

DATE **6-5-78** INSTRUMENT MAN **G. Cotcamp** ROD MAN **R. Hulsey** PARTY NUMBER **6834** NOTES CHECKED BY **G.W.C.** LINE NO. **4**

AREA **CHARLESTON, S.C.** TOPO MAP **Cottageville 15'** STATE **South Carolina** COUNTY **Dorchester** TWP RANGE PPM PARTY MANAGER **L.O. Davis**

STATION NO.	SLOPE DISTANCE	PLOTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS
														Y	X	
BM				2°57'						18.6	BM			373,030	2,188,330	2,188,330 23,030 (scaled)
	196		223°26'-180°	-2.95°	4.1	-	-	+4.1	22.7		BS	+149	+127			U.S.G.S. 32 RFT 1972
	196				5.1	TH	-1.0	+4.1			BS					K. 18.6 (vertical control data)
TP	610		6°55.6'	-2.95°	3.6	-	-	-3.6			TP	+609	+42	373,788	2,188,499	
TP	610				6.6	TH	+3.1	-3.5		19.2	TP					
	862		181°15.3'-180°	-2.95°	3.7	-	-	+3.7	22.9		BS	+862	-25			
	862				8.0	TH	-4.3	+3.7			BS					vertical + horizontal
TP	1152		1°25'	-2.95°	5.2	-	-	-5.2		17.7	TP	+1152	-31	375,802	2,188,443	Traverse from BM. north to station.
TP	1152				11.0	TH	+5.8	-5.2			TP					
	1410		185°26.6'-180°	-2.95°	+5.5	-	-	+5.5	23.2		BS	+1409	+61			
	1410				3.8	90°09'	+1.6	+5.4			BS					
station one	0				5.3	-	-	-5.3		17.9	X	0	0	377,211	2,188,504	
2	220		6°22.6'	-2.95°	5.3	-	-	-5.3		17.9		+220	+13	377,431	2,188,517	
3	440		" "	-2.95°	4.9	-	-	-4.9		18.3		+439	+26	377,650	2,188,530	Sta. 3 is 62' (taped)
4	660		" "	-2.95°	4.9	-	-	-4.9		18.3		+659	+39	377,870	2,188,543	south of trail (west)
5	880		" "	-2.95°	5.0	-	-	5.0		18.2		+878	+53	378,089	2,188,557	
6	1100		" "	-2.95°	5.2	-	-	5.2		18.0		+1098	+66	378,309	2,188,570	
7	1320		" "	-2.95°	5.0	-	-	5.0		18.2		+1318	+79	378,529	2,188,583	sta. 7 is 44' (taped)
8	1540		" "	-2.95°	5.3	-	-	5.3		17.9		+1537	+92	378,748	2,188,596	north of trail (east)
9	1750		6°22.6'	-2.95°	5.7	-	-	-5.7		17.5	TP	+1747	+105	378,958	2,188,609	sta. 8 is 105' south of
9	1750				4.8	90°02'	-1.0	-5.8			TP					4-way Intersect T.P. 10 south of sta. 9.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY			LINE NO.	PAGE				
6/5/78		G. Cotcamp		R. Hulsey		6834		G.W.C.			4	2				
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
Charleston		Cottageville		S. Carolina	Dorchester					L.O. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH +	EAST +	COORDINATES		REMARKS
												SOUTH -	WEST -	Y	X	
												LAT.	DEP.			
9				2°57'						17.5						
	1330		187°26.3'-180°	-2.95°	+4.8	-	-	+4.8	22.3		BS	+1326	+104			
	1330				+11.5	TH	-6.7	+4.8		BS						
10	1100		187°26.3'	-2.95°	5.0	-	-	-5.0		17.3		-1097	-86	379,187	2,188,627	
11	880		" "	-2.95°	5.3	-	-	-5.3		17.0		-877	-69	379,407	2,188,644	
12	660		" "	-2.95°	5.3	-	-	-5.3		17.0		-658	-52	379,626	2,188,661	
13	440		" "	-2.95°	5.8	-	-	-5.8		16.5		-439	-34	379,845	2,188,679	
14	220		" "	-2.95°	5.9	-	-	-5.9		16.4		-219	-17	380,065	2,188,696	
15	0				5.3	-	-	-5.3		17.0	TP	0	0	380,284	2,188,713	
BM	215		8°34.6'	-2.95°	3.3	-	-	-3.3		19.0	BM	+214	+21	380,498	2,188,734	USGS 31 RFT 1972 d 19.
16	220		2°49.5'	-2.95°	5.7	-	-	-5.7		16.6		+220	0	380,504	2,188,713	(vertical control data) (OD)
17	267		3°18.3'	-2.95°	5.8	-	-	-5.8		16.5		+267	+2	380,551	2,188,715	T-intersect. (Line #1)
17	440		2°49.5'	-2.95°	6.3	-	-	-6.3		16.0		+440	-1	380,724	2,188,712	
17	530		2°43.3'	-2.95°	6.0	-	-	-6.0		16.3		+530	-8	380,814	2,188,705	Trail (east)
18	660		2°49.5'	-2.95°	6.1	-	-	-6.1		16.2		+660	-1	380,944	2,188,712	
19	880		" "	-2.95°	5.9	-	-	-5.9		16.4		+880	-2	381,164	2,188,711	
20	1058		2°20'	-2.95°	5.8	-	-	-5.8		16.5		+1058	-11	381,342	2,188,702	Trail (west)
20	110				6.0											
20	1100		2°49.5'	-2.95°	6.0	-	-	-6.0		16.3		+1100	-2	381,384	2,188,711	
21	1320		2°49.5'	-2.95°	5.6	-	-	-5.6		16.7	TP	+1320	-3	381,604	2,188,710	
21	1320				12.3	TH	+6.6	-5.7		16.7	TP					

Y = +8 X = -6
380,498 + 2,188,740 (scaled)
USGS 31 RFT 1972 d 19.

