

# 1 Carbonate

## 1.1 SHC

Table 1: Logs - SHC - Polynomial regression

Format	Coff.	Logs	R2	MAE
$y = a_0 + a_1x_1 + a_2x_1^2$	$a_0 = 7533.854817874224, a_1 = -3418.2639594140214, a_2 = 336.289416673766$	RHOB	0.9536	113.4171
	$a_0 = 579.8966776544637, a_1 = 2737.457890919105, a_2 = 615.1488837450255$	PHIN	0.9721	89.0495
	$a_0 = 1931.9178145268154, a_1 = 4.335023596523911, a_2 = 18.83570040659695$	VSH	$4.5447 \times 10^{-05}$	590.6075
	$a_0 = 4812.383547364019, a_1 = -705.0645149290788, a_2 = 31.979066845241892$	U	0.7596	266.1204
	$a_0 = -385.41631874526, a_1 = 6.5580427474031495, a_2 = 0.000944767402298466$	DT	0.9911	49.8693
	$a_0 = 4302.249366017066, a_1 = -482.4575174483874, a_2 = 17.02933213364895$	AI	0.9809	75.1938
$y = a_0 + a_1x_1 + a_2x_2 + a_3x_1^2 + a_4x_1x_2 + a_5x_2^2$	$'a_0 = -30755.823291737826', 'a_1 = 23218.340274027138', 'a_2 = 40675.21356588678', 'a_3 = -4294.0235562750795', 'a_4 = -14008.952008217804', 'a_5 = -10901.41761314091'$	RHOB, PHIN	0.9792	76.6479
	$a_0 = 7241.651825513943, a_1 = -2985.232343411393, a_2 = -31.56027937353579, a_3 = 245.99341275595938, a_4 = -188.3223900048996, a_5 = 12.052368569755718$	RHOB, VSH	0.9690	92.2189
	$a_0 = 8054.789103844679, a_1 = -3882.9489371669843, a_2 = 55.72934691258442, a_3 = 189.21032498813312, a_4 = 114.39673857953142, a_5 = -17.957198152617142$	RHOB, U	0.9609	103.1456
	$a_0 = -35384.63964802253, a_1 = 21399.80839758616, a_2 = 80.54545076370898, a_3 = -3268.3729685574363, a_4 = -22.603572143000736, a_5 = -0.03821735047332826$	RHOB, DT	0.9927	44.6904
	$a_0 = 7498.237824229404, a_1 = -3424.441151625367, a_2 = -531.5889843407589, a_3 = 948.7769218191487, a_4 = 19.144843247114768, a_5 = 13.252868654114948$	RHOB, AI	0.9879	59.6110

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

Format	Coff.	Logs	R2	MAE
	$a_0 = 833.1348213923061, a_1 = 2872.5461285206025, a_2 = -649.2043438446084, a_3 = 194.41005487018649, a_4 = 624.7820371118187, a_5 = -95.98388311521103$	PHIN, VSH	0.9929	42.3156
	$a_0 = 933.9995913041732, a_1 = 2266.7987514996557, a_2 = -83.92153796013935, a_3 = 757.9593104355162, a_4 = 57.539495096151555, a_5 = 4.795116955325132$	PHIN, U	0.9722	88.8336
	$a_0 = -822.1780739548176, a_1 = -3265.807034593817, a_2 = 13.4861751221392, a_3 = -5900.010523483647, a_4 = 25.161535550928804, a_5 = -0.02586918048065641$	PHIN, DT	0.9913	49.4488
	$a_0 = 2142.0151059370246, a_1 = 2514.476177359103, a_2 = -148.37732137754804, a_3 = -293.75741905755916, a_4 = -187.09379430552133, a_5 = 4.272675695659877$	PHIN, AI	0.9864	62.7281
	$a_0 = 5230.3452715877975, a_1 = -918.4300693197994, a_2 = -719.2129100974489, a_3 = 287.79252974785925, a_4 = 22.35475079243274, a_5 = 31.37068807628751$	VSH, U	0.7824	253.7197
	$a_0 = -208.37263201711085, a_1 = -560.281162958108, a_2 = 6.680729588800145, a_3 = 28.6333870875782, a_4 = 0.8630199058837912, a_5 = 0.00019217774918182075$	VSH, DT	0.9970	28.6318
	$a_0 = 4402.716975499259, a_1 = -219.27668355179586, a_2 = -473.4443313048965, a_3 = -24.455850812653207, a_4 = -3.366449604543719, a_5 = 16.464702507241665$	VSH, AI	0.9874	60.8105
	$a_0 = -1466.6968932732807, a_1 = 160.45367854464328, a_2 = 9.467666764647577, a_3 = -5.7227823628960826, a_4 = -0.20790071379641362, a_5 = -0.0010205060601370184$	U, DT	0.9923	45.3529
	$a_0 = 4350.3059172053145, a_1 = -3.9207765191656794, a_2 = -502.95274339682663, a_3 = 0.7205158785369641, a_4 = 2.9609223796554827, a_5 = 16.331862619590197$	U, AI	0.9829	70.5127
	$a_0 = -234.26776903834661, a_1 = 3.86992030158098, a_2 = -170.0610320640979, a_3 = 0.003782847388103355, a_4 = 0.6218736812990291, a_5 = 5.237139161440485$	DT, AI	0.9924	45.6932

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

Format	Coff.	Logs	R2	MAE
$y = a_0 + a_1x_1 + a_2x_2 + a_3x_3 + a_4x_1^2 + a_5x_1x_2 + a_6x_1x_3 + a_7x_2^2 + a_8x_2x_3 + a_9x_3^2$	$a_0 = 4860.637129579959, a_1 = -2719.196765121784, a_2 = -793.1893268090145, a_3 = 635.8895027523388, a_4 = 456.0217402174824, a_5 = 1237.7645403798058, a_6 = -481.4041685737034, a_7 = 906.2428935052818, a_8 = -57.04766451756831, a_9 = -81.87596156619033$	RHOB, PHIN, VSH	0.9967	29.1274
	$a_0 = -29012.611117960332, a_1 = 22023.43644720585, a_2 = 39452.1889892558, a_3 = -6.595545551724371, a_4 = -4067.146198950541, a_5 = -13879.769370888602, a_6 = -17.892174357292106, a_7 = -10578.291520278292, a_8 = 94.03856149452835, a_9 = 3.8762995742449986$	RHOB, PHIN, U	0.9810	72.8958
	$a_0 = -33826.16481429888, a_1 = 20942.71513223477, a_2 = 5336.3031329432415, a_3 = 67.14817208227825, a_4 = -3312.5936327637505, a_5 = -2457.9939638992737, a_6 = -17.5202131576108, a_7 = -4336.722017945776, a_8 = 10.172094071713621, a_9 = -0.04022173406751192$	RHOB, PHIN, DT	0.9929	44.0511
	$a_0 = -13927.834230759812, a_1 = 12417.188027267111, a_2 = 19836.79855369386, a_3 = -458.95628366526057, a_4 = -2045.3666286743307, a_5 = -7351.804366658908, a_6 = 22.560464415030445, a_7 = -4247.645258623691, a_8 = -44.56630790955293, a_9 = 10.225255198767622$	RHOB, PHIN, AI	0.9912	50.8852
	$a_0 = 6331.955975001349, a_1 = -1649.7961529630231, a_2 = 1171.2658533540705, a_3 = -209.19489537357165, a_4 = -257.2761892152957, a_5 = -1490.2034291190967, a_6 = 180.79335786104633, a_7 = 115.30658426497705, a_8 = 245.33367242665776, a_9 = -18.459739030365537$	RHOB, VSH, U	0.9775	79.2977
	$a_0 = -18639.328234387773, a_1 = 10907.83290484019, a_2 = 2205.362852549421, a_3 = 43.81779260967959, a_4 = -1612.6146724236162, a_5 = -823.0160013168074, a_6 = -10.977164689517798, a_7 = -23.512583315482047, a_8 = -2.0683015335400095, a_9 = -0.01843832939762644$	RHOB, VSH, DT	0.9972	27.8754

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

Format	Coff.	Logs	R2	MAE
	$a_0 = 7620.17577195473, a_1 = -3578.645738241653, a_2 = 344.74647255112694, a_3 = -463.86527615471675, a_4 = 987.8157663664675, a_5 = -401.7654804840647, a_6 = 4.199552763690492, a_7 = -26.096448446678657, a_8 = 35.443542936175994, a_9 = 11.752731849997003]$	RHOB, VSH, AI	0.9940	42.1454
	$a_0 = -17165.287076914414, a_1 = 6735.630247292093, a_2 = 954.6679783317771, a_3 = 47.00285768417321, a_4 = -388.88614601913065, a_5 = -347.8849198021183, a_6 = -8.945206328380136, a_7 = 7.6836003854711645, a_8 = -0.9156157660261299, a_9 = -0.022887628885379423$	RHOB, U, DT	0.9932	42.1926
	$a_0 = 9314.005086914527, a_1 = -6325.481596389901, a_2 = 381.3130164426065, a_3 = -458.13353490684216, a_4 = 1967.0101859156136, a_5 = -219.81831766328582, a_6 = -30.919590346085407, a_7 = 4.462323220632235, a_8 = 8.632151450733064, a_9 = 12.746569623432126$	RHOB, U, AI	0.9893	55.8283
	$a_0 = -33852.96133534026, a_1 = 0.021703676862899778, a_2 = 74.61060690732056, a_3 = -140.25710093319776, a_4 = -3172.5607893995502, a_5 = -22.688992039930252, a_6 = -45.31044563386462, a_7 = -0.032717365990688654, a_8 = 21.70367686093162, a_9 = 8.188567603405016$	RHOB, DT, AI	0.9931	43.5494
	$a_0 = 1286.2319977666853, a_1 = 2039.0735798816836, a_2 = -248.28157390259148, a_3 = -105.74639280560817, a_4 = 558.5391271013042, a_5 = 313.09843587346734, a_6 = 98.45903923636634, a_7 = -113.16778141448326, a_8 = -44.42561641698902, a_9 = 5.979891661590473$	PHIN, VSH, U	0.9938	40.2593
	$a_0 = 536.5550703027275, a_1 = 2071.2343589977163, a_2 = -1403.9256405805365, a_3 = 2.1193868879457325, a_4 = -545.7874270802139, a_5 = -1943.291543887676, a_6 = 2.3269833958922828, a_7 = 127.30833163683462, a_8 = 5.350690018029169, a_9 = -0.0023780764974243016$	PHIN, VSH, DT	0.9990	16.3188
	$a_0 = 2171.229463184252, a_1 = 1496.8082378403474, a_2 = -515.8080935319625, a_3 = -131.11421957688407, a_4 = 568.1845111800436, a_5 = 440.9855500675943, a_6 = -54.335444303089595, a_7 = -64.79124396255713, a_8 = 0.06889888868725456, a_9 = 3.3672261680970723$	PHIN, VSH, AI	0.9982	22.5757

