

DATE		INSTRUMENT MAN			ROD MAN		PARTY NUMBER		NOTES CHECKED BY			LINE NO.		PAGE		
8-13-81		G. Cotcamp			D. Harris		6834		DOH			16		1		
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
New England		Waddington 7 1/2		New York		St. Lawrence								L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									282.6					1767,710	285,730	Instrument - Wild T1 chain - 330 steel cable + pins
14	422		128° 04' +180°	-13.1°	+4.2	-	+4.2	286.8		BS	+178	-383				T-rd (north)
14	422				+6.3	TH	-7.1	+4.2		BS						
15	1068		311° 47'	-13.1°	12.2	91°	-18.6	-20.8			+513	-937	1768,401	284,410		bridge @ 256 R.
1	990		311° 16'	-13.1°	13.8	91°	-17.3	-31.1			+467	-873	1768,355	284,174		
2	660		" "	"	11.8	91° 10'	-13.4	-25.2			+312	-582	1768,200	284,765		paved road
3	330		" "	"	12.0	BH	-1.7	-13.7			+156	-291	1768,044	285,056		↓
4	0				5.4	-	-5.4			π	0	0	1767,888	285,347		
5	330		129° 36'	-13.1°	4.4	-	-4.4				-147	+295	1767,741	285,642		
14	422		128° 04'	-13.1°	4.2	-	-4.2				-178	+383	1767,710	285,730		T-rd (north)
6	660		129° 36'	-13.1°	8.0	-	-8.0				-294	+591	1767,594	285,938		
7	990		" "	"	11.8	BH	-5.0	-16.8			-442	+886	1767,446	286,233		
8	1320		129° 36' 26"	-13.1°	11.2	BH	-6.6	-17.8			-589	+1181	1767,299	286,528		
8	1320				14.0	90° 10'	-3.8	-17.8								
	2640		309° 55' 18" -180°	-13.1°	+4.9	-	+4.9				BS	-1191.2	+2356			
	2640				+14.2	89° 48'	-9.2	+5.0	274.0		BS					
9	2310		309° 55'	-13.1°	4.8	-	-4.8				+1042	-2062	1767,148	286,822		
10	1980		" "	"	4.6	-	-4.6				+893	-1767	1766,999	287,117		
11	1650		" "	"	4.8	-	-4.5				+744	-1473	1766,850	287,111		
12	1320		" "	"	4.6	-	-4.6				+596	-1178	1766,702	287,706		
13	990		" "	"	3.9	-	-3.9				+447	-884	1766,553	288,000		

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
8-13-81		G. Catcamp		D. Harris		6834		DOH		10	2						
AREA		TOPO MAP	STATE	COUNTY		TWP		RANGE	PPM	PARTY MANAGER							
New England		Waddington	New York	St. Lawrence						L. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									274.0								
14	660		309° 55'	-13.0°	3.1	-		-3.1		270.9		+298	-589	1766404	288295		
14	611		311° 15'	-13.1°	2.8	-		-2.8		271.2		+288	-539	1766394	288345	17663854 288370 -rd (south) el. 272.	
15	330		309° 55'	-13.1°	4.0	-		-4.0		270.0		+149	-295	1766255	288529		
16	0				5.4	-		-5.4		268.6	TP	0	0	1766106	288884		
17	330		130° 15'	-13.1°	5.1	-		-5.1		268.9		-151	+294	1765955	289178		
18	660		" "	"	5.1	-		-5.1		268.9		-301	+587	1765805	289471		
19	990		" "	"	5.0	-		-5.0		268.8		-452	+881	1765654	289765		
20	1320		" "	"	5.2	-		-5.2		268.8		-602	+1175	1765504	290059		
21	1650		" "	"	5.0	-		-5.0		269.0		-753	+1468	1765353	290352		
22	1980		" "	"	2.6	-		-2.6		271.4		-904	+1762	1765202	290646		
23	2310		" "	"	2.8	TH	+11.6	+8.8		282.8		-1054	+2055	1765052	290939		
24	2640		130° 15' 16"	-13.1°	3.5	89° 30'	+23.0	+19.5		293.5	TP	-1205.3	+2349.2	1764898	291231		
24	2640				8.2	89° 24'	+27.6	+19.4			TP						
	2640		310° 31' 18" -180°	-12.9°	+3.4	BH	+13.2	+16.6	310.1		BS	-1224.3	+2339.2				
	2640				+13.5	90° 04'	+3.1	+16.6			BS						
25	2310		310° 31'	-12.9°	12.2	BH	-11.6	-23.8		286.3		+1071	-2047	1764755	291521		
26	1980		" "	"	9.1	90° 40'	-23.0	-32.1		278.0		+918	-1754	1764605	291814		
27	1650		" "	"	11.9	90° 40'	-19.2	-31.1		279.0		+765	-1462	1764454	292106		
28	1320		" "	"	10.7	90° 40'	-15.4	-26.1		284.0		+612	-1170	1764303	292398		
29	990		" "	"	11.3	90° 40'	-11.5	-22.8		287.8		+459	-877	1764152	292691		

DATE		INSTRUMENT MAN			ROD MAN		PARTY NUMBER		NOTES CHECKED BY			LINE NO.		PAGE	
8-13-81		G. Cotcamp			D. Harris		6834		D.H. rdu			10		3	
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
New England		Waddington/Chase Mills		New York		St. Lawrence								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									310.1						
30	660		310°31'	-129°	9.3	90°40'	-7.7	-17.0		293.1		+306	-585'	1763,977	292,983
31	330		" "	"	9.1	-		-9.1		301.0		+153	-292	1763,824	293,276
32	0				5.4	-		-5.4		304.7	X	0	0	1763,671	293,568
33	330		130°09'42"	-129°	4.5	-		-4.5		305.6		-151	+293	1763,520	293,861
34	660		" "	"	9.0	-		-9.0		301.1		-302	+587	1763,369	294,155
35	990		" "	"	11.9	BH	-5.0	-16.9		293.2		-453	+880	1763,218	294,448
36	1320		" "	"	11.6	90°30'	-11.5	-23.1		287.0		-605	+1173	1763,066	294,741
37	1650		" "	"	12.7	90°30'	-14.4	-27.1		283.0		-756	+1467	1762,915	295,035
38	1980		" "	"	10.0	90°30'	-17.3	-27.3		282.8		-907	+1760	1762,764	295,328
39	2310		" "	"	4.3	90°30'	-20.2	-24.5		285.6		-1058	+2053	1762,613	295,621
40	2640		130°09'42"	-12.9°	2.4	90°30'	-23.0	-25.4		284.7	TP	-1209-3	+2347-2	1762,459	295,913
40	2640				8.7	90°22'	-16.9	-25.6			TP				
	2640		310°04'06"-180°	-12.9°	+9.1	BH	+13.2	+22.3	307.0		BS	-1205-3	+2347-2		
	2640				+10.0	90°16'	+12.3	+22.3			BS				
41	2310		310°04'	-12.9°	11.8	90°20'	-13.4	-25.2		281.8		+1055	-2055	1762,306	296,205
42	1980		" "		7.1	90°38'	-21.9	-29.0		278.0		+904	-1762	1762,155	296,498
43	1650		" "	"	10.3	90°46'	-22.1	-32.4		274.6		+753	-1468	1762,004	296,792
44	1320		" "	"	9.1	91°-	-23.0	-32.1		274.9		+603	-1174	1761,854	297,086
45	990		" "	"	9.1	91°-	-17.3	-26.4		280.6		+452	-881	1761,703	297,379
46	660		" "	"	13.2	-		-13.2		293.8		+301	-587	1761,552	297,673

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-13-81		G. Catcamp		D. Harris		6834		DCH use		10		4			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
New England		h		New York		St. Lawrence								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									307.0						
47	330		310°04'	-12.9°	7.6	-		-7.6		299.4		+151	-294	1,761,402	297,966
48	0				5.4	-		-5.4		301.6	TP	0	0	1,761,251	298,260
49	330		130°42'48"	-12.9°	9.7	-		-9.7		297.3		-154	+292	1,761,097	298,552
50	660		" "	"	11.2	BH	-3.3	-74.5		292.5		-308	+584	1,760,943	298,944
51	990		" "	"	11.9	BH	-	-76.9		290.1		-462	+876	1,760,789	299,136
52	1320		" "	"	12.6	BH	-6.7	-79.3		287.7		-616	+1168	1,760,635	299,428
53	1650		" "	"	12.8	BH	-8.3	-71.1		285.9		-770	+1459	1,760,481	299,719
54	1980		" "	"	13.1	BH	-	-73.1		283.9		-924	+1751	1,760,327	300,011
55	2310		130°42'48"	-12.9°	11.1	BH	-11.6	-77.7	282.6	284.4	TP	-1078.3	+2043.2	1,760,170	300,301
55	2310				10.4	90°18'	-12.1	-77.5			TP				
	990		302°58'42"-180°	-12.9°	+1.3	89°30'	-8.6	-77.7	2277.1		BS	-340.3	+930		
	990				+4.2	89°20'	-11.5	-77.3			BS				horiz. cond. $y = -20'$ $x = -10'$
JL TF	982		303°58'	-12.9°	1.9	89°30'	+8.6	+6.7		283.8		+353	-916	1,760,180	300,315
56	660		302°59'	-12.9°	7.3	-		-7.3		269.8		+227	-620	1,760,054	300,611
BM	590		305°10'	-12.9°	10.3	-		-10.3		266.8		+224	-546	1,760,051	300,685
57	330		302°59'	-12.9°	9.7	-		-9.7		251.4		+113	-310	1,759,940	300,921
58	0				5.4	-		-5.4		241.7	TP	0	0	1,759,827	301,231
59	330		110°52'	-12.9°	3.8	89°-	-15.2	+2.0		279.1		-46	+327	1,759,781	301,558
60	658		105°18'	-12.9°	2.4	89°-	-11.5	+9.1		286.2		-28	+657	1,759,799	301,888

horiz. cond.  $y = -20'$   
 $x = -10'$   
1,760,180 + 300,315  
4-way Inter.  
el. 267.0  
B.M. USGS, FOR 1963

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-13-81		G. Cotcamp		D Harris		6834		DCH		10		5			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
New England		Chase Mills		New York		St Lawrence								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									277.1						
61	982		103° 00' 30"	-12.6°	7.7	89° -		-9.4		286.5	TP	-7-3	+982	1,759,817	302,213
61	982				5.4	89° 8'	74.8	+0.7			TP				
	1320		278° 27' 18" - 180°	-12.6°	+6.8	-		+6.8	293.3		BS	+95-3	+1317		
	1320				+13.4	TH	-6.6	+6.8			BS				
62	990		278° 08'	-12.6°	10.4	-		-10.4		282.9		-77	-987	1,759,832	302,543
63	660		" "	"	12.8	-		-12.8		280.5		-51	-658	1,759,858	302,872
64	330		" "	"	10.0	-		-10.0		283.3		-26	-329	1,759,883	303,201
65	0				5.4	-		-5.4		287.9	X	0	0	1,759,909	303,530
66	330		108° 46'	-12.6°	1.3	-		-1.3		292.0		-35	+328	1,759,874	303,858
67	660		113° 41'	-12.6°	4.3	TH	+3.3	-1.0		292.3	TP	-127-3	+648	1,759,779	304,178
67	660				4.9	89° 40'	+3.8	-1.1			TP				
	652		317° 24' - 180°	-12.6°	-2.5	TH	-3.3	-0.8			BS	-372-3	+535		
	652				+4.2	89° 34'	-4.9	-0.7	291.6		BS				
68	330		322° 48'	-12.6°	2.7	-		-2.7		288.9		+213	-252	1,759,617	304,461
69	0				5.4	-		-5.4		286.2	X	0	0	1,759,404	304,713
70	330		145° 26'	-12.6°	7.9	-		-7.9		283.7		-224	+242	1,759,180	304,955
71	660		" "	"	4.7	-		-4.7		286.9		-449	+484	1,758,955	305,197
72	990		145° 25' 48"	-12.6°	4.1	TH	+5.0	+0.9		292.5	TP	-673-3	+726	1,758,728	305,439
72	990				4.9	89° 40'	+5.8	+0.9			TP				

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8-14-81		G. Cotcamp		D. Harris		6834		OOH		10		6			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
New England		Chase Mills		New York		St. Lawrence								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
72										292.5					
	1980		325° 11' 22" - 180°	-12.6°	+13.1	91° 08'	+39.2	+52.3	344.8		BS	-1340.3	+1457		
	1980				+10.8	91° 12'	+41.5	+52.3		BS					
73	1650		325° 11'	-12.6°	8.3	91° 20'	-38.4	-46.7		298.1		+1116	-1215	1758,501 305,681	
74	1320		" "	"	10.3	91° 20'	-30.7	-41.0		303.8		+893	-972	1758,278 305,924	
75	990		" "	"	12.4	91° 20'	-23.0	-35.4		309.4		+670	-729	1758,055 306,167	
76	660		" "	"	10.5	91° 20'	-15.4	-25.9		318.9		+447	-486	1757,832 306,410	
77	330		" "	"	9.8	91° -	-5.8	-15.6		329.2		+223	-243	1757,608 306,653	
78	0				5.4	-		-5.4		339.4	π	0	0	1757,385 306,896	
79	330		143° 25'	-12.6°	4.0	-		-4.0		340.8		-216	+250	1757,169 307,146	
80	660		143° 25'	-12.6°	10.8	-		-10.8	}		TP	-431.3	+499	1756,951 307,375	
80	660				7.5	BH	-3.3	-10.8		TP					
	960	958.7	295° 41' - 180°	-12.6°	+3.9	87° -	-50.2	-46.3	} 287.7		BS	-217.3	+934		
	960				+1.7	87° 08'	-48.0	-46.3		BS					
81	650		287° 31'	-12.6°	6.5	87° -	+34.0	+27.5		315.2		+56	-648	1756,787 307,681	
81	640	639.1	288° 12'	-12.6°	6.8	87° -	+33.4	+26.6		314.3		+62	-636	1756,793 307,693 1756,780± 307,710 trail	
82	330		277° 42'	-12.6°	3.1	88° -	+11.5	+8.4		296.1		-28	-329	1756,703 308,000	
83	0				5.4	-		-5.4		282.3	π	0	0	1756,731 308,329	
84	330		90° 22'	-12.4°	8.9	-		-8.9		278.8		+69	+323	1756,800 308,652	
85	661		92° 23'	-12.4°	9.6	-		-9.6	}		TP	+115.3	+651	1756,843 308,980	
85	661				12.9	TH	+3.3	-9.6		TP					

