

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
8-30-85		B. Cotcamp		B. SALDIVAR		6834		R. J. <i>lc</i>		2	1						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
MONTANA		Sylvanite-7 1/2'		MONT.	LINCOLN					W. Cass, <i>dy</i>							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
K.	BRIDGE - Elevation		2616.0							2616.0							BRIDGE K. Elevation 2616.0
	375		258° 55' 10"	+24.0	7.0	-		+7.0	2623.0		BS	+84	-366	678,322	465,949		
	375				+5.1	84	+1.9	+7.0		BS							
1	K	0			5.1	-		-5.1		2617.9	K	0	0	678,238	466,315		B.O.L. Line #2
1/2	K	111	97° 19' 16"	-	4.6	74	+0.6	-4.0		2619.0	K	+58	-95	678,180	466,410		Y=678,180 X=466,410 K Horizontal #1
2		330	97° 20'	-	4.7	74	+1.7	-3.0		2620.0		-172	+282	678,066	466,597		T-Intersect (scaled)
3		659	96° 40'	-	6.3	-		-6.3		2616.7		-336	+567	677,902	466,882		
1/2	K	1021	96° 00' 12"	-	4.7	-		-4.7		2618.3	1/2	-511	+884	677,727	467,199		Y=677,700 X=467,210 Y-Inter.
4		989	96° 20'	-	5.7	-		-5.7		2617.3		-499	+854	677,739	467,169		
TP		1296	96° 46' 38"	-	1.6	89	+22.6	+21.0			TP	-663	+1113	677,574	467,428		
TP		1296			1.5	271	+22.6	+21.1		2644.1	TP	-					
		863	335° 44' 12"	+24.0	1.9	92	+30.1	+32.0	2676.1		BS	-862	+4				
		863			+4.4	91° 50'	+27.6	+32.0		BS							
5		816	334° 25'	-	5.5	92° 22'	-33.7	-39.2		2636.9		+816	-23	677,527	467,909		
6		481	335° 25'	-	5.6	92° 10'	-18.2	-23.8		2652.3		+481	-5	677,192	467,427		
7		155	328° 10'	-	4.5	92° 10'	-5.9	-10.4		2665.7		+154	-21	676,865	467,411		
K		0		-	5.1	-		-5.1		2671.0	K	0	0	676,711	467,432		
8		174	144 -	-	5.3	88	+6.1	+0.8		2676.9		-170	+36	676,541	467,468		
TP		302	137° 24' 50"	+24.3	7.0	87° 30'	+13.2	+6.2		2682.3	TP	-286	+95	676,424	467,527		
TP		302			6.1	87° 40'	+12.3	+6.2			TP	-					

DATE 8-30-85	INSTRUMENT MAN B. Cotnam	ROD MAN B. SALDIVAR	PARTY NUMBER 6834	NOTES CHECKED BY RJ W	LINE NO. 2	PAGE 2
AREA MONTANA	TOPO MAP Sylvanite - 7 1/2'	STATE MONT.	COUNTY LINCOLN	TWP	RANGE	PPM
				PARTY MANAGER W. CASS dy		

STATION NO.	SLOPE 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	
										2682.3						
	281		257° 04' 28"	+24.3	12.9	-		+12.9	2695.2		BS	-55	+275			
	281				11.5	BH	+1.4	+12.9		BS	-1					
9	72		240 -	-	5.3	92 -	-2.5	-7.8		2687.4		-7	-72	676,361	467,730	
1	0				5.1	-		-5.1		2690.1	TP	0	0	676,368	467,802	
10	256		67 -	-	5.3	88 -	+8.9	+3.0		2698.8		-6	+256	676,362	468,058	
TP	501		69° 20' 52"	-	10.1	87° 26'	+22.4	+12.3		2707.5	TP	-32	+499	676,335	468,301	
TP	501				11.0	87° 20'	+23.3	+12.3			TP	-1				
	417		267° 34' 50"	+24.3	13.2	BH	+2.1	+15.3	2722.8		BS	-155	+387			
	417				8.0	91 -	+7.3	+15.3		BS	-1					
11	328		265° 25'	-	9.0	90° 30'	-2.9	-11.9		2710.9		+111	-309	676,290	468,379	
12	0				5.1	-		-5.1		2717.7	TP	0	0	676,179	468,688	
13	329		93° 05'	-	6.4	89 -	+5.7	-0.7		2722.1		-151	+292	676,028	468,986	
TP	540		92° 13' 54"	-	9.8	88 -	+18.8	+9.0			TP	-241	+483	675,937	469,171	
TP	540				5.0	88° 30'	+14.1	+9.1		2731.9	TP	-1				
	509		242° 40' 42"	-	11.1	91° 20'	+11.8	+22.9			BS	+27	+508			
	509				12.6	91° 20'	+10.4	+23.0	2754.9		BS	-1				
14	388		241° 30'	+24.3	6.2	91° 40'	-11.3	-17.5			2737.4		-28	-387	675,935	469,292
15	61		248° 10'	-	5.3	91° 40'	-1.8	-7.1		2747.0		+3	-61	675,966	469,618	
1	0				5.1	-		-5.1		2749.8	TP	0	0	675,963	469,679	
16	268		80° 40'	-	6.9	89 -	+4.7	-2.2		2752.7		-69	+259	675,894	469,938	

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DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
8-30-85		B. Cotcamp		B. SALDIVAR		6834		R.J.		2	3						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
MONTANA		Sylvanite, 7 1/2'		MONT.	LINCOLN					W. Cassidy							
STATION NO.	SLOPE 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		
									2754.9								
17	597		79° 10'	+24.3	11.1	89°	+10.4	-0.9		2754.2		-139	+581	675.824	470.260		
18	926		76° 40'	~	8.5	89° 20'	+10.8	+2.3		2757.2		-176	+909	675.787	470.588		
TP	1061		77° 21' 12"	~	8.8	89° 20'	+12.3	+3.5			TP	-214	+1039	675.748	470.718		
TP	1061				8.7	270° 40'	+12.3	+3.6		2758.5	TP	-	-				
	1162		260° 40' 16"	~	+12.3	-		+12.3	2770.8		BS	-300	+1123				
	1162				6.5	BM	+5.8	+12.3			BS	-	-				
19	990		254° 45'	+24.3	12.6	-		-12.6		2758.2		+156	-978	675.603	470.863		
20	660		253° 20'	~	11.0	-		-11.0		2759.8		+88	-654	675.535	471.187		
21	330		- -	~	7.7	-		-7.7		2763.1		+44	-327	675.491	471.514		
22	0				5.1	-		-5.1		2765.7	TP	○	○	675.447	471.841		
23	330		76° 10'	+24.3	10.3	88°	+11.5	+11.2		2772.0		-60	+325	675.387	472.166		
24	660		76° 05'	~	8.8	88° 30'	+17.3	+8.5		2779.3		-119	+649	675.328	472.490		
25	990		75° 55'	~	5.2	89°	+17.3	+12.1		2782.9		-176	+974	675.271	472.815		
26	1320		- -	~	10.7	87°	+23.0	+12.3		2783.1		-234	+1299	675.213	473.190		
TP	1534		75° 01' 01"	~	9.6	89° 10'	+22.3	+12.7			TP	-248	+1514	675.198	473.355		
TP	1534				9.5	270° 50'	+22.3	+12.8		2783.6	TP	-	-				
	369		238° 49' 10"	+24.3	2.9	-		+2.9	2786.5		BS	+44	+366				
	369				4.7	TH	-1.8	+2.9			BS	-	-				
27	258		235° 10'	~	6.9	89°	4.5	-2.4		2784.1		-47	-254	675.194	473.467		
TP	0				5.1	-		-5.1		2781.4	TP	○	○	675.241	473.721		

DATE 8-30-85	INSTRUMENT MAN B. Cotcamp	ROD MAN B. SALDIVAR	PARTY NUMBER 6834	NOTES CHECKED BY R.J.	LINE NO. 2	PAGE 4
AREA MONTANA	TOPO MAP Sylvanite - 7 1/2'	STATE MONT.	COUNTY LINCOLN	TWP	RANGE PPM	PARTY MANAGER W. Cassidy

STATION NO.	SLOPE 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.	
									2786.5					
28	74		81° 25'	+24.3	7.0	-		-7.0		2779.5		-20	+71	675.221 473.792
29	404		78° 35'	--	10.4	-		-10.4		2776.1		-90	+394	675.151 474.115
30	734		78° -	--	7.9	TH	+3.7	-4.2		2782.3		-156	+717	675.085 474.438
TP	1000		76° 05' 20"	-	12.3	89° 10'	+14.5	+2.2		2788.7	TP	-180	+984	675.060 474.705
TP	1000				12.2	270° 30'	+14.5	+2.3			TP	-		
	592	591.2	255° 29' 53"	+24.3	5.4	93° -	+31.0	+36.4		2825.1	BS	-101	+583	
	592				+10.6	92° 30'	+25.8	+36.4			BS	-		
31	529		255° 20'	-	5.9	93° 10'	-29.2	-35.1		2790.0		+89	-522	675.047 474.766
32	203		263° -	--	5.3	93° 10'	-11.2	-16.5		2808.6		+60	-194	675.018 475.094
X	0				5.1	-		-5.1		2820.0	X	○	○	674.958 475.288
33	128		99° -	--	5.2	87° 10'	+6.3	+1.1		2826.2		-70	+107	674.888 475.395
34	451		94° 25'	--	9.0	87° 20'	+21.0	+12.0		2837.2		-217	+396	674.741 475.684
TP	465		95° 30' 18"	-	5.8	87° 40'	+18.9	+13.1		2838.2	TP	-231	+403	674.726 475.691
TP	465				5.7	272° 20'	+18.9	+13.2			TP	-		
	356		284° 55' 28"	+24.1	14.1	91° 20'	+8.3	+22.4		2860.6	BS	-224	+276	
	356				+13.0	91° 30'	+9.3	+22.3			BS	-		
35	50		274° 50'	-	6.0	91° 30'	-1.3	-7.3		2853.3		+24	-44	674.525 475.923
X	0				5.1	-		-5.1		2855.5	X	○	○	674.501 475.967
36	280		58° 30'	-	6.6	89° 30'	+2.4	-4.4		2856.2		+36	+278	674.537 476.245

DATE 8-30-85	INSTRUMENT MAN B. Cotamp	ROD MAN B. SALDIVAR	PARTY NUMBER 6834	NOTES CHECKED BY R.J. W	LINE NO. 2	PAGE 5
AREA MONTANA	TOPO MAP Sylvanite - 7 1/2'	STATE MONT.	COUNTY LINCOLN	TWP	RANGE	PARTY MANAGER W. Cassidy

STATION NO.	SLOPE 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	
									2860.6							
37 TP	607		55° 57' 24"	+24.1	4.0	89° 30'	+5.3	+1.3		2861.9	TP	+105	+598	674,605	476,565	
37	607				3.9	270° 30'	+5.3	+1.4			TP	-1				
	304		289° 27' 04"	-	+14.4	84	+1.5	+15.9	2877.8		BS	-209	+220			
	304				+5.3	92° -	+10.6	+15.9			BS	-1				
#	60		270° 57' 28"	-	7.7	72° 20'	-2.4	-10.1		2867.7	#	+25	-54	674,420	476,731	# creek
π	0				5.1	-		-5.1		2872.7	π	○	○	674,395	476,785	
38	30		173° 10'	+24.1	8.7	92° 20'	-1.2	-9.9		2867.9		-29	-9	674,366	476,776	
37	335		101° 10'	-	9.0	88° 40'	+7.8	-1.2		2876.6		-193	+274	674,202	477,059	
40	662		103° 55'	-	8.0	88° 40'	+15.4	+7.4		2885.2		-408	+522	673,987	477,307	
TP	851		102° 34' 34"	-	7.6	88° 40'	+19.8	+12.2		2890.0	TP	-508	+682	673,886	477,467	
TP	851				7.5	271° 20'	+19.8	+12.3			TP	-1				
	614		286° 06' 15"	+24.3	+13.9	84	+3.1	+17.0	2907.0		BS	-398	+468			
	614				+6.2	71° -	+10.7	+16.9			BS	-1				
41	474		287° -	-	12.6	90° 20'	-2.8	-15.4		2891.6		+313	-356	673,800	477,579	
42	148		279° -	-	7.3	76° 20'	-0.9	-8.2		2898.8		+81	-124	673,568	477,811	
π	0				5.1	-		-5.1		2901.9	π	○	○	673,487	477,935	
43	181		90° -	-	7.5	88° 20'	+5.3	-2.2		2904.8		-74	+165	673,413	478,100	
44	511		-	-	5.3	89° 20'	+5.9	+0.6		2907.6		-210	+466	673,277	478,401	
45	840		89° 55'	-	17.0	89° 30'	+7.3	-9.7		2897.3		-345	+766	673,142	478,701	
TP	921		89° 16' 12"	-	4.7	89° 30'	+8.0	+3.3		2910.3	TP	-368	+844	673,118	478,779	

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE							
8-30-85		B. Cotcamp		B. SALDIVAR		6834		R.J.		2		6							
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER					
MONTANA		Sylvanite - 7 1/2'		Mont.		Lincoln								W. Cassidy					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X				
									2910.3										
417			307 19 17	+24.3	0.8	-		+0.8	2911.1		BS	-367	+198						
417					2.9	TH	-2.1	+0.8			BS	-1							
46	156		310 45'	~	6.5	BH	-0.8	-7.3		2903.8		+141	-66	672,891	478,911				
π	0				5.1	-		-5.1		2906.0	π	○	○	672,750	478,977				
47	168		123 50'	~	5.4	89-	+2.9	-2.5		2908.6		-143	+89	672,607	479,066				
48	496		119 55'	~	4.1	89-	+8.7	+4.6		2915.7		-402	+290	672,348	479,267				
14	556		119 34 30	-	3.8	89-	+9.7	+5.9		2917.0	14	-449	+328	672,301	479,305				
TP	720		119 54 40	-	5.1	89-	+12.6	+7.5			TP	-584	+421	672,165	479,398				
TP	720				5.0	271-	+12.6	+7.6		2918.7	TP	-1							
428			243 57'	+24.3	9.6	-		+9.6			BS	+13	+428						
428					11.8	TH	-2.1	+9.7	2928.4		BS	-1							
49	321		241'	~	8.0	-		-8.0		2920.4		-26	-320	672,151	479,506				
50	0				5.1	-		-5.1		2923.3	π	○	○	672,177	479,826				
51	324		114 30'	~	6.4	89-	+5.7	-0.7		2927.7		-244	+213	671,933	480,039				
TP	340		115 20 48	~	6.2	89-	+5.9	-0.3		2928.1	TP	-259	+220	671,917	480,046				
TP	340				6.2	271-	+5.9	-0.3			TP	-1							
	375		272 57 03	~	8.4	-		+8.4	2936.5		BS	-172	+333						
	375				10.3	TH	-1.9	+8.4			BS	-1							
52	65		261 50'	~	5.6	-		-5.6		2930.9		+18	-62	671,762	480,317				
π	0				5.1	-		-5.1		2931.4	π	○	○	671,744	480,379				

Y = 672,140 X = 479,320
 Y - Inter. EL. 2917.0

DATE 8-30-85	INSTRUMENT MAN B. Stcamp	ROD MAN B. SALDIVAR	PARTY NUMBER 6834	NOTES CHECKED BY R.G. W	LINE NO. 2	PAGE 7
AREA MONTANA	TOPO MAP Sylvanite - 7 1/2'	STATE MONT.	COUNTY LINCOLN	TWP	RANGE	PPM
				PARTY MANAGER W. Cassidy		

STATION NO.	SLOPE 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	
									2936.5							
53	271		109° 15'	+24.3	5.1	89° -	+4.7	-0.4		2936.1		-187	+196	671,557	480,575	
54	599		111° 30'	-	4.9	88° 20'	+17.4	+12.5		2949.0		-429	+418	671,315	480,797	
TP	745		110° 32' 54"	-	5.4	88° 20'	+21.7	+16.3		2952.8	TP	-525	+528	671,218	480,907	
TP	745				7.6	88° 10'	+23.8	+16.2			TP	-				
	433		272° 24' 44"	+24.3	9.5	-		+9.5	2962.3		BS	-195	+387			
	433				9.4	270° -		+9.4			BS	-				
55	249		269° 40'	-	5.4	89° 30'	+2.2	-3.2		2959.1		+101	-228	671,123	481,066	
X	0				5.1	-		-5.1		2957.2	X	0	0	671,022	481,294	
56	84		43° 40'		6.6	92° -	-2.9	-9.5		2952.8		+32	+78	671,054	481,372	
ATP	187		59° 46' 54"	-	13.6	90° 30'	-1.6	-15.2			TP	+19	+186	671,040	481,480	
TP	187				13.0	269° 30'	-1.6	-15.1		2947.2	TP	-				
	264		308° 54' 58"	-	7.7	88° -	-9.2	-1.5	2945.7		BS	-236	+119			
	264				6.9	88° 10'	-8.4	-1.5			BS	-				
X	229		316° 38' 04"	-	5.3	88° 40'	-5.3	+0.0		2945.7		+216	-75	671,019	481,524	671,000 x -481,545 creek EL. 2945.0
57	41		294° 20'	-	5.6	88° 40'	+7.0	-4.6		2941.1		+31	-27	670,834	481,572	
X	0				5.1	-		-5.1		2940.6	X	0	0	670,803	481,599	
58	286		114° 20'	+24.3	6.3	90° 40'	-3.3	-9.6		2936.1		-215	+189	670,588	481,788	
59	616		115° 10'	-	4.3	90° 40'	-7.2	-11.5		2934.2		-468	+400	670,335	481,999	
TP	787		114° 10' 04"	-	5.0	90° 40'	-9.2	-14.2		2931.5	TP	-589	+522	670,213	482,121	
TP	787				7.3	90° 30'	-6.9	-14.2			TP	-				

