Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/06/02		5/6/02 6:31 PM	95.06825	538	13.21496
05/06/02		5/6/02 6:32 PM	95.68206	539	12.60115
05/06/02	6:33 PM	5/6/02 6:33 PM	95.93481	540	12.3484
05/06/02	6:34 PM	5/6/02 6:34 PM	96.22366	541	12.05955
05/06/02	6:35 PM	5/6/02 6:35 PM	96.4403	542	11.84291
05/06/02	6:36 PM	5/6/02 6:36 PM	96.54862	543	11.73459
05/06/02	6:37 PM	5/6/02 6:37 PM	96.69304	544	11.59017
05/06/02	6:38 PM	5/6/02 6:38 PM	96.69304	545	11.59017
05/06/02	6:39 PM	5/6/02 6:39 PM	96.76526	546	11.51795
05/06/02	6:40 PM	5/6/02 6:40 PM	96.80136	547	11.48185
05/06/02	6:41 PM	5/6/02 6:41 PM	96.90968	548	11.37353
05/06/02	6:42 PM	5/6/02 6:42 PM	96.94579	549	11.33742
05/06/02	6:43 PM	5/6/02 6:43 PM	96.87357	550	11.40963
05/06/02	6:44 PM	5/6/02 6:44 PM	96.90968	551	11.37353
05/06/02	6:45 PM	5/6/02 6:45 PM	97.018	552	11.26521
05/06/02	6:46 PM	5/6/02 6:46 PM	96.90968	553	11.37353
05/06/02	6:47 PM	5/6/02 6:47 PM	96.98189	554	11.30132
05/06/02	6:48 PM	5/6/02 6:48 PM	96.98189	555	11.30132
05/06/02	6:49 PM	5/6/02 6:49 PM	97.05411	556	11.2291
05/06/02	6:50 PM	5/6/02 6:50 PM	95.82649	557	12.45672
05/06/02	6:51 PM	5/6/02 6:51 PM	95.82649	558	12.45672
05/06/02	6:52 PM	5/6/02 6:52 PM	96.22366	559	12.05955
05/06/02	6:53 PM	5/6/02 6:53 PM	95.97091	560	12.3123
05/06/02	6:54 PM	5/6/02 6:54 PM	95.79038	561	12.49283
05/06/02	6:55 PM	5/6/02 6:55 PM	96.07923	562	12.20398
05/06/02	6:56 PM	5/6/02 6:56 PM	96.36808	563	11.91512
05/06/02	6:57 PM	5/6/02 6:57 PM	96.51251	564	11.7707
05/06/02	6:58 PM	5/6/02 6:58 PM	96.69304	565	11.59017
05/06/02	6:59 PM	5/6/02 6:59 PM	96.72915	566	11.55406
05/06/02	7:00 PM	5/6/02 7:00 PM	96.87357	567	11.40963
05/06/02	7:01 PM	5/6/02 7:01 PM	96.62083	568	11.66238
05/06/02	7:02 PM	5/6/02 7:02 PM	96.83747	569	11.44574
05/06/02	7:03 PM	5/6/02 7:03 PM	96.83747	570	11.44574
05/06/02	7:04 PM	5/6/02 7:04 PM	96.83747	571	11.44574
05/06/02	7:05 PM	5/6/02 7:05 PM	96.04313	572	12.24008
05/06/02	7:06 PM	5/6/02 7:06 PM	96.15145	573	12.13176
05/06/02	7:07 PM	5/6/02 7:07 PM	96.40419	574	11.87902
05/06/02	7:08 PM	5/6/02 7:08 PM	96.58472	575	11.69849
05/06/02	7:09 PM	5/6/02 7:09 PM	95.93481	576	12.3484
05/06/02	7:10 PM	5/6/02 7:10 PM	94.92383	577	13.35938
05/06/02	7:11 PM	5/6/02 7:11 PM	95.17657	578	13.10664
05/06/02	7:12 PM	5/6/02 7:12 PM	95.75428	579	12.52893
05/06/02	7:13 PM	5/6/02 7:13 PM	96.18755	580	12.09566
05/06/02	7:14 PM	5/6/02 7:14 PM	96.40419	581	11.87902
05/06/02	7:15 PM	5/6/02 7:15 PM	96.40419	582	11.87902
05/06/02	7:16 PM	5/6/02 7:16 PM	95.64596	583	12.63725
05/06/02	7:17 PM	5/6/02 7:17 PM	94.7794	584	13.50381
05/06/02	7:18 PM	5/6/02 7:18 PM	94.92383	585	13.35938
05/06/02	7:19 PM	5/6/02 7:19 PM	95.57374	586	12.70947

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/06/02	7:20 PM	5/6/02 7:20 PM		587	12.20398
05/06/02	7:21 PM	5/6/02 7:21 PM		588	12.02344
05/06/02	7:22 PM	5/6/02 7:22 PM	96.4764	589	11.80681
05/06/02	7:23 PM	5/6/02 7:23 PM	96.54862	590	11.73459
05/06/02	7:24 PM	5/6/02 7:24 PM	95.42932	591	12.85389
05/06/02	7:25 PM	5/6/02 7:25 PM	94.59887	592	13.68434
05/06/02	7:26 PM	5/6/02 7:26 PM	93.98506	593	14.29815
05/06/02	7:27 PM	5/6/02 7:27 PM	94.88772	594	13.39549
05/06/02	7:28 PM	5/6/02 7:28 PM	95.53764	595	12.74557
05/06/02	7:29 PM	5/6/02 7:29 PM	95.60985	596	12.67336
05/06/02	7:30 PM	5/6/02 7:30 PM	95.10436	597	13.17885
05/06/02	7:31 PM	5/6/02 7:31 PM	94.63498	598	13.64823
05/06/02	7:32 PM	5/6/02 7:32 PM	94.38223	599	13.90098
05/06/02	7:33 PM	5/6/02 7:33 PM	94.38223	600	13.90098
05/06/02	7:34 PM	5/6/02 7:34 PM	94.81551	601	13.4677
05/06/02	7:35 PM	5/6/02 7:35 PM	95.46542	602	12.81779
05/06/02	7:36 PM	5/6/02 7:36 PM	95.79038	603	12.49283
05/06/02	7:37 PM	5/6/02 7:37 PM	95.24879	604	13.03442
05/06/02	7:38 PM	5/6/02 7:38 PM	95.82649	605	12.45672
05/06/02	7:39 PM	5/6/02 7:39 PM	94.88772	606	13.39549
05/06/02	7:40 PM	5/6/02 7:40 PM	94.12949	607	14.15372
05/06/02	7:41 PM	5/6/02 7:41 PM	94.41834	608	13.86487
05/06/02	7:42 PM	5/6/02 7:42 PM	94.59887	609	13.68434
05/06/02	7:43 PM	5/6/02 7:43 PM	94.74329	610	13.53991
05/06/02	7:44 PM	5/6/02 7:44 PM	95.06825	611	13.21496
05/06/02	7:45 PM	5/6/02 7:45 PM	95.64596	612	12.63725
05/06/02	7:46 PM	5/6/02 7:46 PM	95.97091	613	12.3123
05/06/02	7:47 PM	5/6/02 7:47 PM	96.15145	614	12.13176
05/06/02	7:48 PM	5/6/02 7:48 PM	96.15145	615	12.13176
05/06/02	7:49 PM	5/6/02 7:49 PM	96.4403	616	11.84291
05/06/02	7:50 PM	5/6/02 7:50 PM	95.97091	617	12.3123
05/06/02	7:51 PM	5/6/02 7:51 PM	95.42932	618	12.85389
05/06/02	7:52 PM	5/6/02 7:52 PM	95.82649	619	12.45672
05/06/02	7:53 PM	5/6/02 7:53 PM	96.11534	620	12.16787
05/06/02	7:54 PM	5/6/02 7:54 PM	96.33198	621	11.95123
05/06/02	7:55 PM	5/6/02 7:55 PM	95.71817	622	12.56504
05/06/02	7:56 PM	5/6/02 7:56 PM	95.93481	623	12.3484
05/06/02	7:57 PM	5/6/02 7:57 PM	96.15145	624	12.13176
05/06/02	7:58 PM	5/6/02 7:58 PM	96.33198	625	11.95123
05/06/02	7:59 PM	5/6/02 7:59 PM	95.60985	626	12.67336
05/06/02	8:00 PM	5/6/02 8:00 PM	94.59887	627	13.68434
05/06/02	8:01 PM	5/6/02 8:01 PM	94.70719	628	13.57602
05/06/02	8:02 PM	5/6/02 8:02 PM	95.321	629	12.96221
05/06/02	8:03 PM	5/6/02 8:03 PM	95.79038	630	12.49283
05/06/02	8:04 PM	5/6/02 8:04 PM	96.07923	631	12.20398
05/06/02	8:05 PM	5/6/02 8:05 PM	96.29587	632	11.98734
05/06/02	8:06 PM	5/6/02 8:06 PM	95.71817	633	12.56504
05/06/02	8:07 PM	5/6/02 8:07 PM	94.74329	634	13.53991
05/06/02	8:08 PM	5/6/02 8:08 PM	94.52666	635	13.75655

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/06/02		5/6/02 8:09 PM	95.28489	636	12.99832
05/06/02		5/6/02 8:10 PM	95.71817	637	12.56504
05/06/02	8:11 PM	5/6/02 8:11 PM	96.04313	638	12.24008
05/06/02	8:12 PM	5/6/02 8:12 PM	96.25977	639	12.02344
05/06/02	8:13 PM	5/6/02 8:13 PM	96.40419	640	11.87902
05/06/02	8:14 PM	5/6/02 8:14 PM	96.36808	641	11.91512
05/06/02	8:15 PM	5/6/02 8:15 PM	95.39321	642	12.89
05/06/02	8:16 PM	5/6/02 8:16 PM	94.38223	643	13.90098
05/06/02	8:17 PM	5/6/02 8:17 PM	94.49055	644	13.79266
05/06/02	8:18 PM	5/6/02 8:18 PM	95.10436	645	13.17885
05/06/02	8:19 PM	5/6/02 8:19 PM	95.60985	646	12.67336
05/06/02	8:20 PM	5/6/02 8:20 PM	95.86259	647	12.42061
05/06/02	8:21 PM	5/6/02 8:21 PM	96.18755	648	12.09566
05/06/02	8:22 PM	5/6/02 8:22 PM	96.33198	649	11.95123
05/06/02	8:23 PM	5/6/02 8:23 PM	96.40419	650	11.87902
05/06/02	8:24 PM	5/6/02 8:24 PM	96.4403	651	11.84291
05/06/02		5/6/02 8:25 PM	96.51251	652	11.7707
05/06/02	8:26 PM	5/6/02 8:26 PM	96.58472	653	
05/06/02	8:27 PM	5/6/02 8:27 PM	96.58472	654	11.69849
05/06/02	8:28 PM	5/6/02 8:28 PM	96.65694	655	11.62627
05/06/02	8:29 PM	5/6/02 8:29 PM	96.58472	656	11.69849
05/06/02	8:30 PM	5/6/02 8:30 PM	96.62083	657	11.66238
05/06/02	8:31 PM	5/6/02 8:31 PM	96.69304	658	11.59017
05/06/02	8:32 PM	5/6/02 8:32 PM	96.76526	659	11.51795
05/06/02	8:33 PM	5/6/02 8:33 PM	96.62083	660	11.66238
05/06/02	8:34 PM	5/6/02 8:34 PM	96.62083	661	11.66238
05/06/02	8:35 PM	5/6/02 8:35 PM	96.69304	662	11.59017
05/06/02	8:36 PM	5/6/02 8:36 PM	96.62083	663	11.66238
05/06/02	8:37 PM	5/6/02 8:37 PM	96.65694	664	11.62627
05/06/02	8:38 PM	5/6/02 8:38 PM	96.76526	665	11.51795
05/06/02	8:39 PM	5/6/02 8:39 PM	96.65694	666	11.62627
05/06/02	8:40 PM	5/6/02 8:40 PM	96.72915	667	11.55406
05/06/02	8:41 PM	5/6/02 8:41 PM	96.69304	668	11.59017
05/06/02	8:42 PM	5/6/02 8:42 PM	96.69304	669	11.59017
05/06/02	8:43 PM	5/6/02 8:43 PM	95.93481	670	12.3484
05/06/02	8:44 PM			671	13.25106
05/06/02	8:45 PM	5/6/02 8:45 PM	94.34612	672	13.93709
05/06/02	8:46 PM	5/6/02 8:46 PM	94.45444	673	13.82877
05/06/02	8:47 PM	5/6/02 8:47 PM	95.17657	674	13.10664
05/06/02	8:48 PM	5/6/02 8:48 PM	95.57374	675	12.70947
05/06/02	8:49 PM	5/6/02 8:49 PM	95.97091	676	12.3123
05/06/02	8:50 PM	5/6/02 8:50 PM	96.07923	677	12.20398
05/06/02	8:51 PM	5/6/02 8:51 PM	96.25977	678	12.02344
05/06/02	8:52 PM	5/6/02 8:52 PM	96.40419	679	11.87902
05/06/02	8:53 PM	5/6/02 8:53 PM	96.40419	680	11.87902
05/06/02	8:54 PM	5/6/02 8:54 PM	96.54862	681	11.73459
05/06/02	8:55 PM	5/6/02 8:55 PM	96.62083	682	11.66238
05/06/02	8:56 PM	5/6/02 8:56 PM	96.65694	683	11.62627
05/06/02	8:57 PM	5/6/02 8:57 PM	96.62083	684	11.66238

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1		Depth
05/06/02	8:58 PM	5/6/02 8:58 PM	95.57374	685	12.70947
05/06/02	8:59 PM	5/6/02 8:59 PM	95.71817	686	12.56504
05/06/02	9:00 PM	5/6/02 9:00 PM	95.53764	687	12.74557
05/06/02	9:01 PM	5/6/02 9:01 PM	95.10436	688	13.17885
05/06/02	9:02 PM	5/6/02 9:02 PM	94.63498	689	13.64823
05/06/02	9:03 PM	5/6/02 9:03 PM	95.3571	690	12.92611
05/06/02	9:04 PM	5/6/02 9:04 PM	95.28489	691	12.99832
05/06/02	9:05 PM	5/6/02 9:05 PM	94.2378	692	14.0454
05/06/02	9:06 PM	5/6/02 9:06 PM	94.02117	693	14.26204
05/06/02	9:07 PM	5/6/02 9:07 PM	94.95993	694	13.32328
05/06/02	9:08 PM	5/6/02 9:08 PM	95.46542	695	12.81779
05/06/02	9:09 PM	5/6/02 9:09 PM	95.75428	696	12.52893
05/06/02	9:10 PM	5/6/02 9:10 PM	96.07923	697	12.20398
05/06/02	9:11 PM	5/6/02 9:11 PM	95.82649	698	12.45672
05/06/02	9:12 PM	5/6/02 9:12 PM	94.7794	699	13.50381
05/06/02	9:13 PM	5/6/02 9:13 PM	93.98506	700	14.29815
05/06/02	9:14 PM	5/6/02 9:14 PM	94.56276	701	13.72045
05/06/02	9:15 PM	5/6/02 9:15 PM	95.21268	702	13.07053
05/06/02	9:16 PM	5/6/02 9:16 PM	95.53764	703	12.74557
05/06/02	9:17 PM	5/6/02 9:17 PM	95.82649	704	12.45672
05/06/02	9:18 PM	5/6/02 9:18 PM	96.04313	705	12.24008
05/06/02	9:19 PM	5/6/02 9:19 PM	96.00702	706	12.27619
05/06/02	9:20 PM	5/6/02 9:20 PM	94.92383	707	13.35938
05/06/02	9:21 PM	5/6/02 9:21 PM	94.05727	708	14.22594
05/06/02	9:22 PM	5/6/02 9:22 PM	93.98506	709	14.29815
05/06/02	9:23 PM	5/6/02 9:23 PM	94.85161	710	13.4316
05/06/02	9:24 PM	5/6/02 9:24 PM	95.28489	711	12.99832
05/06/02	9:25 PM	5/6/02 9:25 PM	95.68206	712	12.60115
05/06/02	9:26 PM	5/6/02 9:26 PM	95.86259	713	12.42061
05/06/02	9:27 PM	5/6/02 9:27 PM	96.11534	714	12.16787
05/06/02	9:28 PM	5/6/02 9:28 PM	96.25977	715	12.02344
05/06/02	9:29 PM	5/6/02 9:29 PM	96.25977	716	12.02344
05/06/02	9:30 PM	5/6/02 9:30 PM	96.33198	717	11.95123
05/06/02	9:31 PM	5/6/02 9:31 PM	96.4403	718	11.84291
05/06/02	9:32 PM	5/6/02 9:32 PM	96.4764	719	11.80681
05/06/02	9:33 PM	5/6/02 9:33 PM	96.40419	720	11.87902
05/06/02	9:34 PM	5/6/02 9:34 PM	96.4764	721	11.80681
05/06/02	9:35 PM	5/6/02 9:35 PM	96.54862	722	11.73459
05/06/02	9:36 PM	5/6/02 9:36 PM	96.58472	723	11.69849
05/06/02	9:37 PM	5/6/02 9:37 PM	96.4403	724	11.84291
05/06/02	9:38 PM	5/6/02 9:38 PM	96.54862	725	11.73459
05/06/02	9:39 PM	5/6/02 9:39 PM	96.4764	726	11.80681
05/06/02	9:40 PM	5/6/02 9:40 PM	96.07923	727	12.20398
05/06/02	9:41 PM	5/6/02 9:41 PM	95.46542	728	12.81779
05/06/02	9:42 PM	5/6/02 9:42 PM	95.82649	729	12.45672
05/06/02	9:43 PM	5/6/02 9:43 PM	96.04313	730	12.24008
05/06/02	9:44 PM	5/6/02 9:44 PM	96.11534	731	12.16787
05/06/02	9:45 PM	5/6/02 9:45 PM	96.29587	732	11.98734
05/06/02	9:46 PM	5/6/02 9:46 PM	96.40419	733	11.87902

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/06/02	9:47 PM	5/6/02 9:47 PM		734	11.91512
05/06/02	9:48 PM	5/6/02 9:48 PM	96.4764	735	11.80681
05/06/02	9:49 PM	5/6/02 9:49 PM	96.4403	736	11.84291
05/06/02	9:50 PM	5/6/02 9:50 PM	96.54862	737	11.73459
05/06/02	9:51 PM	5/6/02 9:51 PM	96.4403	738	11.84291
05/06/02	9:52 PM	5/6/02 9:52 PM	96.58472	739	11.69849
05/06/02	9:53 PM	5/6/02 9:53 PM	96.51251	740	11.7707
05/06/02	9:54 PM	5/6/02 9:54 PM	96.51251	741	11.7707
05/06/02	9:55 PM	5/6/02 9:55 PM	96.51251	742	11.7707
05/06/02	9:56 PM	5/6/02 9:56 PM	96.58472	743	11.69849
05/06/02	9:57 PM	5/6/02 9:57 PM	96.54862	744	11.73459
05/06/02	9:58 PM	5/6/02 9:58 PM	96.51251	745	11.7707
05/06/02	9:59 PM	5/6/02 9:59 PM	96.51251	746	11.7707
05/06/02	10:00 PM	5/6/02 10:00 PM	96.51251	747	11.7707
05/06/02	10:01 PM	5/6/02 10:01 PM	96.51251	748	11.7707
05/06/02	10:02 PM	5/6/02 10:02 PM	96.51251	749	11.7707
05/06/02	10:03 PM	5/6/02 10:03 PM	96.54862	750	11.73459
05/06/02	10:04 PM	5/6/02 10:04 PM	96.62083	751	11.66238
05/06/02	10:05 PM	5/6/02 10:05 PM	96.4764	752	11.80681
05/06/02	10:06 PM	5/6/02 10:06 PM	96.62083	753	11.66238
05/06/02	10:07 PM	5/6/02 10:07 PM	96.54862	754	11.73459
05/06/02	10:08 PM	5/6/02 10:08 PM	96.58472	755	11.69849
05/06/02	10:09 PM	5/6/02 10:09 PM	96.51251	756	11.7707
05/06/02	10:10 PM	5/6/02 10:10 PM	96.54862	757	11.73459
05/06/02	10:11 PM	5/6/02 10:11 PM	96.58472	758	11.69849
05/06/02	10:12 PM	5/6/02 10:12 PM	96.62083	759	11.66238
05/06/02	10:13 PM	5/6/02 10:13 PM	96.54862	760	11.73459
05/06/02	10:14 PM	5/6/02 10:14 PM	96.58472	761	11.69849
05/06/02	10:15 PM	5/6/02 10:15 PM	96.58472	762	11.69849
05/06/02	10:16 PM	5/6/02 10:16 PM	96.58472	763	11.69849
05/06/02	10:17 PM	5/6/02 10:17 PM	96.62083	764	11.66238
05/06/02	10:18 PM	5/6/02 10:18 PM	96.51251	765	11.7707
05/06/02	10:19 PM	5/6/02 10:19 PM	96.54862	766	11.73459
05/06/02	10:20 PM	5/6/02 10:20 PM	96.54862	767	11.73459
05/06/02		5/6/02 10:21 PM	96.58472	768	11.69849
05/06/02	10:22 PM	5/6/02 10:22 PM	96.54862	769	11.73459
05/06/02	10:23 PM	5/6/02 10:23 PM	96.62083	770	11.66238
05/06/02	10:24 PM	5/6/02 10:24 PM	96.51251	771	11.7707
05/06/02	10:25 PM	5/6/02 10:25 PM	96.58472	772	11.69849
05/06/02	10:26 PM	5/6/02 10:26 PM	96.54862	773	11.73459
05/06/02	10:27 PM	5/6/02 10:27 PM	96.51251	774	11.7707
05/06/02	10:28 PM	5/6/02 10:28 PM	96.54862	775	11.73459
05/06/02	10:29 PM	5/6/02 10:29 PM	96.54862	776	11.73459
05/06/02	10:30 PM	5/6/02 10:30 PM	96.58472	777	11.69849
05/06/02	10:31 PM	5/6/02 10:31 PM	96.54862	778	11.73459
05/06/02	10:32 PM	5/6/02 10:32 PM	96.54862	779	11.73459
05/06/02	10:33 PM	5/6/02 10:33 PM	96.54862	780	11.73459
05/06/02	10:34 PM	5/6/02 10:34 PM	96.51251	781	11.7707
05/06/02	10:35 PM	5/6/02 10:35 PM	96.51251	782	11.7707

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/06/02	10:36 PM	5/6/02 10:36 PM	96.4764	783	11.80681
05/06/02	10:37 PM	5/6/02 10:37 PM		784	11.7707
05/06/02	10:38 PM	5/6/02 10:38 PM		785	11.7707
05/06/02	10:39 PM	5/6/02 10:39 PM	96.4764	786	11.80681
05/06/02	10:40 PM	5/6/02 10:40 PM	96.51251	787	11.7707
05/06/02	10:41 PM	5/6/02 10:41 PM	96.51251	788	11.7707
05/06/02	10:42 PM	5/6/02 10:42 PM	96.54862	789	11.73459
05/06/02	10:43 PM	5/6/02 10:43 PM	96.58472	790	11.69849
05/06/02	10:44 PM	5/6/02 10:44 PM	96.54862	791	11.73459
05/06/02	10:45 PM	5/6/02 10:45 PM	96.54862	792	11.73459
05/06/02	10:46 PM	5/6/02 10:46 PM	96.58472	793	11.69849
05/06/02	10:47 PM	5/6/02 10:47 PM	96.54862	794	11.73459
05/06/02	10:48 PM	5/6/02 10:48 PM	96.54862	795	11.73459
05/06/02	10:49 PM	5/6/02 10:49 PM	96.54862	796	11.73459
05/06/02	10:50 PM	5/6/02 10:50 PM	96.4764	797	11.80681
05/06/02	10:51 PM	5/6/02 10:51 PM	96.62083	798	11.66238
05/06/02	10:52 PM	5/6/02 10:52 PM	96.4764	799	11.80681
05/06/02	10:53 PM	5/6/02 10:53 PM	96.4764	800	11.80681
05/06/02	10:54 PM	5/6/02 10:54 PM	96.51251	801	11.7707
05/06/02	10:55 PM	5/6/02 10:55 PM	96.58472	802	11.69849
05/06/02	10:56 PM	5/6/02 10:56 PM	96.54862	803	11.73459
05/06/02	10:57 PM	5/6/02 10:57 PM	96.54862	804	11.73459
05/06/02	10:58 PM	5/6/02 10:58 PM	96.58472	805	11.69849
05/06/02	10:59 PM	5/6/02 10:59 PM	96.58472	806	11.69849
05/06/02	11:00 PM	5/6/02 11:00 PM	96.4764	807	11.80681
05/06/02	11:01 PM	5/6/02 11:01 PM	96.4764	808	11.80681
05/06/02	11:02 PM	5/6/02 11:02 PM	96.54862	809	11.73459
05/06/02	11:03 PM	5/6/02 11:03 PM	96.54862	810	11.73459
05/06/02	11:04 PM	5/6/02 11:04 PM	96.58472	811	11.69849
05/06/02	11:05 PM	5/6/02 11:05 PM	96.4764	812	11.80681
05/06/02	11:06 PM	5/6/02 11:06 PM	96.51251	813	11.7707
05/06/02	11:07 PM	5/6/02 11:07 PM	96.54862	814	11.73459
05/06/02	11:08 PM	5/6/02 11:08 PM	96.4764	815	11.80681
05/06/02	11:09 PM	5/6/02 11:09 PM		816	11.7707
05/06/02	11:10 PM	5/6/02 11:10 PM	96.51251	817	11.7707
05/06/02	11:11 PM	5/6/02 11:11 PM	96.54862	818	11.73459
05/06/02	11:12 PM	5/6/02 11:12 PM	96.4764	819	11.80681
05/06/02	11:13 PM	5/6/02 11:13 PM	96.4403	820	11.84291
05/06/02	11:14 PM	5/6/02 11:14 PM	96.54862	821	11.73459
05/06/02	11:15 PM	5/6/02 11:15 PM	96.4403	822	11.84291
05/06/02	11:16 PM	5/6/02 11:16 PM	96.54862	823	11.73459
05/06/02	11:17 PM	5/6/02 11:17 PM	96.4764	824	11.80681
05/06/02	11:18 PM	5/6/02 11:18 PM	96.54862	825	
05/06/02	11:19 PM	5/6/02 11:19 PM		826	11.69849
05/06/02	11:20 PM	5/6/02 11:20 PM		827	11.73459
05/06/02	11:21 PM	5/6/02 11:21 PM	96.4764	828	11.80681
05/06/02	11:22 PM	5/6/02 11:22 PM		829	
05/06/02	11:23 PM	5/6/02 11:23 PM		830	11.7707
05/06/02	11:24 PM	5/6/02 11:24 PM	96.51251	831	11.7707