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE			
8-14-81		G. Cotcamp		D. Harris		6834		V. J. P. H. J. S. W.		10	7			
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER				
New England		Chase Mills		New York	St. Lawrence					L. Davis				
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
85										278.1				
	990		302°51'40"	-12.4°	+4.1	TH	-5.0	-0.9	277.2		BS	-346-3	+928	
	990				+4.9	89°40'	-5.8	-0.9		BS				
86	660		305°06'	-12.4°	2.5	-		-2.5		274.7		+255	-609	1756,749 309,299
87	330		" "	"	3.7	-		-3.7		273.5		+127	-304	1756,621 309,604
88	0				5.4	-		-5.4		271.8	π	0	0	1756,494 309,908
89	330		125°34'	-12.4°	5.9	-		-5.9		271.3		-130	+303	1756,364 310,211
90	660		" "	"	4.2	-		-4.2		273.0		-260	+607	1756,234 310,515
91	988		129°09'	-12.4°	1.7	-		-1.7		275.5	TP	-445-3	+882	1756,046 310,790
91	988				6.7	TH	+4.9	-1.8			TP			
	1315		329°01'32"-180°	-12.4°	+7.3	-		+7.3	282.8		BS	-956-3	+903	
	1315				+13.9	TH	-6.6	+7.3		BS				
92	990		330°0'	-12.4°	4.0	-		-4.0		278.8		+731	-668	1755,818 311,025
93	660		" "	"	1.8	-		-1.8		281.0		+487	-445	1755,574 311,248
94	330		" "	"	2.0	-		-2.0		280.8		+244	-223	1755,331 311,470
95	0				5.4	-		-5.4		277.4	π	0	0	1755,087 311,693
96	330		149°57'	-12.4°	7.4	-		-7.4		275.4		-244	+223	1754,847 311,916
97	660		" "	"	8.1	-		-8.1		274.7		-487	+445	1754,600 312,138
98	990		" "	"	9.7	-		-9.7		273.1		-730	+668	1754,357 312,361
99	1320		149°57'	-12.4°	12.1	-		-12.1		270.7	TP	-974	+891	1754,113 312,584
99	1320				5.5	BH	-6.6	-12.1			TP			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-14-81		G. Cotcamp		D. Harris		6834		DOH		10		8			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
New England		Chase Mills		New York		St. Lawrence								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
99										270.7					
	1980		330°02'46"-180°	-12.4°	+0.3	-		+0.3	271.0		BS	-1463	+1334		
	1980				+10.2	TH	-9.9	+0.3			BS				
100	1650		330°03'	-12.4°	2.3	-		-2.3		268.7		+1219	-1112	1,753,867	312,806
101	1320		" "	"	2.9	-		-2.9		268.1		+976	-889	1,753,626	313,529
102	990		" "	"	3.0	-		-3.0		268.0		+732	-667	1,753,382	313,251
103	660		" "	"	3.3	-		-3.3		267.7		+488	-445	1,753,138	313,473
104	419		331°33'	-12.4°	3.3	-		-3.3		267.7		+317	-274	1,752,967	313,644
	330		330°03'	-12.4°	3.7	-		-3.7		267.3		+244	-222	1,752,894	313,696
105	0				5.4	-		-5.4		265.6	TP	0	0	1,752,650	313,918
106	330		149°49'	-12.2°	7.8	-		-7.8		263.2		-244	+222	1,752,406	314,140
107	660		" "	"	7.2	-		-7.2		263.8		-488	+445	1,752,162	314,363
108	990		" "	"	4.8	-		-4.8		266.2		-731	+667	1,751,919	314,585
109	1320		" "	"	2.4	-		-2.4		268.6		-975	+890	1,751,675	314,808
110	1650		" "	"	0.7	-		-0.7		270.3		-1219	+1112	1,751,431	315,030
111	1980		149°48'46"	-12.2°	2.2	-		-2.2		268.8	TP	-1462	+1335	1,751,188	315,253
111	1980				12.1	TH	+9.9	-2.2			TP				
	990		331°02'-180°	-12.2°	+0.9	TH	-5.0	-4.1	264.7		BS	-745	+652.2		
	990				+4.5	89°30'	-8.6	-4.1			BS				
112	660		331°02'	-12.2°	2.7	TH	+3.3	+0.6		265.3		+497	-434	1,750,940	315,469
113	330		" "	"	2.9	-		-2.9		261.8		+248	-217	1,750,691	315,686

1,752,965 + 313,665  
T-rd (north) el. 268

DATE 8-14-81	INSTRUMENT MAN G. Cotcamp	ROD MAN D. Harris	PARTY NUMBER 6834	NOTES CHECKED BY D. H. [initials]	LINE NO. 10	PAGE 9
AREA New England	TOPO MAP Chase Mills	STATE New York	COUNTY St. Lawrence	TWP	RANGE	PPM
			PARTY MANAGER L. Davis			

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									264.7						
114	0				5.4	-		-5.4		259.3	X	0	0	1,750,443	315,903
115	330		155° 14'	-12.2°	3.9	-		-3.9		260.8		-264	+198	1,750,179	316,101
116	660		" "	"	1.3	-		-1.3		263.4		-527	+397	1,749,916	316,300
117	990		155° 14'	-12.2°	3.6	TH	+5.0	+1.4	+1.3	266.0	TP	-791	+595-2	1,749,652	316,496
117	990				5.1	89° 38'	+6.3	+1.2	5		TP				
	1650		335° 21' - 180°	-12.2°	+14.4	90° 20'	+9.6	+24.0	290.0		BS	-1320	+990-2		
	1650				+10.6	90° 23'	+13.4	+24.0	5		BS				
118	1320		335° 21'	-12.2°	7.1	90° 40'	-15.4	-22.5		267.5		+1056	-792	1,749,388	316,692
119	990		" "	"	10.7	90° 40'	-11.5	-22.2		267.8		+792	-594	1,749,124	316,890
120	660		" "	"	9.0	90° 40'	-7.7	-16.7		273.3		+528	-396	1,748,860	317,088
<u>120</u>	410		336° 36'	-12.2°	10.9	-		-10.9		279.1		+333	-239	1,748,665	317,245
121	330		335° 21'	-12.2°	9.9	-		-9.9		280.1		+264	-198	1,748,596	317,286
122	0				5.4	-		-5.4		284.6	X	0	0	1,748,332	317,484
123	330		155° 08'	-12.2°	13.2	-		-13.2		276.8		-263	+199	1,748,069	317,683
124	660		" "	"	10.0	91° 30'	-17.2	-27.2		262.8		-527	+398	1,747,805	317,882
125	990	989.7	155° 08'	-12.2°	8.3	91° 30'	-25.9	-34.2	3	255.8	TP	-790	+597-2	1,747,542	318,079
125	990				12.3	91° 16'	-21.9	-34.2	5		TP				
	950		283° 53' - 180°	-12.2°	+13.6	BH	+4.8	+18.4	274.2		BS	-28	+950-2		horiz. corrad. y = -36' x = -10'
	950				+14.5	90° 14'	+3.9	+18.4	5		BS				1,747,505 + 318,120 = intersect.
<u>125</u>	907		281° 37'	-12.2°	13.5	BH	-4.5	-18.0		256.2		-9	-907	1,747,505	318,120

DATE 8-14-81	INSTRUMENT MAN G. Cotcamp	ROD MAN D. Harris	PARTY NUMBER 6834	NOTES CHECKED BY D.O.H. rlu	LINE NO. 10	PAGE 10
AREA New England	TOPO MAP Chase Mills	STATE New York	COUNTY St. Lawrence	TWP	RANGE	PPM
				PARTY MANAGER L. Davis		

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									274.2						
126	660		281° 18'	-12.2°	12.6	90° 30'	-5.8	78.4		255.8		-10	-660	1,747,504	318,367
127	330		" "	"	12.1	90° 30'	-2.9	15.0		259.2		-5	-330	1,747,509	318,697
128	0				5.4	-		5.4		268.8	TP	0	0	1,747,514	319,027
129	330		100° 36'	-12.2°	1.7	89° -	+5.8	+4.1		278.3		+9	+330	1,747,523	319,357
130	660		100° 36'	-12.0°	6.5	89° -	+11.5	+5.0		279.2	TP	+16-2	+660+2	1,747,528	319,689
130	660				9.6	88° 44'	+14.6	+5.0			TP				
	1650		280° 08' 12" - 180°	-12.0°	+7.5	89° 30'	-14.4	-6.9			BS	+54-2	+1649+2		
	1650		" "		+6.6	89° 32'	-13.4	-6.8	272.4		BS				
131	1320		280° 08'	-12.0°	9.9	89° 32'	+10.7	+0.8		273.2		-43	-1319	1,747,537	320,021
132	990		" "	"	5.8	-		-5.8		266.6		-32	-989	1,747,548	320,351
133	660		" "	"	7.5	-		-7.5		264.9		-22	-660	1,747,558	320,680
134	330		" "	"	7.3	-		-7.3		265.1		-11	-330	1,747,569	321,010
135	0				5.4	-		-5.4		267.0	TP	0	0	1,747,580	321,340
136	330		71° 20'	-12.0°	4.2	-		-4.2		268.2		+168	+284	1,747,798	321,624
137	660		" "	"	4.1	-		-4.1		268.3		+337	+568	1,747,917	321,908
138	990		71° 20'	-12.0°	2.7	-		-2.7		269.7		+505	+852	1,748,085	322,192
139	1320		71° 20' 36"	-12.0°	9.8	89° 30'	+11.5	+1.7		274.1	TP	+673-2	+1135+2	1,748,251	322,477
139	1320		" "		9.0	89° 32'	+10.7	+1.7			TP				
	990		246° 59' - 180°	-12.0°	+9.4	90° 30'	+8.6	+18.0	292.1		BS	+568-2	+811+2		
	990		" "		+8.8	90° 32'	+9.2	+18.0			BS				

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-21-81		T. GRADY		D. HARRIS		6834		TG		10		11			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
New England				New York		St. Lawrence								L. DAVIS	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									292.1						
140	660		246°59'	-12.0°	6.8	40°30'	-5.8	-12.6		279.5		-379	-541	1,748,438	322,749
141	330		" "	"	5.7	90°30'	-2.9	-8.6		283.5		-189	-270	1,748,628	323,020
142	0				5.9	-		-5.4		286.7	TP	0	0	1,748,817	323,290
143	330		67°11'	-12.0°	2.0	-		-2.0		290.1		+188	+271	1,749,005	323,561
144	660		" "	"	1.3	-		-1.3		290.8		+377	+542	1,749,194	323,832
145	990		" "	"	7.7	89°30'	-8.6	-16.3		275.8		+565	+813	1,749,382	324,103
146	1320		" "	"	9.2	89°30'	-11.5	-20.7		271.4		+754	+1084	1,749,571	324,374
147	1650		67°11'	-12.0°	10.3	89°30'	-14.4	-24.7		267.4		+942	+1355	1,749,759	324,645
148	1980		67°11'24"	-12.0°	9.7	89°30'	+17.3	+7.6		299.7	TP	+1130-2	+1626+2	1,749,945	324,918
148	1980		" "		8.9	89°32'	+16.1	+7.2			TP				
	1650		248°15'12"-180°	-12.0°	+13.5	89°34'	-12.4	+1.1			BS	+917-2	+1372+2		
	1650		" "		+14.7	89°32'	-13.4	+1.3	301.0		BS				
149	1320		248°15'	-12.0°	10.1	89°30'	+11.5	+1.4		302.4		-733	-1098	1,750,127	325,194
150	990		" "	"	17.5	89°30'	+8.6	+1.1		302.1		-550	-823	1,750,310	325,467
151	660		" "	"	6.3	89°30'	+5.8	-0.5		300.5		-367	-549	1,750,493	325,743
152	330		248°15'	-12.0°	5.1	89°30'	+2.9	-2.2		298.8		-183	-274	1,750,677	326,018
153	0				5.4	-		-5.4		295.6	TP	0	0	1,750,860	326,292
154	330		102°02'00"	-12.0°	10.1	91°-	-5.8	-15.9			TP	0-2	+330+2	1,750,858	326,624
154	330		" "		9.9	91°02'	-5.9	-15.8		285.2	TP				

opposite Sta.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-21-81		T GRADY		D. Harris		6834		TG		10		12			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
New England		Chase Mills/Norfolk		New York		St. Lawrence								L. DAVIS	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
154										285.2					
	660	658.8	292°37'00"-180°	-12.0°	+8.6	86°30'	-40.2	-31.6			BS	-121-2	+647.2		
	660		" "		+8.2	86°32'	-39.8	-31.2	254.0		BS				↑
155	330		292°37'	-12.0°	2.0	87°-	+17.2	+15.2	269.2			+61	-324	1,750,796	326,949 Chase Mills Quad.
156	0				5.4	-		-5.4	248.6		TP	0	0	1,750,735	327,273 Norfolk Quad
157	330		113°29"	-12.0°	8.8	-		-8.8	245.2			-66	+323	1,750,669	327,596 ↓
158	660		" "	"	7.6	90°30'	-5.8	-13.4	240.6			-131	+647	1,750,604	327,920
159	990		" "	"	3.7	90°30'	-8.6	-12.3	241.7			-197	+970	1,750,538	328,243 Town of Norfolk
160	1320		113°29'	-12.0°	7.4	-		-7.4	246.6			-263	+1294	1,750,972	328,567 ↓
161	1650		113°29'06"	-12.0°	0.8	-		-0.8	253.2		TP	-329-2	+1617	1,750,404	328,890
161	1650		" "		8.9	TH	+8.3	-0.6			TP				
	330		293°02'20"-180°	-12.0°	+6.3	-		+6.3	259.5		BS	-63-2	+324		
	330		" "		+4.7	BH	+1.7	+6.4			BS				
162	0				5.4	-		-5.4	259.1		TP	0	0	1,750,339	329,214
163	330		123°19'36"	-12.0°	3.4	-		-3.4			TP	-120	+307	1,750,219	329,521
163	330		" "		5.0	TH	+1.7	-3.3	256.2		TP				
	988		315°08'42"-180°	-12.0°	+7.2	90°30'	+8.6	+15.8	272.0		BS	-540	+827		
	988		" "		+6.7	90°32'	+9.1	+15.8			BS				
164	660		315°08'	-12.0°	12.9	-		-12.9	259.1			+361	-553	1,750,040	329,795
165	330		" "	"	10.3	-		-10.3	261.7			+180	-276	1,749,859	330,072
166	0				5.4	-		-5.4	266.6		TP	0	0	1,749,679	330,348

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-21-81		T. GRADY		D. Harris		6834		DOH		10		13			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM.		PARTY MANAGER	
New England		Norwood		New York		St. Lawrence								L. DRUWIS	
STATION NO.	SLOPE DISTANCE	PLOTTING 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
									272.0						0
167	330		114° 15'	-12.0°	6.0	89° -	+5.8	-0.2		271.8		-70	+322	1,749,609	330,670
168	660		" "	"	10.8	89° -	+11.5	+0.7		272.7		-140	+645	1,749,559	330,993
BM	885		144° 114° 15' 00"	-12.0°	7.6	89° 30'	+7.7	+0.1		272.1	TP	-188	+865.3	1,749,491	331,216
BM	885		" "	"	7.1	89° 32'	+7.2	+0.1			TP				
	85		337° 17' 30"	-12.0°	+3.9	-		+3.9	276.0		BS	-70	+48.2		
	85		" "	"	+3.5	BH	+4.3	+3.9			BS				
#	82		37° 15' 42"	-12.0°	4.5	-		-4.5		271.5		+74	+35	1,749,445	331,301
	169	0			5.4	-		-5.4		270.6	π	0	0	1,749,421	331,266
170	330		202° 26'	-12.0°	1.4	-		-1.4		274.6		-325	-60	1,749,096	331,206
171	660		" "	"	5.6	89° -	+11.5	+5.9		281.9		-649	-120	1,748,772	331,146
172	940		" "	"	4.1	89° -	+17.3	+13.2		289.2		-974	-179	1,748,447	331,087
173	1320		" "	"	3.8	89° -	+23.0	+19.2		295.2		-1298	-239	1,748,123	331,027
IF	1410		202° 26' 12"	-12.0°	4.8	89° -	+24.6	+19.8		295.8	TP	-1386	-255.2	1,748,035	331,013
IF	1410		" "	"	8.9	88° 50'	+28.7	+19.8			TP				
	542		328° 58' 42"	-12.0°	+8.5	92° -	+18.9	+27.4	323.2		BS	-396	+370.2		
	542		" "	"	+6.9	92° 10'	+20.5	+27.4			BS				
174	330		328° 59'	-12.0°	8.7	92° -	-11.5	-20.2		303.0		+241	-225	1,747,880	331,160
175	0				5.4	-		-5.4		317.8	π	0	0	1,747,639	331,385
176	330		147° 12'	-12.0°	10.4	-		-10.4		312.3		-234	+233	1,747,405	331,618
177	660		" "	"	7.8	91° -	-11.5	-19.3		303.4		-468	+465	1,747,171	331,850

BM. N211 U.S.G.S. el. 272

1,749,460 + 331,295 T-intersect.