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

Format	Coff.	Logs	R2	MAE
	$a_0 = -562.7164527044224, a_1 = 2756.3162156624553, a_2 = 69.0856093858549, a_3 = 1.9252370325573946, a_4 = -2014.9394140483691, a_5 = -368.6596095446686, a_6 = 2.658893881865592, a_7 = -6.53701485145431, a_8 = 0.5694973753240651, a_9 = 0.0025258434836408503$	PHIN, U, DT	0.9925	44.6341
	$a_0 = 1404.7491128159058, a_1 = 3341.125559406026, a_2 = 323.76633707903335, a_3 = -243.9263781264554, a_4 = -285.6659822185976, a_5 = -298.3641391321219, a_6 = -93.63462231277127, a_7 = -7.057446237322233, a_8 = -10.575284158103095, a_9 = 10.118939011072445$	PHIN, U, AI	0.9893	55.3782
	$a_0 = -316.90724679338564, a_1 = -932.2920804464383, a_2 = 5.589833756672814, a_3 = -170.48573429225883, a_4 = -2519.7608431110134, a_5 = 9.462010998338377, a_6 = -21.047824940482766, a_7 = -0.005012481669785465, a_8 = 0.6532645495078018, a_9 = 5.067076862613934$	PHIN, DT, AI	0.9925	45.5315
	$a_0 = -1670.717288160914, a_1 = 26.827632705762714, a_2 = 221.4768040976306, a_3 = 10.391739433118119, a_4 = -17.399184679955614, a_5 = -44.96551304954411, a_6 = 0.059857645840942664, a_7 = -8.192658397860619, a_8 = -0.27801579221289663, a_9 = -0.002121476200801797]$	VSH, U, DT	0.9974	26.4733
	$a_0 = 4516.100463188435, a_1 = -265.3566257488605, a_2 = -38.60918716099334, a_3 = -476.62007364883215, a_4 = -24.630177131464563, a_5 = 13.47692956238571, a_6 = -6.797250575939074, a_7 = 0.01101634523821345, a_8 = 5.753801278123455, a_9 = 14.228098837836272$	VSH, U, AI	0.9886	56.6445
	$a_0 = 251.0935203222566, a_1 = -572.873672721706, a_2 = 4.680892243660825, a_3 = -79.23871986498389, a_4 = 25.20304502156988, a_5 = 0.8769679253480671, a_6 = 2.7683384353636122, a_7 = 0.002042262203740651, a_8 = 0.19566129728330725, a_9 = 2.243355042650691$	VSH, DT, AI	0.9971	28.4395
	$a_0 = -1006.9165536398323, a_1 = 204.83238886289604, a_2 = 7.158197825227197, a_3 = -158.0022798236987, a_4 = -2.4400842815896153, a_5 = -0.33145767048752317, a_6 = -6.851838869424914, a_7 = 0.0010571446880661866, a_8 = 0.4414015848973303, a_9 = 6.954081695995165$	U, DT, AI	0.9928	43.7706

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

Format	Coff.	Logs	R2	MAE
$y =$ $a_0 + a_1x_1 + a_2x_2 +$ $a_3x_3 + a_4x_4 +$ $a_5x_1^2 + a_6x_1x_2 +$ $a_7x_1x_3 +$ $a_8x_1x_4 + a_9x_2^2 +$ $a_{10}x_2x_3 +$ $a_{11}x_2x_4 + a_{12}x_3^2 +$ $a_{13}x_3x_4 + a_{14}x_4^2$	$a_0 = 433.7737355332779, a_1 = 1830.3263629462886, a_2 = 3061.906456694954, a_3 =$ $1479.3354873833568, a_4 = -407.42894515654143, a_5 = -645.2786118868066, a_6 =$ $-817.1488857912251, a_7 = -1090.1446891351854, a_8 = 175.47665693911202, a_9 =$ $76.83774318973002, a_{10} = -331.54517289780324, a_{11} = 197.48002872342244, a_{12} =$ $-30.415511940001927, a_{13} = 86.48713637786169, a_{14} = -5.096741655478328$	RHOB, PHIN, VSH, U	0.9977	24.4722
	$a_0 = 3356.9405879578267, a_1 = -2649.652044264529, a_2 = -8648.871939440412, a_3 =$ $-671.4069841952717, a_4 = 15.806998717655182, a_5 = 516.2474206800425, a_6 =$ $2583.6157457906625, a_7 = -131.09945691888927, a_8 = -1.9935574681923098, a_9 =$ $-4387.132071102828, a_{10} = -839.6285522709184, a_{11} = 27.142163375556247, a_{12} =$ $66.94098999622076, a_{13} = 2.6448969479414264, a_{14} = -0.031832885926695816$	RHOB, PHIN, VSH, DT	0.9991	15.1946
	$a_0 = 4473.301210548696, a_1 = -2495.8820194966706, a_2 = -76.80871861235627, a_3 =$ $1093.403740267281, a_4 = -108.1258574606261, a_5 = 688.1168056036955, a_6 =$ $995.3086007838672, a_7 = -674.1027045910828, a_8 = -27.312744083789518, a_9 =$ $790.877782062235, a_{10} = -355.55867743004364, a_{11} = -116.01102579792374, a_{12} =$ $-57.50278236658456, a_{13} = 21.679260443025015, a_{14} = 4.147280321014776$	RHOB, PHIN, VSH, AI	0.9987	19.4522
	$a_0 = -18847.674337056982, a_1 = 8591.868848196389, a_2 = 189.1826173273337, a_3 =$ $727.1892627001351, a_4 = 49.01079293144442, a_5 = -757.4389954947364, a_6 =$ $346.9989811540608, a_7 = -291.66844810644994, a_8 = -11.285483860602959, a_9 =$ $-3219.8289188862436, a_{10} = -285.433978972014, a_{11} = 10.111052964172528, a_{12} =$ $5.946758108252215, a_{13} = -0.15843666015368493, a_{14} = -0.031207972319802716]$	RHOB, PHIN, U, DT	0.9934	41.7597
	$a_0 = -5218.590972558794, a_1 = 4099.21779979241, a_2 = 12053.995063651051, a_3 =$ $632.6255798126936, a_4 = -474.6506317201376, a_5 = -143.84698706663715, a_6 =$ $-3598.250351333684, a_7 = -260.30318404228035, a_8 = 35.686070836675086, a_9 =$ $-2500.5178739548564, a_{10} = -287.39968820487434, a_{11} = -39.35637807037003, a_{12} =$ $5.311573414411618, a_{13} = -0.8507775312515239, a_{14} = 9.765861426468664$	RHOB, PHIN, U, AI	0.9920	48.0717

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

Format	Coff.	Logs	R2	MAE
	$a_0 = -32604.312008596295, a_1 = 0.020888064489435292, a_2 = 4502.1057689929385, a_3 = 64.06062632810006, a_4 = -95.2737925142049, a_5 = -3182.142785243109, a_6 = -2635.3623497897784, a_7 = -17.249179655752794, a_8 = -52.11127249603112, a_9 = -3857.852484552426, a_{10} = 10.543226239507607, a_{11} = 95.96531569299525, a_{12} = -0.038041498900689516, a_{13} = 20.888064461573496, a_{14} = 8.285212658728438$	RHOB, PHIN, DT, AI	0.9932	42.9764
	$a_0 = -18912.38073314658, a_1 = 11275.244261783364, a_2 = 2476.9321390938885, a_3 = -42.97935078484034, a_4 = 44.200039517824464, a_5 = -1825.5695088758646, a_6 = -832.7118415428574, a_7 = 77.14710938681795, a_8 = -11.103287848830673, a_9 = -53.08183540586987, a_{10} = -19.270520910765182, a_{11} = -2.40182151112514, a_{12} = -7.9187513943994485, a_{13} = -0.003611755640375186, a_{14} = -0.018609729110240992$	RHOB, VSH, U, DT	0.9975	26.0162
	$a_0 = 8136.178715143171, a_1 = -4383.739438867125, a_2 = 516.8711116887563, a_3 = 107.07900888101813, a_4 = -427.61203529351025, a_5 = 1175.7884137204526, a_6 = -520.2556493924482, a_7 = -15.213886096818914, a_8 = -10.210211147201916, a_9 = -33.597913938865815, a_{10} = 13.49161975737316, a_{11} = 36.71479318327537, a_{12} = -6.424094878830708, a_{13} = 3.176895776361344, a_{14} = 10.99056285963901$	RHOB, VSH, U, AI	0.99477	39.6656
	$a_0 = -18494.105046703873, a_1 = 0.011279126884414844, a_2 = 2096.481895523008, a_3 = 42.80099088854004, a_4 = -53.56362052003419, a_5 = -1595.613688452603, a_6 = -838.4621744917465, a_7 = -11.42464984599505, a_8 = -21.269371678627103, a_9 = -23.687543959314407, a_{10} = -1.8491411578185493, a_{11} = 10.062624793408004, a_{12} = -0.017132549776072332, a_{13} = 11.27912688413589, a_{14} = 3.3036132001703593$	RHOB, VSH, DT, AI	0.9973	27.7411
	$a_0 = -16794.88586626514, a_1 = 0.008470546088430057, a_2 = 898.8507458733773, a_3 = 41.982102630659845, a_4 = -215.5975710622765, a_5 = -679.3825990552053, a_6 = -312.9704418483933, a_7 = -9.733531667749034, a_8 = -7.235365864054399, a_9 = 7.105625429964443, a_{10} = -0.8990469659822787, a_{11} = -2.2674756145161052, a_{12} = -0.01728619789050315, a_{13} = 8.470546087914279, a_{14} = 7.552639987698938$	RHOB, U, DT, AI	0.9935	41.2634

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

Format	Coff.	Logs	R2	MAE
	$a_0 = -338.4408487876931, a_1 = 1266.411036058854, a_2 = -952.7785470198894, a_3 = 108.13922727070508, a_4 = 5.681466786205532, a_5 = -263.6465639264627, a_6 = -1750.597657759287, a_7 = 71.40944522129362, a_8 = 2.333390299746043, a_9 = 88.65718623797163, a_{10} = -29.876789506682314, a_{11} = 4.405094396340208, a_{12} = -2.9964121573606644, a_{13} = -0.2555101463801575, a_{14} = -0.004544913571050681$	PHIN, VSH, U, DT	0.9991	15.8154
	$a_0 = 2188.968822744531, a_1 = 1401.0991138391664, a_2 = -524.7880282927914, a_3 = 63.23916516817082, a_4 = -172.57843435782237, a_5 = 707.7833926964803, a_6 = 421.090508029957, a_7 = -57.28307285271034, a_8 = -28.79113757321597, a_9 = -65.45582711336411, a_{10} = 9.174075780486417, a_{11} = -1.9184699283973077, a_{12} = -2.409019942013166, a_{13} = -0.28908896089194824, a_{14} = 4.612562615630942$	PHIN, VSH, U, AI	0.9985	20.4059
	$a_0 = 1019.9230454276641, a_1 = 269.4486818805532, a_2 = -1295.6740311645835, a_3 = 4.382848387184818, a_4 = -39.74206309835911, a_5 = -2627.0003727195517, a_6 = -1509.567680755773, a_7 = 12.216265300073335, a_8 = 27.13046242922873, a_9 = 105.04584055484233, a_{10} = 4.465718253515802, a_{11} = 0.8676206125519642, a_{12} = -0.012789038219655813, a_{13} = -0.10114983325871356, a_{14} = 1.320527238220123$	PHIN, VSH, DT, AI	0.9991	15.5572
	$a_0 = -458.3447879204132, a_1 = 2163.9782503969113, a_2 = 91.03443350791787, a_3 = 1.7010285338759494, a_4 = -124.9300983129989, a_5 = -1207.529600018701, a_6 = -418.23107117695673, a_7 = 1.288633695972361, a_8 = 89.04884533270575, a_9 = -2.863308801187584, a_{10} = 0.5616104149227037, a_{11} = -6.917309267013439, a_{12} = 0.003701227722659779, a_{13} = 0.2700659715656853, a_{14} = 6.74724343581094$	PHIN, U, DT, AI	0.9931	42.9835
	$a_0 = -1140.3637107456548, a_1 = 0.0353478268239046, a_2 = 240.85645263920378, a_3 = 8.5651070078761, a_4 = -74.69622165665598, a_5 = -20.730172077115697, a_6 = -45.251726650266484, a_7 = 0.09868720489967803, a_8 = 3.0618051232782437, a_9 = -7.851506890596313, a_{10} = -0.31668450791348624, a_{11} = -1.4615341976687637, a_{12} = -0.0005356071015299767, a_{13} = 0.13214947673287858, a_{14} = 2.526517291181357$	VSH, U, DT, AI	0.9975	26.3835

