APPENDIX B-1

STRATIGRAPHY LOGS – THROUGH 2012

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: DMW-1
DATE COMPLETED: March 28, 2012
DRILLING METHOD: ROTOSONIC
FIELD PERSONNEL: D. RIVERS

NORTHING: 268202.27
EASTING: 13344258.09

	ELEV. ft BGS
GROUND SURFACE	716.59
TOP OF RISER	716.57
TOP OF CASING	716.20

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	ASPHALT	716.39
		715.89
2	SP/GP-SAND AND GRAVEL (FILL), loose, fine to coarse sand and gravel, poorly graded, brown and gray, moist	715.39
4	SC-CLAYEY SAND (FILL), trace silt and fine gravel, compact, fine to coarse grained, poorly graded, orange brown, moist	
6	SP-SAND (FILL), trace silt, compact, fine grained, trace medium to coarse grained, poorly graded, orange brown, moist	
	- with silt, fine grained at 5.0ft BGS	
8	- with fine gravel, trace silt, fine to coarse grained at 7.0ft BGS	708.69
10	- fine grained, trace silt and fine gravel at 7.3ft BGS	
12	SP-SAND, trace silt, with fine gravel, compact, fine to coarse grained, poorly graded, light brown, moist	
	- trace coarse gravel, with fine gravel, brown, wet at 10.0ft BGS	703.09
14		702.69
	CL-SILTY CLAY, firm, low plasticity, gray, moist	
16		700.89
	SM-SILTY SAND, compact, fine grained, poorly graded, gray, wet	
18	CL-SILTY CLAY, firm, low plasticity, gray, moist	
20	- 0.05' silty sand seam, fine grained, gray, wet at 17.3ft BGS	
	- 0.3' silty sand seam, fine grained, gray, wet at 17.8ft BGS	
22	- trace coarse sand to fine gravel at 18.3ft BGS	
24		
26		
	- stiff at 27.0ft BGS	
28		
30		
32		
34		
36		
38		

MONITORING WELL: CONCRETE SEAL; BENTONITE GROUT; 2" PVC WELL CASING; 8" BOREHOLE; 6" BOREHOLE

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				1.1
				0.1
1RS		90		0.0
				0.0
				0.0
				0.5
				1.1
				26.0
				11.7
				5.2
				0.0
				0.0
				0.0
				0.0
2RS		100		0.0
				0.0
				0.0
4RS		100		0.0
				0.0
				0.0
3RS		100		0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: DMW-1
DATE COMPLETED: March 28, 2012
DRILLING METHOD: ROTOSONIC
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
42								0.0
				5RS		100		0.0
44								0.0
46								0.0
48								0.0
50	- medium plasticity, firm at 49.0ft BGS							0.0
52			BENTONITE GROUT					0.0
				6RS		100		0.0
54								0.0
56								0.0
58	- no coarse sand to fine gravel, stiff, medium to high plasticity at 57.0ft BGS							0.0
	- firm, low plasticity at 59.0ft BGS							0.0
60								0.0
62								0.0
				7RS		100		0.0
64								0.0
66								0.0
	ML-SILT, with clay, trace fine sand, very soft, non plastic, gray, moist to wet	650.09 649.59						0.0
68	CL-SILTY CLAY, firm, low to medium plasticity, gray, moist	648.59 647.79						0.0
70	ML-SILT, with clay, trace fine sand, very soft, non plastic, gray, moist to wet	646.59						0.0
	CL-SILTY CLAY, firm, low to medium plasticity, gray, moist		BENTONITE CHIPS					0.0
72	CL-CLAY, with silt and fine sand, trace coarse sand to fine gravel, soft to firm, low plasticity, gray, moist			8RS		100		0.0
74								0.0
76	COBBLE	640.89 640.59						0.0
	SM-SILTY SAND, dense, fine grained, gray, wet							0.0
78	- 0.3' silty clay seam, stiff, low plasticity, gray at 78.4ft BGS	637.59	2" PVC WELL SCREEN					0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: DMW-1
DATE COMPLETED: March 28, 2012
DRILLING METHOD: ROTOSONIC
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
82	SM/ML-SAND AND SILT, dense, fine sand, gray, wet	636.59	SAND PACK					0.0
	SP-GRAVELLY SAND, compact, fine to coarse grained, fine gravel, poorly graded, gray, wet	635.69		9RS		100		0.0
84	CL-CLAY (till), with silt and fine sand, trace fine gravel, hard, low plasticity, gray, dry							0.0
86	- 0.1' gravelly sand seam, fine to coarse grained, fine gravel, gray, wet at 81.5ft BGS							0.0
88								0.0
90			BENTONITE CHIPS					0.0
92				10RS		100		0.0
94								0.0
96								0.0
98	END OF BOREHOLE @ 97.0ft BGS	619.59						
100								
102								
104								
106								
108								
110								
112								
114								
116								
118								

WELL DETAILS
Screened interval:
640.59 to 635.59ft BGS
76.00 to 81.00ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
647.39 to 642.59ft BGS
69.20 to 74.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
642.59 to 633.09ft BGS
74.00 to 83.50ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: DMW-2
DATE COMPLETED: March 29, 2012
DRILLING METHOD: ROTOSONIC
FIELD PERSONNEL: D. RIVERS

NORTHING: 268231.93
EASTING: 13344731.84

TOP OF RISER 714.65
GROUND SURFACE 714.64
TOP OF CASING 714.23

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	ASPHALT	714.44	CONCRETE SEAL					0.0
		714.04	BENTONITE GROUT					
2	CRUSHED LIMESTONE (FILL), sand and gravel size, loose, gray, moist	713.64						0.0
4	SP-SAND (FILL), trace silt and fine gravel, compact, fine to coarse grained, poorly graded, dark brown, moist		2" PVC WELL CASING	1RS		85		0.0
6	SP-SAND (FILL), with silt, compact, fine grained, poorly graded, orange brown, moist - 0.3' gravelly sand seam, fine to coarse sand, fine gravel, light brown, moist at 6.2ft BGS	707.64						0.0
8	SP-SAND, with fine gravel, compact, fine to coarse grained, poorly graded, light brown, moist		8" BOREHOLE					0.0
10	- brown, wet at 8.8ft BGS - 0.3' silty clay seam, firm, low plasticity, gray, moist at 9.0ft BGS							0.0
12	- fine grained, brown gray, wet at 9.3ft BGS							1.3
14								6.4
16								1.2
18	CL-SILTY CLAY, firm, low plasticity, gray, moist	697.24	6" BOREHOLE					1.3
20	- trace coarse sand to coarse gravel at 20.5ft BGS							0.0
22								0.0
24								0.0
26								0.0
28	- stiff at 29.0ft BGS			2RS		100		0.0
30								0.0
32	- firm, medium plasticity at 33.0ft BGS			4RS		100		0.0
34								0.0
36	- stiff, low plasticity at 37.0ft BGS							0.0
38				3RS		100		0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: DMW-2
DATE COMPLETED: March 29, 2012
DRILLING METHOD: ROTOSONIC
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
42								0.0
				5RS		100		0.0
44								0.0
46								0.0
48	- no sand and gravel, stiff at 48.0ft BGS							0.0
50	- firm at 50.0ft BGS							0.0
52			BENTONITE GROUT	6RS		100		0.0
54								0.0
56								0.0
58								0.0
60	- soft to firm at 59.0ft BGS							0.0
62								0.0
64				7RS		100		0.0
66								0.0
68	ML-SILT, with clay and fine sand, soft, non plastic, gray, moist to wet	647.94						0.0
	- 0.3' clay seam at 67.0ft BGS	646.44						0.0
70	CL-SILTY CLAY, firm, low plasticity, gray, moist	645.64						0.0
72	ML-SILT, with clay and fine sand, soft, non plastic, gray, moist to wet	643.64						0.0
	- 0.3' clay seam at 67.0ft BGS		BENTONITE CHIPS	8RS		100		0.0
74	CL-CLAY, with silt and fine sand, trace coarse sand to coarse gravel, firm to stiff, low plasticity, gray, moist							0.0
76								0.0
78	SM-SILTY SAND, dense, fine grained, poorly graded, gray, wet	637.64						0.0
	SP-SAND, trace silt and fine gravel, very	635.64	2" PVC WELL SCREEN					0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: DMW-2
DATE COMPLETED: March 29, 2012
DRILLING METHOD: ROTOSONIC
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
82	dense, fine to coarse grained, poorly graded, gray, wet		SAND PACK					0.0
	CL-CLAY (till), with silt and fine sand, trace coarse sand to coarse gravel, hard, low plasticity, gray, dry	632.64		9RS		100		0.0
84								0.0
86								0.0
88								0.0
90								0.0
92	- no sand and gravel at 91.5ft BGS		BENTONITE CHIPS					0.0
94	- sandy clay, with silt, trace coarse sand to coarse gravel at 94.0ft BGS			10RS		100		0.0
96	- 0.1' fine to medium grained sand seam, gray, wet at 95.5ft BGS							0.0
98								0.0
100	END OF BOREHOLE @ 99.0ft BGS	615.64						
102								
104								
106								
108								
110								
112								
114								
116								
118								

WELL DETAILS
Screened interval:
637.64 to 632.64ft BGS
77.00 to 82.00ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
644.64 to 640.04ft BGS
70.00 to 74.60ft BGS
Material: BENTONITE CHIPS
Sand Pack:
640.04 to 629.64ft BGS
74.60 to 85.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: EOS-1
DATE COMPLETED: April 23, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	TEMP. MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
2	CL-CLAYS (surficial fill), compacted, gray, dry to moist		BENTONITE CHIPS 1-7/8"	1DP				3.3
4	SP-SANDS (FILL), fine grained, poorly graded, black, wet	2.50	BOREHOLE NATURAL COLLAPSE	2DP				4.9
6	CL-SILTY CLAYS, trace fine subangular gravels, stiff, low plasticity, gray, dry to moist	6.20	WELL DETAILS Screened interval: 1.60 to 3.60ft BGS Length: 2ft Diameter: 1in Slot Size: 0.010 Material: PVC	3DP				2.8
8	END OF BOREHOLE @ 6.4ft BGS	6.40						
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

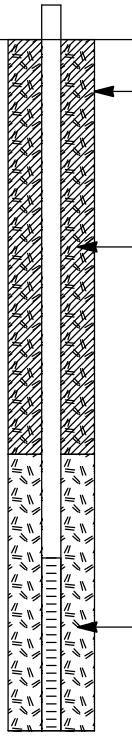
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: EOS-10
DATE COMPLETED: April 24, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
0	SP-SANDS (FILL), fine grained, poorly graded, loose, brown, dry to moist	
2	- vegetation, rootlets at 0.2ft BGS	
4		
6		
8		
10	- oxidation banding at 10.0ft BGS	
12	SP/SM-SANDS, with silts, fine grained, poorly graded, gray-black-brown, strong odor, laminated black sand seams, wet	12.20
14		
16		
18		
20	CL-SILTY CLAYS (native), trace fine subangular gravels, stiff, low plasticity, gray, dry to moist	19.80
22	END OF BOREHOLE @ 20.0ft BGS	20.00
24		
26		
28		
30		
32		
34		
36		
38		

TEMP. MONITORING WELL



WELL DETAILS
Screened interval:
15.00 to 20.00ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP				6.3
2DP				10.1
3DP				41.9
4DP				>2000

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: EOS-11
DATE COMPLETED: April 24, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	TEMP. MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	SP-SANDS (FILL), fine grained, poorly graded, medium brown, loose, moist		1-7/8" BOREHOLE	1DP				4.9
2								
4								
6			BENTONITE CHIPS					
8				2DP				63.2
10	- some medium sands at 9.0ft BGS							
12	- wet, very strong NAPL-like odor, brown staining at 12.0ft BGS			3DP				>2000
14	- black, fine sands, strong odor at 13.5ft BGS - black, fine sands, strong odor at 14.0ft BGS							
16	- becoming gray at 14.6ft BGS		NATURAL COLLAPSE	4DP				>2000
17	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, gray, dry to moist	17.00						
18	END OF BOREHOLE @ 18.0ft BGS	18.00	WELL DETAILS Screened interval: 13.00 to 18.00ft BGS Length: 5ft Diameter: 1in Slot Size: 0.010 Material: PVC					
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: EOS-12
DATE COMPLETED: April 24, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	TEMP. MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	SP-SANDS (FILL), fine grained, poorly graded, loose, brown, moist		CONCRETE; 1-7/8" BOREHOLE	1DP				0.0
2								
4								
6								
8			BENTONITE CHIPS	2DP				0.0
10								
12				3DP				64.1
14								
16	- trace silts, compact at 15.0ft BGS - becoming gray, wet, slight to moderate odor from 16 to 19.5' BGS at 16.0ft BGS		NATURAL COLLAPSE	4DP				392
18	- fine sands, black, moderate odor at 17.0ft BGS							
20	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, gray, dry to moist	19.50 20.00	WELL DETAILS Screened interval: 14.50 to 19.50ft BGS Length: 5ft Diameter: 1in Slot Size: 0.010 Material: PVC					
22	END OF BOREHOLE @ 20.0ft BGS							
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: EOS-13
DATE COMPLETED: April 24, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	TEMP. MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	SP-SANDS (FILL), fine grained, poorly graded, medium brown		CONCRETE; 1-7/8" BOREHOLE					
2				1DP				2.0
4								
6			BENTONITE CHIPS					
8				2DP				4.3
10								
12	- oxidation banding at 11.0ft BGS - wet at 13.0ft BGS			3DP				69.2
14	- black fine sands, strong odor at 13.9ft BGS	14.00						
16	SP-SANDS, trace silts, laminated, intermixing black sands, moderate odor, brown, wet		NATURAL COLLAPSE					
18				4DP				--
20	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, gray, moist	19.30 20.00						
22	END OF BOREHOLE @ 20.0ft BGS		WELL DETAILS Screened interval: 15.00 to 20.00ft BGS Length: 5ft Diameter: 1in Slot Size: 0.010 Material: PVC					
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: EOS-14
DATE COMPLETED: April 24, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	TEMP. MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	SP-SANDS (FILL), fine grained, poorly graded, loose, brown, moist		1-7/8" BOREHOLE	1DP				--
2								
4								
6			BENTONITE CHIPS					
8				2DP				39.4
10								
12	SP/SM-SANDS, fine grained, poorly graded, high silt content, grayish black, moist, strong odor - wet at 12.5ft BGS - becoming gray, moderate odor at 14.0ft BGS - becoming black and sheeny, very strong odor at 14.6ft BGS	11.30		3DP				69.0
14								
16								
18	- 0.1ft seam trace NAPL lens at 17.1ft BGS		NATURAL COLLAPSE	4DP				72.1
20	CL-SILTY CLAYS (native), trace fine subangular gravels, stiff, low plasticity, gray, dry	19.50 20.00						
22	END OF BOREHOLE @ 20.0ft BGS							
24								
26								
28								
30								
32								
34								
36								
38								

WELL DETAILS
Screened interval:
15.00 to 20.00ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: EOS-15
DATE COMPLETED: April 25, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	TEMP. MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	ASPHALT	0.30	CONCRETE; 1-7/8" BOREHOLE; BENTONITE CHIPS; NATURAL COLLAPSE					
2	SP-SANDS (FILL), fine grained, poorly graded, loose			1DP				--
4								
6								
8				2DP				--
10								
12	- increase in silts at 12.0ft BGS			3DP				27.4
	- wet at 13.0ft BGS							
14	- becoming gray, some intermixing black sands, trace sheens, slight odor at 14.0ft BGS							
16								
	CL-SILTY CLAYS (native), trace fine sands, trace fine subangular gravels, stiff, low plasticity, gray, moist	17.00		4DP				16.2
18								
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

WELL DETAILS
Screened interval:
12.00 to 17.00ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

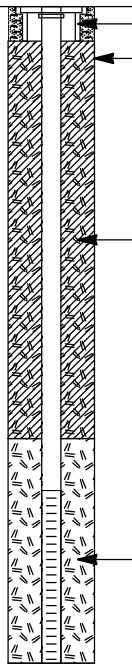
OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: EOS-16
DATE COMPLETED: April 25, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
	ASPHALT	0.30
2	SP-SANDS (FILL), with silts, trace fine gravels, fine grained, poorly graded, loose, brown	
4		
6		
8		
10		
		11.00
12	SP/SM-SANDS, fine grained, some silts, some black fine sands, black gray, wet, very sheeny, strong odor	
14		
16		
18		
		19.00
20	CL-SILTY CLAYS (native), trace fine sands, trace fine subangular gravels, stiff, low plasticity, gray, dry to moist	20.00
	END OF BOREHOLE @ 20.0ft BGS	
22		
24		
26		
28		
30		
32		
34		
36		
38		



WELL DETAILS
Screened interval:
14.00 to 19.00ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC

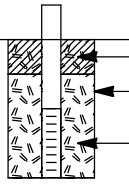
SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP				1.0
2DP				16.2
3DP				124
4DP				77.4

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: EOS-2
DATE COMPLETED: April 23, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	TEMP. MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	SW-SANDS (FILL), some clays, trace vegetation, fine grained, dark brown, saturated		 BENTONITE CHIPS; 1-7/8" BOREHOLE; NATURAL COLLAPSE	1DP				0.0
2	SP/SC-SANDS (FILL), fine grained, poorly graded, loose, black brown, saturated	1.70		2DP				1.3
4	CL-SILTY CLAYS (native), trace fine subangular gravels, low plasticity, gray, moist	4.00		3DP				1.0
6	END OF BOREHOLE @ 5.0ft BGS	5.00	WELL DETAILS Screened interval: 2.00 to 4.00ft BGS Length: 2ft Diameter: 1in Slot Size: 0.010 Material: PVC					
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: EOS-3
DATE COMPLETED: April 23, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	TEMP. MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
2	SP/SM-SANDS (FILL), fine grained, poorly graded, intermixing silts, some peat, brown gray		BENTONITE CHIPS	1DP				4.1
	- wet at 3.0ft BGS		NATURAL COLLAPSE	2DP				3.3
4	- black, fine sands at 4.8ft BGS		1-7/8" BOREHOLE	3DP				4.9
		5.00						
6	CL-SILTY CLAYS, trace fine sands, semi-competent, low to medium plasticity, gray, moist	6.00	WELL DETAILS Screened interval: 3.00 to 5.00ft BGS Length: 2ft Diameter: 1in Slot Size: 0.010 Material: PVC					
8	END OF BOREHOLE @ 6.0ft BGS							
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: EOS-4
DATE COMPLETED: April 23, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	TEMP. MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
2	SP-SANDS (FILL), fine grained, poorly graded, medium brown, loose, moist to wet - some vegetation, rootlets at 0.6ft BGS		BENTONITE CHIPS NATURAL COLLAPSE 1-7/8" BOREHOLE	1DP				16.2
4								
6	SP-SANDS (FILL), fine grained, poorly graded, black, trace sheen, moderate odors, wet	5.00	WELL DETAILS Screened interval: 3.00 to 5.00ft BGS Length: 2ft Diameter: 1in Slot Size: 0.010 Material: PVC					
8	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, gray, dry to moist	7.00		2DP				124
10	END OF BOREHOLE @ 10.0ft BGS	10.00						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

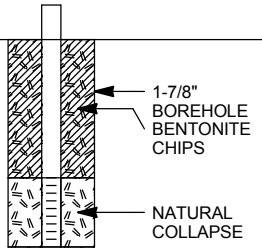
NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: EOS-5
DATE COMPLETED: April 23, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	TEMP. MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	SP-SANDS (FILL), fine grained, poorly graded, loose, brown, moist		 1-7/8" BOREHOLE BENTONITE CHIPS; NATURAL COLLAPSE	1DP				--
6	SP-SANDS (FILL), trace silts, fine grained, poorly graded, intermixing black sands, brown gray, wet, slight odor	5.60	WELL DETAILS Screened interval: 4.00 to 6.00ft BGS Length: 2ft Diameter: 1in Slot Size: 0.010 Material: PVC	2DP				--
8	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, gray, dry to moist	8.00						
10	END OF BOREHOLE @ 10.0ft BGS	10.00						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: EOS-6
DATE COMPLETED: April 23, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	TEMP. MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
2	SP-SANDS (FILL), fine grained, poorly graded, loose, brown, moist		BENTONITE CHIPS 1-7/8" BOREHOLE	1DP				--
4								
6			NATURAL COLLAPSE					
8	SP-SANDS (FILL), some silts, fine grained, poorly graded - sheeny at 8.0ft BGS	7.30 9.00		2DP				--
10	- black fine sands, moderate odor, sheeny at 8.5ft BGS	10.00	WELL DETAILS Screened interval: 4.00 to 9.00ft BGS Length: 5ft Diameter: 1in Slot Size: 0.010 Material: PVC					
12	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, gray, dry to moist							
14	END OF BOREHOLE @ 10.0ft BGS							
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: EOS-7
DATE COMPLETED: April 23, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	TEMP. MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
2	SP-SANDS (FILL), fine grained, poorly graded, brown, moist		1-7/8" BOREHOLE	1DP				2.0
4			BENTONITE CHIPS					
6								
8				2DP				7.7
10	- wet at 9.0ft BGS - becoming black, slight odor at 10.0ft BGS - sheeny at 11.0ft BGS		NATURAL COLLAPSE					
12								
14	- black, sheeny at 13.0ft BGS	12.70		3DP				126.2
16	CI-SILTY CLAYS (native), trace fine subangular gravels, stiff, low plasticity, gray, dry to moist	15.00						
18	END OF BOREHOLE @ 15.0ft BGS							
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

WELL DETAILS
Screened interval:
8.00 to 13.00ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: EOS-8
DATE COMPLETED: April 23, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	TEMP. MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	SP-SANDS (FILL), fine grained, poorly graded, light brown, moist		1-7/8" BOREHOLE					
2				1DP				8.1
4			BENTONITE CHIPS					
6								
8				2DP				14.6
10								
12	SP-SANDS (FILL), fine grained, poorly graded, sheeny, compact, black, strong odor, wet	12.20	NATURAL COLLAPSE	3DP				62.3
14	CI-SILTY CLAYS (native), trace fine gravels, stiff, low plasticity, gray, dry to moist	14.50						
15	END OF BOREHOLE @ 15.0ft BGS	15.00						
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

WELL DETAILS
Screened interval:
10.00 to 15.00ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: EOS-9
DATE COMPLETED: April 23, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	TEMP. MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
2	SP-SANDS (FILL), fine grained, poorly graded, medium brown, loose, moist - trace silts at 2.0ft BGS		1-7/8" BOREHOLE	1DP				1.3
4			BENTONITE CHIPS					
6								
8				2DP				246
10	- oxidation banding at 10.0ft BGS							
12	- wet at 12.0ft BGS - laminated sands, black, strong odor, sheeny at 12.5ft BGS		NATURAL COLLAPSE	3DP				>2000
14	- laminated sand, black, strong odor, sheen at 13.6ft BGS	14.80						
16	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, competent, gray, dry to moist	15.00	WELL DETAILS Screened interval: 10.00 to 15.00ft BGS Length: 5ft Diameter: 1in Slot Size: 0.010 Material: PVC					
18	END OF BOREHOLE @ 15.0ft BGS							
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

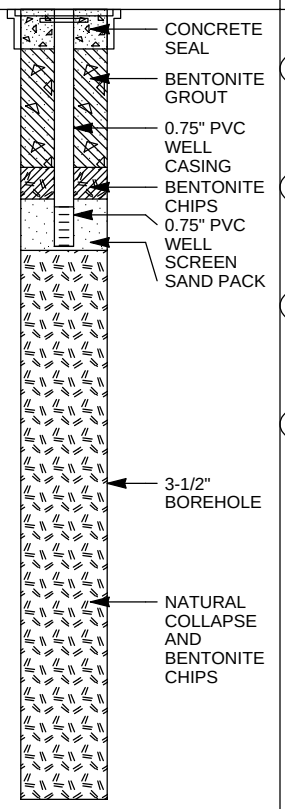
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GP19-01D
DATE COMPLETED: May 25, 2005
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	718.37
0	CONCRETE, with fine subrounded gravels, white, competent	717.87
2	SM-SILTY SANDS, trace fine gravels, compact, fine grained, trace medium to coarse grained, poorly graded, brown, moist	
	- fine grained, light brown at 1.8ft BGS	
4		
6		
8	- trace clays, orange-brown at 8.3ft BGS	
10		
12	SP-SANDS, trace silts, compact, fine to medium grained, poorly graded, brown-gray, very moist	706.87
	- gray, saturated at 12.0ft BGS	
14	SM-SILTY SANDS, compact, fine grained, poorly graded, gray, saturated	703.87
16		
18		
20	CL-SILTY CLAYS, trace fine sands, firm, low plasticity, gray, moist	699.12
	END OF BOREHOLE @ 20.0ft BGS	698.37
22		
24		
26		
28		
30		
32		
34		

MONITORING WELL



WELL DETAILS
Screened interval:
713.37 to 712.37ft BGS
5.00 to 6.00ft BGS
Length: 1ft
Diameter: 0.7in
Slot Size: .25" DIAM.
Material: PVC
Sand Pack:
713.57 to 712.27ft BGS
4.80 to 6.10ft BGS
Material: WASHED GRAVEL

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP				2.0
2DP				0.3
3DP				2.4
4DP				666
5DP				112
6DP				29.0
7DP				10.9

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GP19-02D
DATE COMPLETED: May 27, 2005
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	718.39						
0	CONCRETE, with fine subrounded gravels, white, competent	717.89	CONCRETE SEAL					
2	SM-SILTY SANDS, trace fine gravels, compact, fine to coarse grained, poorly graded, brown, moist		0.75" PVC WELL CASING	1DP				4.1
4	- orange-brown at 3.8ft BGS		BENTONITE GROUT					
	- tan/beige at 5.0ft BGS		BENTONITE CHIPS	2DP				4.3
6			SAND PACK					
			0.75" PVC WELL SCREEN					
8	- brown and orange-brown at 7.5ft BGS			3DP				3.8
10				4DP				39.7
12	- brown-gray, very moist at 11.5ft BGS - saturated at 11.8ft BGS		3-1/2" BOREHOLE					
		705.14		5DP				371
14	CL-SILTY CLAYS, firm, low plasticity, gray, moist	704.39						
	SM-SILTY SANDS, compact, fine grained, poorly graded, gray, saturated		NATURAL COLLAPSE AND BENTONITE CHIPS					
16				6DP				632
18								
	- fine to coarse grained at 18.9ft BGS	699.39		7DP				824
20	CL-SILTY CLAYS, firm, low plasticity, gray, moist	698.39						
	END OF BOREHOLE @ 20.0ft BGS							
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
713.39 to 712.39ft BGS
5.00 to 6.00ft BGS
Length: 1ft
Diameter: 0.7in
Slot Size: .25" DIAM.
Material: PVC
Sand Pack:
713.59 to 712.29ft BGS
4.80 to 6.10ft BGS
Material: WASHED GRAVEL

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1DP)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GP19-03D
DATE COMPLETED: May 27, 2005
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	718.31						
0	CONCRETE, with fine subrounded gravels, white, competent	717.81	CONCRETE SEAL					
2	SM-SILTY SANDS, trace fine gravels, compact, fine grained, trace medium grained, poorly graded, brown, moist	715.81	BENTONITE GROUT; 0.75" PVC WELL CASING	1DP				1340
4	PAINT SLUDGE, trace paper debris, clay to fine gravel size, compact, yellow-green, moist, strong paint-like odor		BENTONITE CHIPS; 0.75" PVC WELL SCREEN; SAND PACK	2DP				+9999
6								
8	SM-SILTY SANDS, compact, fine grained, trace medium grained, poorly graded, brown, moist, slight paint-like odor	710.81	3-1/2" BOREHOLE	3DP				+9999
10				4DP				2495
12	- brown-gray, saturated, slight paint-like odor at 11.5ft BGS - dark gray to black at 12.3ft BGS - gray at 12.5ft BGS			5DP				369
14								
16			NATURAL COLLAPSE AND BENTONITE CHIPS	6DP				125
18	CL-SILTY CLAYS, trace fine sands, firm, low plasticity, gray, moist	700.81		7DP				9.4
20	END OF BOREHOLE @ 20.0ft BGS	698.31						
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
713.31 to 712.31ft BGS
5.00 to 6.00ft BGS
Length: 1ft
Diameter: 0.7in
Slot Size: .25" DIAM.
Material: PVC
Sand Pack:
713.51 to 712.21ft BGS
4.80 to 6.10ft BGS
Material: WASHED GRAVEL

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GP19-04D
DATE COMPLETED: May 25, 2005
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	718.47						
0	CONCRETE, with fine subrounded gravels, white, competent	717.97	CONCRETE SEAL					
2	SM-SILTY SANDS, trace fine gravels, compact, fine grained, trace medium to coarse grained, poorly graded, orange-brown, moist		3-1/2" BOREHOLE BENTONITE GROUT	1DP				18.4
4	- brown at 2.5ft BGS - light brown at 3.5ft BGS		0.75" PVC WELL CASING	2DP				8.3
6	END OF BOREHOLE @ 6.1ft BGS	712.37	BENTONITE CHIPS 0.75" PVC WELL SCREEN SAND PACK					
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
713.47 to 712.47ft BGS
5.00 to 6.00ft BGS
Length: 1ft
Diameter: 0.7in
Slot Size: .25" DIAM.
Material: PVC
Sand Pack:
713.67 to 712.37ft BGS
4.80 to 6.10ft BGS
Material: WASHED GRAVEL

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

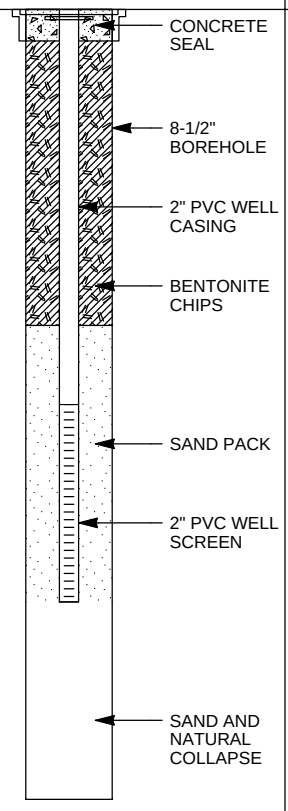
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-1
DATE COMPLETED: March 7, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: M. MATHÉ

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	714.98
0	SC-CLAYEY SANDS, trace fine subangular gravels, trace vegetation (grass and rootlets), firm, poorly graded, fine grained, brown, moist	714.48
2	SP-SANDS, trace fine subangular gravels, loose, poorly graded, fine grained, trace medium grained, dark brown, moist	712.48
	RED BRICK FRAGMENTS	711.73
4	SP-SANDS, trace silts, trace fine subrounded/subangular gravels, loose, poorly graded, fine grained, trace medium grained, brown, moist	
6	- beige at 3.5ft BGS	
	- brown at 4.0ft BGS	
8	- 4" clay layer at 7.5ft BGS	
10	- beige with orange at 10.5ft BGS	
12	CH-SANDY CLAYS, trace rootlets, soft, low plasticity, black and dark brown, very moist to damp	702.48
14	- brown at 13.0ft BGS	700.48
	CH-CLAYS, firm, high plasticity, olive brown, moist	
16		
18		
20	END OF BOREHOLE @ 20.0ft BGS	694.98
22		
24		
26		
28		
30		
32		
34		

MONITORING WELL



WELL DETAILS
Screened interval:
704.98 to 699.98ft BGS
10.00 to 15.00ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
706.98 to 699.98ft BGS
8.00 to 15.00ft BGS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE
1AL		75	
2AL		60	
3AL		100	
4AL		100	

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-2
DATE COMPLETED: March 7, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: M. MATHÉ

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.14						
0	FILL GRAVEL/CONCRETE DEBRIS	713.81	CONCRETE SEAL					
2	SP-SANDS (FILL), trace silts, trace glass shards, trace vegetation (rootlets), trace fine subangular gravels, loose, poorly graded, fine grained, trace medium grained, dark brown mixed with light brown, moist		8-1/2" BOREHOLE	1AL		90		0.0
4	- 3" layer very low plasticity, clay, beige/dark at 4.0ft BGS		2" PVC WELL CASING					
6	- 4" layer orange intermixed at 6.5ft BGS		BENTONITE CHIPS	2AL		70		
8	- gray rock fragment at 8.5ft BGS							
10			SAND PACK					
12	- gray rock fragments at 12.5ft BGS - wet at 13.0ft BGS		2" PVC WELL SCREEN	3AL				26
14		699.14						
16	WOOD PIECES, petroleum-like odor SC-CLAYEY SANDS, loose/soft, poorly graded, low plasticity, fine grained, with medium grained, dark gray with white grains, wet	699.04		4AL				300
18		695.64						
20	CH-CLAYS, firm, high plasticity, olive brown, moist END OF BOREHOLE @ 20.0ft BGS	694.14	SAND AND NATURAL COLLAPSE					
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
700.64 to 695.64ft BGS
13.50 to 18.50ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
702.64 to 695.64ft BGS
11.50 to 18.50ft BGS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-6
DATE COMPLETED: May 24, 2005
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	699.70						
2	CL-SILTY CLAYS, firm, low plasticity, brown and gray, moist		CONCRETE SEAL BENTONITE CHIPS 2" PVC WELL CASING	1HA				2.6
				2HA				1.7
		696.95		3HA				593
4	PAINT SLUDGE DEBRIS, with sands and silts, cork-like texture, brick red, moist, rotten, paint-like odor	696.45	3-1/2" BOREHOLE	4HA				328
	SC/CL-SANDS & CLAYS, with silts, soft/loose, fine sands, low plasticity, yellow-green and gray, saturated, slight petroleum-like odor	694.45	SAND PACK	5HA				50.1
6		693.70	2" PVC WELL SCREEN	6HA				4.8
8	CL-SILTY CLAYS, trace fine sands, firm to stiff, low plasticity, brown and gray mottled, moist							
	END OF BOREHOLE @ 6.0ft BGS							
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
697.70 to 693.70ft BGS
2.00 to 6.00ft BGS
Length: 4ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
698.70 to 693.70ft BGS
1.00 to 6.00ft BGS
Material: SANDS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (3HA)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-7
DATE COMPLETED: June 7, 2005
DRILLING METHOD: DIRECT PUSH/HSA
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	681.59						
2	SM-SILTY SANDS, trace fine gravels, compact, fine grained, trace medium to coarse grained, poorly graded, dark brown, moist		CONCRETE SEAL BENTONITE CHIPS 2" PVC WELL CASING	1DP				10.5
	- with clays at 3.3ft BGS							
4	- no clays, brown and orange brown at 3.8ft BGS			2DP				13.8
		677.09	8-1/4" BOREHOLE					
6	CL-SANDY CLAYS, soft to firm, low plasticity, medium gray, moist, fine sands	675.59	SAND PACK	3DP				13.6
	SC/CL-SANDS & CLAYS, trace silts, compact/firm, low plasticity, brown-gray, very moist to saturated	674.84 674.49	2" PVC WELL SCREEN					
8	SM-SILTY SANDS, trace fine gravels, compact, fine to coarse grained, poorly graded, brown-gray, saturated			4DP				14.1
10	CL-SILTY CLAYS, trace fine sands, firm, low plasticity, gray, moist	671.59	BENTONITE CHIPS AND NATURAL COLLAPSE					
	END OF BOREHOLE @ 10.0ft BGS							
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
678.59 to 673.59ft BGS
3.00 to 8.00ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
679.59 to 673.59ft BGS
2.00 to 8.00ft BGS
Material: SANDS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-8
DATE COMPLETED: February 27, 2006
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: N. RATHBUN

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
2	SP-SANDS, trace silts, brown, moist to wet	2.50	BENTONITE; 3" BOREHOLE; 2" PVC WELL CASING; 2" PVC WELL SCREEN; SAND PACK				
4	CH-CLAYS, high plasticity, firm, gray						
6							
8	END OF BOREHOLE @ 8.0ft BGS	8.00					
10							
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							
36							
38							

WELL DETAILS
Screened interval:
1.50 to 6.50ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
1.00 to 8.00ft BGS
Material: #5 SANDS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

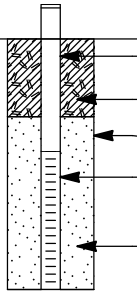
HOLE DESIGNATION: GS-16
DATE COMPLETED: February 7, 2012
DRILLING METHOD: 3-1/4" HAND AUGER
FIELD PERSONNEL: C. BONDY

NORTHING: 268494.29
EASTING: 13344374.72

TOP OF CASING 704.40
GROUND SURFACE 702.06

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	TOPSOIL	701.56
2	CL-CLAY, with silt, trace sand and gravel, fine to coarse sand, fine to coarse gravel, low plasticity, stiff, brown, moist - pockets of wetness at 2.0ft BGS	
4	- firm to soft at 4.3ft BGS	
	WOOD DEBRIS, black, wet	697.31 696.81
6	SP-SAND, with clay, trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose, brown, wet	695.56 694.81
8	CH-SILTY CLAY, high plasticity, firm to stiff, gray, moist	
10	END OF BOREHOLE @ 7.3ft BGS	
12		
14		
16		
18		
20		
22		
24		
26		
28		
30		
32		
34		
36		
38		

MONITORING WELL



WELL DETAILS
Screened interval:
698.81 to 694.81ft BGS
3.25 to 7.25ft BGS
Length: 4ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
702.06 to 699.81ft BGS
0.00 to 2.25ft BGS
Material: BENTONITE CHIPS
Sand Pack:
699.81 to 694.81ft BGS
2.25 to 7.25ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1HA				0.7
2HA				0.7
3HA				0.7
4HA				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

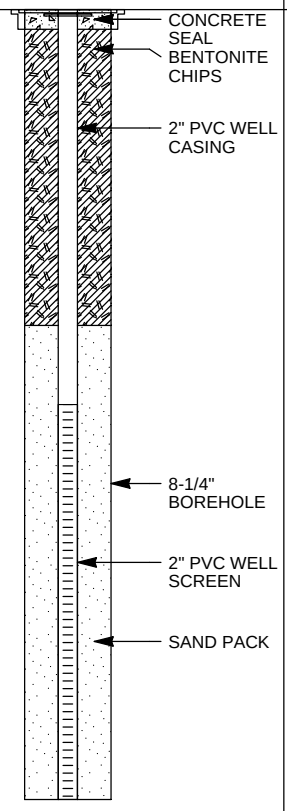
OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: IW-26R
DATE COMPLETED: November 24, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMPORARY MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE "N" VALUE
	GROUND SURFACE TOP OF CASING TOP OF RISER	716.49 716.46 716.12					



WELL DETAILS
Screened interval:
706.49 to 696.49ft BGS
10.00 to 20.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
708.49 to 696.49ft BGS
8.00 to 20.00ft BGS
Material: #5 SILICA

2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/6/04

Date Start/Finish: 09/16/96 / 09/16/96
Drilling Company: Superior Environmental
Driller's Name: G. Hill
Drilling Method: Hollow Stem Auger
Bit Size: N/A-in. **Auger Size :** 7 5/8-in.
Rig Type: Mobile B-57
Spoon Size: 2-in.

Corehole Depth: N/A ft.
Borehole Depth: 18 ft.

Geologist: M. Mueller

Well No. MW-12

Client:
General Motors Corporation

Location:
Complete Auto Transit Site
Ypsilanti, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	FID (ppm) Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
										GROUND SURFACE	
		1					17.8			Sand, brownish yellow (10YR 6/6), fine grained, poorly sorted, 10% silt	Well cap; Cement pad
		2					8				Neat cement
5		3					17.8				Bentonite seal
		4					23.8			Sand yellowish brown (10YR 5/6), fine grained, well sorted, 5% silt	2-inch Schedule 40 PVC riser
		5					34				
10										Sand, dark yellowish brown (10YR 4/6), fine grained, well sorted, 5% silt	6/20 silica sand
										Silt, dark grey (5Y 4/1), some clay (5%)	
15											0.010" slot stainless steel well screen
										Silty clay, light olive grey (5Y 6/2), firm, semi-cohesive	
20											

BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

Remarks:

Saturated Zones

Date / Time	Elevation	Depth
09/17/96		13.14 ▼

Project: 480.43
Script: nbblwell
Date: 11/20/96

Date Start/Finish: 09/16/96 / 09/16/96
Drilling Company: Superior Environmental
Driller's Name: G. Hill
Drilling Method: Hollow Stem Auger
Bit Size: N/A-in. **Auger Size :** 7 5/8-in.
Rig Type: Mobile B-57
Spoon Size: 2-in.

Corehole Depth: N/A ft.
Borehole Depth: 18 ft.

Geologist: M. Mueller

Well No. MW-13

Client:
General Motors Corporation

Location:
Complete Auto Transit Site
Ypsilanti, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	FID (ppm) Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
									GROUND SURFACE	
	1					0.4			Sand, brownish yellow (10YR 6/6), fine grained, poorly sorted, 10% silt	Well cap; Cement pad
	2					0.4				
5	3					0.4				Neat cement; Bentonite seal
	4					1			Sand, dark yellowish brown (10YR 4/6), fine grained, well sorted, 5% silt	2-inch Schedule 40 PVC riser
	5					0.6				
10										▼
									Clay, dark grey (N 2/0), soft, cohesive	6/20 silica sand
15										0.010" slot stainless steel well screen
20										

BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

Remarks:

Saturated Zones

Date / Time	Elevation	Depth
09/17/96		11.09 ▼

Date Start/Finish: 09/16/96 / 09/16/96
Drilling Company: Superior Environmental
Driller's Name: G. Hill
Drilling Method: Hollow Stem Auger
Bit Size: N/A-in. **Auger Size :** 7 5/8-in.
Rig Type: Mobile B-57
Spoon Size: 2-in.

Corehole Depth: N/A ft.
Borehole Depth: 18 ft.

Geologist: M. Mueller

Well No. MW-14

Client:
General Motors Corporation

Location:
Complete Auto Transit Site
Ypsilanti, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	FID (ppm) Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
									GROUND SURFACE	
	1					0.2			Sand, brownish yellow (10YR 6/6), fine grained, poorly sorted, 10% silt	Well cap; Cement pad
	2					0				
5	3					0.2				Neat cement; Bentonite seal
	4					0.4				2-inch Schedule 40 PVC riser
	5					0.6				
10									Silt, dark grey (5Y 4/1), some clay (5%)	6/20 silica sand
15										0.010" slot stainless steel well screen
20										

BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

Remarks:

Saturated Zones

Date / Time	Elevation	Depth
09/17/96		12.48 ▼

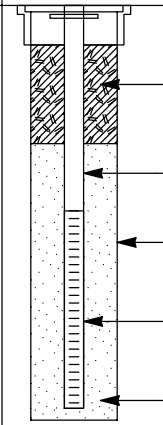
Project: 480.43
Script: nbblwell
Date: 11/20/96

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-63/MW18-01
DATE COMPLETED: November 24, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	708.00						
0	MH-SANDY SILTS, trace clay (FILL), loose, fine grained, poorly graded, gray, moist	707.30	BENTONITE CHIPS	1MC				
2	CL/ML-CLAYEY SILTS, trace sands (FILL), firm, low plasticity, gray, moist	706.50						
	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, brown, moist		2" PVC WELL CASING			70		0.0
4								
	- wet at 5.5ft BGS		8-1/4" BOREHOLE					
6								
	- black, odor present at 7.5ft BGS			2MC				
8	- gray at 8.0ft BGS		2" PVC WELL SCREEN					
	- strong odor, brown liquid at 9.7ft BGS	698.20						
10	CL-SILTY CLAY, (natural), firm, low plasticity, gray, moist	698.00	SAND PACK			100		1100
	END OF BOREHOLE @ 10.0ft BGS							
12	NOTE: BORING COMPLETED ON NOVEMBER 24, 2003, MONITORING WELL COMPLETED ON MAY 17, 2004							
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								



WELL DETAILS
Screened interval:
702.80 to 697.80ft BGS
5.20 to 10.20ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
704.50 to 697.50ft BGS
3.50 to 10.50ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

GRAIN SIZE ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-64/MW18-02
DATE COMPLETED: November 24, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	707.28						
0	CL-SILTY CLAY, with rootlets (topsoil), (FILL), firm, low plasticity, dark brown, moist	707.08		1MC				
2	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, light brown, moist		BENTONITE CHIPS	2MC		80		0.0
4			2" PVC WELL CASING	3MC		80		0.0
6	- wet at 6.0ft BGS		8-1/4" BOREHOLE	4MC		80		5.4
8	- dark gray, staining, odor at 7.0ft BGS		2" PVC WELL SCREEN	5MC		80		2000+
10	- visible brown liquid, strong odor (product) at 9.4ft BGS	697.48	SAND PACK			60		2000+
12	CI-SILTY CLAY, (natural), firm, medium plasticity, gray, moist	697.28						
14	END OF BOREHOLE @ 10.0ft BGS							
16	NOTE: BORING COMPLETED ON NOVEMBER 24, 2003, MONITORING WELL COMPLETED ON MAY 17, 2004							
18								
20								
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
702.18 to 697.18ft BGS
5.10 to 10.10ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
703.78 to 696.78ft BGS
3.50 to 10.50ft BGS
Material: SAND

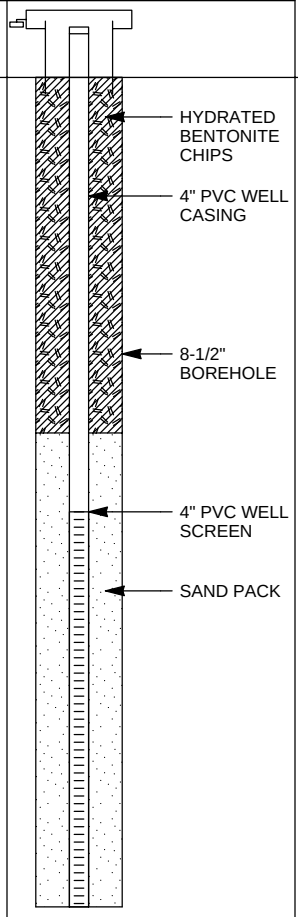
NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW18-03
DATE COMPLETED: September 1, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	715.08					
0	SW-SANDS (FILL), fine to medium sands, well graded, sense, light brown, moist						
2	SP-SANDS (FILL), fine grained, poorly graded, light brown, moist	713.38					
10	SM-SILTY SANDS, trace fine and medium sands, semi-competent, trace clays, trace plasticity, brown, moist	705.08 704.68					
12	SP-SANDS, fine grained, poorly graded - wet at 11.0ft BGS - becoming blackish-gray, strong odor at 11.5ft BGS						
16	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	700.08					
20	END OF BOREHOLE @ 21.0ft BGS	694.08					



WELL DETAILS
Screened interval:
704.08 to 694.08ft BGS
11.00 to 21.00ft BGS
Length: 10ft
Diameter: 4in
Slot Size: 0.010
Material: PVC
Sand Pack:
706.08 to 694.08ft BGS
9.00 to 21.00ft BGS
Material: SANDS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

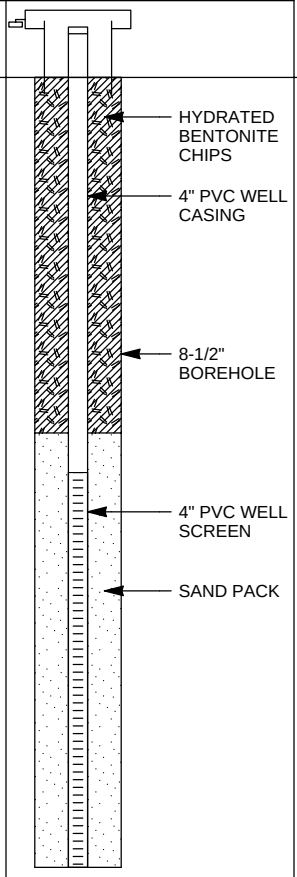
OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW18-04
DATE COMPLETED: September 2, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	714.36					
2	SW-SANDS (FILL), fine to medium sands, trace rootlets, well graded medium brown, moist						
		711.76					
4	SP-SANDS (FILL), fine grained, poorly graded, compact, light brown, moist						
6	- orangish brown at 6.2ft BGS						
8							
10	- very moist at 10.0ft BGS						
	- wet at 11.0ft BGS						
12	SM-SILTY SANDS, some fine sands, poorly graded, trace clays, compact, brown, wet	702.66					
		701.86					
14	SW-SANDS, fine to coarse grained, well graded, compact, gray, wet - sheeny, black foundry sand at 13.0ft BGS						
16	- black foundry sand, strong odor at 14.0ft BGS - brown oily liquid (product) at 15.0ft BGS						
		697.36					
18	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, gray						
20		694.36					
	END OF BOREHOLE @ 20.0ft BGS						
22							
24							
26							
28							
30							
32							
34							



WELL DETAILS
Screened interval:
704.36 to 694.36ft BGS
10.00 to 20.00ft BGS
Length: 10ft
Diameter: 4in
Slot Size: 0.010
Material: PVC
Sand Pack:
705.36 to 694.36ft BGS
9.00 to 20.00ft BGS
Material: SANDS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW18-05
DATE COMPLETED: June 7, 2005
DRILLING METHOD: DIRECT PUSH/8-1/4" HSA
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	713.91						
2	SW-SANDS (FILL), trace silts, trace vegetation (rootlets), loose, well graded, fine and medium grained, with coarse grained, dark brown, moist		BENTONITE CHIPS	1AL		90		
		710.91						
4	SP-SANDS, trace to with silts, loose to compact, poorly graded, light brown, moist							
6	- orange hue, slightly plastic at 5.5ft BGS		2" PVC WELL CASING					
8				2AL		80		90.8
	- very moist at 9.0ft BGS							131
10	SM-SILTY SANDS, compact, poorly graded, fine grained, brown, wet	703.91						>2000
12				3AL		80		>2000
		700.91						
14	SP-SANDS, trace silts, loose to compact, poorly graded, fine with medium grained, dark gray, wet (oily sheen for top 2-inches)		8-1/4" BOREHOLE					>2000
	- black at 13.5ft BGS							
16	- dark gray at 14.5ft BGS		2" PVC WELL SCREEN					>2000
18				4AL		100		>2000
	- brown at 19.0ft BGS		SAND PACK					>2000
20	CL-CLAYS, stiff, low plasticity, dark gray/brown, moist, petroleum-like odor and oily-like substance between liner and clay	693.91						
22				5AL		100		
24								
	END OF BOREHOLE @ 25.0ft BGS	688.91						
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
698.91 to 688.91ft BGS
15.00 to 25.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
700.91 to 688.91ft BGS
13.00 to 25.00ft BGS
Material: SANDS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-200/MW18-06
DATE COMPLETED: June 7, 2005
DRILLING METHOD: DIRECT PUSH/HSA
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	713.27						
0	SM-SILTY SANDS, trace fine gravels, loose, fine grained, poorly graded, trace medium to coarse grained, dark brown, moist		CONCRETE SEAL	1DP				17.9
2	- orange-brown at 1.3ft BGS		BENTONITE CHIPS					
4	- compact, light brown at 4.0ft BGS		2" PVC WELL CASING	2DP				20.1
6	- trace clays, brown and orange-brown, slight increase in silt and moisture content at 6.0ft BGS		8-1/4" BOREHOLE					
8	- no clays, decrease in silt and moisture content at 8.3ft BGS		SAND PACK	3DP				418
10	- light brown at 9.0ft BGS - very moist at 10.0ft BGS - brown-gray, saturated, moderate petroleum-like odor at 10.5ft BGS		2" PVC WELL SCREEN	4DP				1589
12	- dark amber NAPL in soils at 12.0ft BGS - no NAPL at 12.3ft BGS - dark gray at 13.0ft BGS			5DP				3269
14	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist	699.47						
16				6DP				159
18			NATURAL COLLAPSE & BENTONITE CHIPS	7DP				17.1
20	END OF BOREHOLE @ 20.0ft BGS	693.27						
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
707.27 to 697.27ft BGS
6.00 to 16.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
709.27 to 697.27ft BGS
4.00 to 16.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW18-07
DATE COMPLETED: February 27, 2006
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: N. RATHBUN

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
0	SP-SANDS, trace silts and vegetation, loose, fine to medium grained, poorly graded, brown, moist		BENTONITE	1AL		60	
2			2" PVC WELL CASING				
4	- orange hue at 5.0ft BGS						
6							
7	CH-SILTY CLAYS, firm, high plasticity, orange and brown, moist	7.00	3" BOREHOLE	2AL		70	
8							
9	SM-SILTY SANDS, compact, fine grained, poorly graded, brownish gray, wet	9.00					
10			2" PVC WELL SCREEN				
12							
12.5	SP-SANDS, trace silts, compact, poorly graded, brown, wet	12.50	SAND PACK	3AL		75	
14							
16							
17	SC-CLAYEY SANDS, trace silts, compact, poorly graded, brownish gray, wet	17.00		4AL		80	
18							
19	CH-CLAYS, firm to stiff, high plasticity, brownish gray, wet	19.00					
20		20.00					
20	END OF BOREHOLE @ 20.0ft BGS						
22							
24							
26							
28							
30							
32							
34							
36							
38							

WELL DETAILS
Screened interval:
9.50 to 19.50ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
5.00 to 20.00ft BGS
Material: #5 SANDS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

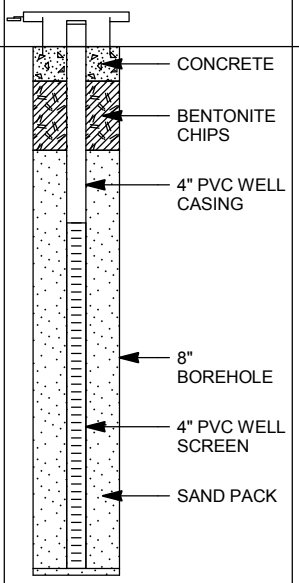
HOLE DESIGNATION: SB18-273/MW18-09
DATE COMPLETED: April 25, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

NORTHING: 268435.59
EASTING: 13344560.09

TOP OF CASING 713.02
GROUND SURFACE 710.58

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	SP-SANDS (FILL), fine grained, poorly graded, compact, brown, moist	
4	- wet at 3.5ft BGS	
10	SP/SM-SANDS, fine grained, high silt content, poorly graded, compact, gray, wet	700.58
12	- some sheen, black, fine sands at 11.0ft BGS	
12	- 1.1' of NAPL staining observed, brown liquid, strong odor at 13.0ft BGS	
14		696.48
14	CL-SILTY CLAYS (native), trace fine subangular gravels, stiff, low plasticity, gray, moist	695.58
16	END OF BOREHOLE @ 15.0ft BGS	

MONITORING WELL



WELL DETAILS
Screened interval:
705.48 to 695.48ft BGS
5.10 to 15.10ft BGS
Length: 10ft
Diameter: 4in
Slot Size: 0010
Material: PVC
Sand Pack:
707.58 to 695.28ft BGS
3.00 to 15.30ft BGS
Material: SANDS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP				NA
2DP				NA
3DP				NA

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 16, 1996

BORING NO.: SB–18–45/MW–18–45

RECORDED BY: Alan Fass

DRILL TYPE: Hand Auger

WEATHER: Sunny, 29°, Wind – West 5 mph

LOCATION: Kaiser–Frazer Dump Area PAOC 18
Approx. 5' east and 3' north of SB–18–37 (See Weston Map – Figure 1)
71' west of outfall 13 and 17' north of fence.
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 11' BGS

COMMENTS: Duplicate 1M2 collected from SB–18–45 (6"–2') for Pb analysis. Duplicate 4M2 collected from SB–18–45 (4'–6') for PAH analysis. Equipment blank 4S from 0–4' sampling tube for PAH analysis. Equipment blank 5S from 4'–8'sampling tube for PAH and Pb analysis.