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE		
8-30-85		B. Cotamp		B. SALDIVAR		6834		R. J. W		2		8		
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PARTY MANAGER		
MONTANA		Sylvanite - 7h		mont.		LINCOLN						W. Cassidy		
STATION NO.	SLOPE 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.	
									2931.5					
	570		272° 54' 32"	+24.3	6.5	TH	-2.9	+3.6	2935.1		BS	-261	+507	
	570				+6.4	TH ₂₁	-2.9	+3.5		BS	-1			
60	415		271° 15'	-	5.0	TH	+2.1	-2.9		2932.2		+179	-374	670,130 482,254
61	85		278° 05'	-	4.6	-		-4.6		2930.5		+46	-72	669,997 482,556
X	0				5.1	-		-5.1		2930.0	X	0	0	669,951 482,628
62	245		105° 55'	+24.3	5.1	-		-5.1		2930.0		-158	+187	669,793 482,815
63	575		167° 05'	-	6.0	-		-6.0		2929.1		-380	+431	669,571 483,059
64	905		105° 46'	-	6.9	-		-6.9			TP	-583	+693	669,367 483,321
64	905				6.8	270°		-6.8		2928.3	TP	-1		
	583		280° 26' 09"	-	8.8	-		+8.8	2937.1		BS	-332	+479	
	583				+8.7	270°		+8.7		BS	-1			
65	254		281° 05'	+24.3	6.8	91° 20'	-5.9	-12.7		2924.4		+147	-207	669,181 483,593
X	0				5.1	-		-5.1		2932.0	X	0	0	669,034 483,800
66	74		110° 10'	-	4.8	88°	2.4	-2.2		2934.9		-52	+53	668,982 483,853
67	403		106° 45' 30"	-	5.2	88° 10'	+12.9	+7.7		2944.8	TP	-265	+304	668,768 484,104 Across
67	403				5.3	271° 50'	+12.9	+7.6			TP	-1		str.
	327		280° 45' 04"	-	+13.7	BM	+1.6	+15.5	2960.3		BS	-188	+268	
	327				+13.8	BM ₂₁	+1.6	+15.4		BS	-1			
68	0				5.1	-		-5.1		2955.2	X	0	0	668,579 484,372
69	329		104° 30'	-	5.1	88° 30'	+8.6	+3.5		2963.8		-206	+256	668,373 484,628

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE		
8-30-85		B. Cotcamp		B. SALDIVAR		6834		R. J. [initials]		2		9		
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PARTY MANAGER		
MONTANA		Sylvanite - 7 1/2'		MONT.		LINCOLN						W. Cassidy		
STATION NO.	SLOPE 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.	
									2960.3					
TP	616		103° 08' 48"	+24.3	5.7	88° 30'	+16.1	+10.4	}	2970.7	TP	-374	+489	668.204 484.861
TP	616				7.5	88° 20'	+17.9	+10.4		TP	-1			
	301		244 -	--	+4.0	-		+4.0	}	2974.7	BS	+9	+301	
	301				+5.5	TM	-1.5	+4.0		BS	-1			
70	260		241 20'	--	5.5	89 -	+4.5	-1.0		2973.6		-20	-259	668.192 484.903
X	0				5.1	-		-5.1		2969.6	X	0	0	668.212 485.162 #creek
71	70		87 -	--	6.3	89 -	+1.2	-5.1		2969.6		-25	+65	668.187 485.227
TP	354		82° 15' 26"	-	5.9	89 -	+6.2	+0.3	}		TP	-101	+339	668.110 485.501
TP	354				5.8	271 -	+6.2	+0.4			TP	-1		
	835		280 43 16	+24.3	4.9	-		+9.9	}	2985.0	BS	-479	+684	
	835				4.8	270 -		+9.8		BS	-1			
72	786		279 40'	--	12.3	-		-12.3		2972.7		+439	-652	668.069 485.533
73	456		280 40'	--	6.7	-		-8.7		2976.3		+261	-374	667.891 485.811
74	127		-	-	4.9	-		-4.9		2980.1		+73	-104	667.703 486.081
X	0				5.1	-		-5.1		2979.9	X	0	0	667.630 486.185
75	204		117 40'	+24.3	6.4	-		-6.4		2978.6		-161	+126	667.469 486.311
76	526		114 -	--	12.4	-		-12.4		2972.6		-393	+350	667.237 486.535
TP	555		113 15 39	-	12.8	-		-12.8	}		TP	-410	+375	667.219 486.560
TP	555				12.7	270 -		-12.7			TP	-1		

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE					
8-30-85		B. Cotcamp		B. SALDIVAR		6834		B. SLW		2		10					
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER			
MONTANA		Sylvanite - 7 1/2'		MONT.		Lincoln								W. Cassidy			
STATION NO.	SLOPE 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		
									2972.3								
	458		230 59 10	+24.3	13.6	88 30'	-12.0	+1.6	2974.0		BS	+116	+443				
	458				11.0	88 50'	-9.3	+1.7			BS	-1					
77	163		235 35	-	7.9	88 50'	+3.3	-4.6		2969.4		-29	-160	667,305	486,843		
π	0				5.1	-		-5.1		2968.9	π	○	○	667,334	487,003		
78	115		108 34 55	-	4.7	89 50'	+0.3	-4.4		2969.6	π	-78	+84	667,256	487,087	π	9-667,300 X-487,015 CREEK EC. 2971.0
78	171		110 55	-	5.7	89 50'	+0.5	-5.2		2968.8		-121	+120	667,213	487,123		
TP	212		113 58 32	-	6.2	89 50'	+0.6	-5.6		2968.4	TP	-158	+141	667,175	487,145		
TP	212				5.6	-		-5.6			TP	-1	+1				
	353		315 04 30	+24.3	8.9	92 -	+12.3	+21.2	2989.6		BS	-330	+124				
	353				7.9	92 10'	+13.3	+21.2			BS	-1	+1				
79	67		306 40	-	5.7	-		-5.7		2983.9		+59	-33	666,903	487,237		
π	0				5.1	-		-5.1		2984.5	π	○	○	666,844	487,270		
80	259		80 53 04	-	5.8	86 -	+18.1	+12.3		3001.9	TP	-68	+249	666,775	487,520		
80	259				5.8	274 -	+18.1	+12.3			TP	-1	+1				
	164	163.2	234 50 25	-	10.3	95 30'	+15.7	+26.0	3027.9		BS	+31	+160				
	164				9.8	95 40'	+16.2	+26.0			BS	-1	+1				
π	0				5.1	-		-5.1		3022.8	π	○	○	666,805	487,681		
81	186		98 10	+24.3	6.0	85 40'	+13.6	+7.6		3035.5		-97	+152	666,708	487,833		
82	509		97 50	-	5.7	84 30'	+48.8	+43.1		3071.0		-271	+431	666,534	488,112		
83	837	835.1	95 43 03	-	9.8	84 30'	+80.4	+70.6		3098.5	TP	-418	+723	666,386	488,405		

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
8-30-85		B. Cotamp		B. SALDIVAR		6834		B. S. W.		2		11			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		Sylvanite - 2 1/2'		MONTANA		LINCOLN								W - Cassidy	
STATION NO.	SLOPE 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
									3098.5						
	387	385.5	284 12 20	+24.3	7.1	95° -	+33.7	+40.8	3139.4		BS	-240	+302		
	387				8.4	94 50	+32.6	+41.0	+40.9		BS	-1	"		
84	58		282 55	-	4.8	95 30	-5.6	-10.4		3129.0		+35	-46	666,180 488,662	
X	0				5.1	-		-5.1		3134.3	X	0	0	666,145 488,708	
85	263		131 25	-	6.3	84 30	+25.2	+18.9		3158.3		-240	+108	665,905 488,816	
86	590		138 45	-	6.7	85 -	+51.4	+44.7		3184.1		-564	+172	665,581 488,880	
TP	758	155.1	138 20 25	-	13.8	85 -	+66.1	+52.3			TP	-721	+225	665,424 488,934	
TP	758				13.7	275 -	+66.1	+52.4		3191.8	TP		"		
	925		308 06 50	+24.3	10.5	91° -	+16.1	+26.6	3218.4		BS	-820	+428		
	925				+10.4	269 -	+16.1	+26.5			BS		"		
87	760		307 40	-	5.0	91 10	-15.5	-20.5		3197.9		+671	-357	665,275 489,006	
88	433		307 50	-	5.3	91 -	-7.0	-12.9		3205.5		+383	-202	664,987 489,161	
89	103		310 05	-	5.3	-		-5.3		3213.1		+93	-45	664,697 489,318	
X	0				5.1	-		-5.1		3213.3	X	0	0	664,604 489,363	
90	241		183 40	+24.3	5.5	87 40	+9.8	+4.3		3222.7		-213	-113	664,391 489,250	
TP	292		183 45 05	-	6.1	87 40	+11.9	+5.8		3224.2	TP	-257	-137	664,347 489,227	
TP	292				5.2	87 50	+11.0	+5.8			TP		"		
	280		14 00 20	-	11.6	-		+11.6	3235.8		BS	-220	-174		
	280				10.2	84	+1.4	+11.6			BS		"		
91	0				5.1	-		-5.1		3230.7	X	0	0	664,127 489,054	

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-3-85		O. Cotcamp		R. Jones		6834		J. S. W.		2		12			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		Sylvanite - 7 1/2'		MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									3235.8						
TP	265		149° 44' 36"	+24.3	2.7	-		-2.7							
TP	265				1.3	BH	-1.3	-2.6		3233.2	TP	-264	+28	663,863	489,083
	372		9° 58' 09"	-	+13.2	91° 30'	+9.7	+22.9	3256.1		BS	-307	-209		
	372				+13.1	268° 30'	+9.7	+22.8							
92	311		9° 10'	-	4.5	93° 04'	-16.6	-21.1		3235.0		+259	+172	663,815	489,047
X	0				5.1	-		-5.1		3251.0	X	0	0	663,556	488,875
93	17		165° 15'	+24.3	4.5	96° 10'	±0.0	-4.5		3251.6		-17	-3	663,539	488,872
94	346		156° 20'	-	5.2	86° 40'	+20.1	+14.9		3271.0		-346	-4	663,210	488,871
TP	476		155° 05' 45"	-	5.2	86° 40'	+27.7	+22.5		3278.6	TP	-475	+5	663,081	488,881
TP	476				6.7	86° 30'	+29.1	+22.4							
	660		302° 42' 20"	+24.3	15.0	-		+15.0			BS	-554	+359		
	660				+11.8	BH	+3.3	+15.1	3293.7		BS				
95	463		301° 36'	-	4.5	90° 36'	-4.8	-9.3		3284.4		+383	-260	662,910	488,981
96	134		296° -	-	4.5	90° 30'	-1.2	-5.7		3288.0		+103	-86	662,630	489,155
X	0				5.1	-		-5.1		3288.6	X	0	0	662,527	489,241
97	189		56° 38' 06"	-	3.6	89° -	+3.3	-0.3		3293.4	TP	+30	+187	662,557	489,429
97	189				3.6	271° -	+3.3	-0.3			TP				
	189		197° 23' 02"	-	+5.3	-		+5.3	3298.7		BS	+141	+126		
	189				+4.4	BH	+0.9	+5.3			BS				
X	0				5.1	-		-5.1		3293.6	X	0	0	662,698	489,556

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-3-85		B. Cotcamp		R. Jones		6834		B. S. V		2		13			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA				MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									3298.7						
98	152		54° 45'	+24.3	4.5	93° 52'	-10.3	-14.8		3283.9		+29	+149	662,727	489,705
TP	347		53° 48' 21"	-	4.8	92° 10'	-13.1	-17.9		3280.8	TP	+71	+339	662,769	489,896
TP	347				5.8	92° -	-12.1	-17.9			TP		+		
	261		305° 44' 11"	-	+1.0	TH	-1.3	-0.3	3280.5		BS	-226	+130		
	261				+4.3	89° -	-4.6	-0.3			BS		+		
99	107		304° 10'	-	4.5	89° 40'	+0.6	-3.9		3276.6		+91	-56	662,634	489,971
π	0				5.1	-		-5.1		3275.4	π	○	○	662,543	490,027
100	218		109° 50'	+24.3	4.4	92° -	-7.6	-12.0		3268.5		-152	+156	662,391	490,183
101	548		110° 45'	-	4.5	91° 38'	-15.6	-20.1		3260.4		-388	+387	662,155	490,414
TP	763		109° 46' 10"	+24.6	5.3	91° -	-13.3	-18.6			TP	-533	+546	662,010	490,574
TP	763				5.2	267° -	-13.3	-18.5		3262.0	TP		+		
	576		214° 38' 20"	-	+1.9	TH	-2.9	-1.0	3261.0		BS	+295	+495		
	576				+9.0	89° -	-10.1	-1.1			BS		+		
102	451		214° -	-	4.5	70° 50'	-6.6	-11.1		3249.9		-235	-385	662,070	490,685
103	124		216° 30'	-	4.4	94° 30'	-9.7	-14.1		3246.9		-60	-109	662,245	490,961
π	0				5.1	-		-5.1		3255.9	π	○	○	662,365	491,070
104	239		131° 30'	-	5.7	88° 30'	+6.3	+0.6		3261.6		-219	+97	662,086	491,167
TP	481		135° 17' 09"	-	3.7	87° 40'	+19.6	+15.7			TP	-451	+165	661,854	491,236
TP	481				3.8	272° 20'	+19.6	+15.8		3276.8	TP		+		

Sylvanite - 7 1/2' J
FLATIRON Mtn. - 7 1/2' J

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-3-85		B. Cotcamp		R. Jones		6834		B. S.V.		2		14			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		FLATIRON Mtn. - 7 1/2		MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									3276.8						
	284		293 57 03	+24.6	5.1	73° -	+14.9	+20.0	3296.8		BS	-213	+188		
	284				+6.8	92 40	+132	+20.0			BS				
105	200		296 -	-	4.5	73 40	-12.8	-17.3		3279.5		+155	-127	661,796	491,298
X	0				5.1	-		-5.1		3291.7	X	0	0	661,641	491,425
106	125		85 -	-	4.2	88 10	+4.0	-0.2		3296.6		-42	+118	661,599	491,543
TP	367		81 13 52	-	1.6	88 50	+7.5	+5.9			TP	-100	+353	661,541	491,779
TP	367				1.5	271 10	+7.5	+6.0		3302.8	TP				
	531		309 51 22	+24.6	4.7	89 -	-9.3	-4.6	3298.3		BS	-479	+229		
	531				+14.1	88 -	-18.5	-4.4		4.5	BS				
107	446		307 20	-	4.5	89 14	+6.0	-1.5		3296.8		+394	-210	661,456	491,799
108	117		311 30	-	4.5	70 04	-0.1	-4.6		3293.7		+107	-47	661,169	491,962
X	0				5.1	-		-5.1		3293.2	X	0	0	661,062	492,009
109	210		99 30	-	4.5	91 56	-7.1	-11.0		3286.7		-118	+174	660,944	492,183
TP	388		99 34 47	-	5.3	71 30	-10.2	-15.5		3282.8	TP	-218	+321	660,844	492,331
TP	388				5.3	268 30	-10.2	-15.5			TP				
	335		265 37 40	+24.6	2.9	-		+2.9	3285.7		BS	-116	+314		
	335				+4.6	74	-1.7	+2.9			BS				
110	194		271 35	-	4.5	90 28	-1.6	-6.1		3279.6		+86	-174	660,814	492,472
X	0				5.1	-		-5.1		3280.6	X	0	0	660,728	492,646
111	139		110 05	-	5.2	-		-5.2		3280.5		-98	+99	660,630	492,745

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-3-85		B. Cotamp		R. Jones		6834		B. Sk		2		15			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		FLATIRON Mtn 7 1/2'		MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									3285.7						
112	467		103° 40'	+24.6	5.1	TH	+2.3	-2.8		3282.9		-289	+367	660,439	493,013
113	797		103° 24'	-	4.5	89° 24'	+8.3	+3.8		3289.5		-491	+628	660,237	493,274
114	1121		104° 30'	-	5.6	89° 08'	+19.0	+11.4		3297.1		-707	+870	660,021	493,516
TP	1163		104° 02' 36"	-	5.3	89° 08'	+17.6	+12.3			TP	-726	+908	660,002	493,555
TP	1163				7.9	89° -	+20.3	+12.4		3298.1	TP		+		
	933		265° 11' 57"	+24.6	10.5	88° 50'	-19.0	-8.4	3289.7		BS	-316	+878		
	933				10.5	271° 10'	-19.0	-8.5			BS		+		
115	664		271° 10'	-	4.5	77° 06'	+10.4	+5.9		3295.6		+289	-598	659,975	493,836
116	357		278° 40'	-	4.5	89° 40'	+2.1	-2.4		3287.3		+196	-299	659,882	494,135
117	34		248° 45'	-	4.5	89° 04'	+0.6	-3.9		3285.8		+2	-34	659,688	494,400
X	0				5.1	-		-5.1		3284.6	X	0	0	659,686	494,434
118	291		66° 50'	+24.6	11.1	90° 30'	-2.5	-13.10		3276.1		-7	+291	659,679	494,725
119	615		71° 22'	-	4.5	90° 22'	-3.9	-8.4		3281.3		-64	+612	659,622	495,046
120	945		69° 55'	-	4.4	-		-4.4		3285.3		-74	+942	659,612	495,376
TP	1200		69° 52' 06"	-	5.6	-		-5.6		3284.1	TP	-93	+1196	659,593	495,631
TP	1200				11.6	TH	+6.0	-5.6			TP		+		
	586		274° 15' 28"	-	10.9	-		+10.9	3295.0		BS	-283	+513		
	586				10.8	270° -		+10.8			BS		+		
121	513		274° 45'	-	8.9	90° 10'	-1.5	-10.4		3284.6		+251	-447	659,561	495,698
122	186		271° -	-	4.5	91° 10'	-3.8	-8.3		3286.7		+80	-168	659,396	495,977

