 49' 47" -180	+15.7°	10.3	94°	+36.2	+46.5			BS	-190	+483				
BS	520			+	10.4	266°	+36.2	+46.6	6501.5		BS						
516	329		276° 58'	+15.7°	9.5	94° 20'	-24.8	-34.3		6467.2		+127	-304	282,109	1,968,886		
517	0				5.2	-		-5.2		6496.3	X	0	0	281,982	1,969,190	ACROSS STA.	
518	330		79° 39'	+15.7°	4.0	87°	+17.2	+13.2		6514.7		-31	+329	281,951	1,969,519		
14	362		81° 53' 37"	" "	2.5	87°	+18.9	+16.4		6517.9	14	-48	+358	281,934	1,969,548	14 y-281,995x-1,969,575 14 y-ROAD SOUTH	
519	660		81° 34' 19"	" "	4.9	86° 30'	+40.2	+35.3			TP	-83	+653	281,899	1,969,843		
519	660				4.8	273° 30'	+40.2	+35.4		6536.9	TP						
BS	1308		237° 45' 38" -180	+15.7°	10.7	92° 30'	+57.0	+67.7	6604.5		BS	+372	+1253			E.D.M.	
BS	1308			+	10.4	267° 30'	+57.0	+67.4	6571.6		BS						
520	984		239° 59'	+15.7°	12.0	93° 20'	-57.1	-69.1		6535.4		-243	-953	282,028	1,970,145		
521	660		244° 32'	" "	11.0	94°	-75.9	-56.9		6547.6		-112	-650	282,159	1,970,446		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9-23-82		B. C. Camp		D. Hamilton		6834		fr B.C.		3	54						
AREA		TOPO MAP	STATE	COUNTY	TWP	RANGE	PPM	PARTY MANAGER									
UTAM		WOODS LAKE-7 1/2'	UTAM	SANPETE				L. O. Davis									
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									6604.5								
522	330		245° 46'	+15.7°	9.8	93°	-17.2	-27.0		6577.5		-49	-326	282,220	1,970,770		
523	0				5.2	-		-5.2		6599.3	T	0	0	282,271	1,971,096	ACROSS STA.	
524	330		58° 43'	+15.7°	4.3	89° 36'	+2.9	-7.4		6603.1		+89	+318	282,360	1,971,414		
525	658		55° 19' 01"	" "	7.0	89°	+11.5	+4.5		6609.0	TP	+214	+622	282,485	1,971,718		
525	658				7.1	271°	+11.5	+4.4			TP						
BS	1316		218° 44' 55" -180	+15.7°	11.3	90° 40'	+15.3	+26.6	6635.5		BS	+765	+1071				
BS	1316				11.0	269° 20'	+15.3	+26.3	6635.5		BS						
526	985		218° 39'	+15.7°	5.2	91° 20'	-22.9	-28.1		6602.4		-574	-800	282,676	1,971,989		
527	660		216° 00'	" "	8.0	92° 10'	-24.9	-32.9		6602.6		-409	-518	282,841	1,972,271		
528	330		" "	" "	7.8	92° 10'	-12.5	-20.3		6615.2		-205	-259	283,046	1,972,530		
529	126		216° 24' 01"	" "	8.4	91° 30'	-3.3	-11.7		6623.8	T	-77	-99	283,113	1,972,690	BRIDGE X=1,972,700	
530	0				5.2	-		-5.2		6630.3	T	0	0	283,250	1,972,789		
531	36		33° 50' 01"	+15.7°	4.7	85° 30'	+2.8	-7.9		6633.6	IF	+23	+27	283,273	1,972,816	Y=283,330 X=1,972,825 Y-ROAD SOUTH	
532	328		62° 56' 01"	" "	5.4	82°	+45.2	+39.8			TP	+64	+318	283,314	1,973,107		
530	328				5.3	278°	+45.2	+39.9		6675.4	TP						
BS	929	916.3	218° 36' 19" -180	+15.7°	8.8	99° 30'	+151.2	+160.0	6835.4		BS	+535	+744				
BS	929				8.7	260° 30'	+151.2	+159.9			BS						
531	600		219° 00'	+15.7°	13.9	100° 30'	-107.5	-121.4		6714.0		-349	-490	283,502	1,973,361		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	9-23-82	INSTRUMENT MAN	B. Cotcamp	ROD MAN	D. Hamilton	PARTY NUMBER	6834	NOTES CHECKED BY	Jm B.C.	LINE NO.	3	PAGE	55	
AREA	UTAH	TOPO MAP	WOODS LAKE-7 1/2	STATE	UTAH	COUNTY	SANPETE	TWP		RANGE		PPM	PARTY MANAGER	L.O. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH+ SOUTH - LAT.	EAST+ WEST - DEP.		Y
									6835.4						
532	301		206° 22'	+15.7°	10.3	160° 50'	55.6	-65.9		6769.5		-223	-202	283,626 1,973,649	CROSS COUNTRY
TP	0				5.2	-		-5.2		6830.2	TP	0	0	283,849 1,973,851	OFFLINE " "
533	192		125° 55'	+15.7°	4.1	84° 50'	+17.2	+13.1		6848.5		-151	+119	283,698 1,973,970	" "
TP	211	208.2	98° 08' 56"	"	6.9	80° 40'	+33.8	+26.9		6862.3	TP	-84	+190	283,764 1,974,040	" "
TP	211				7.0	279° 20'	+33.8	+26.8			TP				
BS	620	617.6	219° 22' 21" -182	+15.7°	13.5	95° -	+53.8	+67.3	6929.6		BS	+354	+506		CROSS COUNTRY
BS	620			+	13.4	265° -	+53.8	+67.2			BS	-1	-1		
534	392		214° 33'	+15.7°	12.9	96° 30'	+44.1	+57.0		6872.6		-251	-301	283,866 1,974,244	
535	85		195° 56'	"	6.2	94° 30'	-6.6	-12.8		6916.8		-72	-45	284,045 1,974,500	
TP	0				5.2	-		-5.2		6924.4	TP	0	0	284,117 1,974,545	
536	255		6° 29'	+15.7°	3.2	87° 30'	+11.1	+7.9		6937.5		+236	+96	284,353 1,974,641	FIRST STA. BACK ON ROAD
537	385		7° 24'	"	6.0	87° -	+30.6	+24.6		6954.2		+538	+230	284,655 1,974,775	
TP	686	685.1	8° 22' 30"	"	0.9	87° -	+35.9	+35.0		6964.6	TP	+625	+279	284,741 1,974,823	
TP	686				1.0	273° -	+35.9	+34.9			TP	-1	-1		
BS	365		235° 34' 42" -182	+15.7°	11.5	91° -	+6.4	+17.9	6982.5		BS	+117	+346		
BS	365			+	11.4	269° -	+6.4	+17.8			BS	-1	-1		
538	138		231° 45'	+15.7°	4.4	91° -	-2.4	-6.8		6975.7		-53	-127	284,804 1,975,041	
TP	0				5.2	-		-5.2		6977.3	TP	0	0	284,857 1,975,168	ACROSS ROAD

