

LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100589

Report Date: 01/01/08
Date Received: 10/11/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	mmhos/cm	%	s_u_	meq/L	meq/L	meq/L	unitless	%	%	%	Results
C07100589-001	SHOB-101	0-2.5	0.68	100	7.6	0.8	1.0	5.5	5.79	6.0	44	50	SiC
C07100589-002	SHOB-101	2.5-5	7.2	100	7.4	24.8	58.3	42.2	6.55	2.0	41	57	SiC
C07100589-003	SHOB-101	5-7.5	8.5	83	3.3	22.2	48.9	66.5	11.2	58	23	19	SL
C07100589-004	SHOB-101	7.5-10	6.0	120	3.4	22.8	17.6	43.4	9.66	76	16	8.0	SL
C07100589-005	SHOB-101	10-12.5	2.9	100	3.9	6.4	6.6	21.2	8.30	16	34	50	C
C07100589-006	SHOB-101	12.5-15	2.3	100	4.8	4.6	4.9	15.1	6.92	2.0	48	50	SiC
C07100589-007	SHOB-101	15-17.5	2.3	100	8.1	5.1	6.9	16.5	6.73	< 1.0	46	54	SiC
C07100589-008	SHOB-101	17.5-20	3.3	130	7.7	11.0	13.4	17.7	5.05	6.00	42	50	SiC
C07100589-009	SHOB-101	20-25	3.8	100	6.4	11.5	15.6	22.1	6.41	8.0	42	50	SiC
C07100589-010	SHOB-101	25-30	5.5	81	6.2	21.8	29.2	32.4	6.41	50	22	28	SCL
C07100589-011	SHOB-101	30-35	2.5	63	7.9	5.2	6.1	17.2	7.22	12	68	20	SiL
C07100589-012	SHOB-101	35-40	1.9	100	8.2	2.8	3.0	15.0	8.80	2.0	54	44	SiC
C07100589-013	SHOB-101	35-40(B)	1.9	81	8.2	1.9	2.4	15.5	10.6	13	57	30	SiCL
C07100589-014	SHOB-101	40-45	1.9	110	8.4	1	1.1	18.5	18.0	6.0	62	32	SiCL
C07100589-015	SHOB-101	45-50	1.9	120	8.7	0.7	0.5	18.9	24.6	6.0	64	30	SiCL
C07100589-016	SHOB-101	50-55	1.9	140	8.8	0.5	0.3	20.2	30.6	10	60	30	SiCL
C07100589-017	SHOB-101	55-60	2.9	78	8.9	0.6	0.5	31.0	41.4	54	30	16	SL
C07100589-018	SHOB-101	60-65	2.8	79	9.0	0.5	0.3	29.1	45.3	64	18	18	SL
C07100589-019	SHOB-101	65-70	3.0	65	8.9	0.5	0.4	31.8	46.9	70	14	16	SL
C07100589-020	SHOB-101	70-75	3.7	59	8.8	0.6	0.5	41.7	55.8	74	12	14	SL
C07100589-021	SHOB-101	75-80	3.8	62	7.7	0.6	0.8	41.2	48.5	76	13	11	SL
C07100589-022	SHOB-101	90-95	2.1	150	8.5	0.4	0.5	23.2	34.9	12	46	42	SiC
C07100589-023	SHOB-101	95-100	1.4	120	9.0	0.2	0.3	13.6	28.9	4.0	63	33	SiCL
C07100589-024	SHOB-101	100-105	1.5	130	9.2	0.1	0.1	16.5	46.7	4.0	62	34	SiCL
C07100589-025	SHOB-102	0-2.5	0.86	52	6.7	4.0	3.1	1.3	0.68				
C07100589-026	SHOB-102	2.5-5	3.9	50	8.1	5.3	14.6	29.9	9.48	16	59	25	SiL
C07100589-027	SHOB-102	5-7.5	6.4	50	8.1	12.5	21.5	57.0	13.8	31	49	20	L
C07100589-028	SHOB-102	7.5-10	9.5	81	8.1	21.2	39.7	93.2	16.9	9.0	75	16	SiL
C07100589-029	SHOB-102	10-12.5	9.6	100	8.0	21.7	39.6	92.1	16.6	< 1.0	44	56	SiC
C07100589-030	SHOB-102	12.5-15	6.8	110	8.1	10.2	20.3	60.3	15.4	2.0	64	34	SiCL
C07100589-031	SHOB-102	15-17.5	5.2	130	8.3	3.7	9.8	49.0	18.8	14	59	27	SiCL
C07100589-032	SHOB-102	17.5-20	6.2	63	8.1	7.5	15.0	58.7	17.5	6.0	64	30	SiCL
C07100589-033	SHOB-102	20-25	7.8	79	8.2	11.1	19.8	77.7	19.8	29	43	28	CL
C07100589-034	SHOB-102	25-30	7.5	110	8.1	8.9	15.3	80.9	23.3	30	43	27	CL
C07100589-035	SHOB-102	30-35	5.9	78	8.3	2.9	4.8	62.7	32.0	< 1.0	54	46	SiC
C07100589-036	SHOB-102	50-55	1.9	70	8.8	0.4	0.3	19.3	33.9	1.0	59	40	SiC
C07100589-037	SHOB-102	55-60	1.4	130	9.1	0.1	< 0.08	14.2	47.8	< 1.0	60	40	SiC
C07100589-038	SHOB-102	60-65	1.4	92	9.3	0.5	0.9	13.6	16.4	7.0	64	29	SiCL
C07100589-039	SHOB-103	0-2.5	1.0	59	7.8	2.8	4.1	4.2	2.24	14	46	40	SiC
C07100589-040	SHOB-103	2.5-5	1.8	41	7.9	4.2	6.5	9.2	3.99	54	24	22	SCL

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
 Project: South Heart Power 063-2174/063-2212
 Workorder: C07100589

Report Date: 01/01/08
 Date Received: 10/11/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	µmhos/cm	%	s_u	meq/L	meq/L	meq/L	unitless	%	%	%	Results
		Depth	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
C07100589-041	SHOB-103	5-7.5	5.5	44	7.2	24.3	34.8	28.5	5.24	54	24	22	SCL
C07100589-042	SHOB-103	7.5-10	13	62	3.7	21.7	96.2	115	15.0	56	28	16	SL
C07100589-043	SHOB-103	12.5-15	8.4	85	3.9	22.3	45.6	67.3	11.6	2.0	42	56	SiC
C07100589-044	SHOB-103	15-17.5	12	56	3.7	22.0	77.3	111	15.8	18	44	38	SiCL
C07100589-045	SHOB-103	17.5-20	7.9	84	4.4	22.5	42.0	64.8	11.4	2.0	56	42	SiC
C07100589-046	SHOB-103	20-25	8.3	120	6.7	20.2	39.5	72.8	13.3	2.0	33	65	C
C07100589-047	SHOB-103	25-30	7.9	83	6.5	12.4	25.2	77.4	17.8	30	34	36	CL
C07100589-048	SHOB-103	30-35	5.0	80	8.3	3.6	4.6	52.1	25.7	1.0	73	26	SiL
C07100589-049	SHOB-103	35-40	3.2	120	8.5	1.8	2.0	31.9	23.3	2.0	46	52	SiC
C07100589-050	SHOB-103	40-45	3.2	110	8.9	0.9	0.5	33.0	38.8	12	62	26	SiL
C07100589-051	SHOB-103	45-50	3.3	130	8.8	0.7	0.6	36.0	44.8	4.0	60	36	SiCL
C07100589-052	SHOB-103	50-55	2.6	140	9.0	0.5	0.3	27.2	40.8	8.0	56	36	SiCL
C07100589-053	SHOB-103	55-60	2.5	97	9.1	0.4	0.3	26.3	42.3	50	30	20	L
C07100589-054	SHOB-103	60-65	2.7	87	9.2	0.4	0.4	28.6	46.1	48	34	18	L
C07100589-055	SHOB-103	65-70	2.0	94	9.2	0.2	0.2	20.8	51.2	46	28	26	L
C07100589-056	SHOB-103	70-75	1.8	130	9.0	0.2	0.2	19.0	39.6	23	57	20	SiL
C07100589-057	SHOB-103	90-95	1.9	150	8.4	0.2	0.2	21.5	43.3	10	50	40	SiC
C07100589-058	SHOB-103	95-100	1.4	150	9.1	0.2	0.1	15.2	39.7	1.0	53	46	SiC
C07100589-059	SHOB-103	100-105	1.8	110	9.2	0.3	0.4	19.4	33.5	20	56	24	SIL

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100604

Report Date: 01/01/08
Date Received: 10/11/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	mmhos/cm	%	s_u_	meq/L	meq/L	meq/L	unitless	%	%	%	Results
C07100604-001	SHOB-104	0-2.5	0.67	84	7.5	2.6	2.9	1.9	1.15				
C07100604-002	SHOB-104	2.5-5	4.0	78	7.5	26.4	27.1	11.3	2.19	20	39	41	C
C07100604-003	SHOB-104	5-7.5	5.8	66	7.4	23.7	44.0	31.2	5.36	28	40	32	CL
C07100604-004	SHOB-104	7.5-10	8.2	67	6.9	24.1	65.5	57.7	8.62	28	43	29	CL
C07100604-005	SHOB-104	15-17.5	15	86	3.3	23.6	162	125	12.9	44	25	31	CL
C07100604-006	SHOB-104	17.5-20	9.9	82	3.6	22.2	83.0	73.6	10.2	6.0	49	45	SiC
C07100604-007	SHOB-104	20-25	6.4	110	5.9	22.2	33.3	45.4	8.63				
C07100604-008	SHOB-104	25-30	5.2	110	6.8	4.3	8.5	50.9	20.1	10	43	47	SiC
C07100604-009	SHOB-104	30-35	6.7	61	7.4	10.8	13.3	66.9	19.3	16	57	27	SiCL
C07100604-010	SHOB-104	35-40	4.9	72	8.5	3.1	3.9	52.2	27.9	8.0	65	27	SiCL
C07100604-011	SHOB-104	40-45	5.3	94	8.3	2.9	3.1	59.3	34.4	< 1.0	58	42	SiC
C07100604-012	SHOB-104	45-50	3.2	100	8.5	0.7	0.8	33.7	40.0	16	47	37	SiCL
C07100604-013	SHOB-104	50-55	2.6	130	8.8	0.4	0.4	27.7	45.6	18	47	35	SiCL
C07100604-014	SHOB-104	55-60	3.4	93	8.9	0.7	0.8	37.3	47.4	44	31	25	L
C07100604-015	SHOB-104	60-65	4.6	100	9.0	0.7	0.8	54.5	63.2	36	39	25	L
C07100604-016	SHOB-104	65-70	2.8	80	8.8	0.4	0.4	30.1	46.3	56	23	21	SCL
C07100604-017	SHOB-104	70-75	2.5	71	9.1	0.4	0.3	26.9	47.6	61	23	16	SL
C07100604-018	SHOB-104	75-80	2.6	64	9.1	0.4	0.3	26.7	43.7	68	15	17	SL
C07100604-019	SHOB-104	80-85	7.8	49	7.9	5.0	5.5	93.7	40.9	68	15	17	SL
C07100604-020	SHOB-104	100-105	2.3	150	8.3	0.3	0.3	23.9	43.2	2.0	41	57	SiC
C07100604-021	SHOB-104	105-110	1.7	120	8.7	0.1	0.1	18.1	57.4	< 1.0	53	47	SiC
C07100604-022	SHOB-105	0-2.5	2.9	64	6.9	26.3	12.1	2.2	0.51				
C07100604-023	SHOB-105	2.5-5	4.6	73	4.2	24.4	37.8	9.0	1.61	15	37	48	C
C07100604-024	SHOB-105	5-7.5	7.4	80	3.5	22.4	55.7	41.2	6.59	49	34	17	L
C07100604-025	SHOB-105	10-12.5	4.5	76	3.9	18.2	22.3	22.1	4.92	< 1.0	49	51	SiC
C07100604-026	SHOB-105	12.5-15	5.7	96	4.9	24.1	35.6	31.8	5.82	10	37	53	C
C07100604-027	SHOB-105	15-17.5	5.1	98	5.7	16.7	25.0	31.2	6.83	4.0	41	55	SiC
C07100604-028	SHOB-105	17.5-20	4.3	130	7.5	4.9	10.3	36.7	13.3	< 1.0	27	73	C
C07100604-029	SHOB-105	17.5-20(B)	4.8	130	7.3	4.2	9.0	45.2	17.6	< 1.0	29	71	C
C07100604-030	SHOB-105	20-25	8.1	100	6.5	12.1	22.5	78.3	18.8	6.0	29	65	C
C07100604-031	SHOB-105	25-30	4.0	81	8.1	2.5	2.9	40.0	24.3	< 1.0	62	38	SiCL
C07100604-032	SHOB-105	30-35	4.3	45	7.3	6.4	7.6	36.1	13.6	24	56	20	SiL
C07100604-033	SHOB-105	35-40	2.5	56	8.3	0.9	0.8	23.8	26.0	2.0	70	28	SiCL
C07100604-034	SHOB-105	40-45	2.8	84	7.8	0.8	0.8	27.4	30.7	3.0	47	50	SiC
C07100604-035	SHOB-105	45-50	5.6	21	7.7	11.1	7.5	52.8	17.3	66	24	10	SL
C07100604-036	SHOB-105	50-55	6.3	42	8.2	4.5	4.0	68.4	33.1	42	37	21	L
C07100604-037	SHOB-105	55-60	3.1	90	8.5	0.6	0.5	29.8	39.2	10	56	34	SiCL
C07100604-038	SHOB-105	60-65	2.7	110	8.5	0.3	0.3	28.1	49.7	4.0	60	36	SiCL
C07100604-039	SHOB-105	65-70	2.2	100	9.1	0.3	0.3	23.9	42.4	24	53	23	SiL
C07100604-040	SHOB-105	70-75	1.9	140	8.9	0.2	0.2	21.0	50.8	2.0	52	46	SiC

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
 Project: South Heart Power 063-2174/063-2212
 Workorder: C07100604

Report Date: 01/01/08
 Date Received: 10/11/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	mmhos/cm	%	s_u_	meq/L	meq/L	meq/L	unitless	%	%	%	Results
		Depth	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
C07100604-041	SHOB-105	75-80	2.1	110	8.5	0.4	0.3	24.0	42.2	2.0	64	34	SiCL
C07100604-042	SHOB-105	95-100	3.0	100	7.9	0.7	0.4	34.8	47.6	19	48	33	SiCL
C07100604-043	SHOB-105	100-105	1.8	110	8.8	0.3	0.2	21.5	41.4	< 1.0	64	36	SiCL
C07100604-044	SHOB-105	105-110	1.7	140	9.0	0.2	0.2	19.2	44.3	1.0	55	44	SiC



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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100614