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-3-85		B. Cotamp		R. Jones		6834		B. S. W.		2		16			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONT.		FLATIRON Mtn. - 7 1/2		MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									3295.0						
π	0				5.1	-		-5.1		3289.9	π	○	○	659,310	496,145
123	144		105° 05'	+24.6	4.5	89° -	+2.5	-2.0		3293.0		-92	+111	659,218	496,256
TP	328		104° 01' 14"	-	6.4	90° 30'	-2.9	-9.3		3285.8	TP	-205	+256	659,105	496,402
TP	328				6.3	267° 30'	-2.9	-9.2		3285.8	TP		"		
	139		262° 13' 41"	-	+2.9	87° -	-7.3	-4.4	3281.4		BS	-40	+133		
	139				+2.5	87° 10'	-6.9	-4.4			BS		"		
124	0				5.1	-		-5.1		3276.3	π	○	○	659,065	496,536
125	330		64° 25'	+24.6	4.5	94° -	-23.0	-27.5		3253.9		+6	+330	659,071	496,866
126	660		65° 35'	-	4.5	93° 10'	-36.5	-41.0		3240.4		-2	+660	659,064	497,196
TP	787	7860	65° 40' -	-	3.5	92° 50'	-38.9	-42.4		3239.0	TP	-4	+786	659,061	497,323
TP	787				5.8	92° 40'	-36.6	-42.4			TP		"		
	396		268° 16' 58"	+24.6	6.3	89° -	-6.9	-0.6	3238.4		BS	-154	+365		
	396				+13.2	88° -	-13.8	-0.6			BS		"		
127	191		263° 45'	-	4.8	89° 10'	+2.8	-2.0		3236.4		+60	-181	658,967	497,508
π	0				5.1	-		-5.1		3233.3	π	○	○	658,907	497,689
128	139		87° 15'	-	5.7	90° 10'	-0.4	-6.1		3232.3		-52	+129	658,855	497,818
129	412		128° 10'	-	6.0	90° 20'	-2.4	-8.4		3230.0		-366	+189	658,541	497,878
130	716		141° -	-	5.2	90° 10'	-2.1	-7.3		3231.1		-694	+178	658,213	497,867
TP	909		142° 21' 34"	-	5.4	89° 40'	+5.3	-0.1		3238.3	TP	-886	+205	658,021	497,895
TP	909				8.1	89° 30'	+7.9	-0.2			TP		"		

DATE 9-3-85 INSTRUMENT MAN B. Cot Camp ROD MAN R. Jones PARTY NUMBER 6834 NOTES CHECKED BY B. S. LINE NO. 2 PAGE 17

AREA MONTANA TOPO MAP FLATIRON Mtn-7 1/2 STATE MONT. COUNTY LINCOLN TWP RANGE PPM PARTY MANAGER W. Cassidy

STATION NO.	SLOPE 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			
										3238.3								
	627		269° 35' 03"	+24.6	14.5	84	+3.1	+17.6	3255.9		TBS	-257	+572					
	627				14.0	90° 20'	+3.6	+17.6										
131	507		267° 25'	-	5.5	91° 14'	-10.9	-16.4		3239.5		+190	-470	657,954	497,998			
132	180		272° 45'	-	4.5	91° 50'	-5.8	-10.3		3245.6		+83	-160	657,847	498,308			
	π	0			5.1	-		-5.1		3250.8	π	0	0	657,764	498,468			
133	161		130° -	-	4.5	90° 06'	-0.3	-4.8		3251.1		-145	+69	657,619	498,537			
	TP	512	132° 24' 20"	+24.3	5.1	88° 40'	+11.9	+6.8	3262.7		TP	-470	+202	657,294	498,671			
	TP	512			6.6	88° 30'	+13.4	+6.8										
	599		341° 02' 57"	-	+6.1	-		+6.1	3268.8		BS	-596	-56					
	599				+9.0	TH	-3.0	+6.0										
134	612		338° 20'	-	4.4	90° 36'	-6.4	-10.8		3258.0		+611	+28	657,309	498,644			
135	281		337° 30'	-	5.6	90° 50'	-4.1	-9.7		3259.1		+281	+9	656,979	498,625			
	π	0			5.1	-		-5.1		3263.7	π	0	0	656,698	498,616			
136	51		181° 30'	+24.3	5.5	87° 50'	+1.9	-3.6		3265.2		-46	-22	656,652	498,594			
137	380		176° 30'	-	5.2	88° 30'	+9.9	-4.7		3264.1		-355	-135	656,343	498,481			
	TP	639	175° 37' 08"	-	6.3	88° 30'	+16.7	+8.4	3277.3		TP	-601	-218	656,097	498,399			
	TP	639			6.4	88° 40'	+14.9	+8.5										
	184		0° 55'	-	+10.7	-		+16.7	3288.0		BS	-166	-78					
	184				+9.8	BM	+0.9	+10.7										
138	113		354° 25'	-	5.0	92° -	-3.9	-8.9		3279.1		+107	+36	656,038	498,358			

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-3-85		B. Cotcamp		R. Jones		6834		B. SW		2		18			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		FLATIRON Mtn. 7 1/2'		MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									3288.0						
π	0				5.1	-		-5.1		3282.9	π	○	○	655.931	498.322
139	216		142° 54' 46"	+24.3	4.9	89° -	+3.8	-1.1		3286.9	TP	-211	+48	655.720	498.371
139	216				4.3	89° 10'	+3.1	-1.2			TP				
	329		312° 52'	-	7.7	92° -	+11.5	+19.2	3306.1		BS	-303	+128		
	329				7.6	268° -	+11.5	+19.1			BS				
140	0				5.1	-		-5.1		3301.0	π	○	○	655.417	498.500
141	330		141° 32' 40"	-	6.0	87° -	+5.8	-0.2		3305.9	TP	-320	+81	655.097	498.582
141	330				5.0	89° 10'	+4.8	-0.2			TP				
	254		348° 04' 54"	-	7.9	-		+7.9	3313.8		BS	-248	-54		
	254				6.6	BH	+1.3	+7.9			BS				
π	0				5.1	-		-5.1		3308.7	π	○	○	654.849	498.529
142	68		173° 10'	+24.3	4.5	-		-4.5		3309.3		-65	-20	654.784	498.509
143	387		149° -	-	5.5	-		-5.5		3308.3		-384	+45	654.465	498.574
TP	505		149° 43' 52"	-	3.4	89° -	+8.8	+5.4			TP	-502	+53	654.347	498.583
TP	505				4.8	88° 50'	+10.3	+5.5		3319.3	TP				
	596		1° 13' 50"	-	4.7	89° 30'	-5.2	-0.5	3318.8		BS	-538	-257		
	596				4.6	270° 30'	-5.2	-0.6			BS				
144	376		1° 10'	+24.3	4.5	90° 48'	-5.3	-9.8		3309.0		+339	+162	654.148	498.489
145	49		348° -	-	5.6	90° 50'	-0.7	-6.3		3312.5		+48	+10	653.857	498.337
π	0				5.1	-		-5.1		3313.7	π	○	○	653.809	498.327

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE							
9-3-85		B. Cotcamp		R. Jones		6834		B. S. W.		2		19							
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER					
MONTANA		Turner Mtn. 7 1/2'		MONT.		LINCOLN								W. Cass, Jr.					
STATION NO.	SLOPE 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				
									3318.8										
146	279		126° 33' 40"	+24.3	8.6	88° 10'	+8.9	+0.3	}										
146	279				8.5	271° 50'	+8.9	+0.4			3319.2	TP	-228	+161	653.581	498.489			
	324		314° 02' 08"	~	+14.5	-	-	+14.5	}	3333.7									
	324				+14.5	270° -	-	+14.5				BS	-301	+120					
H	254		317° 18' 14"	~	2.0	92° -	-8.9	-10.9		3322.8	H	+241	-80	653.521	498.530				y=653.405x-498.525 FLATTAILE CREEK
147	0				5.1	-	-	-5.1		3328.6	X	0	0	653.280	498.610				ACROSS STA.
148	328		122° 42'	+24.3	4.5	86° 38'	+19.3	+14.8		3348.5		-275	+179	653.005	498.789				
TP	353		122° 09' 28"	~	3.8	86° 40'	+20.5	+16.7	}	3350.4									
TP	353				4.9	86° 30'	+21.6	+16.7					TP	-294	+195	652.986	498.806		
	550		327° 03' 12"	~	+14.1	92° 50'	+27.2	+41.3	}	3391.7									
	550				+14.0	267° 10'	+27.2	+41.2				BS	-543	+83					
149	246		327° 10'	+24.3	4.0	94° -	-17.2	-21.2		3370.5		+243	-37	652.686	498.853				
X	0				5.1	-	-	-5.1		3386.6	X	0	0	652.443	498.890				
150	303		168° 40'	~	5.0	87° -	+3.9	-1.1		3390.6		-73	-17	652.370	498.873				
151	403		156° 04' 10"	-	6.1	87° -	+21.1	+15.0	}	3406.7									
151	403				4.9	87° -	+19.9	+15.0					TP	-402	-3	652.041	498.888		
	777		2° 35' 12"	~	+11.1	91° -	+13.6	+24.7	}	3431.4									
	777				+11.0	269°	+13.6	+24.6					BS	-693	-351				
152	450		4° -	-	4.5	91° 10'	-9.2	-13.7		3417.7		+396	+213	651.744	498.751				
153	121		353° 10'	-	5.6	70° 30'	-1.1	-6.7		3424.7		+115	+36	651.463	498.574				

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-3-85		B. Cotnam		R. Jones		6834		B. Slav		2		20			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		Tullock Mtn. - 7E		MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									3431.4						
X	0				5.1	-		-5.1		3426.3	X	0	0	651,348	498,538
154	20		122° 40'	+24.3	5.2	88° 30'	+5.4	+0.2		3431.6		-173	+112	651,175	498,650
TP	485		121° 46' 29"	-	4.8	88° 30'	+12.7	+7.9		3439.3	TP	-402	+271	650,946	498,810
TP	485				6.2	88° 20'	+14.1	+7.9			TP				
	950		330° 10' 04"	-	+6.1	92° -	+33.2	+39.3	3478.6		BS	-945	+92		
	950				+6.0	268° -	+33.2	+39.2			BS				
155	899		329° 40'	+24.3	3.8	92° 10'	-34.0	-37.8		3440.8		+894	-94	650,895	498,809
156	570		330° 35'	-	3.7	92° -	-19.9	-23.6		3455.0		+568	-51	650,569	498,852
157	240		329° 40'	-	4.3	91° 50'	-7.7	-12.0		3466.6		+239	-25	650,240	498,878
X	0				5.1	-		-5.1		3473.5	X	0	0	650,001	498,903
158	87		129° 10'	-	5.1	88° 30'	+2.3	-2.8		3475.8		-78	+39	649,923	498,942
159	409		113° 15'	-	4.5	87° 40'	+16.7	+12.2		3490.8		-302	+276	649,699	499,179
160	734	732.8	115° 10' 09"	-	5.2	86° 40'	+42.7	+37.5			TP	-557	+476	649,444	499,386
160	734				5.1	273° 20'	+42.7	+37.6		3516.2	X				ACROSS FLAG
	130		275° 27' 33"	+24.3	8.7	-		+8.7			BS	-65	+113		
	130				8.1	04	+0.7	+8.8	3525.0		BS				
X	0				5.1	-		-5.1		3519.9	X	0	0	649,379	499,494
161	162		66° 45' 30"	-	3.1	-		-3.1		3521.9	161	-3	+162	649,376	499,656
161	183		69° 05'	-	3.9	-		-3.9		3521.1		-11	+183	649,368	499,677

161 y - 649,360 x - 499,605
161 y - Inter. E. 3522.0

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
7-3-85		B. Cotcamp		R. Jones		6834		B. Sk		2		21			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		TURNER Mtn. 7'4"		MONTANA		LINCOLN								W. Cassid	
STATION NO.	SLOPE 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
									3525.0						
162	512		68° 40'	+24.3	3.2	-		-3.2		3521.8		-27	+511	649,352	500,005
TP	666		67° 41' 21"	-	2.5	TH	+3.3	+0.8			TP	-23	+666	649,356	500,161
TP	666				2.4	TH	+3.3	+0.9		3525.9	TP		+		
	321		274° 10'	-	4.0	91°	+5.6	+9.6	3535.5		BS	-154	+282		
	321				3.1	91° 10'	+6.5	+9.6			BS		+		
163	143		271°	+24.3	3.7	92° 10'	-2.9	-6.6		3528.9		+61	-129	649,263	500,315
TP	0				5.1	-		-5.1		3530.4	TP	0	0	649,202	500,444
164	184		73°	-	4.2	89° 10'	+2.7	-1.5		3534.0		-23	+183	649,179	500,627
TP	361		75° 04' 52"	-	3.4	89° 10'	+5.3	+1.9		3537.4	TP	-59	+356	649,143	500,801
TP	361				2.4	89° 20'	+4.2	+1.8			TP		+		
	383		289° 15' 27"	-	5.9	89° 10'	-5.6	+0.3	3537.7		BS	-264	+278		
	383				5.9	91° 50'	-5.6	+0.3			BS		+		
165	228		286° 40'	+24.3	4.5	70° 10'	-0.7	-5.2		3532.5		+149	-172	649,028	500,968
TP	0				5.1	-		-5.1		3532.6	TP	0	0	648,879	501,080
166	103		129°	-	5.5	88° 20'	2.0	-2.5		3535.2		-92	+46	648,787	501,126
167	433		130° 40'	-	5.6	88°	+15.1	+9.5		3547.2		-392	+183	648,487	501,263
TP	537		129° 05' 04"	-	6.5	88°	+18.7	+12.2		3549.9	TP	-480	+240	648,399	501,321
TP	537				4.9	88° 10'	+17.2	+12.3			TP		+		
	87				6.4	-		+6.4	3556.3		BS	-75	+44		
	87		305° 02' 14"	-	6.0	84°	+0.4	+6.4			BS				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
9-3-85		B. Cotcamp		R. Jones		6834		B.S. [initials]		2		22				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
MONTANA		Turner Mtn. 7 1/2'		MONT.		Lincoln								W. Cassidy		
STATION NO.	SLOPE 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
X	0				5.1	-		-5.1		3551.2	X	0	0	648,324	501,365	
168	139		144° 40'	+24.3	5.5	87° 10'	2.0	-3.5		3552.8		-134	+26	648,190	501,391	
TP	305		138° 56'	-	5.6	-		-5.6		3550.7	TP	-292	+88	648,032	501,453	
TP	305				4.1	84°	-1.5	-5.6			TP					
	509		287° 37' 49"	~	10.4	-		+10.4	3561.1		BS	-340	+379			
	509				7.8	84°	+2.5	+10.3			BS					
169	354		284° 25'	~	5.7	90° 40'	-4.1	-9.8		3551.3		+221	-276	647,913	501,556	
170	31		258° 30'	~	4.5	70° 40'	-0.4	-4.9		3556.2		+7	-30	647,699	501,802	
X	0				5.1	-		-5.1		3556.0	X	0	0	647,692	501,832	
171	295		82° -	+24.3	4.2	-		-4.2		3556.9		-83	+283	647,609	502,115	
TP	484		81° 13' 16"	-	4.6	89° -	+8.4	+3.8		3564.9	TP	-130	+466	647,562	502,298	
TP	484				4.5	27° -	+8.4	+3.9			TP					
	743		271° 09' 34"	~	10.1	-		+10.1	3575.0		BS	-319	+671			
	743				10.0	27° -		+10.0			BS					
172	599		270° 50'	~	4.5	90° 38'	-6.0	-11.1		3563.9		+254	-542	647,497	502,427	
173	271		267° 40'	~	5.3	90° 40'	-3.2	-8.5		3566.5		+101	-251	647,344	502,718	
X	0				5.1	-		-5.1		3569.9	X	0	0	647,243	502,967	
174	60		120° -	~	4.5	89° 40'	+0.3	-4.2		3570.8		-49	+35	647,194	503,004	
TP	369		103° 57' 10"	-	4.1	89° 40'	+2.1	-2.0		3573.0	TP	-229	+290	647,014	503,259	
TP	369				3.1	89° 50'	+1.1	-2.0			TP					

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE					
9-3-85		B. Gotcamp		R. Jones		4834		B. S.W.		2		23					
AREA		TOPO MAP		STATE		COUNTY		RANGE		PPM		PARTY MANAGER					
MONTANA		Turner Mtn - 7 1/2'		MONT.		LINCOLN						Cassidy					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS	
														Y	X		
									3573.0								
	288	287.1	317° 35' 10"	+24.3	9.2	94° 30'	+22.6	+31.8	3604.8		BS	-272	+91				
	288				+8.3	94° 40'	+23.4	+31.7			BS						
175	263		315° 44'	-	4.5	94° 44'	-21.7	-26.2		3578.6		+247	-90	646.989	503.260		
π	0				5.1	-		-5.1		3599.7	π	○	○	646.742	503.350		
176	71		165° 45'	-	4.5	101° 30'	-14.0	-18.5		3586.3		-70	-12	646.672	503.338		
TP	325		99° 52' 22"	-	2.9	96° 20'	-1.9	-4.8		3600.0	TP	-183	+269	646.559	503.619		
TP	325				2.8	269° 40'	-1.9	-4.7			TP						
	411	410.2	336° 08' 54"	-	+11.0	93° 30'	+25.1	+36.4	3636.4		BS	-410	-3				
	411				+11.3	266° 30'	+25.1	+36.4			BS						
177	367		330° 20'	+24.3	4.5	95° 22'	-34.3	-38.8		3597.6		+365	-34	646.514	503.582		
178	111		268° 15'	-	3.6	101° 10'	-21.5	-25.1		3611.3		+43	-103	646.192	503.513		
π	0				5.1	-		-5.1		3631.3	π	○	○	646.149	503.616		
179	251		143° 47'	-	12.2	89° 10'	+3.7	-8.5		3627.9		-246	+52	645.903	503.668		
TP	237		107° 15' 57"	-	4.6	86° 30'	+14.5	+9.9		3646.3	TP	-157	+177	645.992	503.793		
TP	237				4.5	273° 30'	+19.5	+10.0			TP						
	396		213° 10' 52"	+24.3	4.9	87° 40'	-16.1	-11.2	3635.1		BS	+213	+334				
	396				6.1	87° 30'	-17.3	-11.2			BS						
YF	390		191° 13' 56"	-	4.8	-		-4.8		3630.3	YF	-317	-227	645.888	503.900		Y - 645.875 x 503.870 Y - Inter. EL. 3631.0
180	261		192° 20'	-	4.4	-		-4.4		3630.7		-209	-156	645.996	503.971		
π	0				5.1	-		-5.1		3630.0	π	○	○	646.205	504.127		

