1 Carbonate

1.1 SHC

Table 1: Logs - SHC - Linear regression

Foramt	Coff.	Logs	R2	MAE
$y = a_0 + a_1 x_1$	$a_0 = 6114.080896423374, a_1 = -2018.5924061659273$	RHOB	0.9510	115.3794
	$a_0 = 488.3014267571177, a_1 = 3275.2783952511227$	PHIN	0.9709	90.2407
	$a_0 = 1928.0005629103405, a_1 = 23.216086456750922$	VSH	4.4896×10^{-05}	590.6090
	$a_0 = 3720.251252636914, a_1 = -311.8514078046698$	U	0.7226	286.8822
	$a_0 = -483.79902044824485, a_1 = 7.193375970325606$	DT	0.9910	50.0589
	$a_0 = 3310.3882595699997, a_1 = -195.05498783023822$	AI	0.8961	178.8051
$y = a_0 + a_1 x_1 + a_2 x_2$	$a_0 = 2188.178406246421, a_1 = -615.5753320637348, a_2 = 2311.94686595444$	RHOB, PHIN	0.9753	83.3372
	$a_0 = 6398.683159721358, a_1 = -2054.213044430582, a_2 = -417.58418435326394$	RHOB, VSH	0.9668	94.6405
	$a_0 = 6454.62543045984, a_1 = -2377.160459128921, a_2 = 70.2260080923844$	RHOB, U	0.9576	106.1117
	$a_0 = -1707.2207096750344, a_1 = 379.1691657349534, a_2 = 8.49733461271335$	RHOB, DT	0.9920	46.7204
	$a_0 = 5701.520653860308, a_1 = -1710.0761732389797, a_2 = -32.081281851542336$	RHOB, AI	0.9530	113.1003
	$a_0 = 694.4858220841425, a_1 = 3346.4728624696663, a_2 = -470.6253298048036$	PHIN, VSH	0.9910	49.5778

Table 1: Logs - SHC - Linear regression (Continued)

Foramt	Coff.	Logs	R2	MAE
	$a_0 = 497.75785392150055, a_1 = 3267.2356537654596, a_2 = -1.0320156009227952$	PHIN, U	0.9709	90.2167
	$a_0 = -523.7862173810581, a_1 = -141.5864385559871, a_2 = 7.498295320407894$	PHIN, DT	0.9910	49.8839
	$\begin{array}{l} a_0 = 790.2756988215465, a_1 = 2940.340167114771, a_2 = \\ -21.850966055493192 \end{array}$	PHIN, AI	0.9720	88.6876
	$a_0 = 4053.4898390134235, a_1 = -530.9460431871788, a_2 = -323.2418400894651$	VSH, U	0.7475	274.0529
	$a_0 = -376.2478179054219, a_1 = -241.44628343963993, a_2 = 7.236159185991228$	VSH, DT	0.9964	32.2245
	$a_0 = 3514.8269620142637, a_1 = -365.3894775383644, a_2 = -197.88179557251482$	VSH, AI	0.9083	170.409
	$a_0 = -766.3307397029439, a_1 = 24.62512623142382, a_2 = 7.614656327285078$	U, DT	0.9921	45.8230
	$a_0 = 3425.661476093617, a_1 = -49.69464998619708, a_2 = -171.0819532074326$	U, AI	0.9007	171.9898
	$a_0 = -778.600034447069, a_1 = 7.733107505298747, a_2 = 16.074972013858243$	DT, AI	0.9915	49.0098
$y = a_0 + a_1 x_1 + a_2 x_2 + a_3 x_3$	$a_0 = 2225.6857041467665, a_1 = -555.9678631845068, a_2 = 2475.0159061788013, a_3 = -461.3253400436661$	RHOB, PHIN, VSH	0.9946	38.6202
	$a_0 = 2664.1224417927574, a_1 = -925.2194586650181, a_2 = 2149.820266792243, a_3 = 41.374902527744126$	RHOB, PHIN, U	0.9775	79.2406
	$a_0 = -1776.9294198281586, a_1 = 384.4647932111593, a_2 = -186.3233794148745, a_3 = 8.916810663574186$	RHOB, PHIN, DT	0.9920	46.5429

Table 1: Logs - SHC - Linear regression (Continued)

Foramt	Coff.	Logs	R2	MAE
	$a_0 = 2179.2143637830522, a_1 = -599.3223308155823, a_2 = 2297.543109241753, a_3 = -2.599018661030796$	RHOB, PHIN, AI	0.9753	83.3148
	$a_0 = 6635.8314532774275, a_1 = -2325.2967802526696, a_2 = -383.7651851816355, a_3 = 53.65708883655691$	RHOB, VSH, U	0.9707	90.4326
	$a_0 = -709.5089535782258, a_1 = 102.02703929047954, a_2 = -232.32691852210098, a_3 = 7.585413154673808$	RHOB, VSH, DT	0.9964	31.9729
	$a_0 = 6009.122895922449, a_1 = -1764.1957408271426, a_2 = -414.52232835648584, a_3 = -30.130498266250648$	RHOB, VSH, AI	0.9686	92.6804
	$a_0 = -1393.1673115711774, a_1 = 222.72109860051884, a_2 = 16.624639344376106, a_3 = 8.243721484150868$	RHOB, U, DT	0.9923	45.1381
	$a_0 = 6075.747135271379, a_1 = -2090.6794484784155, a_2 = 68.09539397289278, a_3 = -28.65870035131809$	RHOB, U, AI	0.9593	104.3489
	$a_0 = -1736.8736332885005, a_1 = 328.6152137460803, a_2 = 8.676409076394068, a_3 = 10.511379665803979$	RHOB, DT, AI	0.9922	46.3731
	$a_0 = 827.3030671732095, a_1 = 3237.776606721839, a_2 = -478.7673537423276, a_3 = -14.105558505103946$	PHIN, VSH, U	0.9914	48.7759
	$a_0 = -48.50971210667876, a_1 = 1046.1824718750179, a_2 = -313.8964859715043, a_3 = 4.995947366948709$	PHIN, VSH, DT	0.9977	25.6224
	$a_0 = 916.4137964347649, a_1 = 3097.167529885574, a_2 = -465.6797334763231, a_3 = -16.215570717773524$	PHIN, VSH, AI	0.9916	47.9753
	$a_0 = -807.466375481607, a_1 = -144.9121095810623, a_2 = 24.643359373251144, a_3 = 7.927049742130669$	PHIN, U, DT	0.9921	45.7165
	$a_0 = 757.459408805284, a_1 = 2963.42187047639, a_2 = 5.618730714341574, a_3 = -23.20182616421565$	PHIN, U, AI	0.9720	88.6767

