

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	5-17-84	INSTRUMENT MAN	R. Trowbridge	ROD MAN	B. Cotcamp	PARTY NUMBER	6834	NOTES CHECKED BY	R.T. C.J.	LINE NO.	1	PAGE	1		
AREA	Oregon	TOPO MAP	72-375	STATE	Oregon	COUNTY	Benton	TWP		RANGE		PPM		PARTY MANAGER	L. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS A TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
6 Int.	4488		249°00'51"	+22.1°	6.3	90-		+6.3 <sup>x</sup>		265.0	BS	-87	+4487					0-267.920x-1.278,535 R. 14 T. 2 N. E. EL. 265.0
					6.4	270-		+6.4			BS							
π					5.2				271.3		π	0	0	267,833	1,283,022			
T.P.	3420		93°07'35"	--	14.6	89°50'	+10.0	-4.6 <sup>x</sup>		266.7	T.P.	-1458	+3094	266,325	1,286,116			
					8.6	89°56'	+9.0	-4.6 <sup>x</sup>			T.P.							
BS.	1608		249°00'54"	--	11.3	T.H.	-8.0	+3.3 <sup>x</sup>			BS.	-31	+1608					
					11.4	T.H. 200	-8.0	+3.4 <sup>x</sup>			BS							
1	976		96°30'	+22.1°	6.7	90-		-6.7		263.3		-467	+857	265,877	1,286,581			
2	647		94°19'	--	8.6	T.H.	+3.2	-5.4		264.6		-288	+579	266,056	1,286,303			
3	321		86°17'	--	6.3	90-		-6.3		263.7		-101	+305	266,243	1,286,029			
4	0		—	--	5.2	—		-5.2	270.0	264.8	π	0	0	266,344	1,287,724			
5	330		248°50'	+22.1°	7.3	90-		-7.3		262.7		+5	-330	266,349	1,287,344			
6	660		"	--	7.1	T.H.	+3.3	-3.8		266.2		+11	-660	266,355	1,287,064			
7	990		"	--	7.9	T.H.	+5.0	-3.0		267.0		+16	-990	266,360	1,286,734			
8	1320		"	--	4.9	90-		-4.9		265.1		+22	-1320	266,366	1,286,404			
9	1650		"	--	12.5	T.H.	+8.2	-4.3		265.7		+27	-1650	266,371	1,286,074			
10	1980		248°30'	--	10.2	89°50'	+5.8	-4.4		265.6		+32	-1980	266,376	1,285,744			
T.P.	2169		249°02'36"	--	14.3	T.H.	+10.8	-3.5 <sup>x</sup>		266.5	T.P.	+43	-2169	266,387	1,285,555			
					9.8	270°10'	+6.3	-3.5			TP							

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DATE	5-17-84	INSTRUMENT MAN	R. Trowbridge	ROD MAN	B. Cotcamp	PARTY NUMBER	6834	NOTES CHECKED BY	C.W. b.T	LINE NO.	1	PAGE	2
AREA	Oregon	TOPO MAP	Monroe 7 1/2	STATE	ORE.	COUNTY	BENTON	TWP		PARTY MANAGER	L. Davis		

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
BS	1859		116° 5' 36"	+22.1	13.8	T.H.	-9.3	+4.5	220.9		BS	+1404	-1219		
"					13.6	T.H. (20)	-9.3	+4.3			BS				
11	1754		119° 49'	"	4.8	90'		-4.8		266.1		-1381	+1082	266410	1285418
12	1560		129° 12'	"	12.1	T.H.	+7.8	-4.3		266.6		-1368	+749	266423	1285085
13	1423		140° 39'	"	11.3	T.H.	+7.1	-4.2		266.7		-1359	+422	266432	1284758
14	1272		152° 11'	"	6.3	90-		-6.3		264.6		-1266	+127	266525	1284463
15	947		149° 26'	"	5.8	90-		-5.8		265.1		-937	+139	266854	1284425
16	627		143° 36'	"	2.0	90-		-2.0		263.9		-608	+155	267183	1284491
17	323		127° 03'	"	6.7	T.H.	+1.6	-5.1		265.8		-277	+166	267514	1284502
18	0		—		5.2	—		-5.2		265.7	TP	0	0	267791	1284336
19	325		255° 10'	+22.1	6.7	90-		-6.7		264.2		+41	-322	267832	1284014
A	482		250° 47' 08"	"	6.4	90-		-6.4		264.5		+24	-481	267815	1283855
20	654		251° 55'	"	5.9	90-		-5.9		265.0		+46	-652	267837	1283684
21	984		250° —	"	4.8	90-		-4.8		266.1		+36	-983	267827	1283353
22	1315		250° —	"	5.2	90-		-5.2		265.7		+48	-1314	267839	1283022
23	1644		249° 27'	+22.1	6.1	90-		-6.1		264.8		+44	-1643	267835	1282693
24	1974		249° 22'	"	6.0	90-		-6.0		264.9		+51	-1973	267842	1282363
25	2303		249° 18'	"	6.0	90-		-6.0		264.9		+56	-2302	267847	1282034
26	2633		249° 17'	"	5.8	90-		-5.8		265.1		+64	-2632	267855	1281704
27	2962		249° 25' 53"	"	3.8	90-		-3.8		267.0	T.P.	+79	-2961	267870	1281325

267,805 x .1, 283,835  
T-Inter

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DATE	4-17-84	INSTRUMENT MAN	R. Trowbridge	ROD MAN	B. Cotcamp	PARTY NUMBER	6834	NOTES CHECKED BY	C.J. H.I.	LINE NO.	1	PAGE	3
AREA	Oregon	TOPO. MAP	Monroe 7 1/2	STATE	Oregon	COUNTY	Benton	TWP		PARTY MANAGER	L. Davis		

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS
														Y	X	
BS	2640		69°27'31"	+22.1	41	90-		+4.1	270.9		BS	+72	-2639			
					3.7	270-		+3.7			BS					
Δ	2494		69°40'	"	10.8	89°50'	+7.3	-3.5		267.4		-77	+2493	267865	1281229	Y=267,885 X=1,281,225 T-Inter
28	2310		69°30'	"	12.4	89°50'	+6.7	-5.7		265.2		-65	+2309	267877	1281045	
29	1980		"	"	5.9	90-		-5.9		265.0		-55	+1979	267887	1280715	
30	1650		"	+22.1	10-	89°50'	+4.8	-5.2		265.7		-46	+1649	267896	1280385	
31	1320		"	"	7.3	90-		-7.3		263.6		-37	+1319	267905	1280055	
32	990		"	"	6.9	90-		-6.9		264.0		-28	+990	267914	1279726	
33	660		"	"	6.1	90-		-6.1		264.8		-18	+660	267924	1279396	
34	330		"	"	7.4	T.H.	+1.6	-5.7		265.2		-9	+330	267933	1279066	
35	0		—		5.2	—		-5.2		265.7	π	0	0	267942	1278736	
Δ	200		246°01'53"	+22.1	5.7	90-		-5.7		265.2		-7	-200	267935	1278526	Y=267,920 X=1,278,535 T-Inter EL. 265.0
36	243		221°11'	"	5.9	90-		-5.9		265.0		-109	-217	267833	1278519	
37	487		183°21'	"	5.2	90-		-5.2		265.7		-440	-209	267502	1278527	
38	798		173°07'	"	4.8	90-		-4.8		266.1		-770	-209	267172	1278527	
39	1119		168°29'	"	5.0	90-		-5.0		265.9		-1100	-206	266842	1278530	
40	1447		168°15'	"	4.9	90-		-4.9		266.0		-1423	-260	266519	1278476	
41	1724		169°54'	"	12.8	T.H.	+8.9	-3.9		267.0		-1735	-369	266207	1278367	
42	2097		171°57'	"	10.3	89°50'	+6.1	-4.2		266.7		-2034	-509	265908	1278227	

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DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE					
5-17-84		R. Trowbridge		B. Cotcamp		6834		C-7, RT.		1		4					
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER			
Oregon		Monroe 7 1/2		Oregon		Benton								L. Davis			
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS A TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS	
														Y	X		
									270.9								
43	2426		172°41'	+22.1	10.8	89°50'	+7.1	-3.7		267.2		-2346	-619	265596	1278117		
B.M.3	2736		172°35'29"	--	11.6	89°50'	+8.0	-3.6	3.4	267.5	T.P.	-2647	-694	265295	1278042	y=265,295 x=1278,070 EL. 268.0	
					11.2	270°10'	+8.0	-3.2			T.P.						
BS	2712		80°51'20"	--	6.1	90-		+6.1	273.4		BS	+608	-2643				
BS					5.7	270-		+5.7	5.95		BS						
A	2690		80°08'19"	+22.1	6.0	90-		-6.0		267.4		-570	+2629	265333	1278028		
44	2613		80°15'	--	6.9	90-		-6.9		266.5		-559	+2553	265344	1277952		
45	2289		81°38'	--	5.8	90-		-5.8		267.6		-543	+2224	265360	1277623		
46	1967		83°43'	--	7.9	89°56'	+2.3	-5.6		267.8		-536	+1893	265367	1277292		
47	1649		86°33'	--	6.8	89°56'	+1.9	-4.9		268.5		-527	+1562	265376	1276961		
48	1319		89°14'	+22.1	6.9	89°56'	+1.5	-5.4		268.0		-480	+1229	265423	1276628		
49	1038		97°23'	--	8.2	89°56'	+1.2	-7.0		266.4		-511	+904	265392	1276303		
50	761		111°50'	--	8.4	90-		-8.4		265.0		-528	+548	265375	1275947		
51	527		96°03'	--	6.9	90-		-6.9		266.5		-249	+465	265654	1275864		
52	330		70°32'	--	6.4	T.H.	+1.7	-4.7		268.7		-15	+330	265888	1275729		
53	0				5.2			-5.2		268.2	T	0	0	265903	1275399		
54	330		250°18'	+22.1	5.3	90		-5.3		268.1		+14	-330	265917	1275069		
55	660		"	--	5.8	90-		-5.8		267.6		+28	-659	265931	1274740		
56	990		"	--	6.4	90-		-6.4		267.0		+41	-989	265944	1274410		

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Geosource Inc.

DATE	5-17-84	INSTRUMENT MAN	R. Trowbridge	ROD MAN	B. Cotcamp	PARTY NUMBER	6834	NOTES CHECKED BY	C.S. R.T.	LINE NO.	5	PAGE	5
AREA	Oregon	TOPO MAP	Monroe 7 1/2	STATE	Oregon	COUNTY	Benton	TWP		RANGE	PPM	PARTY MANAGER	L. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									273.4					
57	1320		250°16'	+	6.4	90-		-6.4		267.0		+53	-1319	266,956 1,274,080
58	1649		250°22'18"	+22.0	5.3	90-		-5.3	268.3		T.P.	+68	-1648	266,971 1,273,751
					5.0	270		-5.0			T.P.			
BS	1958		84°06'29'	--	6.5	90-		+6.5	274.7		BS	+543	-1881	
BS					6.3	270-		+6.3	276.4		BS			
59	1789		77°34'	+22.0	6.1	90-		-6.1		268.6		-297	+1764	266,217 1,273,634
60	1650		70°07'	--	7.8	90-		-7.8		266.9		-61	+1649	266,453 1,273,519
61	1320		"	--	7.9	90-		-7.9		266.8		-49	+1319	266,465 1,273,189
62	990		"	--	8.0	90-		-8.0		266.7		-37	+989	266,477 1,272,859
63	660		"	--	7.3	90-		-7.3		267.4		-24	+660	266,490 1,272,530
64	330		70°07'	--	7.5	T.H.	+1.75	-5.8		268.9		-12	+330	266,502 1,272,200
65	0		-		5.2	-		-5.2		269.5	X	0	0	266,514 1,271,870
66	330		250°31'	+22.0	5.3	90-		-5.3		269.4		+14	-330	266,528 1,271,540
67	660		↓	--	5.8	90-		-5.8		268.9		+29	-659	266,543 1,271,211
68	990		↓	--	6.0	90-		-6.0		268.7		+43	-989	266,557 1,270,881
69	1320		250°31'	--	10.9	T.H.	+6.6	-4.3		270.4		+58	-1319	266,572 1,270,551
Int.	1517		250°13'12"	--	2.9	90-		-2.9		271.8		+59	-1516	266,573 1,270,354
70	1650		250°30'	--	10.9	T.H.	+8.3	-2.7		272.0		+72	-1648	266,586 1,270,222
71	1980		"	--	9.1	89°50'	+5.8	-3.3		271.4		+86	-1978	266,600 1,269,892
72	2310		"	--	7.5	89°50'	+6.7	-0.8		273.9		+101	-2368	266,615 1,269,562

IL 9-266,515 X-1,270, TF + way Int. 385

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DATE		INSTRUMENT/MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-17-84		R. Trowbridge		B. Catcamp		6834		C.T. RT		1		6			
AREA		TOPO MAP		STATE		COUNTY		TWP.		RANGE		PPM		PARTY MANAGER	
Oregon		Monroe 2 1/2		Oregon		Benton								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTting DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									2747						
73	2639		250°21'33"	+22.0	10.1	89°50'	+7.7	-2.4	272.5	272.5	T.P.	+109	-2637	266,623	1,269,233
					9.8	270°10'	+7.7	-2.1			T.P.				
BS	1389		270°56'35"	--x	9.0	T.H.	-6.9	+2.1	274.6		BS	-894	-1063		
BS					8.9	T.H.	-6.9	+2.0			B.S				
74	1174		16°38'	+22.0	9.0	T.H.	+5.9	-3.1		271.5		+917	+733	266,646	1,268,903
A	1123		140°21'37"	--	3.4	90-		-3.4		271.2		+904	+666	266,633	1,268,836
75	902		110°15'	--	9.4	T.H.	+4.5	-4.9		269.7		+754	+495	266,483	1,268,665
76	648		270°13'	--	6.6	90-		-6.6		268.0		+423	+491	266,152	1,268,661
77	484		570°05'	--	7.3	90-		-7.3		267.3		+92	+475	265,821	1,268,645
78	184		68°24'	--	8.0	89°10'	+0.5	-7.5		267.1		-1	+184	265,728	1,268,394
T	-										T	0	0	265,729	1,268,170
79	147		249°55'	+22.0	7.3	89°10'	+2.1	-5.2		269.4		+5	-147	265,734	1,268,023
80	477		"	--	6.6	89°40'	+2.8	-3.8		270.8		+16	-477	265,745	1,267,693
81	807		"	--	9.7	89°40'	+4.7	-5.0		269.6		+27	-807	265,756	1,267,363
82	1137		"	--	10.9	89°40'	+6.6	-4.3		270.3		+38	-1136	265,767	1,267,034
83	1467		"	--	7.6	89°50'	+4.3	-3.3		271.3		+49	-1466	265,778	1,266,704
84	1797		"	--	8.8	89°50'	+5.2	-3.6		271.0		+60	-1796	265,789	1,266,374
85	2127		"	--	9.3	89°50'	+6.2	-3.1		271.5		+71	-2126	265,800	1,266,044
86	2457		"	--	10.1	89°50'	+7.1	-3.0		271.6		+82	-2456	265,811	1,265,714

y = 266,590 x - 1,268,800

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DATE 5-17-84	INSTRUMENT MAN R. Trowbridge	ROD MAN B. Cotcamp	PARTY NUMBER 6834	NOTES CHECKED BY C.T. R.H.	LINE NO. 1	PAGE 7
AREA Oregon	TOPO MAP Monroe 7 1/2	STATE Oregon	COUNTY Benton	TWP	RANGE	PPM
					PARTY MANAGER L. Davis	

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									274.6					
87	2787		249°55'	+22.0	11.5	89°50'	+8.1	-3.4		271.2		+93	-2785	265,822 1,265,385
88	3117		"	--	7.3	89°54'	+3.6	-3.7		270.9		+104	-3115	265,833 1,265,055
89	3444		250°04'06"	+22.3	10.1	89°54'	+6.0	-4.13		270.7	TP	+142	-3441	265,871 1,264,729
89	3444				9.8	270°06'	+6.0	-3.80			TP			



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DATE	5-18-84	INSTRUMENT MAN	R. Trowbridge	ROD MAN	B. Cotcamp	PARTY NUMBER	6834	NOTES CHECKED BY	C.T. RT.	LINE NO.	1	PAGE	9
AREA	Oregon	TOPO MAP	Monroe 7 1/2	STATE	Oregon	COUNTY	Genton	TWP		PARTY MANAGER	L. Davis		

