

RockWorks, LAS Data, and Log Resolution

Original LAS File

las_version_2_sample.las - Notepad

File Edit Format View Help

#	DEPT	ILD	ILM	SFLU	SP	DPHI	NPHI	GR	CALI
~A	4950.0000	3.5085	3.5102	4.6729	30.2272	0.0760	0.4803	-999.2500	276.0280
	4950.5000	3.5325	3.5597	4.5416	30.2290	0.0851	0.4851	-999.2500	276.0280
	4951.0000	3.6083	3.6094	4.5073	30.2307	0.0962	0.4827	88.0754	278.3948
	4951.5000	3.7132	3.6871	4.6054	30.2325	0.1078	0.4789	90.6814	277.1890
	4952.0000	3.7938	3.7670	4.8445	30.2343	0.1159	0.4932	91.8636	274.0056
	4952.5000	3.8753	3.8756	5.1333	30.2360	0.1244	0.4960	92.3335	270.4260
	4953.0000	3.9307	3.9303	5.4392	30.2378	0.1334	0.4830	92.5751	267.2069
	4953.5000	3.9575	3.8997	5.6390	30.2396	0.1472	0.4564	93.8368	263.9627
	4954.0000	3.9264	3.8412	5.5964	30.4807	0.1183	0.4434	97.5396	258.8914
	4954.5000	3.8961	3.8112	5.2783	30.4821	0.0955	0.4215	100.3830	257.2962
	4955.0000	3.8942	3.8405	5.0118	30.4839	0.0737	0.4106	99.1916	267.9763
	4955.5000	3.9494	3.9190	4.9768	30.4857	0.0567	0.4467	91.5920	275.8864
	4956.0000	3.9764	4.0034	5.1218	30.4877	0.0591	0.4509	90.1632	278.2532
	4956.5000	4.0323	4.1194	5.4271	30.4895	0.0889	0.4553	89.9212	277.0474
	4957.0000	4.1193	4.2698	5.6675	30.4913	0.1069	0.4961	90.3911	278.2221
	4957.5000	4.2390	4.3936	5.8757	30.4930	0.1273	0.4990	91.3358	280.9817
	4958.0000	4.3622	4.5209	6.0035	30.7337	0.1340	0.4849	92.7551	276.6097
	4958.5000	4.4889	4.5515	6.0901	31.2132	0.1074	0.4710	93.9371	260.7480
	4959.0000	4.5527	4.5489	6.0877	31.4538	0.0876	0.4653	96.0923	248.0559
	4959.5000	4.5504	4.5464	6.1751	32.1725	0.0819	0.4857	98.1999	248.0421
	4960.0000	4.4169	4.5104	5.8637	32.6520	0.1117	0.4995	95.1086	250.0093
	4960.5000	4.3201	4.4427	5.4838	32.4145	0.1236	0.5014	95.8159	249.5987
	4961.0000	4.2242	4.2196	5.1430	32.1173	0.0871	0.4824	97.2352	252.7516
	4961.5000	4.1010	4.0963	4.9219	31.9403	0.0705	0.4592	98.6546	259.4731
	4962.0000	4.0105	4.0348	4.9204	31.9425	0.0625	0.4430	94.1404	265.4022
	4962.5000	3.9219	4.0034	4.9909	31.9443	0.0582	0.4397	89.6262	269.7466
	4963.0000	3.9201	4.0012	5.0625	31.9461	0.0748	0.4459	86.7734	274.0909
	4963.5000	3.9182	3.9990	5.0610	31.9478	0.0867	0.4522	87.4807	274.8730
	4964.0000	3.9164	3.9967	5.0228	31.9496	0.0967	0.4631	88.4253	274.0633
	4964.5000	3.9270	3.9651	5.0579	31.9514	0.0891	0.4702	89.1327	274.8419
	4965.0000	3.9411	3.9341	5.0197	31.9536	0.0777	0.4731	90.0926	278.7900
	4965.5000	3.9392	3.9320	4.9817	31.9554	0.0668	0.4740	90.0724	279.2921
	4966.0000	3.9372	3.9301	4.9441	31.9569	0.0582	0.4645	89.1174	270.8385
	4966.5000	3.9350	3.9276	4.9787	31.9587	0.0486	0.4479	90.0620	268.4475
	4967.0000	3.9334	3.9255	5.0135	31.9607	0.0399	0.4285	90.5332	271.3038
	4967.5000	3.9312	3.9233	5.0486	31.9624	0.0299	0.4137	89.3406	266.8316
	4968.0000	3.9293	3.9212	5.0466	31.9641	0.0214	0.4085	89.0997	264.0479
	4968.5000	3.9274	3.9190	5.0451	31.9660	0.0133	0.4266	91.7046	266.4078
	4969.0000	3.9255	3.9168	5.0070	31.9677	0.0076	0.4494	93.5986	271.1483
	4969.5000	3.9236	3.9142	5.0054	31.9695	0.0309	0.4517	96.2047	267.5688
	4970.0000	3.9217	3.9120	4.9676	31.9713	0.0551	0.4579	97.6242	263.2002
	4970.5000	3.9198	3.9099	4.8944	31.9732	0.0778	0.4636	94.5339	265.9563
	4971.0000	3.9179	3.9077	4.8965	31.9753	0.0684	0.4665	91.6811	269.1121
	4971.5000	3.9156	3.9056	4.9631	31.9768	0.0575	0.4693	93.1381	273.4564
	4972.0000	3.9137	3.9320	4.9612	31.9788	0.0526	0.4613	93.8077	270.6692
	4972.5000	3.9118	3.9298	4.9596	31.9806	0.0798	0.4551	94.2777	269.0706
	4973.0000	3.9099	3.9564	4.9581	31.9822	0.1068	0.4518	94.0345	271.8343
	4973.5000	3.9371	3.9541	4.9566	31.9840	0.1220	0.4561	92.8431	273.4697

