

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

1 OF 55

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE			
9/5/80		G. Cotcamp		G. Litzinger		5287		SM rdm		88	11			
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER			
New York		Cranberry Lake 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 A TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
BM				-13°30'						1451.0	R			1451.0 TR U.S.G.S. 1954
	230		280°26'-180°	-13.5°	+0.4	89°30'	-2.0	-1.6	1449.4		BS	+12	+230	
	230				+2.4	89°	-4.0	-1.6			BS			
IL	270		272°55'	-13.5°	3.4	-		-3.4		1446.0		-50	+265-2	1,538,220 361,510 T-rd(north)
1	320		149°15'	-13.5°	5.9	-		-5.9		1443.5		-229	+223	1,538,041 362,000 curve
2	0				5.4	-		-5.4		1444.0	A	0	0	1,538,210 361,777
3	323		272°21'	-13.5°	4.6	-		-4.6		1444.8	TP	-62	-317-2	1,538,208 361,488
3	323				3.0	BH	-1.6	-4.6			TP			
	660		81°5'+180°	-13.5°	+13.8	-		+13.8	1458.4		BS	-252	-610-2	
	660				+10.5	BH	+3.3	+13.8			BS			
4	330		31°45.5'	-13.5°	11.3	91°	-5.8	-17.1		1441.5		+122	+307	1,538,078 361,153
5	0				5.4	-		-5.4		1453.2	A	0	0	1,537,954 360,846
6	328		274°15'	-13.5°	5.2	87°	+17.1	+11.9		1470.5	TP	-53	+329-2	1,537,903 360,520
6	328				2.3	87°30'	+14.3	+12.0			TP			
	328		107°21.5'+180°	-13.5°	+13.4	93°	+17.1	+30.5	1501.0		BS	+22	-327-2	
	328				+12.4	93°10'	+18.1	+30.5			BS			
7	0				5.4	-		-5.4		1495.6	A	0	0	1,537,925 360,191 A-opposite sta.
8	330		307°55.3'	-13.5°	2.9	-		-2.9		1498.1		+136	-300	1,538,061 359,891
9	662		309°51'	-13.5°	4.4	-		-4.4		1496.6		+294	-593	1,538,219 359,598
10	995		307°55.3'	-13.5°	4.7	TH	+5.0	+0.3		1501.3	TP	+411	-906-2	1,538,336 359,283
10	995				5.5	29°40'	+5.8	+0.3			TP			

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DATE 9/5/80	INSTRUMENT MAN G. Cotcamp	ROD MAN G. Litzinger	PARTY NUMBER 6839	NOTES CHECKED BY BHL	LINE NO. 88	PAGE 22
AREA New York	TOPO MAP Cranberry Lake/Newton Falls	STATE New York	COUNTY St. Lawrence	TWP	RANGE	PPM
PARTY MANAGER L Davis						

STATION NO.	SLOPE DISTANCE	PLOT DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
10										1501.3				
	330		108°32'+180°	-13.5°	+3.8	-		+3.8	1505.1		BS	+29	-329.2	
	330				+5.5	TH	-1.7	+3.8			BS			
11	0				5.4	-		-5.4		1499.7	X	0	0	1,538,365 358,952
12	330		304°19'	-13.5°	5.8	-		-5.8		1499.3	TP	+117	-308	1,538,482 358,644 T.P. opposite station
12	330				4.2	BH	-1.7	-5.9			TP			
	660		170°46'+180°	-13.5°	+2.2	89°40'	-3.8	+4.4	1503.7		BS	+609	-255	
	660				+9.5	89°32'	-5.4	+4.1			BS			
13	330		164°14'	-13.5°	5.6	89°30'	+2.9	-2.7		1501.0		-288	+161	1,538,803 358,536
14	0				5.4	-		-5.4		1498.3	X	0	0	1,538,091 358,389
15	330		351°12.5'	-13.5°	7.9	92°-	-11.5	-19.4		1484.3	TP	+305	-125	1,539,294 358,364
15	330				13.6	91°-	-5.8	-19.4			TP			
	320		186°24'+180°		+3.4	87°10'	-15.8	-12.4	1471.9		BS	+185	-261	
	320		138°45'+180°	-13.5°	+1.5	87°30'	-13.9	-12.4			BS			
16	0				5.4	-		-5.4		1466.5	X	0	0	1,535,581 358,563 Cranberry Lake Quad.
17	330		318°40'		1.1	-		-1.1		1470.8	TP	+195	-266	1,539,776 357,737 Newton Falls Quad.
17	330		319°40'	-13.5°	2.8	TH	+1.7	-1.1			TP			
	330		168°52.6'+180°	-13.5°	+9.8	92°-	+11.5	+21.3	1492.1		BS	+300	-127	
	330				+6.9	92°30'	+14.4	+21.3			BS			
18	0				5.4	-		-5.4		1486.7	X	0	0	1,540,976 357,600

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DATE 9/5/80	INSTRUMENT MAN F Cotcamp	ROD MAN J Litzinger	PARTY NUMBER 6834	NOTES CHECKED BY Shl skw	LINE NO. 8	PAGE 33
AREA New York	TOPO MAP Newton 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.	
									1492.1					
19	327		355°19'	-13.5°	9.5	89°	+5.7	-3.8		1488.3	TP	+311	-102	1540.587 357.498
19	327				8.5	89°10'	+4.8	-3.7			TP			
	330		164°24'+180°	-13.5°	+11.5	-		+11.5	1499.8		BS	+288	-160	
	330				+13.2	74	-1.7	+11.5			BS			
20	0				5.4	-		-5.4		1494.4	X	0	0	1540.675 357.738
21	330		334°34'	-13.5°	11.8	91°	-5.8	-17.6		1482.2		+257	-207	1540.932 357.131
BM	473		335° -	-13.5°	13.6	91°	-8.3	-21.9		1477.9		+370	-294	1540.043 357.044 el. 1478. USGS 2 MEA 1966
22	660		334°34'	-13.5°	6.2	92°	-23.0	-29.2		1470.6	TP	+513	-415	1541.888 356.923
22	660				4.3	92°10'	-74.9	-29.2			TP			
	330	329	170°25'+180°	-13.5°	+8.8	85°30'	-25.8	-17.0	1453.6		BS	+303	-129	
	330				+9.8	85°20'	-26.8	-17.0			BS			
23	0				5.4	-		-5.4		1448.2	X	0	0	1541.491 356.794
24	330		1°24'	-13.5°	3.5	93°	-17.2	-20.7		1432.9	TP	+323	-69	1541.814 356.725
24	330				9.3	92°	-11.5	-20.8			TP			
	330		202°47'+180°	-13.5°	+4.4	-		+4.4	1437.3		BS	+326	-53	
	330				+2.7	84	+1.7	+4.4			BS			
25	0				5.4	-		-5.4		1431.9	X	0	0	1542.140 356.778
26	330		32°47°	-13.5°	5.0	-		-5.0		1432.3		+311	-139	1542.451 356.887
27	660		32°47°	-13.5°	7.0	-		-7.0		1430.3	TP	+623	+218	1542.763 356.976
27	660				3.7	84	-3.3	-7.0			TP			

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Geosource Inc.

DATE 9/5/80	INSTRUMENT MAN G. Cotcamp	ROD MAN G. L. Tzinger	PARTY NUMBER 6837	NOTES CHECKED BY BHW rlu	LINE NO. 8	PAGE 4
AREA New York	TOPO MAP Newton 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.	
27										1430.3				
	325		195° 14' - 120°	-13.5°	+3.0	BH	+1.6	+4.4	1434.9		BS	+325	+110	
	325				+4.7	-	-	+4.7		BS				
28	0				5.4	-		-5.4		1429.5	X	0	0	1543688 957006
29	324		351° 5'	-13.5°	1.0	TH	+1.6	+0.6		14337.5	TP	+300	-124	1543888 356,882
29	324				1.3	89° 40'	+1.9	+0.6			TP			
	313		139° 46' + 180°	-13.5°	+9.9	-		+16.9	1446.4		BS	+185	-252	
	313				+9.4	BH	+1.6	+11.0		BS				
30	0				5.4	-		5.4		1441.0	X	0	0	1549523 316,230
31	339		305° 41'	-13.5°	9.7	87° 30'	+14.8	+5.1		1451.5	TP	+128	-314	1543701 356,516 T.P. opposite sta.
31	339				11.7	87° 10'	+16.7	+5.0			TP			
	998		188° 52' - 180°	-13.5°	+9.2	-		+9.2	1460.7		BS	+995	-81	
	998				+4.2	BH	+5.0	+9.2		BS				
32	660		188° 52'	-13.5°	11.8	90° 30'	-5.8	-17.6		1443.1		-658	+53	1544038 356,098
33	330		" "	" "	12.0	91° -	-5.8	-17.8		1442.9		-329	+27	1544367 356,362
34	0				5.4	-		-5.4		1455.3	X	0	0	1544696 356,225
35	330		-6° 25'		9.1									
35	311		5° 40'	-13.5°	8.6	-		-8.6		1452.1		+308	-42	1545004 356,193 T.P. (east)
35	330		6° 43.5'	-13.8°	9.9	-		-9.9		1450.8	TP	+327	-41-3	1545023 356,191
35	330				8.3	BH	-1.7	-10.0			TP			

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DATE 9/5/80	INSTRUMENT MAN G. Cutcamp	ROD MAN G. Litzinger	PARTY NUMBER 6837	NOTES CHECKED BY Skl	LINE NO 88	PAGE 5
AREA New York	TOPO MAP Newton 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.	
35										1450.8				
	328		170°28' +180°	-13.8°	+9.9	92°	+11.4	+21.3	1472.1		BS	+301	-130-3	
	328				+128	91°30'	+8.6	+21.4			BS			
36	0				5.4	-		-5.4		1466.7	X	0	0	1545.524 356.258
37	330		328°52'	-13.8°	2.0	89°	+5.8	+3.8		1475.9		+234	-233	1545.589 356.225
38	660		328°52'	-13.8°	12.6	89°	+11.5	-1.1		1471.0	TP	+467	-466-3	1545.771 356.187
38	660				10.6	89°10'	+9.6	-1.0			TP			
	664		169°49' +180°	-13.8°	+133	90°40'	+7.7	+21.0	1492.0		BS	+581	-322-3	
	664				+114	90°50'	+9.7	+21.1			BS			
39	332		169°49'	-13.8°	128	92°	-11.6	-21.4		1467.6		-290	+161	1546.082 356.212
40	70		169°45'	-13.8°	5.2	-		-5.2		1486.8		-64	+28	1546.308 356.252 T-rd (west)
40	0				5.4	-		-5.4		1486.6	X	0	0	1546.372 356.244 X-opposite station
41	330		15°42'	-13.8°	3.2	-		-3.2		1488.8		-330	+11	1546.702 356.216
42	660		" "	"	0.5	-		-0.5		1491.5		+660	+22	1547.032 356.216
43	990		15°42'	-13.8°	1.3	-		-1.3		1490.7	TP	+989	+33-4	1547.361 356.222
43	990				6.3	TH	+5.0	-1.3			TP			
	660		199°30' +180°	-13.8°	+43	-		+4.3	1495.0		BS	+657	+66-4	
	660				+7.6	TH	-3.3	+4.3			BS			
44	...		199°30'	-13.8°	2.8	-		-2.8		1492.2		-328	-33	1547.690 356.222
45	...				5.4	-		-5.4		1489.6	X	0	0	1548.018 356.222 X-opposite sta.

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DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9/5/80		C. Cat. Camp		C. Cat. Camp		3027		SLL New		8	6						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New York		Newton Falls/Tooley		New York	St. Lawrence					L. Davis							
STATION NO.	SLOPE DISTANCE	PLOT DISTANCE	AZIMUTH FROM MAGNETIC NORTH	POND 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		
									14957.0								
46	332		32°51'	-13.8°	1.0	-		-1.0		1494.0	TP	+319	+108.4	1548,332	355,459		
46	332				2.6	TH	+1.7	-0.9			TP						
	660		217°49'-180°	-13.8°	+9.0	-		+9.0	1503.0		BS	+603	+269.4				
	660		212°38'		+10.8	89°50'	-1.9	+8.9			BS						
47	330		213°38'	-13.8°	6.1	-		-4.1		1496.9		-310	-112	1548,625	355,612	↑	
48	0				5.4	-		-5.4		1492.6	TP	0	0	1548,935	355,724	Newton Falls	
49	330		20°...	-13.8°	4.7	88°-	+11.5	+6.8		1509.8	TP	+317	+93.4	1549,252	355,813	Tooley Pond	
49	330				1.8	88°30'	+8.6	+6.8			TP						↓
	330		193°29'-180°	-13.8°	+10.5	91°-	+5.8	+18.4	1528.2		BS	+330	-2.4				
	330				+10.7	91°20'	+7.7	+18.4			BS						
50	0				5.4	-		-5.4		1522.8	TP	0	0	1549,582	355,807		
51	322		351°48'	-13.5°	14.8	92°-	-11.4	-26.2		1502.0	TP	+309	-123.4	1549,896	355,680		
51	322				12.9	92°20'	-13.3	-26.2			TP						
	328		151°27'+180°	-13.8°	+4.9	-		+4.9	1506.9		BS	+242	-221.4				
	328				+3.2	BH	+1.6	+4.8			BS						
52	0				5.4	-		-5.4		1501.5	TP	0	0	1530,128	355,455		
53	330		322°3'	-13.8°	2.3	-		-2.3		1504.6	TP	+204	-259.4	1540,332	355,192		
53	330				4.0	TH	+1.7	-2.3			TP						
	330		147°6'+180°	-13.8°	+5.8	-		+5.8	1510.4		BS	+226	-290.4				
	330				+4.2	BS	+1.7	+5.9			BS						

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DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9/5/80		G. Co. camp		G. Co. camp		6834		All		8	7						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New York		Newton 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		
									1570.4								
54	0				5.4	-		-5.4		1505.0	T	0	0	1550,558	354,948	T-opposite sta.	
55	330		351°55'	-13.8°	10.0	-		-10.0		1500.4		+306	-123	1530,964	354,825		
56	660		351°55'	-13.8°	4.3	-		-4.3		1506.1	TP	+612	-246.4	1551,170	354,099		
56	660				7.6	TH	+3.3	-4.3			TP						
	320		145°22' + 180°	-13.8°	+13.9	91°-	+5.8	+19.2	1525.3		BS	+290	-157.4				
	330				+10.5	91°30'	+8.6	+19.1			BS						
57	0				5.4	-		-5.4		1519.9	T	0	0	1551,460	354,537		
58	332	331	0°48'	-13.8°	6.3	86°30'	+20.2	+13.9		1539.2	TP	+323	-74.4	1551,782	354,459		
58	332				3.4	87°-	+17.4	+14.0			TP						
	330		120°49' + 180°	-13.8°	+6.4	88°-	-11.5	-5.1	1534.1		BS	+322	-74.4				
	330				+4.5	88°20'	-9.6	-5.1			BS						
59	0				5.4	-		-5.4		1528.7	T	0	0	1552,105	354,381		
60	330	329	349°24'	-13.8°	9.3	94°50'	-25.8	-35.1		1499.0		+300	-136	1552,425	354,245		
60	255	354	348°17'	-13.8°	9.5	94°50'	-27.8	-37.3		1496.8		+319	-152	1552,424	354,227	1550,405 + 354,145 T=rd(east)	
61	660	657	349°24'	-14.0°	6.3	95°50'	-46.7	-73.0		1461.0	TP	+597+3	-273-2	1552,724	354,106		
61	660				14.0	95°10'	-57.2	-73.2			TP						
	330	329	171°41' + 180°	-14.0°	+9.2	86°-	-23.0	-13.8	1447.2		BS	+304+3	-125-2				
	330				+3.4	87°-	-17.2	-13.8			BS						
62	0				EA	-		-5.4		1471.8	T	0	0	1552,012	354,779		