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS A TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									323.9					
102	1650		69°13'	+22.3	9.4	90°40'	-9.2	-28.6		295.3		-44	+1649	266,169 1,260,461
103	1320		"	--	10.7	90°40'	-15.4	-26.1		297.8		-35	+1320	266,178 1,260,132
104	990		"	--	12.2	90°40'	-11.5	-23.7		300.2		-26	+990	266,187 1,259,802
105	660		"	--	9.7	90°40'	-7.7	-17.4		306.5		-17	+660	266,196 1,259,472
106	330		69°13'	--	6.6	90°40'	-3.8	-10.4		313.5		-9	+330	266,204 1,259,142
Δ	67		78°29'24"	--	5.5	90°-		-5.5		318.4	≠	-13	+66	266,200 1,258,878 -266,225x-129880 4 WA Int. 319.0
107	0				5.2			-5.2		318.7	π	0	0	266,213 1,258,812
108	330		246°23'	+22.3	4.8	90°-		-4.8		319.1		-8	-330	266,205 1,258,482
109	660		"	--	8.4	89°-	+11.5	+3.1		327.0		-15	-660	266,198 1,258,152
110	990		"	--	10.3	89°-	+17.3	+7.0		330.9		-23	-990	266,190 1,257,822
111	1320		"	--	12.5	89°-	+23.0	+10.5		334.4		-30	-1320	266,183 1,257,492
112	1650		"	--	7.0	89°-	+28.8	+21.8		345.7		-38	-1650	266,175 1,257,162
113	1980		246°23'	--	8.0	88°50'	+40.3	+32.3		356.2		-46	-1979	266,167 1,256,833
T.P.	2089		246°19'40"	--	7.1	88°50'	+42.5	+35.4		359.2	T.P.	-50	-2088	266,163 1,256,744
"					7.2	271°10'	+42.5	+35.3			T.P.			
BS	500		106°32'19"	+22.3	7.5	90°-		+7.5	316.7		BS	+314	-389	
"					7.5	270°-		+7.5			BS			
Δ	512		105°04'21"	--	7.7	90°-		-7.7		359.0	π	-311	+407	266,166 1,256,742 y-266/115x- T-Int. 1,256,755

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-18-84		R. Trowbridge		B. Cotcamp		6834		C.T. RT		1		10			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
Oregon		MONROE - 15'		Oregon										L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS A TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									366.7						
114	299		82°51'	+22.3	5.9	90-		-5.9		360.8		-78	+289	266,399	1,256,624
π	-	-	-	-	5.2	-		-5.2		361.5	π	0	0	266,477	1,256,335
115	29		314°51'	--	4.4	90-		-4.4		362.3		+27	-11	266,504	1,256,324
116	354		268°25'	--	6.2	T.H.	+1.8	-4.4		362.3		+125	-331	266,602	1,256,004
117	684		269°25'	--	9.8	90		-9.8		356.9		+253	-635	266,730	1,255,700
T.P.	778		268°52'03"	+22.0	10.7	90-		-10.7		356.0	T.P.	+277	-727	266,755	1,255,688
T.P.					10.7	270		-10.7			T.P.	+1			
B.S	1234		80°11'00"	+22.0	3.3	89°30'	-10.8	-7.5	348.5		B.S	+260	-1206		
B.S					3.3	270°30'	-10.8	-7.5			B.S	+2			
118	1035		73°00'	--	6.8	89°20'	+12.0	+5.2		353.7		-90	+1031	266,927	1,255,433
119	767		60°36'	--	7.0	89°00'	+13.4	+6.4		354.9		+99	+761	267,116	1,255,163
120'	447		55°40'	--	6.0	89°00'	+7.8	+1.8		350.3		+95	+437	267,112	1,254,839
121	119		46°06'	--	6.1	89°00'	+2.1	-4.1		344.4		+44	+110	267,061	1,254,512
π	-	-	-	-	5.2	-		-5.2		343.3	π	0	0	267,017	1,254,402
122	223		265°40'	+22.0	9.8	90°40'	-2.6	-12.4		336.1		+68	-212	267,085	1,254,190
T.P.	330		266°39'16"	--	7.7	91°20'	-7.7	-15.4		333.1	T.P.	+106	-313	267,125	1,254,090
T.P.					4.8	91°50'	-10.6	-15.4			T.P.	+2	+1		
B.S	549		98°59'30"	--	4.3	88°20'	-16.0	-11.7	321.3		B.S	+282	-471		
B.S					4.2	271°40'	-16.0	-11.8			B.S	+2	+1		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO	PAGE				
5-18-84		R. Trowbridge		B. Cotcamp		6834		C.T. R.T.		1	11				
AREA		TOPO MAP	STATE	COUNTY	TWP	RANGE	PPM	PARTY MANAGER							
Oregon		Monroe - 15'	Oregon	Benton				L. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS A TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									321.3						
123	326		97°59'	+22.0	6.5	88°30'	+8.5	+2.0		323.3		-163	+282	267,246	1,253,902
124	0	-		-	5.2	-		-5.2		316.1	TP	0	0	267,409	1,253,220
Δ	40		231°35'03"	--	5.9	90-		-5.9		315.4		-11	-38	267,398	1,253,582
125	330		249°32'	--	9.7	90-		-9.7		311.6		+9	-330	267,418	1,253,290
126	660		249°30'59"	--	10.1	90-		-10.1		311.2	T.P.	+17	-660	267,428	1,252,961
					10.0	270-		-10.0			T.P.	+2	+1		
BS	2310		69°51'44"	+22.0	11.0	90-		+11.0	322.0		BS	+75	-2309		
BS					10.7	270-		+10.7	(110.8)		BS	+2	+1		
127	1980		69°52'	--	10.8	90-		-10.8		311.2		-65	+1979	267,440	1,252,632
Δ	1746		70°15'27"	--	10.0	90-		-10.0		312.0	IF	-69	+1745	267,436	1,252,398
128	1650		69°52'	--	10.6	90-		-10.6		311.4		-54	+1649	267,451	1,252,302
129	1320		"	+22.0	9.7	90-		-9.7		312.3		-43	+1319	267,462	1,251,972
130	990		"	--	8.3	90-		-8.3		313.7		-32	+989	267,473	1,251,642
131	660		"	--	7.0	90-		-7.0		315.0		-22	+660	267,483	1,251,313
132	330		69°52'	--	5.9	90-		-5.9		316.1		-11	+330	267,494	1,250,983
133					5.2			-5.2		316.8	TP	0	0	267,505	1,250,653
134	330		249°48'	+22.0	4.8	T.H.	+1.7	-3.1		318.9		+10	-330	267,515	1,250,323
135	660		"	--	11.0	89°-	+11.5	+0.5		322.5		+21	-660	267,526	1,249,993
Δ	921		249°01'39"	--	11.1	89°-	+16.1	+5.0		327.0	IF	+17	-921	267,522	1,249,732

267,380 x - 1,253,595  
4 way

267,400 x - 1,252,405  
T-Inter.

267,495 x - 1,249,725  
T-Inter.

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
5-18-84		R. Trowbridge		B. Cotcamp		6834		C.T. R.T.		1		12			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
Oregon		Monroe - 15		Oregon		Benton								L. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS A TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									322.0						
136	990		249°48'	+22.0	11.2	89°	+17.3'	+6.1		328.1		+31	-990	267,536	1,249,663
137	1320		"	--	8.7	88°40'	+30.7'	+22.0		344.0		+41	-1319	267,546	1,249,331
138	1650		"	--	11.7	88°00'	+57.6'	+45.9		367.9		+52	-1649	267,557	1,249,004
139	1980		"	--	5.0	87°50'	+74.8'	+69.8		391.8		+62	-1979	267,567	1,248,674
140	2309		249°33'54"	--	11.5	87°52'	+86.0'	+74.5		396.6	T.P.	+76	-2306	267,583	1,248,348
T.P.					11.3	272°08'	+86.0'	+74.7			T.P.	+2			
BS	658		57°19'22"	+22.0	5.4	89°00'	-11.5'	-6.1			BS	+122	-647		
BS					5.3	27°00'	-11.5'	-6.2	390.4		BS	+2	+2		
141	582		57°25'17"	--	3.9	89°00'	+10.2'	+6.3		396.7		+107	+572	267,570	1,248,275
141	330		51°37'	--	7.8	88°30'	+8.6'	+0.8		391.2		+93	+317	267,556	1,248,020
142	-	-	-		5.2			-5.2		385.2	A	0	0	267,463	1,247,703
143	330		218°12'	+22.0	8.1	91°50'	-10.6'	-18.7		371.7		-164	-286	267,299	1,247,417
144	660		216°48'	--	8.5	91°20'	-15.4'	-23.9		366.5		-342	-565	267,121	1,247,138
145	990		216°15'	--	7.1	90°		-7.1		383.3		-521	-842	266,942	1,246,861
146	1320		216°08'	--	9.6	T.14	+6.6'	-3.0		387.4		-697	-1121	266,766	1,246,582
T.P.	1523		215°19'46"	--	8.7	90°		-8.7		381.7	T.P.	-822	-1282	266,641	1,246,421
					8.6	270°		-8.6			T.P.				
BS	905		54°32'50"	+4.8	87°52'		-33.7'	-28.9	392.7		BS				
BS					4.7	272°08'		-33.7'	-29.0		BS				

$y = 267,570$   
 $x = 1,248,275$   
 FT-Enter Horiz  
 CORR. y-15  
 x-

AST Magnetic

SET UP

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	6-1-84	INSTRUMENT MAN	B. Cotcamp	ROD MAN	R. TROWBRIDGE	PARTY NUMBER	6834	NOTES CHECKED BY	R.T. C.Y.	LINE NO.	1	PAGE	13
AREA	OREGON	TOPO MAP	Monroe - 75'	STATE	ORE.	COUNTY	BENTON	TWP		RANGE		PPM	
PARTY MANAGER													L.O. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
			<del>(81° 36' 15")</del> 81° 21' 58"							396.7	K			Starting grid az. 81° 21' 58"
140			0 00 00											81-36-15
IF	473		1° 12' 35"	+	4.5	89°	-8.3	-3.8	392.9		IF	-61	-469	267570
TP	0		<del>(82° 48' 50")</del> (82° 34' 33")		4.8	-		-4.8			TP	0	0	267509
142	111		167° 14' (248 36)		6.8	90° 20'	-0.6	-7.4		385.5		-41	-103	267468
143	440		161° 41' (243 03)		5.6	92°	-15.4	-21.0		371.9		-199	-392	267310
144	769		159° 17' (240 39)		8.2	91° 20'	-17.9	-26.1		366.8		-377	-670	267132
145	1098		158° 13' (239 35)		8.2	-		-8.2		384.7		-550	-950	266959
146	1428		157° 58' (239 20)		5.5	-		-5.5		387.4		-728	-1228	266781
TP	1622		157° 12' 48"		9.6	-		-9.5			TP	-846	-1384	266663
TP	1622		(238° 34' 46)		9.7	270°		-9.6		383.3	TP			
TP	0		0 00 00											
TP	0			+	5.0	H.		+5.0	388.3		TP	0	0	266663
147	142		198° 25' (257 00)		11.9	-		-11.9		376.4		-32	-138	266631
148	471		195° 46' 09"		7.0	93°	-24.6	-31.6		356.7	TP	-127	-453	266536
148	471		(254° 20' 55")		7.1	267°	-24.6	-31.7			TP			
TP			0 00 00		11.9	+								
148	0		258° 23' 14"	+	5.0	H.		+5.0	361.7		TP	0	0	266536
IF	324		184° 02' 19"		7.8	91°	-5.7	-13.5		348.2	IF	-65	-317	266471
149	330		186° 34' (260 55)		7.8	91°	-5.8	-13.6		348.1		-52	-326	266484
150	660		186° 56' (261 17)		5.2	90° 40'	-7.7	-12.9		348.8		-100	-652	266436

Starting grid az. 81° 21' 58"  
 81-36-15  
 Scaled take off  
 Y-267,570 X-1,248,275  
 SUNSHOT TAKEN  
 @ this point to determine starting grid azimuth. ELEV. TAKEN FROM PREVIOUS SURVEY.

Y-266,460 X-1,245,625  
 IF T-Enter.

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	6.1.84	INSTRUMENT MAN	B. Cotcamp	ROD MAN	R. Trowbridge	PARTY NUMBER	6834	NOTES CHECKED BY	C.T. R.T.	LINE NO.	1	PAGE	14		
AREA	OREGON	TOPO MAP	Monroe - 15'	STATE	OREGON	COUNTY	BENTON	TWP		RANGE		PPM		PARTY MANAGER	L.O. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
			plates - 7 (9.05)						361.7						
151	990		186 50 (268 01)		11.7	90 40	-11.5	-23.2		338.5		-33	-989	266503	1,244,980
152	1320		" " (" " )		9.8	90 50	-19.2	-29.0		332.7		-43	-1319	266493	1,244,650
153	1647		185 27 (266 44)		4.9	90 50	-23.9	-28.8		332.9		-94	-1644	266442	1,244,325
TP <sub>1</sub>	1716		184 48 26		13.5	90 30	-14.9	-28.4			TP	-323	-1685	266213	1,244,284
TP	1716		(259 09, 21)		13.4	269 30	-14.9	-28.3		333.4	TP				
148			0 00 00												
TP	0				+5.1	H:		+5.1	338.5		TP	0	0	266213	1,244,284
154	257		165 30 (244 39)		7.3	89 30	+2.2	-5.1		333.4		-110	-232	266103	1,244,652
155	585		162 20 (241 29)		8.8	89 30	+5.1	-3.7		334.8		-279	-514	265934	1,243,770
156	915		159 30 (238 39)		5.0	89 55	+1.3	-3.7		334.8		-476	-781	265737	1,243,503
157	1239		156 24 (235 33)		11.0	89 30	+10.8	-0.2		338.3		-701	-1022	265512	1,243,262
158	1571		" " " "		10.0	89 30	+13.7	+3.7		342.2		-889	-1295	265324	1,242,989
TP <sub>2</sub>	1639		155 53 47		9.9	89 30	+14.4	+4.5			TP	-939	-1343	265274	1,242,941
TP <sub>2</sub>	1639		235 03 08		9.8	270 30	+14.4	+4.6		343.1	TP				
TP <sub>1</sub>			0 00 00												
TP <sub>2</sub>	0				+4.65	H:		+4.7	342.8		TP	0	0	265274	1,242,941
159	270		209 30 (264 33)		6.8	89 30	+2.4	-4.4		343.4		-26	-269	265248	1,242,672
TP <sub>2</sub>	529		209 50 20		5.2	89 30	+4.6	-0.6		347.2	TP	-47	-527	265227	1,242,414
TP <sub>2</sub>	529		264 53 28		3.7	89 40	+3.1	-0.6			TP				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 6.1.84	INSTRUMENT MAN B. Cotcamp	ROD MAN R. Trowbridge	PARTY NUMBER 6834	NOTES CHECKED BY RT. C.Y.	LINE NO. 1	PAGE 15
AREA OREgon	TOPO MAP MONROE - 15	STATE OREgon	COUNTY BENTON	TWP	RANGE	PPM
			PARTY MANAGER L. O. Davis			