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0"	6"	Pb	0–1' Silty sand, some rock and coal slag fragments, dusky yellowish brown (10YR 2/2).
2		6"	2'	Pb Dup Pb	1'–1.3' Paint sludge/waste.
3		2'	4'	Pb	1'–3.5' Clayey silt – sandy silt, moderate yellowish brown (10YR 5/4).
4		4'	6'	Pb, PAH Dup PAH	3.5'–3.75' Silty clay, black (N1), discolored, hydrocarbon–like odo 3.75'–4.5' Silty sand, dark yellowish brown.
5		6'	8'	Pb	4.5'–8.5' Silty sand, dark yellowish orange.
6		8'	10'	Pb	8.5'–10' Sandy silt, dark yellowish orange.
7		10'	12'	Pb	10'–10.5' Silty clay, moderate yellowish brown, moist, friable. 10.5'–12.5' Clayey silt, pale yellowish brown, moist.
8		12'	14'		12.5'–14' Silty sand, pale yellowish brown, wet.
9		14'	17'		14'–15.5' Silty sand – sandy silt – pale yellowish brown. 15.5'–17' Organic silty clay, olive gray.
					End of boring = 17' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

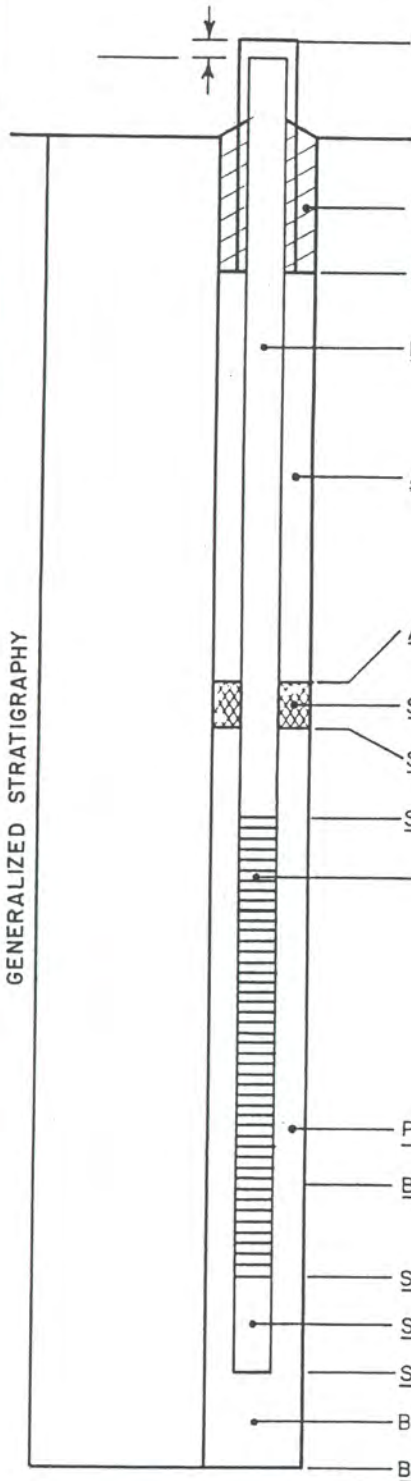
NR – Not Recorded

m:\480\05970266.wk3

SUBSURFACE FIELD LOG
MONITORING WELL CONSTRUCTION DETAILS

SHEET 1 OF 1

MW-18-45
MONITORING WELL
Willow Run (Kaiser-Frazer Dump Area)
PROJECT:
PROJECT NO. 480.75
BY: Alan Fass
DATE: 12/16/96



PROTECTIVE CASING-MATERIAL Sch. 40 PVC
-HEIGHT ~3 feet
-DIAMETER 2 inches
SURFACE SEAL-MATERIAL Cement Grout
SURFACE SEAL-DEPTH 0-3.5 feet BGS
RISER-MATERIAL Sch. 40 PVC
-DIAMETER 2 inches
ANNULUS-MATERIAL Cement Grout
ANNULUS-DEPTH 3.5 feet BGS
SEAL-MATERIAL Bentonite
SEAL-DEPTH 4.5 feet BGS
SCREEN-TOP 6.5 feet BGS
-MATERIAL Sch. 40 PVC
-SLOT SIZE .010
-LENGTH 10 feet
-DIAMETER 2 inches
PACK-MATERIAL #3 Sand
BORING-DIAMETER 7.25 inches
SCREEN-DEPTH 16 feet BGS
SUMP-LENGTH 6 inches
SUMP-DEPTH 16.5 feet BGS
BACKFILL-MATERIAL #3 Sand
BORING-DEPTH 17 feet BGS

WATER LEVEL UPON COMPLETION 14.65 ft. below Top-of-Casing (T.O.C.)
DRILLER Brad Massey ant - Superior Environmental
METHOD Hollow Stem Auger
RIG TYPE Simco Earthprobe 200
SAMPLING METHOD Bailer
DEVELOPMENT DATE 12/17/96
DEVELOPMENT METHOD Peristaltic Pump (Slow Develop)

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

50663

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 2' northwest of SB–18–7 (See Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 17, 1996	
BORING NO.: SB–18–46	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 11' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS:
WEATHER: Cloudy, 34°, Wind – West 10–15 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		2'	2.5'	PAH, 8260*	0–12' See SB–18–7 (0–12') lithology except 1.5'–2' paint waste, dark red, brown and black.
					12'–16' Silty sand, dark olive gray, some shell fragments.
					16'–17' Silty clay, light olive gray.
					End of boring = 17' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\06070266.wk3

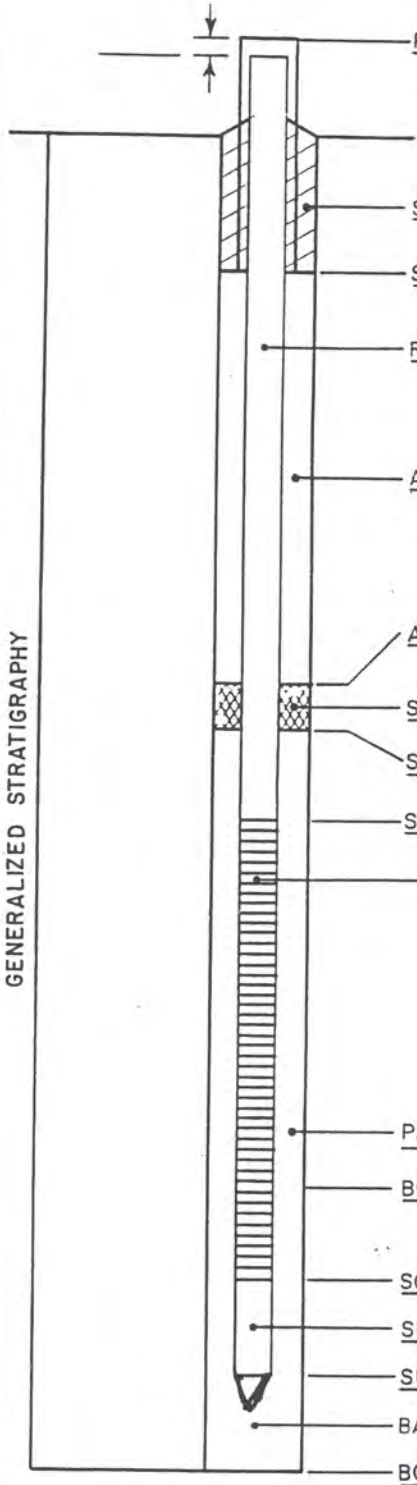
*–Hold 8260 sample for P.M. approval.

An initial boring was attempted at SB–18–7 but encountered concrete debris at 2.5' BGS to 7' BGS. Refusal at 7' BGS.

SUBSURFACE FIELD LOG
MONITORING WELL CONSTRUCTION DETAILS

SHEET 1 OF 1

MONITORING WELL MW-18-46
PROJECT: Willow Run (Kaiser-Frazer Dump Area)
PROJECT NO.: 480.75
BY: Alan Fass
DATE: 12/17/96



PROTECTIVE CASING-MATERIAL Sch. 40 PVC
-HEIGHT ~3 ft.
-DIAMETER 2 inches
SURFACE SEAL-MATERIAL Cement Grout
SURFACE SEAL-DEPTH 0-3.5 feet BGS
RISER-MATERIAL Sch. 40 PVC
-DIAMETER 2 inches
ANNULUS-MATERIAL Cement Grout
ANNULUS-DEPTH 3.5 feet BGS
SEAL-MATERIAL Bentonite
SEAL-DEPTH 4.5 feet BGS
SCREEN-TOP 6.5 feet BGS
-MATERIAL Sch. 40 PVC
-SLOT SIZE .010
-LENGTH 10 feet
-DIAMETER 2 inches
PACK-MATERIAL #3 Sand
BORING-DIAMETER 7.25 inches
SCREEN-DEPTH 16.5 feet BGS
SUMP-LENGTH 6 inches
SUMP-DEPTH 16.5 feet BGS
BACKFILL-MATERIAL #3 Sand
BORING-DEPTH 17 feet BGS

WATER LEVEL UPON COMPLETION 14.34 ft. below Top-of-Casing (T.O.C.)
DRILLER Brad Masserant - Superior Environmental
METHOD Hollow Stem Auger
RIG TYPE Simco Earthprobe 200
SAMPLING METHOD Bailer
DEVELOPMENT DATE 12/17/96
DEVELOPMENT METHOD Peristaltic Pump (Slow Develop)

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

50663

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-01
DATE COMPLETED: November 20, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE 716.76 TOP OF CASING 716.70 TOP OF RISER 716.37							
0	ASPHALT	716.46	CONCRETE SEAL					
	GM-SILTY GRAVELS, (FILL), compact, fine grained angular, poorly graded, gray, moist	715.26						
2	SM-SILTY SANDS, (FILL), compact, fine grained, poorly graded, brown, moist	714.26	BENTONITE CHIPS	1MC 0-2' -226		85		0.0
4	SP-SANDS, trace silts (natural), compact, fine grained, poorly graded, brown, moist		2" PVC WELL CASING			85		0.0
6								
8	- medium grained, trace fine grained rounded gravels at 7.0ft BGS		8-1/4" BOREHOLE	2MC		90		0.0
10						90		0.0
12	- 1.5" lens orange/oxidated at 12.3ft BGS		2" PVC WELL SCREEN	3MC 12.5-14.5 -227		70		0.0
14	- very moist to wet at 14.0ft BGS - wet at 14.5ft BGS		SAND PACK			70		0.0
16								
18	CI-SILTY CLAY, with occasional 1mm thick horizontal silt lenses (natural), firm, medium plasticity, gray, moist	699.56		4MC				0.0
20	END OF BOREHOLE @ 20.0ft BGS	696.76						0.0
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
708.76 to 698.76ft BGS
8.00 to 18.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
710.76 to 698.76ft BGS
6.00 to 18.00ft BGS
Material: #6 SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1MC)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-02
DATE COMPLETED: November 20, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	TOP OF CASING 716.47 GROUND SURFACE 716.47 TOP OF RISER 716.15							
0	ASPHALT	716.17	CONCRETE SEAL					
	GM-SILTY GRAVELS, trace sands (FILL), compact, fine grained angular, poorly graded, gray, moist							
2		714.57		1MC 0-2' -224		90		0.0
	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, brown, moist		BENTONITE CHIPS					
4								
			2" PVC WELL CASING			90		0.0
6								
	- 1" gray at 7.0ft BGS	709.37	8-1/4" BOREHOLE					
	SP-SANDS, trace silts (natural), compact, fine grained, poorly graded, orange-brown, moist			2MC		80		0.0
8	- medium grained, trace fine grained rounded gravels at 8.2ft BGS							
10						80		0.0
	- with gravels at 11.0ft BGS		2" PVC WELL SCREEN					
12				3MC 12-14' -225		90		0.0
			SAND PACK					
14	- trace gravels, wet at 14.0ft BGS							
						90		0.0
16	- gravels not present, fine grained at 16.0ft BGS							
				4MC		100		0.0
18		698.27						
	CI-SILTY CLAY, trace fine grained gravels, stiff, medium plasticity, gray, moist, homogeneous							
20	- 1" lens wet sands at 19.2ft BGS	696.47				100		0.0
	- 1" lens wet sands at 19.9ft BGS							
	END OF BOREHOLE @ 20.0ft BGS							
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
707.47 to 697.47ft BGS
9.00 to 19.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
709.97 to 697.47ft BGS
6.50 to 19.00ft BGS
Material: #6 SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-03
DATE COMPLETED: November 20, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE 714.97 TOP OF CASING 714.95 TOP OF RISER 714.44							
0	ASPHALT	714.67	CONCRETE SEAL BENTONITE CHIPS					
2	GM-SILTY GRAVELS, trace sands (FILL), compact, fine grained angular, poorly graded, light brown, moist	713.67		1MC 0-2' -221 -222		80		0.0
4	SM-SILTY SANDS, (FILL), compact, fine grained, poorly graded, brown, moist	711.47	2" PVC WELL CASING			80		0.0
6	SP-SANDS, trace silts (natural), compact, fine grained, poorly graded, brown, moist	709.47						
8	SM-SILTY SANDS, (natural), compact, fine grained, poorly graded, orange-brown, moist	707.97	8-1/4" BOREHOLE	2MC		80		0.0
10	SP-SANDS, trace silts, trace fine grained rounded gravels (natural), compact, fine grained, poorly graded ,light brown, moist			11-13' -223		80		0.0
12			2" PVC WELL SCREEN	3MC		70		0.0
14			SAND PACK					
16						70		0.0
18	CI-SILTY CLAY, (natural), stiff, medium plasticity, gray, moist - occasional horizontal sand lenses, 1mm thick at 17.0ft BGS - trace coarse grained gravels at 19.4ft BGS	698.77		4MC		100		0.0
20	END OF BOREHOLE @ 20.0ft BGS	694.97				100		0.0
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
707.97 to 697.97ft BGS
7.00 to 17.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
709.97 to 697.97ft BGS
5.00 to 17.00ft BGS
Material: #6 SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-04
DATE COMPLETED: November 20, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	TOP OF CASING 712.10 GROUND SURFACE 712.08 TOP OF RISER 711.56							
0	ASPHALT	711.78	CONCRETE SEAL BENTONITE CHIPS					
	GM-SILTY GRAVELS, (FILL), compact, fine grained angular, poorly graded, light brown, moist	710.78						
2	SP-SANDS, trace silts (FILL), loose, fine grained, poorly graded, brown, moist		2" PVC WELL CASING	1MC 0-2' -219		60		0.0
4	- medium grained at 4.0ft BGS					60		0.0
6	- fine grained at 5.5ft BGS							
	CL-SILTY CLAY, trace sands (FILL), firm, low plasticity, brown, moist	705.48	8-1/4" BOREHOLE					
8	SP-SANDS, trace silts (natural), compact, medium grained, poorly graded, brown, moist	704.38		2MC 7-9' -220		70		0.0
10	- fine grained, wet at 9.0ft BGS					70		0.0
	SM-SILTY SANDS, trace clay (natural), compact, fine grained, poorly graded, brown, wet	701.58	2" PVC WELL SCREEN					
12	ML-CLAYEY SILTS, compact, fine grained, poorly graded, brown, moist	700.38 699.88		3MC		70		0.0
	SM-SILTY SANDS, (natural), compact, fine grained, poorly graded, brown, wet	699.08	SAND PACK					
14	SP-SANDS, trace silts (natural), compact, medium grained, poorly graded, brown with orange oxidated lenses, wet					70		0.0
16	- fine grained, gray at 14.0ft BGS	696.88						
	CL-SILTY CLAY, trace fine grained sands (natural), stiff, low plasticity, brown, moist			4MC		80		0.0
18	- trace fine grained gravels, trace sands at 17.4ft BGS							
20	- trace coarse grained gravels, sands not present at 19.1ft BGS	692.08				80		0.0
	END OF BOREHOLE @ 20.0ft BGS							
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
706.08 to 696.08ft BGS
6.00 to 16.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
708.08 to 696.08ft BGS
4.00 to 16.00ft BGS
Material: #6 SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-05
DATE COMPLETED: November 11, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	712.13						
0	ML-SILTS WITH CLAY, trace sands (FILL), compact, fine grained, poorly graded, gray, moist		2" BOREHOLE; BENTONITE CHIPS	1MC (0-2' -199)		80		0.0
4		707.63				80		0.0
6	MH-SILTS WITH SANDS, trace clay (FILL), compact, fine grained, poorly graded, gray, moist			2MC		80		0.0
10						80		0.0
12	- sandy silts, brown at 12.3ft BGS			3MC		90		0.0
14		698.83				90		0.0
16	CL-SILTY CLAY, trace fine grained sands (natural), firm, low plasticity, gray, moist - 1/2" lens fine sands at 14.2ft BGS - 1/2" lens fine sands at 14.6ft BGS - trace fine grained rounded gravels, stiff at 17.0ft BGS			4MC		50		0.0
20						50		0.0
22				5MC		100		0.0
24		687.13						
26	END OF BOREHOLE @ 25.0ft BGS							
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

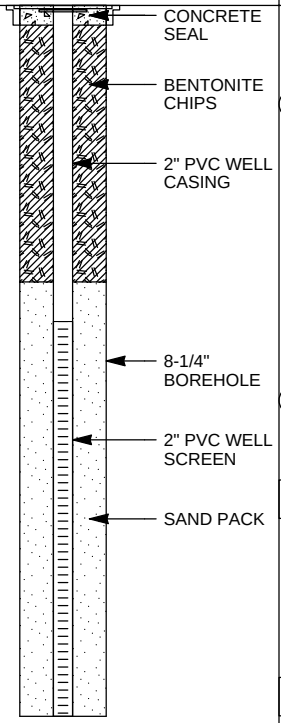
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-06
DATE COMPLETED: November 18, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	TOP OF CASING	714.70
	GROUND SURFACE	714.69
	TOP OF RISER	714.24
0	ASPHALT	714.39
	GW-SANDS AND GRAVELS, trace silts (FILL), compact, fine grained angular, well graded, light gray, damp	713.69
2	SM-SILTY SANDS, (FILL), compact, fine grained, poorly graded, dark brown, moist	712.39
4	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, light brown, damp - with silts at 4.4ft BGS	
6		
8	- trace fine grained rounded gravels, moist at 7.0ft BGS - trace silts, gravel not present at 8.0ft BGS	
10	- medium grained, trace fine grained rounded gravels at 9.5ft BGS	
12	- wet at 12.0ft BGS	
14	- fine grained, gravel not present, gray at 13.4ft BGS	
16	CI-SILTY CLAY, trace fine grained rounded gravels (natural), stiff, medium plasticity, gray, moist	698.69
18		
20	END OF BOREHOLE @ 20.0ft BGS	694.69
22		
24		
26		
28		
30		
32		
34		

MONITORING WELL



WELL DETAILS
Screened interval:
706.69 to 696.69ft BGS
8.00 to 18.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
707.69 to 696.69ft BGS
7.00 to 18.00ft BGS
Material: #6 SAND

SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1MC 0-2' -231 -232		90		0.0
		90		0.0
2MC		100		0.0
10-12' -233		100		0.0
3MC		100		0.0
		100		0.0
4MC		100		0.0
		100		0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval) GRAIN SIZE ANALYSIS (rectangle)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

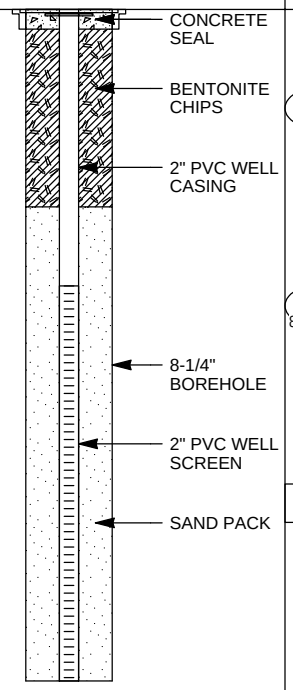
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-07
DATE COMPLETED: November 18, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	TOP OF CASING	716.08
	GROUND SURFACE	716.05
	TOP OF RISER	715.72
0	ASPHALT	715.65
	GW-SANDS AND GRAVELS, trace silts (FILL), compact, fine grained, angular, poorly graded, light gray, dry	715.15
2	SM-SILTY SANDS, (FILL), compact, fine grained, poorly graded, dark brown, moist	713.05
4	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, yellowish brown, moist	
6	- 1" lens silts at 6.2ft BGS	
	- light brown at 7.2ft BGS	
8	- 2" lens fine grained gravels at 8.4ft BGS	
10	- wet at 10.5ft BGS	
	- 2" lens silty sands at 10.8ft BGS	
12		
14		
16		
	CI-SILTY CLAY, trace fine grained sands, trace fine grained rounded gravels, stiff, medium plasticity, gray, moist, homogeneous	699.35
18	END OF BOREHOLE @ 17.0ft BGS	699.05
20		
22		
24		
26		
28		
30		
32		
34		

MONITORING WELL



WELL DETAILS
Screened interval:
709.05 to 699.05ft BGS
7.00 to 17.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
711.05 to 699.05ft BGS
5.00 to 17.00ft BGS
Material: #6 SAND

SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1MC 0-2' -234		70		0.0
		70		0.0
2MC 8.5-10.5 -235		100		0.0
		100		0.0
		90		0.0
3MC		90		0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval) GRAIN SIZE ANALYSIS (rectangle)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-08
DATE COMPLETED: November 18, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: M. MATHE

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	TOP OF CASING GROUND SURFACE TOP OF RISER	716.05 716.05 715.86						
0	CONCRETE	715.30	CONCRETE SEAL					
2	GM-SILTY SAND-GRAVEL, (FILL), compact, fine grained, angular poorly graded, light gray, dry	714.85						
	SP-SANDS, trace silts, loose, fine grained, poorly graded, medium brown, damp		BENTONITE CHIPS	1MC		50		0.0
4								
	- compact at 5.0ft BGS - light brown at 5.5ft BGS		2" PVC WELL CASING			50		0.0
6								
			8-1/4" BOREHOLE	2MC		80		0.0
8								
10	- 1.5" lens sandy silts at 9.8ft BGS					80		0.0
		704.85	2" PVC WELL SCREEN					
12	MH-SANDY SILTS, trace clay (FILL), compact, fine grained, poorly graded, brown, wet, rapid dilatancy	703.95		3MC		90		0.0
	SP-SANDS, trace silts (natural), compact, fine grained, poorly graded, brown, wet		SAND PACK					
14	- gray, faint petroleum-type odor at 13.1ft BGS							
						90		0.0
16								
	- 1" lens black staining, odor at 17.2ft BGS	698.75		4MC		90		0.0
18	CI-SILTY CLAY, trace fine grained gravels (natural), stiff, medium plasticity, gray, moist, homogeneous							
20	END OF BOREHOLE @ 20.0ft BGS	696.05				90		0.0
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
708.05 to 698.05ft BGS
8.00 to 18.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
710.05 to 698.05ft BGS
6.00 to 18.00ft BGS
Material: #6 SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

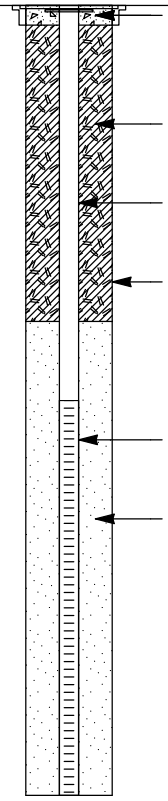
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-09
DATE COMPLETED: November 20, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	718.44
	TOP OF CASING	718.43
	TOP OF RISER	718.24
0	CONCRETE	717.84
	GM-SILTY SAND-GRAVEL, (FILL), compact, fine grained, poorly graded, gray, moist	716.84
2	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, brown, moist	
4	wood debris	714.64
	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, light brown, damp	713.84
6		
		711.44
	ML-CLAYEY SILTS, (FILL), compact, fine grained, poorly graded, gray, moist	710.94
8	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, orange-brown, moist	709.94
10	SP-SANDS, trace silts (natural), compact, fine grained, poorly graded, orange-brown, moist	
	- medium grained, trace fine grained rounded gravels at 9.0ft BGS	
12	- 1" lens orange oxidated at 12.1ft BGS	
	- gray, very moist to wet at 12.4ft BGS	
	- 3" lens sandy clay at 13.0ft BGS	
14	- 3" lens sandy clay at 13.5ft BGS	
	- wet at 14.0ft BGS	
16		
	MH-SANDY SILTS, trace clay (natural), compact, fine grained, poorly graded, gray, wet, rapid dilatancy	701.44
18	- 2" lens wet sands at 18.2ft BGS	699.34
20	CI-SILTY CLAY, (natural), firm, medium plasticity, gray, moist, occasional 1mm thick horizontal sand lenses	698.44
	END OF BOREHOLE @ 20.0ft BGS	
22		
24		
26		
28		
30		
32		
34		

MONITORING WELL



WELL DETAILS
Screened interval:
708.44 to 698.44ft BGS
10.00 to 20.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
710.44 to 698.44ft BGS
8.00 to 20.00ft BGS
Material: #6 SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1MC		60		0.0
		60		0.0
2MC		60		0.0
		60		0.0
3MC		60		0.0
		60		0.0
4MC		100		0.0
		100		0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-10
DATE COMPLETED: November 19, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE 718.45 TOP OF CASING 718.44 TOP OF RISER 718.13							
0	CONCRETE	717.75	CONCRETE SEAL					
2	GM-SILTY GRAVELS, (FILL), compact, coarse grained angular, poorly graded, light gray, dry	716.75		1MC		50		0.0
4	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, brown, moist to very moist - 2" lens silty sands at 3.0ft BGS - 3" lens concrete rubble at 3.2ft BGS		BENTONITE CHIPS					
6	- 2" lens concrete rubble at 3.9ft BGS - trace fine grained rounded gravels at 6.6ft BGS		2" PVC WELL CASING			50		0.0
8	- 1" wood debris at 7.9ft BGS - light brown, moist, faint petroleum type odor at 8.4ft BGS		8-1/4" BOREHOLE	2MC 7.4-9.4 -218		50		0.0
10						50		284
12	- 3" lens clayey sands at 12.4ft BGS - gray, wet, sheen, petroleum type odor at 12.7ft BGS		2" PVC WELL SCREEN	3MC		50		487
14	- black, stronger odor, blue sheen at 14.4ft BGS		SAND PACK			50		593
16	- light gray, sheen not present at 15.5ft BGS							
18	CI-SILTY CLAY, (natural), stiff, medium plasticity, gray, moist, homogeneous - 1/8" lens silts at 19.0ft BGS	700.85		4MC		80		29.5
20	- trace 1mm thick fine grained horizontal sands lens at 19.3ft BGS	698.45				80		13.2
22	END OF BOREHOLE @ 20.0ft BGS							
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
710.45 to 700.45ft BGS
8.00 to 18.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
712.45 to 700.45ft BGS
6.00 to 18.00ft BGS
Material: #6 SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (2MC)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

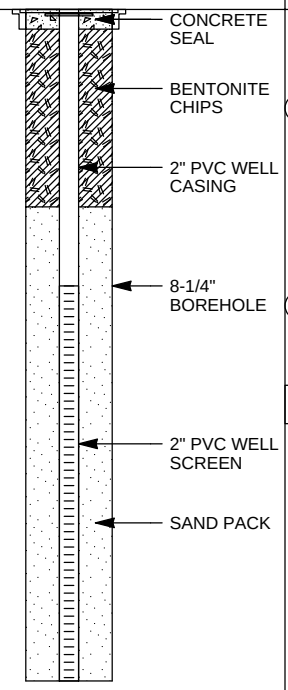
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-11
DATE COMPLETED: November 18, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	TOP OF CASING	716.81
	GROUND SURFACE	716.80
	TOP OF RISER	716.63
0	ASPHALT	716.40
	GM-SILTY SANDS AND GRAVELS, (FILL), compact, fine grained angular, poorly graded, light brown, dry	715.80
2	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, light brown, moist	
4	- 1/2" piece slag at 4.1ft BGS	
6		
8	- 3" lens clayey sands, very moist at 8.0ft BGS - medium grained, grayish brown at 8.5ft BGS	
10	- wet at 9.5ft BGS - fine grained at 10.0ft BGS	
12	- dark gray at 13.0ft BGS	
14		
16	CI-SILTY CLAY, (natural), stiff, medium plasticity, gray, moist, homogeneous	700.70
	END OF BOREHOLE @ 17.0ft BGS	699.80
18		
20		
22		
24		
26		
28		
30		
32		
34		

MONITORING WELL



WELL DETAILS
Screened interval:
709.80 to 699.80ft BGS
7.00 to 17.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
711.80 to 699.80ft BGS
5.00 to 17.00ft BGS
Material: #6 SAND

SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1MC 0-2' -229		80		0.0
		80		0.0
2MC 7.5-9.5' -230		90		0.0
		90		0.0
3MC		100		0.0
4MC				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval) GRAIN SIZE ANALYSIS (rectangle)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-12
DATE COMPLETED: November 19, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	TOP OF CASING 715.67 GROUND SURFACE 715.58 TOP OF RISER 715.29							
0	ASPHALT	715.18	CONCRETE SEAL BENTONITE CHIPS					
	GP-SANDS AND GRAVELS, trace silts (FILL), compact, fine grained angular, poorly graded, light brown, moist	714.18						
2	SP-SANDS WITH SILTS, (FILL), trace fine grained gravels, trace glass, loose, fine grained, poorly graded, brown, moist		2" PVC WELL CASING	1MC 0-2' -215		75		0.0
4						75		0.0
6			8-1/4" BOREHOLE					
8	- 1" lens trace ash/cinders at 7.5ft BGS			2MC		40		0.0
10	- concrete at 10.0ft BGS			11.5-13.5 -216		40		0.0
	- 1.5" wood at 11.5ft BGS		2" PVC WELL SCREEN					
12	- light brown, wet at 12.5ft BGS - black at 13.0ft BGS		SAND PACK	3MC		55		0.0
14	- faint odor at 13.8ft BGS - slight sheen at 14.8ft BGS					55		2.1
16	- gray at 15.5ft BGS - stronger odor at 16.0ft BGS							
	CL-SILTY CLAY, (natural), firm, medium plasticity, gray, moist, homogeneous	698.88		4MC		90		7.4
18								
20	END OF BOREHOLE @ 20.0ft BGS	695.58				90		1.8
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
708.58 to 698.58ft BGS
7.00 to 17.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
710.58 to 698.58ft BGS
5.00 to 17.00ft BGS
Material: #6 SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

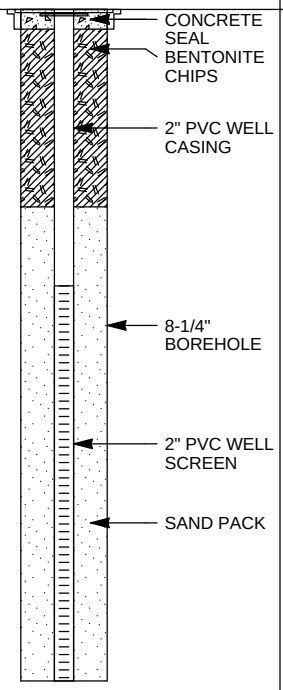
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-13
DATE COMPLETED: November 19, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	709.96
	TOP OF CASING	709.92
	TOP OF RISER	709.41
0	CL-CLAY AND SILTS, trace fine grained gravels (FILL), firm, low plasticity, gray, moist	
8	- 1" lens wet at 8.0ft BGS	
10	- 2" lens wet coarse grained gravels at 10.8ft BGS	
12	- sandy clay, trace silts at 11.0ft BGS	697.96
	GM-SILTY GRAVELS, trace sands, trace clay (FILL), compact, coarse grained angular, poorly graded, gray, wet	
14	- stained black, faint odor at 14.1ft BGS	
	- slight sheen at 15.5ft BGS	
16	PT-PEAT, brown, fibrous, moist	692.96
18	OL-ORGANIC CLAYEY SILTS, trace sands, soft, low plasticity, brown, moist	692.06 / 691.66
	SP-SANDS, trace silts, compact, fine grained, poorly graded, brown, very moist	691.16
20	OL-ORGANIC SILTY CLAY, trace marl, trace peat fibers, firm, low plasticity, gray, moist	689.96
22	END OF BOREHOLE @ 20.0ft BGS	

MONITORING WELL



WELL DETAILS
Screened interval:
702.96 to 692.96ft BGS
7.00 to 17.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
704.96 to 692.96ft BGS
5.00 to 17.00ft BGS
Material: #6 SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1MC		95		0.0
		95		0.0
2MC		95		0.0
		95		0.0
3MC		60		0.0
		60		3.4
4MC		60		3.8
		60		4.2

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-14
DATE COMPLETED: November 12, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	TOP OF CASING GROUND SURFACE TOP OF RISER	714.79 714.70 714.62						
0	ML-SILTS, with clay (FILL), loose, fine grained, poorly graded, gray, moist	714.20	CONCRETE SEAL BENTONITE CHIPS					
2	SM-SILTY SANDS, trace fine grained rounded gravels (FILL), loose, fine grained, poorly graded, brown, moist		2" PVC WELL CASING	1MC (0-2' -209)		30		0.0
4	- with concrete, slag, glass, wood, fine metal shavings at 4.5ft BGS		8-1/4" BOREHOLE			30		0.0
6								
8			2" PVC WELL SCREEN	2MC		80		0.0
10			SAND PACK	(11-13' -210)		80		0.0
12	- wet at 13.0ft BGS			3MC		90		0.0
14	OL-ORGANIC SILTS, trace peat (natural), loose, fine grained, black, very moist	700.80				90		0.0
16	- organic silty clay, gray, firm, moist at 15.5ft BGS							
18				4MC		80		0.0
20	CL-SILTY CLAY, (natural), stiff, low plasticity, brown and gray, moist	695.70				80		0.0
	END OF BOREHOLE @ 20.0ft BGS	694.70						
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
708.70 to 698.70ft BGS
6.00 to 16.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
710.70 to 698.70ft BGS
4.00 to 16.00ft BGS
Material: #6 SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-15
DATE COMPLETED: November 11, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	TOP OF CASING GROUND SURFACE TOP OF RISER	714.55 714.50 714.12						
0	MH-SANDY SILTS, trace rootlets, trace organics (topsoil), loose, fine grained, brown, dry	714.00	CONCRETE SEAL BENTONITE CHIPS 2" PVC WELL CASING	1MC 0-2' -205		80		4.4
2	ML/CL-SILTS AND CLAY, trace fine grained rounded gravels (FILL), loose, fine grained, poorly graded, gray, damp	712.00						
4	MH-SANDY SILTS, (FILL), loose, fine grained, poorly graded, brown, moist					80		4.4
6			8-1/4" BOREHOLE					
8	- trace cinders/ash at 7.8ft BGS		2" PVC WELL SCREEN	2MC 7-9' -206		70		6.7
	SLUDGE-soft, white	705.50						
10	SP-SANDS, trace silts (natural), loose, fine grained, poorly graded, dark gray, very moist to wet, faint odor	705.00	SAND PACK	9-9.5' -207		70		10.1
12				3MC		90		14.3
14	CL-SILTY CLAY, trace fine grained rounded gravels (FILL), (natural), stiff, low plasticity, gray, moist, homogeneous	701.10				90		6.8
16								
18				4MC		100		6.9
20	END OF BOREHOLE @ 20.0ft BGS	694.50				100		7.4
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
710.50 to 700.50ft BGS
4.00 to 14.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
711.50 to 700.50ft BGS
3.00 to 14.00ft BGS
Material: #6 SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-16
DATE COMPLETED: November 19, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	TOP OF CASING GROUND SURFACE TOP OF RISER	714.34 714.28 714.17						
0	SM-SILTY SANDS, trace rootlets/grass (FILL), loose, fine grained, poorly graded, medium brown, moist		CONCRETE SEAL BENTONITE CHIPS					
2				1MC		80		0.0
			2" PVC WELL CASING					
	CONCRETE DEBRIS	710.88						
4		710.38						
	SP-SANDS, trace fine grained rounded gravels, trace silts, loose, fine grained, poorly graded, light brown, dry					80		0.0
6	- gravels not present, light brown at 6.0ft BGS							
			8-1/4" BOREHOLE					
8				2MC		85		0.0
10						85		0.0
	- trace silts, wet at 11.0ft BGS		2" PVC WELL SCREEN					
12				3MC		60		0.0
	- gray at 13.0ft BGS		SAND PACK					
14								
						60		0.0
16	CI-SILTY CLAY, (natural), firm, medium plasticity, gray, moist, homogeneous	698.78						
	- 3" lens sandy silts at 17.5ft BGS			4MC		90		0.0
18								
20	END OF BOREHOLE @ 20.0ft BGS	694.28				90		0.0
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
708.28 to 698.28ft BGS
6.00 to 16.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
710.28 to 698.28ft BGS
4.00 to 16.00ft BGS
Material: #6 SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-17
DATE COMPLETED: November 11, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	TOP OF CASING 712.59 GROUND SURFACE 712.57 TOP OF RISER 712.40							
0	MH-SANDY SILTS, trace clay (FILL), compact, fine grained, poorly graded, brown, moist		CONCRETE SEAL BENTONITE CHIPS					
2				1MC 0-2' -203		80		6.1
4	- 2" lens sands at 3.8ft BGS		2" PVC WELL CASING					
	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, medium brown, moist	707.97				80		14.2
6			8-1/4" BOREHOLE					
8	MH-SILTS WITH SANDS, (FILL), compact, fine grained, poorly graded, brown and gray layers, moist	704.67	2" PVC WELL SCREEN	2MC 8-10' -204		80		15.4
10	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, gray, wet, odor	702.77	SAND PACK			80		20.7
12	- 3" lens silty clay at 11.6ft BGS			3MC		90		25.1
	CL-SILTY CLAY, (FILL), firm, low plasticity, gray, moist	699.67 699.27						
14	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, gray, wet	698.77				90		28.8
16	ML-SILTS AND CLAY, trace fine grained sands, compact, fine grained, poorly graded, gray, moist			4MC		100		14.9
18	CL-SILTY CLAY, trace fine grained rounded gravels (TILL), (natural), stiff, low plasticity, gray, moist	694.57						
20	END OF BOREHOLE @ 20.0ft BGS	692.57				100		11.3
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
708.07 to 698.07ft BGS
4.50 to 14.50ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
709.07 to 698.07ft BGS
3.50 to 14.50ft BGS
Material: #6 SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-18
DATE COMPLETED: November 11, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	TOP OF CASING 711.66 GROUND SURFACE 711.66 TOP OF RISER 711.36							
0	SM-SILTY SANDS, (FILL), trace roots, loose, fine grained, poorly graded, dark brown, very moist		CONCRETE SEAL BENTONITE CHIPS					
2	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, medium brown, moist	709.16	2" PVC WELL CASING	1MC 0-2'-200		60		10.1
4	SM-SANDS WITH SILTS, (FILL), compact, fine grained, poorly graded, orange-brown, moist	707.16 706.16				60		22.3
6	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, brown, moist	704.46	8-1/4" BOREHOLE	2MC 7.5-9.5'-201		75		24.1
8	MH-SANDY SILTS (FILL), loose, fine grained, poorly graded, brown, moist	703.86						
10	SP-SANDS, trace silts, compact, fine grained, poorly graded, brown, moist - black, wet, strong odor at 9.5ft BGS		2" PVC WELL SCREEN			75		325
12			SAND PACK	3MC		75		550
14	- sheen present at 15.0ft BGS					75		585
16	CL-SILTY CLAY, trace fine grained rounded gravels (till), (natural), stiff, low plasticity, gray, moist, homogeneous	696.16						
18				4MC		100		6.6
20	END OF BOREHOLE @ 20.0ft BGS	691.66				100		6.2
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
705.16 to 695.16ft BGS
6.50 to 16.50ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
707.16 to 695.16ft BGS
4.50 to 16.50ft BGS
Material: #6 SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-19
DATE COMPLETED: November 12, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	TOP OF CASING 714.07 GROUND SURFACE 713.99 TOP OF RISER 713.54							
0	SM-SILTY SANDS, trace rootlets, trace organics (topsoil), (FILL), loose, fine grained, poorly graded, dark brown, moist	713.69	CONCRETE SEAL BENTONITE CHIPS					
2	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, yellow-brown, dry - trace fine grained subrounded gravels at 2.0ft BGS			1MC		100		0.0
4								
6			2" PVC WELL CASING			100		0.0
8			8-1/4" BOREHOLE	2MC		100		30.0
	SM-SILTY SANDS, (FILL), compact, fine grained, poorly graded, light brown, damp	706.19						
10	SP-SANDS, trace silts (natural), compact, fine grained, poorly graded, orange-brown, moist - wet at 9.7ft BGS - gray, odor present at 10.5ft BGS	704.99				100		30.2
12			2" PVC WELL SCREEN					
			SAND PACK	3MC		80		104
14	- black, stronger odor, slight sheen at 14.1ft BGS							
	CL-SILTY CLAY, trace fine grained rounded gravels (till), stiff, low plasticity, gray, moist, homogeneous	699.19				80		151
16			WELL DETAILS Screened interval: 708.99 to 698.99ft BGS 5.00 to 15.00ft BGS Length: 10ft Diameter: 2in Slot Size: 0.010 Material: PVC Sand Pack: 710.99 to 698.99ft BGS 3.00 to 15.00ft BGS Material: #6 SAND					
18				4MC				24.1
20	END OF BOREHOLE @ 20.0ft BGS	693.99						6.6
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-22
DATE COMPLETED: November 12, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE 713.70 TOP OF CASING 713.62 TOP OF RISER 713.39							
0	ASPHALT	713.50	CONCRETE SEAL BENTONITE CHIPS					
	SP-SANDS, (FILL), trace silts, compact, fine grained, poorly graded, light brown, damp		2" PVC WELL CASING	1MC		100		0.0
4	- 1-1/2" lens silty sands, moist at 4.8ft BGS - with silts, moist at 5.5ft BGS					100		0.0
8	- 3" lens silts at 7.7ft BGS - 3" lens silts at 8.3ft BGS		8-1/4" BOREHOLE	2MC		100		0.0
10	- trace silts at 10.0ft BGS					100		0.0
12	- medium grained, gray at 11.2ft BGS - wet at 11.8ft BGS - 2" lens orange oxidation at 12.3ft BGS - with silts, fine grained at 12.7ft BGS		2" PVC WELL SCREEN SAND PACK	3MC		100		0.0
16	CI-SILTY CLAY, (natural), firm, medium plasticity, gray, moist	698.10				100		0.0
18	- 2.5" lens wet silty sands at 16.3ft BGS - trace fine grained rounded gravels at 18.7ft BGS			4MC		100		0.0
20	END OF BOREHOLE @ 20.0ft BGS	693.70				100		0.0
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
706.70 to 696.70ft BGS
7.00 to 17.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
708.70 to 696.70ft BGS
5.00 to 17.00ft BGS
Material: #6 SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-22R
DATE COMPLETED: February 27, 2006
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: N. RATHBUN

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	ASPHALT	0.40	BENTONITE; 2" PVC WELL CASING; 3" BOREHOLE				
2	SP-SANDS (FILL), trace silts, compact, fine grained, poorly graded, light brown, damp			1AL		55	
4	- 1.4' seam silty sands at 4.6ft BGS						
6	- silt lens at 7.0ft BGS		2" PVC WELL SCREEN; SAND PACK	2AL		70	
8							
10	- medium grained, gray at 11.2ft BGS		▽				
12	- orange oxidation at 12.5ft BGS			3AL		80	
14	CL-SILTY CLAYS, firm, medium plasticity, gray, saturated	14.60					
16	END OF BOREHOLE @ 15.0ft BGS	15.00					
18							
20							
22							
24							
26							
28							
30							
32							
34							
36							
38							

WELL DETAILS
Screened interval:
5.00 to 15.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
5.00 to 15.00ft BGS
Material: #5 SANDS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

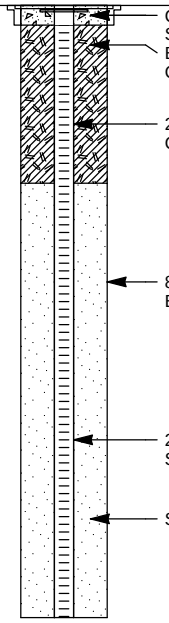
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-23
DATE COMPLETED: November 11, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	TOP OF CASING	711.88
	GROUND SURFACE	711.85
	TOP OF RISER	711.57
0	CL-SILTY CLAY, trace fine grained rounded gravels (FILL), firm ,low plasticity, gray, moist	
8	MH-SILTS WITH SANDS, (FILL), loose, fine grained, poorly graded, brown, moist	704.65
	CONCRETE DEBRIS	704.05
	CL-SILTY CLAY, trace sands (FILL), firm, low plasticity, gray, moist	703.75
10	MH-SANDY SILTS, (FILL), compact, fine grained, poorly graded, brown and gray, moist	702.35
12	GM-SILTY SAND-GRAVEL, (FILL), compact, fine grained angular, poorly graded, dark gray, moist	700.05
		699.65
	MH-SANDY SILTS, (FILL), compact, fine grained, poorly graded, brown, very moist	698.95
14	SP-SANDS, trace silts (natural), compact, fine grained, poorly graded, brown, wet	697.55
16	CI-SILTY CLAY, (natural), firm, medium plasticity, gray, moist, homogeneous	
20	END OF BOREHOLE @ 20.0ft BGS	691.85

MONITORING WELL



WELL DETAILS
Screened interval:
706.35 to 696.35ft BGS
5.50 to 15.50ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
707.35 to 696.35ft BGS
4.50 to 15.50ft BGS
Material: #6 SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1MC		90		0.0
		90		0.0
2MC		90		0.0
		90		0.0
3MC		90		0.0
		90		0.0
4MC		100		0.0
		100		N/A

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

GRAIN SIZE ANALYSIS ☐

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-24
DATE COMPLETED: May 18, 2004
DRILLING METHOD: DIRECT PUSH/4-1/4 HSA
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	TOP OF CASING GROUND SURFACE TOP OF RISER	716.81 716.77 716.64						
0	ASPHALT	716.52	BENTONITE CHIPS					
2	SM-SILTY SANDS, trace fine gravels, compact, fine to coarse grained, poorly graded, brown, moist			1DP				0.0
4			2" PVC WELL CASING					
6			8-1/4" BOREHOLE					
8				2DP				0.0
10			2" PVC WELL SCREEN					
12			SAND PACK					
14	SP-SANDS, trace silts and fine gravels, compact, fine to coarse grained, poorly graded, light brown, moist, brown-orange banding in areas, oxidation - saturated, gray-brown at 14.3ft BGS	704.27		3DP (13-14' -325)				0.0
16								
18	- gray at 17.5ft BGS CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist	698.77		4DP				0.0
20	END OF BOREHOLE @ 20.0ft BGS	696.77	NATURAL COLLAPSE					
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
708.77 to 698.77ft BGS
8.00 to 18.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
710.77 to 698.77ft BGS
6.00 to 18.00ft BGS
Material: SANDS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-25
DATE COMPLETED: May 27, 2005
DRILLING METHOD: DIRECT PUSH/HSA
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	718.47						
0	CONCRETE, with fine subrounded gravels, white, competent	717.97	CONCRETE SEAL	1DP				18.4
2	SM-SILTY SANDS, trace fine gravels, compact, fine grained, trace medium to coarse grained, poorly graded, orange-brown, moist		8-1/4" BOREHOLE					
4	- brown at 2.5ft BGS - light brown at 3.5ft BGS		2" PVC WELL CASING	2DP				8.3
6			BENTONITE CHIPS					
8	- trace to with clays at 7.5ft BGS - no clays at 8.0ft BGS			3DP				28.4
10	SP-SANDS, trace silts and fine gravels, compact, fine to coarse grained, poorly graded, brown, moist	708.97		4DP				112
12	- brown-gray, saturated at 11.5ft BGS		SAND PACK					
14	SM-SILTY SANDS, compact, fine grained, poorly graded, gray, saturated	704.97	2" PVC WELL SCREEN	5DP				50.0
16				6DP				3.4
18								
20	CL-SILTY CLAYS, firm, low plasticity, gray, moist END OF BOREHOLE @ 20.0ft BGS	699.72 698.47		7DP				2.1
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1DP)

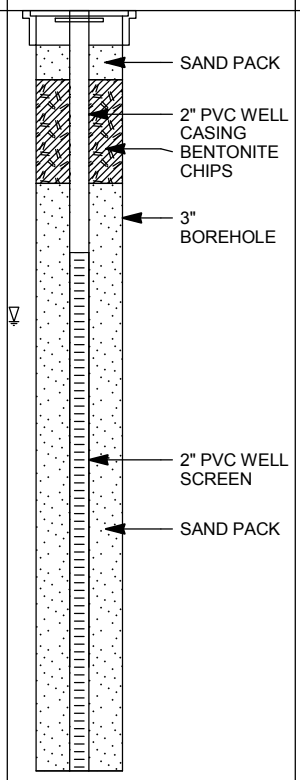
OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-28/MW19-27
DATE COMPLETED: February 28, 2006
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: N. RATHBUN

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	716.90
2	SP-SANDS (FILL), trace silts, gravel and debris (crushed concrete and brick), loose, very fine to fine grained, poorly graded, dark brown to brown, moist	715.40
4	CL-SANDY CLAYS (FILL), trace silts and gravels, low plasticity, firm, brownish gray, moist	714.40
6	SP-SANDS (FILL), trace silts, gravel and debris (crushed concrete and brick), loose, very fine to fine grained, poorly graded, dark brown to brown, moist	712.40
8	SM-SILTY SANDS, compact, poorly graded, very fine to fine grained, tan brown, moist	710.90
10	SP-SANDS, trace silts and brown subrounded gravels, loose, fine to medium grained, poorly graded, dark brown to black, moist, slight petroleum-like odor	707.90
12	SP-SANDS, compact, very fine to fine grained, poorly graded, gray, wet, petroleum-like odor	
14	- petroleum-like substance intermixed with water at 15.0ft BGS	
16		
18	CH-CLAYS, trace silts, high plasticity ,firm, brownish gray, moist	698.90
20	END OF BOREHOLE @ 20.0ft BGS	696.90
22		
24		
26		
28		
30		
32		
34		
36		
38		



WELL DETAILS
Screened interval:
709.90 to 697.90ft BGS
7.00 to 19.00ft BGS
Length: 12ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
711.90 to 697.90ft BGS
5.00 to 19.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				67.2
1AL		60		64.7
				11.4
2AL		65		282
				217
				136
3AL		80		58.3
				54.9
				194
4AL		85		157

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

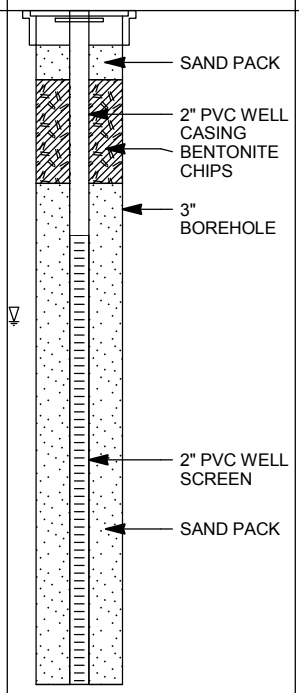
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-40/MW19-28
DATE COMPLETED: March 2, 2006
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: N. RATHBUN

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
0	SP-SANDS (FILL), trace silts, gravel and debris (crushed concrete), loose, very fine to fine grained, poorly graded, dark brown, moist	1.00
2	CL-SANDY CLAYS (FILL), trace silts and gravels, low plasticity, firm, brownish gray, moist	2.50
4	SP-SANDS (FILL), trace silts, gravel and debris (crushed concrete), loose, very fine to fine grained, poorly graded, dark brown, moist	5.00
6	SM-SILTY SANDS, compact, very fine to fine grained, poorly graded, tan, moist	6.00
8	SP-SANDS, trace silts and brown subrounded gravels, loose, fine to medium grained, poorly graded, dark brown, moist	8.00
10	SP-SANDS, compact, very fine to fine grained, poorly graded, gray, wet	
12		
14	SM-SILTY SANDS, compact, very fine to fine grained, poorly graded, gray, wet	13.00
16		
18	CH-CLAYS, trace silts, high plasticity, firm, gray, moist	17.00
20	END OF BOREHOLE @ 20.0ft BGS	20.00

MONITORING WELL



WELL DETAILS
Screened interval:
6.50 to 19.50ft BGS
Length: 13ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
5.00 to 19.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				2.0
1AL		60		5.3
				13.4
2AL		65		89.8
				16.0
				278
3AL		80		127
				151
4AL		85		125
				33.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

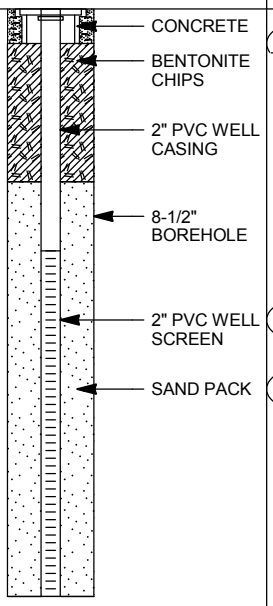
PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-29
DATE COMPLETED: September 21, 2011
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268186.87
EASTING: 13344065.59

GROUND SURFACE elev. 717.41 ft BGS
TOP OF CASING elev. 716.83

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	717.06
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, loose, gray, moist	716.81
4	SP-SAND, trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose, brown, moist	714.66
	CL-SILTY CLAY, with sand, trace gravel, fine to coarse sand, fine gravel, poorly graded, low plasticity, firm, brown, moist	713.91
8	SP-SAND, fine to coarse grained, poorly graded, compact, brown, moist - fine grained at 5.0ft BGS - fine to coarse grained, with fine gravel at 5.7ft BGS - with fine to coarse gravel at 8.5ft BGS - moist to very moist at 10.0ft BGS	
14	- with silt, no gravel, fine to medium grained, gray, wet at 14.0ft BGS	702.41
16	SM-SANDY SILT, fine grained, poorly graded, compact, gray, wet	700.91
18	CL-SILTY CLAY, low plasticity, firm to stiff, gray, moist	
20	END OF BOREHOLE @ 20.0ft BGS	697.41



WELL DETAILS
Screened interval:
710.41 to 700.41ft BGS
7.00 to 17.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
716.41 to 712.41ft BGS
1.00 to 5.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
712.41 to 700.41ft BGS
5.00 to 17.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
0-2' -001/002				0.8
1GP		75		0.8
				0.8
2GP		75		1.2
8-10' -003				0.9
10-12' -004				1.7
3GP		70		0.7
				1.4
4GP		100		1.1
				0.5

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

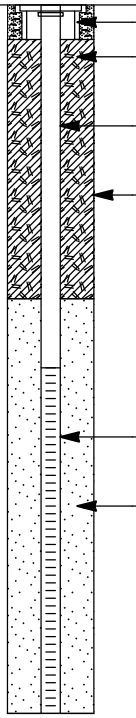
HOLE DESIGNATION: MW19-30
DATE COMPLETED: September 21, 2011
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268181.53
EASTING: 13343987.88