Report Date: 01/01/08
Date Received: 10/10/07

Sample ID	Client Sample ID	Analysis	EC SatPst	Saturation	pH SatPst	Ca SatPst	Mg SatPst	Na SatPst	SAR	Sand	Silt	Clay	Texture
		Units	mmhos/cm	%	s_u	meq/L	meq/L	meq/L	unitless	%	%	%	Results
		Depth	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
C07100614-001	SHOB-106	0-2.5	0.48	69	7.4	2.0	1.8	1	0.71				
C07100614-002	SHOB-106	2.5-5	3.5	90	7.2	27.5	18.7	4.7	0.98	< 1.0	35	65	C
C07100614-003	SHOB-106	5-7.5	4.7	89	5.0	23.8	26.3	18.0	3.60	< 1.0	45	55	SiC
C07100614-004	SHOB-106	7.5-10	7.3	59	4.1	22.3	26.8	55.0	11.1	13	54	33	SiCL
C07100614-005	SHOB-106	10-12.5	8.3	89	4.7	23.8	27.3	70.3	13.9	3.0	54	43	SiC
C07100614-006	SHOB-106	12.5-15	5.8	110	5.5	11.1	15.8	45.6	12.4	1.0	58	41	SiC
C07100614-007	SHOB-106	15-17.5	3.4	120	7.1	3.4	5.5	26.6	12.6	< 1.0	53	47	SiC
C07100614-008	SHOB-106	17.5-20	2.7	130	7.6	2.0	3.2	20.8	12.9	< 1.0	53	47	SiC
C07100614-009	SHOB-106	20-25	3.9	100	7.1	4.8	7.7	30.3	12.1	7.0	38	55	C
C07100614-010	SHOB-106	25-30	2.4	94	8.2	1.7	1.9	20.0	14.9	2.0	59	39	SiCL
C07100614-011	SHOB-106	30-35	2.8	61	8.1	1.3	1.6	25.0	20.7	< 1.0	73	27	SiCL
C07100614-012	SHOB-106	35-40	2.2	90	7.7	0.5	0.6	21.5	28.3	4.0	46	50	SiC
C07100614-013	SHOB-106	40-45	2.2	76	8.5	0.3	0.3	20.9	37.5	< 1.0	65	35	SiCL
C07100614-014	SHOB-106	45-50	2.8	87	8.4	0.4	0.4	25.6	39.7	4.0	55	41	SiC
C07100614-015	SHOB-106	50-55	1.8	110	8.5	0.3	0.2	17.6	37.4	4.0	54	42	SiC
C07100614-016	SHOB-106	55-60	1.6	120	8.7	0.2	0.1	16.5	42.2	4.0	67	29	SiCL
C07100614-017	SHOB-106	60-65	1.4	140	8.9	0.2	0.1	13.8	36.2	15	46	39	SiCL
C07100614-018	SHOB-106	65-70	1.6	130	9.1	0.2	0.1	15.2	39.0	13	54	33	SiCL
C07100614-019	SHOB-106	70-75	1.9	110	7.8	0.2	0.2	20.1	45.0	21	44	35	CL
C07100614-020	SHOB-106	90-95	1.2	190	8.3	0.1	< 0.08	10.7	34.3	9.0	42	49	SiC
C07100614-021	SHOB-106	95-100	0.99	230	9.2	0.1	< 0.08	9.7	34.8	1.0	45	54	SiC
C07100614-022	SHOB-106	100-105	1.4	140	9.2	0.1	< 0.08	13.3	43.7	13	64	23	SiL
C07100614-023	SHOB-107	0-2.5	0.49	48	6.9	1.3	1.4	2.0	1.70	33	34	33	CL
C07100614-024	SHOB-107	2.5-5	0.95	68	8.0	1.1	1.9	6.3	5.12	25	34	41	C
C07100614-025	SHOB-107	5-7.5	5.8	54	8.3	8.2	32.3	39.0	8.66	43	32	25	L
C07100614-026	SHOB-107	7.5-10	8.6	53	8.0	21.5	68.7	54.6	8.13	43	32	25	L
C07100614-027	SHOB-107	10-12.5	11	82	5.2	26.0	99.7	74.6	9.41				
C07100614-028	SHOB-107	17.5-20	6.8	87	4.1	21.6	36.4	42.3	7.85	23	32	45	C
C07100614-029	SHOB-107	20-25	4.6	100	5.5	15.5	21.7	23.2	5.38	9.0	42	49	SiC
C07100614-030	SHOB-107	25-30	4.7	92	7.8	8.9	13.9	34.1	10.1	29	38	33	CL
C07100614-031	SHOB-107	30-35	4.3	120	8.4	3.0	3.9	38.1	20.6	5.0	60	35	SiCL
C07100614-032	SHOB-107	35-40	2.3	110	8.4	0.5	0.5	20.6	29.5	< 1.0	59	41	SiC
C07100614-033	SHOB-107	40-45	2.2	130	8.5	0.4	0.4	19.9	32.3	< 1.0	39	61	C
C07100614-034	SHOB-107	45-50	9.1	89	7.0	4.6	6.2	109	46.8	57	22	21	SCL
C07100614-035	SHOB-107	50-55	3.4	100	7.2	0.6	0.7	35.5	43.6	16	37	47	C
C07100614-036	SHOB-107	55-60	2.4	100	8.6	0.3	0.3	25.4	44.4	9.0	54	37	SiCL
C07100614-037	SHOB-107	60-65	3.0	100	8.7	1.0	0.9	32.3	32.9	3.0	70	27	SiCL
C07100614-038	SHOB-107	65-70	3.8	94	8.0	1.6	1.3	41.2	34.0	< 1.0	65	35	SiCL
C07100614-039	SHOB-107	70-75	2.6	110	8.7	0.5	0.4	27.2	39.5	7.0	62	31	SiCL
C07100614-040	SHOB-107	75-80	1.5	150	8.8	0.2	0.1	15.6	39.6	3.0	50	47	SiC

TRACK# C07100614

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100614

Report Date: 01/01/08
Date Received: 10/10/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	mmhos/cm	%	s_u	meq/L	meq/L	meq/L	unitless	%	%	%	
		Depth	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
C07100614-041	SHOB-107	80-85	1.7	160	8.7	0.2	0.2	18.3	45.4	3.0	46	51	SiC
C07100614-042	SHOB-107	105-110	2.4	110	7.1	0.4	0.3	25.7	44.2	35	38	27	CL
C07100614-043	SHOB-107	110-115	2.6	64	8.0	0.4	0.4	27.3	43.3	48	32	20	L
C07100614-044	SHOB-107	115-120	3.2	48	8.5	0.4	0.4	35.3	55.6	75	14	11	SL
C07100614-045	SHOB-108	0-2.5	0.59	77	7.2	2.5	1.8	2.2	1.51				
C07100614-046	SHOB-108	2.5-5	8.6	91	8.0	23.0	74.4	57.6	8.25	< 1.0	53	47	SiC
C07100614-047	SHOB-108	5-7.5	9.8	110	7.8	21.8	86.5	71.2	9.67	< 1.0	47	53	SiC
C07100614-048	SHOB-108	7.5-10	11	91	7.8	20.4	112	84.8	10.4	< 1.0	53	47	SiC
C07100614-049	SHOB-108	10-12.5	12	89	8.1	22.3	118	95.6	11.4	< 1.0	51	49	SiC
C07100614-050	SHOB-108	12.5-15	7.1	120	7.7	10.1	38.6	57.6	11.7	< 1.0	32	68	C
C07100614-051	SHOB-108	15-17.5	8.2	100	7.2	22.1	51.4	60.2	9.92	< 1.0	41	59	SiC
C07100614-052	SHOB-108	17.5-20	10	74	4.5	24.3	76.4	82.8	11.7	25	27	48	C
C07100614-053	SHOB-108	20-25	6.3	76	7.8	10.5	10.9	59.8	18.3	1.0	59	40	SiC
C07100614-054	SHOB-108	25-30	4.4	72	8.2	2.8	3.4	41.7	23.6	13	61	26	SiL
C07100614-055	SHOB-108	30-35	2.8	120	8.4	0.8	0.9	27.6	30.3	3.0	52	45	SiC
C07100614-056	SHOB-108	35-40	4.7	53	8.5	3.2	3.7	45.2	24.4	33	46	21	L
C07100614-057	SHOB-108	40-45	3.9	120	7.6	1.1	1.3	38.4	35.2	9.0	50	41	SiC
C07100614-058	SHOB-108	45-50	2.6	120	9.0	0.3	0.3	24.5	45.6	25	48	27	CL
C07100614-059	SHOB-108	50-55	2.2	130	8.8	0.2	0.2	21.4	44.3	19	41	40	SiC
C07100614-060	SHOB-108	55-60	1.9	140	9.1	0.2	0.2	20.0	42.6	7.0	60	33	SiCL
C07100614-061	SHOB-108	60-65	2.7	130	9.1	0.3	0.4	26.9	47.2	15	55	30	SiCL
C07100614-062	SHOB-108	85-90	1.6	140	8.3	0.2	0.2	18.3	40.5	9.0	58	33	SiCL
C07100614-063	SHOB-108	90-95	3.4	62	8.7	0.8	0.9	34.2	37.8	64	21	15	SL
C07100614-064	SHOB-108	95-100	2.9	55	8.8	0.4	0.5	30.1	45.6	76	13	11	SL

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
 Project: South Heart Power 063-2174/063-2212
 Workorder: C07100636

Report Date: 01/01/08
 Date Received: 10/10/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	SatPst	mmhos/cm	%	s_u	meq/L	meq/L	meq/L	unitless	%	%	%
		Depth	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
C07100636-001	SHOB-109	0-2.5	0.81	31	5.5	3.2	2.4	2.1	1.24	65	21	14	SL
C07100636-002	SHOB-109	2.5-5	0.40	32	6.6	1.4	1.0	1.1	1.02	83	12	5.0	LS
C07100636-003	SHOB-109	5-7.5	0.31	31	6.8	1.4	0.7	0.8	0.77	89	8.0	3.0	S
C07100636-004	SHOB-109	7.5-10	0.24	33	7.1	1	0.7	0.6	0.62	87	9.0	4.0	LS
C07100636-005	SHOB-109	10-12.5	2.9	30	7.6	7.1	5.5	20.3	8.08	86	9.0	5.0	LS
C07100636-006	SHOB-109	12.5-15	0.34	30	7.5	1.2	1.0	0.7	0.70	89	7.0	4.0	S
C07100636-007	SHOB-109	15-17.5	0.38	32	7.6	1.5	1.3	0.8	0.68	90	6.0	4.0	S
C07100636-008	SHOB-109	17.5-20	0.32	29	7.6	1.3	0.9	0.8	0.74	86	9.0	5.0	LS
C07100636-009	SHOB-109	20-25	0.64	31	7.6	1.9	1.3	3.2	2.51	85	9.0	6.0	LS
C07100636-010	SHOB-109	25-30	0.73	31	7.6	2.8	1.7	2.8	1.88	77	16	7.0	SL
C07100636-011	SHOB-109	30-35	0.88	32	7.7	2.5	1.5	4.8	3.35	85	9.0	6.0	LS
C07100636-012	SHOB-109	35-40	1.5	30	7.5	8.2	4.4	5.2	2.06	87	7.0	6.0	LS
C07100636-013	SHOB-109	40-45	1.0	32	7.4	3.3	2.0	5.4	3.33	71	18	11	SL
C07100636-014	SHOB-109	45-50	0.85	33	7.4	3.6	1.9	3.0	1.81	71	19	10	SL
C07100636-015	SHOB-109	50-55	1.1	30	7.6	5.3	3.0	3.9	1.91	71	19	10	SL
C07100636-016	SHOB-109	55-60	1.9	30	7.6	9.9	5.8	7.7	2.77	73	18	9.0	SL
C07100636-017	SHOB-109	60-65	2.0	36	7.4	12.0	8.0	5.4	1.69	61	26	13	SL
C07100636-018	SHOB-109	65-70	1.5	37	7.3	4.5	3.5	8.1	4.08	72	16	12	SL
C07100636-019	SHOB-109	90-95	1.4	130	8.2	0.4	0.6	14.0	19.1	6.0	56	38	SiCL
C07100636-020	SHOB-109	95-100	0.95	180	8.9	0.09	0.09	9.4	31.8	3.0	55	42	SiC
C07100636-021	SHOB-110	0-2.5	0.84	80	7.0	6.8	1.3	1	0.48	7.0	55	44	SiC
C07100636-022	SHOB-110	2.5-5	7.4	59	4.4	19.5	45.7	54.3	9.51				
C07100636-023	SHOB-110	5-7.5	4.9	130	6.0	9.9	19.8	35.4	9.18	< 1.0	56	44	SiC
C07100636-024	SHOB-110	7.5-10	8.3	79	7.4	20.5	39.4	69.8	12.8	9.0	65	26	SiL
C07100636-025	SHOB-110	10-12.5	8.8	68	7.8	18.6	37.4	83.0	15.7	15	64	21	SiL
C07100636-026	SHOB-110	12.5-15	9.1	77	8.0	21.2	37.4	85.3	15.8	17	59	24	SiL
C07100636-027	SHOB-110	15-17.5	8.8	69	8.1	22.4	29.9	85.1	16.6	34	44	22	L
C07100636-028	SHOB-110	17.5-20	6.8	83	8.3	4.4	7.9	72.4	29.2	43	37	20	L
C07100636-029	SHOB-110	20-25	12	84	7.1	18.0	28.2	155	32.2	32	40	28	CL
C07100636-030	SHOB-110	25-30	5.1	71	8.6	2.0	2.9	53.2	34.1	6.0	76	18	SiL
C07100636-031	SHOB-110	30-35	3.8	83	8.3	1.1	1.3	37.9	35.1	3.0	61	36	SiCL
C07100636-032	SHOB-110	35-40	3.8	88	8.5	1	1	40.4	40.8	7.0	65	28	SiCL
C07100636-033	SHOB-110	40-45	3.5	59	8.5	1.4	1.1	34.5	30.8	32	49	19	L
C07100636-034	SHOB-110	45-50	2.2	110	8.7	0.3	0.3	21.3	37.2	7.0	59	34	SiCL
C07100636-035	SHOB-110	50-55	1.7	140	9.2	0.2	0.1	16.6	43.9	7.0	66	27	SiCL
C07100636-036	SHOB-110	55-60	1.4	200	9.2	0.1	< 0.08	13.3	45.6	< 1.0	51	49	SiC
C07100636-037	SHOB-110	60-65	1.9	110	9.3	0.1	0.1	19.9	53.9	49	26	25	SCL
C07100636-038	SHOB-110	65-70	2.6	85	9.2	0.2	0.2	26.7	60.3	60	19	21	SCL
C07100636-039	SHOB-110	70-75	3.8	86	8.5	0.6	0.4	43.1	62.6	63	18	19	SL
C07100636-040	SHOB-110	90-95	1.6	150	8.8	0.2	0.2	18.5	44.2	5.0	60	35	SiCL

TRACK# C07100636

LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
 Project: South Heart Power 063-2174/063-2212
 Workorder: C07100636

Report Date: 01/01/08
 Date Received: 10/10/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	SatPst	%	SatPst	meq/L	meq/L	meq/L	unitless	%	%	%	Results
		Depth	Results	Results	s_u Results	Results	Results	Results	Results	Results	Results	Results	Results
C07100636-041	SHOB-110	95-100	1.5	120	9.1	0.1	0.09	15.2	45.1	3.0	74	23	SiL
C07100636-042	SHOB-110	100-105	1.3	160	9.5	0.1	< 0.08	12.2	46.2	10	64	26	SiL
C07100636-043	SHOB-111	0-2.5	0.81	71	8.0	0.6	0.4	7.9	11.0	1.0	54	45	SiC
C07100636-044	SHOB-111	2.5-5	7.7	87	8.3	13.4	26.7	70.1	15.6	1.0	53	46	SiC
C07100636-045	SHOB-111	5-7.5	13	92	8.5	26.0	63.0	155	23.2	3.0	50	47	SiC
C07100636-046	SHOB-111	7.5-10	12	110	8.5	22.4	45.2	128	22.0	2.0	52	46	SiC
C07100636-047	SHOB-111	10-12.5	13	81	8.2	22.7	44.1	144	24.8	< 1.0	55	45	SiC
C07100636-048	SHOB-111	12.5-15	10	100	8.3	18.4	29.0	110	22.5	< 1.0	55	45	SiC
C07100636-049	SHOB-111	15-17.5	6.2	160	8.2	7.7	9.5	62.4	21.3	< 1.0	58	42	SiC
C07100636-050	SHOB-111	17.5-20	9.6	96	8.1	17.7	20.4	102	23.3	25	50	25	SiL
C07100636-051	SHOB-111	20-25	9.3	120	8.1	17.4	20.1	97.8	22.6	21	48	31	CL
C07100636-052	SHOB-111	25-30	6.4	140	8.2	4.5	8.9	64.4	24.9	21	44	35	CL
C07100636-053	SHOB-111	30-35	13	57	8.2	24.4	42.4	150	25.9	59	18	23	SCL
C07100636-054	SHOB-111	35-40	14	50	6.7	24.0	52.1	176	28.5	73	12	15	SL
C07100636-055	SHOB-111	55-60	3.7	150	7.9	0.7	0.7	38.2	46.9	23	48	29	CL
C07100636-056	SHOB-111	60-65	1.9	200	9.1	0.2	0.2	19.6	45.6	< 1.0	57	43	SiC
C07100636-057	SHOB-111	65-70	2.3	90	9.3	0.2	0.1	22.9	53.6	31	52	17	SiL

