

## APPENDIX C – PSPA RESULTS

Table 10. Seismic Moduli Measured at Site 1.

Modulus Wheel path (ksi)			Modulus Midlane (ksi)		
Station No.	Longitudinal	Transverse	Station No.	Longitudinal	Transverse
1	518	645	1	866	807
	552	696		866	832
2	684	693	2	642	541
	684	726		785	541
3	679	807	3	823	645
	705	832		934	925
4	494	598	4	685	737
	529	572		615	858
5	578	957	5	879	836
	604	940		914	828
6	749	749	6	793	610
	706	758		1080	610
7	589	806	7	867	771
	598	823		875	754
8	849	685	8	901	607
	633	728		1075	615
9	815	637	9	691	761
	815	602		691	841
10	707	785	10	716	1190
	776	802		802	828
11	543	647	11	707	776
	733	647		707	742
12	892	1235	12	772	866
	678	1192		763	866
13	729	815	13	1132	798
	738	841		1192	841
14	918	806	14	832	583
	901	858		823	523
15	1152	529	15	956	649
	887	606		845	606
<b>Average</b>	<b>741</b>		<b>Average</b>	<b>794</b>	
<b>Std Dev</b>	<b>155</b>		<b>Std Dev</b>	<b>150</b>	
<b>Cov</b>	<b>20.9%</b>		<b>COV</b>	<b>18.8%</b>	

**Table 11. Seismic Moduli Measured at Site 2.**

Modulus Wheel path (ksi)			Modulus Midlane (ksi)		
Station No.	Longitudinal	Transverse	Station No.	Longitudinal	Transverse
1	1603	1169	1	1957	1788
	1240	1169		1974	1815
2	1062	1213	2	1027	992
	1071	1204		1027	992
3	823	814	3	904	1199
	984	832		967	1190
4	2386	2270	4	1228	1460
	2314	2261		1326	1665
5	1584	1495	5	1262	1745
	1942	1557		1298	2112
6	1844	1620	6	1038	1128
	1862	1853		958	1074
7	1029	1128	7	1298	1047
	967	1172		1378	1065
8	2349	1800	8	1233	1557
	2727	2142		1269	1557
9	2402	2256	9	1374	1283
	2402	2001		1765	1265
10	2389	2027	10	959	1294
	2045	2108		860	1249
11	2543	2324	11	732	732
	2644	2296		741	732
12	2205	2223	12	1830	1390
	2177	2186		2360	1372
13	1473	961	13	1692	1784
	1390	1519		1839	1592
14	1113	947	14	1131	1131
	1095	984		1223	1113
15	920	855	15	810	607
	874	865		819	607
<b>Average</b>	<b>1645</b>		<b>Average</b>	<b>1280</b>	
<b>Std Dev</b>	<b>589</b>		<b>Std Dev</b>	<b>392</b>	
<b>COV</b>	<b>35.8%</b>		<b>COV</b>	<b>30.6%</b>	

**Table 12. Seismic Moduli Measured at Site 3.**

Modulus Wheel path (ksi)			Modulus Midlane (ksi)		
Station No.	Longitudinal	Transverse	Station No.	Longitudinal	Transverse
1	1619	1711	1	1674	1711
	1583	1647		1702	1702
2	1619	1628	2	1474	1656
	1565	1574		1483	1656
3	1710	1493	3	1737	1909
	1755	1620		1728	1909
4	1611	1665	4	1737	1881
	1557	1710		1674	1863
5	1797	1629	5	1700	1842
	1850	1664		1718	1842
6	1904	2019	6	2098	2019
	1886	2001		2072	1966
7	2006	1927	7	1883	1910
	2050	1962		1910	1953
8	2009	2087	8	1940	2069
	2018	2069		1906	2095
9	2159	1826	9	2133	2176
	2099	1818		2167	2167
10	2318	2258	10	2131	2284
	2403	2182		2131	2241
11	2221	2019	11	2289	2120
	2272	2052		2238	2103
12	2331	2120	12	2500	2196
	2095	2103		2449	2036
13	2361	2378	13	2235	2370
	2412	2353		2202	2344
14	1808	2318	14	1749	2122
	1851	2428		1800	2199
15	2161	2222	15	1908	1725
	2117	2231		1839	1717
<b>Average</b>	<b>1964</b>		<b>Average</b>	<b>1967</b>	
<b>Std Dev</b>	<b>271</b>		<b>Std Dev</b>	<b>239</b>	
<b>COV</b>	<b>13.8%</b>		<b>COV</b>	<b>12.2%</b>	