GROUND SURFACE ELEV.: 718.61 ft BGS
TOP OF CASING ELEV.: 718.15

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	CONCRETE	718.11
2	SP-SAND, fine grained, poorly graded, loose to compact, brown, moist	
4	- fine to coarse grained, compact at 4.0ft BGS	
	- trace clay at 4.8ft BGS	
6	- fine grained, no clay at 5.0ft BGS	
8	- fine to coarse grained at 7.5ft BGS	
	- fine grained at 8.0ft BGS	
10	- fine to coarse grained, with fine to coarse gravel, loose at 9.5ft BGS	
	- compact, very moist at 10.5ft BGS	
12	- dense, wet at 12.0ft BGS	
	- compact at 12.5ft BGS	
14		
	- trace gravel, gray at 15.0ft BGS	
16	CH-SILTY CLAY, trace sand, medium grained, high plasticity, firm to stiff, gray, moist	702.61
18	SM-SANDY SILT, fine grained, poorly graded, dense, gray, wet	702.11
20	CH-SILTY CLAY, trace sand, medium grained, high plasticity, stiff, gray, moist	698.61
22		
24		
	END OF BOREHOLE @ 25.0ft BGS	693.61
26		
28		
30		
32		
34		
36		
38		

MONITORING WELL



WELL DETAILS
Screened interval:
708.11 to 698.11ft BGS
10.50 to 20.50ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
717.61 to 710.11ft BGS
1.00 to 8.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
710.11 to 698.11ft BGS
8.50 to 20.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
0-2' -005				1.5
1GP		70		1.8
				1.4
2GP		75		1.1
8-10' -006				0.5
10-12' -007				1.9
3GP		70		1.9
				1.0
4GP		70		1.7
				2.1
				1.0
5GP		100		0.6
				0.1

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

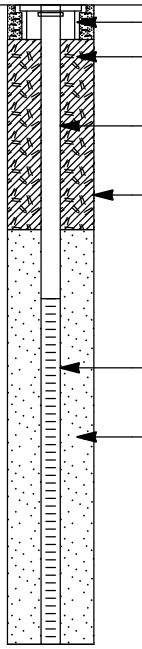
HOLE DESIGNATION: MW19-31
DATE COMPLETED: September 21, 2011
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268225.3
EASTING: 13343975.43

GROUND SURFACE 718.51
TOP OF CASING 718.27

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	CONCRETE	718.16
2	SP-SAND (FILL), fine grained, poorly graded, loose, brown, moist	
	- with fine to coarse gravel at 2.0ft BGS	716.01
4	CL-SANDY CLAY (FILL), with gravel, fine to coarse sand, fine to coarse gravel, low plasticity, stiff, brown, moist	715.01
6	- silty clay, trace fine to medium sand and fine gravel at 3.3ft BGS	713.01
		712.51
	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	712.11
8		
	CONCRETE	709.76
10	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	
12	SP-SAND, fine to medium grained, poorly graded, dense, brown, moist	706.01
14	SP-GRAVELLY SAND, fine to coarse sand, fine to coarse gravel, poorly graded, loose, brown, moist	
	- compact, very moist at 10.5ft BGS	
16	SM-SILTY SAND, fine grained, poorly graded, compact, gray, wet	
	- fine to medium grained at 14.5ft BGS	
18	- fine grained at 16.8ft BGS	700.51
20	END OF BOREHOLE @ 20.0ft BGS	
22		
24		
26		
28		
30		
32		
34		
36		
38		

MONITORING WELL



WELL DETAILS
Screened interval:
710.01 to 700.01ft BGS
8.50 to 18.50ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
717.51 to 712.01ft BGS
1.00 to 6.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
712.01 to 700.01ft BGS
6.50 to 18.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
0-2' -008				0.8
1GP		85		0.9
				2.5
				0.8
2GP		95		
8-10' -009				1.1
10-12' -010				1.3
3GP		70		1.8
				1.1
				2.0
4GP		100		
				2.1

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

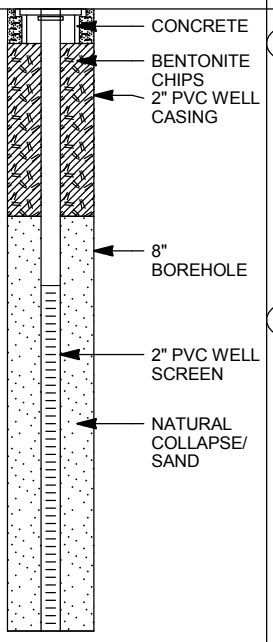
PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-32
DATE COMPLETED: February 8, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268227.03
EASTING: 13343743.14

TOP OF RISER 718.78
GROUND SURFACE 718.75
TOP OF CASING 718.42

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	718.40
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	718.05
2	SP-SAND (FILL), with clay, trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	715.25
4	CL-SANDY CLAY (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, low plasticity, stiff, brown, moist	714.25
6	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	
8	SP-SAND, with gravel, fine to coarse sand, fine to coarse gravel, moderately graded, compact, brown, moist	709.25
10	- fine grained, no gravel, poorly graded, wet at 10.0ft BGS	
12	- fine to coarse grained, with fine to coarse gravel, moderately graded, loose to compact at 10.8ft BGS	
14	SM-SILTY SAND, fine grained, compact to dense, gray, wet	703.75
16	CH-SILTY CLAY, high plasticity, firm to stiff, gray, moist	700.25
18	END OF BOREHOLE @ 20.0ft BGS	698.75
20		
22		
24		
26		
28		
30		
32		
34		
36		
38		



WELL DETAILS
Screened interval:
710.75 to 700.75ft BGS
8.00 to 18.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
717.75 to 712.75ft BGS
1.00 to 6.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
712.75 to 700.75ft BGS
6.00 to 18.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
0-2' -020				0.0
1GP		70		0.0
				0.0
2GP		65		0.0
8-10' -021				0.0
				0.0
3GP		70		0.0
				0.0
4GP		70		0.0
				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

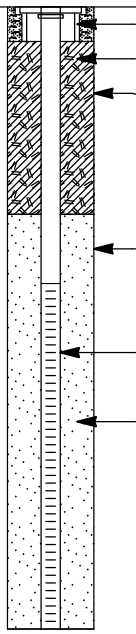
HOLE DESIGNATION: MW19-33
DATE COMPLETED: February 8, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268377.22
EASTING: 13343735.68

TOP OF RISER 718.90
GROUND SURFACE 718.86
TOP OF CASING 718.47

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	718.46
0	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	717.86
2	SC-CLAYEY SAND (FILL), with gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist - trace slag and glass at 2.0ft BGS - no slag or glass at 2.5ft BGS - trace brick debris at 3.0ft BGS	714.61
8	SP-SAND (FILL), trace clay and gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist	710.36
10	SM-SILTY SAND, fine grained, compact to dense, brown, moist - gray, wet at 9.8ft BGS	
18	CH-SILTY CLAY, high plasticity, firm to stiff, gray, moist	701.36
20	END OF BOREHOLE @ 20.0ft BGS	698.86

MONITORING WELL



WELL DETAILS
Screened interval:
710.86 to 700.86ft BGS
8.00 to 18.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
717.86 to 712.86ft BGS
1.00 to 6.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
712.86 to 700.86ft BGS
6.00 to 18.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
0-2' -022				0.0
1GP		75		0.0
				0.0
				0.0
2GP		60		0.0
7.5-9.5' -023				0.0
				0.0
3GP		80		0.0
				0.0
				0.0
4GP		90		0.0
				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

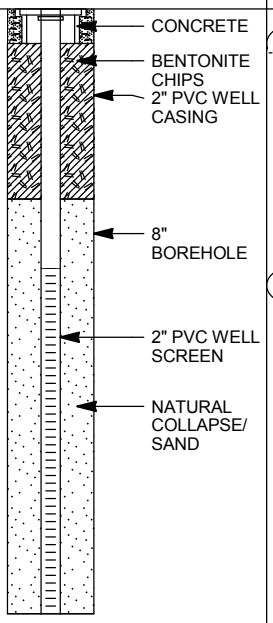
PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-34
DATE COMPLETED: February 9, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268513.46
EASTING: 13343725.62

TOP OF RISER 718.06
GROUND SURFACE 718.04
TOP OF CASING 717.39

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	717.64
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	717.44
2	SP-SAND (FILL), with gravel, trace clay, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist	
4	- trace gravel at 0.85ft BGS	
6	- compact to dense at 4.0ft BGS - loose to compact at 5.0ft BGS	
8	- with clay at 8.0ft BGS	
10	SM-SILTY SAND, fine grained, compact to dense, brown, moist	709.04
	- wet at 9.25ft BGS	
12	- fine to medium grained at 13.0ft BGS	
14	- trace fine gravel at 13.5ft BGS	
16	- gray at 15.0ft BGS	
18	CH-SILTY CLAY, high plasticity, stiff, gray, moist	701.04
20	END OF BOREHOLE @ 20.0ft BGS	698.04
22		
24		
26		
28		
30		
32		
34		
36		
38		



WELL DETAILS
Screened interval:
710.54 to 700.54ft BGS
7.50 to 17.50ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
717.04 to 712.54ft BGS
1.00 to 5.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
712.54 to 700.54ft BGS
5.50 to 17.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
0-2' -025/ 026				0.0
1GP		80		0.0
				0.0
2GP 7-9' -027		70		0.0
				0.0
				0.0
3GP		95		0.0
				0.0
4GP		80		0.0
				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

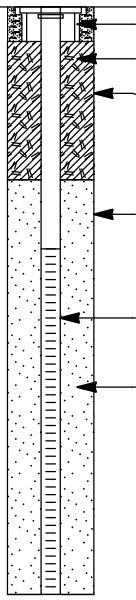
HOLE DESIGNATION: MW19-35
DATE COMPLETED: February 9, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268683.74
EASTING: 13343719.34

TOP OF RISER 717.60
GROUND SURFACE 717.57
TOP OF CASING 717.29

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	717.07
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	716.72
2	SP-SAND (FILL), trace gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist	714.82
4	- trace metal debris and wood debris at 2.5ft BGS	
6	SLAG, with brick debris, glass, metal debris, compact	
8	- with concrete debris at 4.5ft BGS - no concrete debris at 5.3ft BGS	
10	SP-SAND, with silt, trace gravel, fine to coarse sand, fine gravel, poorly graded, compact to dense, brown, wet	708.07 707.32
12	SM-SILTY SAND, fine grained, compact to dense, gray, wet	
14		
16	CH-SILTY CLAY, high plasticity, stiff, gray, moist	701.32
18		
20	END OF BOREHOLE @ 20.0ft BGS	697.57
22		
24		
26		
28		
30		
32		
34		
36		
38		

MONITORING WELL



WELL DETAILS
Screened interval:
710.57 to 700.57ft BGS
7.00 to 17.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
716.57 to 712.57ft BGS
1.00 to 5.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
712.57 to 700.57ft BGS
5.00 to 17.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
0-2' -028				0.0
1GP		75		0.0
				0.0
				0.0
2GP		55		0.0
7.5-9.5' -029				0.0
				0.0
3GP		30		0.0
				0.0
				0.0
4GP		95		0.0
				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

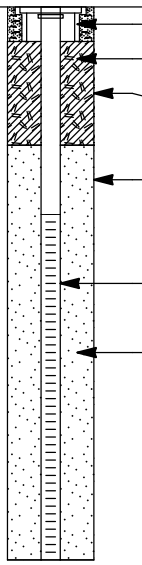
HOLE DESIGNATION: MW19-36
DATE COMPLETED: February 9, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268688.01
EASTING: 13343829.58

TOP OF RISER 717.24
GROUND SURFACE 717.18
TOP OF CASING 716.74

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	716.78
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	716.38
2	SP-SAND (FILL), trace gravel, slag, coal and glass debris, fine to medium sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	
4	- with foundry sand at 3.5ft BGS	
6	- with gravel, no slag, coal, glass or foundry sand, compact at 4.8ft BGS	
8		
10	SM-SILTY SAND, fine grained, compact, brown, wet	707.68
12	- dense at 10.0ft BGS	
14	- gray at 14.0ft BGS	
16	CH-SILTY CLAY, high plasticity, stiff, gray, moist	702.18
18		
20	END OF BOREHOLE @ 20.0ft BGS	697.18
22		
24		
26		
28		
30		
32		
34		
36		
38		

MONITORING WELL



WELL DETAILS
Screened interval:
711.18 to 701.18ft BGS
6.00 to 16.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
716.18 to 713.18ft BGS
1.00 to 4.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
713.18 to 701.18ft BGS
4.00 to 16.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
0-2' -030				0.0
1GP		60		0.0
				0.0
				0.0
2GP		40		0.0
7.5-9.5' -031				0.0
				0.0
3GP		55		0.0
				0.0
				0.0
4GP		90		0.0
				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

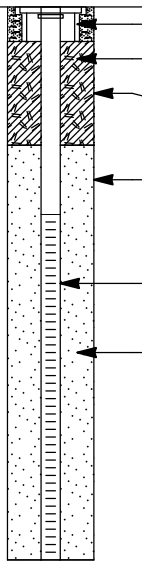
HOLE DESIGNATION: MW19-37
DATE COMPLETED: February 9, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268594.48
EASTING: 13343806.98

TOP OF RISER 717.27
GROUND SURFACE 717.23
TOP OF CASING 716.86

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	716.83
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	716.43
2	SP-SAND (FILL), with gravel, trace slag and metal debris, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	715.73
4	CONCRETE DEBRIS	715.23
6	SLAG	714.98
	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	
8		
10	SM-SILTY SAND, fine grained, compact to dense, brown, wet - dense at 10.0ft BGS	707.73
12	- gray at 12.8ft BGS	
14		
16	CH-SILTY CLAY, high plasticity, stiff, gray, moist	701.98
18		
20	END OF BOREHOLE @ 20.0ft BGS	697.23
22		
24		
26		
28		
30		
32		
34		
36		
38		

MONITORING WELL



WELL DETAILS
Screened interval:
711.23 to 701.23ft BGS
6.00 to 16.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
716.23 to 713.23ft BGS
1.00 to 4.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
713.23 to 701.23ft BGS
4.00 to 16.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
0-2' -033				0.0
2-2.25' -041 1GP		60		0.0
				0.0
				0.0
2GP		35		0.0
7.5-9.5' -034				0.0
				0.0
3GP		100		0.0
				0.0
				0.0
4GP		90		0.0
				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

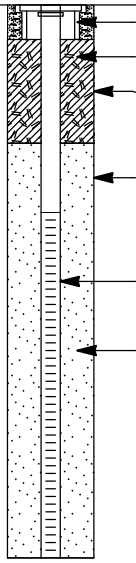
HOLE DESIGNATION: MW19-38
DATE COMPLETED: February 9, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268558.1
EASTING: 13343923.22

TOP OF RISER 717.02
GROUND SURFACE 717.00
TOP OF CASING 716.51

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	716.50
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	716.25
2	SP-SAND (FILL), with clay, trace gravel, fine to medium sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	
4	- 2" slag and glass debris at 2.0ft BGS	
	- no clay at 3.0ft BGS	
6		
	SM-SILTY SAND, with clay, fine grained, compact, brown, wet	710.00
8	- increase in clay content at 8.3ft BGS	
	- no clay, compact to dense at 8.8ft BGS	
10		
	- dense at 11.0ft BGS	
12		
14		
	- gray at 15.0ft BGS	
16		
18	CH-SILTY CLAY, high plasticity, stiff, gray, moist	699.00
20	END OF BOREHOLE @ 20.0ft BGS	697.00
22		
24		
26		
28		
30		
32		
34		
36		
38		

MONITORING WELL



WELL DETAILS
Screened interval:
711.00 to 701.00ft BGS
6.00 to 16.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
716.00 to 713.00ft BGS
1.00 to 4.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
713.00 to 701.00ft BGS
4.00 to 16.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
0-2' -035/ 040				0.0
1GP		80		0.0
				0.0
5-7' -036				
2GP		60		0.0
				0.0
				0.0
3GP		80		0.0
				0.0
				0.0
4GP		75		0.0
				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

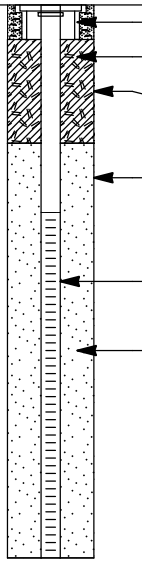
HOLE DESIGNATION: MW19-39
DATE COMPLETED: February 10, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268721.34
EASTING: 13343984.41

TOP OF RISER 716.13
GROUND SURFACE 716.07
TOP OF CASING 715.82

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	715.72
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	715.42
2	SP-SAND (FILL), with gravel, trace coal and slag, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	
4	- trace gravel, no coal or slag at 3.0ft BGS	
6	- gravelly sand, trace brick and metal debris, loose to compact at 5.0ft BGS	
8		
10	- with clay, trace gravel, no brick or metal debris, loose, wet at 10.0ft BGS	
12		
14		
16	CH-SILTY CLAY, high plasticity, stiff, gray, moist	701.07
18		
20	END OF BOREHOLE @ 20.0ft BGS	696.07
22		
24		
26		
28		
30		
32		
34		
36		
38		

MONITORING WELL



WELL DETAILS
Screened interval:
710.07 to 700.07ft BGS
6.00 to 16.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.07 to 712.07ft BGS
1.00 to 4.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
712.07 to 700.07ft BGS
4.00 to 16.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
0-2' -037				0.0
1GP		60		0.0
				0.0
				0.0
2GP		40		0.0
8-10' -038/ 039				0.0
				0.0
3GP		50		0.0
				0.0
4GP		95		0.0
				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

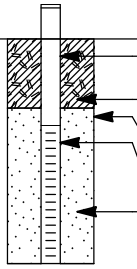
HOLE DESIGNATION: MW19-40
DATE COMPLETED: February 7, 2012
DRILLING METHOD: 3-1/4" HAND AUGER
FIELD PERSONNEL: C. BONDY

NORTHING: 268443.95
EASTING: 13344852.48

TOP OF CASING 704.90
GROUND SURFACE 701.66

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	TOPSOIL	700.91
2	SP-SAND, trace gravel, fine to medium sand, fine to coarse gravel, poorly graded, loose, brown, moist	
		698.66
4	SM-SILTY SAND, with clay, fine grained, compact, brownish orange, wet	
	- gray at 4.3ft BGS	697.16
6	CH-SILTY CLAY, high plasticity, firm to stiff, gray, moist	
		695.16
8	END OF BOREHOLE @ 6.5ft BGS	
10		
12		
14		
16		
18		
20		
22		
24		
26		
28		
30		
32		
34		
36		
38		

MONITORING WELL



WELL DETAILS
Screened interval:
699.16 to 695.16ft BGS
2.50 to 6.50ft BGS
Length: 4ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
701.66 to 699.66ft BGS
0.00 to 2.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
699.66 to 695.16ft BGS
2.00 to 6.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1HA 0-2' -008				0.0
2HA				0.0
3HA				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

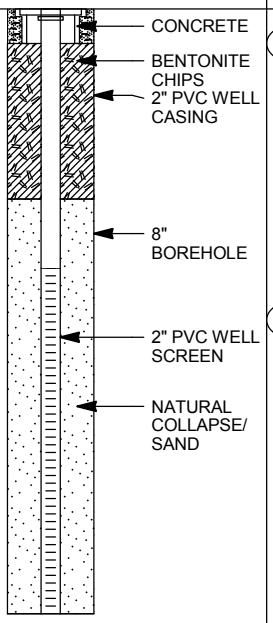
PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-41
DATE COMPLETED: February 8, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268376.03
EASTING: 13344847.42

TOP OF RISER 714.63
GROUND SURFACE 714.60
TOP OF CASING 714.22

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	714.20
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	713.60
2	SP-SAND (FILL), trace gravel, fine to medium sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	
4	- compact at 4.0ft BGS	
	- trace clay at 5.0ft BGS	
6		
8	- with gravel at 8.5ft BGS	
10	- with clay at 10.0ft BGS	
	- wet at 10.3ft BGS	
12	CL-CLAY, with silt, low plasticity, stiff, brown, moist	702.75
		702.35
14	SM-SILTY SAND, fine grained, compact to dense, brown, wet	
	- gray at 13.0ft BGS	
16		
	CH-SILTY CLAY, high plasticity, stiff, gray, moist	697.60
18		
20	END OF BOREHOLE @ 20.0ft BGS	694.60
22		
24		
26		
28		
30		
32		
34		
36		
38		



WELL DETAILS
Screened interval:
707.10 to 697.10ft BGS
7.50 to 17.50ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
713.60 to 709.10ft BGS
1.00 to 5.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
709.10 to 697.10ft BGS
5.50 to 17.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
0-2' -018				0.0
1GP		70		0.0
				0.0
				0.0
2GP		50		0.0
8-10' -019				0.0
				0.0
3GP		90		0.0
				0.0
				0.0
4GP		75		0.0
				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW23-01
DATE COMPLETED: March 1, 2006
DRILLING METHOD: GEOPROBE/DIRECT PUSH
FIELD PERSONNEL: E. VARNAS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.33	BENTONITE					0
2	SM-SILTY SANDS, trace fine gravels, compact, fine grained, poorly graded, brown, moist			1AL		60		0
4			2" PVC WELL CASING					0
6	- increase in silts at 6.0ft BGS - 2" CL-SILTY CLAY seam, firm, low plasticity, brown gray, moist at 6.3ft BGS		3" BOREHOLE					0
8	- brown at 6.5ft BGS - red streaks (8-8.4'), very moist at 8.0ft BGS			2AL		70		0
10								0
12	- gray brown, wet at 11.5ft BGS							0
14	- gray, slight petroleum-like odor at 13.0ft BGS		2" PVC WELL SCREEN	3AL		100		0
16	- stronger petroleum-like odor at 15.8ft BGS		SAND PACK					51.2
18	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray, very moist, slight petroleum odor	17.00 17.50		4AL		100		912
20	END OF BOREHOLE @ 17.5ft BGS							

WELL DETAILS
Screened interval:
7.50 to 17.50ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Sand Pack:
5.00 to 17.50ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW23-02
DATE COMPLETED: March 1, 2006
DRILLING METHOD: GEOPROBE/DIRECT PUSH
FIELD PERSONNEL: E. VARNAS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	CONCRETE	0.33	SAND PACK					0
2	SM-SILTY SANDS, trace fine gravels, compact, fine grained, poorly graded, brown, moist		2" PVC WELL CASING BENTONITE CHIPS	1AL		30		0
4								0
6			3" BOREHOLE					0
8	- increase in silts, very moist, petroleum-like odor at 8.0ft BGS			2AL		40		0
10	- 1" CL-SILTY CLAY seam, trace fine sands, firm, low plasticity, brown, very moist at 9.6ft BGS							0
12	- brown gray, wet at 10.7ft BGS							0
14	- slight petroleum-like sheen, gray at 13.1ft BGS		2" PVC WELL SCREEN	3AL		80		33.5
16	- petroleum-like sheen present (15.6-16.3'), strong odor at 15.6ft BGS	16.10	SAND PACK	4AL		50		27.6
18	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray, moist, slight petroleum-like odor	17.00						1666
20	END OF BOREHOLE @ 17.0ft BGS							
22								
24								
26								
28								
30								
32								
34								
36								
38								

WELL DETAILS
Screened interval:
7.00 to 17.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
5.00 to 17.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

Date Start/Finish: 04/19/96 / 04/19/96
Drilling Company: Superior Environmental
Driller's Name: T. Germayne
Drilling Method: Hollow Stem Auger
Bit Size: N/A-in. **Auger Size :** 7 5/8-in.
Rig Type: Mobile B-57
Spoon Size: 2-in.

Corehole Depth: N/A ft.
Borehole Depth: 20 ft.

Geologist: M.Mueller

Well No. MW-4

Client:
General Motors Corporation

Location:
Complete Auto Transit Site
Ypsilanti, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	FID (ppm) Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
										GROUND SURFACE	
										Fill material	Well cap; Cement pad
										Light brown sand	
5											Neat cement
										Brown sand	Bentonite seal
											2-inch Schedule 40 PVC riser
10											6/20 silica sand
15											0.010" slot stainless steel well screen
										Clay	
20											

BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

Remarks:

Saturated Zones

Date / Time	Elevation	Depth
04/24/96		12.29

Project: 480.43
Script: nbblwell
Date: 11/14/96

Date Start/Finish: 04/22/96 / 04/22/96
Drilling Company: Superior Environmental
Driller's Name: N. Massey
Drilling Method: Hollow Stem Auger
Bit Size: N/A-in. **Auger Size :** 7 5/8-in.
Rig Type: Mobile B-57
Spoon Size: 2-in.

Corehole Depth: N/A ft.
Borehole Depth: 20 ft.

Geologist: M.Mueller

Well No. MW-5

Client:
General Motors Corporation

Location:
Complete Auto Transit Site
Ypsilanti, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	FID (ppm) Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
									GROUND SURFACE	
0									Fill material	Well cap; Cement pad
									Orange/light brown sand	
5										Neat cement
										Bentonite seal
									Light brown/tan sand	2-inch Schedule 40 PVC riser
10										6/20 silica sand
15										0.010" slot stainless steel well screen
									Grey clay	
20										

BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

Remarks:

Saturated Zones

Date / Time	Elevation	Depth
04/24/96		11.84 ▼

Project: 480.43
Script: nbblwell
Date: 11/14/96

Date Start/Finish: 04/22/96 / 04/22/96
Drilling Company: Superior Environmental
Driller's Name: N. Massey
Drilling Method: Hollow Stem Auger
Bit Size: N/A-in. **Auger Size** : 7 5/8-in.
Rig Type: Mobile B-57
Spoon Size: 2-in.

Corehole Depth: N/A ft.
Borehole Depth: 20 ft.

Geologist: R.S.A. Sunderland

Well No. MW-6

Client:
General Motors Corporation

Location:
Complete Auto Transit Site
Ypsilanti, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	FID (ppm) Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
									GROUND SURFACE	
0									Fill material, light brown, fine to medium sand, 20% brownish grey cobbles, poorly sorted	Well cap; Cement pad
									Sand, very dark brown, fine to medium grained, poorly sorted, 10% rounded gravel	
5									Sand, yellowish brown, fine to medium grained, poorly sorted, quartoze	Neat cement; Bentonite seal; 2-inch Schedule 40 PVC riser
10									Sandy clay, grey, soft, semi-cohesive	▼
									Sand, grey, fine to medium grained, poorly sorted, quartzose	6/20 silica sand
15									Clay, grey, firm, cohesive	0.010" slot stainless steel well screen
20										

BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

Remarks:

Saturated Zones

Date / Time	Elevation	Depth
04/24/96		11.18 ▼

Date Start/Finish: 04/23/96 / 04/23/96
Drilling Company: Superior Environmental
Driller's Name: N. Massey
Drilling Method: Hollow Stem Auger
Bit Size: N/A-in. **Auger Size :** 7 5/8-in.
Rig Type: Mobile B-57
Spoon Size: 2-in.

Corehole Depth: N/A ft.
Borehole Depth: 20 ft.

Geologist: R.S.A. Sunderland

Well No. MW-7

Client:
General Motors Corporation

Location:
Complete Auto Transit Site
Ypsilanti, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	FID (ppm) Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
									GROUND SURFACE	
0									Fill material, light brown, fine to medium sand, 20% brownish grey cobbles, poorly sorted	Well cap; Cement pad
									Sand, yellowish brown, fine to medium grained, poorly sorted, quartoze	
5										Neat cement; Bentonite seal; 2-inch Schedule 40 PVC riser
10									Sand, grey, fine to medium grained, poorly sorted, quartzose Sand, olive grey, fine to medium grained, poorly sorted	6/20 silica sand
15										0.010" slot stainless steel well screen
									Sand, grey, fine to medium grained, poorly sorted	
20									Sandy clay, soft, semi-cohesive	

BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

Remarks:

Saturated Zones

Date / Time	Elevation	Depth
04/24/96		10.37 ▼

Project: 480.43
Script: nbblwell
Date: 11/14/96

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MWOS-02
DATE COMPLETED: November 30, 2011
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	NORTHING: 267959.1 EASTING: 13344536.64 TOP OF CASING GROUND SURFACE	721.25 718.46					
0	SEE STRATIGRAPHY FROM TWOS-02		CONCRETE; 2" PVC WELL CASING; 8-1/2" BOREHOLE BENTONITE CHIPS; 2" PVC WELL SCREEN; NATURAL COLLAPSE/ SAND				
20	END OF BOREHOLE @ 20.0ft BGS	698.46					

WELL DETAILS
Screened interval:
708.46 to 698.46ft BGS
10.00 to 20.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
717.46 to 710.46ft BGS
1.00 to 8.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
710.46 to 698.46ft BGS
8.00 to 20.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

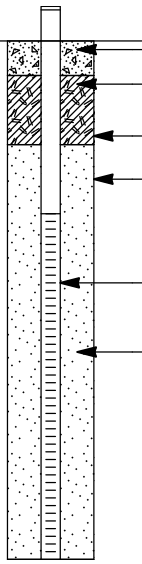
HOLE DESIGNATION: MWOS-05
DATE COMPLETED: September 23, 2011
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 267980.37
EASTING: 13345008.75

TOP OF CASING 712.37
GROUND SURFACE 709.93

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	TOPSOIL	709.68
2	SC-CLAYEY SILTY SAND, trace gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist	
4		705.93
	CL-SILTY CLAY, trace fine sand, low plasticity, firm, brown, moist	705.68
6	SM-SILTY SAND, trace clay and gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	
8	- trace wood debris, dark brown at 8.3ft BGS - with clay, no wood debris, brown at 9.0ft BGS	
10	- no clay or gravel, very moist at 9.4ft BGS	699.93
12	CH-SILTY CLAY, trace fine sand, high plasticity, stiff, gray, moist	
14		
16		
18		
20		689.93
	END OF BOREHOLE @ 20.0ft BGS	
22		
24		
26		
28		
30		
32		
34		
36		
38		

TEMP MONITORING WELL



WELL DETAILS
Screened interval:
704.93 to 694.93ft BGS
5.00 to 15.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
708.93 to 706.93ft BGS
1.00 to 3.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
706.93 to 694.93ft BGS
3.00 to 15.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				1.2
1GP		60		1.7
				0.9
2GP		65		0.7
				1.1
				1.3
3GP		90		0.8
				0.9
4GP		100		0.9
				0.4

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SBOS-06B/MWOS-06
DATE COMPLETED: December 1, 2011
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE 711.32 TOP OF CASING 711.07							
0	TOPSOIL	710.57	CONCRETE					0.0
2	CL-SANDY CLAY (FILL), with gravel, fine to medium sand, fine to coarse gravel, low plasticity, firm, brown, moist	709.32	BENTONITE CHIPS	1GP		70		
4	SP-SAND (FILL), with gravel, fine to medium sand, fine to coarse gravel, poorly graded, loose, brown, moist	709.07	2" PVC WELL CASING					0.0
6	CH-SILTY CLAY (FILL), moderate plasticity, stiff, brown, moist	708.57	8-1/2" BOREHOLE					0.0
8	SP-SAND (FILL), with silt, trace gravel, interbedded with gray silty clay lenses, fine to medium sand, fine to coarse gravel, poorly graded, compact, gray, moist			2GP		70		
10	- compact at 3.0ft BGS							0.0
12	- very moist to wet at 7.5ft BGS - moist at 8.0ft BGS							0.0
14				3GP		40		
16	- wet at 15.0ft BGS		2" PVC WELL SCREEN					0.0
18			SAND PACK	4GP		70		
20	END OF BOREHOLE @ 20.0ft BGS	691.32		5GP		65		0.0
22				6GP		60		0.0
24								
26								
28								
30								
32								
34								
36								
38								

WELL DETAILS
Screened interval:
698.32 to 693.32ft BGS
13.00 to 18.00ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
710.32 to 700.32ft BGS
1.00 to 11.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
700.32 to 693.32ft BGS
11.00 to 18.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MWOS-07
DATE COMPLETED: December 1, 2011
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE 708.29 TOP OF CASING 707.90							
0	TOPSOIL	707.29	CONCRETE					0.0
2	CL-SANDY CLAY (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, low plasticity, firm, brown, moist		BENTONITE CHIPS	1GP		75		
4			2" PVC WELL CASING					0.0
6								0.0
8		700.04	8-1/2" BOREHOLE	2GP		70		
10	SP/GP-SAND AND GRAVEL (FILL), medium to coarse sand, fine to coarse gravel, poorly graded, loose, brown, moist - very moist to wet at 8.5ft BGS	699.04 698.79						0.0
12	CL-SANDY CLAY (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, low plasticity, firm, brown, wet		2" PVC WELL SCREEN SAND PACK	3GP		25		0.0
14	SP/GP-SAND AND GRAVEL (FILL), medium to coarse sand, fine to coarse gravel, poorly graded, loose, brown, moist	694.29						0.0
16	SC-CLAYEY SAND (FILL), fine grained, loose, brown, wet	692.29		4GP		100		0.0
18	END OF BOREHOLE @ 16.0ft BGS							
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

WELL DETAILS
Screened interval:
700.29 to 695.29ft BGS
8.00 to 13.00ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
707.29 to 702.29ft BGS
1.00 to 6.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
702.29 to 695.29ft BGS
6.00 to 13.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: PZ18-01
DATE COMPLETED: May 23, 2005
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	702.27					
0	SM-SILTY SANDS (TOPSOIL), trace clays and fine gravels, loose, fine to coarse grained, poorly graded, dark brown, moist	701.52	BENTONITE CHIPS	1HA			
2	CL-SILTY CLAYS (NEW FILL), firm, low plasticity, gray, moist			2HA			
		699.27	2" BOREHOLE	3HA			
4	CL/CI-SILTY CLAYS (OLD FILL), firm, low to medium plasticity, brown-gray, moist			4HA			
				5HA			
6			1" PVC WELL SCREEN	6HA			
			NATURAL COLLAPSE/ SAND	7HA			
		694.97		8HA			
8	END OF BOREHOLE @ 7.3ft BGS						
10							
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

WELL DETAILS
Screened interval:
699.97 to 694.97ft BGS
2.30 to 7.30ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
700.77 to 694.97ft BGS
1.50 to 7.30ft BGS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: PZ18-02
DATE COMPLETED: May 23, 2005
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	703.49					
0	SM-SILTY SANDS (TOPSOIL), trace clays and fine gravels, loose, fine to coarse grained, poorly graded, dark brown, moist	702.74	BENTONITE CHIPS	1HA			
2	CL-SILTY CLAYS (NEW FILL), firm, low plasticity, gray, moist	700.49	2" BOREHOLE	2HA			
4	SM/CL-SANDS & CLAYS (OLD FILL), with silts, loose/soft, low to non plastic, dark gray to black, saturated, moderate petroleum-like odor, sheen to soils and water	699.74	1" PVC WELL SCREEN	3HA			
6	CL/CI-SILTY CLAYS (OLD FILL), firm, low to medium plasticity, brown-gray, moist	696.99	NATURAL COLLAPSE/ SAND	4HA			
8	END OF BOREHOLE @ 6.5ft BGS			5HA			
10				6HA			
12				7HA			
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

WELL DETAILS
Screened interval:
700.99 to 696.99ft BGS
2.50 to 6.50ft BGS
Length: 4ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
701.99 to 696.99ft BGS
1.50 to 6.50ft BGS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-102/PZ18-102
DATE COMPLETED: August 25, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	699.15						
0	SW-SANDS (topsoil), fine and medium grained, trace black foundry sand, some vegetation, loose, dark brown, wet	698.35	BENTONITE CHIPS	1AL		80		0.0
2	CL-SILTY CLAYS (native), trace fine sands, stiff, competent, low plasticity, gray, moist		2" BOREHOLE					
4				2AL		95		0.0
6	END OF BOREHOLE @ 6.0ft BGS	693.15	1" PVC WELL SCREEN; NATURAL COLLAPSE/ SAND	3AL		95		0.0
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
698.15 to 693.15ft BGS
1.00 to 6.00ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
698.15 to 693.15ft BGS
1.00 to 6.00ft BGS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

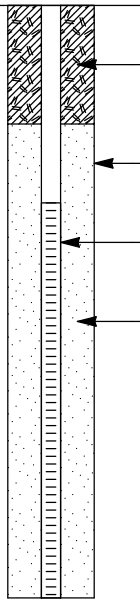
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-126/PZ18-126
DATE COMPLETED: September 2, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	715.07
0	ASPHALT	714.77
	SP-SANDS (FILL), fine grained, poorly graded, dense, light brown, moist	
2		
4		
6		
	- oxidation staining at 7.1ft BGS	707.87
8	SM-SILTY SANDS, trace clays, fine sands, medium plasticity, dark gray, moist to wet	706.77
	SP-SANDS, fine grained, poorly graded, dense, gray, wet	
10		
12		
	- strong petroleum odor at 13.4ft BGS	701.57
14	ML/CL-SILTS AND SILTY CLAYS, trace fine sands, soft, medium plasticity, gray, moist	700.57
	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	700.07
16	END OF BOREHOLE @ 15.0ft BGS	
18		
20		
22		
24		
26		
28		
30		
32		
34		

TEMP MONITORING WELL



WELL DETAILS
Screened interval:
710.07 to 700.07ft BGS
5.00 to 15.00ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
712.07 to 700.07ft BGS
3.00 to 15.00ft BGS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1AL				13.1
2AL				29.4
3AL				57
4AL				67.9
5AL				42.4
6AL				61.3
7AL				--
8AL				--

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

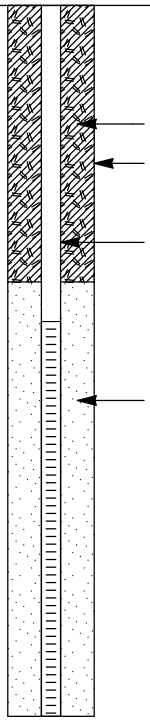
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-127/PZ18-127
DATE COMPLETED: September 2, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	715.12
0	ASPHALT	714.82
2	SW-SANDS (FILL), fine to medium grained, well graded, dark brown, dense, moist	
4		
6		
7	- debris (glass) at 7.1ft BGS	707.92
8	SP-SANDS (FILL), fine grained, poorly graded, dense, dark brown	
10	- 0.2" silty sands at 8.1ft BGS - 0.2" silty sands at 8.5ft BGS	
12	- oxidation staining at 12.5ft BGS	
14	- becoming black, strong odor at 14.0ft BGS	
	- becoming gray at 15.1ft BGS	
16	- black, strong odor at 16.5ft BGS	
17	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	697.92
18		
20	END OF BOREHOLE @ 20.0ft BGS	695.12
22		
24		
26		
28		
30		
32		
34		

TEMP MONITORING WELL



WELL DETAILS
Screened interval:
707.12 to 697.12ft BGS
8.00 to 18.00ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
708.12 to 697.12ft BGS
7.00 to 18.00ft BGS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1AL				10.4
2AL				16.1
3AL				89
4AL				>2000
5AL				>2000
6AL				>2000
7AL				>2000
8AL				29.1

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

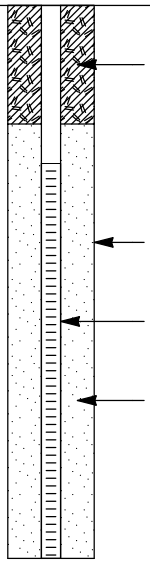
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-128/PZ18-128
DATE COMPLETED: September 2, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	715.12
0	ASPHALT	714.82
2	SW-SANDS (FILL), fine to medium sands, trace fine gravels, well graded, dense, dark brown, moist	
4		
6		
7.5	- debris (glass) at 7.5ft BGS	707.92
8	SP-SANDS, fine grained, trace medium sands, poorly graded, dense, dark brown, moist	
10	SM-SILTY SANDS, with clays, trace fine and medium sands, semi-competent, medium plasticity, soft, brown, moist, strong odor	705.32
12	SP-SANDS (FILL), fine grained, poorly graded, dense, black, wet, strong odor	703.12
12.5	- becoming gray at 12.5ft BGS	701.92
14	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	
15	END OF BOREHOLE @ 15.0ft BGS	700.12
16		
18		
20		
22		
24		
26		
28		
30		
32		
34		

TEMP MONITORING WELL



WELL DETAILS
Screened interval:
711.12 to 701.12ft BGS
4.00 to 14.00ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
712.12 to 701.12ft BGS
3.00 to 14.00ft BGS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1AL				10.1
2AL				36.4
3AL				42.1
4AL				54
5AL				>2000
6AL				>2000
7AL				36.9
8AL				21.1

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: PZ18-130
DATE COMPLETED: September 8, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: M. MATHE

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.62						
2	SW-SANDS (FILL), trace silts, trace vegetation (rootlets), loose, well graded, fine and medium grained, with coarse grained, dark brown, moist		BENTONITE CHIPS	1AL		90		
		711.62						
4	SP-SANDS, trace to with silts, loose to compact, poorly graded, light brown, moist							
6	- orange hue, slightly plastic at 5.5ft BGS		2" BOREHOLE					
8				2AL		80		90.8
	- very moist at 9.0ft BGS							131
10		704.62						
	SM-SILTY SANDS, compact, poorly graded, fine grained, brown, wet							>2000
12			1" PVC WELL SCREEN	3AL		80		>2000
		701.62						
14	SP-SANDS, trace silts, loose to compact, poorly graded, fine with medium grained, dark gray, wet (oily sheen for top 2-inches)							>2000
	- black at 13.5ft BGS							
16	- dark gray at 14.5ft BGS		NATURAL COLLAPSE/ SAND					>2000
18				4AL		100		
	- brown at 19.0ft BGS							>2000
20		694.62						
	CL-CLAYS, stiff, low plasticity, dark gray/brown, moist, petroleum-like odor and oily-like substance between liner and clay							
22				5AL		100		
24								
		689.62						
26	END OF BOREHOLE @ 25.0ft BGS							
28								
30								
32								
34								

WELL DETAILS
Screened interval:
704.62 to 689.62ft BGS
10.00 to 25.00ft BGS
Length: 15ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
704.62 to 689.62ft BGS
10.00 to 25.00ft BGS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: PZ18-131
DATE COMPLETED: September 8, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: M. MATHE

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	713.00						
0	SP-SANDS, trace silts, trace vegetation (rootlets), loose, poorly graded, brown to dark brown, moist							32
2	- light brown, no vegetation trace fine angular gravels at 1.0ft BGS		BENTONITE CHIPS	1AL		60		39.5
4			2" BOREHOLE					
6	- orange hue at 5.0ft BGS							34.9
		706.00						35.1
8	CH-SILTY CLAYS, firm, high plasticity, orange and brown mottled, moist			2AL		80		
	- trace vegetation (rootlets) at 7.8ft BGS	705.00	1" PVC WELL SCREEN					76
10	SM-SILTY SANDS, compact, poorly graded, fine grained, brown, trace orange hue, wet		NATURAL COLLAPSE/ SAND					
	- 2" clay nodule at 10.0ft BGS							64.2
	- 2" clay nodule at 11.0ft BGS	701.50						
12	SP-SANDS, trace to with silts, compact, poorly graded, fine grained, with medium grained, dark gray, wet			3AL				42.2
14								
		698.00						39.9
16	CH-CLAYS, firm to stiff, high plasticity, dark gray, moist							
18				4AL				36.7
								36
20	END OF BOREHOLE @ 20.0ft BGS	693.00						
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
707.00 to 697.00ft BGS
6.00 to 16.00ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
707.00 to 693.00ft BGS
6.00 to 20.00ft BGS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: PZ18-132
DATE COMPLETED: September 8, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: M. MATHE

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	703.93						
2	SC-CLAYEY SANDS, trace vegetation (grass and rootlets), loose, poorly graded, fine grained, trace medium grained, brown, very moist to wet	701.93	BENTONITE CHIPS; 2" BOREHOLE; 1" PVC WELL SCREEN; NATURAL COLLAPSE/ SAND	1AL		75		762
4	SM/SP-SANDS AND SILTY SANDS, loose, to compact, poorly graded, fine grained, black, wet, slight sheen, petroleum-like odor	700.93						522
6	CL-CLAYS, firm, medium plasticity, dark brown, moist	698.93						
8	END OF BOREHOLE @ 5.0ft BGS							
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
702.93 to 697.93ft BGS
1.00 to 6.00ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
702.93 to 698.93ft BGS
1.00 to 5.00ft BGS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

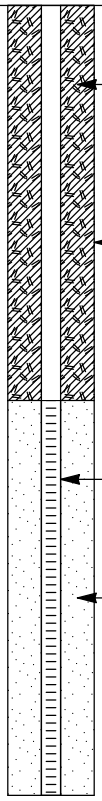
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: PZ18-133
DATE COMPLETED: September 8, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: M. MATHE

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	715.68
0	GRAVEL FILL, light gray, angular	714.68
2	SP-SANDS, trace to with silts, loose to compact, poorly graded, fine grained, trace medium grained, brown with slight orange hue, moist	
4		
5	- strong orange coloration at 5.0ft BGS	
6		
8	SM-SILTY SANDS, compact, poorly graded, fine grained, slightly plastic, dark brown, moist	707.68
10	- wet at 10.5ft BGS	
11	CH-CLAYS, stiff, high plasticity, dark gray, moist	704.68
12		
13	SM-SILTY SANDS, compact, poorly graded, fine grained, trace medium grained, dark gray, wet	702.68
14		
16		
18		
19	CL-CLAYS, stiff, medium plasticity, dark gray, moist	696.68
20	END OF BOREHOLE @ 20.0ft BGS	695.68
22		
24		
26		
28		
30		
32		
34		

TEMP MONITORING WELL



WELL DETAILS
Screened interval:
705.68 to 695.68ft BGS
10.00 to 20.00ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
705.68 to 695.68ft BGS
10.00 to 20.00ft BGS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				5
1AL		70		29.7
				30.6
				33
2AL		80		
				38
				22.9
3AL		90		28
				22.4
				24.1
4AL				23.3

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

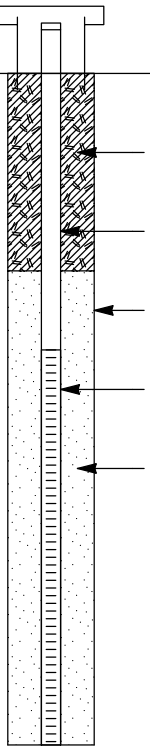
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-140/PZ18-140
DATE COMPLETED: September 10, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	713.91
0	SM-SILTY SANDS, compact, fine to medium grained, poorly graded, brown, moist, some yellow streaking	
4	- tan/beige, fine grained at 4.0ft BGS	
6		707.41
8	SM/ML-SANDS AND SILTS, compact to dense, fine sands, non plastic, light brown and orange brown, moist	
10		704.91
12	SM-SILTY SANDS, dense, fine grained, poorly graded, light brown and gray brown, moist - very moist to saturated, gray and orange banded at 12.0ft BGS	
14	- black and dark gray, saturated, petroleum-like odor (moderate) at 12.5ft BGS	
16	- strong petroleum-like odor, DNAPL-dark brown at 15.8ft BGS	697.91
18	CL/CI-SILTY CLAYS, trace fine sands, firm, low to medium plasticity, gray, moist, moderate petroleum-like odor	
20	END OF BOREHOLE @ 20.0ft BGS	693.91
22		
24		
26		
28		
30		
32		
34		

TEMP MONITORING WELL



WELL DETAILS
Screened interval:
706.91 to 696.91ft BGS
7.00 to 17.00ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
708.91 to 696.91ft BGS
5.00 to 17.00ft BGS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1AL		75		7.3
2AL		75		7
3AL		90		6.8
4AL		90		13.5
5AL		90		336
6AL		90		356
7AL		90		65.8
8AL 17.5-20 -611		90		17.4

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: PZ18-195
DATE COMPLETED: October 8, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	701.10					
0	SW-SANDS		BENTONITE CHIPS				
	- wet at 1.5ft BGS		1" PVC WELL SCREEN				
2	CL-CLAYS	699.10	2" BOREHOLE				
4			NATURAL COLLAPSE/ SAND				
	- REFUSAL at 5.0ft BGS	696.10					
6	END OF BOREHOLE @ 5.0ft BGS						
8							
10							
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

WELL DETAILS
Screened interval:
700.10 to 696.10ft BGS
1.00 to 5.00ft BGS
Length: 4ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
700.60 to 696.10ft BGS
0.50 to 5.00ft BGS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: PZ18-196
DATE COMPLETED: October 8, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	708.56					
0	NO STRATIGRAPHIC LOG AVAILABLE		BENTONITE CHIPS 2" BOREHOLE 1" PVC WELL SCREEN NATURAL COLLAPSE/ SAND				
8	END OF BOREHOLE @ 8.0ft BGS NOTE: CLAY FROM 7.8-8ft BGS	700.56	WELL DETAILS Screened interval: 705.56 to 700.56ft BGS 3.00 to 8.00ft BGS Length: 5ft Diameter: 1in Slot Size: 0.010 Material: PVC Sand Pack: 706.06 to 700.56ft BGS 2.50 to 8.00ft BGS				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: PZ18-197
DATE COMPLETED: October 8, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	703.36					
0	NO STRATIGRAPHIC LOG AVAILABLE		BENTONITE CHIPS; 2" BOREHOLE; 1" PVC WELL SCREEN; NATURAL COLLAPSE/ SAND				
2							
4							
6	END OF BOREHOLE @ 5.0ft BGS						
8	NOTE: CLAY FROM 2.3-5.0ft BGS	695.36					
10							
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

WELL DETAILS
Screened interval:
702.86 to 698.36ft BGS
0.50 to 5.00ft BGS
Length: 4.5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
702.86 to 698.36ft BGS
0.50 to 5.00ft BGS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: PZ18-198
DATE COMPLETED: October 8, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	707.94					
	NO STRATIGRAPHIC LOG AVAILABLE		BENTONITE CHIPS 2" BOREHOLE; 1" PVC WELL SCREEN; NATURAL COLLAPSE/ SAND				
	END OF BOREHOLE @ 7.0ft BGS	700.94					
	NOTE: CLAY AT 6.5ft BGS						

WELL DETAILS
Screened interval:
705.94 to 700.94ft BGS
2.00 to 7.00ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
706.44 to 700.94ft BGS
1.50 to 7.00ft BGS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-73/PZ18-73
DATE COMPLETED: May 24, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	709.65						
2	SM-SILTY SANDS, trace clays and fine gravels, loose, fine to medium grained, poorly graded, dark brown, moist - brown at 0.8ft BGS			1DP (0-2', -344)				0.2
4	- orange-brown oxidation at 3.8ft BGS			2DP				0.3
6	- brown, slight petroleum-like odor at 5.5ft BGS - gray, very moist, moderate petroleum-like odor at 6.8ft BGS		2" BOREHOLE 1" PVC WELL SCREEN	3DP (5-7', -345)				68.3
8	- saturated, black, sheen on water at 7.0ft BGS	701.65		4DP				38.3
10	CL-SILTY CLAYS, trace fine sands, firm, low plasticity, gray, moist, slight petroleum-like odor - no odor at 9.0ft BGS		BENTONITE CHIPS	5DP				12.8
12				6DP				0.2
14	END OF BOREHOLE @ 13.0ft BGS	696.65						
16	NOTE: SOIL BORING COMPLETED MAY 24, 2004, TEMPORARY MONITORING WELL COMPLETED SEPTEMBER 8, 2004							
18								
20								
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
705.65 to 700.65ft BGS
4.00 to 9.00ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-87/PZ18-87
DATE COMPLETED: August 24, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	703.08						
2	SW-SANDS (FILL), fine to medium sands, well graded, loose, dark brown, moist - wet at 2.0ft BGS	700.78	BENTONITE CHIPS 3" BOREHOLE	1AL		100		0.0
4	SC/CL-SANDS AND SANDY CLAYS (FILL), reworked, weathered, trace medium sands, trace plasticity, olive-gray, moist	697.88	1" PVC WELL SCREEN NATURAL COLLAPSE/ SAND	2AL		100		0.0
6	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, competent, gray, moist			3AL		100		0.0
8	END OF BOREHOLE @ 7.5ft BGS	695.58						
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
702.08 to 697.08ft BGS
1.00 to 6.00ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
702.08 to 695.58ft BGS
1.00 to 7.50ft BGS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

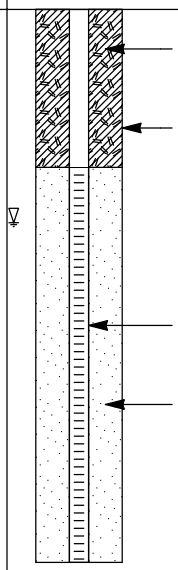
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-96/PZ18-96
DATE COMPLETED: August 25, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	709.17
0	SW-SANDS (FILL), fine to medium sands, trace vegetation, well graded, loose, dark brown, moist	707.97
2	SP-SANDS (FILL), fine grained, poorly graded, loose, intermittent oxidation banding, rust brown, moist	
4		
6	- wet at 5.4ft BGS - some foundry sand, black, sheeny at 5.5ft BGS	
8	- trace oily droplets, brown, strong odor at 8.0ft BGS - becoming dark brown, strong odors at 8.8ft BGS	
10	- foundry sand, black at 9.8ft BGS	699.07
12	CI-SILTY CLAYS (native), trace fine sands, compact, low plasticity, gray, moist	
14	END OF BOREHOLE @ 13.0ft BGS	696.17
16		
18		
20		
22		
24		
26		
28		
30		
32		
34		

TEMP MONITORING WELL



WELL DETAILS
Screened interval:
705.17 to 695.17ft BGS
4.00 to 14.00ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
705.17 to 695.17ft BGS
4.00 to 14.00ft BGS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1AL		70		0.0
2AL		70		8
3AL		85		>2000
4AL		85		649

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-97/PZ18-97
DATE COMPLETED: August 25, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	700.58						
2	SW/SC-SANDS AND SANDY CLAYS, fine and medium sands, trace rootlets, well graded, trace plasticity, dark brown, very moist to wet		BENTONITE CHIPS	1AL		90		0.0
	- black staining, weathered, reworked clay at 3.0ft BGS	697.48	2" BOREHOLE 1" PVC WELL SCREEN	2AL		90		1.6
4	CI-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, gray, moist		NATURAL COLLAPSE/SAND					
	- weathered, olive gray at 4.3ft BGS			3AL		90		3.1
6	END OF BOREHOLE @ 6.0ft BGS	694.58						
8	NOTE: SOIL BORING COMPLETED ON AUGUST 25, 2004, TEMPORARY MONITORING WELL COMPLETED ON SEPTEMBER 8, 2004							
10			WELL DETAILS Screened interval: 699.58 to 694.58ft BGS 1.00 to 6.00ft BGS Length: 5ft Diameter: 1in Slot Size: 0.010 Material: PVC Sand Pack: 699.58 to 694.58ft BGS 1.00 to 6.00ft BGS					
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB-1-03
DATE COMPLETED: March 7, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: M. MATHÉ

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	SP-SANDS, trace silts, loose, poorly graded, fine grained, brown, moist	0.16	2" BOREHOLE					
	CONCRETE DEBRIS	0.50						
2	SP-SANDS, trace silts, trace fine subrounded gravels, loose, poorly graded, fine grained, trace medium grained, brown, moist		BENTONITE CHIPS	1AL 2-4'		60		5.7
4	SC-CLAYEY SANDS, trace fine subrounded gravels, compact, poorly graded, fine grained, trace coarse grained, dark brown, moist	4.00						
6	CH-SANDY CLAYS, soft, low plasticity, dark brown, moist	6.00						
8				2AL 8-10'		70		118
	SP-SANDS, trace silts, loose, poorly graded, fine grained, trace medium grained, brown, moist	9.00						
10	- light gray and black at 9.5ft BGS							
	CH-SANDY CLAYS, firm, low plasticity, brown/black mottled, moist	11.00						
12				3AL 12-15'				311
	SP-SANDS, trace silts, loose, poorly graded, fine grained, trace medium grained, brown, wet, slight petroleum-like odor	13.50						
14	END OF BOREHOLE @ 15.0ft BGS	15.00						
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser Frazer Dump Area PAOC 18 15' north of fence and 10' west of gridline A+00 (see Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 9, 1996	
BORING NO.: SB–18–1	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 13' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS: Duplicate 5 (2'–4') (Pb Only)
WEATHER: Cloudy, 28°, Wind – West 5–10 mph	

SAMPLE NO.	TEST TYPE	DEPTH FROM	DEPTH TO		SOIL DESCRIPTION AND BORING LOG
1		0	6"	Pb, PAH, lPAH	0–1.5' Silty sand, dark yellowish brown (10YR 4/2)
2		6"	2'	Pb, PAH, lPAH	1.5'–2.5' Silty sand, iron slag, moderate brown.
3		2'	4'	Pb, PAH, lPAH, Dup Pb	2.5'–8.5' Silty sand, moderate yellowish brown (10YR 5/4) to grayish orange (10YR 7/4)
4		4'	6'	Pb, PAH, lPAH	
5		6'	8'	Pb, PAH, lPAH	
6		8'	10'	Pb, PAH, lPAH	8.5'–10.5' Clayey sand – gravelly sand, dark yellowish brown (10YR4/2).
7		10'	12'	Pb, PAH, lPAH	10.5'–12.5' Silty sand/sandy silt, dark yellowish orange. 12.5'–14.0' Silty clay – sandy clay, discolored grayish black (N2) to olive gray (5Y 4/1)*
8		12'	13'	Pb, PAH, lPAH	End of boring = 14'BGS.