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DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9/5/80		G. Colcamp		D. Williams		5834		shl slw		8	8						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New York		Tooley Pond		New York	St. Lawrence					L. P. ...							
STATION NO.	SLOPE DISTANCE	PLOTTING 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.				
									1477.2								
62	312		290° 52'	-14.0°	3.5	87°	+16.6	+8.1		1455.3	TP	+232+3	-217-2	1553, 247	553760		
63	318				1.3	85° 30'	+19.4	+8.1			TP						
	560		120° 46' + 180°	-14.0°	+10.7	92°	+23.0	+33.7	1489.0		BS	+190+2	-632-2				
	660				1.2	92°	+21.1	+33.7			BS						
64	330		118° 28'	-14.0°	7.3	92°	-11.5	-18.8		1470.2		-82	+320	1553, 247	352746		
65	0				5.9	-	-	-5.4		1483.6	TP	0	0	1553, 439	352746		
TP	265		305° 29'	-14.0°	0.7	TH	+1.3	+0.6		1489.6	TP	+97+2	-291-2	1553, 558	352777	op. el. 1474	
TP	265				1.7	89° 30'	+2.3	+0.6			TP						
	151		152° 34' + 180°	-14.0°	+7.8	-	-	+7.8	1497.4		BS	+113+2	100-2				
	151				+7.1	84	+0.8	+7.9			BS						
66	80		147° 22'	-14.0°	5.1	-	-	-5.1		1492.3		-55	+58	1553, 598	352783		
TP	0				5.4	-	-	-5.4		1492.0	TP	0	0	1553, 653	352775		
67	250	249	306° 57'	-14.0°	7.6	94°	-17.4	-25.0		1472.4		+97	-229	1553, 758	352746		
68	580		306° 57'	-14.0°	6.0	92°	-20.2	-26.2		1471.2	TP	+226+2	-539-3	1553, 881	352738		
68	580				11.1	91° 30'	-15.2	-26.3			TP						
	330		128° 28' + 180°	-14.0°	+1.6	-	-	+1.6	1472.8		BS	+137+2	-300-2				
	330				+3.2	TH	-1.7	+1.5			BS						
69	0				5.4	-	-	-5.4		1467.4	TP	0	0	1554, 070	351736	horiz correct: YZ+19' XZ-95'	
IF	132		301° 54'	-14.0°	1.4	89°	+3.1	+1.7		1474.5		+55	-171	1554, 075	351765	Top el 1474	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
7/5/80		P. Colcamp		G. Litzinger		6834		SLL New		8	9						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New York		Tooley Pond		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		
									1472.8								
70	328		297°56'	-12.0°	5.2	88°30'	+8.6	+3.4		1476.2	IF	+90+4	-315+2	1554.11+	351.225		
70	328				8.0	88°-	+11.4	+3.4			IF						
	185		110°11'+180°	-12.0°	+2.2			+13.6	1489.8		BS	+26+4	-183+2				
	185				+2.2	0-	+0.9	+13.6			BS						
71	0				5.4			-5.4		1484.4	IF	0	0	1554.44	351.412	split sta. - curve	
	145		313°50'	-12.0°	1.0	86°-	+10.1	+9.1		1498.9		+76	-123	1554.220	351.319		
72	475	473	312°50'	-12.0°	7.5	85°-	+41.2	+33.7		1523.6	IF	+249+4	-402+2	1554.200	351.042		
72	475				6.2	85°10'	+39.9	+33.7			IF						
	660	659	132°25'+180°	-11.5°	+5.8	93°40'	+42.1	+44.9			BS	+406+4	-519+2				
	660				+0.8	93°50'	+44.0	+44.8	1568.3		BS						
73	330		139°35'	-11.5°	2.9	93°-	-17.2	-26.1		1542.2		-20+4	+230	1554.603	351.750		
74	0				5.4			-5.4		1562.9	IF	0	0	1554.807	351.220		
75	330		330°21'	-11.5°	0.2	TH	+1.7	+1.5		1569.8		+246	-211	1555.250	351.111		
76	660				2.1	88°-	+23.0	+19.9		1588.2		+407	-111	1555.200	351.220		
77	990	989	330°21'	-11.5°	11.9	87°-	+51.7	+39.8		1608.1	IF	+174+2	-651+2	1555.550	349.810		
77	990				6.2	87°20'	+46.0	+39.8			IF						
	330		133°18'+180°	-11.5°	+8.9			+8.9	1617.0		BS	+174+3	-280+2				
	330				+10.5	TH	-1.7	+8.8			BS						
78	0				5.4			-5.4		1611.6	IF	0	0	1555.732	349.570		
79	330		302°50'	-11.5°	0.1	88°-	+11.5	+9.4		1626.4		+152	-293	1555.014	349.305		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
7/5/80		G. Cotcamp		G. Cotcamp		6824		ML		8	10				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE	PPM	PARTY MANAGER			
New York		Tooker Pond		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
									1417.0						
80	660	659	306°11'	-2°	3.7	87°	+34.5	+30.8		1447.8	IP	+280.3	-591.2	1556.75	311.01
80	660				9.4	86°30'	+40.2	+38.8			TP				
	330		132°15' +180°	-11°	+8.2			+8.2	1456.0		BS	+200.4	-263.2		
	330				+6.5	84°	+1.7	+8.2			BS				
81	0				5.9			-5.4		1450.6	X	0	0	1556.28	348.74
82	330		324°45'	-11°	12.1		-5.8	-17.9		1438.1		+228	-238	1556.21	348.74
83	662		324°45'	-11°	12.1	92°	-23.1	-35.2		1620.8	TP	+458.13	-470.41	1556.679	347.816
83	662				14.0	91°30'	-21.2	-35.2			TP				Opposite station
	660	659	49°59' +180°	-11°	+12.5	86°20'	-42.1	-29.6	1591.2		BS	+497.13	-432		
	660				+4.8	87°	-34.5	-29.7			BS				
84	330		148°12'	-11°	2.3	87°	+17.2	+14.9		1606.1		-242	+224	1556.777	348.088
85	0				5.9			-5.4		1585.8	X	0	0	1557.109	347.924
86	330		321°47'	-11°	7.8	92°	-11.5	-19.3		1571.9		+216	-250	1557.385	347.681
87	660		321°47'	-11°	6.2	92°	-23.0	-29.2		1562.0	TP	+431.2	-500	1557.613	347.324
87	660				11.9	91°30'	-17.3	-29.2			TP				
	330	329	139°28' +180°	-11°	+5.0	86°	-23.0	-18.0	1574.1		BS	+225.3	-218		
	330				+6.1	85°30'	-23.9	-17.8	1577.9		BS				
IF	400	399	40°9'	-12°	8.7	86°	+27.8	+19.1		1563.2		-246	+244	1557.122	347.111
88	0				5.9			-5.4		1538.7	X	0	0	1557.322	347.111
89	330	329	200°50'	-12°	2.5	93°30'	-22.0	-25.5		1578.6		+229	-299	1557.000	347.111

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 9/5/80	INSTRUMENT MAN G. Cotnam	ROD MAN G. Litzinger	PARTY NUMBER 6537	NOTES CHECKED BY G.H.F.	LINE NO. 8	PAGE 111
AREA New York	TOPO MAP Tooley Pond	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	NORTH +	EAST +	COORDINATES		REMARKS
												SOUTH -	WEST -	Y	X	
												LAT.	DEP.			
									1544.1							
90	660		306°3'	-12.5°	2.0	92°	-23.0	-25.0		1579.1	TP	+219	-60.54	1558,025	346,475	
90	660				13.9	91°	-11.5	-24.9			TP					
	196		133°30'+180°	-12.5°	+5.9	-		+5.9	1525.0		BS	-101	-118.00			
	196				+5.0	84°	+1.0	+6.0			BS					
BM	140		152°8'	-12.5°	5.7	-		-5.7		1519.3		-107	+71	1558,079	346,402	EL 1579. U.S.G.S. S.M.E.A. 1966
T	0				5.4	-		-5.4		1579.6	T	0	0	1558,186	346,311	
91	134		305°13'	-12.5°	4.2	-		-4.2		1520.8		+152	-129	1558,034	346,187	
92	464		305°13'	-12.5°	2.1	74	+2.3	+0.2		1525.2	TP	+179	-125.4	1558,365	345,887	
92	459				3.8	89°30'	+4.1	+0.3			TP					
	233		139°26'+180°	-12.5°	+10.7	92°30'	+14.4	+25.1			BS	-198	-267.4			
	230				+13.5	92°	+11.5	+25.0	1550.2		BS					
73	0				5.4	-		-5.4		1544.8	T	0	0	1558,038	345,627	
74	330		324°2'	-12.5°	4.5	89°30'	+2.9	-1.6		1548.6	TP	+219	-271.4	1558,072	345,384	
94	230				1.6	-		-1.6			TP					
	230		152°20'+180°	-12.5°	+7.7	89°	-5.8	+1.9	1550.5		BS	-250	-213.4			
	330				+6.8	89°15'	-4.8	+2.0			BS					
95	0				5.4	-		-5.4		1545.1	T	0	0	1558,044	345,175	
96	330		338°3'	-12.5°	12.7	-		-12.7		1537.8	TP	-272	-187.4	1558,306	344,992	
96	330				11.0	BH	-1.7	-12.7			TP					

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 7/6/80	INSTRUMENT MAN G. Cotcamp	ROD MAN G. Litzinger	PARTY NUMBER 6837	NOTES CHECKED BY Bll	LINE NO. 8	PAGE 12
AREA New York	TOPO MAP Tooley Pond	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	NORTH +	EAST +	COORDINATES		REMARKS
												SOUTH -	WEST -	Y	X	
												LAT.	DEP.			
96										1537.4						
	212		150°52' +180°	-12.5°	+1.9	-		+1.9	1539.3		BS	+158	-141+4			
	212				+3.0	74	-1.1	+1.9			BS					
π	0				5.4	-		-5.4	1533.9		π	0	0	1,559,969	341,255	
97	114		304°4'	-12.5°	5.9	-		-5.9	1533.4			+42	-106	1,559,506	341,249	
98	444		302°44'	-12.5°	8.3	-		-8.3	1531.0		TP	+154	-417+4	1,559,318	341,212	TP opposite sta.
98	444				10.5	74	+2.2	-8.3			TP					
	330		129°12' +180°	-12.5°	+134	-		+13.4	1544.4		BS	+148	-295+4			
	330				11.7	04	+1.7	+13.4			BS					
99	0				5.4	-		-5.4	1539.0		π	0	0	1,559,766	341,111	
100	330		334°12'	-12.5°	11.8	04	-1.7	-13.5	1530.9			+259	-205	1,560,025	341,041	
TP	590		334°12'	-12.5°	124	04	-3.0	-13.4	1529.0		TP	+463	-306+4	1,560,229	341,000	
TP	590				10.2	90°30'	-5.2	-15.4			TP					
	400		121°29' +180°	-12.5°	+5.3	88°	-14.0	-8.7	1520.4		BS	+130	-378+4			
	400				+31	88°20'	-11.6	-8.5	816		BS					horiz. corr'd. y=+40' x=+65'
101	330		119°18'	-12.5°	4.9	88°	+11.5	+6.6	1527.0			-95	+316	1,560,267	341,011	1,560,330 + 343,185 trail
101	76		124°52'	-12.5°	3.0	-		-3.0	1517.4			-29	+70	1,560,330	341,000	trail
102	0				54	-		-5.4	1515.0		π	0	0	1,560,330	341,000	
103	330		304°10'	-13.0°	3.9	94°	-23.0	-26.9	1493.5			+119	-204	1,560,978	343,107	
TP	600	599	302°42'	-13.0°	1.3	93°	-31.4	-32.7	1487.7		TP	+202	-567+2	1,560,561	342,853	
TP	600				10.0	92°10'	22.7	-32.7			TP					

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445.

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
9/6/80		J. Co-samp		G. Litzinger		6834		Shl J. L. L.		8	13					
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
New York		Troyer Pond		New York	St. Lawrence					L. Paris						
STATION NO.	SLOPE DISTANCE	PLOTTING 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.			
TP										1487.7						
	390		86°10'+180°	-13°	+3.7	71°20'	+9.1	+12.8	1500.5		BS	-113	-373+2			
	390				+2.5	71°30'	+10.2	+12.7			BS					
104	330		83°52'	-13°	7.5	91°-	-5.8	-13.3		1487.2		+108	+312	1560,556	342,774	
105	0				5.4	-		-5.4		1495.1	X	0	0	1560,448	342,482	
106	332		273°10'	-13°	14.9	84°	-1.7	-16.1		1484.4	TP	-57	-327+2	1560,391	342,157	TP opposite to...
106	332				13.2	90°30'	-2.9	-16.1			TP					
	336	335	119°54'+180°	-13°	+5.2	86°30'	-20.5	-15.3	1469.1		BS	+97	-321			
	336				+2.2	87°-	-17.6	-15.4			BS					
GM	180	179	132°55'	-13°	10.4	84°-	+18.7	+8.3		1477.4		-89	+155	1560,399	341,991	CI 1919.3 2.566 G.M.E.A.1766
107	0				5.4	-		-5.4		1463.7	X	0	0	1560,488	341,876	
108	330		300°48'	-13°	8.2	93°-	-17.2	-25.4		1443.7		+101	-314	1560,589	341,522	
109	660	659	300°48'	-13°	13.2	93°-	-34.5	-47.7		1421.4	TP	+201	-627	1560,689	341,200	
109	660				11.3	93°10'	-36.4	-47.7			TP					
	360		102°55'+180°	-13°	+6.6	-		+6.6	1429.0		BS	+79	-655			
	360				+3.3	84°	+3.3	+6.6			BS					
	330		102°55'	-13°	12.7	91°-	-5.8	-18.5		1409.5		-40	+328	1560,728	340,882	
	0				5.4	-		-5.4		1422.6	X	0	0	1560,768	340,557	
112	230		216°22'	-13°	7.8	-		-7.8		1420.2	TP	-38	-328	1560,730	340,226	
112	230				6.1	84°	-1.7	-7.8			TP					

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
2/6/20		S. [unclear]		S. [unclear]		1227		Bill [unclear]		8	14						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New York		Tolley pond		New York	St. Lawrence					[unclear]							
STATION NO.	SLOPE DISTANCE	PLOT DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
112										1420.2							
	222		81°3' +180°	-13.0°	+13.8	-		+13.8	1434.0		BS	-83	-206				
	222				+12.7	84	+1.1	+13.8			BS						
	0				5.4	-		-5.4	1428.6		T	0	0	1560,697	340,020	sharp S-curve	
113	111		296°20'	-13°	9.2	92°-	-3.9	-13.1	1420.9			+26	-108	1560,673	339,012		
TP	265		294°8'	-13°	13.8	92°-	-9.2	-23.0	1411.0		TP	+51	-260	1560,698	339,020		
TP	265				11.5	92°50'	-11.5	-23.0			TP						
	169		85°27' +180°	-13°	+0.3	TH	-0.8	-0.5	1410.5		BS	-51	-161				
	169				+2.4	89°-	-2.9	-0.5			BS						
114	0				5.4	-		-5.4	1405.1		T	0	0	1560,697	339,020		
115	330		292°22'	-13°	11.5	92°-	-11.5	-23.0	1387.5			-210	-254	1560,437	338,045		
TP	470		293°22'	-13°	14.2	92°20'	-19.1	-33.3	1377.2		TP	-300	-762	1560,397	338,020		
TP	470				10.1	92°50'	-23.2	-33.3			TP						
	205	204	130°20' +180°	-13°	+6.6	85°-	-17.8	-11.2	1366.0		BS	+94	-181				
	205				+5.4	85°20'	-16.6	-11.2			BS						
116	0				5.4	-		-5.4	1360.6		T	0	0	1560,941	339,050		
117	330		322°20'	-13°	9.5	91°30'	-8.6	-18.1	1347.9			+209	-255	1560,650	338,020		
118	660		322°20'	-13°	13.7	91°30'	-17.3	-31.0	1335.0		TP	+418	-510	1560,859	338,020		
118	660				7.9	92°-	-23.0	-30.9			TP						
	326		122°17' +180°	-13°	+0.6	88°30'	-8.5	-7.9	1327.1		BS	+144	-292				
	326				+3.4	88°-	-11.4	-8.0			BS						