**Table 13. Seismic Moduli Measured at Site 4.**

Modulus Wheel path (ksi)			Modulus Midlane (ksi)		
Station No.	Longitudinal	Transverse	Station No.	Longitudinal	Transverse
1	1845	2097	1	2170	2212
	1919	2160		2118	2139
2	2052	1689	2	1742	2020
	2073	1731		1892	2063
3	2052	1657	3	1854	1426
	1865	1657		1843	1426
4	1544	1420	4	1307	1567
	1555	1826		1386	1567
5	928	950	5	939	729
	939	1005		983	729
6	712	778	6	1001	367
	756	801		1045	367
7	922	1130	7	965	954
	933	1152		834	954
8	1115	1039	8	736	747
	1115	1039		758	747
9	736	725	9	920	780
	780	736		942	747
10	1343	931	10	1061	1202
	1299	931		1072	1202
11	696	696	11	1049	1027
	685	663		1038	1038
12	954	1009	12	801	1086
	976	1031		801	1053
13	834	596	13	812	812
	823	671		790	671
14	566	460	14	673	695
	566	460		695	727
15	682	628	15	855	996
	682	617		974	1061
<b>Average</b>	<b>1104</b>		<b>Average</b>	<b>1119</b>	
<b>Std Dev</b>	<b>485</b>		<b>Std Dev</b>	<b>468</b>	
<b>COV</b>	<b>44.0%</b>		<b>COV</b>	<b>41.8%</b>	

**Table 14. Seismic Moduli Measured at Site 5.**

Modulus Wheel path (ksi)			Modulus Midlane (ksi)		
Station No.	Longitudinal	Transverse	Station No.	Longitudinal	Transverse
1	2046	1589	1	1980	2341
	1922	1627		2103	2322
2	2080	2291	2	2176	2128
	944	2349		2705	1579
3	1560	1290	3	2118	1560
	1521	1252		1598	1579
4	1646	1983	4	1261	1993
	1126	1579		1608	1935
5	1435	2012	5	1406	1309
	1829	2320		1396	2022
6	2160	1830	6	1637	2102
	1821	1617		2208	2111
7	1811	1734	7	1995	1995
	1753	1637		2014	1433
8	1336	1714	8	2286	2053
	1327	2034		2111	2179
9	1364	2026	9	1724	1705
	1354	1831		1559	1880
10	1489	1754	10	1460	1519
	1362	1823		1823	1480
11	2231	2124	11	1403	1364
	1559	2007		1413	1461
12	2211	2221	12	2046	1968
	2280	2143		2075	1939
13	2087	1636	13	2146	1323
	1970	1646		2234	1480
14	1783	2156	14	1578	1950
	1989	2166		2019	1970
15	1881	2342	15	2283	2058
	1881	2195		1705	2146
<b>Average</b>	<b>1811</b>		<b>Average</b>	<b>1849</b>	
<b>Std Dev</b>	<b>335</b>		<b>Std Dev</b>	<b>331</b>	
<b>COV</b>	<b>18.5%</b>		<b>COV</b>	<b>17.9%</b>	

**Table 15..Seismic Moduli Measured at Site 6.**

Modulus Wheel path (ksi)			Modulus Midlane (ksi)		
Station No.	Longitudinal	Transverse	Station No.	Longitudinal	Transverse
1	1741	1363	1	2082	1400
	1760	1372		975	1542
2	2167	2009	2	1460	2214
	2167	1926		1470	2279
3	2015	1959	3	1817	625
	2139	2006		2044	615
4	1437	1704	4	1009	1456
	1456	1713		1266	1523
5	1863	1656	5	856	941
	2239	1477		1138	941
6	2593	1741	6	1930	1505
	2337	1741		1968	1505
7	1534	1364	7	1646	1656
	1524	1345		1628	1694
8	1375	1179	8	1375	1357
	1366	1179		1413	1394
9	1057	1029	9	1815	2058
	964	1010		1796	2068
10	2498	2021	10	2582	2114
	2545	1843		2451	2301
11	2512	1995	11	1543	1684
	2418	2032		1524	1731
12	1991	2930	12	3191	1600
	1963	3414		3154	1944
13	2102	2391	13	1265	1693
	2158	1972		1274	1572
14	1562	1431	14	1562	2423
	1562	1618		1703	2386
15	664	1684	15	1188	1160
	664	2198		1254	1123
<b>Average</b>	<b>1795</b>		<b>Average</b>	<b>1648</b>	
<b>Std Dev</b>	<b>525</b>		<b>Std Dev</b>	<b>528</b>	
<b>COV</b>	<b>29.2%</b>		<b>COV</b>	<b>32.0%</b>	