



## Lampiran A

### Data Checkshot

#### o Sumur T-1

Depth (feet)	Depth (meter)	Time (ms)	Twt (ms)	Velocity Interval (m/s)
100.1	30.5305	20	40	
200.2	61.061	40	80	1526.525
300.3	91.5915	60	120	1526.525
400.4	122.122	80	160	1526.525
503.8	153.659	100	200	1576.85
611.7	186.5685	120	240	1645.475
718.2	219.051	140	280	1624.125
804	245.22	155	310	1744.6
912.7	278.3735	175	350	1657.675
1026.4	313.052	195	390	1733.925
1115	340.075	210	420	1801.533333
1208.5	368.5925	225	450	1901.166667
1306.5	398.4825	240	480	1992.666667
1412.3	430.7515	255	510	2151.266667
1511.4	460.977	270	540	2015.033333
1609.3	490.8365	285	570	1990.633333
1711.1	521.8855	300	600	2069.933333
1813.9	553.2395	315	630	2090.266667
1910.9	582.8245	330	660	1972.333333
2016	614.88	345	690	2137.033333
2120.1	646.6305	360	720	2116.7
2224.2	678.381	375	750	2116.7
2331.3	711.0465	390	780	2177.7
2433.3	742.1565	405	810	2074
2507.9	764.9095	415	830	2275.3
2619.8	799.039	430	860	2275.3
2730.2	832.711	445	890	2244.8
2808	856.44	455	910	2372.9
2922.5	891.3625	470	940	2328.166667
3036.3	926.0715	485	970	2313.933333
3113.2	949.526	495	990	2345.45
3230.9	985.4245	510	1020	2393.233333
3310.4	1009.672	520	1040	2424.75
3427.2	1045.296	535	1070	2374.933333
3507.2	1069.696	545	1090	2440
3619.3	1103.8865	560	1120	2279.366667
3733.8	1138.809	575	1150	2328.166667
3845.1	1172.7555	585	1170	3394.65
3905.5	1191.1775	590	1180	3684.4
4045.7	1233.9385	600	1200	4276.1
4112.6	1254.343	605	1210	4080.9
4240.9	1293.4745	620	1240	2608.766667
4322.9	1318.4845	630	1260	2501
4408.9	1344.7145	640	1280	2623
4546.9	1386.8045	655	1310	2806
4636.7	1414.1935	665	1330	2738.9
4739.4	1445.517	675	1350	3132.35

4866.2	1484.191	685	1370	3867.4
4927.6	1502.918	690	1380	3745.4
5053	1541.165	700	1400	3824.7
5105.6	1557.208	705	1410	3208.6
5233	1596.065	715	1430	3885.7
5337.8	1628.029	725	1450	3196.4
5434.6	1657.553	735	1470	2952.4
5525.1	1685.1555	745	1490	2760.25
5616.2	1712.941	755	1510	2778.55
5713.9	1742.7395	765	1530	2979.85
5815.3	1773.6665	775	1550	3092.7
5917.1	1804.7155	785	1570	3104.9
6017.4	1835.307	795	1590	3059.15
6114.9	1865.0445	805	1610	2973.75
6215.9	1895.8495	815	1630	3080.5
6311.3	1924.9465	825	1650	2909.7
6421.3	1958.4965	835	1670	3355

o Sumur R-IX

Depth (feet)	Depth (meter)	Time (ms)	Twt (ms)	Velocity Interval (m/s)
102	31.11	16	32	
205	62.525	32	64	1963.4375
301	91.805	47	94	1952
403	122.915	63	126	1944.375
505	154.025	79	158	1944.375
601	183.305	94	188	1952
706	215.33	107	214	2463.461538
802	244.61	118	236	2661.818182
908	276.94	130	260	2694.166667
1004	306.22	141	282	2661.818182
1101	335.805	152	304	2689.545455
1206	367.83	164	328	2668.75
1302	397.11	175	350	2661.818182
1408	429.44	187	374	2694.166667
1504	458.72	197	394	2928
1602	488.61	207	414	2989
1700	518.5	217	434	2989
1808	551.44	228	456	2994.545455
1906	581.33	238	476	2989
2007	612.135	249	498	2800.454545
2106	642.33	260	520	2745
2206	672.83	271	542	2772.727273
2305	703.025	282	564	2745
2405	733.525	293	586	2772.727273
2504	763.72	304	608	2745
2603	793.915	315	630	2745
2701	823.805	325	650	2989
2803	854.915	335	670	3111
2904	885.72	345	690	3080.5
3008	917.44	355	710	3172
3108	947.94	365	730	3050
3205	977.525	375	750	2958.5

