SSCL-SR-1078

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A Year-End Summary Report of SSC Drilling 1989

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1989 GEOTECHNICAL CHARACTERIZATION BORINGS

BORING NUMBER	VE9.3A	BE1	BE1A	BE1.7	BF1.6
DATE COMPLETED	5/31/89	6/1/89	6/1/89	5/30/89	5/25/89
DRILLED BY	SWL/Wood	MJA/Murchisor	MJA/Murchisor	SWL/Wood	MJA/Murchisor
OBJECTIVE	Vibratn mon	Stratigraphy	Install well	Stratigraphy	Stratigraphy
		& structure		& structure	& structure
SURVEY:					
NORTH	212,767	261,640	261,637	269,077	282,039
EAST	2,193,347	2,172,253	2,172,256	2,172,642	2,176,960
ELEVATION	526.9	679.0	679.0	739.9	627.6
DRILLING METHOD	Rot. wash	NX Core	Rot. wash	NX Core	NX Core
DEPTH TO BASE OF:					
SOIL	20.0	4.2	4.0	18.0	n/a
TAYLOR	n/a	n/a	n/a	n/a	n/a
AUSTIN	170+	106.1	106.0	175.0	98.3
TOTAL DEPTH	170.0	212.0	140.0	225.0	152.7
SAMPLING PROGRAM					
SOILS	none	none	none	none	none
CORING	none	Continuous	none	25 - TD	Continuous
WIRELINE LOGGING					
SP	X	X		X	X
R (point, short, lon	X	X		X	X
Natural gamma	X	X		X	X
Compensated densi	X	X		X	X
Full-wave seismic	X	X		X	X
Caliper	X	X		X	X
Televiewer/camera					
Deviation survey					
Neutron					
PACKER TESTING		X			
SLUG TESTS		X			
UPHOLE VELOCITY	X				
CROSS HOLE					
VIBRATION MONITORING	X				
GROUT TO SURFACE		X		X	X
(or)					
WELL INSTALLATION					
Casing diam	4-inch		2-inch		
Screen interval	none		129.0-139.5		
PUMP TEST					
WATER LEVELS					
WATER SAMPLING					
1/3/90					

1989 GEOTECHNICAL CHARACTERIZATION BORINGS

BORING NUMBER	BK1'	B20-89	SE1	SE1.2A	SE1.2B
DATE COMPLETED	6/6/89	7/27/89	7/5/89	6/21/89	6/21/89
DRILLED BY	MJA/Cowan	MJA/Lesikar	MJA/Lesikar	SWL/Wood	SWL/Wood
OBJECTIVE	Stratigraphy	Stratigraphy	Fault investn	Fault investn	Fault investn
	& structure	& structure			
SURVEY:					
NORTH	241,115	264,002	261,548	264,111	263,856
EAST	2,175,593	2,167,707	2,172,406	2,171,656	2,171,463
ELEVATION	676.4	770.3	696.2	666.4	669.3
DRILLING METHOD	NX Core	NX Core	NX core @	Rotary wash	Air rotary
			50 deg plunge		
DEPTH TO BASE OF:					
SOIL	3.0	0.5	0.5	8.0	32.0
TAYLOR	n/a	n/a	n/a	n/a	n/a
AUSTIN	224.4	172.0	166.4	85+	85+
TOTAL DEPTH	330.0	211.0	286.0	85.0	85.0
SAMPLING PROGRAM					
SOILS	none	none	none	none	none
CORING	Continuous	Continuous	Continuous	none	none
WIRELINE LOGGING					
SP	X	X	X	X	X
R (point, short, lon	X	X	X	X	X
Natural gamma	X	X	X	X	X
Compensated densi	X	X	X	X	X
Full-wave seismic	X	X	X	X	X
Caliper	X	X	X	X	X
Televiewer/camera			X		
Deviation survey			X		
Neutron					
PACKER TESTING	X		X		
SLUG TESTS					
UPHOLE VELOCITY					
CROSS HOLE					
VIBRATION MONITORING					
GROUT TO SURFACE	X	X	X	X	X
(or)					
WELL INSTALLATION					
Casing diam					
Screen interval					
PUMP TEST					
WATER LEVELS					
WATER SAMPLING					
1/2/90					