DATE 5/6/78	INSTRUMENT MAN G. Cotcamp	ROD MAN R. Hulsey	PARTY NUMBER 6834	NOTES CHECKED BY G.W.C.	LINE NO. 4	PAGE 3
AREA Charleston	TOPO MAP Cottageville	STATE S. Carolina	COUNTY Dorchester	TWP RANGE	PPM	PARTY MANAGER L.O. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
21										16.7				
	1320		182°27'-180°	-2.95°	+5.4	-	-	+5.4	22.1		BS	+1320	-12	
	1320				+12.0	TH	-6.6	+5.4		BS				
22	1100		182°27'	-2.95°	5.1	-	-	-5.1		17.0		-1100	+10	381,824 2,188,708
23	880		" "	-2.95°	5.0	-	-	-5.0		17.1		-880	+8	382,044 2,188,706
21	695		182°09'	-2.95°	4.8	-	-	-4.8		17.3		-695	+11	382,229 2,188,709 trail (west)
24	660		182°27'	-2.95°	5.2	-	-	-5.2		16.9		-660	+6	382,264 2,188,704
25	440		" "	-2.95°	4.6	-	-	-4.6		17.5		-440	+4	382,484 2,188,702
26	220		" "	-2.95°	4.8	-	-	-4.8		17.3		-220	+2	382,704 2,188,700
27	0				5.3	-	-	-5.3		16.8	TP	0	0	382,924 2,188,698 tra. 27 is 15' south
28	220		16°04'	-2.95°	5.7	-	-	-5.7		16.4	TP	+214	+50	383,138 2,188,748 f driveway (west)
28	220				6.8	TH	+1.1	-5.7			TP			unable to locate
	440		202°41.4'-180°	-2.95°	+6.4	-	-	+6.4	22.8		BS	+414	+149	Tri-station (Leveston)
	440				8.6	TH	-2.2	+6.4		BS				
29	220		199°29'	-2.95°	4.6	-	-	-4.6		18.2		-211	-63	383,341 2,188,834
30	0				5.3	-	-	-5.3		17.5	TP	0	0	383,552 2,188,897
31	218		359°27.3'	-2.95°	5.4	-	-	-5.4		17.4	TP	+216	-32	383,768 2,188,865 shooting interior of curve
31	218				6.5	TH	+1.1	-5.4			TP			
	440		159°40.6'+180°	-2.95°	+4.5	-	-	+4.5	21.9		BS	+404	-174	
	440				+6.7	TH	-2.2	+4.5		BS				
32	220		157°25'	-2.95°	5.1	-	-	-5.1		16.8		-199	+95	383,973 2,188,786 sta. 32 is 110' north of trail (east)

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
6/5/78		G. Cotcamp		R. Hulsey		6834		G.W.C.		4	4						
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
Charleston		Cottageville		S. Carolina		Dorchester					L.O. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									21.9								
33	0				5.3	-	-	-5.3		16.6		0	0	384,172	2,188,691	set up on west side	
34	220		347°09.6'	-2.95°	3.8	-	-	3.8		18.1		+212	-60	384,384	2,188,631		
35	440		347°09.6'	-2.95°	3.9	-	-	-3.9		18.0	TP	+423	-120	384,595	2,188,571		
35	440				6.1	TH	+2.2	-3.9			TP						
	1100		182°33.3'-180°	-2.95°	+5.9	-	-	+5.9	23.9		BS	+1100	-8				
	1109				+0.4	BH	+5.5	+5.9			BS						
36	880		182°33.3'	-2.95°	5.8	-	-	-5.8		18.1		-880	+6	384,815	2,188,569		
37	660		" "	-2.95°	5.8	-	-	-5.8		18.1		-660	+5	385,035	2,188,568		
38	440			-2.95°	5.6	-	-	-5.6		18.3		-440	+3	385,255	2,188,566		
39	220			-2.95°	5.3	-	-	-5.3		18.6		-220	+2	385,475	2,188,565		
40	0				5.3	-	-	-5.3		18.6	X	0	0	385,695	2,188,563		
41	220		7°22.5'	-2.95°	5.2	-	-	-5.2		18.7		+219	+17	385,914	2,188,580		
42	440		" "	-2.95°	5.0	-	-	-5.0		18.9		+439	+34	386,134	2,188,597		
43	660		" "	-2.95°	5.3	-	-	-5.3		18.6		+658	+51	386,353	2,188,614		
44	880		7°22.5'	-2.95°	4.3	-	-	-4.3		19.6	TP	+877	+68	386,572	2,188,631		
44	880				8.7	TH	+4.4	-4.3			TP						
	440		180°12.9'-180°	-2.95°	+1.29	87°	-7.7	+5.2	24.8		BS	+439	-21				
	440				+1.40	88°52'	-8.7	+5.3	24.9		BS						
45	220		180°12.9'	-2.95°	4.8	-	-	-4.8		20.1		-220	+11	386,791	2,188,621		
46	0				5.3	-	-	-5.3		19.6	X	0	0	387,011	2,188,610		

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6/5/78		G. Cotcamp		R. Hulsey		6834		G.W.C.		4	5						
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
Charleston		Cottageville		S. Carolina		Dorchester					L.O. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									24.9								
47	220		4°38.7'	-2.95°	3.5	-	-	-3.5		21.4		+220	+7	387,231	2,188,617		
48	440		" "	-2.95°	3.8	-	-	-3.8		21.1		+440	+13	387,451	2,188,623		
49	660		" "	-2.95°	4.4	-	-	-4.4		20.5		+660	+20	387,671	2,188,630		
50	880		" "	-2.95°	5.3	-	-	-5.3		19.6		+880	+26	387,891	2,188,636		
51	1100		" "	-2.95°	4.8	-	-	-4.8		20.1		+1100	+33	388,111	2,188,643		
52	1320		4°38.7'	-2.95°	5.0	-	-	-5.0		19.9	TP	+1319	+39	388,330	2,188,649		
52	1320				11.6	TH	+6.6	-5.0			TP						
	1320		184°0.5'-180°	-2.95°	+6.1	-	-	+6.1	26.0		BS	+1320	+24				
	1320				3.7	90°06'	+2.3	+6.0			BS						
53	1100		189°-	-2.95°	6.0	-	-	-6.0		20.0		-1100	-20	388,550	2,188,653		
54	880		" "	-2.95°	6.2	-	-	-6.2		19.8		-880	-16	388,770	2,188,657		
bridge	745		184°18.3'	-2.95°	6.0	-	-	-6.0		20.0		-745	-18	388,905	2,188,655	-L bridge	
55	660		189°-	-2.95°	7.0	-	-	-7.0		19.0		-660	-12	388,990	2,188,661		
56	440		" "	-2.95°	6.6	-	-	-6.6		19.4		-440	-8	389,210	2,188,665		
57	220		" "	-2.95°	5.8	-	-	-5.8		20.2		-220	-4	389,430	2,188,669		
58	0				5.3	-	-	-5.3		20.7	X	0	0	389,650	2,188,673		
59	220		4°34.6'	-2.95°	5.7	-	-	-5.7		20.3		+220	+6	389,870	2,188,679		
60	440		" "	-2.95°	5.2	-	-	-5.2		20.8		+440	+12	390,090	2,188,685		
61	660		" "	-2.95°	4.8	-	-	-4.8		21.2		+660	+19	390,310	2,188,692		
62	880		" "	-2.95°	3.7	-	-	-3.7		22.3		+880	+25	390,530	2,188,698		