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 9-23-82	INSTRUMENT MAN B. Cotcamp	ROD MAN D. MacIntosh	PARTY NUMBER 6834	NOTES CHECKED BY Jm B.C.	LINE NO. 3	PAGE 56
AREA UTAM	TOPO MAP WOODS LAKE-7 1/2	STATE UTAM	COUNTY SANPETE	TWP	RANGE	PPM
				PARTY MANAGER L.O. Davis		

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS
														Y	X	
									6982.5							
539	193		11° 24'	+15.7	5.8	88° -	+6.7	+0.9		6983.4		+172	+88	285,029	1,975,256	
540	523		13° 16'	"	5.1	87° -	+27.3	+22.2		7004.9		+458	+253	285,315	1,975,421	
541	853		" "	"	7.2	86° 30'	+52.0	+44.8		7027.3		+746	+413	285,603	1,975,581	
542	1183		" "	"	12.7	86° 30'	+72.1	+59.4		7041.9		+1035	+573	285,892	1,975,741	
543	1513		" "	"	8.7	86° 30'	+92.2	+83.5		7066.0		+1324	+733	286,181	1,975,901	
544	1847	1842.9	13° 54' 40"	"	6.2	86° 10'	+123.2	+117.0		7099.7	TP	+1602	+911	286,458	1,976,078	
544	1847				5.9	273° 50'	+123.2	+117.3	+117.2		TP	-1	-1			
BS	1193	1190.8	206° 37' 19" -180	+15.7	3.9	93° 30'	+72.7	+76.6	7176.3		BS	+880	+802			
BS	1193			+	3.7	266° 30'	+72.7	+76.4			BS	-1	-1			
545	868		205° 04'	+15.7	6.3	93° 30'	-52.9	-59.2		7117.1		-657	-567	286,682	1,976,314	
546	538		205° 36'	"	10.1	93° 30'	-32.8	-42.9		7133.4		-404	-355	286,935	1,976,526	
547	208		206° 27'	"	5.3	93° 30'	-12.7	-18.0		7158.3		-154	-140	287,193	1,976,739	
T	0				5.2	-		-5.2		7171.1	T	0	0	287,337	1,976,879	
548	121		18° 35'	+15.7	6.5	87° 30'	+5.3	-7.2		7175.1		+100	+68	287,437	1,976,947	
549	451		20° 21'	"	5.7	87° 30'	+19.7	+14.0		7190.3		+365	+265	287,702	1,977,144	
550	781		20° 45'	"	6.3	87° -	+40.8	+34.5		7210.8		+628	+464	287,965	1,977,343	
TP	905	903.8	20° 28' 01"	"	3.8	87° -	+47.3	+43.5			TP	+730	+533	288,066	1,977,411	
TP	905				3.7	273° -	+47.3	+43.6		7219.9	TP	-1	-1			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	9-23-82	INSTRUMENT MAN	B. Cotcamp	ROD MAN	D. Hamilton	PARTY NUMBER	6834	NOTES CHECKED BY	Jm B.C.	LINE NO.	3	PAGE	57	
AREA	UTAH	TOPO MAP	WOODS LAKE-7 1/2'	STATE	UTAH	COUNTY	SANPETE	TWP		RANGE		PPM	PARTY MANAGER.	L.O. DAVIS

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
										7219.9								
BS	380	379.1	222° 18' 22" - 180	+15.7	4.6	94° -	+26.4	+31.0	7250.9		BS	+201	+321					
BS	380				+4.5	266° -	+26.4	+30.9		BS		-1						
551	172		220° 24'	+15.7	6.0	94° -	72.0	78.0		7232.9		-96	-143	288,170	1,977,588		WOODS LAKE-7 1/2'	
TP	0				5.2	-		-5.2		7245.7	TP	0	0	288,266	1,977,731		ACROSS ROAD	
552	158		34° 24'	+15.7	4.7	85° -	+13.7	+9.0		7259.9		+101	+121	288,367	1,977,852		BLACK MOUNTAIN-7 1/2'	
TP	246	245.1	34° 34' 59"	" "	5.7	85° -	+21.4	+15.7			TP	+157	+189	288,422	1,977,920		↓	
TP	246				5.6	275° -	+21.4	+15.8		7266.7	TP							
BS	376		229° 17' 40" - 180	+15.7	4.1	93° 30'	+22.9	+27.0	7293.7		BS	+159	+340					
BS	376				+4.0	266° 30'	+22.9	+26.9		BS		-1						
553	135		221° 29'	+15.7	6.2	93° -	-7.1	73.3		7280.4		-73	-113	288,502	1,978,147			
TP	0				5.2	-		-5.2		7288.5	TP	0	0	288,580	1,978,260			
554	194		38° 34'	+15.7	5.5	87° -	+10.1	+4.6		7298.3		+113	+157	288,693	1,978,417			
555	524		36° 52'	" "	8.9	85° 50'	+38.0	+29.1		7322.8		+319	+416	288,899	1,978,676			
556	854		36° 33'	" "	5.8	85° 50'	+61.9	+56.1		7349.8		+523	+675	299,103	1,978,935			
TP	1018	1015.5	36° 34' 02"	" "	0.1	86° -	+70.8	+70.7		7364.4	TP	+621	+803	289,200	1,979,063			
TP	1018				0.1	274° -	+70.8	+70.7			TP							
BS	538	535.9	227° 22' 33" - 180	+15.7	2.8	95° -	+46.7	+49.5	7413.9		BS	+243	+478					
BS	538				+2.7	265° -	+46.7	+49.4		BS								