1,748,070 + 331,005 T-intersect.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-24-81		F. Lopez		D. Harris		6534		DDH		10		14			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
New England		Norfolk		New York		St. Lawrence								L. DAVIS	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									323.2						
178	990		147°12'	-12.0°	2.5	91°-	-17.3	-19.8		303.4		-702	+698	1,746,937	332,083
179	1320		" "	"	8.5	-		-8.5		314.7		-937	+930	1,746,702	332,315
180	1650		147°12'00"	-12.0°	12.8	89°30'	+14.4	+1.6		324.8	TP	-1171	+1163	1,746,918	332,550
180	1650				8.0	89°40'	+9.6	+1.6			TP				
	2310	2309.4	327°32'30"	-12.0°	+6.6	91°20'	+53.7	+60.3	385.1		BS	-1648	+1617.2		
	2310				+3.4	91°10'	+47.0	+60.4			BS				
181	1980		327°32'	-12.0°	5.7	91°30'	-51.8	-57.5		327.6		+1413	-1387	1,746,233	332,782
182	1650		" "	"	1.5	92°-	-57.6	-59.1		326.0		+1178	-1156	1,745,998	333,013
183	1320		" "	"	12.1	92°-	-46.0	-58.1		322.0		+942	-925	1,745,762	333,244
184	990		" "	"	6.5	92°30'	-43.1	-49.6		335.5		+707	-693	1,745,527	333,476
185	660		" "	"	6.0	92°30'	-28.8	-34.8		350.3		+471	-462	1,745,291	333,707
186	330		" "	"	4.5	92°30'	-14.4	-18.9		366.2		+236	-231	1,745,056	333,938
187	0		" "	"	5.4	-		-5.4		379.7	TP	0	0	1,744,820	334,169
188	330		146°37'	-12.0°	4.3	89°-	+5.8	+1.5		386.6		-232	+235	1,744,588	334,404
189	660		" "	"	8.5	89°-	+11.5	+3.0		388.1		-464	+470	1,744,356	334,639
190	990		146°37'00"	-12.0°	9.6	89°30'	+8.6	-1.0		384.1	TP	-695	+705	1,744,125	334,876
190	990				12.5	89°20'	+11.5	-1.0			TP				
	660		310°50'42"	-12.0°	+5.2	88°-	-23.0	-17.8	366.3		BS	-318	+578.2		
	660				+3.3	88°10'	-21.1	-17.8			BS				
191	330		310°51'	-12.0°	4.5	88°-	+11.5	+7.0		373.3		+159	-289	1,743,966	335,167

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
8-29-81		T. Grady		D. Harris		6834		G.W.C. [initials]		10		15				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
New England		Norwood		New York		St. Lawrence								L. DAVIS		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
1									366.3							
192	0				5.4	-		-5.4		360.9	π	0	0	1,743,807	335,456	horiz. correct. y=-20 x=+33
193	330		115° 57'	-12.0°	9.9	91°-	-5.8	-15.7		350.6		-80	+320	1,743,727	335,776	
51	491		114° 38' 06"	-12.0°	10.7	91°-	-8.6	-19.3		347.0		-107	+479	1,743,700	335,935	1,743,700 + 335,935 Rd el 347
194	660		115° 57' 00"	-12.0°	12.0	91°-	-11.5	-23.5		342.8	TP	-159	+640+2	1,743,648	336,098	
194	660				10.1	91°10'	-13.4	-23.5			TP					
	1980		296° 11' 36" -180°	-12.0°	+8.2	89° 28'	-18.4	-10.2	332.6		BS	-485	+1919+2			
	1980				+14.0	89° 18'	-24.2	-10.2			BS					
195	1650		296° 12'	-12.0°	6.0	TH	+8.3	+2.3		334.9		+405	-1600	1,743,568	336,419	
196	1320		"	"	0.1	-		-0.1		332.5		+324	-1280	1,743,487	336,739	
197	990		"	"	0.1	-		-0.1		332.5		+243	-960	1,743,406	337,059	
198	660		"	"	1.3	-		-1.3		331.3		+162	-640	1,743,325	337,379	
199	330		"	"	4.1	-		-4.1		328.5		+81	-320	1,743,244	337,699	
200	0				5.4	-		-5.4		327.2	π	0	0	1,743,163	338,019	
#	92		110° 17'	-12.0°	5.2	-		-5.2		327.4		-13	+91	1,743,150	338,110	railroad el. 328.
201	330		116° 34'	-12.0°	3.8	-		-3.8		328.8		-83	+319	1,743,080	338,338	
202	660		"	"	0.5	TH	+3.3	+2.8		335.4		-166	+639	1,742,997	338,658	
203	990		"	"	4.0	89°-	+17.3	+13.3		345.9		-249	+958	1,742,914	338,977	
204	1320		"	"	4.9	88° 40'	+30.7	+25.8		358.4		-332	+1278	1,742,831	339,297	
205	1650		116° 33' 48"	-12.0°	1.8	88° 40'	+38.4	+36.6		369.2	TP	-415	+1597+2	1,742,748	339,618	
205	1650				3.7	88° 36'	+40.3	+36.6			TP					

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE		
8-26-81		G. Cotcamp		D. Harris		6834		G.V.C. <i>dlw</i>		10		16		
AREA		TOPO MAP		STATE		COUNTY		RANGE		PPM		PARTY MANAGER		
New England		Norfolk		New York		St. Lawrence						L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
205										369.2				
	1650		296° 03' 26" -180°	-12.0°	+13.3	90° 30'	+14.4	+27.7	396.9		BS	-401.	+1601+2	
	1650				+10.4	90° 36'	+17.3	+27.7		BS				
206	1320		296° 03'	-12.0°	0.9	91° -	-23.0	-23.9		373.0		+320	-1281	1,742,667 339,940
207	990		" "	"	4.3	91° -	-17.3	-21.6		375.3		+240	-960	1,742,587 340,261
208	660		" "	"	7.1	91° -	-11.5	-18.6		378.3		+160	-640	1,742,507 340,581
209	330		" "	"	12.6	-		-12.6		384.3		+80	-320	1,742,427 340,901
210	0				5.4	-		-5.4		391.5	π	0	0	1,742,347 341,221
211	330		119° 20'	-12.0°	6.7	-		-6.7		390.2		-98	+315	1,742,249 341,536
212	660		123° 22'	-12.0°	15.0	-		-15.0		381.9	TP	-240.	+615+2	1,742,107 341,838
212	660				11.7	BH	-3.3	-15.0			TP			
	1316	1314.8	345° 15' 36" -180°	-12.0°	+9.8	87° 30'	-57.4	-47.6	334.3		BS	-1174.	+592+2	
	1316				+6.8	87° 38'	-54.3	-47.5		BS				
	1300	1298.8	344° 41'	-12.0°	9.4	87° 30'	+56.7	+47.3		381.6		+1154	-596	1,742,087 341,836 T-rd
213	990		348° 16'	-12.0°	3.4	88° -	+34.5	+31.1		365.4		+906	-398	1,741,839 342,034
214	660		350° 30'	-12.0°	9.3	88° -	+23.0	+13.7		348.0		+614	-242	1,741,547 342,190
215	330		" "	"	1.7	-		-1.7		332.6		+307	-121	1,741,240 342,311
216	0				5.4	-		-5.4		328.9	π	0	0	1,740,933 342,432
217	330		169° 58'	-12.0°	3.9	-		-3.9		330.4		-306	+124	1,740,627 342,556
218	660		" "	"	5.0	89° -	+11.5	+6.5		340.8		-612	+248	1,740,321 342,680
219	990		" "	"	4.7	88° 38'	+23.6	+18.9		353.2		-918	+371	1,740,015 342,803

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
8-26-81		G. Catcamp		D. Harris		6834		Cw <sup>c</sup> Jsw		10	17				
AREA		TOPO MAP		STATE		COUNTY		RANGE		PARTY MANAGER					
New England		Norfolk		New York		St. Lawrence				L. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									334.3						
220	1320		169°58'	-12.0°	7.0	88°38'	+31.5	+24.5		358.8	TP	-1223	+495+2	1,739,710	342,929
220	1320				10.0	88°30'	+34.5	+24.5			TP				
	660		348°12' +180°	-12.0°	+7.4	-	+7.4		366.2		BS	-604	+266+2		
	660				+10.7	TH	-3.3	+7.4			BS				
221	6330		348°12'	-12.0°	6.1	-	-6.1			360.1		+302	-133	1,739,408	343,064
≠	52		357°18'	-12.0°	5.1	-	-5.1			361.1		+50	-13	1,739,156	343,184
															1,739,105 + 343,195 T-rd (west)
222	0				5.4	-	-5.4			360.8	π	0	0	1,739,106	343,197
223	330		148°37'	-12.0°	13.2	-	-13.2			353.0		-240	+227	1,738,866	343,424
≠	442		142°11'	-12.0°	4.8	91°22'	-10.5	-15.3		350.9	TP	-285	+338+2	1,738,821	343,537
≠	442				3.8	91°30'	-11.6	-15.4			TP				T-intersect
	232		016°20' +180°	-12.0°	+10.5	-	+10.5		361.4		BS	-231	-18+2		
	232				+11.7	TH	-1.2	+10.5			BS				
224	0				5.4	-	-5.4			356.0	π	0	0	1,738,590	343,521
225	330		203°35'	-12.0°	3.6	TH	+1.7	-1.9		359.5	TP	-323	-66+2	1,738,267	343,457
225	330				4.0	89°38'	+2.1	-1.9			TP				
	2310		31°01' +180°	-12.0°	+0.7	90°28'	+18.8	+19.5			BS	-2184+2	-753+2		
	2310				+2.1	90°26'	+17.5	+19.6		379.1	BS				
226	1980		31°01'	-12.0°	12.8	BH	-9.9	-22.7		356.4		+1872	+645	1,737,957	343,351
227	1650		"	"	15.3	BH	-8.3	-23.6		355.5		+1560	+538	1,737,645	343,244
228	1320		"	"	13.5	90°30'	-11.5	-25.0		354.1		+1248	+430	1,737,333	343,136

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE		
8-27-81		G. Cotcamp		D. Harris		6834		CwC. JEW		10		18		
AREA		TOPO MAP		STATE		COUNTY		RANGE		PPM		PARTY MANAGER		
New England		Norfolk		New York		St. Lawrence						L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									379.1					
229	990		31° 01'	-12.0°	12.9	90° 30'	-8.6	-21.5		357.6		+936	+323	1,737,021 343,029
230	660		" "	"	14.3	-	-	-14.3		364.8		+624	+215	1,736,709 342,921
231	330		" "	"	9.3	-	-	-9.3		369.8		+312	+108	1,736,397 342,814
232	0				5.4	-	-	-5.4		373.7	π	0	0	1,736,085 342,706
233	330		211° 06'	-12.0°	4.5	-	-	-4.5		374.6		-312	-108	1,735,773 342,598
234	660		" "	"	3.8	-	-	-3.8		375.3		-624	-216	1,735,461 342,490
235	990		" "	"	3.8	-	-	-3.8		375.3		-936	-324	1,735,149 342,382
236	1320		211° 06' 30"	-12.0°	0.4	-	-	-0.4		378.7	TP	-1247+2	-432+2	1,734,840 342,276
236	1320				7.0	TH	+6.6	-0.4			TP			
	1320		30° 00' 54" +180°	-12.0°	+3.6	-	-	+3.6		382.3	BS	-1255+2	-410 8+2	
	1320				+10.2	TH	-6.6	+3.6			BS			
237	990		30° 01'	-12.0°	5.1	-	-	-5.1		377.2		+941	+306	1,734,528 342,176
238	660		" "	"	6.2	-	-	-6.2		376.1		+628	+204	1,734,215 342,074
239	330		" "	"	6.0	-	-	-6.0		376.3		+314	+102	1,733,901 341,972
240	0				5.4	-	-	-5.4		376.9	π	0	0	1,733,587 341,870
241	330		210° 44'	-12.0°	7.1	-	-	-7.1		375.2		-313	-106	1,733,274 341,764
242	660		" "	"	9.0	-	-	-9.0		373.3		-625	-212	1,732,967 341,658
243	990		" "	"	12.6	-	-	-12.6		369.7		-938	-318	1,732,649 341,552
244	1315		206° 54' 30"	-12.0°	13.2	BH	-6.6	-19.8		362.5	TP	-1271+2	-336	1,732,318 341,534
244	1315				14.5	90° 14'	-5.4	-19.9			TP			

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE			
8-27-81		G. Cotcamp		D. Harris		6834		Cwl. <i>rd</i>		10	19			
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER				
New England		Norfolk/Potsdam		New York	St. Lawrence					L. Davis				
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
244										362.5				
	654		337°58' -180°	-12.0°	+9.4	-		+9.4	371.9		BS	-542+2	+366+2	
	654				+12.7	TH	-3.3	+9.4			BS			
↘	497		334°28'	-12.0°	14.0	-		-14.0	357.9			+394	-303	1,732,172 341,599 T-rd (sw) el. 359.
245	330		331°13'	-12.0°	10.7	-		-10.7	361.2			+250	-216	1,732,028 341,686 ↑
246	0				5.4	-		-5.4	366.5		X	0	0	1,731,778 341,902 Norfolk Quad.
247	330		151°47'	-12.3°	12.3	-		-12.3	359.6			-251	+214	1,731,527 342,116 Potsdam Quad.
248	660		"	"	12.8	-		-12.8	359.1			-502	+429	1,731,276 342,331 ↓
249	990		"	"	13.5	-		-13.5	358.4			-753	+643	1,731,025 342,545
250	1320		151°47'26"	-12.3°	10.0	84	-6.6	-16.6	355.3		TP	-1004+2	+857+2	1,730,776 342,761
250	1320				14.3	90°6'	-2.3	-16.6			TP			
	652		291°32' -180°	-12.3°	+12.3	91°-	+11.4	+23.7	379.0		BS	-105+2	+643+2	
	652				+14.6	90°48'	+9.1	+23.7			BS			
251	330		298°0'	-12.3°	11.2	92°-	-11.5	-22.7	356.3			+33	-328	1,730,706 343,078
252	0				5.4	-		-5.4	373.6		X	0	0	1,730,673 343,406
253	330		106°14'	-12.3°	5.7	86°-	+23.0	+17.3	396.3			-23	+329	1,730,650 343,735
TP	448	447.2	105°47'	-12.3°	7.4	86°30'	+27.3	+19.9	398.9		TP	-27+2	+446+3	1,730,648 343,855 T-intersect. el. 400.
TP	448				11.3	86°-	+31.2	+19.9			TP			
	582		3°14' +180°	-12.3°	+13.2	90°26'	+4.4	+17.6	416.5		BS	-575+2	+92+3	
	582				+10.8	90°40'	+6.8	+17.6			BS			
254	330		3°14'	-12.3°	11.0	-		-11.0	405.5			+326	-52	1,730,901 343,898

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DATE		INSTRUMENT MAN			ROD MAN		PARTY NUMBER		NOTES CHECKED BY			LINE NO.	PAGE		
8-27-81		G. Cotcamp			D. Harris		6834		Coul. <i>dlw</i>			10	20		
AREA		TOPO MAP		STATE	COUNTY			TWP	RANGE	PPM	PARTY MANAGER				
New England		Potsdam		New York	St. Lawrence						L. Davis				
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									416.5						
255	0				5.4	-		-5.4		411.1	X	0	0	1,730,075	343,950
256	326		166° 0'	-12.3°	9.1	-		-9.1		407.4	TP	-292 +2	+144 +3	1,729,785	344,097
256	326				7.5	0H	-1.6	-9.1			TP				
	1650		337° 43' 16" -180°	-12.3°	+8.3	88° 40'	-38.4	-30.1	377.3		BS	-1358 +2	+936 +3		
	1650				+10.2	88° 36'	-40.3	-30.1			BS				
257	1320		337° 43'	-12.3°	3.4	88° 40'	+30.7	+27.3		4104.6		+1087	-749	1,729,516	344,287
258	990		" "	"	3.8	88° 40'	+23.0	+19.2		396.5		+815	-562	1,729,244	344,474
259	660		" "	"	3.7	89° -	+11.5	+7.8		385.1		+543	-375	1,728,973	344,661
260	330		" "	"	1.7	-		-1.7		375.6		+272	-187	1,728,701	344,849
261	0				5.4	-		-5.4		371.9	X	0	0	1,728,429	345,036
262	330		157° 24'	-12.3°	3.4	-		-3.4		373.9		-271	+189	1,728,158	345,225
263	660		" "	"	1.6	TH	+3.3	+1.7		379.0		-541	+378	1,727,888	345,414
264	990		" "	"	11.5	89° -	+17.3	+5.8		383.1		-812	+566	1,727,617	345,602
265	1320		" "	"	12.9	89° -	+23.0	+10.1		387.4		-1083	+755	1,727,346	345,791
266	1650		" "	"	9.1	89° -	+28.8	+19.7		397.0		-1353	+944	1,727,076	345,980
267	1980		157° 23' 54"	-12.3°	5.6	89° -	+34.6	+29.0		406.3	TP	-1624 +2	+113 3 +3	1,726,807	346,172
267	1980				2.1	89° 6'	+31.1	+29.0			TP				
	658		334° 51' -180°	-12.3°	+8.2	89° -	-11.5	-3.3	403.0		BS	-522 +2	+400 +3		
	658				+3.6	89° 24'	-6.9	-3.3			BS				
268	330		332° 23'	-12.3°	3.3	89° -	+5.8	+2.5		405.5		+253	-212	1,726,548	346,363