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6/5/78		G. Cotcamp			R. Hulsey			6834		G.W.C.			4	6		
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER					
Charleston		Cottageville		S. Carolina		Dorchester					L.O. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
									26.0							
63	1100		7°34.6'	-295°	26	-	-	-2.6	23.4	TP	+1100	+31	390,750	2,188,704		
63	1100				8.1	TH	+5.5	-2.6								
	440		186°52'-180°	-295°	+4.2	-	-	+4.2	27.6	BS	+439	+30				
	440				+6.4	TH	-2.2	+4.2								
64	270		189°21.5'	-295°	3.9	-	-	-3.9	23.7		-268	-30	390,921	2,188,704	y = +1' x = +14' 390,920 = 2,188,690 (scaled) Y-intersect (southeast)	
BM	260		199° -	-295°	1.6	-	-	-1.6	26.0	BM	-250	-72	390,939	2,188,662		
64	220		186°52'	-295°	4.1	-	-	-4.1	23.5		-219	-15	390,970	2,188,719	U.S.G.S. 30 RFT 1972 dl - 26.2 (vertical control data)	
65	0				5.3	-	-	-5.3	22.3	TP	0	0	391,189	2,188,734		
66	220		6° -	-295°	5.2	-	-	-5.2	22.4		+220	+12	391,409	2,188,746		
67	434		0°34'	-295°	7.7	TH	+2.2	-5.5	22.1	TP	+434	-18	391,623	2,188,716	shooting interior of curve	
67	434				5.6	-	-	-5.6								
	880		166°51'+180°	-295°	+10.7	-	-	+10.7	32.8	BS	+845	-244				
	880				+6.3	BH	+4.4	+10.7								
68	660		166°35'	-295°	6.7	BH	-3.3	-10.0	22.8		-633	+186	391,835	2,188,658		
69	440		165°55'	-295°	7.8	-	-	-7.8	25.0		-421	+129	392,047	2,188,601		
70	220		165°03'	-295°	5.0	-	-	-5.0	27.8		-209	+68	392,259	2,188,540		
71	0				5.3	-	-	-5.3	27.5	TP	0	0	392,468	2,188,472		
72	220		344°23'	-295°	8.8	-	-	-8.8	24.0		+209	-70	392,677	2,188,402		
73	440		" "	-295°	7.8	BH	-2.2	-10.0	22.8		+417	-140	392,885	2,188,332		

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6/5/78		G. Cotcamp		R. Hulsey		6834		G.W.C.		4	7					
AREA		TOPO MAP		STATE		COUNTY		RANGE		PPM		PARTY MANAGER				
Charleston		Cottageville		S. Carolina		Dorchester						L.O. Davis				
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
74	660		341°23'	-2.95°	11.1	-	-	-11.1		21.7	TP	+626.	-210	393,094	2,188,262	TP on west side
74	660				7.8	BH	-3.3	-11.1			TP					
	220		157°41' + 180°	-2.95°	+8.0	89°36'	-1.5	+6.5	28.2		BS	+199	-94			
	220				+10.0	89°09'	-3.6	+6.4			BS					
75	0				5.3	-		-5.3		22.9	TP	0	0	393,293	2,188,168	set-up on west side
76	220		354°-	-2.95°	5.4	-		-5.4		22.8		+217	-34	393,510	2,188,134	
77	440		" "	-2.95°	5.1	-		-5.1		23.1		+435	-68	393,728	2,188,100	
78	660		" "	-2.95°	4.7	-		-4.7		23.5		+652	-103	393,945	2,188,065	
79	880		354°-	-2.95°	5.1	-		-5.1		23.1	TP	+869.	-137	394,162	2,188,031	
79	880				9.5	TH	+4.4	-5.1			TP					
	660		163°38' + 180°	-2.95°	+6.5	-	-	+6.5	29.6		BS	+623.	-218.			
	660				+9.8	TH	-3.3	+6.5			BS					
80	440		163°12'	-2.95°	6.0	-		-6.0		23.6		-414	+149	394,371	2,187,962	
81	220		" "	-2.95°	5.8	-		-5.8		23.8		-207	+74	394,578	2,187,887	
82	0				5.3	-		-5.3		24.3	TP	0	0	394,785	2,187,813	
83	220		354°58'	-2.95°	5.3	-		-5.3		24.3		+218	-31	395,003	2,187,782	
84	440		356°56'	-2.95°	5.2	-		-5.2		24.4		+438	-46	395,223	2,187,767	
84	515		356°46'	-2.95°	5.2	-		-5.2		24.4		+512	-55	395,297	2,187,758	trail (southeast)
85	657		356°37.6'	-2.95°	5.3	-		-5.3		24.3	TP	+653.	-72.	395,438	2,187,741	shooting thru S-curve
85	657				8.6	TH	+3.3	-5.3			TP					E.O.D.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
6/6/78		G. Cotcamp		F. Hulsey		8874		G.W.C.		4	9				
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER				
Charleston		Cottageville		S. Carolina		Lexington					L.O. Davis				
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									32.0						
98	0				5.3	-		-5.3		26.7	TP	0	0	398,113	2,186,827
99	220		344°27'	-2.95°	4.7	-		-4.7		27.3		+209	-70	398,322	2,186,757
IF	410		346°32'	-2.95°	3.0	-		-3.0		29.0		+393	-116	398,506	2,186,711
100	440		346°53'	-2.95°	3.4	-		-3.4		28.6		+423	-122	398,536	2,186,705
BM	454		349°1.6'	-2.95°	4.2	-		-4.2		27.8	BM	+441	-109	398,554	2,186,718
101	655		343°43.3'	-2.95°	4.4	-		-4.4		27.6	TP	+618	-216	398,731	2,186,611
101	655				-1.1	BH	-3.3	-4.4			TP				
	220		146°37'+180°	-2.95°	+14.0	87°30'	-10.2	+3.8	31.4		BS	+177	-130		
	220				+14.5	87°12'	-10.7	+3.8			BS				
102	0				5.3	-		-5.3		26.1	TP	0	0	398,908	2,186,481
103	220		351°41'	-2.95°	5.3	-		-5.3		26.1		+216	-43	399,124	2,186,438
104	440		" "	-2.95°	5.1	-		-5.1		26.3		+432	-86	399,340	2,186,395
105	660		351°41'	-2.95°	5.1	-		-5.1		26.3		+647	-129	399,555	2,186,352
IF	715		349°37'	-2.95°	4.5	-		-4.5		26.9		+696	-164	399,504	2,186,317
106	872		348°29'	-2.95°	4.5	-		-4.5		26.9	TP	+844	-218	399,752	2,186,263
106	872				8.9	TH	+4.4	-4.5			TP				
	1320		180°38.4'-180°	-2.95°	+7.3	-		+7.3	34.2		BS	+1319	-53		
	1320				0.7	BH	+6.6	+7.3			BS				
107	1100		170°22.4'	-2.95°	7.1	-		-7.1		27.1		-1099	+44	399,972	2,186,254
108	880		" "	-2.95°	6.8	-		-6.8		27.4		-879	+35	400,192	2,186,245