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-23-82		B. Cotamp		D. Hamilton		6834		Jm B.C.		3		58			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		BLACK MOUNTAIN-7 1/2		UTAH		SANPETE								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									7413.9						
557	369		227°02'	+15.7	4.6	95°	32.0	36.6		7377.3		-169	-328	289,273	1,979,213
558	39		216°04'	"	5.2	95°	3.4	8.6		7405.3		-24	-31	289,418	1,979,510
π	0				5.2	-		-5.2		7408.7	π	0	0	289,442	1,979,541
559	287		20°57'42"	+15.7	2.7	86°	+20.0	+17.3		7431.2	TP	+230	+171	289,671	1,979,712
559	287				2.8	274°	+20.0	+17.2			TP				
BS	411	410.0	186°54'19"-180	+15.7	4.0	94°	+28.6	+32.6	7463.8		BS	+379	+158		
BS	411				3.9	266°	+28.6	+32.5			BS				
560	82		187°22'	+15.7	5.5	93°30'	5.0	10.5		7453.3		-75	-32	289,974	1,979,838
π	0				5.2	-		-5.2		7458.6	π	0	0	290,049	1,979,870
TP	220		31°50'41"	+15.7	5.0	85°30'	+17.2	+12.2			TP	+148	+162	290,196	1,980,032
TP	220				4.9	274°30'	+17.2	+12.3		7476.1	TP				
BS	318	306.4	270°18'40"-180	+15.7	7.5	105°30'	+81.9	+89.4	7565.5		BS	-85	+295		level
BS	318				7.4	254°30'	+81.9	+89.3			BS				
561	289		270°15'	+15.7	7.6	106°30'	-78.7	-86.3		7479.2		+79	-278	290,189	1,980,073
π	0				5.2	!		-5.2		7560.3	π	0	0	290,110	1,980,327
562	42		41°12'	+15.7	3.3	86°	+2.9	-0.4		7565.1		+23	+35	290,133	1,980,362
TP	217	215.6	27°48'50"	"	6.6	83°30'	+24.4	+17.8		7583.3	TP	+156	+149	290,265	1,980,476
TP	217				6.6	276°30'	+24.4	+17.8			TP				

CROSS COUNTRY
ON TOP OF KNOLL
BACK ON ROAD

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-23-82		B. Cotcamp		D. Hamilton		6834		B.C.		3		59			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		Black Mountain-7 1/2		CTAH		Sampere								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
										7583.3					
BS	290		234° 40' 02" - 180	+15.7	6.5	94° 30'	+22.7	+29.2	7612.5		BS	+97	+272		
BS	290			+	6.4	265° 30'	+22.7	+29.1			BS				
563	148		234° 40'	+15.7	4.2	94° 36'	11.6	15.8		7596.7		-50	-139	290,311	1,980,609
T	0				5.2	-		-5.2		7607.3	T	0	0	290,361	1,980,748 Inside of corner
564	166		22° 39'	+15.7	1.2	85° 30'	+13.0	+11.8		7624.3		+130	+103	290,491	1,980,851
565	495		25° 08'	"	11.6	84° 10'	50.0	38.4		7650.9		+375	+324	290,736	1,981,072
TP	578	575.3	23° 05' 50"	"	6.4	84° 30'	+55.1	+48.7		7661.2	TP	+448	+360	290,809	1,981,108
TP	578				6.5	275° 30'	+55.1	+48.6			TP				
BS	240	238.9	188° 42' 42" - 180	+15.7	6.7	95° 30'	+22.9	+29.6	7690.8		BS	+218	+99		
BS	240			+	6.6	264° 30'	+22.9	+29.5			BS				
566	0				5.2	-		-5.2		7685.6	T	0	0	291,025	1,981,207
TP	182		356° 57' 59"	+15.7	2.0	85° 30'	+14.2	+12.2			TP	+177	+40	291,201	1,981,247
TP	182				1.9	274° 30'	+14.2	+12.3		7703.1	TP				
BS	249	248.1	208° 06' 42" - 180	+15.7	6.9	95° -	+21.6	+28.5	7731.6		BS	+179	+172		
BS	249			+	6.8	265° -	+21.6	+28.4			BS				
567	96		208° 55'	+15.7	8.0	95° -	8.3	16.3		7715.3		-68	-67	291,311	1,981,352
T	0				5.2	-		-5.2		7726.4	T	0	0	291,379	1,981,419