1989 GEOTECHNICAL CHARACTERIZATION BORINGS

BORING NUMBER	SE1.5A	SE1.5B	SE1.8	SE4.6	SE4.7
DATE COMPLETED	6/21/89	6/21/89	10/3/89	9/22/89	9/22/89
DRILLED BY	SWL/Nicholas	SWL/Nicholas	MJA/Crowder	MJA/Crowder	MJA/Crowder
OBJECTIVE	Fault investn	Fault investn	Stratigraphy	Fault investn	Fault investn
			& structure		
SURVEY:					
NORTH	268,606	268,541	~264,930	296,845	297,270
EAST	2,172,645	2,172,842	~2,169,240	2,231,142	2,232,480
ELEVATION	733.0	732.9	740.5	531.0	528.8
DRILLING METHOD	Air rotary	Air rotary	NX Core	Rotary wash	Rotary wash
					& NX Core
DEPTH TO BASE OF:					
SOIL	1.0	2.5	1.0	13.8	13.1
TAYLOR	n/a	n/a	n/a	n/a	n/a
AUSTIN	75+	75+	152.3	86.7+	86.6+
TOTAL DEPTH	75.0	75.0	217.9	86.7	86.6
SAMPLING PROGRAM					
SOILS	none	none	none	none	none
CORING	none	none	Continuous	none	15 - TD
WIRELINE LOGGING					
SP	X	X	X	X	X
R (point, short, lon	X	X	X	X	X
Natural gamma	X	X	X	X	X
Compensated densi	X	X	X	X	X
Full-wave seismic	X	X	X	X	X
Caliper	X	X	X	X	X
Televiewer/camera					
Deviation survey					
Neutron					
PACKER TESTING			X		
SLUG TESTS					
UPHOLE VELOCITY					
CROSS HOLE					
VIBRATION MONITORING					
GROUT TO SURFACE	X	X	X	X	X
(or)					
WELL INSTALLATION					
Casing diam					
Screen interval					
PUMP TEST					
WATER LEVELS					
WATER SAMPLING					
1/3/90					

1989 GEOTECHNICAL CHARACTERIZATION BORINGS

BORING NUMBER	SE5.8A	SE5.8B	SE5.8C	SF5.2A	SF5.2B
DATE COMPLETED	9/23/89	9/23/89	9/23/89	9/23/89	9/23/89
DRILLED BY	SWL/Wood	SWL/Wood	SWL/Wood	SWL/Wood	SWL/Wood
OBJECTIVE	Fault investn	Fault investn	Fault investn	Fault investn	Fault investn
SURVEY:					
NORTH	~265,525	~264,600	~265,250	~259,975	~259,275
EAST	~2,249,700	~2,249,800	~2,249,800	~2,251,600	~2,151,575
ELEVATION	~435	~460	~430	~482	~489
DRILLING METHOD	Air rotary	Air rotary	Air rotary	Air rotary	Air rotary
DEPTH TO BASE OF:					
SOIL	12.0	28.0	22.0	32.0	28.0
TAYLOR	100+	120+	100+	100+	100+
AUSTIN	n/a	n/a	n/a	n/a	n/a
TOTAL DEPTH	100.0	120.0	100.0	100.0	100.0
SAMPLING PROGRAM					
SOILS	none	none	none	none	none
CORING	none	none	none	none	none
WIRELINE LOGGING					
SP	X	X	X	X	X
R (point, short, lon	X	X	X	X	X
Natural gamma	X	X	X	X	X
Compensated densi	X	X	X	X	X
Full-wave seismic	X	X	X	X	X
Caliper	X	X	X	X	X
Televiewer/camera					
Deviation survey					
Neutron					
PACKER TESTING					
SLUG TESTS					
UPHOLE VELOCITY					
CROSS HOLE					
VIBRATION MONITORING					
GROUT TO SURFACE	X	X	X	X	X
(or)					
WELL INSTALLATION					
Casing diam					
Screen interval					
PUMP TEST					
WATER LEVELS					
WATER SAMPLING					
1/2/90					