Ln 1, Col 1

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After Importing LAS Data into RockWorks ...

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Project Folder = C:\Documents and Settings\jim.ROCKWARE\My Documents\RockWorks2006\Samples

Display Project Dimensions

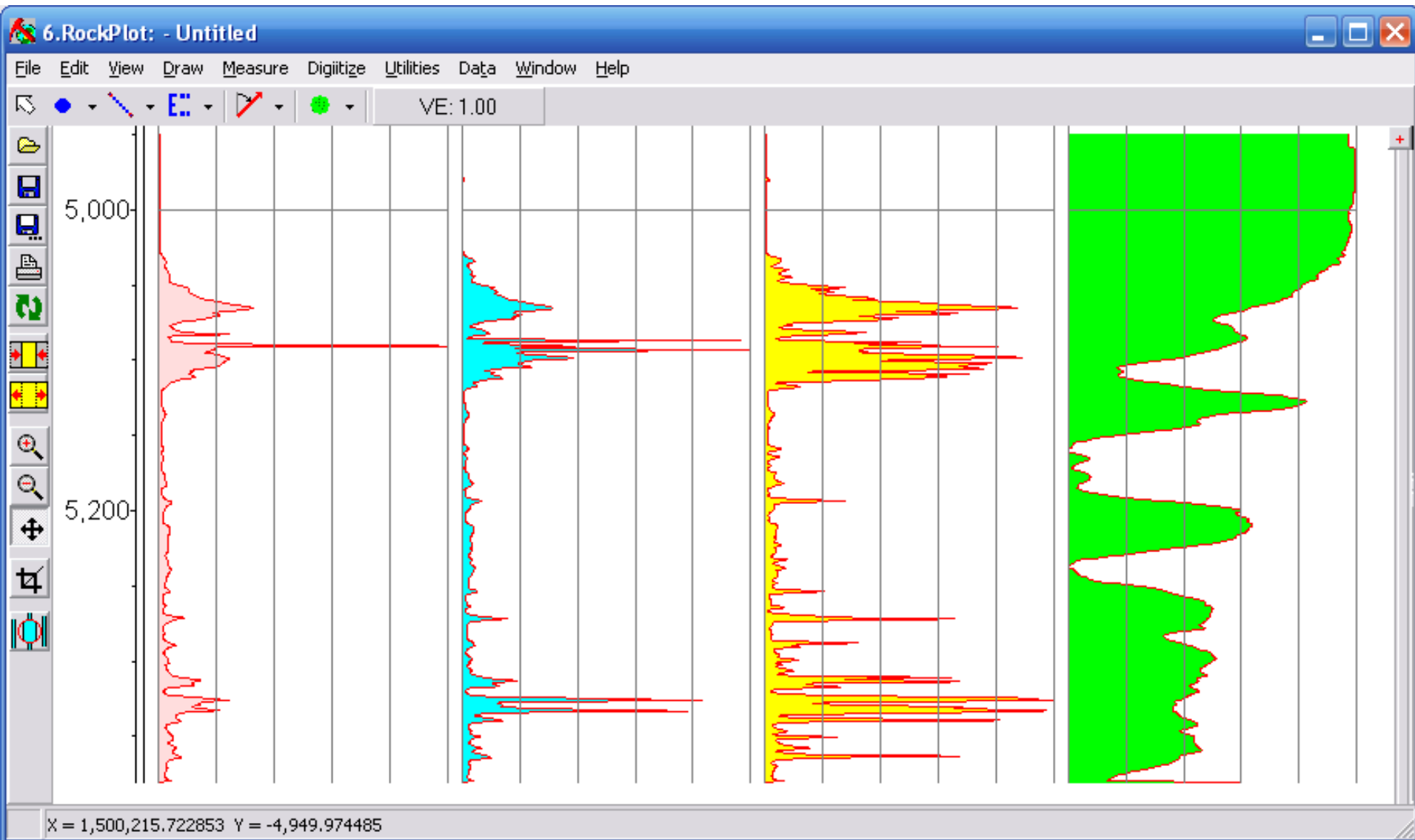
Borehole Data Manager (44 boreholes)