DATE 9-3-85 INSTRUMENT MAN B. Cotcamp ROD MAN R. Jones PARTY NUMBER 6834 NOTES CHECKED BY B.S. W LINE NO. 2 B.S. PAGE 24

AREA MONTANA TOPO MAP Turner Mtn - 7 1/2 STATE MONT COUNTY LINCOLN TWP RANGE PPM PARTY MANAGER W. Cassidy

STATION NO.	SLOPE 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.	
									3635.1					
181	79		50° 05'	+24.3	4.5	91° 18'	-1.8	-6.3		3628.8		+21	+76	646.226 504.203
182	387		73° 11' 15"	--	3.3	89° 50'	+1.1	-2.2		3632.9	TP	-50	+384	646.155 504.511
182	387				3.3	27° 10'	+1.1	2.2			TP			
	242		286° 15' 29"	--	6.7	-		+6.7	3639.6		BS	-157	+184	
	242				5.5	BH	+1.2	+6.7			BS			
X	0				5.1	-		-5.1		3634.5	X	0	0	645.998 504.695
183	88		110° 25'	+24.3	4.6	91° -	-1.5	-6.1		3633.5		-62	+63	645.936 504.758
184	413		91° 55'	--	4.5	70° 24'	-2.9	-7.4		3632.2		-182	+371	645.816 505.066
TP	470		92° 24' 06"	--	5.5	90° 30'	-2.7	-8.2		3631.4	TP	-211	+420	645.787 505.115
TP	470				4.2	90° 30'	-4.1	-8.3			TP			
	357		294° 43' 46"	+24.3	4.4	-		+4.4	3635.8		BS	-270	+234	
	357				4.3	270° -		+4.3			BS			
185	86		285° 20'	--	5.4	-		-5.4		3630.4		+55	-66	645.572 505.283
X	0				5.1	-		-5.1		3630.7	X	0	0	645.517 505.349
186	227		70° 25'	--	11.1	-		-11.1		3624.7		-19	+226	645.498 505.575
187	555		72° 45'	--	5.9	89° 40'	+3.2	-2.7		3633.1		-68	+551	645.449 505.900
188	837		84° -	--	4.5	89° 24'	+8.8	+4.3		3640.1		-263	+795	645.254 506.144
TP	956		98° 11' 51"	+24.0	5.3	88° 50'	+19.5	+14.2		3650.0	TP	-509	+809	645.008 506.158
TP	956				5.2	271° 10'	+19.5	+14.3						

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE							
9-3-85		B. Cotcamp		R. Jones		6834		B S W		2		25							
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER					
MONTANA		Turner Mtn - 7 1/2'		MONT.		LINCOLN								W. Cassidy					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS K TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X				
									3650.0										
	237		330° 41' 26"	+24.0	13.5	-		+13.5	3663.5		BS	-236	+22						
	237				12.3	84	+1.2	+13.5			BS								
189	162		322° 35'	-	4.6	91° 50'	-5.2	-9.8	3653.7			+158	-38	644.930	506.142				
K	0				5.1	-		-5.1	3658.4		K	0	0	644.772	506.180				
190	166		123° 15'	-	4.6	89° 10'	+2.4	-2.2	3661.3			-140	+90	644.632	506.270				
191	494		425° 20'	-	4.5	88° 30'	+12.9	+8.4	3671.9			-425	+252	644.347	506.432				
TP	672		124° 23' 38"	-	4.8	88° 30'	+17.6	+12.8	3676.3		TP	-572	+352	644.200	506.532				
TP	672				6.7	88° 20'	+19.5	+12.8			TP								
	580		271° 58' 59"	+24.0	10.7	91° 26'	+13.5	+24.2	3700.4		BS	-254	+521						
	580				10.6	268° 46'	+13.5	+24.1			BS								
192	427		270° 20'	-	4.0	92° 08'	-15.9	-19.9	3680.5			+176	-389	644.122	506.664				
193	102		255° 30'	-	4.1	92° 10'	-3.9	+8.0	3692.4			+17	-101	643.963	506.952				
K	0				5.1	-		-5.1	3695.3		K	0	0	643.946	507.053				
194	227		85° 50'	-	4.4	89° 10'	+3.3	-1.1	3699.3			-77	+214	643.869	507.267				
TP	326		86° 33' 56"	-	11.2	89° 10'	+4.7	-6.5	3693.9		TP	-115	+305	643.831	507.358				
TP	326				11.1	270° 50'	+4.7	-6.4			TP								
	474		286° 44' 48"	+24.0	6.8	88° -	-16.5	-9.7	3684.1		BS	-309	+359						
	474				6.7	272° -	-16.5	-9.8			BS								
195	248		283° 40'	-	4.4	89° 30'	+2.2	-2.2	3681.9			+152	-196	643.674	507.521				
K	0				5.1	-		-5.1	3679.0		K	0	0	643.522	507.717				

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE							
9-10-85		B. Cotcamp		B. SALDIVAR		6834		B. S. W.		2		26							
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER					
MONT.		Turner Mtn. 7 1/2'		MONT.		LINCOLN								W. Cassidy					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X				
									3684.1										
196	80		110 -	+24.0	4.6	90° 50'	-1.2	-5.8		3678.3		-56	+58	643,466	507,775				
197	409		103 30	--	5.7	91° 30'	-10.7	-16.4		3667.7		-249	+324	643,273	508,041				
TP	459		102° 05' 44"	--	6.8	91° 30'	-12.0	-18.8		3665.3	TP	-270	+371	643,252	508,088				
TP	459				6.7	268° 30'	-12.0	-18.7											
	414		275 29 55	+24.0	5.2	87° -	-21.7	-16.5			BS	-204	+360						
	414				5.1	273° -	-21.7	-16.6	3648.7										
198	142		277 10	--	4.5	88° 30'	+3.7	-0.8		3647.9		+73	-122	643,121	508,326				
π	0				5.1	-		-5.1		3643.6	π	0	0	643,048	508,448				
199	198		127 -	-	5.1	91° 30'	-5.2	-10.3		3638.4	IF	-173	+96	642,875	508,544				IF CAMPGRAND
200	525		125 20	-	5.1	92° 10'	-19.8	-24.9		3623.8		-452	+268	642,596	508,716				
201	853		125 10	-	4.5	91° 36'	-23.8	-28.3		3620.4		-732	+437	642,316	508,885				
TP	863		124 19 -	-	4.4	91° 40'	-25.1	-29.5		3619.2	TP	-734	+453	642,314	508,901				
	863				4.3	268° 20'	-25.1	-29.4											
	1254		289 19 45	+24.0	5.3	88° 50'	-25.5	-20.2			BS	-860	+912						
	1254				5.2	271° 10'	-25.5	-20.3	3598.9										
202	941		289 35	--	5.3	89° 30'	+8.2	+2.9		3601.8		+649	-682	642,103	509,131				
203	611		288 35	-	5.6	89° 40'	+3.6	-2.0		3596.9		+413	-450	641,867	509,363				
204	282		285 40	-	5.0	89° 40'	+1.6	-3.4		3595.5		+180	-217	641,634	509,596				
π	0				5.1	-		-5.1		3593.8	π	0	0	641,454	509,813				
205	46		91° 50'	-	5.6	89° 40'	+0.3	-5.3		3593.6		-20	+41	641,434	509,854				

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-10-85		B. Cotcamp		B. SALDIVAR		6834		B. S. W.		2		28			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		Turner Mtn - 7 1/2		MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									3505.6						
	458		225 28 16	+24.04	5.2	89° -	-8.0	-2.8	3502.7		BS	+161	+429		
	458				+5.1	271 -	-8.0	-2.9							
213	281		226 -	-	5.6	89° -	+4.9	-0.7		3502.0		-96	-264	640,940	512,248
X	0				5.1	-		-5.1		3497.6	X	0	0	641,036	512,512
214	49		52 30	-	5.3	89 30	+0.4	-5.7		3497.0		+11	+48	641,047	512,560
215	379		57 50	-	6.1	90 30	-3.3	-9.4		3493.3		+54	+375	641,090	512,887
216	706		53 45	-	6.1	90 30	-6.2	-12.3		3490.4		+150	+690	641,186	513,202
217	1035		54 50	-	4.1	90 30	-9.0	-13.1		3489.6		+200	+1015	641,236	513,527
TP 218	1363		54 24 58	+24.2	8.9	-		-8.9		3493.8	TP	+269	+1336	641,305	513,848
218	1363				8.8	270 -		-8.8							
	526		255 09 -	-	+14.2	-		+14.2	3508.0		BS	-85	+519		
	526				+12.6	84	+2.6	+14.2							
219	184		253 10	+24.2	3.2	-		-3.2		3504.8		+24	-182	641,244	514,185
X	0				5.1	-		-5.1		3502.9	X	0	0	641,220	514,367
220	146		76 25	-	6.4	92 -	-5.1	-11.5		3496.5		-27	+144	641,193	514,511
221	474		70 05	-	4.1	94 -	-33.1	-37.2		3470.8		-35	+473	641,185	514,840
TP	573	511.6	71 02 20	-	1.6	94 -	-40.0	-41.6		3466.4	TP	-52	+569	641,168	514,936
TP	573				11.6	93 -	-30.0	-41.6			TP				
	613	611.9	273 32 10	-	+5.9	86 30	-37.4	-31.5	3434.9		BS	-285	+542		
	613				+7.7	86 20	-39.2	-31.5							

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY			LINE NO.	PAGE			
9-10-85		B. Catcamp		B. SALDIVAR		6834					2	29			
AREA		TOPO MAP		STATE	COUNTY	TWP	RANGE	PPM	PARTY MANAGER						
mont.		Turner Mtn 7 1/2		mont.	LINCOLN				W. Cassidy						
STATION NO.	SLOPE 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
									3434.9						
222	382		274° 10'	+24.2	5.5	87° -	+20.0	+14.5		3449.4		+181	-336	641,064	515.142
223	53		266° -	-	5.7	87° -	+2.8	-2.9		3432.0		+18	-50	640,901	515.428
π	0				5.1	-		-5.1		3429.8	π	0	0	640,883	515.478
224	242		43° -	-	8.1	92° -	-8.4	-16.5		3418.4		+94	+223	640,977	515.701
TP	511	5	42° 58' 34"	-	0.2	92° -	-17.8	-18.0		3416.9	TP	+198	+471	641,081	515,949
TP	511				9.1	91° -	-8.9	-18.0			TP				
	1463	1462.0	276° 02' 45"	+24.2	+6.3	87° -	-76.6	-70.3	3346.5		BS	-736	+1262		
	1463				+6.2	273° -	-76.6	-70.4			BS				
225	1380		275° 40'	-	10.8	87° -	+72.2	+61.4		3407.9		+687	-197	641,032	516,014
226	1051		276° 20'	-	5.5	87° 40'	+42.8	+37.3		3383.8		+534	-905	640,879	516,306
227	722		275° 50'	-	7.3	88° 10'	+23.1	+15.8		3362.3		+361	-625	640,706	516,586
228	392		273° 20'	-	7.3	88° -	+13.7	+6.4		3352.9		+181	-348	640,526	516,863
229	66		264° -	-	3.6	88° -	+2.3	-1.3		3345.2		+21	-63	640,366	517,148
π	0				5.1	-		-5.1		3341.4	π	0	0	640,345	517,211
TP	418	118	50° 03' 57"	+24.2	3.7	95° -	-10.3	-14.0		3332.5	TP	+32	+113	640,377	517,324
TP	418	118			3.6	265° -	-10.3	-13.9			TP				
	750		184° 12' 39"	-	+4.3	86° -	-52.3	-48.0	3284.5		BS	+658	+356		
	750				+3.0	86° 06'	-51.0	-48.0			BS				
230	613		183° 30'	-	4.5	86° -	+42.8	+38.3		3322.8		-543	-285	640,492	517,395
231	287		183° 50'	-	4.5	86° -	+20.0	15.5		3300.0		-253	-135	640,782	517,945

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-10-85		B. Cotcamp		B. SALDIVAR		6834		R. J.		2		31			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONT.		GOLD HILL-76		MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									3193.5						
240	0				5.1	-		-5.1		3188.4	T	0	0	640,057	519,917
TP	257		98° 42' 10"	+24.2	5.3	92° 20'	-10.5	-15.8		3177.7	TP	-139	+216	639,918	520,133
TP	257				6.0	92° 10'	-9.7	-15.7							
	598	BH	241° 08' 40"	+24.34	1.1	85° 50'	-43.4	-42.3			BS	+47	+595		
	598			+2.8		85° 40'	-45.2	-42.4	3135.3						
241	535		239° 20'	~	3.4	85° 40'	+40.4	+37.0		3172.3		-59	-532	639,906	520,196
242	207		241° 20'	~	2.0	87° 10'	+10.2	+8.2		3143.5		-16	-206	639,949	520,522
T	0				5.1	-		-5.1		3130.2	T	0	0	639,965	520,728
243	85		16° 06' 40"	+24.3	3.8	91° 10'	-1.7	-5.5		3129.8	TP	+65	+55	640,030	520,783
243	85				3.5	91° 20'	-2.0	-5.5							
	356	354.7	109° 55' 33"	~	+4.3	85°	-31.0	-26.7			BS	+247	-254		
	356				+4.2	75°	-31.0	-26.8	3103.0						
244	35		96° 55'	~	5.6	92° 30'	-1.5	-7.1		3095.9		-18	+30	640,259	520,559
T	0				5.1	-		-5.1		3097.9	T	0	0	640,277	520,529
TP	215		30° 14' 03"	~	3.3	93° 10'	-11.9	-15.2		3087.8	TP	+125	+175	640,402	520,704
TP	215				3.9	93°	-11.3	-15.2							
	1852		242° 58' 03"	+24.34	10.6	BH	+9.3	+19.9	3107.5		BS	+88	+1850		
	1852				+10.3	BH	+9.3	+19.6	3197.3						
245	1733		242° 25'	~	3.2	90° 40'	-20.2	-23.4		3084.1		-99	-1730	640,391	520,824
246	1403		-	~	4.0	91° 10'	-28.6	-32.6		3074.9		-80	-1401	640,410	521,153

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
9-10-85		B. Cotcamp		B. SALDIVAR		6834		B. Slw		2		32				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
MONTANA		GOLD HILL - 7 1/2'		MONT.		LINCOLN								W. Cassidy		
STATION NO.	SLOPE 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
									3107.5							
#	1247		242° 40' 34"	+24.3	8.7	91° 10'	-25.4	-34.1		3073.4	#	-66	-1245	640,424	521,309	y-640,400 x-521,300 Pipe Creek EL. 3072.0
247	1074		242° 25'	--	4.2	91° 20'	-25.0	-29.2		3078.3		-62	-1072	640,428	521,482	
248	744		--	--	4.6	91° 30'	-19.5	-24.1		3083.4		-43	-743	640,447	521,811	
249	414		--	--	4.0	92° 20'	-16.9	-20.9		3086.6		-24	-413	640,466	522,141	
250	97		258° 50'	+24.3	4.1	92° 20'	-3.9	-8.0		3099.5		-44	-87	640,446	522,467	
X	0				5.1	-		-5.1		3102.4	X	0	0	640,490	522,554	y-640,470 x-522,515
251	295		121° 35'	--	5.5	90° 20'	-1.7	-7.2		3100.3		-244	+165	640,246	522,719	
252	625		--	--	4.4	90° 40'	-7.3	-11.7		3095.8		-517	+351	639,973	522,905	
253	955		--	--	6.1	90° 40'	-11.1	-17.2		3090.3		-791	+536	639,699	523,090	
254	1285		--	--	5.3	90° 46'	-17.2	-22.5		3085.0		-1064	+721	639,426	523,275	
255	1615		121° 35'	--	5.1	90° 46'	-21.6	-26.7		3080.8		-1337	+906	639,153	523,460	
256	1945		--	--	4.8	90° 50'	-28.3	-33.1		3074.4		-1610	+1091	638,880	523,645	
257	2272		121° 03' 22"	+24.1	13.9	90° 52'	-34.4	-48.3			TP	-1864	+1298	638,626	523,852	Across STA.
257	2272				13.6	269° 08'	-34.4	-48.0	-48.2	3059.3	TP					
	2967		307° 13' 56"	--	10.6	89° 20'	-34.5	-23.9	3035.2		BS	-2603	+1423			
	2967				10.3	270° 40'	-34.5	-24.2	-24.13		BS					
258	2636		307° 26'	+24.1	3.2	TM	+13.2	+10.0		3045.2		+2315	-1260	638,338	524,015	
259	2310		--	--	5.4	89° 50'	+6.7	+1.3		3036.5		+2029	-1105	638,052	524,170	
260	1980		--	--	4.8	-		-4.8		3030.4		+1739	-947	637,762	524,328	
261	1650		--	--	5.6	90° 04'	-1.9	-7.5		3027.7		+1449	-789	637,472	524,486	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	9-10-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	R.J. W	LINE NO.	2	PAGE	33	
AREA	MONTANA	TOPO MAP	GOLD HILL-7 1/2'	STATE	MONT.	COUNTY	LINCOLN	TWP		RANGE		PPM	PARTY MANAGER	W. CASSIDY