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
9-23-82		B. Cotcamp		D. Hamilton		6834		Jm B.C.		3	60				
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER				
UTAH		BLACK MOUNTAIN-7 1/2		UTAH		Sanpete					L.O. Davis				
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									7731.6						
568	235		49° 06'	+15.7°	3.8	84°	+24.4	+20.6		7752.2		+100	+213	291,479	1,980,632
TP	490	487.3	44° 23' 15"	" "	7.8	84°	+50.9	+43.1			TP	+243	+422	291,621	1,981,841
TP	490				7.7	276°	+50.9	+43.2		7774.8	TP				
BS	169		172° 58' 37" +180°	+15.7°	10.2	94° 30'	+13.2	+23.4	7798.2		BS	+167	+25		
BS	169			+	10.1	265° 30'	+13.2	+23.3			BS				
569 _{OFF SET}	106		184° 49'	+15.7°	8.6	95°	9.2	17.8		7780.4		-99	-37	291,688	1,981,829
569 _{SP}	79		171° 04'	" "	7.0	91°	7.4	8.4		7789.8		-78	-9	291,709	1,981,857
X	0				5.2	-		-5.2		7793.0	X	0	0	291,787	1,981,866
570	270	267.0	49° 54' 20"	+15.7°	6.4	81° 30'	+39.5	+33.1			TP	+110	+243	291,896	1,982,109
570	270				6.3	278° 30'	+39.5	+33.2		7831.4	TP				
BS	191		213° 22' 20" -180°	+15.7°	5.9	94°	+13.3	+19.2			BS	+125	+144		
BS	191			+	6.0	266°	+13.3	+19.3	7850.7		BS				
X	0				5.2	-		-5.2		7845.5	X	0	0	292,020	1,982,253
570 _{OFF}															
571	126		22° 37'	+15.7°	10.8	85° 30'	+9.9	0.9		7849.8		+99	+78	292,119	1,982,331
571 _{OFF}	130		18° 06'	" "	10.9	85° 30'	+10.2	0.7		7850.0		+108	+72	292,128	1,982,325
TP	168		23° 00' 18"	" "	4.1	88°	+5.9	+1.8			TP	+131	+105	292,150	1,982,358
TP	168				4.0	272°	+5.9	+1.9		7852.6	TP				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-24-82		B. Cotcamp		D. Hamilton		6834		D.H. Dr		3		61			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		BLACK MOUNTAIN-7 1/2		UTAH		SANPETE								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
BS	96		230° 03' 08" - 180°	+15.7	8.3	93° -	+5.0	+13.3	7865.9	7852.6	BS	+39	+87		
BS	96			+	8.3	267° -	+5.0	+13.3			BS				
570 OFF.	480		239° 28'	+15.7	5.8	94°	33.4	39.2		7826.7		-123	-464	292,066 1,981,981	
T	0				5.2	-		-5.2		7860.7	T	0	0	292,189 1,982,445	
572	190		35° 09'	+15.7	5.3	85° -	+16.5	+11.2		7877.1		+120	+147	292,309 1,982,592	
573	520		31° 27'	" "	6.0	85° 30'	+40.7	34.7		7900.6		+354	+381	292,543 1,982,826	
TP	730	727.8	32° 21' 38"	" "	7.0	85° 30'	+57.1	+50.1			TP	+486	+541	292,675 1,982,986	
TP	730				6.9	274° 30'	+57.1	50.2		7916.1	TP				
BS	462	459.5	243° 29' 58" - 180°	+15.7	3.3	96° -	+48.0	+51.3	7967.4		BS	+86	+457		
BS	462			+	3.2	264° -	+48.0	+51.2			BS				
574	331		243° 30'	+15.7	8.1	95° 30'	31.6	39.7		7927.7		-62	-325	292,699 1,983,112	
575	0				5.2	-		-5.2		7962.2	T	0	0	292,761 1,983,437 ACROSS STA.	
576 OFFSET	333		84° 00' 40"	+15.7	11.5	85° 30'	+26.0	+14.5		7981.9	TP OFF	-56	+327	292,705 1,983,764 OFFSET STA. +	
576 OFFSET	333				11.5	284° 30'	+26.0	+14.5			TP OFF			OFFSET T.P.	
TP ONLINE	206		32° 24' 21"	+15.7	7.7	86° 30'	+12.6	+4.9		7972.3	TP ON	+137	+153	292,898 1,983,590 Go To BS	
TP ONLINE	206				7.6	273° 30'	+12.6	+5.0			TP ON			ON NEXT PAGE	
										7981.9				292,705 1,983,764	
BS OFFSET	476		259° 04' 58" - 180°	+15.7	2.3	-		+2.3	7984.2		BS	-40	+474	OFFSET	
BS OFFSET	476			+	2.2	270° -		+2.2			BS			STA.	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
9-24-82		B. Cotcamp		O. Hamilton		6834		D.H. Jnr B.C.		3	62					
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
UTAM		BLACK MOUNTAIN - 7 1/2'		UTAM	SANPETE					L.O. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									7984.2							
577	offset 117		257° 37'	+15.7°	11.8	-		-11.8		7972.4		+7	-117	292,672	1,984,121	} OFFSET STATIONS
TP	0				5.2	-		-5.2		7979.0	TP	0	0	292,665	1,984,238	
578	off. 226		52° 27'	+15.7°	2.6	86° 30'	+13.8	+11.2		7995.4		+84	+210	292,749	1,984,448	
										7972.3	P			292,898	1,983,590	LAST OFFSET STA.
BS	972	963.7	203° 05' 18" -180°	+15.7°	10.8	97° 30'	+126.9	+137.7	8110.0		BS	+751	+604			E.D.M.
BS	972			+	10.7	262° 30'	+126.9	+137.6			BS		+1			" "
576	871		202° 27'	+15.7°	7.0	99° 30'	-143.8	-150.8		7959.2		-685	-538	292,964	1,983,657	FIRST STA. OFF ROAD
577	553		201° 19'	" "	11.5	103° 30'	-129.1	-140.6		7969.4		-442	-333	293,205	1,983,860	CROSS COUNTRY
578	229		204° 23'	" "	11.9	111° -	-82.1	-94.0		8016.0		-175	-148	293,474	1,984,054	E.D.M.
TP	0				5.2	-		-5.2		8104.8	TP	0	0	293,649	1,984,195	ON SIDE OF RIDGE
579	110		19° 42'	+15.7°	13.6	63° 20'	+49.4	+35.8		8145.8		+90	+64	293,739	1,984,259	CROSS COUNTRY STA.
TP	122	112.7	27° 01' 20"	" "	4.6	67° 30'	+46.7	+42.1		8152.1	TP	+83	+76	293,732	1,984,271	79-35 SOUTH OF ROAD
TP	122				4.6	292° 30'	+46.7	+42.1			TP					E.D.M.
BS	144	142.0	186° 16' 22" -180°	+15.7°	4.6	99° 30'	+23.8	+28.4	8180.5		BS	+132	+53			CROSS COUNTRY
BS	144			+	4.5	260° 30'	+23.8	+28.3			BS					E.D.M.
TP	0				5.2	-		-5.2		8175.3	TP	0	0	293,864	1,984,324	" "
TP	141	+135.5	33° 58' 10"	+15.7°	6.9	74° -	+38.9	+32.0			TP	+88	+103	293,952	1,984,427	E.D.M.
TP	141				6.8	198° -	+38.9	+32.1		8212.6	TP					" "