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
8-27-81		G. Cotcamp		D. Harris		6834		Cwl. <i>W</i>		10	21						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New England		Potsdam		New York	St. Lawrence												
STATION NO.	SLOPE DISTANCE	PLOTTING 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		
									4103.0								
7/1	112		330° 10'	-12.3°	3.0	-		-3.0		400.0		+83	-75	1,726,370	346,500	horiz. correct. y = +26 x = +54 T-rd. el. 400	
269	0				5.4	-		-5.4		397.6	π	0	0	1,726,287	346,575		
270	330		140° 24'	-12.6°	0.1	TH	+1.7	+1.6		404.6		-202	+261	1,726,085	346,836		
271	660		140° 24'	-12.6°	6.7	89° -	+11.5	+4.8		407.8	TP	-404	+521 +2	1,725,883	347,098		
271	660				4.0	89° 14'	+8.8	+4.8			TP						
	510		320° 18' + 180°	-12.6°	+5.4	89° -	-8.9	-3.5			BS	-312	+403 +2				
	510				+3.1	89° 16'	-6.5	-3.4	404.4		BS						
272	180		320° 18'	-12.6°	6.0	-		-6.0		398.4		+110	-142	1,725,681	347,361		
π	0				5.4	-		-5.4		399.0	π	0	0	1,725,571	347,503		
273	167		198° 45'	-12.6°	3.6	-		-3.6		400.8		-166	-18	1,725,405	347,485		
274	497		198° 45'	-12.6°	0.8	TH	+2.5	+1.7		406.1	TP	-494	-53 +2	1,725,077	347,452		
274	497				1.5	89° 38'	+3.2	+1.7			TP						
	1320		20° 00' + 180°	-12.6°	+13.8	BH	+6.6	+20.4	426.5		BS	-1309	-170 +2				
	1320				+11.2	90° 24'	+9.2	+20.4			BS						
275	990		20° 0'	-12.6°	11.4	BH	-5.0	-16.4		410.1		+982	+128	1,724,750	347,412		
276	660		"	"	11.4	BH	-3.3	-14.7		411.8		+655	+85	1,724,423	347,369		
277	330		"	"	9.2	-		-9.2		417.3		+327	+43	1,724,095	347,327		
278	0				5.4	-		-5.4		421.1	π	0	0	1,723,768	347,284		
279	330		201° 38'	-12.6°	12.8	-		-12.8		413.7		-326	-52	1,723,442	347,232		

**SURVEY NOTES-HIGH RESOLUTION DATA**

GEO-445

**Geosource Inc.**

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9/1/81		G. Cotcamp		D. Harris		6834		rlw		10	22						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New England		Potsdam		New York	St. Lawrence					L. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									426.5								
280	660		201° 38' 30"	-12.6°	11.0	91° 16'	-14.6	-25.6		400.9	TP	-652	-104+1	1,723,116	347,181		
280	660				9.5	91° 24'	-16.1	-25.6			TP						
	330		11° 06' +180°	-12.6°	+0.6	-		+0.6		401.5	BS	-330	+9				
	330				+2.3	TH	-1.7	+0.6			BS						
281	0				5.4	-		-5.4		396.1	TP	0	0	1,722,786	347,190		
282	318		162° 13'	-12.6°	6.1	TH	+1.6	-4.5		397.0	TP	-274	+161	1,722,512	347,351		
282	318				6.0	89° 44'	+1.5	-4.5			TP						
	990		323° 03' -180°	-12.6°	+14.4	90° 20'	+5.8	+20.2		417.2	BS	-642	+753				
	990				+13.2	90° 24'	+6.9	+20.1			BS						
283	660		323° 03'	-12.6°	7.2	91° -	-11.5	-18.7		398.5		+428	-502	1,722,298	347,602		
284	330		" "	"	9.3	91° -	-5.8	-15.1		402.1		+214	-251	1,722,084	347,853		
285	0				5.4	-		-5.4		411.8	TP	0	0	1,721,870	348,104		
286	330		144° 30'	-12.6°	8.0	-		-8.0		409.2		-220	+246	1,721,650	348,350		
287	660		" "	"	7.6	-		-7.6		409.6		-441	+491	1,721,429	348,595		
288	990		" "	"	1.1	-		-1.1		416.1		-661	+737	1,721,209	348,841		
289	1320		" "	"	3.2	-		-3.2		414.0		-882	+982	1,720,988	349,086		
290	1650		144° 30' 22"	-12.6°	3.3	-		-3.3		413.9	TP	-1102	+1228	1,720,768	349,332		
290	1650				11.6	TH	+8.3	-3.3			TP						
	1650		321° 39' 24" -180°	-12.6°	+6.8	-		+6.8		420.7	BS	-1040	+1281				
	1650				+4.8	90° 04'	+1.9	+6.7			BS						

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
9/1/81		G. Cotcamp		D. Harris		6834		G.W.C. [initials]		10	23					
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
New England		Potsdam		New York	St. Lawrence					L. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									420.7							
JL TF	1548		321°55'	-12.6°	4.1	-		-4.1		416.6		+981	-1198	1,720,709	349,415	1,120,750+349,435 4-Way (Pt. #11)
291	1320		321°33'	-12.6°	7.1	-		-7.1		413.6		+830	-1027	1,720,558	349,586	
292	990		" "	"	13.9	BH	-5.0	-18.9		401.8		+622	-770	1,720,350	349,843	
293	660		" "	"	12.8	91°14'	-14.2	-27.0		393.7		+415	-513	1,720,143	350,100	
294	330				12.6	-		-12.6		408.1		+207	-257	1,719,935	350,356	
295	0				5.4	-		-5.4		415.3	π	0	0	1,719,728	350,613	
296	330		141°59'	-12.6°	10.2	-		-10.2		410.5		-209	+255	1,719,519	350,868	
297	660		" "	"	14.9	-		-14.9		405.8		-419	+510	1,719,309	351,123	
298	990		" "	"	14.9	-		-14.9		405.8		-628	+765	1,719,100	351,378	
299	1320		141°58'42"	-12.6°	5.5	-		-5.5		415.2	TP	-837	+1020	1,718,891	351,633	
299	1320				4.0	90°4'	-1.5	-5.5			TP					
	990		320°12'36"-180°	-12.6°	+3.7	88°34'	-24.8	-21.1	394.1		BS	-604	+784			
	990				+6.0	88°26'	-27.1	-21.1			BS					
300	660		320°12'	-12.6°	0.7	88°30'	+17.3	+16.6		410.7		+403	-523	1,718,690	351,894	
301	330		" "	"	2.2	89°-	+5.8	+3.6		397.7		+201	-261	1,718,488	352,156	
31	57		323°34'	-12.6°	6.9	-		-6.9		387.2		+37	-43	1,718,324	352,374	1,718,310+352,395 T-rd (west)
302	0				5.4	-		-5.4		388.7	π	0	0	1,718,287	352,417	
303	330		154°39'	-12.6°	3.8	88°-	+11.5	+7.7		401.8	TP	-262	+200	1,718,025	352,617	
303	330				1.2	88°28'	+8.8	+7.6			TP					

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9/1/81		G. Cotcamp		D. Harris		6834		G.W.C. <i>idw</i>		10	24						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New England		Potsdam		New York	St. Lawrence					L. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
303										401.8							
	660		342°51'180°	-12.0°	+14.6	-		+14.6	416.4		BS	-576	+321				
	660				+11.3	BH	+3.3	+14.6			BS						
304	330		342° 51'	-12.0°	11.4	-		-11.4		405.0		+288	-161	1,717,737	352,777		
305	0				5.4	-		-5.4		411.0	π	0	0	1,717,449	352,938		
306	330		152°50'	-12.0°	3.7	89°-	+5.8	+2.1		418.5		-256	+208	1,717,193	353,146		
307	660		152°50'	-12.0°	6.4	88°-	+23.0	+16.6			TP	-511	+417	1,716,938	353,355		
<del>307</del>	660				3.3	88°16'	+20.0	+16.7		433.1	TP						
	990		329°14'180°	-12.0°	+13.8	-		+13.8	446.9		BS	-727	+672				
	990				+8.8	BH	+5.0	+13.8			BS						
308	660		328°09'	-12.0°	9.2	-		-9.2		437.7		+476	-457	1,716,687	353,570		
309	330		" "	"	8.2	-		-8.2		438.7		+238	-229	1,716,449	353,798		
310	0				5.4	-		-5.4		441.5	π	0	0	1,716,211	354,027		
311	330		150°24'	-12.0°	8.1	-		-8.1		438.8		-247	+219	1,715,964	354,246		
312	660		" "	"	11.5	-		-11.5		435.4		-494	+438	1,715,717	354,465		
313	990		150°24'	-12.0°	9.1	-		-9.1		437.8	TP	-740	+657	1,715,471	354,684		
313	990				14.1	TH	+5.0	-9.1			TP						
	330		337°55'180°	-12.0°	+10.1	92°-	+11.5	+21.6	459.4		BS	-273	+185				
	330				+13.0	91°30'	+8.6	+21.6			BS						
314	0				5.4	-		-5.4		454.0	π	0	0	1,715,198	354,869		
315	330		156°0'	-12.0°	11.1	-		-11.1		448.3		-267	+194	1,714,931	355,063		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9/1/81		G. Cotcamp		D. Harris		6834		GWC, J.S.		10		25			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
New England		Potsdam		New York		St. Lawrence								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									459.4						
316	660		154°29'	-12.0°	13.1	84	-3.3	-16.4		443.0		-524	+402	1,714,674	355,271
317	990		154°29'	-12.0°	14.4	90°26'	-7.5	-21.9		437.5	TP	-785	+603	1,714,413	355,472
317	990				12.7	90°32'	-9.2	-21.9			TP				
	2310		332°46' -180°	-12.0°	+7.5	91°-	+40.3	+47.8	485.3		BS	-1789	+1461		
	2310				+12.9	90°52'	+34.9	+47.8			BS				
318	1980		332°46'	-12.0°	13.1	91°-	-34.6	-47.7		437.6		+1534	-1252	1,714,158	355,681
319	1650		" "	"	13.8	91°06'	-31.7	-45.5		439.8		+1278	-1044	1,713,902	355,889
320	1320		" "	"	14.0	91°10'	-26.9	-40.9		444.4		+1022	-835	1,713,646	356,098
321	990		" "	"	20.6	91°04'	-18.4	-39.0		446.3		+767	-626	1,713,391	356,307
322	660		" "	"	15.0	91°04'	-12.3	-27.3		458.0		+511	-417	1,713,135	356,516
323	330		" "	"	9.1	-	-	-9.1		476.2		+256	-209	1,712,880	356,724
IF	205		331°38'	-12.0°	4.2	-	-	-4.2		481.1		+156	-133	1,712,780	356,800
324	0				5.4	-	-	-5.4		479.9	X	0	0	1,712,624	356,933
325	330		158°42'	-12.0°	10.2	93°-	-17.2	-27.4		457.9		-276	+181	1,712,348	357,114
326	660		" "	"	10.8	92°-	-23.0	-33.8		451.5		-552	+362	1,712,072	357,295
327	990		" "	"	10.2	91°20'	-23.0	-33.2		452.1		-827	+544	1,711,797	357,477
328	1320		" "	"	6.6	90°40'	-15.4	-22.0		463.3		-1103	+725	1,711,521	357,658
329	1650		" "	"	5.1	-	-	-5.1		480.2		-1379	+906	1,711,245	357,839
330	1980		" "	"	4.6	TH	+9.9	+5.3		490.6		-1655	+1087	1,710,969	358,020
331	2310														

horiz. coord. y=0  
x=+9  
1,712,780 + 356,800  
y-intersect.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
9-2-81		G. Cotcamp		D. Harris		6834		DDH rlu		10	26				
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER					
New England		Potsdam/Parishville		New York	St. Lawrence					L. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									485.3						
331	2310		158° 42' 34"	-12.3°	7.5	89° 30'	+20.2	+12.7		498.0	TP	-1924	+1278-2	1,710,700	358,201
331	2310				14.3	89° 20'	+26.9	+12.6			TP				
	990	989.2	340° 32' 30" -180°	-12.3°	+13.1	92° 20'	+40.3	+53.4	551.4		BS	-841	+521-2		
	990				+10.3	92° 30'	+43.1	+53.4			BS				
332	660		339° 58'	-12.3°	11.7	93° -	-34.5	-46.2		505.2		+558	-353	1,710,417	358,375
333	330		" "	"	11.7	93° -	-17.2	-28.9		522.5		+279	-177	1,710,138	358,551
334	0				5.4	-		-5.4		546.0	X	0	0	1,709,859	358,728
335	330		157° 59'	-12.3°	1.0	-		-1.0		550.4		-273	+186	1,709,586	358,914
336	660		" "	"	1.1	TH	+3.3	+2.2		553.6		-545	+372	1,709,314	359,100
337	990		157° 58' 46"	-12.3°	9.7	TH	+5.0	-4.7		546.7	TP	-818	+558-2	1,709,041	359,284
337	990				10.5	89° 40'	+5.8	-4.7			TP				
	1320		338° 51' 44" -180°	-12.3°	+10.3	BH	+6.6	+16.9	563.6		BS	-1102	+727-2		
	1320				+10.0	90° 18'	+6.9	+16.9			BS				
338	990		338° 52'	-12.3°	8.2	-		-8.2		555.4		+826	-545	1,708,765	359,464
339	660		" "	"	7.7	-		-7.7		555.9		+551	-364	1,708,490	359,645
340	330		" "	"	5.3	-		-5.3		558.3		+275	-182	1,708,214	359,827
341	0				5.4	-		-5.4		558.2	X	0	0	1,707,939	360,009
342	330		157° 41'	-12.3°	9.7	-		-9.7		553.9		-272	+187	1,707,667	360,196
343	660		" "	"	12.1	-		-12.1		551.5		-543	+375	1,707,396	360,384
344	990		" "	"	9.7	-		-9.7		553.9		-815	+562	1,707,124	360,571

Potsdam Quad.  
Parishville Quad  
↑  
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DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9-2-81		G. Cotcamp		D. Harris		6834		Guc. <i>slw</i>		10	27						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New England		Parishville		New York	St. Lawrence					L. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									563.6								
345	1320		157°40'42"	-12.3°	6.6	-		-6.6	X	557.0	TP	-1086	+750.2	1,706,853	360,757		
345	1320				13.2	TH	+6.6	-6.6		550.4	TP						
	2310	2309.2	339°08'42"-180°	-12.3°	+7.5	91°30'	+60.5	+68.0			BS	-1933	+1263.2				
	2310				+14.1	91°20'	+53.7	+67.8		624.8	BS						
346	1980		339°09'	-12.3°	5.3	92°-	-69.1	-74.4		550.4		+1658	-1083	1,706,578	360,935		
347	1650		" "	"	9.2	92°-	-57.6	-66.8		558.0		+1381	-902	1,706,301	361,116		
348	1320		" "	"	6.0	92°-	-46.0	-52.0		572.8		+1106	-722	1,706,025	361,296		
349	990		" "	"	12.8	91°30'	-25.9	-38.7		586.1		+829	-541	1,705,749	361,477		
350	660		" "	"	12.0	91°-	-11.5	-23.5		601.3		+553	-361	1,705,473	361,657		
351	330		" "	"	9.7	91°-	-5.8	-15.5		609.3		+276	-180	1,705,196	361,838		
352	0				5.4	-		-5.4		619.4	π	0	0	1,704,920	362,018		
353	330		159°15'	-12.3°	3.5	89°-	+5.8	+2.3		627.1		-277	+180	1,704,643	362,198		
354	660		" "	"	9.2	89°-	+11.5	+2.3		627.1		-563	+360	1,704,367	362,378		
355	990		" "	"	10.5	89°-	+17.3	+6.8		631.6		-830	+540	1,704,090	362,558		
356	1320		159°14'48"	-12.3°	10.5	89°10'	+19.2	+8.7		633.5	TP	-1106	+720.2	1,703,814	362,736		
356	1320				6.7	89°20'	+15.4	+8.7			TP						
	580		332°40'-180°	-12.3°	+5.2	88°-	-20.2	-15.0			BS	-446	+370.2				
	580				+2.8	88°14'	-17.9	-15.1		618.4	BS						
357	270		324°37'	-12.3°	2.8	-		-2.8		615.6		+182	-200	1,703,550	362,904		
<u>IL</u>	119		284°40'	-12.3°	7.1	-		-7.1		611.3		+5	-119	1,703,323	362,985	Intersect	



DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
9-2-81		G. Cotcamp		D. Harris		6834		G.W.C. <i>slw</i>		10	29				
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER					
New England		Parishville		New York	St. Lawrence					L. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									6228						
373	1650		154°50'48"	-12.3°	2.5	88°54'	+31.7	+29.2		652.0	TP	-1310	+1003-2	1,700,676	366,560
373	1650				4.4	88°50'	+33.6	+29.2			TP				
	990		346°23'180°	-12.3°	+11.7	91°-	+17.3	+29.0	681.0		BS	-890	+433-2		
	990				+135	90°54'	+15.6	+29.1			BS				
374	660		346°23'	-12.3°	8.7	91°-	-11.5	-20.2		660.8		+594	-288	1,700,380	366,703
375	330		" "	"	12.8	-		-12.8		668.2		+297	-144	1,700,083	366,847
376	0				5.4	-		-5.4		675.6	X	0	0	1,699,786	366,991
377	330		158°42'	-12.3°	1.6	TH	+1.7	+0.1		681.1		-275	+183	1,699,511	367,174
378	660		" "	"	2.0	TH	+3.3	+1.3		682.3		-550	+365	1,699,236	367,356
379	990		" "	"	10.8	89°-	+17.3	+6.5		687.5		-825	+548	1,698,961	367,539
380	1320		" "	"	11.8	81°-	+23.0	+11.2		692.2		-1099	+730	1,698,687	367,721
381	1650		158°14'	-12.3°	11.1	89°-	+28.8	+17.7			TP	-1367-1	+924-2	1,698,420	367,913
381	1650				5.4	89°12'	+23.0	+17.6		698.6	TP				
	1980		7°14'12"180°	-12.3°	+7.8	90°38'	+21.9	+29.7	728.3		BS	-1972-2	+175-2		
	1980				+124	90°30'	+17.3	+29.7			BS				
382	1650		7°36'	-12.3°	12.9	90°30'	-14.4	-27.3		701.0		+1644	-135	1,698,094	367,951
383	1320		" "	"	2.9	91°-	-23.0	-25.9		702.4		+1316	-108	1,697,766	367,978
384	990		" "	"	5.4	91°-	-17.3	-22.7		705.6		+987	-81	1,697,437	368,005
385	660		" "	"	6.2	91°-	-11.5	-17.7		710.6		+658	-54	1,697,108	368,032
386	330		" "	"	11.8	-		-11.8		716.5		+329	-27	1,696,779	368,059

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
9-8-81		G. Cotcamp		D. Harris		6834		Gwl' <i>slw</i>		10	30					
AREA		TOPO MAP		STATE		COUNTY		RANGE		PARTY MANAGER						
New England		Parisshville		New York		St. Lawrence				L. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST - WEST - DEP.		Y	X
									728.3							
387	37		27°15'	-12.3°	5.7	-		-5.7		722.6		+36	+10	1,696,486	368,096	4-way Intersect.
388	0				5.4	-		-5.4		722.9	π	0	0	1,696,450	368,086	
389	330		194°24'	-12.3°	2.4	-		-2.4		725.9		-330	-12	1,696,120	368,074	
390	660		" "	"	3.0	-		-3.0		725.3		-660	-24	1,695,790	368,062	
391	990		" "	"	0.2	-		-0.2		728.1		-989	-36	1,695,461	368,050	
392	1320		193°18'	-12.3°	1.7	TH	+6.7	+5.0		733.3		-1319	-48	1,695,131	368,038	
392	1645		191°30'20"	-12.3°	12.9	89°	+28.7	+15.8		744.1	TP	-1645+2	+23-2	1,694,807	368,107	
392	1645				8.1	89°10'	+23.9	+15.8			TP					
	660		356°13'-180°	-12.3°	+10.3	92°	+23.0	+33.3	777.4		BS	-634+2	+183-2			
	660				+14.1	91°40'	+19.2	+33.3			BS					
393	330		356°13'	-12.3°	11.7	92°	-11.5	-23.2		754.2		+317	-91	1,694,492	368,197	
394	0				5.4	-		-5.4		772.0	π	0	0	1,694,175	368,288	
395	325		155°32'	-12.3°	3.5	87°	+17.0	+13.5		790.9		-260	+195	1,693,915	368,483	
396	645		144°30'	-12.3°	9.7	87°	+33.7	+24.0		801.4	TP	-433+2	+477-2	1,693,744	368,763	
396	645				5.2	87°24'	+29.2	+24.0			TP					
	990		316°0'-180°	-12.3°	+10.3	91°	+17.3	+27.6	829.0		BS	-549+2	+824-2			
	990				+13.8	90°48'	+13.8	+27.6			BS					
397	660		316°0'	-12.3°	7.8	91°	-11.5	-19.3		809.7		+366	-549	1,693,563	369,036	
398	330		" "	"	11.3	-		-11.3		817.7		+183	-275	1,693,380	369,310	
399	0				5.4	-		-5.4		823.6	π	0	0	1,693,197	369,586	

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
9-8-81		G. Cotcamp		D. Harris		6834		Gwl. <i>slu</i>		10	31				
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER				
New England		Parishville		New York		St. Lawrence					L. Davis				
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									829.0						
400	330		133°38'	-12.3°	4.7	-	-4.7			824.3		-172	+282	1,693,025	369,867
401	660		" "	"	4.1	-	-4.1			824.9		-343	+564	1,692,854	370,149
402	990		" "	"	6.3	-	-6.3			822.7		-515	+846	1,692,682	370,431
403	1320		" "	"	10.8	89°-	+23.0	+12.2		841.7		-674	+1135	1,692,523	370,720
404	1650		132°59'	-12.3°	5.0	89°-	+28.8	+23.8		852.8		-842	+1419	1,692,355	371,004
405	1980		" "	"	4.3	89°-	+34.6	+30.3		859.3		-1010	+1703	1,692,187	371,288
406	2310		132°59'12"	-12.3°	9.0	88°42'	+52.4	+43.4		872.4	TP	-1179+2	+1986-2	1,692,020	371,569
406	2310				5.0	88°48'	+48.4	+43.4			TP				
	1320		312°43'10"-180°	-12.3°	+4.6	-	+4.6		877.0		BS	-668+2	+1138-2		
	1320				+11.2	TH	-6.6	+4.6			BS				
41	1208		311°55'	-12.3°	5.2	-	-5.2			871.8		+597	-1050	1,691,951	371,655
407	990		311°07'	-12.3°	9.2	-	-9.2			867.8		+477	-867	1,691,831	371,838
408	660		" "	"	11.8	91°-	11.5	-23.3		853.7		+318	-578	1,691,672	372,127
409	330		" "	"	11.4	91°-	5.8	-17.2		859.8		+159	-289	1,691,513	372,416
410	0				5.4	-	-5.4			871.6	π	0	0	1,691,354	372,705
411	330		133° 11'	-12.3°	10.1	92°-	11.5	-21.6		855.4		-169	+283	1,691,185	372,988
412	660		" "	"	12.8	91°16'	14.6	-27.4		849.6		-339	+566	1,691,015	373,271
413	990		" "	"	7.9	91°16'	21.9	-29.8		847.2		-508	+850	1,690,846	373,555
414	1320		" "	"	10.9	BH	-6.6	-17.5		859.5		-678	+1133	1,690,676	373,838
415	1600		133°18'	-12.3°	6.2	TH	+8.0	+1.8		878.8		-824	+1371	1,690,530	374,076

1,692,000 + 371,655  
Trail (south) el. 871

1,690,570 + 374,065  
intersect. el. 877

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9-8-81		G. Cotcamp		D. Harris		6834		GWC mlw		10	32						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New England		Parishville		New York	St. Lawrence					L. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									877.0								
415	1650		133°15'	-12.3°	4.3	TH	+8.3	+4.0		881.0	TP	-849+2	+1415-1	1,690,507	374,119		
415	1650				5.7	89°40'	+9.6	+3.9			TP						
	1320		326°34'06"-180°	-12.3°	+9.0	BH	+6.6	+15.6	896.6		BS	-921+2	+945				
	1320				+10.2	90°14'	+5.4	+15.6			BS						
416	990		325°37'	-12.3°	4.9	91°-	17.3	-22.2		874.4		+679	-720	1,690,267	374,344		
417	660		"	"	7.1	91°-	11.5	-18.6		878.0		+453	-480	1,690,041	374,584		
418	330		"	"	12.2	-		-12.2		884.4		+226	-240	1,689,814	374,824		
419	0				5.4	-		-5.4		891.2	X	0	0	1,689,588	375,064		
IF	50		174°07'	-12.3°	6.0	-		-6.0		890.6		-48	+16	1,689,540	375,080	1,689,540 → 375,080 T-rd	
420	330		183°0'	-12.3°	3.6	-		-3.6		893.0		-314	+103	1,689,274	375,167	horiz. correct. x = +19 x = -41	
421	660		184°09'	-12.3°	3.1	TH	+3.3	+0.2		896.8		-653	+94	1,688,935	375,158		
422	990		185°10'	-12.0°	12.1	TH	+5.0	-7.1		889.5	TP	-983-2	+118	1,688,603	375,182		
422	990				10.0	89°50'	+2.9	-7.1			TP					Town of Parishville	
	660		8°21' +180°	-12.0°	+4.5	-		+4.5	894.0		BS	-659-2	+42				
	660				+7.8	BH	-3.3	+4.5			BS						
423	330		8°21'	-12.0°	1.8	-		-1.8		892.2		+329	-21	1,688,271	375,203		
424	0				5.4	-		-5.4		888.6	X	0	0	1,687,942	375,224		
425	330		187°38'	-12.0°	5.4	88°-	+11.5	+6.1		900.1		-329	+25	1,687,613	375,249		
IL	562		186°48'	-12.0°	0.3	88°-	+19.6	+19.3		913.3	TP	-559-2	+51	1,687,381	375,275	T-intersect.	
IL	562				3.6	87°40'	+22.9	+19.3			TP						

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
9-10-81		G. Cotcamp		D. Harris		6834		G.C. rlu		10		33				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
New England		Parishville		New York		St. Lawrence								L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
										913.3						
	318		88°23' +180°	-12°	+4.6	88° -	-11.1	-6.5	906.8		BS	-75.2	-309			
	318				+2.7	88°20'	-9.2	-6.5			BS					
426	170		80°30'	-12°	1.6	88° -	+5.9	+4.3		911.1		+62	+158	1,687,366	375,124	
	0				5.4	-		-5.4		901.4	X	0	0	1,687,304	379,966	
427	160		237° -	-12°	12.9	-		-12.9		893.9		-113	-113	1,687,191	374,853	
	248		232°04'	-12°	14.8	-		-14.8		892.0	TP	-190.2	-160	1,687,112	374,806	T-intersect.
	248				13.6	BH	-1.2	-14.8			TP					
	563		325°15' -180°	-12°	+0.6	91° -	+9.8	+10.4	902.4		BS	-386.2	+410			
	563				+10.4	-		+10.4			BS					
428	380		323°0'	-12°	13.0	-		-13.0		889.4		+249	-287	1,686,973	374,929	
429	50		323°30'	-12°	5.4	-		-5.4		897.0		+33	-37	1,686,757	375,179	
	0				5.4	-		-5.4		897.0	X	0	0	1,686,724	375,216	
430	280		133°34'	-12°	7.2	-		-7.2		895.2		-147	+239	1,686,577	375,455	
431	610		"	"	7.5	-		-7.5		894.9		-319	+520	1,686,405	375,736	
432	940		133°34'	-12°	6.6	-		-6.6		895.8	TP	-492.2	+801	1,686,230	376,017	
432	940				11.3	TH	+4.7	-6.6			TP					
	1320		313°50'34" -180°	-12°	+6.6	91°10'	+26.9	+33.5	929.3		BS	-696.2	+1121			
	1320				+3.3	91°16'	+29.2	+33.5			BS					
433	990		313°50'	-12°	9.0	91°20'	-23.0	-32.0		897.3		+522	-841	1,686,054	376,297	↑
434	660		"	"	10.0	91°20'	-15.4	-25.4		903.9		+348	-561	1,685,880	376,577	Parishville Quad

Geosource Inc.

DATE 9-15-81	INSTRUMENT MAN G. Cotcamp	ROD MAN O. Harris	PARTY NUMBER 6834	NOTES CHECKED BY G. L. [initials]	LINE NO. 10	PAGE 34	
AREA New England	TOPO MAP Rainbow Falls	STATE New York	COUNTY St. Lawrence	TWP	RANGE	PPM	PARTY MANAGER L. Davis

STATION NO.	SLOPE DISTANCE	PLOTting DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									929.3							
435	330		313° 50'	-12°	12.0	91° -	-5.8	-17.8		911.5		+174	-280	1,685,706	376,858	Rainbow Falls Quad.
436	0				5.4	-		-5.4		923.9	π	0	0	1,685,532	377,138	↓
437	330		133° 53'	-12°	9.4	-		-9.4		919.9		-174	+280	1,685,358	377,418	
438	660		" "	"	9.7	91° -	-11.5	-21.2		908.1		-349	+560	1,685,183	377,698	
439	990		133° 52' 36"	-12°	6.4	91° -	-17.3	-23.7		905.6	TP	-523-2	+841	1,685,007	377,979	
439	990				13.9	90° 34'	-9.8	-23.7			TP					
	1230		314° 04' 24" -180°	-12°	+3.1	TH	-6.2	-3.1	902.5		BS	-653	+1042			
	1230				+4.6	89° 38'	-7.9	-3.1			BS					
440	900		314° 04'	-12°	4.2	-		-4.2		898.3		+478	-763	1,684,832	378,258	
441	570		" "	"	6.3	-		-6.3		896.2		+303	-483	1,684,657	378,538	
442	240		" "	"	5.5	-		-5.5		897.0		+127	-203	1,684,481	378,818	
π	0				5.4	-		-5.4		897.1	π	0	0	1,684,354	379,021	
443	90		112° 34'	-12°	4.9	-		-4.9		897.6		-17	+88	1,684,337	379,109	
444	420		" "	"	4.2	-		-4.2		898.3		-77	+413	1,684,277	379,434	
445	750		109° 36'	-12°	3.9	-		-3.9		898.6		-99	+743	1,684,255	379,764	
446	1080		109° 35' 30"	-12°	4.2	TH	+5.4	+1.2		903.7	TP	-143-2	+1071-2	1,684,209	380,090	
446	1080				5.1	89° 40'	+6.3	+1.2			TP					
	330		276° 49' -180°	-12°	+13.2	-		+13.2	916.9		BS	+30	+329-2			horiz. correct. y: -20 x: -4.
	330				+11.6	BH	+1.7	+13.2			BS					1,684,215 + 360,250
TF	169		273° 50'	-12°	12.2	-		-12.2		904.7		-24	-167	1,684,215	380,250	Trail (south) el. 907

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-15-81		G. Cotcamp		D. Harris		6834		GWC. J. Davis		10		35			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
New England		Rainbow Falls		New York		St. Lawrence								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									916.9						
447	0				5.4	-		-5.4		911.5	π	0	0	1,684,239	380,417
448	330		87°16'	-12°	4.6	88°-	+11.5	+6.9		923.8		+84	+319	1,684,323	380,736
449	660		86°17'	-12°	4.9	88°-	+23.0	+18.1		935.0	TP	+179	+635-2	1,684,418	381,050
449	660				1.1	88°20'	+19.2	+18.1			TP				
	192		281°22' -180°	-12°	+14.7	BH	+1.0	+15.7	950.7		BS	+2	+192-2		
	192				+14.0	90°30'	+1.7	+15.7			BS				
π	0				5.4	-		-5.4		945.3	π	0	0	1,684,420	381,240
450	148		133°20'	-12°	2.4	89°-	+2.6	+0.2		950.9		-77	+126	1,684,343	381,366
451	478		"	"	6.1	87°-	+25.0	+18.9		969.6		-249	+408	1,684,171	381,648
452	808		"	"	8.3	87°-	+42.2	+33.9		984.6		-420	+690	1,684,000	381,930
453	1138	1136.4	133°19'44"	-12°	9.6	87°-	+59.5	+49.9		1000.6	TP	-591	+971-2	1,683,829	382,209
453	1138				5.0	87°14'	+54.9	+49.9			TP				
	845		314°10' -180°	-12°	+14.1	91°-	+14.7	+28.8	1029.4		BS	-450	+715-2		
	845				+8.2	91°24'	+20.6	+28.8			BS				
454	515		314°10'	-12°	10.3	92°-	-18.0	-28.3		1001.1		+274	-436	1,683,653	382,486
455	185		"	"	11.9	93°-	-9.7	-21.6		1007.8		+98	-157	1,683,477	382,765
π	0				5.4	-		-5.4		1024.0	π	0	0	1,683,379	382,922
456	143		133°15'	-12°	9.2	-		-9.2		1020.2		-74	+122	1,683,305	383,044
457	473		129°11'	-12°	5.9	-		-5.9		1023.5	TP	-216	+421-2	1,683,163	383,341
457	473				8.3	TH	+2.4	-5.9			TP				