1989 GEOTECHNICAL CHARACTERIZATION BORINGS

BORING NUMBER	SF8.1	SF8.6	SF10.6A	SF10.6B	SE10.4
DATE COMPLETED	10/3/89	9/30/89	6/20/89	6/20/89	7/31/89
DRILLED BY	MJA/Crowder	MJA/Crowder	SWL/Wood	SWL/Nicholas	SWL/Wood
OBJECTIVE	Fault investn	Fault investn	Fault investn	Fault investn	Stratigraphy
					& structure
SURVEY:					
NORTH	206,750	206,944	254,183	254,026	234,498
EAST	2,216,280	2,206,678	2,172,909	2,172,923	2,177,792
ELEVATION	475.5	533.5	737.4	733.2	643.1
DRILLING METHOD	Rotary wash	Rotary wash	Air rotary	Air rotary	Air rotary
		& NX Core			& NX Core
DEPTH TO BASE OF:					
SOIL	7.0	13.0	1.0	6.0	0.5
TAYLOR	72.8	74.2	n/a	n/a	n/a
AUSTIN	n/a	n/a	75+	75+	190.5
TOTAL DEPTH	129.0	128.2	75.0	75.0	225.0
SAMPLING PROGRAM					
SOILS	none	none	none	none	none
CORING	none	35 - TD	none	none	150 - TD
WIRELINE LOGGING					
SP	X	X	X	X	X
R (point, short, lon	X	X	X	X	X
Natural gamma	X	X	X	X	X
Compensated densi	X	X	X	X	X
Full-wave seismic	X	X	X	X	X
Caliper	X	X	X	X	X
Televiewer/camera					
Deviation survey					
Neutron					
PACKER TESTING					
SLUG TESTS					
UPHOLE VELOCITY					
CROSS HOLE					
VIBRATION MONITORING					
GROUT TO SURFACE	X	X	X	X	X
(or)					
WELL INSTALLATION					
Casing diam					
Screen interval					
PUMP TEST					
WATER LEVELS					
WATER SAMPLING					
1/2/90					

1989 GEOTECHNICAL CHARACTERIZATION BORINGS

BORING NUMBER	BE10.5	BE10.7	SE10.8	BE10.9	SE10.9A
DATE COMPLETED	7/28/89	7/27/89	7/31/89	7/26/89	7/28/89
DRILLED BY	SWL/Wood	SWL/Randall	SWL/Hartsfiel	SWL/Hartsfiel	SWL/Hartsfiel
OBJECTIVE	Stratigraphy	Stratigraphy	Stratigraphy	Stratigraphy	Stratigraphy
	& structure	& structure	& structure	& structure	& structure
SURVEY:					
NORTH	236,330	238,870	240,750	242,387	242,170
EAST	2,177,010	2,175,803	2,174,960	2,174,878	2,175,210
ELEVATION	645.6	662.2	678.6	689.3	685.8
DRILLING METHOD	Air rotary	NX Core	Rotary &	Rotary wash	Rotary &
	& NX Core		NX Core	& NX Core	NX Core
DEPTH TO BASE OF:					
SOIL	14.5	1.0	0.5	6.5	4.0
TAYLOR	n/a	n/a	n/a	n/a	n/a
AUSTIN	179.4	208.7	211.1	191.0	219.0
TOTAL DEPTH	215.0	259.0	246.0	241.0	254.0
SAMPLING PROGRAM					
SOILS	none	none	none	none	none
CORING	15 - TD	10 - TD	145 - TD	122 - 127	160 - TD
WIRELINE LOGGING					
SP	X	X	X	X	X
R (point, short, lon	X	X	X	X	X
Natural gamma	X	X	X	X	X
Compensated densi	X	X	X	X	X
Full-wave seismic	X	X	X	X	X
Caliper	X	X	X	X	X
Televiewer/camera					
Deviation survey					
Neutron					
PACKER TESTING					
SLUG TESTS					
UPHOLE VELOCITY					
CROSS HOLE					
VIBRATION MONITORING					
GROUT TO SURFACE	X	X	X	X	X
(or)					
WELL INSTALLATION					
Casing diam					
Screen interval					
PUMP TEST					
WATER LEVELS					
WATER SAMPLING					
1/2/90					