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE		
9/6/80		G. Litzinger		G. Litzinger		6834		BHL		8	15		
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER			
New York		Tooley Pond		New York	St. Lawrence					L. Davis			
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
											NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
								1327.1					
119	0				5.4	-	-5.4		1321.7	T	0	0	1561003 338.054
120	330		303°46'	-13°	12.9	92°30'	-14.4	-28.3	1298.8	T	+117	-309	1561120 337.945
120	330				9.1	93°20'	-19.2	-28.3		T			
	494		133°47'+180°	-13°	+3.6	88°-	-17.2	-13.6	1288.2	BS	+253	-424	
	494				+2.2	88°10'	-15.8	-13.6		BS			
121	164		133°47'	-13°	6.1	-	-6.1		1279.1		-84	+111	1561289 337.662
T	0				5.4	-	-5.4		1279.9	T	0	0	1561373 337.521
120	170		345°27'	-13°	2.2	88°-	+5.9	+3.7	1288.9		+151	-119	1561524 337.942
123	500	499	343°31'	-13°	1.4	87°-	+26.1	+14.7	1299.9	T	+434	-246	1561807 337.275 trail (north)
123	500				9.9	87°10'	+24.7	+14.8		T			
	330		146°6'+180°	-13°	+12.4	91°-	+5.8	+18.2	1318.1	BS	+225+2	-241+2	
	330				+11.5	91°10'	+6.7	+18.2		BS			
124	0				5.4	-	-5.4		1312.7	T	0	0	1562034 337.226
T	175		210°48'	-13°	1.4	-	-1.4		1316.7	T	+15+2	+11+2	1562131 336.211
T	175				2.3	TH	+0.9	-1.4		T			
	155		132°44'+180°	-13°	+1.5	-	+1.5		1318.2	BS	+17+2	+135+2	
	155				+2.2	TH	-0.8	+1.4		BS			
BM	28		70°26'	-13°	2.3	-	-2.3		1315.9		+15	+24	1562225 336.782 el. 1316.5 U.S.G.S. 7 MEA 1966
125	0				5.4	-	-5.4		1312.8	T	0	0	1562210 336.758

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
7/15/50		B. K. Camp		G. Litzinger		5274		BRL New		8	11/16						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New York		County Road		New York	St. Lawrence					L. J. ...							
STATION NO.	SLOPE DISTANCE	PLOTTING 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		
									1318.2								
126	330		310°56'	-12.5°	8.3	93°-	-17.2	-25.5		1292.7	TP	+157+2	-290+2	1562369	336,470		
126	330				11.2	92°30'	-14.4	-25.6			TP						
	660	657	111°40'+180°	-12.5°	+9.3	85°-	-57.3	-48.0	1244.7		BS	+105+2	-649+2				
	660				+11.2	84°50'	-59.2	-48.0			BS						
127	330		111°40'	-12.5°	6.6	87°-	+17.2	+10.6		1255.3		-5.3	+326	1562423	336,149		
128	0				5.4	-		-5.4		1239.3	π	0	0	1562476	335,823		
129	330		274°55'	-12.5°	11.6	-		-12.6		1233.1		-44	-427	1562432	335,496		
130	660		271°11'	-12.5°	12.6	-		-12.6		1232.1	TP	-130+1	-677+2	1562347	335,178	west edge of bridge	
	660				9.3	8H	-3.3	-12.6			TP						
	330		95°10'+180°	-12.5°	+5.5	-		+5.5	1237.6		BS	-42+1	-327+2				
	330				+3.7	0	+1.7	+5.6			BS						
131	0				5.4	-		-5.4		1232.2	π	0	0	1562306	334,853	π-opposite station	
132	335		301°18'	-12.5°	4.0	-		-4.0		1233.6	TP	+108+1	-217+2	1562415	334,538		
132	335				5.7	8H	1.7	-4.0			TP						
	260		116°25'+180°	-12.5°	+5.7	-		+5.7	1239.3		BS	+63+1	-252+2				
	260				+4.4	8H	+1.3	+5.7			BS						
π	0				5.4	-		-5.4		1233.9	π	0	0	1562479	334,288		
133	70		281°52'	-12.5°	4.9	-		-4.9		1234.4		-1	-1	1562478	334,218		
134	395		281°52'	-12.5°	6.3	-		-6.3		1233.8	TP	-4+1	-395+2	1562476	333,895		
134	395				8.3	TH	-2.0	-6.3			TP						

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
11/6/80		[Signature]		[Signature]		[Signature]		[Signature]		8	17					
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE	PPM	PARTY MANAGER				
Map 112		Turkey Land		Illinois		[County]		[Twp]		[Range]	[PPM]	[Manager]				
STATION NO.	SLOPE DISTANCE	PLOTTING 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.			
134										1233.0						
	330		102°27'+180°	-12.5°	+14.1	90°30'	2.9	+17.0	1250.0		BS	0+1	-330+2			
	330				+11.2	91°-	+5.8	+17.0			BS					
135	0				54	-		-5.4		1244.6	T	0	0	1,562,427	333,567	
136	330		277°11'	-12.5°	12.9	-		-12.9		1237.1		-31	-329	1,562,446	333,238	
137	660		" "	"	12.0	90°30'	-5.8	-17.8		1232.2		-61	-657	1,562,416	332,910	
138	990		277°11'	-12.5°	12.3	-		-12.3		1237.7	TP	-92+1	-986+2	1,562,386	332,583	
138	990				74	BH	-5.0	-12.3			TP					
	478		102°57'+180°	-12.5°	+8.1	-		+8.1	1245.8		BS	+4+1	-478+2			
	478				+10.5	TH	-2.4	+8.1			BS					
139	148		101°51'	-12.5°	5.1	-		-5.1		1240.7		+2	+148	1,562,393	332,255	
T	0				5.4	-		-5.4		1240.4	T	0	0	1,562,391	332,107	
T	53		311°42'	-12.5°	7.0	-		-7.0		1238.8		+26	-46	1,562,417	332,951	
140	193		" "	"	10.9	-		-10.9		1234.9		+94	-168	1,562,485	334,929	Trail (south)
H	422		311°33'	-12.5°	10.9	-		-10.9		1234.9		+205	-369	1,562,596	331,088	c/L New bridge
141	523		311°5'	-12.5°	10.4	-		-10.4		1235.4	TP	+250	-451+4	1,562,641	331,652	T.P. opposite sta.
141	523				7.8	BH	-2.6	-10.4			TP					
	233		149°57'+180°	-12.5°	+12.3	-		+12.3	1247.7		BS	+245	-225+4			
	333				+10.6	BH	+1.7	+12.3			BS					
142	0				5.4	-		-5.4		1242.3	T	0	0	1,562,886	331,471	T-opposite sta.

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE	PPM	PARTY MANAGER				
STATION NO.	 SLOPE DISTANCE	 PLOTTING 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				
									1247.7							
143	333		346° i	-12.5°	8.3	87°30'	+14.5	+6.2		1253.9	TP	+298	-148.9	1563,184	331,287	T.P. opposite sta.
143	333				5.4	88°-	+11.6	+6.2			TP					
	285		186°20'-180°	-12.5°	+14.4	92°40'	+13.2	+27.6	1281.5		BS	+253	-31.4			
	285				+13.6	92°50'	+14.1	+27.7			BS					
π	0				5.4	-		-5.4		1276.1	π	0	0	1563,467	331,260	
144	40		28°46'	-12.5°	2.6	-		-2.6		1278.9		+28	+11	1563,505	331,271	
145	370		28°46'	-12.5°	14.0	90°30'	-3.2	-17.2			TP	+355	+104.9	1563,822	331,368	
145	370				10.8	91°-	-6.5	-17.3		1264.2	TP					
	660		173°21'+180°	-12.5°	+15.0	91°-	+11.5	+26.5	1290.7		BS	+623	-217.4			
	660				+11.2	91°20'	+15.4	+26.6			BS					
146	330		170°32'	-12.5°	12.6	91°-	-5.8	-18.4		1272.3		-306	+123	1,564,139	331,278	
147	0				5.4	-		-5.4		1285.3	π	0	0	1564,445	331,155	
148	330		336°14'	-12.5°	1.1	TH	+1.7	+0.6		1291.3	TP	+266	-105.9	1,564,711	330,864	
148	330				2.3	89°30'	+2.9	+0.6			TP					
	660		139°14'+180°	-12.5°	+6.1	89°30'	-3.8	+0.3	1291.6		BS	+395	-529.4			
	660				+4.2	89°40'	-3.8	+0.4			BS					
149	330		135°26'	-12.5°	6.0	89°30'	+2.9	-3.1		1288.5		+379	+27.1	1,564,927	330,576	
	62		139°43'	-12.5°	2.1	-		-2.1		1289.5		-37	+47	1,565,069	330,488	Y-intersect.
150	0				5.4	-		-5.4		1286.2	π	0	0	1,565,106	330,489	
151	220		99°47'	-12.5°	16.2	93°-	-17.2	-27.5		1274.1		+48	-27.2	1,565,244	330,112	

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
11/17/72		J. G. Camp		D. A. [unclear]		5207		J. G. Camp		8	19						
AREA		TOPO MAP		STATE	COUNTY	TWP	RANGE	PPM	PARTY MANAGER								
Hwy 512		[unclear]		Illinois	Laurens				[unclear]								
STATION NO.	SLOPE DISTANCE	PLOTTING 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		
									1291.4								
152	664	663	290°58'	-12.5°	8.4	93°-	-34.7	-43.1		1248.5	TP	+98	-656.7	1565204	329,787		
152	664				14.2	92°30'	-28.9	-43.1			TP						
	330		136°23' +180°	-12.5°	+7.8	92°-	+11.5	+19.3	1267.8		BS	+184	-217.4				
	330				113.5	91°-	+5.8	+19.3			BS					horiz. correct. y=+18'	
153	0				5.4	-		-5.4		1262.4	X	0	0	1565388	329,517	x=+72'	
153	368		154°12'	-12.5°	13.2	91°-	-6.4	-19.6		1248.2		-193	+315	1565195	329,830	USGS 1954 329,830 Y-intersect el. 1248. 1278.3 el. U.S.G.S. 2 MEA 1966	
BM	288		301°19'	-12.5°	0.7	87°50'	+10.9	+10.5		1278.3		+93	-273	1565481	329,244		
154	330		309°15'	-12.5°	5.2	88°-	+11.5	+6.3		1274.1	TP	+149	-295	1565537	329,222		
154	230				4.2	88°10'	+10.6	+6.4			TP						
	330		141°25' +180°	-12.5°	+1.5	-		+1.5	1275.4		BS	+207	-257				
	330				+3.2	TH	-1.7	+11.5			BS						
155	0				5.4	-		-5.4		1270.2	X	0	0	1565744	328,965		
156	330		323°12'	-12.5°	10.7 10.4	93°30'	-20.1	-30.8		1244.8	TP	+215	-250	1565759	328,715		
156	330				13.6	93°-	-17.2	-30.8			TP						
	325		158°45' +180°	-12.5°	+1.1	92°-	+11.9	+12.4			BS	+270	-181				
	325				+4.0	91°30'	+8.5	+12.5	1257.3		BS					curve	
157	0				5.4	-		-5.4		1251.9	X	0	0	1566229	328,534		
158	330	329	359°57'	-12.5°	12.7	85°30'	+25.8	+13.1		1270.5	TP	+321	-71	1566550	328,463		
158	330				9.7	86°-	+23.0	+13.3	113.2		TP						

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

DATE		INSTRUMENT MAN			ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
7/7/80		G. Cotcamp			G. Litzinger		5834		Bil. rlx		88	20					
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New York		Tooley Pond		New York	St. Lawrence					L. P. ...							
STATION NO.	SLOPE DISTANCE	PLOTTING 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		
158										1270.5							
	330		199°12' - 180°	-12.5°	+36	87°	-17.2	-13.6	1256.9		BS	+328	+39				
	330				+38	86°52'	-18.0	-14.2			BS						
159	0				5.4	-		-5.4		1251.5	π	0	0	1566,878	328,502		
TP	240		14°33'	-12.5°	7.7	-		-7.7		1249.2	TP	+240	+9	1567,118	328,511	ap - the curve	
TP	240				8.9	TH	+1.2	-7.7			TP						
	415		169°50' - 180°	-12.5°	+4.8	88°	-14.5	-9.7	1239.5		BS	-343	-160				
	415				+1.2	88°30'	-10.9	-9.7			BS						
160	330		168°32'	-12.5°	7.7	88°	+11.5	+3.8		1243.3		-302	+134	1567,199	328,485		
161	0				5.4	-		-5.4		1234.1	π	0	0	1567,501	328,351		
162	330		340°54'	-12.5°	3.2	-		-3.2		1236.3		+221	-173	1567,782	328,178		
163	660		" "	" "	8.2	88°30'	+17.3	+9.1		1248.4		+562	-346	1568,083	328,005		
164	990		340°54'	-12.5°	1.9	88°	+34.5	+32.6		1272.1	TP	+873	-519	1568,344	327,832		
164	990				10.5	87°30'	+43.1	+32.6			TP						
	322		150°28' - 180°	-12.5°	+14.9	92°40'	+15.0	+29.9	1302.0		BS	+227	-216				
	322				+14.0	92°50'	+15.9	+29.9			BS						curve
165	0				5.4	-		-5.4		1296.6	π	0	0	1568,583	327,616		
166	330		315°34'	-12.5°	8.2	-		-8.2		1293.8		+180	-277	1568,763	327,339		
TP	465		312°24'	-12.5°	13.4	-		-13.4		1288.6	TP	+229	-404	1568,812	327,212		
TP	465				11.1	BH	-2.3	-13.4			TP						