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

*Note: Discolored soils at 12.5' – 14' soil interval.

m:\480\01770266.wk3

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 10, 1996

BORING NO.: SB-18-10

RECORDED BY: Alan Fass

DRILL TYPE: Simco Earthprobe 200

WEATHER: Mostly cloudy, 40°, Wind - West 5-10 mph

LOCATION: Kaiser-Frazer Dump Area PAOC 18
Approx. 17' north of fence and 106' east of gridline A+00 (see Weston Map - Figure 1)
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 10' BGS

COMMENTS: 14:50 Prepared field equipment blank 2T off inside of plastic sampling tube (12'-14' interval) - (Pb and PAH) Duplicate 3T (6'-8') - (Pb)

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0"	6"	Pb, PAH IPAH	0-5' Silty sand to clayey sand, some gravel, dark yellowish brown (10YR 4/2); brick, metal, glass and paint fragments (solidified).
2		6"	2'	Pb, PAH IPAH	
3		2'	4'	Pb, PAH IPAH	
4		4'	6'	Pb, PAH IPAH	5'-7' Silty sand, dark yellowish orange (10YR 6/6).
5		6'	8'	Pb, PAH IPAH Dup Pb-Lab	7'-7.5' Silty sand, dark yellowish orange (10YR 6/6); glass, paint (solidified) and unidentifiable debris.
6		8'		10'	7.5'-8.5' Silty clay, brownish black (5YR 2/1), hydrocarbon odors. 8.5'-10' Silty-sandy clay, grayish brown (5YR 3/2).
		7			10'-12' Clayey sand to silty sand, light olive gray (6/1). End of boring = 12' BGS

REMARKS

SS - Split Spoon

BLS - Below Land Surface

NR - Not Recorded

m:\480\02670266.wk3

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-100
DATE COMPLETED: August 25, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	699.16						
0	SW-SANDS (topsoil), fine and medium sands, some vegetation, well graded, wet, brown	698.36	2" BOREHOLE	1AL				0.1
2	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist		BENTONITE CHIPS	2AL				0.0
4								
6	END OF BOREHOLE @ 6.0ft BGS	693.16		3AL				0.0
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-101
DATE COMPLETED: August 25, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	699.62						
0	SW-SANDS (topsoil), fine and medium sands, some vegetation, well graded, wet, brown	698.82	2" BOREHOLE	1AL		80		0.0
2	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist		BENTONITE CHIPS	2AL		80		0.0
4								
6	END OF BOREHOLE @ 6.0ft BGS	693.62		3AL		85		0.0
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-102/PZ18-102
DATE COMPLETED: August 25, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	699.15						
0	SW-SANDS (topsoil), fine and medium grained, trace black foundry sand, some vegetation, loose, dark brown, wet	698.35	BENTONITE CHIPS	1AL		80		0.0
2	CL-SILTY CLAYS (native), trace fine sands, stiff, competent, low plasticity, gray, moist		2" BOREHOLE					
4				2AL		95		0.0
6	END OF BOREHOLE @ 6.0ft BGS	693.15	1" PVC WELL SCREEN; NATURAL COLLAPSE/ SAND	3AL		95		0.0
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
698.15 to 693.15ft BGS
1.00 to 6.00ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
698.15 to 693.15ft BGS
1.00 to 6.00ft BGS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-103
DATE COMPLETED: August 25, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	698.79						
0	SW-SANDS (topsoil), fine and medium sands, some vegetation, well graded, black, wet	698.59	2" BOREHOLE	1AL		90		0.7
2	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, gray, moist		BENTONITE CHIPS	2AL		90		0.0
6	END OF BOREHOLE @ 6.0ft BGS	692.79		3AL		90		0.0
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-104
DATE COMPLETED: August 25, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	699.54						
0	SW-SANDS (topsoil), fine to medium sands, trace sandy clays, trace plasticity, well graded, dark brown, wet	698.34	2" BOREHOLE	1AL		95		0.2
2	CL-SILTY CLAYS (native), trace fine sands, very stiff, competent, low plasticity, gray, moist		BENTONITE CHIPS	2AL		95		0.0
6	END OF BOREHOLE @ 6.0ft BGS	693.54		3AL		95		0.0
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-105
DATE COMPLETED: August 25, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	700.63						
0	SW-SANDS (topsoil-fill), fine to medium sands, trace sandy clays, trace plasticity, well graded, dark brown, wet	699.43	2" BOREHOLE	1AL		95		0.0
2	CL-SILTY CLAYS (native), trace fine sands, very stiff, competent, low plasticity, gray, moist		BENTONITE CHIPS	2AL		95		0.0
4								
6	END OF BOREHOLE @ 6.0ft BGS	694.63		3AL		95		0.0
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-106
DATE COMPLETED: August 25, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	711.24						
0	SW-SANDS (FILL), fine to medium sands, trace vegetation, well graded, dark brown, moist	710.04	2" BOREHOLE	1AL		80		0.0
2	SP-SANDS (FILL), fine grained, poorly graded, loose, light brown, moist			2AL		80		0.0
4			BENTONITE CHIPS	3AL		85		0.0
6				4AL		85		0.0
8	- very moist at 8.0ft BGS - wet at 8.3ft BGS			5AL		85		--
10	- trace oily product, brown, strong odor at 9.0ft BGS - trace oily product, brown, strong odor at 9.8ft BGS	700.24		6AL		85		--
12	- black foundry sand, sheeny at 10.0ft BGS CL-SILTY CLAYS (native), trace fine sands, stiff, competent, low plasticity, gray, moist	699.74						
14	END OF BOREHOLE @ 11.5ft BGS							
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-107
DATE COMPLETED: August 26, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	712.89						
0	SW-SANDS (FILL), fine to medium sands, well graded, some vegetation, loose, dark brown, moist			1AL		80		0.0
2	SP-SANDS (FILL), fine grained, poorly graded, dense, light brown, moist	710.89	2" BOREHOLE					
4			BENTONITE CHIPS	2AL		80		0.0
	- rust brown color at 5.0ft BGS							
6				3AL		75		6
8								
	- becoming grayish brown at 9.0ft BGS			4AL		75		13.2
10	- very moist at 10.0ft BGS	702.59	▽					
	SM-SILTY SANDS, some fine sands, compact, dark brown, moist	702.29		5AL		75		>2000
12	SP-SANDS, fine grained, poorly graded, compact, multicolored, laminated product layers, strong odor, wet	700.19						
	- oily brown product, strong odor at 11.0ft BGS							
14	- black foundry sand, sheeny at 12.4ft BGS	699.89						
	CL-SILTY CLAYS (native), trace fine sands, stiff, competent, low plasticity, gray, moist							
16	END OF BOREHOLE @ 13.0ft BGS							
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-108
DATE COMPLETED: August 26, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	712.79						
0	SW-SANDS (FILL), fine to coarse grained, some rootlets, well graded, loose, dark brown, moist			1AL		70		0.0
2	SP-SANDS (FILL), fine grained, poorly graded, loose, light brown, moist	710.79	2" BOREHOLE					
4			BENTONITE CHIPS	2AL		70		0.0
6	- trace oxidation banding at 6.0ft BGS			3AL		70		0.0
8	- glass fragments at 8.3ft BGS - trace silts at 9.0ft BGS			4AL		70		--
10	- trace laminated layers of product, brown, wet at 10.0ft BGS - trace laminated layers of product, brown, strong odor at 10.2ft BGS		▽	5AL		70		784
12	- trace laminated layers of product, brown, strong odor at 10.4ft BGS	700.19						
14	- black foundry sand at 12.0ft BGS CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, gray, moist	699.79						
16	END OF BOREHOLE @ 13.0ft BGS							
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-109
DATE COMPLETED: August 26, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	713.08						
0	SW-SANDS (FILL), fine to medium sands, trace vegetation, well graded, loose, dark brown, moist	712.48	2" BOREHOLE	1AL		90		0.0
2	SP-SANDS (FILL), fine grained, poorly graded, loose, light brown, moist - glass fragments at 3.0ft BGS		BENTONITE CHIPS	2AL		90		0.1
4	- trace silts at 5.0ft BGS			3AL		85		0.3
6				4AL		85		31.2
8	- becoming rust brown at 9.0ft BGS			5AL		95		>2000
10	- wet at 11.0ft BGS - becoming black, foundry sand at 11.5ft BGS - sheeny, strong odor at 12.0ft BGS - trace product, brown at 12.2ft BGS			6AL		95		>2000
12	- oily product, strong odor, brown at 12.4ft BGS	699.58						
14	- oily product, strong odor, brown at 13.0ft BGS	699.08						
16	CI-SILTY CLAYS (native), trace fine sands, compact, stiff, low plasticity, gray, moist END OF BOREHOLE @ 14.0ft BGS							
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 12, 1996

BORING NO.: SB-18-11

RECORDED BY: Alan Fass

DRILL TYPE: Simco Earthprobe 200

WEATHER: Overcast, 38°, Wind - NE 5-10 mph

LOCATION: Kaiser-Frazer Dump Area PAOC 18
Approx. 25' north of fence and 96' east of gridline A+00 (see Weston Map - Figure 1)
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 11' BGS

COMMENTS: Duplicate 3 TH (2'-4') (Pb)

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0"	6"	Pb	0-5' Silty sand to clayey sand, some gravel, dark yellowish brown (10YR 4/2); brick, metal, glass and paint fragments (solidified).
2		6"	2'	Pb	
3		2'	4'	Dup Pb	
4		4'	6'	Pb	5'-6' Silty sand, dark yellowish orange (10YR 6/6).
5		6'	8'	Pb, PAH	6'-8' solidified paint? waste, rock fragments.
6		8'	10'	Pb	8'-10' Silty-sandy clay, grayish brown (5YR 3/2).
7		10'	11'	Pb	10'-12' Clayey sand to silty sand, light olive gray (6/1).
					End of boring = 12' BGS

REMARKS

Pb - lead

PAH - polynuclear aromatic hydrocarbons

IPAH - PAH sample collected for immunoassay

m:\480\75\kaiser\sblogs\02770266.wk3

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-110
DATE COMPLETED: August 26, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	708.35						
0	SW-SANDS (FILL), fine to medium grained, some vegetation, dark brown, moist	707.45	2" BOREHOLE	1AL		80		7.1
2	SP-SANDS (FILL), fine grained, poorly graded, trace medium sands, loose, light brown, moist							
	- oxidation staining at 3.2ft BGS							
4	- rust brown at 4.5ft BGS		BENTONITE CHIPS	2AL		80		7.6
	- medium brown at 4.8ft BGS							
6	- becoming black at 6.3ft BGS			3AL		80		231
	- sheeny, strong odor, black at 6.7ft BGS							
8	- some product, oily brown, strong odor at 8.9ft BGS	699.35		4AL		80		461
10	CI-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, competent, gray, moist	698.85						
	END OF BOREHOLE @ 9.5ft BGS							
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-111
DATE COMPLETED: August 26, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	705.47						
2	SP-SANDS (FILL), fine grained, poorly graded, loose, light brown, moist - wet at 2.0ft BGS		2" BOREHOLE	1AL		80		3.6
4	- becoming black, foundry sand, strong odor at 4.0ft BGS		BENTONITE CHIPS	2AL		80		16.2
6	- oily brown product, strong odor at 6.1ft BGS			3AL		80		>2000
8	CL-SILTY CLAYS (native), stiff, low plasticity, gray, moist	698.47		4AL		80		>2000
	END OF BOREHOLE @ 8.5ft BGS	696.97						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-112
DATE COMPLETED: August 26, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	705.59						
0	SW-SANDS (FILL), fine to medium sands, well graded, loose, dark brown, moist	704.79		1AL		80		--
2	SP-SANDS (FILL), fine grained, poorly graded, loose, brown, moist - wet at 2.0ft BGS		2" BOREHOLE	2AL		80		--
4	- black foundry sand at 4.1ft BGS - grayish black at 4.4ft BGS		BENTONITE CHIPS					
6	- trace oily product, strong odor at 6.3ft BGS - trace oily product, strong odor at 6.9ft BGS	698.59		3AL		70		--
8	CL-SILTY CLAYS (native), stiff, low plasticity, competent, gray, moist	696.59		4AL		70		--
10	END OF BOREHOLE @ 9.0ft BGS							
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-113
DATE COMPLETED: August 26, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	704.92						
0	SP-SANDS (FILL), fine grained, poorly graded, loose, light brown, moist			1AL		75		--
2	- wet at 2.0ft BGS		▽ 2" BOREHOLE					
4	- becoming black, foundry sand at 3.5ft BGS		BENTONITE CHIPS	2AL		75		--
6	- trace oily product at 6.8ft BGS			3AL		75		--
8		697.92		4AL		75		--
	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, competent, gray, moist							
10	END OF BOREHOLE @ 9.0ft BGS	695.92						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-114
DATE COMPLETED: August 26, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	701.96						
0	SP-SANDS (FILL), fine grained, trace medium sands, trace vegetation, poorly graded, trace clays, brown, very moist		2" BOREHOLE	1AL		85		1.1
4	CL-SILTY CLAYS (native), stiff, low plasticity, gray, moist	697.96	BENTONITE CHIPS	2AL		85		0.7
5	END OF BOREHOLE @ 5.0ft BGS	696.96						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-115
DATE COMPLETED: August 26, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	702.06						
0	SW-SANDS (topsoil), fine and medium grained, some vegetation, dark brown, wet	701.76						
2	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, competent, gray, moist		2" BOREHOLE	1AL		80		2.4
4			BENTONITE CHIPS	2AL		100		0.0
5	END OF BOREHOLE @ 5.0ft BGS	697.06						
6								
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-116
DATE COMPLETED: August 26, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	702.92						
0	SP-SANDS (FILL), fine grained, poorly graded, loose, brown, wet			1AL		80		--
2	- some rootlets at 0.4ft BGS - becoming black, foundry sands at 1.0ft BGS		2" BOREHOLE					
	- sheeny, strong odor at 2.3ft BGS	699.92		2AL		100		--
	- trace oily product, brown at 2.9ft BGS	699.42	BENTONITE CHIPS					
4	CI-SILTY CLAYS (native), stiff, low plasticity, gray, moist							
	END OF BOREHOLE @ 3.5ft BGS							
6								
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-117
DATE COMPLETED: August 31, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	708.23						
0	SW-SANDS (topsoil), fine to medium d, trace vegetation, loose, dark brown, moist	707.63		1AL		80		0.0
2	SP-SANDS (FILL), fine grained, poorly graded, loose, light brown, moist		2" BOREHOLE	2AL		80		0.0
4			BENTONITE CHIPS	3AL		90		751
6	- gray at 5.8ft BGS - becoming black, wet, strong odor at 5.9ft BGS		▽	4AL		90		>2000
8	- becoming gray again, strong odor at 6.2ft BGS	700.53		5AL		90		13
10	CL-SILTY CLAYS (native), some silts, trace fine sands, competent, stiff, low plasticity, gray, moist	699.03						
	END OF BOREHOLE @ 9.2ft BGS							
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-118
DATE COMPLETED: August 31, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	706.85						
0	SW-SANDS (topsoil), fine ti medium sands, some vegetation, loose, dark brown, moist	706.15	2" BOREHOLE	1AL				0.4
2	SP-SANDS (FILL), fine grained, poorly graded, loose, trace oxidation staining, light brown, moist - trace silts at 2.2ft BGS			2AL				62.4
4	- wet, becoming black at 3.5ft BGS - brownish-gray at 4.2ft BGS		BENTONITE CHIPS	3AL				1.1
6	- dark gray, strong odor at 5.6ft BGS	701.15						
	CL-SILTY CLAYS (native), some silts, trace fine sands, competent, stiff, low plasticity, gray, moist	700.85						
8	END OF BOREHOLE @ 6.0ft BGS							
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-119
DATE COMPLETED: August 31, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	712.68						
0	SW-SANDS (topsoil), fine to medium grained, trace vegetation, well graded, loose, dark brown, moist	711.68		1AL		80		0.0
2	SP-SANDS (FILL), fine grained, poorly graded, trace silts, loose, light brown, dry		2" BOREHOLE					
4			BENTONITE CHIPS	2AL		80		0.0
6				3AL		90		0.0
8	- 0.1" silty clay layer at 8.8ft BGS			4AL		90		0.3
10	- oxidation staining at 9.0ft BGS - wet, becoming grayish-brown at 9.9ft BGS			5AL		95		64.2
12	- black, strong odor at 12.5ft BGS							
14	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	699.58		6AL		95		51.9
16	END OF BOREHOLE @ 15.0ft BGS	697.68						0.0
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 32' West of SB–18–19
DATE: December 9, 1996	Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
BORING NO.: SB–18–12	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 11.5' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS: Field equipment blank 1M prepared at 10:25 off inside of plastic sampling tube (0–4' interval) Duplicate 2 (2.2'–4.2') (Pb)
WEATHER: Sunny, 28°, Wind – West 10 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		2"	8"	Pb, PAH IPAH	0–2" Asphalt 2"–2' Silty sand, some gravel, dark yellowish brown (10YR 4/2).
2		8"	2.2'	Pb, PAH IPAH	2'–5' Silty sand, dark yellowish orange (10YR 6/6).
3		2.2'	4.2'	Dup Pb	
4		4.2'	6.2'	Pb, PAH IPAH	5'–6' Silty clay, same color, moist, slightly friable.
5		6.2'	8.2'	Pb, PAH IPAH	6'–7.5' Clayey silt, same color.
6		8.2'	10.2'	Pb, PAH IPAH	7.5'–8.5' Silty clay, same color. 8.5'–11' Sand, pale yellowish brown (10YR 6/2), very fine to fine.
7		10.2'	11.5'	Pb, PAH IPAH	11'–12' Sand, moderate yellowish brown, (10YR 5/4), medium–coarse, moist–wet.
					End of boring = 12' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\02870266.wk3

Driller had to readvance probe 0'–4' BGS to allow us to obtain enough soil for sampling.

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-120
DATE COMPLETED: August 31, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.07						
0	SW-SANDS (FILL), fine to medium grained, well graded, trace vegetation, dark brown, moist	713.97	2" BOREHOLE	1AL		75		0.0
2	SP-SANDS (FILL), fine grained, poorly graded, loose, light brown, moist		BENTONITE CHIPS	2AL		75		0.0
4				3AL		80		0.0
6				4AL		80		64.2
8	- 0.5" sandy and silty clay seam at 8.9ft BGS			5AL		95		742
10	- very moist to wet at 11.0ft BGS			6AL		95		>2000
12	- becoming black, strong odor at 12.0ft BGS			7AL		99		>2000
14	- trace oily product, light brown at 14.5ft BGS			8AL		99		0.0
16	- trace oily product, light brown at 16.3ft BGS	698.67						
18	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist							
20	END OF BOREHOLE @ 20.0ft BGS	695.07						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-121
DATE COMPLETED: August 31, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.98						
0	SW-SANDS (FILL), fine to medium grained, well graded, trace vegetation, dark brown, moist	713.68	2" BOREHOLE; BENTONITE CHIPS	1AL		70		0.0
2	SP-SANDS (FILL), fine grained, poorly graded, loose, light brown, moist			2AL		70		0.0
4				3AL		90		0.0
6				4AL		90		0.1
8	- trace silts at 8.0ft BGS							
10	- oxidation staining at 9.5ft BGS							
12	- wet at 12.0ft BGS							
14	- gray at 14.2ft BGS							
16	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	698.98						
18								
20	END OF BOREHOLE @ 20.0ft BGS	694.98						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-122
DATE COMPLETED: September 1, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.68						
0	SW-SANDS (FILL), fine to medium grained, trace vegetation, well graded, loose, dark brown, moist			1AL		75		0.0
2		712.48	2" BOREHOLE					
	SP-SANDS (FILL), fine grained, trace medium sands, poorly graded, light brown, moist		BENTONITE CHIPS	2AL		75		0.0
4								
6				3AL		80		0.0
	- 0.3" sandy clay seam at 7.2ft BGS - becoming brownish gray at 7.6ft BGS							
8				4AL		80		1.1
10	ML-SILTS, trace fine sands, competent, soft, medium plasticity, gray, moist	704.78						
	SP-SANDS, fine grained, poorly graded, dense, gray, wet - wet at 11.5ft BGS	703.68		5AL		95		2.0
12								
14				6AL		95		0.0
	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	699.68						
16				7AL		99		0.1
18				8AL		99		0.3
20	END OF BOREHOLE @ 20.0ft BGS	694.68						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-123
DATE COMPLETED: September 1, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.73						
0	SW-SANDS (FILL), fine to medium grained, trace fine and medium gravels, well graded, dense, dark brown, moist		2" BOREHOLE	1AL		75		0.1
2		712.03	BENTONITE CHIPS					
4	SP-SANDS (FILL), fine grained, trace medium and coarse sands, poorly graded, dense, light brown, moist			2AL		75		18.5
6				3AL		95		111
8	- 0.5" silty clay seam, high plasticity, very moist at 8.1ft BGS			4AL		95		492
10	ML-SILTS, firm, low plasticity, competent, gray, moist	704.73	▽	5AL		95		>2000
12	- 0.3" fine grained sand seam, rust brown, wet at 11.1ft BGS	702.73		6AL		95		>2000
14	SP-SANDS, fine grained, poorly graded, dense, gray, wet - becoming black, sheeny, strong odor at 13.0ft BGS			7AL		95		1500
16	- trace oily liquid at 13.1ft BGS - trace oily liquid at 15.0ft BGS	699.63		8AL		95		1200
18	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist							
20	END OF BOREHOLE @ 20.0ft BGS	694.73						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-124
DATE COMPLETED: September 1, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.34						
0	SW-SANDS (FILL), fine to medium sands, well graded, sense, light brown, moist		2" BOREHOLE	1AL 0-2.5' -544		70		--
2	SP-SANDS (FILL), fine grained, poorly graded, light brown, moist	712.64	BENTONITE CHIPS	2AL 2.5-5' -545		70		--
4								
6				3AL 5-7.5' -546		90		--
8				4AL 7.5-10' -547		90		--
10	SM-SILTY SANDS, trace fine and medium sands, semi-competent, trace clays, trace plasticity, brown, moist	704.34 703.94		5AL 10-12.5' -548		95		--
12	SP-SANDS, fine grained, poorly graded - wet at 11.0ft BGS - becoming blackish-gray, strong odor at 11.5ft BGS			6AL 12.5-15' -549		95		--
14								
16	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	699.34		7AL		100		--
18				8AL		100		--
20	END OF BOREHOLE @ 20.0ft BGS	694.34		20' -550				
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-125
DATE COMPLETED: September 2, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.14						
0	ASPHALT	714.84	2" BOREHOLE					
	SP-SANDS (FILL), fine grained, poorly graded, trace medium sands, dense, medium brown, moist			1AL		60		3.8
2								
			BENTONITE CHIPS	2AL		60		16.2
4								
6				3AL		80		>2000
	- becoming black at 6.9ft BGS - wet at 7.2ft BGS							
8	- debris-grass fragments, metal shavings at 7.6ft BGS - yellow staining at 7.7ft BGS	707.34		4AL		80		>2000
10	SW-SANDS (FILL), fine to coarse grained, well graded, trace fine gravels, dense, gray-black, wet	704.64		5AL		90		>2000
12	ML-SILTS, trace clays, stiff, low to medium plasticity, grayish-brown, moist	703.14						
	SP-SANDS, medium grained, poorly graded, dense, grayish-brown, wet			6AL		90		>2000
14								
	- trace oily residue, yellow at 15.0ft BGS	700.04						
16	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist			7AL		98		79.2
18								
				8AL		98		31.4
20	END OF BOREHOLE @ 20.0ft BGS	695.14						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

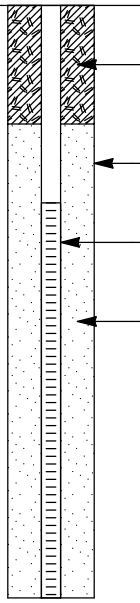
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-126/PZ18-126
DATE COMPLETED: September 2, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	715.07
0	ASPHALT	714.77
	SP-SANDS (FILL), fine grained, poorly graded, dense, light brown, moist	
2		
4		
6		
	- oxidation staining at 7.1ft BGS	707.87
8	SM-SILTY SANDS, trace clays, fine sands, medium plasticity, dark gray, moist to wet	706.77
	SP-SANDS, fine grained, poorly graded, dense, gray, wet	
10		
12		
	- strong petroleum odor at 13.4ft BGS	701.57
14	ML/CL-SILTS AND SILTY CLAYS, trace fine sands, soft, medium plasticity, gray, moist	700.57
	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	700.07
16	END OF BOREHOLE @ 15.0ft BGS	
18		
20		
22		
24		
26		
28		
30		
32		
34		

TEMP MONITORING WELL



WELL DETAILS
Screened interval:
710.07 to 700.07ft BGS
5.00 to 15.00ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
712.07 to 700.07ft BGS
3.00 to 15.00ft BGS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1AL				13.1
2AL				29.4
3AL				57
4AL				67.9
5AL				42.4
6AL				61.3
7AL				--
8AL				--

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

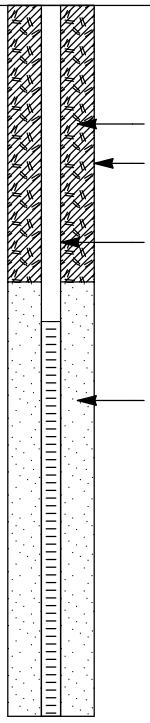
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-127/PZ18-127
DATE COMPLETED: September 2, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	715.12
0	ASPHALT	714.82
2	SW-SANDS (FILL), fine to medium grained, well graded, dark brown, dense, moist	
4		
6		
7	- debris (glass) at 7.1ft BGS	707.92
8	SP-SANDS (FILL), fine grained, poorly graded, dense, dark brown	
10	- 0.2" silty sands at 8.1ft BGS - 0.2" silty sands at 8.5ft BGS	
12	- oxidation staining at 12.5ft BGS	
14	- becoming black, strong odor at 14.0ft BGS	
	- becoming gray at 15.1ft BGS	
16	- black, strong odor at 16.5ft BGS	
17	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	697.92
18		
20	END OF BOREHOLE @ 20.0ft BGS	695.12
22		
24		
26		
28		
30		
32		
34		

TEMP MONITORING WELL



WELL DETAILS
Screened interval:
707.12 to 697.12ft BGS
8.00 to 18.00ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
708.12 to 697.12ft BGS
7.00 to 18.00ft BGS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1AL				10.4
2AL				16.1
3AL				89
4AL				>2000
5AL				>2000
6AL				>2000
7AL				>2000
8AL				29.1

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-128/PZ18-128
DATE COMPLETED: September 2, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.12						
0	ASPHALT	714.82	BENTONITE CHIPS	1AL				10.1
2	SW-SANDS (FILL), fine to medium sands, trace fine gravels, well graded, dense, dark brown, moist							
4				2AL				36.4
6			2" BOREHOLE	3AL				42.1
8	- debris (glass) at 7.5ft BGS	707.92	1" PVC WELL SCREEN	4AL				54
10	SP-SANDS, fine grained, trace medium sands, poorly graded, dense, dark brown, moist							
12	SM-SILTY SANDS, with clays, trace fine and medium sands, semi-competent, medium plasticity, soft, brown, moist, strong odor	705.32	NATURAL COLLAPSE/ SAND	5AL				>2000
14	SP-SANDS (FILL), fine grained, poorly graded, dense, black, wet, strong odor	703.12		6AL				>2000
16	- becoming gray at 12.5ft BGS	701.92		7AL				36.9
18	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	700.12		8AL				21.1
20	END OF BOREHOLE @ 15.0ft BGS							
22								
24								
26								
28								
30								
32								
34								
36								
38								

WELL DETAILS
Screened interval:
711.12 to 701.12ft BGS
4.00 to 14.00ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
712.12 to 701.12ft BGS
3.00 to 14.00ft BGS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-129
DATE COMPLETED: September 2, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	713.79						
0	SW-SANDS (FILL), fine to medium grained, well graded, dense, dark brown, moist			1AL		60		--
2	SP-SANDS (FILL), fine grained, poorly graded, dense, brown, moist	712.09	2" BOREHOLE					
4			BENTONITE CHIPS	2AL		60		--
6	- becoming grayish-brown at 6.0ft BGS			3AL		80		--
8				4AL		80		--
10	- moist to wet at 10.0ft BGS - gray at 10.3ft BGS		▽	5AL		95		--
12				6AL		95		--
14				7AL		90		--
16				8AL		90		--
18								
20	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist END OF BOREHOLE @ 20.0ft BGS	694.79 693.79						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser-Frazer Dump Area PAOC 18 38' West of SB-18-19
DATE: December 9, 1996	Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
BORING NO.: SB-18-13	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 11.5' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS:
WEATHER: Sunny, 30o, Wind - West 10 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		2"	8"	Pb, PAH IPAH	0-2" Asphalt 2"-2' Silty sand, some gravel, dark yellowish brown (10YR 4/2).
2		8"	2.2'	Pb, PAH IPAH	2'-5' Silty sand, dark yellowish orange (10YR 6/6).
3		2.2'	4.2'	Pb, PAH IPAH	
4		4.2'	6.2'	Pb, PAH IPAH	5'-6' Silty clay, same color, moist, slightly friable.
5		6.2'	8.2'	Pb, PAH IPAH	6'-7.5' Clayey silt, same color.
6		8.2'	10.2'	Pb, PAH IPAH	7.5'-8.5' Silty clay, same color. 8.5'-11' Sand, pale yellowish brown (10YR 6/2), very fine to fine.
7		10.2'	11.5'	Pb, PAH IPAH	11'-12' Sand, moderate yellowish brown, (10YR 5/4), medium-coarse, moist-wet.
					End of boring = 12' BGS

REMARKS

Pb - lead

PAH - polynuclear aromatic hydrocarbons

IPAH - PAH sample collected for immunoassay

m:\480\75\kaiser\sblogs\02970266.wk3

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-134
DATE COMPLETED: September 9, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	700.09						
0	CL-SILTY CLAYS (FILL), trace fine to medium sands, firm, low plasticity, brown, moist, trace rootlets	699.34	2" BOREHOLE	1AL 0-2.5' -589		90		10.6
2	- gray at 0.3ft BGS`			2AL 2.5-5' -590		90		25.9
4	CL-SANDY CLAYS WITH SILTS (FILL), firm, low plasticity, fine sands, gray and black, moist to very moist, slight petroleum-like odor	696.09	BENTONITE CHIPS	3AL		90		3.1
6	- increase in sand content, decrease in clay content, very moist, brown and gray at 2.8ft BGS							
	CH-SILTY CLAYS (native), firm, high plasticity, gray, moist	694.09						
8	END OF BOREHOLE @ 6.0ft BGS							
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-135
DATE COMPLETED: September 9, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	709.91						
0	CL-SILTY CLAYS (FILL), trace fine to medium sands, firm, low plasticity, dark brown, moist, trace vegetation	708.66	2" BOREHOLE	1AL 0-2.5' -591		100		0.8
2	SM-SILTY SANDS, compact, fine to medium grained, poorly graded, orange-brown, moist							
	- tan/beige, some orange streaking at 1.8ft BGS							
4	- fine grained, brown, some orange streaking at 2.5ft BGS	705.66	BENTONITE CHIPS	2AL 2.5-5' -592		90		0.2
	- brown-orange at 3.8ft BGS							
6	SM/ML-SANDS & SILTS (FILL), trace clays, compact, fine sands, nonplastic, brown,	702.91		3AL 5-7.5' -593		100		0.3
	brown-gray, some orange streaking, moist,	702.66						
8	trace clay nodules up to 1"	701.91						
	- brown-gray, some orange streaking at 5.0ft BGS	701.16		4AL 7.5-10' -594		100		0.5
10	- brown-orange, saturated at 6.0ft BGS	699.91						
	CL-SILTY CLAYS, firm, low plasticity, gray, moist							
12	SM-SILTY SANDS (native), compact, fine grained, poorly graded, light gray, saturated							
	CL-SILTY CLAYS, firm, low plasticity, gray, moist							
14	SM-SILTY SANDS, compact, fine grained, poorly graded, light gray, saturated							
	END OF BOREHOLE @ 10.0ft BGS							
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-136
DATE COMPLETED: September 9, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	713.66						
0	CL-SILTY CLAYS (FILL), trace fine to medium sands, firm, low plasticity, dark brown, moist, trace vegetation							
2	- tan/beige, fine grained at 2.0ft BGS	711.91	2" BOREHOLE	1AL 0-2.5' -595		75		4.8
	SM-SILTY SANDS, compact, fine to medium grained, poorly graded, orange-brown, moist		BENTONITE CHIPS	2AL 2.5-5' -596		75		6.2
4								
6	- light brown and orange-brown at 5.5ft BGS			3AL 5-7.5' -597		90		4.5
8	SM/ML-SANDS & SILTS, compact, fine sands, nonplastic, brown and gray, moist	706.16		4AL 7.5-10' -598		90		4.1
10	- trace to with clays, gray, very moist, non to low plasticity at 9.0ft BGS							
	CL-SILTY CLAYS, trace fine to coarse sands, stiff, low plasticity, gray, moist	702.91		5AL 10-12.5' -599		90		4.6
12	SM-SILTY SANDS, compact, fine grained, poorly graded, gray, saturated	701.91		6AL 12.5-15' -600		90		5.1
14								
16				7AL 15-17.5' -601		90		4.1
18	CL/CI-SILTY CLAYS, trace fine to coarse sands, stiff, low to medium plasticity, gray, moist	695.41		8AL 17.5-20' -602		90		3.9
20	END OF BOREHOLE @ 20.0ft BGS	693.66						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-137
DATE COMPLETED: September 9, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	700.40						
0	SM-SILTY SANDS, trace clays, loose to compact, fine to medium grained, poorly graded, dark brown, moist, trace rootlets							
2	- very moist to saturated at 1.5ft BGS		2" BOREHOLE	1AL 0-2' -603		75		8.7
	- saturated at 2.0ft BGS			2AL 2-4' -604		100		40.6
	- trace to with clays, brown at 2.3ft BGS							
4	- increase in clay content, dark gray to black, slight petroleum-like odor at 3.0ft BGS		BENTONITE CHIPS					
		695.65		3AL 4-6' -605		100		4.6
6	CL/CI-SILTY CLAYS, trace fine to medium sands, firm to stiff, low to medium plasticity, gray, moist	694.40						
	END OF BOREHOLE @ 6.0ft BGS							
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-138
DATE COMPLETED: September 9, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	702.95						
0	CL-SANDY CLAYS, trace silts, firm, low plasticity, medium brown, moist, trace rootlets	701.95		1AL 0-2.5' -606				72.5
2	CI/CH-SANDY CLAYS, trace fine sands, stiff, medium to high plasticity, gray, moist - firm, slight petroleum-like odor at 2.0ft BGS - stiff, no odor at 3.0ft BGS		2" BOREHOLE					
4			BENTONITE CHIPS	2AL 2.5-5' -607				8.3
6	END OF BOREHOLE @ 6.0ft BGS	696.95		3AL				0.2
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-139
DATE COMPLETED: September 9, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	706.56						
0	SM-SILTY SANDS, trace clays, loose to compact, fine to coarse grained, poorly graded, dark brown, moist - brown, some orange streaking at 0.3ft BGS - fine to medium grained, brown and orange-brown at 1.5ft BGS - green-gray and orange-brown at 3.0ft BGS - black, very moist, slight petroleum-like odor at 3.8ft BGS		2" BOREHOLE BENTONITE CHIPS	1AL 0-2.5' -608		100		8.1
2								
4				2AL 2.5-5' -609		90		27.4
6		701.31						
	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray, moist, slight petroleum-like odor			3AL 5-8' -610		90		19.4
8	END OF BOREHOLE @ 8.0ft BGS	698.56						
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 1' north of fence and 156' east of gridline A+00 (see Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 12, 1996	
BORING NO.: SB–18–14	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 10.5' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS:
WEATHER: Overcast, 37°, Wind – NE 5–10 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0"	6"	Pb	0'–2' Silty sand, dusky brown, and debris (metal, glass, bricks).
2		6"	2'	Pb	2'–7' Silty sand, moderate yellowish brown – grayish orange, and metal debris.
3		2'	4'	Pb, PAH	
4		4'	6'	Pb	
5		6'	8'	Pb	7'–8' Sandy silt, grayish orange.
6		8'	10.5'	Pb	8'–11' Silty sand, dark yellowish orange – grayish orange. 11'–12' Sand, grayish orange – dark yellowish orange, very fine – fine. End of boring = 12' BGS.

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\03070266.wk3

Attempted boring at approximately 1' north of this boring. Driller advanced probe 0–4' BGS with approx. 50% recovery and 4'–8' BGS with approx. 20% recovery. Second boring attempted, resulted in approx. ____% recovery. Apparent fill material.

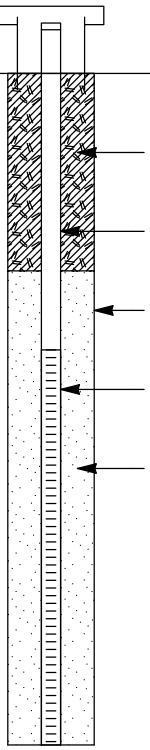
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-140/PZ18-140
DATE COMPLETED: September 10, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	713.91
0	SM-SILTY SANDS, compact, fine to medium grained, poorly graded, brown, moist, some yellow streaking	
4	- tan/beige, fine grained at 4.0ft BGS	
6		707.41
8	SM/ML-SANDS AND SILTS, compact to dense, fine sands, non plastic, light brown and orange brown, moist	
10		704.91
12	SM-SILTY SANDS, dense, fine grained, poorly graded, light brown and gray brown, moist - very moist to saturated, gray and orange banded at 12.0ft BGS	
14	- black and dark gray, saturated, petroleum-like odor (moderate) at 12.5ft BGS	
16	- strong petroleum-like odor, DNAPL-dark brown at 15.8ft BGS	697.91
18	CL/CI-SILTY CLAYS, trace fine sands, firm, low to medium plasticity, gray, moist, moderate petroleum-like odor	
20	END OF BOREHOLE @ 20.0ft BGS	693.91
22		
24		
26		
28		
30		
32		
34		

TEMP MONITORING WELL



WELL DETAILS
Screened interval:
706.91 to 696.91ft BGS
7.00 to 17.00ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
708.91 to 696.91ft BGS
5.00 to 17.00ft BGS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1AL		75		7.3
2AL		75		7
3AL		90		6.8
4AL		90		13.5
5AL		90		336
6AL		90		356
7AL		90		65.8
8AL 17.5-20 -611		90		17.4

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-142
DATE COMPLETED: September 10, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.55						
0	SM-SILTY SANDS, compact, fine to coarse grained, poorly graded, dark brown, moist							
2	- brown, some orange streaking at 0.8ft BGS		2" BOREHOLE	1AL				7.2
4	- medium brown at 4.3ft BGS		BENTONITE CHIPS					
6								
8	- increase in silt content, brown and orange-brown at 7.8ft BGS			2AL				14.6
10								
12	- light brown, fine grained at 12.0ft BGS - brown at 12.8ft BGS			3AL				116
14	- very moist to saturated, dark gray, slight petroleum-like odor at 13.5ft BGS - black, saturated, moderate petroleum-like odor at 14.0ft BGS							
16	- dark gray to black at 14.5ft BGS			4AL				334
18	- DNAPL-dark brown at 17.7ft BGS	696.80						
	CL/CI-SILTY CLAYS, trace fine sands, firm, low to medium plasticity, gray, moist, moderate petroleum-like odor	695.55						
20	END OF BOREHOLE @ 19.0ft BGS							
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-143
DATE COMPLETED: September 10, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.91						
0	SM-SILTY SANDS, compact, fine to coarse grained, poorly graded, brown, moist, some orange streaking		2" BOREHOLE	1AL		75		4.8
2	- light brown, fine to medium grained at 3.0ft BGS		BENTONITE CHIPS	2AL		78		7.4
4				3AL		85		9.8
6				4AL		85		674
8	- increase in silt content, fine grained, brown, orange and brown at 8.3ft BGS			5AL		85		1901
10				6AL		85		>2000
12	- brown-gray, decrease in silt content, very moist at 12.5ft BGS			7AL		75		1890
14	- increase in silt content, gray, saturated at 13.3ft BGS			8AL		75		1535
16	- dark gray to black, slight sheen to water/soil, moderate petroleum-like odor at 13.5ft BGS							
18	- DNAPL-dark brown at 18.5ft BGS	696.41						
20	CL/CI-SILTY CLAYS, trace fine sands, firm, low to medium plasticity, gray, moist, moderate petroleum-like odor	694.91						
22	END OF BOREHOLE @ 20.0ft BGS							
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-144
DATE COMPLETED: September 10, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	SM-SILTY SANDS, compact, fine to coarse grained, poorly graded, brown, moist, some orange streaking		2" BOREHOLE	1AL 0-2.5' -612				9.8
			BENTONITE CHIPS	2AL 2.5-5' -613				5.2
	- light brown at 4.3ft BGS			3AL 5-7.5' -614				18.9
	- increase in silt content, orange brown and brown at 9.0ft BGS			4AL 7.5-10' -615				37.4
	- light gray, very moist to saturated at 12.5ft BGS			5AL 10-12.5' -616				43.9
	- gray, saturated, slight petroleum-like odor at 13.0ft BGS			6AL 12.5-15' -617				18
	- dark gray to black, moderate petroleum-like odor at 14.5ft BGS	15.00						
	CL/CI-SILTY CLAYS, trace fine sands, firm, low to medium plasticity, gray, moist, moderate petroleum-like odor			7AL 15-17.5' -624				3.6
				8AL 17.5-20' -625				2.9
	END OF BOREHOLE @ 20.0ft BGS	20.00						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-145
DATE COMPLETED: October 4, 2004
DRILLING METHOD: HAND SAMPLING
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	699.67						
0	SW-SANDS (topsoil), fine and medium grained, some rootlets, loose, dark brown, moist	699.37	2" BOREHOLE	1AL		60		0.0
2	SM-SILTY SANDS, fine and medium sands, trace silty clays, dense, brown-gray, moist to wet	697.37	BACKFILLED WITH BENTONITE CHIPS	2AL		80		0.0
4	- trace oxidation staining at 2.0ft BGS							
	CL-SILTY CLAYS, trace fine sands, stiff, competent, low plasticity, gray, moist	694.67						
6	END OF BOREHOLE @ 5.0ft BGS							
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-146
DATE COMPLETED: October 4, 2004
DRILLING METHOD: HAND SAMPLING
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	700.07						
0	SW-SANDS (topsoil), fine and medium grained, some rootlets, loose, dark brown, moist	699.87	2" BOREHOLE	1AL		65		0.0
2	CL-SILTY CLAYS, trace fine sands, stiff, competent, low plasticity, gray, moist		BACKFILLED WITH BENTONITE CHIPS	2AL		85		0.0
4	END OF BOREHOLE @ 4.6ft BGS	695.47						
6								
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-147
DATE COMPLETED: October 4, 2004
DRILLING METHOD: HAND SAMPLING
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	699.63						
0	SW-SANDS (topsoil), fine to medium grained, well graded, dark brown, moist to wet	699.13	2" BOREHOLE	1AL		70		0.0
2	CL-SILTY CLAYS, trace fine sands, competent, stiff, low plasticity, gray, dry		BACKFILLED WITH BENTONITE CHIPS	2AL		75		0.0
4								
5	END OF BOREHOLE @ 5.0ft BGS	694.63						
6								
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-148
DATE COMPLETED: October 4, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	701.02						
0	SW-SANDS (topsoil), fine to medium grained, well graded, trace rootlets, dark brown, moist	700.72	2" BOREHOLE	1AL		75		0.0
2	SW/SM-SILTY SANDS, compact, fine to medium grained, poorly graded, brown, moist to wet	698.52	BACKFILLED WITH BENTONITE CHIPS	2AL		80		0.0
4	- trace black sands, trace sheen at 2.4ft BGS							
	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray, moist	696.02						
6	END OF BOREHOLE @ 5.0ft BGS							
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-149
DATE COMPLETED: October 4, 2004
DRILLING METHOD: HAND SAMPLING
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	703.34						
0	SW-SANDS, fine to coarse sands, trace vegetation, well graded, loose, light brown, moist	702.14	2" BOREHOLE	1AL		70		3.1
2	SP-SANDS, medium grained, trace fine sands, poorly graded, loose, gray, wet - trace sheen, slight odor at 2.5ft BGS - black foundry type sands at 2.7ft BGS	700.34	BACKFILLED WITH BENTONITE CHIPS	2AL		90		26.1
4								
6	CL-SILTY CLAYS, trace fine sands, firm, low plasticity, gray, moist			3AL		100		3.1
	END OF BOREHOLE @ 6.0ft BGS	697.34						
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 10, 1996

BORING NO.: SB-18-15

RECORDED BY: Alan Fass

DRILL TYPE: Simco Earthprobe 200

WEATHER: Mostly cloudy, 40₀, Wind - West <5 mph

LOCATION: Kaiser-Frazer Dump Area PAOC 18
Approx. 16' north of fence and 139' east of gridline A+00 (see Weston Map - Figure 1)
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 10' BGS

COMMENTS: 15:10 Prepared field equipment blank #1T off inside of plastic sampling tube (4'-8' interval) (Pb and PAH analysis)

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0"	6"	Pb	0-5' Silty sand to clayey sand, some gravel, dark yellowish brown (10YR 4/2); brick, metal, glass and paint fragments (solidified).
2		6"	2'	Pb	
3		2'	4'	Pb	
4		4'	6'	Pb	5'-7' Silty sand, dark yellowish orange (10YR 6/6).
5		6'	8'	Pb	7'-8' Metal, glass, paint chips, paint (solidified) fragments; some sand, moderate brown (5YR 4/4).
6		8'	10'	Pb	8'-10' Same lithology as SB-18-15 (8.5'-10'). 10'-12' Silty sand, pale yellowish brown (10YR 5/4) - dark yellowish orange (10YR 6/6)
					End of boring = 12' BGS.