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

Format	Coff.	Logs	R2	MAE
$y = a_0 + a_1x_1 + a_2x_2 + a_3x_3 + a_4x_4 + a_5x_5 + a_6x_1^2 + a_7x_1x_2 + a_8x_1x_3 + a_9x_1x_4 + a_{10}x_1x_5 + a_{11}x_2^2 + a_{12}x_2x_3 + a_{13}x_2x_4 + a_{14}x_2x_5 + a_{15}x_3^2 + a_{16}x_3x_4 + a_{17}x_3x_5 + a_{18}x_4^2 + a_{19}x_4x_5 + a_{20}x_5^2$	$a_0 = -1968.228216365299, a_1 = 1220.7758155620193, a_2 = -10473.853640726256, a_3 = 439.1035505831293, a_4 = -240.9292007601592, a_5 = 29.10651003302037, a_6 = -178.983903564616, a_7 = 3886.580642507711, a_8 = -565.9097446752198, a_9 = 96.15757118359119, a_{10} = -7.985658349030573, a_{11} = -2777.7046389443917, a_{12} = -813.8001920003095, a_{13} = -143.74278198185874, a_{14} = 22.53908568990226, a_{15} = 37.81180707330023, a_{16} = 28.581443552753516, a_{17} = 1.587044883605468, a_{18} = -4.872477341764287, a_{19} = 0.4773980423369481, a_{20} = -0.03347040545768572$	RHOB, PHIN, VSH, U, DT	0.9993	13.5027
	$a_0 = 4381.943793810564, a_1 = -2144.7021524170336, a_2 = -363.96965277048434, a_3 = 1521.5563797141795, a_4 = -43.0004428338732, a_5 = -122.1903558967453, a_6 = 493.5303979021619, a_7 = 1010.8680584450487, a_8 = -940.0137643904209, a_9 = 44.33466947595353, a_{10} = -12.964989865674001, a_{11} = 937.8053255415435, a_{12} = -511.1572196985793, a_{13} = 4.963174380524441, a_{14} = -91.31948552269621, a_{15} = -45.95650433000779, a_{16} = 33.92358970056079, a_{17} = 19.167258708413414, a_{18} = -3.927402912566544, a_{19} = -0.5705578795266525, a_{20} = 3.660175059272676$	RHOB, PHIN, VSH, U, AI	0.9990	16.8661
	$a_0 = 3360.9688445360734, a_1 = -0.0025322070224288134, a_2 = -8380.796772841906, a_3 = -700.1722933394356, a_4 = 15.28141338053797, a_5 = -5.100508409905592, a_6 = 549.4097771075362, a_7 = 2619.906731078907, a_8 = -133.98138130263698, a_9 = -2.285800378189779, a_{10} = -14.597100898061553, a_{11} = -4314.721838165782, a_{12} = -852.7447215158044, a_{13} = 26.29852973122078, a_{14} = -17.884021835153323, a_{15} = 66.03073346959499, a_{16} = 2.7204996995942525, a_{17} = 2.551159000378635, a_{18} = -0.030348181912569522, a_{19} = -2.5322069098019835, a_{20} = 1.3123195412078543$	RHOB, PHIN, VSH, DT, AI	0.9991	15.1493

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

Format	Coff.	Logs	R2	MAE
	$a_0 = -18333.61555686865, a_1 = 0.009520335910544997, a_2 =$ $-365.9514598701283, a_3 = 700.3371002995906, a_4 = 45.63912157294626, a_5 =$ $-161.7369736138541, a_6 = -942.7480688269768, a_7 = -59.776170010427506, a_8 =$ $-265.46165124574554, a_9 = -10.893794499730449, a_{10} = -15.146068799053246, a_{11} =$ $-2736.2620180886433, a_{12} = -271.6200128333508, a_{13} = 10.526900672023796, a_{14} =$ $110.27106775738017, a_{15} = 5.775744810300877, a_{16} = -0.20053297184004656, a_{17} =$ $-2.549299170428806, a_{18} = -0.02883986914331913, a_{19} = 9.52033591197655, a_{20} =$ $7.720324356345051$	RHOB, PHIN, U, DT, AI	0.9937	40.8229
	$a_0 = -18558.226407636947, a_1 = 0.011660528093686926, a_2 =$ $2356.4688910323116, a_3 = -30.77439539558042, a_4 = 42.276663051438945, a_5 =$ $-80.37623952552521, a_6 = -1864.6568543572369, a_7 = -833.1209521413887, a_8 =$ $79.50698185533227, a_9 = -11.258029673788608, a_{10} = -4.302898590072161, a_{11} =$ $-53.044566608022656, a_{12} = -19.90937303797836, a_{13} = -2.1939104907771148, a_{14} =$ $8.272633528488345, a_{15} = -7.705065549799357, a_{16} = -0.03659180885691414, a_{17} =$ $-1.230008913401022, a_{18} = -0.0167063983864591, a_{19} = 11.660528090505382, a_{20} =$ $2.9286300436285146$	RHOB, VSH, U, DT, AI	0.9976	25.9137
	$a_0 = 986.1983323274155, a_1 = 718.8385106756425, a_2 = -1310.9435526763136, a_3 =$ $72.16439777620957, a_4 = 4.105799040468988, a_5 = -40.4747680097576, a_6 =$ $-1274.9195047685248, a_7 = -1595.7776176482362, a_8 = 21.905793047575806, a_9 =$ $6.923571474559674, a_{10} = 30.533143245071123, a_{11} = 103.73580154962697, a_{12} =$ $4.793084992553305, a_{13} = 4.624509999678231, a_{14} = -2.5463735477908074, a_{15} =$ $-2.711736602644067, a_{16} = -0.1271020122874586, a_{17} = 0.18522518769688956, a_{18} =$ $-0.008112210649751752, a_{19} = -0.21008334868310785, a_{20} = 1.3197656194625333$	PHIN, VSH, U, DT, AI	0.9992	14.4111

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

Format	Coff.	Logs	R2	MAE
$y =$ $a_0 + a_1x_1 + a_2x_2 +$ $a_3x_3 + a_4x_4 +$ $a_5x_5 + a_6x_6 +$ $a_7x_1^2 + a_8x_1x_2 +$ $a_9x_1x_3 +$ $a_{10}x_1x_4 +$ $a_{11}x_1x_5 +$ $a_{12}x_1x_6 +$ $a_{13}x_2^2 + a_{14}x_2x_3 +$ $a_{15}x_2x_4 +$ $a_{16}x_2x_5 +$ $a_{17}x_2x_6 +$ $a_{18}x_3^2 + a_{19}x_3x_4 +$ $a_{20}x_3x_5 +$ $a_{21}x_3x_6 +$ $a_{22}x_4^2 + a_{23}x_4x_5 +$ $a_{24}x_4x_6 + a_{25}x_5^2 +$ $a_{26}x_5x_6 + a_{27}x_6^2$	$a_0 = -1911.5443613789157, a_1 = 0.0012999735515765352, a_2 =$ $-10240.542260370443, a_3 = 407.0552388859564, a_4 = -236.83389592166247, a_5 =$ $28.45483958199506, a_6 = -9.469790597823373, a_7 = -165.0308943845403, a_8 =$ $3863.2700371119327, a_9 = -558.6827031768481, a_{10} = 97.53790995174145, a_{11} =$ $-8.056610859206229, a_{12} = -8.975489816244169, a_{13} = -2721.136418358177, a_{14} =$ $-821.5119044972039, a_{15} = -141.96178529655597, a_{16} = 21.964679910525696, a_{17} =$ $-7.72724721865916, a_{18} = 36.91175196151913, a_{19} = 28.164446311216416, a_{20} =$ $1.6374214319938407, a_{21} = 1.205097697360944, a_{22} = -4.819681113376073, a_{23} =$ $0.4624294124993212, a_{24} = -0.4637845009409057, a_{25} = -0.03232159275172765, a_{26} =$ $1.2999736341595791, a_{27} = 1.1610065764507795$	RHOB, PHIN, VSH, U, DT, AI	0.9993	13.4732

## 1.2 TC

Table 2: Logs - TC - Polynomial regression

Format	Coff.	Logs	R2	MAE
$y =$ $a_0 + a_1x_1 + a_2x_1^2$	$a_0 = 2.6658223838665824, a_1 = -2.990323559940549, a_2 = 1.2467313608416961$	RHOB	0.8520	0.2012
	$a_0 = 4.067090678354352, a_1 = -6.756527681298703, a_2 = 3.6728382080048085$	PHIN	0.8666	0.1996

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

Format	Coff.	Logs	R2	MAE
	$a_0 = 2.6070098039288374, a_1 = -1.415659330769338, a_2 = 0.19164453909027632$	VSH	0.1033	0.6186
	$a_0 = -0.6168531838046263, a_1 = 0.5910084966022562, a_2 = -0.02242398326220547$	U	0.5560	0.3883
	$a_0 = 6.413844719933834, a_1 = -0.019857676839602743, a_2 = 1.817776039493746e - 05$	DT	0.8511	0.2097
	$a_0 = 0.16835500479252907, a_1 = 0.2846126606794739, a_2 = -0.003633091000816591$	AI	0.8627	0.2000
$y = a_0 + a_1x_1 + a_2x_2 + a_3x_1^2 + a_4x_1x_2 + a_5x_2^2$	$a_0 = -68.56095645774435, a_1 = 51.299263490530564, a_2 = 77.2853700693836, a_3 = -9.035274558433516, a_4 = -29.73849671559837, a_5 = -20.59065183742745$	RHOB, PHIN	0.8872	0.1825
	$a_0 = -0.3162428569001652, a_1 = -0.5620569000824152, a_2 = 3.08606878712882, a_3 = 0.8498282814741316, a_4 = -1.7155098195390341, a_5 = -0.27402980734544624$	RHOB, VSH	0.9082	0.1668
	$a_0 = 7.495889532657592, a_1 = -11.585016878152443, a_2 = 1.260902261043483, a_3 = 5.161839687307709, a_4 = -1.1702265331950892, a_5 = 0.0843874793752708$	RHOB, U	0.9181	0.1558
	$a_0 = -163.88305246654988, a_1 = 103.20096618894888, a_2 = 0.3521000194675343, a_3 = -15.616685616151475, a_4 = -0.11270627200002868, a_5 = -0.00018509268455256373$	RHOB, DT	0.8719	0.1918
	$a_0 = -1.4247597622211978, a_1 = 1.7601957718637178, a_2 = 0.05488425780893124, a_3 = -0.2680047284487061, a_4 = 0.026058168131595748, a_5 = 0.0019468850115401388$	RHOB, AI	0.8656	0.1966
	$a_0 = 4.670820361148919, a_1 = -6.876514638262064, a_2 = -1.564497531913751, a_3 = 2.5490274607243464, a_4 = 2.4793463555603212, a_5 = -0.21116006482591226$	PHIN, VSH	0.9115	0.1627
	$a_0 = 1.8263859239122542, a_1 = -3.3348400068231117, a_2 = 0.6367750030068811, a_3 = 2.3906494080933998, a_4 = -0.5028330869699374, a_5 = -0.041561702436646586$	PHIN, U	0.8826	0.1851
	$a_0 = 7.091401473947675, a_1 = 15.104061230111501, a_2 = -0.046976838668930244, a_3 = 42.554582021242005, a_4 = -0.16691102715069786, a_5 = 0.00017942584375651592$	PHIN, DT	0.8712	0.1951

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

Format	Coff.	Logs	R2	MAE
	$a_0 = 2.853161846012501, a_1 = -3.1683561378722995, a_2 = 0.010641027633977078, a_3 = 0.9498154536458544, a_4 = -0.0217222233053523, a_5 = 0.0041793353173160425$	PHIN, AI	0.8746	0.1929
	$a_0 = -1.5882090272761837, a_1 = 1.6951714204512647, a_2 = 0.8755369222392119, a_3 = -0.5673660848878749, a_4 = -0.32540645823364844, a_5 = -0.034233701577532236$	VSH, U	0.6138	0.3670
	$a_0 = 7.3877011140311994, a_1 = -2.8922492215175355, a_2 = -0.019967264590105765, a_3 = -0.10083726952969367, a_4 = 0.006163863551558479, a_5 = 1.4056179245086525e - 05$	VSH, DT	0.9302	0.1405
	$a_0 = -0.3245572983956275, a_1 = 0.6468568168560621, a_2 = 0.4548977501286374, a_3 = -0.21741693464445125, a_4 = -0.1830750439704086, a_5 = -0.009121884117891646$	VSH, AI	0.9307	0.1399
	$a_0 = 6.26392905778976, a_1 = 0.24898223227548788, a_2 = -0.020583106888665787, a_3 = -0.01950954392390967, a_4 = -0.00028958911472970353, a_5 = 1.972130697285723e - 05$	U, DT	0.8661	0.1997
	$a_0 = -0.053992370286536806, a_1 = -0.009490604870075471, a_2 = 0.39826318066634614, a_3 = 0.012253928057442255, a_4 = -0.0335906240806338, a_5 = 0.$	U, AI	0.8947	0.1778
	$a_0 = 4.70514986401633, a_1 = -0.019594276770983098, a_2 = -0.43703979348340616, a_3 = 1.7912473984653583e - 05, a_4 = 0.0018185324411395002, a_5 = 0.01595497703046869$	DT, AI	0.8659	0.1961
$y = a_0 + a_1x_1 + a_2x_2 + a_3x_3 + a_4x_1^2 + a_5x_1x_2 + a_6x_1x_3 + a_7x_2^2 + a_8x_2x_3 + a_9x_3^2$	$a_0 = -6.866317292855708, a_1 = 6.672807757539399, a_2 = 6.3246441666046564, a_3 = -0.34265049335889664, a_4 = -0.9016624234227356, a_5 = -3.8765131324762043, a_6 = -0.41436988383088, a_7 = -1.069498483652061, a_8 = 1.675670086124127, a_9 = -0.21566248180162353$	RHOB, PHIN, VSH	0.9224	0.1514
	$a_0 = -51.88067774621134, a_1 = 28.488811442030027, a_2 = 68.24857085784443, a_3 = 2.7299775610003927, a_4 = -1.7812653847456443, a_5 = -22.560591656179028, a_6 = -1.5684470113151106, a_7 = -19.773537565940916, a_8 = -1.0080460903410184, a_9 = 0.06679064150744274$	RHOB, PHIN, U	0.9414	0.1335