Table 1: Logs - SHC - Linear regression (Continued)

Foramt	Coff.	Logs	R2	MAE
	$a_0 = -808.963760955708, a_1 = -117.45192932426319, a_2 = 7.980911206430862, a_3 = 15.921892685502819$	PHIN, DT, AI	0.9915	48.8896
	$a_0 = -518.2678548002236, a_1 = -228.435954860531, a_2 = 11.873176652527244, a_3 = 7.436977080520606$	VSH, U, DT	0.9966	31.0981
	$a_0 = 3693.945737984609, a_1 = -416.0201469385873, a_2 = -65.00624677878533, a_3 = -166.91404359505418$	VSH, U, AI	0.9159	158.7839
	$a_0 = -523.3053973363867, a_1 = -235.61259789799198, a_2 = 7.4996058216353845, a_3 = 7.877090315651347$	VSH, DT, AI	0.9965	31.7891
	$a_0 = -958.6665920208757, a_1 = 22.234016913007114, a_2 = 7.976111710656669, a_3 = 11.983653676401554$	U, DT, AI	0.9923	45.3717
$y = a_0 + a_1 x_1 + a_2 x_2 + a_3 x_3 + a_4 x_4$	$a_0 = 2439.8168317056443, a_1 = -697.6774460086731, a_2 = 2397.054090014056, a_3 = -448.15624201796544, a_4 = 18.707985891029715$	RHOB, PHIN, VSH, U	0.9951	37.0021
	$a_0 = 56.36982516356284, a_1 = -30.317488989170347, a_2 = 1064.8579836826623, a_3 = -317.8996351245387, a_4 = 4.852175768566132$	RHOB, PHIN, VSH, DT	0.9977	25.5776
	$a_0 = 2232.5988584257157, a_1 = -568.3915102047446, a_2 = 2486.2134933364414, a_3 = -461.72596175906295, a_4 = 1.99494392200141$	RHOB, PHIN, VSH, AI	0.9946	38.6216
	$a_0 = -1461.324103162045, a_1 = 229.73799251091904, a_2 = -170.53152887923198, a_3 = 16.394038275223814, a_4 = 8.631162692485598$	RHOB, PHIN, U, DT	0.9923	45.0162
	$a_0 = 2655.156191325673, a_1 = -908.9613331688012, a_2 = 2135.4110845531, a_3 = 41.37498634180015, a_4 = -2.5999383839969323$	RHOB, PHIN, U,	0.9775	79.2117
	$a_0 = -1797.7384253721848, a_1 = 334.8503486125862, a_2 = -165.10313715926108, a_3 = 9.04264693947446, a_4 = 10.19063137405624$	RHOB, PHIN, DT, AI	0.9922	46.2200
	$a_0 = -495.0408243083425, a_1 = -8.086553273219012, a_2 = -228.86679791962393, a_3 = 12.139607279142895, a_4 = 7.413801882108651$	RHOB, VSH, U, DT	0.9966	31.0970

Table 1: Logs - SHC - Linear regression (Continued)

Foramt	Coff.	Logs	R2	MAE
	$a_0 = 6269.079869598129, a_1 = -2048.752203472757, a_2 = -382.2066459052087, a_3 = 51.666096753476616, a_4 = -27.685759897370676$	RHOB, VSH, U, AI	0.9722	88.2230
	$\begin{array}{l} a_0 = -739.0951870181839, a_1 = 71.89252071106024, a_2 = \\ -229.9420151705693, a_3 = 7.711595618634468, a_4 = 6.857221717301128 \end{array}$	RHOB, VSH, DT, AI	0.9965	31.664
	$a_0 = -1429.287504204617, a_1 = 178.0974241586982, a_2 = \\ 16.217206520228558, a_3 = 8.421586596106515, a_4 = 10.075553418006159$	RHOB, U, DT, AI	0.9925	44.8501
	$a_0 = -153.40651657137732, a_1 = 1002.0157086376787, a_2 = -302.4958647065497, a_3 = 7.61286457553529, a_4 = 5.2192833316204155$	PHIN, VSH, U, DT	0.9978	24.9527
	$a_0 = 976.5224717391366, a_1 = 3058.3286688235717, a_2 = -472.20223426175005, a_3 = -9.989173476671946, a_4 = -13.73503332010292$	PHIN, VSH, U, AI	0.9918	47.5078
	$a_0 = -177.29848317548476, a_1 = 1034.4974507560914, a_2 = -308.1235149556352, a_3 = 5.245129937001432, a_4 = 6.702450330826299$	PHIN, VSH, DT, AI	0.9978	25.3379
	$a_0 = -991.8304400285742, a_1 = -126.69336425185298, a_2 = 22.284768476197602, a_3 = 8.24396795962446, a_4 = 11.809190773829252$	PHIN, U, DT, AI	0.9924	45.2858
	$a_0 = -622.4696975587553, a_1 = -224.95732782734848, a_2 = 10.818893450580068, a_3 = 7.628409516391386, a_4 = 6.2570262089217135$	VSH, U, DT, AI	0.9967	30.7844
$y = a_0 + a_1 x_1 + a_2 x_2 + a_3 x_3 + a_4 x_4 + a_5 x_5$	$a_0 = 264.6536251567759, a_1 = -137.9319852211234, a_2 = 1062.0982552916491, a_3 = -314.2854926235067, a_4 = 11.901904636364847, a_5 = 4.691008340760249$	RHOB, PHIN, VSH, U, DT	0.9979	24.3895
	$a_0 = 2446.0487208304808, a_1 = -709.1326227982494, a_2 = 2407.5952374615126, a_3 = -448.5443011826279, a_4 = 18.68829850421772, a_5 = 1.8633769940486926$	RHOB, PHIN, VSH, U, AI	0.9951	37.0145