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE			
9/7/80		G Cutcamp		S. Lutzinger		2447		Gul slw		8	21			
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER			
New York		Tooley Pond		New York		St. Lawrence					L. Paris			
STATION NO.	SLOPE DISTANCE	PLOT DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
167 1/2										1288.6				
	870	868	168° 6' +180°	-12.5°	+8.2	85° 40'	-65.5	-57.3	1231.3		BS	+790	-359	
	870				+10.8	85° 30'	-68.1	-57.3			BS			
167	660	658	168° 6'	-12.5°	10.0	86° -	+45.9	+35.9		1267.2		-599	+272	1,569,003 327,125
168	330		" "	"	1.1	TH	+1.7	+0.6		1221.9		-301	+136	1,569,301 326,989 Unable to locate BM
167	0				5.4	-		-5.4		1225.9	TP	0	0	1,569,602 326,853 TP opposite sta.
170	336		22° 16'	-12.5°	6.6	87° -	+17.6	+11.0		1242.3	TP	+331	+57	1,569,933 326,910
170	336				3.7	87° 30'	+14.6	+10.9			TP			
	660		174° 3' -180°	-12.5°	+8.9	89° -	-11.5	-2.6	1239.7		BS	+660	+18	
	660				+12.7 +13.7	88° 40'	-15.4	-2.7			BS			9/8/80 rechecked rod reading GUC
171	330		187° 4'	-12.5°	3.9	89° -	+5.8	+1.9		1241.6		-329	+31	1,570,204 326,959
172	0				5.4	-		-5.4		1234.3	TP	0	0	1,570,593 326,928
173	330		15° 57'	-12.5°	14.3	-		-14.3		1225.4	TP	+329	+20	1,570,722 326,948
173	330				12.7	TH	-1.7	-14.4			TP			
	655		207° 47' -180°	-12.5°	+0.7	-		+0.7	1226.1		BS	+632	+113	c. v. v. v. e
	655				+4.0	TH	-3.3	+0.7			BS			
174	330		199° 17'	-12.5°	3.8	-		-3.8		1222.3		-328	-39	1,571,226 327,082
174	225		201° 17'	-12.5°	3.7	-		-3.7		1222.4		-222	-34	1,571,332 327,087 Y-intersect.
175	0				5.4	-		-5.4		1220.7	TP	0	0	1,571,554 327,121
176	328		5° 22'	-12.5°	0.6	TH	+1.6	+1.0			TP	+325	-41	1,571,829 327,080
176	202				1.8	89° 30'	+2.9	+1.1		1227.2	TP			

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

DATE 9/7/80	INSTRUMENT MAN G. Cotcamp	ROD MAN G. Litzinger	PARTY NUMBER 6834	NOTES CHECKED BY SLL	LINE NO. 8	PAGE 22
AREA New York	TOPO MAP Tooley Pond	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	NORTH +	EAST +	COORDINATES		REMARKS	
												SOUTH -	WEST -	Y	X		
												LAT.	DEP.				
176										1227.2							
	330		170°55' +180°	-12.5°	+11.0	-		+11.0	1238.2		BS	+307	-121				
	330				+9.3	BH	+1.7	+11.0		BS							
177	0				5.4	-		-5.4		1232.8	T	0	0	1572186	326,989		
178	330		20°26'	-12.5°	2.9	87°30'	+14.4	+11.5			TP	+327	+46	1572573	327,005		
178	330				0.9	87°50'	+12.5	+11.6		1249.8	TP						
	423		179°5' -180°	-12.5°	+6.0	-		+10.0	1259.9		BS	+323	19				
	323				+8.4	BH	+1.6	+10.0		BS							
179	0				5.4	-		-5.4		1254.4	T	0	0	1572836	327,014		
180	330		351°56'	-12.5°	4.2	-		-4.2		1255.6		+309	-116	1573145	326,898		
181	660		" "	"	3.6	-		-3.6		1256.2		+618	-232	1573454	326,782		
182	990		351°56'	-12.5°	4.7	TH	+5.0	+0.3	1260.1		TP	+927	-398	1573763	326,664		
182	990				2.6	89°50'	+2.9	+0.3		TP							
	330		160°21' +180°	-12.5°	+6.1	-		+6.1	1266.2		BS	+279	-176				
	330				+4.4	BH	+1.7	+6.1		BS							
183	0				5.4	-		-5.4		1260.8	T	0	0	1574042	326,490		
184	330		320°8'	-12.5°	10.9	92°-	-11.5	-22.4		1249.8		+201	-261	1574243	326,229		
185	656		316°24'	-12.5°	10.6	92°-	-22.9	-33.5	1232.7		TP	+366	-544	1574408	325,946		
185	656				4.9	92°30'	-28.6	-33.5		TP							
	330	329	123°39' +180°	-12.5°	+5.5	86°45'	-18.2	-12.7	1220.0		BS	+119	-367				
	330				+6.5	86°40'	-19.7	-12.7		BS							

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 9/7/80	INSTRUMENT MAN G. G. [unclear]	ROD MAN [unclear]	PARTY NUMBER 6834	NOTES CHECKED BY [unclear]	LINE NO. 8	PAGE 23
AREA New York	TOPO MAP Troy Pond/Degrasse, New York	STATE New York	COUNTY St. Lawrence	TWP [unclear]	RANGE [unclear]	PPM [unclear]
				PARTY MANAGER L. Davis		

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
									1220.0									
186	0				5.4	-		-5.4		1214.6	π	0	0	1,574,527	325,639			Trolley Pond
187	330		330° 44'	-12.5°	7.5	93° -	-17.2	-26.7		1193.3		+246	-220	1,574,723	325,419			Degrasse
188	660		327° 26'	-12.5°	2.9	92° 10'	-24.9	-27.3		1192.7	TF	+466	-467	1,574,993	325,172			
188	660				6.2	91° 50'	-21.1	-27.3			TF							
	330		139° 50' + 180°	-12.5°	+5.5	-		+5.5			BS	+200	-262					
	330				+3.9	84°	-1.7	+5.6	1198.3		BS							
189	0				5.4	-		-5.4		1192.9	π	0	0	1,575,193	324,910			
190	330		320° 3'	-12.5°	9.7	92° -	-11.5	-21.2		1177.1	TF	+201	-262	1,575,394	324,648			T.P. opposite sta.
190	330				12.6	91° 30'	-8.6	-21.2			TF							
	330		155° 26' + 180°	-12.5°	+2.7	88° 30'	-8.6	-5.9	1171.2		BS	+263	-199					
	330				+0.7	88° 50'	-6.7	-6.0			BS							
↗	182		157° 42'	-12.5°	1.3	89° -	+3.2	+1.9		1173.1		-149	+104	1,575,508	324,533			1,575,510 + 324,535 T-rd. el. 1174.
U.E.	180		169° 56'	-12.5°	2.1	89° -	+3.1	+1.0		1172.2		-166	+69	1,575,491	324,518			u.s.c.s. nail 1173.3 el.
191	0				5.1	-		-5.1		1166.1	π	0	0	1,575,657	324,449			
192	330		0° 38'	-12.5°	13.1	-		-13.1		1158.1	TF	+323	-68	1,575,786	324,381			
192	330				11.5	84°	-1.7	-13.2			TF							
	660	657	179° 11' + 180°	-12.5°	+2.0	84° 40'	-6.1	-59.1	1099.0		BS	+639	-151					
	660				+3.9	84° 30'	-6.0	-59.1			BS							
11--	100		170° 48'	-12.5°	0.4	-		-0.4		1098.6		-93	+37	1,576,526	324,267			T-rd. (old road)
193	330	329	179° 11'	-12.5°	5.4	85° -	+28.7	+23.3		1122.3		-320	+76	1,576,299	324,306			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 9/7/80	INSTRUMENT MAN G. Cotcamp	ROD MAN G. Litzinger	PARTY NUMBER 6834	NOTES CHECKED BY shl	LINE NO. 88	PAGE 24
AREA New York	TOPO MAP Sage	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
									1099.0						
194	0				5.4	-		-5.4		1093.4	TP	0	0	1576.619	329.230
195	330		346°35'	-13°	3.0	88°30'	+8.6	+5.6			TP	+296-2	-197-2	1576.913	329.061
195	330				2.0	88°40'	+7.7	+5.7		1104.7	TP				
	657		179°26'+180°	-13°	+1.2	90°30'	+5.7	+16.9	1121.6		BS	+639-2	-159-2		
	657				+9.3	90°40'	+7.6	+16.9			BS				
196	330		176° -	-13°	6.8	-		-6.8		1114.8		-316	+96	1577.234	329.021
197	0				5.4	-		-5.4		1116.2	TP	0	0	1577.530	329.925
198	334	333	318°59'	-13°	10.4	95° -	-29.0	-39.4		1082.2	TP	+197-1	-269-2	1577.746	323.654
198	334				13.4	94°30'	-26.1	-39.5			TP				T.P. opposite sta.
	658		170°18'+180°	-13°	+4.1	88°20'	-19.1	-15.0	1067.2		BS	+607-1	-259-1		
	658				+6.0	88°10'	-21.0	-15.0			BS				
199	330		170°18'	-13°	9.2	92° -	-11.5	-20.7		1046.5		-304	+127	1578.048	323.524
200	0				5.4	-		-5.4		1061.8	TP	0	0	1578.352	323.399
201	330		307°23'	-13°	9.1	88° -	+11.5	+2.4		1069.4		+136	-301	1578.958	323.098
202	657	656	307°23'	-13°	1.5	87°20'	+30.5	+29.0		1096.2	TP	+271-1	-597-1	1578.622	322.801
202	657				5.3	87° -	+34.3	+29.0			TP				
	330		160°2'+180°	-13°	+9.8	88°30'	-8.6	+1.2	1097.4		BS	+277-1	-180-1		
	330				+2.8	TH	-1.7	+1.1			BS				
203	0				5.1	-		-5.1		1092.3	TP	0	0	1578.898	322.620

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9/7/80		G. Cutcamp		G. Litzinger		6834		slw		8	25						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New York		Regrasse		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		
									1097.4								
204	330		321°40'	-13°	5.0	-		-5.0			TP	+206-1	-258-1	1579,103	322,361		
204	330				6.6	74	-1.7	-4.9		1092.5	TP						
	420	479	129°35'+180°	-13°	+6.7	86°-	-29.2	-22.5	10700		BS	+188-1	-375-1				
	420				+3.1	86°30'	-25.6	-22.5			BS						
205	90		129°35'	-13°	3.2	87°-	+4.7	+1.5		1071.5		-40	+80	1579,230	322,065		
π	0				5.4	-		-5.4		1064.6	π	0	0	1579,290	321,985	split sta - curve	
206	240	239	352°7'	-13°	9.5	94°-	-16.7	-26.2		1043.8		+223	-85	1579,513	321,900		
TP	490		348°46'	-13°	11.2	91°-	-8.6	-19.8		1050.2	TP	+447-1	-201-1	1579,236	321,783	sharp curve	
TP	490				14.1	90°40'	-5.7	-19.8			TP						
	398		95°28'+180°	-13°	+0.6	89°-	-6.9	-6.3	1043.9		BS	-52-1	-395-1				
	398				+4.0	88°30'	-10.4	-6.4			BS						
207	330		92°23'	-13°	1.8	89°-	+5.8	+4.0		1047.9		+61	+324	1579,744	321,711		
208	0				5.4	-		-5.4		1038.5	π	0	0	1579,683	321,387		
209	315		273°42'	-13°	8.9	-		-8.9		1035.0	TP	-51-1	-311-1	1579,631	321,075	sharp curve	
209	315				7.3	BH	1.6	-8.9			TP						
	328		31°43'+180°	-13°	+5.9	-		+5.9	1040.9		BS	-311-1	-105-1				
	328				+4.2	BH	+1.6	+5.8			BS						
210	0				5.2	-		-5.2		1035.7	π	0	0	1579,319	320,969		
TP	250		226°44'	-13°	4.4	88°30'	+5.1	+0.7		1041.6	TP	-208-1	-139-1	1579,110	320,829	curve	
TP	250				5.1	88°40'	+5.8	+0.7		1041.6	TP						

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
9/7/80		G. Cotcamp		G. Litzinger		6834		SLP		8	26					
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
New York		Degrasse		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	
210 1/2										1041.4						
	430		114° 51' + 180°	-13°	+8.4	-		+8.4	1050.0		BS	+88-1	-421-1			
	430				+6.2	BH	+2.2	+8.4			BS					
211	330		114° 51'	-13°	8.5	-		-8.5		1041.5		-68	+323	1,579,129	320,730	
212	0				5.4	-		-5.4		1044.4	TP	0	0	1,579,197	320,407	
213	330		302° 16'	-13°	12.9	-		-12.9		1037.1		+109	-312	1,579,306	320,095	
214	660		304° 58'	-13°	14.0	91° 10'	-13.4	-27.4		1022.6	TP	+247-1	-612-1	1,579,443	319,794	
214	660				12.1	91° 20'	-15.4	-27.5			TP					
	330		101° 4' + 180°	-13°	+8.2	88° 30'	-8.6	-0.4	1022.2		BS	-11-1	-330-1			
	330				+7.3	88° 40'	-7.7	-0.4			BS					
215	0				5.4	-		-5.4		1016.8	TP	0	0	1,579,431	319,463	TP-opposite station
216	330		297° 4'	-12°	11.9	-		-11.9		1010.3		-90	-320	1,579,571	319,143	
TP	570		297° 4'	-13°	7.3	91° 30'	-14.9	-22.2		1000.0	TP	+139-1	-553-1	1,579,569	318,909	
TP	570				4.0	91° 50'	-18.2	-22.2			TP					
	100		161° 20' + 180°	-13°	+2.2	-		+2.2	1002.2		BS	+85-1	-52-1			
	100				+2.7	TH	-0.5	+2.2			BS					
217	0				5.2	-		-5.2		997.0	TP	0	0	1,579,653	318,856	
218	330	329	1° 58'	-12°	8.1	94°	-23.0	-31.1			TP	+323-1	-63-1	1,579,975	318,792	
218	330				13.8	93°	-11.2	-31.0		971.2	TP					
	323		157° 39' + 180°	-13°	+12.7	90° 30'	+2.8	+15.5	986.7		BS	+263-1	-187-1		3	
	323				+13.9	BH	+1.6	+15.5			BS					