REMARKS

Pb - lead

PAH - polynuclear aromatic hydrocarbons

IPAH - PAH sample collected for immunoassay

m:\480\75\kaiser\sblogs\03170266.wk3

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-150
DATE COMPLETED: October 4, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	706.27						
0	SP-SANDS, fine grained, trace fine gravels, trace rootlets, poorly graded, loose, light brown, dry		2" BOREHOLE	1AL		60		3.3
2			BACKFILLED WITH BENTONITE CHIPS					
4				2AL		75		18.2
	- 0.3' layer black foundry type sand, sheeny at 4.4ft BGS	701.57						
6	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray, moist			3AL		75		1.1
	END OF BOREHOLE @ 7.0ft BGS	699.27						
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-151
DATE COMPLETED: October 4, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	705.71						
0	SW-SANDS, fine to medium grained, trace rootlets, well graded, dark brown, moist							
	- root at 1.0ft BGS	704.51		1AL				16.1
2	SP-SANDS (FILL), fine grained, poorly graded, dense, brown, moist		2" BOREHOLE					
	- 0.5' layer rust color at 2.0ft BGS		BACKFILLED WITH BENTONITE CHIPS	2AL				64.2
4	- wet at 4.0ft BGS		▽					
	- 1' layer black foundry type sand, sheeny, moderate odor at 5.0ft BGS			3AL				60.0
6	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray, moist	699.71						
8	END OF BOREHOLE @ 8.0ft BGS	697.71						
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-152
DATE COMPLETED: October 4, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	SW-SANDS, fine to medium grained, trace silts, trace rootlets, loose, dark brown, moist		2" BOREHOLE				
2	SP-SANDS, fine grained, poorly graded, loose, light brown, moist	1.30	BACKFILLED WITH BENTONITE CHIPS	1AL		60	
4	- trace iron banding at 4.1ft BGS						
6							
8	- 0.1' silty sand seam at 7.2ft BGS			2AL		90	
10	SP-SANDS, medium grained, poorly graded, dense, medium brown, moist - very moist at 10.0ft BGS	8.90					
12	SM-SILTY SANDS, trace fine sands, dense, gray, wet - grading to finer sands at 12.9ft BGS	11.00		3AL		90	
14							
16	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray, moist	15.00		4AL		100	
18							
20	END OF BOREHOLE @ 20.0ft BGS	20.00					
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-153
DATE COMPLETED: October 4, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	SW-SANDS (FILL), fine to medium sands, trace gravels, well graded, trace silts, medium brown, moist		2" BOREHOLE					
2			BACKFILLED WITH BENTONITE CHIPS	1AL		60		1.2
4								
6								
8	- dense at 7.0ft BGS - trace oxidation staining at 8.0ft BGS			2AL		80		6.8
10	- debris (rivets, steel plates), strong odors at 9.0ft BGS - increase in moisture content at 10.0ft BGS							
12	SM-SILTY SANDS, trace fine sands, homogeneous, dense, gray, moist	11.00						
	- black foundry type sands, sheeny at 12.6ft BGS	12.50	▽	3AL		85		72.3
14	SP-SANDS, fine grained, poorly graded, dense, brown, saturated - black foundry type sands, sheeny at 14.5ft BGS							
16								
	- sheeny at 16.9ft BGS	17.00		4AL		85		13
18	CL-SILTY CLAYS, trace fine sands, stiff, competent, low plasticity, gray, moist							
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-154
DATE COMPLETED: October 4, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	SW-SANDS (FILL), fine to medium grained, trace fine gravels, well graded, trace silts, medium brown, moist		2" BOREHOLE					
2			BACKFILLED WITH BENTONITE CHIPS	1AL		60		7.2
4								
6								
8	- trace coarse sands at 8.1ft BGS			2AL		85		8.9
10	- trace oxidation staining at 9.5ft BGS - becoming gray, increase in silts at 10.0ft BGS							
12	SM-SILTY SANDS, some fine sands, homogeneous, compact, gray, very moist - trace black sands at 13.0ft BGS - 0.2' silty clay seam at 13.3ft BGS	11.50		3AL		100		13.2
14								
16	CL-SILTY CLAYS, trace fine sands, competent, stiff, low plasticity, gray, moist	15.00						
18				4AL		100		3.4
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-155
DATE COMPLETED: October 5, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.12						
0	ASPHALT (parking lot)	713.72	2" BOREHOLE					
2	SP-SANDS (FILL), fine grained, trace medium grained, poorly graded, loose, medium brown, moist - trace medium gravels at 2.1ft BGS		BACKFILLED WITH BENTONITE CHIPS	1AL		70		2.1
4								
6	SM-SILTY SANDS, trace clays, some fine sands, trace plasticity, dense, brownish gray, moist	708.92						
8	- moist to wet at 7.0ft BGS - 0.2' silty clay seam at 8.3ft BGS			2AL		75		3.0
10								
12	- wet at 12.5ft BGS		▽	3AL		85		4.0
14	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	700.12						
16								
18				4AL		85		1.2
20	END OF BOREHOLE @ 20.0ft BGS	694.12						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-156
DATE COMPLETED: October 5, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	713.73						
0	ASPHALT	713.23	2" BOREHOLE; BACKFILLED WITH BENTONITE CHIPS					
	SP-SANDS (FILL), fine grained, poorly graded, homogeneous, medium brown, moist			1AL		70		0.0
4	- trace silts at 5.5ft BGS							
6	SM/SC-SILTY SANDS, some fine sands, trace silty clays, trace plasticity, dense, brown, very moist	707.73						
	- becoming gray, decrease in moisture, semi-competent at 8.0ft BGS			2AL		80		0.0
10	- becoming darker gray, low plasticity at 9.5ft BGS							
	SP-SANDS, fine grained, poorly graded, trace silts, intermittent oxidation banding, dense, brown gray, moist to wet	702.73						
12	- wet at 12.5ft BGS			3AL		95		0.0
14	SM-SILTY SANDS, some fine sands, poorly graded, dense, gray, wet	699.83						
	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	698.73						
16								
18				4AL		100		0.0
20	END OF BOREHOLE @ 20.0ft BGS	693.73						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-157
DATE COMPLETED: October 5, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.05						
0	ASPHALT	713.55	2" BOREHOLE; BACKFILLED WITH BENTONITE CHIPS					
	SP-SANDS (FILL), fine grained, poorly graded, loose, medium brown, moist			1AL		75		1.1
6	- some silts at 5.9ft BGS	708.05						
	SM/SC-SILTY AND SANDY CLAYS, some fine sands, trace plasticity, dense, brown-gray, moist			2AL		85		0.0
	- becoming gray at 7.5ft BGS							
	- 0.2 fine sand seam, gray, moist at 8.1ft BGS							
	- 0.2 fine sand seam, gray, moist at 9.2ft BGS							
12	SP-SANDS (native), fine grained, trace silts, poorly graded, intermittent oxidation banding, dense, brown-gray, wet	703.05		3AL		95		0.0
	- wet at 12.5ft BGS							
14	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	699.55						
15	END OF BOREHOLE @ 15.0ft BGS	699.05		4AL		95		0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-158
DATE COMPLETED: October 5, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.07						
0	ASPHALT	713.57	2" BOREHOLE; BACKFILLED WITH BENTONITE CHIPS					
	SP-SANDS (FILL), fine grained, poorly graded, medium brown, moist			1AL		60		0.0
6		707.77						
	SM/SC-SILTY AND SANDY CLAYS (FILL), some fine and medium sands, trace plasticity, dense, brown-gray, moist - 0.2' fine grained sands at 8.0ft BGS			2AL		75		0.0
10	- 0.1' trace silty sand seam at 9.9ft BGS	703.57						
	SP-SANDS, fine grained, poorly graded, dense, brown, moist - wet at 11.0ft BGS - oxidation staining at 11.1ft BGS - oxidation staining at 13.2ft BGS - oxidation staining at 14.0ft BGS - becoming gray at 14.1ft BGS			3AL		90		0.1
16	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	698.97						
				4AL		95		0.0
20	END OF BOREHOLE @ 20.0ft BGS	694.07						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-159
DATE COMPLETED: October 4, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.83						
0	ASPHALT	714.33	2" BOREHOLE; BACKFILLED WITH BENTONITE CHIPS					
	SP-SANDS (FILL), fine grained, poorly graded, loose, medium brown, moist			1AL		60		0.0
8	SM/SC-SILTY AND SANDY CLAYS (FILL), some fine and medium sands, trace plasticity, dense, brown-gray, moist	707.63		2AL		80		0.0
12	SP-SANDS, fine grained, poorly graded, dense, intermittent oxidation banding, brown-gray, wet - wet at 11.5ft BGS	703.83		3AL		90		0.0
16	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	699.33		4AL		95		0.0
20	END OF BOREHOLE @ 20.0ft BGS	694.83						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 50' north of fence and 160' east of gridline A+00 (see Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 11, 1996	
BORING NO.: SB–18–16	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 5.5' BGS
DRILL TYPE: Hand Auger	COMMENTS: 12:30 Prepared field equipment blank #2W off inside of hand auger prior to boring (0–4') Pb and PAH analysis.
WEATHER: Overcast, 36°, Wind – NE 10–15 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0"	6"	Pb	0'–5.5' Clayey sand/sandy clay, moderate–dark yellowish brown, some roots, rock fragments, and black solidified material as noted below.
2		6"	2'	Pb, PAH Dup Pb	
3		2'	4'	Pb	
4		4'	5.5'	Pb	5.5'–6' Organic clay, black, hydrocarbon odors.
5					End of boring = 6.0' BGS
6					
7					

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\03270266.wk3

Black solidified layer at 16"–18", 23"–24", 26"–27" BGS, creosote–like odors.
Duplicate 4W (6"–2') (Pb)

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-160
DATE COMPLETED: October 5, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.47						
0	ASPHALT	713.97	2" BOREHOLE					
	SP-SANDS (FILL), fine grained, poorly graded, loose, medium brown, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		60		10.0
8	SM/ML-SANDS AND SILTS (FILL), trace clays, compact, fine sands, trace oxidation, trace plasticity, brown-gray, moist - orange-rust color at 8.0ft BGS - becoming gray at 9.0ft BGS	706.97		2AL		75		8.1
12	- wet at 12.0ft BGS			3AL		80		2.1
14	SP-SANDS, fine grained, poorly graded, trace oxidation staining, brown-gray, wet	701.47						
	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	699.97 699.47						
16	END OF BOREHOLE @ 15.0ft BGS							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-161
DATE COMPLETED:
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.51						
0	ASPHALT	714.01	2" BOREHOLE					
	SP-SANDS (FILL), fine grained, poorly graded, loose, medium brown, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		60		1.2
8	SM/ML-SANDS AND SILTS (FILL), trace clays, dense, fine sands, trace oxidation, trace plasticity, brown-gray, moist	707.01		2AL		75		3.3
10	- 0.1' clay seam at 10.1ft BGS							
12	- wet at 12.0ft BGS - increase in sand content at 12.5ft BGS			3AL		95		3.3
14	SP-SANDS (native), fine grained, poorly graded, oxidation staining, dense, brown, gray	701.51						
15	END OF BOREHOLE @ 15.0ft BGS	699.51						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-162
DATE COMPLETED: October 5, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	715.10					
0	ASPHALT	714.60	2" BOREHOLE				
	SP-SANDS (FILL), fine grained, poorly graded, compact, medium brown, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		60	
8	SM-SILTY SANDS (FILL), some fine sands, trace clays, compact, brown, moist	707.10		2AL		85	
	SP-SANDS, fine grained, poorly graded, trace silts, compact, brown, moist	706.10					
12	- wet, becoming gray at 12.0ft BGS - trace black sands at 13.0ft BGS - 0.3' seam silty sands at 13.5ft BGS			3AL		95	
15	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	700.30					
	END OF BOREHOLE @ 15.0ft BGS	700.10					

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-163
DATE COMPLETED: October 5, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.61						
0	ASPHALT	714.11	2" BOREHOLE; BACKFILLED WITH BENTONITE CHIPS					
	SP-SANDS (FILL), fine grained, poorly graded, compact, medium brown, moist			1AL		60		16.1
8	SM-SILTY SANDS (FILL), some fine sands, trace clays, compact, brown, moist	707.41		2AL		90		11
10	SP-SANDS, fine grained, poorly graded, dense, brown-gray, moist - 0.3' seam silty sands, wet at 11.0ft BGS - 0.2' seam silty clays at 13.0ft BGS	704.31		3AL		95		11.0
14	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	700.11						
16	END OF BOREHOLE @ 15.0ft BGS	699.61						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-164
DATE COMPLETED: October 5, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.73						
0	ASPHALT (parking lot)	714.23	2" BOREHOLE; BACKFILLED WITH BENTONITE CHIPS					
	SP-SANDS (FILL), fine grained, poorly graded, dense, trace concrete materials, medium brown, moist							
	- 0.7' seam dark brown at 1.2ft BGS			1AL		70		2.4
	- trace asphalt material at 2.0ft BGS							
	- trace silts at 5.0ft BGS							
	- increase in silts at 7.5ft BGS			2AL		90		4.6
	ML-SILTS, trace fine sands, stiff, trace plasticity, gray, competent, moist	706.73						
	SP-SANDS, medium grained, trace fine grained, poorly graded, dense, brown, moist	705.23						
	SM-SILTY SANDS, trace fine sands, compact, brown, wet	703.73		3AL		95		3.1
	SP-SANDS, medium grained, poorly graded, compact, brown, wet	701.73						
	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray, moist	699.73		4AL		95		2.0
20	END OF BOREHOLE @ 20.0ft BGS	694.73						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-165
DATE COMPLETED: October 6, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.40						
0	ASPHALT (parking lot)	714.90	2" BOREHOLE					
2	SP-SANDS (FILL), fine grained, poorly graded, loose, trace intermittent oxidation staining, medium brown, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		75		2.2
4	- trace fine gravels at 4.0ft BGS							
6								
8	SM-SILTY SANDS, some fine sands, trace clays, compact, gray, moist	708.40		2AL		80		3.3
10	END OF BOREHOLE @ 10.0ft BGS	705.40						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-166
DATE COMPLETED: October 6, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	715.02					
0	ASPHALT	714.52	2" BOREHOLE; BACKFILLED WITH BENTONITE CHIPS				
0	SP-SANDS (FILL), fine grained, poorly graded, medium brown, dense, moist			1AL		70	
8	SM/SC-SILTY SANDS, with sandy clays, some medium sands, compact, trace plasticity, brown, moist	707.02		2AL		85	
10	SP-SANDS, fine grained, trace medium sands, poorly graded, trace oxidation banding, brown, moist	705.12					
12	- wet at 12.0ft BGS			3AL		60	
15	END OF BOREHOLE @ 15.0ft BGS	700.02					

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-167
DATE COMPLETED: October 6, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.08						
0	ASPHALT (parking lot)	714.58	2" BOREHOLE					
2	SW-SANDS (FILL), some fine gravels, some concrete material, fine to medium grained, well graded, loose, brown, moist			1AL		50		39.2
4	- rubber material, trace refuse at 1.0ft BGS - becoming black at 3.0ft BGS - strong odor, black at 4.0ft BGS		BACKFILLED WITH BENTONITE CHIPS					
6	- trace debris, fibers, trace shavings at 4.3ft BGS	710.08						
8	SP-SANDS (FILL), fine grained, poorly graded, trace oxidation staining, dense, brown, moist			2AL		70		16.1
10								
12	- wet at 12.0ft BGS			3AL		85		9.0
14	- 0.5' silty sand seam at 13.1ft BGS - 0.4' silty sand seam at 14.0ft BGS							
16	END OF BOREHOLE @ 15.0ft BGS	700.08						
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-168
DATE COMPLETED: October 6, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.97						
0	ASPHALT	714.47	2" BOREHOLE					
	SW/GW-SANDY GRAVELS (FILL), with debris, cardboard material, solidified sludges, purple-gray staining, loose, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		60		92.1
4	SP-SANDS (FILL), fine grained, poorly graded, trace silts, oxidation banding, dense, brown, moist	710.47						
	- olive-gray at 5.0ft BGS							
	- oxidation banding at 7.0ft BGS			2AL		90		13.7
12	- moist to wet at 12.5ft BGS			3AL		90		4.7
	SP/SM-SILTY SANDS, some fine sands, poorly graded, dense, brown, wet	701.97						
14	END OF BOREHOLE @ 15.0ft BGS	699.97						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-169
DATE COMPLETED: October 6, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.04						
0	ASPHALT	714.54	2" BOREHOLE					
	SP-SANDS (FILL), fine grained, trace silts, poorly graded, loose, brown, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		70		2.2
8	SM-SILTY SANDS, some fine sands, poorly graded, trace clays, brown, moist	707.74		2AL		90		4.6
10	END OF BOREHOLE @ 10.0ft BGS	705.04						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 34' north of fence and 190' east of gridline A+00 (see Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 11, 1996	
BORING NO.: SB–18–17	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 3' BGS
DRILL TYPE: Hand Auger	COMMENTS:
WEATHER: Overcast, 35°, Wind – NE 10–15 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0"	6"	Pb	0'–2' Clayey sand/sandy clay, some roots and rock fragments, dusky yellowish brown.
2		6"	2'	Pb	2'–3' Clayey sand, moderate–dark yellowish orange, some rock and shell fragments.
3		2'	3'	Pb	3'–4' Organic clay, olive gray.
4					End of boring = 4' BGS.
5					
6					
7					

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\03370266.wk3

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-170
DATE COMPLETED: October 6, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.08						
0	ASPHALT	714.58	2" BOREHOLE; BACKFILLED WITH BENTONITE CHIPS					
	SP-SANDS (FILL), fine grained, poorly graded, loose, brown, moist			1AL		70		0.0
8	SM-SILTY SANDS (FILL), some fine sands, trace medium sands, compact, trace clays, trace plasticity, brown, moist	707.58		2AL		80		0.0
12	SP-SANDS, fine grained, poorly graded, trace medium sands, brown, wet - wet at 12.5ft BGS	704.08		3AL		85		0.0
15	END OF BOREHOLE @ 15.0ft BGS	700.08						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-171
DATE COMPLETED: October 6, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.96						
0	ASPHALT	714.46	2" BOREHOLE					
	SP-SANDS (FILL), fine grained, poorly graded, loose, brown, moist - trace asphalt material at 1.0ft BGS		BACKFILLED WITH BENTONITE CHIPS	1AL		60		0.0
10	SM-SILTY SANDS (FILL), trace silty clays, compact, trace plasticity, brown, moist	705.46		2AL		80		0.0
14	SP-SANDS, fine grained, poorly graded, dense, intermittent oxidation staining, brown, moist	701.46		3AL		90		1.1
	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, gray, moist	699.96		4AL		95		2.2
20	END OF BOREHOLE @ 20.0ft BGS	694.96						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-172
DATE COMPLETED: October 6, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.18						
0	ASPHALT	714.68	2" BOREHOLE					
2	SW/GW-GRAVELLY SANDS (FILL), some concrete material, glass, metal shavings, landfill material, black solids, strong odors, black, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		65		--
4	- trace debris, glass, paper products at 2.0ft BGS							
	- decrease in debris at 3.0ft BGS	710.68						
6	SP-SANDS, fine grained, poorly graded, dense, brown, moist							
8				2AL		85		--
	- trace silts at 9.2ft BGS							
10	END OF BOREHOLE @ 10.0ft BGS	705.18						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-173
DATE COMPLETED: October 6, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.99						
0	ASPHALT	714.49	2" BOREHOLE					
2	SP-SANDS (FILL), fine grained, poorly graded, loose, medium brown, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		60		1.1
4	- trace medium sands at 4.0ft BGS							
6								
8	- 1.0' seam silty sands, trace silty clays, olive-gray, trace black sands, fine grained at 8.0ft BGS			2AL		75		2.2
10	- oxidation banding at 9.5ft BGS	704.99						
	END OF BOREHOLE @ 10.0ft BGS							
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-174
DATE COMPLETED: October 6, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.62						
0	ASPHALT	714.12	2" BOREHOLE					
2	SW/GW-GRAVELLY SANDS (FILL), some debris, fine to medium sands, well graded, paint sludge, cardboard products, metal shavings, black sludge, trace purple staining, loose, black, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		60		194.0
4								
6	SP-SANDS, fine grained, trace medium sands, poorly graded, dense, dark brown, moist	709.62						
8	- 0.6' seam silty sands at 8.3ft BGS			2AL		80		60.0
10	END OF BOREHOLE @ 10.0ft BGS	704.62						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-175
DATE COMPLETED: October 6, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.06						
0	ASPHALT	714.56	2" BOREHOLE					
2	SW/GW-GRAVELLY SANDS (FILL), some debris, fine to medium sands, well graded, paint sludge, cardboard products, metal shavings, black sludge, trace purple staining, loose, black, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		60		42.1
4								
6	SP-SANDS, fine grained, trace medium sands, poorly graded, dense, dark brown, moist	710.06						
8	- 0.6' seam silty sands at 8.3ft BGS			2AL		80		40
10	END OF BOREHOLE @ 10.0ft BGS	705.06						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-176
DATE COMPLETED: October 6, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.12						
0	ASPHALT	714.62	2" BOREHOLE					
	SP-SANDS (FILL), fine grained, poorly graded, compact, medium brown, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		70		--
8	- 0.7' silty sand seam, brown, very moist at 8.5ft BGS			2AL		90		--
10	END OF BOREHOLE @ 10.0ft BGS	705.12						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-177
DATE COMPLETED: October 6, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.07						
0	ASPHALT	714.57	2" BOREHOLE					
2	SW-SANDS (FILL-debris), fine to coarse sands, some concrete material, black sludge, glass, paper products, well graded, strong odor, black-gray, moist	712.77	BACKFILLED WITH BENTONITE CHIPS	1AL		60		--
4	SP-SANDS (FILL), fine grained, poorly graded, dense, medium brown, moist							
6								
8	- 0.7' silty sand seam at 8.2ft BGS			2AL		75		--
10	END OF BOREHOLE @ 10.0ft BGS	705.07						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-178
DATE COMPLETED: October 6, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.08						
0	ASPHALT	714.58	2" BOREHOLE					
	SP-SANDS (FILL), fine grained, poorly graded, loose, medium brown, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		75		0.0
8	- 0.7' silty sand seam at 8.0ft BGS			2AL		95		0.0
10	END OF BOREHOLE @ 10.0ft BGS	705.08						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-179
DATE COMPLETED: October 6, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	713.83						
0	ASPHALT	713.33	2" BOREHOLE					
2	SP-SANDS (FILL), fine grained, poorly graded, trace medium sands, compact, medium brown, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		70		0.0
4								
6								
8	- coarse sands at 7.1ft BGS - 0.7' silty sand seam at 9.0ft BGS			2AL		90		1.1
10	- wet at 10.5ft BGS							
12	- oxidation staining at 12.0ft BGS			3AL		95		0.0
14	CL-SILTY CLAYS trace fine sands, stiff, competent, low plasticity, gray, moist	700.83						
16	END OF BOREHOLE @ 15.0ft BGS	698.83						
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 20' north of fence and 6.5' west of SB–17 (see Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 12, 1996	
BORING NO.: SB–18–18	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 9' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS: 9:00 Field equipment blank 1TH prepared off the inside of the sampling tube (8'–12' interval).
WEATHER: Overcast, 36°, Wind – NE 5–10 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0"	6"	Pb	0–1' Gravelly sand, dark yellowish brown.
2		6"	2'	Pb	1'–5' Clayey sand, pale yellowish brown.
3		2'	4'	Pb, PAH Dup Pb	
4		4'	6'	Pb	5'–6' Sandy clay, pale yellowish brown.
5		6'	8'	Pb	6'–7' Sand, little silt and rock fragments, moderate brown. 7'–8' Asphalt and rock fragments.
6		8'	9'	Pb	8'–9' Silty sand, pale yellowish orange. 9'–11' Sandy silt, pale yellowish brown.
					11'–12' Silty sand, pale yellowish orange. End of boring = 12' BGS

REMARKS Duplicate 4TH (2'–4') – Pb

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\03470266.wk3

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-180
DATE COMPLETED: October 6, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.31						
0	ASPHALT	713.81	2" BOREHOLE					
	SP-SANDS (FILL), fine grained, poorly graded, trace medium sands, compact, medium brown, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		70		0.0
2								
4								
6								
8				2AL		90		0.0
10								
12				3AL		95		0.0
	CL-SILTY CLAYS trace fine sands, stiff, competent, low plasticity, gray, moist	701.11						
14								
	END OF BOREHOLE @ 15.0ft BGS	699.31						
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-181
DATE COMPLETED: October 7, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.90						
0	ASPHALT	714.40	2" BOREHOLE					
	SP-SANDS (FILL), fine grained, poorly graded, trace silts, loose, light brown, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		60		0.0
6	- trace fine gravels at 7.0ft BGS			2AL		85		0.0
8	SM-SILTY SANDS, some fine sands, trace clays, compact, brown, moist	706.90						
10	END OF BOREHOLE @ 10.0ft BGS	704.90						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-182
DATE COMPLETED: October 7, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.69						
0	ASPHALT	714.19	2" BOREHOLE					
2	SW/GW-SANDS AND GRAVELS, fine to coarse grained, trace concrete material, well graded, compact, black-brown, moist	712.39	BACKFILLED WITH BENTONITE CHIPS	1AL		70		0.0
4	SP-SANDS, fine grained, poorly graded, compact, brown, moist							
6								
8	- 0.6' seam silty sands, trace clays, strong odor at 7.5ft BGS			2AL		90		36.7
10	SP/SM-SILTY SANDS, with fine grained sands, poorly graded, compact, brown, moist - decrease in silts at 10.5ft BGS	705.69						
12	SP-SANDS, fine grained, poorly graded, dense, brown, wet - wet at 12.5ft BGS	703.69		3AL		95		18.0
14								
16	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray, moist END OF BOREHOLE @ 15.0ft BGS	699.79 699.69						
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-183
DATE COMPLETED: October 7, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.67						
0	ASPHALT	714.17	2" BOREHOLE					
2	SW/GW-SANDS AND GRAVELS, fine to coarse grained, trace concrete and asphalt material, well graded, dark brown, moist	712.67						
	SP-SANDS (FILL), fine grained, poorly graded, dense, medium brown		BACKFILLED WITH BENTONITE CHIPS	1AL		70		3.3
4								
6								
8	- 0.5' silty sand seam at 8.0ft BGS			2AL		90		3.1
10	END OF BOREHOLE @ 10.0ft BGS	704.67						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-184
DATE COMPLETED:
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	ASPHALT	0.50	2" BOREHOLE					
	SP-SANDS (FILL), fine grained, poorly graded, compact, brown, moist							
2	- trace coarse sands at 2.4ft BGS		BACKFILLED WITH BENTONITE CHIPS	1AL		70		--
4								
6	- trace fine gravels at 6.1ft BGS							
8				2AL		95		--
	- 0.4' silty sand seam at 8.3ft BGS							
	- oxidation staining at 9.0ft BGS							
10	- increase in moisture at 9.9ft BGS	10.00						
	END OF BOREHOLE @ 10.0ft BGS							
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-185
DATE COMPLETED: October 7, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.18						
0	ASPHALT (parking lot)	714.68	2" BOREHOLE					
2	SW/GW-SANDS AND GRAVELS (FILL), fine to coarse grained, well graded, trace debris, glass, paper products, brown-black, moist	713.18	BACKFILLED WITH BENTONITE CHIPS	1AL		70		10.0
4	SP-SANDS (FILL), fine grained, poorly graded, loose, medium brown, moist							
6								
8				2AL		90		78.0
10	END OF BOREHOLE @ 10.0ft BGS	705.18						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-186
DATE COMPLETED: October 7, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.09						
0	ASPHALT (parking lot)	714.59	2" BOREHOLE					
	SW-SANDS (FILL), fine to medium grained, some vegetation, loose, dark brown, moist							
2	SP-SANDS (FILL), fine grained, poorly graded, loose, medium brown, moist	713.09	BACKFILLED WITH BENTONITE CHIPS	1AL		60		0.0
4								
6								
	- oxidation staining at 7.0ft BGS			2AL		90		0.0
8								
	- some silts at 9.2ft BGS							
10	END OF BOREHOLE @ 10.0ft BGS	705.09						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-187
DATE COMPLETED: October 7, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.79						
0	SW-SANDS (topsoil), fine to medium grained, well graded, trace rootlets	714.39	2" BOREHOLE					
2	SW-SANDS, with gravels, fine to medium grained, poorly graded - 2' debris, paper products, black sludge, glass, strong odor at 1.0ft BGS		BACKFILLED WITH BENTONITE CHIPS	1AL		70		69.2
4	SP-SANDS (FILL), fine grained, poorly graded, loose, medium brown, moist	710.79						
6	- 0.3' dark brown seam at 5.0ft BGS							
8	- 0.5' silty sand seam at 7.2ft BGS - grading to silty sands at 8.0ft BGS - oxidation staining at 9.0ft BGS			2AL		90		7.1
10	END OF BOREHOLE @ 10.0ft BGS	704.79						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-188
DATE COMPLETED: October 7, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.31						
0	SW-SANDS (topsoil), fine to medium grained, well graded, trace rootlets, dark brown, moist	713.81	2" BOREHOLE	1AL		70		0.0
2	SP-SANDS (FILL), fine grained, poorly graded, loose, light brown, moist		BACKFILLED WITH BENTONITE CHIPS					
4								
	END OF BOREHOLE @ 5.0ft BGS	709.31						
6								
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-189
DATE COMPLETED: October 7, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.53						
2	SW-SANDS (FILL), fine to medium grained, well graded, trace rootlets, dark brown - trace brick material at 2.0ft BGS		2" BOREHOLE	1AL		60		0.0
4	SW-SANDS, fine to medium grained, trace fine gravels, well graded	711.53	BACKFILLED WITH BENTONITE CHIPS					
6	- 0.6' debris seam, paper products, sludge, glass, black, strong odor at 4.0ft BGS	709.83						
8	SP-SANDS, fine grained, poorly graded, loose, light brown			2AL		80		0.0
10	END OF BOREHOLE @ 10.0ft BGS	704.53						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Offset east of proposed location due to utilities conflict (underground) pipes) 18' west of SB–18–13 Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 9, 1996	
BORING NO.: SB–18–19	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 11.5' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS: Duplicate (2.2'–4.2')–(Pb)
WEATHER: Sunny, 30°, Wind – West 5–10 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		2"	8"	Pb, PAH, IPAH	Same lithology as SB–18–12 except 2'–4' clayey sand, dark yellowish orange to silty sand, dark yellowish orange.
2		8"	2.2'	Pb, PAH, IPAH	
3		2.2'	4.2'	Dup Pb	4'–8.5' Silty sand, dark yellowish orange.
4		4.2'	6.2'	Pb, PAH, IPAH	
5		6.2'	8.2'	Pb, PAH, IPAH	
6		8.2'	10.2'	Pb, PAH, IPAH	8.5'–10' Sandy silt, dark yellowish orange.
7		10.2'	11.5'	Pb, PAH, IPAH	10'–12' Silty sand – silty sand moderate yellowish brown, moist–wet.
					End of boring = 12' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\03570266.wk3

Boring location was offset approx. 36' east due to proposed location lying in an area of underground pipelines.

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-190
DATE COMPLETED: October 7, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.30						
0	SW-SANDS (FILL), fine to medium sands, well graded, trace rootlets, dark brown, moist		2" BOREHOLE					
2				1AL		70		0.0
4	SP-SANDS (FILL), fine grained, poorly graded, loose, medium brown, moist	711.30	BACKFILLED WITH BENTONITE CHIPS					
6	- oxidation staining at 5.0ft BGS			2AL		90		0.0
8	- trace silts at 7.1ft BGS - some silts at 7.6ft BGS END OF BOREHOLE @ 8.0ft BGS	706.30						
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-191
DATE COMPLETED: October 7, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.31						
0	SP-SANDS (FILL), fine grained, trace silts, poorly graded, loose, medium brown - rootlets at 1.0ft BGS		2" BOREHOLE					
2				1AL		60		0.0
4	- becoming grayish-black, strong odor at 4.5ft BGS		BACKFILLED WITH BENTONITE CHIPS					
6								
8				2AL		85		1.2
10	END OF BOREHOLE @ 10.0ft BGS	704.31						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-192
DATE COMPLETED: October 7, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.55						
0	SW-SANDS (topsoil), fine to medium grained, trace vegetation, well graded, dark brown, moist	713.55	2" BOREHOLE					
2	SP-SANDS (FILL), fine grained, poorly graded, loose, medium brown, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		80		2.4
4	- trace coarse sands at 3.2ft BGS							
6	- some silts at 6.2ft BGS							
		707.55						
8	SM-SILTY SANDS, trace clays, compact, trace plasticity, dark brown, moist	706.55		2AL		95		6.1
10	SP-SANDS, fine grained, trace medium sands, poorly graded, intermittent oxidation staining, brown, moist - very moist at 9.9ft BGS	704.55						
12	END OF BOREHOLE @ 10.0ft BGS							
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-193
DATE COMPLETED: October 7, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	713.53						
0	SW-SANDS (topsoil), fine to medium grained, some rootlets, loose, dark brown, moist	712.53	2" BOREHOLE					
2	SP-SANDS (FILL), fine grained, poorly graded, loose, light brown, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		60		0.0
4								
6								
8		705.53		2AL		95		0.0
8	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, brown, moist							
10		703.53						
10	END OF BOREHOLE @ 10.0ft BGS							
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-194
DATE COMPLETED: October 7, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	713.12						
0	SW-SANDS (topsoil), fine to medium grained, well graded, dark brown, loose, moist	712.12	2" BOREHOLE					
2	SP-SANDS (FILL), fine grained, trace silts, poorly graded, very loose, light brown, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		60		0.0
4								
6								
8				2AL		50		0.0
10								
12				3AL		90		0.0
14								
15	END OF BOREHOLE @ 15.0ft BGS	698.12						
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser Frazer Dump Area PAOC 18 Approx. 33' north of fence and 20' east of gridline A+00 (see Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 10, 1996	
BORING NO.: SB–18–2	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 6.25' BGS
DRILL TYPE: Hand Auger	COMMENTS: Duplicate 1T (4'–6') (Pb Only)
WEATHER: Cloudy, 32°, Wind – West <5 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	LAB/FIELD TEST TYPE	SOIL DESCRIPTION AND BORING LOG
1		0	6"	Pb, PAH, IPAH	0–2' Silty sand/clayey sand, some gravel, concrete debris, iron slag, debris, dark yellowish brown (10YR 4/2)
2		6"	2'	Pb, PAH, IPAH	2'–5' Gravelly sand, some silt, dark yellowish brown concrete debris, paint sludge (hardened) – green and yellow fragments, glass debris, plastic, debris.
3		2'	4'	Pb, PAH, IPAH,	
4		4'	6'	Pb, PAH, IPAH, Dup Pb–Lab	5'–6.25' – Organic silty clay, brownish black (5YR 2/1), hydrocarbon odors.
5					6.25'–7' Sandy clay–silty clay, grayish black (N2) – dark gray (N3), stained/discolored, petroleum sheen, hydrocarbon odors.
6					
7					End of boring = 7' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

*Note: 9:05–9:20 One soil boring was attempted. Refusal @ 2' BLS – concrete encountered. Boring moved approx. 1' east.
8:20–9:15 Spent time securing safety lines and shoveling soil and debris to make a level surface to hand auger and sample.

m:\480\01870266.wk3

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 49' south of fence and 10' east of center of westmost catwalk.
DATE: December 14, 1996	Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
BORING NO.: SB–18–20	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 4' BGS
DRILL TYPE: Hand Auger/Shovel	COMMENTS: 12:35 Duplicate 1S from 6"–2' interval (Pb and 8260 analysis)
WEATHER: Sunny, 40°, Wind – Southwest 5–10 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0	6"	Pb	0–1.5' Clayey sand, dusky brown, some roots, some rock fragments, little paint (hardened) fragments, metal debris.**
2		6"	2'	Pb, PAH, 8260*	1.5'–2.5' Paint waste material (some hardened and some pliable wastes blended together) colors include shades of blue, red, and purple. Chemical vapors noted.
3		2'	4'	Pb	2.5'–3' Clayey sand, dusky brown, some glass debris.
					3'–4' Organic sandy clay, black.
					4'–5' Organic sandy clay, black.
					End of boring = 5' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

* – Hold 8260 sample for P.M. approval.

** – Metal debris included a crushed rusting 5–gallon metal container. Container was empty.

m:\480\03670266.wk3

Duplicate soil sample collected from 6"–2' interval for Pb and PAH analysis. Did not submit PAH duplicate to lab. Did submit Pb and 8260 duplicate to lab, labeled Duplicate 1S.

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-200/MW18-06
DATE COMPLETED: June 7, 2005
DRILLING METHOD: DIRECT PUSH/HSA
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	713.27						
0	SM-SILTY SANDS, trace fine gravels, loose, fine grained, poorly graded, trace medium to coarse grained, dark brown, moist		CONCRETE SEAL	1DP				17.9
2	- orange-brown at 1.3ft BGS		BENTONITE CHIPS					
4	- compact, light brown at 4.0ft BGS		2" PVC WELL CASING	2DP				20.1
6	- trace clays, brown and orange-brown, slight increase in silt and moisture content at 6.0ft BGS		8-1/4" BOREHOLE					
8	- no clays, decrease in silt and moisture content at 8.3ft BGS		SAND PACK	3DP				418
10	- light brown at 9.0ft BGS - very moist at 10.0ft BGS - brown-gray, saturated, moderate petroleum-like odor at 10.5ft BGS		2" PVC WELL SCREEN	4DP				1589
12	- dark amber NAPL in soils at 12.0ft BGS - no NAPL at 12.3ft BGS - dark gray at 13.0ft BGS			5DP				3269
14	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist	699.47						
16				6DP				159
18			NATURAL COLLAPSE & BENTONITE CHIPS	7DP				17.1
20	END OF BOREHOLE @ 20.0ft BGS	693.27						
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
707.27 to 697.27ft BGS
6.00 to 16.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
709.27 to 697.27ft BGS
4.00 to 16.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-201
DATE COMPLETED: June 6, 2005
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	713.80						
2	SM-SILTY SANDS, trace fine gravels, loose, fine grained, poorly graded, trace medium to coarse grained, dark brown, moist			1DP				3.5
4	- compact, light brown at 4.0ft BGS			2DP				8.4
6	- medium brown and orange brown, slight increase in silt content and moisture content at 6.0ft BGS		2" BOREHOLE					
8	- trace clays at 7.8ft BGS - brown and rust brown at 8.5ft BGS - orange-brown, decrease in silt content and moisture content at 9.0ft BGS			3DP				65.8
10	- brown, very moist at 10.5ft BGS		BENTONITE CHIPS	4DP				555
12	- saturated slight petroleum-like odor at 11.0ft BGS - brown, gray and rust brown, slight sheen to water, strong petroleum-like odor at 12.0ft BGS			5DP				1558
14	- black staining at 14.0ft BGS - dark gray at 14.3ft BGS							
16	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist	698.80		6DP				39.4
18				7DP				15.7
20	END OF BOREHOLE @ 20.0ft BGS	693.80						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-203
DATE COMPLETED: June 2, 2005
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.15						
0	ASPHALT	714.85	ASPHALT PATCH					
2	SM-SILTY SANDS, trace fine gravels, compact, fine grained, poorly graded, trace medium to coarse grained, dark brown, moist - light brown, trace orange streaking at 0.8ft BGS			1DP				27.5
4				2DP				24.4
6			2" BOREHOLE					
8	- gray to dark gray, slight increase in silt and moisture content, slight petroleum-like odor at 7.8ft BGS			3DP				751
10	- black staining, strong petroleum-like odor, very moist at 8.3ft BGS - with clays, orange-brown, slight petroleum-like odor at 8.8ft BGS		BENTONITE CHIPS	4DP				274
12	- trace clays, decrease in silt content and moisture content at 9.5ft BGS - very moist at 10.8ft BGS			5DP				90.1
14	- saturated at 11.3ft BGS - gray, increase in silt content at 12.0ft BGS							
16				6DP				50.8
18	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist	698.40		7DP				6.4
20	END OF BOREHOLE @ 20.0ft BGS	695.15						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1DP)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-205
DATE COMPLETED: June 6, 2005
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.02						
2	SM-SILTY SANDS, trace fine gravels, loose, fine grained, poorly graded, trace medium to coarse grained, dark brown, moist - compact, fine grained, brown at 0.8ft BGS			1DP				8.9
4			2" BOREHOLE	2DP				8.6
6	- orange-brown at 6.0ft BGS							
8	- light brown at 7.3ft BGS - light brown and orange brown, slight increase in silt and moisture content at 7.8ft BGS			3DP				7.9
10	- light brown, decrease in silt and moisture content at 8.5ft BGS		BENTONITE CHIPS	4DP				6.9
12	- very moist at 11.0ft BGS - brown, rust brown and gray layering, saturated at 11.5ft BGS							
14	- gray at 13.0ft BGS - brown, rust brown and gray layering at 14.5ft BGS			5DP				246
16	- brown-gray at 15.0ft BGS			6DP				27.3
18	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist	697.69		7DP				13.9
20	END OF BOREHOLE @ 20.0ft BGS	695.02						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-207
DATE COMPLETED: June 8, 2005
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.17						
	ASPHALT	713.87	ASPHALT PATCH					
2	SM-SILTY SANDS, trace fine gravels, loose, fine grained, poorly graded, trace medium to coarse grained, dark brown, moist			1DP				74.0
4	- medium brown and orange brown at 0.8ft BGS - compact, fine grained at 3.0ft BGS			2DP				973
6	- green-gray to black, strong petroleum-like odor at 4.3ft BGS - with wood, plastic, brick debris, gray at 4.8ft BGS		2" BOREHOLE					
8	- no debris, brown-gray at 5.3ft BGS - increase in silt and moisture content at 6.0ft BGS			3DP				3005
10	- 2" CL-SANDY CLAY seam, firm, low plasticity, green-gray and brown mottled, moist, slight petroleum-like odor at 8.8ft BGS - brown at 9.1ft BGS		BENTONITE CHIPS	4DP				4485
12	- gray, very moist at 11.0ft BGS - trace clays, brown-gray, saturated at 11.3ft BGS			5DP				3989
14	- 3" CL-SILTY CLAY seam, firm, low plasticity, gray, very moist at 13.5ft BGS							
	- brown-gray, sheen to water in soils at 13.8ft BGS	699.42		6DP				816
16	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist, slight petroleum-like odor							
18				7DP				749
20	END OF BOREHOLE @ 20.0ft BGS	694.17						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-208
DATE COMPLETED: August 11, 2005
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	700.70					
0	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, dark brown, moist - brown & gray at 0.5ft BGS - gray w/ dark gray to black banding at 1.3ft BGS - red paint sludge debris, very moist to saturated, strong paint-like odor at 1.5ft BGS		2-1/4" BOREHOLE BENTONITE CHIPS	1HA 2HA 3HA 4HA			
2		698.70					
2	END OF BOREHOLE @ 2.0ft BGS						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-209
DATE COMPLETED: August 11, 2005
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	699.30					
0	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, dark brown, moist		2-1/4" BOREHOLE	1HA			
	- brown & gray at 0.5ft BGS	697.80		2HA			
2	CI-SILTY CLAYS, trace fine to coarse sands, firm, medium plasticity, gray, moist			3HA			
	- soft to firm, very moist at 2.8ft BGS	695.80	BENTONITE CHIPS	4HA			
4	END OF BOREHOLE @ 3.5ft BGS			5HA			
				6HA			
				7HA			
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 10/5/05

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 11, 1996

BORING NO.: SB-18-21

RECORDED BY: Alan Fass

DRILL TYPE: Simco Earthprobe 200

WEATHER: Overcast, rain (light), 38°, Wind - NE 10-15 mph

LOCATION: Kaiser-Frazer Dump Area PAOC 18
Approx. 24' north of fence and 11' east of center of westmost pipe trestle/catwalk
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 10.5' BGS

COMMENTS:

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0	6"	Pb, PAH/ IPAH	0-1.5' Clayey sand, dusky brown, some roots, rock fragments, metal and glass debris.
2		6"	2'	Pb, PAH/ IPAH	1.5'-4' Clayey sand, dusky brown and some yellow paint-like fragments (hardened).
3		2'	4'	Pb, PAH/ IPAH	4'-5.5' Sandy silt, light yellowish orange.
4		4'	6'	Pb, PAH/ IPAH	5.5'-9.5' Clayey silt, dark yellowish orange - light yellowish orange - dark yellowish orange.
5		6'	8'	Pb, PAH/ IPAH	9.5'-10.5' Sandy clay, brownish-olive gray. 10.5'-11' Organic sandy clay. 11'-12' Organic silty clay, brownish-olive gray.
6		8'	10'	Pb, PAH/ IPAH	
					End of boring = 12' BGS.

REMARKS

SS - Split Spoon

BLS - Below Land Surface

NR - Not Recorded

m:\480\03770266.wk3

Attempted a soil boring initially at approx. 3' south of this boring. Refusal at 6' BGS.
Hold PAH & IPAH soil samples until receive authorization from Barb Sullivan to run.

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-210
DATE COMPLETED: August 11, 2005
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	699.20					
0	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, dark brown, moist		2-1/4" BOREHOLE	1HA			
	- brown & gray at 0.5ft BGS	697.70		2HA			
2	CI-SILTY CLAYS, trace fine to coarse sands, firm, medium plasticity, gray, moist	696.70	BENTONITE CHIPS	3HA			
	SM/CI-SILTY SANDS & SILTY CLAYS MIX-sands are compact, fine grained, gray, saturated; clays are firm, medium plasticity, gray, very moist	696.20		4HA			
4				5HA			
	END OF BOREHOLE @ 3.0ft BGS			6HA			
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-211
DATE COMPLETED: August 11, 2005
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	698.20					
0	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, dark brown, moist	697.20	2-1/4" BOREHOLE	1HA			
2	CI-SILTY CLAYS, trace fine to coarse sands, firm, medium plasticity, gray, moist	695.70	BENTONITE CHIPS	2HA			
4	SM/CI-SILTY SANDS & SILTY CLAYS MIX-sands are compact, fine grained, gray, saturated; clays are firm, medium plasticity, gray, very moist	695.20		3HA			
6	END OF BOREHOLE @ 3.0ft BGS			4HA			
				5HA			
				6HA			

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-212
DATE COMPLETED: August 11, 2005
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	701.40					
0	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, dark brown, moist - brown & gray at 0.5ft BGS - gray with black banding, slight paint-like odor at 1.3ft BGS - red & black paint sludge debris, very moist, strong paint-like odor at 1.3ft BGS		2-1/4" BOREHOLE BENTONITE CHIPS	1HA 2HA 3HA 4HA			
2		699.40					
2	END OF BOREHOLE @ 2.0ft BGS						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-213
DATE COMPLETED: August 11, 2005
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	702.30					
0	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, dark brown, moist	701.80	2-1/4" BOREHOLE BENTONITE CHIPS	1HA			
2	CI-SILTY CLAYS, trace fine to coarse sands, firm, medium plasticity, gray, moist - red & black paint sludge debris, very moist to saturated, strong paint-like odor at 1.5ft BGS - 2" SM-SILTY SANDS seam-compact, fine gravel, poorly graded, brown, & gray, saturated at 1.8ft BGS	700.30		2HA 3HA 4HA			
4	END OF BOREHOLE @ 2.0ft BGS						
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-214
DATE COMPLETED: August 11, 2005
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	703.10					
2	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, dark brown, moist	702.60	2-1/4" BOREHOLE	1HA			
	CI-SILTY CLAYS, trace fine to coarse sands, firm, medium plasticity, gray, moist	701.10		2HA			
	SM/CI-SILTY SANDS & SILTY CLAYS MIX-sands are compact, fine grained, gray, saturated; clays are firm, medium plasticity, grey, very moist	700.60	BENTONITE CHIPS	3HA			
4	SC-CLAYEY SANDS-compact, fine grained, poorly graded, brown, gray & black, saturated	699.60		4HA			
	CI-SILTY CLAYS, trace fine to coarse sands, firm, medium plasticity, gray, moist	699.10		5HA			
6	END OF BOREHOLE @ 4.0ft BGS			6HA			
				7HA			
8				8HA			
10							
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-215
DATE COMPLETED: August 11, 2005
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	699.20					
0	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, dark brown, moist	698.20	2-1/4" BOREHOLE	1HA			
2	CI-SILTY CLAYS, trace fine to coarse sands, firm, medium plasticity, gray, moist		BENTONITE CHIPS	2HA			
	- with red, yellow & black paint sludge debris, very moist, strong paint-like odor at 2.5ft BGS	696.20		3HA			
4	- no paint sludge, debris at 2.8ft BGS			4HA			
	- dark gray to black,moderate paint-like odor at 3.3ft BGS	695.70		5HA			
6	SC/CI-SANDS & CLAYS, loose/soft, fine sands, non to medium plasticity, brown, gray & black, saturated			6HA			
8	END OF BOREHOLE @ 3.5ft BGS			7HA			
10							
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-216
DATE COMPLETED: August 11, 2005
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	698.70					
0	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, dark brown, moist	697.95	2-1/4" BOREHOLE	1HA			
2	CI-SILTY CLAYS, trace fine to coarse sands, firm, medium plasticity, gray, moist - soft, with fine to coarse sands, trace saturated silty sand seams at 2.5ft BGS		BENTONITE CHIPS	2HA 3HA 4HA 5HA 6HA 7HA			
4	END OF BOREHOLE @ 3.5ft BGS	695.20					
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-217
DATE COMPLETED: August 11, 2005
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	699.40					
0	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, dark brown, moist		2-1/4" BOREHOLE	1HA			
2	CI-SILTY CLAYS, trace fine to coarse sands, firm, medium plasticity, gray, moist	697.90		2HA			
	- soft, with fine to coarse sands, trace saturated silty sand seams at 2.5ft BGS	695.90	BENTONITE CHIPS	3HA			
4	END OF BOREHOLE @ 3.5ft BGS			4HA			
				5HA			
6				6HA			
				7HA			
8							
10							
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-218
DATE COMPLETED: August 11, 2005
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	702.00					
0	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, dark brown, moist	701.00	2-1/4" BOREHOLE	1HA			
2	CI-SILTY CLAYS, trace fine to coarse sands, firm, medium plasticity, brown & gray, moist	700.00	BENTONITE CHIPS	2HA			
	- trace saturated silty sand seams at 1.8ft BGS			3HA			
4	SC-CLAYEY SANDS-compact, fine grained, poorly graded, brown, gray & black, saturated	699.50		4HA			
	END OF BOREHOLE @ 2.5ft BGS			5HA			
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-219
DATE COMPLETED: August 11, 2005
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	701.80					
0	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, dark brown, moist	701.05	2-1/4" BOREHOLE	1HA			
2	CI-SILTY CLAYS, trace fine to coarse sands, firm, medium plasticity, brown & gray, moist - trace saturated silty sand seams at 1.8ft BGS	699.55	BENTONITE CHIPS	2HA 3HA 4HA 5HA			
4	SC-CLAYEY SANDS-compact, fine grained, poorly graded, brown, gray & black, saturated	699.30					
6	END OF BOREHOLE @ 2.5ft BGS						
8							
10							
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 10/5/05

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 2' north of SB–18–21 (See Weston Map–Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 13, 1996	
BORING NO.: SB–18–21A	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 10.5' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS: Duplicate 1F (4'–6') – (Pb) Duplicate 6F (4'–6') – (PAH)
WEATHER: Cloudy, 38°, Wind – NW 5–10 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0	6"	Pb, IPAH	0–1' Silty sand, moderate yellowish brown with rock fragments, roots, and paint fragments.
2		6"	2'	Pb, IPAH	1'–5' Paint fragments (blue, dark red, and yellow) dispersed with concrete fragments, and brown sand.
3		2'	4'	Pb, IPAH	
4		4'	6'	Pb, PAH IPAH, Dup Pb, PAH	5'–5.75' Layer of paint waste sludge (dark red). 5.75'–6.5' Coarse sand with rock fragments, rustic discoloration.
5		6'	8'	Pb, IPAH	6.5'–7' Silty sand, some rock fragments, dusky brown. 7'–8' Silty sand, moderate yellowish orange.
6		8'	10.5'	Pb, IPAH	8'–8.5' Silty clay/clayey silt, moderate yellowish brown – light yellowish orange.
					8.5'–10' Clayey sand, some rock fragments, olive brown. 10'–12' Clayey sand, little shell fragments, olive brown.
					End of boring = 12 BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\03870266.wk3

Duplicate soil sample collected from 4'–6' interval for Pb and PAH analysis, based on paint sludge.

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 13' north and 7' east of SB–18–23 (See Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 17, 1996	
BORING NO.: SB–18–22	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 6' BGS
DRILL TYPE: Hand Auger	COMMENTS:
WEATHER: Light Snow, 32°, Wind – SW 0–5 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0	6"	Pb	0'–3.5' Clayey/gravelly sand, dusky yellowish brown (fill) paint waste fragments at 2'–3' BGS.
2		6"	2'	Pb	
3		2'	4'	Pb, PAH Dup Pb, PAH	3.5'–5' Gravelly sand, coarse grained (fill for pipeline trench/ catwalk pipes situated approx. 2' west of boring).
4		4'	6'	Pb	5'–5.5' Organic silty clay, dusky brown. 5.5'–7' Silty sand, some shell fragments, olive gray.
					End of boring = 7'BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\03970266.wk3

Duplicate soil sample collected from 2'–4' BGS for Pb and PAH analysis labeled Duplicate 1T2 (soil from 2'–4' BGS for Pb and PAH analyses).

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 11, 1996

BORING NO.: SB-18-23

RECORDED BY: Alan Fass

DRILL TYPE: Simco Earthprobe 200

WEATHER: Overcast, Drizzle, 39°, Wind - NE 5-10 mph

LOCATION: Kaiser-Frazer Dump Area PAOC 18
Approx. 40' east and 20' south of SB-18-21 (See Weston Map - Figure 1)
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 12' BGS

COMMENTS:

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0	6"	Pb, PAH IPAH	0-0.5' Clayey sand, dusky brown. 0.5'-2' Silty clay, pale brown.
2		6"	2'	Pb, PAH IPAH	2'-2.5' Paint waste (hardened), brown, gray and dark blue.
3		2'	4'	Pb, PAH IPAH	2.5'-3' Clayey sand, some rock fragments, dusky brown. 3'-3.5' Clayey sand, some rock fragments, dark yellowish orange.
4		4'	6'	Pb, PAH IPAH	3.5'-4' Sand, some silt and rock fragments, dark yellowish orange. 4'-5.5' Sandy silt, light yellowish orange.
5		6'	8'	Pb, PAH IPAH	5.5'-9.5' Clayey silt, dark yellowish orange - light yellowish orange - dark yellowish orange.
6		8'	10'	No Sample Recovery	9.5'-10.5' Sandy clay, brownish-olive gray. 10.5'-11' Organic sandy clay.
7		10'	12'	Pb, PAH IPAH	11'-12' Organic silty clay, brownish-olive gray.
					End of boring = 14' BGS

REMARKS

SS - Split Spoon

BLS - Below Land Surface

NR - Not Recorded

m:\480\04070266.wk3

Void at 8'-9' BGS, concrete and rock debris was found in the 8'-10' sample tube.