Table 1: Logs - SHC - Linear regression (Continued)

Foramt	Coff.	Logs	R2	MAE
	$a_0 = 29.37106656248102, a_1 = -64.5900219738767, a_2 = 1072.7630930384903, a_3 = -315.90025647839485, a_4 = 4.971280899543814, a_5 = 7.575276092154932$	RHOB, PHIN, VSH, DT, AI	0.9978	25.2125
	$a_0 = -1488.410226911305, a_1 = 185.5623624020812, a_2 = -150.50421435763724, a_3 = 16.025302280901546, a_4 = 8.758455999873028, a_5 = 9.788323962372308$	RHOB, PHIN, U, DT, AI	0.9925	44.7453
	$a_0 = -527.4078862686852, a_1 = -35.023493204564694, a_2 = -226.63852240433536, a_3 = 11.916810951669111, a_4 = 7.5382067772496715, a_5 = 6.5894635861497965$	RHOB, VSH, U, DT, AI	0.9967	30.7572
	$a_0 = -250.7509427109635, a_1 = 997.50337051592, a_2 = -298.9675028271876, a_3 = 6.663772018761892, a_4 = 5.4050861211900125, a_5 = 5.746596260907925$	PHIN, VSH, U, DT, AI	0.9979	24.7210
$y = y = a_0 + a_1 x_1 + a_2 x_2 + a_3 x_3 + a_4 x_4 + a_5 x_5 + a_6 x_6$	$a_0 = 234.23889786252994, a_1 = -168.7601598947678, a_2 = 1069.7857743208742, a_3 = -312.43133570989704, a_4 = 11.65297661857264, a_5 = 4.8093362289456385, a_6 = 7.311453169876555$	RHOB, PHIN, VSH, U, DT, AI	0.9980	23.8965

1.2 TC

Table 2: Logs - TC - Linear regression

Foramt	Coff.	Logs	R2	MAE
$y = a_0 + a_1 x_1$	$a_0 = -2.597729144712293, a_1 = 2.1987021238657594$	RHOB	0.8267	0.2330
	$a_0 = 3.520207564270706, a_1 = -3.5453901021597214$	PHIN	0.8341	0.2327
	$a_0 = 2.5671535806754013, a_1 = -1.2235532496960042$	VSH	0.1031	0.6187
	$a_0 = 0.14895891495328262, a_1 = 0.31528424938428407$	U	0.5428	0.3877

Table 2: Logs - TC - Linear regression (Continued)

Foramt	Coff.	Logs	R2	MAE
	$a_0 = 4.520916180894034, a_1 = -0.007633572717115793$	DT	0.8181	0.2433
	$a_0 = 0.3799617566963227, a_1 = 0.22329730575111328$	AI	0.8596	0.2060
$y = a_0 + a_1 x_1 + a_2 x_2$	$a_0 = 0.9317135750083294, a_1 = 0.9373696251030311, a_2 = -2.0784734350485654$	RHOB, PHIN	0.8415	0.2271
	$a_0 = -2.075826233933607, a_1 = 2.1333810874878676, a_2 = -0.765764821346226$	RHOB, VSH	0.8664	0.2131
	$\begin{array}{l} a_0 = -3.628234991929709, a_1 = 3.2837480966317276, a_2 = \\ -0.21250763037703252 \end{array}$	RHOB, U	0.8703	0.2079
	$\begin{array}{l} a_0 = -0.35017350751708176, a_1 = 1.509673262816098, a_2 = \\ -0.002441822764518715 \end{array}$	RHOB, DT	0.8293	0.2335
	$a_0 = -0.47929803115023106, a_1 = 0.6145204227618333, a_2 = 0.16473227089222559$	RHOB, AI	0.8652	0.1965
	$a_0 = 3.834045391522327, a_1 = -3.437023429362944, a_2 = -0.7163492209061401$	PHIN, VSH	0.8687	0.2134
	$\begin{array}{l} a_0 = 4.299584263679328, a_1 = -4.208254120919613, a_2 = \\ -0.08505632188601542 \end{array}$	PHIN, U	0.8440	0.2235
	$\begin{array}{l} a_0 = 3.507540501397095, a_1 = -3.5881548191594237, a_2 = \\ 9.384698925890721e - 05 \end{array}$	PHIN, DT	0.8341	0.2327
	$a_0 = 1.4626589791994116, a_1 = -1.2632364846449073, a_2 = 0.1488849496434195$	PHIN, AI	0.8703	0.1946
	$a_0 = 0.5940213503371088, a_1 = -0.7091139762887669, a_2 = 0.3000715647193167$	VSH, U	0.5765	0.3794
	$a_0 = 4.944319291910835, a_1 = -0.95051570912094, a_2 = -0.007465145529098678$	VSH, DT	0.8798	0.2013