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
9/7/80		G. Cotcamp		G. Litzinger		5834		shl		8	27					
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE	PPM	PARTY MANAGER				
New York		Ingrasso		New York		St Lawrence						L. Davis				
STATION NO.	SLOPE DISTANCE	PLOT DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
									986.7							
219	0				5.2	-		-5.2		981.5	TP	0	0	1,580,237	318,604	
220	321		313°57'	-13°	7.2	89°-	+5.6	-1.6		983.1	TP	+165-1	-275-1	1,580,401	318,328	
220	321				1.6	-		-1.6			TP					
	323		87°37'+180°	-13°	+9.3	92°-	+11.3	+20.6	1005.7		BS	-86-1	-311-1			
	323				+6.5	92°30'	+14.1	+20.6			BS					
221	0				5.2	-		-5.2		1000.5	TP	0	0	1,580,314	318,014	TP opposite station
222	332	331	282°20'	-13°	9.4	94°+	-26.9	-36.3		969.4	TP	-9-1	-331-1	1,580,309	317,684	
222	332				13.2	94°-	-23.1	-36.3			TP					
	660		121°58'+180°	-13°	+8.3	-		+8.3	977.7		BS	+215-1	-624-1			
	660				+5.0	84	+3.3	+8.3			BS					
223	330		121°58'	-13°	12.2	-		-12.2		965.5		-107	+312	1,580,416	317,371	horiz. corrad. y = -26'
224	0				5.2	-		-5.2		972.5	TP	0	0	1,580,523	317,059	y = -27'
6M	29		287°49'	-13°	4.8	-		-4.8		972.9		+2	-19	1,580,525	317,030	1,580,525 + 317,030 Trail (south)
6M	122		243°37'	-13°	3.3	-		-3.3		974.4		-77	-94	1,580,446	316,965	FL 975 U.S.G.S. 12 MEA 1964
225	330		202°-	-13°	2.1	-		-2.1		975.6		+107	-312	1,580,630	316,747	
226	660		202°-	-13°	6.9	-		-8.9		968.8	TP	+215	-624+1	1,580,738	316,436	
226	660				12.2	TH	-3.3	-8.9			TP					
	660		121°31'+180°	-13°	+4.3	-		+4.3	973.1		BS	+210	-626+1			
	660				+7.6	TH	-3.3	+4.3			BS					
227	330		121°31'	-13°	3.1	-		-3.1		970.0		-105	+313	1,580,843	316,124	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	9/8/80	INSTRUMENT MAN	G. Cotcamp	ROD MAN	G. Litzinger	PARTY NUMBER	6834	NOTES CHECKED BY	SLD	LINE NO.	8	PAGE	28	
AREA	New York	TOPO MAP	Degrasse	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.	
									973.1					
228	0				54	-		-5.4		967.7	TP	0	0	1,580,948 315,811
229	330		301°32'	-13°	11.1	-		-11.1		962.0		+105	-313	1,581,053 315,498
230	660		301°32'	-13°	12.7	-		-12.7		960.4	TP	+210	-626+1	1,581,158 315,186
230	660				99	BH	-3.3	-12.7			TP			
	330		112°1' +180°	-13°	+136	90°30'	+2.9	+16.5	976.9		BS	+52	-326+1	
	330				+10.7	91°-	+5.8	+16.5			BS			
231	0				54	-		-5.4		971.5	TP	0	0	1,581,210 314,961
232	330		289°17'	-13°	8.8	91°20'	-8.6	-17.4		959.5	TP	+7	-330+1	1,581,217 314,532
232	330				5.9	92°-	-11.5	-17.4			TP			
	990		137°16.5' +180°	-13°	+9.9	89°-	-17.3	-7.4	952.1		BS	+556	-819+1	
	990				+40	89°20'	-11.5	-7.5			BS			
233	660		137°11.5'	-13°	8.0	-		-8.0		944.1		-371	+546	1,581,402 314,260
234	930		" "	"	8.0	-		-8.0		944.1		-185	+273	1,581,588 313,987
TP	332		140°2'	-13°	8.1	-		-8.1		944.0		-200	+265	1,581,573 313,979 1,581,580 + 313,985 +1d(s.w.)
235	0				54	-		-5.4		946.7	TP	0	0	1,581,773 313,714
236	330		331°39'	-13°	13.1	-		-13.1		939.0		+248	-218	1,582,021 313,496
237	660		" "	"	11.7	BH	-3.3	-15.0		937.1		+495	-436	1,582,268 313,278
238	990		" "	"	8.7	-		-8.7		943.4		+743	-654	1,582,516 313,060
239	1320		331°39'	-13°	10.3	TH	+6.6	-3.7		948.4	TP	+991	-872+1	1,582,764 312,849
239	1320				3.7	-		-3.7			TP			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	9/8/80	INSTRUMENT MAN	G. S. C. [unclear]	ROD MAN	G. Litzinger	PARTY NUMBER	6834	NOTES CHECKED BY	SLL	LINE NO.	8	PAGE	29	
AREA	New York	TOPO MAP	Degrasse	STATE	New York	COUNTY	St. Lawrence	TWP		RANGE		PPM		
													PARTY MANAGER	L. Davis

STATION NO.	SLOPE DISTANCE	PLOT DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
239										948.4				
	328		155°26' - 190°	-13°	+9.7	88° -	-11.4	-1.7	946.7		BS	+260	-200+1	
	328				+7.8	88°20'	-9.5	-1.7		BS				
240	0				5.2	-		-5.2		991.5	T	0	0	1,583,024 312,644
241	328		313°57'	-13°	0.0	77	+1.6	+1.6	948.3		TP	+169	-281+1	1,583,193 312,364 curve
241	328				7.9	88°20'	+9.5	+1.6		TP				
	660		116°49' - 180°	-13°	+135	91° -	+11.5	+25.0	973.4		BS	+158	-691+1	
	660				+9.7	91°20'	+13.4	+25.1		BS				
242	330		116°49'	-13°	12.8	-		-12.8		960.6		-79	+320	1,583,272 312,044
243	0				5.4	-		-5.4		969.0	T	0	0	1,583,357 314,724
244	330		339°40'	-13°	1.4	-		-7.4	966.0		TP	+122	-307+1	1,583,123 311,418
244	330				5.7	88°	-1.7	-7.4		TP				
	990	989	119°43' - 160°	-13°	+0.2	87°	-37.4	-37.1	928.9		BS	+284	-997+1	
	990				+6.0	87°30'	-43.1	-37.1		BS				
245	660		119°43'	-13°	5.8	88°	+23.0	+17.2		946.1		-190	+632	1,583,567 311,104
246	330		" "	"	2.5	89° -	+5.8	+3.3		932.2		-95	+316	1,583,662 310,788
247	0				5.2	-		-5.2		923.7	T	0	0	1,583,757 310,472 T-approx. dia.
248	332		311°11'	-13°	9.2	91° -	-5.8	-15.0		913.9		+157	-293	1,583,914 310,179
249	662		311°11'	-13°	10.0	91° -	-11.6	-21.6	907.3		TP	+313	-584+1	1,584,070 309,889
249	662				13.9	90°40'	-7.7	-21.6		TP				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
7/8/80		G. Cotcamp		G. L. ...		6237		blh		8	30						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New York		DeGraesse		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		
249										907.3							
	330		145°26' +120°	-13°	+2.2	87°	-5.8	-3.5	903.9		BS	+223	-244+				
	330				+1.3	87°5'	-4.8	-3.5			BS						
250	0				5.4	-	-5.4			898.4	π	0	0	1589,293	309,646		
251	330		346°1'	-13°	14.2	-	-14.2				π	+294	-150+	1584,587	309,497		
251	330				12.6	84	-1.7	-14.3		899.5	π						
	660		182°4' -180°	-13°	+10.2	84°	-11.5	-1.3	888.2		BS	+648	-125+				
	660				+5.0	72	-3.3	-1.3			BS						
252	330		182°4'	-13°	7.1	-	-7.1			881.1		-324	+63	1584,911	309,434		
253	0				5.2	-	-5.2			883.0	π	0	0	1585,235	309,773		
254	330		340°21'	-13°	12.2	91°	-5.8	-18.0		870.2		+278	-178	1585,573	309,195		
255	660		335°46'	-13°	10.4	91°	-11.5	-21.9			π	+525	-399+	1585,760	308,975	T.P. opposite sta.	
255	660				14.3	90°40'	-7.7	-22.0		866.2	π						
	660		184°59' +80°	-13°	+5.2	88°30'	-17.3	-12.1	857.1		BS	+654	-92+				
	660				+10.9	88°	-23.0	-12.1			BS						
256	330		184°59'	-13°	4.4	89°	+5.8	+1.4		855.5		-327	+46	1586,087	308,930		
BM	61		114°54'	-13°	2.2	-	-2.2			851.9		-13	+60	1586,481	308,944	EL 831	U.S.G.S. 17 MFA 1966
257	0				5.2	-	-5.2			848.9	π	0	0	1586,414	308,884		
258	328		357°52'	-13°	9.6	-	-9.6			844.5	π	+317	-86+	1586,731	308,799		
258	328				7.9	84	-1.6	-9.5			π						

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9/8/80		G. Cotcamp		G. Litzinger		6834		SW		8		31			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
New York		Degrasse		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
258										844.5					
	322		134°24'+180°	-13°	+6.5	-		+6.5	857.0		BS	+168	-275		
	322				+7.7	84	+1.6	+6.5		BS					
259	0				5.2	-		-5.2		845.8	π	0	0	1586,899 308,524	
260	330		288°3'	-13°	8.4	-		-8.4		842.6	TP	+29	-329	1586,938 308,195	
260	330				6.7	84	-1.7	-8.4			TP				
	647		119°16'+180°	-13°	+5.3	TH	-3.2	+2.1	844.7		BS	+126	-635		
	677				+9.6	89°20'	-7.5	+2.15		BS					S-curve
261	320		109°23'	-13°	4.0	-		-4.0		840.7		-36	+318	1587,018 307,878	
262	0				5.4	-		-5.4		839.3	π	0	0	1587,054 307,560	
263	330		273°54'	-13°	6.2	-		-6.2		838.5		-51	-310	1587,003 307,244	
264	660		273°54'	-13°	7.0	-		-7.0		837.7	TP	-104	-652	1586,950 306,908	
264	660				3.7	84	-3.3	-7.0			TP				
	462		67°21'+180°	-13°	+8.0	92°30'	+20.1	+28.1	865.8		BS	-269	-375		
	462				+5.3	92°50'	+22.8	+28.15		BS					
265	132		67°21'	-13°	11.0	94°-	-9.2	-20.2		845.6		+77	+107	1586,758 306,640	
π	0				5.4	-		-5.4		860.4	π	0	0	1586,681 306,533	
266	185		255°8'	-13°	13.0	-		-13.0		852.8		-86	-164	1586,575 306,369	
TP	235		257°15'	-13°	14.3	-		-14.3		851.5	TP	-102	-212	1586,579 306,321	
TP	235				10.9	90°50'	-3.4	-14.3			TP			1586,575+ 306,335 T-intersect el. 851	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	9/8/80	INSTRUMENT MAN	G. Cotcamp	ROD MAN	R. F. Singer	PARTY NUMBER	6037	NOTES CHECKED BY	shl J. L. W.	LINE NO.	8	PAGE	32	
AREA	New York	TOPO MAP	Degrasse	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.	
T-intersect.										857.5				
	598		42°23' +180°	-13°	+4.1	-		+4.1	855.6		BS	-521	-293	
	598				+7.1	TH	-3.0	+4.1			BS			
267	330		42°23'	-13°	11.4	-		-11.4		844.2		+288	+162	1,586,346 306,190
≡	80		39°45'	-13°	8.3	-		-8.3		847.3		+71	+36	1,586,129 306,064 bridge
268	0				5.2	-		-5.2		850.4	π	0	0	1,586,058 306,628 π-opposite etc.
TF	320	319	247°22'	-13°	0.2	86°30'	+19.5	+19.3		874.9		-186	-259	1,585,872 305,769 T-intersect.
269	335	334	249°34'	-13°	6.3	85°20'	+26.2	+19.9		875.5	π	-184	-279	1,585,874 305,749
269	335				5.3	85°4'	+25.2	+19.9			TP			
	660		89°25' +180°	-13°	+12.2	-		+12.2	887.7		BS	-155	-642	Town of Regis ↓
	660				+8.9	BH	-3.3	+12.2			BS			
270	330		86°16'	-13°	3.7	-		-3.7		884.0		+95	+316	1,585,814 305,423
271	0				5.4	-		-5.4		882.3	π	0	0	1,585,719 305,107
272	330		264°49'	-13°	8.3	-		-8.3		879.4		-103	-314	1,585,616 309,793
273	658		269°33'	-13°	14.4	-		-14.4		873.3	TP	-153	-640	1,585,566 309,467
273	658				11.1	BH	-3.3	-14.4			TP			
	662		114°17' +180°	-13°	+14.6	-		+14.6	887.9		BS	+130	-649	
	662				+11.3	BH	+3.3	+14.6			BS			
TF	410		117°4'	-13°	14.1	98°30'	-3.6	-17.7		870.2		-100	+398	1,585,596 304,216 T-rod (south)
BM	305		124°50'	-13°	10.6	-		-10.6		877.3		-113	+283	1,585,588 304,101 E.L. 877 U.S.G.S. 142 MEA 1965
274	330		115°16'	-13°	11.8	BH	-1.7	-13.5		874.4		-70	+322	1,585,626 304,140

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 9/8/80	INSTRUMENT MAN G. Cotcamp	ROD MAN G. Litzinger	PARTY NUMBER 6834	NOTES CHECKED BY SLL	LINE NO. 8	PAGE 33
AREA New York	TOPO MAP Degrasse	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	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
									887.9							
275	0				5.2	-		-5.2		882.7	π	0	0	1585,696	303,818	
276	335		326°28'	-13°	3.7	-		-3.7		884.2	TP	+230	-243	1585,926	303,575	
276	335				5.9	TH	+1.7	-3.7			TP					
	330		147°15'+180°	-13°	+6.6	87°	-17.2	-10.6	873.6		BS	+230	-236			
	330				+2.0	88°	-11.5	-10.6			BS					
277	0				5.2	-		-5.2		869.4	π	0	0	1586,156	303,339	
278	330		336°37'	-13°	9.6	92°	-11.5	-21.1		852.5		+266	-196	1586,422	303,143	
279	660		327°11'	-13°	10.8	92°	-23.0	-33.8		839.8	TP	+535-1	-386	1586,696	302,953	
279	660				14.6	91°40'	-19.2	-33.8			TP					
	660		153°39'+180°	-13°	+1.1	89°	-11.5	-10.4			BS	+510-1	-918			
	660				+6.8	88°30'	-17.3	-10.5	829.3		BS					
280	330		151°39'	-13°	1.7	-		-1.7		827.6		-248	+218	1586,951	302,753	
281	0				5.2	-		-5.2		824.1	π	0	0	1587,199	302,535	
282	325		322°3'	-13°	10.8	-		-10.8		818.5		+205	-252	1587,404	302,283	
283	650		313°44'	-13°	8.8	-		-8.8		820.5	TP	+332-1	-559	1587,530	301,976	c/v 1/2
283	650				12.0	TH	+3.3	-8.7			TP					
	990		127°26'+180°	-13°	+12.2	TH	-5.0	+7.2	827.7		BS	+409-1	-901			
	990				+13.0	89°40'	-5.8	+7.2			BS					
284	660		127°26'	-13°	6.0	TH	+3.3	-2.7		825.0		-273	+601	1587,665	301,676	
288	388		128°35'	-13°	1.5	TH	+1.9	+0.4		828.1		-168	+350	1587,770	301,425	1587,790 + 301,400 Trail

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9/8/80		G. Cutcamp		G. Litzinger		6834		shl New		8	34						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New York		DeGraese		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		
									827.7								
285	330		127°26'	-13°	0.3	-		-0.3		827.4		-136	+300	1,588,862	301,375		
286	0				5.2	-		-5.2		822.5	π	0	0	1,588,958	301,075		
287	330		307°37'	-13°	2.2	-		-3.2		824.5		+137	-300	1,588,075	300,775		
288	660		307°37'	-13°	1.4	-		-1.4		826.3	TP	+275-2	-600	1,588,211	300,475		
288	660				4.7	TH	-3.3	-1.4			TP						
	330		132°41'+180°	-13°	+9.2	-		+9.2	835.5		BS	+163-2	-287				
	330				+7.5	BM	+1.7	+9.2			BS						
BM	113		113°29'	-13°	8.1	88°-	+3.9	-4.2		831.3		-21	+111	1,588,351	300,299	EL 831 U.S.G.S. 193 MEA '66	
289	0				5.4	-		-5.4		830.1	π	0	0	1,588,372	300,188		
<u>LL</u>	230		310°58'	-13°	5.0	-		-5.0		830.5		+108	-209	1,588,180	299,985	1588,180 + 299,985 T-rod (north)	
290	330		313°3'	-13°	7.3	-		-7.3		828.2		+165	-256	1,588,537	299,902	horiz. correct. y = 8'	
291	660		313°3'	-128°	14.3	-		-14.3		821.2	TP	+332	-570-2	1,588,704	299,616	x = +19'	
291	660				11.0	BM	-3.7	-14.3			TP						
	330		118°34'+180°	-128°	+4.0	-		+4.0	825.2		BS	+90	-318-2				
	330				+5.7	TH	-1.7	+4.0			BS						
292	0				5.2	-		-5.2		830.0	π	0	0	1,588,794	299,296		
293	330		292°2'	-128°	10.7	92°-	-11.5	-22.2		809.0	TP	+53	-326-2	1,588,897	298,968		
293	330				13.6	91°30'	-8.6	-22.2			TP						
	1318		136°0'+180°	-124°	+2.2	89°50'	-3.8	-1.6	801.4		BS	+729	-1098			curve	
	1318				+6.1	89°40'	-7.7	-1.6			BS						