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/06/02	11:25 PM	5/6/02 11:25 PM	96.4764	832	11.80681
05/06/02	11:26 PM	5/6/02 11:26 PM	96.51251	833	11.7707
05/06/02	11:27 PM	5/6/02 11:27 PM	96.4764	834	11.80681
05/06/02	11:28 PM	5/6/02 11:28 PM		835	11.7707
05/06/02	11:29 PM	5/6/02 11:29 PM		836	11.73459
05/06/02	11:30 PM	5/6/02 11:30 PM	96.4764	837	11.80681
05/06/02	11:31 PM	5/6/02 11:31 PM	96.40419	838	11.87902
05/06/02	11:32 PM	5/6/02 11:32 PM	96.54862	839	11.73459
05/06/02	11:33 PM	5/6/02 11:33 PM	96.4764	840	11.80681
05/06/02	11:34 PM	5/6/02 11:34 PM	96.51251	841	11.7707
05/06/02	11:35 PM	5/6/02 11:35 PM	96.4764	842	11.80681
05/06/02	11:36 PM	5/6/02 11:36 PM	96.54862	843	11.73459
05/06/02		5/6/02 11:37 PM	96.4764	844	11.80681
05/06/02	11:38 PM	5/6/02 11:38 PM	96.4764	845	11.80681
05/06/02	11:39 PM	5/6/02 11:39 PM	96.40419	846	11.87902
05/06/02		5/6/02 11:40 PM		847	
05/06/02		5/6/02 11:41 PM	96.54862	848	11.73459
05/06/02	11:42 PM	5/6/02 11:42 PM	96.4764	849	11.80681
05/06/02		5/6/02 11:43 PM	96.4403	850	
05/06/02	11:44 PM	5/6/02 11:44 PM	96.4764	851	11.80681
05/06/02	11:45 PM			852	11.87902
05/06/02	11:46 PM	5/6/02 11:46 PM	96.51251	853	11.7707
05/06/02		5/6/02 11:47 PM	96.4764	854	
05/06/02	11:48 PM	5/6/02 11:48 PM	96.51251	855	11.7707
05/06/02	11:49 PM	5/6/02 11:49 PM	96.4764	856	11.80681
05/06/02	11:50 PM	5/6/02 11:50 PM	96.51251	857	11.7707
05/06/02	11:51 PM	5/6/02 11:51 PM	96.4403	858	11.84291
05/06/02	11:52 PM	5/6/02 11:52 PM	96.4764	859	11.80681
05/06/02	11:53 PM	5/6/02 11:53 PM	96.4403	860	11.84291
05/06/02	11:54 PM	5/6/02 11:54 PM	96.51251	861	11.7707
05/06/02	11:55 PM	5/6/02 11:55 PM	96.51251	862	11.7707
05/06/02	11:56 PM	5/6/02 11:56 PM	96.51251	863	11.7707
05/06/02	11:57 PM	5/6/02 11:57 PM	96.40419	864	11.87902
05/06/02	11:58 PM	5/6/02 11:58 PM	96.36808	865	11.91512
05/06/02	11:59 PM	5/6/02 11:59 PM	96.36808	866	11.91512
05/07/02	12:00 AM	1			
05/07/02	12:01 AM	5/7/02 12:01 AM	96.4403	868	11.84291
05/07/02	12:02 AM	5/7/02 12:02 AM	96.40419	869	11.87902
05/07/02	12:03 AM	5/7/02 12:03 AM	96.4403	870	11.84291
05/07/02	12:04 AM	5/7/02 12:04 AM	96.40419	871	11.87902
05/07/02	12:05 AM	5/7/02 12:05 AM	96.4764	872	11.80681
05/07/02	12:06 AM	5/7/02 12:06 AM	96.4403	873	11.84291
05/07/02	12:07 AM	5/7/02 12:07 AM	96.4403	A	
05/07/02	12:08 AM	5/7/02 12:08 AM	96.40419	875	11.87902
05/07/02	12:09 AM	5/7/02 12:09 AM	96.36808	876	11.91512
05/07/02	12:10 AM	5/7/02 12:10 AM	96.4764	877	11.80681
05/07/02	12:11 AM	5/7/02 12:11 AM	96.4403	878	11.84291
05/07/02	<del></del>		96.4403	879	11.84291
05/07/02	12:13 AM	5/7/02 12:13 AM	96.4403	880	11.84291

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/07/02	12:14 AM	5/7/02 12:14 AM		881	11.91512
05/07/02	12:15 AM	5/7/02 12:15 AM	96.36808	882	11.91512
05/07/02	12:16 AM	5/7/02 12:16 AM	96.36808	883	11.91512
05/07/02	12:17 AM	5/7/02 12:17 AM	96.36808	884	11.91512
05/07/02	12:18 AM	5/7/02 12:18 AM	96.36808	885	11.91512
05/07/02	12:19 AM	5/7/02 12:19 AM	96.40419	886	11.87902
05/07/02	12:20 AM	5/7/02 12:10 AM	96.4764	887	11.80681
05/07/02	12:21 AM	5/7/02 12:21 AM	96.36808	888	11.91512
05/07/02	12:22 AM	5/7/02 12:22 AM	96.4403	889	11.84291
05/07/02	12:23 AM	5/7/02 12:23 AM	96.36808	890	11.91512
05/07/02	12:24 AM	5/7/02 12:24 AM	96.40419	891	11.87902
05/07/02	12:25 AM	5/7/02 12:25 AM	96.4403	892	11.84291
05/07/02	12:26 AM	5/7/02 12:26 AM	96.36808	893	11.91512
05/07/02	12:27 AM	5/7/02 12:27 AM	96.40419	894	
05/07/02	12:28 AM	5/7/02 12:28 AM	96.36808	895	
05/07/02	12:29 AM	5/7/02 12:29 AM	96.40419	896	
05/07/02	12:30 AM	5/7/02 12:30 AM	96.4403	897	11.84291
05/07/02	12:31 AM	5/7/02 12:31 AM	96.40419	898	
05/07/02	12:32 AM	5/7/02 12:32 AM	96.36808	899	11.91512
05/07/02	12:33 AM	5/7/02 12:33 AM	96.33198	900	11.95123
05/07/02	12:34 AM	5/7/02 12:34 AM	96.40419	901	11.87902
05/07/02	12:35 AM	5/7/02 12:35 AM	96.4403	902	11.84291
05/07/02	12:36 AM	5/7/02 12:36 AM	96.29587	903	11.98734
05/07/02	12:37 AM	5/7/02 12:37 AM	96.40419	904	11.87902
05/07/02	12:38 AM	5/7/02 12:38 AM	96.33198	905	11.95123
05/07/02	12:39 AM	5/7/02 12:39 AM	96.33198	906	11.95123
05/07/02	12:40 AM	5/7/02 12:40 AM	96.40419	907	11.87902
05/07/02	12:41 AM	5/7/02 12:41 AM	96.40419	908	11.87902
05/07/02	12:42 AM	5/7/02 12:42 AM	96.33198	909	11.95123
05/07/02	12:43 AM	5/7/02 12:43 AM	96.40419	910	11.87902
05/07/02	12:44 AM	5/7/02 12:44 AM	96.36808	911	11.91512
05/07/02	12:45 AM	5/7/02 12:45 AM	96.40419	912	11.87902
05/07/02	12:46 AM	5/7/02 12:46 AM	96.40419	913	
05/07/02	12:47 AM	5/7/02 12:47 AM	96.36808	914	11.91512
05/07/02		5/7/02 12:48 AM			
05/07/02	12:49 AM	5/7/02 12:49 AM	96.29587		
05/07/02	12:50 AM	5/7/02 12:50 AM	96.36808	917	
05/07/02	12:51 AM	5/7/02 12:51 AM	96.29587	918	<del> </del>
05/07/02	12:52 AM	5/7/02 12:52 AM	96.40419	919	
05/07/02	12:53 AM	5/7/02 12:53 AM	96.40419	920	
05/07/02	12:54 AM	5/7/02 12:54 AM	96.33198		11.95123
05/07/02	12:55 AM	5/7/02 12:55 AM	96.33198		11.95123
05/07/02	12:56 AM	5/7/02 12:56 AM	96.36808	923	
05/07/02	12:57 AM	5/7/02 12:57 AM	96.40419	924	
05/07/02	12:58 AM	5/7/02 12:58 AM	96.29587	925	
05/07/02	12:59 AM	5/7/02 12:59 AM	96.36808	926	
05/07/02	1:00 AM	5/7/02 1:00 AM	96.33198	927	
05/07/02	1:01 AM	5/7/02 1:01 AM	96.36808	928	<del></del>
05/07/02	1:02 AM	5/7/02 1:02 AM	96.29587	929	11.98734
00/01/02	1.02 /101	51102 1.02 AIVI	50.25501	929	11.007.04

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/07/02		5/7/02 1:03 AM	96.33198	930	11.95123
05/07/02	1:04 AM	5/7/02 1:04 AM	96.29587	931	11.98734
05/07/02	1:05 AM	5/7/02 1:05 AM	96.33198	932	11.95123
05/07/02	1:06 AM	5/7/02 1:06 AM	96.29587	933	11.98734
05/07/02	1:07 AM	5/7/02 1:07 AM	96.25977	934	12.02344
05/07/02	1:08 AM	5/7/02 1:08 AM	96.40419	935	11.87902
05/07/02	1:09 AM	5/7/02 1:09 AM	96.33198	936	11.95123
05/07/02	1:10 AM	5/7/02 1:10 AM	96.36808	937	11.91512
05/07/02	1:11 AM	5/7/02 1:11 AM	96.29587	938	11.98734
05/07/02	1:12 AM	5/7/02 1:12 AM	96.36808	939	11.91512
05/07/02	1:13 AM	5/7/02 1:13 AM	96.29587	940	11.98734
05/07/02	1:14 AM	5/7/02 1:14 AM	96.40419	941	11.87902
05/07/02	1:15 AM	5/7/02 1:15 AM	96.40419	942	11.87902
05/07/02	1:16 AM	5/7/02 1:16 AM	96.29587	943	
05/07/02	1:17 AM	5/7/02 1:17 AM	96.36808	944	
05/07/02	1:18 AM	5/7/02 1:18 AM	96.29587	945	
05/07/02	1:19 AM	5/7/02 1:19 AM	96.25977	946	
05/07/02	1:20 AM	5/7/02 1:20 AM	96.33198	947	
05/07/02	1:21 AM	5/7/02 1:21 AM	96.36808	948	11.91512
05/07/02	1:22 AM	5/7/02 1:22 AM	96.25977	949	12.02344
05/07/02	1:23 AM	5/7/02 1:23 AM	96.25977	950	12.02344
05/07/02	1:24 AM	5/7/02 1:24 AM	96.33198	951	11.95123
05/07/02	1:25 AM	5/7/02 1:25 AM	96.25977	952	12.02344
05/07/02	1:26 AM	5/7/02 1:26 AM	96.29587	953	11.98734
05/07/02	1:27 AM	5/7/02 1:27 AM	96.25977	954	12.02344
05/07/02	1:28 AM	5/7/02 1:28 AM	96.33198	955	11.95123
05/07/02	1:29 AM	5/7/02 1:29 AM	96.25977	956	12.02344
05/07/02	1:30 AM	5/7/02 1:30 AM	96.25977	957	12.02344
05/07/02	1:31 AM	5/7/02 1:31 AM	96.29587	958	11.98734
05/07/02	1:32 AM	5/7/02 1:32 AM	96.29587	959	11.98734
05/07/02	1:33 AM	5/7/02 1:33 AM	96.25977	960	12.02344
05/07/02	1:34 AM	5/7/02 1:34 AM	96.22366	961	12.05955
05/07/02	1:35 AM	5/7/02 1:35 AM	96.29587	962	11.98734
05/07/02	1:36 AM	5/7/02 1:36 AM	96.25977	963	12.02344
05/07/02	1:37 AM	5/7/02 1:37 AM	96.25977	964	12.02344
05/07/02	1:38 AM	5/7/02 1:38 AM		965	
05/07/02	1:39 AM	5/7/02 1:39 AM	96.29587	966	11.98734
05/07/02	1:40 AM	5/7/02 1:40 AM	96.18755	967	12.09566
05/07/02	1:41 AM	5/7/02 1:41 AM	96.33198	968	11.95123
05/07/02	1:42 AM	5/7/02 1:42 AM	96.33198	969	11.95123
05/07/02	1:43 AM	5/7/02 1:43 AM	96.25977	970	
05/07/02	1:44 AM	5/7/02 1:44 AM	96.25977	971	12.02344
05/07/02	1:45 AM	5/7/02 1:45 AM	96.25977	972	12.02344
05/07/02	1:46 AM	5/7/02 1:46 AM	96.29587	973	11.98734
05/07/02	1:47 AM	5/7/02 1:47 AM	96.22366	974	12.05955
05/07/02	1:48 AM	5/7/02 1:48 AM	96.25977	975	
05/07/02	1:49 AM	5/7/02 1:49 AM	96.22366	976	
05/07/02	1:50 AM	5/7/02 1:50 AM	96.22366	977	12.05955
05/07/02	1:51 AM	5/7/02 1:51 AM	96.33198	978	11.95123

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/07/02	1:52 AM	5/7/02 1:52 AM	96.29587	979	11.98734
05/07/02	1:53 AM	5/7/02 1:53 AM	96.22366	980	12.05955
05/07/02	1:54 AM	5/7/02 1:54 AM	96.29587	981	11.98734
05/07/02	1:55 AM	5/7/02 1:55 AM	96.29587	982	11.98734
05/07/02	1:56 AM	5/7/02 1:56 AM	96.22366	983	12.05955
05/07/02	1:57 AM	5/7/02 1:57 AM	96.29587	984	11.98734
05/07/02	1:58 AM	5/7/02 1:58 AM	96.18755	985	12.09566
05/07/02	1:59 AM	5/7/02 1:59 AM	96.25977	986	12.02344
05/07/02	2:00 AM	5/7/02 2:00 AM	96.22366	987	12.05955
05/07/02	2:01 AM	5/7/02 2:01 AM	96.18755	988	12.09566
05/07/02	2:02 AM	5/7/02 2:02 AM	96.25977	989	12.02344
05/07/02	2:03 AM	5/7/02 2:03 AM	96.18755	990	12.09566
05/07/02	2:04 AM	5/7/02 2:04 AM	96.29587	991	11.98734
05/07/02	2:05 AM	5/7/02 2:05 AM	95.93481	992	12.3484
05/07/02	2:06 AM	5/7/02 2:06 AM	95.53764	993	12.74557
05/07/02	2:07 AM	5/7/02 2:07 AM	95.321	994	12.96221
05/07/02	2:08 AM	5/7/02 2:08 AM	95.71817	995	12.56504
05/07/02	2:09 AM	5/7/02 2:09 AM	95.79038	996	12.49283
05/07/02	2:10 AM	5/7/02 2:10 AM	96.00702	997	12.49203
05/07/02	2:11 AM	5/7/02 2:10 AM	96.00702	998	12.27619
05/07/02	2:12 AM	5/7/02 2:12 AM	96.11534	999	12.27619
05/07/02	2:13 AM	5/7/02 2:13 AM	96.04313	1000	12.10787
05/07/02	2:14 AM	5/7/02 2:14 AM	96.04313		
05/07/02	2:15 AM	5/7/02 2:15 AM		1001	12.20398
05/07/02	2:16 AM		96.07923	1002	12.20398
		5/7/02 2:16 AM	96.15145	1003	12.13176
05/07/02	2:17 AM	5/7/02 2:17 AM	96.11534	1004	12.16787
05/07/02	2:18 AM	5/7/02 2:18 AM	96.11534	1005	12.16787
05/07/02	2:19 AM	5/7/02 2:19 AM	96.11534	1006	12.16787
05/07/02	2:20 AM	5/7/02 2:20 AM	96.22366	1007	12.05955
05/07/02	2:21 AM	5/7/02 2:21 AM	96.15145	1008	12.13176
05/07/02	2:22 AM	5/7/02 2:22 AM	96.18755	1009	12.09566
05/07/02	2:23 AM	5/7/02 2:23 AM	96.15145	1010	12.13176
05/07/02	2:24 AM	5/7/02 2:24 AM	96.15145	1011	12.13176
05/07/02	2:25 AM	5/7/02 2:25 AM	96.22366	1012	12.05955
05/07/02	2:26 AM	5/7/02 2:26 AM	96.18755	1013	
05/07/02	2:27 AM	5/7/02 2:27 AM	96.22366	1014	12.05955
05/07/02	2:28 AM	5/7/02 2:28 AM	96.22366	1015	12.05955
05/07/02	2:29 AM	5/7/02 2:29 AM	96.22366	1016	
05/07/02	2:30 AM	5/7/02 2:30 AM	96.15145	1017	12.13176
05/07/02	2:31 AM	5/7/02 2:31 AM	96.22366	1018	12.05955
05/07/02	2:32 AM	5/7/02 2:32 AM	96.15145	1019	12.13176
05/07/02	2:33 AM	5/7/02 2:33 AM	96.18755	1020	12.09566
05/07/02	2:34 AM	5/7/02 2:34 AM	96.22366	1021	12.05955
05/07/02	2:35 AM	5/7/02 2:35 AM	96.18755	1022	12.09566
05/07/02	2:36 AM	5/7/02 2:36 AM	96.22366	1023	12.05955
05/07/02	2:37 AM	5/7/02 2:37 AM	96.18755	1024	12.09566
05/07/02	2:38 AM	5/7/02 2:38 AM	96.18755	1025	12.09566
05/07/02	2:39 AM	5/7/02 2:39 AM	96.18755	1026	12.09566
05/07/02	2:40 AM	5/7/02 2:40 AM	96.04313	1027	12.24008

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/07/02	2:41 AM	5/7/02 2:41 AM	95.53764	1028	12.74557
05/07/02	2:42 AM	5/7/02 2:42 AM	95.321	1029	12.96221
05/07/02	2:43 AM	5/7/02 2:43 AM	95.57374	1030	12.70947
05/07/02	2:44 AM	5/7/02 2:44 AM	95.75428	1031	12.52893
05/07/02	2:45 AM	5/7/02 2:45 AM	95.82649	1032	12.45672
05/07/02	2:46 AM	5/7/02 2:46 AM	96.00702	1033	12.27619
05/07/02	2:47 AM	5/7/02 2:47 AM	96.04313	1034	12.24008
05/07/02	2:48 AM	5/7/02 2:48 AM	96.07923	1035	12.20398
05/07/02	2:49 AM	5/7/02 2:49 AM	96.04313		12.24008
05/07/02	2:50 AM	5/7/02 2:50 AM	96.11534	1037	12.16787
05/07/02	2:51 AM	5/7/02 2:51 AM	96.15145		12.13176
05/07/02	2:52 AM	5/7/02 2:52 AM	95.28489		12.99832
05/07/02	2:53 AM	5/7/02 2:53 AM	95.14047	1040	13.14274
05/07/02	2:54 AM	5/7/02 2:54 AM	95.46542	1041	12.81779
05/07/02	2:55 AM	5/7/02 2:55 AM	95.71817	1042	12.56504
05/07/02	2:56 AM	5/7/02 2:56 AM	95.82649	1042	12.45672
05/07/02	2:57 AM	5/7/02 2:57 AM	95.86259	1043	12.43072
05/07/02	2:58 AM	5/7/02 2:58 AM	95.8987	1044	12.38451
05/07/02	2:59 AM	5/7/02 2:59 AM	95.53764	1045	12.74557
05/07/02	3:00 AM	5/7/02 3:00 AM	95.14047	1040	13.14274
05/07/02	3:01 AM	5/7/02 3:01 AM	95.24879	1047	<del></del>
05/07/02	3:02 AM	5/7/02 3:02 AM	95.50153		13.03442
05/07/02	3:03 AM	5/7/02 3:03 AM	95.71817	<del></del>	12.78168
05/07/02	3:04 AM	5/7/02 3:04 AM	<del></del>		12.56504
05/07/02	3:05 AM	5/7/02 3:05 AM	95.82649		12.45672
05/07/02	3:06 AM		95.97091		12.3123
05/07/02	3:07 AM	5/7/02 3:06 AM 5/7/02 3:07 AM	96.00702		12.27619
05/07/02	3:08 AM	5/7/02 3:08 AM	96.00702	1054	12.27619
05/07/02	3:09 AM	5/7/02 3:09 AM	96.00702 96.04313	1055	12.27619
05/07/02	3:10 AM	5/7/02 3:10 AM	96.04313	1056	12.24008
05/07/02	3:11 AM	5/7/02 3:10 AM	96.04313		12.24008
05/07/02	3:12 AM	5/7/02 3:11 AM	96.07923	1058	12.20398
05/07/02	3:13 AM	5/7/02 3:13 AM	96.11534	1059	12.20398
05/07/02	3:14 AM	5/7/02 3:14 AM	96.11334	1060	12.16787
05/07/02	3:14 AM		95.75428	1061	12.24008
05/07/02	3:16 AM	5/7/02 3:16 AM 5/7/02 3:17 AM	95.28489	<del></del>	12.99832
05/07/02	3:17 AM 3:18 AM		95.321	1064	12.96221
05/07/02		5/7/02 3:18 AM	95.46542		12.81779
05/07/02 05/07/02	3:19 AM	5/7/02 3:19 AM	95.75428		12.52893
	3:20 AM	5/7/02 3:20 AM	95.82649		12.45672
05/07/02	3:21 AM	5/7/02 3:21 AM	95.86259	1068	12.42061
05/07/02	3:22 AM	5/7/02 3:22 AM	95.97091	1069	12.3123
05/07/02	3:23 AM	5/7/02 3:23 AM	96.00702	1070	12.27619
05/07/02	3:24 AM	5/7/02 3:24 AM	95.93481	1071	12.3484
05/07/02	3:25 AM	5/7/02 3:25 AM	96.04313	1072	12.24008
05/07/02	3:26 AM	5/7/02 3:26 AM	96.04313	1073	12.24008
05/07/02	3:27 AM	5/7/02 3:27 AM	96.04313	1074	12.24008
05/07/02	3:28 AM	5/7/02 3:28 AM	96.00702	1075	12.27619
05/07/02	3:29 AM	5/7/02 3:29 AM	96.00702	1076	12.27619