Table 2: Logs - TC - Linear regression (Continued)

Foramt	Coff.	Logs	R2	MAE
	$a_0 = 0.8259727243609343, a_1 = -0.7971470788208072, a_2 = 0.21713023835408898$	VSH, AI	0.9028	0.1760
	$a_0 = 5.55653766397137, a_1 = -0.09026352798909153, a_2 = -0.009177778051711969$	U, DT	0.8286	0.2354
	$a_0 = 0.619093144689858, a_1 = -0.10309030133306273, a_2 = 0.27302876303714413$	U, AI	0.8747	0.2039
	$a_0 = 1.2442214889371743, a_1 = -0.0016344907202835977, a_2 = 0.17867230087402136$	DT, AI	0.8630	0.1998
$y = a_0 + a_1 x_1 + a_2 x_2 + a_3 x_3$	$a_0 = 0.991358914359962, a_1 = 1.0321593835825582, a_2 = -1.819155681267174, a_3 = -0.7336147362979816$	RHOB, PHIN, VSH	0.8776	0.2047
	$a_0 = -1.3098145474374598, a_1 = 2.3956839769788982, a_2 = -1.3149144779510051, a_3 = -0.19486116150805813$	RHOB, PHIN, U	0.8760	0.2038
	$\begin{array}{l} a_0 = -1.762995812480811, a_1 = 1.6170024703242885, a_2 = \\ -3.776311823808522, a_3 = 0.00605991424585912 \end{array}$	RHOB, PHIN, DT	0.8470	0.2235
	$a_0 = 1.4443437327066921, a_1 = 0.007902966843966871, a_2 = -1.2547602381002052, a_3 = 0.14863108374502482$	RHOB, PHIN, AI	0.8703	0.1946
	$a_0 = -3.191529521241015, a_1 = 3.4087392638298204, a_2 = -0.9248718846248029, a_3 = -0.25243863029584773$	RHOB, VSH, U	0.9262	0.1622
	$\begin{array}{l} a_0 = 3.57028297569895, a_1 = 0.4206576831639602, a_2 = \\ -0.912916549674428, a_3 = -0.006025170731011059 \end{array}$	RHOB, VSH, DT	0.8805	0.2009
	$\begin{array}{l} a_0 = 0.10164877632135805, a_1 = 0.512308586458862, a_2 = \\ -0.7828792848517365, a_3 = 0.16841657920007558 \end{array}$	RHOB, VSH, AI	0.9067	0.1726
	$\begin{array}{l} a_0 = -4.473709954872728, a_1 = 3.5638440211717213, a_2 = \\ -0.2182823261094007, a_3 = 0.0008881299934179767 \end{array}$	RHOB, U, DT	0.8706	0.2074

Table 2: Logs - TC - Linear regression (Continued)

Foramt	Coff.	Logs	R2	MAE
	$a_0 = -1.583982830578776, a_1 = 1.7380289761500638, a_2 = -0.20101182136899842, a_3 = 0.15462910089782203$	RHOB, U, AI	0.9046	0.1707
	$\begin{array}{l} a_0 = -0.8203982037074462, a_1 = 0.708008070370533, a_2 = \\ 0.00039787143822801394, a_3 = 0.1666854295488372 \end{array}$	RHOB, DT, AI	0.8652	0.1962
	$\begin{array}{l} a_0 = 4.834893360759605, a_1 = -4.256107026195236, a_2 = \\ -0.777703664132903, a_3 = -0.10629282044905888 \end{array}$	PHIN, VSH, U	0.8838	0.2030
	$\begin{array}{l} a_0 = 4.94794887777368, a_1 = 0.011586108065808171, a_2 = \\ -0.951318069988706, a_3 = -0.0074899550980982305 \end{array}$	PHIN, VSH, DT	0.8798	0.2013
	$a_0 = 1.6697597323627198, a_1 = -1.0057483382322119, a_2 = -0.7645796580154882, a_3 = 0.1581374644735824$	PHIN, VSH, AI	0.9095	0.1700
	$\begin{array}{l} a_0 = 4.541422745594913, a_1 = -3.5760342949539923, a_2 = \\ -0.08981358394604268, a_3 = -0.0014687634756695063 \end{array}$	PHIN, U, DT	0.8445	0.2227
	$\begin{array}{l} a_0 = 2.263909532776987, a_1 = -1.8268049924453436, a_2 = \\ -0.1371883016952397, a_3 = 0.18186788005338894 \end{array}$	PHIN, U, AI	0.8949	0.1778
	$a_0 = 0.3849282181068543, a_1 = -3.32388886738251, a_2 = 0.005378352476318212, a_3 = 0.17434015683624657$	PHIN, DT, AI	0.8768	0.1923
	$\begin{array}{l} a_0 = 6.770376767540479, a_1 = -1.1177992015191487, a_2 = \\ -0.15266228244878124, a_3 = -0.010047210888067475 \end{array}$	VSH, U, DT	0.9081	0.1772
	$\begin{array}{l} a_0 = 1.2016382011360058, a_1 = -0.9033346878899109, a_2 = \\ -0.13633748085433092, a_3 = 0.2820788471654239 \end{array}$	VSH, U, AI	0.9283	0.1582
	$a_0 = 2.1542113154238356, a_1 = -0.8398338073444315, a_2 = -0.0024668002392219716, a_3 = 0.14945120548189378$	VSH, DT, AI	0.9102	0.1693
	$a_0 = 2.3028300771586863, a_1 = -0.13071345158092687, a_2 = -0.0030631087947999383, a_3 = 0.20272509994751642$	U, DT, AI	0.8848	0.1877

Table 2: Logs - TC - Linear regression (Continued)