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
 Project: South Heart Power 063-2174/063-2212
 Workorder: C07100670

Report Date: 01/01/08
 Date Received: 10/10/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture	
		Units	SatPst	%	SatPst	meq/L	meq/L	meq/L	unitless	%	%	%		
		Depth	mmhos/cm	%	s_u	meq/L	meq/L	meq/L	unitless	%	%	%	Results	
C07100670-001	SHOB-112	0-2.5	1.4	62	6.9	9.2	5.2	1.4	0.50	7.0		47	46	SIC
C07100670-002	SHOB-112	2.5-5	3.2	73	7.5	28.7	16.8	3.6	0.76	< 1.0		50	50	SIC
C07100670-003	SHOB-112	5-7.5	5.2	110	7.7	22.7	40.9	20.0	3.54	< 1.0		48	52	SIC
C07100670-004	SHOB-112	7.5-10	8.7	78	5.1	23.1	80.2	55.8	7.76	9.0		42	49	SIC
C07100670-005	SHOB-112	10-12.5	6.4	79	5.2	20.7	43.8	35.1	6.18	< 1.0		62	38	SiCL
C07100670-006	SHOB-112	12.5-15	5.9	110	7.0	24.0	42.1	31.0	5.40	< 1.0		41	59	SIC
C07100670-007	SHOB-112	15-17.5	5.7	66	7.2	17.8	37.5	33.6	6.39	< 1.0		66	34	SiCL
C07100670-008	SHOB-112	17.5-20	6.2	57	7.2	17.1	42.4	36.5	6.69	3.0		73	24	SIL
C07100670-009	SHOB-112	20-25	6.7	49	7.6	24.0	46.5	37.7	6.35	13		67	20	SIL
C07100670-010	SHOB-112	25-30	6.6	39	7.7	22.7	41.2	37.6	6.64	33		55	12	SIL
C07100670-011	SHOB-112	30-35	4.8	31	7.6	22.9	27.0	23.4	4.68	83		11	6.0	LS
C07100670-012	SHOB-112	35-40	5.0	31	7.5	21.9	24.3	26.7	5.56	85		10	5.0	LS
C07100670-013	SHOB-112	40-45	3.6	33	7.8	11.3	13.2	21.2	6.06	85		9.0	6.0	LS
C07100670-014	SHOB-112	45-50	2.5	34	8.0	3.8	5.2	18.4	8.67	85		9.0	6.0	LS
C07100670-015	SHOB-112	50-55	2.2	34	7.9	5.4	6.8	13.4	5.41	83		10	7.0	LS
C07100670-016	SHOB-112	55-60	1.6	33	7.8	5.8	6.6	7.1	2.87	79		13	8.0	LS
C07100670-017	SHOB-112	60-65	1.9	33	7.7	9.5	8.1	6.0	2.02					
C07100670-018	SHOB-112	65-70	1.0	32	7.7	4.2	3.3	3.5	1.80	85		9.0	6.0	LS
C07100670-019	SHOB-112	70-75	1.0	35	7.7	4.5	3.5	3.3	1.65	83		11	6.0	LS
C07100670-020	SHOB-112	75-80	1.2	34	7.7	6.2	4.8	3.6	1.55	84		11	5.0	LS
C07100670-021	SHOB-112	80-85	3.2	30	7.6	24.2	17.2	5.3	1.15	80		13	7.0	LS
C07100670-022	SHOB-112	85-90	2.4	31	7.3	14.6	11.8	5.6	1.54	85		10	5.0	LS
C07100670-023	SHOB-112	110-115	1.6	130	8.4	0.6	0.6	15.0	19.6	1.0		59	40	SIC
C07100670-024	SHOB-112	115-120	1.7	140	8.4	0.4	0.5	18.2	27.9	1.0		46	53	SIC
C07100670-025	SHOB-113	0-2.5	1.3	59	8.0	0.9	1	12.0	12.2	21		49	30	CL
C07100670-026	SHOB-113	2.5-5	12	78	8.4	22.2	55.8	130	20.9	23		45	32	CL
C07100670-027	SHOB-113	5-7.5	15	100	8.3	23.1	94.3	178	23.2	7.0		52	41	SIC
C07100670-028	SHOB-113	7.5-10	15	110	8.2	23.1	104	182	22.9	< 1.0		47	53	SIC
C07100670-029	SHOB-113	10-12.5	12	88	6.9	26.0	48.7	126	20.6					
C07100670-030	SHOB-113	15-17.5	11	94	4.4	12.6	23.8	123	28.8					
C07100670-031	SHOB-113	17.5-20	6.4	120	6.1	9.4	13.4	61.2	18.1	1.0		49	50	SiC
C07100670-032	SHOB-113	20-25	5.1	120	8.7	2.0	2.7	52.1	33.8	3.0		67	30	SiCL
C07100670-033	SHOB-113	25-30	3.7	92	8.7	1.4	1.7	38.1	28.8	17		63	20	SiL
C07100670-034	SHOB-113	30-35	3.2	83	8.8	1.1	1.2	31.5	29.4	37		43	20	L
C07100670-035	SHOB-113	35-40	3.4	85	8.7	1.3	1.4	33.2	28.5	21		59	20	SIL
C07100670-036	SHOB-113	40-45	6.2	89	7.4	3.9	4.5	65.5	31.8	20		46	34	SiCL
C07100670-037	SHOB-113	45-50	4.6	90	7.5	2.4	2.9	47.6	29.3	11		51	38	SiCL
C07100670-038	SHOB-113	50-55	3.1	93	8.5	0.9	1.0	31.7	32.0	< 1.0		64	36	SiCL
C07100670-039	SHOB-113	55-60	3.6	63	8.5	1.1	1.2	35.6	33.5	12		67	21	SiL
C07100670-040	SHOB-113	60-65	2.9	100	8.6	0.5	0.5	27.9	38.4	2.0		71	27	SiCL

TRACK# C07100670

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100670

Report Date: 01/01/08
Date Received: 10/10/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	SatPst	%	SatPst	meq/L	meq/L	meq/L	unitless	%	%	%	Results
		Depth	mmhos/cm	%	s_u_	meq/L	meq/L	meq/L	unitless	%	%	%	Results
C07100670-041	SHOB-113	65-70	2.5	120	8.8	0.5	0.4	24.5	36.6	6.0	65	29	SiCL
C07100670-042	SHOB-113	70-75	2.3	130	8.9	0.3	0.2	22.8	46.0	12	60	28	SiCL
C07100670-043	SHOB-113	75-80	2.9	110	8.9	0.4	0.5	30.9	47.2	24	52	24	SiL
C07100670-044	SHOB-113	80-85	2.7	120	9.1	0.3	0.3	28.4	49.9	6.0	66	28	SiCL
C07100670-045	SHOB-113	85-90	2.5	120	9.0	0.3	0.3	27.3	51.1	20	52	28	SiCL
C07100670-046	SHOB-113	90-95	5.5	77	7.7	1.6	1.9	61.6	46.8	46	35	19	L
C07100670-047	SHOB-113	110-115	2.4	140	8.5	0.3	0.3	27.0	46.8	7.0	63	30	SiCL
C07100670-048	SHOB-113	115-120	1.8	140	9.2	0.2	0.2	18.9	47.3	8.0	65	27	SiCL

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100741

Report Date: 01/01/08
Date Received: 10/10/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	SatPst mmhos/cm	%	SatPst s_u	SatPst meq/L	SatPst meq/L	SatPst meq/L	unitless	%	%	%	Results
		Depth	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
C07100741-001	SHOB-114	0-5	0.84	77	7.6	2.0	3.0	4.6	2.90	1.0	49	50	SiC
C07100741-002	SHOB-114	5-7.5	2.3	84	7.9	3.8	5.6	17.7	8.17	1.0	48	51	SiC
C07100741-003	SHOB-114	7.5-10	6.0	78	7.9	24.2	27.0	43.6	8.62	1.0	50	49	SiC
C07100741-004	SHOB-114	10-12.5	5.4	79	7.8	18.5	20.2	42.0	9.56	3.0	50	47	SiC
C07100741-005	SHOB-114	12.5-15	5.8	81	7.9	26.3	25.2	39.2	7.73	< 1.0	51	49	SiC
C07100741-006	SHOB-114	15-17.5	5.7	86	7.8	26.6	24.0	34.1	6.78	< 1.0	45	55	SiC
C07100741-007	SHOB-114	17.5-20	4.3	91	7.9	11.6	12.7	28.8	8.27	< 1.0	45	55	SiC
C07100741-008	SHOB-114	20-25	3.8	94	7.8	9.3	10.0	24.7	7.94	< 1.0	41	59	SiC
C07100741-009	SHOB-114	25-30	5.4	30	7.6	28.3	23.6	25.6	5.03	69	20	11	SL
C07100741-010	SHOB-114	30-35	4.8	30	7.6	23.4	20.4	23.4	5.00	68	21	11	SL
C07100741-011	SHOB-114	35-40	4.4	32	7.6	26.1	24.9	14.8	2.94	78	15	7.0	LS
C07100741-012	SHOB-114	40-45	3.9	31	7.7	12.8	16.7	21.8	5.67	75	16	9.0	SL
C07100741-013	SHOB-114	60-65	1.9	130	7.9	1.2	1.6	19.2	16.3	6.0	65	29	SiCL
C07100741-014	SHOB-114	65-70	1.9	95	8.6	0.9	1.2	19.2	18.5	9.0	70	21	SiL
C07100741-015	SHOB-114	70-75	3.0	49	8.6	1.9	2.3	30.5	20.9	49	36	15	L
C07100741-016	SHOB-115	0-2.5	0.73	70	6.9	3.0	3.4	1	0.55	9.0	46	45	SiC
C07100741-017	SHOB-115	2.5-5	0.70	86	8.0	0.8	1.1	5.7	5.89	3.0	46	51	SiC
C07100741-018	SHOB-115	5-7.5	4.5	82	7.9	12.1	19.0	31.8	8.06	3.0	48	49	SiC
C07100741-019	SHOB-115	7.5-10	4.5	71	8.0	7.0	11.8	40.3	13.2	3.0	56	41	SiC
C07100741-020	SHOB-115	10-12.5	5.6	65	8.1	23.3	27.9	37.8	7.49	5.0	52	43	SiC
C07100741-021	SHOB-115	12.5-15	5.4	81	7.8	25.8	25.9	32.0	6.29	5.0	48	47	SiC
C07100741-022	SHOB-115	15-17.5	3.7	65	7.9	11.4	15.3	22.6	6.19	10	52	38	SiCL
C07100741-023	SHOB-115	17.5-20	2.9	38	7.8	8.4	10.1	18.6	6.11				
C07100741-024	SHOB-115	20-25	1.2	30	8.0	3.7	3.2	5.9	3.15	85	9.0	6.0	LS
C07100741-025	SHOB-115	25-30	1.4	46	7.9	5.6	4.5	6.3	2.79	42	33	25	L
C07100741-026	SHOB-115	30-35	1.2	75	7.7	2.2	2.4	8.5	5.68	15	60	25	SiL
C07100741-027	SHOB-115	35-40	1.5	94	7.8	1.4	1.7	13.3	10.7	11	58	31	SiCL
C07100741-028	SHOB-115	40-45	1.4	100	8.5	0.6	0.7	13.7	16.7	9.0	63	28	SiCL
C07100741-029	SHOB-115	45-50	1.2	120	8.5	0.4	0.4	12.8	19.8	9.0	50	41	SiC
C07100741-030	SHOB-115	50-55	1.3	110	8.7	0.4	0.4	13.5	21.4	15	49	36	SiCL
C07100741-031	SHOB-115	55-60	1.8	81	8.4	0.8	1.2	17.6	17.7	31	44	25	L
C07100741-032	SHOB-115	75-80	3.0	80	6.9	1.9	2.4	31.0	21.4	64	18	18	SL
C07100741-033	SHOB-115	80-85	1.3	120	8.7	0.2	0.2	13.8	31.3	4.0	56	40	SiC
C07100741-034	SHOB-115	85-90	1.6	140	8.5	0.3	0.3	16.6	31.2	2.0	44	54	SiC

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
 Project: South Heart Power 063-2174/063-2212
 Workorder: C07100496

Report Date: 01/01/08
 Date Received: 10/08/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	SAR	Ca	Mg	Na	Sand	Silt	Clay	Texture
		Units	SatPst	SatPst	SatPst	unitless	SatPst	SatPst	SatPst	SatPst	%	%	%
		Depth	mmhos/cm	%	s_u_	Results	meq/L	meq/L	meq/L	Results	Results	Results	Results
C07100496-001	SHOB-116	0-2.5	1.84	55.1	7.5	1.70	12	4.0	4.7	36	47	17	L
C07100496-002	SHOB-116	2.5-5	1.53	99.4	8.4	12.8	1.3	1.1	14	13	47	40	SiC - SiCL
C07100496-003	SHOB-116	5-7.5	8.61	110	8.2	17.4	21	21	80	20	48	32	SiCL
C07100496-004	SHOB-116	7.5-10	9.13	101	8.1	19.0	22	16	83	19	47	34	SiCL
C07100496-005	SHOB-116	10-12.5	3.10	112	8.5	27.8	1.1	0.88	28	25	47	28	CL
C07100496-006	SHOB-116	12.5-15	1.65	126	8.6	30.0	0.29	0.27	16	34	36	30	CL
C07100496-007	SHOB-116	17.5-20								49	29	22	L
C07100496-008	SHOB-116	20-25	0.92	42.8	7.7	5.88	1.7	0.87	6.7	53	26	21	SCL
C07100496-009	SHOB-116	25-30	1.02	98.8	7.6	4.47	2.8	1.4	6.5	17	35	48	C
C07100496-010	SHOB-116	30-35	0.66	102	7.6	3.15	1.8	1.1	3.7	13	37	50	C
C07100496-011	SHOB-116	35-40	0.68	81.5	7.5	3.30	2.0	1.0	4.0	37	25	38	CL
C07100496-012	SHOB-116	55-60	1.00	84.2	8.4	11.2	0.77	0.63	9.4	48	30	22	L
C07100496-013	SHOB-116	60-65	0.91	47.7	7.3	8.88	1.1	0.45	7.9	65	15	20	SL - SCL
C07100496-014	SHOB-116	65-70	0.76	94.8	7.8	12.8	0.40	0.26	7.3	43	25	32	CL
C07100496-015	SHOB-120	0-2.5								44	26	30	CL
C07100496-016	SHOB-120	2.5-5	0.43	47.7	8.0	1.03	1.4	2.2	1.4	56	22	22	SCL
C07100496-017	SHOB-120	5-7.5	0.37	47.4	8.4	1.04	0.37	2.6	1.3	75	17	8.0	SL
C07100496-018	SHOB-120	7.5-10	0.53	52.1	8.3	1.24	0.54	2.6	1.5	79	17	4.0	LS
C07100496-019	SHOB-120	10-12.5	0.73	49.0	8.4	1.16	1.6	4.5	2.0	78	19	3.0	LS
C07100496-020	SHOB-120	12.5-15	0.33	47.6	8.6	1.27	0.76	1.1	1.2	75	20	5.0	SL
C07100496-021	SHOB-120	15-17.5	0.25	50.1	7.1	1.36	0.68	0.71	1.1	83	13	4.0	LS
C07100496-022	SHOB-120	17.5-20	0.28	42.8	8.3	1.66	0.85	0.67	1.4	79	16	5.0	LS
C07100496-023	SHOB-120	20-25	0.27	43.0	8.4	1.94	0.68	0.49	1.5	82	15	3.0	LS
C07100496-024	SHOB-120	25-30	0.28	42.1	8.3	2.27	0.62	0.51	1.7	83	11	6.0	LS
C07100496-025	SHOB-120	30-35	0.73	51.4	8.0	8.30	0.65	0.56	6.4	75	15	10	SL
C07100496-026	SHOB-120	35-40	1.17	80.6	8.2	11.0	0.83	0.91	10	55	29	16	SL
C07100496-027	SHOB-120	40-45	1.66	110	8.5	12.1	1.4	1.3	14	21	47	32	CL
C07100496-028	SHOB-120	45-50	1.38	107	8.7	15.1	0.62	0.67	12	45	30	25	L
C07100496-029	SHOB-120	50-55	1.63	94.1	8.9	14.0	0.95	1.1	14	49	32	19	L
C07100496-030	SHOB-120	55-60	1.29	124	9.2	14.9	0.58	0.63	12	62	22	16	SL
C07100496-031	SHOB-120	60-65	1.62	54.4	7.6	12.0	1.4	1.5	14	73	15	12	SL
C07100496-032	SHOB-120	80-85	2.31	76.3	7.0	14.7	1.9	2.0	21	55	24	21	SCL
C07100496-033	SHOB-120	85-90	1.09	125	8.9	15.4	0.46	0.39	10	7.0	55	38	SiCL
C07100496-034	SHOB-120	90-95	1.10	127	9.0	17.7	0.40	0.34	11	6.0	55	39	SiCL
C07100496-035	SHOB-120	95-100	1.22	151	8.9	25.1	0.27	0.23	13	1.0	49	50	SiC
C07100496-036	SHOB-121	0-2.5	0.46	57.1	7.3	1.19	1.6	1.1	1.4	55	27	18	SL
C07100496-037	SHOB-121	2.5-5	0.44	46.6	7.7	0.89	1.6	2.0	1.2	63	21	16	SL
C07100496-038	SHOB-121	5-7.5	0.71	16.3	8.1	4.04	0.60	1.9	4.5	79	11	10	SL
C07100496-039	SHOB-121	7.5-10	3.92	49.7	8.2	10.3	4.2	12	29	48	38	14	L
C07100496-040	SHOB-121	10-12.5	6.44	67.1	7.9	6.95	23	31	36	24	52	24	SIL