Name	Location	Intervals (I-Data)	Points (P-Data)	Symbols	Patterns	Bitmaps	Depth	ILD	ILM	SFLU	SP	DPHI	NPHI	GR	CALI
Big Well															
DH-01							4,950.0	3.5085	3.5102	4.6729	30.2272	0.076	0.4803		276.028
DH-02							4,950.5	3.5325	3.5597	4.5416	30.229	0.0851	0.4851		276.028
DH-03							4,951.0	3.6083	3.6094	4.5073	30.2307	0.0962	0.4827	88.0754	278.3948
DH-04							4,951.5	3.7132	3.6871	4.6054	30.2325	0.1078	0.4789	90.6814	277.189
DH-05							4,952.0	3.7938	3.767	4.8445	30.2343	0.1159	0.4932	91.8636	274.0056
DH-06							4,952.5	3.8753	3.8756	5.1333	30.236	0.1244	0.496	92.3335	270.426
DH-07							4,953.0	3.9307	3.9303	5.4392	30.2378	0.1334	0.483	92.5751	267.2069
DH-08							4,953.5	3.9575	3.8997	5.639	30.2396	0.1472	0.4564	93.8368	263.9627
DH-09							4,954.0	3.9264	3.8412	5.5964	30.4807	0.1183	0.4434	97.5396	258.8914
DH-10							4,954.5	3.8961	3.8112	5.2783	30.4821	0.0955	0.4215	100.383	257.2962
DH-11							4,955.0	3.8942	3.8405	5.0118	30.4839	0.0737	0.4106	99.1916	267.9763
DH-12							4,955.5	3.9494	3.919	4.9768	30.4857	0.0567	0.4467	91.592	275.8864
DH-13							4,956.0	3.9764	4.0034	5.1218	30.4877	0.0591	0.4509	90.1632	278.2532
DH-14							4,956.5	4.0323	4.1194	5.4271	30.4895	0.0889	0.4553	89.9212	277.0474
DH-15							4,957.0	4.1193	4.2698	5.6675	30.4913	0.1069	0.4961	90.3911	278.2221
DH-16							4,957.5	4.239	4.3936	5.8757	30.493	0.1273	0.499	91.3358	280.9817
DH-17							4,958.0	4.3622	4.5209	6.0035	30.7337	0.134	0.4849	92.7551	276.6097
DH-18							4,958.5	4.4889	4.5515	6.0901	31.2132	0.1074	0.471	93.9371	260.748
DH-19							4,959.0	4.5527	4.5489	6.0877	31.4538	0.0876	0.4653	96.0923	248.0559
DH-20							4,959.5	4.5504	4.5464	6.1751	32.1725	0.0819	0.4857	98.1999	248.0421
DH-21							4,960.0	4.4169	4.5104	5.8637	32.652	0.1117	0.4995	95.1086	250.0093
DH-22							4,960.5	4.3201	4.4427	5.4838	32.4145	0.1236	0.5014	95.8159	249.5987
DH-23							4,961.0	4.2242	4.2196	5.143	32.1173	0.0871	0.4824	97.2352	252.7516
DH-24							4,961.5	4.101	4.0963	4.9219	31.9403	0.0705	0.4592	98.6546	259.4731
DH-25							4,962.0	4.0105	4.0348	4.9204	31.9425	0.0625	0.443	94.1404	265.4022
DH-26							4,962.5	3.9219	4.0034	4.9909	31.9443	0.0582	0.4397	89.6262	269.7466
DH-27							4,963.0	3.9201	4.0012	5.0625	31.9461	0.0748	0.4459	86.7734	274.0909
DH-28							4,963.5	3.9182	3.999	5.061	31.9478	0.0867	0.4522	87.4807	274.873