Foramt	Coff.	Logs	R2	MAE
$y = a_0 + a_1 x_1 + a_2 x_2 + a_3 x_3 + a_4 x_4$	$a_0 = -1.7617382061676687, a_1 = 2.8541282345012844, a_2 = -0.8167958000058988, a_3 = -0.902930642246929, a_4 = -0.2405297290245753$	RHOB, PHIN, VSH, U	0.9283	0.1609
	$\begin{array}{l} a_0 = 3.3774855852982784, a_1 = 0.45397324222413077, a_2 = \\ -0.26806048959690326, a_3 = -0.891375025208166, a_4 = \\ -0.0053371231574080675 \end{array}$	RHOB, PHIN, VSH, DT	0.8805	0.2010
	$\begin{array}{l} a_0=1.532791571788174, a_1=0.05914938703314941, a_2=\\ -0.9421697025234234, a_3=-0.7649911053530141, a_4=\\ 0.1562423960934907 \end{array}$	RHOB, PHIN, VSH, AI	0.9096	0.1700
	$\begin{array}{l} a_0 = -6.06911364056166, a_1 = 3.728094393664654, a_2 = \\ -3.9917757768508753, a_3 = -0.22368020043801126, a_4 = \\ 0.00995729415648266 \end{array}$	RHOB, PHIN, U, DT	0.8903	0.1937
	$\begin{array}{l} a_0 = -0.7972245679699392, a_1 = 1.4662260898856396, a_2 = \\ -0.49115849932663036, a_3 = -0.19486595305894855, a_4 = \\ 0.1486354154127357 \end{array}$	RHOB, PHIN, U,	0.9053	0.1701
	$\begin{array}{l} a_0 = -2.089704275085195, a_1 = 0.8380388200202104, a_2 = \\ -3.4431468050017786, a_3 = 0.00803558656485855, a_4 = \\ 0.15999637763287428 \end{array}$	RHOB, PHIN, DT, AI	0.8799	0.1890
	$\begin{array}{l} a_0 = -0.6255673823715322, a_1 = 2.574917891244067, a_2 = \\ -0.980610282623545, a_3 = -0.23749904343599093, a_4 = \\ -0.002667771093638459 \end{array}$	RHOB, VSH, U, DT	0.9287	0.1595
	$\begin{array}{l} a_0 = -1.1116813176511815, a_1 = 1.8404549896133764, a_2 = \\ -0.9337103607447464, a_3 = -0.24114771434174095, a_4 = \\ 0.15700594230540024 \end{array}$	RHOB, VSH, U,	0.9617	0.1145
	$\begin{array}{l} a_0=2.910046581117677, a_1=-0.2518140574360605, a_2=\\ -0.8596958518311599, a_3=-0.0032093254753576194, a_4=\\ 0.1530234442525223 \end{array}$	RHOB, VSH, DT, AI	0.9105	0.1689

Table 2: Logs - TC - Linear regression (Continued)

Foramt	Coff.	Logs	R2	MAE
	$a_0 = -5.092969060099502, a_1 = 2.798797804859188, a_2 = -0.22526751826163527, a_3 = 0.00393752098638124, a_4 = 0.17273933884028955$	RHOB, U, DT, AI	0.9099	0.1660
	$a_0 = 7.105360689687353, a_1 = 0.9199636052469327, a_2 = -1.1857945643452188, a_3 = -0.1565737301676521, a_4 = -0.01208330425365514$	PHIN, VSH, U, DT	0.9089	0.1766
	$a_0 = 2.6689094769211152, a_1 = -1.6513429701640963, a_2 = -0.8729991991323244, a_3 = -0.16604392089872072, a_4 = 0.1993699204327247$	PHIN, VSH, U, AI	0.9447	0.1385
	$a_0 = 2.0707746909605467, a_1 = -0.24946026155659667, a_2 = -0.8223484164218707, a_3 = -0.0019231525545970714, a_4 = 0.14973445992358791$	PHIN, VSH, DT, AI	0.9102	0.1693
	$a_0 = 1.44680051838372, a_1 = -3.270225598523707, a_2 = -0.12940344563007136, a_3 = 0.0038508315466811603, a_4 = 0.19822184081193425$	PHIN, U, DT, AI	0.8982	0.1770
	$a_0 = 3.826497511622285, a_1 = -1.0195220723344645, a_2 = -0.1824475757402542, a_3 = -0.00463891903879764, a_4 = 0.17677163064060386$	VSH, U, DT, AI	0.9504	0.1294
$y = a_0 + a_1 x_1 + a_2 x_2 + a_3 x_3 + a_4 x_4 + a_5 x_5$	$a_0 = -0.7779227889194489, a_1 = 2.600958167814121, a_2 = \\ -0.21300196624149828, a_3 = -0.963479711289802, a_4 = \\ -0.23745137258252863, a_5 = -0.0021217195630127703$	RHOB, PHIN, VSH, U, DT	0.9288	0.1597
	$\begin{array}{l} a_0 = -1.233497677367274, a_1 = 1.8831403809617522, a_2 = \\ 0.07671517078585499, a_3 = -0.9358241315625844, a_4 = \\ -0.24219851282542093, a_5 = 0.15794749055567475 \end{array}$	RHOB, PHIN, VSH, U, AI	0.9617	0.1144
	$a_0 = 2.8323591618458575, a_1 = -0.2380164749561156, a_2 = -0.10845004032360875, a_3 = -0.8510059791123046, a_4 = -0.0029322957716760452, a_5 = 0.152950853177743$	RHOB, PHIN, VSH, DT, AI	0.9105	0.1689

Table 2: Logs - TC - Linear regression (Continued)