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE		
9-24-82		B. Cotcamp		D. Hamilton		6834		D.H. Jm		3		64		
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PARTY MANAGER		
UTAH		BLACK MOUNTAIN-7 1/2		UTAH		SANPETE						L.O. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
										8410.2				
BS	170		196° 44' 42" - 180	+15.7	7.7	93° -	+8.9	+16.6	8426.8		BS	+143	+91	
BS	170				7.6	267° -	+8.9	+16.5		BS				
586	0				5.2	-		-5.2	8421.6		T	0	0	294,687 1,986,110 LAST STA. ON ROAD
587 _{OFF}	380		309° 19'	+15.7	7.0	87° -	+19.9	+12.9	8439.7			+311	-218	294,998 1,985,892 OFFSET STATION
588 _{OFF}	703		324° 59' 25"	" "	8.1	86° -	+48.9	+40.8	8467.6		TP _{OFF}	+662	-232	295,349 1,985,878 " " + TP.
587	331		344° 25'	" "	8.0	88° 10'	+10.6	+2.6	8429.4			+331	+1	295,018 1,986,111
TP	560	558.6	346° 26'	" "	7.7	86° -	+39.0	+31.3	8458.1		TP _{ON}	+558	+21	295,245 1,986,131 CROSS COUNTRY
TP	560				7.7	274° -	+39.0	+31.3		TP _{ON}				
BS	250	245.4	189° 01' 01" - 180	+15.7	4.6	101° -	+46.8	+51.4	8509.5		BS	+223	+103	CROSS COUNTRY
BS	250				4.5	259° -	+46.8	+51.3		BS				
588	150		186° 40'	+15.7	5.9	101° 30'	29.3	35.2	8474.3			-139	-59	295,329 1,986,179 " "
T	0				5.2	-		-5.2	8504.3		T	0	0	295,468 1,986,234
589	185		00° 11'	+15.7	12.0	79° -	+34.7	+22.7	8532.2			+178	+50	295,646 1,986,284 CROSS COUNTRY
TP	325	318.5	355° 08' 40"	" "	13.1	78° 30'	+63.5	+50.4	8560.0		TP	+313	+60	295,781 1,986,294 " "
TP	325				13.0	281° 30'	+63.5	+50.5		TP				
BS	274		181° 09' 10" - 180	+15.7	6.0	89° -	-4.8	+7.2	8561.2		BS	+262	+79	" "
BS	274				5.9	271° -	-4.8	+1.1		BS				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
9-24-82		B. Costamp		D. Hamilton		6834		D.H. Jm		3	65					
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER					
UTAH		BLACK MOUNTAIN-7 1/2		UTAH		SANPETE					L.O. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									8561.2							
590	88		163° 36'	+15.7°	10.7	90° 30'	-0.8	-11.5		9549.7		-88	+1	295,955	1,986,374	CROSS COUNTRY
X	0				5.2	-		-5.2		8556.0	X	0	0	296,043	1,986,373	" "
TP _{ROAD}	245		13° 23' 28"	+15.7°	2.2	86° -	+17.0	+14.8			TP	+214	+119	296,257	1,986,492	BACK ON ROAD
TP _{ROAD}	245				2.1	274° -	+17.0	+14.9		8576.1	TP					GO TO O.S. ROAD
														295,349	1,985,878	
BS _{OFF}	223		162° 28' +120°	+15.7°	8.3	93° -	+11.7	+20.0	8596.1		BS _{OFF}	+223	-10			OFFSET STATIONS
BS _{OFF}	223				7.6	93° 10'	+12.3	+19.9			BS _{OFF}					" "
X	0				5.2	-		-5.2		8590.9	X	0	0	295,572	1,985,868	" "
589 _{OFF}	137		344° 58'	+15.7°	6.4	85° -	+11.9	+5.5			OFF.	+137	+2	295,709	1,985,870	" "
589 _{OFF}	137				6.3	275° -	+11.9	+5.6		8601.7	OFF.					" "
										8576.1				296,257	1,986,492	
BS _{ROAD}	602	600.9	204° 37' 21" -180°	+15.7°	9.4	93° 30'	+36.7	+46.1	8622.2		BS	+458	+389			ON LINE
BS _{ROAD}	602				9.3	266° 30'	+36.7	+46.0			BS					" "
591	600		204° 31'	+15.7°	9.3	93° 30'	36.6	45.9		8576.3		-458	-387	296,257	1,986,494	" "
592	270		203° 55'	" "	6.0	93° 30'	76.5	22.5		8599.7		-208	-172	296,507	1,986,709	
X	0				5.2	-		-5.2		8617.0	X	0	0	296,715	1,986,881	ACCESS ROAD IN CORNER
593	74		75° 20'	+15.7°	2.7	88° -	+2.6	0.1		8622.1		-1	+74	296,714	1,986,955	
TP	243		74° 02' 42"	" "	1.2	87° -	+12.7	+11.5			TP	+143	+243	296,716	1,987,124	CRK
TP	243				1.1	273° -	+12.7	+11.6		8633.8	TP					CROSSING