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1		Depth
05/07/02	3:30 AM	5/7/02 3:30 AM	96.04313	1077	12.24008
05/07/02	3:31 AM	5/7/02 3:31 AM	95.97091	1078	12.3123
05/07/02	3:32 AM	5/7/02 3:32 AM	96.07923	1079	12.20398
05/07/02	3:33 AM	5/7/02 3:33 AM	96.07923	1080	12.20398
05/07/02	3:34 AM	5/7/02 3:34 AM	96.00702	1081	12.27619
05/07/02	3:35 AM	5/7/02 3:35 AM	96.07923	1082	12.20398
05/07/02		5/7/02 3:36 AM	96.04313	1083	12.24008
05/07/02	3:37 AM	5/7/02 3:37 AM	95.97091	1084	12.3123
05/07/02	3:38 AM	5/7/02 3:38 AM	96.07923	1085	12.20398
05/07/02	3:39 AM	5/7/02 3:39 AM	96.07923	1086	12.20398
05/07/02	3:40 AM	5/7/02 3:40 AM	96.04313	1087	12.24008
05/07/02	3:41 AM	5/7/02 3:41 AM	96.00702	1088	12.27619
05/07/02	3:42 AM	5/7/02 3:42 AM	96.04313	1089	
05/07/02	3:43 AM	5/7/02 3:43 AM	96.07923	1090	
05/07/02	3:44 AM	5/7/02 3:44 AM	96.07923	1091	12.20398
05/07/02	3:45 AM	5/7/02 3:45 AM	95.97091	1092	12.3123
05/07/02	3:46 AM	5/7/02 3:46 AM	96.07923	1093	12.20398
05/07/02	3:47 AM	5/7/02 3:47 AM	96.00702	1094	12.27619
05/07/02	3:48 AM	5/7/02 3:48 AM	96.04313	1095	12.24008
05/07/02	3:49 AM	5/7/02 3:49 AM	96.00702	1096	12.27619
05/07/02	3:50 AM	5/7/02 3:50 AM	96.00702	1097	12.27619
05/07/02	3:51 AM	5/7/02 3:51 AM	96.04313	1098	12.24008
05/07/02	3:52 AM	5/7/02 3:52 AM	96.04313	1099	12.24008
05/07/02	3:53 AM	5/7/02 3:53 AM	96.00702	1100	12.27619
05/07/02	3:54 AM	5/7/02 3:54 AM	96.04313	1101	12.24008
05/07/02	3:55 AM	5/7/02 3:55 AM	96.07923	1102	12.20398
05/07/02	3:56 AM	5/7/02 3:56 AM	95.97091	1103	12.3123
05/07/02	3:57 AM	5/7/02 3:57 AM	96.04313	1103	12.24008
05/07/02	3:58 AM	5/7/02 3:58 AM	96.00702	1105	12.27619
05/07/02	3:59 AM	5/7/02 3:59 AM	95.97091	1105	12.3123
05/07/02	4:00 AM	5/7/02 4:00 AM	96.04313	1107	12.24008
05/07/02	4:01 AM	5/7/02 4:01 AM	96.04313	1107	12.24008
05/07/02	4:02 AM	5/7/02 4:02 AM	96.00702	1109	12.27619
05/07/02	4:03 AM	5/7/02 4:03 AM	95.97091	1110	12.3123
05/07/02	4:04 AM	5/7/02 4:04 AM	96.07923	1111	
05/07/02	4:05 AM	5/7/02 4:05 AM	96.00702	1112	12.27619
05/07/02	4:06 AM	5/7/02 4:06 AM	96.04313	1113	12.24008
05/07/02	4:07 AM	5/7/02 4:07 AM	96.04313	1113	12.24008
05/07/02	4:08 AM	5/7/02 4:08 AM	96.00702	1115	12.27619
05/07/02	4:09 AM	5/7/02 4:09 AM	95.97091	1116	12.3123
05/07/02	4:10 AM	5/7/02 4:10 AM	96.00702	1117	12.27619
05/07/02	4:11 AM	5/7/02 4:11 AM	95.97091		12.3123
05/07/02	4:12 AM	5/7/02 4:12 AM	95.93481	1118 1119	12.3484
05/07/02	4:12 AM	5/7/02 4:13 AM	96.04313	1120	12.3464
05/07/02	4:14 AM	5/7/02 4:14 AM			
05/07/02	4:14 AM		95.97091	1121	12.3123
05/07/02	4:16 AM	5/7/02 4:15 AM	95.93481	1122	12.3484
		5/7/02 4:16 AM	96.04313	1123	12.24008
05/07/02	4:17 AM	5/7/02 4:17 AM	95.97091	1124	12.3123
05/07/02	4:18 AM	5/7/02 4:18 AM	96.00702	1125	12.27619

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/07/02		5/7/02 4:19 AM	96.00702	1126	
05/07/02		5/7/02 4:20 AM	96.00702	1127	
05/07/02		5/7/02 4:21 AM	95.93481	1128	12.3484
05/07/02	4:22 AM	5/7/02 4:22 AM	95.93481	1129	12.3484
05/07/02		5/7/02 4:23 AM	96.00702	1130	12.27619
05/07/02	4:24 AM	5/7/02 4:24 AM	96.00702	1131	12.27619
05/07/02		5/7/02 4:25 AM	95.8987	1132	12.38451
05/07/02	4:26 AM	5/7/02 4:26 AM	95.97091	1133	12.3123
05/07/02	4:27 AM	5/7/02 4:27 AM	95.97091	1134	12.3123
05/07/02	4:28 AM	5/7/02 4:28 AM	96.00702	1135	12.27619
05/07/02	4:29 AM	5/7/02 4:29 AM	95.97091	1136	12.3123
05/07/02	4:30 AM	5/7/02 4:30 AM	96.04313	1137	12.24008
05/07/02	4:31 AM	5/7/02 4:31 AM	95.8987	1138	12.38451
05/07/02	4:32 AM	5/7/02 4:32 AM	95.93481	1139	12.3484
05/07/02	4:33 AM	5/7/02 4:33 AM	96.04313	1140	
05/07/02	4:34 AM	5/7/02 4:34 AM	95.97091	1141	12.3123
05/07/02	4:35 AM	5/7/02 4:35 AM	95.8987	1142	12.38451
05/07/02	4:36 AM	5/7/02 4:36 AM	95.93481	1143	12.3484
05/07/02	4:37 AM	5/7/02 4:37 AM	95.93481	1144	12.3484
05/07/02	4:38 AM	5/7/02 4:38 AM	95.8987	1145	12.38451
05/07/02	4:39 AM	5/7/02 4:39 AM	96.00702	1146	12.27619
05/07/02	4:40 AM	5/7/02 4:40 AM	95.86259	1147	12.42061
05/07/02	4:41 AM	5/7/02 4:41 AM	95.97091	1148	12.3123
05/07/02	4:42 AM	5/7/02 4:42 AM	95.93481	1149	12.3484
05/07/02	4:43 AM	5/7/02 4:43 AM	95.93481	1150	12.3484
05/07/02	4:44 AM	5/7/02 4:44 AM	95.97091	1151	12.3123
05/07/02	4:45 AM	5/7/02 4:45 AM	95.97091	1152	12.3123
05/07/02	4:46 AM	5/7/02 4:46 AM	95.86259	1153	12.42061
05/07/02	4:47 AM	5/7/02 4:47 AM	95.8987	1154	12.38451
05/07/02	4:48 AM	5/7/02 4:48 AM	95.93481	1155	12.3484
05/07/02	4:49 AM	5/7/02 4:49 AM	96.00702	1156	12.27619
05/07/02	4:50 AM	5/7/02 4:50 AM	95.93481	1157	12.3484
05/07/02	4:51 AM	5/7/02 4:51 AM	95.93481	1158	12.3484
05/07/02		5/7/02 4:52 AM	96.00702	1159	12.27619
05/07/02		5/7/02 4:53 AM	95.97091	1160	12.3123
05/07/02		5/7/02 4:54 AM	95.97091	1161	12.3123
05/07/02		5/7/02 4:55 AM	95.86259	1162	12.42061
05/07/02		5/7/02 4:56 AM	95.93481	1163	12.3484
05/07/02	4:57 AM	5/7/02 4:57 AM	95.93481	1164	12.3484
05/07/02	4:58 AM	5/7/02 4:58 AM	96.00702	1165	12.27619
05/07/02	4:59 AM	5/7/02 4:59 AM	96.00702	1166	12.27619
05/07/02	5:00 AM	5/7/02 5:00 AM	95.8987	1167	12.38451
05/07/02	5:01 AM	5/7/02 5:01 AM	95.8987	1168	12.38451
05/07/02	5:02 AM	5/7/02 5:02 AM	95.97091	1169	12.3123
05/07/02	5:03 AM	5/7/02 5:03 AM	95.97091	1170	12.3123
05/07/02	5:04 AM	5/7/02 5:04 AM	95.86259	1171	12.42061
05/07/02	5:05 AM	5/7/02 5:05 AM	95.93481	1172	12.3484
05/07/02	5:06 AM	5/7/02 5:06 AM	95.93481	1173	12.3484
05/07/02	5:07 AM	5/7/02 5:07 AM	95.86259	1174	12.42061

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/07/02	5:08 AM	5/7/02 5:08 AM	95.93481	1175	12.3484
05/07/02	5:09 AM	5/7/02 5:09 AM	95.8987	1176	12.38451
05/07/02	5:10 AM	5/7/02 5:10 AM	95.93481	1177	12.3484
05/07/02	5:11 AM	5/7/02 5:11 AM	95.8987	1178	12.38451
05/07/02	5:12 AM	5/7/02 5:12 AM	95.93481	1179	12.3484
05/07/02	5:13 AM	5/7/02 5:13 AM	95.86259	1180	12.42061
05/07/02	5:14 AM	5/7/02 5:14 AM	95.93481	1181	12.3484
05/07/02	5:15 AM	5/7/02 5:15 AM	95.86259	1182	12.42061
05/07/02	5:16 AM	5/7/02 5:16 AM	95.93481	1183	12.3484
05/07/02	5:17 AM	5/7/02 5:17 AM	95.93481	1184	12.3484
05/07/02	5:18 AM	5/7/02 5:18 AM	95.93481	1185	12.3484
05/07/02	5:19 AM	5/7/02 5:19 AM	95.8987	1186	12.38451
05/07/02	5:20 AM	5/7/02 5:20 AM	95.82649	1187	12.45672
05/07/02	5:21 AM	5/7/02 5:21 AM	95.93481	1188	12.3484
05/07/02	5:22 AM	5/7/02 5:22 AM	95.8987	1189	12.38451
05/07/02	5:23 AM	5/7/02 5:23 AM	95.86259	1190	12.42061
05/07/02	5:24 AM	5/7/02 5:24 AM	95.86259	1191	12.42061
05/07/02	5:25 AM	5/7/02 5:25 AM	95.86259	1192	12.42061
05/07/02	5:26 AM	5/7/02 5:26 AM	95.82649	1193	12.45672
05/07/02	5:27 AM	5/7/02 5:27 AM	95.86259	1194	12.42061
05/07/02	5:28 AM	5/7/02 5:28 AM	95.8987	1195	12.38451
05/07/02	5:29 AM	5/7/02 5:29 AM	95.8987	1196	12.38451
05/07/02	5:30 AM	5/7/02 5:30 AM	95.93481	1197	12.3484
05/07/02	5:31 AM	5/7/02 5:31 AM	95.8987	1198	12.38451
05/07/02	5:32 AM	5/7/02 5:32 AM	95.8987	1199	12.38451
05/07/02	5:33 AM	5/7/02 5:33 AM	95.8987	1200	12.38451
05/07/02	5:34 AM	5/7/02 5:34 AM	95.86259	1201	12.42061
05/07/02	5:35 AM	5/7/02 5:35 AM	95.8987	1202	12.38451
05/07/02	5:36 AM	5/7/02 5:36 AM	95.82649	1203	12.45672
05/07/02	5:37 AM	5/7/02 5:37 AM	95.79038	1204	12.49283
05/07/02	5:38 AM	5/7/02 5:38 AM	95.86259	1205	12.42061
05/07/02	5:39 AM	5/7/02 5:39 AM	95.8987	1206	12.38451
05/07/02	5:40 AM	5/7/02 5:40 AM	95.8987	1207	12.38451
05/07/02	5:41 AM	5/7/02 5:41 AM	95.8987	1208	12.38451
05/07/02	5:42 AM	5/7/02 5:42 AM	95.8987	1209	12.38451
05/07/02	5:43 AM	5/7/02 5:43 AM	95.93481	1210	12.3484
05/07/02	5:44 AM	5/7/02 5:44 AM	95.86259	1211	12.42061
05/07/02	5:45 AM	5/7/02 5:45 AM	95.8987	1212	12.38451
05/07/02	5:46 AM	5/7/02 5:46 AM	95.82649	1213	12.45672
05/07/02	5:47 AM	5/7/02 5:47 AM	95.86259	1214	12.42061
05/07/02	5:48 AM	5/7/02 5:48 AM	95.86259	1215	12.42061
05/07/02	5:49 AM	5/7/02 5:49 AM	95.86259	1216	12.42061
05/07/02	5:50 AM	5/7/02 5:50 AM	95.79038	1217	12.49283
05/07/02	5:51 AM	5/7/02 5:51 AM	95.75428	1218	12.52893
05/07/02	5:52 AM	5/7/02 5:52 AM	95.82649	1219	12.45672
05/07/02	5:53 AM	5/7/02 5:53 AM	95.79038	1220	12.49283
05/07/02	5:54 AM	5/7/02 5:54 AM	95.86259	1221	12.42061
05/07/02	5:55 AM	5/7/02 5:55 AM	95.82649	1222	12.45672
05/07/02	5:56 AM	5/7/02 5:56 AM	95.8987	1223	12.38451

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/07/02	5:57 AM	5/7/02 5:57 AM	95.75428	1224	12.52893
05/07/02	5:58 AM	5/7/02 5:58 AM	95.82649	1225	
05/07/02	5:59 AM	5/7/02 5:59 AM	95.79038	1226	
05/07/02	6:00 AM	5/7/02 6:00 AM	95.86259	1227	12.42061
05/07/02	6:01 AM	5/7/02 6:01 AM	95.68206	1228	12.60115
05/07/02	6:02 AM	5/7/02 6:02 AM	93.15461	1229	15.1286
05/07/02	6:03 AM	5/7/02 6:03 AM	92.36027	1230	15.92294
05/07/02	6:04 AM	5/7/02 6:04 AM	91.81867	1231	16.46454
05/07/02	6:05 AM	5/7/02 6:05 AM	91.49372	1232	16.78949
05/07/02	6:06 AM	5/7/02 6:06 AM	91.24097	1233	17.04224
05/07/02	6:07 AM	5/7/02 6:07 AM	90.98823	1234	17.29498
05/07/02	6:08 AM	5/7/02 6:08 AM	90.91601	1235	17.3672
05/07/02	6:09 AM	5/7/02 6:09 AM	91.45761	1236	16.8256
05/07/02	6:10 AM	5/7/02 6:10 AM	92.72133	1237	15.56188
05/07/02	6:11 AM	5/7/02 6:11 AM	93.58789	1238	14.69532
05/07/02	6:12 AM	5/7/02 6:12 AM	94.09338	1239	14.18983
05/07/02	6:13 AM	5/7/02 6:13 AM	94.52666	1240	13.75655
05/07/02	6:14 AM	5/7/02 6:14 AM	94.88772	1241	13.39549
05/07/02	6:15 AM	5/7/02 6:15 AM	94.99604	1242	13.28717
05/07/02	6:16 AM	5/7/02 6:16 AM	95.10436	1243	13.17885
05/07/02	6:17 AM	5/7/02 6:17 AM	95.24879	1244	13.03442
05/07/02	6:18 AM	5/7/02 6:18 AM	95.28489	1245	12.99832
05/07/02	6:19 AM	5/7/02 6:19 AM	95.39321	1246	12.89
05/07/02	6:20 AM	5/7/02 6:20 AM	95.39321	1247	12.89
05/07/02	6:21 AM	5/7/02 6:21 AM	95.50153	1248	12.78168
05/07/02	6:22 AM	5/7/02 6:22 AM	95.46542	1249	12.81779
05/07/02	6:23 AM	5/7/02 6:23 AM	95.53764	1250	12.74557
05/07/02	6:24 AM	5/7/02 6:24 AM	95.50153	1251	12.78168
05/07/02	6:25 AM	5/7/02 6:25 AM	95.50153	1252	12.78168
05/07/02	6:26 AM	5/7/02 6:26 AM	95.60985	1253	12.67336
05/07/02	6:27 AM	5/7/02 6:27 AM	95.64596	1254	12.63725
05/07/02	6:28 AM	5/7/02 6:28 AM	95.53764	1255	12.74557
05/07/02	6:29 AM	5/7/02 6:29 AM	95.64596	1256	12.63725
05/07/02	6:30 AM	5/7/02 6:30 AM	95.57374	1257	12.70947
05/07/02	6:31 AM	5/7/02 6:31 AM	95.57374	1258	12.70947
05/07/02	6:32 AM	5/7/02 6:32 AM	95.68206	1259	12.60115
05/07/02	6:33 AM	5/7/02 6:33 AM	95.57374	1260	12.70947
05/07/02	6:34 AM	5/7/02 6:34 AM	95.64596	1261	12.63725
05/07/02	6:35 AM	5/7/02 6:35 AM	95.64596	1262	12.63725
05/07/02	6:36 AM	5/7/02 6:36 AM	95.60985	1263	12.67336
05/07/02	6:37 AM	5/7/02 6:37 AM	95.64596	1264	12.63725
05/07/02	6:38 AM	5/7/02 6:38 AM	95.68206	1265	12.60115
05/07/02	6:39 AM	5/7/02 6:39 AM	95.68206	1266	12.60115
05/07/02	6:40 AM	5/7/02 6:40 AM	95.64596	1267	12.63725
05/07/02	6:41 AM	5/7/02 6:41 AM	95.64596	1268	12.63725
05/07/02	6:42 AM	5/7/02 6:42 AM	95.64596	1269	12.63725
05/07/02	6:43 AM	5/7/02 6:43 AM	95.64596	1270	12.63725
05/07/02	6:44 AM	5/7/02 6:44 AM	95.64596	1271	12.63725
05/07/02	6:45 AM	5/7/02 6:45 AM	95.64596	1272	12.63725

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/07/02	6:46 AM	5/7/02 6:46 AM	95.64596	1273	12.63725
05/07/02		5/7/02 6:47 AM	95.60985	1274	
05/07/02	6:48 AM	5/7/02 6:48 AM	95.57374	1275	12.70947
05/07/02	6:49 AM	5/7/02 6:49 AM	95.64596	1276	12.63725
05/07/02	6:50 AM	5/7/02 6:50 AM	95.57374	1277	12.70947
05/07/02	6:51 AM	5/7/02 6:51 AM	95.68206	1278	12.60115
05/07/02	6:52 AM	5/7/02 6:52 AM	95.64596	1279	12.63725
05/07/02	6:53 AM	5/7/02 6:53 AM	95.64596	1280	12.63725
05/07/02	6:54 AM	5/7/02 6:54 AM	95.68206	1281	12.60115
05/07/02	6:55 AM	5/7/02 6:55 AM	95.60985	1282	12.67336
05/07/02	6:56 AM	5/7/02 6:56 AM	95.68206	1283	12.60115
05/07/02	6:57 AM	5/7/02 6:57 AM	95.57374	1284	12.70947
05/07/02	6:58 AM	5/7/02 6:58 AM	95.60985	1285	12.67336
05/07/02	6:59 AM	5/7/02 6:59 AM	95.64596	1286	12.63725
05/07/02	7:00 AM	5/7/02 7:00 AM	95.60985	1287	12.67336
05/07/02	7:01 AM	5/7/02 7:01 AM	95.64596	1288	12.63725
05/07/02	7:02 AM	5/7/02 7:02 AM	95.60985	1289	12.67336
05/07/02	7:03 AM	5/7/02 7:03 AM	95.64596	1290	12.63725
05/07/02	7:04 AM	5/7/02 7:04 AM	95.57374	1291	12.70947
05/07/02	7:05 AM	5/7/02 7:05 AM	95.57374	1292	12.70947
05/07/02	7:06 AM	5/7/02 7:06 AM	95.60985	1293	12.67336
05/07/02	7:07 AM	5/7/02 7:07 AM	95.68206	1294	12.60115
05/07/02	7:08 AM	5/7/02 7:08 AM	95.68206	1295	12.60115
05/07/02	7:09 AM	5/7/02 7:09 AM	95.57374	1296	12.70947
05/07/02	7:10 AM	5/7/02 7:10 AM	95.60985	1297	12.67336
05/07/02	7:11 AM	5/7/02 7:11 AM	95.24879	1298	13.03442
05/07/02	7:12 AM	5/7/02 7:12 AM	94.63498	1299	13.64823
05/07/02	7:13 AM	5/7/02 7:13 AM	95.03215	1300	13.25106
05/07/02	7:14 AM	5/7/02 7:14 AM	95.10436	1301	13.17885
05/07/02	7:15 AM	5/7/02 7:15 AM	95.24879	1302	13.03442
05/07/02	7:16 AM	5/7/02 7:16 AM	95.3571	1303	12.92611
05/07/02	7:17 AM	5/7/02 7:17 AM	95.50153	1304	12.78168
05/07/02	7:18 AM	5/7/02 7:18 AM	94.41834	1305	13.86487
05/07/02	7:19 AM	5/7/02 7:19 AM	94.49055	1306	13.79266
05/07/02	7:20 AM	5/7/02 7:20 AM	94.85161	1307	13.4316
05/07/02	7:21 AM	5/7/02 7:21 AM	95.14047	1308	
05/07/02	7:22 AM	5/7/02 7:22 AM	95.10436	1309	13.17885
05/07/02	7:23 AM	5/7/02 7:23 AM	94.09338	1310	14.18983
05/07/02	7:24 AM	5/7/02 7:24 AM	92.10752	1311	16.17568
05/07/02	7:25 AM	5/7/02 7:25 AM	91.74646	1312	16.53675
05/07/02	7:26 AM	5/7/02 7:26 AM	91.56593	1313	16.71728
05/07/02	7:27 AM	5/7/02 7:27 AM	91.31318	1314	16.97003
05/07/02	7:28 AM	5/7/02 7:28 AM	91.06044	1315	17.22277
05/07/02	7:29 AM	5/7/02 7:29 AM	91.02433	1316	17.25888
05/07/02	7:30 AM	5/7/02 7:30 AM	90.91601	1317	17.3672
05/07/02	7:31 AM	5/7/02 7:31 AM	90.87991	1318	17.4033
05/07/02	7:32 AM	5/7/02 7:32 AM	90.87991	1319	17.4033
05/07/02	7:33 AM	5/7/02 7:33 AM	90.73548	1320	17.54773
05/07/02	7:34 AM	5/7/02 7:34 AM	90.69937	1321	17.58384

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/07/02	7:35 AM	5/7/02 7:35 AM	90.55495	1322	17.72826
05/07/02	7:36 AM	5/7/02 7:36 AM	90.55495	1323	17.72826
05/07/02	7:37 AM	5/7/02 7:37 AM	90.48274	1324	17.80047
05/07/02	7:38 AM	5/7/02 7:38 AM	90.51884	1325	17.76437
05/07/02	7:39 AM	5/7/02 7:39 AM	90.41052	1326	
05/07/02	7:40 AM	5/7/02 7:40 AM	90.41052	1327	17.87269
05/07/02	7:41 AM	5/7/02 7:41 AM	91.85478	1328	16.42843
05/07/02	7:42 AM	5/7/02 7:42 AM	92.86576	1329	15.41745
05/07/02	<del></del>	5/7/02 7:43 AM	93.44346	1330	
05/07/02	7:44 AM	5/7/02 7:44 AM	93.91285	1331	
05/07/02		5/7/02 7:45 AM	94.34612	1332	13.93709
05/07/02	7:46 AM	5/7/02 7:46 AM		1333	13.72045
05/07/02	7:47 AM	5/7/02 7:47 AM	94.70719	1334	
05/07/02		5/7/02 7:48 AM		1335	13.4677
05/07/02		5/7/02 7:49 AM		1336	
05/07/02	7:50 AM	5/7/02 7:50 AM		1337	13.32328
05/07/02	7:51 AM	5/7/02 7:51 AM	94.95993	1338	
05/07/02		5/7/02 7:52 AM	95.10436	1339	13.17885
05/07/02	7:53 AM	5/7/02 7:53 AM	95.14047	1340	13.14274
05/07/02	7:54 AM	5/7/02 7:54 AM	95.14047	1341	13.14274
05/07/02	<del></del>	5/7/02 7:55 AM		1342	13.10664
05/07/02	<del></del>	5/7/02 7:56 AM	95.24879	1343	13.03442
05/07/02		5/7/02 7:57 AM	95.17657	1344	13.10664
05/07/02	7:58 AM	5/7/02 7:58 AM	95.24879	1345	13.03442
05/07/02	7:59 AM	5/7/02 7:59 AM	95.14047	1346	13.14274
05/07/02		5/7/02 8:00 AM	95.24879	1347	13.03442
05/07/02	8:01 AM	5/7/02 8:01 AM	95.28489	1348	12.99832
05/07/02		5/7/02 8:02 AM	95.21268	1349	13.07053
05/07/02	8:03 AM	5/7/02 8:03 AM	95.24879	1350	13.03442
05/07/02	8:04 AM	5/7/02 8:04 AM	95.28489	1351	12.99832
05/07/02		5/7/02 8:05 AM	95.21268	1352	13.07053
05/07/02	8:06 AM	5/7/02 8:06 AM	95.28489		
05/07/02	8:07 AM	5/7/02 8:07 AM	95.24879	1354	<del></del>
05/07/02		5/7/02 8:08 AM	95.28489	1355	12.99832
05/07/02	8:09 AM	5/7/02 8:09 AM	95.321	1356	12.96221
05/07/02					
05/07/02			<del></del>		<del>                                     </del>
05/07/02	8:12 AM	5/7/02 8:12 AM	94.52666	<del></del>	<del></del>
05/07/02		5/7/02 8:13 AM	94.7794	1360	<del></del>
05/07/02		5/7/02 8:14 AM	<del></del>	<del></del>	<del> </del>
05/07/02					<del> </del>
05/07/02			<del></del>	<del></del>	<del></del>
05/07/02		5/7/02 8:17 AM		<del> </del>	<del></del>
05/07/02			95.21268	1365	<u> </u>
05/07/02		5/7/02 8:19 AM		<del></del>	+
05/07/02				1367	<del></del>
05/07/02		5/7/02 8:21 AM			
05/07/02	<del></del>	5/7/02 8:22 AM	95.24879	1369	<del>†                                      </del>
05/07/02	8:23 AM	5/7/02 8:23 AM	95.21268	1370	13.07053