Foramt	Coff.	Logs	R2	MAE
	$a_0 = -6.527826176100465, a_1 = 2.9799653707063833, a_2 = -3.6526065288151575, a_3 = -0.22992486742934115, a_4 = 0.012113048753535872, a_5 = 0.1657685294884729$	RHOB, PHIN, U, DT, AI	0.9265	0.1536
	$a_0 = -1.4040128767934246, a_1 = 1.9270697934220455, a_2 = -0.927019041091215, a_3 = -0.24285741663366536, a_4 = 0.0003242344898549856, a_5 = 0.15848019340108155$	RHOB, VSH, U, DT, AI	0.9617	0.1146
	$\begin{array}{l} a_0=4.117712780526003, a_1=0.7814731123700038, a_2=\\ -1.0775037930120517, a_3=-0.18570281855303689, a_4=\\ -0.006380735161738887, a_5=0.17637174499418756 \end{array}$	PHIN, VSH, U, DT, AI	0.9510	0.1278
$y = y = a_0 + a_1 x_1 + a_2 x_2 + a_3 x_3 + a_4 x_4 + a_5 x_5 + a_6 x_6$	$a_0 = -1.4370502221164243, a_1 = 1.9328707821898083, a_2 = \\ -0.04640324463303122, a_3 = -0.9232976746278121, a_4 = \\ -0.24284597250214446, a_5 = 0.00044260253200367956, a_6 = \\ 0.15844887623452603$	RHOB, PHIN, VSH, U, DT, AI	0.9617	0.1146

1.3 TD

Table 3: Logs - TD - Linear regression

Foramt	Coff.	Logs	R2	MAE
$y = a_0 + a_1 x_1$	$a_0 = -1.6570405760262146, a_1 = 1.150604449556771$	RHOB	0.8360	0.1212
	$a_0 = 1.5572860947726046, a_1 = -1.8841002110794958$	PHIN	0.8690	0.1119
	$a_0 = 0.9444970573020778, a_1 = -0.4397600265468137$	VSH	0.0492	0.3316
	$a_0 = -0.23317413008254484, a_1 = 0.16735696998672406$	U	0.5652	0.1933
	$a_0 = 2.0896467505722276, a_1 = -0.004058319333675759$	DT	0.8539	0.1165

Table 3: Logs - TD - Linear regression (Continued)

Foramt	Coff.	Logs	R2	MAE
	$a_0 = -0.12322399307471266, a_1 = 0.12033202234847301$	AI	0.9222	0.0714
$y = a_0 + a_1 x_1 + a_2 x_2$	$a_0 = 1.160569448677773, a_1 = 0.14366273801084467, a_2 = -1.6592782633790228$	RHOB, PHIN	0.8703	0.1110
	$a_0 = -1.5231475501621454, a_1 = 1.1338464835968505, a_2 = -0.1964552542489717$	RHOB, VSH	0.8457	0.1202
	$a_0 = -2.1323557255422245, a_1 = 1.6510759317609762, a_2 = -0.09801797474385555$	RHOB, U	0.8700	0.1120
	$a_0 = 1.4969753289148071, a_1 = 0.18368378661556878, a_2 = -0.0034266327866971343$	RHOB, DT	0.8544	0.1162
	$a_0 = a_0 = -0.012828925372696975, a_1 = -0.07895170312238284, a_2 = 0.1278562787836782$	RHOB, AI	0.9225	0.0714
	$a_0 = 1.6297554871978144, a_1 = -1.8590768829310136, a_2 = -0.16541470879391032$	PHIN, VSH	0.8765	0.1099
	$a_0 = 1.9782739315523243, a_1 = -2.2421526003138457, a_2 = -0.04594399214449627$	PHIN, U	0.8802	0.1075
	$a_0 = 1.5626240183321347, a_1 = -1.8660790807932544, a_2 = -3.954729363503181e - 0508660790807932544, a_3 = -3.954729363503181e - 0508660790807932544, a_4 = -3.954729363503181e - 0508660790807932544, a_5 = -3.954729363503181e - 0508660790807932544, a_5 = -3.954729363503181e - 0508660790807932544, a_5 = -3.954729363503181e - 0508660790807932544, a_6 = -3.954729363503181e - 0508660790807932544, a_7 = -3.954729363503181e - 0508660790807932544, a_8 = -3.956660790807932544, a_8 = -3.9566607908079325644, a_8 = -3.9566660790807908079076644, a_8 = -3.956666079080790766644, a_8 = -3.956666079080790766644, a_8 = -3.956666079080790766644, a_8 = -3.956666666644, a_8 = -3.95666666666664, a_8 = -3.95666666666666666666666666666666666666$	PHIN, DT	0.8697	0.1114
	$a_0 = 0.2265562556971793, a_1 = -0.40810594381622306, a_2 = 0.09629208589155884$	PHIN, AI	0.9263	0.0730
	$a_0 = -0.1335807290167007, a_1 = -0.1586812703728149, a_2 = 0.16395276670046033$	VSH, U	0.5715	0.1936
	$a_0 = 2.220263657577705, a_1 = -0.2932274675246506, a_2 = -0.004006360720755737$	VSH, DT	0.8755	0.1086
	$a_0 = -0.007636446818102494, a_1 = -0.20658746427017863, a_2 = 0.11873377423418609$	VSH, AI	0.9329	0.0700
	$a_0 = 2.652497244432959, a_1 = -0.049057374857950906, a_2 = -0.004897580346895715$	U, DT	0.8651	0.1127
	$a_0 = 0.028283541493084208, a_1 = -0.06531537964914294, a_2 = 0.15184060241021907$	U, AI	0.9445	0.0658
	$a_0 = -0.008568508543434383, a_1 = -0.00021683681248239116, a_2 = 0.11441192522312424$	DT, AI	0.9224	0.0719
$y = a_0 + a_1 x_1 + a_2 x_2 + a_3 x_3$	$a_0 = 1.1742431555867738, a_1 = 0.1653933105838796, a_2 = -1.59982961240224, a_3 = -0.16818133650181774$	RHOB, PHIN, VSH	0.8774	0.1093