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

Format	Coff.	Logs	R2	MAE
	$a_0 = -120.32095199644515, a_1 = 85.00289869703934, a_2 = 117.57980165346314, a_3 = 0.04465962218481952, a_4 = -14.082519302527379, a_5 = -30.845042930419254, a_6 = -0.03638083133749349, a_7 = 50.53592090197869, a_8 = -0.30529040711217165, a_9 = 0.0002527457818209755$	RHOB, PHIN, DT	0.9016	0.1689
	$a_0 = -67.05228948074408, a_1 = 56.84281480997184, a_2 = 63.90097135776773, a_3 = -1.2928112278985682, a_4 = -10.894466566518915, a_5 = -28.86207914886634, a_6 = 0.33282518744859135, a_7 = -13.52474242066208, a_8 = 0.7102499033420412, a_9 = 0.0137238627043917$	RHOB, PHIN, AI	0.8913	0.1798
	$a_0 = 3.2461529754254705, a_1 = -6.469193385013383, a_2 = 2.432693949642248, a_3 = 0.7615392773632741, a_4 = 3.4421784908656563, a_5 = -1.3141934790954615, a_6 = -0.6822266456561837, a_7 = -0.0931872564854331, a_8 = -0.08010052931406407, a_9 = 0.04040977122178452$	RHOB, VSH, U	0.9812	0.0759
	$a_0 = -89.19044404855183, a_1 = 57.23646357675177, a_2 = 10.642550167878722, a_3 = 0.1788080162021292, a_4 = -8.472871947296053, a_5 = -4.030222674985167, a_6 = -0.05888974150311786, a_7 = -0.35180556182806944, a_8 = -0.00823274621852624, a_9 = -8.798385436202885e - 05$	RHOB, VSH, DT	0.9332	0.1375
	$a_0 = -4.258203450517901, a_1 = 5.58067675780336, a_2 = 1.0869524423594041, a_3 = 0.029136774530262696, a_4 = -2.083967951670598, a_5 = -0.2938446337932623, a_6 = 0.3688225392321274, a_7 = -0.20719466177224197, a_8 = -0.166535621079759, a_9 = -0.029009360858067202$	RHOB, VSH, AI	0.9328	0.1370
	$a_0 = -74.93446208089543, a_1 = 25.34313882762203, a_2 = 5.584171670167413, a_3 = 0.19485878937513884, a_4 = 1.7532334141008168, a_5 = -2.587903310315528, a_6 = -0.04512404690961134, a_7 = 0.09816099559950159, a_8 = -0.0046426051530101455, a_9 = -0.00011448769227053583$	RHOB, U, DT	0.9332	0.1393
	$a_0 = 7.135117454857215, a_1 = -12.74351933639709, a_2 = 1.6505982922355702, a_3 = 0.1483266333048605, a_4 = 6.1945346096119565, a_5 = -1.4193834669523058, a_6 = -0.24633255554727115, a_7 = 0.0802886104187413, a_8 = 0.025325863172745263, a_9 = 0.01450884728281995$	RHOB, U, AI	0.9255	0.1509

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

Format	Coff.	Logs	R2	MAE
	$a_0 = -156.459941817464, a_1 = 0.0001060361163679826, a_2 = 0.31895540638323894, a_3 = -0.9677624062932451, a_4 = -16.297944953278208, a_5 = -0.11023566791203337, a_6 = 0.08929688877693905, a_7 = -0.00015774495490993113, a_8 = 0.10603611635779149, a_9 = 0.021271434203785623$	RHOB, DT, AI	0.8763	0.1883
	$a_0 = 5.893392796282847, a_1 = -7.678235913375262, a_2 = -5.03641346423199, a_3 = 0.09591589895914397, a_4 = 2.3359909138269357, a_5 = 5.238084126792611, a_6 = -0.19943062263772465, a_7 = 0.10451502745353565, a_8 = 0.32464109491666976, a_9 = -0.022545508095942725$	PHIN, VSH, U	0.9399	0.1357
	$a_0 = 9.893338251725515, a_1 = 20.76481724583287, a_2 = -1.9511702529793855, a_3 = -0.06364717644492875, a_4 = 40.31350138667953, a_5 = 2.4966253445462177, a_6 = -0.17085393429790824, a_7 = -0.5029372014441392, a_8 = 0.0010878298423194067, a_9 = 0.00019477337300110274$	PHIN, VSH, DT	0.9366	0.1315
	$a_0 = 1.214784985785933, a_1 = -3.3560140802507257, a_2 = -0.21433091682289365, a_3 = 0.27884603161496, a_4 = 1.7814867797191836, a_5 = 1.0325864542752534, a_6 = 0.18865853427647664, a_7 = -0.2549934044979414, a_8 = -0.12088998511133935, a_9 = -0.004357812562819982$	PHIN, VSH, AI	0.9312	0.1396
	$a_0 = 6.631216434568026, a_1 = 17.136211258388414, a_2 = 0.34707979500580194, a_3 = -0.050235322360597974, a_4 = 27.380380553199185, a_5 = -0.9686700827930869, a_6 = -0.11709322718591361, a_7 = -0.035366002177483126, a_8 = 0.001248548497808067, a_9 = 0.00013937836815439177$	PHIN, U, DT	0.8866	0.1820
	$a_0 = -2.336364593386522, a_1 = 6.573902034729849, a_2 = 0.7393596976197443, a_3 = 0.3007177155960424, a_4 = -3.7229381420166563, a_5 = -0.849663861434323, a_6 = -0.1035288906003983, a_7 = -0.005618325100539414, a_8 = -0.059109988162058605, a_9 = 0.015555895383804526$	PHIN, U, AI	0.9047	0.1696
	$a_0 = 8.03688294434492, a_1 = 35.61002714510586, a_2 = -0.09408851574834949, a_3 = -0.496994085347351, a_4 = 56.59216206014569, a_5 = -0.25326774161596227, a_6 = -0.6409902840484427, a_7 = 0.00029777204198462717, a_8 = 0.0033340648985808494, a_9 = 0.012160832784574417$	PHIN, DT, AI	0.8900	0.1794

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

Format	Coff.	Logs	R2	MAE
	$a_0 = 13.796195095657055, a_1 = -7.701156912715276, a_2 = -0.5572006201599409, a_3 = -0.03650217539505812, a_4 = 0.40122546124078284, a_5 = 0.3256241755423891, a_6 = 0.012866960984520207, a_7 = 0.0032100452587542107, a_8 = 0.0006522413596579147, a_9 = 2.4558413054862494e - 05$	VSH, U, DT	0.9746	0.0889
	$a_0 = -0.20723343809139538, a_1 = -0.05174416513067073, a_2 = -0.18608002644393248, a_3 = 0.6999905323762636, a_4 = 0.08280845215533135, a_5 = 0.16490413937350196, a_6 = -0.285668818445049, a_7 = 0.006860514128098623, a_8 = -0.021216467372773152, a_9 = -0.007557787594139083$	VSH, U, AI	0.9838	0.0685
	$a_0 = -1.596757763139917, a_1 = 1.0470676652983886, a_2 = 0.008534606949768951, a_3 = 0.7820593509270329, a_4 = -0.22140203373088962, a_5 = -0.000740473645365011, a_6 = -0.21121499614945943, a_7 = -8.77983078508143e - 06, a_8 = -0.0011123812409758323, a_9 = -0.017459823983916604$	VSH, DT, AI	0.9323	0.1367
	$a_0 = -2.6710150982921057, a_1 = 0.09349595810236215, a_2 = -0.005925750470157183, a_3 = -0.2755973117000928, a_4 = 0.027217337620676813, a_5 = -0.0007050257424978724, a_6 = -0.05493458954077784, a_7 = 9.970750163213292e - 06, a_8 = 0.0037636027643779013, a_9 = 0.029457984754970155$	U, DT, AI	0.9168	0.1604
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$y =$ $a_0 + a_1x_1 + a_2x_2 +$ $a_3x_3 + a_4x_4 +$ $a_5x_1^2 + a_6x_1x_2 +$ $a_7x_1x_3 +$ $a_8x_1x_4 + a_9x_2^2 +$ $a_{10}x_2x_3 +$ $a_{11}x_2x_4 + a_{12}x_3^2 +$ $a_{13}x_3x_4 + a_{14}x_4^2$	$a_0 = 2.8595949180688542, a_1 = -5.713823851477171, a_2 = 2.5049591912529237, a_3 = -3.9314523863322153, a_4 = 1.298757422354538, a_5 = 3.134619004814187, a_6 = -1.0059812559306336, a_7 = 0.9227605185603247, a_8 = -0.8245479607389716, a_9 = -1.2928891278040873, a_{10} = 3.6598454820755255, a_{11} = -0.3814375690727437, a_{12} = -0.0965366124315927, a_{13} = -0.05178257950561824, a_{14} = 0.03310274441889929$	RHOB, PHIN, VSH, U	0.9858	0.0665
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Table 2: Logs - TC - Polynomial regression (Continued)

Format	Coff.	Logs	R2	MAE
	$a_0 = -57.72909719946381, a_1 = 40.30825297133064, a_2 = 43.319813555681506, a_3 = 12.823023489023239, a_4 = 0.03326204241412831, a_5 = -6.008983626455462, a_6 = -6.2045878911884405, a_7 = -4.382274140680064, a_8 = -0.029705915729043013, a_9 = 47.632474635863076, a_{10} = 1.9437539361956842, a_{11} = -0.22014794875878843, a_{12} = -0.8393619540742078, a_{13} = -0.01370506929921045, a_{14} = 0.00019017905409836027$	RHOB, PHIN, VSH, DT	0.9399	0.1288
	$a_0 = -7.642561523916179, a_1 = 10.278003605211506, a_2 = 1.8177402186770724, a_3 = -1.9371414411333663, a_4 = -0.24614358695846364, a_5 = -3.2336067954473693, a_6 = -2.8020831809019615, a_7 = 0.7689016243089909, a_8 = 0.4094537714230042, a_9 = 0.5885673359962437, a_{10} = 1.881855384671265, a_{11} = 0.43453931253104083, a_{12} = -0.254515772114024, a_{13} = -0.16889608139897286, a_{14} = -0.022474428375305222$	RHOB, PHIN, VSH, AI	0.9342	0.1341
	$a_0 = -81.12110518691922, a_1 = 40.99671263290088, a_2 = 74.30082452869884, a_3 = 3.827951081370876, a_4 = 0.0643512729872971, a_5 = -2.9333268470489346, a_6 = -20.785583122614877, a_7 = -1.8269948816970096, a_8 = -0.019651609369915002, a_9 = 25.467512103813483, a_{10} = -0.16425407955760155, a_{11} = -0.16746833960789104, a_{12} = 0.06679672859403746, a_{13} = -0.0027826246693153913, a_{14} = 0.00010674946164917295$	RHOB, PHIN, U, DT	0.9524	0.1192
	$a_0 = -34.19468571445374, a_1 = 18.451229668035847, a_2 = 42.13945052961858, a_3 = 3.1015441394733125, a_4 = -0.9030120881557876, a_5 = 0.002604395026438439, a_6 = -14.34472160971287, a_7 = -1.658175137031813, a_8 = 0.15049605869822247, a_9 = -10.965314090521943, a_{10} = -1.3257046489990951, a_{11} = 0.28006344244922793, a_{12} = 0.06714874779286355, a_{13} = -0.009860297365726568, a_{14} = 0.019268186758581055$	RHOB, PHIN, U, AI	0.9507	0.1218
	$a_0 = -115.26151198713897, a_1 = 8.792260313071008e - 05, a_2 = 113.99951797597605, a_3 = 0.024435003371577817, a_4 = -0.8837495043964615, a_5 = -14.979133008373678, a_6 = -30.43396777900574, a_7 = -0.034927163663018006, a_8 = 0.14704658593065192, a_9 = 51.73847436154638, a_{10} = -0.3039756861705628, a_{11} = 0.18052660797683914, a_{12} = 0.0002689703641368941, a_{13} = 0.08792260210239537, a_{14} = 0.014852571061089274$	RHOB, PHIN, DT, AI	0.9042	0.1662