STATION NO.	SLOPE 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			
									3035.2									
262	1320		307° 20'	+24.1	5.2	-		-5.2		3030.0		+1159	-631	637.182	524.644			
263	990		- -	-	6.0	90° 10'	-2.9	-8.9		3026.3		+869	-473	636.892	524.802			
264	660		- -	-	4.7	90° 50'	-9.6	-14.3		3020.9		+580	-316	636.603	524.959			
265	330		- -	-	5.7	91° 50'	-10.6	-16.3		3018.9		+290	-158	636.313	525.117			
266	0				5.1	-		-5.1		3030.1	TP	0	0	636.023	525.275			
267	330		126° 15'	+24.1	4.7	91° 20'	-7.7	-12.4		3022.8		-287	+163	635.736	525.438			
268	660		126° 10'	-	6.2	90° 30'	-5.8	-12.0		3023.2		-573	+327	635.450	525.602			
TP	771		123° 51' 04"	-	7.5	90° 30'	-6.7	-14.2		3021.0	TP	-653	+409	635.370	525.684			
TP	771				7.4	269° 30'	-6.7	-14.1			TP							
	1199		284° 14' 42"	+24.1	4.2	TH	-6.0	-1.8	3019.0		BS	-744	+940					
	1199				3.9	TH	-6.0	-2.1	2.03		BS							
269	990		282° 40'	-	4.8	89° 50'	+2.9	-1.9		3017.1		+593	-793	635.219	525.831			
270	660		- -	-	5.7	89° 50'	+1.9	-3.8		3015.2		+395	-529	635.021	562.095			
271	330		- -	-	5.0	89° 30'	+2.9	-2.1		3016.9		+198	-264	634.824	526.360			
272	0				5.1	-		-5.1		3013.9	TP	0	0	634.626	526.624			
273	330		103° 10'	+24.1	5.3	91° -	-5.8	-11.1		3007.9		-260	+263	634.426	526.887			
274	660		- -	-	3.9	91° 20'	-15.4	-19.3		2999.7		-400	+525	634.226	527.149			
TP	907		103° 52' 18"	-	6.4	91° 20'	-21.1	-27.5		2991.5	TP	-558	+715	634.068	527.339			
TP	907				6.3	268° 40'	-21.1	-27.4			TP							

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-10-85		B. Cotcamp		B. SALONAR		6834		B. SW		2		34			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		GOLD HILL-7 1/2'		MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									2991.5						
	927		304° 54' 56"	+24.3	3.3	-		+3.3	2994.8		BS	-796	+474		
	927			+8.0	TM	-4.6	+3.4								
275	843		304° 55'	-	6.0	-		-6.0		2988.8		+724	-431	633.996	527.382
276	514		303° 35'	-	3.3	-		-3.3		2991.5		+435	-273	633.767	527.540
277	187		299° -	-	4.7	-		-4.7		2990.1		+150	-112	633.422	527.701
π	0				5.1	-		-5.1		2989.7	π	0	0	633.272	527.813
278	143		117° 05'	+24.3	6.0	70° 30'	-1.2	-7.2		2987.6		-112	+89	633.160	527.902
279	473		115° 45'	-	5.4	90° 40'	-5.5	-10.9		2983.9		-363	+304	632.909	528.117
280	802		115° 15'	-	4.1	90° 30'	-7.0	-11.1		2983.7		-610	+520	632.662	528.333
281	1132		115° 55'	-	6.3	90° 10'	-3.3	-9.6		2985.2		-870	+724	632.402	528.537
TP	1371		114° 41' 08"	-	6.6	90° 20'	-8.0	-14.6		2980.3	TP	-1034	+900	632.238	528.713
TP	1371				6.3	269° 40'	-8.0	-14.3	-14.5		TP				
	3387		282° 34' 21"	+24.3	+9.0	89° 34'	-25.6	-16.6		2963.4	BS	-2032	+2709		
	3387			+8.5	270° 24'	-25.6	-17.1	-16.9							
282	3297		282° 38'	-	4.5	89° 40'	+19.2	+14.7		2978.1		+1981	-2635	632.187	528.787
≡	3255		282° 45' 10"	-	4.6	89° 40'	+18.9	+14.6		2978.0	≡	+1961	-2598	632.167	528.824
283	2970		282° 38'	-	4.5	89° 40'	+17.3	+12.8		2976.2		+1785	-2374	631.991	529.048
284	2640		-	-	5.1	87° 38'	+16.9	+11.8		2975.2		+1586	-2110	631.792	529.312
285	2310		-	-	5.2	87° 40'	+13.4	+8.2		2971.6		+1388	-1846	631.594	529.576
286	1980		-	-	4.3	89° 40'	+11.5	+7.2		2970.6		+1190	-1583	631.396	529.839

y=632.140 x=528.800
≡ T-Intersect

DATE 7-10-85 INSTRUMENT MAN B. Cotcamp ROD MAN B. SARDIVAR PARTY NUMBER 6834 NOTES CHECKED BY BSK LINE NO 2 PAGE 35

AREA MONTANA TOPO MAP GOLD HILL-7 1/2' STATE MONT. COUNTY LINCOLN TWP RANGE PPM PARTY MANAGER W. CASSIDY

STATION NO.	SLOPE 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.	
									2963.4					
287	1650		282° 25'	+24.3	3.8	89° 40'	+9.0	+5.8		2969.2		+986	-1323	631,192 530,099
288	1320		282° 20'	-	4.3	89° 40'	+7.7	+3.4		2966.8		+788	-1059	630,994 530,363
289	990		282° -	-	6.1	89° 40'	+5.8	-0.3		2963.1		+586	-798	630,792 530,624
290	660		- -	-	4.0	-	-	-4.0		2959.4		+391	-532	630,597 530,890
291	330		- -	-	4.6	-	-	-4.6		2958.8		+195	-266	630,401 531,156
292	0				5.1	-	-	-5.1		2958.3	X	0	0	630,206 531,422
293	330		100 35	+24.3	4.0	91° -	-5.8	-9.8		2953.6		-189	+271	630,017 531,693
294	660		- -	-	4.9	90° 30'	-5.8	-10.7		2952.7		-377	+541	629,829 531,963
295	990		99° 50'	-	4.0	BM	-5.0	-9.0		2954.4		-556	+819	629,650 532,241
296	1320		- -	-	6.3	-	-	-6.3		2957.1		-741	+1093	629,465 532,515
X	1352		99° 17 41	-	5.9	-	-	-5.9		2957.5	X	-748	+1126	629,458 532,548
297	1650		99° 45'	+24.3	6.5	90° 14'	-6.7	-13.2		2950.2		-924	+1367	629,282 532,789
TP	1702		98° 52 53	+24.2	9.1	90° 10'	-5.0	-14.1		2949.3	TP	-929	+1426	629,277 532,848
TP	1702				9.0	267° 50'	-5.0	-14.0			TP			
	762		282 43 -	-	6.0	89° -	-13.3	-7.3			BS	-458	+609	
	762				3.7	89° 10'	-11.1	-7.4	2941.9		BS			
298	486		281 35	+24.2	5.8	89° 20'	+5.7	-0.1		2941.8		+284	-394	629,103 533,063
299	157		286 10	-	4.4	89° 20'	+1.8	-2.0		2939.3		+102	-120	628,921 533,337
X	0				5.1	-	-	-5.1		2936.8	X	0	0	628,819 533,457
300	172		115 40	-	5.0	90° 20'	-1.0	-6.0		2935.9		-132	+111	628,687 533,568

y-629480 x-532525
X Brio9e El. 2954.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-10-85		B. Cotcamp		B. SALDIVAR		6834		B. S. L.		2		36			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		BOLD HILL-7 1/2'		Mont.		Lincoln								W. Cassidy	
STATION NO.	SLOPE 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
									2941.9						
301	500		118° 30'	+24.2	6.5	90° 20'	-2.9	-9.4		2932.5		-398	+303	628,421	533,760
302	828		116° 01' 27"	--	7.8	90° 20'	-4.8	-12.6		2929.3	TP	-636	+530	628,183	533,987
302	828				10.2	90° 10'	-2.4	-12.6			TP				
	1497		288° 06' 34"	--	5.2	89° 30'	-13.1	-7.9	2921.3		BS	-1008	+1107		
	1497				5.0	270° 30'	-13.1	-8.1	-8.0		BS				
303	1167		288° 10'	+24.2	4.4	89° 30'	+10.2	+5.8		2927.1		+786	-862	627,961	534,232
304	837		287° 30'	--	6.6	89° 30'	+7.3	+0.7		2922.0		+557	-625	627,732	534,469
305	568		286° 25'	--	5.1	89° 30'	+4.4	-0.7		2920.6		+331	-386	627,506	534,708
306	180		278° 25'	--	5.2	89° 30'	+1.6	-3.6		2917.7		+97	-152	627,272	534,942
π	0				5.1	-	-	-5.1		2916.2	π	0	0	627,175	535,094
307	149		108° 40'	+24.2	5.2	90° 10'	-0.4	-5.1		2915.7		-101	+109	627,074	535,203
308	475		98° -	--	4.4	90° 10'	-1.4	-5.8		2915.5		-253	+402	626,922	535,496
309	802		95° 05'	--	5.5	90° 10'	-2.3	-7.8		2913.5		-392	+700	626,783	535,794
310	1132		95° 20'	--	9.2	90° 10'	-3.3	-12.5		2908.8		-558	+985	626,617	536,079
TP	1312		95° 28' 42"	--	5.0	90° 10'	-3.8	-8.8		2912.5	TP	-650	+1140	626,525	536,234
	1312				8.8	-	-	-8.8							
	1157		316° 06' 46"	+24.2	4.6	TH	-5.8	-1.2			BS	-1089	+390		
	1157				4.5	TH 20'	-5.8	-1.3	2911.2						
311	990		315° 40'	--	6.3	-	-	-6.3		2904.9		+930	-341	626,366	536,283
312	660		316° 15'	--	6.0	-	-	-6.0		2905.2		+622	-221	626,058	536,403

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-10-85		B. G. Camp		B. SALDIVAR		6834		B. S. W.		2		37			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		GOLD MILL - 7 1/2'		MONTANA		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									2911.2						
313	330		316 40'	+24.2	5.6	-		-5.6		2905.6		+312	-108	625.748	536.516
314	0				5.1	-		-5.1		2906.1	π	0	0	625.436	536.624
315	329		142 40'	-	5.0	89-	+5.7	+0.7		2911.9		-320	+75	625.116	536.699
H	423		141 57 52	-	4.5	89-	+7.4	+2.9		2911.1	H	-411	+101	625.025	536.725
316	658		142 35'	-	6.4	89 30	+5.7	-0.7		2910.5		-641	+150	624.795	536.774
TP	746		140 17 10	-	10.8	89 20	+8.7	-2.1		2909.1	TP	-719	+200	624.717	536.824
	746				10.7	270 40	+8.7	-2.0							
	888		318 00 22	+24.2	6.0	89-	-15.5	-9.5			BS	-845	+271		
	888				5.9	271-	-15.5	-9.6		2899.5					
317	655		317 55'	-	5.3	89-	+11.4	+10.1		2905.6		+623	-201	624.495	536.894
318	328		322 -	-	2.3	-		-2.3		2897.2		+319	-78	624.191	537.017
319	0				5.1	-		-5.1		2894.4	π	0	0	623.872	537.095
320	330		144 40'	-	4.6	-		-4.6		2894.9		-324	+64	623.548	537.159
321	660		144 25'	-	6.5	BH	-3.3	-9.8		2889.7		-647	+130	623.225	537.225
322	988		142 21 34	-	8.2	BH	-4.9	-13.1		2886.4	TP	-961	+230	622.911	537.325
322	988				8.1	BH 270-	-4.9	-13.0							
	990		312 44 06	+24.2	2.2	TH	-5.0	-2.8			BS	-911	+388		
	990				2.1	TH 270-	-5.0	-2.9		2883.5					
323	660		312 30'	-	4.3	TH	+3.3	-1.0		2882.5		+606	-261	622.606	537.452
324	330		-	-	4.2	-		-4.2		2879.3		+303	-131	622.303	537.582

y = 625.025x - 536.725
 creek horiz. = 48'
 CORR. x = +61'

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
9-11-85		B. Cotcamp		R. Jones		6834		B.S.W.		2		38				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
MONTANA		Gold Hill-7 1/2'		MONT.		LINCOLN								W. CASSIDY		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH -	EAST + WEST -		Y	X
									2883.5							
check	270		310° 40'	+24.2	7.9	-		-7.9		2875.6		+244	-115	622,244	537,598	y. 622,200 x-537,635 Appon B.M. El. 2875.0
325	0				5.1	-		-5.1		2878.4	π	○	○	622,000	537,713	
326	330		139° -	-	5.4	-		-5.4		2878.1		-316	+95	621,684	537,808	
327	659		141° 10'	-	5.2	-		-5.2		2878.3		-638	+166	621,362	537,879	
328	988		140° 40'	-	5.1	-		-5.1		2878.4		-954	+258	621,046	537,971	
TP	1212		140° 09' 39"	-	3.3	-		-3.3		2880.2	TP			620,833	538,040	
TP	1212				3.2	270° -		-3.2								
	764		291° 32' 45"	+24.2	6.7	89° -	-13.3	-6.6				BS	-547	+533		
	764				6.6	271° -	-13.3	-6.7	2873.5							
329	656		290° 35'	-	4.9	89° -	+11.4	+6.5		2880.0		+462	-466	620,748	538,107	
330	330		284° 25'	-	5.0	88° 36'	+8.6	+3.6		2877.1		+206	-258	620,492	538,315	
331	0				5.1	-		-5.1		2868.4	π	○	○	620,286	538,573	
332	330		101° 25'	+24.2	5.9	91° 30'	-8.10	-14.5		2859.0		-192	+268	620,094	538,841	LAST STA. ON PAVEMENT
#1	481		99° 53' 51"	-	5.7	91° 30'	-12.0	-18.3		2855.2	#1	-270	+398	620,016	538,971	#3-620,075 x-539,000 #1 T-Inter.
#2	690		100° 20' 52"	-	2.0	91° 30'	-18.1	-20.1		2853.4	#2	-391	+568	619,895	539,141	#3-619,910 x-539,165 # creek
TP	457		97° 05' 15"	-	6.4	91° 30'	-12.0	-18.9		2854.6	TP	-237	+390	620,049	538,963	
TP	457				6.8	268° 30'	-12.0	-18.8								on dirt
	153		220° 04' 22"	+24.2	2.8	88° -	-5.3	-2.5	2852.1			BS	+66	+138		
	153				5.5	87° -	-8.0	-2.5								
Concrete	193		140° -	-	6.1	-		-6.1		2846.0	π	-186	+53	619,929	539,154	Elev. 2844.0 Concrete Bridge

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	9-11-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	R. Jones	PARTY NUMBER	6834	NOTES CHECKED BY	B.S.W.	LINE NO.	2	PAGE	39
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AREA	MONTANA	TOPO MAP	GOLD HILL - 7 1/2'	STATE	MONT.	COUNTY	LINCOLN	TWP		RANGE		PPM		PARTY MANAGER	W. Cassidy
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STATION NO.	SLOPE 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
									2852.1						
333	0				5.1	-		-5.1		2847.0	X	0	0	620.115	539.101
334	324		11 10	+24.2	6.0	BH	-1.6	-7.6		2844.5		+264	+188	620.379	539.289
TP	587		11 17 52	-	7.0	88	+20.5	+13.5		2865.6	TP	+478	+341	620.593	539.442
TP	587				6.9	272	+20.5	+13.6							
	410		254 27 42	-	6.0	92	+14.3	+20.3	2885.9		BS	-62	+405		
	410				4.8	92 10	+15.5	+20.3							
335	326		254 50	+24.2	3.7	92 10	-12.3	-16.0		2869.9		+51	-322	620.582	539.525
336	0				5.1	-		-5.1		2880.8	X	0	0	620.531	539.847
337	326		95	-	4.3	86 10	+21.8	+17.5		2903.4		-159	+285	620.372	540.132
TP	408	407.1	91 58 30	-	6.3	86 10	+27.3	+21.0		2906.9	TP	-180	+365	620.351	540.212
TP	408				5.1	86 20	+26.1	+21.0							
	492		228 03 57	-	14.4	BH	+2.5	+16.9	2923.8		BS	+150	+469		
	492				8.3	91	+8.6	+16.9							
338	256		220 50	+24.2	4.4	92 30	-11.2	-15.6		2908.2		-108	-232	620.393	546.449
X	0				5.1	-		-5.1		2918.7	X	0	0	620.501	540.681
TP	1568	1563.2	336 32 12	-	10.2	85 30	+123.0	+112.8			TP	+1563	+20	622.064	540.701
	1568				9.9	274 30	+123.0	+113.1	+112.9 3	3036.7	TP				
	785	758.3	227 59 23	-	11.6	105	+203.2	+214.8			BS	+232	+72.2		
	785				11.5	255	+203.2	+214.7	3251.4						
X	0				5.1	-		-5.1		3246.3	X	0	0	622.296	541.423

LAST STA. ON ROAD 338
 CROSS County
 LINE WAS JUMPERS
 ground switch back
 339-342-REQD
 Station 3. DISREGARD