398,475 + 2,186,625 (calcd)
4-Way Intersect.
y = -31'
x = 86'

U.S.G.S. REF 27 & 27B

shooting interior of curve

4-Way Intersect

shooting interior of curve

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
6/6/78		G. CoT camp		R. Hulsey		224		G.W.C.		4	11						
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
Charleston		Cottageville		S. Carolina		Lexington					L.O. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
123										28.4							
	660		178° 10.6' ± 180°	-2.95°	+6.6	-		+6.6	35.0		BS	+658	-55+2				
	660				+3.3	8H	+3.3	+6.6			BS						
124	440		178° 16'	-2.95°	8.8	-		-8.8		26.2		-438	+37	403,610	2,185,540		
125	220		173° 54'	-2.95°	8.8	-		-8.8		26.2		-217	+35	403,831	2,185,538		
126	0				5.2	-		-5.2		29.8	X	0	0	404,048	2,185,503		
127	220		336° 47' 332-5	-2.95°	3.8	-		-3.8		31.2		+197	-97	404,245	2,185,406		
128	440		332° 4.8'	-2.95°	8.1	-		-8.1		26.9	TP	+378	-226+2	404,426	2,185,279	T.P. on west side of road	
128	440				10.3	TH	+2.2	-8.1			TP						
	445		172° 25' ± 180°	-2.95°	+4.1	-		+4.1	31.0		BS	+438	-81+2				
	445				+6.3	TH	-2.2	+4.1			BS						
129	220		172° 25'	-2.95°	4.8	-		-4.8		26.2		-216	+40	404,648	2,185,240		
130	0				5.2	-		-5.2		25.8		0	0	404,864	2,185,200		
#1	133		1° 41'	-2.95°	4.9	-		-4.9		26.1		+133	-3	404,997	2,185,197	Trail (NW)	
BM	188		355° 23'	-2.95°	4.3	-		-4.3		26.7	BM	+186	-25	405,050	2,185,175	USGS 28875 d. 26.9	
131	220		6° 12'	-2.95°	5.3	-		-5.3		25.7	TP	+220	+12+2	405,084	2,185,214		
131	220				4.2	BL	-1.1	-5.3			TP						
	445		204° 45.6' ± 180°	-2.95°	+5.5	-		+5.5	31.2		BS	+413	+165+2				T.P. on west side
	445				+7.7	TH	-2.2	+5.5			BS						
132	220		200° 54'	-2.95°	4.8	-		-4.8		26.4		-209	-68	405,288	2,185,313		
133	0				5.3	-		-5.3		25.9	X	0	0	405,497	2,185,381		

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
6/6/78		G. Co ⁺ camp		R. Hulsey		5234		G.W.C.		7	12						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
Charleston		Cottageville		S. Carolina	Fairfield					L.O. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									31.2								
134	220		351°28'	-2.95°	4.8	-		-4.8		26.4		+216	-44	405,713	2,185,337		
135	440		349°25'	-2.95°	4.3	-		-4.3		26.9		+428	-103	405,925	2,185,278		
136	660		349°12'	-2.95°	3.2	-		-3.2		28.0	TP	+641	-157+2	406,138	2,185,226		
136	660				6.5	TH	+3.3	-3.2			TP						
	220		153°30.3'+180°	-2.95°	5.2	-		+6.2		34.2	BS	+207	-73+2				
	220				+7.3	TL	-1.1	+6.2			BS						
137	0				5.3	-		-5.3		28.9	X	0	0	406,345	2,185,155		
138	220		356°5'	-2.95°	5.7	-		-5.7		28.5		+218	-26	406,563	2,185,129		
139	440		356°5'	-2.95°	5.0	-		-5.0		29.2	TP	+437	-53+2	406,782	2,185,104		
139	440				1.0	90°32'	-4.1	-5.1			TP						
	440		177°46.7'+180°	-2.95°	+14.0	88°46'	-9.5	+4.5		33.7	BS	+438	-40+2				
	440				+13.5	88°56'	-9.0	+4.5			BS						
140	220		14°04'	-2.95°	2.2	-		-3.9		29.8		-217	+34	407,003	2,185,100		
141	0				5.2	-		-5.3		28.4	X	0	0	407,220	2,185,066		
142	220		248°--	-2.95°	5.0	-		-5.0		28.7		+213	-57	407,433	2,185,009		
143	440		248°--	-2.95°	3.4	-		-3.4		30.3		+425	-114	407,645	2,184,952		
144	660		248°--	-2.95°	2.7	-		-2.7		31.0	TP	+638	-170+2	407,858	2,184,898	Trail (no)	
144	660				4.5	TH	+3.3	-2.7			TP						
	220		177°28.3'+180°	-2.95°	+3.4	-		+3.4		34.4	BS	+219	-21+2				
	220				+4.5	TH	-1.1	+3.4			BS						

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
6/6/78		G. Cotcamp		R. Holway		583-1		G.W.C.		7	13				
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER				
Charleston		Cottageville		S. Carolina		Dorchester					L.O. Davis				
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									34.4						
145	0				5.3	-		-5.3		29.1	T	0	0	408,077	2,184,871
146	220		6°9'	-2.95°	5.0	-		-5.0		29.4		+220	+12	408,297	2,184,891
147	440		" "	-2.95°	4.8	-		-4.8		29.6		+439	+25	408,516	2,184,904
148	660		" "	-2.95°	4.2	-		-4.2		30.2		+659	+37	408,736	2,184,916
149	880		6°9'	-2.95°	7.9	TH	+4.4	-3.5		30.9	TP	+879	+49+2	408,956	2,184,930
149	880				8.2	89°42'	+4.6	-3.6			TP				
	880		178°57.4'+180°	-2.95°	+4.8	-		+4.8	35.7		BS	+878	-61+2		
	880				+9.2	TH	-4.4	+4.8			BS				
150	660		178°57'	-2.95°	3.6	-		-3.6		32.1		-658	+46	409,176	2,184,917
151	440		" "	-2.95°	4.0	-		-4.0		31.7		-439	+31	409,395	2,184,902
152	220		" "	-2.95°	4.4	-		-4.4		31.3		-219	+15	409,615	2,184,886
153	0				5.3	-		-5.3		30.4	T	0	0	409,834	2,184,871
154	220		11°17.6'	-2.95°	5.3	-		-5.3		30.4		+218	+32	410,052	2,184,903
155	440		" "	-2.95°	5.8	-		-5.8		29.9		+435	+64	410,269	2,184,935
156	660		11°17.6'	-2.95°	6.2	-		-6.2		29.5	TP	+653	+96+2	410,487	2,184,969
156	660				2.9	BH	-3.3	-6.2			TP				
	440		200°45'-180°	-2.95°	+6.2	-		+6.2	35.7		BS	+419	+135+2		
	440				+8.4	TH	-2.2	+6.2			BS				
157	220		200°45'	-2.95°	6.8	-		-6.8		28.9		-209	-67	410,697	2,185,039
158	0				5.3	-		-5.3		30.4	T	0	0	410,906	2,185,106