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 18, 1996

BORING NO.: SB–18–24

RECORDED BY: Alan Fass

DRILL TYPE: Simco Earthprobe 200

WEATHER: Sunny, 27°, Wind – West 10–15 mph

LOCATION: Kaiser–Frazer Dump Area PAOC 18
13' east and 19' south of
SB–18–23 (See Weston Map – Figure 1)
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 11' BGS

COMMENTS:

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
					0–2" Asphaltic concrete.
1		2	8"	Pb	2"–1' Sandy gravel, dusky brown – very pale orange.
					1'–1.5' Clayey sand, moderate yellowish brown.
2		8"	2.2'	Pb, PAH	1.5'–2' Sandy clay, olive gray.
					2'–3' Clayey/silty sand, light yellowish orange.
3		2.2'	4.2'	Pb	3'–8' Clayey/silty sand, some rock fragments, dark – light
					yellowish orange.
4		4.2'	6.2'	Pb	
					8'–9' Silty sand–sandy clay, apparent petroleum discolored soils,
5		6.2'	8.2'	Pb	light olive gray; metal and glass debris, apparent paint waste
					fragments, petroleum (PAH and solvent–like odors).
6		8.2'	10.2'	Pb	9'–10' Sandy clay–clayey sand, dark yellowish orange–
					olive gray, some paint waste fragments, fabric cloth.
7		10.2'	11.5'	Pb	10'–11' Silty clay, olive gray.
					11'–12' Silty/clayey sand, olive gray.
					End of boring = 12' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\04170266.wk3

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 18, 1996

BORING NO.: SB–18–25

RECORDED BY: Alan Fass

DRILL TYPE: Simco Earthprobe 200

WEATHER: Sunny, 26°, Wind – West 15–20 mph

LOCATION: Kaiser–Frazer Dump Area PAOC 18
Approx. 40' west of
SB–18–23 (See Weston Map – Figure 1)
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 10.5' BGS

COMMENTS:

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0	6"	Pb	0–0.5' Clayey sand, dusky brown. 0.5'–2' Silty clay, pale brown.
2		6"	2'	Pb	2'–2.5' Paint waste (hardened), brown, gray and dark blue.
3		2'	4'	Pb, PAH	2.5'–3' Clayey sand, some rock fragments, dusky brown. 3'–3.5' Clayey sand, some rock fragments, dark yellowish orange.
4		4'	6'	Pb	3.5'–4' Sand, some silt and rock fragments, dark yellowish orange. 4'–5.5' Sandy silt, light yellowish orange.
5		6'	8'	Pb	5.5'–9.5' Clayey silt, dark yellowish orange – light yellowish orange – dark yellowish orange.
6		8'	10.5'	Pb	9.5'–10.5' Sandy clay, brownish–olive gray. 10.5'–11' Organic sandy clay.
					11'–12' Organic silty clay, brownish–olive gray.
					End of boring = 12' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\04270266.wk3

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-250
DATE COMPLETED: February 5, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268408.9
EASTING: 13344573.48

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.26						
2	SM-SILTY SANDS, with gravels, compact, fine to coarse grained, poorly graded, dark brown to gray, moist			1DP		100		8.3
4		711.01						
6	SM-SILTY SANDS, compact, fine grained, poorly graded, light brown to orange brown, moist							
8	- orange-brown at 8.0ft BGS			2DP		66		77.9
10	- light brown & gray banding, slight odor at 9.3ft BGS		2-1/2" BOREHOLE					
12	- with clays, very moist at 11.5ft BGS	703.01		3DP		85		1212
	CL-SILTY CLAYS, firm, low plasticity, medium brown, moist	702.26						
14	SP-SANDS, trace to with silts, compact, fine grained, poorly graded, dark gray to black-stained, saturated, visible sheen on soils & water, strong petroleum like odor		BENTONITE CHIPS					
16	- brown at 16.0ft BGS							
	- amber liquid in soils/water at 17.4ft BGS	697.86		4DP		85		9155
18	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, brown and gray, moist, petroleum like odor							
20	END OF BOREHOLE @ 20.0ft BGS	695.26						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-252
DATE COMPLETED: February 5, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268411.02
EASTING: 13344582.16

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.06					
2	SM-SILTY SANDS, with gravels, compact, fine to coarse grained, poorly graded, dark brown to gray, moist		1DP		80		12.5
4		711.26					
6	SM-SILTY SANDS, compact, fine grained, poorly graded, light brown to orange brown, moist						
8	- orange-brown at 7.3ft BGS		2DP		80		68.2
10	- brown & orange-brown at 8.5ft BGS						
12		702.81	3DP		75		105
14	SM/ML-SANDS & SILTS, compact, fine sands, non-plastic, brown & orange brown, very moist to saturated	702.06					
16	CL-SILTY CLAYS, firm, low plasticity, medium brown, moist	701.56					
18	SP-SANDS, trace to with silts, compact, fine grained, poorly graded, brown to medium brown, saturated, visible sheen on soils & water, strong petroleum like odor		4DP		80		10,000+
20	- dark gray to black, sheen to soils/water, strong petroleum like odor at 14.0ft BGS	696.86					
22	- medium brown at 17.3ft BGS						
24	- amber liquid in soils/water at 18.0ft BGS	695.06					
26	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, brown and gray, moist, petroleum like odor,						
28	END OF BOREHOLE @ 20.0ft BGS						
30							
32							
34							

BOREHOLE INSTALLATION:
- 2-1/2" BOREHOLE
- BENTONITE CHIPS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-253
DATE COMPLETED: February 5, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268416.02
EASTING: 13344579.29

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.43						
0	SM/SC-SANDS with silts & clays, compact, fine to coarse grained, poorly graded, medium to dark brown, moist, non-plastic							
2				1DP		90		10.1
4		710.43						
4	SM-SILTY SANDS, compact, fine grained, poorly graded, light brown, moist							
6								
6	- orange-brown at 7.0ft BGS							
8				2DP		60		99.8
8		705.93						
8	SM/ML-SANDS & SILTS, compact, fine sands, non-plastic, light gray & orange-brown mottled, very moist	705.43						
10			2-1/2" BOREHOLE					
10	SM-SILTY SANDS, compact, fine grained, poorly graded, orange-brown & gray, moist							
12	- with silty clay nodules at 11.0ft BGS	702.63						
12	CL-SILTY CLAYS, firm, low plasticity, medium brown, moist	702.13		3DP		80		+9999
14	- medium-brown at 12.5ft BGS							
14	SP-SANDS, trace to with silts, compact, fine grained, poorly graded, medium gray to black-stained, saturated, visible sheen on soils & water, strong petroleum like odor		BENTONITE CHIPS					
16	- black at 13.0ft BGS							
16	- gray at 13.2ft BGS			4DP		85		+9999
18	- brown/gray at 16.0ft BGS	696.63						
18	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, brown and gray, moist, petroleum like odor	694.43						
20	END OF BOREHOLE @ 20.0ft BGS							
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-254
DATE COMPLETED: February 5, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268416.88
EASTING: 13344573.89

GROUND SURFACE 714.37

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	SM/SC-SANDS with silts & clays, compact, fine to coarse grained, poorly graded, medium to dark brown, moist, non-plastic	
4	SM-SILTY SANDS, compact, fine grained, poorly graded, light brown to orange-brown, moist	710.12
8	- orange-brown & light brown banded at 8.0ft BGS	
12	- very moist to saturated at 11.5ft BGS	
	CL-SILTY CLAYS, firm, low plasticity, medium brown, moist	701.97 701.77
14	SP-SANDS, trace to with silts, compact, fine grained, poorly graded, brown to orange-brown, saturated, visible sheen on soils & water, strong petroleum like odor	
16	- dark gray to black-stained at 13.0ft BGS - brown gray at 14.5ft BGS	
	- amber liquid in soils at 16.9ft BGS	697.27
18	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, brown and gray, moist, petroleum like odor	
20	END OF BOREHOLE @ 20.0ft BGS	694.37

BOREHOLE INSTALLATION: 2-1/2" BOREHOLE; BENTONITE CHIPS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		90		55.7
2DP		60		81.6
3DP		80		7.63
4DP		85		+9999

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-255
DATE COMPLETED: February 5, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268415.38
EASTING: 13344570.23

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.68						
0	SM/SC-SANDS with silts & clays, compact, fine to coarse grained, poorly graded, medium to dark brown, moist, non-plastic			1DP		85		38.4
4	SM-SILTY SANDS, compact, fine grained, poorly graded, orange brown, moist	710.68						
6	- brown and orange-brown at 6.0ft BGS			2DP		80		49.2
8	- brown and gray banded at 8.0ft BGS							
10			2-1/2" BOREHOLE					
12	- very moist at 11.5ft BGS			3DP		75		733
12	SP-SANDS, trace to with silts, compact, fine grained, poorly graded, brown and orange-brown, saturated, visible sheen on soils & water, strong petroleum like odor	702.68						
14	- dark gray to black-stained at 13.0ft BGS		BENTONITE CHIPS					
14	- gray at 14.5ft BGS							
16								
16	- amber liquid in soils/water at 17.1ft BGS	697.58		4DP		80		+9999
18	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, brown and gray, moist, petroleum like odor							
20	END OF BOREHOLE @ 20.0ft BGS	694.68						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-256
DATE COMPLETED: February 6, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268403.89
EASTING: 13344580.34

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.26						
2	SM-SILTY SANDS, with gravels, compact, fine to coarse grained, poorly graded, dark brown to gray, moist			1DP		95		37.1
4		711.26						
6	SM-SILTY SANDS, compact, fine grained, poorly graded, light brown to orange-brown, moist							
8				2DP		66		56.7
	- gray and brown banded at 8.5ft BGS							
10	- brown and orange-brown at 9.5ft BGS		2-1/2" BOREHOLE					
12	- very moist at 12.5ft BGS	702.56		3DP		66		+9999
	red brick debris with sands, saturated	702.36						
14	CL-SILTY CLAYS, firm, low plasticity, medium brown, moist	702.16	BENTONITE CHIPS					
16	SP-SANDS, trace to with silts, compact, fine grained, poorly graded, brown, saturated, visible sheen on soils & water, strong petroleum like odor							
18	- dark gray to black stained, heavy sheen on soils/water at 13.5ft BGS			4DP		80		+9999
	- brown-gray at 17.5ft BGS	696.16						
20	- amber liquidt in soils/water at 18.6ft BGS	695.26						
	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, brown and gray, moist, petroleum like odor							
22	END OF BOREHOLE @ 20.0ft BGS							
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-257
DATE COMPLETED: February 6, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268400.11
EASTING: 13344582.17

GROUND SURFACE 715.28

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	SM-SILTY SANDS, with gravels, compact, fine to coarse grained, poorly graded, dark brown to gray, moist	
4	SM-SILTY SANDS, compact, fine grained, poorly graded, light brown to orange-brown, moist	711.78
8	- increase in silt content at 8.8ft BGS - decrease in silt content at 9.3ft BGS	
12	ML-SANDY SILTS, compact, fine sands, non-plastic, orange-brown and brown, very moist	703.58 703.18 702.68
14	CL-SILTY CLAYS, firm, low plasticity, medium brown, moist	
16	SP-SANDS, trace with silts, compact, fine grained, poorly graded, brown and orange/brown, saturated, visible sheen on soils & water, strong petroleum like odor	
18	- dark gray staining, strong petroleum-like odor at 13.0ft BGS - dark gray to black-stained at 14.5ft BGS - brown/gray at 17.4ft BGS	697.38
20	- amber liquid in soils at 17.9ft BGS	695.28
22	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, brown and gray, moist, petroleum like odor	
	END OF BOREHOLE @ 20.0ft BGS	

BOREHOLE INSTALLATION

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		85		18.6
2DP		66		29.4
3DP		80		+9999
4DP		90		+9999

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-258
DATE COMPLETED: February 6, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268421.69 EASTING: 13344569.11 GROUND SURFACE	713.73						
0	SM/SC-SANDS with silts & clays, compact, fine to coarse grained, poorly graded, medium to dark brown, moist, non-plastic							
2				1DP		90		14.2
4		708.98						
6	SM-SILTY SANDS, compact, fine grained, poorly graded, light brown to orange-brown, moist							
8	- orange-brown at 7.5ft BGS - gray and orange-brown banding at 8.3ft BGS			2DP		66		46.6
10	- medium brown at 9.0ft BGS		2-1/2" BOREHOLE					
12	CL-SILTY CLAYS, firm, low plasticity, medium brown, moist	702.03 701.63		3DP		85		2970
14	- dark gray to black stained, strong petroleum-like odor at 12.4ft BGS							
16	SP-SANDS, trace to with silts, compact, fine grained, poorly graded, dark gray to black-stained, saturated, visible sheen on soils & water, strong petroleum like odor	698.43	BENTONITE CHIPS					
18	- brown/gray at 13.5ft BGS CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, brown and gray, moist, petroleum like odor			4DP		95		+9999
20	- no odor at 17.5ft BGS	693.73						
22	END OF BOREHOLE @ 20.0ft BGS							
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-259
DATE COMPLETED: February 6, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268419.14 EASTING: 13344584.06 GROUND SURFACE	713.53						
0	SM/SC-SANDS w/ silts & clays, compact, fine to coarse grained, poorly graded, medium to dark brown, moist, non-plastic			1DP		80		24
4		709.03						
6	SM-SILTY SANDS, compact, fine grained, poorly graded, light brown to orange- brown, moist							
8	- orange-brown, increase in silt content at 7.8ft BGS - gray and orange-brown banding at 8.8ft BGS			2DP		20		16.6
10	- very moist to saturated at 10.8ft BGS		2-1/2" BOREHOLE					
12	CL-SILTY CLAYS, firm, low plasticity, medium brown, moist	702.23 701.83		3DP		75		1633
14	SP-SANDS, trace to with silts, compact, fine grained, poorly graded, orange-brown and gray, saturated, visible sheen on soils & water, strong petroleum like odor - dark gray to black-stained at 12.5ft BGS		BENTONITE CHIPS					
16	- brown/gray at 15.2ft BGS - amber liquid in soils/water at 15.8ft BGS	697.63						
18	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, brown and gray, moist, petroleum like odor			4DP		90		+9999
20	END OF BOREHOLE @ 20.0ft BGS	693.53						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 20' north of fence and 92' east of eastmost catwalk/pipe trestle See Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 11, 1996	
BORING NO.: SB–18–26	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 12.5' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS: 9:00 Field equipment blank #1W prepared off inside of plastic sampling tube for 4'–8' interval Pb and PAH analysis.
WEATHER: Overcast, light rain, 38°, Wind – NE 5–10 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0	6"	Pb Dup–Pb	0–1' Sandy clay, dark yellowish brown, some rock fragments, roots
2		6"	2'	Pb	1'–4.5' Silty sand, dark yellowish orange.
3		2'	4'	Pb	4.5'–6' Sandy silt, dark yellowish orange.
4		4'	6'	Pb	6'–7' Sandy silt, grayish orange.
5		6'	8'	Pb	7'–8.5' Clayey silt, pale yellowish brown.
6		8'	10'	Pb	8.5'–9' Silty clay, pale yellowish orange. 9'–10' Silty sand, pale yellowish orange.
7		10'	12'	Pb	10'–11' Silty clay, moderate–dark yellowish brown. 11'–14' Sand, olive gray, very fine.
					End of boring = 14' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\04370266.wk3

Duplicate soil sample collected from 0'–6" interval for Pb analysis.
Duplicate 3W (0–6") – Pb.

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-260
DATE COMPLETED: February 6, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268409.3 EASTING: 13344589.16 GROUND SURFACE	714.93						
0	SM/SC-SANDS with silts & clays, compact, fine to coarse grained, poorly graded, medium to dark brown, moist, non-plastic			1DP		75		38.4
4	SM-SILTY SANDS, compact, fine grained, poorly graded, light brown to orange-brown, moist	711.43						
6	- orange-brown at 6.8ft BGS			2DP		80		65.6
8	- increase in silt content, light gray and orange-brown banding at 8.8ft BGS							
10	- decrease in silt content, gray & orange-brown at 11.0ft BGS		2-1/2" BOREHOLE					
12	SP-SANDS, trace to with silts, compact, fine grained, poorly graded, brown, saturated, visible sheen on soils & water, strong petroleum like odor	703.23		3DP		80		1273
14	- dark gray to black-stained at 12.6ft BGS		BENTONITE CHIPS					
16	- amber liquid in soil/water at 16.5ft BGS	698.43						
18	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, brown and gray, moist, petroleum like odor			4DP		90		4695
20	- no odor at 19.0ft BGS							
	END OF BOREHOLE @ 20.0ft BGS	694.93						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

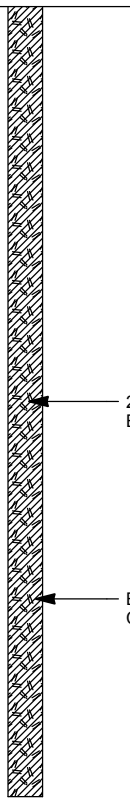
HOLE DESIGNATION: SB18-261
DATE COMPLETED: February 6, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268396.08
EASTING: 13344600.84

GROUND SURFACE 715.11

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	No Recovery-pushed +2" dia. gravel	
6	SM-SILTY SANDS, compact, fine grained, poorly graded, light brown to orange brown, moist	710.11
8	- increase in silt content, orange-brown at 8.3ft BGS	
10	- light gray & orange-brown banding at 8.8ft BGS	
12	- very moist, brown at 11.5ft BGS	
12	CL-SILTY CLAYS, firm, low plasticity, medium brown, moist	703.01 702.51
14	SP-SANDS, trace to with silts, compact, fine grained, poorly graded, brown, saturated, visible sheen on soils & water, strong petroleum like odor	
16	- 2" CL-SILTY CLAY SEAM at 13.6ft BGS	698.91
16	- brown-gray at 13.8ft BGS	
18	- dark brown to black stained, slight sheen at 14.3ft BGS	
18	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, brown and gray, moist, petroleum like odor	
20	- no odor at 18.0ft BGS	695.11
20	END OF BOREHOLE @ 20.0ft BGS	

BOREHOLE INSTALLATION



SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		0		
2DP		66		60.2
3DP		80		2395
4DP		90		899

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-262
DATE COMPLETED: February 6, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268407.69
EASTING: 13344613.08

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.60						
0	SM/SC-SANDS with silts & clays, compact, fine to coarse grained, poorly graded, medium to dark brown, moist, non-plastic							
2				1DP		80		4.1
4	SM-SILTY SANDS, compact, fine grained, poorly graded, light brown to orange-brown, moist	710.60						
6								
8	- gray-brown at 7.5ft BGS			2DP		70		8.5
10	- light gray and orange-brown banding, increase in silt content at 9.0ft BGS		2-1/2" BOREHOLE					
12	- very moist to saturated at 11.4ft BGS	702.90		3DP		80		580
	CL-SILTY CLAYS, firm, low plasticity, medium brown, moist	702.00						
14	SP-SANDS, trace to with silts, compact, fine grained, poorly graded, gray, saturated, visible sheen on soils & water, slight petroleum-like odor		BENTONITE CHIPS					
16	- dark gray to black stained, strong petroleum-like odor, slight sheen to soils/water at 14.3ft BGS	698.00						
18	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, brown and gray, moist, petroleum like odor			4DP		90		818
20	- no odor at 18.5ft BGS	694.60						
	END OF BOREHOLE @ 20.0ft BGS							
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-263
DATE COMPLETED: February 6, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268394.02
EASTING: 13344618.8

GROUND SURFACE 714.83

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	SM-SILTY SANDS, with gravels, compact, fine to coarse grained, poorly graded, dark brown to gray, moist	
4		710.83
	SM-SILTY SANDS, compact, fine grained, partly graded, brown, moist	
8	- orange-brown and brown at 8.0ft BGS	
	- increase in silt content, gray and black, slight petroleum-like odor at 9.3ft BGS	
12		702.73
	CL-SILTY CLAYS, firm, low plasticity, medium brown, moist	702.23
	SP-SANDS, trace to with silts, compact, fine grained, poorly graded, brown-gray, saturated, visible sheen on soils & water, strong petroleum like odor	699.53
16	- dark gray to black-stained at 14.3ft BGS	
	CL-SILTY CLAYS, trace fine to coarse sands, firm, low plasticity, brown and gray, moist, petroleum like odor	
20		694.83
	END OF BOREHOLE @ 20.0ft BGS	

BOREHOLE INSTALLATION: 2-1/2" BOREHOLE; BENTONITE CHIPS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		50		14.2
2DP		75		86.3
3DP		80		1240
4DP		75		806

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-264
DATE COMPLETED: February 6, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268375.58
EASTING: 13344555.95

GROUND SURFACE 715.58

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	Asphalt	715.33
2	SM/GM-SILTY SANDS & GRAVELS, loose, fine to coarse sands, fine gravels, poorly graded, light brown to dark brown, moist	713.58
4	SM-SILTY SANDS, trace fine gravels, compact, fine to coarse grained, poorly graded, medium brown, moist - 2" red brick debris at 3.8ft BGS - brown-gray, trace clays, no gravels at 4.3ft BGS	
6	- fine grained, light brown at 6.0ft BGS	
8	- gray and brown banding at 8.2ft BGS - light gray, slight petroleum-like odor at 8.6ft BGS	
10	- dark gray to black, strong petroleum-like odor at 9.0ft BGS	
12	- brown-gray, slight petroleum-like odor at 9.3ft BGS	
14	- very moist to saturated at 13.6ft BGS CL-SILTY CLAYS, trace fine sands, firm, low plasticity, gray, moist	701.58
16	SM-SANDS WITH SILTS, compact, fine grained, poorly graded, gray, saturated, trace silty clay, nodules	699.58
18	CL-SILTY CLAYS, trace fine sands, firm, low plasticity, gray, moist	697.58
20	END OF BOREHOLE @ 20.0ft BGS	695.58
22		
24		
26		
28		
30		
32		
34		

BOREHOLE INSTALLATION:
- 2-1/2" BOREHOLE
- BENTONITE CHIPS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		85		125
2DP		80		3925
3DP		75		1772
4DP		85		49.3

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

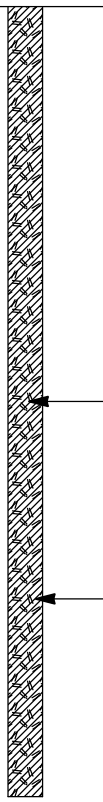
PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-265
DATE COMPLETED: February 7, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268365.87
EASTING: 13344566.94

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.29					
	Asphalt	715.04					
2	SM/GM-SILTY SANDS & GRAVELS, loose, fine to coarse sands, fine gravels, poorly graded, light brown to dark brown, moist	713.29	1DP		85		17.6
4	SM-SILTY SANDS, trace fine gravels, compact, fine to coarse grained, poorly graded, medium brown, moist - brown, no gravels at 4.0ft BGS						
6							
8	- dark gray, black and brown banding, strong petroleum-like odor at 8.0ft BGS		2DP		80		115
10	CL-SILTY CLAYS, trace fine sands, firm, low plasticity, gray, moist	706.04					
12	- 1" SM-SAND SEAM at 11.5ft BGS - 1" SP-SAND SEAM at 12.5ft BGS		3DP		80		51.2
14	SM-SANDS WITH SILTS, compact, fine grained, poorly graded, gray, saturated, trace silty clay, nodules	702.29 701.04					
16	CL-SILTY CLAYS, trace fine sands, firm, low plasticity, gray, moist						
18			4DP		90		7.1
20	END OF BOREHOLE @ 20.0ft BGS	695.29					
22							
24							
26							
28							
30							
32							
34							

BOREHOLE INSTALLATION



NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-266
DATE COMPLETED: February 7, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268371.32
EASTING: 13344581.66

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.16						
0	Asphalt	714.91						
2	SM/GM-SILTY SANDS & GRAVELS, loose, fine to coarse sands, fine gravels, poorly graded, light brown to dark brown, moist	713.41		1DP				357
4	SM-SILTY SANDS, trace fine gravels, compact, fine to coarse grained, poorly graded, medium brown, moist							
6	DEBRIS SEAM-mix of sands, silts, paper debris, glass debris, cork debris, paint sludge debris, brick debris, brown to dark brown, moist, strong solvent/paint-like odor	710.41						
8	SM-SANDS WITH SILTS, compact, fine grained, poorly graded, brown, moist, trace orange-brown banding	707.66		2DP				3992
10	- increase in silt content, brown-gray at 9.0ft BGS - brown at 9.3ft BGS		2-1/2" BOREHOLE					
12	- very moist at 12.5ft BGS			3DP				3373
14	- saturated, gray, slight petroleum-like odor at 13.0ft BGS - dark gray to black, moderate petroleum-like odor at 13.8ft BGS		BENTONITE CHIPS					
16	- gray at 14.3ft BGS CL-SILTY CLAYS, trace fine sands, firm, low plasticity, gray, moist	699.96						
18				4DP				7.9
20	END OF BOREHOLE @ 20.0ft BGS	695.16						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303-04
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-267
DATE COMPLETED: February 7, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268410.54
EASTING: 13344562.91

GROUND SURFACE 715.19

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	SM-SILTY SANDS, with gravels, compact, fine to coarse grained, poorly graded, dark brown to gray, moist	
4	SM-SILTY SANDS, compact, fine grained, poorly graded, light brown, moist	711.19
8	- brown and orange-brown at 8.0ft BGS	
10	- gray-brown banding, increase in silt content at 9.3ft BGS - decrease in silt content, brown and orange brown at 9.8ft BGS	
12	- increase in silt content, gray and brown banding at 10.3ft BGS - decrease in silt content, brown and orange-brown at 10.8ft BGS	702.79 702.19
14	CL-SILTY CLAYS, low plasticity, gray, moist, firm, trace fine sands	701.39 701.09 700.69
16	SM-SANDS WITH SILTS, compact, fine grained, poorly graded, gray, saturated, slight petroleum-like odor, with silty clay nodules	700.39 699.99
18	CL-SILTY CLAYS, low plasticity, gray, moist, firm, trace fine sands	
20	SM-SANDS WITH SILTS, compact, fine grained, poorly graded, gray, saturated, slight petroleum-like odor	695.19
22	CL-SILTY CLAYS, low plasticity, gray, moist, firm, trace fine sands	
24	SM-SANDS WITH SILTS, compact, fine grained, poorly graded, gray, saturated, slight petroleum-like odor, with silty clay nodules	
26	CL-SILTY CLAYS, low plasticity, gray, moist, firm, trace fine sands	
28	END OF BOREHOLE @ 20.0ft BGS	
30		
32		
34		

BOREHOLE INSTALLATION

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		90		22.6
2DP		75		95.5
3DP		75		1280
4DP		75		12.7

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303-04.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-268
DATE COMPLETED: April 25, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268428.78 EASTING: 13344564.35 GROUND SURFACE	711.79						
0	SP-SANDS (FILL), fine grained, poorly graded, compact, intermittent iron banding, brown, moist		2-1/8" BOREHOLE; BACKFILLED WITH BENTONITE CHIPS	1DP				--
6	- wet at 6.0ft BGS			2DP				469
12	SP-SANDS, fine grained, some medium sands, trace silts, strong odors, grayish black, wet	699.49		3DP				>2000
14	- sheeny, black at 12.8ft BGS	697.09						
	- sheeny, gray at 13.0ft BGS	696.79						
16	- 0.3' NAPL, brown, strong odor at 14.4ft BGS							
18	CL-SILTY CLAYS (native), high silt content, trace fine sands, competent, stiff, low to medium plasticity, gray, dry to moist							
20	END OF BOREHOLE @ 15.0ft BGS							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-269
DATE COMPLETED: April 25, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268439.6 EASTING: 13344558.33 GROUND SURFACE	708.97						
0	SP-SANDS (FILL), fine grained, poorly graded, compact, brown, moist		2-1/8" BOREHOLE; BACKFILLED WITH BENTONITE CHIPS	1DP				--
6	- wet at 5.5ft BGS			2DP				334
12	SP-SANDS (FILL), fine grained, poorly graded, gray, sheeny, brown liquid, strong NAPL-like odor, wet	696.87 696.07		3DP				267
14	SM-SILTY SANDS, very fine grained, very compact, poorly graded, gray, slight sheen, slight NAPL-like odor, wet	694.17						
16	CL-SILTY CLAYS (native), trace fine subangular gravels, stiff, low plasticity, gray, dry to moist	692.97						
18	END OF BOREHOLE @ 16.0ft BGS							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 17, 1996

BORING NO.: SB–18–27

RECORDED BY: Alan Fass

DRILL TYPE: Hand Auger

WEATHER: Snow flurries, 32°, Wind – SW 10–15 mph

LOCATION: Kaiser–Frazer Dump Area PAOC 18
Approx. 30' north and 30' east of SB–18–27
See Weston Map – Figure 1)
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 6' BGS

COMMENTS: 12:09 Equipment blank 1T2 prepared off inside of hand auger prior to boring for Pb and PAH analysis.

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0	6"	Pb	0–1.5' Clayey sand; little rock, paint waste fragments, and roots, plastic debris, dusky yellowish brown.
2		6"	2'	Pb	1.5'–3.5' Same as 0–1.5' except moderate yellowish brown.
3		2'	4'	Pb, PAH	3.5'–4.5' Paint waste layer, black and red.
4		4'	6'	Pb	4.5'–6' Clayey/sandy silt – silty sand, dark yellowish orange. 6'–7' Silty sand, light olive gray–black, petroleum sheen.

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\04470266.wk3

Duplicate soil sample collected from 0–6" for Pb analysis. (Not sent to lab.)
Duplicate soil sample collected from 0–6" for PAH analysis. (Not sent to lab.)

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-270
DATE COMPLETED: April 25, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

NORTHING: 268435.6
EASTING: 13344549.9

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	710.77						
2	SP-SANDS (FILL), fine grained, poorly graded, compact, brown, moist - some vegetation dark brown at 0.3ft BGS		2-1/8" BOREHOLE BACKFILLED WITH BENTONITE CHIPS	1DP				--
4								
6	- intermittent iron banding at 5.0ft BGS - wet at 6.0ft BGS							
8	- becoming gray, sheeny, strong odors at 7.0ft BGS			2DP				74.2
10								
12				3DP				174
14	NAPL, brown, strong odor	696.27		4DP				264
16	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, gray, dry to moist	695.77						
	END OF BOREHOLE @ 15.0ft BGS							
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-271
DATE COMPLETED: April 25, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	NORTHING: 268440.28 EASTING: 13344548.7 GROUND SURFACE	709.01					
0	SP-SANDS (FILL), fine grained, poorly graded, brown, moist		2-1/8" BOREHOLE; BACKFILLED WITH BENTONITE CHIPS	1DP			
6	- wet at 6.5ft BGS						
7.5	- becoming grayish brown at 7.5ft BGS			2DP			
12	- sheeny, black, wet at 12.0ft BGS			3DP			
13	- 0.5' trace NAPL, strong NAPL-like odor at 13.0ft BGS	695.51					
15	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, gray, dry to moist	694.01					
15	END OF BOREHOLE @ 15.0ft BGS						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-272
DATE COMPLETED: April 25, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

NORTHING: 268445.78
EASTING: 13344561.95

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	706.64						
0	SP-SANDS (FILL), fine grained, poorly graded, brown, moist		2-1/8" BOREHOLE					
2				1DP				16.3
4	- wet at 3.0ft BGS		BACKFILLED WITH BENTONITE CHIPS					
6	- sheeny, black fine sands at 5.0ft BGS							
8				2DP				256
		698.04						
10	SM-SILTY SANDS, fine grained, poorly graded, compact, gray, trace brown NAPL staining, strong odor, black, sheeny	697.04						
	- brown, NAPL at 9.4ft BGS	696.64						
12	CL-SILTY CLAYS (native), trace fine sands, stiff, low to medium plasticity, gray, moist							
14	END OF BOREHOLE @ 10.0ft BGS							
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

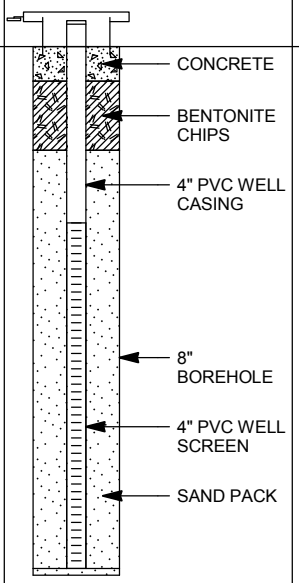
HOLE DESIGNATION: SB18-273/MW18-09
DATE COMPLETED: April 25, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

NORTHING: 268435.59
EASTING: 13344560.09

TOP OF CASING 713.02
GROUND SURFACE 710.58

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	SP-SANDS (FILL), fine grained, poorly graded, compact, brown, moist	
4	- wet at 3.5ft BGS	
10	SP/SM-SANDS, fine grained, high silt content, poorly graded, compact, gray, wet	700.58
12	- some sheen, black, fine sands at 11.0ft BGS	
12	- 1.1' of NAPL staining observed, brown liquid, strong odor at 13.0ft BGS	
14		696.48
14	CL-SILTY CLAYS (native), trace fine subangular gravels, stiff, low plasticity, gray, moist	695.58
16	END OF BOREHOLE @ 15.0ft BGS	

MONITORING WELL



WELL DETAILS
Screened interval:
705.48 to 695.48ft BGS
5.10 to 15.10ft BGS
Length: 10ft
Diameter: 4in
Slot Size: 0010
Material: PVC
Sand Pack:
707.58 to 695.28ft BGS
3.00 to 15.30ft BGS
Material: SANDS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP				NA
2DP				NA
3DP				NA

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-274
DATE COMPLETED: April 26, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268438.37 EASTING: 13344565.05 GROUND SURFACE	709.11						
0	SP-SANDS (FILL), fine grained, poorly graded, compact, medium brown, moist		2-1/8" BOREHOLE; BACKFILLED WITH BENTONITE CHIPS	1DP				--
6	- wet at 6.0ft BGS			2DP				273
8	SP-SANDS (FILL), fine grained, poorly graded, compact, grayish black, sheeny, strong odor, wet	701.61						
10	- brown liquid (NAPL), strong odor at 9.5ft BGS - sheeny at 10.0ft BGS							
12	- brown liquid (NAPL), strong odor at 10.9ft BGS	698.11		3DP				194
14	CL-SILTY CLAYS (native), trace fine sands, trace fine subangular gravels, stiff, low plasticity, gray, dry to moist	697.61						
16	END OF BOREHOLE @ 15.0ft BGS							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-275
DATE COMPLETED: April 25, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

NORTHING: 268426.24
EASTING: 13344591.17
GROUND SURFACE ELEV. ft BGS: 711.31

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	SP-SANDS (topsoil), fine grained, poorly graded, compact, brown, moist	
2	- trace vegetation, dark brown at 0.5ft BGS - some silts at 2.4ft BGS	
4		
6	- iron banding, wet at 6.0ft BGS	
8		
10	- becoming grayish-black, very moist to wet at 9.0ft BGS - becoming black, very sheeny, strong odors from 10-14.6 BGS at 10.0ft BGS	
12		
14	- trace NAPL-like odor at 14.5ft BGS	696.71
16	CL-SILTY CLAYS (native), trace fine subangular gravel, stiff, low plasticity, gray, dry to moist	696.31
18	END OF BOREHOLE @ 15.0ft BGS	
20		
22		
24		
26		
28		
30		
32		
34		
36		
38		

BOREHOLE INSTALLATION: 2-1/8" BOREHOLE; BACKFILLED WITH BENTONITE CHIPS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP				1.2
2DP				>2000
3DP				>2000

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-276
DATE COMPLETED: February 7, 2012
DRILLING METHOD: 3-1/4" HAND AUGER
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268424.01 EASTING: 13344671.17 GROUND SURFACE	710.86						
0	TOPSOIL	710.36	BENTONITE CHIPS	1HA 0-2' -005				0.7
2	CL-CLAY (FILL), with silt, trace gravel, fine to coarse grained, low plasticity, firm to stiff, gray, moist	709.36						
4	SP-SAND (FILL), trace gravel, fine to medium sand, fine to coarse gravel, poorly graded, loose, brown, moist	708.86						
6	END OF BOREHOLE @ 2.0ft BGS							
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-277
DATE COMPLETED: February 7, 2012
DRILLING METHOD: 3-1/4" HAND AUGER
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268435.18 EASTING: 13344566.02 GROUND SURFACE	709.72						
0	TOPSOIL	709.22	BENTONITE CHIPS	1HA 0-2' -004				0.7
2	CL-CLAY (FILL), with silt, trace gravel, fine to coarse gravel, low plasticity, firm, gray, moist	708.97						
4	SP-SAND (FILL), trace clay and gravel, fine to medium sand, fine to coarse gravel, poorly graded, loose, brown, moist	707.72						
	END OF BOREHOLE @ 2.0ft BGS							
6								
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-278
DATE COMPLETED: February 7, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268378.57
EASTING: 13344678.88

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	PID (ppm)
	GROUND SURFACE	714.98						
0	ASPHALT	714.33						0.7
	SP-SAND (FILL), with gravel, trace clay, fine to medium sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	713.98		1GP		60		13.1
2		713.73						
	CL-SILTY CLAY (FILL), trace sand, fine to medium grained, medium plasticity, firm to stiff, brown, moist	711.98						
4		711.48						
		710.98						107
		710.63						
6	SP-SAND (FILL), with gravel, trace clay, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist	710.13	BENTONITE CHIPS					
		709.98						
	CL-SILTY CLAY (FILL), trace sand, fine to medium grained, medium plasticity, firm to stiff, brown, moist			2GP		50		548
8				8-10' -007				14.8
	SP-SAND (FILL), with gravel, trace clay and paint sludge, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist, odor	704.98						
10								
	ASPHALT							
12								
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist							
14								
	ASPHALT							
16								
	SP-SAND (FILL), with gravel and clay, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist, odor							
	- with paint sludge, trace glass at 8.0ft BGS							
18								
	END OF BOREHOLE @ 10.0ft BGS							
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-279
DATE COMPLETED: February 7, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268373.37
EASTING: 13344592.06

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.95						
0	ASPHALT	714.50						0.7
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	713.95		1GP		60		0.7
2	SP-SAND (FILL), with clay, trace gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist							
4	- gray at 5.0ft BGS		BENTONITE CHIPS					14.6
6	- trace paint sludge, slight odor at 5.8ft BGS - no paint sludge, brown at 6.3ft BGS							
8	- with clay, trace paint sludge, strong odor at 7.3ft BGS			2GP 7-9' 006		50		94
		705.70						397
10	SC-CLAYEY SAND (FILL), fine to medium grained, poorly graded, compact, brown, wet	704.95						
	END OF BOREHOLE @ 10.0ft BGS							
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-280
DATE COMPLETED: April 2, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268362.6
EASTING: 13344802.99

GROUND SURFACE 714.46

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	714.26
	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse sand, fine angular gravel, light gray, moist	713.86
2		
	SP-SAND (FILL), with silt, compact, fine grained, poorly graded, brown, moist	
4	- moist to wet at 5.0ft BGS	
6		707.96
	ML-SANDY SILT (FILL), compact, fine sand, non plastic, brown, moist to wet	707.66
8	SP-SAND, trace silt, fine grained, poorly graded, brown, moist	
10	- 0.2' silty clay seam, firm, low plasticity, brown and rust brown, moist at 9.8ft BGS	
	- gray, wet at 10.0ft BGS	
12		701.96
	SM-SILTY SAND, compact, fine grained, poorly graded, gray, wet	
14		
16		697.96
	CL-SILTY CLAY, stiff, low plasticity, gray, moist	
18		
20	END OF BOREHOLE @ 20.0ft BGS	694.46
22		
24		
26		
28		
30		
32		
34		
36		
38		

BOREHOLE INSTALLATION: BACKFILLED WITH BENTONITE CHIPS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				0.0
1DP		75		
				0.0
				4.4
2DP		75		
				11.0
				7.5
3DP		75		
				1.1
				0.0
4DP		75		
				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-281
DATE COMPLETED: April 2, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268338.01
EASTING: 13344789.29

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.23						
0	ASPHALT	714.03						
	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse sand, fine angular gravel, light gray, moist	713.63						0.0
2				1DP		80		
4	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, brown, moist							0.0
6	ML-SANDY SILT (FILL), compact, fine grained, non plastic, brown, moist	708.23						0.0
	SP-SAND, trace silt, fine grained, poorly graded, brown, moist	707.43						
8		706.23		2DP		80		
	SC-SAND, with clay, compact, fine grained, non plastic, brown to gray, moist	705.83	BACKFILLED WITH BENTONITE CHIPS					0.0
10		704.73						
	CL-SILTY CLAY, firm, non plastic, brownish gray, moist - 0.1' sand lens, trace silt, fine grained, poorly graded, brown, moist at 9.0ft BGS							1.1
12				3DP		80		
14	SP-SAND, fine grained, compact, poorly graded, light brown to brown, wet	700.03						0.0
	CL-SILTY CLAY, stiff, low plasticity, gray, moist - 0.1' sand lens, trace silt, fine grained, poorly graded, brown to gray, moist at 14.8ft BGS							
16				4DP		100		0.0
18	END OF BOREHOLE @ 18.0ft BGS	696.23						
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-282
DATE COMPLETED: April 2, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268339.07
EASTING: 13344762.53

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.63						
0	ASPHALT	714.43						
	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse sand, angular fine gravel, light gray, moist	714.03						0.0
2				1DP		80		
4	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, brown, moist							0.0
		709.43						
6	ML-SANDY SILT (FILL), compact, fine sand, brown to light gray, moist							0.0
8		706.83		2DP		75		
	SP-SAND, trace silt, compact, fine grained, poorly graded, brown to gray, moist		BACKFILLED WITH BENTONITE CHIPS					3.3
10	- wet at 10.0ft BGS - 0.1' sandy silt lens, compact, fine, poorly graded, brownish gray, moist at 10.8ft BGS							0.0
12				3DP		90		
		701.13						
14	CL-SILTY CLAY, stiff, low plasticity, gray, moist							0.0
16				4DP		100		0.0
18	END OF BOREHOLE @ 18.0ft BGS	696.63						
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-283
DATE COMPLETED: April 2, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268335.14
EASTING: 13344729.06

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.78						
0	ASPHALT	714.38						
	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse sand, fine angular gravel, light gray, moist	714.18						0.0
2				1DP		85		
4	SP-SAND (FILL), trace silt, compact, fine grained, brown, moist	709.48						0.0
6	ML-SANDY SILT (FILL), compact, fine sand, brown, moist	707.38						0.0
8	SC-CLAYEY SAND, compact, fine grained, poorly graded, gray, wet	706.28		2DP		75		
10	ML-SANDY SILT, compact, fine sand, brown to gray, moist	704.78	BACKFILLED WITH BENTONITE CHIPS					0.0
12	CL-SANDY CLAY, soft to firm, fine sand, gray, moist	703.58						0.0
	ML-SANDY SILT, compact, fine sand, brown to gray, moist to wet			3DP		90		
14								0.0
16	CL-SILTY CLAY, stiff, low plasticity, gray, moist	700.38		4DP		100		0.0
18	END OF BOREHOLE @ 18.0ft BGS	696.78						
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-284
DATE COMPLETED: April 2, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268332.26
EASTING: 13344690.27

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.16						
0	ASPHALT	713.76						
	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse sand, fine angular gravel, light gray, moist	713.36						0.0
2				1DP		80		
4	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, brown, moist - fine gravel at 1.4ft BGS							0.0
6	ML-SANDY SILT (FILL), trace clay, compact, fine sand, brown to gray, moist	708.36						0.0
	SC-CLAYEY SAND, compact, fine grained, poorly graded, gray, moist	706.76		2DP		90		
8	CL-SILTY CLAY, stiff, low plasticity, gray, moist	705.96	BACKFILLED WITH BENTONITE CHIPS					0.0
10	SM-SAND, with silt, compact, fine grained, poorly graded, brown and gray, wet	704.16						
	SP-SAND, trace silt, compact, fine grained, poorly graded, brown to gray, wet	703.36						0.0
12				3DP		100		
14	ML-SANDY SILT, compact, fine sand, gray, moist to wet	700.66						0.0
	CL-SILTY CLAY, stiff, low plasticity, gray, moist	699.96						
16				4DP		100		0.0
	- 0.02' sand lens compact, fine grained, gray, moist at 17.2ft BGS							
18	END OF BOREHOLE @ 18.0ft BGS	696.16						
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-285
DATE COMPLETED: April 2, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268332.43
EASTING: 13344663.13

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	713.77						
0	ASPHALT	713.37						
	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse sand, angular fine gravel, light gray, moist	713.17						0.0
2				1DP		60		
	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, brown to light gray, moist							0.0
4								
6	CL-SANDY CLAY (FILL), compact, fine sand, low plasticity, gray, moist	707.77						1.1
	SP-SAND, trace clay, compact, fine grained, poorly graded, gray, moist	706.77		2DP		85		
8	CL-SILTY CLAY, stiff, low plasticity, gray, moist	704.97						2.2
	SP-SAND, trace clay, compact, fine grained, poorly graded, gray, moist to wet	704.47						
10	CL-SILTY CLAY, stiff, low plasticity, gray, moist	703.77	BACKFILLED WITH BENTONITE CHIPS					1.1
	ML-SANDY SILT, compact, fine sand, gray, moist to wet	701.97		3DP		80		
12	SP-SAND ,trace silt, compact, fine grained, poorly graded, brown to gray, wet	701.37						2.5
14	CL-SILTY CLAY, stiff, low plasticity, gray, moist	698.77						
16								0.0
18				4DP		75		
								0.0
20	END OF BOREHOLE @ 20.0ft BGS	693.77						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-286
DATE COMPLETED: April 2, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268356.52
EASTING: 13344652.15

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.54						
0	ASPHALT	714.34						
	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse sand, fine angular gravel, light gray, moist	713.74		1DP		80		0.0
2								
4	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, light brown to brown, moist							0.0
6	SC-CLAYEY SAND (FILL), compact, fine grained, poorly graded, brown gray, moist	708.54						2.2
8				2DP		80		
			BACKFILLED WITH BENTONITE CHIPS					14.4
10	CL-CLAY, medium stiff, low plasticity, gray, moist	705.14 704.54						
	SP-SAND, trace silt, compact, fine grained, poorly graded, light brown to dark brown, wet							12.1
12				3DP		85		
14								10.6
	CL-SILTY CLAY, stiff, low plasticity, gray, moist	700.04						
16	SM-SILTY SAND, compact, fine grained, gray, wet	698.74 698.04		4DP		100		0.0
18	CL-SILTY CLAY, stiff, low plasticity, gray, moist	696.54						
	END OF BOREHOLE @ 18.0ft BGS							
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-287
DATE COMPLETED: April 4, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268364.72
EASTING: 13344555.4

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	715.37
	ASPHALT	715.17
	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse grained sand, fine angular gravel, light gray, moist	714.77
	SP-SAND (FILL), with gravel, compact, fine grained, subangular gravel, poorly graded, dark brown, moist	711.57
	CL-SILTY CLAY (FILL), stiff, low plasticity, gray, moist	711.17
	SP-SAND, compact, fine grained, poorly graded, light brown, moist	707.87
	- trace silt, orange brown at 5.3ft BGS	706.87
	CL-SANDY CLAY, medium stiff, low plasticity, fine sand, brown gray, moist	706.37
	SP-SAND, trace clay, compact, fine grained, poorly graded, gray, moist	705.57
	CL-SANDY CLAY, medium stiff, low plasticity, fine sand, gray, moist	705.17
	SP-SAND, trace clay, compact, fine grained, poorly graded, gray brown, wet	703.07
	CL-SILTY CLAY, stiff, low plasticity, gray, moist	701.07
	- 0.1' SP-SAND seam, compact, fine grained, poorly graded, gray, moist at 11.0ft BGS	
	SP-SAND, compact, fine grained, poorly graded, light gray, wet	696.57
	SM-SILTY SAND, compact, fine grained, poorly graded, brown gray, wet	694.57
	SP-SAND, compact, fine grained, poorly graded, gray, wet	
	CL-SILTY CLAY, stiff, low plasticity, gray, moist	692.37
	END OF BOREHOLE @ 23.0ft BGS	

BOREHOLE INSTALLATION: BACKFILLED WITH BENTONITE CHIPS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				0.0
1DP		80		
				0.7
				1.7
2DP		85		
				9.6
				9.8
3DP		80		
				19.3
				4.3
4DP		70		
				0.7
5DP		100		0.8

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-288
DATE COMPLETED: April 4, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268374.91
EASTING: 13344582.51

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.11						
0	ASPHALT	714.81						
	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse grained, fine angular gravel, light gray, moist	714.51						7.0
2				1DP		80		
4	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, brown, moist							20.1
	- light brown at 3.0ft BGS	710.11						
6	DEBRIS ZONE, SP-SAND (FILL), with wood, metal, paint sludge, glass, brown and gray, moist							732
8		707.11		2DP		55		
	SP-SAND, trace silt, compact, fine grained, poorly graded, light brown, moist	706.81						742
		706.51	BACKFILLED WITH BENTONITE CHIPS					
10	CL-SILTY CLAY, medium stiff, low plasticity, gray, moist							521
12	SP-SAND, trace silt, compact, fine grained, poorly graded, light brown, wet	703.31		3DP		60		
	- gray at 11.4ft BGS	702.31						419
14	CL-SILTY CLAY, stiff, low plasticity, gray, moist							
	SP-SAND, trace silt, compact, fine grained, poorly graded, dark gray, wet							592
16								
	CL-SILTY CLAY, stiff, low plasticity, gray, moist	698.11		4DP		75		
18								14.6
20	END OF BOREHOLE @ 20.0ft BGS	695.11						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-289
DATE COMPLETED: April 4, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268384.89
EASTING: 13344606.35

GROUND SURFACE 715.11

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	ASPHALT	714.91						
2	SP-SAND (FILL), trace silt and fine gravel, compact, fine grained, poorly graded, brown, moist, trace asphalt and concrete pieces							0.0
				1DP		75		
4	- 0.2' silty clay seam, firm, low plasticity, brown and orange brown, moist at 2.5ft BGS							2.6
6								0.8
8	- with paper and wood debris, moderate odor, some black staining at 7.5ft BGS			2DP		50		
			BACKFILLED WITH BENTONITE CHIPS					166
10	- some dark gray to black staining, wet, sheen to water at 10.5ft BGS							
12	SP-SAND, trace silt, compact, fine grained, poorly graded, gray, wet, moderate odor	703.61		3DP		50		84
14								64
16	CL-SILTY CLAY, stiff, low plasticity, gray, moist	700.51		4DP		80		0.8
18	END OF BOREHOLE @ 18.0ft BGS	697.11						
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-290
DATE COMPLETED: April 3, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268383.43
EASTING: 13344627.83

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.98						
0	ASPHALT	714.68						
		714.38						
	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse sand, fine to coarse angular gravel, light gray, moist	713.58						2.4
2				1DP		75		
	SP-SAND (FILL), compact, fine grained, poorly graded, orange brown, moist							0.0
4								
	SM-SILTY SAND (FILL), with gravel, compact, fine grained, poorly graded, brown to light brown, moist							7.4
6		708.18						
	SP-SAND (FILL), compact, fine grained, poorly graded, black, moist, strong odor	706.98		2DP		70		1168
8	PAINT SLUDGE (FILL), yellow-green-black, moist, strong odor	705.98						
	SM-SILTY SAND (FILL), with debris (fiberous cloth and paper), compact, fine grained, brown-yellow-gray, strong odor, moist	704.78	BACKFILLED WITH BENTONITE CHIPS					264
10								
	SP-SAND, with fine gravel, compact, fine grained, poorly graded, coarse angular gravel, gray to black, wet			3DP		70		
12	- brown at 10.8ft BGS							206
	- black at 12.3ft BGS	699.98						
14	- gray at 13.6ft BGS							35
	CL-CLAY, stiff, low plasticity, gray, moist			4DP		80		
16								0.4
18								
20	END OF BOREHOLE @ 20.0ft BGS	694.98						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-291
DATE COMPLETED: April 2, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268382.22
EASTING: 13344651.43

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.03						
0	ASPHALT	714.63						
	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse sand, fine angular gravel, light gray, damp	714.23						0.0
2				1DP		70		
	SP-SAND (FILL), trace gravel, compact, fine grained, poorly graded, angular gravel, brown, moist							0.0
4								
	SM-SILTY SAND (FILL), trace debris, compact, fine grained, poorly graded, black gray, moist, staining, strong odor, (metal, brick, paint debris)	709.33						111
6				2DP		50		
8								
	SC-CLAYEY SAND, compact, fine grained, gray staining, moist, strong odor	706.53						28.2
	CL-CLAY, stiff, low plasticity, gray, moist	705.43						
10	SP-SAND, compact, fine grained, poorly graded, light gray, wet - brown at 10.8ft BGS - dark brown at 11.4ft BGS - black at 13.5ft BGS - 0.2' clay seam, stiff, low plasticity, gray, moist at 14.3ft BGS - gray at 14.4ft BGS	705.03	BACKFILLED WITH BENTONITE CHIPS					7.4
12				3DP		85		
14								145
16		699.53						1.1
	CL-SILTY CLAY, stiff, low plasticity, gray, moist			4DP		90		
18								0.0
20	END OF BOREHOLE @ 20.0ft BGS	695.03						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-292
DATE COMPLETED: April 2, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268380.67
EASTING: 13344693.41

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.30						
0	ASPHALT	714.90						
	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse sand, fine angular gravel, light gray, moist	714.50						0.0
2				1DP		75		
4	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, brown, moist							0.0
6								3.3
	SM-SILTY SAND (FILL), compact, fine grained, poorly graded, brown, wet	708.60						
8		707.50		2DP		75		
	SP-GRAVELLY SAND (FILL), fiberous material, compact, fine grained, black, staining, moist, odorous	706.70 / 706.30 / 705.80 / 705.30	BACKFILLED WITH BENTONITE CHIPS					229
10								
	PAINT SLUDGE (FILL), yellow black, strong odor							178
12	PAPER/CARDBOARD MATERIAL (FILL), brown, strong odor			3DP		80		
14	CL-SANDY CLAY, stiff, low plasticity, gray, moist							125
	SP-SAND, trace silt, compact, fine grained, poorly graded, brown, wet	700.30						
16	- gray at 10.7ft BGS							16.6
18	- black at 12.2ft BGS - 0.2' clay seam, stiff, low plasticity, gray, moist at 13.9ft BGS			4DP		65		
20	- gray at 14.0ft BGS	695.30						0.0
	CL-SILTY CLAY, stiff, low plasticity, gray, moist							
22	END OF BOREHOLE @ 20.0ft BGS							
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-293
DATE COMPLETED: April 2, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268370.7
EASTING: 13344710.21

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.15						
0	ASPHALT	714.95						
	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse sand, fine angular gravel, light gray, moist	714.35		1DP		60		0.0
2								
4	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, brown, moist							0.0
6								0.0
	SM-SILTY SAND (FILL), compact, fine grained, poorly graded, brown, moist	708.35		2DP		60		
8								4.0
	CL-SANDY CLAY, firm, low plasticity, light gray to orange brown mottled, moist	706.15						
10		705.35	BACKFILLED WITH BENTONITE CHIPS					
	SP-SAND, trace silt, compact, fine grained, poorly graded, brown to gray, wet			3DP		90		16.6
12								
14								149
	CL-SILTY CLAY, stiff, low plasticity, gray, moist	700.15						
16								0.0
18				4DP		85		
								0.0
20	END OF BOREHOLE @ 20.0ft BGS	695.15						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-294
DATE COMPLETED: April 2, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268370.08
EASTING: 13344732.28

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.06						
0	ASPHALT	714.86						
		714.46						
2	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse sand, fine angular gravel, light gray, moist							0.0
				1DP		80		
4	SP-SAND (FILL), trace silt, compact, fine grained, poorly sorted, brown, moist - light brown at 3.8ft BGS							0.0
6	- brown red at 5.0ft BGS - brown at 5.6ft BGS							0.0
		707.86						
8	SC-CLAYEY SAND, compact, fine grained, poorly graded, brown gray mottled, moist			2DP		75		
		705.86						0.0
10	SP-SAND, trace silt, compact, fine grained, poorly graded, orangish brown, wet	705.06	BACKFILLED WITH BENTONITE CHIPS					
	CL-CLAY, stiff, low plasticity, gray, moist	704.46						67
12	SC-CLAYEY SAND, compact, fine grained, poorly graded, gray, wet	703.56		3DP		80		
14	SP-SAND, trace silt, compact, fine grained, poorly graded, gray to brown, wet							4.4
		699.56						
16	CL-SILTY CLAY, stiff, low plasticity, gray, moist							0.4
18				4DP		95		
								0.0
20	END OF BOREHOLE @ 20.0ft BGS	695.06						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-295
DATE COMPLETED: April 2, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268369.23
EASTING: 13344759.64

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.04						
0	ASPHALT	714.84						
	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse sand, fine angular gravel, light gray, moist	714.44		1DP		80		5.5
2								
4	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, light brown, moist							8.8
6								15.5
	SC-CLAYEY SAND, compact, fine grained, poorly graded, brown, moist	708.24		2DP		80		
8		707.54						
	CL-SANDY CLAY, medium stiff, low plasticity, brown, moist	707.24						11.0
10	CL-CLAY, stiff, low plasticity, brown, moist	707.04	BACKFILLED WITH BENTONITE CHIPS					
	SP-SAND, trace silt, compact, fine grained, poorly graded, orangish brown, moist	705.64						10.2
12	SM-SILTY SAND, compact, fine grained, poorly graded, brown, wet	705.04		3DP		85		
		702.74						2.2
14	SP-SAND, trace silt, compact, fine grained, poorly graded, gray, wet	701.84						
		701.24						
16	SM-SILTY SAND, compact, fine grained, poorly graded, gray, wet	699.74						0.0
	CL-CLAY, stiff, low plasticity, gray, moist			4DP		95		
18	SM-SILTY SAND, compact, fine grained, poorly graded, gray, wet							0.0
20	CL-CLAY, stiff, low plasticity, gray, moist	695.04						
	END OF BOREHOLE @ 20.0ft BGS							
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-296
DATE COMPLETED: April 4, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268380.09
EASTING: 13344565.37

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.30						
0	ASPHALT	715.00						
		714.60						
2	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse grained sand, fine angular gravel, light gray, moist	714.00		1DP		80		116
4	CL-SILTY CLAY (FILL), stiff, low plasticity, gray, moist							20.2
6	SP-SAND (FILL), compact, fine grained, poorly graded, orange brown, moist	710.30						294
8	PAINT SLUDGE-DEBRIS ZONE (FILL), paints/cardboard-paper material, black, yellow, green, strong odor, moist			2DP		90		1170
10	SP-SAND, trace silt, compact, fine grained, poorly graded, light gray, moist	706.30 705.90	BACKFILLED WITH BENTONITE CHIPS					
12	SM-SILTY SAND, compact, fine grained, poorly graded, black, wet - trace clay, gray at 10.0ft BGS			3DP		75		497
14								162
16	CL-SILTY CLAY, stiff, low plasticity, gray, moist	700.70						7.1
18				4DP		75		0.0
20	END OF BOREHOLE @ 20.0ft BGS	695.30						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-297
DATE COMPLETED: April 4, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268374.63
EASTING: 13344534.2

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.28					
0	ASPHALT	714.98					
	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse grained sand, fine angular gravel, light gray, moist	714.58					0.0
2			1DP		80		
	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, brown, moist	712.48					0.0
4	- black at 1.6ft BGS	712.08					
	CL-SILTY CLAY (FILL), stiff, low plasticity, brown gray, moist	710.48					1.7
6							
	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, brown, moist	707.78	2DP		95		7.8
8		707.08					
	SM-SILTY SAND (FILL), compact, fine grained, poorly graded, orange brown, moist	706.48					
10		705.48					1.7
	CL-SILTY CLAY, stiff, low plasticity, orange gray, moist	704.98					
12	SC-CLAYEY SAND, compact, fine grained, poorly graded, brown gray, moist		3DP		80		
	SP-SAND, trace silt, compact, fine grained, poorly graded, light brown, moist						2.6
14	CL-SILTY CLAY, stiff, low plasticity, gray, moist						
	SM-SILTY SAND, compact, fine grained, poorly graded, gray, wet						3.5
16	- 0.1' clay lens, stiff, low plasticity, gray, moist at 11.0ft BGS		4DP		75		
	- 0.1' clay lens, stiff, low plasticity, gray, moist at 13.0ft BGS						2.6
18	- 0.1' clay lens, stiff, low plasticity, gray, moist at 15.0ft BGS						
20							6.1
22			5DP				
	CL-SILTY CLAY, stiff, low plasticity, gray, moist	691.88					0.0
24	END OF BOREHOLE @ 23.4ft BGS	690.28					
26							
28							
30							
32							
34							
36							
38							

BOREHOLE INSTALLATION: BACKFILLED WITH BENTONITE CHIPS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-298
DATE COMPLETED: April 4, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268380.52
EASTING: 13344519.8

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.76						
0	ASPHALT	715.36						
	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse sand, fine angular gravel, light gray, moist	715.06		1DP		75		0.0
4	SM-SILTY SAND (FILL), compact, fine grained, poorly graded, brown to dark brown, moist	711.96						0.0
	CL-SILTY CLAY (FILL), stiff, low plasticity, dark brown, moist	711.76						0.0
8	SM-SILTY SAND (FILL), compact, fine grained, poorly graded, moist, brown			2DP		90		
	- light brown laminate (light brown-gray-black) at 5.8ft BGS	707.56						0.0
10	SC-CLAYEY SAND, compact, fine grained, poorly graded, brown gray, moist	706.96 706.26 705.76						0.0
12	SM-SILTY SAND, compact, fine grained, poorly graded, brown, wet	704.36	BACKFILLED WITH BENTONITE CHIPS	3DP		85		1.7
14	SC-CLAYEY SAND, compact, fine grained, poorly graded, brown, wet							
	CL-SILTY CLAY, stiff, low plasticity, gray, moist	701.56						1.2
16	SM-SILTY SAND, compact, fine to medium grained, poorly graded, brown, wet			4DP		60		
18	SM-SILTY SAND, compact, fine grained, poorly graded, light brown, wet							6.1
	- fine to medium grained, brown at 17.5ft BGS							
20								18.5
22	CL-SILTY CLAY, stiff, low plasticity, gray, moist	693.76		5DP		85		
24								0.0
	END OF BOREHOLE @ 25.0ft BGS	690.76						
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-299
DATE COMPLETED: April 4, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268386.17
EASTING: 13344534.61