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE			
9-24-82		B. Cotcamp		D. Hamilton		6834		DHT, Jm		3	66			
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER					
UTAH		Black Mountain-7 1/2	UTAH	Sanpete					L.O. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
										8633.8				
BS	315		304° 03' 42" -180	+15.7	6.7	92° 30'	+13.7	+20.4	8654.3		BS	-240	+203	
BS	315				6.8	267° 30'	+13.7	+20.5			BS			
594	139		303° 11'	+15.7	7.0	92° 30'	-6.1	-13.1		8641.2		+105	-91	296,581 1,987,236
X	0				5.2	-		-5.2		8649.1	X	0	0	296,476 1,987,327
595	190		132° 14'	+15.7	3.7	86° 30'	+11.6	+7.9		8662.2		-161	+101	296,315 1,987,428
TP	380		126° 47' 35"	"	7.1	86° 30'	+23.2	+16.1	8670.5		TP	-301	+231	296,175 1,987,558
TP	380				7.0	273° 30'	+23.2	+16.2			TP			
BS	406		271° 36' 20" -180	+15.7	7.3	93° 30'	+24.7	+32.0	8702.5		BS	-121	+387	
BS	406				7.2	266° 30'	+24.7	+31.9			BS			
596	272		269° 42'	+15.7	9.0	94° -	-18.9	-27.9		8674.6		+72	-262	296,126 1,987,683
X	0				5.2	-		-5.2		8697.3	X	0	0	296,054 1,987,945
597	58		80° 31'	+15.7	5.6	86° 30'	+3.5	-2.1		8700.4		-6	+58	296,048 1,988,003
598	388		73° 29'	"	4.4	87° -	+20.3	+15.9		8718.4		+6	+388	296,060 1,988,333
TP	691	+689.3	72° 14' 01"	"	7.5	86° -	+48.1	+40.6	8743.1		TP	+25	+689	296,079 1,988,634
TP	691				5.5	86° 10'	+46.1	+40.6			TP			
BS	330	328.9	244° 22' 52" -180	+15.7	7.9	94° 30'	+25.8	+33.7	8776.8		BS	+57	+324	
BS	330			"	7.8	265° 30'	+25.8	+33.6			BS			
599	304		244° 23'	"	5.5	95° -	-26.4	-31.9		8744.9		-52	-299	296,084 1,988,659

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
9-24-82		B. Cotcamp		D. Hamilton		6834		A.H. dm		3	67					
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER					
UTAH		BLACK MOUNTAIN-7 1/2		UTAH		SANPETE					L.O. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH+ SOUTH-	EAST+ WEST-		Y	X
									8776.8							
X	0				5.2	-		-5.2		8771.6	X	0	0	296,136	1,988,958	IN ROAD
X	35		133° 41' 38"	+15.7	4.9	95°	-3.0	7.9		8768.9	X	-30	+18	296,106	1,988,976	Y-296,140X-1,989,000
600	47		129° 40'	" "	5.8	92°	-7.6	7.4		8769.4		-39	+27	296,097	1,988,985	Y-ROAD NORTH
601	372		105° 52'	" "	6.1	87°	+19.4	7.3		8790.1		-195	+317	295,941	1,989,275	
TP	461		105° 32' 20"	" "	7.8	87°	+24.1	+16.3		8793.1	TP	-239	+394	295,897	1,989,352	
TP	461				7.9	273°	+24.1	+16.2			TP					
BS	626		295° 14' 38" -180	+15.7	7.7	91° 16'	+12.7	+20.4			BS	-410	+473			
BS	626			+	7.8	268° 50'	+12.7	+20.5	8813.6		BS					
602	382		295° 15'	+15.7	9.3	91° 30'	70.0	19.3		8794.3		+250	-289	295,737	1,989,536	
603	54		286° 31'	" "	6.3	92° 30'	2.4	8.7		8804.9		+29	-46	295,516	1,989,799	
X	0				5.2	-		-5.2		8808.9	X	0	0	295,487	1,989,825	
604	275		101° 59'	+15.7	4.3	86° 30'	+16.8	+12.5		8826.1		-128	+244	295,359	1,990,069	
605	605		" "	" "	4.7	86° 30'	+36.9	+32.2		8845.8		-281	+536	295,206	1,990,361	
TP	859	857.4	100° 50' 16"	+15.7	3.3	86° 30'	+52.3	+49.0		8862.6	TP	-383	+767	295,104	1,990,592	
TP	859				5.8	86° 20'	+54.8	+49.0			TP					
BS	370		254° 22' 40" -180	+15.7	5.3	94°	+25.7	+31.0	8893.6		BS	-1	+369			
BS	370			+	5.2	266°	+25.7	+30.9			BS					

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 9-24-82	INSTRUMENT MAN B. Cotcamp	ROD MAN D. Hamilton	PARTY NUMBER 6834	NOTES CHECKED BY D.H. Jm	LINE NO. 3	PAGE 68
AREA UTAH	TOPO MAP BLACK MOUNTAIN-7 1/2	STATE UTAH	COUNTY SANPETE	TWP RANGE	PPM	PARTY MANAGER L.O. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS
												NORTH+ SOUTH - LAT.	EAST+ WEST - DEP.	
									8893.6					
606	293		252° 11'	+15.7°	5.2	94° -	-20.4	-25.6		8868.0		-11	-293	295,092 1990,668
TP	0				5.2	-		-5.2		8888.4	TP	0	0	295,103 1990,961
607	36		69° 15'	+15.7°	4.6	88° -	+1.3	-3.3		8890.3		+3	+36	295,106 1990,997
608	366		70° 03'	" "	5.7	87° -	+19.1	+13.4		8907.0		+27	+365	295,130 1991,326
TP	507		69° 45' 55"	" "	2.6	87° -	+26.5	+23.9			TP	+40	+505	295,143 1991,466
TP	507				2.5	273° -	+26.5	+24.0		8917.6	TP			
BS	286		296° 39' 40" -180	+15.7°	4.9	94° 30'	+22.4	+27.3			BS	-192	+211	
BS	286			+	5.0	265° 30'	+22.4	+27.4	8945.0		BS			
TP	231		297° 52' 40"	+15.7°	5.9	95° -	-20.1	-26.0		8919.0	TP	+159	-167	295,110 1991,510 creek crossing -27 HORIZ CORR. y=-27 x=-8
609	84		287° 53'	" "	5.3	95° -	-7.3	-12.6		8932.4		+46	-70	294,997 1991,607
TP	0				5.2	-		-5.2		8939.8	TP	0	0	294,951 1991,677 INSIDE OF CORNER
610	239		88° 06'	+15.7°	3.5	86° -	+16.6	+13.1		8958.1		-57	+232	294,894 1991,909
TP	270		87° 47' 41"	" "	3.1	86° -	+18.8	+15.7			TP	-63	+262	294,887 1991,935
TP	270				3.0	274° -	+18.8	+15.8		8960.8	TP	-1	-4	
BS	447	445.3	288° 18' 40" -180	+15.7°	3.7	95° -	+38.8	+42.5			BS	-249	+369	
BS	447			+	3.8	265° -	+38.8	+42.6	9003.4		BS	-1	-4	
TP	285		292° 30' 45"	+15.7°	5.2	95° -	-24.7	-29.9		8973.5				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 9-24-82	INSTRUMENT MAN B. Cotcamp	ROD MAN D. Hamilton	PARTY NUMBER 6834	NOTES CHECKED BY D.H. [Signature]	LINE NO. 3	PAGE 70
AREA UTAM	TOPO MAP BLACK MOUNTAIN-7 1/2 UTAM	STATE UTAM	COUNTY Sanpete	TWP	RANGE	PPM
					PARTY MANAGER L.O. Davis	