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO		PAGE				
9-15-85		B. Cotamp		R. Jones		6834		B. C. W		2		41				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
MONTANA		GOLD HILL-7 1/2		Mont.		LINCOLN								CASSIDY		
STATION NO.	SLOPE 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
R.	Sta. 346	4-620	324 x- 542.746		Elev.	3408.6				3408.6	K.				9-620,324 X-542.746 TL Sta. 346 EL. 3408.6	
346	970	967.4	105° 00' 36"	+24.0	+11.2	85° 50'	-70.5	-57.3	3349.3		BS	+609	-752			
346	970				+11.1	274° 10'	-70.5	-59.4								
344	310		103° 17' 34"	~	6.0	87° -	+16.2	+16.2		3359.5		-188	+246	620,745	542,240	
X	0				5.1	-		-5.1		3344.2	X	0	0	620,933	541,994	
TP	122	119.3	219° 05' 42"	~	12.2	102° -	-25.4	-37.6			TP	-54	-106	620,879	541,888	CROSS Country
TP	122				12.1	258° -	-25.4	-37.5		3311.8						↓
	200	175.8	52° 59' 09"	~	+7.2	61° 30'	-75.4	-88.2	3223.6		BS	-40	-171			↓
	200				+7.1	298° 30'	-95.4	-88.3								
X	0				5.1	-		-5.1		3218.5	X	0	0	620,839	541,717	
342	88	78.2	213° 20'	+24.0	13.8	117° 20'	-40.4	-54.2		3169.4		-42	-66	620,797	541,651	CROSS Country
TP	293	269.0	225° 42' 54"	~	4.8	113° 20'	-116.1	-120.7			TP	-93	-252	620,746	541,464	-
TP	293				4.7	216° 40'	-116.1	-120.8		3102.8						↓
	122	120.5	62° 45' -	~	+5.8	81° -	-19.1	-13.3	3089.5		BS	-7	-120			↓
	122				+3.6	82° -	-17.0	-13.4								
341	0				5.1	-		-5.1		3084.4	X	0	0	620,739	541,344	
340	327	321.2	221° 04' 31"	~	5.2	100° 50'	-61.5	-66.7			TP	-135	-291	620,604	541,053	↓
340	327				5.1	259° 10'	-61.5	-66.6		3022.9						↓
	209	204.4	40° 49' 30"	~	+3.2	78° -	-43.5	-40.3	2982.8		BS	-87	-185			
	209				+7.0	77° -	-47.0	-40.0	-40.3							
X	0				5.1	-		-5.1		2977.7	X	0	0	620,517	540,868	

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE					
9-11-85		B. Cotcamp		R. Jones		6834		B. SW		2		42					
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER			
MONTANA		GOLD HILL - 7 1/2'		MONTANA		LINCOLN								W. Cassidy			
STATION NO.	SLOPE 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		
									3251.4								
TP	631	429.5	133 34 34	+23.8	6.3	86° -	+44.0	+37.7			TP	-581	+242	621,715	541,665		
TP	631				4.6	86° 10'	+42.2	+37.6		3289.0							
	641	640.0	321 08 36	-	13.8	93° 10'	+35.4	+49.2	3338.2		BS	-618	+166				
	641				11.9	93° 20'	+37.3	+49.2									
K	0				5.1	-		-5.1		3333.1	K	0	0	621,097	541,831		
343	214		113 50	-	5.8	87° -	+11.2	+5.4		3343.6		-158	+144	620,939	541,975	BACK ON ROAD	
344	541		107 05	-	5.3	87° 10'	+20.7	+21.4		3359.6		-354	+409	620,743	542,240		
345	871		106 -	-	3.7	86° 40'	+50.0	+46.9		3385.1		-558	+669	620,539	542,500		
346	1200	1197.8	106 25	-	2.8	86° 30'	+73.3	+70.5			TP	-773	+915	620,324	542,746		
346	1200				6.3	86° 20'	+76.7	+70.4		3408.6	TP						
	576	574.6	304 33 06	+23.8	10.5	94° -	+40.2	+50.7	3459.3		BS	-489	+301				
	576				8.8	94° 10'	+41.9	+50.7									
347	247		304 45	-	5.0	94° 10'	-17.9	-22.9		3436.4		+211	-129	620,046	542,918		
K	0				5.1	-		-5.1		3454.2	K	0	0	619,835	543,047		
348	87		102 -	-	4.1	86° 10'	+5.8	-1.7		3457.6		-51	+71	619,784	543,118		
TP	302	300.9	103 40 02	-	5.7	85° 10'	+25.4	+19.7		3479.0	TP	-183	+239	619,652	543,286		
TP	302				4.8	85° 20'	+24.6	+19.8			TP						
	240		275 25 20	+23.8	12.1	92° -	+8.4	+20.5	3499.5		BS	-117	+209				
	240				7.9	93° -	+12.6	+20.5									
349	138		279 20	-	5.4	94° -	-9.6	-15.0		3484.5		+75	-116	619,610	543,379		

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE					
9-11-85		B. Cotcamp		R. Jones		6834		R. J.		2		43					
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PARTY MANAGER					
MONTANA		GOLD HILL - 7 1/2'		MONT.		LINCOLN						W. Cassidy					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS	
														Y	X		
									3499.5								
π	0				5.1	-		-5.1		3494.4	π	○	○	619,535	543,495		
350	190		110	+23.8	3.4	85	+16.6	+13.2		3512.7		-132	+137	619,403	543,632		
TP	285	283.7	101 59 10	-	4.2	85	+24.8	+20.6			TP	-166	+230	619,369	543,725		
TP	285				9.3	84	+29.8	+20.5		3520.0							
	792	790.5	252 57 30	-	7.8	93 30	+48.4	+56.2			BS	-93	+785				
	792				7.7	266 30	+48.4	+56.1	3576.1								
351	593		261 40	+23.8	4.2	93 50	-39.6	-43.8		3532.3		+158	-572	619,434	543,938		
352	434		292 45	-	5.7	92 50	-21.5	-27.2		3548.9		+315	-298	619,591	544,212		§52
353	109		288 30	-	4.9	92 20	-4.4	-9.3		3566.8		+73	-81	619,349	544,429		
π	0				5.1	-		-5.1		3571.0	π	○	○	619,276	544,510		
354	218		61 50	+23.8	4.8	87 20	+10.1	+5.3		3581.4		+17	+217	619,293	544,727		
355	546		55 40	-	4.7	87	+28.6	+23.9		3600.0		+100	+537	619,376	545,047		
TP	699	697.7	57 38 42	-	1.5	86 30	+42.7	+41.2		3617.3	TP	+104	+690	619,380	545,200		
TP	699				1.4	273 30	+42.7	+41.3									
	666	665.1	271 31 45	+23.8	6.2	93	+34.9	+41.1			BS	-285	+601				
	666				6.1	267	+34.9	+41.0	3658.3								
356	487		270 30	-	6.1	93 30	-29.7	-35.8		3622.5		+208	-444	619,295	545,357		
357	162		266 -	-	4.3	93 10	-8.9	-13.2		3645.1		+55	-152	619,150	545,649		
π	0				5.1	-		-5.1		3653.2	π	○	○	619,095	545,801		
358	155		32 55	-	6.1	88 10	+5.0	-1.1		3657.2		+85	+130	619,180	545,931		

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE					
9-11-85		B. Cotcamp		R. Jones		6834		B. S. W.		2		44					
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER			
MONTANA		GOLD Hill - 7 1/2'		MONT.		LINCOLN								W. Cassidy			
STATION NO.	SLOPE 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		
									3658.3								
TP	244		26° 43' 12"	+23.8	6.1	88° 10'	+7.8	+1.7	}	3660.0	TP	+155	+188	619,250	545,989		
	244				5.4	88° 20'	+7.1	+1.7									
	461		271° 54' 30"	-	+9.6	91° -	+8.0	+17.6	}	3677.5	BS	-200	+415				
	461				+9.5	269° -	+8.0	+17.5									
359	471		300° 50'	~	7.6	90° 44'	-6.0	-13.6		3663.9		+384	-273	619,434	546,131	57	
360	327		326° 40'	-	4.8	90° 20'	-1.9	-6.7		3670.8		+322	-54	619,372	546,350		
361	0				5.1	-		-5.1		3672.4	X	0	0	619,050	546,404		
362	330		112° 20'	+23.8	6.0	87° 30'	+14.4	+8.4		3685.9		-238	+229	618,812	546,633		
363	662	661.4	109° 09' 39"	-	7.2	87° 30'	+28.9	+21.7	}	3699.1	TP	-451	+484	618,599	546,888	Access FLAG	
363	662				5.4	87° 40'	+27.0	+21.6									
	650	648.4	272° 23' 39"	~	+2.9	94° -	+45.3	+48.2	}	3747.3	BS	-286	+582				
	650				+14.3	93° -	+34.0	+48.3									
364	320		270° 15'	+23.8	4.2	94° -	-22.3	-26.5		3720.8		+130	-292	618,443	547,178		
X	0				5.1	-		-5.1		3742.2	X	0	0	618,313	547,470		
365	29		353° 50'	~	3.9	88° -	+1.0	-2.9		3744.4		+28	+9	618,341	547,479		
366	344	343.3	37° 00' 15"	+24.1	5.2	86° 20'	+22.0	+16.8	}	3764.1	TP	+166	+301	618,479	547,771	Cold Mill - 7 1/2'	
366	344				6.7	86° 10'	+23.0	+16.8									
	722	721.0	217° 18' 06"	~	+13.7	93° -	+37.8	+51.5	}	3815.5	BS	+345	+633				
	722				+13.6	267° -	+37.8	+51.4									
367	401		223° 30'	~	8.8	94° 10'	-29.1	-37.9		3777.6		-153	-371	618,671	548,033	BANFIELD mtw.	

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-11-85		B. Cotcamp		R. Jones		6834		B.S.		2		45			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		GOLD Hill - 7 1/2'		Mont.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									3815.5						
368	86		193° 45'	+24.1	4.2	98° 10'	-12.2	-16.4		3799.1		-68	-53	618.756	548.351
π	0				5.1	-		-5.1		3810.4	π	⊙	⊙	618.824	548.404
369	282		80° 15'	-	4.2	90° 40'	-3.3	-7.5		3808.0		-70	+273	618.754	548.677
370	611		82° 50'	-	5.0	-		-5.0		3810.5		-178	+585	618.646	548.989
TP	781		82° 30' 25"	-	3.1	TH	+3.9	+0.8		3816.3	TP		+748	618.601	549.152
TP	781				3.0	TH ₂₁₀	+3.9	+0.9			TP				
	593		235° 36' 16"	+24.1	+7.9	89°	-10.3	-2.4			BS	+106	+583		
	593				+7.8	211°	-10.3	-2.5		3813.8					
371	444		235° 40'	-	4.1	89°	+7.7	-3.6		3810.2		-79	-437	618.628	549.298
372	116		227° 10'	-	3.6	89°	+2.0	-1.6		3812.2		-37	-110	618.670	549.625
π	0				5.1	-		-5.1		3808.7	π	⊙	⊙	618.707	549.735
373	202		24° -	-	4.8	91° 30'	-5.3	-10.1		3803.7		+135	+150	618.842	549.885
TP	416		24° 35' 21"	-	3.5	91° 30'	-10.9	-14.4		3799.4	TP	+275	+312	618.982	550.047
TP	416				10.8	90° 30'	-3.6	-14.4			TP				
	229		167° 26' 48"	+24.1	+2.6	89°	-4.0	-1.4		3798.0		+224	+46		
	229				+6.7	88°	-8.0	-1.3			BS				
374	121		168° 05'	-	5.0	89° 10'	+1.8	-3.2		3794.8		-118	-26	619.088	550.067
π	0				5.1	-		-5.1		3792.9	π	⊙	⊙	619.206	550.093
375	200		42° 30'	-	3.7	87° 30'	+8.7	+5.0		3803.0		+79	+184	619.285	550.277
TP	191		37° 00' 38"	-	6.2	86° 30'	+11.7	+5.5		3803.5	TP	+92	+167	619.298	550.260

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-11-85		B. Cotcamp		R. Jones		6834		B. S. [Signature]		2		46			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		BANFIELD Mtn. 76		MONTANA		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
										3803.5					
	281	280.1	171° 58' 34"	+24.1	4.1	94° 30'	+22.0	+26.1	3829.6		BS	+269	+78		
	281				4.9	94° 20'	+21.2	+26.1							
X	0				5.1	-		-5.1		3824.5	X	0	0	619,567	550,338
376	43		28 -	-	4.3	88° 20'	+1.3	-3.0		3826.6		+26	+34	619,593	550,372
377	369		32° 30'	-	6.0	85° 50'	+26.8	+20.8		3850.4		+203	+308	619,770	550,646
TP	357	356.1	32° 20' 03"	-	7.1	85° 50'	+25.9	+18.8	3848.4		TP	+197	+297	619,764	550,635
	357				6.1	86 -	+24.9	+18.8							
	1070	1042.2	274° 51' 09"	+24.1	10.5	76° 54'	-242.5	-232.0	3616.3		BS	-504	+912		
	1070				10.4	283° 06'	-242.5	-232.1							
378	351		289 -	-	4.7	93° 50'	-23.5	-28.2		3588.1		+240	-256	619,500	551,291
TP	309	308.3	291° 40' 15"	-	7.0	93° 50'	-20.7	-27.7		3588.6		+221	-215	619,481	551,332
379	31		271° 50'	-	4.4	97° 10'	-3.9	-8.3		3608.0		+14	-28	619,274	551,519
X	0				5.1	-		-5.1		3611.2	X	0	0	619,260	551,547
380	297		88° 41' 46"	+23.9	5.3	87 -	+15.5	+10.2	3628.6		TP	-114	+274	619,146	551,821
380	297				4.4	87° 10'	+14.7	+10.3							
	311		207° 06' 42"	-	3.7	74 -	-1.6	+2.1	3628.6		BS	+196	+242		
	311				7.6	89 -	-5.4	+2.2							
381	0				5.1	-		-5.1		3623.5	X	0	0	619,342	552,063
382	329		45° 20'	-	5.7	91 -	-5.7	-11.4		3617.2		+117	+308	619,459	552,371

150' to corner
last sta. on road
note 700' offset south east
1st sta. back on road
180' north of switchback
y-619,445 x-551,305
creek

across from flag

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-11-85		B. Cotamp		R. Jones		6834		B. S. W.		2		47			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		Banfield mtr - 7 1/2'		MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									3628.6						
TP	481		46° 09' 12"	+23.9	3.3	91°	-8.4	-11.7		3616.9	TP	+164	+452	619,506	552,515
TP	481				11.7	-		-11.7							
	461		272° 17' 32"	~	6.6	-		+6.6	3623.5		BS	-203	+414		
	461				4.3	BH	+2.3	+6.6							
383	286		273° 45'	~	4.3	76° 50'	-4.2	-8.5		3615.0		+133	-253	619,436	552,676
π	0				5.1	-		-5.1		3618.4	π	○	○	619,303	552,929
384	40		99° 30'	-	4.2	88° 50'	+0.8	-3.4		3620.1'		-22	+33	619,281	552,962
385	367		79° 30'	~	5.7	87°	+19.2	+13.5		3637.0		-85	+357	619,218	553,286
386	695	694.2	86° 16' 33"	-	5.1	87° 10'	+34.4	+29.3		3652.8	TP	-170	+673	619,133	553,602
386	695				5.0	272° 50'	+34.4	+29.4							
	985	984.3	270° 53' 06"	+23.9	11.6	92° 10'	+37.2	+48.8	3701.4		BS	-413	+894		
	985				11.3	267° 56'	+37.2	+48.5	+48.6						
387	657		271°	-	5.3	92° 20'	-26.7	-32.0		3669.4		+277	-596	618,997	553,900
388	330		273° 50'	~	4.2	92° 20'	-13.4	-17.6		3683.8		+154	-292	618,874	554,204
389	0				5.1	-		-5.1		3696.3	π	○	○	618,720	554,496
390	323		78° 35'	~	8.0	87°	+16.9	+8.9		3710.3		-70	+315	618,650	554,811
391	647		86° 46'	-	4.2	87°	+33.9	+29.7		3731.1		-227	+606	618,493	555,102
TP	799	796.5	87° 28' 52"	-	6.7	85° 30'	+62.7	+56.0		3757.4	TP	-290	+742	618,430	555,238
TP	799				6.6	274° 30'	+62.7	+56.1							

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-11-85		B. Cotcamp		R. Jones		6834		B. S. W.		2		48			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		BANFIELD Mountain		MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
										3757.4					
	696		318 31 26	+23.9	6.6	71	-3.5	+3.1			BS	-664	+210		
	696				6.5	71 270	-3.5	+3.0	3760.4						
392	497		319 -	-	6.4	84	-2.5	-8.9		3751.5		+475	-146	618,241 555,302	
393	173		324 -	-	4.2	-		-4.2		3756.2		+169	-36	617,935 555,412	
X	0				5.1	-		-5.1		3755.3	X	0	0	617,766 555,448	
394	155		126 10	+23.9	3.1	-		-3.1		3757.3		-134	+77	617,632 555,525	
395	483		126 -	-	4.4	88 20	+14.0	+9.6		3770.0		-418	+242	617,348 555,690	
TP	745	744.5	124 42 48	+23.7	5.0	87 50	+28.2	+23.2			TP	-634	+390	617,132 555,838	
TP	745				7.2	87 40	+30.3	+23.1	3783.5						
	276	275.3	290 28 10	+23.7	11.3	94 -	+19.3	+30.6	3814.1		BS	-192	+197		
	276				6.5	95 -	+24.1	+30.6							
396	209		292 20	-	4.6	95 30	-20.0	-24.6		3789.5		+150	-145	617,090 555,890	
X	0				5.1	-		-5.1		3807.0	X	0	0	616,940 556,035	
397	115		108 30	-	4.1	85 30	+9.0	+4.9		3819.0		-77	+85	616,863 556,120	
TP	356	354.4	98 27 54	-	4.4	84 30	+34.1	+29.7		3843.8	TP	-189	+300	616,751 556,335	
	356				4.4	275 30	+34.1	+29.7							
	182		279 27 45	+23.7	9.5	-		+7.5	3853.3		BS	-100	+152		
	182				8.6	04	+0.9	+9.5							
398	106		271 10	-	4.1	91 -	-1.8	-6.0		3847.3		+45	-96	616,696 556,391	
X	0				5.1	-		-5.1		3848.2	X	0	0	616,651 556,487	