TRACK# C07100496

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100496

Report Date: 01/01/08
Date Received: 10/08/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	SAR	Ca	Mg	Na	Sand	Silt	Clay	Texture
		Units	SatPst	SatPst	SatPst	unitless	SatPst	SatPst	SatPst	SatPst	%	%	%
		Depth	mmhos/cm	%	s_u	Results	meq/L	meq/L	meq/L	Results	Results	Results	Results
C07100496-041	SHOB-121	12.5-15	6.15	80.0	7.8	7.08	23	26	35	31	41	28	CL
C07100496-042	SHOB-121	15-17.5	6.78	87.4	7.7	9.09	24	26	45	40	26	34	CL
C07100496-043	SHOB-121	20-25	3.81	128	8.0	10.8	6.0	8.8	29	33	34	33	CL
C07100496-044	SHOB-121	25-30	4.33	106	8.0	11.0	9.0	10	34	40	30	30	CL
C07100496-045	SHOB-121	30-35	3.30	102	8.1	12.8	4.2	5.7	28	48	27	25	SCL
C07100496-046	SHOB-121	35-40	3.37	90.0	8.7	14.9	3.5	4.9	30	58	24	18	SL
C07100496-047	SHOB-121	40-45	3.08	111	8.7	14.1	3.2	4.2	27	40	36	24	L
C07100496-048	SHOB-121	45-50	3.09	88.6	8.6	12.7	4.1	5.0	27	57	26	17	SL
C07100496-049	SHOB-121	70-75	1.77	109	7.7	10.1	2.3	2.1	15	29	37	34	CL
C07100496-050	SHOB-121	75-80	1.16	96.7	8.7	18.6	0.30	0.36	11	28	28	44	C
C07100496-051	SHOB-122	0-2.5								50	30	20	L
C07100496-052	SHOB-122	2.5-5	0.74	94.0	8.1	7.34	9.0	7.5	21	11	56	33	SiCL
C07100496-053	SHOB-122	5-7.5	2.88	78.6	8.2	15.0	3.1	2.2	24	24	49	27	CL - L
C07100496-054	SHOB-122	7.5-10	8.06	103	8.2	18.0	21	11	71	4.0	62	34	SiCL
C07100496-055	SHOB-122	10-12.5	3.43	71.5	8.2	18.0	3.2	1.9	29	47	31	22	L
C07100496-056	SHOB-122	12.5-15	1.64	96.3	8.5	15.2	0.77	0.68	13	23	51	26	SIL
C07100496-057	SHOB-122	15-17.5	1.20	85.7	8.3	8.63	1.2	1.1	9.2	23	47	30	CL
C07100496-058	SHOB-122	15.5-20	3.53	148	7.6	2.85	24	12	12	51	24	25	SCL
C07100496-059	SHOB-122	20-25								17	43	40	SiC - SiCL
C07100496-060	SHOB-122	25-30	0.72	41.4	7.7	4.63	1.8	0.73	5.2	13	73	14	SIL
C07100496-061	SHOB-122	50-55								25	48	27	CL - L
C07100496-062	SHOB-122	55-60	0.89	122	8.8	23.4	0.17	0.13	9.0	29	37	34	CL
C07100496-063	SHOB-116	15-17.5								57	25	18	SL

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
 Project: South Heart Power 063-2174/063-2212
 Workorder: C07100757

Report Date: 01/01/08
 Date Received: 10/10/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	SatPst	%	SatPst	meq/L	meq/L	meq/L	unitless	%	%	%	Results
		Depth	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
C07100757-001	SHOB-117	0-2.5	0.69	28	7.0	4.4	1.9	0.8	0.42	66	19	15	SL
C07100757-002	SHOB-117	2.5-5	0.73	27	7.5	3.3	3.0	0.8	0.45	62	21	17	SL
C07100757-003	SHOB-117	5-7.5	1.2	28	7.8	2.0	4.6	5.8	3.22	62	23	15	SL
C07100757-004	SHOB-117	7.5-10	4.2	66	7.6	24.6	28.0	11.1	2.16	8.0	57	35	SiCL
C07100757-005	SHOB-117	10-12.5	4.0	42	7.6	26.7	23.5	9.6	1.92	46	33	21	L
C07100757-006	SHOB-117	12.5-15	3.1	75	7.4	18.2	16.1	7.7	1.86	20	45	35	SiCL
C07100757-007	SHOB-117	15-17.5	3.8	66	7.4	26.4	19.1	10	2.09	15	50	35	SiCL
C07100757-008	SHOB-117	17.5-20	4.9	57	7.5	24.8	28.0	20.7	4.03	24	49	27	CL
C07100757-009	SHOB-117	20-25	5.8	74	7.4	21.9	31.3	31.6	6.13	21	41	38	CL
C07100757-010	SHOB-117	25-30	6.4	57	7.6	21.3	32.3	40.2	7.77	44	31	25	L
C07100757-011	SHOB-117	30-35	6.2	69	7.8	21.8	31.9	37.5	7.23	36	33	31	CL
C07100757-012	SHOB-117	35-40	4.3	46	8.4	7.0	12.1	30.4	9.85	62	20	18	SL
C07100757-013	SHOB-117	40-45	4.6	45	8.4	6.9	11.0	35.8	12.0	64	19	17	SL
C07100757-014	SHOB-117	45-50	5.0	53	7.0	6.5	8.7	40.3	14.6	74	16	10	SL
C07100757-015	SHOB-117	65-70	2.2	130	8.0	0.6	0.7	21.0	26.2	10	33	57	C
C07100757-016	SHOB-117	70-75	1.5	140	8.7	0.2	0.2	14.6	36.7	2.0	47	51	SIC
C07100757-017	SHOB-117	75-80	1.5	130	8.9	0.2	0.2	15.6	39.2	8.0	56	36	SiCL
C07100757-018	SHOB-118	0-2.5	6.8	58	7.6	16.6	24.7	54.3	12.0				
C07100757-019	SHOB-118	2.5-5	13	81	8.2	25.7	76.6	161	22.5	10	46	44	SiC
C07100757-020	SHOB-118	5-7.5	11	86	8.2	24.1	47.0	130	21.9	10	43	47	SiC
C07100757-021	SHOB-118	7.5-10	7.8	68	8.0	23.4	27.4	77.4	15.4	10	48	42	SiC
C07100757-022	SHOB-118	10-12.5	6.2	72	8.0	22.0	18.8	53.5	11.9	22	38	40	C
C07100757-023	SHOB-118	12.5-15	2.0	150	8.3	1.2	1.2	19.4	17.6	2.0	58	40	SiC
C07100757-024	SHOB-118	15-17.5	1.4	170	8.5	0.4	0.4	14.3	22.6	6.0	60	34	SiCL
C07100757-025	SHOB-118	17.5-20	1.7	150	8.3	0.7	0.7	16.4	19.6	1.0	62	37	SiCL
C07100757-026	SHOB-118	20-25	2.2	140	8.4	1	1.0	22.1	22.1	18	50	32	SiCL
C07100757-027	SHOB-118	25-30	1.8	95	8.8	0.6	0.5	19.3	25.3	24	51	25	SiL
C07100757-028	SHOB-118	30-35	1.1	160	8.6	0.1	0.1	12.1	36.5	4.0	49	47	SiC
C07100757-029	SHOB-118	35-40	1.6	110	8.7	0.2	0.2	18.2	41.5	30	43	27	CL
C07100757-030	SHOB-118	40-45	1.5	94	9.0	0.1	0.1	15.5	42.3	52	22	26	SCL
C07100757-031	SHOB-118	45-50	2.4	71	8.0	0.5	0.5	26.5	37.4	54	24	22	SCL
C07100757-032	SHOB-118	70-75	1.9	140	7.7	0.3	0.3	21.9	41.4	12	27	61	C
C07100757-033	SHOB-118	75-80	1.3	150	8.8	0.1	0.09	14.6	44.4	< 1.0	50	50	SiC
C07100757-034	SHOB-118	80-85	1.5	120	9.0	0.1	0.1	16.3	50.1	28	45	27	CL
C07100757-035	SHOB-119	0-2.5	6.7	150	8.1	23.0	22.5	57.9	12.1	< 1.0	38	62	C
C07100757-036	SHOB-119	2.5-5	12	130	8.3	13.3	43.5	142	26.7	< 1.0	57	43	SiC
C07100757-037	SHOB-119	5-7.5	12	120	8.0	22.5	50.8	120	19.8	4.0	48	48	SiC
C07100757-038	SHOB-119	7.5-10	12	110	7.8	23.2	54.9	117	18.8	< 1.0	50	50	SiC
C07100757-039	SHOB-119	10-12.5	18	140	5.5	20.7	173	177	18.0	82	8.0	10	LS
C07100757-040	SHOB-119	15-17.5	14	95	5.2	21.8	60.7	147	22.8	14	42	44	SiC

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100757

Report Date: 01/01/08
Date Received: 10/10/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	mmhos/cm	%	s_u	meq/L	meq/L	meq/L	unitless	%	%	%	Results
C07100757-041	SHOB-119	17.5-20	3.7	170	8.7	0.7	0.8	36.6	41.9	4.0	48	48	SiC
C07100757-042	SHOB-119	20-25	3.8	160	8.7	0.6	0.8	36.8	43.2	6.0	50	44	SiC
C07100757-043	SHOB-119	25-30	3.4	150	8.9	0.6	1.1	33.0	36.6	6.0	64	30	SiCL
C07100757-044	SHOB-119	30-35	5.4	110	8.3	3.3	8.4	48.5	20.0	10	68	22	SiL
C07100757-045	SHOB-119	35-40	17	70	5.6	25.2	131	163	18.5	28	50	22	SiL
C07100757-046	SHOB-119	40-45	8.5	36	6.7	21.8	39.3	64.3	11.6				
C07100757-047	SHOB-119	45-50	7.0	ISS	7.7	22.5	24.7	49.3	10.2				
C07100757-048	SHOB-119	50-55	7.1	32	7.8	23.9	20.9	55.1	11.6	68	22	10	SL
C07100757-049	SHOB-119	55-60	7.0	32	7.8	23.7	18.7	55.1	12.0	74	17	9.0	SL
C07100757-050	SHOB-119	60-65	7.1	30	7.7	22.5	19.8	55.8	12.1	82	9.0	9.0	LS
C07100757-051	SHOB-119	65-70	3.4	30	8.3	2.0	2.5	29.4	19.6	84	9.0	7.0	LS
C07100757-052	SHOB-119	70-75	4.2	30	8.2	3.1	3.7	37.7	20.4	80	13	7.0	LS
C07100757-053	SHOB-119	75-80	2.6	110	9.0	0.4	0.4	26.7	43.1	23	51	26	SiL
C07100757-054	SHOB-119	80-85	2.7	110	9.3	0.3	0.4	27.0	44.6	44	31	25	L
C07100757-055	SHOB-119	85-90	2.3	120	9.4	0.2	0.2	22.3	46.4	58	19	23	SCL
C07100757-056	SHOB-119	90-95	2.2	120	9.5	0.2	0.2	24.8	59.4	58	17	25	SCL
C07100757-057	SHOB-119	95-100	2.6	86	9.4	0.3	0.3	29.2	55.4	67	14	19	SL
C07100757-058	SHOB-119	100-105	3.7	82	8.4	0.7	0.8	45.0	52.4	63	16	21	SCL
C07100757-059	SHOB-119	105-110	5.0	84	7.7	1	1.1	62.4	60.6	70	15	15	SL
C07100757-060	SHOB-119	120-125	3.3	110	7.4	1.1	1.1	38.0	35.9	40	39	21	L
C07100757-061	SHOB-119	125-130	2.9	57	8.3	0.7	0.8	31.6	36.4				
C07100757-062	SHOB-119	130-135	2.9	63	8.2	0.6	0.8	34.2	39.8	50	35	15	L