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									9150.3						
X	0				5.2	-		5.2		9145.1	X	0	0	294,494	1,994,371
618	6		78° 48'	+15.7	5.2	-		5.2		9145.1		-0	+6	294,494	1,994,377
619	336	335.0	74° 35'	" "	4.4	85° 30'	+26.3	+21.9		9172.2		-2	+335	294,492	1,994,706
TP	460	458.6	73° 32' 42"	" "	4.2	85° 30'	+36.0	+31.8			TP	+6	+459	294,500	1,994,825
TP	460				4.1	274° 30'	+36.0	+31.9		9182.2	TP				
BS	1192	1189.1	241° 30' 40" -180°	+15.7	2.4	94°	+83.0	+85.4	9267.5		BS	+263	+1160		
BS	1192			+2.1	266°	+83.0	+85.1	+85.3			BS				
620	990	988.2	241° 15'	+15.7	10.3	93° 30'	-60.3	-70.6		9196.9		-223	-963	294,540	1,995,018
621	660	658.8	" "	" "	7.5	93° 30'	-40.2	-47.7		9219.8		-149	-642	294,614	1,995,359
41	477	476.1	242° 39' 20"	" "	9.0	93° 30'	-29.1	-38.1		9229.4	41	-96	-466	294,667	1,995,514
622	330		241° 15'	" "	9.1	93° 30'	-20.1	-29.2		9238.3		-74	-321	294,689	1,995,660
623	0				5.2	-		-5.2		9262.3	X	0	0	294,763	1,995,981
624	330		65° 39'	+15.7	5.1	86° 30'	+20.1	+15.0		9282.5		+50	+326	294,813	1,996,306
625	649	647.8	74° 57'	" "	7.2	86° 30'	+39.5	+32.3		9299.8		-7	+648	294,756	1,996,629
626	972	970.2	79° 38'	" "	9.0	86° 30'	+59.2	+50.2		9317.7		-90	+966	294,673	1,996,947
627	1298	1295.6	81° 53'	" "	10.0	86° 30'	+79.1	+69.1		9336.6		-171	+1284	294,592	1,997,265
628	1626	1623.0	83° 27'	+15.7	11.9	86° 30'	+99.1	+87.2		9354.7		-258	+1602	294,505	1,997,583
629	1955	1951.7	" "	" "	10.0	86° 40'	+113.5	+103.5		9371.0		-310	+1927	294,453	1,997,908
630	2284	2280.1	83° 21'	" "	12.0	86° 40'	+132.6	+120.6		9388.1		-359	+2252	294,404	1,998,233

u-294,665 v-1,995,585
T-RD. SOUTH

AROUND CURVE

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	9-24-82	INSTRUMENT MAN	B. Cotcamp	ROD MAN	D. Hamilton	PARTY NUMBER	6834	NOTES CHECKED BY	B.H. Jm	LINE NO.	683	PAGE	71
AREA	UTAM	TOPO MAP	BLACK Mountain-7 1/2	STATE	UTAM	COUNTY	SANPETE	TWP		RANGE		PPM	
PARTY MANAGER													L.O. 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.	
									9267.5					
631	2613	2608.6	83° 15'	+15.7	7.8	86° 40'	+151.7	+143.9		9411.4		-406	+2577	294,357 1,998,558
632	2944	2938.5	83° 11' 10"	" "	10.0	86° 30'	+179.4	+169.4		9437.3	TP	454	+2903	294,309 1,998,880
632	2944				9.3	273° 30'	+179.4	+170.1	+169.8		TP			
BS	0		0° 00' 00"	+15.7	5.2	-		+5.2	9442.5		BS			
BS	0			+5.2	5.2	-		+5.2			BS			
632	0				5.2	-		-5.2		9437.3	T	0	0	294,309 1,998,880
Δ	5363.33	5207.8	73° 36' 53"	+15.7	10.3	76° 10'	+1282.9	+1272.6		10,715.5	Δ	+62	+5207	294,372 2,004,087
Δ	5363.33				9.6	283° 50'	+1282.9	+1273.3	+1273.0		Δ			
										9437.3				DEPT. OF AGRIC. -1.5 Δ H-112 1962 EL. 10,717.0 y-294,444 x-2004,174
BS	914	912.9	252° 54' 22" -180	+15.7	8.1	92° 50'	+45.1	+53.2	9490.5		BS	+22	+913	
BS	914			+8.0	8.0	267° 10'	+45.1	+53.1			BS			
633	582	581.5	252° 36'	+15.7	6.9	92° 30'	+25.4	+32.3		9458.2		-17	-581	294,314 1,999,207
634	255		256° 25'	" "	4.6	93° -	+13.3	+17.9		9472.6		+9	-254	294,341 1,999,534
IF	158		260° 41' 30"	" "	4.7	93° -	-8.3	+13.0		9477.5	IF	+18	+157	294,349 1,999,632
T	0				5.2	-					T	0	0	294,331 1,999,789
CREEK CROSSING	82		114° 08'	+15.7	8.0	87°	+4.3	-3.7		9486.8	CREEK CROSSING	-52	+63	294,279 1,999,852
635	82		117° 28'	" "	8.0	87°	+4.3	-3.7		9486.8		-56	+60	294,275 1,999,848