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.76						
0	ASPHALT	715.46						0.8
	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse sand, fine angular gravel, light gray, moist	715.16		1DP		90		0.0
2		714.76						
4	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, brown, moist	713.96						0.0
6	CL-SILTY CLAY (FILL), stiff, low plasticity, gray, moist	713.36		2DP		90		11.4
	SP-SAND (FILL), trace gravel, compact, fine grained, poorly graded, brown, moist	708.36						
8	SM-SILTY SAND (FILL), compact, fine grained, poorly graded, orange brown, moist	706.76						9.6
10	CL-SILTY CLAY, medium stiff, low plasticity, gray brown, moist	704.96	BACKFILLED WITH BENTONITE CHIPS	3DP		85		4.3
12	SM-SILTY SAND, compact, fine grained, poorly graded, brown gray, wet							
	SC-CLAYEY SAND, compact, fine grained, poorly graded, gray, wet							
14	CL-SILTY CLAY, stiff, low plasticity, gray, moist	701.56						0.0
16				4DP		85		
18								0.0
20	END OF BOREHOLE @ 20.0ft BGS	695.76						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-300
DATE COMPLETED: April 4, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268410.58
EASTING: 13344515.82

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.76						
0	TOPSOIL	715.16						
2	SM-SILTY SAND (FILL), compact, fine grained, poorly graded, brown to dark brown, moist			1DP		75		0.0
4	- 0.2' gravel lens, fine to medium grained, angular at 3.6ft BGS	711.86						0.0
		711.56						
6	CL-SILTY CLAY (FILL), medium stiff, low plasticity, laminate brown-dark brown-light brown, moist	710.16						0.0
8	SM-SILTY SAND (FILL), trace gravel, compact, fine grained, poorly graded, brown, moist			2DP		50		0.0
10	SM-SILTY SAND, compact, fine grained, poorly graded, orange brown, moist to wet		BACKFILLED WITH BENTONITE CHIPS					0.0
12	ML/CL-SILT AND CLAY, firm to stiff, non to low plasticity, gray, moist	704.36 703.96		3DP		75		0.0
14	SM-SILTY SAND, compact, fine grained, poorly graded, gray, wet	703.16 701.96						0.0
16	SP-SAND, trace silt, compact, fine grained, poorly graded, gray, wet	700.26						0.0
18	SM-SILTY SAND, compact, fine grained, poorly graded, gray, wet CL-SILTY CLAY, stiff, low plasticity, gray, moist			4DP		75		0.0
20	END OF BOREHOLE @ 20.0ft BGS	695.76						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-301
DATE COMPLETED: April 4, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268423.1
EASTING: 13344506.75

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	714.78
	TOPSOIL	713.88
2	SM-SILTY SAND (FILL), trace gravel, compact, fine grained, poorly graded, brown black, moist	712.98
4	DEBRIS, and SP-SAND, broken asphalt and wood mulch in fine grained sand, poorly graded, dark brown, moist	711.08
6	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, light brown, moist	707.48
8	ML-SANDY SILT (FILL), compact, fine sand, brown gray, moist	706.38
	SP-SAND, trace silt, compact, fine grained, poorly graded, light brown, moist	706.08 / 705.48
10	CL-SILTY CLAY, medium stiff, low plasticity, light gray, moist	704.58 / 704.28
12	ML-SANDY SILT, compact, fine grained sand, brown, moist	702.78 / 702.28
14	CL-SILTY CLAY, stiff, low plasticity, gray, moist	701.38 / 700.78
	ML-SANDY SILT, compact, fine grained sand, gray, wet	699.18
16	- 0.2' sand lens, trace silt, compact, fine grained, poorly graded, brown, wet at 11.0ft BGS	
18	SP-SAND, trace silt, compact, fine grained, poorly graded, gray, wet	
20	ML-SANDY SILT, compact, fine grained sand, gray, wet	694.78
22	CL-SILTY CLAY, stiff, low plasticity, gray, moist	
24	SM-SILTY SAND, compact, fine grained, poorly graded, gray, wet	
	CL-SILTY CLAY, stiff, low plasticity, gray, moist	
	END OF BOREHOLE @ 20.0ft BGS	
26		
28		
30		
32		
34		
36		
38		

BOREHOLE INSTALLATION

BACKFILLED WITH BENTONITE CHIPS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		75		0.0
				0.0
				0.0
2DP		80		0.0
				0.0
3DP		80		0.0
				0.0
4DP		85		0.0
				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-302
DATE COMPLETED: April 4, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268432.06
EASTING: 13344529.54

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	712.42						
0	TOPSOIL	711.42						0.0
2	SC-CLAYEY SAND (FILL), with gravel, compact, fine grained, poorly graded, brown, moist	710.92		1DP		75		
4	CL-SILTY CLAY (FILL), trace gravel, stiff, low plasticity, brown, moist	710.22						0.0
6	SP-SAND (FILL), compact, fine grained, poorly graded, light brown, moist	706.42						0.0
8	ML-SANDY SILT, compact, fine sand, laminate brown-gray	705.42	BACKFILLED WITH BENTONITE CHIPS	2DP		85		
10	SP-SAND, trace silt, compact, fine grained, poorly graded, light brown, moist	705.22						6.1
12	SC-CLAYEY SAND, compact, fine grained, poorly graded, brown gray, moist	704.32						
14	ML-SANDY SILT, compact, fine sand, brown gray, moist	702.82						9.6
16	SP-SAND, trace silt, compact, fine grained, poorly graded, brown gray, wet	702.22		3DP		75		
18	CL-SILTY CLAY, stiff, low plasticity, gray, moist							0.0
20	END OF BOREHOLE @ 15.0ft BGS	697.42						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-303
DATE COMPLETED: April 4, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268419.44
EASTING: 13344554.11

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.52						
0	TOPSOIL	713.52						0.0
2	CL-SILTY CLAY (FILL), stiff, low plasticity, gray, moist	712.92		1DP		95		0.8
4	SC-SAND (FILL), with clay, compact, fine grained, poorly graded, brown, moist	711.92						0.0
6	SM-SILTY SAND (FILL), compact, fine grained, poorly graded, brown, moist	710.42		2DP		95		0.8
8	SP-SAND (FILL), compact, fine to medium grained, poorly graded, light brown, damp - fine grained, orange brown, moist at 5.2ft BGS	706.52						86.2
10	CL-SILTY CLAY, soft, low plasticity, gray, moist - 0.1' sand lens, compact, fine grained, poorly graded, orange brown, moist at 8.8ft BGS	705.12	BACKFILLED WITH BENTONITE CHIPS	3DP		85		36.3
12	SM-SILTY SAND, compact, fine grained, poorly graded, gray, moist to wet - 0.1' clay lens, stiff, low plasticity, gray, moist at 12.8ft BGS							
14	- 0.1' clay lens, stiff, low plasticity, gray, moist at 13.7ft BGS	700.32						0.0
16	CL-SILTY CLAY, stiff, low plasticity, gray, moist			4DP		85		0.0
18								
20	END OF BOREHOLE @ 20.0ft BGS	694.52						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-304
DATE COMPLETED: April 4, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268412.69
EASTING: 13344573.58

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.75						
0	TOPSOIL	713.95						0.8
2	SM-SILTY SAND (FILL), trace fine gravel, compact, fine grained, poorly graded, brown, moist	712.25		1DP		85		
4	CL-SILTY CLAY (FILL), stiff, low plasticity, gray, moist	711.55						0.8
6	SP-SAND (FILL), compact, fine to medium grained, poorly graded, light brown, moist	707.95						1.7
8	SM-SILTY SAND (FILL), compact, fine grained, poorly graded, brown, moist	705.75		2DP		85		11.4
10	ML-SANDY SILT, compact, fine sand, laminate brown gray, moist	704.75						24.6
	- 0.1' sand lens, compact, fine grained, poorly graded, brown, moist at 9.8ft BGS							
12	CL-CLAY, trace fine sand, stiff, low plasticity, brown to gray, moist	702.25	BACKFILLED WITH BENTONITE CHIPS	3DP		50		1254
14	SP-SAND, compact, fine grained, poorly graded, gray to black staining, wet, odor							
16	- brown to gray at 14.8ft BGS							318
18	CL-SILTY CLAY, stiff, low plasticity, gray, moist	697.15		4DP		70		1063
20								
22				5DP		75		16.7
24								4.3
26	END OF BOREHOLE @ 25.0ft BGS	689.75						
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-305
DATE COMPLETED: April 4, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268411.24
EASTING: 13344586.72

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.57						
0	TOPSOIL	714.17						5.2
2	CL-SILTY CLAY (FILL), stiff, low plasticity, gray, damp	713.17		1DP		90		
		712.37						3.5
4	SM-SILTY SAND (FILL), compact, fine grained, poorly graded, brown, moist	712.17						
6	CL-SILTY CLAY (FILL), stiff, low plasticity, gray SP-SAND (FILL), trace silt, compact, fine to medium grained, poorly graded, brown to light brown, moist	707.57						2.6
8	SM-SILTY SAND (FILL), compact, fine grained, poorly graded, orange brown, moist	705.57		2DP		85		5.2
10	CL-SANDY CLAY, medium stiff, low plasticity, laminate brown-gray, moist	705.17	BACKFILLED WITH BENTONITE CHIPS					
		704.77						19.3
12	SM-SILTY SAND, compact, fine grained, poorly graded, brown, wet	704.37						
	CL-SANDY CLAY, medium stiff, low plasticity, fine sand, light brown gray, moist	702.37		3DP		80		
14	SP-SAND, compact, fine grained, poorly graded, brown, wet							663
16	- 0.1' clay lens, stiff, low plasticity, gray, moist at 12.2ft BGS							584
	SP-SAND, compact, fine grained, poorly graded, gray to black staining, slight odor, wet	697.97		4DP		95		
18	CL-SILTY CLAY, stiff, low plasticity, gray, moist							18.5
20	END OF BOREHOLE @ 20.0ft BGS	694.57						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-306
DATE COMPLETED: April 5, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268416.6
EASTING: 13344615.45

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	712.85						
0	TOPSOIL	712.25						
	CL-CLAY (FILL), stiff, low plasticity, gray, moist	711.85						0.0
2	SP-SAND (FILL), trace gravel, compact, fine grained, poorly graded, brown, moist			1DP		85		
4	- trace silt, light brown at 2.6ft BGS							20.6
6								0.0
	SM-SILTY SAND (FILL), compact, fine grained, poorly graded, light gray and light brown laminate, moist	705.85						
8		705.05		2DP		90		20.8
10	SP-SAND, trace silt, compact, fine grained, poorly graded, light brown, moist		BACKFILLED WITH BENTONITE CHIPS					4543
12	- light gray to dark gray, staining, wet, strong odor at 9.8ft BGS			3DP		85		
14		698.85						5836
	CL-SILTY CLAY, stiff, low plasticity, gray, moist							
16								24.7
18				4DP				
								2.9
20	END OF BOREHOLE @ 20.0ft BGS	692.85						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-307
DATE COMPLETED: April 5, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268403.22
EASTING: 13344616.36

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.91						
0	TOPSOIL	714.31						
2	SM-SILTY SAND (FILL), compact, fine grained, poorly graded, brown, moist	712.41		1DP		80		0.0
4	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, light brown, moist	709.91						0.0
6	SM-SILTY SAND (FILL), compact, fine grained, poorly graded, brown, moist	707.91						0.0
8	SP-SAND, trace silt, compact, fine grained, poorly graded, light brown, moist	704.71		2DP		70		0.0
10	ML-SANDY SILT, compact, fine grained sand, brown, moist	704.41						26.9
12	CL-SILTY CLAY, stiff, low plasticity, gray, moist	702.41	BACKFILLED WITH BENTONITE CHIPS	3DP		85		243.1
14	SP-SAND, trace silt, compact, fine grained, poorly graded, light gray, wet - light brown at 14.5ft BGS - dark gray black staining, moderate odor at 15.0ft BGS							6525
16								
18	CL-SILTY CLAY, stiff, low plasticity, gray, moist	697.41		4DP		80		1604
20								20.8
22				5DP		50		
24								0.0
26	END OF BOREHOLE @ 25.0ft BGS	689.91						
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-308
DATE COMPLETED: April 5, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268403.8
EASTING: 13344640.26
GROUND SURFACE 714.69

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	TOPSOIL	714.09
2	SP-SAND (FILL), trace silt and gravel, compact, fine grained, poorly graded, brown, moist	
4		710.69
4	CL-SILTY CLAY (FILL), stiff, low plasticity, gray, moist	710.19
6	- 0.1' GP-GRAVEL lens at 4.4ft BGS SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, light brown, moist	
8		706.49
8	SM-SILTY SAND, compact, fine grained, poorly graded, light brown gray laminate, moist	705.29
10	SP-SAND, trace silt, compact, fine grained, poorly graded, brown, wet	
12		703.09
12	SM-SILTY SAND, compact, fine grained, poorly graded, dark gray to black staining, wet, moderate odor	
14		
16		699.69
16	CL-SILTY CLAY, stiff, low plasticity, gray, moist	
18		
20		694.69
20	END OF BOREHOLE @ 20.0ft BGS	
22		
24		
26		
28		
30		
32		
34		
36		
38		

BOREHOLE INSTALLATION: BACKFILLED WITH BENTONITE CHIPS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				7.9
1DP		60		
				2.9
				2.9
2DP		80		
				0.7
				279
3DP		85		
				9899
				392
4DP		85		
				2.9

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-309
DATE COMPLETED: April 5, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268431.58
EASTING: 13344687.22

GROUND SURFACE 707.55

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	TOPSOIL	707.35
2	CL-SILTY CLAY (FILL), stiff, low plasticity, gray, moist	705.75
	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, light brown, moist	704.55
4	CL-SANDY CLAY (FILL), firm, low plasticity, light brown gray, moist	703.85
6	SP-SAND, trace silt, compact, fine grained, poorly graded, light brown to brown to black/dark gray, wet	700.15
8	CL-SILTY CLAY, stiff, low plasticity, gray, moist	699.55
	END OF BOREHOLE @ 8.0ft BGS	
10		
12		
14		
16		
18		
20		
22		
24		
26		
28		
30		
32		
34		
36		
38		

BOREHOLE INSTALLATION: BACKFILLED WITH BENTONITE CHIPS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		50		0.0
2DP		95		805
3DP		100		576
4DP		100		376

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-310
DATE COMPLETED: April 5, 2012
DRILLING METHOD: DIRECT PUSH/ JACK HAMMER PROBE
FIELD PERSONNEL: D. RIVERS

NORTHING: 268430.82
EASTING: 13344706.89

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	706.73						
0	TOPSOIL	706.13		1DP				0.0
2	CL-SILTY CLAY (FILL), stiff, low plasticity, light gray, moist			2DP				0.0
4	SP-SAND, trace silt, compact, fine grained, poorly graded, black, wet, slight odor	702.73	BACKFILLED WITH BENTONITE CHIPS	3DP				826
6	CL-SILTY CLAY, stiff, low plasticity, gray, moist	700.93		4DP				222
8	END OF BOREHOLE @ 8.0ft BGS	698.73						
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-311
DATE COMPLETED: April 5, 2012
DRILLING METHOD: DIRECT PUSH/ JACK HAMMER PROBE
FIELD PERSONNEL: D. RIVERS

NORTHING: 268427.67
EASTING: 13344732.27

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	707.49						
0	TOPSOIL	706.69	BACKFILLED WITH BENTONITE CHIPS	1DP		55		0.0
2	CL-SILTY CLAY (FILL), stiff, low plasticity, gray, moist to dry	705.49		2DP		100		0.0
4	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, light brown to brown, moist	704.69		3DP		100		559
6	CL-SILTY CLAY (FILL), stiff, low plasticity, gray, moist to dry - 0.2' sand lens, compact, fine grained, poorly graded, black, moist at 3.9ft BGS	703.69 701.99		4DP		100		2255
8	SM-SILTY SAND, compact, fine grained, poorly graded, light brown, wet - gray to light gray at 4.9ft BGS	699.69		5DP		100		51
10	SP-SAND, trace silt, compact, fine grained, poorly graded, laminate gray, brown, black staining, wet, slight odor	697.99						
12	CL-SILTY CLAY, stiff, low plasticity, gray, moist							
	END OF BOREHOLE @ 9.5ft BGS							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-312
DATE COMPLETED: April 5, 2012
DRILLING METHOD: DIRECT PUSH/ JACK HAMMER PROBE
FIELD PERSONNEL: D. RIVERS

NORTHING: 268430.08
EASTING: 13344747.36

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	706.57						
0	TOPSOIL	706.07		1DP				482
2	CL-SILTY CLAY (FILL), soft, medium stiff, low plasticity, brown, moist	703.57		2DP				0.0
4	SM-SILTY SAND (FILL), compact, fine grained, poorly graded, dark brown to brown, wet	702.97	BACKFILLED WITH BENTONITE CHIPS	3DP				3629
6	ML-SANDY SILT, compact, fine sand, brown gray, moist	701.57		4DP				82.5
8	SP-SAND, trace silt, compact, fine grained, poorly graded, staining black to gray, wet, strong odor	700.27						
10	CL-SILTY CLAY, stiff, low plasticity, gray, moist	699.07						
	END OF BOREHOLE @ 7.5ft BGS							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-313
DATE COMPLETED: April 5, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268401.57
EASTING: 13344674.99

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.75						
0	TOPSOIL	714.25						
2	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, light brown, moist			1DP		65		140
4								76.7
6								173
8		706.55		2DP		85		
	SM-SILTY SAND, compact, fine grained, poorly graded, light brown gray laminate, moist	705.55						690
10	SP-SAND, trace silt, compact, fine grained, poorly graded, light brown, wet	704.75	BACKFILLED WITH BENTONITE CHIPS					
12	SM-SILTY SAND, compact, fine grained, poorly graded, brown, wet, slight odor			3DP		75		1575
14	SP-SAND, trace silt, compact, fine grained, poorly graded, staining black to gray, wet, strong odor	701.95						3209
16	CL-SILTY CLAY, stiff, low plasticity, gray, moist	699.75						120
18				4DP		80		2.9
20	END OF BOREHOLE @ 20.0ft BGS	694.75						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-314
DATE COMPLETED: April 5, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268388.08
EASTING: 13344697.31

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.24						
0	TOPSOIL	714.44						
2	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, light brown, moist			1DP		70		39.0
4								88.8
6								51.3
8		707.04		2DP		85		
8	SM-SILTY SAND, compact, fine grained, poorly graded, light brown and gray, moist							1511
10	SP-SAND, with silt, compact, fine grained, poorly graded, brown to light brown, wet	705.24	BACKFILLED WITH BENTONITE CHIPS					8203
12				3DP		85		
14	SM-SILTY SAND, compact, fine grained, poorly graded, gray with slight black staining, wet, moderate odor	702.04						5772
16	CL-SILTY CLAY, stiff, low plasticity, gray, moist	699.44						76
18				4DP		100		32
20	END OF BOREHOLE @ 20.0ft BGS	695.24						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-315
DATE COMPLETED: April 5, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268401.68
EASTING: 13344736.35

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.65						
0	TOPSOIL	713.85						
2	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, brown to light brown, moist			1DP				76.7
4								45.2
6								8.9
8	SM-SILTY SAND, compact, fine grained, poorly graded, orange brown, moist	707.65		2DP				
10	SP-SAND, trace silt, compact, fine grained, poorly graded, orange brown, wet	705.65 / 704.65	BACKFILLED WITH BENTONITE CHIPS					8.9
12	SM-SILTY SAND, compact, fine grained, poorly graded, brown gray, wet			3DP				1527
14	ML-SANDY SILT, compact, fine grained sand, gray, wet	701.65 / 700.65						1998
16	CL-SILTY CLAY, stiff, low plasticity, gray, moist							0.0
18				4DP		100		0.0
20	END OF BOREHOLE @ 20.0ft BGS	694.65						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-316
DATE COMPLETED: April 5, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268403.57
EASTING: 13344764.18

GROUND SURFACE 714.76

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	TOPSOIL	714.06
2	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, light brown, moist	
4		
6		
8		
10	- 0.2' clayey sand, compact, fine grained, poorly graded, light brown to orange, moist at 9.4ft BGS	704.76
12	SM-SILTY SAND, compact, fine grained, poorly graded, light brown, wet	
14	- 0.2' sand lens, compact, fine grained, poorly graded, light brown, wet at 10.8ft BGS	701.26
	ML-SANDY SILT, compact, fine grained sand, light gray, moist to wet	700.56
16	SP-SAND, trace silt, compact, fine grained, poorly graded, light gray, wet, slight odor	698.26
18	CL-SILTY CLAY, stiff, low plasticity, gray, moist	
20	END OF BOREHOLE @ 20.0ft BGS	694.76
22		
24		
26		
28		
30		
32		
34		
36		
38		

BOREHOLE INSTALLATION: BACKFILLED WITH BENTONITE CHIPS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		60		20.8
				32.9
				0.0
2DP		70		8.9
				805
3DP		60		6100
				167.1
4DP		70		0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-317
DATE COMPLETED: April 5, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268394.54
EASTING: 13344794.59

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.35						
0	TOPSOIL	715.05						
	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse sand, fine angular gravel, light gray, moist	714.75						0.0
2				1DP		80		
	SM-SILTY SAND (FILL), compact, fine grained, poorly graded, brown, moist	712.65						8.9
4		712.35						
	DEBRIS ZONE (FILL), paint sludge, compact, dark bluish black, moist							145
6								
	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, light brown to brown, moist	708.35						
8		707.35		2DP		85		
	- black staining, slight odor at 6.3ft BGS							579
	SM-SILTY SAND(FILL), compact, fine grained, poorly graded, light gray, moist							
10			BACKFILLED WITH BENTONITE CHIPS					
	SP-SAND, trace silt, compact, fine grained, poorly graded, light brown to orange, moist							369
12	- light gray, wet at 10.3ft BGS			3DP		80		
	ML-SANDY SILT, compact, fine sand, light gray, moist to wet	701.85						329
14								
	SP-SAND, trace silt, compact, fine grained, poorly graded, light brown, wet	700.35						
16								349
	CL-SILTY CLAY, stiff, low plasticity, gray, moist	698.15						
18				4DP		95		
	- 0.1' silty sand seam, compact, fine grained, poorly graded, light gray, wet at 18.7ft BGS							0.0
20								
	END OF BOREHOLE @ 21.0ft BGS	694.35						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-318
DATE COMPLETED: April 5, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

NORTHING: 268393.86
EASTING: 13344612.97

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.67						
0	TOPSOIL	714.07						0.0
2	SP-SAND (FILL), compact, fine to medium grained, poorly graded, red brown, moist - trace silt, fine grained, poorly graded, light brown at 1.0ft BGS			1DP		75		2.9
4								
6								14.8
8	CL-SANDY CLAY (FILL), soft to firm, low plasticity, gray, moist	706.87		2DP		80		101
10	CL-SILTY CLAY, stiff, low plasticity, gray, moist	705.07	BACKFILLED WITH BENTONITE CHIPS					
	SP-SAND, trace silt, compact, fine grained, poorly graded, light gray, wet	704.17 703.67						1924
12	CL-SILTY CLAY, stiff, low plasticity, gray, moist	702.87		3DP		80		
14	SP-SAND, trace silt, compact, fine grained, poorly graded, light gray, wet - dark gray black, moderate odor at 12.5ft BGS							1826
16	CL-SILTY CLAY, stiff, low plasticity, gray, moist	699.67						257
18				4DP		75		8.9
20	END OF BOREHOLE @ 20.0ft BGS	694.67						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-319
DATE COMPLETED: April 5, 2012
DRILLING METHOD: DIRECT PUSH/ JACK HAMMER PROBE
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268457.22 EASTING: 13344522.62 GROUND SURFACE	702.99						
0	TOPSOIL	702.69		1DP		80		0.0
2	SP/GP-SAND AND GRAVEL (FILL), compact, fine to coarse sand, fine angular gravel, light gray, moist							
4	- light brown at 3.7ft BGS - light gray at 4.0ft BGS	698.69 698.49	BACKFILLED WITH BENTONITE CHIPS	2DP		85		0.0
6	SP-SAND, fine to coarse grained, poorly graded, brown, moist to wet	696.99		3DP		90		26.9
8	CL-SILTY CLAY, medium stiff, low plasticity, gray, moist END OF BOREHOLE @ 6.0ft BGS							
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/10/13

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 45' west of SB–18–33 and 15' north of fence See Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 11, 1996	
BORING NO.: SB–18–28	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 13' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS: Duplicate 2W (6"–2') – (Pb)
WEATHER: Overcast, 36°, Wind – NE 10–15 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0	6"	Pb, PAH/ IPAH	0–1' Silty sand, some rock and coal slag fragments, dusky yellowish brown (10YR 2/2).
2		6"	2'	Dup Pb	1'–3.5' Clayey silt – sandy silt, moderate yellowish brown (10YR 5/4).
3		2'	4'	Pb, PAH/ IPAH	3.5'–3.75' Silty clay, black (N1), discolored, hydrocarbon–like odo 3.75'–4.5' Silty sand, dark yellowish brown.
4		4'	6'	Pb, PAH/ IPAH	4.5'–8.5' Silty sand, dark yellowish orange.
5		6'	8'	Pb, PAH/ IPAH	4.5'–8.5' Silty sand, dark yellowish orange.
6		8'	10'	Pb, PAH/ IPAH	8.5'–10' Sandy silt, dark yellowish orange.
7		10'	12'	Pb, PAH/ IPAH	10'–10.5' Silty clay, moderate yellowish brown, moist, friable. 10.5'–13' Clayey silt, pale yellowish brown, moist.
8		12'	13'	Pb, PAH/ IPAH	13'–13.25' Sand, dark yellowish orange, very fine –fine grained. 13.25'–13.75' Clayey silt, black discoloration, petroleum sheen.
					13.75'–14' Silty clay, olive gray. End of boring = 14' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\04570266.wk3

Boring lies approx. 3' west of a large (3–prong growth) tree.

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 18, 1996

BORING NO.: SB-18-29

RECORDED BY: Alan Fass

DRILL TYPE: Simco Earthprobe 200

WEATHER: Sunny, 27°, Wind - West approx. 15-20 mph

LOCATION: Kaiser-Frazer Dump Area PAOC 18
Approx. 8' south of fence and 26' east of outfall 12
See Weston Map - Figure 1)
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 11' BGS

COMMENTS: 10:52 Equipment blank 2W2 prepared off inside of a 4' sampling tube for Pb analysis only.

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		2	8"	Pb	0-2" Asphaltic concrete.
2		8"	2.2'	Pb	2"-1' Sandy gravel, dusky brown - very pale orange. 1'-1.5' Clayey sand, moderate yellowish brown.
3		2.2'	4.2'	Pb	1.5'-2' Sandy clay, olive gray. 2'-3' Clayey/silty sand, light yellowish orange.
4		4.2'	6.2'	Pb Dup Pb	3'-8' Clayey/silty sand, some rock fragments, dark - light yellowish orange.
5		6.2'	8.2'	Pb, 8260 Dup 8260	8'-9' Silty sand-sandy clay, apparent petroleum discolored soils, light olive gray; metal and glass debris, apparent paint waste fragments, petroleum (PAH and solvent-like odors).
6		8.2'	11'	Pb, PAH Dup PAH	9'-10' Sandy clay-clayey sand, dark yellowish orange-olive gray, some paint waste fragments, fabric cloth. 10'-11' Silty clay, olive gray.
					11'-12' Silty/clayey sand, olive gray. End of boring = 12' BGS

REMARKS

SS - Split Spoon

BLS - Below Land Surface

NR - Not Recorded

m:\480\04670266.wk3

Hydrocarbon (solvent-like) odors noted in soils recovered from 1'-12' BGS. Petroleum odors (PAHs) noted in soils recovered from 8'-12' BGS.
Duplicate soil sample collected from 4'-6' BGS for Pb analysis, from 8.2'-11' BGS for PAH analysis, and from 6.2'-8.2' BGS for 8260 analysis.

Duplicate I.D.'s for Soil Samples:

Duplicate I.D.	Corresponds to SB#	Lab Analysis
Duplicate 1W2	SB-18-29 (4.2'-6.2')	7421-Pb
Duplicate 2W2	SB-18-29 (8.2'-11')	8100-PAH
Duplicate 3W2	SB-18-29 (6'-8')	8260 (Hold)

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser Frazer Dump Area PAOC 18 Approx. 5' north of fence and 30' east of gridline A+00 (see Weston Map–Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 12, 1996	
BORING NO.: SB–18–3	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 11' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS:
WEATHER: Overcast, 39°, Wind – NE 5–10 mph	

SAMPLE NO.	TEST TYPE	DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0	6"	Pb, PAH, IPAH	0–1' Silty sand/clayey sand, some gravel, dark red solidified paint waste?
2		6"	2'	Pb, PAH, IPAH	2'–4' Gravelly sand, some silt, dark yellowish brown concrete debris, paint sludge (hardened) – green and yellow fragments, glass debris, plastic debris.
3		2'	4'	Pb, PAH, IPAH,	
4		4'	6'	Pb, PAH, IPAH	4'–5' concrete fragments 5'–5.5' concrete fragments
5		6'	8'	Pb, PAH, IPAH	5.5'–9.75' Concrete debris
6		8'	10'	Pb, PAH, IPAH	9.75'–10' Glass and plastic debris 10'–11' Organic silty clay, hydrocarbon odors, dusky brown, shell fragments.
7		10'	11'	Pb, PAH, IPAH	11'–12' Silty clay – sandy silt, olive gray, petroleum sheen, hydrocarbon odors. End of boring = 12'BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

Note: Sample 10'–11' has strong hydrocarbon odors, note on COC.

m:\480\01970266.wk3

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 14, 1996

BORING NO.: SB-18-31

RECORDED BY: Alan Fass

DRILL TYPE: Simco Earthprobe 200

WEATHER: Sunny, 26°, Wind - West 0-5 mph

LOCATION: Kaiser-Frazer Dump Area PAOC 18
Approx. 20' southwest of SB-18-35
See Weston Map - Figure 1)

Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 12' BGS

COMMENTS: 8:35 Equipment blank 1S prepared off inside of plastic sampling tube for 4'-8' interval for PAH and Pb analysis.

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
					0-2" Asphaltic concrete.
1		2"	8"	Pb	2"-1' Sand and rock fragments (sub base).
				Pb	1'-3' Silty sand, dark yellowish orange.
2		8"	2.2'	Dup Pb	
					3'-3.5' Clayey sand, dark yellowish orange.
3		2.2'	4.2'	Pb, PAH	3.5'-4.5' Silty sand, moderate yellowish orange.
					4.5'-6.5' Gravelly, clayey sand - gravelly sandy clay.
4		4.2'	6.2'	Pb	
					6.5'-7.5' Silty clay, light olive gray.
5		6.2'	8.2'	Pb	7.5'-10.5' Silty sand, pale yellowish brown - moderate yellowish brown - dark yellowish orange.
6		8.2'	10.2'	Pb	
					10.5'-11.75' Silty/sandy clay, dark yellowish orange.
7		10.2'	12'	Pb	11.75'-12' Silty sand, pale yellowish brown.
					End of boring = 12'BGS

REMARKS

SS - Split Spoon

BLS - Below Land Surface

NR - Not Recorded

m:\480\04770266.wk3

Duplicate soil sample collected from 2.2'-4.2' for PAH analysis. (Not submitted to lab.)
Duplicate soil sample collected from 8"-2.2' for Pb analysis (Duplicate 2S) - submitted to lab.

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 10, 1996

BORING NO.: SB-18-33

RECORDED BY: Alan Fass

DRILL TYPE: Simco Earthprobe 200

WEATHER: Mostly cloudy, 33°, Wind - West <5 mph

LOCATION: Kaiser-Frazer Dump Area PAOC 18
Approx. 18' north of fence and 92' west of outfall 13
See Weston Map - Figure 1)
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 11.5' BGS

COMMENTS:

SAMPLE NO.	DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1	0"		6"	0-1' Silty sand, some rock and coal slag fragments, dusky yellowish brown (10YR 2/2).
2	6"		2'	1'-3.5' Clayey silt - sandy silt, moderate yellowish brown (10YR 5/4).
3	2'		4'	3.5'-3.75' Silty clay, black (N1), discolored, hydrocarbon-like odor. 3.75'-4.5' Silty sand, dark yellowish brown.
4	4'		6'	4.5'-8.5' Silty sand, dark yellowish orange.
5	6'		8'	
6	8'		10'	8.5'-10' Sandy silt, dark yellowish orange.
7	10'	11.5'	12'	10'-10.5' Silty clay, moderate yellowish brown, moist, friable. 10.5'-12.5' Clayey silt, pale yellowish brown, moist.
				End of boring = 12' BGS

REMARKS

SS - Split Spoon

BLS - Below Land Surface

NR - Not Recorded

m:\480\04870266.wk3

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 9.5' south of fence and 69' west of outfall 13 See Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 13, 1996	
BORING NO.: SB–18–35	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 12' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS: Duplicate 4F (2.2'–4.2') – (Pb) Duplicate 7F (8"–2.2') – (8260)
WEATHER: Sunny, 41°, Wind – West 5–10 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		2"	8"	Pb, 8260*	0–2" Asphaltic concrete. 2"–1' Sandy gravel, pale yellowish brown (sub–base).
2		8"	2.2'	Pb, 8260* Dup 8260	1'–2' Silty sand, olive brown apparent staining and hydrocarbon odors.
3		2.2'	4.2'	Pb, PAH, 8260* Dup Pb	2'–4.5' Paint sludge (red, dark blue), gooey, hydrocarbon odors.
4		4.2'	6.2'	Pb, 8260*	4.5'–6' Sand, moderate yellowish brown, hydrocarbon odors. 6'–7' Silty sand, moderate yellowish brown, (oil–like residue in soil), hydrocarbon odors.
5		6.2'	8.2'	Pb, 8260*	7'–7.5' Clayey sand, dark yellowish orange (oil–like residue in soil), no hydrocarbon odors.
6		8.2'	10.2'	Pb, PAH, 8260*	7.5'–8.5' Silty sand, dark yellowish orange, hydrocarbon odors.
7		10.2'	12'	Pb, 8260*	8.5'–11.5' Silty sand, moderate brown, hydrocarbon odors. 11.5'–12.5' Silty sand, light olive gray, hydrocarbon odors.
					12.5'–13' Sandy silt, light olive gray, hydrocarbon odors. 13'–14' Silty sand, pale yellowish brown – light olive gray, hydrocarbon odors.

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\04970266.wk3

* – Hold 8260 sample for P.M. approval.

Note: All soils between 2' and 14' BGS had hydrocarbon odors.

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 13, 1996

BORING NO.: SB-18-36

RECORDED BY: Alan Fass

DRILL TYPE: Hand Auger

WEATHER: Cloudy, 38°, Wind - West 5-10 mph

LOCATION: Kaiser-Frazer Dump Area PAOC 18
Approx. 40' north of fence and 62' west of outfall 13
See Weston Map - Figure 1)
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 5' BGS

COMMENTS: Duplicate 4F (2.2'-4.2') - (Pb)
Duplicate 7F (8"-2.2') - (8260)

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0"	6"	Pb	0-1.5' Silty sand, dark yellowish brown, some roots and rock fragments.
2		6"	2'	Pb	1.5'-4' Silty sand, moderate yellowish brown, some roots.
3		2'	4'	Pb, PAH Dup Pb	4'-5' Silty sand, dark yellowish orange.
4		4'	5'	Pb	5'-6' Silty sand/sandy silt, dark yellowish orange - moderate olive brown.
					End of boring = 6' BGS

REMARKS

SS - Split Spoon

BLS - Below Land Surface

NR - Not Recorded

m:\480\05070266.wk3

Duplicate soil sample taken @ 2'-4' interval for Pb analysis.
(Duplicate 2F) - (Pb)

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 14' north of fence and 70' west of outfall 13 See Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 9, 1996	
BORING NO.: SB–18–37	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 12' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS: Duplicate 4 (2'–4') – (Pb)
WEATHER: Cloudy, 28°, Wind – West <5 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0"	6"	Pb, PAH IPAH	0–1' Silty sand, some rock and coal slag fragments, dusky yellowish brown (10YR 2/2).
2		6"	2'	Pb, PAH IPAH	1'–3.5' Clayey silt – sandy silt, moderate yellowish brown (10YR 5/4).
3		2'	4'	Dup. Pb	3.5'–3.75' Silty clay, black (N1), discolored, hydrocarbon–like odo 3.75'–4.5' Silty sand, dark yellowish brown.
4		4'	6'	Pb, PAH IPAH	4.5'–8.5' Silty sand, dark yellowish orange.
5		6'	8'	Pb, PAH IPAH	8.5'–10' Sandy silt, dark yellowish orange.
6		8'	10'	Pb, PAH IPAH	10'–10.5' Silty clay, moderate yellowish brown, moist, friable. 10.5'–12.5' Clayey silt, pale yellowish brown, moist.
7		10'	12'	Pb, PAH IPAH	12.5'–14' Silty sand, pale yellowish brown, wet.
					End of boring = 14' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\05170266.wk3

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 13, 1996

BORING NO.: SB-18-38

RECORDED BY: Alan Fass

DRILL TYPE: Hand Auger

WEATHER: Cloudy, 38°, Wind - NW 5-10 mph

LOCATION: Kaiser-Frazer Dump Area PAOC 18
Approx. 41' north of fence and 36' west of outfall 13
See Weston Map - Figure 1)
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 5.5' BGS

COMMENTS: 9:50 Field equipment blank 1F prepared off inside of hand auger. Pb & PAH analysis (lab).

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0"	6"	Pb	0-1.5' Silty sand, dark yellowish brown, some roots and rock fragments.
2		6"	2'	Pb	1.5'-4' Silty sand, moderate yellowish brown, some roots.
3		2'	4'	Pb, PAH Dup PAH	4'-5' Silty sand, dark yellowish orange.
4		4'	5.5'	Pb	5'-6' Silty sand/sandy silt, dark yellowish orange - moderate olive brown.

REMARKS

SS - Split Spoon

BLS - Below Land Surface

NR - Not Recorded

m:\480\05270266.wk3

Duplicate soil sample taken at 2'-4' interval for PAH analysis. (Duplicate 5F)

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 20' southeast of SB–18–35 See Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 14, 1996	
BORING NO.: SB–18–39	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 12' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS: 9:05 Equipment blank 2S from 0–4' sampling tube.
WEATHER: Sunny, 27°, Wind – West 5 mph	9:10 Equipment blank 3S from 4'–8' sampling tube. Both equipment blanks for PAH analysis only.

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		2"	8"	Pb	0–2" Asphaltic concrete. 2"–1' Sand and rock fragments (sub base).
2		8"	2.2'	Pb	1'–3' Silty sand, dark yellowish orange.
3		2.2'	4.2'	Pb, PAH	3'–3.5' Clayey sand, dark yellowish orange. 3.5'–6.5' Silty sand, moderate yellowish orange.
4		4.2'	6.2'	Pb	
5		6.2'	8.2'	Pb	6.5'–7.5' Sandy silt, dark yellowish orange – moderate yellowish brown.
6		8.2'	10.2'	Pb	7.5'–8' Silty clay, dark yellowish orange – moderate yellowish brown.
7		10.2'	12'	Pb	8'–9' Silty sand, dark yellowish orange – moderate yellowish brown.
					9'–10' Sandy–clayey silt, pale yellowish brown – dark yellowish orange.
					10'–12' Silty sand, pale yellowish brown.
					End of boring = 12' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\05370266.wk3

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 11, 1996

BORING NO.: SB-18-4

RECORDED BY: Alan Fass

DRILL TYPE: Simco Earthprobe 200

WEATHER: Overcast, 36o, Wind - NE 10-15 mph

LOCATION: Kaiser-Frazer Dump Area PAOC 18
Approx. 16' north of fence and 10' east of gridline A+00 (see Weston Map - Figure 1)
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 11' BGS

COMMENTS: Duplicate W (0-6") (Pb Only)

SAMPLE NO.	DEPTH FROM	DEPTH TO	Test Type	Lab/Field SOIL DESCRIPTION AND BORING LOG
1	0	6"	Pb, Dup-Pb	0-1' Silty sand/clayey sand, some gravel, dark red solidified paint waste? Material at 0' - 1' interval.
2	6"	2'	Pb	2'-4' Gravelly sand, some silt, dark yellowish brown concrete debris, paint sludge (hardened) - green and yellow fragments, glass debris, plastic, debris.
3	2'	4'	Pb	
4	4'	6'	Pb	4'-7' Plastic debris
5	6'	8'	Pb	7'-8' Concrete debris
6	8'	10'	Pb	
7	10'	11'	Pb	11'-12' Silty sand, dark yellowish orange
				End of boring = 14' BGS

REMARKS

SS - Split Spoon

BLS - Below Land Surface

NR - Not Recorded

Note: At approx. 1' BLS, a yellow fragment of hardened paint-waste material encountered.

m:\480\02070266.wk3

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 13, 1996

BORING NO.: SB–18–40

RECORDED BY: Alan Fass

DRILL TYPE: Hand Auger

WEATHER: Cloudy, 36°, Wind – NW 5–10 mph

LOCATION: Kaiser–Frazer Dump Area PAOC 18
Approx. 38' north of fence and 16' west of outfall 13
(See Weston Map – Figure 1)
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 6.25' BGS

COMMENTS:

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0"	6"	Pb	0–1.5' Silty sand, dark yellowish brown, some roots and rock fragments.
2		6"	2'	Pb	1.5'–4' Silty sand, moderate yellowish brown, some roots.
3		2'	4'	Pb, PAH	4'–5' Silty sand, dark yellowish orange.
4		4'	6'	Pb	5'–7' Silty sand/sandy silt, dark yellowish orange – moderate olive brown.
					End of boring = 7' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\05470266.wk3

Duplicate soil sample taken @ 2'–4' interval for Pb analysis. (Not submitted to lab.)

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 17' north of fence and 38' west of outfall 13 (See Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 9, 1996	
BORING NO.: SB–18–41	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 13.5' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS: 14:10 (Pb and PH analysis) Equipment rinse #2M blank taken on plastic sampling tube, prior to boring. Taken off inside of plastic sampling tube. (0'–4' interval) (Duplicate 3–Pb)
WEATHER: Cloudy, 28°, Wind – West 5–10 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0"	6"	Pb, PAH, lPAH	0–1.5' Silty sand, dark yellowish brown (10YR 4/2).
2		6"	2'	Dup Pb	1.5'–5' Silty sand, dark yellowish orange (10YR 6/6).
3		2'	4'	Pb, PAH, lPAH	
4		4'	6'	Pb, PAH, lPAH	5'–6' Clayey silt – silty clay, dark yellowish orange.
5		6'	8'	Pb, PAH, lPAH	6'–10' Silt, grayish orange (10YR 7/4) – dark yellowish orange.
6		8'	10'	Pb, PAH, lPAH	10'–13' Silty sand, pale yellowish brown (10YR 6/2).
7		10'	12'	Pb, PAH, lPAH	
8		12'	13.5'	Pb, PAH, lPAH	13'–13.5' Silty clay, pale yellowish brown, moist, friable. 13.5'–14' Silty sand, pale yellowish brown, wet.
					End of boring = 14' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\05570266.wk3

Duplicate soil sample (Duplicate 3) taken from 6"–2' interval for Pb analysis.
Duplicate soil sample collected from 2'–4' interval for PAH analysis, but not submitted to lab.

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 23' south of fence and 24' west of outfall 13 (See Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 13, 1996	
BORING NO.: SB–18–41A	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 11' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS: 12:18 Equipment blank 2F prepared off inside of plastic sampling tube for 0–4' interval – (Pb and PAH analysis)
WEATHER: Cloudy, 39°, Wind – NW 10–15 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0"	6"	Pb, IPAH	0'–3' Silty sand, brown.
2		6"	2'	Dup Pb	
3		2'	4'	Pb, PAH, IPAH	3'–6' Silty sand, light yellowish orange.
4		4'	6'	Pb, IPAH	6'–6.5' Clayey sand – sandy clay – clayey silt, light yellowish orange.
5		6'	8'	Pb, IPAH	6.5'–7.5' Silty gravelly sand, light–pale yellowish orange. 7.5'–9' Sandy silt, pale yellowish orange to silt, dark yellowish orange.
6		8'	10'	Pb, IPAH	9'–10' Silty clay, dark yellowish orange and medium gray blended.
7		10'	11'	Pb, IPAH	10'–11' Silty sand, pale yellowish orange – dark yellowish orange. 11'–12' Silty sand, pale yellowish brown.
					End of boring = 12' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\05670266.wk3

Duplicate soil sample collected from 6"–2' for Pb analysis. (Duplicate 3F)

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 9, 1996

BORING NO.: SB-18-43

RECORDED BY: Alan Fass

DRILL TYPE: Simco Earthprobe 200

WEATHER: Cloudy, 30₀, Wind - West 5-10 mph

LOCATION: Kaiser-Frazer Dump Area PAOC 18
Approx. 16' north of fence and 10' east of outfall 13 (centerline)
(See Weston Map - Figure 1)
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 13' BGS

COMMENTS:

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0"	6"	Pb, PAH IPAH	0-1.5' Silty sand, dark yellowish brown (10YR 4/2).
2		6"	2'	Pb, PAH IPAH	1.5'-5' Silty sand, dark yellowish orange (10YR 6/6).
3		2'	4'	Dup. Pb	
4		4'	6'	Pb, PAH IPAH	5'-6' Clayey silt - silty clay, dark yellowish orange.
5		6'	8'	Pb, PAH IPAH	6'-10' Silt, grayish orange (10YR 7/4) - dark yellowish orange.
6		8'	10'	Pb, PAH IPAH	
7		10'	12'	Pb, PAH IPAH	10'-13' Silty sand, pale yellowish brown (10YR 6/2).
8		12'	13'	Pb, PAH IPAH	13'-13.5' Silty clay, pale yellowish brown, moist, friable.
					13.5'-14' Silty sand, pale yellowish brown, wet.
					End of boring = 14' BGS

REMARKS

SS - Split Spoon

BLS - Below Land Surface

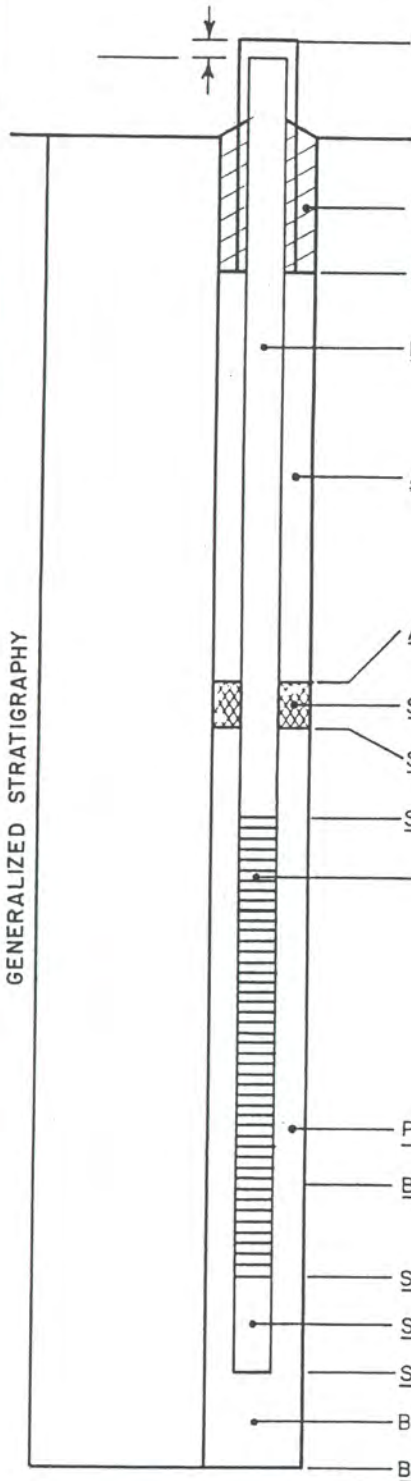
NR - Not Recorded

m:\480\05770266.wk3

SUBSURFACE FIELD LOG
MONITORING WELL CONSTRUCTION DETAILS

SHEET 1 OF 1

MW-18-45
MONITORING WELL
Willow Run (Kaiser-Frazer Dump Area)
PROJECT:
PROJECT NO. 480.75
BY: Alan Fass
DATE: 12/16/96



PROTECTIVE CASING-MATERIAL Sch. 40 PVC
-HEIGHT ~3 feet
-DIAMETER 2 inches
SURFACE SEAL-MATERIAL Cement Grout
SURFACE SEAL-DEPTH 0-3.5 feet BGS
RISER-MATERIAL Sch. 40 PVC
-DIAMETER 2 inches
ANNULUS-MATERIAL Cement Grout
ANNULUS-DEPTH 3.5 feet BGS
SEAL-MATERIAL Bentonite
SEAL-DEPTH 4.5 feet BGS
SCREEN-TOP 6.5 feet BGS
-MATERIAL Sch. 40 PVC
-SLOT SIZE .010
-LENGTH 10 feet
-DIAMETER 2 inches
PACK-MATERIAL #3 Sand
BORING-DIAMETER 7.25 inches
SCREEN-DEPTH 16 feet BGS
SUMP-LENGTH 6 inches
SUMP-DEPTH 16.5 feet BGS
BACKFILL-MATERIAL #3 Sand
BORING-DEPTH 17 feet BGS

WATER LEVEL UPON COMPLETION 14.65 ft. below Top-of-Casing (T.O.C.)
DRILLER Brad Massey ant - Superior Environmental
METHOD Hollow Stem Auger
RIG TYPE Simco Earthprobe 200
SAMPLING METHOD Bailer
DEVELOPMENT DATE 12/17/96
DEVELOPMENT METHOD Peristaltic Pump (Slow Develop)

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

50663

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 16, 1996

BORING NO.: SB–18–45/MW–18–45

RECORDED BY: Alan Fass

DRILL TYPE: Hand Auger

WEATHER: Sunny, 29°, Wind – West 5 mph

LOCATION: Kaiser–Frazer Dump Area PAOC 18
Approx. 5' east and 3' north of SB–18–37 (See Weston Map – Figure 1)
71' west of outfall 13 and 17' north of fence.
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 11' BGS

COMMENTS: Duplicate 1M2 collected from SB–18–45 (6"–2') for Pb analysis. Duplicate 4M2 collected from SB–18–45 (4'–6') for PAH analysis. Equipment blank 4S from 0–4' sampling tube for PAH analysis. Equipment blank 5S from 4'–8'sampling tube for PAH and Pb analysis.

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0"	6"	Pb	0–1' Silty sand, some rock and coal slag fragments, dusky yellowish brown (10YR 2/2).
2		6"	2'	Pb Dup Pb	1'–1.3' Paint sludge/waste.
3		2'	4'	Pb	1'–3.5' Clayey silt – sandy silt, moderate yellowish brown (10YR 5/4).
4		4'	6'	Pb, PAH Dup PAH	3.5'–3.75' Silty clay, black (N1), discolored, hydrocarbon–like odo 3.75'–4.5' Silty sand, dark yellowish brown.
5		6'	8'	Pb	4.5'–8.5' Silty sand, dark yellowish orange.
6		8'	10'	Pb	8.5'–10' Sandy silt, dark yellowish orange.
7		10'	12'	Pb	10'–10.5' Silty clay, moderate yellowish brown, moist, friable. 10.5'–12.5' Clayey silt, pale yellowish brown, moist.
8		12'	14'		12.5'–14' Silty sand, pale yellowish brown, wet.
9		14'	17'		14'–15.5' Silty sand – sandy silt – pale yellowish brown. 15.5'–17' Organic silty clay, olive gray.
					End of boring = 17' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

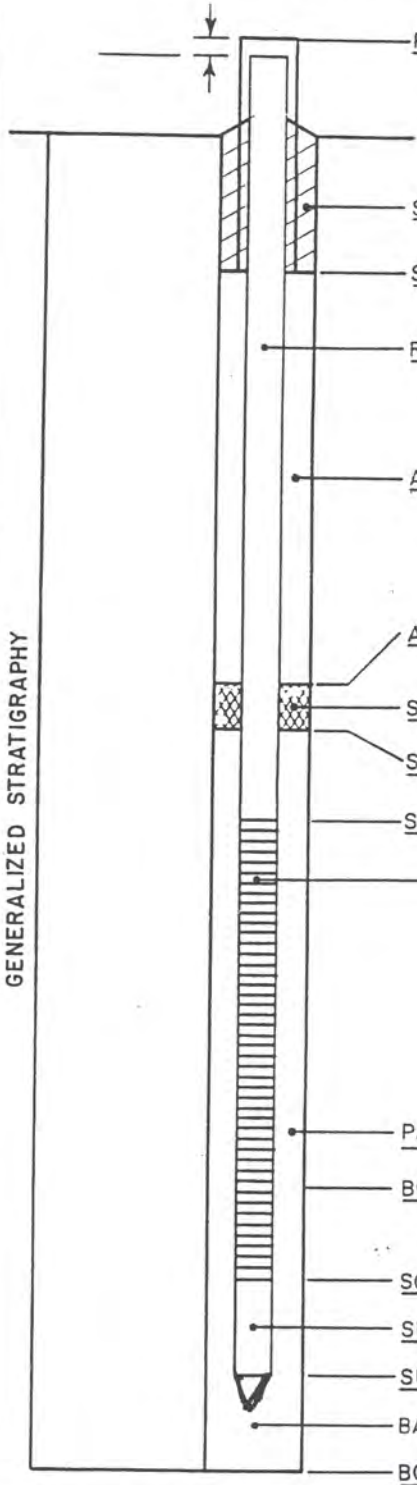
NR – Not Recorded

m:\480\05970266.wk3

SUBSURFACE FIELD LOG
MONITORING WELL CONSTRUCTION DETAILS

SHEET 1 OF 1

MONITORING WELL MW-18-46
PROJECT: Willow Run (Kaiser-Frazer Dump Area)
PROJECT NO.: 480.75
BY: Alan Fass
DATE: 12/17/96



PROTECTIVE CASING-MATERIAL Sch. 40 PVC
-HEIGHT ~3 ft.
-DIAMETER 2 inches
SURFACE SEAL-MATERIAL Cement Grout
SURFACE SEAL-DEPTH 0-3.5 feet BGS
RISER-MATERIAL Sch. 40 PVC
-DIAMETER 2 inches
ANNULUS-MATERIAL Cement Grout
ANNULUS-DEPTH 3.5 feet BGS
SEAL-MATERIAL Bentonite
SEAL-DEPTH 4.5 feet BGS
SCREEN-TOP 6.5 feet BGS
-MATERIAL Sch. 40 PVC
-SLOT SIZE .010
-LENGTH 10 feet
-DIAMETER 2 inches
PACK-MATERIAL #3 Sand
BORING-DIAMETER 7.25 inches
SCREEN-DEPTH 16.5 feet BGS
SUMP-LENGTH 6 inches
SUMP-DEPTH 16.5 feet BGS
BACKFILL-MATERIAL #3 Sand
BORING-DEPTH 17 feet BGS

WATER LEVEL UPON COMPLETION 14.34 ft. below Top-of-Casing (T.O.C.)
DRILLER Brad Masserant - Superior Environmental
METHOD Hollow Stem Auger
RIG TYPE Simco Earthprobe 200
SAMPLING METHOD Bailer
DEVELOPMENT DATE 12/17/96
DEVELOPMENT METHOD Peristaltic Pump (Slow Develop)

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

50663

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 2' northwest of SB–18–7 (See Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 17, 1996	
BORING NO.: SB–18–46	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 11' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS:
WEATHER: Cloudy, 34°, Wind – West 10–15 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		2'	2.5'	PAH, 8260*	0–12' See SB–18–7 (0–12') lithology except 1.5'–2' paint waste, dark red, brown and black.
					12'–16' Silty sand, dark olive gray, some shell fragments.
					16'–17' Silty clay, light olive gray.
					End of boring = 17' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\06070266.wk3

*–Hold 8260 sample for P.M. approval.