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
6/7/78		G. Cotcamp		R. Highway		6834		G.W.C.		4	14						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
Charleston		Cottageville		S. Carolina	Dorchester					L.O. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									35.7								
159	220		4° 33'	-2.95°	3.5	-		-3.5		32.2		+220	+6	411,126	2,185,112	y = +18' x = +10' 411,180 + 2,185,110 (scaled) Intersect. (east) d. 3115	
160	292		1° 48'	-2.95°	4.5	-		-4.5		31.2		+292	-6	411,198	2,185,100		
160	440		1° 5'	-2.95°	6.2	-		-6.2		29.5	TP	+440	-14 +2	411,346	2,185,094		
160	440				3.7	BH	-2.2	-6.1			TP						
	220		172° 24.5' + 180°	-2.95°	6.7	-		+6.7	36.2		BS	+216	-40 +2				
	220				7.8	TH	-1.1	+6.7			BS						
161	0				5.3	-		-5.3		30.9	π	0	0	411,562	2,185,056		
162	220		0° 40'	-2.95°	5.0	-		-5.0		31.2		+220	-9	411,782	2,185,047		
163	440		" "	-2.95°	4.6	-		-4.6		31.6		+440	-18	412,002	2,185,038		
164	660		" "	-2.95°	3.7	-		-3.9		32.3		+659	-26	412,221	2,185,030		
165	880		0° 40'	-2.95°	4.2	-		-4.2		32.0		+879	-35	412,441	2,185,021		
166	1100		0° 40'	-2.95°	4.0	-		-4.0		32.2	TP	+1099	-44 +2	412,661	2,185,014		
166	1100				9.5	TH	+5.5	-4.0			TP						
	222		172° 25.3' + 180°	-2.95°	6.0	-		+6.0	38.2		BS	+218	-41 +2				
	222				4.1	BH	+1.1	+6.0			BS						
167	0				5.3	-		-5.3		32.9	π	0	0	412,879	2,184,975	set up on west side	
168	222		8° 39.5'	-2.95°	2.9	-		-2.9		35.3	TP	+221	+22 +2	413,100	2,184,999		
168	222				4.0	TH	+1.1	-2.9			TP						
	226		201° 44' - 180°	-2.95°	10.8	-		+10.8	46.1		BS	+214	+73 +2				
	226				11.9	TH	-1.1	+10.8			BS						

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
6/7/78		G. Cotcamp		R. Hulsey		6834		G.W.C.		4	15				
AREA		TOPO MAP	STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
Charleston		Cottageville	S. Carolina	Dorchester					L.O. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									46.1						
169	0			-	5.2	-		-5.2		40.9	TP	0	0	413,314	2,185,074 set up opposite
170	220		44°16'	-2.95°	2.2	-		-2.2		43.9		+165	+145	413,419	2,185,219 station - west side
171	260		41°6'	-2.95°	2.3	-		-2.3		43.8		+204	+161	413,518	2,185,235 (trail - n.w.)
171	440		44°16'	-2.95°	4.4	-		-4.4		41.7		+330	+290	413,644	2,185,364
172	660		" "	-2.95°	4.7	-		-4.7		41.4		+496	+436	413,810	2,185,510
173	880		" "	-2.95°	2.9	-		-2.9		43.2		+661	+581	413,975	2,185,655
174	1100		49°15.7'	-2.95°	2.4	-		-2.4		43.7	TP	+826	+726+2	414,140	2,185,802
174	1100				7.9	TH	+5.5	-2.4			TP				
	1540		226°29'-180°	-2.95°	+6.1	-		+6.1	49.8		BS	+1116	+1061+1		
	1540				+3.8	TH	-7.7	+6.1			BS				
175	1320		226°29'	-2.95°	5.3	-		-5.3		44.5		-957	-909	414,299	2,185,955
176	1100		" "	-2.95°	4.5	-		-4.5		45.3		-797	-758	414,459	2,186,106
176	1055		" "	-2.95°	3.8	-		-3.8		46.0		-765	-727	414,491	2,186,137 F-intersect. (west)
177	880		" "	-2.95°	4.4	-		-4.4		45.4		-638	-606	414,618	2,186,258
178	660		" "	-2.95°	4.8	-		-4.8		45.0		-478	-455	414,778	2,186,409
179	440		" "	-2.95°	4.4	-		-4.4		45.4		-319	-303	414,937	2,186,561
180	220		" "	-2.95°	4.7	-		-4.7		45.1		-159	-152	415,097	2,186,712
181	0				5.3	-		-5.3		44.5		0	0	415,256	2,186,864
182	220		29°24'	-2.95°	4.1	-		-4.1		45.7		+197	+98	415,453	2,186,962
183	440		" "	-2.95°	3.5	-		-3.5		46.3		+394	+196	415,650	2,187,060

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
6/7/78		G. Cotcamp		R. Hulsey		5834		G.W.C.		4	16						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
Charleston		Cottageville		S. Carolina	Dorchester					L.O. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									49.8								
184	660		29°24'	-2.95°	3.2	-		-3.2		46.6		+591	+294	415,847	2,187,158		
185	880		" "	-2.95°	3.9	-		-3.9		45.9		+788	+392	416,044	2,187,256		
186	1100		29°24'	-2.95°	3.3	-		-3.3		46.5	TP	+985	+490	416,241	2,187,354		
186	1100			-2.95°	8.8	TH	+5.5	-3.3			TP						
	440		210°26' - 180°	-2.95°	+5.4	-		+5.4		51.9	BS	+390	+203				
	440				+3.2	BH	+2.2	+5.4			BS						
187	220		210°26'	-2.95°	4.9	-		-4.9		47.0		-195	-102	416,436	2,187,455		
188	0			-2.95°	5.3	-		-5.3		46.6	X	0	0	416,631	2,187,557		
F	176		19°56'	-2.95°	3.8	-		-3.8		48.1		+168	+51	416,799	2,187,608	Y-intersect.	
189	215		17°6.6'	-2.95°	4.2	-		-4.2		47.7	TP	+208	+53	416,839	2,187,610		
189	215			-2.95°	5.3	TH	+1.1	-4.2			TP						
	1320		161°23.6' + 180°	-2.95°	+1.8	BH	+6.6	+8.4		56.1	BS	+1228	-485				
	1320			-2.95°	+5.3	90°08'	+3.1	+8.4			BS						
190	1100		161°23.6'	-2.95°	8.1	-		-8.1		48.0		-1023	+404	417,044	2,187,529		
191	880		" "	-2.95°	6.8	-		-6.8		49.3		-818	+323	417,249	2,187,448		
F	840		" "	-2.95°	6.5	-		-6.5		49.6		-781	+309	417,286	2,187,434	Trail (east)	
192	660		" "	-2.95°	6.5	-		-6.5		49.6		-614	+243	417,453	2,187,368		
193	440		" "	-2.95°	6.2	-		-6.2		49.9		-409	+162	417,658	2,187,287		
194	220		" "	-2.95°	6.0	-		-6.0		50.1		-205	+81	417,862	2,187,206		
195	0				5.3	-		-5.3		50.8	X	0	0	418,067	2,187,125		