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

Format	Coff.	Logs	R2	MAE
	$a_0 = -44.17573188475056, a_1 = 26.151172813324635, a_2 = -2.087448100903281, a_3 = 0.7820231210198602, a_4 = 0.10100702160410925, a_5 = -2.1671080925417483, a_6 = -0.5061814533725726, a_7 = -0.6317011765062144, a_8 = -0.03430853657241061, a_9 = 0.17679495267073214, a_{10} = 0.05250149759242348, a_{11} = 0.0051995615103038765, a_{12} = 0.0321358075239847, a_{13} = -0.00021268167848393821, a_{14} = -5.377520095553609e - 05$	RHOB, VSH, U, DT	0.9889	0.0586
	$a_0 = 0.08104687929501009, a_1 = -1.1074902240198665, a_2 = 0.5169412837364562, a_3 = 0.509729341965428, a_4 = 0.03521054930342197, a_5 = 0.9204703059544191, a_6 = -0.19739336502420227, a_7 = -0.512844584351722, a_8 = 0.25180403736190277, a_9 = 0.03067180940980438, a_{10} = 0.06803160940094231, a_{11} = -0.208459182890866, a_{12} = 0.03009321395793314, a_{13} = -0.0036912289688933583, a_{14} = -0.017738271969234234$	RHOB, VSH, U, AI	0.9897	0.0552
	$a_0 = -86.51465501264104, a_1 = 5.581122658707567e - 05, a_2 = 11.159330509329253, a_3 = 0.16950131477238928, a_4 = -0.09575685859659586, a_5 = -9.326298242546224, a_6 = -3.2272008235413345, a_7 = -0.053050276868062234, a_8 = 0.30881786623434127, a_9 = -0.3870268333033421, a_{10} = -0.010979939854498778$	RHOB, VSH, DT, AI	0.9349	0.1343
	$a_0 = -74.41929335007345, a_1 = 3.075843399346698e - 05, a_2 = 5.3394665449105085, a_3 = 0.18133762502895157, a_4 = -0.5937141749088424, a_5 = 0.5963652907483532, a_6 = -2.4010450879812844, a_7 = -0.04636846984264731, a_8 = -0.02517693000724088, a_9 = 0.09589391478504547, a_{10} = -0.004673304177707474, a_{11} = -0.01564709945612709, a_{12} = -0.00010103527135336018, a_{13} = 0.030758433992939743, a_{14} = 0.02642275093224209$	RHOB, U, DT, AI	0.9387	0.1332
	$a_0 = 17.582029116820426, a_1 = 4.455382129801835, a_2 = -6.743167082667592, a_3 = -1.0526116099719114, a_4 = -0.05598566959293864, a_5 = -3.301653135907062, a_6 = 5.618087693351325, a_7 = -0.5567580573794436, a_8 = 0.0013401156491476768, a_9 = -0.009859353977744938, a_{10} = 0.3823894953216741, a_{11} = 0.002488983604393913, a_{12} = 0.015673900360348013, a_{13} = 0.0023079928523652734, a_{14} = 4.094958343477325e - 05$	PHIN, VSH, U, DT	0.9807	0.0769

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

Format	Coff.	Logs	R2	MAE
	$a_0 = -0.06930047880431167, a_1 = 0.48666747694094714, a_2 =$ $-2.1159735302247804, a_3 = -0.4359813986162601, a_4 = 0.8324458231032208, a_5 =$ $-1.2124922978121142, a_6 = 2.5181451972051834, a_7 = 0.2066460574171112, a_8 =$ $-0.05949408024955453, a_9 = -0.005396302414609031, a_{10} =$ $0.18517047322924726, a_{11} = -0.16947755221330077, a_{12} = 0.01645967763404029, a_{13} =$ $-0.018504958758334182, a_{14} = -0.012792127541656668$	PHIN, VSH, U, AI	0.9893	0.0543
	$a_0 = 1.7941559492041819, a_1 = 22.851977344465496, a_2 = 1.9722486142075741, a_3 =$ $-0.04285054679794375, a_4 = 0.7114499285658618, a_5 = 42.83566986282255, a_6 =$ $2.2020824543963333, a_7 = -0.1846449505223363, a_8 = 0.01789155477459753, a_9 =$ $-0.6162580112264795, a_{10} = -0.005231730886045892, a_{11} =$ $-0.21666187552531943, a_{12} = 0.0001922808542396344, a_{13} =$ $-0.00094938248565077, a_{14} = -0.015396558803939284$	PHIN, VSH, DT, AI	0.9388	0.1274
	$a_0 = 1.3976799951723788, a_1 = 35.25836821887642, a_2 = -0.12058089990493895, a_3 =$ $-0.0809112472427048, a_4 = -0.24443094343294097, a_5 = 33.46872834652463, a_6 =$ $-1.6187406347991324, a_7 = -0.17018364756050686, a_8 = -0.34719812604654826, a_9 =$ $0.011813265891953086, a_{10} = 0.0024503274056996874, a_{11} =$ $-0.04919797927679171, a_{12} = 0.00021542260719346204, a_{13} =$ $0.004537088208526538, a_{14} = 0.023530620610311893$	PHIN, U, DT, AI	0.9391	0.1389
	$a_0 = -3.7813639972148145, a_1 = -0.7214651830917513, a_2 =$ $-0.33840528558973654, a_3 = 0.005792319640703413, a_4 = 0.7708798794623751, a_5 =$ $0.0696723075501703, a_6 = 0.06803620716203884, a_7 = 0.001781456175720127, a_8 =$ $-0.18492840750682898, a_9 = 0.011958589637922594, a_{10} =$ $0.0002599462277915272, a_{11} = -0.019062782076159256, a_{12} = -4.108263014144984e -$ $06, a_{13} = 0.0009154738735363249, a_{14} = -0.010516599814912946$	VSH, U, DT, AI	0.9880	0.0612

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

Format	Coff.	Logs	R2	MAE
$y = a_0 + a_1x_1 + a_2x_2 + a_3x_3 + a_4x_4 + a_5x_5 + a_6x_1^2 + a_7x_1x_2 + a_8x_1x_3 + a_9x_1x_4 + a_{10}x_1x_5 + a_{11}x_2^2 + a_{12}x_2x_3 + a_{13}x_2x_4 + a_{14}x_2x_5 + a_{15}x_3^2 + a_{16}x_3x_4 + a_{17}x_3x_5 + a_{18}x_4^2 + a_{19}x_4x_5 + a_{20}x_5^2$	$a_0 = 7.648129881696301, a_1 = -2.1239562166998454, a_2 = 43.28006353298769, a_3 = -3.9682025516730635, a_4 = 0.854614510276423, a_5 = -0.08552556167161113, a_6 = 1.553577710928418, a_7 = -12.938281668667578, a_8 = 0.24700628802862087, a_9 = -0.6197671038337728, a_{10} = 0.018825682061502348, a_{11} = 12.034211839463286, a_{12} = 2.37406971784032, a_{13} = 0.35124412593284593, a_{14} = -0.08791470042152862, a_{15} = -0.09182558633761533, a_{16} = 0.06783458485974339, a_{17} = 0.003263987904859166, a_{18} = 0.03186962685316866, a_{19} = -0.00095279873784381, a_{20} = 0.00012210955563324486$	RHOB, PHIN, VSH, U, DT	0.9911	0.0522
	$a_0 = -6.0596694466634915, a_1 = 3.8258294995802835, a_2 = 10.13806233113824, a_3 = -4.81181176088273, a_4 = 0.37787070424448804, a_5 = 0.2716203358194685, a_6 = -0.2133813064207432, a_7 = -4.0048092524138355, a_8 = 1.5989336069473117, a_9 = -0.4398265506654477, a_{10} = 0.18191777817049268, a_{11} = -3.9915379132487687, a_{12} = 3.413448360097851, a_{13} = 0.019402032213414945, a_{14} = 0.06158346977833393, a_{15} = -0.03649835374414012, a_{16} = 0.06663694932905388, a_{17} = -0.19424009331748388, a_{18} = 0.030043226866279762, a_{19} = -0.008421410087779071, a_{20} = -0.016138805912837912$	RHOB, PHIN, VSH, U, AI	0.9922	0.0461
	$a_0 = -54.324208747525375, a_1 = 3.7620006308525075e - 05, a_2 = 42.888734350233754, a_3 = 13.068828895222605, a_4 = 0.023687167595436636, a_5 = 0.019035082486409935, a_6 = -6.619421321164516, a_7 = -6.654871534073123, a_8 = -3.5522769830277316, a_9 = -0.022506406485381537, a_{10} = 0.25896841436629714, a_{11} = 47.43510178656349, a_{12} = 1.826879978962213, a_{13} = -0.2189109045881779, a_{14} = 0.15049094641721972, a_{15} = -0.8542129356884176, a_{16} = -0.01578984041058523, a_{17} = -0.17070648503060526, a_{18} = 0.0001923058471516545, a_{19} = 0.03762000558384029, a_{20} = -0.018685962842902047$	RHOB, PHIN, VSH, DT, AI	0.9413	0.1257

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

Format	Coff.	Logs	R2	MAE
	$a_0 = -78.86421625527535, a_1 = 4.489467054793762e - 05, a_2 =$ $73.24031762177387, a_3 = 3.746080029433023, a_4 = 0.04880106137938696, a_5 =$ $-0.6280897481421839, a_6 = -3.8916640999431946, a_7 = -20.08037567327892, a_8 =$ $-1.7023513910765953, a_9 = -0.020180660512120793, a_{10} =$ $0.04217187877301301, a_{11} = 26.272483227664786, a_{12} = -0.1113168206138591, a_{13} =$ $-0.1710356534573708, a_{14} = -0.02962248914139854, a_{15} =$ $0.06648098901129874, a_{16} = -0.0030628191038962484, a_{17} =$ $-0.015041249473610338, a_{18} = 0.00012588435807714898, a_{19} =$ $0.044894669900587374, a_{20} = 0.020600755002936573$	RHOB, PHIN, U, DT, AI	0.9561	0.1140
	$a_0 = -44.589151565805416, a_1 = 2.455601590090462e - 05, a_2 =$ $-1.4230227534272362, a_3 = 0.760420054610434, a_4 = 0.1034696290779711, a_5 =$ $0.22397979741376847, a_6 = -2.784348167018048, a_7 = 0.34817149357048205, a_8 =$ $-0.5589725038252485, a_9 = -0.02999404961309046, a_{10} = 0.17064647176345316, a_{11} =$ $0.12943165565213696, a_{12} = 0.04852055180587143, a_{13} = 0.002042248423125718, a_{14} =$ $-0.18549076626809263, a_{15} = 0.03141346285487346, a_{16} =$ $-0.0003687777497615294, a_{17} = -0.009749642509994787, a_{18} =$ $-5.955685544725407e - 05, a_{19} = 0.02455601590175488, a_{20} = -0.014069444695588467$	RHOB, VSH, U, DT, AI	0.9909	0.0511
	$a_0 = 0.42004548389772345, a_1 = 7.354568288272071, a_2 = 0.1931209554744173, a_3 =$ $-0.5886503238219087, a_4 = -0.02046464889307831, a_5 = 0.694534079099605, a_6 =$ $5.866294311631743, a_7 = 4.753085807743812, a_8 = -0.13884064646980884, a_9 =$ $-0.038141687514878626, a_{10} = -0.12043408870347817, a_{11} =$ $-0.2927769079973683, a_{12} = 0.11483918850423303, a_{13} =$ $-0.00703253278458311, a_{14} = -0.18956825292717905, a_{15} =$ $0.017099124382747483, a_{16} = 0.0008936423281154337, a_{17} =$ $-0.015809774722675474, a_{18} = 5.532542709896286e - 05, a_{19} =$ $0.0010103269449240726, a_{20} = -0.010445375454498218$	PHIN, VSH, U, DT, AI	0.9909	0.0526