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100767

Report Date: 01/01/08
Date Received: 10/10/07



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Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	SatPst	%	SatPst	meq/L	meq/L	meq/L	unitless	%	%	%	Results
		Depth	mmhos/cm	%	s_u	meq/L	meq/L	meq/L	unitless	%	%	%	Results
C07100767-001	SHOB-123	0-2.5	0.76	41	7.1	2.9	2.1	1.8	1.12	42	35	23	L
C07100767-002	SHOB-123	2.5-5	2.0	38	7.7	7.1	8.3	4.8	1.74	32	43	25	L
C07100767-003	SHOB-123	5-7.5	0.94	33	8.1	1.6	4.0	3.0	1.80	62	29	9.0	SL
C07100767-004	SHOB-123	7.5-10	1.2	73	8.2	1.2	2.1	8.8	6.80	16	49	35	SiCL
C07100767-005	SHOB-123	10-12.5	1.7	61	8.2	1.4	3.4	11.5	7.43	26	53	21	SiL
C07100767-006	SHOB-123	12.5-15	1.6	88	7.9	1.9	2.3	11.7	8.10	18	55	27	SiCL
C07100767-007	SHOB-123	15-17.5	1.6	88	7.9	1.9	2.2	12.0	8.40	16	53	31	SiCL
C07100767-008	SHOB-123	17.5-20	2.1	100	7.9	2.3	2.6	16.9	10.7	8.0	49	43	SiC
C07100767-009	SHOB-123	20-25	1.4	100	8.6	0.6	0.8	12.7	15.2	24	51	25	SiL
C07100767-010	SHOB-123	25-30	1.8	130	8.5	0.5	0.8	17.8	22.1	6.0	56	38	SiCL
C07100767-011	SHOB-123	30-35	2.4	100	8.8	0.5	0.7	24.1	30.7	36	40	24	L
C07100767-012	SHOB-123	35-40	2.9	90	8.9	0.6	0.8	28.0	33.8	46	31	23	L
C07100767-013	SHOB-123	40-45	2.6	90	8.9	0.5	0.6	24.7	33.4	47	33	20	L
C07100767-014	SHOB-123	45-50	2.8	74	8.6	0.6	0.9	27.2	31.3	62	23	15	SL
C07100767-015	SHOB-123	65-70	1.9	130	7.8	0.3	0.4	19.9	32.4	18	44	38	SiCL
C07100767-016	SHOB-123	70-75	1.7	140	8.3	0.2	0.3	18.3	35.9	1.0	29	70	C
C07100767-017	SHOB-123	75-80	1.7	140	8.7	0.2	0.2	18.6	42.4	< 1.0	47	53	SiC
C07100767-018	SHOB-124	0-2.5	1.1	51	7.5	1.9	2.1	6.9	4.84	26	41	33	CL
C07100767-019	SHOB-124	2.5-5	3.8	91	8.0	4.7	11.6	26.9	9.43	8.0	43	49	SiC
C07100767-020	SHOB-124	5-7.5	4.2	58	8.0	5.9	10.3	33.5	11.8	24	54	22	SiL
C07100767-021	SHOB-124	7.5-10	3.2	150	8.2	1.4	2.8	28.9	20.0	4.0	48	48	SiC
C07100767-022	SHOB-124	10-12.5	6.3	100	7.9	10.7	15.2	57.8	16.0	6.0	57	37	SiCL
C07100767-023	SHOB-124	12.5-15	10	93	7.8	25.1	30.9	101	19.0	26	46	28	CL
C07100767-024	SHOB-124	15-17.5	7.1	140	7.9	18.8	17.8	63.8	14.9	15	49	36	SiCL
C07100767-025	SHOB-124	17.5-20	5.6	170	8.3	2.3	4.0	58.4	32.8	10	56	34	SiCL
C07100767-026	SHOB-124	20-25	3.8	120	8.7	1.1	2.1	38.1	30.3	16	58	26	SiL
C07100767-027	SHOB-124	25-30	3.6	100	8.7	0.8	1.3	37.1	35.9	37	39	24	L
C07100767-028	SHOB-124	30-35	2.6	92	8.9	0.3	0.4	26.4	42.6	52	24	24	SCL
C07100767-029	SHOB-124	35-40	2.2	100	8.8	0.3	0.4	21.8	38.3	29	45	26	L
C07100767-030	SHOB-124	40-45	1.9	82	8.7	0.3	0.4	20.7	34.2	44	35	21	L
C07100767-031	SHOB-124	65-70	1.6	150	7.6	0.2	0.3	16.3	33.4	16	26	58	C
C07100767-032	SHOB-124	70-75	1.6	150	8.5	0.2	0.2	16.7	35.4	< 1.0	35	65	C
C07100767-033	SHOB-124	75-80	1.6	140	8.8	0.2	0.2	16.4	39.9	12	51	37	SiCL
C07100767-034	SHOB-125	0-2.5	0.62	83	7.9	1.3	1.5	3.7	3.11	7.0	37	56	C
C07100767-035	SHOB-125	2.5-5	5.5	80	7.7	24.9	31.2	28.9	5.46	< 1.0	50	50	SiC
C07100767-036	SHOB-125	5-7.5	11	130	3.9	22.1	62.5	106	16.4	56	30	14	SL
C07100767-037	SHOB-125	7.5-10	10	88	4.1	23.5	46.7	95.0	16.0	2.0	43	55	SiC
C07100767-038	SHOB-125	10-12.5	8.7	110	4.3	20.9	37.6	76.3	14.1	2.0	38	60	C
C07100767-039	SHOB-125	12.5-15	7.6	110	5.1	13.5	28.8	67.6	14.7	2.0	42	56	SiC
C07100767-040	SHOB-125	15-17.5	9.4	96	5.0	22.4	48.3	83.5	14.0	10	48	42	SiC



LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
 Project: South Heart Power 063-2174/063-2212
 Workorder: C07100767

Report Date: 01/01/08
 Date Received: 10/10/07

Sample ID	Client Sample ID	Analysis	EC SatPst	Saturation	pH SatPst	Ca SatPst	Mg SatPst	Na SatPst	SAR	Sand	Silt	Clay	Texture
		Units	mmhos/cm	%	s_u_	meq/L	meq/L	meq/L	unitless	%	%	%	Results
		Depth	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
C07100767-041	SHOB-125	17.5-20	10	78	6.9	22.6	49.6	95.5	15.9	18	46	36	SiCL
C07100767-042	SHOB-125	20-25	7.8	98	6.6	8.9	20.8	72.6	18.8	6.0	60	34	SiCL
C07100767-043	SHOB-125	25-30	8.7	84	7.5	15.7	28.8	82.8	17.5	4.0	62	34	SiCL
C07100767-044	SHOB-125	30-35	8.9	96	7.9	4.8	8.2	99.2	39.0	4.0	62	34	SiCL
C07100767-045	SHOB-125	35-40	7.4	76	8.4	3.9	5.5	78.6	36.3	2.0	71	27	SiCL
C07100767-046	SHOB-125	40-45	9.0	82	8.5	4.4	6.0	98.8	43.3	2.0	66	32	SiCL
C07100767-047	SHOB-125	45-50	6.3	82	8.8	2.8	2.6	64.4	39.0	3.0	68	29	SiCL
C07100767-048	SHOB-125	50-55	5.4	110	8.9	1	1.1	56.3	55.1	16	50	34	SiCL
C07100767-049	SHOB-125	55-60	7.1	46	8.4	5.6	6.1	73.3	30.3	39	43	18	L
C07100767-050	SHOB-125	60-65	3.6	72	8.7	0.6	0.8	35.0	41.6	23	45	32	CL
C07100767-051	SHOB-125	65-70	2.6	93	8.9	0.2	0.2	24.6	49.8	9.0	63	28	SiCL
C07100767-052	SHOB-125	70-75	2.1	130	9.1	0.1	0.2	20.2	53.0	5.0	64	31	SiCL
C07100767-053	SHOB-125	75-80	2.3	130	9.3	0.2	0.2	22.1	48.2	35	39	26	L
C07100767-054	SHOB-125	80-85	2.3	130	9.3	0.2	0.2	22.1	52.7	47	28	25	L
C07100767-055	SHOB-125	85-90	1.9	130	9.3	0.2	0.2	19.8	42.3	56	22	22	SCL
C07100767-056	SHOB-125	90-95	1.8	130	9.3	0.2	0.2	18.7	40.2	56	20	24	SCL
C07100767-057	SHOB-125	95-100	1.9	120	9.3	0.2	0.2	19.4	44.0	61	16	23	SCL
C07100767-058	SHOB-125	100-105	4.3	69	7.9	1.2	1.6	40.7	34.4	70	14	16	SL
C07100767-059	SHOB-125	120-125	2.6	84	8.8	0.4	0.6	26.8	37.3	19	57	24	SiL
C07100767-060	SHOB-125	125-130	4.0	87	8.4	0.7	1.2	41.9	43.1	35	43	22	L
C07100767-061	SHOB-125	130-135	3.1	51	9.0	0.5	0.5	31.2	44.6	65	25	10	SL

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100834

Report Date: 01/01/08
Date Received: 10/10/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	SatPst	%	SatPst	meq/L	meq/L	meq/L	unitless	%	%	%	Results
		Depth	mmhos/cm	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
C07100834-001	SHOB-126	0-2.5	1.2	90	8.3	0.9	1.8	11.4	9.91				
C07100834-002	SHOB-126	2.5-5	11	100	8.2	22.8	84.6	101	13.8	< 1.0	49	51	SiC
C07100834-003	SHOB-126	5-7.5	10	100	7.1	21.7	60.3	90.9	14.2	< 1.0	45	55	SiC
C07100834-004	SHOB-126	7.5-10	9.1	130	3.8	23.9	40.9	80.4	14.1	62	26	12	SL
C07100834-005	SHOB-126	10-12.5	7.1	56	3.9	25.2	31.0	53.2	10.0	20	39	41	C
C07100834-006	SHOB-126	12.5-15	5.6	57	7.0	24.0	29.7	32.3	6.23	< 1.0	70	30	SiCL
C07100834-007	SHOB-126	15-17.5	5.3	60	7.7	23.0	29.3	31.0	6.05	< 1.0	65	35	SiCL
C07100834-008	SHOB-126	17.5-20	3.7	44	8.1	8.1	14.4	26.8	7.98	6.0	69	25	SiL
C07100834-009	SHOB-126	20-25	5.0	32	7.8	24.4	28.6	25.7	4.98	44	47	9.0	L
C07100834-010	SHOB-126	25-30	1.9	36	8.3	2.3	4.8	14.7	7.77	56	37	7.0	SL
C07100834-011	SHOB-126	30-35	2.7	35	8.2	4.3	8.4	18.6	7.36	50	43	7.0	L
C07100834-012	SHOB-126	35-40	3.1	32	8.3	5.6	10.3	21.1	7.49	64	29	7.0	SL
C07100834-013	SHOB-126	40-45	3.1	34	8.1	7.1	11.4	19.9	6.57	78	16	6.0	LS
C07100834-014	SHOB-126	45-50	2.6	32	8.3	2.8	6.0	20.4	9.76	72	19	9.0	SL
C07100834-015	SHOB-126	50-55	3.5	34	8.1	9.2	13.0	20.2	6.06	82	11	7.0	LS
C07100834-016	SHOB-126	55-60	3.0	32	8.2	4.9	8.8	20.8	7.95	83	10	7.0	LS
C07100834-017	SHOB-126	60-65	2.6	34	8.3	2.9	5.6	20.8	10.1	82	11	7.0	LS
C07100834-018	SHOB-126	65-70	5.5	32	7.9	24.3	24.9	32.7	6.60	66	25	9.0	SL
C07100834-019	SHOB-126	70-75	4.9	33	8.0	23.3	20.9	29.7	6.32	70	21	9.0	SL
C07100834-020	SHOB-126	75-80	5.3	32	7.8	18.1	23.9	38.1	8.33	56	31	13	SL
C07100834-021	SHOB-126	80-85	5.7	42	7.8	21.6	30.3	36.6	7.18	35	46	19	L
C07100834-022	SHOB-126	85-90	5.4	46	7.9	22.0	30.2	33.8	6.61				
C07100834-023	SHOB-126	100-105	1.8	110	8.2	2.6	3.1	15.3	9.04	6.0	44	50	SiC
C07100834-024	SHOB-126	110-115	4.3	82	7.5	6.6	8.8	37.8	13.6				
C07100834-025	SHOB-126	115-120	3.9	92	7.3	2.5	3.1	41.7	25.0	52	29	19	L
C07100834-026	SHOB-126	130-135	2.5	130	8.3	0.4	0.4	30.0	48.1	22	41	37	CL
C07100834-027	SHOB-126	135-140	2.3	110	8.5	0.3	0.3	25.7	46.0	10	67	23	SiL
C07100834-028	SHOB-126	140-145	1.9	110	8.8	0.2	0.2	20.7	45.1	48	31	21	L
C07100834-029	SHOB-130	0-2.5	0.67	91	7.3	2.5	1.3	2.9	2.08				
C07100834-030	SHOB-130	2.5-5	0.68	63	7.4	3.2	1.2	2.5	1.65	< 1.0	67	33	SiCL
C07100834-031	SHOB-130	5-7.5	0.60	55	7.5	2.8	0.9	2.4	1.80	7.0	61	32	SiCL
C07100834-032	SHOB-130	7.5-10	0.63	59	7.5	3.1	1.1	2.2	1.52	9.0	58	33	SiCL
C07100834-033	SHOB-130	10-12.5	0.72	38	7.7	3.5	1.5	2.5	1.58	43	42	15	L
C07100834-034	SHOB-130	12.5-15	0.69	44	7.7	3.2	1.7	2.2	1.40	33	44	23	L
C07100834-035	SHOB-130	15-17.5	0.86	40	7.8	4.2	2.6	2.5	1.36	37	42	21	L
C07100834-036	SHOB-130	17.5-20	0.73	39	7.8	3.5	1.8	2.2	1.37	39	42	19	L
C07100834-037	SHOB-130	20-25	0.88	28	7.6	4.5	2.3	2.9	1.55	65	22	13	SL
C07100834-038	SHOB-130	40-45	1.0	32	7.4	5.3	2.9	2.8	1.38	61	28	11	SL
C07100834-039	SHOB-130	45-50	0.94	31	7.5	4.7	2.8	3.0	1.55	59	28	13	SL
C07100834-040	SHOB-130	50-55	0.98	34	7.6	4.1	2.5	4.3	2.37	58	29	13	SL

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100834

Report Date: 01/01/08
Date Received: 10/10/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	mmhos/cm	%	s_u_	meq/L	meq/L	meq/L	unitless	%	%	%	Results
		Depth	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
C07100834-041	SHOB-130	55-60	1.1	36	7.8	3.0	1.9	6.7	4.24	55	30	15	SL
C07100834-042	SHOB-130	60-65	1.6	100	8.4	0.4	0.3	15.9	26.0	17	41	42	SiC

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100506

Report Date: 01/01/08
Date Received: 10/08/07

Sample ID	Client Sample ID	Analysis Depth	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
			SatPst mmhos/cm	SatPst %	SatPst s_u	SatPst meq/L	SatPst meq/L	SatPst meq/L	unitless	%	%	%	Results
C07100506-001	SHOB-127	0-2.5								41	29	30	CL
C07100506-002	SHOB-127	2.5-5	0.40	88.1	7.0	1.4	0.86	1.5	1.38	27	34	39	CL
C07100506-003	SHOB-127	5-7.5	0.35	84.5	7.2	1.3	0.82	1.4	1.32	9.0	47	44	SIC
C07100506-004	SHOB-127	7.5-10	0.68	93.6	7.8	3.4	2.0	2.0	1.25	9.0	47	44	SIC
C07100506-005	SHOB-127	10-12.5	0.54	103	7.9	2.4	1.4	1.6	1.19	35	27	38	CL
C07100506-006	SHOB-127	12.5-15	0.45	77.6	7.9	1.9	0.98	2.0	1.66	39	26	35	CL
C07100506-007	SHOB-127	15-17.5	2.97	141	7.5	25	11	5.6	1.32	43	21	36	CL
C07100506-008	SHOB-127	17.5-20	0.68	98.6	7.7	2.1	1.2	3.3	2.60	48	21	31	SCL
C07100506-009	SHOB-127B	20-25	1.07	97.2	8.0	0.62	0.64	9.6	12.1	41	25	34	CL
C07100506-010	SHOB-127B	25-30	1.21	101	8.0	1.6	0.89	11	9.66	25	39	36	CL
C07100506-011	SHOB-127B	30-35	1.01	108	8.0	1.1	0.72	9.1	9.69	18	38	44	C
C07100506-012	SHOB-127B	35-40	0.93	108	8.2	1.0	0.62	8.4	9.35	19	38	43	C
C07100506-013	SHOB-127B	40-45	0.68	86.0	8.2	0.80	0.25	6.3	8.64	21	39	40	C - CL
C07100506-014	SHOB-127B	45-50	0.85	58.8	8.3	0.96	0.55	7.7	8.95	25	38	37	CL
C07100506-015	SHOB-127B	50-55	0.78	84.2	8.3	0.80	0.32	6.9	9.27	35	34	31	CL
C07100506-016	SHOB-127B	55-60	1.12	67.2	8.1	0.97	0.62	9.5	10.7	65	18	17	SL
C07100506-017	SHOB-127B	60-65	1.18	59.7	8.5	0.73	0.45	11	14.4	63	21	16	SL
C07100506-018	SHOB-127B	65-70	5.20	61.7	8.1	24	12	32	7.50	75	14	11	SL
C07100506-019	SHOB-127B	70-75	4.24	48.9	8.3	14	7.1	27	8.35	81	12	7.0	LS
C07100506-020	SHOB-127B	75-80	1.23	42.5	8.9	0.44	0.26	11	18.1	83	8.0	9.0	LS
C07100506-021	SHOB-128	0-2.5	0.56	69.3	7.4	4.2	1.7	0.99	0.58	43	40	17	L
C07100506-022	SHOB-128	2.5-5	0.37	40.4	7.6	2.2	0.51	1.7	1.48	65	22	13	SL
C07100506-023	SHOB-128	5-7.5	0.37	60.2	7.7	2.1	0.76	1.8	1.49	33	46	21	L
C07100506-024	SHOB-128	7.5-10	0.45	60.4	7.5	2.4	0.93	2.1	1.65	27	48	25	L
C07100506-025	SHOB-128	10-12.5	1.22	75.1	7.8	3.4	1.7	8.7	5.46	13	52	35	SICL
C07100506-026	SHOB-128	12.5-15	1.71	72.7	8.1	1.5	0.78	14	13.0	24	47	29	CL
C07100506-027	SHOB-128	15-17.5	2.07	53.1	8.4	0.98	0.32	18	22.0	63	23	14	SL
C07100506-028	SHOB-128	17.5-20	0.88	59.7	8.2	0.85	0.12	7.7	11.1	49	34	17	L
C07100506-029	SHOB-128	20-25	0.76	85.8	8.2	0.37	< 0.04	7.2	16.0	41	34	25	L
C07100506-030	SHOB-128	25-30								35	36	29	CL
C07100506-031	SHOB-128	30-35	0.72	76.5	8.2	0.71	0.07	6.4	10.2	34	37	29	CL
C07100506-032	SHOB-128	35-40	0.78	69.7	8.3	0.80	0.10	7.3	10.8	36	42	22	L
C07100506-033	SHOB-128	40-45	0.77	51.2	8.2	1.2	0.17	7.2	8.81	56	23	21	SCL
C07100506-034	SHOB-128	45-50	0.83	48.6	8.3	1.2	0.23	7.9	9.42	68	18	14	SL
C07100506-035	SHOB-128	50-55	1.01	51.4	8.6	1.2	0.36	10	11.5	74	10	16	SL
C07100506-036	SHOB-128	55-60	1.52	52.8	8.6	1.1	0.64	16	17.0	70	15	15	SL
C07100506-037	SHOB-129	0-2.5								40	37	23	L
C07100506-038	SHOB-129	2.5-5								72	16	12	SL
C07100506-039	SHOB-129	5-7.5	0.44	53.2	7.7	2.2	0.80	2.5	2.03	48	34	18	L
C07100506-040	SHOB-129	7.5-10	1.59	61.5	7.8	7.7	3.5	7.6	3.22	30	42	28	CL