3303	1007.415	385	770	2989
3403	1037.915	396	792	2772.727273
3506	1069.33	407	814	2855.909091
3601	1098.305	416	832	3219.444444
3707	1130.635	426	852	3233
3805	1160.525	435	870	3321.111111
3906	1191.33	444	888	3422.777778
4003	1220.915	453	906	3287.222222
4102	1251.11	462	924	3355
4200	1281	471	942	3321.111111
4300	1311.5	480	960	3388.888889
4409	1344.745	490	980	3324.5
4508	1374.94	499	998	3355
4609	1405.745	508	1016	3422.777778
4707	1435.635	517	1034	3321.111111
4808	1466.44	526	1052	3422.777778
4908	1496.94	535	1070	3388.888889
5009	1527.745	544	1088	3422.777778
5099	1555.195	552	1104	3431.25
5199	1585.695	561	1122	3388.888889
5302	1617.11	570	1140	3490.555556
5406	1648.83	579	1158	3524.444444
5508	1679.94	588	1176	3456.666667
5608	1710.44	597	1194	3388.888889
5709	1741.245	606	1212	3422.777778
5799	1768.695	614	1228	3431.25
5905	1801.025	623	1246	3592.222222
6005	1831.525	632	1264	3388.888889
6103	1861.415	641	1282	3321.111111
6207	1893.135	651	1302	3172
6301	1921.805	659	1318	3583.75
6408	1954.44	669	1338	3263.5
6508	1984.94	679	1358	3050
6599	2012.695	688	1376	3083.888889
6701	2043.805	697	1394	3456.666667
6807	2076.135	707	1414	3233
6900	2104.5	715	1430	3545.625
7005	2136.525	725	1450	3202.5
7108	2167.94	734	1468	3490.555556
7203	2196.915	743	1486	3219.444444
7300	2226.5	752	1504	3287.222222
7404	2258.22	762	1524	3172
7508	2289.94	771	1542	3524.444444
7600	2318	780	1560	3117.777778
7704	2349.72	790	1580	3172
7801	2379.305	799	1598	3287.222222
7910	2412.55	808	1616	3693.888889
8005	2441.525	816	1632	3621.875
8095	2468.975	822	1644	4575
8200	2501	828	1656	5337.5
8307	2533.635	834	1668	5439.166667
8412	2565.66	840	1680	5337.5
8509	2595.245	846	1692	4930.833333
8615	2627.575	852	1704	5388.333333

8710	2656.55	857	1714	5795
8808	2686.44	863	1726	4981.666667
8910	2717.55	869	1738	5185
9015	2749.575	875	1750	5337.5
9098	2774.89	880	1760	5063
9196	2804.78	886	1772	4981.666667
9305	2838.025	894	1788	4155.625
9409	2869.745	902	1804	3965
9504	2898.72	910	1820	3621.875
9595	2926.475	918	1836	3469.375
9701	2958.805	925	1850	4618.571429
9799	2988.695	933	1866	3736.25
9897	3018.585	941	1882	3736.25
10009	3052.745	950	1900	3795.555556
10110	3083.55	958	1916	3850.625
10200	3111	965	1930	3921.428571
10302	3142.11	973	1946	3888.75
10402	3172.61	981	1962	3812.5
10502	3203.11	989	1978	3812.5
10606	3234.83	997	1994	3965
10705	3265.025	1005	2010	3774.375
10805	3295.525	1012	2024	4357.142857
10899	3324.195	1019	2038	4095.714286
10992	3352.56	1024	2048	5673

o Sumur L-1

Depth (feet)	Depth (meter)	Time (ms)	Twt (ms)	Velocity Interval (m/s)
1000	305	190	380	
1500	457.5	275	550	1794.117647
2000	610	350	700	2033.333333
2500	762.5	405	810	2772.727273
3000	915	475	950	2178.571429
3500	1067.5	545	1090	2178.571429
4000	1220	600	1200	2772.727273
4500	1372.5	650	1300	3050
5000	1525	705	1410	2772.727273
5500	1677.5	757.5	1515	2904.761905
6000	1830	800	1600	3588.235294
6500	1982.5	845	1690	3388.888889
7000	2135	900	1800	2772.727273

o Sumur K-1

Depth (feet)	Depth (meter)	Time (ms)	Twt (ms)	Velocity Interval (m/s)
1000	305	165	330	
2000	610	350	700	1648.648649
3000	915	490	980	2178.571429
4000	1220	625	1250	2259.259259
5000	1525	750	1500	2440