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1		Depth
05/07/02	8:24 AM	5/7/02 8:24 AM	95.321	1371	12.96221
05/07/02	8:25 AM	5/7/02 8:25 AM	95.3571	1372	12.92611
05/07/02	8:26 AM	5/7/02 8:26 AM	95.24879	1373	13.03442
05/07/02	8:27 AM	5/7/02 8:27 AM	95.28489	1374	12.99832
05/07/02	8:28 AM	5/7/02 8:28 AM	95.28489	1375	12.99832
05/07/02	8:29 AM	5/7/02 8:29 AM	95.321	1376	12.96221
05/07/02	8:30 AM	5/7/02 8:30 AM	95.28489	1377	12.99832
05/07/02	8:31 AM	5/7/02 8:31 AM	95.24879	1378	13.03442
05/07/02	8:32 AM	5/7/02 8:32 AM	95.39321	1379	12.89
05/07/02	8:33 AM	5/7/02 8:33 AM	95.3571	1380	12.92611
05/07/02	8:34 AM	5/7/02 8:34 AM	95.3571	1381	12.92611
05/07/02	8:35 AM	5/7/02 8:35 AM	95.321	1382	12.96221
05/07/02	8:36 AM	5/7/02 8:36 AM	95.321	1383	12.96221
05/07/02	8:37 AM	5/7/02 8:37 AM	95.24879	1384	13.03442
05/07/02	8:38 AM	5/7/02 8:38 AM	95.3571	1385	12.92611
05/07/02	8:39 AM	5/7/02 8:39 AM	95.3571	1386	12.92611
05/07/02	8:40 AM	5/7/02 8:40 AM	95.39321	1387	12.89
05/07/02	8:41 AM	5/7/02 8:41 AM	95.321	1388	12.96221
05/07/02	8:42 AM	5/7/02 8:42 AM	95.28489	1389	12.99832
05/07/02	8:43 AM	5/7/02 8:43 AM	95.3571	1390	12.92611
05/07/02	8:44 AM	5/7/02 8:44 AM	95.39321	1391	12.89
05/07/02	8:45 AM	5/7/02 8:45 AM	95.39321	1392	12.89
05/07/02	8:46 AM	5/7/02 8:46 AM	95.28489	1393	12.99832
05/07/02	8:47 AM	5/7/02 8:47 AM	95.39321	1394	12.89
05/07/02	8:48 AM	5/7/02 8:48 AM	95.28489	1395	12.99832
05/07/02	8:49 AM	5/7/02 8:49 AM	95.39321	1396	12.89
05/07/02	8:50 AM	5/7/02 8:50 AM	95.39321	1397	12.89
05/07/02	8:51 AM	5/7/02 8:51 AM	95.39321	1398	12.89
05/07/02	8:52 AM	5/7/02 8:52 AM	95.39321	1399	12.89
05/07/02	8:53 AM	5/7/02 8:53 AM	95.321	1400	12.96221
05/07/02	8:54 AM	5/7/02 8:54 AM	95.39321	1401	12.89
05/07/02	8:55 AM	5/7/02 8:55 AM	95.24879	1402	13.03442
05/07/02	8:56 AM	5/7/02 8:56 AM	95.3571	1403	12.92611
05/07/02	8:57 AM	5/7/02 8:57 AM	95.321	1404	12.96221
05/07/02	8:58 AM	5/7/02 8:58 AM	95.39321	1405	12.89
05/07/02	8:59 AM	5/7/02 8:59 AM	95.3571	1406	12.92611
05/07/02	9:00 AM	5/7/02 9:00 AM	95.28489	1407	12.99832
05/07/02	9:01 AM	5/7/02 9:01 AM	95.321	1408	12.96221
05/07/02	9:02 AM	5/7/02 9:02 AM	95.3571	1409	12.92611
05/07/02	9:03 AM	5/7/02 9:03 AM	94.95993	1410	13.32328
05/07/02	9:04 AM	5/7/02 9:04 AM	94.2017	1411	14.08151
05/07/02	9:05 AM	5/7/02 9:05 AM	94.27391	1412	14.0093
05/07/02	9:06 AM	5/7/02 9:06 AM	94.56276	1413	13.72045
05/07/02	9:07 AM	5/7/02 9:07 AM	94.85161	1414	13.4316
05/07/02	9:08 AM	5/7/02 9:08 AM	94.95993	1415	13.32328
05/07/02	9:09 AM	5/7/02 9:09 AM	94.2017	1416	14.08151
05/07/02	9:10 AM	5/7/02 9:10 AM	94.31002	1417	13.97319
05/07/02	9:11 AM	5/7/02 9:11 AM	94.67108	1418	13.61213
05/07/02	9:12 AM	5/7/02 9:12 AM	94.7794	1419	13.50381

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/07/02	9:13 AM	5/7/02 9:13 AM	93.94895	1420	14.33426
05/07/02	9:14 AM	5/7/02 9:14 AM	93.19072	1421	15.09249
05/07/02	9:15 AM	5/7/02 9:15 AM	93.91285	1422	14.37036
05/07/02	9:16 AM	5/7/02 9:16 AM	94.31002	1423	13.97319
05/07/02	9:17 AM	5/7/02 9:17 AM	94.67108	1424	13.61213
05/07/02	9:18 AM	5/7/02 9:18 AM	94.2017	1425	14.08151
05/07/02	9:19 AM	5/7/02 9:19 AM	94.16559	1426	14.11762
05/07/02	9:20 AM	5/7/02 9:20 AM	94.41834	1427	13.86487
05/07/02	9:21 AM	5/7/02 9:21 AM	94.41834	1428	13.86487
05/07/02	9:22 AM	5/7/02 9:22 AM	94.63498	1429	13.64823
05/07/02		5/7/02 9:23 AM	94.88772	1430	13.39549
05/07/02	9:24 AM	5/7/02 9:24 AM	94.92383	1431	13.35938
05/07/02	9:25 AM	5/7/02 9:25 AM	95.03215	1432	13.25106
05/07/02	9:26 AM	5/7/02 9:26 AM	95.03215	1433	13.25106
05/07/02	9:27 AM	5/7/02 9:27 AM	95.14047	1434	13.14274
05/07/02	9:28 AM	5/7/02 9:28 AM	95.06825	1435	13.21496
05/07/02	9:29 AM	5/7/02 9:29 AM	95.17657	1436	13.10664
05/07/02	9:30 AM	5/7/02 9:30 AM	95.28489	1437	12.99832
05/07/02	9:31 AM	5/7/02 9:31 AM	95.14047	1437	13.14274
05/07/02	9:32 AM	5/7/02 9:32 AM	95.17657	1439	13.14274
05/07/02	9:33 AM	5/7/02 9:33 AM	95.28489	1440	12.99832
05/07/02	9:34 AM	5/7/02 9:34 AM	95.21268	1441	13.07053
05/07/02	9:35 AM	5/7/02 9:35 AM	95.24879		
05/07/02	9:36 AM	5/7/02 9:36 AM	95.28489	1442	13.03442
05/07/02	9:37 AM	5/7/02 9:37 AM	95.24879	1443	12.99832
05/07/02	9:38 AM	5/7/02 9:38 AM	95.24679	1444	13.03442
05/07/02	9:39 AM	5/7/02 9:39 AM	95.24879	1445	13.07053
05/07/02	9:40 AM	5/7/02 9:40 AM	95.21268	1446	
	9:40 AM 9:41 AM	5/7/02 9:41 AM		1447	13.07053
05/07/02			95.28489	1448	12.99832
05/07/02	9:42 AM	5/7/02 9:42 AM	94.34612	1449	13.93709
05/07/02	9:43 AM	5/7/02 9:43 AM 5/7/02 9:44 AM	94.74329	1450	13.53991
05/07/02	9:44 AM	5/7/02 9:45 AM	94.81551	1451	13.4677
05/07/02	9:45 AM	5/7/02 9:46 AM	94.92383	1452	13.35938
05/07/02	9:46 AM		93.87674	1453	14.40647
05/07/02			92.86576	1454	
05/07/02	9:48 AM	5/7/02 9:48 AM		1455	
05/07/02	9:49 AM	5/7/02 9:49 AM		1456	14.62311
05/07/02	9:50 AM	5/7/02 9:50 AM	94.2017	1457	14.08151
05/07/02	9:51 AM	5/7/02 9:51 AM	94.49055	1458	13.79266
05/07/02	9:52 AM	5/7/02 9:52 AM	94.59887	1459	13.68434
05/07/02	9:53 AM	5/7/02 9:53 AM	94.81551	1460	13.4677
05/07/02	9:54 AM	5/7/02 9:54 AM	94.92383	1461	13.35938
05/07/02	9:55 AM	5/7/02 9:55 AM	93.76842	1462	14.51479
05/07/02	9:56 AM	5/7/02 9:56 AM	93.04629	1463	15.23692
05/07/02	9:57 AM	5/7/02 9:57 AM	92.82965	1464	15.45356
05/07/02	9:58 AM	5/7/02 9:58 AM	93.58789	1465	14.69532
05/07/02	9:59 AM	5/7/02 9:59 AM	94.09338	1466	14.18983
05/07/02	10:00 AM	5/7/02 10:00 AM	94.45444	1467	13.82877
05/07/02	10:01 AM	5/7/02 10:01 AM	94.63498	1468	13.64823

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/07/02		5/7/02 10:02 AM		1469	13.57602
05/07/02	10:03 AM	5/7/02 10:03 AM	94.95993	1470	13.32328
05/07/02	10:04 AM	5/7/02 10:04 AM	94.85161	1471	13.4316
05/07/02	10:05 AM	5/7/02 10:05 AM	94.2017	1472	14.08151
05/07/02	10:06 AM	5/7/02 10:06 AM	93.0824	1473	15.20081
05/07/02	10:07 AM	5/7/02 10:07 AM	92.32416	1474	15.95905
05/07/02	10:08 AM	5/7/02 10:08 AM	92.86576	1475	15.41745
05/07/02	10:09 AM	5/7/02 10:09 AM	93.6601	1476	14.62311
05/07/02		5/7/02 10:10 AM	94.09338	1477	14.18983
05/07/02		5/7/02 10:11 AM	94.45444	1478	13.82877
05/07/02		5/7/02 10:12 AM	94.52666	1479	13.75655
05/07/02	10:13 AM	5/7/02 10:13 AM	94.74329	1480	13.53991
05/07/02	10:14 AM	5/7/02 10:14 AM	94.85161	1481	13.4316
05/07/02	10:15 AM	5/7/02 10:15 AM	94.85161	1482	13.4316
05/07/02	10:16 AM	5/7/02 10:16 AM	94.95993	1483	13.32328
05/07/02	10:17 AM	5/7/02 10:17 AM	94.95993	1484	13.32328
05/07/02	10:18 AM	5/7/02 10:18 AM	95.06825	1485	13.21496
05/07/02	10:10 AM	5/7/02 10:19 AM	95.10436	1486	13.17885
05/07/02	10:10 AM	5/7/02 10:10 AM	95.10436	1487	13.17885
05/07/02	10:20 AM	5/7/02 10:20 AM	95.03215	1488	13.25106
05/07/02	10:21 AM	5/7/02 10:21 AM	95.14047	1489	13.14274
05/07/02	10:22 AM	5/7/02 10:22 AM	95.10436	1490	13.17885
05/07/02	10:23 AM	5/7/02 10:24 AM	95.14047	1490	13.14274
05/07/02	10:24 AM	5/7/02 10:24 AM	95.06825	1491	13.14274
05/07/02	10:25 AM	5/7/02 10:25 AM	95.17657	1493	13.10664
05/07/02	10:20 AM	5/7/02 10:20 AM	95.06825	1493	13.21496
05/07/02	10:27 AM	5/7/02 10:27 AM 5/7/02 10:28 AM	95.10436	1494	13.17885
05/07/02	10:28 AM	5/7/02 10:28 AM	95.14047	1495	13.17883
05/07/02	10:29 AM	5/7/02 10:29 AM	95.14047	1490	13.17885
05/07/02	10:30 AM	5/7/02 10:30 AM	95.10436	1498	13.17885
05/07/02	10:31 AM	5/7/02 10:31 AM 5/7/02 10:32 AM			13.86487
	10:32 AM	5/7/02 10:32 AM	94.41834	1499	
05/07/02	10:33 AM	5/7/02 10:34 AM	92.61302 92.17974	1500	15.67019
05/07/02 05/07/02	10:34 AM	5/7/02 10:34 AM		1501	16.10347
			92.07142	1502	16.21179
05/07/02		5/7/02 10:36 AM			
05/07/02		5/7/02 10:37 AM	91.81867		16.46454
05/07/02		5/7/02 10:38 AM	91.78257	1505	16.50064
05/07/02		5/7/02 10:39 AM	91.74646	1506	16.53675
05/07/02		5/7/02 10:40 AM	91.67425	1507	16.60896
05/07/02		5/7/02 10:41 AM	91.60203	1508	16.68117
05/07/02	10:42 AM	5/7/02 10:42 AM	91.63814	1509	16.64507
05/07/02	10:43 AM	5/7/02 10:43 AM	91.52982	1510	16.75339
05/07/02	10:44 AM	5/7/02 10:44 AM	92.39638	1511	15.88683
05/07/02	10:45 AM	5/7/02 10:45 AM	93.15461	1512	15.1286
05/07/02	10:46 AM	5/7/02 10:46 AM	93.73231	1513	14.55089
05/07/02	10:47 AM	5/7/02 10:47 AM	94.09338	1514	14.18983
05/07/02	10:48 AM	5/7/02 10:48 AM	94.34612	1515	13.93709
05/07/02	10:49 AM	5/7/02 10:49 AM	94.45444	1516	13.82877
05/07/02	10:50 AM	5/7/02 10:50 AM	94.56276	1517	13.72045

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/07/02	10:51 AM	5/7/02 10:51 AM	94.74329	1518	
05/07/02		5/7/02 10:52 AM	94.70719	1519	13.57602
05/07/02	10:53 AM	5/7/02 10:53 AM	94.74329	1520	13.53991
05/07/02	10:54 AM	5/7/02 10:54 AM	94.7794	1521	13.50381
05/07/02	10:55 AM	5/7/02 10:55 AM	94.92383	1522	13.35938
05/07/02	10:56 AM	5/7/02 10:56 AM	94.92383	1523	13.35938
05/07/02	10:57 AM	5/7/02 10:57 AM	94.88772	1524	13.39549
05/07/02	10:58 AM	5/7/02 10:58 AM	94.99604	1525	13.28717
05/07/02	10:59 AM	5/7/02 10:59 AM	94.92383	1526	13.35938
05/07/02	11:00 AM	5/7/02 11:00 AM	94.99604	1527	13.28717
05/07/02	11:01 AM	5/7/02 11:01 AM	94.95993	1528	13.32328
05/07/02	11:02 AM	5/7/02 11:02 AM	94.95993	1529	13.32328
05/07/02	11:03 AM	5/7/02 11:03 AM	95.06825	1530	13.21496
05/07/02		5/7/02 11:04 AM	94.92383	1531	13.35938
05/07/02		5/7/02 11:05 AM	94.95993	1532	13.32328
05/07/02		5/7/02 11:06 AM	95.06825	1533	13.21496
05/07/02		5/7/02 11:07 AM	94.95993	1534	13.32328
05/07/02		5/7/02 11:08 AM	95.03215	1535	13.25106
05/07/02		5/7/02 11:09 AM	95.03215	1536	13.25106
05/07/02	11:10 AM	5/7/02 11:10 AM	95.10436	1537	13.17885
05/07/02	11:11 AM	5/7/02 11:11 AM	95.06825	1538	13.21496
05/07/02	11:12 AM	5/7/02 11:12 AM	94.99604	1539	13.28717
05/07/02	11:13 AM	5/7/02 11:13 AM	95.06825	1540	13.21496
05/07/02	11:14 AM	5/7/02 11:14 AM	94.12949	1541	14.15372
05/07/02	11:15 AM	5/7/02 11:15 AM	94.34612	1542	13.93709
05/07/02	11:17 AM	5/7/02 11:17 AM	94.63498	1543	13.64823
05/07/02	11:18 AM	5/7/02 11:18 AM	94.7794	1544	13.50381
05/07/02	11:19 AM	5/7/02 11:19 AM	94.81551	1545	13.4677
05/07/02	11:20 AM	5/7/02 11:20 AM	96.25977	1546	12.02344
05/07/02	11:21 AM	5/7/02 11:21 AM	98.31783	1547	9.965377
05/07/02	11:22 AM	5/7/02 11:22 AM	99.50934	1548	8.773865
05/07/02	11:23 AM	5/7/02 11:23 AM	100.3398	1549	7.943417
05/07/02	11:24 AM	5/7/02 11:24 AM	100.8814	1550	7.40182
05/07/02	11:25 AM	5/7/02 11:25 AM	101.2425	1551	7.040756
05/07/02		5/7/02 11:26 AM	101.4952	1552	
05/07/02		5/7/02 11:27 AM	101.6396	1553	6.643585
05/07/02	11:28 AM	5/7/02 11:28 AM	101.7841	1554	6.499159
05/07/02	11:29 AM	5/7/02 11:29 AM	101.8924	1555	6.39084
05/07/02	11:30 AM	5/7/02 11:30 AM	102.0007	1556	6.28252
05/07/02	11:31 AM	5/7/02 11:31 AM	102.0729	1557	6.210307
05/07/02	11:32 AM	5/7/02 11:32 AM	102.1451	1558	6.138095
05/07/02	11:33 AM	5/7/02 11:33 AM	102.2173	1559	6.065882
05/07/02		5/7/02 11:34 AM	102.2895	1560	5.993669
05/07/02	11:34 AM	5/7/02 11:34 AM	102.3618	1561	5.921456
05/07/02	11:35 AM	5/7/02 11:35 AM	102.3979	1562	5.885349
05/07/02	11:36 AM	5/7/02 11:36 AM	102.434	1563	5.849243
05/07/02	11:37 AM	5/7/02 11:37 AM	102.5062	1564	5.77703
05/07/02	11:38 AM	5/7/02 11:38 AM	102.5423	1565	5.740924

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/07/02		5/7/02 11:40 AM	102.6506	1567	5.632604
05/07/02	11:41 AM	5/7/02 11:41 AM			
05/07/02	11:42 AM	5/7/02 11:42 AM	102.6867	1569	5.596498
05/07/02	11:43 AM	5/7/02 11:43 AM	102.7228	1570	5.560392
05/07/02	11:44 AM	5/7/02 11:44 AM	102.7589	1571	5.524285
05/07/02	11:45 AM	5/7/02 11:45 AM	102.795	1572	5.488179
05/07/02	11:46 AM	5/7/02 11:46 AM	102.8311	1573	5.452072
05/07/02	11:47 AM	5/7/02 11:47 AM	102.8311	1574	5.452072
05/07/02	11:48 AM	5/7/02 11:48 AM	102.8672	1575	5.415966
05/07/02	11:49 AM	5/7/02 11:49 AM	102.9034	1576	5.379859
05/07/02	11:50 AM	5/7/02 11:50 AM	102.9395	1577	5.343753
05/07/02	11:51 AM	5/7/02 11:51 AM	102.9395	1578	5.343753
05/07/02	11:52 AM	5/7/02 11:52 AM	102.9756	1579	
05/07/02	11:53 AM	5/7/02 11:53 AM	103.0117	1580	5.27154
05/07/02	11:54 AM	5/7/02 11:54 AM	103.0117	1581	5.27154
05/07/02	11:55 AM	5/7/02 11:55 AM	103.0478	1582	5.235434
05/07/02	11:56 AM	5/7/02 11:56 AM	103.0478	1583	5.235434
05/07/02	11:57 AM	5/7/02 11:57 AM	103.0839	1584	5.199327
05/07/02	11:58 AM	5/7/02 11:58 AM	103.0839	1585	5.199327
05/07/02	11:59 AM	5/7/02 11:59 AM	103.12	1586	5.163221
05/07/02	12:00 PM	5/7/02 12:00 PM	103.1561	1587	5.127114
05/07/02	12:01 PM	5/7/02 12:01 PM	103.1561	1588	5.127114
05/07/02	12:02 PM	5/7/02 12:02 PM	103.1922	1589	5.091008
05/07/02	12:03 PM	5/7/02 12:03 PM	103.2283	1590	5.054901
05/07/02	12:04 PM	5/7/02 12:04 PM	103.2283	1591	5.054901
05/07/02	12:05 PM	5/7/02 12:05 PM	103.2283	1592	5.054901
05/07/02	12:06 PM	5/7/02 12:06 PM	103.2644	1593	5.018795
05/07/02	12:07 PM	5/7/02 12:07 PM	103.3005	1594	4.982689
05/07/02	12:08 PM	5/7/02 12:08 PM	103.3005	1595	4.982689
05/07/02	12:09 PM	5/7/02 12:09 PM	103.3005	1596	4.982689
05/07/02	12:10 PM	5/7/02 12:10 PM	103.3366	1597	4.946582
05/07/02	12:11 PM	5/7/02 12:11 PM	103.3727	1598	4.910476
05/07/02	12:12 PM	5/7/02 12:12 PM	103.3366	1599	4.946582
05/07/02	12:13 PM	5/7/02 12:13 PM	103.3727	1600	4.910476
05/07/02	12:14 PM	5/7/02 12:14 PM	103.4449	1601	
05/07/02		5/7/02 12:15 PM	103.4088	1602	
05/07/02	12:16 PM	5/7/02 12:16 PM	103.4449	1603	4.838263
05/07/02	12:17 PM	5/7/02 12:17 PM	103.4449	1604	4.838263
05/07/02	12:18 PM	5/7/02 12:18 PM	103.4449	1605	4.838263
05/07/02	12:19 PM	5/7/02 12:19 PM	103.4811	1606	4.802156
05/07/02	12:20 PM	5/7/02 12:20 PM	103.5172	1607	4.76605
05/07/02	12:21 PM	5/7/02 12:21 PM	103.5172	1608	4.76605
05/07/02	12:22 PM	5/7/02 12:22 PM	103.5172	1609	4.76605
05/07/02	12:23 PM	5/7/02 12:23 PM	103.5172	1610	4.76605
05/07/02	12:24 PM	5/7/02 12:24 PM	103.5533	1611	4.729943
05/07/02	12:25 PM	5/7/02 12:25 PM	103.5533	1612	4.729943
05/07/02	12:26 PM	5/7/02 12:26 PM	103.5894	1613	4.693837
05/07/02	12:27 PM	5/7/02 12:27 PM	103.5894	1614	4.693837
05/07/02	12:28 PM	5/7/02 12:28 PM	103.5894	1615	4.693837

Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/07/02	12:29 PM	5/7/02 12:29 PM	103.5894	1616	4.693837
05/07/02	12:30 PM	5/7/02 12:30 PM		1617	
05/07/02	12:31 PM	5/7/02 12:31 PM		1618	
05/07/02	12:32 PM	5/7/02 12:32 PM	103.6616	1619	
05/07/02	12:33 PM	5/7/02 12:33 PM	103.6977	1620	
05/07/02	12:34 PM	5/7/02 12:34 PM	103.6977	1621	4.585518
05/07/02	12:35 PM	5/7/02 12:35 PM	103.6977	1622	
05/07/02	12:36 PM	5/7/02 12:36 PM	103.6977	1623	
05/07/02	12:37 PM	5/7/02 12:37 PM	103.6977	1624	
05/07/02	12:38 PM	5/7/02 12:38 PM	103.7338	1625	
05/07/02	12:39 PM	5/7/02 12:39 PM	103.7338	1626	
05/07/02	12:40 PM	<del></del>	103.7699	1627	
05/07/02	12:41 PM		103.7699	1628	
05/07/02	12:42 PM	<del></del>	103.806	1629	
05/07/02	12:43 PM		103.806		<del></del>
05/07/02			103.806		
05/07/02			103.806		
05/07/02		5/7/02 12:46 PM	103.806		
05/07/02	12:47 PM	5/7/02 12:47 PM	103.8421	1634	
05/07/02	12:48 PM	5/7/02 12:48 PM	103.8421	1635	
05/07/02	12:49 PM		103.8782	1636	
05/07/02	12:50 PM		103.8782	1637	
05/07/02	12:51 PM		103.8782	1638	
05/07/02	12:52 PM	<u> </u>	103.9143		
05/07/02	12:53 PM		103.9143		
05/07/02	12:54 PM		103.9143		4.368879
05/07/02	12:55 PM		103.9143	1642	
05/07/02	12:56 PM	5/7/02 12:56 PM	103.9504	1643	
05/07/02	12:57 PM	5/7/02 12:57 PM	103.9504	1644	
05/07/02	12:57 PM		103.9504	1645	
05/07/02	12:59 PM		103.9865	1646	
05/07/02	1:00 PM		103.9865		
05/07/02	1:01 PM		103.9865		
05/07/02	1:02 PM		103.9865	1649	
05/07/02					
05/07/02					
05/07/02		L		1652	4.26056
05/07/02		·		1653	
05/07/02		5/7/02 1:00 PM		1654	
05/07/02		5/7/02 1:08 PM	104.0588	1655	<del></del>
05/07/02	1:09 PM	5/7/02 1:09 PM	104.0949	1656	
05/07/02	1:10 PM	5/7/02 1:10 PM	104.0949	1657	4.188347
05/07/02	1:11 PM	5/7/02 1:10 PM	104.0949	1658	4.188347
05/07/02	1:12 PM	5/7/02 1:11 PM	104.0949	1659	4.188347
05/07/02	1:13 PM	5/7/02 1:13 PM	104.0949	1660	4.188347
05/07/02	1:14 PM	5/7/02 1:13 PM	104.0949	1661	4.166347
05/07/02	1:14 FM	5/7/02 1:14 PM	104.131	1662	
05/07/02	1:16 PM	5/7/02 1:16 PM	104.131	1663	4.15224 4.15224
05/07/02	1:17 PM	5/7/02 1:17 PM	104.131		
03/07/02	I II PIVI	3/1/02 1.17 PM	104.131	1664	4.15224