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TRACK# C07100506

LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heat Power 063-2174/063-2212
Workorder: C07100506

Revised Date: 05/21/08
Report Date: 01/01/08
Date Received: 10/08/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	SatPst	SatPst	SatPst	SatPst	SatPst	SatPst	SatPst	unitless	%	%	%
		Depth	mmhos/cm	%	s_u_	meq/L	meq/L	meq/L	meq/L	Results	Results	Results	Results
C07100506-041	SHOB-129	10-12.5	2.30	47.0	7.9	6.9	3.3	17	7.38	70	16	14	SL
C07100506-042	SHOB-129	12.5-15								52	27	21	SCL
C07100506-043	SHOB-129	15-17.5	2.21	48.2	8.0	4.1	1.9	18	10.6	62	22	16	SL
C07100506-044	SHOB-129	17.5-20	0.99	34.6	8.0	7.7	3.6	43	18.3	80	10	10	SL
C07100506-045	SHOB-129	20-25	4.07	115	7.3	29	11	18	3.92	64	18	18	SL
C07100506-046	SHOB-129	25-30	3.61	56.0	7.4	23	7.7	18	4.64	54	24	22	SCL
C07100506-047	SHOB-129	30-35	1.15	35.3	7.5	2.3	0.80	9.3	7.53	70	14	16	SL
C07100506-048	SHOB-129	35-40								40	38	22	L
C07100506-049	SHOB-129	40-45	2.19	40.8	7.5	10	3.3	13	5.08	80	8.0	12	SL
C07100506-050	SHOB-129	45-50	1.30	40.3	7.4	3.1	1.2	9.9	6.76	76	12	12	SL
C07100506-051	SHOB-129	50-55	1.65	37.0	7.4	4.2	1.8	12	7.19	74	13	13	SL
C07100506-052	SHOB-129	55-60	1.35	61.5	8.1	2.3	1.3	11	8.41	65	21	14	SL
C07100506-053	SHOB-129	60-65	1.71	39.2	7.8	4.0	1.6	13	7.82	77	7.0	16	SL
C07100506-054	SHOB-129	65-68	4.21	48.5	7.4	28	10	21	4.80	75	13	12	SL

LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
 Project: South Heart Power 063-2174/063-2212
 Workorder: C07100836

Report Date: 01/01/08
 Date Received: 10/10/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	SatPst	%	SatPst	meq/L	meq/L	meq/L	unitless	%	%	%	
		Depth	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
C07100836-001	SHOB-131	0-2.5	0.78	77	6.4	2.2	3.2	2.7	1.66	6.0	49	45	SiC
C07100836-002	SHOB-131	2.5-5	0.61	73	7.9	0.6	0.9	5.3	6.07	6.0	47	47	SiC
C07100836-003	SHOB-131	5-7.5	4.1	66	8.0	8.1	18.2	26.8	7.40	14	48	38	SiCL
C07100836-004	SHOB-131	7.5-10	4.4	71	8.1	8.0	15.7	31.7	9.19	8.0	53	39	SiCL
C07100836-005	SHOB-131	10-12.5	6.0	55	8.0	17.6	23.4	42.3	9.35	20	45	35	SiCL
C07100836-006	SHOB-131	12.5-15	5.6	63	7.9	19.7	20.7	36.8	8.18	22	43	35	CL
C07100836-007	SHOB-131	15-17.5	5.4	57	8.0	18.3	18.5	36.6	8.52	20	46	34	SiCL
C07100836-008	SHOB-131	17.5-20	5.7	64	8.0	21.2	22.3	37.9	8.12	8.0	53	39	SiCL
C07100836-009	SHOB-131	20-25	6.1	52	7.8	24.1	29.4	38.6	7.47	32	39	29	CL
C07100836-010	SHOB-131	25-30	5.7	61	8.0	24.9	31.4	31.6	5.95	20	46	34	SiCL
C07100836-011	SHOB-131	30-35	4.9	73	7.9	24.1	25.4	22.1	4.44	10	49	41	SiC
C07100836-012	SHOB-131	35-40	3.8	68	8.0	17.4	20.1	16.2	3.74	18	49	33	SiCL
C07100836-013	SHOB-131	40-45	1.7	67	8.1	4.9	7.3	8.3	3.36	23	45	32	CL
C07100836-014	SHOB-131	45-50	1.7	44	7.9	5.6	7.1	8.1	3.20	56	25	19	SL
C07100836-015	SHOB-131	50-55	1.7	35	8.0	3.7	4.3	11.6	5.83	70	19	11	SL
C07100836-016	SHOB-131	55-60	3.1	62	8.1	3.6	4.6	26.7	13.2	62	21	17	SL
C07100836-017	SHOB-131	60-65	1.3	62	8.5	0.8	1	12.0	12.8	74	15	11	SL
C07100836-018	SHOB-131	65-70	2.0	48	8.6	1.1	1.5	20.0	17.8	76	15	9.0	SL
C07100836-019	SHOB-131	70-75	1.6	42	8.5	0.6	0.6	16.3	21.0	64	27	9.0	SL
C07100836-020	SHOB-131	75-80	2.3	37	8.3	2.1	2.5	20.1	13.2	78	13	9.0	SL
C07100836-021	SHOB-131	80-85	1.8	38	8.3	1.5	1.8	16.7	13.0	82	10	8.0	LS
C07100836-022	SHOB-131	85-90	2.3	39	8.4	1.5	1.7	22.1	17.4	82	9.0	9.0	LS
C07100836-023	SHOB-131	90-95	2.8	46	8.6	0.8	0.9	29.5	32.0	78	13	9.0	SL
C07100836-024	SHOB-131	95-100	1.9	82	8.9	0.5	0.2	21.5	36.4	52	33	15	L
C07100836-025	SHOB-131	100-105	2.7	44	8.5	1.1	1.3	28.1	25.7	76	14	10	SL
C07100836-026	SHOB-131	105-110	2.4	50	8.6	0.7	0.8	23.2	27.0	74	15	11	SL
C07100836-027	SHOB-131	110-115	2.7	52	8.7	0.5	0.7	26.7	34.6	76	13	11	SL
C07100836-028	SHOB-131	115-120	3.4	51	8.9	0.4	0.6	34.4	47.0	70	19	11	SL
C07100836-029	SHOB-132	0-2.5	1.0	57	7.6	3.6	1.3	6.2	3.98				
C07100836-030	SHOB-132	2.5-5	8.3	69	8.9	2.4	29.9	84.7	21.1	12	65	23	SiL
C07100836-031	SHOB-132	5-7.5	13	53	8.3	22.7	92.2	141	18.5	14	67	19	SiL
C07100836-032	SHOB-132	7.5-10	14	66	8.4	23.6	118	132	15.7	14	59	27	SiCL
C07100836-033	SHOB-132	10-12.5	10	92	8.1	21.3	60.2	88.2	13.8	< 1.0	54	46	SiC
C07100836-034	SHOB-132	12.5-15	9.9	80	8.1	21.5	55.6	84.5	13.6	< 1.0	57	43	SiC
C07100836-035	SHOB-132	15-17.5	9.2	98	8.1	22.6	48.4	77.5	13.0	< 1.0	37	63	C
C07100836-036	SHOB-132	17.5-20	8.2	97	8.0	21.9	38.4	65.8	12.0	< 1.0	49	51	SiC
C07100836-037	SHOB-132	20-25	8.1	78	8.1	22.7	34.1	67.2	12.6	< 1.0	57	43	SiC
C07100836-038	SHOB-132	25-30	5.0	64	8.2	7.5	10.1	43.5	14.7	25	50	25	SiL
C07100836-039	SHOB-132	30-35	3.0	150	8.5	1.2	1.6	28.9	24.3	4.0	57	39	SiCL
C07100836-040	SHOB-132	35-40	2.6	130	8.6	0.5	0.8	24.8	30.7	48	26	26	SCL

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100836

Report Date: 01/01/08
Date Received: 10/10/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	SatPst	%	SatPst	meq/L	meq/L	meq/L	unitless	%	%	%	Results
		Depth	mmhos/cm	%	s_u_	meq/L	meq/L	meq/L	unitless	%	%	%	Results
C07100836-041	SHOB-132	40-45	3.4	150	8.5	0.8	1.2	34.8	34.2	4.0	39	57	C
C07100836-042	SHOB-132	45-50	2.7	140	9.0	0.4	0.5	27.7	41.2	5.0	62	33	SiCL
C07100836-043	SHOB-132	50-55	2.4	130	9.1	0.2	0.4	24.1	42.7	10	57	33	SiCL
C07100836-044	SHOB-132	55-60	4.4	110	7.5	0.8	1	45.9	48.1	38	39	23	L
C07100836-045	SHOB-132	75-80	1.9	120	8.7	0.4	0.6	22.2	32.0	16	56	28	SiCL
C07100836-046	SHOB-132	80-85	3.0	62	8.6	1	1.6	32.0	28.0	52	33	15	L
C07100836-047	SHOB-142	0-2.5	0.86	58	7.7	3.5	0.6	6.0	4.20				
C07100836-048	SHOB-142	2.5-5	1.1	52	8.3	1.6	0.4	11.6	11.8	12	73	15	SiL
C07100836-049	SHOB-142	5-7.5	1.5	81	8.1	1.4	0.3	16.0	17.0	6.0	64	30	SiCL
C07100836-050	SHOB-142	7.5-10	6.1	88	8.1	10.6	1.7	62.2	25.1	16	46	38	SiCL
C07100836-051	SHOB-142	10-12.5	5.9	89	8.1	12.0	2.2	59.4	22.3				
C07100836-052	SHOB-142	12.5-15	6.0	92	8.1	12.3	2.1	60.4	22.5	18	45	37	SiCL
C07100836-053	SHOB-142	15-17.5	4.8	88	8.2	4.7	1.2	49.2	28.6				
C07100836-054	SHOB-142	17.5-20	2.8	57	8.4	1.0	0.5	27.5	31.2	50	31	19	L
C07100836-055	SHOB-142	20-25	2.4	64	8.1	0.8	0.5	22.8	29.0	40	35	25	L
C07100836-056	SHOB-142	25-30	2.5	37	8.2	1.2	0.5	24.0	25.9	62	22	16	SL
C07100836-057	SHOB-142	30-35	1.5	45	8.4	0.5	0.3	15.7	24.8	50	31	19	L
C07100836-058	SHOB-142	35-40	1.2	52	8.4	0.4	0.1	11.8	22.1	64	13	23	SCL
C07100836-059	SHOB-142	40-45	1.2	47	8.4	0.4	0.2	12.8	23.7	58	21	21	SCL
C07100836-060	SHOB-142	45-50	2.3	29	8.3	1.2	0.6	23.9	25.1	75	14	11	SL
C07100836-061	SHOB-142	50-55	1.4	65	8.0	0.6	0.3	15.6	23.4	44	31	25	L
C07100836-062	SHOB-142	55-60	1.2	120	8.4	0.4	0.2	12.6	22.5	17	44	39	SiCL
C07100836-063	SHOB-142	65-70	1.5	150	8.5	0.4	0.2	16.0	29.8	1.0	49	50	SiC
C07100836-064	SHOB-142	70-75	1.4	150	8.7	0.2	0.2	15.8	35.5	< 1.0	50	50	SiC
C07100836-065	SHOB-142	75-80	1.7	94	8.8	0.2	0.2	17.7	39.0	19	51	30	SiCL

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100511

Report Date: 01/01/08
Date Received: 10/08/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	mmhos/cm	%	s_u	meq/L	meq/L	meq/L	unitless	%	%	%	Results
C07100511-001	SHOB-133	0-2.5								31	33	36	CL
C07100511-002	SHOB-133	2.5-5								25	37	38	CL
C07100511-003	SHOB-133	5-7.5	0.37	98.7	7.4	1.6	0.91	1.4	1.21	35	40	25	L
C07100511-004	SHOB-133	7.5-10	0.69	97.8	7.9	3.4	2.0	1.9	1.14	49	25	26	SCL
C07100511-005	SHOB-133	10-12.5	0.50	119	8.0	2.5	1.4	1.5	1.05				
C07100511-006	SHOB-133	12.5-15	0.34	131	8.3	1.6	0.78	1.4	1.28	39	37	24	L
C07100511-007	SHOB-133	15-17.5								55	12	33	SCL
C07100511-008	SHOB-133	17.5-20	0.69	84.2	7.9	2.6	1.5	3.5	2.44	39	27	34	CL
C07100511-009	SHOB-133	20-25	1.27	96.7	8.3	1.8	1.0	11	8.96	65	19	16	SL
C07100511-010	SHOB-133	25-30	3.05	162	8.4	1.3	2.4	28	21.1	43	26	31	CL
C07100511-011	SHOB-133	30-35	2.38	154	8.9	0.95	1.4	22	20.3	33	33	34	CL
C07100511-012	SHOB-133	35-40	1.63	137	9.1	1.0	1.3	15	13.7	27	41	32	CL
C07100511-013	SHOB-133	40-45	2.04	129	8.6	1.4	2.1	18	13.6	41	31	28	CL
C07100511-014	SHOB-133	65-70	1.67	122	8.8	0.56	0.74	17	20.9	40	34	26	L
C07100511-015	SHOB-133	70-75	1.49	133	9.1	0.32	0.38	15	24.6	45	31	24	L
C07100511-016	SHOB-134	0-2.5	0.41	90.6	7.6	1.9	0.86	1.9	1.61	15	43	42	SiC
C07100511-017	SHOB-134	2.5-5	0.45	109	8.0	1.4	0.58	3.3	3.28	29	33	38	CL
C07100511-018	SHOB-134	5-7.5	0.62	78.5	8.9	1.4	0.29	6.4	6.89	62	17	21	SCL
C07100511-019	SHOB-134	7.5-10	0.61	142	8.8	1.2	1.2	6.6	6.14	68	15	17	SL
C07100511-020	SHOB-134	10-12.5								29	44	27	CL - L
C07100511-021	SHOB-134	12.5-15	0.72	100	9.1	0.68	0.30	7.5	10.8	31	46	23	L
C07100511-022	SHOB-134	17.5-20	0.86	69.4	8.3	0.45	0.20	8.3	14.6	64	19	17	SL
C07100511-023	SHOB-134	20-25	0.70	67.9	8.3	0.77	0.31	6.7	9.09	70	15	15	SL
C07100511-024	SHOB-134	25-30	0.66	72.7	8.4	0.83	0.31	6.1	8.12	76	11	13	SL
C07100511-025	SHOB-134	30-35	0.74	74.8	8.4	1.1	0.45	6.4	7.36	75	11	14	SL
C07100511-026	SHOB-134	35-40	0.66	70.6	8.5	0.53	0.21	6.3	10.4	78	13	9.0	SL
C07100511-027	SHOB-134	40-45	0.94	54.8	8.2	0.60	0.31	9.1	13.5	80	7.0	13	SL
C07100511-028	SHOB-134	45-50	1.29	43.5	8.3	0.58	0.32	12	18.5	76	13	11	SL
C07100511-029	SHOB-134	50-55	1.44	40.9	8.7	0.54	0.36	14	21.5	81	7.0	12	SL
C07100511-030	SHOB-134	55-60	1.59	41.5	8.8	0.78	0.48	16	19.9	80	12	8.0	LS
C07100511-031	SHOB-134	60-65	1.48	40.4	9.0	0.59	0.37	15	21.4	83	8.0	9.0	LS
C07100511-032	SHOB-134	65-70	1.58	41.4	8.9	0.68	0.43	16	21.1	82	6.0	12	SL
C07100511-033	SHOB-134	70-75	1.68	38.7	8.6	0.76	0.46	17	21.4	82	7.0	11	LS
C07100511-034	SHOB-134	75-80	2.04	43.0	8.9	0.69	0.49	21	27.0	83	8.0	9.0	LS
C07100511-035	SHOB-135	0-2.5								30	43	27	CL - L
C07100511-036	SHOB-135	2.5-5								36	41	23	L
C07100511-037	SHOB-135	5-7.5	2.81	106	8.5	1.0	0.68	27	29.5	31	43	26	L
C07100511-038	SHOB-135	7.5-10	5.83	130	8.9	1.3	2.0	60	46.7	28	42	30	CL
C07100511-039	SHOB-135	10-12.5								44	36	20	L
C07100511-041	SHOB-135	15-17.5	4.21	104	8.8	1.1	1.2	41	38.5	38	28	34	CL