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 9/9/80	INSTRUMENT MAN G. Cotcamp		ROD MAN G. Litzinger		PARTY NUMBER 6837		NOTES CHECKED BY shl rlv		LINE NO. 8	PAGE 35
AREA New York	TOPO MAP Degrasse	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
									801.4						
294	990		137°35'	-12.9'	6.5	90°30'	-8.6	-15.1		786.3		-570	+809	1,589,006	298,679
295	660		" "	"	12.2	91°-	-11.5	-23.7		777.7		-380	+539	1,589,196	298,409
296	330		" "	"	11.2	91°-	-5.8	-17.0		784.4		-190	+270	1,589,386	298,140
297	0				5.2	-		-5.0		796.2	T	0	0	1,589,576	297,870
298	330		303°5'	-12.9'	4.7	89°-	+5.8	+1.1		802.5		+117	-309	1,589,693	297,561
299	660		296°-	-12.9'	8.1	89°-	+11.5	+3.4		804.8		+155	-691	1,589,731	297,229
300	980		297°42'	-12.9'	9.5	89°-	+17.1	+7.6		809.0	TP	+259	-945	1,589,835	296,925 S-curve
300	980				3.8	89°20'	+11.4	+7.6			TP				
	660		139°5'+180°	-12.9'	+5.3	TH	-3.3	+2.0	811.0		BS	+394	-529		
	660				+7.8	89°30'	-5.8	+2.0			BS				
301	330		139°5'	-12.9'	2.2	-		-2.2		808.8		-197	+265	1,590,032	296,661
302	0				5.2	-		-5.2		805.8	T	0	0	1,590,229	296,394
303	330		322°59'	-12.9'	10.3	92°-	-11.5	-21.8		789.2		+215	-251	1,590,444	296,145
304	660	659		-12.9'	7.9	93°-	-21.5	-42.4		768.6		+429	-500	1,590,658	295,896
305	990	989	322°59'	-12.9'	6.3	92°40'	-46.0	-52.3		758.7	TP	+643	-751	1,590,872	295,645
305	990				11.9	92°10'	-37.4	-52.3			TP				
	330	329	127°14'+180°	-12.9'	+8.0	86°-	-23.0	-15.0	743.7		BS	+138	-299		
	330				+5.1	86°30'	-20.1	-15.0			BS				
306	0				5.4	-		-5.4		738.3	T	0	0	1,591,010	295,346 T-opposite sta.
306	270		341°57'	-12.9'	12.2	91°30'	-7.1	-19.3		724.4		+233	-137	1,591,243	295,209 T-intersect.

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
9/9/80		G. Cotcamp		R. [unclear]		6837		[unclear]		8	36				
AREA		TOPO MAP		STATE		COUNTY		TWP		PARTY MANAGER					
New York		Degrasse		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
									743.7						
307	334		347°46'	-11.8°	8.7	92°-	-11.6	-20.3		723.4	TP	+305+3	-136	1591,318	295,210
307	334				11.6	91°30'	-8.7	-20.3			TP				
	985		188°47' +180°	-11.8°	+0.8	-		+0.8	724.2		BS	+984+3	-52		
	985				+5.7	TH	-4.9	+0.8			BS				
BM	982		187°24'	-11.8°	7.0	89°30'	+8.6	+1.6		725.8		-979	+75	1591,324	295,233
308	660		" "	" "	1.4	-		-1.4		722.8		-658	+51	1591,447	295,209
309	330		189°11'	-11.8°	3.8	-		-3.8		720.4		-327	-44	1591,978	295,202
310	0				5.2	-		-5.2		719.0	TP	0	0	1592,305	295,158
311	330		190°50'	-11.8°	2.1	-		-2.1		722.1		+283	-170	1592,588	294,988
312	660		340°50'	-11.8°	6.7	-		-6.7		717.5	TP	+566+3	-340	1592,874	294,818
312	660				10.0	TH					TP				
	322		137°28' +180°	-11.8°	+13.0	-		+13.0	730.5		BS	+188+3	-262		
	322				+11.3	BS					BS				curve
313	0				5.4	-		-5.4		725.1	TP	0	0	1593,065	294,556
314	330		305°15'	-11.8°	12.8	-		-12.8		717.7		+131	-303	1593,196	294,253
315	660				12.5	-		-12.5		718.0		+263	-605	1593,338	293,951
TP	860		305°15'	-11.8°	10.9	-		-10.9		719.6	TP	+342+3	-789	1593,410	293,767
TP	860				6.6	BS	-4.3	-10.9			TP				split st. - curve
	797		150°15' +180°	-11.8°	+5.4	92°20'	+32.4	+37.8	757.4		BS	+596+3	-507		
	797				+7.7	92°16'	+30.1	+37.8			BS				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	9/9/80	INSTRUMENT MAN	G. Cotsamp	ROD MAN	G. L. Linaer	PARTY NUMBER	6834	NOTES CHECKED BY	slh	LINE NO.	8	PAGE	37
AREA	New York	TOPO MAP	DeGrasse/South Edwards New York	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.	
									757.4					
316	655		150°15'	-11.4°	7.3	92°30'	-28.5	-35.8		721.6		-493	+431	1,593,516 293,469
317	325	324	146°18'	-11.4°	10.2	94°-	-22.6	-32.8		724.6		-229	+230	1,593,780 293,468
<u>1</u>	37		237°7'	-11.4°	7.2	-	-	-7.2		750.2		-26	-26	1,593,983 293,212 Trail (north)
318	0				5.2	-	-	-5.2		752.2	TP	0	0	1,594,009 293,238 DeGrasse Quad
319	332		279°37'	-11.4°	134	91°-	-5.8	-19.2		738.2	TP	-16+3	-332	1,593,996 292,906 South Edwards
319	332				10.5	91°30'	-8.7	-19.2			TP			
	662		88°23'+180°	-11.4°	+10.6	88°-	-23.1	-12.5	725.7		BS	-199+3	-695	South Russell
	662				4.8	88°30'	-17.3	-12.5			BS			↓
320	332		88°23'	-11.4°	7.8	91°-	-5.8	-13.6		712.1		-75	-327	1,593,925 292,584
BM	85		117°18'	-11.4°	84	-	-	-8.4		717.3		-23	+82	1,593,827 292,343 el. 715. U.S.G.S. 145 ME A 1965
TP	22		8°14'	-11.4°	5.6	-	-	-5.6		720.1		+22	-1	1,593,873 292,260 1,593,880 + 292,285 Y-intersect (south)
321	0				5.2	-	-	-5.2		720.5	TP	0	0	1,593,850 292,261 TP - opposite side
322	330		323°57'	-11°	2.8	-	-	-2.8		722.9		+225	-242	1,594,025 292,019
323	660			"	1.3	-	-	-1.3		724.4		+450	-483	1,594,300 291,778
324	993		321°46'	-11°	0.8	TH	+5.0	+4.2		729.9	TP	+198+3	-152-3	1,594,501 291,506
324	993				4.5	89°30'	+8.7	+4.2			TP			
	330		123°36'+30°	-11°	+6.3	89°-	-5.8	+0.5	730.4		BS	+127+3	-305-2	
	330				+4.3	89°20'	-3.8	+0.5			BS			
325	0				5.2	-	-	-5.2		725.2	TP	0	0	1,594,631 291,199
326	330		392°52'	-11°	7.7	-	-	-7.7		722.7		+291	-156	1,594,922 291,043

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	7/9/80	INSTRUMENT MAN	G. Cotcamp	ROD MAN	G. Litzinger	PARTY NUMBER	6834	NOTES CHECKED BY	ALL	LINE NO.	8	PAGE	38	
AREA	New York	TOPO MAP	South Edwards/Hermon	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
									730.4							
327	650		352°40'	-11°	2.7	TH	+3.3	+0.6		-731.0	TP	+617+3	-209-2	1,595,257	290,993	curve South Edwards ↑
327	650				5.1	89°30'	+5.7	+0.6			TP					
	656		170°55'+180°	-11°	+5.0	88°-	-22.9	-17.9	713.1		BS	+616+2	-225-2			curve
	656				+31	88°10'	-21.0	-17.9			BS					
328	327		164°23'	-11°	5.0	88°-	+11.4	+6.4		719.5		-292	+147	1,595,577	290,913	Hermon Quad.
329	0				5.2	-				707.9	π	0	0	1,595,869	290,766	↓
330	330		311°11'	-11°	12.2	-				700.9		+166	-285	1,596,035	290,481	
331	661		311°11'	-11°	11.7	-				701.4	TP	+332+2	-571-2	1,596,203	290,193	
331	661				8.9	80		-11.7			TP					
	330		147°57'+180°	-11°	+10.5	92°-	+11.5	+22.0			BS	+241+2	-225-2			
	222				+12.3	91°30'	+8.6	+21.9	723.3		BS					
332	0				5.2	-		-5.2		718.1	π	0	0	1,596,446	289,966	
332	185		232°41'	-11°	0.2	-		-0.2		723.1		+145	-145	1,596,591	289,851	1,596,615 + 289,865 7-2 (south west) el. 721
333	185		235°26'	-11°	4.6	-		-4.0		719.3	TP	+272+2	-187-1	1,596,720	289,778	
333	185				5.7	-	+1.7	-4.0			TP					
	1980		161°57'+180°	-11°	+3.5	-		+3.5	722.8		BS	+1731+2	-961-			
	1980				+13.4	TH	-9.9	+3.5			BS					
334	1650		161°57'	-11°	8.6	-		-8.6		714.2		-142	+801	1,597,011	289,618	
335	1320		"	"	12.8	-		-12.8		710.0		-1154	+641	1,597,294	289,458	
336	990		"	"	11.2	90°30'	8.6	-19.8		703.0		-865	+481	1,597,588	289,298	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 9/9/80	INSTRUMENT MAN G. Cotcamp	ROD MAN S. Litzinger	PARTY NUMBER 6934	NOTES CHECKED BY JLL	LINE NO. 8	PAGE 39
AREA New York	TOPO MAP HERMON	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
									722.8						North Corrad. y = +43' x = -20'	
337	840		161° 8'	-11°	126	90° 30'	-7.3	-19.9		702.9		-728	+418	1,597,725	289,235	T-rod (northeast)
338	660		159° 23'	-11°	128	90° 30'	-5.8	-18.6		704.2		-562	+346	1,597,891	289,163	
339	330		156° 26'	-11°	129	-	-	-		709.4		-272	+157	1,598,181	289,004	
340	0				5.2	-	-	-		717.6	X	0	0	1,598,453	288,817	
341	330		325° 14'	-11°	5.2	-	-	-		717.0		+230	-236	1,598,693	288,581	
342	660			"	5.0	-	-	-		717.8		+460	-473	1,598,913	288,344	
343	990			"	10.3	-	-	-		712.5		+691	-709	1,597,144	288,108	
343	1320		325° 14'	-10.5°	7.6	85°	-3.8	-16.2		706.6	TP	+929+3	-938	1,599,385	287,879	
343	1320				27	90° 30'	-3.8	-16.2			TP					
	330		150° 14' + 180°	-10.5°	+6.0	88° 30'	-8.6	-2.6			BS	+252+3	-213			
	330				+7.9	88° 10'	-10.6	-2.7	703.9		BS					
344	0				5.2	-	-	-		698.7	X	0	0	1,599,640	287,666	
345	330		345° 39'	-10.5°	12.2	90° 30'	-2.9	-15.1		688.8		+299	-139	1,599,339	287,527	
346	660		345° 34'	-10.5°	8.3	90° 30'	-5.8	-14.1		689.8	TP	+598+3	-278	1,600,240	287,388	
346	660				191	-	-	-			TP					
	1320		167° 56' + 180°	-10.5°	+15.0	90° 44'	+16.9	+31.9	721.7		BS	+1219+3	-506			
	1320				+13.9	90° 48'	+18.4	+32.3			BS					
347	990		167° 56'	-10.5°	17.8	90° 40'	-11.5	-29.3		692.4		-914	+379	1,600,549	287,261	
348	660		"	"	19.7	90° 40'	-7.7	-27.4		694.3		-610	+253	1,600,853	287,135	
349	330		"	"	12.3	-	-	-		709.4		-305	+126	1,601,168	287,009	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 9/9/80	INSTRUMENT MAN G. Cotcamp		ROD MAN G. Litzinger		PARTY NUMBER 6834		NOTES CHECKED BY shl		LINE NO. 8	PAGE 40
AREA New York	TOPO MAP Hermon		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.	
									721.7					
350	0				5.2	-				716.5	π	0	0	1601,963 286,882
351	330		171° 10'	-10°	1.5	71°	-5.8	-17.4		704.3		+292	-153	1601,755 286,729
352	660			"	7.5	72°	-28.2	-38.3		693.4		+587	-307	1602,047 286,575
353		989		-10°	5.0	82°	-43.1	-48.1			π	+876.7	-960	1602,342 286,422
353					5.0	72°	-34.5	-48.2		673.5	π			
	660		171° 10' +180°	-10°	+6.0	-		+6.0	679.5		BS	+625.3	-213	
	660				+2.7	84	+3.3	+6.0			BS			
354	330		171° 10'	-10°	7.4	-		-7.4		672.1		-312	+107	1602,658 286,316
355	0				5.4	-		-5.4		674.1	π	0	0	1602,970 286,209
356	330		359° 20'	-10°	1.3	-		-1.3		679.2		+311	-111	1603,281 286,098
357	660		359° 20'	-10°	2.1	-		-2.1		677.4	π	+622.3	-220	1603,595 285,987
357	660				5.9	74	+3.3	-2.1			π			
	323		150° 0' +180°	-10°	+5.7	93°	+16.9	+22.6			BS	+247.3	-208	
	323				+11.4	92°	+11.3	+22.7	706.1		BS			
358	0				5.4	-		-5.4		694.7	π	0	0	1603,845 285,779
359	333		316° 52'	-10°	11.4	89°	+57.8	-5.6		694.5	π	+200.3	-266	1604,048 285,573 T.P. opposite sta
359	333				14.3	88° 30'	+8.7	-5.6			π			
	660	658	176° 2' +180°	-10°	+10.6	86°	-45.9	-35.3			BS	+639.3	-259	
	660				+4.8	86° 30'	-40.2	-35.4	659.1		BS			
360	330		176° 2'	-10°	6.1	87°	+17.2	+11.1		670.2		-320	+80	1604,370 285,434

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	9/10/80	INSTRUMENT MAN	G. Cotcamp	ROD MAN	G. Litzinger	PARTY NUMBER	6834	NOTES CHECKED BY	all	LINE NO.	8	PAGE	41	
AREA	New York	TOPO MAP	Heron	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.	
									659.1					
361	0				5.2	-		-5.2		653.9	T	0	0	1604,690 285,351
362	330		0°57'	-10°	8.9	91°	-5.8	-14.7		644.4		+326	-52	1605,016 285,300
363	660		0°57'	-10°	13.6	84	+3.3	-16.9				+652+3	-104	1605,245 285,250
363	660				11.2	90°30'	-5.8	-17.0		641.9	T			
	328		160°20'+180°	-10°	+1.8	-		+1.8	643.5		BS	+285+3	-162	
	328				+3.6	74	-1.6	+2.0			BS			
364	0				5.4	-		-5.4		638.1	T	0	0	1605,638 285,088
IF	252		325°4'	-10°	10.9	-		-10.9			TP	+178+3	-178-2	1605,814 285,908
IF	252				9.7	84	-1.3	-11.0		632.3	TP			
	1104		220°13'-180°	-10.5°	+1.7	-		+1.7	633.8		BS	+959+3	+547-3	
	1104				+7.2	74	-5.5	+1.7			BS			
BM	1290		218°37'	-10.5°	8.7	74	+6.5	-2.2		631.6		-1138	-608	1605,638 284,814
365	990		219°27'	-10.5°	2.7	-		-2.7		631.1		-866	-479	1605,910 285,973
366	660		"	"	3.1	-		-3.1		630.7		-578	-319	1606,198 285,133
367	330		"	"	3.7	-		-3.7		630.1		-289	-130	1606,487 285,292
368	0				5.4	-		-5.4		628.4	T	0	0	1606,776 285,452
369	330		39°12'	-10.5°	5.3	-		-5.3		628.5		+289	+158	1607,065 285,610
370	660		"	"	5.2	-		-5.2		628.6		+579	+317	1607,355 285,769
IF	770		37°38'	-10.5°	5.9	-		-5.9		627.9		+685	+351	1607,461 285,803

Whipple's Corner
1605,810 + 284,955
T-intersect.