Δ H-112 1962 EL. 10,717.0
y-294,444
x-2004,174
y-294,315 x-1,999,700
IF T-RD NORTH SIX MILE RD.
y-294,270 x-1,999,910
CREEK CROSSING BLACK MOUNTAIN
FERLOW RESERVOIR

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
9-24-82		B. Cotcamp		D. Hamilton		6834		D.H.		3	72					
AREA		TOPO MAP	STATE	COUNTY	TWP	RANGE	PPM	PARTY MANAGER								
UTAH		B. FERREN Reservoir-7 1/2	UTAH	SANPETE				L.O. Davis								
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
636	410		116° 52' 38"		4.6	87°	+21.4	+16.8		9507.3	TP	-277	+302.4	294,054	2,000,086	
636	410				4.5	273°	+21.4	+16.9			TP					
BS	652	650.0	275° 55' 45"-180°	+	3.7	94° 30'	+51.0	+54.7	9562.0		BS	240	+604.4			
BS	652			+	3.7	265° 30'	+51.0	+54.7			BS					
637	329	327.8	279° 15'		8.0	95°						+138	-297	293,953	2,000,389	
638	0				5.2	-		-5.2		9556.8	X	0	0	293,815	2,000,686	LAST STA. ON ROAD
639 off	330		122° 13'		5.7	86° 30'	+20.1	+14.4		9576.4		-244	+221	293,570	2,000,907	OFFSET STA.
639	329	327.8	103° 31'		0.3	85°	+28.6	+28.3		9590.3		-160	+286	293,655	2,000,972	CROSS COUNTRY
TP	417	415.4	112° 03' 01"		8.3	85°	+36.2	+27.9		9589.9	TP	-254	+328.4	293,560	2,001,011	UP TO 651
TP	417				8.2	275°	+36.2	+28.0			TP					
BS	604	592.9	247° 59' 21"-180°	+	1.6	101°	+113.1	+114.7	9704.6		BS	+65	+589.4			
BS	604			+	1.5	259°	+113.1	+114.6			BS					
640	330	322.8	248° 32'		8.1	102°	+67.1	75.2		9629.4		-32	-321	293,593	2,001,275	
641	0				5.2	-		-5.2		9699.4	X	0	0	293,626	2,001,596	
BS TP	278	273.8	75° 07' 15"		12.7	80°	+47.5	+34.8		9739.4	TP	-4	+274.4	293,622	2,001,866	
BS TP	278				12.6	280°	+47.5	+34.9			TP					

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

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DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-24-82		B. Cotcamp		D. Hamilton		6834		D.H. <i>Jan</i>		3		73			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		FERROV ROSEVOIR-7 1/2		UTAM		Sampete								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS
													Y	X	
BS	570.27	546.3	272° 42' 01" -120		+6.2	106° 40'	+163.6	+169.8	909.2	BS	-172	+518			E.D.M.
BS	570.27				+6.3	253° 20'	+163.6	+169.9		BS					
642	502	481.3	270° 50'		13.1	106° 30'	-142.6	-155.7	9753.5		+137	-461	293,586	2,001,920	
643	178	167.8	281° 25'		9.4	109° 30'	-59.4	-68.8	9840.4		+76	-149	293,526	2,002,232	
Σ	0				5.2	-		-5.2	9904.0	Σ	0	0	293,449	2,002,381	
644	151	149.5	114° 41'		2.2	82°	+21.0	+18.8	9928.0		-97	+114	293,352	2,002,495	
645	460	429.5	77° 02'		7.5	69°	+164.8	+157.3	10,066.5		-20	+429	293,429	2,002,810	
TP	724.44	682.9	77° 04' 10"		5.0	70° 30'	+241.8	+236.8	10,146.1	TP	-33	+682	293,416	2,003,060	E.D.M.
TP	724.44				4.8	289° 30'	+241.8	+237.0	236.9	TP					
	1131.59	1093.1	248° 02' 55" -120		+5.0	104° 59' 42"	+292.8	+297.8	10,443.9	BS	+119	+1087			E.D.M.
	1131.59				+5.0	255° 00' 24"	+292.7	+297.7		BS					
646	1066	1029.0	247° 42'		5.0	105° 08' 36"	278.5	283.5	10,160.4		-118	-1022	293,417	2,003,123	
647	737	714.0	245° 54'		8.8	104° 22'	182.9	191.7	10,352.2		-104	-706	293,431	2,003,439	
648	409	392.8	244° 35'		8.8	106° 11'	114.0	122.8	10,321.1		-66	-387	293,469	2,003,758	
649	88	83.6	225° 50'		8.8	108° 11'	27.5	36.3	10,407.6		-40	-74	293,495	2,004,071	
Σ	0				5.2	-		5.2	10,438.7	Σ	0	0	293,535	2,004,145	
650	238	229.9	49° 24'		8.8	75°	+61.6	+52.8	10,496.7		+97	+209	293,632	2,004,353	U.S. DEPT. OF AGRIC.
Δ	952.88	910.2	345° 55' 54"		8.8	72° 46' 42"	282.1	+273.3	10,717.2	Δ	+910	+26	294,445	2,004,171	Δ H-112 1962 EL. 10,717.0 E.D.M. y=294,444 HORIZ. y=16' x=2,004,171 CORR. X-19 FROM DEPT. OF INT. CONTROL DATA
Δ	952.88				8.8	287° 13' 23"	282.1	273.3		Δ					