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-15-81		G. Catcamp		D. Harris		6834		GWC		10		36			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
New England				New York		St. Lawrence								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
457										1023.5					
	660		282° 11' 180°	-12°	+151	-		+15.1	1038.6		BS	-2	+660		
	660				+11.8	BH	+3.3	+15.1		BS					
458	330		281° 0'	-12°	11.2	-		-11.2		1027.4		-6	-330	1,683,155	383,671
459	0				5.4	-		-5.4		1033.2	π	0	0	1,683,161	384,001
460	330		100° 26'	-12°	10.7	-		-10.7		1027.9		+9	+330	1,683,170	384,331
461	660		" "	"	8.1	-		-8.1		1030.5		+18	+660	1,683,179	384,661
462	990		100° 26'	-12°	7.2	-		-7.2	1031.4		TP	+27	+990	1,683,188	384,991
462	990				2.3	BH	-5.0	-7.3		TP					
	1330		281° 0' 180°	-12°	+9.5	BH	+6.7	+16.2	1047.6		BS	+23	+1330		
	1330				+13.8	90° 6'	+2.3	+16.1		BS					
463	1000		281° 0'	-12°	4.0	91° -	-17.5	-21.5		1026.1		-17	-1000	1,683,194	385,321
464	670		" "	"	13.3	91° -	-11.7	-25.0		1022.6		-12	-670	1,683,199	385,651
465	340		" "	"	13.2	91° -	-5.9	-19.1		1028.5		-6	-340	1,683,205	385,981
466	0				5.4	-		-5.4		1042.2	π	0	0	1,683,211	386,321
467	343		159° 14'	-12°	7.8	92° -	-12.0	-19.8		1027.8		-288	+186	1,682,923	386,507
468	673		" "	"	10.0	92° -	-23.5	-33.5		1014.1		-566	+364	1,682,645	386,685
469	1003		" "	"	8.2	92° 30'	-43.7	-51.9		9957		-843	+543	1,682,368	386,864
470	1333		" "	"	8.1	92° 30'	-58.1	-66.2		981.4		-1121	+721	1,682,090	387,042
470	1663	1661.4	159° 13' 54"	-12°	7.3	92° 30'	-72.5	-79.8	967.8		TP	-1397	+899	1,681,814	387,220
471	1663				14.1	92° 16'	-65.7	-79.8		TP					

set up on exterior of curve



SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9-16-81		G. Cotcamp		D. Harris		6834		G.W.C. <i>slw</i>		10	38						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New England		Rainbow Falls/ <i>Sylvan Falls</i>		New York	St. Lawrence					L. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									1,024.4								
481	189		123° 0'	-12°	13.0	-		-13.0		1,011.4	TP	-68	+176	1,679,826	389,793		
481	189				12.1	BH	-0.9	-13.0			TP						
	330		293° 07' - 180°	-12°	+3.2	89° -	-5.8	-2.6		1,008.8	BS	-64	+324				
	330				+1.1	89° 22'	-3.6	-2.5			BS						
482	0				5.4	-		-5.4		1,003.4	π	0	0	1,679,762	390,117		
483	331		138° 31'	-12°	8.1	88° -	+11.5	+3.4		1,012.2	TP	-197	+266	1,679,565	390,383		
483	331				6.4	88° 18'	+9.8	+3.4			TP						
	330		328° 36' - 180°	-12°	+8.5	87° 30'	-14.4	-5.9		1,006.3	BS	-240	+227				
	330				+7.8	87° 38'	-13.6	-5.8			BS						
484	0				5.4	-		-5.4		1,000.9	π	0	0	1,679,325	390,610		
485	330		151° 36'	-12°	14.4	92° -	-11.5	-25.9		980.4		-251	+214	1,679,074	390,824		
486	660	658.8	149° 29'	-12°	7.4	93° 30'	-40.2	-47.6		958.7	TP	-486	+445	1,678,839	391,055		
486	660				11.3	93° 10'	-36.4	47.7			TP						
	436		326° 27' - 180°	-12°	+14.5	-		+14.5		973.2	BS	-305	+311				
	436				+12.3	BH	+2.2	+14.5			BS						
487	106		326° 27'	-12°	11.0	-		-11.0		962.2		+74	-76	1,678,608	391,290		
	π	0			5.4	-		-5.4		967.8	π	0	0	1,678,534	391,366	↑	
488	228		162° 05'	-12°	4.8	-		-4.8		968.4		-198	+114	1,678,336	391,480	Rainbow Falls Quad	
489	558		162° 05'	-12°	11.0	-		-11.0		962.2	TP	-484	+278	1,678,050	391,644	Sylvan Falls Quad.	
489	558				13.8	TH	+2.8	-11.0			TP					↓	

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-16-81		G. Cotcamp		D. Harris		6834		Gwc. <i>adw</i>		10		39			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
New England		Rainbow Falls		New York		St. Lawrence								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
489										962.2					
	330		340°43'-180°	-12°	+0.6	88°	-11.5	-10.9	951.3		BS	-282	+171		
	330				+2.1	87°44'	-13.0	-10.9			BS				
490	0				5.4	-		-5.4	945.9		X	0	0	1,677,768	391,815
491	330		137°57'	-12°	6.3	-		-6.3	945.0			-194	+267	1,677,574	392,082
492	660		134°47'	-12°	7.0	-		-7.0	944.3		TP	-357	+555	1,677,411	392,370
492	660				10.3	TH	+3.3	-7.0			TP				
	660		312°17'-180°	-12°	+13.0	TH	-3.3	+9.7	954.0		BS	-333	+570		
	660				+14.3	89°36'	-4.6	+9.7			BS				
493	330		312°17'	-12°	8.8	-		-8.8	945.2			+166	-285	1,677,244	392,655
494	0				5.4	-		-5.4	948.6		X	0	0	1,677,078	392,940
495	325		123°06'	-12°	9.1	89°	+5.7	-3.4	950.6		TP	-117	+303	1,676,961	393,243
495	325				11.0	88°40'	+7.6	-3.4			TP				
	666		267°38'-180°	-12°	+12.1	BH	+3.3	+15.4	966.0		BS	+165	+645		
	666				+14.2	90°6'	+1.2	+15.4			BS				
496	336		267°38'	-12°	7.6	-		-7.6	958.4			-83	-325	1,677,043	393,563
497	0				5.4	-		-5.4	960.6		X	0	0	1,677,126	393,888
TP	268		122°51'	-12°	2.1	88°	+9.3	+7.2	973.2		TP	-95	+250	1,677,031	394,138
TP	268				0.7	88°18'	+7.9	+7.2			TP				
	404		331°27'-180°	-12°	+14.8	91°	+7.0	+21.8			BS	-307	+263		
	404				+13.2	91°14'	+8.7	+21.9	995.1		BS				

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
9-16-81		G. Cotcamp		D. Harris		6834		G.W.C. slw		10	40				
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER					
New England				New York	St. Lawrence					L. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST - WEST - DEP.		Y
									995.1						
498	330		330° 10'	-12°	13.2	91° -	-5.8	-19.0		976.1		+246	-220	1,676,970	394,181
499	0				5.4	-	-	-5.4		989.7	π	0	0	1,676,724	394,401
500	330		156° 18'	-12°	1.7	-	-	-1.7		993.4		-268	+193	1,676,456	394,594
TP	667		156° 18'	-12°	3.8	-	-	-3.8		991.3	TP	-542	+389	1,676,182	394,790
TP	667				7.1	TH	+3.3	-3.8			TP				
	473		70° 48' +180°	-11.7°	+8.2	88° -	-16.5	-8.3	983.0		BS	-243-2	-406-2		
	473				+6.8	88° 10'	-15.1	-8.3			BS				
501	450		70° 03'	-11.7°	9.3	88° -	+15.7	+6.4		989.4		+236	+383	1,676,173	394,765
502	120		73° 0'	-11.7°	4.5	-	-	-4.5		978.5		+58	+105	1,675,995	394,487
π	0				5.4	-	-	-5.4		977.6	π	0	0	1,675,937	394,387
503	210		297° 16'	-11.7°	2.9	-	-	-2.9		980.1		+56	-202	1,675,993	394,180
504	540		297° 16'	-11.7°	12.9	-	-	-12.9		970.1	TP	+145-2	-520-2	1,676,080	393,860
504	540				10.2	BH	-2.7	-12.9			TP				
	583		110° 40' +180°	-11.7°	+0.2	89° -	-10.2	-10.0	960.1		BS	+91-2	-576-2		
	583				+2.9	88° 44'	-12.9	-10.0			BS				
505	253		109° 28'	-11.7°	4.7	-	-	-4.7		955.4		-34	+251	1,676,135	393,533
π	0				5.4	-	-	-5.4		954.7	π	0	0	1,676,169	393,282
506	72		265° 26'	-11.7°	3.7	-	-	-3.7		956.4		-20	-69	1,676,149	393,213
507	402		255° 0'	-11.7°	4.1	-	-	-4.1		956.0	TP	-181-2	-359-2	1,675,986	392,921
507	402				6.1	TH	+2.0	-4.1			TP				

1,676,200 + 394,790  
T intersect.

dirt road  
bridge 5-ton

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE			
9-17-81		G. Cotcamp		D. Harris		6834		GMC JSD		10	41			
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER					
New England		Sylvan Falls	New York	St. Lawrence					L. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
507										956.0				
	330		61°36' +180°	-11.7°	+12.1	91°	+5.8	+17.9	2973.9		BS	-213-2	-252-2	
	330				+14.0	90°40'	+3.8	+17.8			BS			
508	0				5.4	-	-	-5.4		968.5	TP	0	0	1,675,771 392,667
509	331	329.7	252°04'	-11.7°	7.6	85°	+28.7	+21.1			TP	-163-2	-287-2	1,675,606 392,378
509	331				1.8	86°	+23.0	+21.2		995.1	TP			
	332		87°15' +180°	-11.7°	+11.5	92°	+11.6	+23.1	31018.2		BS	-83-2	-321-2	
	332				+14.0	91°34'	+9.1	+23.1			BS			
510	0				5.4	-	-	-5.4		1012.8	TP	0	0	1,675,521 392,055
511	329	327.2	208°48'	-11.7°	5.3	84°	+34.2	+28.9		1047.1	TP	-313-2	-96-2	1,675,206 391,957
511	329				2.4	84°30'	+31.4	+29.0			TP			
	330	329.2	14°04' +180°	-11.7°	+12.1	94°	+23.0	+35.1	21082.2		BS	-329-2	-74-2	
	330				+13.4	93°46'	+21.6	+35.0			BS			
512	0				5.4	-	-	-5.4		1076.8	TP	0	0	1,674,875 391,941
513	330		185°40'	-11.7°	2.1	87°	+17.2	+15.1		1097.3		-328	+35	1,674,547 391,976
514	660	659.0	182°36'	-11.7°	2.0	86°50'	+36.4	+34.4		1116.6	TP	-651-2	+104	1,674,222 392,045
514	660				4.0	86°40'	+38.3	+34.3			TP			
	660	659.5	1°41' +180°	-11.7°	+7.0	92°18'	+26.4	+33.4	21150.0		BS	-649-1	+115	
	660				+6.3	92°22'	+27.2	+33.5			BS			
515	330		1°41'	-11.7°	9.8	91°	-5.8	-15.6		1134.4		+325	-57	1,673,897 392,103
516	0				5.4	-	-	-5.4		1144.6	TP	0	0	1,673,572 392,160

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE					
9-17-81		G. Cotcamp		D. Harris		6834		Gwc		10		42					
AREA		TOPO MAP		STATE		COUNTY		RANGE		PPM		PARTY MANAGER					
New England		Sylvan Falls		New York		St. Lawrence						L. Davis					
STATION NO.	SLOPE DISTANCE	PLOTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS	
														Y	X		
									1150.0								
517	330		200°25'	-11.7°	0.2	-		-0.2		1149.8		-326	-50	1,673,246	392,110		
518	661		200°25'	-11.7°	2.3	89°08'	+11.5	+9.2		1159.2	TP	-653	-100	1,672,919	392,060		
518	661				0.7	89°08'	+10.0	+9.3			TP						
	660	659.6	21°12'+180°	-11.7°	+9.6	92°-	+23.0	+32.6		1191.8	BS	-651	-109				
	660				+14.5	91°34'	+18.0	+32.5			BS						
7/	348		20°39'	-11.7°	11.9	91°-	-6.1	-18.0		1173.8		+344	+54	1,672,612	392,005		T-rod (west) el. 1174.
519	330		21°12'	-11.7°	11.1	91°-	-5.8	-16.9		1174.9		+325	+54	1,672,593	392,005		
520	0				5.4	-		-5.4		1186.4	X	0	0	1,672,268	391,951		
521	330		206°07'	-11.5°	1.1	-		-1.1		1190.7	TP	-319	-83	1,671,949	391,868		
521	330				2.8	TH	+1.7	-1.1			TP						
	330		35°41'+180°	-11.5°	+10.4	-		+10.4		1201.1	BS	-301	-135				
	330				+12.1	TH	-1.7	+10.4			BS						
522	0				5.4	-		-5.4		1195.7	X	0	0	1,672,648	391,733		
523	330		205°08'	-11.5°	12.2	-		-12.2		1188.9	TP	-321	-78	1,671,327	391,655		
523	330				13.9	TH	+1.7	-17.2			TP						
	330		10°18'+180°	-11.5°	+10.6	TH	-1.7	-0.1		1188.8	BS	-330	+7				
	330				+1.9	89°40'	-1.9	±0.0			BS						
524	0				5.4	-		-5.4		1183.4	X	0	0	1,670,997	391,662		
525	330		171°34'	-11.5°	2.7	87°-	+17.2	+14.5		1203.3		-310	+113	1,679,687	391,775		

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE		
9-17-81		G. Cotcamp		D. Harris		6834		G.C.		10		43		
AREA		TOPO MAP		STATE		COUNTY		RANGE		PPM		PARTY MANAGER		
New England		Sylvan Falls		New York		St. Lawrence						L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									1,188.8					
526	658	657.1	168°34'	-11.5°	12.0	87°	+34.4	+22.4		1211.2	TP	-605	+256	1,670,392 391,918
526	658				8.2	87°20'	+30.6	+22.4			TP			
	337		358°49'+180°	-11.5°	+14.8	-	-	+14.8		2,172.0	BS	-329	+74	
	337				+131	BH	+1.7	+14.8			BS			
527	0				5.4	-	-	-5.4		1220.6	π	0	0	1,670,063 391,992 opposite station
528	337		214°21'	-11.5°	2.3	89°	+5.9	+3.6		1229.6		-311	-131	1,669,752 391,861
529	667		" "	"	4.9	88°30'	+17.5	+12.6		1238.6		-615	-259	1,669,448 391,733
530	997		214°21'	-11.5°	4.8	88°30'	+26.1	+21.3		1247.3	TP	-918	-387	1,669,145 391,605
530	997				0.8	88°44'	+22.0	+21.2			TP			
	660		40°14'+180°	-11.5°	+13.8	-	-	+13.8		1,261.1	BS	-579	-317	
	660				+10.5	BH	+3.3	+13.8			BS			
531	330		38°19'	-11.5°	6.7	-	-	-6.7		1254.4		+295	+149	1,668,861 391,437
532	0				5.4	-	-	-5.4		1255.7	π	0	0	1,668,566 391,288
533	330		218°0'	-11.5°	0.3	TH	+1.7	+1.4		1262.5		-295	-147	1,668,271 391,141
534	660		216°04'	-11.5°	8.4	88°	+23.0	+14.6		1275.7	TP	-600	-274	1,667,966 391,014
534	660				5.7	88°14'	+20.3	+14.6			TP			
	660		10°47'+180°	-11.5°	+9.6	-	-	+9.6		1,285.3	BS	-660	+8	
	660				+12.9	TH	-3.3	+9.6			BS			
535	330		10°47'	-11.5°	2.4	-	-	-2.4		1282.9		+330	-4	1,667,636 391,018
536	0				5.4	-	-	-5.4		1279.9	π	0	0	1,667,306 391,022