1989 GEOTECHNICAL CHARACTERIZATION BORINGS

BORING NUMBER	BF10.1	SF10.1	BIR11	BIR12	BIR21
DATE COMPLETED	7/25/89	7/28/89	9/21/89	9/19/89	9/22/89
DRILLED BY	MJA/Lesikar	SWL/Wood	SWL/Wood	MJA/Lesikar	SWL/Randall
OBJECTIVE	Stratigraphy	Stratigraphy	Interaction	Interaction	Interaction
	& structure	& structure	hall investn	hall investn	hall investn
SURVEY:					
NORTH	246,194	247,060	239,029	239,008	238,620
EAST	2,174,168	2,173,580	2,175,454	2,175,582	2,175,708
ELEVATION	730.5	714.6	670.2	667.5	665.3
DRILLING METHOD	NX Core	Air rotary	NX Core	NX Core @	NX Core
		& NX Core		45 dg plunge	
DEPTH TO BASE OF:					
SOIL	2.2	3.0	1.0	2.5	1.0
TAYLOR	n/a	n/a	n/a	n/a	n/a
AUSTIN	203.0	209.8	217.4	304.6	212.6
TOTAL DEPTH	257.6	245.0	265.0	341.5	312.6
SAMPLING PROGRAM					
SOILS	none	none	none	none	none
CORING	Continuous	155 - TD	Continuous	Continuous	Continuous
WIRELINE LOGGING					
SP	X	X	X	X	X
R (point, short, lon	X	X	X	X	X
Natural gamma	X	X	X	X	X
Compensated densi	X	X	X	X	X
Full-wave seismic	X	X	X	X	X
Caliper	X	X	X	X	X
Televiewer/camera					
Deviation survey				X	
Neutron			X		X
PACKER TESTING			X	X	X
SLUG TESTS					
UPHOLE VELOCITY			X		X
CROSS HOLE					
VIBRATION MONITORING					
GROUT TO SURFACE	X	X		X	
(or)					
WELL INSTALLATION					
Casing diam			4-inch		4-inch
Screen interval			205.0-225.0		202.5-222,5
PUMP TEST					
WATER LEVELS					
WATER SAMPLING					
1/2/90					

1989 GEOTECHNICAL CHARACTERIZATION BORINGS

BORING NUMBER	BIR22	BIR23	BIR31	BIR32	BIR33
DATE COMPLETED	9/21/89	9/20/89	9/25/89	9/28/89	9/15/89
DRILLED BY	MJA/	SWL/Granger	SWL/Granger	MJA/	SWL/Granger
OBJECTIVE	Interaction	Interaction	Interaction	Interaction	Interaction
	hall investn	hall investn	hall investn	hall investn	hall investn
SURVEY:					
NORTH	238,494	238,320	232,079	231,944	231,772
EAST	2,175,935	2,175,840	2,178,422	2,178,644	2,178,541
ELEVATION	658.4	659.9	617.5	618.5	616.4
DRILLING METHOD	NX Core @	NX Core	NX Core	NX Core @	NX Core
	45 dg plunge			45 dg plunge	
DEPTH TO BASE OF:					
SOIL	0.5	2.0	2.4	6.0	1.5
TAYLOR	n/a	n/a	n/a	n/a	n/a
AUSTIN	286.7	208.5	165.0	220.6	169.3
TOTAL DEPTH	357.0	241.0	295.0	293.7	204.0
SAMPLING PROGRAM					
SOILS	none	none	none	none	none
CORING	Continuous	Continuous	Continuous	Continuous	Continuous
WIRELINE LOGGING					
SP	X	X	X	X	X
R (point, short, lon	X	X	X	X	X
Natural gamma	X	X	X	X	X
Compensated densi	X	X	X	X	X
Full-wave seismic	X	X	X	X	X
Caliper	X	X	X	X	X
Televiewer/camera					
Deviation survey	X			X	
Neutron			X		
PACKER TESTING	X		X	X	
SLUG TESTS					
UPHOLE VELOCITY			X		
CROSS HOLE					
VIBRATION MONITORING					
GROUT TO SURFACE	X	X		X	X
(or)					
WELL INSTALLATION					
Casing diam			4-inch		
Screen interval			155.0-175.0		
PUMP TEST					
WATER LEVELS					
WATER SAMPLING					
1/3/90					