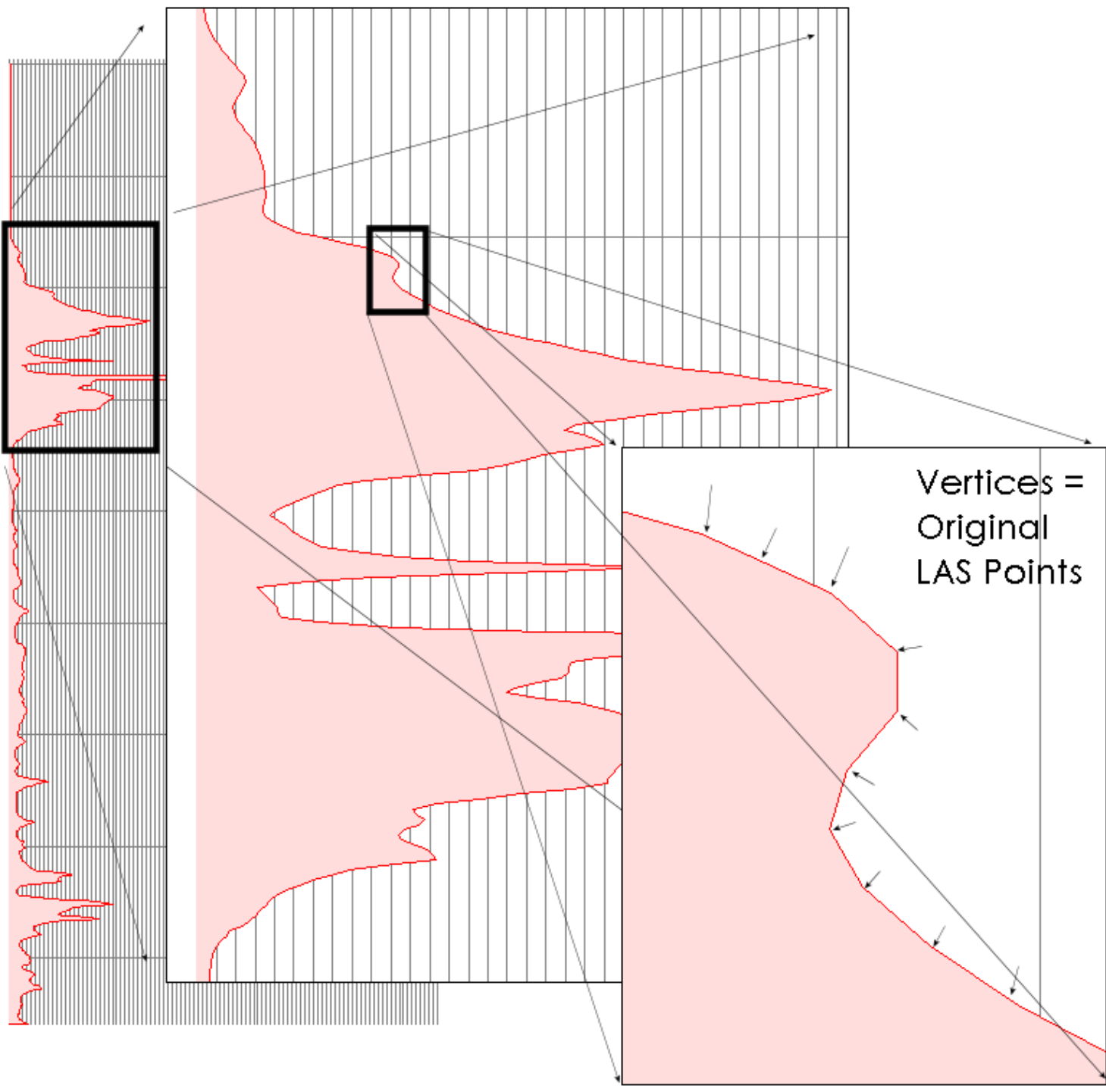
Cancel 0%

Notice that the original “resolution” of the LAS data is maintained. Nothing is averaged or smoothed.

E-Logs Based On P-Data (aka LAS)



Successive
Enlargements
Within E-Logs
Proves That
No Data Has
Been Lost



Conclusions

- We're not idiots.
- Our sample e-logs should be replaced.
- No data is lost, smoothed, etc.
- The program is suitable for high-resolution interpretation and correlation.