Table 3: Logs - TD - Linear regression (Continued)

Foramt	Coff.	$_{ m Logs}$	R2	MAE
	$a_0 = 0.24083488475665787, a_1 = 0.7420322614852892, a_2 = -1.34597790484151, a_3 = -0.07995462720727474$	RHOB, PHIN, U	0.8914	0.1043
	$a_0 = 0.7884841035011108, a_1 = 0.23750640923625024, a_2 = -1.893715708050798, a_3 = 0.0008367526733606454$	RHOB, PHIN, DT	0.8707	0.1112
	$a_0 = 1.556249724349267, a_1 = -0.5737582292195066, a_2 = -1.0234844850610654, a_3 = 0.114722841226576$	RHOB, PHIN, AI	0.9347	0.0683
	$a_0 = -2.0070120601482553, a_1 = 1.6869510285711349, a_2 = -0.26545770506581273, a_3 = -0.1094790125109762$	RHOB, VSH, U	0.8869	0.1063
	$a_0 = 2.8275887726746114, a_1 = -0.18593102149481006, a_2 = -0.3098463250970865, a_3 = -0.004642830695868418$	RHOB, VSH, DT	0.8762	0.1083
	$\begin{array}{l} a_0 = 0.1426693233761701, a_1 = -0.10631007972778651, a_2 = \\ -0.20954819995662266, a_3 = 0.12884243359570752 \end{array}$	RHOB, VSH, AI	0.9335	0.0691
	$a_0 = -0.09131816816031546, a_1 = 0.9749041623855912, a_2 = -0.08407744263017893, a_3 = -0.0021440098782977333$	RHOB, U, DT	0.8765	0.1097
	$a_0 = -0.5010849488896147, a_1 = 0.4176241698762769, a_2 = -0.08884455786147194, a_3 = 0.12339081170299088$	RHOB, U, AI	0.9509	0.0613
	$\begin{array}{l} a_0 = 1.1551557539917916, a_1 = -0.3990692196225167, a_2 = \\ -0.0013623790944553111, a_3 = 0.12116833321569852 \end{array}$	RHOB, DT, AI	0.9252	0.0712
	$\begin{array}{l} a_0 = 2.112502045364691, a_1 = -2.254151658896305, a_2 = -0.19500826066826393, a_3 = -0.05126901867896788 \end{array}$	PHIN, VSH, U	0.8894	0.1059
	$a_0 = 1.8991113230029057, a_1 = -1.0251598373475792, a_2 = -0.22223312395643624, a_3 = -0.0018111650968798188$	PHIN, VSH, DT	0.8790	0.1080
	$a_0 = 0.27951230893241424, a_1 = -0.3422657390820183, a_2 = -0.19550446077098668, a_3 = 0.09865797138652811$	PHIN, VSH, AI	0.9358	0.0698

Table 3: Logs - TD - Linear regression (Continued)

Foramt	Coff.	Logs	R2	MAE
	$a_0 = 2.1246509904375612, a_1 = -1.8594902632004022, a_2 = -0.04882340994094183, a_3 = -0.0008889953164757559$	PHIN, U, DT	0.8809	0.1069
	$a_0 = 0.68789590257626, a_1 = -0.7325943266571996, a_2 = -0.07898952752972387, a_3 = 0.11528281656928707$	PHIN, U, AI	0.9564	0.0583
	$a_0 = -0.44702007529933363, a_1 = -1.6960033682309563, a_2 = 0.003361443375831541, a_3 = 0.11220146296855558$	PHIN, DT, AI	0.9355	0.0682
	$a_0 = 3.0538429530930418, a_1 = -0.3695909213620231, a_2 = -0.0696889991436519, a_3 = -0.005185051014806701$	VSH, U, DT	0.8971	0.1015
	$a_0 = 0.19921424853460423, a_1 = -0.2650569860435009, a_2 = -0.07507078627361055, a_3 = 0.15449608332403658$	VSH, U, AI	0.9615	0.0553
	$\begin{array}{l} a_0 = 0.22331880249318176, a_1 = -0.2140098687197968, a_2 = \\ -0.0004289293114083589, a_3 = 0.10696568677210053 \end{array}$	VSH, DT, AI	0.9338	0.0702
	$a_0 = 0.5958053263772229, a_1 = -0.07462606187656388, a_2 = -0.0010324540235452419, a_3 = 0.12814399067051196$	U, DT, AI	0.9487	0.0623
$y = a_0 + a_1 x_1 + a_2 x_2 + a_3 x_3 + a_4 x_4$	$a_0 = 0.12434151167477892, a_1 = 0.8602064639133244, a_2 = -1.217576738255193, a_3 = -0.23275045274214146, a_4 = -0.0917267160790209$	RHOB, PHIN, VSH, U	0.9041	0.0996
	$a_0 = 2.118338759290928, a_1 = -0.06337199380142093, a_2 = -0.986122817529325, a_3 = -0.23060082035118723, a_4 = -0.002111687770270527$	RHOB, PHIN, VSH, DT	0.8791	0.1079
	$a_0 = 1.578402713437249, a_1 = -0.5609228519051599, a_2 = -0.9451918461955783, a_3 = -0.1916026415713525, a_4 = 0.11662920006079722$	RHOB, PHIN, VSH, AI	0.9438	0.0650
	$a_0 = -0.881583094390944, a_1 = 1.0562637014576375, a_2 = -1.9772803699273651, a_3 = -0.08675121779841292, a_4 = 0.0023482966223000285$	RHOB, PHIN, U, DT	0.8942	0.1037