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS
														Y	X	
			plates → (92.05)													
TP <sub>2</sub>			0 00 00													
TP <sub>3</sub>	0				+4.85	Hi		+4.9	352.1		π	0	0	265227	1,242,414	
160	83		219.00 (303.53)		6.2	88° 40'	+1.9	-4.3		347.8		+46	-69	265273	1,242,345	
IF	279		284.59 (56") 200.06 28		8.8	88° 40'	+6.5	-2.3		349.8	IF	+72	-269	265299	1,242,145	5-265.290 T. Inter.
161	408		201.25 (386.18')		6.2	89°	+7.1	+0.9		353.0		+115	-392	265342	1,242,022	
TP <sub>4</sub>	695		201 27 41		4.9	88° 30'	+18.2	+13.3		365.4	TP	+196	-667	265423	1,241,747	
TP <sub>4</sub>	695		(266 21 09')		5.0	271° 30'	+18.2	+13.2			TP					
TP <sub>3</sub>			0 00 00													
TP <sub>4</sub>	0				+4.95	Hi		+5.0	370.4		π	0	0	265423	1,241,747	
162	60		231 48 (338.09')		6.2	89° -	+1.0	-5.1		365.3		+56	-22	265479	1,241,725	
163	383		216 29 (322.50')		9.7	89° -	+6.7	-3.0		367.4		+305	-231	265728	1,241,516	
TP <sub>5</sub>	636		214 41 24		6.7	89° 40'	+3.7	-3.0		367.4	TP	+495	-400	265918	1,241,347	
TP <sub>5</sub>	636		(321 02 33')		6.7	270° 20'	+3.7	-3.0			TP					
TP <sub>4</sub>			0 00 00													
TP <sub>5</sub>	0				+5.0	Hi		+5.0	372.4		π	0	0	265918	1,241,347	
164	72		150 45 (291.48')		5.3	-		-5.3		367.1		+27	-67	265945	1,241,280	
165	396		128 40 (269.43')		9.5	-		-9.5		362.9		+2	-396	266916	1,240,951	
IF	644		(266 23 51) 125 21 24		7.0	90° 30'	-5.6	-12.6		359.8	IF	-40	-643	265878	1,240,704	
166	709 723		127 09 (268.12')		6.2	90° 30'	-6.3	-12.5		359.9		-23	-723	265895	1,240,624	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE					
6.1.84		B. Cotcamp		R. Trowbridge		6834		R.T. C.T.		1		16					
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER			
OREGON		MONROE - 27		OREGON		BENTON								L.O. Davis			
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS	
														Y	X		
			Plates → (92.05)														
TP <sub>6</sub>	793		126° 26' 25"		4.3	90° 30'	-6.9	-11.2			TP	-35	-792	265883	1,240,555		
TP <sub>6</sub>	793		267° 28' 58"		4.2	269° 30'	-6.9	-11.1		361.3	TP						
TP <sub>5</sub>			0 00 00														
TP <sub>6</sub>	0				+4.75	Hi		+4.8		366.1	TP	0	0	265883	1,240,555		
167	270		211° 42' (299.11)		7.7	89° 30'	+2.4	-5.3		360.8		+132	-236	266015	1,240,319		
168	600		" " " "		7.9	89° 30'	+5.2	-2.7		363.4		+293	-524	266176	1,240,031		
169	930		" " " "		5.4	89° 30'	+8.1	+2.7		368.8		+453	-812	266336	1,239,743		
170	1260		" " " "		5.3	89° 40'	+7.3	+2.0		368.1		+614	-1100	266497	1,239,455		
#	1510		(298° 44' 59") 211° 20' 55"		6.0	89° 40'	+8.8	+2.8		368.9		+728	-1323	266611	1,239,232		
171	1591		211° 07' 23"		7.6	89° 40'	+9.3	+1.7			TP	+762	-1397	266645	1,239,158		
171	1591		(298° 36' 21")		7.5	270° 20'	+9.3	+1.8		367.9	TP						
TP <sub>6</sub>			0 00 00														
171	0				+5.25	Hi		5.3		373.2	TP	0	0	266645	1,239,158		
172	329		170° 00' (288.36)		5.2	88° 20'	+9.6	+4.4		377.6		+105	-312	266750	1,238,846		
173	650		171° 25' (290.01)		5.7	88° 40'	+15.1	+9.4		382.6		+222	-611	266867	1,238,547		
TP <sub>7</sub>	903		171° 06' 18"		8.2	88° 40'	+21.0	+12.8		386.0	TP	+304	-850	266949	1,238,308		
TP <sub>7</sub>	903		(289° 42' 39")		8.2	271° 20'	+21.0	+12.8			TP						
171			0 00 00														
TP <sub>7</sub>	0				+5.05	Hi		5.1		391.1	TP	0	0	266949	1,238,308		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE					
6.1.84		B. Cotcamp		R. Trowbridge		6834		R.T. C. 7		1		17					
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER			
OREGON		MONROE - 15		OREGON		BENTON								L.O. Davis			
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS	
														Y	X		
			plates → (geios)						391.1								
174	77		190 30 (300 13)		5.6	89° 10'	+1.1	-4.5		386.6		+39	-67	266988	1,238,241		
175	400		177 35 (287 18)		7.4	89° 10'	+5.8	-1.6		389.5		+119	-382	267068	1,237,926		
TP <sub>8</sub>	687		169 35 52		0.9	89° 20'	+8.0	+7.1			TP	+111	-678	267060	1,237,630		
TP <sub>8</sub>	687		(279 18 31)		0.8	270° 40'	+8.0	+7.2		398.3	TP						
TP <sub>8</sub>			0 00 00														
TP <sub>8</sub>	0				+5.05	Hi		5.1	403.4		π	0	0	267060	1,237,630		
176	34		171 00 (270 19)		4.8	89° 14'	+0.5	-4.3		399.1		+0	-34	267060	1,237,596		
177	362		172 40 (271 59)		6.0	89° -	+6.3	+0.3		403.7		+13	-362	267073	1,237,268		
178	689		170 55 (270 14)		11.3	89° 10'	+10.0	-1.3		402.1		+3	-689	267063	1,236,941		
179	1009		166 07 (265 26)		11.3	89° 20'	+11.7	+0.4		403.8		-80	-1006	266980	1,236,624		
TP <sub>9</sub>	1189		165 23 51		5.1	89° 20'	+13.9	+8.8			TP	-110	-1184	266950	1,236,446		
TP <sub>9</sub>	1189		(264 42 22)		5.0	270° 40'	+13.9	+8.9		412.3	TP						
TP <sub>9</sub>			0 00 00														
TP <sub>9</sub>	0				+5.1	Hi		+5.1	412.4		π	0	0	266950	1,236,446		
180	176		105 34 (190 16)		5.5	86° 10'	+11.8	+6.3		423.7		-173	-31	266777	1,236,415		
TP <sub>10</sub>	441		104 05 17		7.5	87° 30'	+19.2	+11.7			TP	-435	-67	266515	1,236,379		
TP <sub>10</sub>	441		(188 47 39)		8.7	87° 20'	+20.5	+11.8		429.2	TP						
TP <sub>10</sub>			0 00 00														
TP <sub>10</sub>	0				+5.15	Hi		5.2	434.4		π	0	0	266515	1,236,379		
181	70		216 36 (225 24)		7.8	88° 50'	+1.4	-6.4		428.0		-49	-50	266466	1,236,329		

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE					
6.1.84		B. Cotcamp		R. Trowbridge		6834		CT R.T.		1		18					
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER			
OREGON		MONROE-15		ORE.		Benton								L.O. Davis			
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
														LAT.	DEP.		Y
			plates 7 (92.05)						434.4								
TP <sub>11</sub>	261		186° 16' 54"		4.6	88° 10'	+8.4	+3.8		438.2	TP	-252	-68	266263	1,236,311		
TP <sub>11</sub>	261		(195° 04' 33")		3.8	88° 20'	+7.6	+3.8			TP						
TP <sub>10</sub>			0 00 00														
TP <sub>11</sub>	0				+4.75	H.		4.8	443.0		π	0	0	266263	1,236,311		
182	129		209° 10' (224° 15')		6.1	85° -	+11.2	+5.1		448.1		-92	-90	266171	1,236,221		
TP <sub>12</sub>	157		210° 41' 35"		7.6	85° -	+13.7	+6.1		449.1	TP	-109	-112	266154	1,236,199		
TP <sub>12</sub>	157		(225° 46' 08")		7.2	85° 10'	+13.2	+6.0			TP						
TP <sub>11</sub>			0 00 00														
TP <sub>12</sub>	0				+5.1	H.		+5.1	454.2		π	0	0	266154	1,236,199		
183	269		199° 23' (245° 09')		10.4	86° 10'	+18.0	+7.6		461.8		-113	-244	266041	1,235,955		
184	561		181° 17' (227° 03')		11.7	86° 10'	+37.5	+25.8		480.0		-382	-411	265172	1,235,788		
185	891		179° 55' 05"		5.6	85° 50'	+14.8	+59.2	513.3	513.5	TP	-621	-636	265533	1,235,563		
185	891		(225° 41' 13")		5.4	274° 10'	+14.8	+59.4			TP						
TP <sub>12</sub>			0 00 00														
185	0				+5.1	H.		+5.1	518.6		π	0	0	265533	1,235,563		
186	314		178° 57' (224° 38')		7.1	85° 30'	+24.6	+17.5		536.1		-223	-221	265310	1,235,342		
TP <sub>13</sub>	514		178° 11' 25"		9.2	85° 50'	+37.4	+28.2			TP	-370	-355	265163	1,235,208		
TP <sub>13</sub>	514		(223° 32' 38")		9.1	274° 10'	+37.4	+28.3		546.9	TP						
185			0 00 00														
TP <sub>13</sub>	0				+4.85	H.		4.9	551.8		π	0	0	265163	1,235,208		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
6.1.84		B. Cotcamp		R. Trowbridge		6834		RT. CT.		1		19			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
OREGON		Monroe-15		ORE.		Benton								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
			plates → (grips)						551.8						
187	130		195° 44' (239° 37')		5.1	91° -	-2.3	-7.4		544.4		-66	-112	265097	1,235,096
188	463		197° 29' (241° 22')		6.3	89° 50'	+1.4	-4.9		546.9		-222	-406	264941	1,234,802
189	691		183° 18' (227° 11')		5.9	88° 10'	+22.1	+16.2		568.0		-470	-507	264693	1,234,701
TP <sub>14</sub>	987		178° 40' 32"		7.8	87° 30'	+43.1	+35.3			TP	-726	-667	264437	1,234,541
TP <sub>14</sub>	987		(222° 33' 10")		7.7	272° 30'	+43.1	+35.4		587.2	TP				
TP <sub>13</sub>			0 00 00												
TP <sub>14</sub>	0				+4.95	Hi		5.0	592.2		π	0	0	264437	1,234,541
190	30		236° 00' (278° 33')		5.9	85° 30'	+2.4	-3.5		588.7		+4	-30	264441	1,234,511
191	353		208° 06' (250° 39')		8.6	85° 30'	+27.7	+19.1		611.3		+117	-333	264320	1,234,208
TP <sub>15</sub>	444		208° 43' 49"		7.3	86° 10'	+29.7	+22.4		614.6	TP	-142	-420	264295	1,234,121
TP <sub>15</sub>	444		(251° 16' 59")		7.3	273° 50'	+29.7	+22.4			TP				
TP <sub>14</sub>			0 00 00												
TP <sub>15</sub>	0				+4.85	Hi		4.9	619.5		π	0	0	264295	1,234,121
192	235		174° 12' (245° 29')		8.0	91° -	-4.1	-12.1		607.4		-98	-214	264197	1,233,907
TP <sub>16</sub>	368		174° 38' 06"		4.4	91° -	-6.4	-10.8		608.7	TP	-150	-336	264145	1,233,785
TP <sub>16</sub>	368		(245° 55' 05")		3.3	91° 10'	-7.5	-10.8			TP				
TP <sub>15</sub>			0 00 00												
TP <sub>16</sub>	0				+4.55	Hi		4.6	613.3		π	0	0	264145	1,233,785
193	205		218° 30' (284° 25')		6.1	87° -	+10.7	+4.6		617.9		+51	-199	264196	1,233,586

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

DATE 6.1.84	INSTRUMENT MAN B. Cotcamp	ROD MAN R. Trowbridge	PARTY NUMBER 6834	NOTES CHECKED BY R.T. CT	LINE NO. 1	PAGE 20
AREA OREGON	TOPO MAP Monroe - 15	STATE Oregon	COUNTY Benton	TWP	RANGE	PPM
				PARTY MANAGER L.O. Davis		

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
			plates → (grids)						613.3					
TP <sub>17</sub>	367		219° 46' 00"		6.9	86° 40'	+21.3	+14.4		627.7	TP	+99	-353	264244 1,233,432
TP <sub>17</sub>	367		(285° 41' 05")		7.0	273° 20'	+21.3	+14.3			TP			
TP <sub>16</sub>			0° 00' 00"											
TP <sub>17</sub>	0				+5.05	Hi		+5.1	632.8		π	0	0	264244 1,233,432
194	153		117° 52' 21"		8.0	84° 30'	+14.7	+6.7		639.5	TP	-110	-105	264134 1,233,327
194	153		(223° 33' 26")		8.4	84° 20'	+15.1	+6.7			TP			
TP <sub>17</sub>			0° 00' 00"											
194	0				+5.0	Hi		+5.0	644.5		π	0	0	264134 1,233,327
TP <sub>18</sub>	202		162° 09' 33"		5.8	84° -	+21.1	+15.3		659.8	TP	-181	-87	263953 1,233,240
TP <sub>18</sub>	202		(205° 42' 39")		5.2	84° 10'	+20.5	+15.3			TP			
194			0° 00' 00"											
TP <sub>18</sub>	0				+4.75	Hi		4.8	664.6		π	0	0	263953 1,233,240
195	143		238° 40' (264° 23')		6.4	82° 40'	+18.3	+11.9		676.5		-14	-142	263939 1,233,098
196	473		239° 27' (265° 10')		5.1	82° 10'	+14.5	+59.4		724.0		-40	-471	263913 1,232,769
TP <sub>19</sub>	545		239° 10' 51"		5.6	82° 10'	+74.3	+68.7		733.4	TP	-48	-538	263905 1,232,702
TP <sub>19</sub>	545		(264° 53' 50")		5.5	271° 50'	+74.3	+68.8			TP			
TP <sub>18</sub>			0° 00' 00"											
TP <sub>19</sub>	0				+5.0	Hi		+5.0	738.4		π	0	0	263905 1,232,702
197	245		185° 06' (269° 60')		5.4	83° 30'	+27.7	+22.3		760.7		±0	-245	263905 1,232,459

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 6.1.84	INSTRUMENT MAN B. Cotcamp	ROD MAN R. TRUMBIDGE	PARTY NUMBER 6834	NOTES CHECKED BY R.T. C.T.	LINE NO. 1	PAGE 21
AREA OREGON	TOPO MAP MONROE - 7 1/2'	STATE ORE.	COUNTY Benton	TWP	RANGE	PPM
			PARTY MANAGER L.O. Davis			

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
			plates → (grids)											
TP <sub>20</sub>	444		179° 50' 38"		3.9	82° 30'	+58.0	+54.1		792.5	TP	-40	-438	263865 1,232,264
TP <sub>20</sub>	444		(267° 44' 28")		3.9	277° 30'	+58.0	+54.1			TP			
TP <sub>19</sub>			0 00 00											
TP <sub>20</sub>	0				+4.6	Hi		+4.6		797.1	TP	0	0	263865 1,232,264
198	131		222° 00' (306° 44')		7.4	79° -	+25.0	+17.6		814.7		+78	-105	263943 1,232,159
TP <sub>21</sub>	268		217° 50' 50"		5.2	81° -	+41.9	+36.7			TP	+143	-223	264008 1,232,041
TP <sub>21</sub>	268		(302° 35' 18")		4.4	81° 10'	+41.2	+36.8		833.9	TP			
TP <sub>20</sub>			0 00 00											
TP <sub>21</sub>	0				+4.95	Hi		5.0		838.9	TP	0	0	264008 1,232,041
TP <sub>22</sub>	153		149° 08' 24"		5.2	85° -	+13.3	+8.1		847	TP	+5	-152	264013 1,231,889
TP <sub>22</sub>	153		(271° 43' 42")		4.8	85° 10'	+12.9	+8.1			TP			
TP <sub>21</sub>			0 00 00											
TP <sub>22</sub>	0				+4.95	Hi		5.0		852.0	TP	0	0	264013 1,231,889
199	33		160° 30' (252° 14')		6.2	87° -	+1.7	-4.5		847.5		-10	-31	264003 1,231,858
TP <sub>23</sub>	238		136° 08' 40"		6.0	86° 40'	+13.8	+7.8		859.8	TP	-159	-176	263854 1,231,713
TP <sub>23</sub>	238		(227° 52' 22")		5.3	86° 50'	+13.1	+7.8			TP			
TP <sub>22</sub>			0 00 00											
TP <sub>23</sub>	0				+4.7	Hi		+4.7		864.5	TP	0	0	263854 1,231,713
200	146		132° 18' (180° 10')		7.4	86° 30'	+8.9	+1.5		866.0		-146	+0	263708 1,231,713

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	6-5-84	INSTRUMENT MAN	B. Cotcamp	ROD MAN	R. Trowbridge	PARTY NUMBER	6834	NOTES CHECKED BY	R.T. CT.	LINE NO.	1	PAGE	22
AREA	OREGON	TOPO MAP	MONROE 15'	STATE	ORE.	COUNTY	BENTON	TWP		RANGE		PPM	
												PARTY MANAGER	L.O. Davis

STATION NO.	SLOPE DISTANCE	PLOTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
			Plates → (GRIDS)						864.5					
TP <sub>1</sub>	267	265.3	122° 09' 40"		4.5	83° 30'	+30.2	+25.7	}	890.2	TP	-261	+46	263593 1,231,759
TP <sub>1</sub>	267		(170° 02' 02")		4.5	276° 30'	+30.2	+25.7		TP				
TP <sub>23</sub>			0 00 00											
TP <sub>1</sub>	0				+4.5	H.		+4.5	}	894.7	TP	0	0	263593 1,231,759
201	150		196° 30' (186° 32')		7.3	88° 30'	+3.9	-3.4		891.3		-149	-17	263444 1,231,742
TP <sub>2</sub>	326		193° 29' 23"		5.4	88°	+11.4	+6.0*	}	900.7	TP	-325	-20	263268 1,231,739
TP <sub>2</sub>	326		(183° 31' 25")		5.3	272°	+11.4	+6.1		TP				
TP <sub>1</sub>			0 00 00											
TP <sub>2</sub>	0				+4.75	H.		4.8	}	905.5	TP	0	0	263268 1,231,739
202	157		226° 15' (229° 46')		7.2	88° 20'	+4.6	-2.6		902.9		-101	-120	263167 1,231,619
TP <sub>3</sub>	246		229° 06' 47"		6.1	88°	+8.6	+2.5*	}	908.0	TP	-149	-195	263119 1,231,544
TP <sub>3</sub>	246		(232° 38' 12")		6.1	272°	+8.6	+2.5		TP				
TP <sub>2</sub>			0 00 00											
TP <sub>3</sub>	0				+4.95	H.		5.0	}	913.0	TP	0	0	263119 1,231,544
TP <sub>4</sub>	175		112° 07' 45"		4.1	84° 40'	+16.3	+12.2		925.2	TP	-168	+46	262951 1,231,590
TP <sub>4</sub>	175		(169° 45' 57")		3.6	84° 50'	+15.8	+12.2	}		TP			
TP <sub>3</sub>			0 00 00											
TP <sub>4</sub>	0				+5.0	H.		+5.0	}	930.2	TP	0	0	262951 1,231,590
203	42		225° 16' (210° 02')		5.2	87°	+2.2	-3.0		927.2		-36	-21	262915 1,231,569