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Ogle Aquifer Test-Pumping Well Data

Date	Time	Date & Time	Channel 1	Minutes	Depth
05/07/02	1:18 PM	5/7/02 1:18 PM	104.1671	1665	4.116134
05/07/02	1:19 PM	5/7/02 1:19 PM	104.1671	1666	4.116134
05/07/02	1:20 PM	5/7/02 1:20 PM	104.1671	1667	4.116134
05/07/02	1:21 PM	5/7/02 1:21 PM	104.1671	1668	4.116134
05/07/02	1:22 PM	5/7/02 1:22 PM	104.1671	1669	4.116134
05/07/02	1:23 PM	5/7/02 1:23 PM	104.1671	1670	4.116134
05/07/02	1:24 PM	5/7/02 1:24 PM	104.2393	1671	4.043921
05/07/02	1:25 PM	5/7/02 1:25 PM	104.2032	1672	4.080028

## APPENDIX E INTERPRETIVE PLOTS

to predict drawdown: enter parameters in blue cells adjust v in green cells for automatic lookup read drawdown in red cell

drawdown=114.6 Q W(u)/T = \$250.00 | W(u) function of u=1.87'(\* S)/(4 T t)= 2.2E.07 | W(u) function of u=1.87'(\* S)/(4 T t)= 2.2E.07 | W(u)=1.85 | W(u) 484 gpd/ft 5.5 gpm 1.0E-04 1.5 feet 1.00 days T transmissivity (from observation well Jacobs-Cooper)

Q pumping rate during initial drawdown

S storage

1 distance from well

I time since pumping started Match observed drawdown to Theis-predicted drawdown in the Pumping Well Assumptions Ogle: Aquifer Test Theis\* calibration solution for confined aquifer

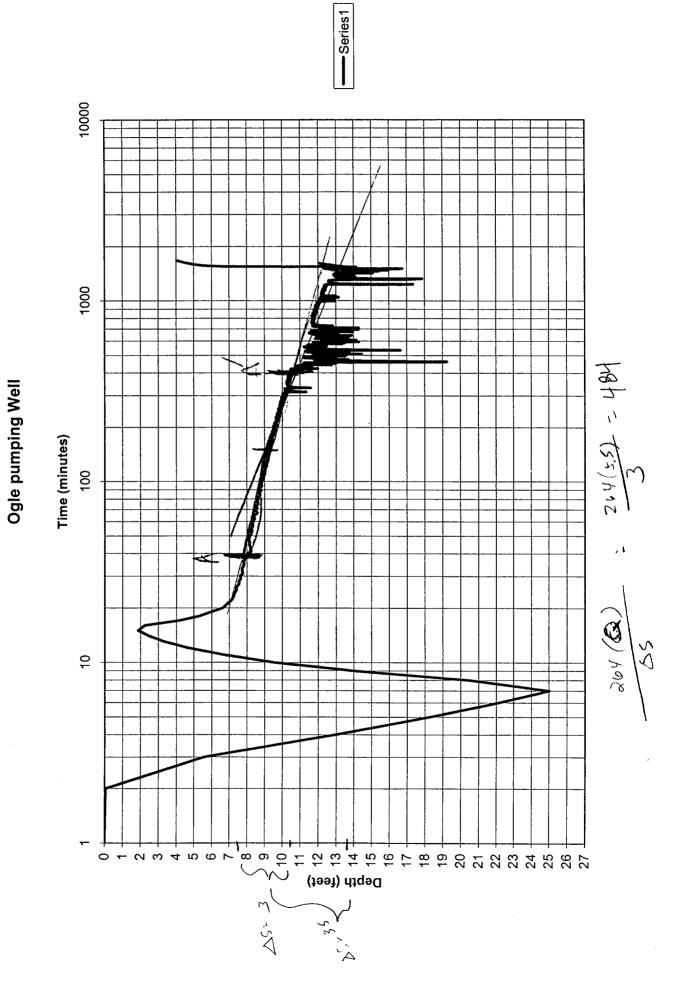
	p218	whole	dxa	whole	exb
OTO. D318	St. Paul MN.	2 W	1.E-07	8	1.E-07
ited from Freeze and Cherry, 1979, Groundwater, Prentice-Hall, Toronto, p318	Driscoll. 1995. Groundwater and Wells. U.S. Filter/Johnson Screens. St. Paul MN. p218	2.1733E-07			
ned from Freeze and Cherr	Driscoll. 1995. Groundwate.	action split out			

to predict drawdown: enter parameters in blue cells adjust u in green cells for automatic lookup

read drawdown in red cell			
Ogle: Aquifer Test Theis° predictive solution for confined aquifer			
Match observed drawdown to that predicted by the Theis Recovery Data in Aquesoive Assumptions	s Recover	``	
T transmissivity (from equilibrium)	283	gpd/ft	
Q pumping rate during initial drawdown	5.5	EdB	
S storage	1.00		
r distance from well	1.5	feet	_
t time since pumping started	8.	days	_
drawdown=114 8 Q W(נו)/T = \$\text{\$15}\feet{52}\feet{52}\feet W(ti) function of u=1,87't/"5 S/(tl T) = 3.7E-07	3.7E-07	[ee	
= M(m)	14.15		_

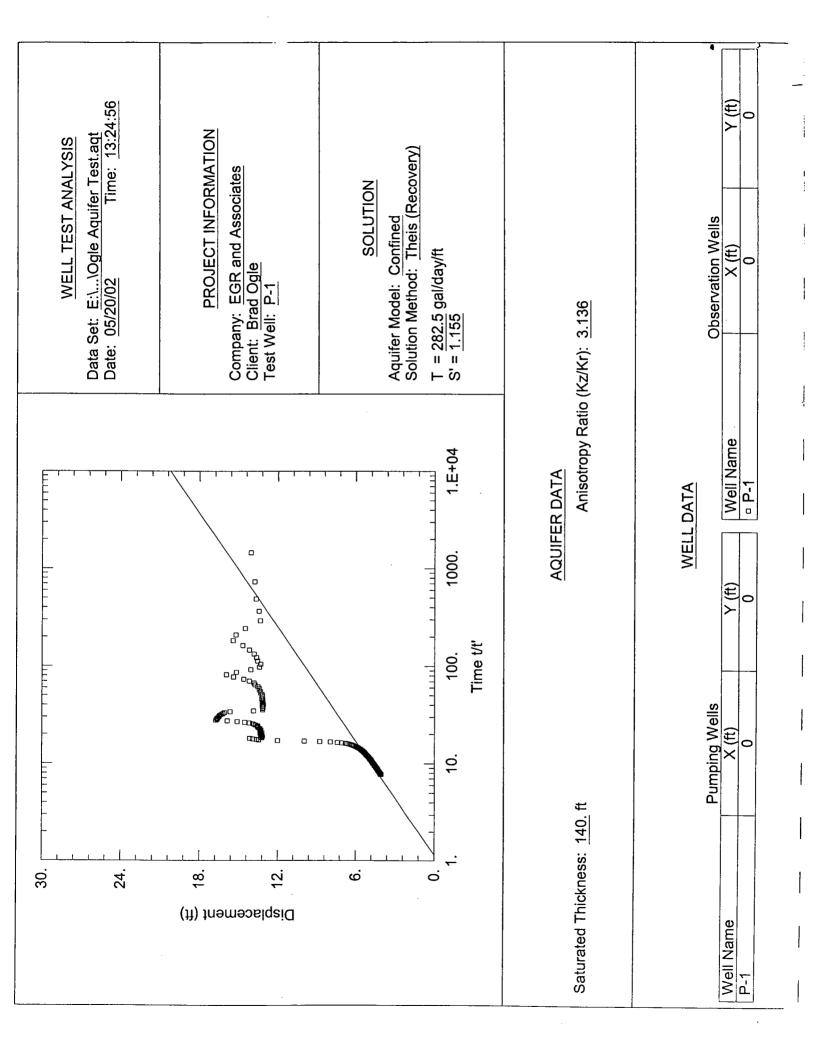
unj n		_		
whole	exp	whole	exp	
	1.E-07	4	1.E-07 exp	
1 3.7169E-07				

adjust uin green cells for automatic bokup read drawdown in red cell Ogles Aquifer Test Theis' predictive solution for confined aquifer Theis' predicted Drawdown in pumping well after 180 days of pumping at peak use rates of 1 gpm. Assumptions T transmissivity (from equilibrium) 283 gpolft O pumping rate during initial drawdown 9.0 gpm S storage r distance from well 10.E-04 r distance from well 10.E-04		
and in pumping well after 180 days of pumping at gpm.  T transmissivity (from equilibrium) 283  Q pumping rate during initial drawdown 9:0  S storage Storage 25:00  T distance from well 25:00  I time since pumping started 180 00		
olution for confined equifer  In in pumping well after 180 days of pumping at gpm.  T transmissivity (from equilibrium) 283  Q pumping rate during initial drawdown 9:0  S stonge To distance from well 555:0  T time since pumping started 180 00		
~ 26.8		
283 8.0 1.0E-04 250.0	ĕ	
_		gpd/ft
from well ce pumping started		mdo
i from well ce pumping started	96.02	
	250.0	feet
	80.08	days
	W(u) function of u=1.87*(r2 S)/(4 T t)= 5.7E-05	
drawdown=114.6 Q W(u)T = 配名第2		



-Observation Well - Pumping Well 0.02 0.03 0.04 0.05 90.0 0.07 0.08 0.09 0.12 0.13 0.01 0.11 0.1 10000 1000 Time (minutes) 100 9 Depth (feet)

Ogle pumping Well



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## MINUTES

Lane County Planning Commission
BCC Conference Room - Lane County Courthouse

February 7, 2006 5:30 p.m.

PRESENT:

James Carmichael, Chair; Ed Becker, Vice Chair; Lisa Arkin, Todd Johnston, Juanita

Kirkham, Nancy Nichols, John Sullivan, Jozef Zdzienicki, members; Planning Director

Kent Howe, Associate Planners Bill Sage and Jerry Kendall, Staff

ABSENT:

Steve Dignam

## I. WORKSESSION: Training

Commission Chair James Carmichael convened the work session at 5:30 pm.

Members participated in a training exercise on soil classifications and findings of fact.

The work session adjourned at 7 pm.

## **PUBLIC HEARINGS**

1. In the matter of adopting proposed Lane Code 16.266 – Wildland Urban Interface combining Zone (WUI, RCP) for implementation of fire safety standards for new development within the wildland – urban interface or rural Lane County.

Committee Chair James Carmichael convened the meeting at 7 pm. He called for public comment on subjects not related to items on the agenda. Seeing no one wishing to speak he opened the public hearing.

Associate Planner Bill Sage provided the staff report. He said regulations were being proposed that would include new development of residential structures. He said the regulations would not affect existing structures but would affect properties that added a new building or add 50 percent or more to an existing house.

Mr. Sage provided a brief history of the proposed legislation. He said Lane Code required that a new residential development in a forest zone required a primary fuel break of 30 feet and a secondary shield break of 100 feet. He said the Planning Commission would make decisions on information in the record. He said the Planning Commission would have discussions of policy of protection against wildfires and determine which policy should be recommended for implementation.

Mr. Sage said the Oregon Department of Forestry required properties to be inspected to identify things that could be done to minimize the potential for a wildfire to spread from or on to a property. He said property owners had the choice of voluntarily complying with the suggested standards. He said if a property had complied then they would not be held liable if a fire spread off of their property but if they had chosen not to comply then they would be liable if a fire spread off of their property and required extreme measures to

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extinguish. He noted that the proposed standards would not apply in metro areas but would apply in rural areas. He said the City of Eugene could create their own standards for areas within its urban growth boundary since the County could not enforce any standards inside of that boundary.

Mr. Carmichael stressed that the evening's public hearing would not be the last opportunity for people to provide input to the Planning Commission. He added that there would also be another chance to testify in a hearing before the Board of County Commissioners after the Planning Commission had provided a recommendation.

Mr. Carmichael opened the public hearing.

Mac Johnson, 22865 West Sheffler Road, Elmira, said the staff report had shed some light on the confusion caused by an inaccurate newspaper report. He questioned whether there would be a mailing sent out to individual residents who were likely to be affected within a calendar year.

Mr. Sage said there would be a second mailing sent out to residents before the Board of County Commissioners had their own public hearing.

Bob Kintigh, 38865 East Cedar Flat Road, Springfield, said he had six decades of forestry experience in Oregon. He said, to general applause, the whole proposal should be rejected because it was not needed. He added that Senate Bill 360 provisions at the state level would handle the situation in a much more equitable manner. He said he was the chair of the committee that had put Senate Bill 360 to a legislative vote. He said the bill was not a one-size-fits-all piece of legislation but targeted certain areas and provided variable standards suitable to different types of hazards. He said the photos shown in the brochure sent out by the County did not contain one photo or drawing that was representative of northwest Oregon conditions. He said the photos shown were from Nevada and portrayed dry mountain areas. He said the brochure had mentioned the use of Butterfly Bush as a desired plant in fire break areas and noted that the plant was illegal to propagate, sell or grow in the State of Oregon. He said minimum road widths of 20 feet, with 16 feet of road surface, was recommended but noted that the county road near his property was 13 feet. He said the road was regularly used by log trucks, semi trucks, and school buses. He questioned why the County was trying to impose higher standards for private citizens than it used for its own roads. He urged the commission to adopt the changes proposed by the City of Coburg Fire District. He said those proposed changes were more practical because they were result oriented. He reiterated that the issue could be adequately addressed by Senate Bill 360. He submitted written material into the record.

Lyle Clengman 88922 Evers Road, Elmira, requested that the record be held open for additional testimony. He commented that he had contacted county staff about the proposal and had not received a response. He stressed the need to have more information provided to the commission so it could make informed decisions.

**Judy Templeton**, 23399 Highway 36, Cheshire, said the general information and proposed guidelines seemed reasonable to her and added that all citizens should take general precautions against wildfire. She stressed that there were multiple origins of wildfire and added that homes should not be ignored as potential risks for fire.

**Jeff Strasheim** 92786 KInser Lane, Cheshire, questioned if the proposed rules were being implemented immediately.

James Walsh, 85476 Willamette, Eugene, said the proposal was going to cause trouble with tax payers. He questioned why the County was trying to take the lead in a project that was not yet implemented by the State. He raised concern that the proposal was not well thought out and would drive up the price of rural residential property and would effect fundamental changes in zoning regulations. He said there was no clear need for the county to act when the state laws would provide uniformity across the state.

Al Johnson, 2303 South East Grant, Portland, submitted written material into the record. He said he was an attorney representing the Northwest Propane Gas Association. He said the letter he had distributed contained background information on a legislative initiative that the Association had taken to the last state legislative session and was now in Chapter 88 of Oregon law. He said the legislation dealt with the problem of duplication of laws. He said the use of propane tanks used to provide household heat were installed and replaced by the State Fire Marshal. He said problems had arisen in the previous two years when Lane County had begun to regulate the siting of the tanks as structures. He said this resulted in substantial time delays and financial disincentives to people who wanted to switch to propane for heating. He said the written material he had submitted reconfirmed the allocation of authority established by the State and expressly prohibited local jurisdictions to regulate the installation and removal of small propane tanks. He said the proposed regulations clearly did regulate the tanks and suggested that County staff modify the ordinance to take care of that issue. He added that there were broader problems such as the scope of Senate Bill 360 which was shown as a community wildfire protection act that covered the whole county except those lands located within city limits. The scope of that act was limited to forest urban interfaces where there was a concentration of structures within an urban setting.

Jim Baker, 51013 McKenzie Highway, Vida, said citizens needed help to change a one time good idea that had 'run amok' because of bureaucracy. He said the proposed regulations were a useless and ridiculous attack on the livability of communities and the environment. He said citizens needed help to make the plan legitimate instead of massive overkill. He stressed that he kept a wildfire defensive zone around his property because it made good sense but added that he would not destroy his garden or remove his fruit trees. He said the plan would destroy riparian areas and leave only a small strip of stream protection. He said Lane County had a workable plan already that addressed individual on site conditions.

**Dick Lamster**, PO Box 682, Walterville, said he did not receive any notice of the proposal. He said he was very passionate about the proposed regulations. He said the proposal would destroy backyard habitat in rural areas. He stressed that people wanted to attract wildlife to their back yards.

Hal Reed, 85139 Appletree Drive, Eugene, reiterated the testimony of Mr. Walsh that Senate Bill 360 should be allowed to run its course. He questioned who from Lane County had initiated the idea and questioned how many homes had burned from wildfire in Lane County. He established that none had burned and remarked that the proposal was trying to fix a problem that did not exist.

Robert Haven, 84502, Thomas Judson Road, said he had moved to Lane County specifically to live among trees. He stressed that he owned 35 acres of forest and meadows south of Spencer Butte. He said he considered himself a steward of the land and protected it from bulldozers and chainsaws. He raised concern that the local government was being heavy handed and threatening his property with extreme requirements and draconian policy. He remarked that for him to get a building permit he would have to cut down a high volume of Douglas Fir, Oaks, Maples and other trees to widen his private road, a driveway, to the established county standards. He said citizens should not be punished with blanket regulations because of irresponsible land owners in another location. He added that high fire insurance

costs could provide an effective incentive for home owners to maintain a fire defensible area around their homes. He urged the commission to reject the proposed regulations entirely.

Nick Williams, 41180 Winberry Creek Road, Fall Creek, said he found much of the proposal was reasonable but noted that the proposal, as it was structured, was a 'wrong step in the right direction.' He said there was nothing wrong with trying to prevent fires but said the county should be focused on back yard burning standards. He said the general public perspective was that the County was trying to get rid of trees. He added there would be unintended consequences to the proposed regulations with negative impacts to wildlife habitat.

Martha Moulton, PO Box 624, Pleasant Hill, said she lived in a forested area and would be affected by the proposed regulations because she was planning on building a dream home on her property. She said she could not afford to improve 1.5 miles of road to her property and added that her access road to her property had posed no problem to the local fire protection district. She said the proposed regulations were one more way that the County was trying to keep people from living their own lifestyle in rural areas. She said insurance risk costs should determine whether people made fire defensible spaces and stressed that nothing further was necessary

Fred Smith, 5151 Blanton, Eugene, said he had bought his house in 1984 and the regulations that were being proposed would require him to cut 153 trees on his property. He said this was not acceptable to him. He remarked that the wildlife around his home would also be negatively impacted.

Kelly Crane, PO Box 21424, Eugene, requested that the record be left open so additional material could be submitted. She reiterated the testimony that had been previously given. She said fire protection was important to everyone but said she did not believe that the ordinance would not affect existing homes and asked for specific language in the proposal that would prohibit that from happening. She said the proposed regulations would remove the reason she had moved to a rural area. She reiterated her request to keep the record open.

Marty Nelson, 85710 Doane Road, spoke as the fire chief of Lane County Fire District Number 1. He said he had thought that the proposed regulations would address an equity issue he had been concerned about for some time. He remarked that F2 zoned lands had different rules than rural residential zoned lands and said anything that could be done to make an equitable situation that included all citizens should be done. He also raised concern with the application of proposed standards. He said anything that was done needed to be identical with state statutes that would be implemented. He reiterated the importance of balancing needs of society and individual rights of citizens. He said it was absolutely wrong to ask people to clear cut the areas around their homes. He also requested that the record be left open for additional testimony.

Keith Tattersall, 47688 McKenzie, Vida, said he had moved to Oregon to take advantage of living among trees in the country. He said, under the proposed regulations he would lose 200 trees on his property that would be lost.

Marylyn Cohen, PO Box 11752, Eugene, said she was opposed to the proposed regulations. She raised concern over the costs of implementing the regulations and suggested looking into the way Deschutes County had implemented its plan which included payments to citizens for implementing defensive fire standards.

Jim Welsh, 90050 Killtan Lane, Elmira, spoke on behalf of the Eugene Association of Realtors, Springfield Board of Realtors, Cottage Grove Board of Realtors, and the Central Oregon Coast Board of Realtors. He stressed that all of the proposed regulations were a draft and commented that much of the regulations was not needed. He read a quote from Senate Bill 360; "... the legislative purpose was

- a. provide a forest land urban interface fire protection system in Oregon that minimized cost and risk while maximizing effectiveness and efficiency for protection of the values at risk from fire.
- b. Promote and encourage property owner efforts to minimize and mitigate fire hazards and risks within the forest land urban interface.
- c. Promote and encourage the interaction of all levels of government and the private who had a direct or indirect interest and role in the forest land urban interface situation over the long term."

Mr. Welsh said there had been no intention in the legislation to bring the 'heavy hand of government' to land owners in urban interface areas. He asked that the record be left open for at least six weeks so more information could be gathered and so further time would be allowed to look at alternatives to the proposed regulations. He suggested reviewing the City of Coburg plan.

Kate Gessert, 86070 Cougar Lane, Crow, said she had moved to Crow ten years previously and if the proposed rules were implemented on existing housing then she would have to move back to town to be able to garden anywhere near her home. She said new housing would have to be built in 'moonscapes' that would deface rural landscape, force people to remove plants and wildlife from their property, cause homes to be surrounded by huge driveways and masses and pavement, and force people to live without nearby trees to provide shade. She noted that the proposed regulations suggested planting lawns and opined that grass was the most wasteful type of landscaping that could be used. She acknowledged that fire prevention was extremely important to everyone but stressed that there was more to living in the country than fire prevention. She said the proposed regulations were a solution that would cause more problems.

George Gessert, 86070 Cougar Lane, Crow, said he was confused and bewildered by the proposed regulations. He noted that there was forest land on his property and he was very concerned over the possibility of fire but stressed that fire concerns had to be balanced with other concerns. He read a list of things he considered to balance his concern over fire.

- Privacy
- Shade in the summer
- The pleasure of living among plants and animals
- Year round protection from wind
- Property values
- Investments of time and money in landscaping and gardens
- Historical value of old trees
- Water conservation
- Erosion control
- The immediate economic value trees

Mr. Gessler stressed the importance of balancing fire concerns with other factors important to citizens.

George Letchworth 55429 Delta Road, Blue River, said the River Reflections newspaper had run a front page article advertising the public hearing and remarked that if this had not been done then many citizens would not have known about the hearing. He stressed the importance of better publicizing future hearings.

Mr. Letchworth said he had looked at the data and said the mistake that was made was in terms of problem analysis. He said the proposed regulations were a solution looking for a problem. He said he did not see the problem that the proposal was trying to solve. He questioned why there was a solution being proposed when there was no problem.

Boyd Iverson, 84453 Murdock Road, said the proposed regulations were unneeded. He questioned how the funding would be found for fire districts to come to every property and do the required inspections for fire breaks. He added that the proposed regulations did not take northwest weather into account and the proposed roof materials did not make sense. He said driveway turnarounds would be impossible to install according to the regulations for many homes. He added his concerns over runoff and bank erosion from widening private roads and driveways. He reiterated that the proposed regulations did not make any sense

Cheryl Smith, Cheshire, suggested that further public hearings be held in rural areas where the regulations were proposed. She remarked that many people were elderly and poor and could not make it to the County courthouse to provide input. She added that she wanted data on the fiscal responsibility of enforcement of the regulations and the environmental impacts.

Merle Whiner, 37<sup>th</sup> Avenue, Eugene, said she generally supported safety standards for new development but objected to the proposed road standards. She said adoption of the standards would require a modification of her driveway beyond what was necessary for fire safety. She suggested a grandfather clause so the new road standards would not apply for existing property owners. She added that section 8(a) of Code Section 16.266 should not apply if there were only commercial or farm uses on the property and should be modified to include wildlife habitat conservation and management areas which the State and County now recognized. She submitted written material into the record.