1989 GEOTECHNICAL CHARACTERIZATION BORINGS

BORING NUMBER	BIR41	BIR42	BIR51	BIR52	BIR53
DATE COMPLETED	9/28/89	9/25/89	11/17/89	11/21/89	11/20/89
DRILLED BY	SWL/Wood	MJA/Lesikar	SWL/Wood	SWL/Wood	MJA/Lesikar
OBJECTIVE	Interaction	Interaction	Interaction	Interaction	Interaction
	hall investn	hall investn	hall investn	hall investn	hall investn
SURVEY:					
NORTH	231,388	231,357	~266,212	~266,420	~266,099
EAST	2,178,618	2,178,714	~2,250,535	~2,250,682	~2,250,836
ELEVATION	618.7	620.0	~449	~447.8	~447.0
DRILLING METHOD	NX Core	NX Core @	NX Core	NX Core	NX Core @
		45 dg plunge			45 dg plunge
DEPTH TO BASE OF:					
SOIL	4.0	1.5	20.0	24.5	16.5
TAYLOR	n/a	n/a	180.7	186.3	238.7
AUSTIN	175.0	245.2	n/a	n/a	n/a
TOTAL DEPTH	223.0	282.5	200.0	205.0	285.5
SAMPLING PROGRAM					
SOILS	none	none	Shelby tube	Shelby tube	none
CORING	Continuous	Continuous	Continuous	Continuous	Continuous
WIRELINE LOGGING					
SP	X	X	X	X	X
R (point, short, long	X	X	X	X	X
Natural gamma	X	X	X	X	X
Compensated densit	X	X	X	X	X
Full-wave seismic (	X	X	X	X	X
Caliper	X	X	X	X	X
Televiewer/camera					
Deviation survey		X			X
Neutron	X				
PACKER TESTING	X	X			X
SLUG TESTS					
UPHOLE VELOCITY	X				
CROSS HOLE					
VIBRATION MONITORING					
GROUT TO SURFACE		X	X	X	X
(or)					
WELL INSTALLATION					
Casing diam	4-inch				
Screen interval	165.0-185.0				
PUMP TEST					
WATER LEVELS					
WATER SAMPLING					
1/3/90					

1989 GEOTECHNICAL CHARACTERIZATION BORINGS

BORING NUMBER	BIR54	BIR81	BIR82	BIR83	BIR84
DATE COMPLETED	9/29/89	12/5/89	10/3/89	10/2/89	10/5/89
DRILLED BY	SWL/Randall	SWL/Granger	SWL/Granger	MJA/Lesikar	SWL/Granger
OBJECTIVE	Interaction	Interaction	Interaction	Interaction	Interaction
	hall investn	hall investn	hall investn	hall investn	hall investn
SURVEY:					
NORTH	266,015	273,893	273,986	~273,745	273,653
EAST	2,250,622	2,247,359	2,247,570	~2,247,675	2,247,464
ELEVATION	446.2	452.2	464.5	~454.8	446.8
DRILLING METHOD	NX Core	NX Core	NX Core	NX Core @	NX Core
				45 dg plunge	
DEPTH TO BASE OF:					
SOIL	17.0	5.0	21.5 feet	8.0	14.0
TAYLOR	187.0	140.4	154.8	206.0	136.0
AUSTIN	n/a	n/a	n/a	n/a	n/a
TOTAL DEPTH	422.0	405.0	197.0	286.0	179.0
SAMPLING PROGRAM					
SOILS	none	none	none	none	none
CORING	Continuous	Continuous	Continuous	Continuous	Continuous
WIRELINE LOGGING					
SP	X	X	X	X	X
R (point, short, long	X	X	X	X	X
Natural gamma	X	X	X	X	X
Compensated densit	X	X	X	X	X
Full-wave seismic (	X	X	X	X	X
Caliper	X	X	X	X	X
Televiewer/camera					
Deviation survey				X	
Neutron	X	X			
PACKER TESTING	X	X		X	
SLUG TESTS					
UPHOLE VELOCITY	X	X			
CROSS HOLE					
VIBRATION MONITORING					
GROUT TO SURFACE			X	X	X
(or)					
WELL INSTALLATION					
Casing diam	4-inch	4-inch			
Screen interval	176.0-196.0	130.0-150.0			
PUMP TEST					
WATER LEVELS					
WATER SAMPLING					
1/3/90					