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

Format	Coff.	Logs	R2	MAE
$y =$ $a_0 + a_1x_1 + a_2x_2 +$ $a_3x_3 + a_4x_4 +$ $a_5x_5 + a_6x_6 +$ $a_7x_1^2 + a_8x_1x_2 +$ $a_9x_1x_3 +$ $a_{10}x_1x_4 +$ $a_{11}x_1x_5 +$ $a_{12}x_1x_6 +$ $a_{13}x_2^2 + a_{14}x_2x_3 +$ $a_{15}x_2x_4 +$ $a_{16}x_2x_5 +$ $a_{17}x_2x_6 +$ $a_{18}x_3^2 + a_{19}x_3x_4 +$ $a_{20}x_3x_5 +$ $a_{21}x_3x_6 +$ $a_{22}x_4^2 + a_{23}x_4x_5 +$ $a_{24}x_4x_6 + a_{25}x_5^2 +$ $a_{26}x_5x_6 + a_{27}x_6^2$	$a_0 = 9.716557697715889, a_1 = -5.114805776511193e - 06, a_2 =$ $45.32852002659636, a_3 = -3.739655314448532, a_4 = 0.864030923063866, a_5 =$ $-0.09309784090772191, a_6 = 0.2624796255713784, a_7 = 1.1588138392971266, a_8 =$ $-13.252515947849131, a_9 = 1.1983351706310092, a_{10} = -0.5560479740148101, a_{11} =$ $0.025227562195575207, a_{12} = 0.15822387204096253, a_{13} = 11.957447256649596, a_{14} =$ $2.147680773735084, a_{15} = 0.3943579615791953, a_{16} = -0.09255888970006859, a_{17} =$ $-0.011756406655363707, a_{18} = -0.11440867698462692, a_{19} =$ $0.05973761482674129, a_{20} = 0.0011215886548928723, a_{21} =$ $-0.18594539048201317, a_{22} = 0.03131905901503394, a_{23} =$ $-0.0012109804475930656, a_{24} = -0.009370504997473923, a_{25} =$ $0.00012890249896894667, a_{26} = -0.005114806135781951, a_{27} =$ $-0.014196386937855248$	RHOB, PHIN, VSH, U, DT, AI	0.9929	0.0433

### 1.3 TD

Table 3: Logs - TD - Polynomial regression

Format	Coff.	Logs	R2	MAE
$y =$ $a_0 + a_1x_1 + a_2x_1^2$	$a_0 = 1.9269666520514428, a_1 = -2.382657352187896, a_2 = 0.8489124091341735$	RHOB	0.8800	0.0892
	$a_0 = 1.9615845554309417, a_1 = -4.25802243828774, a_2 = 2.715247180801325$	PHIN	0.9358	0.0692

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

Format	Coff.	Logs	R2	MAE
	$a_0 = 0.9521355105218918, a_1 = -0.476577195704799, a_2 = 0.03672871454390608$	VSH	0.0492	0.3316
	$a_0 = -0.48492748245203665, a_1 = 0.257998660917523, a_2 = -0.007371668544926383$	U	0.5702	0.1956
	$a_0 = 3.4870531063977346, a_1 = -0.013082453337012846, a_2 = 1.341926934201343e-05$	DT	0.9209	0.0752
	$a_0 = -0.14384531441816784, a_1 = 0.12630727420547191, a_2 = -0.0003540488964736381$	AI	0.9223	0.0716
<hr/>				
$y = a_0 + a_1x_1 + a_2x_2 + a_3x_1^2 + a_4x_1x_2 + a_5x_2^2$	$a_0 = -15.918756298789244, a_1 = 12.734627764340667, a_2 = 15.772749675028221, a_3 = -2.262657146204285, a_4 = -7.140429472565293, a_5 = -2.8868587379919375$	RHOB, PHIN	0.9402	0.0665
	$a_0 = 0.9357214910676487, a_1 = -1.6267453762733874, a_2 = 1.142122103594229, a_3 = 0.7297689074346755, a_4 = -0.5613058430709468, a_5 = -0.15173522915600543$	RHOB, VSH	0.8953	0.0877
	$a_0 = 4.499219409741285, a_1 = -6.975858693353287, a_2 = 0.6877168255856997, a_3 = 2.940704677274059, a_4 = -0.6358394127833126, a_5 = 0.04679992498156071$	RHOB, U	0.9386	0.0654
	$a_0 = -48.8389496341657, a_1 = 32.49408413006159, a_2 = 0.09887694336566101, a_3 = -5.039756147066333, a_4 = -0.034763927592229196, a_5 = -4.650419015655874e-05$	RHOB, DT	0.9249	0.0731
	$a_0 = -0.6384073392589449, a_1 = 0.6134847664407993, a_2 = 0.1934316886046716, a_3 = -0.29094118682140835, a_4 = 0.011449691911970932, a_5 = -0.002811592030066772$	RHOB, AI	0.9260	0.0706
	$a_0 = 2.0775551466057847, a_1 = -4.302045376262588, a_2 = -0.2780274041170944, a_3 = 2.478215710905845, a_4 = 0.5555419193468436, a_5 = -0.09175629503579934$	PHIN, VSH	0.9423	0.0652
	$a_0 = 1.7710446576884047, a_1 = -4.376813755448464, a_2 = 0.12790664963604378, a_3 = 2.9554952224028015, a_4 = -0.061332993809846796, a_5 = -0.011355194300373194$	PHIN, U	0.9500	0.0608
	$a_0 = 3.721776291314436, a_1 = 7.855994124796679, a_2 = -0.02636254069839043, a_3 = 23.523799197904946, a_4 = -0.08997103348707476, a_5 = 9.76148137699596e-05$	PHIN, DT	0.9421	0.0652

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

Format	Coff.	Logs	R2	MAE
	$a_0 = 0.28312965091330966, a_1 = -0.0307897594553501, a_2 = 0.16594895526970901, a_3 = 0.012405516536622875, a_4 = -0.19919917303992077, a_5 = -0.003722409918963255]$	PHIN, AI	0.9411	0.0640
	$a_0 = -0.9537884021866354, a_1 = 0.887789649489372, a_2 = 0.36869234662296113, a_3 = -0.3202502423017383, a_4 = -0.12827913706913668, a_5 = -0.011687038542157835$	VSH, U	0.5900	0.1932
	$a_0 = 3.7901269513856435, a_1 = -0.8738259419494557, a_2 = -0.013170653924767248, a_3 = -0.08283131487990061, a_4 = 0.002054266946803979, a_5 = 1.2111634748795959e - 05$	VSH, DT	0.9475	0.0605
	$a_0 = -0.3223233694442227, a_1 = 0.2981016418820696, a_2 = 0.17645380025945354, a_3 = -0.1304432936774882, a_4 = -0.05510042739947466, a_5 = -0.001922440702847438$	VSH, AI	0.9408	0.0645
	$a_0 = 5.271259648092871, a_1 = -0.16642670449984304, a_2 = -0.019579370581840505, a_3 = 0.0012464877126677266, a_4 = 0.00033876981171910946, a_5 = 1.9218491029546374e - 05$	U, DT	0.9380	0.0681
	$a_0 = -0.16826950433514942, a_1 = -0.07094103916042716, a_2 = 0.21539463816259347, a_3 = 0.013731106121653243, a_4 = -0.02182155484720961, a_5 = 0.004606930414627882$	U, AI	0.9566	0.0553
	$a_0 = 0.5713206866888251, a_1 = 0.00030719611304722656, a_2 = 0.1964810222018005, a_3 = -1.1279133960479274e - 06, a_4 = -0.0005102698625337255, a_5 = -0.002317137770701046$	DT, AI	0.9254	0.0708
$y = a_0 + a_1x_1 + a_2x_2 + a_3x_3 + a_4x_1^2 + a_5x_1x_2 + a_6x_1x_3 + a_7x_2^2 + a_8x_2x_3 + a_9x_3^2$	$a_0 = -3.931615595103482, a_1 = 4.263969994690492, a_2 = 2.5210771680498616, a_3 = -1.085474101795338, a_4 = -0.7557315701130249, a_5 = -2.4342219715516693, a_6 = 0.3050044958264973, a_7 = 0.5824010117059598, a_8 = 0.9748855977966138, a_9 = -0.09262674631070301$	RHOB, PHIN, VSH	0.9448	0.0637

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

Format	Coff.	Logs	R2	MAE
	$a_0 = -11.249291869140752, a_1 = 5.419845373151302, a_2 = 14.484362628861195, a_3 = 0.9610953971769228, a_4 = 0.26259633971815777, a_5 = -5.4431712734710445, a_6 = -0.5831726601141685, a_7 = -3.142945116731648, a_8 = -0.2962097972254529, a_9 = 0.026244581530895074$	RHOB, PHIN, U	0.9755	0.0443
	$a_0 = -35.123378813962816, a_1 = 26.85248234506979, a_2 = 41.96599977220037, a_3 = -0.005692576355988879, a_4 = -4.598705838966426, a_5 = -10.727340151124231, a_6 = -0.009058017796681124, a_7 = 23.240295753567604, a_8 = -0.12522799323593725, a_9 = 0.00011857800585705864$	RHOB, PHIN, DT	0.9492	0.0607
	$a_0 = -19.19449769269596, a_1 = 16.325418813097134, a_2 = 17.176414735653818, a_3 = -0.18506418636945604, a_4 = -3.381480230712385, a_5 = -7.4850095031429404, a_6 = 0.13175975986418575, a_7 = -3.525575912862027, a_8 = 0.02410373901191448, a_9 = -0.0038398212803110493$	RHOB, PHIN, AI	0.9443	0.0626
	$a_0 = 3.4678294517066917, a_1 = -5.753185448228243, a_2 = 0.49937936470590044, a_3 = 0.5790702111853434, a_4 = 2.4115205815083858, a_5 = 0.05791205070118269, a_6 = -0.46322265122214096, a_7 = -0.12903835611264725, a_8 = -0.12086914292930889, a_9 = 0.029487697331841704$	RHOB, VSH, U	0.9569	0.0561
	$a_0 = -15.337010277801411, a_1 = 12.312919910916682, a_2 = 1.285010686760257, a_3 = 0.023666037462427472, a_4 = -1.975241647036315, a_5 = -0.6732530487046305, a_6 = -0.011920672580210427, a_7 = -0.11895328808269945, a_8 = -0.00013671759586483828, a_9 = -5.458408460410865e - 06$	RHOB, VSH, DT	0.9501	0.0588
	$a_0 = -1.4906873464797061, a_1 = 1.8285011748683346, a_2 = 0.17010506212445686, a_3 = 0.19115339774429185, a_4 = -0.921509518072428, a_5 = 0.10195212752013418, a_6 = 0.13341065585698414, a_7 = -0.11518325289526694, a_8 = -0.0788111322880063, a_9 = -0.013797801720565706$	RHOB, VSH, AI	0.9527	0.0548
	$a_0 = -21.90517459579811, a_1 = 8.057593014491264, a_2 = 1.8040922338117658, a_3 = 0.053850178477988064, a_4 = 0.7026308960980784, a_5 = -0.9162205782517072, a_6 = -0.01506943052496547, a_7 = 0.03991032893173472, a_8 = -0.0013109935921270953, a_9 = -2.7063831766294026e - 05$	RHOB, U, DT	0.9611	0.0537