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-11-85		B. Camp		R. Jones		6834		R. J. W		2		49			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		BANKFIELD Mountain - 7 1/2		MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									3853.3						
399	215		73° 35'	+23.7	4.3	96° 30'	-1.9	-6.2		3847.1		-27	+213	616,624	556,700
400	544		74° 30'	-	4.4	89° -	+9.5	+5.1		3858.4		-78	+538	616,573	557,025
TP	694		75° 22' 55"	-	2.2	88° 30'	+18.2	+16.0		3867.3	TP	-110	+685	616,541	557,172
TP	694				4.2	88° 20'	+20.2	+16.0			TP				
	701		270° 59' 05"	+23.7	13.2	71° -	+12.2	+25.4	3894.5		BS	-293	+637		
	701				12.9	269° -	+12.2	+25.1		+25.23		BS			
401	519		269° 40'	-	4.5	72° 10'	-19.6	-24.1		3890.1		+206	-476	616,454	557,333
402	191		266° -	-	3.2	72° 10'	-7.2	-10.4		3884.1		+64	-186	616,312	557,629
π	0				5.1	-		-5.1		3889.4	π	0	0	616,248	557,809
403	139		76° -	-	3.3	87° -	+2.4	-0.9		3893.6		-23	+137	616,225	557,946
404	462		76° 55'	-	4.5	89° 24'	+4.8	+0.3		3894.8		-37	+461	616,211	558,270
TP	509		73° 07' 27"	-	7.1	88° 50'	+10.4	+3.3		3897.8	TP	-60	+505	616,188	558,314
TP	509				7.0	271° 10'	+10.4	+3.4							
	666		277° 37' -	+23.7	13.4	92° 10'	+25.2	+38.6	3936.4		BS	-346	+569		
	666				11.5	92° 20'	+27.1	+38.6			BS				
405	389		276° 40'	-	6.0	92° 30'	-17.0	-23.0		3913.4		+197	-336	616,039	558,547
406	60		272° 30'	-	3.9	92° 30'	-2.6	-6.5		3929.9		+26	-54	615,868	558,829
π	0				5.1	-		-5.1		3931.3	π	0	0	615,842	558,883
407	270		83° 30'	-	4.5	88° 30'	+7.1	+2.6		3939.0		-80	+258	615,762	559,141

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-11-85		B. Cotcamp		R. Jones		6834		B. Skw		2		50			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONT.		BANFIELD Mountain - 7 1/2'		MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									3936.4						
408	598		79° 24' 02"	+23.7	4.5	88° -	+20.9	+16.4	}	3952.8	TP	-135	+582	615.707	559.465
408	598				4.4	272 -	+20.9	+16.5							
	660		254° 29' 18"	-	+9.9	92 -	+23.0	+32.9	}	3985.6	BS	-94	+653		
	660				+9.8	268 -	+23.0	+32.8							
409	330		254° 50'	-	6.8	91° 30'	-8.10	-15.4		3970.2		+49	-326	615.662	559.792
410	0				5.1	-		-5.1		3980.5	TP	0	0	615.613	560.118
411	329		68° 50'	-	5.2	88° 30'	+8.10	+3.4		3989.6		-15	+329	615.598	560.447
TP	541		67° 25' 05"	-	7.7	87° -	+9.4	+1.7	}	3987.3	TP	-11	+541	615.602	560.659
TP	541				7.6	271 -	+9.4	+1.8							
	1102		265° 53' 39"	+23.7	2.1	-		+2.1	}	3989.4	BS	-370	+1038		
	1102				+7.7	TH	-5.5	+2.2							
412	982		266° 10'	-	6.1	-		-6.1		3983.3		+334	-924	615.566	560.773
413	655		266° 30'	-	4.0	91° -	-11.4	-15.4		3974.0		+226	-615	615.458	561.082
414	330		266° 20'	-	5.8	71° -	-5.8	-11.0		3977.8		+113	-310	615.345	561.387
415	0				5.1	-		-5.1		3984.3	TP	0	0	615.232	561.697
416	330		93° 35'	+23.7	5.8	88° 40'	+7.9	+1.9		3991.3		-151	+293	615.081	561.990
417	659		91° 49' 47"	-	10.4	88° 40'	+15.3	+4.9	}	3994.3	TP	-284	+595	614.948	562.292
417	659				10.4	271° 20'	+15.3	+4.9							
	540		262° 34' 04"	-	+5.6	TH	-2.7	+2.9	}	3997.2	BS	-151	+518		
	540				+12.3	87° -	-9.4	+2.9							

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-11-85		B. Cotcamp		R. Jones		6834		B. S. W.		2		51			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		Banfield Mountain St.		MONT.		LINCOLN								W Cassidy	
STATION NO.	SLOPE 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
									3997.2						
418	211		260° -	+23.7	2.9	-		-2.9		3994.3		+50	-205	614.847	563.605
π	0				5.1	-		-5.1		3992.1	π	○	○	614.797	562.810
419	120		79° 10'	"	4.3	-		-4.3		3992.9		-27	+117	614.770	562.927
420	450		75° 50'	"	4.2	89° -	+7.9	+3.7		4000.9		-75	+444	614.722	563.254
421	780		76° 25'	"	3.4	89° -	+13.6	+10.2		4007.4		-137	+768	614.660	563.578
TP	991		76° 14' 01"	"	4.5	89° -	+17.3	+12.8		4010.0	TP	-171	+976	614.626	563.786
TP	991				7.4	88° 50'	+20.2	+12.8			TP				
	253		261° 37' 33"	+23.7	3.9	74°	-1.3	+2.6	4012.6		BS	-67	+244		
	253				7.0	89° -	-4.4	+2.6			BS				
422	134		260° 40'	"	3.5	89° 30'	+1.2	-2.3		4010.3		+33	-130	614.592	563.900
π	0				5.1	-		-5.1		4007.5	π	○	○	614.559	564.030
423	145		81° 10'	"	5.4	91° -	-3.4	-8.8		4003.8		-50	+188	614.509	564.218
424	523		78° 40'	"	5.3	BH	-2.6	-7.9		4004.7		-112	+511	614.447	564.541
TP	594		78° 39' 06"	"	5.5	BH	-3.0	-8.5		4004.1	TP	-127	+580	614.432	564.610
TP	594				5.4	BH	-3.0	-8.4			TP				
	364		289° 46' 33"	+23.7	6.3	87° -	-19.1	-12.8	3991.3		BS	-250	+264		
	364				5.2	87° 10'	-18.0	-12.8			BS				
425	98		293° 05'	"	3.0	87° 10'	+4.8	+1.8		3993.1		+71	-67	614.253	564.807
π	0				5.1	-		-5.1		3986.2	π	○	○	614.182	564.874
π	108		139° 05' 30"	"	5.3	74° 10'	-7.8	-13.1		3978.2	π	-103	+32	614.079	564.906

b-614.080 x-564.910
y-Inter. EL. 3975.0

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-11-85		B. Cotcamp		R. Jones		6834		B. S. W.		2		52			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONT.		BANFIELD Mountain-7E		Mont.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									3991.3						
426	238	237.4	144° 05'	-23.8	3.8	94°	-16.0	-20.4		3970.9		-232	+50	613,950	564,924
TP	446	445.4	140° 22' 07"	-	5.2	93°	-23.3	-28.5		3962.8	TP	-428	+122	613,754	564,996
TP	446				3.9	93° 10'	-24.6	-28.5			TP				
	380		332° 18' 52"	-	+5.3	88° 50'	-7.7	-2.4	3960.4		BS	-379	+20		
	380				+5.2	271° 10'	-7.7	-2.5							
427	262		331° 10'	-	2.0	89°	+4.0	+2.0		3963.0		+261	-23	613,636	564,999
X	0				5.1	-		-5.1		3955.3	X	0	0	613,375	565,022
428	67		137° 50'	-	6.0	-		-6.0		3954.4		-64	+21	613,311	565,043
TP	351		133° 47' 20"	-	14.0	84°	-1.8	-15.8			TP	+324	+134	613,051	565,156
TP	351				13.9	84° 27'	-1.8	-15.7		3944.7					
	97		293° 39'	+23.8	5.5	86°	-6.8	-1.3	3943.4		BS	-71	+65		
	97				+3.8	87°	-5.1	-1.3							
429	53		291° 10'	-	4.3	87°	+2.8	-1.5		3941.9		+37	-38	613,017	565,183
X	0				5.1	-		-5.1		3938.3	X	0	0	612,980	565,221
430	276	273.9	112° -	-	2.9	97°	-33.0	-36.5		3906.9		-196	+191	612,784	565,418
431	604	601.7	113° -	-	5.7	95°	-52.0	-58.3		3885.1		-439	+412	612,541	565,633
TP	700	697.3	112° 12' 08"	-	7.8	95°	-61.0	-68.8			TP	-502.	+484	612,478	565,705
TP	700				7.7	265°	-61.0	-68.7		3874.7					
	491	487.0	271° 48'	+23.8	2.2	82° 40'	-62.7	-60.5	3814.2		BS	-210	+439		
	491				+2.2	277° 20'	-62.7	-60.5							

DATE 9-13-85	INSTRUMENT MAN B. Cot Camp	ROD MAN B. SALDIVAR	PARTY NUMBER 6834	NOTES CHECKED BY R.J.	LINE NO. 2	PAGE 53
AREA MONTANA	TOPO MAP Banfield Mountains 7 1/2	STATE MONT.	COUNTY LINCOLN	TWP	RANGE	PPM
				PARTY MANAGER W. Cassidy		

STATION NO.	SLOPE 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.	
									3814.2					
432	255	252.9	268° 50'	+23.8	6.0	82° 40'	+32.5	+26.5		3840.7		+97	-233	612,365 565,911
K	0				5.1	-	-5.1			3809.1	K	○	○	612,268 566,144
433	74		79° 30'	-	5.2	96° 40'	-8.1	-13.8		3800.4		-17	+72	612,251 566,216
TP	273	271.7	74° 11' 21"	-	4.9	95° 40'	-27.0	-31.9			TP	-38	+269	612,230 566,413
TP	273				4.1	95° 50'	-27.7	-31.8		3782.4	TP			
	245		248° 08' 07"	+24.0	2.2	86° 30'	-15.0	-12.8			BS	-9	+244	
	245	244.5			3.0	86° 20'	-15.7	-12.7	3769.7		BS			
434	117		248° 25'	-	1.3	86° 20'	+7.5	+6.2		3775.9		+5	-117	612,226 566,540
K	0				5.1	-	-5.1			3764.4	K	○	○	612,221 566,657
435	216	215.1	97° -	-	5.9	75° 20'	-20.1	-26.0		3743.7		-111	+184	612,110 566,841
TP	309	307.7	93° 44' 48"	-	6.5	95° 20'	-28.7	-35.2		3734.5	TP	-143	+272	612,078 566,929
TP	309				6.5	264° 40'	-28.7	-35.2			TP			
	477	475.8	258° 58' 42"	+24.0	0.8	86° -	-33.3	-32.5	3702.0		BS	-107	+464	
	477				0.7	274° -	-33.3	-32.6						
436	245	244.4	258° 20'	-	3.6	86° -	+17.1	+13.5		3715.5		+52	-239	612,023 567,154
K	0				5.1	-	-5.1			3696.9	K	○	○	611,971 567,393
437	84		82° 40'	-	5.9	93° -	-4.4	-10.3		3691.7		-24	+80	611,947 567,473
438	411	410.4	85° 40'	-	6.1	93° -	-21.5	-27.6		3674.4		-138	+386	611,833 567,779
TP	455	454.4	83° 44' -	-	6.3	93° -	-23.8	-30.1			TP	-138	+433	611,833 567,826
TP	455				6.2	267° -	-23.8	-30.0		3672.0	TP			

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-13-85		B. Cotcamp		B. SALDIVAR		6834		B. S. W.		2		54			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		BANKERS Mtn 7 1/2'		MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									3672.0						
	740	736.6	233° 05' 20"	+24.0	9.6	84° 30'	-70.9	-61.3	3610.7		BS	+165	+718		
	740				9.5	275° 30'	-70.9	-61.4		BS					
H	672	690.0	232° 52' 10"	-	6.3	84° 30'	+64.4	+58.1		3668.8		-152	-651	611,846	567,893
439	458	455.8	232° -	-	4.0	84° 20'	+45.2	+41.2		3651.9		-110	-442	611,888	568,102
440	129		233° 30'	-	5.1	85° 20'	+10.5	+5.4		3616.1		-28	-126	611,970	568,418
π	0				5.1	-		-5.1		3605.6	H	0	0	611,998	568,544
441	205		81° 36'	+24.0	5.6	93° 20'	-11.9	-17.5		3593.2		-55	+198	611,943	568,742
TP	419	418.0	82° 12' 04"	-	4.5	94° 10'	-30.4	-34.9		3575.8	TP	-117	+401	611,881	568,945
TP	419				5.7	94° -	-29.2	-34.9							
	299		271° 23' 22"	-	1.0	87° -	-15.6	-14.6	3561.2		BS	-128	+270		
	299				6.2	86° -	-20.9	-14.7							
442	184		268° 20'	-	5.3	87° -	+9.6	+4.3		3565.5		+70	-170	611,823	569,045
π	0				5.1	-		-5.1		3556.1	π	0	0	611,753	569,215
443	143	142.1	45° 40'	+24.0	5.8	76° 30'	-16.2	-22.0		3539.2		+49	+133	611,802	569,348
TP	179		39° 53' 58"	-	6.9	96° 30'	-20.3	-27.2			TP	+78	+160	611,831	569,375
TP	179				6.3	76° 40'	-20.8	-27.1		3534.1	TP				
	650	646.4	209° 27' 40"	-	2.2	84° -	-67.9	-65.7	3468.4		BS	+385	+519		
	650				2.1	276° -	-67.9	-65.8							
444	361	359.0	209° 50'	-	6.4	84° -	+37.7	+31.3		3499.7		-212	-290	612,004	569,604
445	36		186° 15'	-	5.5	84° -	+3.8	-1.7		3466.7		-31	-18	612,185	569,876

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-13-85		B. Cotcamp		B. SALDIVAR		6834		B. SW		2		55			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		BANFIELD Mtn 7 1/2		MONT.		M. LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									3468.4						
π	0				5.1	-	-	-5.1		3463.3	π	○	○	612,216	569,894
TP	179	178.2	60° 36' 12"	+24.0	5.9	95° 30'	-17.2	-23.1		3445.3	TP	+17	+177	612,223	570,071
TP	179				5.4	95° 46'	-17.7	-23.1							
	322		255° 51' 39"	-	+9.9	86° -	-22.5	-12.6			BS	-55	+316		
	322				+9.0	86° 10'	-21.5	-12.5	3432.8						
446	205		255° 45'	-	3.5	86° 50'	+11.3	+7.8		3440.6		+35	-202	612,213	570,185
π	0				5.1	-	-	-5.1		3427.7	π	○	○	612,178	570,387
447	122		61° 30'	+24.0	5.9	95° -	-10.6	-16.5		3416.3		+10	+122	612,188	570,509
448	450	448.3	55° 25'	-	5.2	95° -	-39.2	-44.4		3388.4		+82	+441	612,260	570,828
TP	574	572.0	55° 52' 35"	-	2.3	95° -	-50.0	-52.3			TP	+101	+563	612,279	570,950
TP	574				2.2	265° -	-50.0	-52.2		3380.6					
	595		250° 14' 51"	+24.0	4.0	87° 30'	-26.0	-22.0	3358.6		BS	-44	+593		
	595				3.9	272° 30'	-26.0	-22.1							
449	389		250° 55'	-	5.8	87° 46'	+15.8	+10.0		3368.6		+33	-388	612,268	571,155
450	63		238° 20'	-	4.8	89° 40'	+0.4	-4.4		3354.2		-8	-62	612,227	571,481
π	0				5.1	-	-	-5.1		3353.5	π	○	○	612,235	571,543
451	259		44° 50'	-	7.9	93° 40'	-16.6	-24.5		3334.1		+94	+242	612,329	571,785
TP	488		45° 11' 27"	-	3.5	73° 10'	-27.0	-30.5		3328.1	TP	+173	+455	612,408	571,998
TP	488				5.0	73° -	-25.5	-30.5							