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9-17-81		G. Cotcamp		D. Harris		6834		G.W.C. <i>sluc</i>		10	44						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New England		Rainbow Falls/Sylvan		New York	St. Lawrence					L. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH +	EAST +	COORDINATES		REMARKS	
												SOUTH -	WEST -	Y	X		
												LAT.	DEP.	Y	X		
									1285.3								
537	330		185° 0'	-11.5°	12.7	-	-	12.7		1272.6		-328	+37	1,666,978	391,059	last station on dist. 1,666,710 + 391,090 road. T-intersect. el. 1264.	
	600		185° 0'	-11.5°	10.9	91° -	-10.5	-21.4		1263.9		-596	+68	1,666,710	391,090		
538	644		183° 04'	-12.3°	5.7	91° 30'	-16.9	-22.6		1262.7	TP	-635+2	+103+2	1,666,673	391,127	pavement horiz. corr. ↓ y = -21' x = -28'	
538	644				3.8	91° 40'	-18.7	-22.5			TP						
	330		340° 37' +80°	-12.3°	+5.4	89° 06'	-5.2	+0.2	1262.9		BS	-281+2	+173+2				
	330				+5.0	89° 10'	-4.8	+0.2			BS						
539	0				5.4	-	-	-5.4		1257.5	X	0	0	1,666,394	391,302		
540	330		177° 29'	-12.3°	11.8	-	-	-11.8		1251.1	TP	-319+2	+84+2	1,666,077	391,388		
540	330				13.5	TH	+1.7	-11.8			TP						
	810		8° 26' +180°	-12.3°	+10.3	91° 34'	+22.1	+32.4	1283.5		BS	-808+2	+55+2				
	810				+7.9	91° 44'	+24.5	+32.4			BS						
541	480		8° 0'	-12.3°	7.0	93° -	-25.1	-32.1		1251.4		+479	-36	1,665,750	391,409	↑	
542	150		356° 18'	-12.3°	10.0	93° -	-7.8	-17.8		1265.7		+144	-41	1,665,415	391,404	Rainbow Falls Quad.	
	0				5.4	-	-	-5.4		1278.1	X	0	0	1,665,271	391,445	Sylvan Falls	
543	179		172° 17'	-12.3°	7.2	-	-	-7.2		1276.3		-168	+61	1,665,103	391,506	↓	
544	509		172° 17'	-12.3°	12.0	91° -	-8.9	-20.9		1262.6	TP	-478+2	+174+2	1,664,795	391,621		
544	509				10.6	91° 10'	-10.4	-21.0			TP						
	660		356° 30' +180°	-12.3°	+1.7	88° -	-23.0	-21.3	1241.3		BS	-635+2	+180+2				
	660				+0.6	88° 6'	-21.9	-21.3			BS						
BM	661		354° 29'	-12.3°	0.3	88° -	+23.1	+22.8		1264.1		+629	-202	1,664,791	391,601	1942 U.S.G.S. F213 el. 1264.0	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
9-17-81		G. Cotcamp		D. Harris		6834		G.C. J. Law		10	45				
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER					
New England		Sylvan Falls		New York	St. Lawrence					L. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									1241.3						
545	330		355°22'	-12.3°	5.8	88°-	+11.5	+5.7		1247.0		+316	-96	1,664,478	391,707
546	0				5.4	-		-5.4		1235.9	π	0	0	1,664,162	391,803
547	330		168°47'	-12.3°	12.1	-		-12.1		1229.2		-303	+132	1,663,859	391,935
548	658		164°28'	-12.9°	10.9	91°-	-11.5	-22.4		1218.9	TP	-579+2	+313+2	1,663,585	392,118
548	658				9.0	91°10'	-13.4	-22.4			TP				
	660		354°56'±80°	-12.9°	+9.9	-		+9.9	1228.8		BS	-628+2	+204+2		
	660				+6.6	BH	+3.3	+9.9			BS				
549	330		354°56'	-12.9°	11.9	-		-11.9		1216.9		+314	-102	1,663,273	392,222
550	0				5.4	-		-5.4		1223.4	π	0	0	1,662,959	392,324
551	330		168°05'	-12.9°	2.9	89°-	+5.8	+2.9		1231.7		-300	+139	1,662,659	392,463
552	660		168°05'	-12.9°	9.6	89°-	+11.5	+1.9		1230.7	TP	-599+1	+277.2	1,662,361	392,603
552	660				5.8	89°20'	+7.7	+1.9			TP				
	660		342°38'±80°	-12.9°	+11.0	-		+11.0	1241.7		BS	-570	+333+2		
	660				+14.3	TH	-3.3	+11.0			BS				
553	330		342°38'	-12.9°	3.3	-		-3.3		1238.4		+285	-166	1,662,076	392,772
554	0				5.4	-		-5.4		1236.3	π	0	0	1,661,791	392,938
555	330		175°07'	-12.9°	7.8	-		-7.8		1233.9		-314	+101	1,661,477	393,039
556	660		" "	"	9.6	-		-9.6		1232.1		-628	+202	1,661,163	393,140
557	991		173°86'	-12.9°	11.4	-		-11.4		1230.3	TP	-937	+322+2	1,660,854	393,262
557	991				6.4	BH	-5.0	-11.4			TP				

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE			
9-18-81		G. Cotcamp		D. Harris		6834				10	46			
AREA		TOPO MAP		STATE		COUNTY		RANGE		PPM		PARTY MANAGER		
New England		Sylvan Falls		New York		St. Lawrence						L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
557										1230.3				
	332		11°13' + 180°	-12.9°	+14.3	BH	+1.7	+16.0	1246.3		BS	-332	+10 +2	
	332				+14.1	90°20'	+1.9	+16.0		BS				
1#	193		14°25'	-12.9°	11.6	-		-11.6		1234.7		+193	+5	1,660,715 393,279 rd (east)
558	0				5.4	-		-5.4		1240.9	π	0	0	1,660,522 393,274
559	330		200°30'	-12.9°	11.2	-		-11.2		1235.1	TP	-327	-44 +2	1,660,195 393,232
559	330				9.5	BH	-1.7	-11.2			TP			
	658		5°12' + 180°	-12.9°	+11.1	-		+11.1	1246.2		BS	-652	+88 +2	
	658				+14.4	TH	-3.3	+11.1		BS				
560	330		2°20'	-12.9°	11.7	91°	-5.8	-17.5		1228.7		+324	-61	1,659,867 393,261
561	0				5.4	-		-5.4		1240.8	π	0	0	1,659,543 393,372
562	330	329.2	187°09'	-12.9°	13.3	86°	+23.0	+9.7		1255.9	TP	-328	+33 +2	1,659,215 393,357
562	330				10.5	86°30'	+20.1	+9.6			TP			
	323		351°59' + 180°	-12.9°	+4.0	89°	-5.6	-1.6	1254.3		BS	-302	+115 +2	
	323				+2.1	89°20'	-3.8	-1.7		BS				
563	0				5.4	-		-5.4		1248.9	π	0	0	1,658,913 393,474
564	330		160°11'	-12.9°	7.5	-		-7.5		1246.8		-278	+178	1,658,635 393,652
565	660		157°33'	-12.9°	12.1	-		-12.1		1242.2	TP	-538	+382 +2	1,658,375 393,858
565	660				8.8	BH	-3.3	-12.1			TP			
	330		325°42' + 180°	-12.9°	+4.9	88°	-11.5	-6.6	1235.6		BS	-224	+242 +2	
	330				+3.4	88°16'	-10.0	-6.6		BS				

DATE		INSTRUMENT MAN			ROD MAN			PARTY NUMBER		NOTES CHECKED BY			LINE NO.	PAGE			
9-18-81		G. Cotcamp			D. Harris			6834		J. Davis			10	47			
AREA		TOPO MAP		STATE	COUNTY			TWP	RANGE	PPM	PARTY MANAGER						
New England		Sylvan Falls		New York	St. Lawrence						L. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									1235.6								
566	0				5.4	-		-5.4		1230.2	π	0	0	1,658,151	394,102		
567	340		164°47'	-13.6°	6.6	93°	-17.8	-24.4		1211.7	TP	-297	+164+2	1,657,854	394,268		
567	340				9.2	92°34'	-15.2	-24.4			TP						
	340		20°08'+180°	-13.6°	+7.9	-		+7.9	1219.1		BS	-338	-39+2				
	340				+9.6	TH	-1.7	+7.9			BS						
568	0				5.4	-		-5.4		1213.7	π	0	0	1,657,516	394,231		
569	338		242°27'	-13.6°	0.8	89°	+5.9	+5.1		1224.2	TP	-222	-254+2	1,657,294	393,979		
569	338				2.7	88°40'	+7.9	+5.2			TP						
	660		67°28'+180°	-13.6°	+8.4	91°	+11.5	+19.9	1244.1		BS	-389	-533+2				
	660				+13.4	90°34'	+6.5	+19.9			BS						
570	330		63°28'	-13.6°	8.3	-		-8.3		1235.8		+213	+252	1,657,118	393,700		
571	0				5.4	-		-5.4		1238.7	π	0	0	1,656,905	393,448		
572	330		221°50'	-13.6°	2.8	89°	+5.8	+3.0		1247.1		-291	-156	1,656,614	393,292		
573	660		217°42'	-13.6°	7.6	88°	+23.0	+15.4		1259.5	TP	-602	-269+2	1,656,303	393,181		
573	660				1.8	88°30'	+17.3	+15.5			TP						
	330		1°03'+180°	-13.6°	+14.2	94°	+23.0	+37.2	1296.7		BS	-321	+72+2				
	330				+11.3	94°30'	+25.8	+37.1			BS						
574	0				5.4	-		-5.4		1291.3	π	0	0	1,655,982	393,255		
575	330		168°10'	-13.6°	5.9	87°	+17.3	+11.4		1308.1	TP	-298	+142+2	1,655,684	393,399		
575	330				3.6	87°24'	+15.0	+11.4			TP						

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE		
9-18-81		G. Cotcamp		D. Harris		6834		New		10		48		
AREA		TOPO MAP		STATE		COUNTY		RANGE		PPM		PARTY MANAGER		
New England		Sylvan Falls		New York		St. Lawrence						L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
575										1308.1				
	430		340°36'±80°	-136°	+6.4	88°	-15.0	-8.6	1299.5		BS	-360	+234.1	
	430				+3.9	88°20'	-12.5	-8.6			BS			
576	100		338°31'	-136°	3.5	-		-3.5		1296.0		+82	-57	1,655,406 393,577
π	0				5.4	-		-5.4		1294.1	π	0	0	1,655,324 393,634
577	242		198°59'	-136°	10.4	-		-10.4		1289.1		-241	-23	1,655,083 393,611
578	572		198°59'	-136°	10.4	-		-10.4		1289.1	TP	-569	-54	1,654,755 393,580
578	572				7.6	BH	-2.9	-10.5			TP			
	660		16°33'±180°	-136°	+4.3	TH	-3.3	+1.0	1290.1		BS	-659	-34	
	660				+6.0	89°34'	-5.0	+1.0			BS			
579	330		10°58'	-136°	6.6	-		-6.6		1283.5		+330	-15	1,654,426 393,531
580	0				5.4	-		-5.4		1284.7	π	0	0	1,654,096 393,546
581	327		160°10'	-136°	2.0	88°40'	+7.6	+5.6		1295.7	TP	-273	+180	1,653,823 393,726
581	327				1.1	88°50'	+6.7	+5.6			TP			
	330		316°50'±180°	-136°	+5.7	-		+5.7	1301.4		BS	-181	+276	
	330				+7.3	TH	-1.7	+5.6			BS			
582	0				5.4	-		-5.4		1296.0	π	0	0	1,653,642 394,002
583	333		155°39'	-136°	15.0	-		-15.0		1286.4	TP	-263	+205	1,653,379 394,207
583	333				13.3	BH	-1.7	-15.0			TP			
	333		5°01'±180°	-136°	+13.1	-		+13.1	1299.5		BS	-329	+50	
	333				+11.4	BH	+1.7	+13.1			BS			

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE			
9-18-81		G. Cotcamp		D. Harris		6834		[initials]		10	49			
AREA		TOPO MAP		STATE		COUNTY		RANGE	PPM	PARTY MANAGER				
New England		Sylvan Falls		New York		St. Lawrence				L. Davis				
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									1299.5					
584	0				5.4	-		-5.4		1294.1	π	0	0	1,653,050 394,257
585	330		185° 16'	-13.6°	1.2	-		-1.2		1298.3		-327	+48	1,652,723 394,305
586	660		"	"	6.5	89°-	+11.5	+5.0		1304.5		-653	+96	1,652,397 394,353
587	990		185° 16'	-13.6°	8.1	89°-	+17.3	+9.2		1308.7	TP	-979	+143	1,652,071 394,400
587	990				4.0	89° 14'	+13.2	+9.2			TP			
	660		1° 53' +180°	-13.6°	+4.1	89°-	-11.5	-7.4		1301.3	BS	-646	+134	
	660				+1.0	89° 16'	-8.4	-7.4			BS			
588	330		358° 47'	-13.6°	2.7	-		-2.7		1298.6		+319	-84	1,651,744 394,450
589	0				5.4	-		-5.4		1295.9	π	0	0	1,651,425 394,534
590	330		151° 14'	-13.6°	5.9	-		-5.9		1295.4		-244	+222	1,651,181 394,756
591	659		146° 11'	-13.6°	13.9	84	-3.3	-17.2		1284.1	TP	-446	+485	1,650,979 395,019
591	659				14.6	90° 14'	-2.7	-17.3			TP			
	336		326° 50' -180°	-13.6°	+4.4	86°-	-23.4	-19.0		1265.1	BS	-230	+244	
	336				+5.0	85° 54'	-24.0	-19.0			BS			
592	0				5.4	-		-5.4		1259.7	π	0	0	1,650,749 395,263
593	332		201° 22'	-13.6°	14.0	90° 34'	-3.3	-17.3		1247.8	TP	-329	-45	1,650,420 395,218
593	332				13.4	90° 40'	-3.9	-17.3			TP			
	333		53° 33' +180°	-13.6°	+14.6	91° 20'	+7.7	+22.3		1270.1	BS	-255	-214	
	333				+12.7	91° 40'	+9.7	+22.4			BS			
594	0				5.4	-		-5.4		1264.7	π	0	0	1,650,165 395,004

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
9-18-81		G. Cotcamp		D. Harris		6834		G.W.C. G.W.C.		10	50					
AREA		TOPO MAP		STATE		COUNTY		RANGE		PPM		PARTY MANAGER				
New England		Sylvan Falls		New York		St. Lawrence						L. Davis				
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									1270.1							
1E	71		232°21'	-13.6°	8.1	-	-	8.1		1262.0		-55	-44	1,650,110	394,960	1,650,110 + 394,960 T-rd (east)
II	116		216°56'	-13.6°	9.4	-	-	-9.4		1260.7		-107	-46	1,650,058	394,958	horiz. corrad.
595	330		237°31'	-13.2°	14.5	0H	-1.7	-16.2			TP	-236+2	-231	1,649,931	394,723	y = +17 x = +51
595	330				14.6	90°16'	-1.5	-16.1		1254.0	TP					
	984		57°26' +180°	-13.2°	+10.5	0H	+4.9	+15.4	1269.4		BS	-705+2	-686			
	984				+13.6	90°06'	+1.7	+15.3			BS					
596	655		57°16'	-13.2°	10.8	91°20'	-15.2	-26.0		1243.4		+471	+456	1,649,699	394,543	
597	328		53°12'	-13.2°	11.7	91°20'	-7.6	-19.3		1250.1		+251	+211	1,649,479	394,298	
598	0				5.4	-	-	-5.4		1264.0	TP	0	0	1,649,228	394,087	
599	330		193°53'	-13.2°	5.6	88°-	+11.5	+5.9		1275.3		-330	-4	1,648,898	394,083	
600	658		188°38'	-13.2°	3.4	88°-	+23.0	+19.6		1289.0		-656	+52	1,648,572	394,139	
601	982		186°38'	-13.2°	8.5	88°-	+34.3	+25.8		1295.2	TP	-975+2	+112	1,648,255	394,199	
601	982				6.2	88°08'	+32.0	+25.8			TP					
	990		4°34' +180°	-13.2°	+10.4	0H	+5.0	+15.4	1310.6		BS	-979+2	+149			
	990				+14.3	90°04'	+1.1	+15.4			BS					
602	660		4°34'	-13.2°	12.7	0H	-3.3	-16.0		1294.6		+653	-99	1,647,931	394,249	
603	330		" "	"	12.7	-	-	-12.7		1297.9		+326	-50	1,647,604	394,298	
604	0				5.4	-	-	-5.4		1305.2	TP	0	0	1,647,278	394,348	
605	330		185°55'	-13.2°	6.1	-	-	-6.1		1304.5		-327	+42	1,646,951	394,390	
606	660		" "	"	11.3 9.8	-	-	-11.3		1299.3		-655	+84	1,646,623	394,432	

Geosource Inc.