Norm LeCompt, 84477 Murdoch Road, said he had lived in the woods for 25 years. He said he recognized that the risk of wildfire but raised concern that the County was trying to regulate people in their homes. He reiterated that there had not been a wildfire problem in Lane County and said it was not the County's business to protect private property unless it wanted to pay for building his home. He added that there was another potential problem in that islands of landscaping would not prevent the spread of forest fires. He said the idea was ridiculous. He questioned whether the theoretical risk of wildfire justified the extreme intrusion into people's lives.

John Karen, Applewood Subdivision on Spencer Creek, reiterated the testimony that had been submitted. He said he would be extremely impacted if the proposed regulations went into effect. He said the proposal would preclude him from building on his property and added that his property values would plummet dramatically.

Lisa Warrens, 520 Nectar Way, Eugene, raised concern over what the proposed legislation would require. She raised concern over the necessity of clear cutting property to comply with regulations. She said the regulations were giving a green light for developers to clear cut hillsides for new development and increase impervious surfaces that would contribute to stormwater runoff. She said if the government was so concerned about wildfires they should limit development in forested areas.

Jim Mann, 5025 Saratoga Street, said he had been a land use planner for 33 years and had been involved in land use regulation. He raised concern over the complexity, discretionary nature, and the comprehensiveness of the proposal. He noted that current F2 and F1 zones had standards for fire safety for dwellings.

He said the proposed regulations were too complex. Regarding the discretionary nature of the proposed regulations, Mr. Mann said there were statutes in Oregon land use law that if a permit was issued that included the exercise of discretion or policy making then that was a land use decision that required notice and opportunity for appeal. He said his initial view of the proposed regulations was that there were several elements that required the exercise of discretion and the decision making was laid out in a ministerial process. He said if someone challenged the discretionary nature of the regulations in court there had been cases where decisions had been made regarding providing notice and opportunity for appeal of regulations.

Regarding the comprehensive nature of the proposal, Mr. Mann said 85 percent of Rural Residential zoned land in the County was already developed. He said rather than making the regulations required, the County should make the regulations voluntary with incentives for property owners to provide fire protection measures on their property.

Laurie Segel, Land Watch Lane County, said there was no explanation from staff as to why structural standard criteria had been removed from the proposed regulations. She said the road and driveway standards were so extreme that removal of structural standards from the proposed regulations did not make sense. She added that there was no requirement for fire break protection standards for secondary structures.

Regarding amendments to fire hazard maps subsequent to the regulations being adopted, Ms. Segel said the draft gave the Planning Director authority to make amendments when identification of classifications of each of the areas was done by professionals. She questioned whether this was legal.

Regarding defensible space and secondary fuel breaks, Ms. Segal said there was reference to water system standards and she could not find the section of Lane Code where water system standards were defined. She reiterated the request to leave the record open for written testimony.

**Bob Crambly**, Junction City, said if people thought the standards would not affect existing property owners they were wrong. He said the standards will apply to all people sooner or later.

Ron Apply, 85201 Christianson Road, said he had been a professional fire fighter for 32 years. He said he had fought dozens of urban interface fires and remarked that the proposed regulations were too extreme for what was needed. He said the timber in the area did not burn the same as it did east of the Cascade Mountain Range for which most of the language of the proposed standards had been designed. He reiterated that the proposal was too extreme for what was needed in the area.

**Janice Tritton**, 86390 Sanford Road, said when it would be a constant battle to keep grass mowed to the required fire break distance. She said old people did not have the money or ability to do the constant care that would be necessary.

Rebecca Love 88946 Ross Lane, Walterville, said her family had recently had a house fire and the fire fighters had no trouble negotiating the lane to her house. She said she had moved to the area to live among the trees. She said Lane Code 9.930, which would require her to cut twenty trees, had the effect of

charging people to cut down their own trees to comply with the proposed regulations. She raised concern over mud slides if too many trees were cut.

Randy Johnson, 22536 Highway 36, Cheshire, said if he had to follow the proposed rules then the only thing he could have on his property would be pavement or grass. He said he never heard of a structure fire causing a forest fire in Lane County.

Mr. Carmichael thanked those who had come to the hearing. He expressed his appreciation of the input provided.

Commission member John Sullivan, seconded by Commission member Jozef Zdzienicki, moved to keep the record open for four weeks.

Mr. Sullivan said he would not normally be in favor of extending for four weeks but stressed that there was no pressing issue other than making sure that the public had enough information and that staff had enough time to review the Coburg plan as was suggested.

Mr. Zdzienkcki stressed that it was the written record that would be left open for four weeks.

Mr. Carmichael said the Planning Commissioners would deliberate in four weeks and make a recommendation to the board of County Commissioners who would then hold another public hearing on the matter.

The motion passed unanimously.

Planning Director Kent Howe said the written record would close on March 7 at 5 pm.

II. PA 05-5985/Plan Amendment and Zone Change from "Agricultural" to "Marginal Land" and from "E-40/Exclusive Farm Use" to "Marginal Land" for a 73+ acre portion of Map 18-04-11, tax lots 303 and 304. Applicant: Ogle, Childs

Associate Planner Jerry Kendall provided the staff report. He distributed written material that had come in since the staff report had been written. He said the application had been submitted in a similar form in 2003 and had gone to the Board of County Commissioner level. He said the new application composition had been changed. He called attention to the map included in the staff report. He said the parcel was 113 acres and noted that 40 acres of the parcel had already been zoned Marginal Lands through a prior application. He said it's the remaining acres that are before the commission at present. He said the area was contiguous with the urban growth boundary of the City of Eugene and was approximately .75 miles from the intersection of Blanton Road and Loraine Highway.

Mr. Kendall said the land was mostly surrounded by resource land with more marginal lands to the southeast. He access to the land would be dealt with during subsequent subdivision applications but noted that the current access was to the north and was provided through an easement in city limits to Timberline Drive. He said the property had access to urban services and the transportation department had reviewed the request and had no concerns over traffic loads. He said the State Watermaster's office had reviewed the application and while there was some difficulty with how the report was written they supported the basic conclusion that the property could support up to nine parcels. He said if the application went to the



Board of Commissioners level there would be a stipulation that the entire 113 acres would be limited to nine parcels.

Mr. Kendall said Marginal Lands have a two tiered test:

• During a five year period there could be no farm use on the property that had produced \$20,000 annually. During the same five year period the subject property could not gross more than \$10,000 in forest income over its growth cycle.

Mr. Kendall said a Board of Commissioners' guideline stated that an affidavit submitted by the applicant would be sufficient proof that the land had not produced that amount of income. He noted that the applicant had submitted that affidavit and added that the income test had included the entire 113 acres and not just the 73 that were included in the application.

Mr. Kendall said the forester for the applicant (Mark) had concluded that the entire 113 acres had only produced \$5,173 annually. He concluded that the forest income test had been met.

• Half of the land in question had to be comprised of agricultural soil classes five through eight. The proposed marginal land is not capable of producing 85 feet of merchantable timber per acre per year.

Mr. Kendall said the staff report included statements that said the soil class 5-8 requirement had been met.

Mr. Kendall said it was concluded that the land could produce 69 feet of merchantable timber per acre per year. He said the established definition of 'merchantable' as stated by Webster's Dictionary was: "...of commercial quality and acceptable to buyers or sellable." He said it was established that Douglas Fir, and to a minor extent Ponderosa Pine, were the only two species that were merchantable or sellable. He said staff was recommending approval based on the current record. He noted that the forestry report was very complex and urged the commissioners to ask questions to make the information more clear.

Mr. Carmichael noted that the commission by-laws required a vote to continue a meeting past 9:30 pm. He called for a motion to continue from the commission.

Commission member Juanita Kirkham, seconded by Commission member Lisa Arkin, moved that the hearing continue for a maximum of one hour.

Mr. Carmichael said he would vote against the motion since the applicant had waited so long for the hearing.

Mr. Becker noted that he had material from the Goal One Coalition that he had not read and maps in the staff report that were illegible. He said he was not sure that he could give the applicant a fair hearing.

Mr. Zdzienicki said he agreed with Mr. Becker. He noted that the forestry report was complicated and the document from the Goal One Coalition had not been read. He said he did not feel confident that he could ask relevant questions.

Ms. Kirkham called for the question.

Mr. Sullivan offered a friendly amendment, which was accepted, to continue to 10:30 and leave the record open.

The motion, as amended, passed 6:2 with Mr. Carmichael and Mr. Zdzienicki voting in opposition.

Mr. Carmichael opened the public hearing.

Mike Farthing, 767 Willamette Street, spoke as the applicant's representative. He said the 73 acres was contiguous with the urban growth boundary of the City of Eugene and was accessed by Timberline Drive on a private easement. He apologized for the illegible photos in the application. He noted that exhibits c and f were aerial photos of large grassy areas on the property. He said he would supply color photos so the lands could be seen in more detail. He said two power lines crossed and joined across the property. He noted that there were a few areas on the site that grew trees but the majority of the area did not grow trees.

Mr. Farthing distributed the approval criteria for the application. He said the entire application was centered on the two criteria established in ORS 197.247 adopted in 1983. He said the Lane and Washington Counties were the only counties that had implemented the Marginal Lands statute. He said there were numerous marginal lands applications that had been approved in the past and stressed that the statute was a viable planning tool. He said the application had to meet the two criteria outlined by Mr. Kendall. He said the affidavit regarding the agricultural income portion of the criteria had been met. He noted that the land was made up of class 6 soils. He added that the property was not managed as part of a forest operation capable of producing an annual income of \$10,000 during the growth cycle. He said that portion of the criterion was addressed in detail in the forester's report.

Mr. Farthing said the soil productivity test had been met since the class six soils were within the requirement of soil classes 5-8 on a majority of the site. He added that Marginal Lands criteria was relatively objective compared to Non-Resource Land classifications.

Mr. Farthing said the property was not capable of producing 85 cubic feet of merchantable timber per acre per year.

Mr. Farthing said marginal lands occurred between forest lands and bottom lands. He said the real focus was on the inability of the land to be used for forestry. He urged the commission to review the forester's qualifications and ask him any questions the commissioners thought was necessary.

Mr. Farthing called attention to a recent Land Use Board of Appeals Case, (2005-029 Carver). He said many of Mr. Just's Goal One Coalition arguments were made in that case and were rejected by LUBA. He noted that the same forester had been consulted in that application as well.

Mr. Farthing called attention to Exhibit K in the staff report which identified the Board of County Commissioner's interpretation of Marginal Lands. He said several basic questions about marginal lands were answered. He said he had been in the process that led to the adoption of that interpretation and stressed that the Board of Commissioners had not altered or modified the interpretation. He said the Board of Commissioners had used that interpretation in the Carver case and had approved certain methods used by the forester in his forest analysis. He stressed that marginal lands were looked in a 'slice of time' between 1978 and 1983 and 1983 log prices had to be used to measure the amount of income the land had generated. He said LUBA had approved that 'slice of time' analysis.

Mr. Farthing reminded the planning commission that the Board of County Commissioners had said marginal lands were still resource lands. He said the planning commission would not be changing resource land to non resource land. He said farm and forest uses were permitted and encouraged but it was acknowledged that the land was not as productive as other areas.

Mr. Farthing reiterated that the forester's forest income test for the Carver case was affirmed by the Land Use Board of Appeals. He said the same method had been used in the current application. He added that the average cubic foot per acre per year income for the land in question was \$5,173 per year under 1983 log prices with a 50 year growth cycle. He said the average cubic foot per acre per year yield was 69.33 cubic feet. He said the calculation based on 24 acres of the 73 cited in the application being exposed rock with no productivity at all. He stressed the predominant grassy areas, shown on the aerial photos, were incapable of producing merchantable trees.

Mr. Farthing called attention to the analysis provided by Jim Just of the Goal One Coalition. He said that document had been reviewed and said there were portions of the document that had been used in the Carver case and had been dismissed by LUBA such as the challenge of the 50 year growth cycle and the argument against using 1983 log prices. He said Mr. Just's argument regarding the Dixonville/Philomath/Hazelaire (DPH) soil complex only applied in the income portion of the criteria because the income portion the entire 113 acres had to be reviewed. He said the forester had applied 1983 log prices and had analyzed and applied DPH soil complex and came up with rating and productivity income factors. He said the same process had been used in the Carver case and had been approved by LUBA and the Board of County Commissioners. He noted that Mr. Just's analysis again challenged that process even though they had been dismissed by LUBA.

Mr. Farthing noted that Mr. Just's document, on page 2 table 1 footnote 1, had mentioned the site index for the Philomath soil series where Ponderosa Pine was analyzed. He said Mr. Just had a site index of 125 which he said he had gotten from Exhibit One. He noted that Exhibit One had a Philomath site index of 104 and remarked that the skewed numbers were an example of the kind of 'number movement' that occurred in Mr. Just's materials. He remarked that Mr. Just moved numbers around and did not account for the changes. He noted that he had put up with the same kind of assertions based on data that was not relevant for over a year during the Carver case. He stressed the need to critically review the material that Mr. Just submitted. He stressed that Mr. Just was not a forester.

Mark, 870 Fox Glenn Avenue, Eugene, spoke as the forester representing the applicant. He referred to the written material submitted by Jim Just and reiterated Mr. Farthing's note about the site index for the Philomath soil series noted at 125 when the actual table data showed an index of 104. He stressed that he was very familiar with the booklet where Mr. Just had gotten his data and was also very familiar with Ponderosa Pine he came to the conclusion that Mr. Just's projections were based on a very small sample of 30 year plantations. He noted that after 30 years the growth of Ponderosa Pine slowed significantly and added that the booklet from which Mr. Just had taken his data specifically stated that the figures should be used carefully because the projections were based on an extremely small sample. He noted that the tables shown for Douglas Fir were based on thousands of samples whereas the Ponderosa Pine data was based, sometimes, on one sample.

Regarding the grassland on the property, Mark said he was not a soil scientist and could only make statements based on forestry but noted that he had been a forester for 30 years, owned property of a very similar nature, and had worked on other marginal lands applications near Lowell. He said he had planted his property three times with Ponderosa Pine under the same soil conditions, the same solar aspect, and the

same conditions as the applicant and barely 40 trees had survived. He reiterated that he was not a soil scientist but strongly stated his opinion that a tree could not be planted in one inch of soil and take root enough to grow as desired.

Mark called attention to page six of Mr. Just's written material and noted that Mr. Just had referred to lumber prices and said he had not used any of the grades mentioned in Mr. Just's material because they were physically impossible to achieve in a 50 year growth cycle. Referring to page nine of Mr. Just's material he said Mr. Just had asserted that using 16 foot logs would increase the scale over what would be done if 32 foot logs were used. Mark stated that this was true but stressed that virtually no mill west of the Cascades would pay over a 'default price' for 16 foot logs. He said 'default price' meant that the price would be \$200-\$250 less per thousand than a 32 foot log.

In response to a question from Mr. Zdzienicki regarding trees used for lumber for construction, Mark said that lumber generally came from larger trees. He said, in the coast range and on very good soils, a tree could grow to a 16 inch diameter at the top within 50 years but noted that the property in question had soils of low site 3, site 4, or site 5 ground. He said site five ground, from a forester's standpoint, was not even considered forest land.

Mark reiterated that mills in western Oregon paid a premium price for 36 to 40 foot logs. He said some companies would pay a premium for 32 foot logs but noted that the price dropped \$100 per thousand. He said if the length dropped below 26 feet the price dropped an additional \$125 per thousand. He again acknowledged that 16 foot logs would increase the scale but would reduce the price paid for the logs by 40 to 50 percent. He said companies considered 16 foot logs as 'leftover scrap.' He said one of jobs he did was to manage people's forest land and administer logging jobs. He stressed that he was in contact with log buyers on a continuous basis. He stressed that the biggest price determinant for logs was length and not diameter.

Noting that the meeting was 5 minutes short of the extended time allotted, Mr. Carmicheal called for a date and time certain to continue the public hearing.

Mr. Kendall said February 21 would be the date to continue the hearing. He said the hearing could pick up exactly where it had left off.

The meeting adjourned at 10:30 pm. (Recorded by Joe Sams)

FINALIZED self-2 for Ogle

## MINUTES

Lane County Planning Commission Board of County Commissioners Conference Room - Lane County Courthouse

> February 21, 2006 5:30 p.m. Work Session / 7:00 p.m. Public Hearing

PRESENT:

Lisa Arkin, Ed Becker, James Carmichael, Steve Dignam, Todd Johnston, Juanita Kirkham, John Sullivan, Nancy Nichols, Jozeph Zdzienicki, Lane County Planning Commission members: Kent Howe & Jerry Kendall, Staff

#### I. WORK SESSION:

#### Approval of November 15, 2005 Minutes a.

Commission Chair James Carmichael convened the meeting at 5:30 pm. He called for public comment on items not related to the evening's agenda. Seeing no one wishing to speak he moved on to the first agenda item.

Mr. Carmichael noted that there had been a suggestion from the commission to invite speakers to work sessions when there was a light agenda to get a better scope of the feelings of the community. He commented that the more people that were brought in on the process the better the process became.

Commission member Ed Becker said he was in favor of the idea but stressed that the items mentioned in the annual report should take a higher priority.

Commission member Steve Dignam agreed with Mr. Becker.

Commission member Jozef Zdzienicki said the guest speakers would fit in better if they spoke on items mentioned in the annual report.

Mr. Carmichael suggested having Thousand Friends of Oregon and Oregonians in Action as guests for future work sessions.

Commission member Lisa Arkin commented that it would be interesting to hear from planning commissions from other counties or states. She noted that this could be possible through teleconferencing.

Mr. Dignam reiterated that the items on the annual work plan should take precedence.

Mr. Carmichael said he would contact some groups to see if there was any interest in coming to speak with the planning commission. He said there could be a further discussion at the next meeting.

> Mr. Zdzienicki, seconded by Commission member John Sullivan, moved to approve the minutes of November 15, 2005. The motion passed unanimously.

#### b. Training Session: Findings of Fact

Planning Director Kent Howe provided an informational update on the State Supreme Court decision to uphold Ballot Measure 37. He noted that Lane and Lynn Counties represented only 4 percent of the claims that had been filed at the State level. He commented that the reason that the measure passed was that there were people in rural areas that could not build on their property. He noted that 86 percent of the claims were filed for subdivisions that could not be built.

Mr. Howe distributed a handout outlining hearings procedure. He said the outline could be distributed with the meeting packet for each public hearing so the community could be familiar with the procedures guiding the planning commission.

Mr. Zdzienicki commented that people in the audience during the last public hearing had thought that the commission members were responsible for the proposed policy. He stressed that it should be made clear that the commission was present to listen to people and make recommendations to the Board of County Commissioners who were the policy making body.

There was general consensus to distribute a handout at public hearings to outline hearings procedure.

Commission member Todd Johnston commented that the commission chair should outline the hearings procedure at the beginning of each public hearing.

Mr. Becker suggested a large poster board with a simple outline of hearings procedure.

Mr. Howe said he could have a poster made that could be displayed at hearings.

The commission members participated in a training session involving findings of fact.

I. PUBLIC HEARING: Continued from February 7, 2006; PA05-5985/ Plan amendment and zone change from "Agricultural" to "Marginal Land" and from "E-40/Exclusive Farm Use" to "Marginal Land", for a 73+ acre portion of Map 18-04-11 Tax Lots 303 & 304. Owner/Applicants: Ogle, Childs

Commission Chair James Carmichael convened the regular session of the Lane County Planning Commission at 7 pm.

Mr. Carmichael called for public comment on issues not related to the evening's agenda. Seeing none, he moved on to the public hearing.

Mr. Carmichael called for declarations of ex parte contact or conflicts of interest. None were declared.

Mr. Carmichael noted that the hearing record was still open and noted that the commission had ended the previous meeting with the testimony of Mark Setchko.

Mr. Dignam noted that he had not been present at the previous hearing but confirmed that he had listened to the audio tape and was familiar with the testimony submitted during the first part of the public hearing on February 7.

Lane County Associate Jerry Kendall distributed written material that had been requested by the commissioners at the February 7 meeting. He also distributed copies of a previous court case relevant to the current application, (Carver), supplied by land use attorney Mike Farthing. He suggested continuing with the hearing testimony.

Mark Setchko, Eugene, said he had begun his testimony describing his experiences in planting trees in thin southern exposure soils with little moisture retention. He noted that the testimony had been more detailed in his written supplement. He reiterated his previous testimony that he owned land with similar soils and had not been able to grow Ponderosa Pine because when soil was too thin there was not enough room for a tree to take root, there was very little water retention and the southern slope aspect of the land made the soil too hot for growing trees when exposed to the sun. He stressed that his property was extremely similar to the applicant's property. He commented that a soils map could state that certain soils conducive to growing trees were present but noted that there was probably not be enough of the right soil to grow a tree.

Moving on to the material submitted by James Just, Mr. Setchko noted Mr. Just had a used a site index table different from the one he had used in his report and cited his data source as a table with different site indexes. He said the confusing numbers shown in Mr. Just's submitted material was pervasive through all of his presentations. Citing page 6 of Mr. Just's document, he noted that Mr. Just had made a point of stating that Mr. Setchko's report had not used no grades higher than 'two saw.' He explained that higher grades than two saw were worth more money and therefore the income test data had been skewed. He submitted a sheet showing grading standards for Douglas Fir. He said Mr. Just had questioned why Mr. Setchko's report had not used 1 peeler, 2 peeler, or 3 peeler trees in his report. He stressed that a 1 peeler tree had to be 350 years old and 30 inches in diameter at the top of the log. He said a 2 peeler had to be 275 years old, a 3 peeler had to be 100 years old and a Special Mill (SM) tree had to be 70 years old. He stressed that none of those types of trees could grow in a fifty year cycle and said he did not use the prices for those logs because those grades of logs were not available in a 50 year rotation. He said the grading rules for logs that he had submitted were the industry standard and added that he had used a very generous 40 percent two saw standard on the Ogle parcel for the forest income test. He called attention to a chart which showed an average diameter reached by trees during a 50 year growing cycle on high site three ground. He said Douglas Fir would reach ten inches in diameter and 8 inches at the top of the log. He stressed that none of the Ogle property was high site three soils but said he wanted to err on the high side of the estimate. He said there could be some two saw because some trees were bigger and some were smaller but said the average on site three soils, in a 50 year cycle, there would be 20-25 percent two saw rating. He reiterated that he had assumed a forty percent two saw figure for his calculations to err on the high side of the estimated income. He said logs sold to a mill were measured inside the bark at 32 feet length. He reiterated that the current market priced on length of logs rather than width. He reiterated previous testimony, stating that Mr. Just had suggested that selling 16 foot logs would increase the yield but stressed that, west of the Cascades, the common scaling figure was 32 feet. He said the current market standard was 36 to 40 feet. He said the price for 16 foot logs dropped \$250 dollars per thousand. He reemphasized that 16 foot logs could not be sold on the current market and that was why he had not used that length in his figures in the forest income test.

Regarding grade timber, Mr. Setchko said the only time grade timber came into effect was when there were older bigger trees with certain characteristics and ring counts. He said this was grade timber. He said grade was not determined by length and lengths were established by grading and scaling bureaus to accurately reflect the products being produced. He said most scale books came out of 32 foot log scaling. He stressed the confusing nature of the material submitted by Mr. Just and noted that scaling and grading were unrelated.

Mr. Setchko referred to the last table presented by Mr. Just. He said Mr. Just was trying to show that the income exceeded the income that Mr. Setchko had shown in his own report. He noted that:

- 1. You could not split the DPH complex. He noted that this had been decided by the Lane Use Board of Appeals.
- 2. All the board foot volumes in Mr. Just's tables were 60 year volumes for Douglas Fir and not the standard 50 year volumes.
- 3. Mr. Just stated that the site index he used for his data came from page three of "Establishing and Managing Ponderosa Pine in the Willamette Valley." Mr. Setchko said he owned that book and had not found any relevant data on page three. He said the site index was actually on page twelve of the book and showed different figures than those shown in Mr. Just's written material.

Mr. Setchko said the data Mr. Just's material had been misrepresented to produce an answer that he desired. He speculated that the calculation for income on Ponderosa Pine was 'some kind of average.' He said Ponderosa Pine log was graded differently than Douglas Fir. He remarked that a two saw ponderosa log was very difficult grade to get since it required a 100-200 year old tree. He said, in the Willamette Valley, *some* Ponderosa Pine would reach four saw but most of the Ponderosa Pine was five or six saw which was \$150-\$175 per thousand and not the \$309 cited by Mr. Just. He added that Mr. Just's figures had used a 40 growth cycle for Ponderosa Pine and a 60 year growth cycle for Douglas Fir and stressed that neither of those lengths of time were the 50 year standard used for the forest income test. He added that there were not enough figures shown in the book on Ponderosa Pine to be statistically valid.