1989 GEOTECHNICAL CHARACTERIZATION BORINGS

BORING NUMBER	BI1	BI2	BI2A	BI3
DATE COMPLETED	12/5/89	12/7/89	12/7/89	12/11/89
DRILLED BY	SWL/Hartsfield	MJA/Lesikar	MJA/Lesikar	SWL/Hartsfield
OBJECTIVE	Injector	Injector	Injector	Injector
				in
SURVEY:				
NORTH	251,717	256,245	256,267	246,179
EAST	2,171,756	2,179,235	2,179,204	2,180,466
ELEVATION	741.4	641.4	639.9	696.7
DRILLING METHOD	NX Core	NX Core	NX Core	NX Core
DEPTH TO BASE OF:				
SOIL	0.5		4.7	5.0
TAYLOR	n/a		n/a	n/a
AUSTIN	183.0		234.2	261.5
TOTAL DEPTH	211.0	110 approx.	261.5	282.0
SAMPLING PROGRAM				
SOILS	none		none	none
CORING	Continuous		Continuous	Continuous
WIRELINE LOGGING				
SP	X		X	X
R (point, short, long	X		X	X
Natural gamma	X		X	X
Compensated densit	X		X	X
Full-wave seismic (	X		X	X
Caliper	X		X	X
Televiewer/camera				
Deviation survey				
Neutron				
PACKER TESTING	X		X	X
SLUG TESTS				
UPHOLE VELOCITY				
CROSS HOLE				
VIBRATION MONITORING				
GROUT TO SURFACE		X		
(or)				
WELL INSTALLATION				
Casing diam	2-inch		2-inch	2-inch
Screen interval	170.0-190.0		49.7-69.7	76.0-96.0
PUMP TEST				
WATER LEVELS				
WATER SAMPLING				
1/3/90				

1989 GEOTECHNICAL CHARACTERIZATION BORINGS

BORING NUMBER	VF1.7	VE3.5	VE3.5A	VF5.4	VE9.3
DATE COMPLETED	5/25/89	6/2/89	6/9/89	6/3/89	5/26/89
DRILLED BY	SWL/Wood	SWL/Wood	SWL/Wood	SWL/Nicholas	SWL/Wood
OBJECTIVE	Vibratn mon	Vibratn mon	Vibratn mon	Vibratn mon	Vibratn mon
SURVEY:					
NORTH	282,162	~302,080	301,759	~256,525	~212,781
EAST	2,177,122	~2,210,160	2,209,063	~2,252,425	~2,193,347
ELEVATION	611.9	~550	569.4	~480	~526
DRILLING METHOD	Rot. wash	Rot. wash	Rot. wash	Rot. wash	Rot. wash
DEPTH TO BASE OF:					
SOIL	21.0	7.5	3.0	22.5	20.0
TAYLOR	n/a	n/a	n/a	270+	n/a
AUSTIN	69+	83+	105+	n/a	172+
TOTAL DEPTH	69.0	83.0	105.0	270.0	172.0
SAMPLING PROGRAM					
SOILS	S/5 ft	S/5 ft	S/5 ft	S/5 ft	S/5 ft
CORING	none	none	none	none	none
WIRELINE LOGGING					
SP	X	X	X	X	X
R (point, short, lon	X	X	X	X	X
Natural gamma	X	X	X	X	X
Compensated densi	X	X	X	X	X
Full-wave seismic	X	X	X	X	X
Caliper	X	X	X	X	X
Televiewer/camera					
Deviation survey					
Neutron					
PACKER TESTING					
SLUG TESTS					
UPHOLE VELOCITY	X	X	X	X	X
CROSS HOLE					
VIBRATION MONITORING	X	X	X	X	X
GROUT TO SURFACE					
(or)					
WELL INSTALLATION					
Casing diam	4-inch	4-inch	4-inch	4-inch	4-inch
Screen interval	none	none	none	none	none
PUMP TEST					
WATER LEVELS					
WATER SAMPLING					
1/2/90					