6000	1830	850	1700	3050
7000	2135	950	1900	3050
8000	2440	1050	2100	3050
9000	2745	1135	2270	3588.235294
10000	3050	1240	2480	2904.761905

o Sumur D-1

Depth (feet)	Depth (meter)	Time (ms)	Twt (ms)	Velocity Interval (m/s)
1000	305	95	190	
2000	610	340	680	1244.897959
3000	915	500	1000	1906.25
4000	1220	650	1300	2033.333333
5000	1525	775	1550	2440
6000	1830	865	1730	3388.888889
7000	2135	970	1940	2904.761905
8000	2440	1075	2150	2904.761905
9000	2745	1155	2310	3812.5
10000	3050	1250	2500	3210.526316
11000	3355	1310	2620	5083.333333
12000	3660	1400	2800	3388.888889

o Sumur I-1

Depth (feet)	Depth (meter)	Time (ms)	Twt (ms)	Velocity Interval (m/s)
500	152.5	47.5	95	
1000	305	95	190	3210.526316
1500	457.5	125	250	5083.333333
2000	610	160	320	4357.142857
2500	762.5	200	400	3812.5
3000	915	250	500	3050
3500	1067.5	295	590	3388.888889
4000	1220	325	650	5083.333333
4500	1372.5	370	740	3388.888889
5000	1525	407.5	815	4066.666667
5500	1677.5	455	910	3210.526316
6000	1830	500	1000	3388.888889
6500	1982.5	550	1100	3050
7000	2135	590	1180	3812.5
7500	2287.5	625	1250	4357.142857
8000	2440	675	1350	3050
8500	2592.5	712.5	1425	4066.666667
9000	2745	750	1500	4066.666667
9500	2897.5	790	1580	3812.5
10000	3050	825	1650	4357.142857
10500	3202.5	870	1740	3388.888889

## Lampiran B

### Posisi Marker, Vo, dan Residual

#### o Top Formasi A

Well	Marker Position		Vo (m/s)	Residual (m)
	Depth(m)	Time(ms)		
T-1	570	649	1640	-18
L-1	509	602	1928	-138
R-IX	192	195	2350	(out of bound)
D-1	1164	1254	1530	-77
K-1	1248	1273	1690	-292

#### o Top Formasi B

Well	Marker Position		Vo (m/s)	Residual (m)
	Depth(m)	Time(ms)		
T-1	1437	1345	1530	-169
L-1	1665	1506	1650	-340
R-IX	2498	1655	2400	-259
D-1	2948	2436	1200	-678
K-1	3200	(no data)	(no data)	(no data)