EL 631
USGS 126 MEA 1965

1607,500 + 285,830
V. Point

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
9/10/80		G. Cotcamp		G. Litzinger		6834		JHL		8	42					
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
New York		Herman		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	
									633.8							
371	988		36°3'	-10.8°	5.8	-		-5.8	2.2	627.8	TP	+2.4+3	+421-3	1,607,673	285,870	curve
371	988				0.8	84	-4.9	-5.7			TP					
	990		189°27.5-189°	-10.8°	+7.0	-		+7.0	2.2	634.6	BS	+984+3	-109.3			
	990				+2.1	84	+5.0	+7.1			BS					
372	660		182°51'	-10.8°	8.1	-		-8.1		626.5		-159	+91	1,609,000	285,249	
373	330		" "	"	7.0	-		-7.0		627.6		-327	+46	1,608,333	285,804	
374	0				5.2	-		-5.2		629.4	TP	0	0	1,609,660	285,758	
375	330		2°9'	-10.8°	3.8	88°-	+11.5	+7.7		642.3		+326	-50	1,608,986	285,708	
376	660	658	" "	"	8.4	86°-	+45.9	+37.5		672.1		+651	-99	1,609,311	285,659	
377	990	988	" "	"	0.3	86°-	+68.9	+48.6		703.2		+977	-149	1,609,637	285,609	
378	1330	1326	3°38'	-10.8°	6.1	85°20'	+107.8	+101.7	2.2	736.1	TP	+1316+2	-165-3	1,609,978	285,590	- C opposite Sta.
378	1330				10.0	85°10'	+111.7	+101.7			TP					
	665	664	213°45'-180°	-10.8°	+10.8	92°20'	+27.0	+37.8	2.2	773.7	BS	+611+0	+259-3			
	665				+2.8	92°30'	+28.9	+37.8			BS					
379	740	739	211°59'	-10.8°	12.9	92°30'	-32.2	-49.6		729.1		-689	-127	1,609,902	285,579	1,609,900 + 285,585 front seat
379	330		213°45'	-10.8°	12.7	90°30'	-2.9	-15.6		758.1		-304	-129	1,610,287	285,717	
380	0				5.2	-		-5.2		768.5	TP	0	0	1,610,591	285,846	
381	330		31°45'	-11.3°	1.8	-		-1.8		771.9		+309	+115	1,610,900	285,761	
382	660		27°59'	-11.3°	5.4	-		-5.4	2.2	768.1	TP	+632+2	+189-3	1,611,225	286,032	
382	660				5.7	TH	+9.3	-5.4			TP					

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 9/10/80	INSTRUMENT MAN G. Cotcamp	ROD MAN G. Litzinger	PARTY NUMBER 6834	NOTES CHECKED BY HLL	LINE NO. 8	PAGE 43
AREA New York	TOPO MAP Heron	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.	
382	1320	1318	205° 29' - 180°	-11.3°	+9.6 +10.6	87° -	-68.9	-59.3		768.1	BS	+1278+2	+323-3	
	1320				+5.7	87° 10'	-65.2	-59.5	708.4		BS			
383	990	989	205° 29'	-11.3°	6.9	87° -	+51.7	+44.8		753.2		-959	-242	1,611,546 286,110
384	660	659	" "	"	6.1	87° -	+34.5	+28.4		736.8		-637	-101	1,611,866 286,191
385	330		" "	"	5.5	87° -	+17.2	+11.7		720.1		-320	-81	1,612,185 286,271
386	0				5.2	-		-5.2		703.2	TP	0	0	1,612,505 286,352
387	330	329	26° 13'	-11.3°	3.9	94° -	-23.0	-26.9		681.5		+318	185	1,612,823 286,437
388	660	658	" "	"	5.4	94° -	-45.9	-51.3		657.1		+636	469	1,613,141 286,521
389	990	887	26° 13'	-11.3°	13.0	94° 10'	-71.7	-84.7	2-2'	623.5	TP	+959+2	+259+3	1,613,461 286,603
389	990				11.1	94° 20'	-74.6	-84.7			TP			
	640	638	200° 12' - 180°	-11.3°	4.0	86° -	-44.5	-37.5			BS	+630+2	+99-2	
	640				1.4	86° 30'	-39.0	-37.6	5-1' 585.8		BS			
390	310		200° 12'	-11.3°	5.2	87° -	+14.2	+11.0		596.8		-306	-4*	1,613,787 286,651 Town at Rural.
391	0				5.4	-		-5.4		580.4	TP	0	0	1,614,093 286,699 vertical coord. -2.3'
BM	420		9° 50'	-11.3°	11.2	89° -	+7.3	-3.8		582.0		+420	-11	1,614,513 286,688 U.S.G.S 124 MCA 1965
#1	28		226° 16'	-11.3°	4.1	-		-4.1		581.7		-23	-16	1,614,070 286,683 T-intersect
392	340		273° 29'	-11.3°	4.8	-		-4.8		581.0		-46	-337	1,614,047 286,762
393	670		273° 29'	-11.3°	2.7	-		-2.7		583.1	TP	-91	-667-3	1,614,002 286,032
292	670				6.1	TH	+3.4	-2.7			?			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	9/10/81	INSTRUMENT MAN	G. Cotcamp	ROD MAN	G. Litzinger	PARTY NUMBER	6834	NOTES CHECKED BY	ghl	LINE NO.	8	PAGE	44	
AREA	New York	TOPO MAP	Herman	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.	
393										583.1				
	660		102°17' +180°	-11.3°	+2.7	TH	-3.3	+6.4	589.5		BS	+11	-660-2	
	660				+10.2	89°4'	-3.8	+6.4			BS			
394	330		100°36'	-11.3°	2.2	TH	+1.7	-0.5		589.0		+4	+330	1614017 285,699
395	0				5.2	-		-5.2		584.3	π	0	0	1614,013 285,369
396	70		279°25'	-11.3°	7.6	-		-7.6		581.9		-8	-6.9	1614,005 285,300
396	330		282°4'	-11.3°	9.9	91°-	-5.8	-15.7		573.8		+7	-3.0	1614,017 285,339
397	656		285°-	-11.3°	4.6	91°-	-11.4	-16.0		573.5		+72	-55.5	1614,063 284,714
398	982		288°7'	-11.6°	14.1	-		-14.1		575.4	TP	+111+2	-976-3	1614,126 284,390
398	982				9.2	64	-4.9	-14.1			TP			
	660		128°30' +180°	-11.6°	+5.1	-		+5.1	580.5		BS	+299+2	-589-3	
	660				+8.4	TH	-3.3	+5.1			BS			
399	330		132°46'	-11.6°	4.2	-		-4.2		576.3		-171	+282	1614,256 284,080
400	0				5.2	-		-5.2		575.3	π	0	0	1614,427 283,798
401	330		320°54'	-11.6°	6.8	-		-6.8		573.7		+209	-255	1614,636 283,543
402	660		329°55'	-11.6°	9.5	-		-9.5		571.0		+453	-480	1614,880 283,316
403	980		327°22'	-11.6°	4.9	-		-4.9		575.6	π	+710+2	-684-3	1615,139 283,111
403	980				9.8	TH	+4.9	-4.9			π			Top opposite sta.
	990		163°9' +180°	-11.6°	+9.1	-		+9.1	584.7		BS	+870+2	-472-3	
	990				+4.1	64	+5.0	+9.1			BS			
404	660		161°30'	-11.6°	5.7	-		-5.7		579.0		-571	+331	1615,440 282,767

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
9/10/80		G. Cochrane		G. Litzinger		6834		BHL DLW		8	45					
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
New York		Herman		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	
									584.7							
405	330		61°30'	-11.6°	41	-		-4.1		580.6		-285	+165	1615.726	282.801	
406	0				52	-		-5.2		579.5	X	0	0	1616.011	282.636	
407	330		341°18'	-11.6°	7.8	-		-7.8		576.9		+285	-166	1616.296	282.478	
408	660		" "	"	11.3	-		-11.3		573.4		+570	-333	1616.581	282.303	
409	985		349°6'		14.1	-		-14.1		570.6	TP	-831+2	-529-3	1616.844	282.104	curve
409	985		339°6'	-11.6°	9.2	04	-4.9	-14.1			TP					
	660		143°24'+180°	-11.6°	+8.3	-		+8.3	578.9		BS	+990+2	-992-3			
	660				+5.0	04	+3.3	+8.3			BS					
410	330		143°24'	-11.6°	6.9	-		-6.9		572.0		-220	+296	1617.066	281.855	
411	0				5.2	-		-5.2		573.7	X	0	0	1617.286	281.609	
412	330		322°46'	-11.6°	2.4	-		-2.4		576.5		+217	-298	1617.503	281.361	
413	660		322°46'	-11.6°	5.8	89°-	+11.5	+5.7		584.6	TP	+434.2	-497.3	1617.722	281.109	
413	660				1.8	89°20'	+7.7	+5.9			TP					
	330		153°58'+180°	-11.6°	+11.6	92°-	+11.5	+23.1	607.7		BS	+261+2	-222.3			
	330				+14.5	91°30'	+8.6	+23.1			BS					
414	0				5.2	-		-5.2		602.5	X	0	0	1617.985	280.984	
415	330		348°15'	-11.6°	3.6	87°30'	+14.4	+10.8		619.5		+303	-131	1618.288	280.773	
416	660		351°53'	-11.6°	11.6	87°30'	+28.8	+17.2			TP	+621+2	-223-3	1618.608	280.678	
416	660				9.7	87°40'	+26.8	+17.1		624.8	TP					

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9/10/80		G. Catcamp		G. Litzinger		6834		slw		8	46						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New York		Heron		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		
416										624.8							
	985		164° 9' +180°	-11.9°	+8.9	-		+ 8.9			BS	+ 872+2	-759-3				
	985				+3.9	8H	-4.9	+ 8.8	633.6		BS						
417	660		159° 44'	-11.9°	6.8	-		- 6.8		626.8		-559	+351	1,618,923	280,567		
418	330		156° 25'	-11.9°	4.5	-		- 4.5		629.1		-269	+192	1,619,213	280,408		
419	0				5.2	-		- 5.2		628.4	TP	0	0	1,619,482	280,216		
420	330		328° 52'	-11.9°	12.7	8H	-1.7	- 14.4		619.2		+241	-225	1,619,723	279,991		
421	660		325° 18'	-11.9°	4.4	?	-11.5	- 26.0			TP	+453+1	-480-3	1,619,936	279,733		
421	660				8.8	91° 30'	-17.3	- 26.1	*	607.5	TP						
	985		125° 55' +180°	-11.9°	+8.3	88° 30'	-25.8	- 17.5	590.0		BS	+401	-900-3				
	985				+26	88° 50'	-20.1	- 17.5			BS						
422	658		119° -	-11.9°	44	89° -	+11.4	+ 7.1		597.1		-193	+627	1,620,144	279,459		
423	330		116° 35'	-11.9°	50	89° -	+ 5.8	+ 0.8		590.8		-84	+319	1,620,253	279,149		
424	0				5.2	-		- 5.2		584.8	TP	0	0	1,620,337	278,830		
425	330		290° 42'	-12.3°	11.1	-		- 11.1		578.9		+98	-326	1,620,385	278,504		
426	660		287° 59'	-12.3°	11.3	90° 30'	-5.8	- 17.1		572.9		+65	-657	1,620,402	278,173		
427	990				58	91° -	-17.3	- 23.1		566.9		+98	-985	1,620,435	277,845		
428	320		281° 59'	-12.3°	53	91° -	-23.0	- 28.3			TP	+131	-1319-3	1,620,468	277,513		
428	1320				130	90° 40'	-15.4	- 28.4		561.6	TP						
			107° 41' +180°	-12.3°	+11	91° 30'	+17.3	+ 28.4	590.0		BS	+62	-657-3				
					+130	91° 20'	+15.4	+ 28.4			BS						

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
9/11/80		G. Catcamp		G. L. King		6837		JEL vlw		88	47						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
New York		Hicmen		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		
									590.0								
429	330		107°41'	-12.3°	11.2	92° -	-11.5	-22.7		567.3		-31	+329	1620,499	277,182		
430	0				5.2	-		-5.2		584.8	X	0	0	1620,530	276,833		
431	330	329	286°56'	-12.3°	3.2	86° -	+23.0	+19.8		609.8		-27	-328	1620,557	276,525		
432	660	658	286°56'	-12.3°	7.5	86° -	+45.9	+44.4			TP	+53	-656-3	1620,583	276,194		
432	660				7.3	85°30'	+57.6	+44.3		634.3	TP						
	330		125°45' +180°	-12.3°	+12.3	93° -	+17.2	+29.5	663.8		BS	+131	-303-3				
	330				+12.3	93°20'	+19.2	+29.5			BS						
433	0				5.4	-		-5.4		658.4	X	0	0	1620,714	275,888		
434	330		321°38'	-12.3°	4.9	87° -	+17.2	+12.3		676.1	TP	+209	-255-3	1620,923	275,630		
434	330				1.9	87°30'	+14.4	+12.5			TP						
	1980	1979	197°3' +180°	-12.7°	+14.6	91°30'	+57.8	+66.4	742.5		BS	+1383	-1415-3				
	1980				+8.8	91°46'	+57.6	+66.4			BS						
435	1650	1649	197°3'	-12.7°	10.2	91°4'	-48.0	-58.9		683.6		-1153	+1179	1621,153	275,399		
436	1320	1319	"	"	12.8	92° -	-46.0	-56.8		685.7		-922	+943	1621,384	275,155		
437	990	989	195°58'	-12.7°	13.6	92°10'	-37.4	-50.4		692.1		-678	+720	1621,628	274,932		
438	660		"	"	8.7	92°15'	-24.9	-33.6		708.9		-452	+481	1621,854	274,693		
439	330		"	"	12.2	90°30'	-2.9	-15.1		727.4		-226	+240	1622,080	274,452		
440	0				5.2	-		-5.2		737.3	X	0	0	1622,306	274,212		
441	330		325°22'	-12.7°	6.0	-		-6.0		736.5		+224	-243	1622,530	273,969		
442	660		"	"	11.2	90°30'	-5.8	-17.0		725.5		+447	-485	1622,753	273,727		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
7/11/80		G. Cotcamp		[Handwritten]		[Handwritten]		[Handwritten]		8	48				
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER				
New York		Herman		New York		[Handwritten]		[Handwritten]	[Handwritten]	[Handwritten]	[Handwritten]				
STATION NO.	SLOPE DISTANCE	PLOTTING 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
									742.5						
443	990		325° 22'	-12.7°	11.9	91° -	-17.3	-29.2		713.3		+671	-728	1,622,977	273,484
444	1320		"	"	7.5	91° -	-23.0	-30.5		712.0		+895	-971	1,623,201	272,741
445	1650		325° 22'	-12.7°	6.2	88° 55'	-24.0	-30.3		712.2	TP	+1118	-1213.3	1,623,424	272,996
445	1650		"	"	111	90° 40'	-19.2	-30.3			TP				
	1252		148° 13' +180°	-12.7°	+6.7	89° -	-28.8	-22.1			BS	+1177	-1156.3		
	1257		"	"	+1.8	89° 10'	-24.0	-22.2	690.0		BS				
446	1352		148° 13'	-12.7°	9.8	89° -	+23.0	+13.2		703.2		-792	+925	1,623,659	272,762
446	1360		148° 26'	-12.7°	9.3	89° -	+23.7	+14.4		709.4		-974	+949	1,623,627	272,786
447	992		148° 13'	-12.7°	3.5	TH	+5.0	+1.5		691.5		-706	+644	1,623,895	272,531
448	660		"	"	2.7	-	-	-2.7		687.9		-471	+462	1,624,110	272,299
449	830		"	"	3.4	-	-	-3.4		686.6		-235	+231	1,624,366	272,068
450	0		"	"	5.2	-	-	-5.2		684.8	TP	0	0	1,624,601	271,837
451	330		327° 6'	-12.7°	8.1	-	-	-8.1		681.9		+231	-236	1,624,832	271,601
452	665		"	"	13.3	-	-	-13.3		676.7		+462	-712	1,625,063	271,365
453	730		"	"	10.8	64	-5.0	-15.8		674.2		+693	-707	1,625,294	271,130
454	1320		327° 6'	-12.7°	14.2	-	-	-14.2		675.8	TP	+924 +4	-943 -2	1,625,529	270,892
454	1320		"	"	7.6	BH	-6.6	-14.2			TP				
	1322		147° 22' +180°	-12.7°	+4.2	84°	-23.0	-19.8	657.0		BS	+928 +4	-939 -2		
	1324		"	"	+8.1	88° 50'	-26.9	-18.8			BS				
455	990		147° 22'	-12.7°	3.3	89° -	+17.3	+14.0		671.0		-696	+704	1,625,765	270,655