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
6/7/78		G. Cotcamp		R. Hulsey		6837		G.W.C		7	16-T					
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
Charleston		Ridgeville		S. Carolina	Dorchester					L.O. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
1140			314°20.7'-180°	-2.95°	4.6	-		+4.6	52.7	48.1	BS	-754	+855	416,799	2,187,608	Y-intersect. sta. 188-189
1140					+1.4	90°10'	+3.3	+4.7			BS					
Δ 840			130°43.8'	-2.95°	14.2	89°20'	+9.8	-4.4				-515	+664	415,530	2,189,127	Timber Tri-station
Δ 840					13.3	89°24'	+8.8	-4.5		48.2						el. 48.2 ^{with} 0.0
																415,529 + 2,189,127
																h. correction y=0 x=51'
																vertical + horizontal traverse from Y-inter- section easterly to Timber tri-station.

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
6/7/78		G. Cotcamp		R. Hulsey		6834				4	17				
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER					
Charleston		Cottageville		S. Carolina	Dorchester					L.O. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									56.1						
196	220		341°53'	-2.95°	4.3	-		-4.3		51.8		+205	-79	418,272	2,187,046
197	440		" "	-2.95°	3.9	-		-3.9		52.2		+411	-158	418,478	2,186,967
198	660		" "	-2.95°	3.5	-		-3.5		52.6		+616	-237	418,683	2,186,888
199	880		" "	-2.95°	3.2	-		-3.2		52.9		+821	-316	418,888	2,186,807
200	1100		341°53.5'	-2.95°	2.8	-		-2.8			TP	+1027	-395-2	419,094	2,186,730 E.O.P.
200	1100				8.4	TH	+5.5	-2.9		53.2	TP				
	440		167°28.7'+180°	-2.95°	2.4	BH	+2.2	+4.6	57.8		BS	+424	-117-2		
	440				4.6	-		+4.6			BS				
201	220		172°44'	-2.95°	4.5	-		-4.5		53.3		-217	+39	419,301	2,186,652
202	0				5.3	-		-5.3		52.5	TP	0	0	419,518	2,186,613
203	220		357°-	-2.95°	5.1	-		-5.1		52.7		+219	-23	419,737	2,186,590
204	440		" "	-2.95°	5.0	-		-5.0		52.8		+438	-46	419,956	2,186,567
205	660		357°-	-2.95°	5.3	-		-5.3		52.5		+656	-68	420,174	2,186,545
206	880		355°34'	-2.95°	6.7	-		-6.7		51.1	TP	+873	-113-2	420,391	2,186,498
206	880				11.1	TH	+4.4	-6.7			TP				
	662		163°34'+180°	-2.95°	+0.8	TH	-3.3	-2.5	48.6		BS	+624	-220-2		
	662				1.0	89°42'	-3.5	-2.5			BS				
207	440		163°34'	-2.95°	1.3	-		-1.3		47.3		-415	+146	420,600	2,186,422
208	220		" "	-2.95°	5.6	-		-5.6		43.0		-208	+73	420,807	2,186,349 sta 209 is 15's. of bridge
209	0				5.3	-		-5.3		43.3	TP	0	0	421,015	2,186,276 set-up on west side

SURVEY NOTES-HIGH RESOLUTION DATA

Geosource Inc.

GEO-445

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
6/9/78		G. Cotcamp		R. Hulsey		6234				4		18				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
Charleston		Cottageville		S. Carolina		Dorchester								L.O. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH+ SOUTH - LAT.	EAST+ WEST - DEP.		Y	X
									48.6							
IF	51		11°40'	-2.95°	5.2	-		-5.2		43.4		+50	+8	421,065	2,186,284	Intersect. (east)
210	222		16°45.6'	-2.95°	4.5	-		-4.5		44.1	TP	+216	+53.2	421,231	2,186,327	
210	222				5.6	TH	+1.1	-4.5			TP					
	880		205°55'-180°	-2.95°	+14.7	-		+14.7	58.8		BS	+810	+343.2			
	880				10.3	BH	+4.4	+14.7			BS					
211	660		206°49'	-2.95°	7.5	BH	-3.3	-10.8		48.0		-604	-266	421,437	2,186,402	
212	440		" "	-2.95°	6.8	-		-6.8		52.0		-403	-177	421,638	2,186,491	
213	220		204°11'	-2.95°	5.6	-		-5.6		53.2		-205	-80	421,836	2,186,588	
214	0				5.3	-		-5.3		53.5	X	0	0	422,041	2,186,668	
215	220		18°42'	-2.95°	4.2	-		-4.2		54.6		+212	+60	422,253	2,186,728	
216	440		" "	-2.95°	3.4	-		-3.4		55.4		+423	+119	422,464	2,186,787	
217	660		18°42'	-2.95°	3.0	-		-3.0		55.8		+635	+179	422,676	2,186,847	
IF	710		17°48'	-2.95°	2.8	-		-2.8		56.0		+686	+182	422,727	2,186,850	Trail (east)
218	880		17°30'	-2.95°	2.7	-		-2.7		56.1	TP	+852	+221.2	422,892	2,186,887	
218	880				7.1	TH	+4.4	-2.7			TP					
	660		188°55'-180°	-2.95°	+6.6	-		+6.6	62.7		BS	+656.2	+69.2			
	660				9.9	TH	-3.3	+6.6			BS					
219	440		188°55'	-2.95°	6.3	-		-6.3		56.4		-438	-46	423,108	2,186,908	
220	220		" "	-2.95°	5.8	-		-5.8		56.9		-219	-23	423,327	2,186,931	
221	0				5.3	-		-5.3		57.4	X	0	0	423,546	2,186,954	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
6/9/78		G. Cotcamp		R. Hulsey		6234				7	20				
AREA		TOPO MAP		STATE		COUNTY		RANGE		PPM		PARTY MANAGER			
Charleston				S. Carolina		York						L. O. Davis			
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									66.0						
234	1320		27°57'	-2.95°	1.0	-		-1.0		65.0	TP	+1196 ₋₂	+558 ₋₂	426,147	2,188,122
234	1320				7.6	TH	+6.6	-1.0			TP				
	435		187°10' - 180°	-2.95°	+3.8	-		+3.8	68.8		BS	+434 ₋₂	+32 ₋₂		
	435				7.6	BH	+2.2	+3.8			BS				
235	220		183° -	-2.95°	3.7	-		-3.7		65.1		-220	0	426,359	2,188,152
236	0				5.3	-		-5.3		63.5	TP	0	0	426,579	2,188,152
237	220		354°15'	-2.95°	6.9	-		-6.9		61.9		+217	-33	426,796	2,188,119
238	440		" "	-2.95°	7.6	-		-7.6		61.2		+435	-67	427,014	2,188,085
239	660		" "	-2.95°	8.2	-		-8.2		60.6		+652	-100	427,231	2,188,052
240	880				8.7	-									
241	1100				8.5	-									
240	850		353°38'	-2.95°	8.5	-		-8.5		60.3		+839	-138	427,418	2,188,014
240	880		354°15'	-2.95°	8.7	-		-8.7		60.1		+870	-133	427,449	2,188,019
241	1100		" "	-2.95°	8.7	-		-8.7		60.1		+1087	-166	427,666	2,187,986
242	1320		" "	-2.95°	8.8	-		-8.8		60.0		+1305	-200	427,884	2,187,952
142	1420		353°52'	-2.95°	8.8	-		-8.8		60.0		+1402	-224	427,981	2,187,928
243	1540		354°15'	-2.95°	9.0	-		-9.0			TP	+1522 ₋₂	-233 ₋₂	428,099	2,187,917
243	1540				14.5	89°48'	-5.4	-9.1		59.7	TP				FOO
	2640		174°9.5' + 180°	-2.95°	+12.3			+12.3	72.0		BS	+2609 ₋₂	-404 ₋₃		
	2640				13.9	89°58'	-1.5	+12.4			BS				