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

DATE 6.5.84	INSTRUMENT MAN B. Cotcamp	ROD MAN R. Trowbridge	PARTY NUMBER 6834	NOTES CHECKED BY R.T. C.T.	LINE NO. 1	PAGE 23
AREA OREGON	TOPO MAP MONROE - 15	STATE ORE.	COUNTY BENTON	TWP	RANGE	PPM
PARTY MANAGER L.O. Davis						

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH - EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
			plates → (gr.ios)						930.2								
TP <sub>5</sub>	273		219° 25' 23"		5.7	88° 20'	+7.9	+2.2			TP	-249	-112	262702	1,231,478		
TP <sub>5</sub>	273		(204° 11' 20")		5.6	271° 40'	+7.9	+2.3		932.5	TP						
TP <sub>4</sub>			0 00 00														
TP <sub>5</sub>	0				+4.85	Hi		4.9	937.4		π	0	0	262702	1,231,478		
204	125		268° 30' (292.4)		6.1	81° -	+19.6	+13.5		950.9		+48	-115	262750	1,231,363		
TP <sub>6</sub>	334		307° 13' 49"		6.1	80° -	+58.0	+51.9		989.3	TP	+289	-157	262991	1,231,321		
TP <sub>4</sub>	334		(331° 25' 09")		6.1	280° -	+58.0	+51.9			TP						
TP <sub>5</sub>			0 00 00														
TP <sub>6</sub>	0				+4.65	Hi		4.7	994.0		π	0	0	262991	1,231,321		
205	40		137° 00' (288° 25')		4.8	79° 42'	+7.2	+2.4		996.4		+13	-38	263004	1,231,283		
TP <sub>7</sub>	327		135° 18' 01"		5.2	79° 40'	+58.7	+53.5		1047.5	TP	+93	-308	263084	1,231,013		
TP <sub>7</sub>	327		(286° 43' 10")		5.3	280° 20'	+58.7	+53.4			TP						
TP <sub>6</sub>			0 00 00														
TP <sub>7</sub>	0				+4.75	Hi		4.8	1052.3		π	0	0	263084	1,231,013		
206	42		144° 00' (250° 43')		4.8	81° 54'	+5.9	+1.1		1053.4		-14	-40	263070	1,230,973		
207	369		131° 20' (238° 03')		7.0	82° -	+51.4	+44.4		1096.7		-195	-313	262889	1,230,700		
TP <sub>8</sub>	449		131° 20' 18"		3.6	82° -	+62.5	+58.9			TP	-235	-377	262849	1,230,636		
TP <sub>8</sub>	449		(238° 03' 28")		3.7	278° -	+62.5	+58.8		1111.1	TP						
TP <sub>7</sub>			0 00 00														
TP <sub>8</sub>	0				+4.85	Hi		+4.9	1116.0		π	0	0	262849	1,230,636		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
6-5-84		B. Cotcamp		R. Trowbridge		6834		R.T. C.T.		1		24			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
OREGON		MONROE - 15'		ORE.		BENTON								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
			Plates → (grips)						11160						
TP <sub>9</sub>	183		256 37 37		6.0	84 -	+19.1	+13.1		1129.1	TP	+128	-129	262977	1,230,507
TP <sub>9</sub>	183		(314° 41' 05")		6.1	276 -	+19.1	+13.0			TP				
TP <sub>8</sub>			0 00 00												
TP <sub>9</sub>	0			+4.8	H <sub>i</sub>			+4.8	1133.9		T	0	0	262977	1,230,507
208	87		163 30 (298° 11')		5.7	-		-5.7		1128.2		+41	-77	263018	1,230,430
TP <sub>10</sub>	313		158° 40' 20"		5.3	92 -	-10.9	-16.2		1117.7	TP	+124	-287	263101	1,230,220
TP <sub>10</sub>	313		(293° 21' 25")		5.4	268 -	-10.9	-16.3			TP				
TP <sub>9</sub>			0 00 00												
TP <sub>10</sub>	0			+4.8	H <sub>i</sub>			+4.8	1122.5		T	0	0	263101	1,230,220
209	100		169 20 (282° 41')		6.0	93 -	-5.2	-11.2		1111.3	TP	+22	-98	263123	1,230,122
TP <sub>11</sub>	213		167° 48' 27"		4.1	93 36	-13.0	-17.1		1105.4	TP	+41	-209	263142	1,230,011
TP <sub>11</sub>	213		(281° 09' 52")		3.5	93 40	-13.6	-17.1			TP				
TP <sub>10</sub>			0 00 00												
TP <sub>11</sub>	0			+4.85	H <sub>i</sub>			4.9	1110.3		T	0	0	263142	1,230,011
TP <sub>12</sub>	199		209 39 59		4.5	93 -	-10.4	-14.9		1095.4	TP	+130	-150	263272	1,229,861
TP <sub>12</sub>	199		(310° 49' 51")		3.9	93 10	-11.0	-14.9			TP				
TP <sub>11</sub>			0 00 00												
TP <sub>12</sub>	0			+4.9	H <sub>i</sub>			+4.9	1100.3		T	0	0	263272	1,229,861
210	28		227 00 (357° 50')		5.7	91 -	-0.5	-6.2				+28	-1	263300	1,229,860



SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
6-7-84		B. Cotcamp		R. Trowbridge		6834		R.T. CT		1	26						
AREA		TOPO MAP		STATE	COUNTY	TWP	RANGE	PPM	PARTY MANAGER								
OREGON		Monroe - 15		ORE.	BENTON				L.O. Davis								
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS	
														Y	X		
			notes → (92.05)						1051.9								
TP <sub>1</sub>	555		48° 37' 42"		6.5	94° 40'	-45.1	-51.6		1000.3	TP	-462	-304	263557	1,229,555		
TP <sub>1</sub>	555		(213° 20' 58")		6.6	265° 20'	-45.1	-51.7			TP						
TP <sub>1x</sub>			0 00 00														
TP <sub>1</sub>	0				+5.05	H.i.		5.1	1005.4		TP	0	0	263557	1,229,555		
215	107		193° 00' (226° 21')		7.3	93° -	-5.6	-12.9		992.5		-74	-77	263483	1,229,478		
TP <sub>2</sub>	317		191° 44' 44"		2.7	93° -	-16.6	-19.3			TP	-223	-224	263334	1,229,331		
TP <sub>2</sub>	317		(225° 05' 42")		2.6	267° -	-16.6	-19.2		986.2	TP						
TP <sub>1</sub>			0 00 00														
TP <sub>2</sub>	0				+5.05	H.i.		5.1	991.3		TP	0	0	263334	1,229,331		
216	109		137° 00' (182° 06')		5.3	-		-5.3		986.0		-109	-4	263225	1,229,327		
TP <sub>3</sub>	413		129° 28' 31"		4.3	91° -	-7.2	-11.5			TP	-411	+39	262923	1,229,370		
TP <sub>3</sub>	413		(174° 34' 13")		4.2	269° -	-7.2	-11.4		979.9	TP						
TP <sub>2</sub>			0 00 00														
TP <sub>3</sub>	0				+5.0	H.i.		+5.0	984.9		TP	0	0	262923	1,229,370		
217	37		242° 00' (236° 34')		4.8	74°	+0.2	-4.6		980.3		-20	-31	262903	1,229,339		
218	364		229° 30' (224° 04')		4.9	88° 30'	+9.5	+4.6		989.5		-262	-253	262666	1,229,117		
TP <sub>4</sub>	519		228° 28' 05"		7.1	89° -	+9.1	+2.0		986.9	TP	-379	-354	262544	1,229,016		
TP <sub>4</sub>	519		(223° 02' 18")		7.1	271° -	+9.1	+2.0			TP						
TP <sub>3</sub>			0 00 00														
TP <sub>4</sub>	0				+4.95	H.i.		5.0	991.9		TP	0	0	262544	1,229,016		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 6-7-84	INSTRUMENT MAN B. Cotcamp	ROD MAN R. Trowbridge	PARTY NUMBER 6834	NOTES CHECKED BY R.T. CT	LINE NO. 1	PAGE 27
AREA OREGON	TOPO MAP Monroe - 15	STATE ORE.	COUNTY BENTON	TWP	RANGE	PPM
			PARTY MANAGER L.O. Davis			

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
			plates → (9 & 05)						991.9						
219	175		180° 20' (223° 22')		9.7	91° -	-3.1	-12.8		979.1		-127	-120	262,417	1,228,896
TP5	289		180° 08' 44"		5.1	92° 30'	-12.6	-17.7		974.2	TP	-211	-198	262,333	1,228,818
TP5	289		(223° 11' 02")		5.0	267° 30'	-12.6	-17.6			TP				
TP4			0 00 00												
TP5	0				+5.05	H.i.		5.1	979.3		TP	0	0	262,333	1,228,818
220	215		193° 10' (236° 21')		8.4	91° 20'	-5.0	-13.4		965.9		-119	-179	262,214	1,228,639
221	543		192° 50' (236° 01')		8.3	91° 20'	-12.6	-20.9		958.4		-304	-450	262,029	1,228,368
TP6	486		192° 48' 36"		4.8	91° 50'	-15.5	-20.3		959.0	TP	-272	-403	262,061	1,228,415
TP6	486		(236° 59' 38")		4.7	268° 10'	-15.5	-20.2			TP				
TP5			0 00 00												
TP6	0				+5.1	H.i.		+5.1	964.1		TP	0	0	262,061	1,228,415
TP7	337		163° 20' 41"		6.6	92° -	-11.8	-18.4			TP	-260	-213	261,801	1,228,202
TP7	337		(219° 20' 19")		6.5	268° -	-11.8	-18.3		945.8	TP				
TP6			0 00 00												
TP7	0				+5.05	H.i.		5.1	950.9		TP	0	0	261,801	1,228,202
222	50		205° 00' (244° 20')		5.7	91° -	-0.9	-6.6		944.3		-22	-45	261,779	1,228,157
223	377		191° 05' (230° 25')		7.9	91° -	-6.6	-14.5		936.4		-240	-291	261,561	1,227,911
TP8	472		191° 59' 42"		7.9	91° -	-8.2	-16.1		934.8	TP	-295	-368	261,506	1,227,834
TP8	472		(231° 20' 01")		7.8	269° -	-8.2	-16.0			TP				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
6.7.84		B. Cotcamp		R. Trowbridge		6834		C.T. R.T.		1		28			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
ORE.		Monroe - 15		ORE.		Benton								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
TP <sub>7</sub>			0 00 00						934.8						
TP <sub>8</sub>	0				+5.05	M.		5.1	939.9		T	0	0	261506	1,227,834
224	235		196° 35' (277° 55')		6.3	91° -	-4.1	-10.4		929.5		-88	-218	261418	1,227,616
TP <sub>9</sub>	346		192° 20' 12"		5.8	92° -	-12.1	-17.9			TP	-153	-310	261353	1,227,524
TP <sub>9</sub>	346		(243° 40' 13")		5.7	268° -	-12.1	-17.8		922.1	TP				
TP <sub>8</sub>			0 00 00												
TP <sub>9</sub>	0				+5.1	M.		+5.1	927.2		T	0	0	261353	1,227,524
225	216		177° 10' (246° 50')		5.0	93° -	-11.3	-16.3		910.9		-105	-189	261248	1,227,335
TP <sub>10</sub>	367		176° 31' 59"		6.3	93° 30'	-22.4	-28.7			TP	-182	-318	261171	1,227,206
TP <sub>10</sub>	367		(240° 12' 12")		6.2	266° 30'	-22.4	-28.6		898.6	TP				
TP <sub>9</sub>			0 00 00												
TP <sub>10</sub>	0				+5.05	M.		5.1	903.7		T	0	0	261171	1,227,206
226	178		193° 15' (253° 21')		8.8	91° -	-3.1	-11.9		891.8		-51	-171	261120	1,227,035
TP <sub>11</sub>	445		190° 47' 36"		2.5	-	-	-2.5			TP	-145	-421	261026	1,226,785
TP <sub>11</sub>	445		(250° 59' 48")		4.8	TH	+2.2	-2.6		901.1	TP				
TP <sub>10</sub>			0 00 00												
TP <sub>11</sub>	0				+4.95	M.		5.0	906.1		T	0	0	261026	1,226,785
227	62		149° 30' (220° 30')		5.7	88° -	+2.2	-3.5		902.6		-47	-40	260999	1,226,745
228	390		139° 47' (210° 47')		7.1	91° -	-6.8	-13.9		892.2	TP	-335	-200	260191	1,226,585

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
6-7-84		B. Cotcamp		R. Trowbridge		6834		R.T. C.T.		1		29			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
OREGON		MONROE -15		ORE.		BENTON								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									906.1						
TP <sub>12</sub>	439		139° 44' 12"		4.8	91° -	-7.7	-12.5			TP	-377	-224	260649	1,226,561
TP <sub>12</sub>	439		(210° 44' 00")		4.7	269° -	-7.7	-12.4		893.7	TP				
TP <sub>11</sub>			0 00 00												
TP <sub>12</sub>	0		(229° 24' 35")		+ 5.0	Hi		+5.0	898.7		TP	0	0	260649	1,226,561
TP	133		198° 40' 35"		7.3	89° -	+2.3	-5.0		893.7	TP	-87	-101	260562	1,226,460
229	282		196° 30' 23"		4.7	91° 40'	-8.2	-12.9		885.8	TP	-191	-207	260458	1,226,354
229	282		(227° 14' 23")		5.5	91° 30'	-7.4	-12.9			TP				
TP <sub>12</sub>			0 00 00												
229	0				+ 5.05	Hi		+5.1	890.9		TP	0	0	260458	1,226,354
TP <sub>13</sub> <sup>230</sup>	329		195° 20' (242° 34')		8.8	91° -	-5.7	-14.5		876.4	TP	-152	-292	260306	1,226,062
TP <sub>13</sub>	282		194° 19' 35"		5.1	92° -	-9.8	-14.9			TP	-134	-248	260324	1,226,106
TP <sub>13</sub>	282		(241° 33' 58")		5.0	268° -	-9.8	-14.8		876.1	TP				
229			0 00 00												
TP <sub>13</sub>	0				+ 4.95	Hi		5.0	881.1		TP	0	0	260324	1,226,106
TP <sub>14</sub>	340		173° 29' 26"		5.0	-		-5.0		876.1	TP	-195	-279	260129	1,225,827
TP <sub>14</sub>	340		(235° 03' 24")		5.0	270° -		-5.0			TP				
TP <sub>13</sub>			0 00 00												
TP <sub>14</sub>	0				+ 4.85	Hi		+4.9	881.0		TP	0	0	260129	1,225,827
230	51		236° 00' (291° 03')		5.3	-		-5.3		875.7		+18	-48	260145	1,225,779
232	378		230° 05' (285° 08')		7.8	-		-7.8		873.2		+99	-365	260228	1,225,462

SURVEY NOTES-HIGH RESOLUTION DATA

GEO--445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
6-7-84		B. Cotcamp		R. Trowbridge		6834		R.T. C.T.		1		30			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
OREGON		MONROE 15'		OREGON		BENTON								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
			plates → (geoids)						881.0						
233	702		229° 25' (284° 28')		5.0	-	-5.0		876.0			+175	-680	260304	1,225,147
TP <sub>14</sub>	749		229° 31' 25"		6.3	-	-6.3			TP		+189	-725	260318	1,225,102
TP <sub>14</sub>	749		(284° 34' 49")		6.2	270° -	-6.2		874.8	TP					
TP <sub>13</sub>			0 00 00												
TP <sub>14</sub>	0				+4.55	Hi	4.6		879.4	X		0	0	260318	1,225,102
234	291		196° 40' (301° 15')		5.3	-	-5.3		874.1			+151	-249	260469	1,224,853
235	621		196° 52' (301° 27')		11.1	-	-11.1		868.3			+324	-530	260642	1,224,572
TP <sub>16</sub>	731		196° 56' 55"		8.7	-	-8.7			TP		+382	-623	260700	1,224,479
TP <sub>16</sub>	731		(301° 31' 44")		8.6	270° -	-8.6		870.8	TP					
TP <sub>14</sub>			0 00 00												
TP <sub>16</sub>	0				+4.9	Hi	4.9		875.7	X		0	0	260700	1,224,479
236	223		191° 30' (313° 02')		6.2	89° -	+3.9 -2.3		873.4			+152	-163	260852	1,224,316
TP <sub>17</sub>	493		188° 42' 24"		10.6	-	-10.6		865.1	TP		+318	-376	261018	1,224,103
TP <sub>17</sub>	493		(310° 14' 08")		8.1	84° -	-2.5 -10.6			TP					
TP <sub>16</sub>			0 00 00												
TP <sub>17</sub>	0				+5.15	Hi	5.2		870.3	X		0	0	261018	1,224,103
237	59		165° 40' (295° 54')		6.2	89° -	+1.0 -5.2		865.1			+26	-53	261044	1,224,050
YF	230		(291° 46' 08")		5.3	89° -	+4.0 -1.3		869.0			+85	-214	261103	1,223,889
TP <sub>18</sub>	259		161° 02' 32"		5.5	89° -	+4.5 -1.0		869.3	TP		+94	-241	261112	1,223,862
TP <sub>18</sub>	259		(291° 16' 40")		5.4	271° -	+4.5 -0.9			TP					