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100844

Report Date: 01/01/08
Date Received: 10/10/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	mmhos/cm	%	s_u	meq/L	meq/L	meq/L	unitless	%	%	%	Results
C07100844-041	SHOB-143	20-25	2.4	140	8.1	1.1	1.8	20.5	17.3	3.0	66	31	SiCL
C07100844-042	SHOB-143	25-30	3.6	150	8.3	2.3	3.9	31.0	17.7	6.0	61	33	SiCL
C07100844-043	SHOB-143	30-35	3.9	110	8.3	1.6	2.6	35.5	24.5	20	55	25	SiL
C07100844-044	SHOB-143	35-40	4.2	66	8.5	1.2	2.2	37.5	28.8	64	19	17	SL
C07100844-045	SHOB-143	40-45	4.2	67	8.7	1.0	1.8	40.7	34.1	62	22	16	SL
C07100844-046	SHOB-143	45-50	3.0	80	8.3	0.5	0.8	28.7	36.6	56	28	16	SL
C07100844-047	SHOB-143	50-55	4.2	60	9.1	0.9	1.3	41.7	39.8	64	21	15	SL
C07100844-048	SHOB-143	55-60	3.7	44	9.0	0.8	0.9	35.2	38.7	ISS	ISS	ISS	ISS
C07100844-049	SHOB-143	60-65	2.2	82	8.5	0.5	0.6	21.0	29.1	41	40	19	L
C07100844-050	SHOB-143	80-85	1.3	150	8.9	0.1	0.1	13.3	38.7	2.0	53	45	SiC
C07100844-051	SHOB-143	85-90	1.5	140	9.1	0.2	0.2	16.2	38.5	10	58	32	SiCL
C07100844-052	SHOB-143	90-95	1.5	94	9.0	0.2	0.2	16.7	40.4	26	52	22	SiL

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
 Project: South Heart Power 063-2174/063-2212
 Workorder: C07100511

Report Date: 01/01/08
 Date Received: 10/08/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	mmhos/cm	%	s_u_	meq/L	meq/L	meq/L	unitless	%	%	%	Results
C07100511-042	SHOB-135	17.5-20	2.58	42.4	7.6	1.8	1.2	23	18.8	66	8.0	26	SCL
C07100511-043	SHOB-135	20-25	1.82	56.3	7.6	1.7	0.75	16	14.3	74	11	15	SL
C07100511-044	SHOB-135	40-45	1.89	39.1	7.5	1.3	0.83	18	17.1	69	17	14	SL
C07100511-045	SHOB-135	45-50	2.08	37.4	7.3	1.4	0.95	19	17.5	62	25	13	SL
C07100511-046	SHOB-135	50-55	2.19	53.5	7.4	1.4	1.1	20	17.9	60	26	14	SL
C07100511-047	SHOB-135	55-60	1.99	47.8	7.4	1.3	0.89	18	17.6	64	20	16	SL
C07100511-048	SHOB-135	60-65	4.02	50.0	7.8	1.8	1.5	33	26.0	48	34	18	L
C07100511-049	SHOB-135	65-70	2.00	77.3	8.0	0.87	0.73	19	20.9	42	34	24	L
C07100511-050	SHOB-136	0-2.5								49	19	32	SCL
C07100511-051	SHOB-136	2.5-5								46	24	30	SCL
C07100511-052	SHOB-136	5-7.5	5.09	127	8.0	11	15	37	10.1	12	59	29	SiCL
C07100511-053	SHOB-136	7.5-10	2.35	237	8.4	0.98	2.3	19	15.1	32	37	31	CL
C07100511-054	SHOB-136	10-12.5	3.43	183	8.2	5.0	6.3	26	11.0	37	27	36	CL
C07100511-055	SHOB-136	12.5-15	2.12	105	8.3	1.1	1.6	18	15.4	58	12	30	SCL
C07100511-056	SHOB-136	15-17.5	1.04	92.5	8.6	0.25	0.31	9.3	17.7	66	17	17	SL
C07100511-057	SHOB-136	17.5-20	1.07	88.4	8.6	0.28	0.42	9.7	16.5	64	21	15	SL
C07100511-058	SHOB-136	20-25								71	14	15	SL
C07100511-059	SHOB-136	25-30								74	13	13	SL
C07100511-060	SHOB-136	30-35								72	14	14	SL
C07100511-061	SHOB-136	35-40	0.97	80.9	7.1	1.3	1.1	7.4	6.81	80	11	9.0	LS
C07100511-062	SHOB-136	60-65	1.40	114	8.8	0.65	0.68	12	15.0	80	9.0	11	SL
C07100511-063	SHOB-136	65-70	1.47	112	8.7	1.2	0.96	13	12.6	4.0	49	47	SiC
C07100511-064	SHOB-136	70-75	1.77	111	9.2	1.2	0.83	16	16.2	11	56	33	SiCL

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100513

Report Date: 01/01/08
Date Received: 10/08/07



ENERGY LABORATORIES, INC. • 2393 Sall Creek Highway (82201) • P.O. Box 9258 • Casper, WY 82202
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Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	SatPst	SatPst	SatPst	SatPst	SatPst	SatPst	SatPst	unitless	%	%	%
		Depth	mmhos/cm	%	s_u	meq/L	meq/L	meq/L	meq/L	Results	Results	Results	Results
C07100513-001	SHOB-137	0-2.5	0.67	148	8.3	0.98	0.47	5.8	6.83	24	41	35	CL
C07100513-002	SHOB-137	2.5-5	0.83	73.1	7.4	3.7	1.9	3.9	2.35	12	51	37	SiCL
C07100513-003	SHOB-137	5-7.5	1.10	73.6	7.5	3.9	2.0	6.7	3.91	25	44	31	CL
C07100513-004	SHOB-137	7.5-10	0.73	75.7	7.7	2.8	1.4	4.2	2.93	36	34	30	CL
C07100513-005	SHOB-137	10-12.5	0.71	73.7	7.9	2.2	1.1	4.7	3.63	42	31	27	CL - L
C07100513-006	SHOB-137	12.5-15	1.66	138	7.0	3.1	1.9	13	8.44	35	34	31	CL
C07100513-007	SHOB-137	25-30	2.20	193	6.8	4.3	2.8	18	9.38	46	25	29	SCL
C07100513-008	SHOB-137	30-35	2.59	149	6.6	7.2	5.2	19	7.52	52	27	21	SCL
C07100513-009	SHOB-138	0-2.5	0.31	92.8	7.5	2.2	0.56	1.3	1.13	60	25	15	SL
C07100513-010	SHOB-138	2.5-5	0.22	52.6	7.7	1.5	0.35	0.89	0.93	76	3.0	21	SCL
C07100513-011	SHOB-138	5-7.5	0.78	84.4	8.3	0.98	0.34	7.5	9.28	44	32	24	L
C07100513-012	SHOB-138	7.5-10	1.28	94.7	9.1	0.67	0.31	12	17.8	23	49	28	CL
C07100513-013	SHOB-138	10-12.5	1.37	111	9.0	0.52	0.31	13	21.0	25	55	20	SIL
C07100513-014	SHOB-138	12.5-15	1.16	67.5	7.8	1.3	0.64	10	10.6	67	15	18	SL
C07100513-015	SHOB-138	15-17.5	0.83	66.9	7.8	1.2	0.47	7.3	7.99	69	16	15	SL
C07100513-016	SHOB-138	17.5-20	1.04	53.1	7.8	1.3	0.64	9.1	9.25	63	17	20	SL - SCL
C07100513-017	SHOB-138	20-25	1.38	43.9	7.6	2.0	1.1	12	9.58	71	13	16	SL
C07100513-018	SHOB-138	25-30	1.29	44.0	7.6	1.7	0.88	11	9.83	68	14	18	SL
C07100513-019	SHOB-138	30-35	1.37	43.4	7.4	2.0	1.1	12	9.66	71	15	14	SL
C07100513-020	SHOB-138	35-40	1.26	51.6	7.4	1.7	0.87	12	10.3	69	11	20	SL - SCL
C07100513-021	SHOB-138B	40-45	1.45	121	7.3	1.1	0.64	15	15.5	71	11	18	SL
C07100513-022	SHOB-138B	45-50	1.09	169	8.4	0.47	0.43	12	17.5	59	21	20	SL - SCL
C07100513-023	SHOB-138B	50-55	1.21	169	8.9	0.49	0.53	13	18.5	49	27	24	SCL
C07100513-024	SHOB-138B	55-60	1.21	144	9.1	0.44	0.43	13	19.8	53	25	22	SCL
C07100513-025	SHOB-138B	60-65	1.17	127	8.9	0.47	0.41	13	19.3	79	7.0	14	SL
C07100513-026	SHOB-138B	65-70	1.12	134	9.0	0.47	0.46	12	17.7	77	9.0	14	SL
C07100513-027	SHOB-138B	70-75	0.94	141	9.2	0.25	0.43	10	17.9	69	15	16	SL
C07100513-028	SHOB-138B	75-80	1.32	113	9.3	0.34	0.30	14	24.7	71	16	13	SL
C07100513-029	SHOB-138B	80-85	1.12	129	9.3	0.40	0.32	12	20.0	75	15	10	SL
C07100513-030	SHOB-138B	85-90	1.30	101	9.4	0.30	0.30	14	25.5	80	6.0	12	SL
C07100513-031	SHOB-138B	90-95	1.11	119	9.5	0.24	0.22	12	25.0	79	11	10	SL
C07100513-032	SHOB-138B	95-100	1.33	103	9.4	0.23	0.28	13	26.4	79	10	11	SL
C07100513-033	SHOB-138B	100-105	1.74	114	9.1	0.42	0.28	17	29.5	75	12	13	SL
C07100513-034	SHOB-138B	105-110	1.84	140	9.1	0.32	0.37	19	32.0	34	31	35	CL
C07100513-035	SHOB-138B	110-115	1.94	156	9.3	0.31	0.33	20	36.0	34	28	38	CL
C07100513-036	SHOB-138B	115-120	1.23	213	9.7	0.36	0.42	13	20.2	44	27	29	CL
C07100513-037	SHOB-139	0-2.5	0.58	151	8.0	1.1	0.67	4.7	5.00	85	8.0	7.0	LS
C07100513-038	SHOB-139	2.5-5	0.71	91.1	8.2	1.1	0.45	4.6	5.14	85	5.0	10	LS
C07100513-039	SHOB-139	5-7.5	0.53	83.1	8.0	1.6	0.69	3.0	2.75	73	20	7.0	SL
C07100513-040	SHOB-139	7.5-10	1.30	67.3	8.4	1.5	0.66	11	10.2	79	6.0	15	SL

TRACK# C07100513



LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100513

Report Date: 01/01/08
Date Received: 10/08/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	SatPst	SatPst	SatPst	SatPst	SatPst	SatPst	SatPst	unitless	%	%	%
		Depth	mmhos/cm	%	s_u	meq/L	meq/L	meq/L		%	%	%	Results
C07100513-041	SHOB-139	10-12.5	0.74	105	8.9	0.30	0.15	6.7	14.2	89	3.0	8.0	LS
C07100513-042	SHOB-139	12.5-15								83	10	7.0	LS
C07100513-043	SHOB-139	15-17.5	0.84	40.2	8.1	4.0	1.9	36	20.9	63	28	9.0	SL
C07100513-044	SHOB-139	17.5-20	0.79	105	7.8	0.98	0.33	7.9	9.82	38	41	21	L
C07100513-045	SHOB-139	20-25	0.96	120	8.2	1.1	0.61	8.1	8.87	25	37	38	CL
C07100513-046	SHOB-139	25-30	1.02	130	8.5	0.87	0.53	9.8	11.8	26	34	40	C - CL
C07100513-047	SHOB-139	30-35	0.94	114	8.8	0.47	0.27	8.4	13.9	40	17	43	C
C07100513-048	SHOB-139	35-40	0.61	127	9.2	0.98	0.51	5.7	6.56	49	15	36	SC
C07100513-049	SHOB-139	40-45	0.52	145	9.3	1.8	0.89	4.9	4.26	50	17	33	SCL
C07100513-050	SHOB-139	45-50	0.60	114	8.6	0.89	0.90	8.2	8.69	49	17	34	SCL
C07100513-051	SHOB-139	50-55	0.80	89.6	7.9	0.90	0.98	7.6	7.90	47	23	30	SCL
C07100513-052	SHOB-139	55-60	0.98	137	8.8	1.7	0.86	9.6	8.57	26	40	34	CL
C07100513-053	SHOB-139	60-65	1.19	145	9.1	0.62	0.43	12	16.3	9.0	58	33	SiCL
C07100513-054	SHOB-139	65-70	1.84	150	8.9	0.42	0.49	18	26.8	20	36	44	C
C07100513-055	SHOB-139	70-75	1.64	140	9.3	0.48	0.48	16	23.0	24	26	50	C
C07100513-056	SHOB-139	75-80	1.23	120	9.3	0.52	0.29	12	18.5	29	39	32	CL