1,623,590 + 272,720
Fordham el. 702

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 9/11/80	INSTRUMENT MAN G. Catcamp	ROD MAN G. Intinger	PARTY NUMBER 5874	NOTES CHECKED BY MLD rlu	LINE NO. 28	PAGE 49
AREA New York	TOPO MAP Herman	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.	
									657.0					
456	660		147°22'	-12.7°	5.1	89°-	+11.5	+6.4		663.4		-969	+969	1625997 270420
457	330		" "	"	6.6	TH	+1.7	+1.1		658.1		-232	+235	1626222 270186
458	0				5.2	-	"	-5.2		651.8	TP	0	0	1626461 269951
459	330		320°18'	-12.7°	9.8	92°-	-11.5	-21.3		635.7		+201	-261	1626662 269690
460	655	654	314°15'	-12.7°	10.0	93°-	-34.2	-44.2		612.8	TP	+342+4	-557-2	1626807 269392 curve
460	655				13.8	92°40'	-30.4	-44.2			TP			
	2310	2309	112°47.4 +180°	-12.7°	+8.9	88°-	-80.6	-71.7	541.1		BS	+405+4	-2273-2	
	2310				+2.2	88°0'	-73.9	-71.7			BS			
461	1980		712°32'	-12.7°	4.0	88°30'	+51.8	+47.8		588.9		-338	+1951	1626878 269068
462	1650		"	"	2.9	89°-	+28.8	+25.9		567.0		-282	+1626	1626934 268793
463	1320		"	"	6.9	89°-	+23.0	+16.1		557.2		-225	+1301	1626991 268918
464	790		"	"	0.7	89°30'	+8.6	+7.9		549.0		-169	+975	1627047 268092
465	660		"	"	3.0	TH	+3.3	+0.3		541.4		-113	+650	1627103 267767
466	330		"	"	7.3	-		-7.3		533.8		-56	+325	1627160 267492
467	0				5.2	-		-5.2		535.9	TP	0	0	1627216 267117
468	330		220°42.5'	-12.7°	10.8	91°-	-5.8	-16.6		524.5		+46	-327	1627262 266790
469	660		"	"	10.3	91°30'	-17.3	-27.6		513.5		+92	-654	1627308 266467 Town of Herman
470	990		"	"	10.4	91°-	-17.3	-27.7		513.4		+138	-780	1627359 266137 ↓
471	1210		290°34'	-12.7°	5.9	91°-	-21.1	-27.0		514.1		+166	-1199	1627382 265418 4-Way Intersert
471	1320		297°42.5'	-12.7°	8.7	91°-	-23.0	-31.7		509.4		+184	-1307	1627400 265810

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	INSTRUMENT MAN	ROD MAN	PARTY NUMBER	NOTES CHECKED BY	LINE NO.	PAGE
7/1/80	S. Lutz	G. Lutzinger	6834	BW	88	51
AREA	TOPO MAP	STATE	COUNTY	TWP	RANGE	PPM
110.5.2	Bigelow	New York	St. Lawrence			
					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.	
									486.9					horiz. curved yr +61 vs -76'
JL 75	512		116° 59'	-12.7°	3.7	88° 30'	+13.1'	+9.7		486.6		-126	+496	1628,225 262,835 4-way Intersect.
481	330		116° 1'	-12.7°	2.2	-		-2.2		484.7		-76	+321	1628,235 262,660
482	0				5.2	-		-5.2		481.7	T	0	0	1628,351 262,339
483	330		295° 52'	-12.7°	5.2	-		-5.2		481.7		+75	-321	1628,426 262,218
484	660		" "	"	3.2	TH	+3.3	+0.1		487.0		+150	-693	1628,501 261,223
485	990		" "	"	5.8	TH	+5.0	-0.8		486.1		+226	-964	1628,577 261,225
486	1320		295° 52'	-12.3°	10.2	TH	+6.6	-3.7	*	483.2	TP	+310	-1283+4	1628,661 261,060
486	1320				11.4	89° 40'	+7.7	-3.7			TP			
	990		116° 31' +180°	-12.3°	+9.6	-		+9.6	492.8		BS	+243	-960+4	
	990				+14.6	TH	-5.0	+9.6			BS			↑
487	660		116° 31'	-12.7°	5.3	-		-5.3		487.5		-162	+640	1628,742 260,744 Herman Quad.
488	330		" "		5.3	-		-5.3		487.5		-81	+320	1628,823 260,424 Bigelow Quad.
489	0				5.2	-		-5.2		487.6	T	0	0	1628,904 260,104 ↓
490	330		275° 18'	-12.3°	2.4	-		-2.4		490.4		+80	-320	1628,984 259,784
491	660		" "		2.4	-		-2.4		490.4		+160	-640	1629,064 259,464
492	990		295° 18'	-12.3°	2.0	TH	+5.0	+3.0		495.8	TP	+240	-961+4	1629,144 259,147
492	990				5.7	89° 30'	+8.6	+2.9			TP			
	330		120° 8' +180°	-12.3°	+3.9	89° 0'	-5.8	-1.9	493.9		BS	+101	-319+4	
	330				+3.0	89° 10'	-4.8	-1.8			BS			
493	0				5.2	-		-5.2		488.7	T	0	0	1629,245 259,837

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 9/12/80	INSTRUMENT MAN G. Cottramp	ROD MAN G. Litzinger	PARTY NUMBER 6837	NOTES CHECKED BY shl	LINE NO. 8	PAGE 52
AREA New York	TOPO MAP Kigokew	STATE New York	COUNTY St. Lawrence	TWP	RANGE	PPM
				PARTY MANAGER L. Paris		

STATION NO.	SLOPE DISTANCE	PLOTTING 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.	
									493.9					
494	328		284°58'	-12°	8.8	-		-8.8		485.1	TP	+17	-328+4	1,629,262 258,573
494	328				10.5	TH	+1.6	-8.9			TP			
	535		97°33'+180°	-12°	+9.5	89°	-9.3	+0.2	485.3		BS	-42	-533+4	
	535				+6.3	89°20'	-6.2	+0.1			BS			
495	205		97°33'	-12°	2.9	-		-2.9		482.4		+16	+204	1,629,236 258,188
π	0				5.2	-		-5.2		480.1	π	0	0	1,629,220 257,984
≡	172		313°-	-12°	8.2	-		-8.2		477.1		+89	-147	1,629,309 257,937 bridge
496	132		315°42'	-12°	8.1	-		-8.1		477.2		+73	-110	1,629,293 257,874
497	465		315°42'	-12°	5.8	-		-5.8		479.5	TP	+258	-387+4	1,627,478 257,601
497	465				8.1	TH	+2.3	-5.8			TP			
	990		139°29'+180°	-12°	+2.6	89°	+17.3	-14.7	404.8		BS	+602	-786+4	
	990				+11.2	88°30'	-25.9	-14.7			BS			
498	660		139°29'	-12°	7.0	89°20'	+5.8	-1.2		463.6		-402	+524	1,629,678 257,343
499	330		" "	"	9.8	-		-9.8		453.0		-201	+262	1,629,879 257,081
500	0				5.2	-		-5.2		459.6	π	0	0	1,630,086 256,819
501	330		319°51'	-12°	13.1	-		-13.1		451.7		+202	-261	1,630,282 256,558
502	660			"	13.5	TH	-3.2	-11.8		448.0		+405	-521	1,630,485 256,298
503	990		319°51'	-12°	7.1	89°20'	+8.6	+1.5		466.3	TP	+607	-782+4	1,630,687 256,041
503	990				10.0	89°20'	+11.5	+1.5			TP			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 9/12/80	INSTRUMENT MAN G. Catcamp	ROD MAN G. Litzinger	PARTY NUMBER 6834	NOTES CHECKED BY GHL	LINE NO. 8	PAGE 53
AREA New York	TOPO MAP Bigelow	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	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
503										446.3'								
	990		122°59'+120°	-12°	+24	87°-	-17.3	-16.9			BS	+510	-849.4					
	990				+8.2	88°40'	-23.0	-17.8	451.5		BS							
	880		132°45'	-12°	7.3	87°-	+15.4	+8.1		459.6		-450	+756	1,630,797	255,952		1,630,780 + 255,480 Trail (southwest)	
504	660		131°11'	-12°	4.1	-	-	-4.1		447.4		-322	+576	1,630,875	255,772			
505	330		" "	"	136	84	1.7	-15.3		436.2		-161	+288	1,631,036	255,484			
506	0				5.2	-	-	-5.2		446.9	X	0	0	1,631,197	255,196			
507	330		308°55.5'	-12°	7.0	-	-	-7.0		444.5		+199	-294	1,631,346	254,902			
508	660		308°55.5'	-12°	4.0	TH	3.3	-0.7		450.8	TP	+294	-588.3	1,631,496	254,611			
508	660				6.5	87°30'	5.8	-0.7			TP							
	660		127°57'+120°	-12°	+9.2	-	-	+9.2	460.0		BS	+289	-593.3					
	660				+5.9	84	+3.3	+9.2			BS							
509	330		127°57'	-12°	15.0	91°-	-5.8	-20.8		439.2		-144	+297	1,631,641	254,318			
510	0				5.2	-	-	-5.2		454.8	X	0	0	1,631,785	254,021			
511	330		306°16'	-12°	15.2	-	-	-15.2		444.8		+136	-301	1,631,921	253,726			
512	660			"	1.1	89°35'	+5.8	+4.7		464.7		+271	-602	1,632,056	253,719			
	990		306°14'	-12°	13.0	80°-	+16.8	+3.8		463.8		+394	-875	1,632,179	253,146		1,632,220 + 253,130 4-Way Interest. el. 464.	
513	990		306°16'	-12°	14.9	89°-	+17.3	+21.4		462.4	TP	+407.1	-903.3	1,632,191	253,121			
513	990				9.1	89°20'	+11.5	+2.4			TP							
	990		128°1'+120°	-12°	+6.7	-	-	+6.7	469.1		BS	+434.1	-890.3					
	990				+3.9	90°10'	+2.8	+6.8			BS							

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	9/10/80	INSTRUMENT MAN	G. Cutcamp	ROD MAN	G. Litzinger	PARTY NUMBER	6834	NOTES CHECKED BY	shl	LINE NO.	8	PAGE	54
AREA	New York	TOPO MAP	Bigelow	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.	
									469.1					
514	660		128° 1'	-12°	3.7	-	-3.7			465.4		-289	+593	1,632,335 252,827
515	330		" "	"	6.3	-	-6.3			462.8		-145	+297	1,632,479 252,531
516	0				5.2	-	-5.2			463.9	π	0	0	1,632,629 252,234
517	330		306° 47'	-12°	14.7	BH	-1.7	-16.4		452.7		+138	-300	1,632,762 251,934
518	660		" "	"	13.9	90° 30'	-5.8	-19.7		449.4		+277	-599	1,632,901 251,635
519	990		306° 47'	-12°	6.7	90° 30'	-9.6	-15.3		453.8	TP	-915-1	-899+3	1,633,038 251,338
519	990				10.4	BH	-5.0	-15.4			TP			
	990		127° 20' +180°	-12°	+4.3	91° 46'	+28.8	+33.1	486.9		BS	+429-1	-895+3	
	990				+1.9	91° 50'	+31.7	+33.1			BS			
520	660		127° 20'	-12°	12.0	91° 30'	-17.3	-29.3		457.6		-282	+597	1,633,179 251,043
521	330		" "	"	11.7	91° 30'	-9.6	-20.3		466.6		-141	+298	1,633,320 250,744
522	0				5.2	-	-5.2			481.7	π	0	0	1,633,461 250,446
523	330		311° 46'	-12°	8.3	89°	+5.8	-2.5		484.4	TP	+169-1	-286+3	1,633,604 250,163
523	330				2.6	-	-2.6				TP			
	330		142° 46' +180°	-11.7°	+1.0	88° 40'	-7.7	-6.7	477.7		BS	+217-1	-249+3	
	330				4.8	88°	-11.5	-6.7			BS			
524	0				5.2	-	-5.2			472.5	π	0	0	1,633,840 249,917
525	330		304° 56'	-11.7°	9.5	2.3	-5.8	-15.1		462.6		+130	-303	1,633,970 249,614
526	660		304° 56'	-11.7°	3.7	91°	-11.5	-15.2		462.5	TP	+260	-606+4	1,634,100 249,315
526	660				1.8	91° 10'	-13.4	-15.2			TP			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 9/12/80	INSTRUMENT MAN G. Cotcamp	ROD MAN G. H. Feiner	PARTY NUMBER 6834	NOTES CHECKED BY blh	LINE NO. 8	PAGE 55
AREA New York	TOPO MAP Bigelow	STATE New York	COUNTY St. Lawrence	TWP	RANGE	PPM
					PARTY MANAGER L. Paris	

STATION NO.	SLOPE DISTANCE	PLOTTING 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.	
526										462.5				
	990		127°32' +180°	-11.7°	+5.1	-		+5.1	467.6		BS	+431	-891.4	
	990				+10.1	TH	-5.0	+5.1			BS			
527	600		127°32'	-11.7°	7.6	-		-7.6		460.0		-288	+599	1,634,243 249,022
528	330		" "	"	5.2	-		-5.2		462.4		-144	+297	1,634,387 248,785
529	0				5.2	-		-5.2		462.4	π	0	0	1,634,531 248,428 note correct. y = 6 x = +72
530	330		306°57'	-11.7°	11.0	-		-11.0		456.6		+191	-298	1,634,672 248,130
531	660		" "	"	10.0	-		-10.0		457.6		+282	-597	1,634,813 247,831 E.O.L. #8 1,634,970 = 247,480 4-way Intersect
TL TF	1045		306°31'	-11.7°	2.3	89°30'	+9.1	+6.8		474.4		+439	-998	1,634,970 247,480 Route 11 CL 474