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SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	6-7-84	INSTRUMENT MAN	B. Cotearp	ROD MAN	R. TROWBRIDGE	PARTY NUMBER	6834	NOTES CHECKED BY	R.T. CT	LINE NO.	1	PAGE	31
AREA	OREGON	TOPO MAP	MONROE - 15	STATE	ORE.	COUNTY	BENTON	TWP		RANGE		PPM	
PARTY MANAGER L.O. Davis													

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
			plates → (gaids)											
TP <sub>17</sub>			0 00 00						869.3					
TP <sub>18</sub>	0			+5.15	4i			+5.1	874.4		π	0	0	261,112 1,223,862
238	127		158° 45' (270° 02')		6.4	91° -	-2.2	-8.6		865.8		±0	-127	261,112 1,223,735
239	457		155° 20' (266° 37')		8.7	91° -	-8.0	-16.7		857.7		-27	-456	261,085 1,223,406
240	887.87		155° 00' (266° 17')		6.9	91° -	-13.7	-20.6		853.8		-51	-785	261,061 1,223,677
241	1117		" " " "		8.4	91° -	-19.5	-27.9		846.5		-72	-1115	261,040 1,222,747
242	1446		154° 19' 14"		7.1	91° 10'	-29.4	-36.5		837.4	TP	-111	-1441	261,001 1,222,421
242	1446		(265° 35' 54")		7.0	268° 50'	-29.4	-36.4			TP			
TP <sub>18</sub>			0 00 00											
242	0			+5.0	4i			+5.0	842.9		π	0	0	261,001 1,222,421
243	330		177° 30' (263° 06')		6.2	90° 40'	-3.8	-10.0		832.9		-40	-328	260,961 1,222,093
TP <sub>19</sub>	526		176° 32' 06"		5.4	91° -	-9.2	-14.6		828.3	TP	-72	-521	260,929 1,221,900 <small>b-260,970 x-1,221,860 on TP before</small>
TP <sub>19</sub>	526		(262° 08' 00")		5.3	269° -	-9.2	-14.5			TP			
242			0 00 00											
TP <sub>19</sub>	0			+4.95	4i			4.9	833.2		π	0	0	260,929 1,221,900
#	101		225° 15' 30" / 143° 07' 30"		5.3	89° -	+1.8	-3.5		829.7				
244	131		146° 00' (228° 08')		5.2	89° -	+2.3	-2.9		830.3		-87	-98	260,842 1,221,802
245	461		143° 40' (225° 48')		6.2	89° 30'	+4.0	-2.2		831.0		-321	-331	260,608 1,221,569
246	791		142° 30' (224° 38')		8.7	89° 30'	+6.9	-1.8		831.4		-563	-556	260,366 1,221,344

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 6.7.84	INSTRUMENT MAN B. Cotcamp	ROD MAN R. Trowbridge	PARTY NUMBER 6834	NOTES CHECKED BY R.T. C.T.	LINE NO. 1	PAGE 32
AREA Oregon	TOPO MAP MONROE - 15'	STATE ORE.	COUNTY Benton	TWP	RANGE	PPM
			PARTY MANAGER L.O. Davis			

STATION NO.	SLOPE DISTANCE	PLOTting DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS
														Y	X	
			Plates → (98105)						833.2							
TP <sub>20</sub>	836		142° 05' 26"		6.5	89° 40'	+4.9	-1.6			TP	-599	-583	260330	1,221,317	
TP <sub>20</sub>	836		(224° 13' 26")		6.4	276° 20'	+4.9	-1.5X		831.7	TP					
TP <sub>19</sub>			0 00 00													
TP <sub>20</sub>	0				+5.05	H.I.		+5.1	836.8		T	0	0	260330	1,221,317	
IF	153		(217° 21' 54") 173° 00' 11"		6.4	89° -	+2.7	-3.7		833.1		-121	-93	260209	1,221,224	y = 260,250 x = 1,221,170 y = Inter.
247	283		175° 20' (219° 33')		7.3	88° 10'	+9.1	+1.8		838.6		-218	-180	260112	1,221,137	
248	613		" " " "		8.0	88° 10'	+19.6	+11.6		848.4		-473	-390	259,857	1,220,927	
TP <sub>21</sub>	732		174° 28' 41"		7.2	88° 30'	+19.2	+12.0X		848.8	TP	-571	-458	259,759	1,220,859	
TP <sub>21</sub>	732		(218° 42' 07")		7.3	271° 30'	+19.2	+11.9			TP					
TP <sub>20</sub>			0 00 00													
TP <sub>21</sub>	0				+4.95	H.I.		+5.0	853.8		T	0	0	259,759	1,220,859	
249	213		187° 00' (225° 42')		5.6	74	+1.1	-4.5		849.3		-149	-152	259,610	1,220,707	
250	543		186° 50' (225° 32')		8.2	-		-8.2		845.6		-380	-388	259,379	1,220,471	
TP <sub>A</sub>	620		187° 08' 55"		8.3	-		-8.3X		845.5	TP	-432	-445	259,327	1,220,414	
TP <sub>A</sub>	620		(225° 51' 02")		5.2	84	-3.1	-8.3			TP					
TP <sub>21</sub>			0 00 00													
TP <sub>A</sub>	0				+5.1	H.I.		+5.1	850.6		T	0	0	259,327	1,220,414	
251	254		206° 10' (252° 01')		8.2	-		-8.2		842.4		-78	-242	259,249	1,220,172	
TP <sub>B</sub>	371		204° 51' 10"		6.1	90° 40'	-4.3	-10.4		840.2	TP	-123	-350	259,204	1,220,064	
TP <sub>B</sub>	371		(250° 42' 12")		6.1	269° 20'	-4.3	-10.4			TP					

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 6.8.84	INSTRUMENT MAN B. Cotcamp		ROD MAN R. Trowbridge	PARTY NUMBER 6834	NOTES CHECKED BY C.T. R.T.	LINE NO. 1	PAGE 33
AREA Oregon	TOPO MAP monroe - 15	STATE OR	COUNTY BENTON	TWP	RANGE	PPM	PARTY MANAGER L.O. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
TPA			Plates → (geoids) 0 00 00						840.2					
TPB	0				+5.05	Hi		+5.1	845.3		π	0	0	259204   1,220,064
252	206		151° 20' (222° 02')		10.1	-		-10.1		835.2		-153	-138	259051   1,219,926
TPc	406		150° 47' 44"		10.5	-		-10.5			TP	-300	-265	258904   1,219,799
TPc	400		(221° 29' 56")		10.4	270° -		-10.4		834.9	TP			
TPB			0 00 00											
TPc	0				+4.95	Hi		+5.0	839.9		π	0	0	258904   1,219,799
253	143		220° 40' (262° 10')		5.0	-		-5.0		834.9		-19	-142	258865   1,219,657
254	473		222° 30' (264° 00')		6.1	-		-6.1		833.8		-49	-470	258855   1,219,329
255	803		221° 40' (263° 10')		12.1	-		-12.1		827.8		-96	-797	258808   1,219,002
256	1132		221° 20' (262° 50')		6.7	90° 30'	-9.8	-16.6		823.3		-141	-1123	258763   1,218,676
TPD	1427		221° 20' 35"		1.0	90° 25' 40"	-10.6	-11.6			TP	-178	-1416	258726   1,218,383
TPD	1427		(262° 50' 31")		1.0	269° 34' 13"	-10.7	-11.7		828.3	TP			
TPc			0 00 00											
TPD	0				+3.55	Hi		3.6	831.9		π	0	0	258726   1,218,383
257	34		150° 30' (233° 21')		5.0	86° -	+24	-2.6		829.3		-20	-27	258706   1,218,350
TPe	280		122° 43' 51"		5.3	87° 20'	+13.0	+7.7		839.6	TP	-252	-121	258474   1,218,262
TPe	280		(265° 34' 22")		6.2	87° 10'	+13.8	+7.6			TP			
TPD			0 00 00											
TPe	0				+4.55	Hi		+4.6	844.2		π	0	0	258474   1,218,262

⊙ through trees

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE				
6.8.84		B. Cotcamp		R. Trowbridge		6834		R.T. C.T.		1	34				
AREA		TOPO MAP	STATE	COUNTY	TWP	RANGE	PPM	PARTY MANAGER							
OREGON		Monroe - 15	ORE.	Benton				L.O. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									844.2						
258	90		137° 00' (162° 34')		11.7	92°	-3.1	-14.8		829.4		-86	+27	258388	1,218,289
TP <sub>F</sub>	111		181° 10' 35"		14.3	92°	-3.9	-18.2			TP	-99	-50	258375	1,218,212
TP <sub>F</sub>	111		(206° 44' 57")		13.9	92° 10'	-4.2	-18.1		826.1	TP				
TP <sub>E</sub>			0 00 00												
TP <sub>F</sub>	0				+5.0	H.		+5.0	831.1		TP	0	0	258375	1,218,212
259	255		305° 10' 30"		5.8	92° 20'	-10.4	-16.2			TP	+225	-120	258600	1,218,092
259	255		(331° 55' 27")		5.7	267° 40'	-10.4	-16.1		815.0	TP				
TP <sub>F</sub>			0 00 00												
259	0				+4.95	H.		+5.0	820.0		TP	0	0	258600	1,218,092
260	321		156° 00' (302° 55')		7.9	86°	+22.4	+14.5		834.5		+197	-253	258797	1,217,839
TP <sub>G</sub>	541		154° 06' 35"		4.8	86° 10'	+36.2	+31.4		851.4	TP	+318	-437	258918	1,217,655
TP <sub>G</sub>	541		(306° 02' 02")		4.8	273° 50'	+36.2	+31.4			TP				
259			0 00 00												
TP <sub>G</sub>	0				+5.0	H.		+5.0	856.4		TP	0	0	258918	1,217,655
261	108		163° 05' (289° 09')		5.1	89°	+1.9	-3.2		853.2		+35	-102	258953	1,217,553
TP <sub>M</sub>	206		158° 04' 07"		3.7	-	-	-3.7		852.7	TP	+50	-200	258968	1,217,455
TP <sub>M</sub>	206		(284° 06' 09")		3.1	96° 10'	-0.6	-3.7			TP				
TP <sub>G</sub>			0 00 00												
TP <sub>M</sub>	0				+5.1	H.		+5.1	857.8		TP	0	0	258968	1,217,455
262	223		147° 10' (251° 16')		6.7	-	-	-6.7		851.1		-72	-211	258896	1,217,244

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445




Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
6.8.84		B. Cotcamp		R. TROWBRIDGE		6834		R.T. C.T.		1		35			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
OREGON		manroe - 15		ORE.		BENTON								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
			plates → (geoids)						857.8						
TPi	280		147° 20' 50"		7.1	-		-7.1		850.7	TP	-89	-265	258,879	1,217,190
TPi	280		(251° 26' 59" )		8.5	TH	+1.4	-7.1			TP				
TPH			0 00 00												
TPi	0				+5.0	Hi		+5.0	855.7		TP	0	0	258,879	1,217,190
263	267		204° 10' (275° 37')		4.9	-		-4.9		850.8		+24	-266	258,905	1,216,924
TPs	240		203° 11' 12"		5.7	-		-5.7			TP	+19	-239	258,898	1,216,951
TPs	240		(274° 38' 11" )		5.6	270-		-5.6		850.1	TP				
TPi			0 00 00												
TPs	0				+5.05	Hi		+5.1	855.2		TP	0	0	258,898	1,216,951 creek crossing
264	345		140° 20' (234° 58')		9.3	88°	+12.0	+2.7		857.9		-198	-282	258,700	1,216,669
TPk	372		140° 08' 28"		3.2	89-	+6.5	+3.3			TP	-215	-304	258,683	1,216,647
TPk	372		(234° 46' 39" )		6.4	88° 30'	+9.7	+3.3		858.5	TP				
TPs			0 00 00												
TPk	0				+5.1	Hi		+5.1	863.6		TP	0	0	258,683	1,216,647
265	306		203° 15' (258° 02')		6.7	89-	+5.3	-1.4		862.2		-63	-299	258,620	1,216,348
TPi	386		202° 04' 55"		6.1	89-	+6.7	+0.6			TP	-88	-376	258,595	1,216,271
TPi	386		(256° 51' 34" )		6.0	271-	+6.7	+0.7		864.3	TP				
TPk			0 00 00												
TPi	0				+4.95	Hi		+5.0	869.3		TP	0	0	258,595	1,216,271
266	239		160° 10' (237° 02')		5.7	87° 30'	+10.4	+4.7		874.0		-130	-201	258,465	1,216,070

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445




Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
6.8.84		B. Cotnam		R. Trowbridge		6834		R.T. CT		1	36						
AREA		TOPO MAP		STATE	COUNTY	TWP	RANGE	PPM	PARTY MANAGER								
OREGON		MONROE - A-SEA - 15		ORE.	Benton				L.O. Davis								
STATION NO.	 SLOPE DISTANCE	 PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	 VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES Y X		REMARKS	
									869.3								
TP <sub>n</sub>	360		159° 58' 04"		7.3	88° 30'	+9.4	+2.1		871.4	TP	-197	-301	258398	1,215,970		
TP <sub>n</sub>	360		(236° 49' 38")		7.4	271° 30'	+9.4	+2.0			TP						
TP <sub>o</sub>			0 00 00														
TP <sub>n</sub>	0				+5.0	Mi		+5.0		876.4	TP	0	0	258398	1,215,970		
267	217		211° 55' (208° 45')		7.8	91° 30'	-5.7	-13.5		862.9		-5	-217	258393	1,215,753		
TP <sub>n</sub>	297		212° 55' 16"		6.1	92° -	-10.4	-16.5			TP	-1	-297	258397	1,215,673		
TP <sub>n</sub>	297		(260° 44' 54")		6.0	268° -	-10.4	-16.4		860.0	TP						
TP <sub>n</sub>			0 00 00														
TP <sub>n</sub>	0				+4.95	Mi		+5.0		865.0	TP	0	0	258397	1,215,673		
268	246		193° 50' (283° 35')		5.2	93° -	-12.9	-18.1		866.9		+58	-239	258455	1,215,434		
TP <sub>o</sub>	274		191° 12' 22"		5.6	93° -	-14.3	-19.9		845.1	TP	+52	-269	258449	1,215,404		
TP <sub>o</sub>	274		(280° 57' 16")		4.8	93° 10'	-15.1	-19.9			TP						
TP <sub>n</sub>			0 00 00														
TP <sub>o</sub>	0				+4.9	Mi		+4.9		850.0	TP	0	0	258449	1,215,404		
269	296		131° 00' (231° 57')		7.0	91° 20'	-6.9	-13.9		836.1		-182	-233	258267	1,215,171		
TP <sub>o</sub>	237		130° 49' 12"		6.0	92° -	-8.3	-14.3		835.7	TP	-147	-186	258302	1,215,218		
TP <sub>o</sub>	237		(231° 46' 28")		5.3	92° 10'	-9.0	-14.3			TP						
TP <sub>o</sub>			0 00 00														
TP <sub>o</sub>	0				+5.0	Mi		+5.0		840.0	TP	0	0	258302	1,215,218		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE					
6.8.84		B. Cotcamp		R. Trowbridge		6834		R.T. CT.		1	37					
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER					
OREGON		ASEA-15		OREGON		BENTON					L.O. Davis					
STATION NO.	 SLOPE DISTANCE	 PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	 VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS
			plates → (geoids)						840.7					Y	X	
TP <sub>a</sub>	209		174° 12' 01"		7.0	-		-7.0			TP	-145	-150	258,157	1,215,068	
TP <sub>a</sub>	209		(225° 58' 29")		6.9	270° -		-6.9		833.8	TP					
TP <sub>p</sub>			0 00 00													
TP <sub>a</sub>	0				+4.85	Hi.		+4.9	838.7		TP	0	0	258,157	1,215,068	
270	183		206° 00' (251° 58')		6.9	91° -	-3.2	-10.1		828.6		-57	-174	258,100	1,214,894	
TP <sub>R</sub>	335		206° 48' 34"		5.6	91° -	-5.8	-11.4			TP	-99	-320	258,058	1,214,748	
TP <sub>R</sub>	335		(252° 47' 03")		5.5	269° -	-5.8	-11.3		827.4	TP					
TP <sub>a</sub>			0 00 00													
TP <sub>R</sub>	0				+4.8	Hi.		+4.8	832.2		TP	0	0	258,058	1,214,748	
271	181		193° 30' (266° 17')		6.0	87° -	+9.5	+3.5		835.7		-12	-181	258,046	1,214,567	
TP <sub>s</sub>	477		192° 48' 20"		6.9	81° 10'	+23.6	+16.7		848.9	TP	-37	-475	258,021	1,214,273	
TP <sub>s</sub>	477		(265° 35' 23")		5.5	87° 20'	+22.2	+16.7			TP					
TP <sub>R</sub>			0 00 00													
TP <sub>s</sub>	0				+4.9	Hi.		+4.9	853.8		TP	0	0	258,021	1,214,273	
272	37		210° 35' (296° 10')		5.4	89° -	+0.6	-4.8		849.0		+16	-33	258,037	1,214,240	
TP <sub>p</sub>	174		197° 18' 02"		5.0	-		-5.0		848.8	TP	+39	-170	258,060	1,214,103	
TP <sub>p</sub>	174		(282° 53' 25")		5.9	TH	+0.9	-5.0			TP					
TP <sub>s</sub>			0 00 00													
TP <sub>p</sub>	0				+4.8	Hi.		+4.8	853.6		TP	0	0	258,060	1,214,103	