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100515

Report Date: 01/01/08
Date Received: 10/08/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	mmhos/cm	%	s_u_	meq/L	meq/L	meq/L	unitless	%	%	%	Results
C07100515-001	SHOB-140	0-0								29	43	28	CL
C07100515-002	SHOB-140	2.5-5								61	27	12	SL
C07100515-003	SHOB-140	5-7.5	7.89	173	8.6	12	2.8	77	28.9	20	56	24	SiL
C07100515-004	SHOB-140	7.5-10	6.10	229	8.5	12	2.1	56	21.1	23	45	32	CL
C07100515-005	SHOB-140	10-12.5	4.80	240	8.4	5.3	0.89	45	25.5	25	43	32	CL
C07100515-006	SHOB-140	12.5-15								30	49	21	L
C07100515-007	SHOB-140	15-17.5								21	46	33	CL
C07100515-008	SHOB-140	17.5-20								17	71	12	SiL
C07100515-009	SHOB-140	20-25	0.64	126	9.0	0.44	0.17	6.1	11.1	77	18	5.0	LS
C07100515-010	SHOB-140	25-30	0.56	177	9.0	0.58	0.24	5.6	8.81	64	19	17	SL
C07100515-011	SHOB-140	30-35	0.69	178	9.0	0.91	0.38	7.2	8.91	59	24	17	SL
C07100515-012	SHOB-140	35-40	0.91	173	8.1	0.82	0.47	9.8	12.2	55	30	15	SL
C07100515-013	SHOB-140	40-45	0.68	145	8.6	0.58	0.24	6.8	10.7	80	13	7.0	LS
C07100515-014	SHOB-140	45-50	1.07	120	8.3	0.62	0.33	10	15.2	68	21	11	SL
C07100515-015	SHOB-140	50-55	0.94	114	8.7	0.40	0.24	9.2	16.3	65	22	13	SL
C07100515-016	SHOB-140	55-60	0.81	134	8.7	0.46	0.24	8.4	14.2	65	24	11	SL
C07100515-017	SHOB-140	60-65	0.74	143	8.8	0.49	0.22	7.3	12.2	71	14	15	SL
C07100515-018	SHOB-140	65-70	0.72	154	8.9	0.44	0.20	7.2	12.8	73	14	13	SL
C07100515-019	SHOB-140	70-75	0.84	128	9.0	0.45	0.24	8.8	15.1	65	19	16	SL
C07100515-020	SHOB-140	75-80	0.70	167	9.2	0.29	0.34	7.5	13.4	68	19	13	SL
C07100515-021	SHOB-141	0-2.5	0.37	183	8.2	1.6	1.5	1.0	0.81	11	64	25	SiL
C07100515-022	SHOB-141	2.5-5	4.61	154	8.0	19	27	19	4.07	5.0	62	33	SiCL
C07100515-023	SHOB-141	5-7.5	3.69	155	8.4	6.0	17	21	6.20	3.0	60	37	SiCL
C07100515-024	SHOB-141	7.5-10	4.89	154	8.2	12	27	25	5.76	6.0	63	31	SiCL
C07100515-026	SHOB-141	10-12.5	7.08	156	5.6	27	44	38	6.38	32	49	19	L
C07100515-027	SHOB-141	12.5-15	6.90	172	4.1	18	39	41	7.67	34	35	31	CL
C07100515-028	SHOB-141	15-17.5	4.72	155	5.0	21	25	20	4.11	9.0	50	41	SiC
C07100515-029	SHOB-141	17.5-20	4.79	174	6.4	24	24	18	3.65	9.0	44	47	SiC
C07100515-030	SHOB-141	20-25	3.68	135	7.1	8.3	15	20	5.98	11	52	37	SiCL
C07100515-031	SHOB-141	25-30	3.62	156	7.4	9.9	14	20	5.82	19	42	39	SiCL
C07100515-032	SHOB-141	30-35	1.84	268	8.0	1.8	3.1	13	8.27	1.0	30	69	C
C07100515-033	SHOB-141	35-40	5.86	197	6.4	16	23	38	8.69	47	22	31	SCL
C07100515-034	SHOB-141	40-45	3.22	139	8.1	2.8	4.7	25	13.2	60	17	23	SCL
C07100515-035	SHOB-141	45-50	3.27	130	8.8	1.9	2.6	29	19.2	19	56	25	SiL
C07100515-036	SHOB-141	50-55	2.09	195	8.9	0.71	0.73	19	22.4	12	55	33	SiCL
C07100515-037	SHOB-141	55-60	2.66	183	9.5	1.4	1.3	25	21.6	13	58	29	SiCL
C07100515-038	SHOB-141	60-65	1.12	260	9.5	0.25	0.21	11	23.2	1.0	60	39	SiCL
C07100515-039	SHOB-141	65-70	0.64	634	9.7	0.18	0.67	7.0	10.9	16	61	23	SiL
C07100515-040	SHOB-141	70-75	1.01	410	9.4	0.29	0.31	11	19.8	48	33	19	L
C07100515-041	SHOB-141	75-80	1.30	231	9.2	0.55	0.45	14	19.7	59	24	17	SL



LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100515

Report Date: 01/01/08
Date Received: 10/08/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	mmhos/cm	%	s_u_	meq/L	meq/L	meq/L	unitless	%	%	%	Results
C07100515-042	SHOB-141	80-85	1.19	106	7.3	0.76	0.81	56	63.7	51	30	19	L
C07100515-043	SHOB-141	95-100	4.40	97.5	7.0	2.6	3.2	41	24.3	15	44	41	SiC
C07100515-044	SHOB-141	100-105	8.76	99.9	8.1	3.4	3.0	33	18.4	10	63	27	SiCL - SiL
C07100515-045	SHOB-141	105-110	7.67	115	9.0	1.8	1.0	19	16.1	9.0	58	33	SiCL
C07100515-046	SHOB-144	0-2.5	3.50	97.7	7.4	3.3	0.81	1.4	0.99	28	55	17	SiL
C07100515-047	SHOB-144	2.5-5	0.37	65.2	7.6	2.0	0.42	1.1	1.03	31	60	9.0	SiL
C07100515-048	SHOB-144	5-7.5	2.10	99.5	8.2	1.8	0.32	19	18.1	7.0	60	33	SiCL
C07100515-049	SHOB-144	7.5-10	6.65	140	8.1	12	2.7	61	22.5	5.0	58	37	SiCL
C07100515-050	SHOB-144	10-12.5	4.93	123	8.4	3.3	0.88	45	31.4	17	54	29	SiCL
C07100515-051	SHOB-144	15-17.5	1.23	253	8.7	1.1	0.21	9.4	11.8	19	51	30	SiCL
C07100515-052	SHOB-144	17.5-20	5.25	157	7.6	21	6.6	36	9.79	26	41	33	CL
C07100515-053	SHOB-144	20-25	2.60	67.6	8.0	4.0	1.9	19	11.0	46	35	19	L
C07100515-054	SHOB-144	25-30	1.36	78.9	8.2	1.1	0.68	11	11.9	23	42	35	CL
C07100515-055	SHOB-144	30-35	0.77	96.9	8.4	0.54	0.30	6.6	10.2	21	41	38	CL
C07100515-056	SHOB-144	35-40	4.95	110	7.5	22	9.6	31	7.89	62	21	17	SL
C07100515-057	SHOB-144	40-45	4.00	61.0	7.6	14	6.0	25	8.04	72	15	13	SL
C07100515-058	SHOB-144	45-50	5.33	77.3	7.5	21	9.4	32	8.27	70	15	15	SL
C07100515-059	SHOB-144	50-55	1.92	44.1	8.4	1.5	0.64	9.1	8.72	69	15	16	SL
C07100515-060	SHOB-144	55-60	0.98	48.3	8.6	0.63	0.36	8.8	12.6	68	18	14	SL
C07100515-061	SHOB-144	60-65	1.81	48.2	8.1	1.4	0.80	15	14.3	72	15	13	SL
C07100515-062	SHOB-144	65-70	1.32	46.0	8.0	0.67	0.40	12	16.3	68	17	15	SL
C07100515-063	SHOB-144	70-75	1.28	68.6	8.4	0.76	0.45	12	15.0	65	22	13	SL
C07100515-064	SHOB-144	75-80	1.62	50.4	7.9	0.96	0.62	14	16.2	62	22	16	SL
C07100515-065	SHOB-144	80-85	1.93	63.0	8.1	1.3	0.72	17	16.5	58	25	17	SL
C07100515-066	SHOB-144	85-90	1.75	62.6	8.2	1.1	0.56	15	17.0	63	21	16	SL
C07100515-067	SHOB-144	90-95	1.81	56.6	8.0	1.2	0.75	16	15.8	61	21	18	SL
C07100515-068	SHOB-144	95-100	1.76	46.8	8.1	1.2	0.74	15	15.6	59	22	19	SL

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
 Project: South Heart Power 063-2174/063-2212
 Workorder: C07100844

Report Date: 01/01/08
 Date Received: 10/10/07

Sample ID	Client Sample ID	Analysis	EC	Saturation	pH	Ca	Mg	Na	SAR	Sand	Silt	Clay	Texture
		Units	SatPst mmhos/cm	%	SatPst s_u	meq/L	meq/L	meq/L	unitless	%	%	%	
		Depth	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
C07100844-001	BD-SAH-21	0-0	2.4	40	8.5	1.3	0.5	24.7	25.9	63	21	16	SL
C07100844-002	BD-SAH-22	0-0	0.62	59	7.8	3.2	1.1	2.2	1.53	13	54	33	SiCL
C07100844-003	BD-SAH-23	0-0	1.6	110	8.6	0.9	0.8	14.7	16.1	21	52	27	CL
C07100844-004	BD-SAH-24	0-0	5.1	110	8.0	8.4	11.6	45.6	14.4	11	53	36	SiCL
C07100844-005	BD-SAH-25	0-0	2.2	140	8.0	0.7	0.7	21.8	25.6	15	28	57	C
C07100844-006	BD-SAH-27	0-0	1.6	150	8.5	0.5	0.5	15.5	21.5	21	48	31	CL
C07100844-007	BD-SAH-28	0-0	1.6	160	8.0	0.2	0.2	16.4	37.6	7.0	28	65	C
C07100844-008	BD-SAH-29	0-0	4.7	32	7.6	28.1	28.2	15.8	2.97	75	16	9.0	SL
C07100844-009	BD-SAH-30	0-0	2.9	120	8.2	2.2	3.3	27.3	16.5	1.0	67	32	SiCL
C07100844-010	BD-SAH-31	0-0	6.0	84	8.8	1.9	2.6	69.8	46.4	7.0	64	29	SiCL
C07100844-011	BD-SAH-32	0-0	2.3	160	9.0	0.3	0.3	22.8	41.8	7.0	60	33	SiCL
C07100844-012	BD-SAH-33	0-0	6.2	48	8.2	25.8	31.8	41.7	7.78	28	41	31	CL
C07100844-013	BD-SAH-34	0-0	2.7	100	9.0	0.3	0.4	28.3	47.0	28	47	25	L
C07100844-014	BD-SAH-35	0-0	4.9	32	7.7	25.8	28.5	22.3	4.28	51	40	9.0	L
C07100844-015	BD-SAH-36	0-0	2.8	31	8.2	3.9	7.1	22.9	9.77	79	16	5.0	LS
C07100844-016	BD-SAH-40	0-0	3.4	100	8.2	1.2	1.5	35.5	30.9	9.0	70	21	SiL
C07100844-017	BD-SAH-41	0-0	2.6	130	9.2	0.3	0.3	27.0	49.8	5.0	68	27	SiCL
C07100844-018	BD-SAH-42	0-0	2.9	110	7.7	2.9	5.0	23.9	12.0	1.0	43	56	SiC
C07100844-019	BD-SAH-43	0-0	6.3	110	6.5	11.1	20.1	55.9	14.2	1.0	34	65	C
C07100844-020	BD-SAH-44	0-0	2.7	110	8.3	0.6	0.6	27.7	34.6	< 1.0	67	33	SiCL
C07100844-021	BD-SAH-45	0-0	2.5	110	9.0	0.3	0.4	25.0	42.6	11	64	25	SiL
C07100844-022	BD-SAH-46	0-0	2.4	170	9.0	0.2	0.3	23.8	44.8	1.0	60	39	SiCL
C07100844-023	BD-SAH-47	0-0	2.5	140	9.0	0.3	0.3	25.6	45.4	13	56	31	SiCL
C07100844-024	BD-SAH-48	0-0	1.7	140	8.7	0.4	0.4	15.9	25.3	10	61	29	SiCL
C07100844-025	BD-SAH-49	0-0	7.2	120	8.0	7.9	21.0	71.9	18.9	9.0	56	35	SiCL
C07100844-026	BD-SAH-50	0-0	6.5	130	7.0	11.6	25.9	52.2	12.1	5.0	31	64	C
C07100844-027	BD-SAH-51	0-0	4.7	86	8.5	3.4	4.7	45.5	22.7	12	63	25	SiL
C07100844-028	BD-SAH-52	0-0	4.6	100	8.4	1.8	2.3	45.6	31.9	14	52	34	SiCL
C07100844-029	BD-SAH-53	0-0	0.26	37	6.7	1.2	0.6	0.5	0.48	90	6.0	4.0	S
C07100844-030	BD-SAH-54	0-0	5.7	60	7.4	13.5	35.5	34.0	6.88	< 1.0	77	23	SiL
C07100844-031	BD-SAH-55	0-0	1.6	100	7.6	1.9	2.5	12.5	8.52	12	55	33	SiCL
C07100844-032	BD-SAH-56	0-0	1.3	170	8.5	0.2	0.2	12.5	28.3	7.0	41	52	SiC
C07100844-033	SHOB-143	0-2.5	0.53	70	8.0	1.8	2.4	1.3	0.93	ISS	ISS	ISS	ISS
C07100844-034	SHOB-143	2.5-5	2.7	79	7.8	15.1	15.4	6.2	1.60	9.0	47	44	SiC
C07100844-035	SHOB-143	5-7.5	5.3	69	7.9	22.9	31.1	26.4	5.07	12	53	35	SiCL
C07100844-036	SHOB-143	7.5-10	7.8	79	7.7	21.7	41.6	64.4	11.4	10	58	32	SiCL
C07100844-037	SHOB-143	10-12.5	14	67	4.4	23.6	106	141	17.4	18	45	37	SiCL
C07100844-038	SHOB-143	12.5-15	12	83	4.0	24.2	70.6	123	17.8	44	31	25	L
C07100844-039	SHOB-143	15-17.5	7.5	55	6.8	23.8	41.1	54.6	9.59	ISS	ISS	ISS	ISS
C07100844-040	SHOB-143	17.5-20	4.5	76	7.9	6.2	10.2	34.3	12.0	2.0	67	31	SiCL

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LABORATORY ANALYTICAL REPORT

Client: Golder Associates Inc
Project: South Heart Power 063-2174/063-2212
Workorder: C07100549

Report Date: 01/01/08
Date Received: 10/08/07

Sample ID	Client Sample ID	Analysis										
		EC SatPst	Saturation SatPst	pH SatPst	Ca SatPst	Mg SatPst	Na SatPst	SAR	Sand	Silt	Clay	Texture
		mmhos/cm	%	s_u_	meq/L	meq/L	meq/L	unitless	%	%	%	Results
		Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
C07100549-001	BD-SAH-01	1.97	45.6	7.6	2.0	1.1	17	13.4	62	23	15	SL
C07100549-002	BD-SAH-02	1.32	99.5	9.2	0.39	0.24	9.8	17.5	73	18	9.0	SL
C07100549-003	BD-SAH-03	1.47	146	9.5	0.31	0.24	15	28.6	6.0	61	33	SiCL
C07100549-004	BD-SAH-04	1.67	127	8.8	0.96	0.53	9.6	11.2	25	41	34	CL
C07100549-005	BD-SAH-05	1.38	39.2	8.3	1.0	0.65	13	13.7	81	11	8.0	LS
C07100549-006	BD-SAH-06	1.04	45.4	8.0	1.5	0.64	8.8	8.47	74	15	11	SL
C07100549-007	BD-SAH-07	3.58	112	8.4	2.1	3.7	31	18.3	48	30	22	L
C07100549-008	BD-SAH-08	1.42	94.8	8.1	2.0	1.2	9.3	7.37	25	37	38	CL
C07100549-009	BD-SAH-09	0.74	78.1	8.5	0.73	0.25	6.8	9.79	54	28	18	SL
C07100549-010	BD-SAH-10	2.91	97.2	8.1	3.5	4.3	22	11.5	39	37	24	L
C07100549-011	BD-SAH-11	0.38	51.3	8.5	0.42	1.1	1.5	1.69	81	16	3.0	LS
C07100549-012	BD-SAH-12	1.12	141	9.1	0.34	0.32	11	18.9	12	55	33	SiCL
C07100549-013	BD-SAH-13	0.74	98.4	7.9	2.1	1.1	4.2	3.34	27	33	40	C - CL
C07100549-014	BD-SAH-14	2.74	93.0	8.1	1.8	1.2	8.8	7.18	42	37	21	L
C07100549-015	BD-SAH-15	1.43	57.4	7.5	3.7	1.6	9.5	5.82	76	14	10	SL
C07100549-016	BD-SAH-16	1.76	110	8.5	0.87	0.77	17	18.6	7.0	49	44	SIC
C07100549-017	BD-SAH-17	2.08	57.0	8.1	0.85	0.74	19	21.9	43	33	24	L
C07100549-018	BD-SAH-18	5.00	98.1	7.1	16	23	26	5.75	39	30	31	CL
C07100549-019	BD-SAH-19	4.01	108	7.1	2.0	2.6	37	24.3	29	37	34	CL
C07100549-020	BD-SAH-20	1.60	69.0	8.0	1.4	0.82	12	11.0	47	32	21	L

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