#### o Top Formasi C

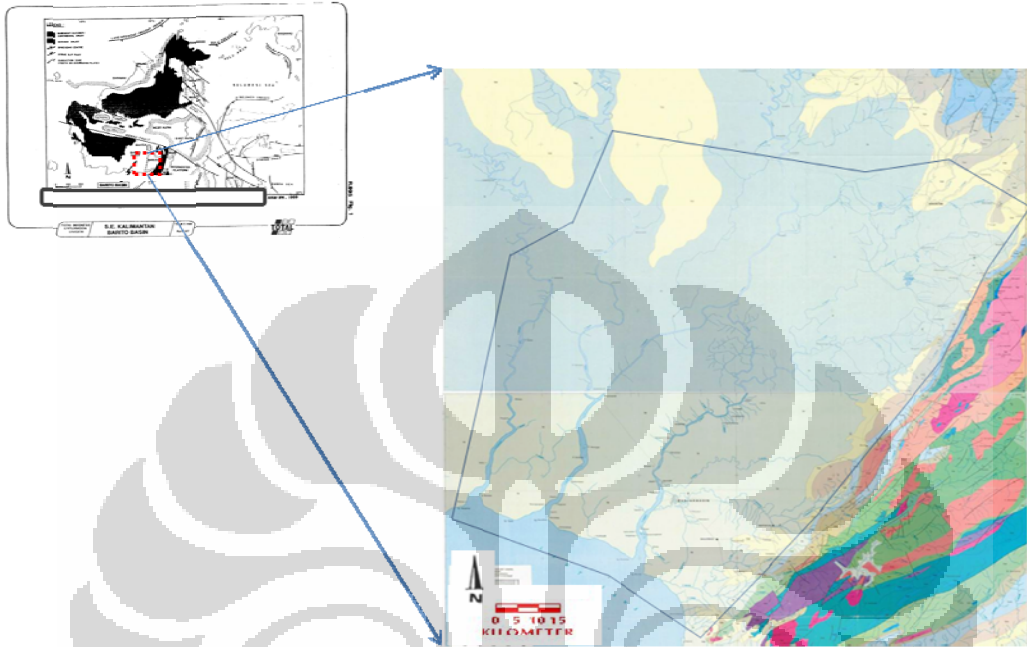
Well	Marker Position		Vinterval (m/s)	Residual (m)
	Depth(m)	Time(ms)		
T-1	1605	1436	3650	-11
L-1	1939	1664	3650	-33
R-IX	2783	1763	5200	-11
D-1	3354	2620	3600	-85
K-1	(no data)	(no data)	(no data)	(no data)

#### o Top Basement

Well	Marker Position		Vinterval (m/s)	Residual (m)
	Depth(m)	Time(ms)		
T-1	1952	1666	2500	-72
L-1	2183	1836	3000	-77
R-IX	3332	2041	3700	44
D-1	3691	±3790	2000	-160
K-1	(no data)	(no data)	(no data)	(no data)

# Lampiran C

## Peta Geologi



Keterangan warna peta geologi:

<b>Qa</b>	<b>ALLUVIUM</b> kerikil, pasir, lempung dan lumpur <i>ALLUVIUM: Pebble, sand, silt, clay and mud.</i>
<b>TQd</b>	<b>FORMASI DAHOR</b> Batupasir kuarsa kurang pejal, konglomerat dan batulempung lunak, dengan silika lignit (5-10 cm), kaolin (30-100 cm) dan limonit. Formasi ini terendapkan dalam lingkungan paralic dengan tebal formasi diperkirakan 230m Umurnya diduga Plio-Plistosen. <i>DAHOR FORMATION: Unconsolidated quartz sandstone, conglomerate and soft claystone intercalated with lignite (5-10 cm), kaoline (30-100 cm) and limonite are found in places. This formation were deposited in paralic environment with the thickness about 230 m. The unit is presumed Plio-Pliocene in age.</i>
<b>Tmw</b>	<b>Formasi A</b> Perelangan batupasir kuarsa halus-keasar setempat konglomerat (5-10 cm) dan batulempung (3-100 cm) dengan silika batulempung pasir dan batubara (20-50 cm) yang terendapkan dalam lingkungan paralic dengan ketebalan diperkirakan 1250 m. Fossil foraminifera yang terdapat dalam batulempung pasir antara lain <i>Ammonia indica</i> (Le Roy), <i>Celastina</i> sp., <i>Amphistegina</i> sp., <i>Eliothia</i> sp., <i>Lepidocyclina</i> sp., <i>Austrorillina bowcheri</i> (Schlumberger), menunjukkan umur nabi akhir Mosen Awal-Mosen Tengah. <i>Alternating of fine to coarse grained quartz sandstone in places conglomerate (3-30 cm) and claystone (3-100 cm) with interbeds of sandy claystone and coal (20-50 cm) which were deposited in a paralic depositional environment with the thickness of about 1250 m. Fossil content within sandy claystone are <i>Ammonia indica</i> (Le Roy), <i>Celastina</i> sp., <i>Amphistegina</i> sp., <i>Eliothia</i> sp., <i>Lepidocyclina</i> sp. and <i>Austrorillina bowcheri</i> (Schlumberger) which indicated Late Late Miocene-Middle Miocene age.</i>
<b>Tmb</b>	<b>Formasi B</b> Batugamping berwarna putih kelabu, berapis baik dengan ketebalan 20 sampai 200 cm, setempat kaya akan koral, foraminifera dan ganggang, berpasir napal berwarna kelabu muda padat berapis baik (10-15 cm), mengandung foraminifera plankton, dan batulempung berwarna kelabu setempat lempungan dengan ketebalan 25 sampai 75 cm. Kumpulan foraminifera besar yang terdapat dalam batugamping adalah <i>Nummulites fichteli</i> (Michelom), <i>Heterostegina</i> sp., <i>Quinquiloculina</i> sp., <i>Lepidocyclina</i> ( <i>Eolepidina</i> ) sp., <i>Cyclochopea</i> sp., <i>Cyprina</i> sp., <i>Echinoid</i> dan <i>Rotalia</i> sp., yang menunjukkan umur Oligosen Awal-Mosen Awal. Kumpulan foraminifera plankton yang terdapat dalam napal dan batulempung adalah <i>Globorotalia opima</i> (Boll), <i>Globigerina oolithensis</i> (Boll), <i>Globigerina uncinata</i> (Boll, Loeblich & Tappan), <i>Globigerinoides quadrilobatus</i> (Banner dan Blow), dan <i>Cassigerinella chipoleana</i> (Chapman & Poston) yang menunjukkan umur nabi Oligosen. Formasi ini terendapkan dalam lingkungan neritik dan ketebalan formasi lebih kurang 1000 m. <i>Limestone white to grey in places abundant of corals, foraminifera and algae, well bedded with the thickness of beds between 20 and 200 cm; with intercalation of light grey marl well bedded (10-15 cm) contains abundant of planktonic foraminifera and grey claystone, shaly in places with the thickness of beds 25-75 cm. The assemblage of large foraminifera which found in the limestone are <i>Nummulites fichteli</i> (Michelom), <i>Heterostegina</i> sp., <i>Quinquiloculina</i> sp., <i>Lepidocyclina</i> (<i>Eolepidina</i>) sp., <i>Cyclochopea</i> sp., <i>Cyprina</i> sp., <i>Echinoid</i> and <i>Rotalia</i> sp., yielded a Early Oligocene-Early Miocene age. However the assemblage of planktonic foraminifera which found within marl and claystone are: <i>Globorotalia opima</i> (Boll), <i>Globigerina Oolithensis</i> (Boll), <i>Globigerina uncinata</i> (Boll, Loeblich &amp; Tappan), <i>Globigerinoides quadrilobatus</i> (Banner and Blow), and <i>Cassigerinella chipoleana</i> (Chapman &amp; Poston). They yielded an Oligocene age. This formation was deposited in the neritic depositional environment with the thickness of the formation about 1000 m.</i>
<b>Tcl</b>	<b>Formasi C</b> Batupasir kuarsa berbatu halus sampai kasar dengan tebal perlapisan 50-150 cm, berstruktur sedimen perisan halus dan perlapisan silang-silang, tipis batugamping berwarna kelabu setempat menyerpi; ketebalan perlapisan 30-150 cm, di jumpai pada bagian atas formasi, serpihan batubara berwarna hitam, mengkilat, pejal, dijumpai pada bagian bawah formasi dengan tebal lapisan 50-150 cm setempat dijumpai lempa batugamping warna kelabu kecoklatan, mengandung kerang moluska, echinoid, dan foraminifera di antaranya <i>Stenulites javana</i> (Verbeek) dan <i>Heterostegina</i> sp., juga foraminifera kecil bentuk dari keluarga <i>Miliolidae</i> yang menunjukkan umur Eosen, terendapkan di lingkungan paralic-neritik. Ketebalan formasi lebih kurang 750 m. <i>Quartz sandstone, fine to coarse grained, the thickness of beds 50-150 cm with the sedimentary structures of parallel laminations and cross-bedding; grey claystone, shaly in places, present as intercalation in the upper part of formation with the thickness of beds 30-150 cm; coal seam; black, lustrous, massive, found as intercalation in the lower part of formation with the thickness of seam 30-150 cm. In places lenses of limestone, brownish grey, contains fragments of mollusks, Echinoids and foraminifera such as <i>Stenulites javana</i> (Verbeek), <i>Heterostegina</i> sp., small benthonic foraminifera mainly <i>Miliolidae</i>, which indicating an Eocene age and was deposited in a paralic-neritic environment. The thickness of the formation is about 750 m.</i>