SURVEY NOTES-HIGH RESOLUTION DATA

Geosource Inc.

GEO-443

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
6/10/78		G. Cotcamp		R. Hulsey		6834				4		21			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
Charleston		Ridgeville		S. Carolina		Dorchester								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									72.0						
244	2420		179°09'	-2.95°	8.0	90°00'	-4.2	-12.2		59.8		-2392	+370	428,314	2,187,880
245	2200		" "	-2.95°	0.9	BH	-11.0	-11.9		60.1		-2174	+337	428,532	2,187,847
246	1980		" "	-2.95°	2.1	BH	-9.9	-12.0		60.0		-1957	+303	428,749	2,187,813
247	1760		" "	-2.95°	2.9	BH	-8.8	-11.7		60.3		-1738	+269	428,967	2,187,779
248	1540		" "	-2.95°	3.9	BH	-7.7	-11.6		60.4		-1522	+236	429,184	2,187,746
249	1320		" "	-2.95°	4.5	BH	-6.6	-11.1		60.9		-1304	+202	429,402	2,187,712
250	1100		" "	-2.95°	5.3	BH	-5.5	-10.8		61.2		-1087	+168	429,619	2,187,678
251	880		" "	-2.95°	6.0	BH	-4.4	-10.4		61.6		-870	+135	429,836	2,187,645
252	660		" "	-2.95°	7.0	-	-	-9.0		63.0		-652	+101	430,054	2,187,611
253	440		" "	-2.95°	7.8	-	-	-7.8		64.2		-435	+67	430,271	2,187,577
254	220		" "	-2.95°	7.0	-	-	-7.0		65.0		-252	+39	430,489	2,187,549 trail (west)
255	0		" "	-2.95°	6.8	-	-	-6.8		65.2		-217	+34	430,706	2,187,544
256	0		" "	-2.95°	5.3	-	-	-5.3		66.7		0	0	430,923	2,187,510
256	220		354°12'	-2.95°	5.9	-	-	-5.9		66.1		+217	-33	430,923	2,187,477
257	440		" "	-2.95°	8.3	-	-	-8.3		63.7		+435	-67	431,141	2,187,443
258	496		353°08'	-2.95°	8.8	-	-	-8.8		63.2		+489	-85	431,195	2,187,425 trail (east)
258	660		354°08'	-2.95°	7.0	BH	-3.3	-10.3		61.7		+652	-100	431,358	2,187,410
259	880		" "	-2.95°	7.0	BH	-4.4	-11.4		60.6		+870	-134	431,576	2,187,376
260	1100		" "	-2.95°	6.7	BH	-5.5	-12.2		59.8		+1087	-167	431,793	2,187,343
261	1320		" "	-2.95°	5.2	BH	-6.6	-11.8		60.2		+1305	-201	432,011	2,187,309

DATE		INSTRUMENT MAN			ROD MAN		PARTY NUMBER		NOTES CHECKED BY			LINE NO.	PAGE				
6/10/78		G. Cotcamp			R. Hulsey		6257					7	22				
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
Charleston		Ridgville		S. Carolina	Dorchester					J. 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		
									72.0								
262	1540		354°19'	-2.95°	4.1	BH	-7.7	-11.8		60.2		+1523	-231	432,229	2,187,279		
263	1750		354°52.3'	-2.95°	11.5	-	-	-11.5		60.5	TP	+1733	-246	432,437	2,187,262		
263	1750				2.7	BH	-8.8	-11.5			TP						
	440		188°56.6'-80°	-2.95°	+10.1	-	-	+10.1		70.6	BS	+438	+46				
	440				+12.3	TH	-2.2	+10.1			BS						
264	220		188°57'	-2.95°	7.3	-	-	-7.3		63.3		-219	-23	432,654	2,187,283		
265	0				5.3	-	-	-5.3		65.3	TP	0	0	432,873	2,187,306		
266	220		230'	-2.95°	6.3	-	-	-6.3		64.3		+218	+33	433,091	2,187,337		
267	265		2°43'	-2.95°	6.5	-	-	-6.5		64.1		+259	+26	433,132	2,187,332		
267	440		2°35'	-2.95°	7.2	-	-	-7.2		63.4		+435	+66	433,308	2,187,372		
268	660		" "	-2.95°	7.8	-	-	-7.8		62.8		+653	+99	433,526	2,187,405		
269	880		" "	-2.95°	8.3	-	-	-8.3		62.3		+870	+132	433,743	2,187,438		
270	1100		11°55'	-2.95°	8.5	-	-	-8.5		62.1	TP	+1087	+171	433,950	2,187,475		
270	1100		" "		13.9	TH	+5.5	-8.4			TP						
	660		200°36'-190°	-2.95°	+3.0	-	-	+3.0		65.1	BS	+629	+200				
	660		" "		+6.3	TH	-3.3	+3.0			BS						
271	440		" "	-2.95°	3.2	-	-	-3.2		61.9		-419	-133	434,170	2,187,540	tie y=+1, x=+35' 434,370+2,187,550	
TP	230		202°46'	-2.95°	2.8	-	-	-2.8		62.3		-216	-78	434,373	2,187,595	Intersect.	
272	220		178°26'	-2.95°	4.0	TH	+1.1	-2.9		62.2		-212	-59	434,377	2,187,614	last sta. on road	
273	0		" "		5.3	-	-	-5.3		59.8	TP	0	0	434,589	2,187,673	in woods	