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

Format	Coff.	Logs	R2	MAE
	$a_0 = 2.5207745323627924, a_1 = -4.676620272799655, a_2 = 0.6239050430884736, a_3 = 0.1887234774820401, a_4 = 2.0475073838801054, a_5 = -0.5343101709615652, a_6 = -0.056376928299339935, a_7 = 0.03443662217190859, a_8 = 0.0024773392739448103, a_9 = 0.002236885075789586$	RHOB, U, AI	0.9625	0.0514
	$a_0 = -46.767575581749085, a_1 = 3.036426418183758e - 05, a_2 = 0.0960921540949523, a_3 = 0.09062905986187522, a_4 = -4.833853358806566, a_5 = -0.0316948173382591, a_6 = -0.006168698646752638, a_7 = -4.8716462065474105e - 05, a_8 = 0.030364264179025536, a_9 = 0.0008978806506658205$	RHOB, DT, AI	0.9292	0.0688
	$a_0 = 2.8969313497323292, a_1 = -5.602703893591709, a_2 = -1.3968795944741959, a_3 = -0.026140649385258334, a_4 = 2.9673607262825517, a_5 = 1.4694128144030214, a_6 = 0.02120671350059066, a_7 = 0.01740740632462303, a_8 = 0.09988716475151545, a_9 = -0.005979943729785959$	PHIN, VSH, U	0.9614	0.0546
	$a_0 = 4.245027627375036, a_1 = 8.686188143593242, a_2 = -0.17175491831184683, a_3 = -0.029266800147389253, a_4 = 22.567293778570857, a_5 = 1.1139141150636112, a_6 = -0.08920302717603425, a_7 = -0.26270711967431204, a_8 = -0.0008409608297026338, a_9 = 9.956873401775406e - 05$	PHIN, VSH, DT	0.9557	0.0559
	$a_0 = 0.0003082650790736663, a_1 = -0.05442687059251638, a_2 = -0.1581675348567256, a_3 = 0.2169852385123104, a_4 = 0.07158067561449334, a_5 = 0.44581992619443805, a_6 = -0.16570705095195448, a_7 = -0.10799514798038536, a_8 = -0.013729479288752587, a_9 = -0.00546312229989737$	PHIN, VSH, AI	0.9500	0.0587
	$a_0 = 4.597565680858432, a_1 = 5.829474138866782, a_2 = -0.05552974529797005, a_3 = -0.026600003634713033, a_4 = 14.408709108046718, a_5 = -0.26698873877042495, a_6 = -0.05524115996808562, a_7 = -0.0065514384977095694, a_8 = 0.0006373959595525376, a_9 = 6.850723050822099e - 05$	PHIN, U, DT	0.9567	0.0571
	$a_0 = -1.1973366788035755, a_1 = 2.776304137153094, a_2 = 0.09830079433079832, a_3 = 0.32637800386330207, a_4 = -1.4545166674526349, a_5 = -0.1287002323660433, a_6 = -0.27550108397967665, a_7 = 0.0046642251964380595, a_8 = -0.021365463121235228, a_9 = -0.000878959693228522$	PHIN, U, AI	0.9684	0.0477

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

Format	Coff.	Logs	R2	MAE
	$a_0 = 2.19121711997203, a_1 = 17.155747686363515, a_2 = -0.03518768203090989, a_3 = 0.15849829793009182, a_4 = 24.889823634463077, a_5 = -0.11279035593433503, a_6 = -0.42696267619517875, a_7 = 0.00012422661579733856, a_8 = 0.00042380607015486064, a_9 = -0.0048456259320654$	PHIN, DT, AI	0.9472	0.0598
	$a_0 = 7.910039211972133, a_1 = -2.619741185761862, a_2 = -0.4489945358603535, a_3 = -0.02541805178100468, a_4 = 0.08942753358449251, a_5 = 0.11154479097042483, a_6 = 0.004591121974112485, a_7 = 0.009161840897657625, a_8 = 0.0006834813079753388, a_9 = 2.1182235990396276e - 05$	VSH, U, DT	0.9814	0.0379
	$a_0 = -0.2858407955436755, a_1 = 0.13493224399616782, a_2 = -0.1022184791944181, a_3 = 0.29739063610139604, a_4 = -0.03746698276140877, a_5 = 0.025294891852559356, a_6 = -0.07690509471450441, a_7 = 0.011052029189270902, a_8 = -0.017592388103635618, a_9 = 0.0006780040226752681$	VSH, U, AI	0.9852	0.0316
	$a_0 = -2.3468357474902417, a_1 = 0.8355424059638137, a_2 = 0.011937596585955182, a_3 = 0.674113116375116, a_4 = -0.13126692361695144, a_5 = -0.0009711481714442656, a_6 = -0.09513641875537049, a_7 = -1.1614823019372705e - 05, a_8 = -0.0015673953984973385, a_9 = -0.015126545033408243$	VSH, DT, AI	0.9522	0.0559
	$a_0 = -1.192044886046784, a_1 = -0.12414791358172268, a_2 = 0.001303743910850954, a_3 = 0.25174791817809333, a_4 = 0.01597662785668473, a_5 = 5.4128270727271636e - 05, a_6 = -0.02213220177822304, a_7 = -3.3184372927045054e - 07, a_8 = 0.00027662081356780166, a_9 = 0.0035918494307804983$	U, DT, AI	0.9579	0.0549
$y =$	$a_0 = -0.3148959679762666, a_1 = -0.5589092723412098, a_2 = 1.9606642501712577, a_3 = -2.8248928820561936, a_4 = 0.5246739057003222, a_5 = 0.8794340597450453, a_6 = -1.8443559297155367, a_7 = 1.0714708269304603, a_8 = -0.35086586073308923, a_9 = 0.19098883275952272, a_{10} = 1.8893938538061645, a_{11} = -0.08387912758954251, a_{12} = -0.07124842107161487, a_{13} = -0.05514778580428075, a_{14} = 0.0159773620933879$	RHOB, PHIN, VSH, U	0.9834	0.0369
$a_0 + a_1x_1 + a_2x_2 +$				
$a_3x_3 + a_4x_4 +$				
$a_5x_1^2 + a_6x_1x_2 +$				
$a_7x_1x_3 +$				
$a_8x_1x_4 + a_9x_2^2 +$				
$a_{10}x_2x_3 +$				
$a_{11}x_2x_4 + a_{12}x_3^2 +$				
$a_{13}x_3x_4 + a_{14}x_4^2$				

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

Format	Coff.	Logs	R2	MAE
	$a_0 = -19.739482768028648, a_1 = 15.82365803498561, a_2 = 24.53185273817958, a_3 = 3.8851561646577273, a_4 = -0.01077943982956584, a_5 = -2.6046848240280838, a_6 = -4.895866229272262, a_7 = -1.2361118664139663, a_8 = -0.006773668994692978, a_9 = 22.96649777087605, a_{10} = 0.7782880152767476, a_{11} = -0.10717598882079364, a_{12} = -0.34606938017781513, a_{13} = -0.004512210796450115, a_{14} = 0.00010777827001970486$	RHOB, PHIN, VSH, DT	0.9579	0.0545
	$a_0 = -3.1073395082756488, a_1 = 3.9710720110167905, a_2 = 1.0457831199520535, a_3 = -1.8095132434298553, a_4 = 0.09442333153814841, a_5 = -1.3808804021325245, a_6 = -0.8508299604992748, a_7 = 0.6915882899149238, a_8 = 0.14722650629326925, a_9 = -0.09518656490367201, a_{10} = 1.3096927475791698, a_{11} = -0.050898122085714585, a_{12} = -0.12092776811712665, a_{13} = -0.04499040926254299, a_{14} = -0.013038829827229167$	RHOB, PHIN, VSH, AI	0.9551	0.0543
	$a_0 = -28.85860447322378, a_1 = 17.042112035611403, a_2 = 28.980100369075494, a_3 = 1.0473507026472002, a_4 = 0.013422107749236656, a_5 = -1.698361084333283, a_6 = -8.675078800279378, a_7 = -0.5603716908952511, a_8 = -0.006954603121768932, a_9 = 13.31745366688443, a_{10} = 0.11440333476158379, a_{11} = -0.07412746665330974, a_{12} = 0.02489955984223112, a_{13} = -0.0008672749797520152, a_{14} = 5.7828182818350786e-05$	RHOB, PHIN, U, DT	0.9788	0.0416
	$a_0 = -11.079993151461071, a_1 = 5.837787750861723, a_2 = 13.493441030350906, a_3 = 0.8756144687092501, a_4 = -0.03821527076024552, a_5 = -0.16703171162282046, a_6 = -4.23328880401413, a_7 = -0.5141345103421439, a_8 = 0.06773744199758384, a_9 = -3.683942566157979, a_{10} = -0.3147802616337554, a_{11} = -0.13471339551245023, a_{12} = 0.02600803670990164, a_{13} = -0.0069763679910717245, a_{14} = -0.001055355512420876$	RHOB, PHIN, U, AI	0.9793	0.0385
	$a_0 = -33.39191058328211, a_1 = 2.5799502616786978e-05, a_2 = 41.72819665968894, a_3 = -0.009015912040615066, a_4 = -0.0034649358220847845, a_5 = -4.621971634207441, a_6 = -9.551216297505146, a_7 = -0.00826527552417412, a_8 = 0.05560205447228833, a_9 = 23.181912067022637, a_{10} = -0.1281706720853884, a_{11} = -0.16794496980675472, a_{12} = 0.00012299023929093902, a_{13} = 0.0257995022321734, a_{14} = -0.003526861653878025$	RHOB, PHIN, DT, AI	0.9521	0.0566

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

Format	Coff.	Logs	R2	MAE
	$a_0 = -2.483452585834782, a_1 = 3.3857392535523605, a_2 = -3.4186547475694575, a_3 = 0.15237066048199618, a_4 = 0.004044076632642206, a_5 = 0.061861933366435855, a_6 = 0.5816560161867815, a_7 = -0.2515974853936485, a_8 = -0.006507461256142922, a_9 = 0.08416414808634626, a_{10} = 0.031798253846547116, a_{11} = 0.004890118682850291, a_{12} = 0.017978350642591574, a_{13} = 0.0002157519754648294, a_{14} = 2.3280551026041757e - 06$	RHOB, VSH, U, DT	0.9846	0.0339
	$a_0 = 0.23591907570152504, a_1 = -0.853284528245282, a_2 = 0.044326237007289264, a_3 = 0.25060791639500934, a_4 = 0.16076896538012272, a_5 = 0.28572445219463327, a_6 = 0.03536616243700502, a_7 = -0.2509359145413678, a_8 = 0.12060351232381653, a_9 = -0.015186371668959324, a_{10} = 0.050225972047638116, a_{11} = -0.09742426338192421, a_{12} = 0.019579895135584495, a_{13} = -0.007315069493644272, a_{14} = -0.009458901131918222$	RHOB, VSH, U, AI	0.9875	0.0272
	$a_0 = -16.136330962780782, a_1 = 9.270255647820185e - 06, a_2 = 1.7906913995776828, a_3 = 0.03164356200733209, a_4 = 0.41236628690331767, a_5 = -1.974463818936073, a_6 = -0.3314329288385736, a_7 = -0.008108789223079104, a_8 = 0.0863625117682607, a_9 = -0.13842337563797022, a_{10} = -0.0018261220564972473, a_{11} = -0.08885540002422293, a_{12} = -1.7330958190119363e - 05, a_{13} = 0.00927025564766562, a_{14} = -0.015468159806123179$	RHOB, VSH, DT, AI	0.9530	0.0546
	$a_0 = -23.17150193251663, a_1 = 7.44089637286596e - 06, a_2 = 1.688237729933047, a_3 = 0.05986025670386591, a_4 = 0.23343130342733695, a_5 = 0.5872464828525249, a_6 = -0.819865204293629, a_7 = -0.013733568917554805, a_8 = -0.04698810825928003, a_9 = 0.03902843097386207, a_{10} = -0.0013507207684112434, a_{11} = -0.00892448178092333, a_{12} = -3.533871522473438e - 05, a_{13} = 0.0074408963731107634, a_{14} = 0.003570112272269346$	RHOB, U, DT, AI	0.9667	0.0470

