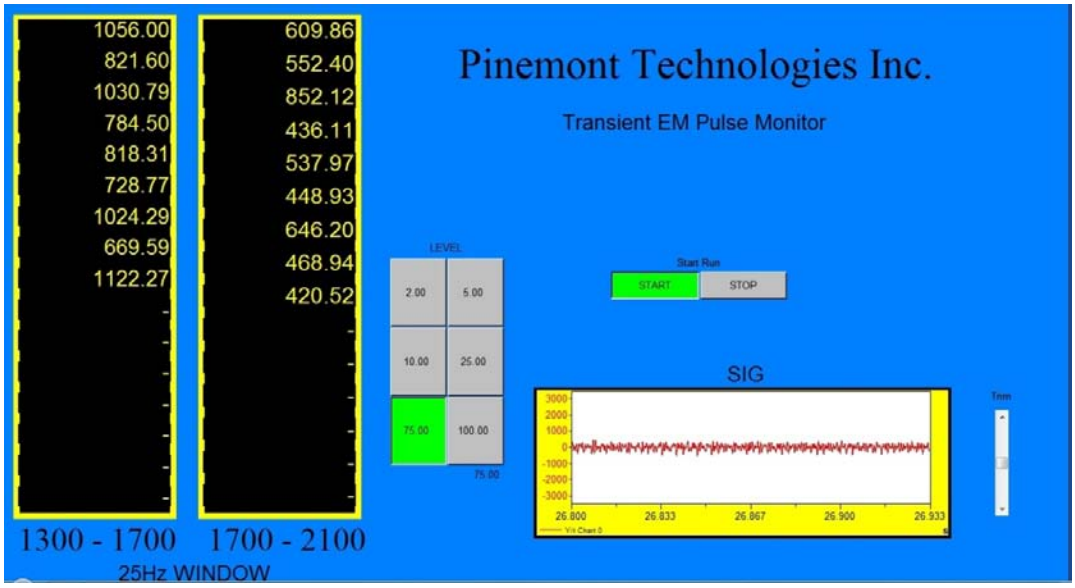
Pinemont Technologies Inc.

Passive Transient Pulse Survey Software System

The software is a windows based program that runs on a popular DSP software platform. The program steps in a continuous fashion through a series of overlapping band pass filters and records the resulting pulse count levels using a peak to peak detector. The resulting data is recorded in txt file format, where each filter is recorded in a separate column for 3 seconds at approx 200 cells per second. Frequency is related to the depth of investigation. *See Ref:*

Further features include - gain selection, course gain "trim" adjustment, and count levels are displayed in real time for visual reference in the field.