SURVEY NOTES-HIGH RESOLUTION DATA
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-13-85		B. Cotamp		B. SALDIVAR		6834		B.S.W.		2		56			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		Ban Field Mtn. - 76'		MONT.		LINCOLN								W. CASSIDY	
STATION NO.	SLOPE 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
										3328.1					
	340		209° 44'	+24.0	4.7	87° -	-17.8	-13.1	3315.0		BS	+201	+274		
	340				3.7	87° 10'	-16.8	-13.1							
452	248		206° 35'	-	5.8	87° 20'	+11.5	+5.7		3320.7		-157	-192	612,452 572,080	
X	0				5.1	-		-5.1		3309.9	X	0	0	612,609 572,272	
453	108		90° 15'	-	4.5	95° 04'	-9.5	-14.0		3301.0		-44	+98	612,565 572,370	
454	434		88° 45'	-	5.8	92° -	-15.1	-20.9		3294.1		-168	+400	612,441 572,672	
TP	534		88° 21' 52"	-	7.0	92° 10'	-20.2	-29.2			TP	-203	+493	612,706 572,765	
TP	534				8.9	267° 50'	-20.2	-29.1		3285.9	TP				
	343		239° 53' 52"	+24.0	8.4	86° -	-23.9	-15.5	3270.4		BS	+36	+340		
	343				4.4	86° 40'	-19.9	-15.5							
455	115		229° -	-	5.2	87° 30'	+5.0	-0.2		3270.2		-34	-110	612,408 572,995	
X	0				5.1	-		-5.1		3265.3	X	0	0	612,442 573,105	
456	212		53° 45'	-	5.1	92° 30'	-9.2	-14.3		3256.1		+45	+207	612,487 573,312	
TP	298		54° 22' 14"	-	3.9	92° 30'	-13.0	-16.9		3253.5	TP	+60	+292	612,502 573,397	
TP	298				4.8	92° 20'	-12.1	-16.9			TP				
	766		261° 57' 38"	-	+6.8	88° -	-26.7	-19.9	3233.6		BS	-211	+730		
	766				+6.7	272° -	-26.7	-20.0							
457	517		262° -	-	6.0	88° 10'	+16.5	+10.5		3244.1		+143	-497	612,434 573,636	
458	190		255° 25'	-	5.5	88° 10'	+10.1	+0.0		3234.2		+31	-187	612,322 573,946	
X	0				5.1	-		-5.1		3228.5	X	0	0	612,291 574,133	

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-13-85		B. Cotcamp		B. SALDIVAR		6834		B. S. W.		2		57			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		RANFIELD WITH 76		MONT.		LINCOLN								W. CASS. 44	
STATION NO.	SLOPE 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
									3233.6						
459	139		78° 30'	+24.0	6.6	90° 10'	0.4	-7.0		3226.6		-30	+136	612.261	574.269
460	465		73° 48' 09"	-	7.5	91° 10'	-9.5	-17.0		3216.6	TP	-63	+461	612.228	574.594
460	465				8.9	91° -	-8.1	-17.0							
	178		267° 04' 46"	~ +	5.5	87° -	-9.3	-3.8	3212.8		BS	-64	+166		
	178			+	5.0	87° 10'	-8.8	-3.8							
π	0				5.1	-		-5.1		3207.7	π	0	0	612.164	574.760
461	150		85° -	+24.0	5.7	93° -	-7.9	-13.6		3199.2		-49	+142	612.115	574.982
462	478		78° 50'	-	6.2	92° 30'	-20.9	-27.1		3185.7		-106	+466	612.058	575.226
TP	616	615.4	78° 32' 12"	-	5.3	92° 30'	-26.9	-32.2			TP	-134	+601	612.030	575.361
TP	616				5.2	267° 30'	-26.9	-32.1		3180.7	TP				
	576	575.2	250° 25' 52"	+24.0	4.8	87° -	-30.1	-25.3	3155.4		BS	-44	+573		
	576			+	4.7	273° -	-30.1	-25.4							
463	393		251° 45'	-	4.8	87° -	+20.6	+15.8		3171.2		+39	-391	612.025	575.543
464	65		242° -	-	4.8	87° -	+3.4	-1.4		3154.0		-5	-65	611.981	575.869
π	0				5.1	-		-5.1		3150.3	π	0	0	611.986	575.934
465	266		76° 08' 36"	-	4.3	92° -	-9.3	-13.6		3141.8	TP	-47	+262	611.939	576.196
465	266				3.5	92° 10'	-16.1	-13.6			TP				
	441		263° 33' 10"	- +	1.5	-		+1.5	3143.3		BS	-133	+420		
	441			+	3.6	TH	-2.2	+1.4							
466	115		254° -	-	4.3	-		-4.3		3139.0		+16	-114	611.822	576.502

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
4-13-85		B. Cotcamp		B. SALDIVAR		6834		R. J. W		2		59			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		URAL CREEK-7 1/2'		MONT.		LINDSEY								W. Cassidy	
STATION NO.	SLOPE 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
									3051.1						
	460		272° 52' 25"	+23.8	5.7	88° -	-16.1	-10.4	3040.7		BS	-206	+411		
	460				+4.3	88° 10'	-14.7	-10.4							
475	400		271° 35'	-	3.4	88° 10'	+12.8	+9.4	3050.1			+171	-361	611,428	579,419
476	70		266° 55'	-	5.7	88° 10'	+12.2	-3.5	3037.2			+25	-65	611,282	579,715
π	0				5.1	-		-5.1	3035.6	π	0	0		611,257	579,780
477	254		79° 30'	+23.8	4.4	91° 40'	-7.4	-11.8	3028.9			-58	+247	611,199	580,027
TP	313		86° 03' 26"	-	4.2	91° 46'	-9.1	-13.3	3027.4	TP	-75	+304		611,182	580,084
TP	313				3.3	91° 50'	-10.0	-13.3		TP					
	200		280° 11' 38"	-	+2.1	89° -	-3.5	-1.4	3026.0	BS	-112	+166			
	200				+1.5	89° 10'	-2.9	-1.4		BS					
π	0				5.1	-		-5.1	3020.9	π	0	0		611,070	580,250
478	65		87° 15'	-	5.6	92° -	-2.3	-7.9	3018.1			-23	+61	611,047	580,311
TP	211		69° 06' 50"	-	7.8	92° -	-7.4	-15.2	3016.9	TP	-11	+211		611,059	580,461
TP	211				4.1	93° ✓	-11.0	-15.1		TP					
	231		260° 06' 16"	+23.8	5.3	-		+5.3	3016.3	BS	-56	+224			
	231				+4.2	84	+1.2	+5.4		BS					
479	57		247° 20'	-	5.1	-		-5.1	3011.2			+1	-57	611,004	580,628
π	0				5.1	-		-5.1	3011.2	π	0	0		611,003	580,685
480	273		74° 36' 15"	-	13.1	-		-13.1	3063.2	TP	-40	+270		610,963	580,955
480	273				11.7	84	-1.4	-13.1		TP					

ACROSS FROM STA.

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-13-85		B. Cotcamp		B. SALDIVAR		6834		B. S. W.		2		60			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		URAL CREEK - 7 1/2'		MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									3003.2						
	296		270 39 52	+23.8	2.4	89°	-5.2	-2.8	3000.4		BS	-123	+269		
	296				7.5	88°	-10.3	-2.8							
π	0				5.1	-		-5.1	2995.3		π	○	○	610.840	581.224
481	33		105 40'	-	5.2	90 30'	-0.3	-5.5	2994.9			-21	+25	610.819	581.249
482	358		111 45'	-	5.3	71 10'	-7.3	-12.6	2987.8			-256	+251	610.584	581.475
TP	401		111 29 52	-	5.1	71 -	-7.0	-12.1	2988.3		TP	-285	+282	610.555	581.506
TP	401				12.1	-		-12.1							
	543		263 59 04	+23.8	4.6	88 30'	-14.2	-9.6	2978.7		BS	-166	+519		
	543				4.5	271 30'	-14.2	-9.7							
483	254		262 45'	-	3.5	88 30'	+6.6	+3.1	2981.8			+72	-243	610.461	581.780
π	0				5.1	-		-5.1	2973.6		π	○	○	610.389	582.023
484	75		84 10'	-	5.3	92 30'	-3.3	-8.6	2970.1			-23	+71	610.366	582.094
485	402		88 05 55	-	5.7	91 30'	-10.5	-16.4	2962.4		TP	-150	+373	610.239	582.396
485	402				5.8	268 30'	-10.5	-16.3							
	407	406.4	233 28 58	+23.8	8.7	87°	-21.3	-12.6	2949.8		BS	+89	+396		
	407				7.5	87 10'	-20.1	-12.6							
486	79		233 30'	-	3.2	87 30'	+3.4	+0.2	2950.0			-17	-77	610.311	582.715
π	0				5.1	-		-5.1	2944.7		π	○	○	610.328	582.792
487	252		95 10'	-	5.3	71 10'	-5.1	-10.4	2939.4			-122	+220	610.206	583.012

ACROSS STA.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-13-85		B. Cotcamp		B. SALDIVAR		6834		B. SW		2		61			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		URAL Creek - 7 1/2		MONT.		LINCOLN								W. ASS. Dy	
STATION NO.	SLOPE 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
									2949.8						
TP	298		90° 37' 28"	+23.8	6.7	91° 10'	-6.1	-12.8		2937.0	TP	-123	+271	610,205	583,063
TP	298				5.9	91° 20'	-6.9	-12.8							
	469	468.0	252° 52' 07"	-	+9.1	86° -	-32.7	-23.6	2913.4		BS	-54	+465		
	469				+7.8	86° 10'	-31.4	-23.6							
488	192		251° 26'	-	2.9	86° 10'	+12.8	+9.9		2923.3		+17	-191	610,168	583,337
π	0				5.1	-		-5.1		2908.3	π	0	0	610,151	583,528
489	135		104° 40'	-	5.3	91° 30'	-3.5	-8.8		2904.6		-84	+106	610,067	583,634
TP	364		101° 52' 30"	-	6.9	92° 30'	-15.9	-22.8			TP	-212	+295	609,939	583,823
TP	364				6.8	267° 30'	-15.9	-22.7		2890.7					
	249		266° 18' 52"	+23.8	4.9	88° -	-8.7	-3.8	2886.9		BS	-86	+234		
	249				4.1	88° 10'	-8.0	-3.9							
490	150		262° 45'	-	4.5	88° 10'	+4.8	+0.3		2887.2		+43	-144	609,896	583,913
π	0				5.1	-		-5.1		2881.8	π	0	0	609,853	584,057
491	175		69° 25'	-	5.1	92° 10'	-6.6	-11.7		2875.2		-10	+175	609,843	584,232
492	505		67° 40'	-	10.1	92° 10'	-19.1	-29.2		2857.7		-13	+505	609,840	584,562
TP	694		67° 46' 54"	-	1.9	92° 10'	-26.2	-28.1		2858.8	TP	-19	+693	609,834	584,750
TP	694				3.9	92° -	-24.2	-28.1			TP				
	567		269° 29' 42"	+23.8	8.7	87° 40'	-23.1	-14.4	2844.4		BS	-224	+520		
	567				8.6	272° 26'	-23.1	-14.5			BS				
493	425		269° 10'	-	5.7	87° 10'	+21.0	+15.3		2859.7		+166	-391	609,776	584,879

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-13-85		B. Cotcamp		B. SALDIVAR		6834		B. SLV		2		62			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		URAL Creek-7 1/2		MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									2844.4						
494	95		266° 40'	+23.8	4.7	87° 10'	+4.7	+0.0		2844.4		+33	-89	609,643	585,181
π	0				5.1	-	-5.1			2839.3	π	0	0	609,610	585,270
IF	58		103° 39' 27"	-	5.6	92° 10'	-2.2	-7.8		2836.6	IF	-35	+46	609,575	585,316
495	237		99° 05'	-	5.3	12° 10'	-9.0	-14.3		2830.1		-129	+199	609,481	585,469
496	564		101° -	-	6.2	91° 20'	-13.2	-19.4		2825.0		-323	+465	609,287	585,735
497	896		101° 20'	+23.8	7.3	91° 30'	-23.5	-30.8		2813.6		-516	+733	609,094	586,003
498	1226		101° 25'	-	4.1	91° 20'	-28.5	-32.6		2811.8		-707	+1002	608,903	586,272
499	1553		100° 44' 42"	-	8.1	91° -	-27.1	-35.2			TP	-881	+1279	608,729	586,549
499	1553				7.8	269° -	-27.1	-34.9	-35.03	2809.4	TP				
	1384		277° 21' 12"	-	11.4	88° 30'	-36.2	-24.8	2784.5		BS	-716	+1184		
	1384				11.1	271° 30'	-36.2	-25.1	24.93		BS				
500	1053		276° 50'	+23.8	6.0	88° 30'	+27.6	+21.6		2806.1		+537	-906	608,550	586,827
501	724		276° 40'	-	5.7	88° 30'	+19.0	+13.3		2797.8		+367	-624	608,380	587,109
502	394		- -	-	11.9	88° 30'	+10.3	-1.6		2782.9		+200	-346	608,213	587,393
503	66		272° 30'	-	6.9	88° 30'	+1.7	-5.2		2779.3		+29	-59	608,042	587,674
π	0				5.1	-	-5.1			2779.4	π	0	0	608,013	587,733
504	263		87° 50'	+23.8	3.1	90° 10'	-0.8	-3.9		2780.6		-97	+244	607,916	587,977
505	592		- -	-	6.9	90° 10'	-1.7	-8.6		2775.9		-218	+550	607,795	588,283
506	921		- -	-	10.8	90° 10'	-2.7	-13.5		2771.0		-340	+854	607,673	588,589
507	1251		- -	-	9.2	90° 20'	-7.3	-16.5		2768.0		-461	+1163	607,552	588,896

5.609,600 x 585,300
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DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-13-85		B. Cotcamp		B. SALDIVAR		6834		B. S. W.		2		63			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		URAL creek - 7 1/2		MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									2784.5						
508	1581		87° 50'	+23.8°	10.8	90° 20'	-9.2	-20.0		2764.5		-583	+1470	607,430	589,263
509	1911		- -	-	11.5	90° 20'	-11.1	-22.6		2761.9		-765	+1776	607,368	589,509
510	2240		- -	-	6.2	90° 30'	-19.5	-25.7		2758.8		-826	+2082	607,187	589,815
511	2570		- -	-	4.3	90° 30'	-22.4	-26.7		2757.8		-947	+2389	607,066	590,122
TP	2756		87° 44' 35"	-	4.4	90° 30'	-24.1	-28.5			TP	-1012	+2563	607,001	590,296
TP	2756				3.9	269° 30'	-24.1	-28.0	-28.23	2756.3					
	764		264° 04' 34"	+23.84	0.2	TM	-3.8	-3.6		2752.7	BS	-235	+1727		
	764			+9.7	89° -		-13.3	-3.6							
512	621		264° 10'	-	0.9	-		-0.9		2751.8		+192	-591	606,958	590,432
513	291		- -	-	5.8	-		-5.8		2746.9		+90	-277	606,856	590,746
π	0			-	5.1	-		-5.1		2747.6	π	0	0	606,766	591,023
514	54		136° -	+23.8	3.9	-		-3.9		2748.8		-51	+19	606,715	591,042
515	379		115° 05'	-	6.0	91° 38'	-10.8	-16.8		2735.9		-286	+249	606,480	591,272
516	709		115° 35'	-	4.2	91° 20'	-16.5	-20.7		2732.0		-538	+462	606,228	591,485
TP	895		114° 39' 53"	-	5.2	90° 50'	-13.0	-18.2			TP	-670	+593	606,696	591,616
TP	895				5.1	269° 16'	-13.0	-18.1		2734.6					
	700		276° 53' 22"	+23.84	4.0	89° -	-12.2	-8.2		2726.4	BS	-357	+602		
	700			+3.9	271° -		-12.2	-8.3			BS				
517	561		276° 35'	-	5.6	88° 40'	+13.1	+7.5		2733.9		+284	-484	606,023	591,734
518	231		275° -	-	8.7	88° 40'	+5.4	-3.3		2723.1		+111	-202	605,850	592,016

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
9-13-85		B. Cotkamp		B. SALDIVAR		6834		B. S.W.		2		65			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
MONTANA		VITAL Creek - 7k		MONT.		LINCOLN								W. Cassidy	
STATION NO.	SLOPE 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
									2652.4						
525	498		251° 30'	+23.8	10.7	TH	+2.5	-8.2		2644.2	#	+46	-496	606,308	594,112
526	171		246° -	--	0.5	-		-0.5		2651.9		-1	-171	606,261	594,437
π	0				5.1	-		-5.1		2647.3	π	0	0	606,262	594,608
527	159		56° -	-	8.6	-		-8.6		2643.8		+28	+156	606,290	594,764
528	487		53° 05'	-	7.0	92° 30'	-21.2	-28.2		2624.2		+111	+474	606,373	595,082
TP	604	603.4	52° 54' 28"	-	7.1	92° 30'	-26.3	-33.4			TP	+139	+581	606,401	595,195
TP	604				8.7	92° 20'	-24.6	-33.3		2619.1	TP				
	450		249° 18' 33"	+23.8	5.5	-		+5.5	2624.6		BS	-24	+449		
	450				+7.8	TH	-2.3	+5.5							
1K	263		247° -	-	2.2	-		-2.2		2622.4	1K	+4	-263	606,381	595,381
529	233		243° 30'	-	2.1	-		-2.1		2622.5		-11	-233	606,366	595,411
π	0				5.1	-		-5.1		2619.5	π	0	0	606,377	595,644
530	97		66° 15'	+23.8	9.9	-		-9.9		2614.7		±0	+97	606,377	595,741
531	425	424.1	58° 20'	-	6.0	93° 40'	-27.2	-33.2		2591.4		+58	+420	606,435	596,064
TP	659	658.3	57° 38' 36"	-	10.6	92° 40'	-30.7	-41.3		2583.3	TP	+98	+1051	606,475	596,295
TP	659				12.6	92° 30'	-28.7	-41.3							92° 40' B.C.C.
	323		269° 50' 30"	-	8.1	85° -	+28.2	+20.1			BS	-129	+295		
	323				+8.0	275° -	+28.2	+20.2	2603.5						
532	205		257° 40'	-	4.7	86° 50'	+11.3	+6.6		2610.1		+41	-201	606,387	596,389
π	0				5.1	-		-5.1		2598.4	π	0	0	606,346	596,590

3-606,300 X 595,400
4-Enter EL 2623.0

E.O.L. Line # 2

MONTANA