In response to the assertion from Mr. Just that the cubic foot yields exceeding the 85 cubic feet per acre per year, Mr. Setchko said Mr. Just had made that assertion about thin soils on south facing rocky slopes that had never grown trees as far back as photos of the land could be found, were not growing trees now, and would never grow trees in the future. He said reasonable forest management practices did not include paying a thousand dollars an acre for planting trees that could not bring in a profit if they even survived. He stressed that Ponderosa Pine brought in very little profit in the current market. He said he would never recommend such a practice to a client. He added that there was no place in the Willamette Valley where Ponderosa Pine could be sold. He said the closest place to sell would be Cave Junction or Gilcrest which were long and expensive places to haul logs to.

In response to a question from Ms. Arkin regarding the map of the property and the different patterns, Mr. Setchko pointed out on the site map where the soil classifications for different areas were shown. He said every area that was crosshatched with red was grass with rock underneath.

In response to a question from Ms. Arkin regarding ten acres that had been excluded from his income test, Mr. Setchko said BPA would cut trees that were growing underneath power lines so he had not included that land. He said in some cases BPA would allow property owners to grow Christmas trees under power lines but had established limits for how high the trees could be grown.

In response to a question from Ms. Arkin regarding whether ground underneath a power line was specifically removed from a soils test by state statute, Mr. Setchko said he would not recommend that a client grow trees in such an area because BPA would 'mow the area to the ground.' He stressed that he would not consider the land productive since the BPA would mow the trees down.

In response to a question from Ms. Arkin regarding ORS 197.247(1) and the years that were established for the forest income test and whether Mr. Setchko had averaged forest income through all of those years, Mr. Setchko said the years established in the ORS were 1978 – 1983. He said he had used the 1983 rates since the 1983 prices were the highest prices of that time period so an average of all of the years would show an even lower income.

Ms. Arkin said she would like to see an average of the projected income using prices from 1978 through 1983.

Mr. Setchko reiterated that he had presented the income generated in 1983 at an extremely optimistic two saw grade price to show that he was not deflating values.

Mike Farthing said Mr. Setchko said had been instructed by himself to use 1983 prices since the Board interpretation to use 1983 figures was clearly established in page two, exhibit a of the application.

Ms. Arkin questioned why the entire 113 acres of land had not been tested for forest income.

Mr. Kendall said that was a different test in the marginal lands law. He said the 113 acres had been divided into two parcels and the top 40 acres had already been rezoned. He said the law required looking at the proposed marginal land in the application.

In response to a question from Mr. Sullivan regarding a Goal One Coalition claim that Mr. Setchko's report disregarded 1/3 of the site, Mr. Setchko said that portion of the site was grassland over rocky soil.

Mr. Sullivan stressed the importance of the applicant addressing the issue raised by the Goal One Coalition that 'grassland over rocky soils' was not a legitimate soil type.

Mr. Setchko said he was not creating a new soil type in his report. He said he was simply making an observation. He reiterated that no trees grew in those areas now, no trees were shown in the area in the 67 years of photographs shown in the record and, from his 30 years of experience in trying to establish trees in similar ground he had been unsuccessful. He stressed that he was not excluding the ground but making the simple observation that no trees were growing there.

In response to a question from Mr. Sullivan regarding whether staff was comfortable that a new soil type was being established and the soils expert would address the issue, Mr. Kendall said it was the applicant's burden to address the issue.

In response to a question from Mr. Sullivan regarding the BPA easement under the power lines and whether there was an income calculation that included that land, Mr. Setchko said he had included both sets of figures in his report and neither had met criterion of the income test. He added that he had excluded land only in the productivity portion of the tests and not the income portion.

Commission member Nancy Nichols noted that some of the land in the application clearly had trees growing and suggested only allowing the portions that could not grow trees to be rezoned for Marginal lands.

Mr. Kendall said that creation of split-zoned parcels is contrary to county policy.

In response to a question from Ms. Arkin regarding the differences in the acreage figures presented for soil types presented in the Goal One Coalition's (Mr. Just's) written material, Mr. Setchko said Mr. Just had gotten his figures by splitting the soil complex and noted that the Land Use Board of Appeals had determined that this could not be done because it was too difficult to split apart in the field. He said Mr. Just had split the soil complex because he had known that it would result in higher soil class numbers.

In response to a question from Mr. Becker regarding previous logging activity on the property and whether the logging income figures from the previous owners were available, Mr. Setchko said those figures were available only if the previous owner wanted to divulge that information. He said he had taken volumes off of the tables shown in his exhibit site indexes for that reason. He noted that the 81(d) portion of the map of the property had been previously logged.

In response to a question from Mr. Becker regarding when the land had last been logged, Mr. Setchko said the land had last been logged in 1990-91. An unknown person in the audience shouted that it had been logged in 1995.

Mr. Becker commented that there had been multiple loggings on the property and questioned whether the income test data was valid.

Mr. Setchko said that was why he had been following the procedure of predicting what would be present in a 50 year growth cycle.

Mr. Becker said those predictions probably did not reflect the actual forest income from past logging activity.

Mr. Setchko reiterated that the income figures from past owners were not public information. He stressed that companies were not required to reveal that kind of information. He said the person who had previously logged the land would have to be found and then an analysis would have to be done to show that all the trees cut down were 50 years old. He said he had doing an analysis on a fabricated scenario that there was a perfect 50 year old stand of fully stocked trees on the property. He said that rarely existed in nature. He added that the areas on the property which had been previously harvested had not been fully stocked at the time of logging.

In response to a question from Mr. Dignam regarding whether the State Statute allowed the applicant and the Planning Commission to use the fabricated 'perfect case scenario' instead of the actual logging records, Mr. Kendall said the statute was silent in that case.

Mr. Setchko said if the actual income figures were used it would likely result in an even lower figure than he had compiled under the 'perfect case scenario.'

Mr. Kendall said the ORS had not mentioned a particular cycle.

Mr. Dignam said he was trying to address the point made by Mr. Becker regarding why actual income figures for previous logging on the land were not being used.

Mr. Kendall said the question had been addressed by the applicant when he stated that there was no actual data available.

Mr. Setchko reiterated that the information was confidential and not a matter of public record.

Given the lack of actual income figures, Mr. Dignam questioned whether the commission was required to use the projected income figures from the fabricated 'perfect case scenario.'

Mr. Kendall said the commission could use those figures as long as it felt that the figures presented were reasonable evidence. He added that his initial recommendation on the application had been on the data originally presented by the applicant. He noted that additional materials had been submitted since that time. He said his instructions were to present additional data and let the planning commission make a decision.

In response to a question from Mr. Becker regarding whether his initial recommendation still stood without adjustment, Mr. Kendall stressed that his initial recommendation was dated. He said if the planning commission desired another recommendation then a majority of members would have to make that request and he would go the Planning Director for additional instructions.

Mr. Carmichael called for additional testimony.

Stephen Caruana, Agronomical Analytics, 3419 Chaucer Way, submitted a written summary of his testimony. He said he had a Bachelor of Science Degree in Agronomy from Oregon State University and had worked for 15 years with the Natural Resources Conservation Service (Oregon and South Dakota) as a line officer, a staff specialist and Salmon Recovery Specialist. He said he had been the principal of Agronomical Analytics for the last 11 years who provided consulting services to private and governmental agencies.

Mr. Caruana said there were five necessary for forming soils:

#### 1. Climate

Mr. Caruana said heat and moisture had a great influence on what kind of vegetation would grow and also had a large effect on the rate of removal of some soil horizons. He noted that northern and southern aspects produced entirely different vegetation.

- 2. Living Organisms
- 3. Time

- 4. Topography
- 5. Parent Material Rock Genesis

Mr. Caruana said there had been a large grassy area noted on the property in 1909. He noted that the map was included in the hearing record. He said the earliest know photo was a 1936 aerial photo that showed a large grassy area. He added that 1987 USDA soil surveys also showed the large grassy area. He said he had done an initial field examination and field reconnaissance during the previous May. He said he had dug 20 augur holes and backhoe pits to determine if the land matched what had been previously mapped. He said he had specifically looked at soil texture, color, rock content, PH, depth of bedrock and types of vegetation present. He listed his conclusions in the written report submitted into the record:

- a. Mr. Caruana said the soils on the site did not significantly deviate from the previously published soil characteristics.
- b. The Philomath Soils in the large grassy area appeared to contain more observed inclusions which were documented in his report on Table 14 on page 11. He said the key factor was soil depth since soil depths specifically tied into available moisture holding capacity. He said moisture holding capacity would determine what kind of trees would grow on the site. He referred the commission members to 107(c) and 108(f) portions of the soil survey he noted that the compositions were Philomath silty clay and Philomath cobbely silty clay respectively. He noted that cobbley silty clay had even more rock content than Philomath silty clay. He added that the (f) classification meant that the slope of the land was steeper than a (c) classification. He said both classifications had a published soil depth of 14 inches but noted that the actual depths ranged from 14 inches to as much as 56 inches at specific augur hole locations.
- c. In general, where the soil depths matched the Philomath 14-20 inch depth there was typically short lived annual type grasses that had been present as far as the historical record reached. Where there were 38 to 48 inch soil depth there were trees already growing as shown on the soils map. He stressed that where there were trees already growing the soils were deeper.
- d. The large grassy area is characterized by steep slopes, shallow soils, southern aspect, (Hot and dry), and in general environmental conditions detrimental to the establishment of native tree species. (Douglas Fir).

Mr. Becker commented that much of Mr. Setchko's analysis had been done on 107(c) soils which only covered approximately 45 percent of the area in question. He noted that some of the property had a high capability for growing trees. He said he had doubts about the initial information given about the site.

Mr. Caruana noted that there would be some instances of inclusions but stressed that across the broad landscape of the foothills across the county the percentages of land he had outlined would stay similar to what he had sampled on the Ogle property. He reiterated that the soil was deeper in those areas that already held trees. He stressed that the pattern he found on the landscape was that the grassy area had shallow soils and reiterated that the grassy area could not grow trees.

Mr. Becker maintained that the data in the soil analysis raised many questions related to the forestry report that asserted that the soil was unproductive.

Mr. Caruana reiterated that the pattern he had documented for the area was that it was a southern aspect with shallow soils. He said the areas that were mapped as 107(c) that already contained trees were generally deeper soils. He said to accurately map where deeper soils transitioned to shallow soils he would have to dig holes on every acre on a planned grid. He remarked that this was not what he had been charged by the applicant to do. He said he had been hired to find out why the grassy area had no trees. He reiterated and stressed that there were shallow soils on the steep southern aspect on the land in question and noted that there had been grass on the site for at least 100 years.

Mr. Dignam confirmed with Mr. Caruana that grass was the best adapted vegetation for the shallow soils on the southern aspect of the property.

Mr. Zdzienicki noted that area 102(c) in the southwest corner of the property had deeper soils with trees growing and noted that Mr. Caruana had written that it was a grassy area.

Mr. Caruana said he had walked the area which was 'grassed out' and had some small younger trees coming in. He said grass was the land use cover specifically where he had dug his sample pit.

In response to a question from Ms. Nichols regarding whether grass had been planted on the property in areas that could grow trees, Mr. Caruana if the underlying soil could support trees then it would have trees growing. He reiterated that the grassy area had steep southern aspect slopes with soil that was too hot to grow trees. He stressed that there would never be a chance for trees to be established. He reiterated that the area had been mapped as grassland for 100 years.

Mike Farthing, attorney for the applicant, stressed that marginal lands were a subset of resource (farm and forest) lands. He encouraged the commission to read Exhibit K in the application which was the Board interpretation. He said that interpretation would be what the Board of County Commissioners would be reading when it made a decision on the application. He said identification of marginal lands was pursuant to established State Statute. He said the applicant was required to provide evidence and stressed that this evidence had been provided in the applicant's report. He noted that there had been a lot of discussion about cubic feet per acre per year in OAR 660.04. He stressed that the OAR was not relevant to the current case and should not have any bearing on the planning commission's recommendation. He said the OAR was referenced was in the forest lands regulations of LCDC regarding mapping of forest lands for Goal 4 purposes. He urged the commission to read Footnote 11 in the Carver case and said LUBA had noted that the regulation did not have anything to do with marginal lands.

Mr. Farthing said the primary criteria for approval ORS 197.247(1)(a), (b), and (c). He said the application had addressed those criteria. He stressed that there had been two LUBA cases, (Ericson and Carver) that were included in the applicant report.

Mr. Farthing stressed agricultural land was not an issue on the site. He said forest land was the issue. He said the income test of \$10,000 per year of the growth cycle. He stressed that the wording was 'capable of producing 85 cubic feet of timber per acre per year'. He said soils were a valuable tool to use but the question of capability of production and annual income.

Mr. Farthing said he had asked Mr. Setchko to base his report on what a reasonable and prudent forester would do with the property. He stressed that Mr. Setchko would not advise a client to grow Ponderosa Pine for a number of reasons especially in the grassy areas of the Ogle property. He reiterated to Mr. Setchko and Mr. Caruana that thin soils on a southern aspect would simply not grow trees. He stressed that this conclusion was supported by the evidence in the record. He showed recent photos with photos from 1937 and noted that the grassy area had not changed during that time.

Mr. Becker acknowledged that the area was not growing trees but added that the data from the soil scientist had shown that soils were deeper than anticipated.

Mr. Farthing stressed that where deeper soils were found were areas that were already supporting trees.

Regarding the power line easement on the property, Mr. Farthing said marginal lands applications did not include an inventory of forest lands for the entire county. He reiterated that the question was whether the property was capable of producing merchantable timber at a rate of 85 cubic feet per acre per year or to meet the established income test.

Mr. Carmichael called a five minute break. He added that if the hearing were to proceed then a motion would be required to go past 9 pm.

Mr. Becker, seconded by Ms. Arkin, moved that the hearing close no later than 10 pm. The motion passed unanimously.

Mr. Carmichael called for opposing testimony.

Jessie Ullaha, owner of the southern adjacent property, commented that a similar request for the property had been made in 1993. He said the property owner had logged the land in 1994-95. He acknowledged that he was not an expert forester or an expert on soils but opined that rocky soil did not keep trees from growing to marketable size. He said trees on the site were 'creeping in' to the meadows and grasslands proposed for marginal lands. Regarding the production test of 85 cubic feet of wood per year per acre, he remarked that this was less than a cord of wood and said he had harvested six cords of wood from the land near his home.

Jim Just, Executive Director of Goal One Coalition, 39625 Almond Drive, asked that the record be left open two weeks so he could review the soils analysis provided by Mr. Caruana.

Regarding the figures in Table 1 used in his written testimony. Mr. Just said he had used a 100 year site index for growing Ponderosa Pine in the Willamette Valley. He said all of the productivity figures and income figures in his testimony used the productivity figures for Ponderosa Pine that was generated by Mr. Setchko.

Mr. Just said his testimony hinged upon how soils on the site were sampled. He remarked that 1/3 of the soils on the property were not included in the applicant's report. He said if those soils were included then the applicant could easily meet both the income test and the productivity test. He reiterated that his testimony hinged upon how the soils on the property were managed. He said he would respond to the soils analysis during the additional time the record remained open.

Regarding the Carver case and its relevance to the current case, Mr. Just said there was very little relevance to the current case. He said forest productivity was the relevant point in the current case while the Carver case's relevant point was income. Speaking to the income portion on the Carver case, Mr. Just referred to the 50 year growth cycle. He said LUBA had said stated that he had not shown the reason why a 50 year growth cycle should not be used in the Carver case. He said he had shown the reasoning behind that assertion for the current case. He said the 50 cycle was not appropriately used for the site because a 60 year growth cycle would yield 27 percent more income. He said LUBA had not ruled on a 50 year growth cycle as a rule of law but had ruled on the 50 year cycle based on the evidence in the record. He said his argument was that a 50 year growth cycle was not appropriate for the Ogle land.

Regarding what price period to use for the forest income test, Mr. Just questioned using 1983 prices during the Carver case and LUBA had ruled for 1983 prices. He said LUBA's language had said to look back to the time period that was referenced in the state statute which was January 1, 1978 to January 1, 1983. He questioned why 1983 prices where used when the time period ended on January 1, 1983. He said the prices of the early years of that established period had gone down in 1983 and recommended averaging the prices over the five year time period stated by LUBA. He said there was a case to be made for using peak prices during that time period since the property owner could have made more money when the priced had peaked during the established period. He opined that LUBA's language called for pricing within the established time period and not a price that came after.

Regarding the soil complex issue, Mr. Just said the Carver case was based on agricultural soils. He said the current case had to be based on forest productivity data. He said every soil within the complex could be classed separately for forest production. He said the Carver case did not apply to forest practices because;

- 1. The statute did not direct that 1983 data had to be used.
- 2. Even if that data was used it related to the individual soil components of a complex.

Regarding the use of actual income data, Mr. Just said the legislature wanted to use *objective* data for determining income potential because it did not want to reward poor management practices. He said the legislature wanted objective data based on Soil Conservation Service data. He stressed the desire for objective data and not data based on what actually happened because that was too open to rewarding someone for poor management practices.

In response to a question from Mr. Sullivan regarding whether Mr. Just was making the assertion that the legislature's intent that potential for farm uses should be considered, Mr. Just said the first part of the income test was that the land had to be managed as a farm. He said if the commission determined that the land had been used as a farm then objective data should be used rather than an income tax statement showing the income that the land actually made.

Mr. Johnston called attention to page three of the LUBA decision on the Carver Case which stated that ORS 197.247 did not expressly mandate that 1983 timber prices be used in the forest income test but agreed with County and the Intervener that it was implicitly mandated. He remarked that the Board seemed to disagree with Mr. Just's interpretation.

Mr. Just said Mr. Johnston had not read far enough into the document.

Mr. Johnston produced the document and asked to be shown where he was misreading the document.

Mr. Just said he did not have his glasses on and the response would have to wait. He said his question to LUBA should have been whether to use 1983 prices or whether to use 1978 to 1982 prices. He said if LUBA were posed *that* question he thought he knew what the logical answer should be.

Mr. Johnston said it would be helpful to document any other way to interpret that portion of the opinion other that LUBA agreeing that ORS 197.247 implicitly mandated the use of 1983 timber prices.

In response to a question from Mr. Johnston regarding the conclusion in Mr. Just's on page 11 and establishing a figure by using prevailing prices and whether 1983 prices were use or whether the other method of pricing he had outlined previously was used, Mr. Just said on the back of his written testimony there was a computation of averaged prices from 1978 to 1982 as well as using 1983 prices. He said 'prevailing prices' were the averaged price between 1978 and 1982. He opined that this was more accurate.

Lauri Segel, 1192 Lawrence, said she did not know about soils but did know about process and procedure on land use actions. She expressed her dismay about the way that the hearing had been handled. She cited the commission decision of allowing the hearing to start at 9:30 at night during the previous meeting when people had been sitting for hours and added that it was inappropriate for an applicant to use their initial testimony to rebut testimony from the opposition. She said the applicant rebuttal period should be used for that purpose. She acknowledged that it was not a requirement but said it was not common for an applicant to use their initial testimony for that purpose. She said this was not fair and expressed the hope that the commission would consider that.

Seeing no one else wishing to testify, Mr. Carmichael called for applicant rebuttal.

Mr. Farthing said there was nothing in appropriate about responding to materials in the record during the applicant's main testimony. He said there was nothing prohibiting that in statute, code, or case law. He stressed that it was a common place practice and was not inappropriate. He said the applicant was addressing issues before the commission.

Mr. Farthing stressed that forest land was the issue before the commission. He reiterated that the applicant report had stated that 24 acres out of 73 was non productive and would not grow trees. He said during the Ericson case, included in the record, LUBA had determined that on site evaluation by qualified experts was weightier evidence than published data. He called attention to page two Exhibit K of that document. He added that the only expert testimony in the case was submitted from Mr. Setchko, Mr. Caruana, and EGR and associates regarding water on the site. He said the testimony from Mr. Just was what he had submitted in other applications.

In response to a question from Mr. Becker regarding whether the applicant would allow other experts on the site, Mr. Farthing said he personally would allow other experts. He said the property spoke for itself. He established with his client that other experts would be allowed to walk the property.

Mr. Farthing said the 50 year rotation cycle, He said LUBA had decided on the use of the 50 year growth cycle and he would use that in his calculations until he was told differently by LUBA. He said Mr. Just

was free to make his case to LUBA but stressed that until the board changed their mind he would 'play the game by LUBA rules.'

Mr. Carmichael called for deliberation/comments from the commissioners.

Mr. Dignam said he did not dispute the fact that the grassland on the property would not grow trees but said he did not understand the legal justification that ½ of that land should not be included in the calculations.

Mr. Sullivan agreed and asked staff to provide an expert position on the matter.

Mr. Becker raised concern that area 107(c) was a major part of the parcel and there was ambiguous testimony from the applicant regarding whether the land was productive. He suggested further investigation on the site to get site specific information. He said there was a report from Mark Setchko that the land was not productive and statements from the soil scientist that the land could be productive based on soil depth. He reiterated Mr. Farthing that site specific information was different from the source of the data used in the forester's report.

Mr. Zdzienicki remarked that a large portion of the property was growing trees.

Mr. Kendall said he would speak with the planning director to get direction on how to respond to the assignments being requested by the commission.

Mr. Becker stressed that the information being requested was important that staff had some obligation to address.

Mr. Kendall said he would relay that to the Planning Director.

Mr. Zdzienicki moved to keep the written record open for two weeks.

Mr. Kendall outlined the hearing process for two additional weeks. He said two weeks to keep the record open for written testimony, one additional week for response to any new testimony, and an additional week for applicant's rebuttal. He said the commission could reconvene on April 4.

The motion died for lack of a second.

Mr. Dignam, seconded by Mr. Johnston, moved to accept the outlined time period offered by Mr. Kendall. The motion passed unanimously.

Mr. Carmichael closed the hearing for spoken testimony.

There was general consensus for the commission to ask Mr. Kendall to provide a staff opinion on the items mentioned by the commission.

The meeting adjourned at 10 pm. (Recorded by Joe Sams)

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Lane County Planning Commission Harris Hall - Lane County Courthouse

MINUTES

April 4, 2006 7 p.m.

PRESENT:

Ed Becker, Vice Chair; Lisa Arkin, Steve Dignam, Juanita Kirkham, Nancy Nichols, Jozef

Zdzienicki, John Sullivan, Todd Johnston, members; Thom Lanfear, Jerry Kendall, Staff

ABSENT:

James Carmichael, Chair;

I. Public Hearing: In the matter of adopting revisions to Lane Code Chapter 16.090 "Definitions" Lane Code 16.244 "Floodplain Combining Zone" and Lane Code 10.271 "Floodplain Combining Zone."

Commission Vice Chair Ed Becker convened the meeting at 7 pm.

Mr. Becker called for declarations of *ex parte* contact or conflicts of interest from the commissioners. None were declared.

Lane County Planning Staff Thom Lanfear said the proposal was to revise the flood plain ordinance to bring it up to FEMA standards. He said it was primarily a housecleaning function with a few changes to definitions. He said there had been problems identified with the document in the meeting packet in that the requirements listed in Chapter 16 (requirements applicable to the rural Lane County Area) did not match the provisions set in Chapter 10 (applicable within the urban growth boundary. He said staff would amend the document to have the two match. He stressed that there was no intention of having the standards be different within the urban growth boundary. He said staff would bring the document back at the main meeting.

He opened the public hearing. Seeing no one wishing to speak he continued the public hearing until the date certain of May 2, 2006.

II. Deliberations: PA 04-6308; Request for a Rural Comprehensive Plan Amendment to redesignate 102.69 acres from Forest to "Marginal Lands" and rezone from "Impacted Forest Lands" to "Marginal Lands pursuant to Lane Code 16.400 and 16.252. Tax Lot 106 of Map 18-01-33.

Commission member Juanita Kirkham said she would be unable to deliberate since she was not at the public and had not had a chance to review the materials.

Commission member Todd Johnston declared a conflict of interest and said he would not participate in the first deliberation.

Commission member Nancy Nichols spoke to the inaccuracy of the soil survey map. She noted that the applicant's forestry consultant, Mr. Setchko, had represented that the maps were accurate to 1/1000 of an acre but stated that the area had not been intensively used and carefully mapped and read from a document that stated that some roughly circular included areas were as much as four acres were present in some delineations because they were smaller than the minimum size recommended in the publication scale. She said furnished map was not accurate enough to address the applicant's request.

Commission member Jozef Zdzienicki commented that page five of the supplemental staff report under the Philomath 107(c) 138 (b) section mentioned that the Goal One Coalition had given different productivity ratings for Ponderosa Pine species at 175 and 87 cubic feet per acre per year which exceeded the 85 that was necessary. He said the applicant maintained that Goal One had not provided the documentation to back up the numbers. He said it was up to the applicant to support data provided and not the opponent. He said it was up to the applicant to provide information rebutting the opposition's numbers which skewed the data that the applicant was providing.

Mr. Becker said he intended to vote against the application. He distributed and read prepared comments into the record:

The following is my deliberation for the Dennis/Sutton marginal land application. I am reading this so my comments can be placed into the record in a clear and concise manner.

I intend to vote in opposition to this application. The following are my reasons:

#### Inadequate Review of the Marginal Lands Proposal

It is important for the planning commission to understand that nobody other than the applicant's paid consultant have had the opportunity to conduct a field review of the site. The consultant's analyses indicate that the subject land can produce 80.7 cubic feet per acre, falling short of the 85 cubic feet per acre minimum standard by a mere 4.3 cubic feet per acre. There has been no on site validation of the consultant's analysis by any other interested party, even when only 4cfa separates this parcel from productive to being deemed "Marginal." All the site evidence before supporting their productivity and income test findings are provided solely by the applicant's paid attorney and consultants.