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
6/10/78		G. Cotcamp		R. Hickey		6844				7	23				
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER				
Charleston		Ridgeville		S. Carolina		Dorchester					L. J. [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	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									65.1						
274	220		37°37'	-2.95°	5.4	-		-5.4		59.7	TP	+181	+125.2	434,770	2,187,796
274	220				6.5	TH	+1.1	-5.4			TP				
	440		275°19'-180°	-2.95°	+0.8	90°50'	+6.4	+7.2	66.9		BS	-18	+440.2		
	440				2.1	90°40'	+5.1	+7.2			BS				
275	220		275°19'	-2.95°	6.7	-		-6.7		60.2		+9	-220	434,761	2,188,014
276	0				5.3	-		-5.3		61.6	TP	0	0	434,752	2,188,234
277	220				5.3	-									
	172		48°59'	-2.95°	5.3	-		-5.3		61.6		+120	+124	434,872	2,188,358
277	220		47°54'	-2.95°	5.3	-		-5.3		61.6		+156	+155	434,908	2,188,389
278	440		43°08'	-2.95°	4.5	-		-4.5		62.4		+336	+284	435,088	2,188,518
279	660		41°48'	-2.95°	4.3	-		-4.3		62.6		+514	+414	435,266	2,188,648
280	880		40°57'	-2.95°	4.5	-		-4.5		62.4		+693	+542	435,445	2,188,776
281	1100		40°36'	-2.95°	4.8	-		-4.8		62.1		+871	+672	435,623	2,188,906
282	1310		40°24.6'	-2.95°	4.6	-		-4.6		62.3	TP	+1040	+797.2	435,792	2,189,029
282	1310				11.1	TH	+6.6	-4.5			TP				
	440		208°22.5'-180°	-2.95°	4.5	-		+4.5	66.8		BS	+397	+189.2		
	440				6.7	TH	-2.2	+4.5			BS				
283	220		205°11'	-2.95°	5.1	-		-5.1		61.7		-204	-83	435,985	2,189,133
284	0				5.3	-		-5.3		61.5		0	0	436,189	2,189,216
285	220		15°04'	-2.95°	5.3	-		-5.3		61.5		+215	+46	436,404	2,189,262

in woods (cutting across corner of Givhans Ferry State Park).

Givhans State Park entrance

shooting thru curve

DATE		INSTRUMENT MAN			ROD MAN		PARTY NUMBER		NOTES CHECKED BY			LINE NO.	PAGE				
6/10/78		G. Cutcamp			R. Hulsey		6834					4	24				
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER						
Charleston		Ridgeville		S. Carolina		Dorchester					L.O. Davis						
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
									66.8								
286	440		10°20.6'	-2.95°	5.1	-		-5.1		61.7	TP	+436	+57-3	436,625	2,189,270		
286	440				7.3	TH	+2.2	-5.1			TP						
	440		173°37.3'+180°	-2.95°	4.5	-		+4.5		66.2	BS	+434	-71-3				
	440				6.7	TH	-2.2	+4.5			BS						
287	220		171°42'	-2.95°	5.2	-		-5.2		61.0		-216	+43	436,843	2,189,289		
288	0				5.3	-		-5.3		60.9	π	0	0	437,059	2,189,196		
289	220		336°50'	-2.95°	5.8	-		-5.8		60.4		+198	-97	437,257	2,189,099		
290	440		" "	-2.95°	5.1	-		-5.1		61.1		+395	-194	437,454	2,189,002		
291	660		336°50'	-2.95°	4.5	-		-4.5		61.7		+593	-291	437,652	2,188,905		
292	880		336°6'	-2.95°	4.3	-		-4.3		61.9		+785	-397	437,844	2,188,799		
293	1100		" "	-2.95°	4.3	-		-4.3		61.9		+981	-497	438,040	2,188,699		
1/2	1148		335°21'	-2.95°	4.2	-		-4.2		62.0		+1017	-532	438,076	2,188,664	Trail (east)	
1/2	1220		335°27'	-2.95°	4.1	-		-4.1		62.1		+1082	-563	438,141	2,188,633	Trail (west)	
294	1320			-	4.5	-		-4.5		61.7	TP	+1178	-596-3	438,237	2,188,597		
294	1320		336°5.5'	-2.95°	11.1	TH	+6.6	-4.5			TP						
	440		169°48.6'+180°	-2.95°	4.33	TH	+2.2	+5.5		67.2	BS	+418	-137-3				
	440				4.29	90°20'	+2.6	+5.5			BS						
295	220		164°49'	-2.95°	5.6	-		-5.6		61.6		-209	+68	438,446	2,188,525		
296	0				5.2	-		-5.2		62.0	π	0	0	438,655	2,188,467	set up on west side	
297	220		3°29.3'	-2.95°	5.3	-		-5.3		61.9		+220	+2	438,875	2,188,469		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geo Source Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY			LINE NO.		PAGE						
6/10/78		G. Cotcamp		R. Hulsey		6834					4		25 of 25						
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER					
Charleston		Ridgeville		S. Carolina		Dorchester								L.O. Davis					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X				
									67.2										
298	355		1° 19'		4.8	-		-4.8	62.4	62.4		+355	-10	439,010	2,188,447			driveway (west)	
299	440		3° 29.3'		4.8	-		-4.8	62.4	62.4		+440	+4	439,095	2,188,461				
BM	860		" "		4.9	-		-4.9	62.3	62.3		+660	+6	439,315	2,188,463				
300	705		4° 50'		3.7	-		-3.7	63.5	63.5	BM	+705	+23	439,360	2,188,480			" 4 RFJ " USGS 63.1	
300	880				4.9	-		-4.9	62.3	62.3	TP	+880	+8	439,535	2,188,465				
300	880		3° 29.3'		9.3	74	+4.4	-4.9			TP								