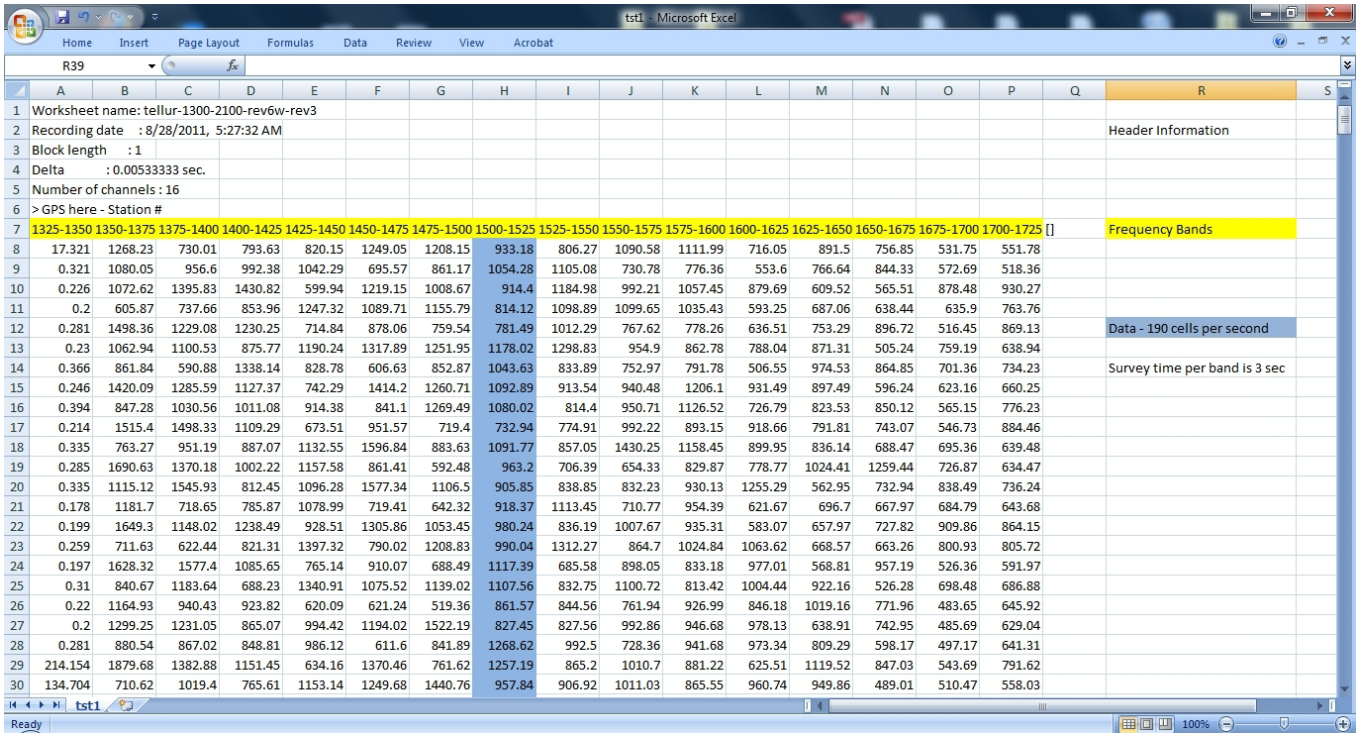
Included is a custom designed near field, impedance matched antenna that is plugged into the microphone input of your laptop computer – using the internal audio A/D converter.

Individual stations are recorded using the appropriate band width program (shown above) for the depth section of interest, at multiple locations within the prospective area. Hydrocarbon bearing formations (resistive formations) will exhibit a 15 to 20% plus increase in transient pulse activity. Conductive (wet) sections will exhibit a decreasing count level. *See Ref:*

The txt data file is easily opened in Excel spreadsheet. The file has the header information (including notes the user adds such as GPS, weather etc.). The data is written one column at a time from top to bottom for each band pass filter being measured. The measurement for each column is averaged (by the user) to get the true value for that column over the 3 second period.

With the survey complete, and the data from multiple stations in individual files, one just needs to plot (contour map) the resulting measured number for the depth of interest from each station, in order to map the indicated hydrocarbon concentrations for that horizon.