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
6.8.84		B. Cotcamp		R. Trowbridge		6834		R.T. CT		1		38			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
OREGON		ALSEA-15		ORE.		BENTON								L. O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
			plates → (grids)						853.6						
273	195		198° 44' (301' 37")		7.8	91° -	-3.4	-11.2		842.4		+102	-166	258162	1,213,937
274	525		197° 42' (300' 35")		7.4	91° 30'	-13.7	-21.1		832.5		+267	-452	258327	1,213,651
TP <sub>w</sub>	780		197° 16' 17"		8.5	91° 30'	-20.4	-28.9		824.8	TP	+392	-674	258452	1,213,429
TP <sub>w</sub>	780		(300° 09' 42")		8.4	268° 30'	-20.4	-28.8			TP				
TP <sub>w</sub>	0		0 00 00												
TP <sub>w</sub>	0				+5.0	H.I.		+5.0	829.8		T	0	0	258452	1,213,429
275	76		198° 30' (318° 40')		7.2	92° -	-2.7	-9.9		819.9		+57	-50	258509	1,213,379
TP <sub>w</sub>	289		195° 29' 55"		4.2	95° -	-25.2	-29.4		800.4	TP	+206	-201	258658	1,213,228
TP <sub>w</sub>	289		(315° 39' 37")		4.2	265° -	-25.2	-29.4			TP				
TP <sub>w</sub>			0 00 00												
TP <sub>w</sub>	0				+5.1	H.I.		+5.1	805.5		T	0	0	258658	1,213,228
276	118		199° 00' (334° 40')		6.9	94° -	-8.2	-15.1		790.4		+107	-50	258765	1,213,178
TP <sub>w</sub>	297		198° 23' 36"		6.6	94° -	-20.7	-27.3			TP	+266	-130	258924	1,213,098
TP <sub>w</sub>	297		(334° 03' 13")		6.7	266° -	-20.7	-27.4		778.2	TP				
TP <sub>w</sub>			0 00 00												
TP <sub>w</sub>	0				+4.95	H.I.		5.0	783.2		T	0	0	258924	1,213,098
277	148		150° 20' (304° 22')		6.7	92° 30'	-6.5	-13.2		770.0		+84	-122	259008	1,212,976
TP <sub>w</sub>	271		148° 40' 32"		6.5	93° 10'	-15.0	-21.5		761.7	TP	+146	-228	259070	1,212,870
TP <sub>w</sub>	271		(302° 43' 46")		5.7	93° 20'	-15.8	-21.5			TP				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
6.8.84		B. Cotcamp		R. Trowbridge		6834		R.T. CT		1	39						
AREA		TOPO MAP		STATE	COUNTY		TWP	RANGE	PPM	PARTY MANAGER							
OREGON		ALSEA - 15'		ORE.	BENTON					L.O. Davis							
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
			Plates → (grids)						761.7								
TP <sub>w</sub>			0° 00' 00"														
TP <sub>x</sub>	0				4.85 Hi			4.8	766.5		π	0	0	259,070	1,212,870		
278	206		193° 00' (315° 44')		7.2	94° -	-14.4	-21.6		744.9		+148	-144	259,218	1,212,726		
TP <sub>y</sub>	399		191° 19' 24"		2.2	95° -	-34.8	-37.08		729.5	TP	+276	-286	259,346	1,212,584		
TP <sub>y</sub>	399		(314° 03' 09")		2.1	265° -	-34.8	-36.9			TP						
TP <sub>x</sub>			0 00 00														
TP <sub>y</sub>	0				4.95 Hi			4.9	734.4		π	0	0	259,346	1,212,584		
279	137		161° 30' (295° 33')		7.7	91° 20'	-3.2	-10.9		723.5		+59	-124	259,405	1,212,460		
280	467		162° 30' (296° 33')		9.9	91° 20'	-10.9	-20.8		713.6		+209	-418	259,555	1,212,166		
TP <sub>z</sub>	646		159° 04' 08"		6.0	91° 30'	-16.9	-22.98		711.5	TP	+254	-594	259,600	1,211,990		
TP <sub>z</sub>	646		(293° 07' 17")		5.9	268° 30'	-16.9	-22.88			TP						
TP <sub>y</sub>			0 00 00														
TP <sub>z</sub>	0				5.05 Hi			5.0	716.5		π	0	0	259,600	1,211,990		
#	25		(249° 26' 22") 136° 19' 05"		4.8	89° 54'	-0.0	-4.8		711.7							
281	113		147° 25' (260° 32')		6.8	88° 10'	+4.6	-2.2		714.3		-24	-141	259,576	1,211,849		
282	468		135° 55' (249° 02')		6.8	88° 30'	+12.3	+5.5		722.0		-167	-437	259,433	1,211,553		
TP <sub>1</sub>	611		136° 40' 29"		6.2	88° 50'	+12.4	+6.2		722.7	TP	-211	-573	259,389	1,211,417		
TP <sub>1</sub>	611		(249° 47' 46")		6.1	271° 10'	+12.4	+6.3			TP						
TP <sub>z</sub>			0 00 00														
TP <sub>1</sub>	0				4.85 Hi			4.8	727.5		π	0	0	259,389	1,211,417		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 6.8.84	INSTRUMENT MAN B. Cotcamp	ROD MAN R. Trowbridge	PARTY NUMBER 6834	NOTES CHECKED BY R.T. CT	LINE NO. 1	PAGE 40
AREA OREGON	TOPO MAP ALSEA-15'	STATE ORE.	COUNTY BENTON	TWP	RANGE	PPM
				PARTY MANAGER L.O. Davis		

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									727.5						
283	195		211° 05' (280° 53')		4.8	91°	-3.4	-8.2		719.3		+ 37	-191	259426	1,211,226
284	525		268° 00' (277° 48')		5.5	91°	-9.2	-14.7		712.8		+ 71	-520	259460	1,210,897
285	855		207° 28' (277° 16')		7.7	91°	-14.9	-22.6		704.9		+ 108	-848	259497	1,210,569
286	1185		207° 17' (277° 05')		10.0	91°	-26.7	-30.7		696.8		+ 146	-1176	259535	1,210,241
TP	1348		207° 12' 56"		9.7	91° 10'	-27.4	-37.1		690.4	TP	+165	-1338	259554	1,210,079
TP	1348		(277° 00' 42")		9.6	268° 50'	-27.4	-37.0			TP				
TR			0° 00' 00"												
TP	0				+4.85	H;		+4.8		695.2	X	0	0	259554	1,210,079
287	172		200° 15' (299° 16')		5.6	93°	-9.0	-14.6		680.6		+ 79	-153	259633	1,209,926
288	500		196° 00' (293° 01')		8.8	93°	-26.2	-35.0		660.2		+ 196	-460	259750	1,209,619
TP	762		196° 11' 34"		5.2	92° 30'	-33.2	-38.4		656.8	TP	+300	-700	259854	1,209,379
TP	762		(293° 12' 16")		5.1	267° 30'	-33.2	-38.3			TP				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 6.10.84	INSTRUMENT MAN B. Cotcamp		ROD MAN R. Trowbridge	PARTY NUMBER 6834	NOTES CHECKED BY R.T. CT	LINE NO. 1	PAGE 41
AREA ORE.	TOPO MAP ALSEA - 15	STATE OREGON	COUNTY BENTON	TWP	RANGE	PPM	PARTY MANAGER L.O. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
TP			0 00 00													
TP <sub>A</sub>	0				+ 5.0	H <sub>i</sub>		+5.0	661.8		T	0	0	259,854	1,209,379	See spot taken
289	94		250 30 (3 42)		6.4	88°	+ 3.3	-3.1		658.7		+ 94	+ 6	259,948	1,209,385	
TP <sub>1</sub>	223		255 06 33		5.0	89°	+ 3.9	-1.1		660.7	TP	+ 221	+ 32	260,075	1,209,411	grid Azim. corrected
TP <sub>1</sub>	223		(8° 16' 13")		4.9	271°	+ 3.9	-1.0			TP					From 8° 18' 49" to 8° 16' 13"
TP <sub>A</sub>			0 00 00													
TP <sub>1</sub>	0				+ 5.2	H <sub>i</sub>		+5.2	665.9		T	0	0	260,075	1,209,411	
290	202		192 20 (20 36)		6.7	89°	+ 3.5	-3.2		662.7		+ 189	+ 71	260,264	1,209,482	
291	531		189 20 (10 36)		9.7	89°	+ 9.3	-0.5		665.4		+ 506	+ 161	260,581	1,209,572	
TP <sub>2</sub>	575		187 09 26		5.3	89 30'	+ 5.0	-0.3			TP	+ 554	+ 153	260,629	1,209,564	
TP <sub>2</sub>	575		(15° 25' 39")		5.1	270° 30'	+ 5.0	-0.1	0.23	665.7	TP					
TP <sub>1</sub>			0 00 00													
TP <sub>2</sub>	0				+ 5.1	H <sub>i</sub>		+5.1	670.8		T	0	0	260,629	1,209,564	
TP <sub>3</sub>	168		117 43 04		6.3	-		-6.3		664.5	TP	+ 115	- 123	260,744	1,209,441	
TP <sub>3</sub>	168		(313° 08' 43")		5.4	BH	- 0.8	-6.2			TP					
TP <sub>2</sub>			0 00 00													
TP <sub>3</sub>	0				+ 5.0	H <sub>i</sub>		+5.0	669.5		T	0	0	260,744	1,209,441	
292	93		132 00 (265 09)		4.8	91°	- 1.6	-6.4		663.1		- 8	- 93	260,736	1,209,348	
TP <sub>4</sub>	337		113 48 09		5.3	-		-5.3		664.2	TP	- 132	- 310	260,612	1,209,131	
TP <sub>A</sub>	337		(246° 56' 52")		5.2	270°		-5.2			TP					

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
6.10.84		B. Cotcamp		R. Trowbridge		6834		R.T. CT		1		42			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
OREGON		ALSEA-15		OREGON		BENTON								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
			Plates → (gr. DS)												
TP <sub>3</sub>			0 00 00												
TP <sub>4</sub>	0				+5.05	M.		+5.0	669.2		TP	0	0	260612	1,209,131
293	82		207° 30' (274° 27')		5.2	89° -	+1.4	-3.8		665.4		+6	-82	260618	1,209,049
294	401		232° 58' (299° 55')		5.6	88° 50'	+8.2	+2.6		671.8		+200	-348	260812	1,208,783
295	728		236° 43' 42"		5.1	89° -	+12.7	+7.6			TP	+404	-606	261016	1,208,525
295	728		(303° 40' 34")		4.8	271° -	+12.7	+7.9	+7.7	676.9	TP				
TP <sub>4</sub>			0 00 00												
295	0				+5.15	M.		+5.1	682.0		TP	0	0	261016	1,208,525
296	330		185° 00' (308° 41')		5.1	89° 30'	+2.9	-2.2		679.8		+206	-258	261222	1,208,267
TP <sub>5</sub>	511		181° 16' 18"		7.9	74°	+2.6	-5.3			TP	+293	-419	261309	1,208,106
TP <sub>5</sub>	511		(304° 56' 52")		7.7	74° 270'	+2.6	-5.1	-5.23	676.8	TP				
TP <sub>4</sub> 295			0 00 00												
TP <sub>5</sub>	0				+4.7	M.		+4.7	681.5		TP	0	0	261309	1,208,106
297	153		136° 00' (260° 57')		6.3	-		-6.3		675.2		-24	-151	261285	1,207,955
298	483		132° 00' (256° 57')		6.9	91° -	-8.4	-15.3		666.2		-109	-471	261200	1,207,635
TP <sub>6</sub>	609		131° 47' 49"		5.8	91° 20'	-14.2	-20.0		661.5	TP	-140	-593	261169	1,207,513
TP <sub>6</sub>	609		(256° 44' 41")		5.7	268° 40'	-14.2	-19.9			TP				
TP <sub>5</sub>			0 00 00												
TP <sub>6</sub>	0				+4.85	M.		+4.8	666.3		TP	0	0	261169	1,207,513
299	219		233° 00' (309° 45')		5.8	93° -	-11.5	-17.3		649.0		+140	-168	261309	1,207,345

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE					
6.10.84		P. Cotcamp		R. Trowbridge		6834		R.T. CT		1		43					
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER			
OREgon		ALSEA - 15'		ORE.		BENTON								L.O. Davis			
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS	
														Y	X		
									666.3								
TP <sub>7</sub>	363		229° 01' 04"		8.2	93° -	-19.0	-27.2		639.1	TP	+212	-294	261,381	1,207,219		
TP <sub>7</sub>	363		(305° 45' 45")		8.1	267° -	-19.0	-27.1			TP						
TP <sub>6</sub>			0 00 00														
TP <sub>7</sub>	0				+5.0	H.		+5.0	644.1		X	0	0	261,381	1,207,219		
300	170		157° 00' (282° 46')		7.3	93° -	-8.9	-16.2		627.9		+38	-166	261,419	1,207,053		
301	498		150° 30' (276° 16')		8.7	92° -	-17.4	-26.1		618.0		+54	-495	261,435	1,206,724		
TP <sub>8</sub>	591		149° 51' 13"		0.8	92° -	-20.6	-21.4			TP	+58	-588	261,439	1,206,631		
TP <sub>8</sub>	591		(275° 36' 58")		0.5	268° -	-20.6	-21.1	-21.3	622.8	TP						
TP <sub>7</sub>			0 00 00														
TP <sub>8</sub>	0				+4.95	H.		+4.9	627.7		X	0	0	261,439	1,206,631		
302	257		254° 00' (349° 37')		5.4	87° -	+13.5	+8.1		635.8		+253	-46	261,692	1,206,585		
TP <sub>9</sub>	494		250° 15' 35"		8.4	87° -	+25.9	+17.5		645.2	TP	+478	-120	261,917	1,206,511		
TP <sub>9</sub>	494		(346° 52' 33")		8.3	273° -	+25.9	+17.6			TP						
TP <sub>8</sub>			0 00 00														
TP <sub>9</sub>	0				+5.0	H.		+5.0	650.2		X	0	0	261,917	1,206,511		
303	90		157° 15' (323° 08')		5.9	88° -	+3.1	-2.8		647.4		+72	-54	261,989	1,206,457		
TP <sub>10</sub>	277		139° 51' 43"		6.5	89° 10'	+4.0	-2.5		647.7	TP	+162	-225	262,079	1,206,286		
TP <sub>10</sub>	277		(305° 44' 16")		6.4	270° 50'	+4.0	-2.4			TP						
TP <sub>9</sub>			0 00 00														
TP <sub>10</sub>	0				+4.75	H.		+4.7	652.4		X	0	0	262,079	1,206,286		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 6.10.84	INSTRUMENT MAN B. Cotcamp	ROD MAN R. Trowbridge	PARTY NUMBER 6834	NOTES CHECKED BY R.T. CT	LINE NO. 1	PAGE 44
AREA OREGON	TOPO MAP ALSEA - 15'	STATE ORE.	COUNTY BENTON	TWP	RANGE	PPM
			PARTY MANAGER L.O. Davis			

