

	SOIL ENGINEERING SERVICES (SES)		خدمات مهندسی مکانیک خاک
	PROJ NO: 1347-EE-PEP-GEO-001-B	REV: B	
	SUBJECT: GEOTECHNICAL INVESTIGATION, PHASE I, FACTUAL REPORT, SOUTH AIUMINIUM SMELTER (SALCO) IRAN		

Enclosure S

Soil and Water Chemical Tests

Field Investigation Data			Sulphate Content			Water Soluble Cl ⁻ 1 : 2 (%)	pH at 25° C
Boring No.	Depth (m)		Total SO ₃ ⁻² (%)	SO ₃ ⁻² in 2:1 Aqueous Extract (gr/lit)			
	From	To					
BH-025	3.00	3.50	3.38	3.35		1.010	9.01
BH-031	10.00	10.50	1.89	3.00		0.990	8.79
BH-044	7.00	7.50	0.68	1.15		0.920	8.68
BH-049	23.00	23.50	1.26	2.05		1.050	8.74
BH-053	13.50	14.00	1.28	1.95		0.980	8.88
BH-059	3.50	4.00	2.24	3.00		0.690	8.96
BH-069	4.00	4.50	4.82	2.70		0.740	8.90
BH-069	20.00	20.50	1.06	2.00		0.910	8.53
BH-086	7.50	8.00	0.91	1.90		1.010	9.12
BH-107	4.00	4.50	4.73	2.85		0.600	8.89
BH-114	11.00	11.50	0.72	1.20		0.950	9.04
BH-119	8.50	9.00	0.40	0.70		0.690	8.79
BH-119	26.00	26.50	1.15	2.00		1.110	8.83
BH-139	6.00	6.50	0.75	1.25		1.080	8.94
BH-139	10.00	10.50	1.51	2.14		1.130	8.91
BH-139	22.00	22.50	3.02	2.05		0.850	8.56
BH-151	15.50	16.00	1.96	2.45		1.360	8.66
BH-157	20.00	20.50	0.95	1.60		1.010	9.01
BH-157	24.00	24.50	1.48	2.10		0.910	8.91
BH-173	28.00	28.40	1.12	1.75		1.120	8.89
BH-180	16.00	16.50	0.67	1.20		0.240	8.76
BH-273	4.50	5.00	1.86	2.55		0.850	9.03
BH-064	18.00	18.50	0.52	1.23		0.850	8.76
BH-130	12.00	12.50	0.99	2.32		0.532	8.52
BH-169	5.50	6.00	1.13	2.75		0.455	8.41
BH-169	15.50	16.00	1.27	2.76		1.064	8.53
BH-186	17.50	18.00	1.13	2.12		1.090	8.46

TITLE : SOIL CHEMICAL TEST RESULTS

	PROJECT: SOUTH ALUMINUM SMELTER PLANT	FIG. No.: 1
	CLIENT : NFC	PROJ. No. : 1347

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Field Investigation Data			Sulphate Content			Water Soluble Cl ⁻ 1 : 2 (%)	pH at 25° C
Boring No.	Depth (m)		Total SO ₃ ⁻² (%)	SO ₃ ⁻² in 2:1 Aqueous Extract (gr/lit)			
	From	To					
BH-216	22.00	22.50	1.23	2.25		0.970	8.00
BH-277	14.00	14.50	0.52	1.85		0.961	8.67
BH-286	27.50	28.00	1.17	2.84		1.124	8.42
BH-320	4.00	4.50	1.14	2.10		1.064	8.28
BH-329	32.00	32.50	1.33	2.58		1.004	8.15
BH-329	4.00	4.50	0.65	1.45		0.824	8.23
BH-048	7.50	7.90	1.23	1.72		0.669	8.25
BH-048	17.50	17.95	0.98	1.68		0.987	8.34
BH-048	25.00	25.45	0.86	1.71		0.824	8.27
BH-048	40.00	40.25	1.13	1.98		0.850	8.19
BH-048	32.50	32.85	2.89	2.06		0.789	8.15
BH-222	18.00	18.50	1.83	2.37		0.987	8.48
BH-286	33.50	34.00	2.25	2.55		1.304	8.18
BH-329	24.00	24.50	1.44	2.71		1.098	8.26

TITLE : SOIL CHEMICAL TEST RESULTS

	PROJECT: SOUTH ALUMINUM SMELTER PLANT	FIG. No.: 2
	CLIENT : NFC	PROJ. No. : 1347

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Sample No.	T.D.S ppm	E _c μmhos/cm	Cl ⁻ ppm	pH	SO ₄ ⁻² ppm
BH-009	58070	70700	33678	7.29	5748
BH-082	66330	80400	32348	7.43	7126
BH-100	69120	85300	38995	7.29	5875
BH-124	52140	65200	26588	7.15	5455
BH-287	98200	113000	53618	7.27	7373
BH-291	76620	93400	41654	7.44	6544
BH-329	19255	26744	8862	7.16	3848

TITLE : WATER CHEMICAL TEST RESULTS

	PROJECT: SOUTH ALUMINUM SMELTER PLANT	FIG. No.: 3
	CLIENT : NFC	PROJ. No. : 1347

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