DATE		INSTRUMENT MAN			ROD MAN			PARTY NUMBER		NOTES CHECKED BY			LINE NO.	PAGE		
9-21-81		G. Cotcamp			D. Harris			6834		GWC			10	51		
AREA		TOPO MAP		STATE	COUNTY			TWP	RANGE	PPM	PARTY MANAGER					
New England		Sylvan Falls		New York	St. Lawrence						L. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
									1310.6							
607	990		185° 55'	-13.2°	13.6	-	-	13.6		1297.0		-982	+126	1,646,296	394,474	
608	1320		185° 03'	-13.2°	8.7	04	-6.6	-15.3		1295.3	TP	-1307+2	+187	1,645,973	394,535	
608	1320				13.8	90° 04'	1.5	-15.3			TP					
	340		27° 04' +180°	-13.2°	+3.1	-	-	3.1	1298.4		BS	-330+2	-81			
	340				+4.8	TH	-1.7	+3.1			BS					
609	0				5.4	-	-	5.4		1293.0	X	0	0	1,645,645	394,454	
610	330		212° 44'	-13.2°	12.1	-	-	2.1		1296.3		-311	-110	1,645,334	394,344	
611	660		212° 44'	-13.2°	2.0	TH	+3.3	+1.3		1299.7	TP	-622+2	-221	1,645,025	394,233	
611	660				2.1	89° 42'	+3.5	+1.4			TP					
	324		17° 32' +180°	-13.2°	+6.8	-	-	6.8	1306.5		BS	-323+2	-24			
	324				+5.2	04	+1.6	+6.8			BS					
611	122		10° 0'	-13.2°	6.2	-	-	6.2		1300.3		+122	-7	1,644,826	394,202	1,644,835 + 394,185 trail (west)
612	0				5.4	-	-	5.4		1301.1	X	0	0	1,644,704	394,209	
613	330		165° 0'	-13.2°	3.8	-	-	3.8		1302.7		-291	+156	1,644,913	394,365	
614	662		162° 39'	-12.8°	0.6	-	-	0.6		1305.9	TP	-572+2	+333	1,644,134	394,542	
614	662				3.9	TH	+3.3	-0.6			TP					
	1320		6° 00' 48" +180°	-12.8°	+11.7	04	+6.6	+18.3	1324.2		BS	-1311+2	+156			
	1320				+14.4	90° 10'	+3.8	+18.2			BS					
615	990		6° 01'	-12.8°	13.3	-	-	13.3		1310.9		+983	-117	1,643,808	394,581	
616	660		" "		12.0	-	-	12.0		1312.2		+655	-78	1,643,480	394,620	

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
9-21-81		G. Cotcamp		D. Harris		6834		Gvc. Gvc.		10	52				
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
New England		Sylvan Falls	New York	St. Lawrence					L. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									1324.2						
617	330		6°01'	-128°	10.0	-	-	10.0		1314.2		+328	-39	1,643,153	394,659
618	0				5.4	-	-	5.4		1318.8	π	0	0	1,642,825	394,698
619	330		187°0'	-128°	4.9	-	-	4.9		1319.3		-328	+33	1,642,497	394,731
620	660		" "	"	5.5	-	-	5.5		1318.7		-657	+67	1,642,168	394,765
621	990		185°40'	-128°	6.1	-	-	6.1		1318.1	TP	-982+2	+123	1,641,845	394,821
621	990				11.1	TH	+5.0	6.1			TP				
	420		29°28'+180°	-128°	+6.9	-	+6.9	6.9	1325.0		BS	-402+2	-120		
	420				+5.9	90°8'	+1.0	6.9			BS				
622	90		29°28'	-128°	2.8	-	-	2.8		1322.2		+86	+26	1,641,531	394,727
π	0				5.4	-	-	5.4		1319.6	π	0	0	1,641,445	394,701
623	256		250°21'	-128°	12.8	BH	-1.3	14.1		1310.9		-137	-216	1,641,308	394,485
624	586		250°21'	-128°	13.8	BH	-2.9	16.7		1308.3	TP	-314+2	-495	1,641,133	394,206
624	586				14.3	90°14'	-2.4	16.7			TP				
	330		61°06'+180°	-128°	+2.9	89°-	-5.8	2.9	1305.4		BS	-219+2	-246		
	330				+0.9	89°20'	-3.8	2.9			BS				
625	0				5.4	-	-	5.4		1300.0	π	0	0	1,640,916	393,960
626	330		258°21'	-128°	10.2	91°-	-5.8	16.0		1289.4		-137	-300	1,640,779	393,660
627	658		258°21'	-128°	11.2	91°-	-11.5	22.7		1282.7	TP	-272+2	-599	1,640,646	393,361
627	658				14.2	90°44'	-8.4	22.6			TP				

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE			
9-25-81		G. Cotcamp		D. Harris		6834		G.C. Guc		10	53			
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER					
New England		Sylvan Falls/Carry Falls Reservoir	New York	St. Lawrence					L. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
627										1282.7				
	320		36° 23' +180°	-12.8°	+14.1	8H	+1.6	+15.7	1298.4		BS	-293+1	-128	
	320				+14.2	90° 16'	+1.5	+15.7			BS			↑
628	0				5.4	-		-5.4		1293.0	π	0	0	1,640,354 393,233 Sylvan Falls Quad.
629	330		209° 30'	-12.8°	4.5	-		-4.5		1293.9	TP	-316	-75	1,640,038 393,138 Carry Falls Reservoir
629	330				6.2	TH	+1.7	-4.5			TP			↓
	990		41° 22' +180°	-12.8°	+9.1	91° 24'	+24.2	+33.3	1327.2		BS	-869	-473	
	990				+2.7	91° 46'	+30.5	+33.2			BS			
630	660		39° 38'	-12.8°	13.0	91° -	-11.5	-24.5		1302.7		+589	+298	1,639,758 392,963
631	330		" "	"	11.2	91° -	-5.8	-17.0		1310.2		+294	+149	1,639,463 392,814
≠	109		43° 28'	-12.8°	7.6	-		-7.6		1319.6		+94	+56	1,639,263 392,721 trail (west)
632	0				5.4	-		-5.4		1321.8	π	0	0	1,639,169 392,665
633	328		212° 50'	-12.8°	5.6	-		-5.6		1321.6	TP	-308	-112	1,638,861 392,553
633	328				7.2	TH	+1.6	-5.6			TP			
	1650		8° 20' 54' +180°	-12.5°	+13.2	91° 08'	+32.6	+45.8	1367.4		BS	-1645	+119	
	1650				+11.2	91° 12'	+34.6	+45.8			BS			
634	1320		8° 0'	-12.5°	10.3	91° 30'	-34.5	-44.8		1322.6		+1316	-104	1,638,532 392,568
635	990		" "	"	8.2	92° -	-34.5	-42.7		1324.7		+987	-78	1,638,203 392,594
636	660		" "	"	10.7	92° 20'	-26.8	-37.5		1329.9		+658	-52	1,637,874 392,620
637	330		" "	"	11.2	92° -	-11.5	-22.7		1344.7		+329	-26	1,637,545 392,646
638	0				5.4	-		-5.4		1362.0	π	0	0	1,637,216 392,672

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE		
9-26-81		G. Cotcamp		D. Harris		6834		GWC		10		54		
AREA		TOPO MAP		STATE		COUNTY		RANGE		PPM		PARTY MANAGER		
New England		Cary Falls Reservoir		New York		St. Lawrence						L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									1367.4					
639	330		187°42'	-12.5°	3.2	89°-	+5.8	+2.6		1370.0		-329	+28	1,636,887 392,700
640	660		187°42'	-12.5°	12.8	89°-	+11.5	-1.3		1366.1	TP	-658	+55	1,636,558 392,727
640	660				9.0	89°20'	+7.7	-1.3			TP			
	330		6°11' +180°	-12.5°	+4.1	88°-	-11.5	-7.4	1358.7		BS	-328	+36	
	330				+2.1	88°20'	9.6	-7.5			BS			
BM	190		359°34'	-12.5°	4.9	87°40'	+7.7	+2.8		1361.5		+185	-43	1,636,415 392,720 USCGS ELEV 1212 1942 1362
641	0				5.4	-		5.4		1353.3	π	0	0	1,636,230 392,763
IF	143		192°13'	-12.5°	13.5	91°-	-2.5	-16.0		1342.7		-143	+1	1,636,087 392,764 T-rd (east)
642	330		189°0'	-12.5°	12.9	93°-	-17.2	-30.1		1328.6		-329	+20	1,635,901 392,783
643	665	664.0	188°46'	-12.5°	8.8	93°-	-34.8	-43.6		1315.1	TP	-663	+43	1,635,567 392,806
643	665				14.2	92°32'	-29.4	-43.6			TP			
	1320		6°49'18" +180°	-12.5°	+8.7	90°30'	+11.5	+20.2			BS	-1313	+131	
	1320				+5.7	90°38'	+14.6	+20.3	1335.4		BS			
644	990		6°49'	-12.5°	2.6	91°-	-17.3	-19.9		1315.5		+985	-98	1,635,239 392,839
645	660		" "	"	11.9	04	-3.3	-15.2		1320.2		+657	-65	1,634,911 392,872
646	330		" "	"	8.8	-		-8.8		1326.6		+328	-33	1,634,582 392,904
647	0				5.4	-		-5.4		1330.0	π	0	0	1,634,254 392,937
648	330		192°19'	-12.5°	10.6	93°-	-17.2	-27.8		1307.6		-330	+1	1,633,924 392,938
649	669		190°56'	-12.5°	11.0	93°-	-35.0	-46.0		1289.4	TP	-668	+18	1,633,586 392,955
649	669				14.1	92°44'	-31.9	-46.0			TP			

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE		
9-26-81		G. Cotcamp		D. Harris		6834		GWC GWC		10		55		
AREA		TOPO MAP		STATE		COUNTY		RANGE		PPM		PARTY MANAGER		
New England		Carry Falls Reservoir		New York		St. Lawrence						L. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
649										1289.4				
	330		13°54' +180°	-12.5°	+12.0	91°-	+5.8	+17.8	1307.2		BS	-320	-8	
	330				+14.5	90°34'	+3.3	+17.8			BS			
650	260		12°0'	-12.5°	15.0	84°	-1.3	-16.3		1290.9		+260	-2	1,633,516 392,945 Trail (west) el 1292.
650	0				5.4	-	-	-5.4		1301.8	TP	0	0	1,633,256 392,947
651	333		219°30'	-12.5°	6.1	88°30'	+8.7	+2.6		1309.8	TP	-297	-151	1,632,959 392,796
651	333				9.0	88°-	+11.6	+2.6			TP			
	1320		47°21' +180°	-12.5°	+7.9	-	-	+7.9	1317.7		BS	-1083	-754+1	
	1320				+14.5	TH	-6.6	+7.9			BS			
652	990		47° 21'	-12.5°	10.5	-	-	-10.5		1307.2		+812	+566	1,632,688 392,609
653	660		" "	"	4.2	-	-	-4.2		1313.5		+542	+377	1,632,418 392,420
654	330		" "	"	3.8	-	-	-3.8		1313.9		+271	+189	1,632,147 392,282
655	0				5.4	-	-	-5.4		1312.3	TP	0	0	1,631,876 392,043
656	330		227°23'	-12.5°	9.3	-	-	-9.3		1308.4		-271	-189	1,631,605 391,854
657	660		" "	"	12.9	91°-	-11.5	-24.4		1293.3		-541	-377	1,631,335 391,666
IF	739		227°13'	-12.5°	13.7	91°-	-12.9	-26.6		1291.1		-607	-421	1,631,269 391,622 T-rd. (west)
658	990		227°23'	-12.5°	13.9	91°-	-17.3	-31.2		1286.5		-812	-566	1,631,064 391,477
659	1320		227°23'16"	-12.5°	12.7	91°-	-23.0	-35.7		1282.0	TP	-1083	-755+2	1,630,793 391,290
659	1320				8.8	91°10'	-26.9	-35.7			TP			
	328		24°50' +180°	-12.5°	+1.5	TH	-1.6	-0.1			BS	-320	-70.2	
	328				+2.7	89°30'	-2.9	-0.2	1281.8		BS			

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
9-26-81		G. Cotcamp		D. Harris		6834		GWC GWC		10	56					
AREA		TOPO MAP	STATE	COUNTY		TWP		RANGE	PPM	PARTY MANAGER						
New England		Carry Falls Reservoir	New York	St. Lawrence						L. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
									1281.8						↑	
660	0				5.4	-		-5.4		1276.4	π	0	0	1,630,473	391,222	Carry Falls Reservoir
661	330		193° 16'	-12.5°	8.4	-		-8.4		1273.4		-330	-4	1,630,143	391,218	Stark Quad.
662	660		" "	"	9.3	-		-9.3		1272.5		-660	-9	1,629,813	391,213	↓
663	990		" "	"	3.5	TH	+5.0	+1.5		1283.3		-990	-13	1,629,483	391,209	
#1	1020		192° 47'	-12.5°	2.6	TH	+5.1	+2.5		1284.3		-1020	-5	1,629,453	391,217	1,629,440 + 391,195 Trod (west) el. 1285.
664	1320		193° 15' 36"	-12.5°	10.8	89° -	+23.0	+12.2		1294.0	TP	-1320	-18.2	1,629,153	391,206	
664	1320				5.5	89° 14'	+17.7	+12.2			TP					
	990		13° 14' +180°	-12.5°	+9.8	89° 38'	-6.3	+3.5	1297.5		BS	-990	-13+2			
	990				+12.0	89° 30'	-8.6	+3.4			BS					
665	660		13° 14'	-12.5°	4.1	89° 30'	+5.8	+1.7		1299.2		+660	+8	1,628,823	391,203	
666	330		" "	"	1.0	89° 30'	+2.9	+1.9		1299.4		+330	+4	1,628,493	391,199	
667	0				5.4	-		-5.4		1292.1	π	0	0	1,628,163	391,195	
668	330		209° 08'	-12.5°	11.4	91° -	-5.8	-17.2		1280.3		-316	-94	1,627,847	391,101	
669	660		" "	"	4.3	92° -	-23.0	-27.3		1270.2		-632	-189	1,627,531	391,006	
670	990		" "	"	9.2	91° 30'	-25.9	-35.1		1262.4		-949	-283	1,627,214	390,912	
671	1320		209° 07' 32"	-12.5°	8.1	91° -	-23.0	-31.1		1266.4	TP	-1265	-378+2	1,626,898	390,819	
671	1320				12.7	90° 48'	-18.4	-31.1			TP					
	990		31° 03' +180°	-12.5°	+11.3	TH	-5.0	+6.3	1272.7		BS	-939	-315+2			
	990				+9.8	89° 48'	-3.5	+6.3			BS					
672	660		32° 0'	-12.5°	4.7	-		-4.7		1268.0		+622	+220	1,626,581	390,726	

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
9-26-81		G. Cotcamp		D. Harris		6834		G.W.C. G.W.C.		10	57				
AREA		TOPO MAP		STATE		COUNTY		RANGE		PPM		PARTY MANAGER			
New England		Corry Falls Reservoir		New York		St. Lawrence						L. Davis			
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									1272.7						
673	330		32° 0'	-12.5°	4.7	-	-4.7		1268.0			+311	+110	1626,270	390,616
674	0				5.4	-	-5.4		1267.3	π		0	0	1625,959	390,506
675	330		227° 0'	-12.5°	6.1	-	-6.1		1266.6			-272	-187	1625,687	390,319
IF	550		225° 55'	-12.5°	8.0	-	-8.0		1264.7	TP		-459	-303.2	1625500	390,205
IF	550				5.2	OH	-2.8	-8.0			TP				
	740	739.0	322° 47' -180°	-12.5°	+11.1	92° -	+38.7	+49.8	1314.5		BS	-478	+564.2		
	740				+13.7	92° 48'	+36.1	+49.8			BS				dirt road (private)
676	660		321° 37'	-12.5°	13.8	93° -	-34.5	-48.3	1266.2			+416	-512	1625,438	390,259
677	330		" "	"	9.8	92° -	-11.5	-21.3	1293.2			+208	-256	1625,230	390,515
678	0				5.4	-	-5.4		1309.1	π		0	0	1625,022	390,771
679	330		140° 39'	-12.5°	5.3	-	-5.3		1309.2			-204	+260	1624,818	391,031
680	660		" "	"	5.2	-	-5.2		1309.3			-408	+519	1624,614	391,290
681	982		136° 46' 30"	-12.5°	13.6	88° 46'	+21.1	+7.5	1322.0	TP		-553	+811.2	1624,469	391,584
681	982				12.5	88° 50'	+20.0	+7.5			TP				
	993	991.2	278° 09' -180°	-12.5°	+11.1	93° 30'	+60.5	+71.6	1393.6		BS	+75	+988.2		
	993				+14.0	93° 20'	+57.6	+71.6			BS				
682	660		278° 09'	-12.5°	12.8	93° -	-34.5	-47.3	1346.3			-50	-658	1624,494	391,916
683	330		" "	"	9.1	94° -	-23.0	-32.1	1361.5			-25	-329	1624,519	392,245
684	0				5.4	-	-5.4		1388.2	π		0	0	1624,544	392,574
∞	96		102° 34'	-12.5°	1.7	88° -	+3.3	+1.6	1395.2			+ -0	+96	1624,544	392,670

Temporary End of line  
last station on paved rd.  
1625,500 390,205  
T-rd (east) el. 1265.5