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

Format	Coff.	Logs	R2	MAE
	$a_0 = 7.306873982630165, a_1 = -0.5176577632309343, a_2 = -1.344389233229531, a_3 =$ $-0.4660745344536818, a_4 = -0.023062554430879467, a_5 = 1.8971195826577743, a_6 =$ $3.195025735514109, a_7 = -0.1502247392181841, a_8 = -0.0063376821824845915, a_9 =$ $-0.14845650086568005, a_{10} = 0.11057673794232292, a_{11} =$ $-0.002611926352479649, a_{12} = 0.008329300625696508, a_{13} =$ $0.0009647803640573776, a_{14} = 2.5638988995192136e - 05$	PHIN, VSH, U, DT	0.9838	0.0361
	$a_0 = -0.5261631835406606, a_1 = 1.1841472555491035, a_2 =$ $-0.7145964726699248, a_3 = -0.20396974956422395, a_4 = 0.4560158469328422, a_5 =$ $-0.9262079549242146, a_6 = 0.9384144746273644, a_7 = 0.15124900924584708, a_8 =$ $-0.27921760746017654, a_9 = -0.035117802275533065, a_{10} =$ $0.04229608063213918, a_{11} = -0.026419709294734334, a_{12} =$ $0.010033662609796587, a_{13} = -0.010424861966453557, a_{14} = -0.008273994821192463$	PHIN, VSH, U, AI	0.9885	0.0277
	$a_0 = 0.3047690099453281, a_1 = 12.716030830324225, a_2 = 0.9632602789767969, a_3 =$ $-0.01960312420719795, a_4 = 0.4641898528204797, a_5 = 20.672441128548407, a_6 =$ $1.2098097289753793, a_7 = -0.09144438513366597, a_8 = -0.23842024660244363, a_9 =$ $-0.30532801316560537, a_{10} = -0.0029639573874492625, a_{11} =$ $-0.06117410454092134, a_{12} = 9.271526307409291e - 05, a_{13} =$ $-0.0006832688999023203, a_{14} = -0.011586007751061101$	PHIN, VSH, DT, AI	0.9589	0.0517
	$a_0 = 0.28480576902344085, a_1 = 15.313744500946116, a_2 =$ $-0.11019187215148012, a_3 = -0.030186448697486164, a_4 =$ $0.22284020696706675, a_5 = 15.399749358033027, a_6 = -0.37809779435676566, a_7 =$ $-0.07683179328226923, a_8 = -0.3752183487740502, a_9 = 0.008320566562201566, a_{10} =$ $0.0007065500323859646, a_{11} = -0.01894705368139304, a_{12} = 9.043027081765671e -$ $05, a_{13} = 0.0010371256691296404, a_{14} = 0.00016315368510948103$	PHIN, U, DT, AI	0.9765	0.0422

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

Format	Coff.	Logs	R2	MAE
	$a_0 = -1.5811732381252241, a_1 = -0.23925907755220685, a_2 =$ $-0.3407224709860921, a_3 = 0.005729993690460193, a_4 = 0.6718939922051282, a_5 =$ $0.000281427094507773, a_6 = 0.06149642237427451, a_7 = 0.0005978907441166926, a_8 =$ $-0.08878899662016883, a_9 = 0.012551195561259297, a_{10} =$ $0.0004721453498513092, a_{11} = -0.009392176099859853, a_{12} = -5.687065264467113e -$ $06, a_{13} = -0.0008286182029248828, a_{14} = -0.011639482063089318$	VSH, U, DT, AI	0.9872	0.0282
$y = a_0 + a_1x_1 +$ $a_2x_2 + a_3x_3 +$ $a_4x_4 + a_5x_5 +$ $a_6x_1^2 + a_7x_1x_2 +$ $a_8x_1x_3 +$ $a_9x_1x_4 +$ $a_{10}x_1x_5 +$ $a_{11}x_2^2 + a_{12}x_2x_3 +$ $a_{13}x_2x_4 +$ $a_{14}x_2x_5 +$ $a_{15}x_3^2 + a_{16}x_3x_4 +$ $a_{17}x_3x_5 + a_{18}x_4^2 +$ $a_{19}x_4x_5 + a_{20}x_5^2$	$a_0 = 3.973070063179934, a_1 = 0.14385345159659146, a_2 = 25.17798223663134, a_3 =$ $-2.6497040899639477, a_4 = 0.36207945577260736, a_5 = -0.05308923156721876, a_6 =$ $0.24912159021988356, a_7 = -8.477545059179334, a_8 = 0.6941360671095826, a_9 =$ $-0.264285950616757, a_{10} = 0.012086795120516029, a_{11} = 8.16473043723859, a_{12} =$ $1.2119108973583028, a_{13} = 0.30117024358319455, a_{14} = -0.052425077618762014, a_{15} =$ $-0.0814062539401026, a_{16} = -0.0009591103646040102, a_{17} =$ $0.0015145148604564424, a_{18} = 0.015413515188695175, a_{19} =$ $-0.0005752201110720531, a_{20} = 7.548469656379861e - 05$	RHOB, PHIN, VSH, U, DT	0.9879	0.0314
	$a_0 = -3.7173018678875396, a_1 = 2.5947441651990006, a_2 = 6.051324659800356, a_3 =$ $-3.2414905206655162, a_4 = 0.07380462646861033, a_5 = 0.28331457866153253, a_6 =$ $-0.4625001499454719, a_7 = -2.2146079165312447, a_8 = 1.2336206005133863, a_9 =$ $-0.15103778114573996, a_{10} = 0.07173949918849236, a_{11} =$ $-2.3922604985330396, a_{12} = 2.023230521891407, a_{13} = 0.09058689161442016, a_{14} =$ $-0.1976860620992173, a_{15} = -0.05370925025044584, a_{16} =$ $0.0005362204200399803, a_{17} = -0.05819298268767073, a_{18} =$ $0.014758684554319237, a_{19} = -0.006643587964817837, a_{20} = -0.010267742707547784$	RHOB, PHIN, VSH, U, AI	0.9904	0.0250

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

Format	Coff.	Logs	R2	MAE
	$a_0 = -19.211291252579734, a_1 = 1.3807711565984085e - 05, a_2 =$ $25.695482071133135, a_3 = 4.01543551335565, a_4 = -0.01108394681633828, a_5 =$ $0.23758113994996743, a_6 = -2.6321839899045196, a_7 = -4.0932770095195465, a_8 =$ $-1.019463033783972, a_9 = -0.004710761806373456, a_{10} = 0.08052656943845093, a_{11} =$ $22.956228373556012, a_{12} = 0.6431376920626526, a_{13} = -0.11226766595206884, a_{14} =$ $-0.16343793109073307, a_{15} = -0.34967912025079056, a_{16} =$ $-0.0049797588439313405, a_{17} = -0.049923410055910715, a_{18} =$ $0.00011058527199497735, a_{19} = 0.013807711169506116, a_{20} = -0.011875778154606807$	RHOB, PHIN, VSH, DT, AI	0.9603	0.0507
	$a_0 = -28.499633143037514, a_1 = 1.662436423596304e - 05, a_2 =$ $29.784738114337898, a_3 = 1.010988237152751, a_4 = 0.012231986517400302, a_5 =$ $0.09331768681702703, a_6 = -1.8159848268338383, a_7 = -7.34842574260458, a_8 =$ $-0.4954621540653702, a_9 = -0.007066675702590975, a_{10} =$ $0.01544222620098346, a_{11} = 13.06067742379759, a_{12} = 0.13539250532161665, a_{13} =$ $-0.07907028306409623, a_{14} = -0.2593523154884212, a_{15} =$ $0.02491077401279498, a_{16} = -0.0010174527330006433, a_{17} =$ $-0.008466034642869344, a_{18} = 6.345071470437006e - 05, a_{19} =$ $0.016624363972149968, a_{20} = -0.0004964319009544567$	RHOB, PHIN, U, DT, AI	0.9829	0.0347
	$a_0 = -4.849418835713314, a_1 = 5.525219596327456e - 07, a_2 =$ $-2.886504196902197, a_3 = 0.1410180850119466, a_4 = 0.01725820246095727, a_5 =$ $0.5325034517097105, a_6 = 0.04932254221404997, a_7 = 0.9724680431724102, a_8 =$ $-0.20322411425399792, a_9 = -0.003323610870814453, a_{10} =$ $0.039841110140787395, a_{11} = 0.05933409001635241, a_{12} =$ $0.028141249375208344, a_{13} = 0.003032265656745259, a_{14} =$ $-0.09494745360653546, a_{15} = 0.017797450283920827, a_{16} =$ $0.00010456876510716807, a_{17} = -0.007033496973906923, a_{18} =$ $-1.3508385937751272e - 05, a_{19} = 0.0005525219632348179, a_{20} =$ $-0.01216735385453487$	RHOB, VSH, U, DT, AI	0.9883	0.0264

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

Format	Coff.	Logs	R2	MAE
	$a_0 = -0.23814387657195035, a_1 = 5.329677607189574, a_2 = 0.5834161456041523, a_3 =$ $-0.2573813578189102, a_4 = -0.009595036738455295, a_5 = 0.47298018358485283, a_6 =$ $4.899362396857883, a_7 = 2.6345380167224968, a_8 = 0.016511540833499906, a_9 =$ $-0.028567626116876844, a_{10} = -0.29750085376550467, a_{11} =$ $-0.21745895131498616, a_{12} = 0.03358042592607968, a_{13} =$ $-0.004756656237438634, a_{14} = -0.05434710920258172, a_{15} =$ $0.010068448692907538, a_{16} = 0.0003361599015202646, a_{17} =$ $-0.009561244324100653, a_{18} = 3.492516644605777e - 05, a_{19} =$ $6.31417810915112e - 05, a_{20} = -0.008875114504492878$	PHIN, VSH, U, DT, AI	0.9900	0.0262
$y =$ $a_0 + a_1x_1 + a_2x_2 +$ $a_3x_3 + a_4x_4 +$ $a_5x_5 + a_6x_6 +$ $a_7x_1^2 + a_8x_1x_2 +$ $a_9x_1x_3 +$ $a_{10}x_1x_4 +$ $a_{11}x_1x_5 +$ $a_{12}x_1x_6 +$ $a_{13}x_2^2 + a_{14}x_2x_3 +$ $a_{15}x_2x_4 +$ $a_{16}x_2x_5 +$ $a_{17}x_2x_6 +$ $a_{18}x_3^2 + a_{19}x_3x_4 +$ $a_{20}x_3x_5 +$ $a_{21}x_3x_6 +$ $a_{22}x_4^2 + a_{23}x_4x_5 +$ $a_{24}x_4x_6 + a_{25}x_5^2 +$ $a_{26}x_5x_6 + a_{27}x_6^2$	$a_0 = 4.1131499549584625, a_1 = -1.975355017196941e - 06, a_2 =$ $27.64558374647761, a_3 = -2.60649104623536, a_4 = 0.3863371928576521, a_5 =$ $-0.053785464252790564, a_6 = 0.3154491121549542, a_7 = 0.21688332193263685, a_8 =$ $-7.779619332963799, a_9 = 1.0122955484301737, a_{10} = -0.2228277670238407, a_{11} =$ $0.014495427609885488, a_{12} = 0.05571244015982654, a_{13} = 8.142867682331987, a_{14} =$ $1.0322101501290544, a_{15} = 0.3319642118365854, a_{16} = -0.05991342301544937, a_{17} =$ $-0.2271376871944319, a_{18} = -0.0878907450520304, a_{19} =$ $-0.008186237853149524, a_{20} = 0.0010545246755633438, a_{21} =$ $-0.05837784986927773, a_{22} = 0.01544431237896554, a_{23} =$ $-0.0007857200863512735, a_{24} = -0.007415483821177123, a_{25} = 8.070330228548381e -$ $05, a_{26} = -0.001975355236070847, a_{27} = -0.009701760421864523$	RHOB, PHIN, VSH, U, DT, AI	0.9912	0.0236