Table 3: Logs - TD - Linear regression (Continued)

Foramt	Coff.	Logs	R2	MAE
	$a_0 = 0.6364787475470914, a_1 = 0.02462785741829596, a_2 = -0.7101597842488709, a_3 = -0.07995832557786123, a_4 = 0.11472461861709327$	RHOB, PHIN, U, AI	0.9564	0.0583
	$a_0 = 0.5475993541392219, a_1 = -0.336829688977616, a_2 = -1.648070488420704, a_3 = 0.002293431596183428, a_4 = 0.117966602449471$	RHOB, PHIN, DT, AI	0.9376	0.0672
	$a_0 = 1.2259905209230872, a_1 = 0.636371751158283, a_2 = -0.3356857033144956, a_3 = -0.09065577184564985, a_4 = -0.003361277510992557$	RHOB, VSH, U, DT	0.9016	0.1000
	$a_0 = -0.3632743415301638, a_1 = 0.4475105681587954, a_2 = -0.272442895883287, a_3 = -0.1005556187750888, a_4 = 0.12408433892873515$	RHOB, VSH, U, AI	0.9688	0.0508
	$a_0 = 2.3232522630481993, a_1 = -0.6996137770347426, a_2 = -0.2691924907880106, a_3 = -0.002491883581260299, a_4 = 0.11689042045947108$	RHOB, VSH, DT, AI	0.9416	0.0658
	$a_0 = -0.5342802539324925, a_1 = 0.4276591322687401, a_2 = -0.08907401879540237, a_3 = 3.724927990772893e - 05, a_4 = 0.1235621360780629$	RHOB, U, DT, AI	0.9509	0.0613
	$\begin{array}{l} a_0 = 2.8220561345855075, a_1 = -0.6365542436671677, a_2 = \\ -0.32254260715728156, a_3 = -0.06698253485513807, a_4 = -0.0037762084638890197 \end{array}$	PHIN, VSH, U, DT	0.8984	0.1011
	$\begin{array}{l} a_0 = 0.8050497727990779, a_1 = -0.6818386283303383, a_2 = \\ -0.2525314789756629, a_3 = -0.08733655946452593, a_4 = 0.12034561175452782 \end{array}$	PHIN, VSH, U, AI	0.9717	0.0492
	$a_0 = -0.18274166986060159, a_1 = -1.2140466167317474, a_2 = -0.1289138315419511, a_3 = 0.002216837305263965, a_4 = 0.1083441993033909$	PHIN, VSH, DT, AI	0.9387	0.0679
	$\begin{array}{l} a_0 = 0.1598800221623674, a_1 = -1.6653327846852402, a_2 = \\ -0.07395895320397468, a_3 = 0.0024884075118865156, a_4 = 0.1258507467182282 \end{array}$	PHIN, U, DT, AI	0.9614	0.0559
	$a_0 = 1.04808584208205, a_1 = -0.3026316361550481, a_2 = -0.08998265205173857, a_3 = -0.0015002124422707486, a_4 = 0.12044004674091527$	VSH, U, DT, AI	0.9700	0.0499

Table 3: Logs - TD - Linear regression (Continued)

Foramt	Coff.	Logs	R2	MAE
$y = a_0 + a_1 x_1 + a_2 x_2 + a_3 x_3 + a_4 x_4 + a_5 x_5$	$a_0 = 0.5356392885728161, a_1 = 0.7543651813108828, a_2 = -0.9651522923906064, a_3 = -0.25806383679158434, a_4 = -0.09043976617061797, a_5 = -0.000887014499029339$	RHOB, PHIN, VSH, U, DT	0.9044	0.0993
	$\begin{array}{l} a_0=0.5165857710900493, a_1=0.13920080314406819, a_2=\\ -0.5541014274653685, a_3=-0.2571754668271162, a_4=-0.09296586913600714, a_5=\\ 0.11728368627868035 \end{array}$	RHOB, PHIN, VSH, U, AI	0.9721	0.0489
	$\begin{array}{l} a_0 = 1.7037969233288834, a_1 = -0.5895961419717869, a_2 = \\ -0.8647469204275826, a_3 = -0.1999021461269404, a_4 = \\ -0.00028293481175656977, a_5 = 0.11631160178703115 \end{array}$	RHOB, PHIN, VSH, DT, AI	0.9439	0.0650
	$a_0 = -1.2143599758352894, a_1 = 0.5135271859064258, a_2 = -1.7312271756091524, a_3 = -0.0912814641859286, a_4 = 0.003912206994018851, a_5 = 0.1202581791665665$	RHOB, PHIN, U, DT, AI	0.9645	0.0546
	$a_0 = 0.6413821201522856, a_1 = 0.14984129639412275, a_2 = -0.2954389676958291, a_3 = -0.09467988144391004, a_4 = -0.0011142973283112321, a_5 = 0.11901777720078938$	RHOB, VSH, U, DT, AI	0.9703	0.0498
	$a_0 = 0.7755228305932738, a_1 = -0.7314199756999902, a_2 = -0.24836362864754524, a_3 = -0.08693590664062333, a_4 = 0.00013004083983135303, a_5 = 0.12081431982229823$	PHIN, VSH, U, DT, AI	0.9717	0.0493
$y = y = a_0 + a_1x_1 + a_2x_2 + a_3x_3 + a_4x_4 + a_5x_5 + a_6x_6$	$a_0 = 0.04290025827094046, a_1 = 0.25492802550547655, a_2 = -0.8406093157212, a_3 = -0.22802524822253803, a_4 = -0.09447256741568869, a_5 = 0.0010299768426160374, a_6 = 0.1184504569162038$	RHOB, PHIN, VSH, U, DT, AI	0.9724	0.0490