In order for the review process to be objective and transparent, especially when there are so many questions concerning the site's productivity, the County needs to conduct some level of site specific review of the applicant's input. Testimony during the public hearing, and the many photos and comments received afterwards, raises many doubts as to the marginality of this parcel. In this case I don not believe that relying solely upon the applicant's paid consultants will allow for accrate staff analysis and good land use decisions. For this reason, I cannot support the application. There are other reasons as well.

#### The Productivity Test's Conclusion of 80.7 Cubic Feet Per Acre is Highly Suspect

The applicant's attorney has chosen to use the productivity test as one to request rezoning to marginal land. Mr. Setchko has concluded in his June 2004 information that "the subject property

will only produce 80.7 cubic feet per acre per year." That's 4.3 cfa less than the 85 cfa minimum criteria, or imagine a cube approximately 1.6 feet X 1.6 feet X 1.6 feet spread over 43, 560 square feet of area, (about a football field in size!). In other words, that's less than one six inch dbh tree that is ten feet tall growing on one acre per year. That is an extremely small amount of biomass for a western Oregon forest to produce, and a very close call to conclude that 102.61 acres near Fall Creek are "Marginal" for producing merchantable timber or agricultural crops. It is a fact that the foothills of the western cascade slope around Fall Creek is known for having excellent timber producing capability.

Furthermore, Mr. Setchko's report calculates volume per acre using only soil rating tables to obtain site indices. No actual measurements were taken of the site's timber because Mr. Setchko states in his previous report "selective thinning" removed the merchantable timber leaving only "pre-commercial size or of poor form and health." Testimony from several of the applicant's neighbors and photos we all received of the property contradict this statement.

ORS 197.247(c) specifically states "the proposed marginal land is composed predominantly of soils in capability classes V through VIII... on October 15, 1983 AND is not capable of producing 85 cubic feet of merchantable timber per acre per year..." The key point is that the applicant must not only provide soils analysis but also provide additional evidence that the subject land is truly not productive. Mr. Setchko's report provides nothing more than soil rating calculations to determine productivity.

The methodology Mr. Setchko uses for the Sutton Application is puzzling given his previous reports which state "the productivity of the soil itself is only one determining factor of a soil's potential site index rating. Other factors include aspect, ground water levels, moisture content, rainfall amounts, temperature averages, and variations in slope and elevation. These are the reasons that growth and/or productivity of a tree species growing in specific soil type are a reflection of all of the site conditions, not just of the soil itself."

You will not find any of this information in the Sutton forest productivity analysis. Why does Mr. Setchko rely completely upon soil type information when he also acknowledges that "...the variation within a particular soil type can be large." Given the same soil, trees on a north slope will grow faster than on a south slope; trees in an area of high rainfall will grow faster than trees in an area of low rainfall, etc. etc." Variation within and between soil mapping units does exist which is another reason this information alone is not a reliable indicator of site productivity and must be supplemented with field measurement of site index.

Mr. Setchko's productivity report does not provide any of this information to support his assertion the parcel is unproductive timber land. No tree cruise measurments, no harvest volumes, and no site specific measurements of any type! All we are given is LCOG soil type information as the basis of his conclusion, without any additional environmental information that Mr. Setchko admits is crucial for determining site productivity.

## The Lands Surrounding the Applicant's Parcel Have Been Managed for Timber Harvest Successfully for Many Years.

During the public hearing several of the applicant's neighbors testified as to how the Sutton Parcel was currently being managed. Though Mr. Setchko makes passing reference that "it has been several years since any logging activities were undertaken on the property." Written testimony received by Mr. Watson, Ms. DeWees and oral testimony by other neighbors state that timber

harvesting was done in 1996 and 1997. Furthermore, according to the neighbors, trees of sufficient size do exist on the parcel which could be measured for determining site productivity.

This testimony is not only contrary to the statements made by Mr. Setchko regarding remaining timber, but also regarding the land's ability to support reforestation. Setchko states "the owners have planted new conifer seedlings more than once to establish new stands of trees; their efforts have been thwarted by extremely high mortality rates." However, testimony by many of the applicant's neighbors indicate they have never observed any reforestation attempts at all on the property even though they have harvested and successfully reforested their own adjacent lands for may years. Does the applicant have receipts from reforestation crews or of the purchase of nursery stock to validate their reforestation efforts? How can it be that the neighbor's surrounding lands are successfully managed for timber production while the applicant's 103 acres is described as an island of unproductive timberland?

#### Misleading Information Regarding the Forest Income Test

After acknowledging that "logging activities were undertaken on the property," Mr. Setchko provides no information on amount removed or value obtained. His conclusion that the average annual gross income would have been \$5,773 per year is completely based again on soil type analysis. This analysis is made even after acknowledging that recent logging has taken place on the property and cutout data from logging exists, but for some reason is not available from the applicant. Please see the neighbor's testimony on the frequency of logging that has occurred on this property, and how the property was purchased by Mr. Dennis.

In Mr. Setchko's 3/2005 report for the Dahlen application's average gross annual income through a complete rotation was calculated using actual timber volume growing on the property uding actual cutout data from past logging and cruise data of standing trees. Mr. Setchko used both sets of data to determine the volume that was actually growing on the parcel at the present time. This cutout volume and the cruised volume were added together to calculate the total volume for the entire parcel.

Mr. Setchko's methodology for determining Dahlen's gross annual income is completely different than Sutton, even though they are both marginal land applications on recently logged parcels. When I specifically asked Mr. Cornacchia again for this information during the Sutton hearing, Mr. Cornacchia stated that it was "not relavent" for the income test though his own consultant has previously used it for the Dahlen income test. Why is different methodology being used for similar marginal lands applications?

Mr. Cornacchia further responded that applicant does not have the amounts of volume removed. Mr. Cornacchia later acknowledges that the applicant did receive \$90,000 in timber receipts following the harvest in 1997, but for some reason, neigher he nor the applicant has any idea how much timber volume was removed during this harvest operation. Mr. Cornacchia also states that the \$90,000 received is a moot point given the fact that it is under the \$10,000 per year amount over the 50 year rotation. How do we know this if is not addressed in the application and investigated by County Staff?

I find it harder to believe that no other timber harvest has occurred on this property from 1955 through 1997. The fact is that this is forested land and it was likely managed for timber three of the five calendar years preceding 1/1/83. A quick review of the 1979 and 1989 resource photo flights would likely confirm this. (These photos are readily available from WAC in Eugene or the Forest Service Office in Lowell or McKenzie Bridge.)

Furthermore, the application submitted by Mr Cornacchia, (page 15), states that Mr. Stechko concludes that the subject property could not have been managed during the subject time period as a forest operation capable of producing an average over the growth cycle of \$10,000 in annual gross income. Mr. Setchko's opinion was based on a detailed analysis of the subject property's existing soils. Mr. Setchko's methodology for determining forest income capability is dictated by the Board Interpretation (Direction for Issue 4). The Board's direction actually states the methodology to be used should be "based on the best information available regarding soils, topography etc, determine the optimal level of timber production for the tract assuming reasonable management,"

It is clear the Board direction requires more than simply a soils analysis otherwise the County Staff could simply obtain the LCOG soils maps and complete the computations without the consultant's input. However, Mr. Setchko again relies exclusively on soil type information to compute the income test even though his own previous reports acknowledge that harvest and cruise volumes are the more accurate determination of the income test.

In my opinion the applicant has not met the burden of proof regarding their land's inability to produce a thriving stand of merchantable timber. Furthermore, the public testimony leads me to believe this is highly productive timberland, and if properly managed will easily exceed the minimum standards of which "Marginal" couty lands are measured. Once the logging slash is cleaned up, drainages restored, hazardous chemicals and trash removed and proper reforestation completed, I believe current or future landowners will once again realize a healthy, thriving forest.

Ed Becker Lane County Planning Commissioner

Commission member Steve Dignam, seconded by Commission member John Sullivan, moved to approve PA 04-6308.

#### Ms. Nichols read comments into the record:

I first bought forest land in 1970. At one time we had 160 acres certified in the tree farm system. Over the years, I've been to a lot of classes and seminars on growing trees. I've toured Roseburg and Swanson Superior sites. Foresters teaching seminars and leading tours have all been proud of their ability to get the land to produce more wood than one might expect from reading standard calculations like the Lane County Soils Maps. How does it happen that this landowner found such an unusual forest which is so negative about growing trees?

Therefore, even in intensively used and carefully mapped areas, roughly circular included areas as much as 2 acres in size and long narrow included areas as much as 4 acres in size are present in some delineations because they are smaller than the minimum size recommended at the publication scale. (Page 4 of Soil Survey of Lane County)

Mr. Setchko's calculations, assuming the soils maps are correct to 1/1000 of an acre can't be correct. Therefore I cannot give this testimony more weight than that of the adjoining landowners who report trees they planted in 1996 along their border with the Dennis property are doing well. They also report that Weyerhauser is growing Ponderosa Pine within a mile of this site. I believe

it is possible, maybe even likely, that this land is capable of growing 85 cubic feet per acre per year.

Mr. Cornacchia points out that no proof of DEQ violations has been provided by the neighbors. Has anyone in a rural area ever tried to get the cops to come without blood on the floor? No one will come even when you catch a thief.

Commission member Lisa Arkin said she would not support the motion. She opined that the land was productive timberland and had mismanaged rather than managed and property owners should not be rewarded for mismanagement of productive timberland. She added that there was no evidence the owner had attempted any hay harvesting which was also a way to make land productive. She said she had requested information from staff regarding trailers on the property and what condition those trailers were in as well as hazardous materials on the site. She said this indicated further mismanagement of the property. She said the applicant had shown no proof of reforestation efforts on the property. She said she agreed with the comments Mr. Becker had read into the record

Mr. Sullivan said he was also disturbed about the condition the land was in, but said there was nothing in marginal land requirements that made condition of land an issue. He added that some of the comments submitted into the record by Mr. Becker were actually facts that were not brought out during the hearing and it could be argued that Mr. Becker was entering new information into the record instead of deliberating.

Mr. Sullivan said approval of the application was not an approval of land division. He said if the application were approved it was not a mandate to divide the land. He said the landowner would have to meet numerous other tests before such a division could happen. He said the application was a proposed minor amendment change and addressed all the items in Lane County Code Section 16.4 and the Oregon State Law concerning Marginal Land.

Regarding the income test, Mr. Sullivan said the land had *not* been managed as a farm in the previous three to five years. He said the statute was very specific in stating that it must have been so managed. He stressed that the only expert witness that the commission had listened to had stated that the forest operation would not generate the required productivity. He said the applicant should not be penalized because the County could not fund an outside independent survey.

Regarding the second test, Mr. Sullivan noted that the applicant had voluntarily met the requirements of two tests rather than one:

- **Productivity:** The applicant had provided the only expert testimony and commonly accepted forest productivity and soil data to show the land's ability to meet productivity guidelines.
- Parcelization: There is a conflict of interpretation and the applicant had chosen to use the same parcel test that the Board of County Commissioners have said would be adopted in Lane County.

Mr. Sullivan said the basic logic and spirit of the law and the very well documented James Roberts memo on interpreting the SB 237 that was written in 1983, it only made sense to support the motion. He said there were other underlying factors that had no relevance to a decision made by the commission.

Mr. Becker said his deliberation was based on fact and also based on the record. He said he had tapes of all the meetings as well as written record and offered the material for Mr. Sullivan to review.

Mr. Sullivan said he respected Mr. Becker's efforts but said he did not recall the Dahlen application being brought into the record.

Mr. Sullivan said the commission as a body could not take new fact into consideration without offering the opportunity for rebuttal.

Mr. Dignam noted for the record that he had listened to the tapes of the public hearing. He said he intended to support his motion. He congratulated County Staff and said the staff report was one of the best he had seen in terms of addressing, in detail, the points that had been raised by the commission. He said the staff report had helped him tremendously to come to his decision to support the application. He said the key criteria was ORS 197.247 and added that the applicant had met the requirements of the Income Test. He added that, in part two, the applicant had met the requirements of both the productivity test and the parcelization test. He noted that the applicant had only been required to meet one of those tests and had chosen to meet the requirements of both. He said the applicant had properly applied the March 1997 Lane County interpretations as provided by the Board of Commissioners. He stressed that these were the factors that the commission decision should be based on. He added that other things such as trailers on the property, potential presence of oil drums, water issues and legal lot arguments were not relevant to the commission's decision. He said the testimony submitted regarding soil analysis, at a minimum, appeared to be unconvincing and, in his opinion, wrong. He added that the opposition's testimony about forestry methods were, at a minimum, unconvincing, and more appropriately, wrong. He said the opposition's testimony regarding parcelization appeared to him to be wrong. He stressed the applicant had met the relevant requirement tests as outlined in ORS 197.247 and as clarified in the March 1997 Board of Commissioner interpretation.

Commission member Jozef Zdzienicki said he was opposed to the application. He said Mr. Setchko was not very convincing. He said he did not trust his analyses.

Ms. Nichols said she had spent a lot of time reading the parcelization portion of the information in the record. She said she did not think that the parcelization test had been proven.

Ms. Arkin said a parcel that was surrounded other properties that had significant timber growth. She said she did not see an sense in saying that the one parcel was incapable of producing a timber harvest.

The motion failed 4:2 with Commissioners Dignam and Sullivan voting in favor.

Ms. Arkin, seconded by Mr Zdzienicki, moved to recommend denial the application to the Board of County Commissioners. The motion passed 4:2 with Commissioners Sullivan and Dignam voting in opposition.

III. Deliberation: PA 05-5985/ Plan Amendment and Zone Change from "Agricultural to "Marginal Land" and from "E-40/Exclusive Farm Use" to "Marginal Land" for a 73 + acre portion of Map 18-04-11, Tax Lots 303 and 304

Lane County Planning Staff Jerry Kendall provided the staff report. He said attachment 9 contained staff response to three points raised by the commission:

# • Legislative History of Marginal Lands that Shed Some Guidance on the Issue of Grassland Productivity

Mr. Kendall said that although there were some cases that were distantly related, there was no specific language or case history to provide guidance on the matter.

### Data from Test Holes for Soil Analysis on the Property from Kathy Wiederhold

Mr. Kendall said Ms. Wiederhold had stated that the auger holes were 'points of no dimension' with no associated acreage provided. He said without that data Ms. Wiederhold stated that the holes did not add to the discussion and added that her statements had not changed staff's original recommendation for approval of the application.

#### • Issue Raised by Mr. Ulloa On a Prior Partition that Created the Two Subject Properties

Mr. Kendall said the testimony provided that a statement in the plat notes precluded any further division on the subject property. He read the statement from the plat notes:

"Provisions of Section 16.214 of Lane Code in effect at the time the plat was approved prohibit the redivision of Parcel One or Parcel Two."

Mr. Kendall said the statement in the plat notes was a fact that was current at the time and did not preclude the applicant's ability to apply to rezone the property.

In response to a question from Mr. Dignam regarding the March 6 memo from Kathy Wiederhold and the conclusions she had written on the supplemental soil study, Mr. Kendall said she needed more data. He said she had stated that the auger holes had simply provided soil depth but did not provide data on the extent of those soil depths or how the extent of that depth provided data on soil productivity. He reiterated that Ms. Wiederhold had felt that the Agronomist's report did not add to the discussion.

Mr. Becker said there had been a forester's report that stated that 39 acres of soil in 107(c) was Philomath silty clay and the Soil Scientist's report indicated that he had drilled ten auger holes seven of which exceeded the 14 inch soil depth which classified the Philomath silty soils. He said he had asked for a statement on the meaning of that discrepancy and asked the meaning of the answer provided by Ms. Wiederhold.

Mr. Kendall said the statement provided by Ms. Wiederhold had said there was no data in the Agronomist's report that could be used to further the discussion of productivity of the soils.

Ms. Kirkham said Ms. Wiederhold's statement that quantitative information would need to be used to determine productivity and commented that the information that had been given was not adequate enough for the commission to make a decision on whether the land was marginal.

Mr. Kendall said Ms. Weiderhold's memo stated the information she was provided. He said she was taking issue with Table 14 which mentioned the auger hole statistics. He said the Agronomist was making a statement that deeper soils on the property would tend to have forest lands and the shallow soils would have grasslands and acknowledged that the commission had discovered discrepancies in that statement at a previous meeting. He reiterated that there was no data that Ms. Weiderhold felt she could work with in order to further the discussion.

Ms. Arkin commented that Ms. Weiderhold's statement's did not indicate whether the soils could support timber growth but the data from the auger holes seemed to provide clear evidence that some of the soils had the capacity for tree production. She said over half of the 21 auger holes were deeper than 20 inches and Ms. Weiderhold had said 20 inches was the cut off point to indicate productive or non productive soils. She said the data indicated productive soils for trees. She added that half of the Philomath soils had trees as the predominant vegetation including trees growing on shallow soils. She said the data spoke for itself

Commission member Todd Johnston commented that the information provided by Ms. Wiederhold was in response to the commission's perceived inconsistency between the auger holds and the forester's report. He said his interpretation of Ms. Weiderhold's statement was that there was not enough information to generate a conflict so there was no conflict. He said she was not saying that there was not enough information to make a decision.

Mr. Zdzienicki said his questions were about 102(c). He said the Agronomist had not responded to the questions about southwest corner of the site. He said there were no auger holes dug there and Mr. Setchko denied that the area even existed. He said that indicated a big discrepancy as to the productivity of the land.

Mr. Johnston said he would support the application because all of the decision making criteria were met: He said the land had not been a farm operation from 1978 to 1983 and added that the land had not been managed as a forest operation during the same time period.

Regarding soils, Mr. Johnston noted that there was a report from Mr. Setchko (with conflicting testimony from neighbors) as well as a power line easement issue that still needed discussion. He said there was no guidance on the issue and it did not seem to him that an easement could be granted and therefore qualify land for a marginal lands application but added that there was no conflicting evidence stating the requirements of the application had not been met while there was substantial evidence that the requirements for approval had been met. He said the same rational went for Element 4 regarding whether the land was capable of producing 85 cubic feet of marketable timber per acre per year which had Mr. Setchko's report as well as guidance from the Ericson and Carver cases and the 1997 memo from the Board of Commissioners. He stressed that there was evidence provided on all important factors and no contradictory evidence provided. He said it was appropriate to approve the application.

Ms. Nichols said the key words were 'capable off' and not whether there were trees growing currently. She said there were many areas of grassland, which were capable of growing trees, where people had not chosen to grow trees. She said there was no proof that soils on the site were less productive than shown on Lane County soil survey maps and there was no reason to calculate land impacted by an easement as zero production. She said that would open up potential for huge abuse. She said she had calculated assuming that the Lane County Soil Survey maps since nothing had proved that those maps were wrong. She said her calculation, including the easement on the property, was 105 cubic feet per acre. She said she had also

calculated without the easement and come up with a figure of 106.9 and stressed that both figures exceeded the 85 cubic feet per acre.

Mr. Sullivan pointed out the following:

- 1. The March 1887 Board of County Commissioners Memo providing direction and interpretation said Marginal Land was intended to be a subset of resource land and was to be available for occupancy.
- 2. Regarding soils, Mr. Sullivan said he had referred to the Ericson Case which had stated that there was nothing in the marginal lands statute or lane code that required strict adherence to published soil surveys when addressing and applying marginal land and income productivity standards. He stressed the need to use common sense. He said the soil analysis that was done stated that the soils on the property were unsuitable for cultivation and production of grass seed, small grain, row crops, high value fruits and vegetables, wines etc. and were best suited for pasture and small wood lot production on the better soils. The areas of slightly better soils could be used for tree production. The Philomath Silty clay was unrated for timber production indicating how unsuitable the soil was for long term timber production of commercially viable trees.

Mr. Sullivan said his conclusion was that he took the facts provided by the experts and the spirit of what the previous rulings had been and concluded that the land qualified for marginal lands under Goals 4,5, and 1

Mr. Dignam, seconded by Mr. Johnston, moved to recommend approval PA -5985.

Mr. Dignam reiterated Mr. Sullivan that all land outside the urban growth boundary was not necessarily valuable resource land. He said there was some land was marginal land and he believed that it was the County's goal to identify marginal land. He said there had not been a lot of new evidence supplied since the original application and the issue came down to who had the greatest credibility and expertise in the matter. He said he 'leaned on' scientific evidence and the applicant had met the requirements of ORS 197.247. He said he saw nothing particularly inconsistent between the soils report and the forestry report and Kathy Weiderhold's provided no input to the process. He reiterated that the applicant met the tests of ORS 197.247 and the tests of the March 1997, memo from the Board of County Commissioners and said he intended to support the application.

Mr. Zdzienicki said his mouth dropped when he heard the soil scientist's testimony about the soils. He said some of the testimony was very different from the data provided by the forester.

Mr. Becker said he had also been perplexed by the conflicting testimony. He said the diagram showed in 107(c) showed a different situation than what was provided in Mr. Setchko's report. He said there were areas on the parcel that could not grow trees but did not know if the whole parcel was marginal. He said there was a higher level of productivity than what was represented in Mr. Setchko's report.

Mr. Sullivan said his decision was based on the request of the commission to verify the data provided by the forester and based on the March 1997 memo from the Board of County Commissioners which said if there was a question then consult a soils expert. He stressed that the soil expert said the soils were absolutely unsuitable for commercial production and farming. He said the soils expert had come to an

conclusion based on Lane County Code and the 1997 memo. He said of the commission wanted to over analyzed his conclusion and come to a different conclusion then why should it ask for expert witnesses at all. He said it was not fair to ask for expert data and then discount it.

Mr. Johnston said the record had been open for a very long time. He added that the applicant had been open about inviting experts on the land and no conflicting evidence had been produced. He said Goal One Coalition's submitted evidence was inaccurate or wrong. He reiterated Mr. Sullivan that it was not right to ask for expert testimony and then discount the data provided.

Ms. Nichols raised concern that approval of the application would give a 'blank check' to make an easement through their property and call the land not productive. She said it should be made clear that this was not the case. She suggested wording indicating that should be included in the motion.

Mr. Dignam said his motion would remain as it was stated.

Ms. Arkin said when she had reviewed the aerial photos and was impressed with the fact that, over time, more and more of the land was growing timber. She added that she lived close to the property and said she had trees growing everywhere on her property in seemingly unproductive soils. She added that her neighbor had a vineyard on similar soils that was doing quite well. She said she leaned toward giving the land the benefit of the doubt. She added that the soil scientist had observed small conifers growing the areas considered to be meadow land. She said the area was not decisively marginal lands and would not support the motion.

The motion failed 5:3 with commissioners Johnston, Dignam, and Sullivan voting in favor.

Mr. Zdzienicki, seconded by Ms Kirkham, moved that PA -0 be recommend to not be approved for marginal lands. The motion passed 5:3 with Commissioners Johnston, Dignam and Sullivan voting in opposition.

The meeting adjourned at 8:45 pm. (Recorded by Joe Sams)

# Michael E. Farthing Attorney at Law

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February 16, 2006

FEB 17 2006

#### HAND DELIVERED

Lane County Planning Commission c/o Jerry Kendall Lane County Land Management Division 125 E. 8<sup>th</sup> Avenue Eugene, OR 97401

Re:

Marginal Lands Plan Amendment Application Tax Lots 303 and 304, Map No. 18-04-11 (PA 05-5985 Ogle-Childs)

### Dear Jerry:

In response to comments and suggestions made by members of the Planning Commission, I have better aerial maps for inclusion in the record together with a supplemental report from Marc Setchko and a new report prepared by our soils expert Stephen Caruana. Enclosed for the record are the following:

- (1) Ten copies of a soils report prepared by Stephen Caruana (Agronomic Analytics) In which Mr. Caruana provides background information for the soils on the subject property and their ability to grow trees and crops.
- (2) Ten copies of a report prepared by Marc Setchko responding to comments made by Mr. Just in his written materials and also providing further explanation of the areas to which Mr. Setchko has assigned zero productivity for the production of merchantable timber.
- (3) Ten copies of a colored aerial photograph that was part of Mr. Setchko's analysis and specifically identifies the areas that he assigned zero productivity.
- (4) Ten copies of an aerial photo taken in 1936 of the subject property and surrounding properties.

-	
BCC TY-51 Pg.	FILE # PA
	-17-06 from Mr. Faithing

Jerry Kendall February 17, 2006 Page 2

Hopefully these enclosures will provide further information and clarification of the materials previously submitted with the application. We look forward to appearing in front of the Planning Commission and continuing are testimony and presentation of our application on Tuesday, February 21, 2006.

Please contact me if I can provide any additional information prior to that time or if you have additional questions. Feel free to call either Mr. Setchko or Mr. Caruana directly if you have questions about their reports.

Sincerely,

Michael E. Farthing

MEF/alp

**Enclosures** 

cc: Brad Ogle (w/o attachments)

Marc Setchko (w/o attachments) Stephen Caruana (w/o attachments)