Example of data file -



tst1 - Microsoft Excel

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	Worksheet name: tellur-1300-2100-rev6w-rev3																	
2	Recording date : 8/28/2011, 5:27:32 AM																	Header Information
3	Block length : 1																	
4	Delta : 0.00533333 sec.																	
5	Number of channels : 16																	
6	> GPS here - Station #																	
7	1325-1350	1350-1375	1375-1400	1400-1425	1425-1450	1450-1475	1475-1500	1500-1525	1525-1550	1550-1575	1575-1600	1600-1625	1625-1650	1650-1675	1675-1700	1700-1725	[]	Frequency Bands
8	17.321	1268.23	730.01	793.63	820.15	1249.05	1208.15	933.18	806.27	1090.58	1111.99	716.05	891.5	756.85	531.75	551.78		
9	0.321	1080.05	956.6	992.38	1042.29	695.57	861.17	1054.28	1105.08	730.78	776.36	553.6	766.64	844.33	572.69	518.36		
10	0.226	1072.62	1395.83	1430.82	599.94	1219.15	1008.67	914.4	1184.98	992.21	1057.45	879.69	609.52	565.51	878.48	930.27		
11	0.2	605.87	737.66	853.96	1247.32	1089.71	1155.79	814.12	1098.89	1099.65	1035.43	593.25	687.06	638.44	635.9	763.76		
12	0.281	1498.36	1229.08	1230.25	714.84	878.06	759.54	781.49	1012.29	767.62	778.26	636.51	753.29	896.72	516.45	869.13		Data - 190 cells per second
13	0.23	1062.94	1100.53	875.77	1190.24	1317.89	1251.95	1178.02	1298.83	954.9	862.78	788.04	871.31	505.24	759.19	638.94		
14	0.366	861.84	590.88	1338.14	828.78	606.63	852.87	1043.63	833.89	752.97	791.78	506.55	974.53	864.85	701.36	734.23		Survey time per band is 3 sec
15	0.246	1420.09	1285.59	1127.37	742.29	1414.2	1260.71	1092.89	913.54	940.48	1206.1	931.49	897.49	596.24	623.16	660.25		
16	0.394	847.28	1030.56	1011.08	914.38	841.1	1269.49	1080.02	814.4	950.71	1126.52	726.79	823.53	850.12	565.15	776.23		
17	0.214	1515.4	1498.33	1109.29	673.51	951.57	719.4	732.94	774.91	992.22	893.15	918.66	791.81	743.07	546.73	884.46		
18	0.335	763.27	951.19	887.07	1132.55	1596.84	883.63	1091.77	857.05	1430.25	1158.45	899.95	836.14	688.47	695.36	639.48		
19	0.285	1690.63	1370.18	1002.22	1157.58	861.41	592.48	963.2	706.39	654.33	829.87	778.77	1024.41	1259.44	726.87	634.47		
20	0.335	1115.12	1545.93	812.45	1096.28	1577.34	1106.5	905.85	838.85	832.23	930.13	1255.29	562.95	732.94	838.49	736.24		
21	0.178	1181.7	718.65	785.87	1078.99	719.41	642.32	918.37	1113.45	710.77	954.39	621.67	696.7	667.97	684.79	643.68		
22	0.199	1649.3	1148.02	1238.49	928.51	1305.86	1053.45	980.24	836.19	1007.67	935.31	583.07	657.97	727.82	909.86	864.15		
23	0.259	711.63	622.44	821.31	1397.32	790.02	1208.83	990.04	1312.27	864.7	1024.84	1063.62	668.57	663.26	800.93	805.72		
24	0.197	1628.32	1577.4	1085.65	765.14	910.07	688.49	1117.39	685.58	898.05	833.18	977.01	568.81	957.19	526.36	591.97		
25	0.31	840.67	1183.64	688.23	1340.91	1075.52	1139.02	1107.56	832.75	1100.72	813.42	1004.44	922.16	526.28	698.48	686.88		
26	0.22	1164.93	940.43	923.82	620.09	621.24	519.36	861.57	844.56	761.94	926.99	846.18	1019.16	771.96	483.65	645.92		
27	0.2	1299.25	1231.05	865.07	994.42	1194.02	1522.19	827.45	827.56	992.86	946.68	978.13	638.91	742.95	485.69	629.04		
28	0.281	880.54	867.02	848.81	986.12	611.6	841.89	1268.62	992.5	728.36	941.68	973.34	809.29	598.17	497.17	641.31		
29	214.154	1879.68	1382.88	1151.45	634.16	1370.46	761.62	1257.19	865.2	1010.7	881.22	625.51	1119.52	847.03	543.69	791.62		
30	134.704	710.62	1019.4	765.61	1153.14	1249.68	1440.76	957.84	906.92	1011.03	865.55	960.74	949.86	489.01	510.47	558.03		

Included in the package:

1) The Pinemont run files (program files) to run the program using the DSP platform.
2) The Pinemont antenna for receiving the transient pulses within the electro-telluric field.
3) A manual for the operation of the software.
4) A “tips and tricks” cheat sheet related to conducting successful field surveys.

And for those who desire and for an additional fee – Pinemont will furnish the system fully installed on a laptop computer ready to go to the field.

The package is priced at $8900.00 dollars US for a single user license with each additional user under a license charged at $600.00 dollars US per user.

Contact:

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Ref: Based in part on US Patent 4,686,475 and US Patent 5,777,478 covering the electro telluric survey method, and Surface Exploration Successful in Finding Alberta Leduc Pinnacle Reefs - AAPG Annual Meeting, April 18-21, 2004.