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
			plates → (92.05)						652.4									
304	130		129° 35' (255° 19')		5.2	TH	+0.7	-4.6		647.8		-33	-126	262,046	1,206,160			
305	445		108° 25' (234° 09')		8.9	TH	+2.2	-6.7		645.7		-261	-361	261,818	1,205,925			
TP <sub>11</sub>	535		109° 20' 40"		6.9	-		-6.9			TP	-306	-439	261,773	1,205,847			
TP <sub>11</sub>	535		(235° 04' 56")		6.7	-		-6.7	-6.8	645.6	TP							
TP <sub>10</sub>			0 00 00															
TP <sub>11</sub>	0				+5.15	hi		+5.1	650.7		T	0	0	261,773	1,205,847			
306	236		222° 15' (277° 20')		5.3	-		-5.3		645.4		+30	-234	261,803	1,205,613			
307	566		222° 00' (272° 05')		7.3	89° 10'	+8.2	+0.9		651.6		+70	-562	261,843	1,205,285			
TP <sub>12</sub>	785		219° 43' 53"		5.5	89° 10'	+11.4	+5.9			TP	+66	-782	261,839	1,205,065			
TP <sub>12</sub>	785		(274° 48' 49")		5.2	270° 50'	+11.4	+6.2	+6.0	656.7	TP							
TP <sub>11</sub>			0 00 00															
TP <sub>12</sub>	0				+4.95	hi		+4.9	661.6		T	0	0	261,839	1,205,065			
308	110		146° 40' (241° 29')		5.9	88° -	+3.8	-2.1		659.5		-53	-97	261,786	1,204,968			
TP <sub>13</sub>	262		134° 56' 39"		7.4	88° -	+9.1	+1.7		663.4	TP	-169	-200	261,670	1,204,865			
TP <sub>13</sub>	262		(229° 45' 28")		7.3	272° -	+9.1	+1.8			TP							
TP <sub>12</sub>			0 00 00															
TP <sub>13</sub>	0				+5.0	hi		+5.0	668.4		T	0	0	261,670	1,204,865			
309	169		148° 15' (198° 00')		6.6	88° -	+5.9	-0.7		667.7		-161	-52	261,509	1,204,813			
TP <sub>14</sub>	509		143° 08' 29"		6.7	89° 30'	+4.4	-2.3		666.1	TP	-496	-114	261,174	1,204,751			
TP <sub>14</sub>	509		(192° 53' 57")		6.6	270° 30'	+4.4	-2.2			TP							

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
6-10-84		B. Cotcamp		R. Trowbridge		6834		R.T. CT		1		45			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
OREGON		ALSEA-15		OREGON		BENTON								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
			plates → (grids)												
TP <sub>14</sub>			0 00 00												
TP <sub>15</sub>	0				+ 4.75	Mi		+4.7	620.8		TP	0	0	261,174	1,204,751 previous TP
310	38		296 00 (308° 54')		5.0	88° 30'	+1.0	-4.0		666.8		+24	-30	261,198	1,204,721
311	343		231 45 (244° 39')		8.6	91 -	-6.0	-14.6		656.2		-147	-310	261,027	1,204,441
312	667		231 40 (244° 34')		6.3	91 30	-17.5	-23.8		647.0		-286	-602	260,888	1,204,149
TP <sub>15</sub>	792		231 56 20		12.5	91 06	-15.2	-27.7			TP	-337	-717	260,837	1,204,034
TP <sub>15</sub>	792		(244° 50' 11")		12.3	268 54	-15.2	-27.5	-27.6	643.2	TP				
TP <sub>15a</sub>			0 00 00												
TP <sub>15</sub>	0				+ 5.25	Mi		+5.2	648.4		TP	0	0	260,837	1,204,034
313	205		197 00 (261° 50')		7.3	91 -	-3.6	-10.9		637.5		-29	-203	260,808	1,203,831
TP <sub>16</sub>	291		189° 09 46		4.1	92 -	-10.2	-14.3		634.1	TP	-80	-280	260,757	1,203,754
TP <sub>16</sub>	291		(254° 00 03")		4.0	268 -	-10.2	-14.2			TP				
TP <sub>15</sub>			0 00 00												
TP <sub>16</sub>	0				+ 5.1	Mi		+5.1	639.2		TP	0	0	260,757	1,203,754
314	236		156 10 (230° 10')		8.9	-		-8.9		630.3		-151	-181	260,606	1,203,573
315	565		151 55 (225° 55')		10.1	-		-10.1		629.1		-393	-406	260,364	1,203,348
316	894		150 15 (224° 15')		8.0	TH	+4.5	-3.5		635.7		-640	-624	260,117	1,203,130
TP <sub>17</sub>	983		150 22 28		7.5	89 30	+8.6	+1.1			TP	-703	-687	260,054	1,203,067
TP <sub>17</sub>	983		(224° 22 31")		7.2	270 30	+8.6	+1.4	412	640.4	TP				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
6-10-84		B. Cotcamp		R. TROWBRIDGE		6834		R.T. CT		1		46			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
OREGON		ALSEA-15		OREGON		BENTON								L.O. Davis	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
			PLATES → (92105)												
TP <sub>16</sub>			0 00 00												
TP <sub>17</sub>	0				+4.75 Hi			+4.7	645.1		T	0	0	260054	1,203,067
317	262		242 46 58		6.4	87 30	+11.4	+5.0x		650.1	TP	+77	-250	260131	1,202,817
317	262		(287° 09' 29")		6.3	272 30	+11.4	+5.1			TP				
TP <sub>17</sub>			0 00 00												
317	0				+4.65 Hi			+4.6	654.7		T	0	0	260131	1,202,817 6.1 PREVIOUS TP.
318	330		201 35 (308 49)		7.8	89 -	+5.8	-2.0		652.7		+206	-257	260337	1,202,560
TP <sub>18</sub>	362		203 00 46		9.2	89 -	+6.3	-2.9x		651.8	TP	+233	-277	260364	1,202,540
TP <sub>18</sub>	362		(310° 10' 15")		9.1	271°	+6.3	-2.8			TP				
TP <sub>317</sub>			0 00 00												
TP <sub>18</sub>	0				+5.25 Hi			+5.2	657.0		T	0	0	260364	1,202,540
319	295		226 00 (356 10)		7.7	91 -	-5.1	-12.8		644.2		+294	-20	260658	1,202,520
TP <sub>19</sub>	510		223 04 30		6.0	91 30	-13.4	-19.4x		637.6	TP	+506	-60	260870	1,202,480
TP <sub>19</sub>	510		(353° 14' 45")		5.9	268 30	-13.4	-19.3			TP				
TP <sub>18</sub>			0 00 00												
TP <sub>19</sub>	0				+5.15 Hi			+5.1	642.7		T	0	0	260870	1,202,480
320	113		167 40 (340 55)		6.7	91 -	-2.0	-8.7		634.0		+107	-37	260977	1,202,443
321	441		161 - (334° 15')		8.9	91 -	-7.7	-16.6		626.1		+397	-192	261267	1,202,288
322	776		158 50 (332 05)		12.2	91 -	-13.4	-25.6		617.1		+680	-361	261550	1,202,119

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	6.10.84	INSTRUMENT MAN	B. Cotcamp	ROD MAN	R. Trowbridge	PARTY NUMBER	6834	NOTES CHECKED BY	R.I. CT	LINE NO.	1	PAGE	47
AREA	OREGON	TOPO MAP	ALSEA - 15'	STATE	ORE.	COUNTY	BENTON	TWP		RANGE		PPM	
												PARTY MANAGER	L.O. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS	
														Y	X		
			Plates - 7 (Grids)						642.7								
TP <sub>20</sub>	820		159° 28' 41"		6.4	91° 30'	-21.5	-27.9			TP	+729	-376	261,599	1,202,104		
TP <sub>20</sub>	820		(332° 43' 26")		6.1	268° 30'	-21.5	-27.6	-27.8	614.9	TP						
TP <sub>19</sub>			0 00 06														
TP <sub>20</sub>	0				+5.15	H.		+5.1		620.0	X	0	0	261,599	1,202,104		
323	282		217° 25' (10 08)		6.4	92° -	-9.8	-16.2		603.8		+278	+50	261,877	1,202,154		
TP <sub>21</sub>	491		213° 22' 46"		7.1	92° -	-17.1	-24.2x		595.8	TP	+488	+52	262,087	1,202,156		
TP <sub>21</sub>	491		(6° 06' 12")		7.0	268° -	-17.1	-24.1			TP						
TP <sub>20</sub>			0 00 00														
TP <sub>21</sub>	0				+4.95	H.		+4.9	600.7		X	0	0	262,087	1,202,156		
324	107		122° 15' (308 2)		6.9	91° -	-1.9	-8.8		591.9		+66	-84	262,153	1,202,072		
TP <sub>22</sub>	169		101° 56' 18"		6.3	91° 30'	-4.4	-10.7x		590.0	TP	+52	-161	262,139	1,201,995		
TP <sub>22</sub>	169		(288° 02' 30")		6.2	268° 30'	-4.4	-10.6			TP						
TP <sub>21</sub>			0 00 00														
TP <sub>22</sub>	0				+5.1	H.		+5.1	595.1		X	0	0	262,139	1,201,995		
325	231		128° 29' 59"		6.5	-		-6.5		588.6	TP	-127	-193	262,012	1,201,802		
325	231		(236° 32' 29")		6.4	270° -		-6.4			TP						
TP <sub>22</sub>			0 00 00														
325	0				+5.25	H.		+5.2	593.8		X	0	0	262,012	1,201,802		
326	326		204° 40' (261 12)		6.9	-		-6.9		586.9		-50	-322	261,962	1,201,480		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 6.10.84	INSTRUMENT MAN B. Cotcamp	ROD MAN R. Trowbridge	PARTY NUMBER 6834	NOTES CHECKED BY R.T. CT	LINE NO. 1	PAGE 48
AREA OREGON	TOPO MAP ALSEA-15	STATE OREGON	COUNTY BENTON	TWP	RANGE	PPM
			PARTY MANAGER L.O. Davis			

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
			Plates 7 (39.05)												
TP <sub>23</sub>	462		200 52 14		7.1	-		-7.1 X		586.7	TP	-101	-451	261911	1,201,351
TP <sub>23</sub>	462		(257° 24' 43")		7.0	270 -		-7.0			TP				
325			0 00 00												
TP <sub>23</sub>	0				+5.15	HI		+5.1	591.8		π	0	0	261911	1,201,351
327	190		159 50 (237 15)		7.3	-		-7.3		584.5		-103	-160	261808	1,201,191
TP <sub>24</sub>	378		152 55 16		8.9	BH	-1.9	-10.8 X		581.0	TP	-241	-291	261670	1,201,060
TP <sub>24</sub>	378		(230° 19' 59")		8.8	BH 270	-1.9	-10.7			TP				
TP <sub>23</sub>			0 00 00												
TP <sub>24</sub>	0				+5.05	HI		+5.0	586.0		π	0	0	261670	1,201,060
328	136		163 00 (213 20)		10.1	-		-10.1		575.9		-114	-75	261556	1,200,985
329	466		155 30 (205 50)		6.0	90 40	-5.4	-11.4		574.6		-419	-203	261251	1,200,857
TP <sub>25</sub>	508		154 48 59		4.1	91 -	-8.9	-13.0 X		573.0	TP	-460	-216	261210	1,200,844
TP <sub>25</sub>	508		(205° 08' 38")		4.0	269 -	-8.9	-12.9			TP				
TP <sub>24</sub>			0 00 00												
TP <sub>25</sub>	0				+5.05	HI		+5.0	578.0		π	0	0	261210	1,200,844
330	280		186 30 (211 39)		6.8	91 -	-4.9	-11.7		566.3		-238	-147	260972	1,200,697
331	611		182 45 (207 54)		6.2	90 30	-5.3	-11.5		566.5		-540	-286	261670	1,200,558
TP <sub>26</sub>	649		182 07 40		1.7	90 50	-9.4	-11.1			TP	-577	-297	261633	1,200,547
TP <sub>26</sub>	649		(207° 16' 38")		1.5	269 10	-9.4	-10.9	-11.0	567.0	TP				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	6.10.84	INSTRUMENT MAN	B. Cotcamp	ROD MAN	R. Trowbridge	PARTY NUMBER	6834	NOTES CHECKED BY	R.T. CT	LINE NO.	1	PAGE	49
AREA	OREGON	TOPO MAP	ALSEA - 15'	STATE	ORE.	COUNTY	BERTON	TWP		RANGE		PARTY MANAGER	L.O. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X				
			plates → (grids)																
TP <sub>25</sub>			0 00 00																
TP <sub>26</sub>	0				+5.2	H.		+5.2		572.2	T	0	0			260633	1,200,547		
332	288		153 35 (180 52)		8.2	-		-8.2		564.0		-288	-4			260345	1,200,543		
TP <sub>27</sub>	509		152 28 58		4.1	91 -	-8.9	-13.0X		559.2	TP	-509	+2			260124	1,200,549		
TP <sub>27</sub>	509		(179° 45' 36")		4.0	269 -	-8.9	-12.9			TP								
TP <sub>26</sub>			0 00 00																
TP <sub>27</sub>	0				+4.9	H.		+4.9		564.1	T	0	0			260124	1,200,549		
333	155		257 50 (257° 36')		6.0	92 36	-6.8	-12.8		551.3		-33	-151			260091	1,200,398		
TP <sub>28</sub>	340		261 23 22		5.0	92 30	-14.8	-19.8X		544.3	TP	-52	-336			260072	1,200,213		
TP <sub>28</sub>	340		(261° 08' 58")		4.9	267 30'	-14.8	-19.7			TP								
TP <sub>27</sub>			0 00 00																
TP <sub>28</sub>	0				+5.05			+5.0		549.3	T	0	0			260072	1,200,213		
334	147		198 10 (279 19)		5.9	92 20	-6.0	-11.9		537.4		+24	-145			260096	1,200,068		
335	476		193 40 (274 49)		10.0	92 20	-19.4	-29.4		519.9		+40	-474			260112	1,199,739		
336	806		191 40 (272 49)		12.3	92 20'	-32.8	-45.1		504.2		+40	-805			260112	1,199,408		
TP <sub>29</sub>	1232		190 51 15 (		6.8	92 40	-57.3	-64.1			TP	+43	-1230			260115	1,198,983		
TP <sub>29</sub>	1232		(272° 00' 13")		6.5	267 20'	-57.3	-63.8	-64.0	485.3	TP								
TP <sub>28</sub>			0 00 00																
337	106		11 45' (103 45)		6.0	-		-6.0		484.2		-25	+103			260090	1,199,086		
TP <sub>29</sub>	0				+4.95	H.		+4.9		490.2	T	0	0			260115	1,198,983		



SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
6.10.84		B. Cotcamp		R. Trowbridge		6834		R.T. CT		1	51						
AREA		TOPO MAP	STATE	COUNTY	TWP	RANGE	PPM	PARTY MANAGER									
OREGON		ALSEA - 15'	OREGON	BENTON				L.O. Davis									
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS	
														Y	X		
			Plates → (grips)														
342			0° 00' 00"														
TP <sub>32</sub>	0			+5.15	Hi			+5.1	493.3		π	0	0	261,542	1,197,828		
345	128		164° 10' (287° 42')		6.4	87° -	+6.7	+0.3		493.6		+39	-122	261,581	1,197,706		
346	455		157° 00' (280° 32')		8.0	86° -	+31.7	+23.7		517.0		+83	-447	261,625	1,197,381		
TP <sub>33</sub>	637		156° 06' 02"		3.3	86° 30'	+38.9	+35.6		528.9	TP	+106	-627	261,648	1,197,201		
TP <sub>33</sub>	637		(279° 38' 13")		3.2	273° 30'	+38.9	+35.7			TP						
TP <sub>32</sub>			0° 00' 00"														
TP <sub>33</sub>	0			+4.95	Hi			+4.9	533.8		π	0	0	261,648	1,197,201		
347	152		196° 50' (296° 28')		4.6	86° -	+10.6	+6.0		539.8		+68	-136	261,716	1,197,065		
TP <sub>34</sub>	289		199° 29' 04"		4.0	87° -	+15.1	+11.1		544.9	TP	+140	-252	261,788	1,196,949		
TP <sub>34</sub>	289		(299° 07' 17")		3.9	273° -	+15.1	+11.2			TP						
TP <sub>33</sub>			0° 00' 00"														
TP <sub>34</sub>	0			+4.85	Hi			+4.8	549.7		π	0	0	261,788	1,196,949		
348	197		204° 25' (323° 32')		6.0	85° 40'	+14.9	+8.9		558.6		+158	-117	261,946	1,196,832		
TP <sub>35</sub>	310		202° 02' 16"		5.5	86° 40'	+18.0	+12.5		562.2	TP	+241	-194	262,029	1,196,755		
TP <sub>35</sub>	310		(321° 09' 33")		5.4	273° 20'	+18.0	+12.6			TP						
TP <sub>34</sub>			0° 00' 00"														
TP <sub>35</sub>	0			+5.15	Hi			+5.1	567.3		π	0	0	262,029	1,196,755		
349	227		238° 25' (19° 35')		8.3	92° -	-7.9	-16.2		551.1		+214	+76	262,243	1,196,831		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
6.11.84		B. Cotcamp		R. Trowbridge		6834		R.T. CT		1		52				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
OREGON		ALSEA-15		ORE.		BENTON								L.O. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
TP <sub>1</sub>	375		228° 40' 48"		5.6	92°	-13.1	-18.7		548.6	TP	+369	+64	262,398	1,196,819	
TP <sub>1</sub>	375		(9° 50' 21")		5.5	268°	-13.1	-18.6			TP					
TP <sub>35</sub>			0 00 00													
TP <sub>1</sub>	0				+5.0	H <sub>i</sub>		+5.0	553.6		TP	0	0	262,398	1,196,819	
350	159		129° 20' (319° 10')		5.9	92°	-5.5	-11.4		542.2		+120	-104	262,518	1,196,715	
351	488		123° 50' (313° 40')		10.0	93°	-25.5	-35.5		518.1		+337	-353	262,735	1,196,466	
TP <sub>2</sub>	512		123° 45' 54"		6.6	93° 30'	-31.3	-37.9		515.7	TP	+352	-370	262,750	1,196,449	
TP <sub>2</sub>	512		(313° 36' 15")		6.5	266° 30'	-31.3	-37.8			TP					
TP <sub>1</sub>			0 00 00													
TP <sub>2</sub>	0				+4.85	H <sub>i</sub>		+4.8	520.5		TP	0	0	262,750	1,196,449	
Sec. Line	309		173° 00' 26"		7.7	94°	-21.6	-29.3		491.2		+184	-247	262,934	1,196,202	y-262,980 x- Section line + ROAD
352	306		(306° 36' H <sub>i</sub> ) 175° 20' (308° 56')		8.0	94°	-21.3	-29.3		491.2		+192	-238	262,942	1,196,211	
TP <sub>3</sub>	344		172° 51' 16"		7.2	94°	-24.0	-31.2		489.3	TP	+204	-276	262,954	1,196,173	
TP <sub>3</sub>	344		(306° 27' 31")		7.1	266°	-24.0	-31.1			TP					
TP <sub>2</sub>			0 00 00													
TP <sub>3</sub>	0				+5.05	H <sub>i</sub>		+5.0	494.3		TP	0	0	262,954	1,196,173	
353	301		209° 05' (335° 33')		7.8	96°	-26.2	-34.0		460.3		+274	-125	263,228	1,196,048	
TP <sub>4</sub>	595		209° 16' 09"		6.3	95°	-51.9	-58.2		436.1	TP	+540	-245	263,494	1,195,927	
TP <sub>4</sub>	595		(335° 37' 40")		6.2	265°	-51.9	-58.1			TP		-1			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	6.11.84	INSTRUMENT MAN	B. Cotcamp	ROD MAN	R. Trowbridge	PARTY NUMBER	6834	NOTES CHECKED BY	R.T. CT	LINE NO.	1	PAGE	53	
AREA	OREGON	TOPO MAP	A-SEA-15	STATE	ORE.	COUNTY	BENTON	TWP		RANGE		PPM	PARTY MANAGER	L.O. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X				
			plates → (grids)																
TP <sub>3</sub>			0 00 00																
TP <sub>4</sub>	0				+5.1	M.		+5.1	441.2		T	0	0	263494	1195927				
354	43		220° 00' (15° 38')		4.8	93°	-2.3	-7.1	434.1			+41	+12	263535	1195939				
TP <sub>5</sub>	287		197° 43' 47"		8.2	94°	-20.0	-28.2	413.0		TP	+284	-33	263778	1195893				
TP <sub>5</sub>	287		(353° 21' 27")		8.1	266°	-20.0	-28.1			TP		-1						
TP <sub>4</sub>			0 00 00																
TP <sub>5</sub>	0				+4.65	M.		+4.6	412.6		T	0	0	263778	1195893				
355	80		193° 20' (6° 41')		6.0	93°	-4.2	-10.2	407.4			+79	+9	263857	1195902				
356	402		200° 45' (14° 06')		7.6	94°	-28.0	-35.6	382.0			+390	+98	264168	1195991				
357	732		" " (14° 06')		5.0	93 40'	-46.8	-51.8	365.8			+710	+178	264488	1196071				
TP <sub>6</sub>	921		200° 04' 26"		1.7	93°	-48.2	-49.9	367.7		TP	+895	+214	264623	1196106				
TP <sub>6</sub>	921		(13° 25' 53")		1.6	267°	-48.2	-49.8			TP		-1						
TP <sub>5</sub>			0 00 00																
TP <sub>6</sub>	0				+4.95	M.		+4.9	372.6		T	0	0	264673	1196106				
358	137		148° 10' (34° 36')		5.3	91°	-2.4	-7.7	364.9			+130	-43	264803	1196063				
TP <sub>7</sub>	268		132° 43' 06"		5.5	91°	-4.7	-10.2	362.4		TP	+223	-149	264896	1195956				
TP <sub>7</sub>	268		(326° 08' 59")		5.4	269°	-4.7	-10.1			TP		-1						
TP <sub>6</sub>			0 00 00																
TP <sub>7</sub>	0				+4.85	M.		+4.8	367.2		T	0	0	264896	1195956				
359	194		136° 40' (282° 49')		5.5	88°	+6.8	+1.3	368.5			+43	-189	264939	1195767				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
6-11-84		B. Cotran		R. Trowbridge		6834		R.T. CT		1		54				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
OREGON		ALSEA - 15'		ORE.		BENTON								L.O. Davis		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
#	294		PLATES → (GRIDS) 282° 22' 04" 136 04 50		5.8	88°	+10.3	+4.5	367.2							
TP <sub>8</sub>	501		133° 49' 28"		8.8	88° 30'	+13.1	+4.3X	}	371.5	TP	+87	-493	24983	1,195,462	
TP <sub>8</sub>	501		(279° 58' 27")		8.7	271° 30'	+13.1	+4.4		TP				-1		
TP <sub>7</sub>			0 00 00													
TP <sub>8</sub>	0				+5.05	H:		+5.0	}	376.5	TP	0	0	24983	1,195,462	3.3 - to previous TA <sup>360</sup>
360	17		152° 00' (251° 58')		5.7	91°	-0.3	-6.0		370.5			-5	-16	24998	1,195,446
361	342		141° 20' (241° 18')		7.4	91°	-6.0	-13.4		363.1		-164	-300	24989	1,195,162	
TP <sub>9</sub>	302		140° 46' 46"		7.8	91°	-5.3	-13.1X	}	361.4	TP	-148	-263	24985	1,195,198	
TP <sub>9</sub>	302		(240° 45' 13")		7.7	269°	-5.3	-13.0		TP				-1		
TP <sub>8</sub>			0 00 00													
TP <sub>9</sub>	0				+5.15	H:		+5.1	}	368.5	TP	0	0	24985	1,195,198	
TP <sub>10</sub>	400		166° 05' 52"		6.9	91°	-7.0	-13.9X		354.6	TP	-274	-292	24986	1,194,905	
TP <sub>10</sub>	400		(226° 51' 05")		6.8	269°	-7.0	-13.8			TP		-1			
TP <sub>9</sub>			0 00 00													
TP <sub>10</sub>	0				+4.8	H:		+4.8	}	359.4	TP	0	0	24986	1,194,905	
362	45		335° 15' (22° 06')		5.7	86°	+3.1	-2.6		356.8			+42	+17	249603	1,194,922
363	319		255° 20' (302° 11')		9.3	89°	+5.6	-3.7		355.7		+170	-270	249731	1,194,635	
TP <sub>11</sub>	437		255° 35' 38"		8.0	89° 30'	+3.8	-4.2X	}	353.2	TP	-234	-369	24995	1,194,535	
TP <sub>11</sub>	437		(302° 26' 43")		7.9	270° 30'	+3.8	-4.1		TP				-1		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	6.11.84	INSTRUMENT MAN	B. Cotcamp	ROD MAN	R. Trowbridge	PARTY NUMBER	6834	NOTES CHECKED BY	R.T. CT	LINE NO.	1	PAGE	55		
AREA	OREGON	TOPO MAP	ALSEA-15	STATE	ORE.	COUNTY	BENTON	TWP		RANGE		PPM		PARTY MANAGER	L.O. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X				
			Plates → (9.105)																
TP <sub>10</sub>			0° 00' 00"																
TP <sub>11</sub>	0				+5.1	H <sub>i</sub>		+5.1	360.3		T	0	0	264795	1194.535				
364	223		213° 45' (336° 12')		5.7	T <sub>H</sub>	+1.1	-4.6		355.7		+264	-90	264999	1194.445				
365	552		209° 30' (331° 57')		5.3	T <sub>H</sub>	+2.8	-2.5		357.8		+487	-260	265282	1194.275				
366	882		207° 57' (330° 24')		11.1	-		-11.1		349.2		+767	-436	265562	1194.099				
367	1211		207° 20' (329° 47')		9.7	-		-9.7		350.6		+1046	-609	265841	1193.926				
TP <sub>12</sub>	1509		207° 32' 50"		9.7	-		-9.7			TP	+1307	-755	266102	1193.779				
TP <sub>12</sub>	1509		(329° 59' 33")		9.2	270° -		-9.2	9.5	350.8	TP		-1						
TP <sub>11</sub>			0° 00' 00"																
TP <sub>12</sub>	0				+5.15	H <sub>i</sub>		+5.1	355.9		T	0	0	266102	1193.779				
368	42		231° 35' (21° 35')		5.7	-		-5.7		350.2		+39	+15	266141	1193.794				
369	368		202° 55' (352° 55')		10.4	-		-10.4		345.5		+365	-45	266467	1193.734				
370	746 696		204° 35' (354° 35')		12.1	B <sub>H</sub>	-4.0	-16.1		339.8		+693	-66	266795	1193.713				
371	1026 1026		265° 00' (351° 00')		9.2	90° 30'	-9.0	-18.2		337.7		+1022	-89	267124	1193.690				
372	1338 1338		201° 40' (351° 40')		4.7	90° 30'	-11.7	-16.4		339.5		+1324	-194	267426	1193.585				
373	1645		196° 59' (346° 59')		11.1	90° 10'	-4.8	-15.9		340.0		+1603	-371	267705	1193.408				
TP <sub>13</sub>	2035		195° 23' 52"		4.6	90° 22'	-13.0	-17.67	17.4	338.5	TP	+1969	-513	268071	1193.265				
TP <sub>13</sub>	2035		(345° 23' 25")		4.1	269° 38'	-13.0	-17.15			TP		-1						
T <sub>12</sub>			0° 00' 00"																
TP <sub>13</sub>	0				+5.2	H <sub>i</sub>		+5.2	343.7		T	0	0	268071	1193.265				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE					
6.11.84		B. Cotcamp		R. Trowbridge		6834		R.T. CT		1		56					
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER			
OREGON		ALSEA - 15'		ORE.		BENTON								L.O. Davis			
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH - LAT.	EAST + WEST - DEP.	COORDINATES		REMARKS	
														Y	X		
			Plates & (guides)						343.7								
374	67		5° 30' (170° 53')		7.2	89° -	+1.2	-6.0		337.7		-66	+11	268,005	1,193,276		
375	266		164° 00' (329° 23')		9.4	91° -	-4.6	-14.0		329.7		+229	-135	268,300	1,193,130		
376	594		161° 10' (326° 33')		8.0	91° -	-10.4	-18.4		325.3		+496	-327	268,567	1,192,938		
TP <sub>13</sub>	806		161° 09' 04"		5.1	91° -	-14.1	-19.2			TP	+672	-444	268,743	1,192,820		
TP <sub>14</sub>	806		(326° 32' 29")		4.8	269° -	-14.1	-18.9	-19.1	324.6	TP		-1				
TP <sub>13</sub>			0 00 00														
TP <sub>14</sub>	0				+5.05	Hi		+5.0	329.6		TP	0	0	268,743	1,192,820		
377	132		219° 15' (5° 47')		7.4	-		-7.4		322.2		+131	+13	268,874	1,192,833		
378	462		" " " "		8.0	-		-8.0		321.6		+460	+47	269,203	1,192,867		
379	775		217° 58' (4° 30')		8.2	TH	+3.9	-4.3		325.3		+773	+61	269,516	1,192,881		
TP	779		218° 50' (10' 34") 37 55		8.8	89° 40'	+4.5	-4.3		325.3	TP	+776	+70	269,519	1,192,890		4-269,490x-1,192,800 TP - Inter
380	849		195° 01' (341° 33')		8.8	-		-8.8		320.8		+805	-269	269,548	1,192,551		
381	1007		177° 30' (324° 02')		5.2	90° 22'	-6.4	-11.6		318.0		+815	-591	269,558	1,192,229		
TP <sub>15</sub>	1179		168° 20' 04"		7.9	90° 20'	-6.8	-14.7			TP	+832	-835	269,574	1,191,984		
TP <sub>15</sub>	1179		(314° 57' 33")		7.6	269° 40'	-6.8	-14.4	-14.6	315.0	TP	-1	-1				
TP <sub>14</sub>			0 00 00														
TP <sub>15</sub>	0				+5.15	Hi		+5.1	320.1		TP	0	0	269,574	1,191,984		
382	95		138° 30' (273° 23')		5.7	-		-5.7		314.4		+6	-95	269,580	1,191,889		
383	425		137° 30' (272° 23')		10.8	BH	-2.1	-12.9		307.2		+18	-425	269,592	1,191,559		
384	716		152° 45' (287° 38')		10.1	BH	-3.6	-13.7		306.4		+217	-282	269,791	1,191,302		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	6.11.84	INSTRUMENT MAN	B. Cotcamp	ROD MAN	R. Trowbridge	PARTY NUMBER	6834	NOTES CHECKED BY	R.T. CT	LINE NO.	1	PAGE	57
AREA	OREGON	TOPO MAP	ALSEA - 15'	STATE	OREGON	COUNTY	BENTON	TWP		RANGE	PPM	PARTY MANAGER	L.O. Davis

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH - EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X		
			plates → (grids)														
TP <sub>16</sub>	952		159° 59' 05"		6.8	90° 30'	-8.3	-15.1			TP	+400	-864	219,923	1,191,119		
TP <sub>16</sub>	952		(294° 51' 38")		6.5	269° 30'	-8.3	-14.8	-15.0	305.1	TP	-1	-1				
TP <sub>15</sub>			0° 00' 00"														
TP <sub>16</sub>	0				+5.25	Hi		+5.2	310.3		TP	0	0	219,923	1,191,119		
385	70		203° 40' (318° 32')		5.6	-		-5.6		304.7		+52	-46	270,025	1,191,073		
386	396		209° 30' (324° 22')		9.0	-		-9.0		301.3		+322	-231	270,295	1,190,888		
387	712		218° 30' (333° 22')		10.2	-		-10.2		300.1		+636	-319	270,609	1,190,800		
388	1032		222° 05' (336° 57')		5.0	90° 18'	-5.4	-10.4		299.9		+950	-404	270,923	1,190,715		
389	1340		227° 14' (342° 06')		5.0	90° 14'	-5.5	-10.5		299.8		+1275	-412	271,248	1,190,707		
390	1519		216° 36' (331° 28')		5.0	90° 22'	-9.7	-14.7		295.6		+1335	-726	271,308	1,190,393		E.O.L. Line #1
TP	1701		(323° 16' 43") 208° 25' 05"		5.2	90° 20'	-9.8	-15.0		295.3		+1363	-1017	271,326	1,190,102		1-271,250 x -1,190,050 TP - Zutter
TP <sub>17</sub>	1875		211° 54' 16"		6.0	90° 20'	-10.8	-16.8		293.7	TP	+1568	-1028	271,540	1,190,090		TRaverse to A
TP <sub>17</sub>	1875		(326° 45' 54")		5.5	269° 40'	-10.8	-16.3			TP	-1	-1				
TP <sub>16</sub>			0° 00' 00"														
TP <sub>17</sub>	0				+5.05	Hi		+5.0	298.7		TP	0	0	271,540	1,190,090		
TP <sub>18</sub>	1762		(2° 40' 16") 213° 54' 32"		5.8	90° 10'						+1760	+82	273,300	1,190,172		
TP <sub>18</sub>	2348		215° 29' 52"		12.5	-		-12.5		286.7	TP	+2346	+93	273,885	1,190,182		
TP <sub>18</sub>	2348		(2° 15' 46")		11.6	270° -		-11.6	-12.03		TP	-1	-1				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE 6-12-84	INSTRUMENT MAN B. Cotcamp	ROD MAN R. Trowbridge	PARTY NUMBER 6834	NOTES CHECKED BY CT	LINE NO. 1	PAGE 58
AREA OREGON	TOPO MAP ALSEA-15'	STATE ORE.	COUNTY BENTON	TWP	RANGE	PPM
				PARTY MANAGER L.O. Davis		

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
TP <sub>1</sub>			0 00 00													
TP <sub>25</sub>	0		4° 51' 05"		+4.95 Hi			+4.9	291.6		TP	0	0	276,385	1,190,182	
TP <sub>27</sub>	2476		181° 51' 04"		4.3	89° 40'	+14.4	+10.1		301.7	TP					
TP <sub>2</sub>	2510		181° 37' 40"		2.5	89° 40'	+14.7	+12.2			TP	+2504	+170	276,388	1,190,351	
TP <sub>3</sub>	2510		(4° 01' Hi) (3° 53' 26")		2.2	270° 20'	+14.7	+12.5	+12.3	303.9		-1	-1			
TP <sub>2</sub>			0 00 00													
TP <sub>3</sub>	0				+5.1 Hi			+5.1	309		TP	0	0	276,388	1,190,351	
A	966		271° 59' 03"		5.5	90° 30'	-8.4	-13.9		295.1	TP	-99	+961	276,288	1,191,311	Bm. W-232
A	966		(96° 00' 44") (95° 52' 29")		5.4	269° 30'	-8.4	-13.8	tie High	.2	TP	-1	-1			E1.294.9

276,288 x=1,191,311  
Bm. W-232  
E1.294.9  
MOR 2-9-86  
CORR. -6  
X-1  
-17