An initial boring was attempted at SB–18–7 but encountered concrete debris at 2.5' BGS to 7' BGS. Refusal at 7' BGS.

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 13, 1996

BORING NO.: SB-18-48

RECORDED BY: Alan Fass

DRILL TYPE: Simco Earthprobe 200

WEATHER: Partly sunny, 40o, Wind - West 10-15 mph

LOCATION: Kaiser-Frazer Dump Area PAOC 18
Approx. 25' east of SB-18-43
(See Weston Map - Figure 1)

Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 12' BGS

COMMENTS:

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0	6"	Pb	0-1.5' Silty sand, dark yellowish brown (10YR 4/2).
2		6"	2'	Pb, PAH	1.5'-5' Silty sand, dark yellowish orange (10YR 6/6).
3		2'	4'	Pb	
4		4'	6'	Pb	5'-6' Clayey silt - silty clay, dark yellowish orange.
5		6'	8'	Pb	6'-10' Silt, grayish orange (10YR 7/4) - dark yellowish orange.
6		8'	10'	Pb	
7		10'	12'	Pb	10'-13' Silty sand, pale yellowish brown (10YR 6/2).
					13'-13.5' Silty clay, pale yellowish brown, moist, friable.
					13.5'-14' Silty sand, pale yellowish brown, wet.
					End of boring = 14' BGS

REMARKS

SS - Split Spoon

BLS - Below Land Surface

NR - Not Recorded

m:\480\06170266.wk3

Duplicate soil samples were collected from 6"-2' for Pb and PAH analysis. (Not submitted to Lab.)

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 18, 1996

BORING NO.: SB-18-49

RECORDED BY: Alan Fass

DRILL TYPE: Simco Earthprobe 200

WEATHER: Cloudy, 25°, Wind - West 5-10 mph

LOCATION: Kaiser-Frazer Dump Area PAOC 18
Approx. 20' southwest of SB-18-8
(See Weston Map - Figure 1)

Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 11.5' BGS

COMMENTS: 9:14 Equipment blank 1W2 prepared off 4'-8' sampling tube for PAH and Pb analysis.

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
					0-2" Asphaltic concrete.
1		2"	8"	Pb	2"-1' Sandy gravel, dusky brown - very pale orange.
				Pb	1'-1.5' Clayey sand, moderate brown, wood debris (black stained).
2		8"	2.2'	Dup Pb	1.5'-3' Silty clay, little sand, dusky brown (5YR 2/2).
					3'-5' Same as 1'-3' except dark yellowish orange (10YR 6/6).
3		2.2'	4.2'	Pb, PAH	
					5'-7' Sandy silt, same color.
4		4.2'	6.2'	Pb	
					7'-8' Silty clay, same color, wet, plastic.
5		6.2'	8.2'	Pb	
					8'-11' Silty sand, same color.
6		8.2'	10.2'	Pb	
					11'-12.2' Sand, fine-medium grained, same color, moist-wet.
7		10.2'	11.5'	Pb	
					End of boring = 12' BGS

REMARKS

SS - Split Spoon

BLS - Below Land Surface

NR - Not Recorded

m:\480\06270266.wk3

Duplicate soil sample collected from 8"-2.2' for Pb analysis (Duplicate 4W2).

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 12, 1996

BORING NO.: SB-18-5

RECORDED BY: Alan Fass

DRILL TYPE: Simco Earthprobe 200

WEATHER: Overcast, Drizzle, 38°, Wind - NE 5-10 mph

LOCATION: Kaiser-Frazer Dump Area PAOC 18
Approx. 8' south of fence and 20' east of gridline A+00 (see Weston Map - Figure 1)
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 10.25' BGS

COMMENTS: Duplicate 1 TH (2.2'-4.2') (Pb Only)

SAMPLE NO.	DEPTH FROM	DEPTH TO	Test Type	Lab/Field SOIL DESCRIPTION AND BORING LOG
1	2"	8"	Pb	0-2" Asphaltic Concrete
2	8"	2.2'	Pb	2" - 1' Sand and rock fragments pale yellowish brown (fill material)
3	2.2'	4.2'	Pb, PAH Dup Pb, PAH	1'-5' Sand, coal, iron slag, and apparent roof shingle debris (fill material), rock fragments and other debris.
4	4.2'	6.2'	Pb	5'-7' Iron slag, some clayey sand (fill material).
5	6.2'	8.2'	Pb	7'-8.5' Sandy clay to clayey sand, dark yellowish orange.
6	8.2'	10.2'	Pb	8.5'-11' Silty sand, dark yellowish orange - pale yellowish brown.
				11'-12' Sandy silt, pale yellowish brown.
				End of boring = 12.5' BGS

REMARKS Borehole grouted and asphalt patched.

SS - Split Spoon

BLS - Below Land Surface

NR - Not Recorded

8:15 - Attemped boring at approx. 1' east of this boring. Driller advanced probe 0-8' BGS with approx. 30-35% recovery, so another boring was attempted to obtain better recovery. Second attempt resulted in approx. 50% recovery. Apparent fill material.

m:\480\02170266.wk3

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 25' west of SB–18–1 (See Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 18, 1996	
BORING NO.: SB–18–50	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 12' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS:
WEATHER: Light snow, 24°, Wind – West 5–10 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		2"	8"	Pb	0–2" Asphaltic concrete. 2"–1' Sandy gravel, dusky brown – very pale orange.
2		8"	2.2'	Pb	1'–3' Clayey sand, some rock fragments, moderate brown.
3		2.2'	4.2'	Pb, PAH	3'–10' Fill material consisting of sandy gravel, (discolored black–dusky brown), iron slag.
4		4.2'	6.2'	Pb Dup Pb	
5		6'	8.2'	Pb	
6		8.2'	10.2'	Pb	10'–10.5' Organic silty clay, dusky brown, glass debris.
7		10.2'	12'	Pb	10.5'–12' Clayey–silty sand, dark yellowish orange.
					End of boring = 12.5' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\06370266.wk3

Duplicate soil sample collected from 4.2'–6.2' for Pb analysis. (Duplicate 5W2)
Driller had to resample 0–12' BGS due to poor recovery (voids or non compact fill).

SOIL BORING LOG

Exploration for: Lead, PAH

Date: 3/22/97

Boring No.: SB-51

Record By: John Menhennett

Drill Type: Geoprobe

Weather: Overcast, cool 30°F

Location

WILLOW RUN CUO FACILITY
YPSILANTI, MICHIGAN

Water Table

10' BLS

Sample No.	Type	Depth From	Depth To	No. of Blows	Soil Description and Boring Log
		LS	3"	N/A	asphalt
		3"	12'	N/A	fill rock material
		12"	3.5'	N/A	7.5YR 3/2 (dark brown) very fine to fine grained sand sub rounded to rounded - moderately sorted
		3.5'	7.0'	N/A	10YR 5/6 (yellowish brown) - Very fine to fine grained sand - sub rounded to rounded - moderately sorted
		7	7.5'	N/A	10YR 6/6 (brownish yellow) same description as above
		7.5	8.0	N/A	10YR 6/1 (gray) silty clay
		8.0'	10.5'	N/A	10YR 6/6 (brownish yellow) Very fine to fine grained sand - sub rounded to rounded - moderately sorted
		10.5'	12.0'	N/A	10YR 6/1 (gray) silty clay.

*Remarks PH – Post Hole Digger
SPT – Standard Penetration Test
N/A - Not applicable

BLS - Below Land Surface.

1892264H

SOIL BORING LOG

Exploration for: LEAD

Date: 3/22/97

Boring No.: SB-52

Record By: John Menhennet

Drill Type: Geoprobe

Weather: Overcast - Cool 30°F

Location

WILLOW RUN CVO FACILITY

YPSILANTI, MICHIGAN

Water Table

10' BLS

Sample No.	Type	Depth From	Depth To	No. of Blows	Soil Description and Boring Log
		LS	3"	N/A	asphalt
		3"	12"	N/A	rock fill material
		12"	3'	N/A	5Y 3/1 (very dark gray) clayey sand - low plasticity
		3'	4.5'	N/A	2.5Y 4/4 (olive brown) very fine to fine grained sand with rounded to rounded - moderately sorted.
		4.5	7.0'	N/A	10YR 5/6 (yellowish brown) clayey sand - very fine to fine grained - sub rounded to rounded - moderately sorted
		7.0'	8.0'	N/A	2.5Y 6/6 brownish yellow clayey sand - very fine grained to fine grained - sub-rounded to rounded moderately sorted.
		8.0'	12.0'	N/A	10YR 6/4 (light yellowish brown) sand - very fine to fine grained - sub rounded to rounded - moderately sorted.

*Remarks PH – Post Hole Digger
SPT – Standard Penetration Test
N/A - Not Applicable

BLS - Below Land Surface.

SOIL BORING LOG

Exploration for: LEAD

Date: 3/22/97

Boring No.: SB-53

Record By: JOHN MENHENNETT

Drill Type: GEOPROBE

Weather: ONEcast, cool 30°F

Location

WILLOW RUN CVO FACILITY

YPSILANTI, MICHIGAN

Water Table

10' BLS

Sample No.	Type	Depth From	Depth To	No. of Blows	Soil Description and Boring Log
		LS	3"	N/A	asphalt
		3"	12"	N/A	fill rock material
		12"	18"	N/A	7.5 YR 3/2 (very dark brown) very fine to fine grained road subbase to sanded - moderately sorted
		18"	3'	N/A	5Y 3/1 (very dark gray) sandy clay - low plasticity
		3'	10'	N/A	10 YR 6/6 (brownish yellow) ~~very fine to fine grain~~ sand - subrounded to rounded - ~~moderately sorted~~
		10'	12'	N/A	2.5 Y 4/2 (dark grayish brown) sandy clay - low to moderate plasticity.

*Remarks PH – Post Hole Digger

SPT – Standard Penetration Test

N/A – not applicable

BLS - Below Land Surface.

SOIL BORING LOG

Exploration for: LEAD

Date: 3/22/97

Boring No.: SB-5.4

Record By: JOHN MENHENNETT

Drill Type: GEOPROBE

Weather: OVERCAST, COOL 30°F

Location

WILLOW RUN CVO FACILITY

YPSILANTI, MICHIGAN

Water Table

10' BLS

Sample No.	Type	Depth From	Depth To	No. of Blows	Soil Description and Boring Log
		LS	3"	N/A	asphalt
		3"	12"	N/A	fill rock material
		12"	18"	N/A	7.5 YR 3/2 (very dark brown) very fine to fine Gravel sand mixtures to sandest - moderately sorted
		18"	3'	N/A	5Y 3/1 (very dark gray) sandy clay - low plasticity
		3'	10'	N/A	10 YR 6/6 (brownish yellow) very fine to fine quartz sand - subrounded to rounded - moderately sorted
		10'	12'	N/A	2.5 Y 4/2 (dark grayish brown) sandy clay - low to moderate plasticity.

*Remarks PH – Post Hole Digger
SPT – Standard Penetration Test
N/A – not applicable

BLS – Below Land Surface.

1663284 K

SOIL BORING LOG

Exploration for: LEAD

Date: 3/22/97

Boring No.: SB-55

Record By: JOHN MENHENNETT

Drill Type: GEOPROBE

Weather: OVERCAST, COOL 30°F

Location

WILLOW RUN CVO FACILITY

YPSILANTI, MICHIGAN

Water Table

10' BLS

Sample No.	Type	Depth From	Depth To	No. of Blows	Soil Description and Boring Log
		LS	3"	N/A	asphalt
		3"	12"	N/A	fill rock material
		12"	18"	N/A	7.5 YR 3/2 (very dark brown) very fine to fine grained sand w/ trace to rounded - moderately sorted
		18"	3'	N/A	5Y 3/1 (very dark gray) sandy clay - low plasticity
		3'	10'	N/A	10 YR 6/6 (brownish yellow) ~~very fine to fine grain~~ sand - ~~sub~~ rounded to rounded - ~~moderately~~ sorted
		10'	12'	N/A	2.5 Y 4/2 (dark grayish brown) sandy clay - low to moderate plasticity.

*Remarks: PH – Post Hole Digger; SPT – Standard Penetration Test; N/A – not applicable; BLS – Below Land Surface.

16032861

SOIL BORING LOG

Exploration for: LEAD

Location: WILLOW RUN CVO FACILITY, YPSILANTI, MICHIGAN

Date: 3/22/97

Boring No.: SB-56

Record By: JOHN MENHENNETT

Drill Type: GEOPROBE

Weather: OVERCAST, COOL 30°F

Water Table: 10' BLS

Sample No.	Type	Depth From	Depth To	No. of Blows	Soil Description and Boring Log
		LS	3"	N/A	asphalt
		3"	12"	N/A	fill rock material
		12"	18"	N/A	7.5 YR 3/2 (very dark brown) very fine to fine grained sand w/ boulders to rounded - moderately sorted
		18"	3'	N/A	5Y 3/1 (very dark gray) sandy clay - low plasticity
		3'	10'	N/A	10 YR 6/6 (brownish yellow) very fine to fine grain sand - subrounded to rounded - moderately sorted
		10'	12'	N/A	2.5 Y 4/2 (dark grayish brown) sandy clay - low to moderate plasticity.

*Remarks: PH – Post Hole Digger; SPT – Standard Penetration Test; N/A – not applicable; BLS – Below Land Surface.

SOIL BORING LOG

Exploration for: LEAD

Location: WILLOW RUN CVO FACILITY, YPSILANTI, MICHIGAN

Date: 3/22/97

Boring No.: SB-57

Record By: JOHN MENHENNETT

Drill Type: GEOPROBE

Weather: OVERCAST, COOL 30°F

Water Table: 10' BLS

Sample No.	Type	Depth From	Depth To	No. of Blows	Soil Description and Boring Log
		LS	3"	N/A	asphalt
		3"	12"	N/A	fill rock material
		12"	18"	N/A	7.5 YR 3/2 (very dark brown) very fine to fine grained sand subrounded to rounded - moderately sorted
		18"	3'	N/A	5Y 3/1 (very dark gray) sandy clay - low plasticity
		3'	10'	N/A	10 YR 6/6 (brownish yellow) very fine to fine grained sand - subrounded to rounded - moderately sorted
		10'	12'	N/A	2.5 Y 4/2 (dark grayish brown) sandy clay - low moderate plasticity.

*Remarks: PH – Post Hole Digger; SPT – Standard Penetration Test; N/A – not applicable

BLS - Below Land Surface.

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-58
DATE COMPLETED: November 24, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	703.03						
0	SP-SANDS, trace silts (FILL), loose, fine grained, poorly graded, dark brown, moist	702.53	2" BOREHOLE	1MC				
2	OL-ORGANIC CLAYEY SILTS, (natural), compact, fine grained, poorly graded, light brown, dry	701.53				80		0.0
		700.83	BENTONITE CHIPS	2MC				
4	SM-SILTY SANDS, (FILL), compact, fine grained, poorly graded, brown, moist - 2" lens organic silts at 2.0ft BGS - 3" sheen at 2.3ft BGS	699.53				100		32
6	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, black, wet, petroleum type odor	699.03						
8	CI-SILTY CLAY, trace roots (natural), firm, medium plasticity, gray, moist							
	END OF BOREHOLE @ 4.0ft BGS							
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-59
DATE COMPLETED: November 24, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	706.66						
2	SP-SANDS, trace silts (FILL), trace rootlets, loose, fine grained, poorly graded, brown, dry - rootlets not present, orange-brown, damp, compact at 1.5ft BGS		2" BOREHOLE BENTONITE CHIPS	1MC		60		0.0
4				2MC		100		0.0
6	- black, odor, wet, slight sheen (petroleum type odor) at 4.6ft BGS			3MC		100		64
8	CL-SILTY CLAY, (natural), firm, medium plasticity, gray, moist	699.66		4MC		70		28
	END OF BOREHOLE @ 8.0ft BGS	698.66						
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 10, 1996

BORING NO.: SB-18-6

RECORDED BY: Alan Fass

DRILL TYPE: Hand Auger

WEATHER: Cloudy, 35°, Wind - West <5 mph

LOCATION: Kaiser-Frazer Dump Area PAOC 18
Approx. 26' north of fence and 64' east of gridline A+00 (see Weston Map - Figure 1)
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 6.5' BGS

COMMENTS: Duplicate 4 T (4'-6') - PAH
Duplicate 2T (4'-6') - Pb

SAMPLE NO.	DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1	0"	6"	Pb, PAH IPAH	0-2' Silty sand/clayey sand, some gravel, concrete debris, iron slag, debris, dark yellowish brown (10YR 4/2)
2	6"	2'	Pb, PAH IPAH	2'-5' Gravelly sand, some silt, dark yellowish brown concrete debris, paint sludge (hardened) - green and yellow fragments, glass debris, plastic, debris.
3	2'	4'	Pb, PAH IPAH	
4	4'	6'	Pb (dup), IPAH,PAH PAH - Lab	5'-5.5' Sand, dark yellowish orange (10 YR 6/6), coarse grained, some gravel. 5.5'-6.5' Organic silty clay, brownish black (5YR 2/1), hydrocarbon odors.
5				6.5'-7' Sandy clay - silty clay, grayish black (N2) - dark gray (N3), stained/discolored, petroleum sheen. Hydrocarbon odors.
6				End of boring = 7' BGS
	7			

REMARKS

SS - Split Spoon

BLS - Below Land Surface

NR - Not Recorded

m:\480\02270266.wk3

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-60
DATE COMPLETED: November 24, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	705.72						
2	SP-SANDS, with silts (FILL), compact, fine grained, poorly graded, black, moist - medium brown at 0.5ft BGS		2" BOREHOLE	1MC				
2						50		10.4
4	- black, faint petroleum type odor, wet at 3.0ft BGS		BENTONITE CHIPS	2MC				
4						70		180
4	- sheen at 4.8ft BGS	700.72		3MC				
6	CI-SILTY CLAY, (natural), firm, medium plasticity, gray, moist	699.72				80		220
6	END OF BOREHOLE @ 6.0ft BGS							
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-61
DATE COMPLETED: November 24, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	702.72						
0	MH-SANDY SILTS, trace clay (FILL), loose, fine grained, poorly graded, brown, very moist - gray and black, very moist to wet, faint organic odor at 1.5ft BGS		2" BOREHOLE	1MC				
2								
4	CI-SILTY CLAY, (natural), firm, medium plasticity, gray, moist	699.72	BENTONITE CHIPS			90		6.2
6								
8				2MC				
10	END OF BOREHOLE @ 10.0ft BGS	692.72				90		0.0
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

GRAIN SIZE ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-62
DATE COMPLETED: November 24, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	705.90						
0	CL-SILTY CLAY, trace rootlets (FILL), firm, low plasticity, gray, moist		2" BOREHOLE	1MC				
2	MH/SM-SILTY SANDS, trace clay (FILL), compact, fine grained, poorly graded, brown, moist	704.20	BENTONITE CHIPS	2MC		70		0.0
4	- very moist to wet at 2.1ft BGS					70		0.0
	- 2" lens sand at 5.5ft BGS	700.70		3MC				
6	CI-SILTY CLAY, (natural), firm, medium plasticity, gray, moist					70		0.0
	- 3" lens sand at 6.2ft BGS			4MC				
8	- 1" lens sand at 6.6ft BGS					100		0.0
	- 2" lens sandy clay at 8.4ft BGS			5MC				
10	END OF BOREHOLE @ 10.0ft BGS	695.90				100		0.0
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

GRAIN SIZE ANALYSIS

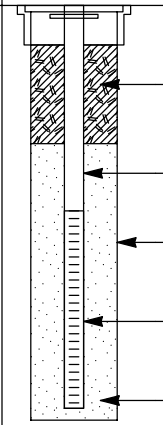
OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-63/MW18-01
DATE COMPLETED: November 24, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	708.00						
0	MH-SANDY SILTS, trace clay (FILL), loose, fine grained, poorly graded, gray, moist	707.30	BENTONITE CHIPS	1MC				
2	CL/ML-CLAYEY SILTS, trace sands (FILL), firm, low plasticity, gray, moist	706.50						
	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, brown, moist		2" PVC WELL CASING			70		0.0
4								
	- wet at 5.5ft BGS		8-1/4" BOREHOLE					
6								
	- black, odor present at 7.5ft BGS			2MC				
8	- gray at 8.0ft BGS		2" PVC WELL SCREEN					
	- strong odor, brown liquid at 9.7ft BGS	698.20						
10	CL-SILTY CLAY, (natural), firm, low plasticity, gray, moist	698.00	SAND PACK			100		1100
	END OF BOREHOLE @ 10.0ft BGS							
12	NOTE: BORING COMPLETED ON NOVEMBER 24, 2003, MONITORING WELL COMPLETED ON MAY 17, 2004							
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								



WELL DETAILS
Screened interval:
702.80 to 697.80ft BGS
5.20 to 10.20ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
704.50 to 697.50ft BGS
3.50 to 10.50ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

GRAIN SIZE ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-64/MW18-02
DATE COMPLETED: November 24, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	707.28						
0	CL-SILTY CLAY, with rootlets (topsoil), (FILL), firm, low plasticity, dark brown, moist	707.08		1MC				
2	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, light brown, moist		BENTONITE CHIPS	2MC		80		0.0
4			2" PVC WELL CASING	3MC		80		0.0
6	- wet at 6.0ft BGS		8-1/4" BOREHOLE	4MC		80		5.4
8	- dark gray, staining, odor at 7.0ft BGS		2" PVC WELL SCREEN	5MC		80		2000+
10	- visible brown liquid, strong odor (product) at 9.4ft BGS	697.48	SAND PACK			60		2000+
12	CI-SILTY CLAY, (natural), firm, medium plasticity, gray, moist	697.28						
14	END OF BOREHOLE @ 10.0ft BGS							
16	NOTE: BORING COMPLETED ON NOVEMBER 24, 2003, MONITORING WELL COMPLETED ON MAY 17, 2004							
18								
20								
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
702.18 to 697.18ft BGS
5.10 to 10.10ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
703.78 to 696.78ft BGS
3.50 to 10.50ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-65
DATE COMPLETED: May 19, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.55						
0	ASPHALT	715.30						
	SM/CL-SANDY SILTS AND CLAYS, trace fine gravels, compact/firm, fine to coarse sands, low to non plastic, medium brown, moist	714.05						
2	SM-SILTY SANDS, trace fine gravels, fine to coarse grained, poorly graded, dark brown, moist			1DP (0-2', -339)				0.8
4	- fine grained, light brown, trace orange streaks, oxidation at 2.0ft BGS - brown at 4.0ft BGS		2" BOREHOLE					
6	- rust brown banding/streaking at 7.3ft BGS			2DP				2.5
8	- trace to with clays, brown-gray with rust brown streaking, oxidation, very moist at 8.3ft BGS							
10	- no clays, very moist at 9.0ft BGS	705.55	BENTONITE CHIPS					
	CL-SILTY CLAYS, firm, low plasticity, gray, moist	704.80						
12	SM/CL-INTERBEDDED SILTY SANDS AND SILTY CLAYS, fine grained sands, gray, saturated/low plasticity, gray, moist clays			3DP (9-11', -340)				2.8
		702.05						
14	SM-SILTY SANDS, compact, fine grained, poorly graded, brown and gray, saturated							
16								
		699.05						
18	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist			4DP				0.9
20	END OF BOREHOLE @ 20.0ft BGS	695.55						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-66
DATE COMPLETED: May 19, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.09						
0	ASPHALT, black	714.84						
	SM-SILTY SANDS, trace clays and fine gravels, loose, fine to coarse grained, poorly graded, brown, moist			1DP 0-2' -337				0.6
2								
4			2" BOREHOLE					
6				2DP				1.4
8	- light brown, very moist at 8.0ft BGS							
	- wood debris-3" thick, black, stained at 8.8ft BGS			3DP 8-10' -338				+2000
10	- dark gray to black, strong petroleum-like odor, very moist at 9.0ft BGS		BENTONITE CHIPS					
	- saturated at 10.8ft BGS							
12	- black at 12.0ft BGS			4DP				+2000
	- dark gray to black at 12.8ft BGS							
14								
	- fine to coarse grained at 15.0ft BGS	699.84						
16	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist, slight petroleum-like odor							
	- no odor at 16.5ft BGS			5DP				0.5
18								
20	END OF BOREHOLE @ 20.0ft BGS	695.09						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-67
DATE COMPLETED: May 19, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.36						
0	ASPHALT, black	714.11						
	CRUSHED BRICK, red	713.86						
2	SM-SILTY SANDS, loose, fine to coarse grained, poorly graded, dark brown, moist			1DP (0-2', -335)				0.9
	- light brown, fine to medium grained at 1.3ft BGS							
4								
			2" BOREHOLE					
6	- 2" crushed asphalt, dark gray at 6.0ft BGS							
8	- very moist to saturated at 8.0ft BGS			2DP (6-8', -336)				12.8
		705.11	BENTONITE CHIPS					
10	CL-SANDY CLAYS, firm, low plasticity, fine sands, gray, moist							
		702.86						
12	SM-SILTY SANDS, compact, fine grained, poorly graded, brown with orange banding, saturated, oxidation			3DP				78.8
14								
	- gray at 15.5ft BGS							
16								
		697.36						
18	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist			4DP				0.4
	- stiff at 19.5ft BGS							
20	END OF BOREHOLE @ 20.0ft BGS	694.36						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-68
DATE COMPLETED: May 19, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.90						
0	ASPHALT, black	714.65						
	SM-SILTY SANDS, loose, fine to medium grained, poorly graded, white-gray, moist							
2	- orange-brown, oxidation at 0.8ft BGS			1DP (0-2', -333)				73.5
	- brown with orange banding at 2.5ft BGS							
4	- light brown at 4.0ft BGS							
			2" BOREHOLE					
6								
	- very moist at 7.0ft BGS							
8				2DP (9-11', -334)				384
		706.40						
	CL-SANDY CLAYS, firm, low plasticity, rust brown and gray mottled, moist	705.90						
10	SM-SILTY SANDS, compact, fine grained, poorly graded, brown-gray and rust brown banded, very moist, slight odor		BENTONITE CHIPS					
12	- strong petroleum-like odor, gray at 10.0ft BGS			3DP				1278
	- saturated at 11.5ft BGS							
	- orange brown at 11.8ft BGS							
14	- brown, slight petroleum-like odor at 12.5ft BGS							
16				4DP				0.8
		698.40						
	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist							
18								0.0
20		694.90						
	END OF BOREHOLE @ 20.0ft BGS							
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-69
DATE COMPLETED: May 18, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.68						
0	ASPHALT, black	714.43						
	SM-SILTY SANDS, compact, fine to medium grained, poorly graded, orange-brown, moist, oxidation							
2	- brown at 3.0ft BGS			1DP 0-2' -331				0.8
4			2" BOREHOLE					
	- very moist at 5.5ft BGS							
6	- saturated, orange banding, oxidation at 6.3ft BGS							
	- brown and gray, trace clays at 7.5ft BGS			2DP 4-6' -332				0.2
8								
		705.18						
10	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist	704.68	BENTONITE CHIPS					
	SM-SILTY SANDS, compact, fine grained, poorly graded, gray, saturated							
12	- rust brown and gray oxidation at 13.0ft BGS			3DP				0.3
14		700.43						
	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist	699.68						
16	END OF BOREHOLE @ 15.0ft BGS							
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 11' north of fence and 60' east of gridline A+00 (see Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 12, 1996	
BORING NO.: SB–18–7	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 10' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS: Duplicate 2 TH (2'–4') (Pb)
WEATHER: Overcast, 39°, Wind – NE 5–10 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lab/Field Test Type	SOIL DESCRIPTION AND BORING LOG
1		0"	6"	Pb, PAH IPAH	0–1.5' Clayey sand, dark yellowish brown, some rock fragments and grass.
2		6"	2'	Pb, PAH IPAH	1.5'–2.5' Clayey sand as above, and solidified paint waste? material (blue and dark red)
3		2'	4'	Pb, PAH IPAH Dup Pb	2.5'–4' Silty clay, moderate–dark yellowish brown, some rock and metal fragments.
4		4'	6'	Pb, PAH IPAH	4'–5.5' Clayey sand, dark yellowish brown. 5.5'–5.75' Paint waste? (solidified)
5		6'	8'	Pb, PAH IPAH	5.75'–6' Silty clay, moderate yellowish brown. 6'–7' Sand and paint waste?
6		8'	10'	Pb, PAH IPAH	7'–7.25' Black hardened material (looks like coal but noteable hydrocarbon odors)
					7.25'–9' Silty sand, pale–dark yellowish orange and glass debris. 9'–10' Sand clay, dark yellowish orange–olive gray.
					10'–11.5' Sandy silt, olive gray. 11.5'–12' Silty sand, black, apparent discoloration.
					End of boring = 12' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\02370266.wk3

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-70
DATE COMPLETED: May 19, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.10						
0	ASPHALT	714.85						
	SM-GRAVELLY SANDS, with silts, loose, fine to coarse grained, poorly graded, brown, moist, fine gravels							
2	- light brown, trace crushed concrete at 1.0ft BGS	712.10		1DP (0-2') -328				234
	- dark brown, slight petroleum-like odor at 1.5ft BGS	711.35						
4	CRUSHED CONCRETE, white	710.60	2" BOREHOLE					
	ASPHALT, black							
6	DEBRIS, mix of paper, asphalt, paint sludge, sands, silts and clays, gray to black, fine to medium sands, very moist, strong paint-like odor	708.60		2DP (5-6') -330				758
8	SM-SILTY SANDS, compact, fine grained, poorly graded, light brown, moist, trace oxidation, strong paint-like odor							
10	- orange banding, oxidation at 8.5ft BGS		BENTONITE CHIPS					
	- very moist, brown-gray at 11.5ft BGS							
12	- saturated, moderate paint-like odor at 12.0ft BGS			3DP (10-12') -329				148
14								
16	- slight paint-like odor at 16.0ft BGS							
	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist	698.10		4DP				25.8
18								
20								
22				5DP				12.9
24								
	END OF BOREHOLE @ 25.0ft BGS	690.10						
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-71
DATE COMPLETED: May 24, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	698.94						
0	CL-SILTY CLAYS, trace fine to medium sands, soft to firm, low plasticity, gray, moist to very moist - firm at 0.5ft BGS		2" BOREHOLE BENTONITE CHIPS	1DP (0-2' -348)				0.4
2				2DP				0.2
4				3DP				0.2
6	END OF BOREHOLE @ 6.0ft BGS	692.94						
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1DP)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-72
DATE COMPLETED: May 24, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	699.71						
0	CL-SANDY CLAYS, trace silts, soft, low plasticity, black and gray, very moist, slight odor	698.96		1DP 0-2' -346				6.8
2	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist		2" BOREHOLE	2DP 3-4' -347				0.1
4			BENTONITE CHIPS	3DP				0.1
6	END OF BOREHOLE @ 6.0ft BGS	693.71						
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-73/PZ18-73
DATE COMPLETED: May 24, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	709.65						
2	SM-SILTY SANDS, trace clays and fine gravels, loose, fine to medium grained, poorly graded, dark brown, moist - brown at 0.8ft BGS			1DP (0-2', -344)				0.2
4	- orange-brown oxidation at 3.8ft BGS			2DP				0.3
6	- brown, slight petroleum-like odor at 5.5ft BGS - gray, very moist, moderate petroleum-like odor at 6.8ft BGS		2" BOREHOLE 1" PVC WELL SCREEN	3DP (5-7', -345)				68.3
8	- saturated, black, sheen on water at 7.0ft BGS	701.65		4DP				38.3
10	CL-SILTY CLAYS, trace fine sands, firm, low plasticity, gray, moist, slight petroleum-like odor - no odor at 9.0ft BGS		BENTONITE CHIPS	5DP				12.8
12				6DP				0.2
14	END OF BOREHOLE @ 13.0ft BGS	696.65						
16	NOTE: SOIL BORING COMPLETED MAY 24, 2004, TEMPORARY MONITORING WELL COMPLETED SEPTEMBER 8, 2004							
18								
20								
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
705.65 to 700.65ft BGS
4.00 to 9.00ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-74
DATE COMPLETED: May 19, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	699.03						
0	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist		2" BOREHOLE	1DP 0-2' -341				2.2
2				2DP				1.2
4			BENTONITE CHIPS	3DP				0.7
6	END OF BOREHOLE @ 6.0ft BGS	693.03						
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-75
DATE COMPLETED: May 19, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	698.72						
0	CL-SANDY CLAYS, trace to with silts, firm, low plasticity, fine sands, gray, moist		2" BOREHOLE	1DP 0-2' -342				3.8
2				2DP				2.1
4	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray, moist	695.22	BENTONITE CHIPS					
6	SM-SILTY SANDS, compact, fine grained, poorly graded, gray, saturated	693.72 693.22		3DP 4-5' -343				2.0
	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray			4DP				1.8
8	END OF BOREHOLE @ 8.0ft BGS	690.72						
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-76
DATE COMPLETED: May 24, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.51						
0	SM-SILTY SANDS, trace clays and fine gravels, loose, fine to coarse grained, poorly graded, dark brown, moist							
2	- brown at 0.8ft BGS			1DP 0-2' -349				0.2
4	- fine grained, light brown, oxidation, orange banding at 3.5ft BGS		2" BOREHOLE					
6								
8				2DP				0.2
10			BENTONITE CHIPS					
12	- very moist at 11.8ft BGS - saturated, brown-gray at 12.3ft BGS			3DP 10-12' -350				0.4
14								
16	- gray at 15.0ft BGS							
18	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist	697.51		4DP				0.2
20	END OF BOREHOLE @ 20.0ft BGS	694.51						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1DP, 2DP, 3DP, 4DP)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-77
DATE COMPLETED: May 24, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.68						
0	ASPHALT, black	714.43						
	SM-SILTY SANDS, trace fine gravels, loose, fine to coarse grained, poorly graded, brown, moist			1DP 0-2' -351				9.7
4	- fine to medium grained, light brown, oxidation at 4.3ft BGS		2" BOREHOLE					
6	- with clays, brown, very moist at 6.3ft BGS							
8	ML/CL-CLAYS AND SILTS, firm, low plasticity, brown and gray mottled, moist	706.93 706.68		2DP 9-10' -352				30.8
	SM-SILTY SANDS, compact, fine grained, poorly graded, gray-brown, very moist							
10	- light brown, oxidation at 9.5ft BGS	704.68 704.18	BENTONITE CHIPS					
	CL-SILTY CLAYS, firm, low plasticity, gray, moist							
12	SM-SILTY SANDS, compact, fine grained, poorly graded, gray-brown, very moist			3DP				6.4
14	- saturated at 11.0ft BGS							
16		698.18						
18	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist			4DP				0.6
20	END OF BOREHOLE @ 20.0ft BGS	694.68						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-78
DATE COMPLETED: August 23, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	711.93						
0	SW-SANDS (topsoil), fine to medium sands, brown, moist	711.63						
2	SP-SANDS (FILL), fine grained, poorly graded, loose, light brown, moist		2" BOREHOLE	1AL		95		0.0
4			BENTONITE CHIPS	2AL		95		0.0
6	SM-SILTY SANDS, trace fine sands, compact, gray, moist	705.93		3AL		95		0.0
8	SP/SM-SANDS, fine grained, with some silts, poorly graded, compact, gray, moist	704.43		4AL		95		0.0
10	- wet at 9.3ft BGS		▽					
12	CI-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, gray, moist	700.93		5AL		95		0.0
14				6AL		95		0.0
16	END OF BOREHOLE @ 15.0ft BGS	696.93						
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-79
DATE COMPLETED: August 23, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	712.78						
0	SW-SANDS (topsoil), fine to medium sands, well graded, dark brown, moist			1AL		95		0.0
2	SP-SANDS, fine grained, poorly graded, compact, medium brown	710.78	2" BOREHOLE					
	- oxidation staining at 3.5ft BGS		BENTONITE CHIPS	2AL		95		0.0
4								
6	- trace coarse sands at 6.0ft BGS			3AL		95		0.0
8	SC-SANDY CLAYS, with silts, trace plasticity, semi-competent, brown, moist	704.78		4AL		95		10
	- increase in moisture content at 10.8ft BGS							
10		701.88	▽					
	SW-SANDS, fine to medium sands, well graded, dense, brown, wet	701.38		5AL		95		781
12	SC-SANDY CLAYS, with silts, fine grained, very dense, trace plasticity, gray, wet	700.58						
	SP-SANDS, poorly graded, fine grained, trace medium sands, compact, brown, wet			6AL		95		2000
14	- orangish brown staining at 13.0ft BGS	697.78						
	- black staining at 13.1ft BGS							
16	- grayish black staining at 13.2ft BGS	696.78						
	- grayish at 13.3ft BGS							
	- becoming brown at 14.0ft BGS							
18	- trace coarse sands, brown oil product at 14.5ft BGS							
	CL-SILTY CLAYS (native), trace fine sands, stiff, competent, low plasticity, gray brown, moist							
20	END OF BOREHOLE @ 15.0ft BGS							
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Kaiser–Frazer Dump Area PAOC 18 Approx. 10' south of fence and 75' east of gridline A+00 (see Weston Map – Figure 1) Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 9, 1996	
BORING NO.: SB–18–8	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 12.25' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS:
WEATHER: Sunny, 28°, Wind – West 10 mph	

SAMPLE NO.		DEPTH FROM	DEPTH TO	Lead–7420 PAH–8100 Immunoassay PAH	SOIL DESCRIPTION AND BORING LOG
1		2"	8"	Pb, PAH IPAH	0–2" Asphalt 2"–1' Silty sand, some gravel, dark yellowish brown (10YR 4/2) well sorted.
2		8"	2.2'	Pb, PAH IPAH	1'–3' Silty clay, little sand, dusky brown (5YR 2/2).
3		2.2'	4.2'	Pb, PAH IPAH	3'–5' Same as 1'–3' except dark yellowish orange (10YR 6/6).
4		4.2'	6.2'	Pb IPAH	5'–7' Sandy silt, same color.
5		6.2'	8.2'	Pb IPAH	7'–8' Silty clay, same color, wet, plastic.
6		8.2'	10.2'	Pb IPAH	8'–11' Silty sand, same color.
7		10.2'	12.2'	Pb IPAH	11'–12.2' Sand, fine–medium grained, same color, moist–wet.
					End of boring = 14' BGS

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\48002470266.wk3

Note: Driller said 0'–1' is very soft (below asphalt), 25% recovery from 0–4' below asphalt.

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-80
DATE COMPLETED: August 23, 2004
DRILLING METHOD: GEOPROBE/DIRECT PUSH/MACRO CORE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	708.30						
0	SW-SANDS (topsoil), fine to medium sands, trace vegetation, well graded, loose, dark brown, moist	707.90	2" BOREHOLE	1AL		98		0.0
2	SP-SANDS (FILL), medium grained, trace fine sands, poorly graded, compact, light brown, moist							
4	- oxidation staining at 4.0ft BGS		BENTONITE CHIPS	2AL		98		0.0
6	- wet at 6.0ft BGS			3AL		95		458
	- becoming gray at 7.0ft BGS							
8	- multicolored sheen at 7.5ft BGS							
	- brown at 8.8ft BGS	699.30		4AL		95		952
10	CI-SILTY CLAYS (TILL), firm, low plasticity, gray, moist	698.30						
	END OF BOREHOLE @ 10.0ft BGS							
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-81
DATE COMPLETED: August 23, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	713.18
0	SW-SANDS (topsoil), fine to medium grained, some vegetation, well graded, dark brown, moist	712.68
2	SP-SANDS, fine grained, poorly graded, compact, medium brown, moist	
4		
6	SP/SM-SANDS, some silts, very fine grained, poorly graded, brown, moist	707.98
8	- 0.1' silty clay seam, gray at 8.1ft BGS	
	- 0.1' silty clay seam, gray at 9.4ft BGS	
10	- becoming black at 10.0ft BGS	703.48
	SP-SANDS, fine grained, poorly graded, compact, gray	
12	- sheeny, multicolored, strong odor at 11.5ft BGS	
14	- black (foundry sand), strong odor at 14.0ft BGS	698.68
	CI-SILTY CLAYS (till), trace fine sands, stiff, low plasticity, competent	698.18
16	END OF BOREHOLE @ 15.0ft BGS	
18		
20		
22		
24		
26		
28		
30		
32		
34		

BOREHOLE INSTALLATION: 2" BOREHOLE; BENTONITE CHIPS; ▽

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1AL		95		0.0
2AL		95		0.0
3AL		95		5.2
4AL		95		4.1
5AL		95		>2000
6AL		95		>2000

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-82
DATE COMPLETED: August 23, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	713.27						
0	SW-SANDS (topsoil), fine to medium sands, well graded, trace vegetation, loose, dark brown, moist	712.97		1AL		100		0.0
2	SP-SANDS, fine grained, poorly graded, loose, brown, moist		2" BOREHOLE					
4	- trace silts at 4.0ft BGS - dark orange color at 4.7ft BGS		BENTONITE CHIPS	2AL		100		0.0
6				3AL		100		--
8				4AL		90		--
10	- oxidation banding at 8.9ft BGS - becoming grayish, faint odor at 10.1ft BGS - wet, faint odor at 10.5ft BGS			5AL		90		--
12								
14	- black, foundry sand, strong odor at 14.4ft BGS	698.67		6AL		90		--
16	CI-SILTY CLAYS, trace fine sands, stiff, low plasticity, competent, gray, moist END OF BOREHOLE @ 15.0ft BGS	698.27						
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-83
DATE COMPLETED: August 23, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	707.95						
0	SW-SANDS (topsoil), fine to medium sands, trace vegetation, well graded, compact, dark brown, moist			1AL		100		--
2	SP-SANDS (FILL), fine grained, poorly graded, loose, light brown, moist	705.95	2" BOREHOLE					
4			BENTONITE CHIPS	2AL		100		--
	- wet at 5.0ft BGS		▽					
6	- black staining, strong odor at 6.0ft BGS			3AL		100		--
8	- brown oily product, liquid, strong odor at 8.0ft BGS	699.45		4AL		100		--
	CL-SILTY CLAYS (native), trace sands, stiff, competent, low plasticity, gray, moist							
10	END OF BOREHOLE @ 10.0ft BGS	697.95						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-84
DATE COMPLETED: August 23, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	706.63						
0	SW-SANDS (topsoil), fine to medium sands, trace vegetation, well graded, compact, dark brown, moist			1AL		100		--
2	SP-SANDS, fine and medium sands, poorly graded, dense, brown, moist	704.83	2" BOREHOLE					
4	- wet at 4.0ft BGS - becoming black and gray, faint odor at 4.5ft BGS		▽ BENTONITE CHIPS	2AL		100		--
6				3AL		100		--
8	- black foundry sands, strong odor, sheeny at 7.3ft BGS	698.63		4AL		100		--
10	CI-SILTY CLAYS, trace fine sands, compact, stiff, low plasticity, gray, moist END OF BOREHOLE @ 10.0ft BGS	696.63						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-85
DATE COMPLETED: August 24, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	710.43						
2	SW-SANDS (FILL), fine to medium sands, well graded, trace vegetation, loose, dark brown, moist		2" BOREHOLE	1AL		90		0.0
		708.23						
	SP-SANDS (FILL), fine grained, poorly graded, compact, light brown, moist							
4	- trace silts at 4.3ft BGS		BENTONITE CHIPS	2AL		90		0.0
		705.93						
	SM-SILTY SANDS (FILL), some fine sands, compact, gray brown, moist	704.93						
6	SP-SANDS, fine grained, trace medium grained, poorly graded, medium brown, very moist		▽	3AL		95		27.1
8	- wet at 6.0ft BGS - light brown banding at 6.5ft BGS - becoming gray at 7.5ft BGS			4AL		95		44.2
10								
12	- very sheeny, strong odor at 12.1ft BGS			5AL		100		75
	- multicolored, sheeny at 12.5ft BGS	697.83						
14	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	696.43		6AL		100		139
	END OF BOREHOLE @ 14.0ft BGS							
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-86
DATE COMPLETED: August 24, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	707.33						
0	SW-SANDS (topsoil), fine to medium sands, trace vegetation, compact, dark brown, moist	707.03						
2	SP-SANDS (FILL), medium grained, poorly graded, loose, medium brown, moist		2" BOREHOLE	1AL		90		0.0
4			BENTONITE CHIPS	2AL		90		0.0
6	- wet at 5.6ft BGS	701.63		3AL		95		66
8	SM-SILTY SANDS (FILL), trace fine and medium sands, weathered, reworked, compact, black - sheeny, strong odor at 6.2ft BGS - black foundry sand, sheeny, strong odor at 6.5ft BGS	700.33		4AL		95		59
10	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, competent, gray, moist END OF BOREHOLE @ 10.0ft BGS	697.33						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-87/PZ18-87
DATE COMPLETED: August 24, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	703.08						
2	SW-SANDS (FILL), fine to medium sands, well graded, loose, dark brown, moist - wet at 2.0ft BGS	700.78	BENTONITE CHIPS 3" BOREHOLE	1AL		100		0.0
4	SC/CL-SANDS AND SANDY CLAYS (FILL), reworked, weathered, trace medium sands, trace plasticity, olive-gray, moist	697.88	1" PVC WELL SCREEN NATURAL COLLAPSE/ SAND	2AL		100		0.0
6	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, competent, gray, moist			3AL		100		0.0
8	END OF BOREHOLE @ 7.5ft BGS	695.58						
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
702.08 to 697.08ft BGS
1.00 to 6.00ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
702.08 to 695.58ft BGS
1.00 to 7.50ft BGS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-88
DATE COMPLETED: August 24, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	707.08						
0	SW-SANDS (FILL), fine to medium grained, well graded, loose, trace vegetation, medium brown, moist		2" BOREHOLE	1AL		95		0.0
2	SP-SANDS (FILL), fine grained, poorly graded, loose, brown, moist	705.48	BENTONITE CHIPS	2AL		95		0.0
4			▽					
6	SM-SILTY SANDS (FILL), some fine sands, trace clays, poorly graded, compact, brown	701.38		3AL		95		0.0
	- black foundry sand, slight odor at 6.1ft BGS	700.88						
8	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, competent, gray, moist			4AL		95		0.0
10	END OF BOREHOLE @ 10.0ft BGS	697.08						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-89
DATE COMPLETED: August 24, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.08						
0	SW-SANDS (FILL), fine to medium grained, well graded, trace vegetation, rootlets, loose, dark brown, moist		2" BOREHOLE; BENTONITE CHIPS	1AL		95		0.0
4	SP-SANDS (FILL), fine grained, poorly graded, loose, light brown, moist	710.48		2AL		95		0.0
6	- 0.3' layer silty sands at 7.1ft BGS			3AL		95		0.0
8	- 0.4' silty clay seam at 8.9ft BGS			4AL		95		36
10	- wet at 11.0ft BGS			5AL		95		191
12	- becoming gray at 13.0ft BGS							
14	- sheeny, black at 13.6ft BGS - sheeny, black at 14.3ft BGS	699.58		6AL		95		274
16	CL-SILTY CLAYS (native), trace fine sands, stiff, competent, low plasticity	699.08						
	END OF BOREHOLE @ 15.0ft BGS							
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology

DATE: December 10, 1996

BORING NO.: SB-18-9

RECORDED BY: Alan Fass

DRILL TYPE: Hand Auger

WEATHER: Cloudy, 37°, Wind - West <5 mph

LOCATION: Kaiser-Frazer Dump Area PAOC 18
Approx. 33' north of fence and 106' east of gridline A+00 (see Weston Map - Figure 1)
Willow Run
GM Willow Run Facility
Ypsilanti Township, Michigan

WATER TABLE: Approx. 6' BGS

COMMENTS:

SAMPLE NO.		DEPTH FROM	DEPTH TO	Test Type	Lab/Field SOIL DESCRIPTION AND BORING LOG
1		0"	6"	Pb, PAH IPAH	0-2' Silty sand/clayey sand, some gravel, concrete debris, iron slag, debris, dark yellowish brown (10YR 4/2)
2		6"	2'	Pb, PAH IPAH	
3		2'	4'	Pb, PAH IPAH	2'-5' Gravelly sand, some silt, dark yellowish brown concrete debris, paint sludge (hardened) - green and yellow fragments, glass debris, plastic, debris.
4		4'	6'	Pb, PAH IPAH PAH - Lab	Hydrocarbon odors noted in soils from 5'-7' BGS.
					End of boring = 7' BGS

REMARKS

SS - Split Spoon

BLS - Below Land Surface

NR - Not Recorded

m:\480\02570266.wk3

Spent 45 minutes securing safety lines and leveling the soils in the work area along the slope.

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-90
DATE COMPLETED: August 24, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.49						
0	SW-SANDS (FILL), fine to medium sands, trace rootlets, well graded medium brown, moist		2" BOREHOLE	1AL		95		0.0
2		711.89						
2	SP-SANDS (FILL), fine grained, poorly graded, compact, light brown, moist		BENTONITE CHIPS	2AL		95		0.0
4								
6	- orangish brown at 6.2ft BGS			3AL		90		0.0
8				4AL		90		0.0
10	- very moist at 10.0ft BGS							
10	- wet at 11.0ft BGS		▽	5AL		95		--
12	SM-SILTY SANDS, some fine sands, poorly graded, trace clays, compact, brown, wet	702.79 701.99						
12	SW-SANDS, fine to coarse grained, well graded, compact, gray, wet			6AL		95		--
14	- sheeny, black foundry sand at 13.0ft BGS							
14	- black foundry sand, strong odor at 14.0ft BGS							
16	- brown oily liquid (product) at 15.0ft BGS			7AL		95		--
16		697.49						
18	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, gray	696.99						
18	END OF BOREHOLE @ 17.5ft BGS							
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-91
DATE COMPLETED: August 24, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.98						
2	SW-SANDS (FILL), fine to medium grained, well graded, trace concrete material, grayish brown, moist		2" BOREHOLE	1AL		90		--
		712.38						
4	SP-SANDS (FILL), fine grained, poorly graded, compact, medium brown, moist		BENTONITE CHIPS	2AL		90		--
6				3AL		100		--
8	- rust brown at 8.5ft BGS			4AL		100		--
10	- increase in moisture at 10.0ft BGS			5AL		100		--
12	- wet at 12.0ft BGS		▽					
		702.68						
14	SM-SILTY SANDS, trace fine and medium sands, trace clays, semi-competent, gray, wet - strong odors, black foundry sand at 13.6ft BGS	700.98		6AL		100		--
16	- trace oily product at 14.1ft BGS SP-SANDS, fine grained, poorly graded, trace medium sands, gray black, wet, strong odors			7AL		100		--
18	- saturated oily product, brown, strong odor at 15.0ft BGS	697.48						
	CI-SILTY CLAYS (native), trace fine sands, compact, competent, low plasticity, gray, moist	696.98						
20	END OF BOREHOLE @ 18.0ft BGS							
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-92
DATE COMPLETED: August 24, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	706.00						
0	SW-SANDS (FILL), fine to medium grained, some vegetation, loose, dark brown	704.90	2" BOREHOLE	1AL		100		--
2	SP-SANDS (FILL), fine grained, poorly graded, medium brown, moist - wet at 2.5ft BGS			2AL		100		--
4	- sheeny, black foundry sand, strong odor at 4.0ft BGS		BENTONITE CHIPS					
6	- oily brown liquid (product) at 5.5ft BGS			3AL		100		--
8	CL-SILTY CLAYS (native), trace fine sands, stiff, compact, competent, low plasticity, gray	699.00		4AL		100		--
10	END OF BOREHOLE @ 10.0ft BGS	696.00						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-93
DATE COMPLETED: August 24, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	704.20						
0	SP-SANDS (FILL), fine grained, poorly graded, loose, brown, moist		▽	1AL		50		--
2			2" BOREHOLE					
4	- black foundry sand, strong odor at 3.7ft BGS	700.20	BENTONITE CHIPS	2AL		90		--
	CI-SILTY CLAYS (native), stiff, low plasticity, competent, gray, moist	699.20						
6	END OF BOREHOLE @ 5.0ft BGS							
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-94
DATE COMPLETED: August 24, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	705.11						
0	SW-SANDS (FILL), fine to medium grained, trace vegetation, loose, medium brown, moist			1AL		80		--
2	- wet at 1.8ft BGS		▽ 2" BOREHOLE					
4	SP-SANDS (FILL), fine grained, poorly graded, dense, brown, wet	701.81	BENTONITE CHIPS	2AL		80		--
	- black foundry sand, sheeny, strong odor at 4.3ft BGS	700.51						
6	CI-SILTY CLAYS (native), stiff, low plasticity, competent, gray, moist	700.11						
8	END OF BOREHOLE @ 5.0ft BGS							
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-95
DATE COMPLETED: August 25, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	712.50						
0	SW-SANDS (FILL), fine to medium grained, trace vegetation, well graded, loose, dark brown, moist	711.40	2" BOREHOLE	1AL		75		0.0
2	SP-SANDS (FILL), fine grained, poorly graded, loose, light brown, moist		BENTONITE CHIPS	2AL		75		0.0
4	- very loose, trace silts at 5.0ft BGS			3AL		75		0.0
6				4AL		80		0.0
8	- rust brown, trace silts at 8.2ft BGS - oxidation bonding at 9.2ft BGS			5AL		80		641
10	- very moist at 10.0ft BGS - becoming dark or brown, gray, wet at 10.2ft BGS		▽					
12	- trace oily product at 11.0ft BGS - black foundry sand, strong odor at 11.8ft BGS	700.50 699.50						
14	CI-SILTY CLAYS (native), trace fine sands, compact, low plasticity, gray, moist END OF BOREHOLE @ 13.0ft BGS							
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

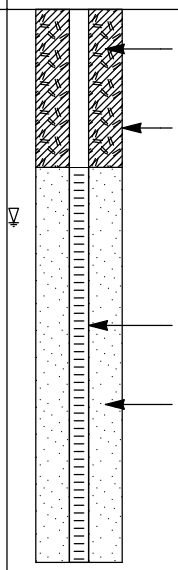
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-96/PZ18-96
DATE COMPLETED: August 25, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	709.17
0	SW-SANDS (FILL), fine to medium sands, trace vegetation, well graded, loose, dark brown, moist	707.97
2	SP-SANDS (FILL), fine grained, poorly graded, loose, intermittent oxidation banding, rust brown, moist	
4		
6	- wet at 5.4ft BGS - some foundry sand, black, sheeny at 5.5ft BGS	
8	- trace oily droplets, brown, strong odor at 8.0ft BGS - becoming dark brown, strong odors at 8.8ft BGS	
10	- foundry sand, black at 9.8ft BGS	699.07
12	CI-SILTY CLAYS (native), trace fine sands, compact, low plasticity, gray, moist	
14	END OF BOREHOLE @ 13.0ft BGS	696.17
16		
18		
20		
22		
24		
26		
28		
30		
32		
34		

TEMP MONITORING WELL



WELL DETAILS
Screened interval:
705.17 to 695.17ft BGS
4.00 to 14.00ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
705.17 to 695.17ft BGS
4.00 to 14.00ft BGS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1AL		70		0.0
2AL		70		8
3AL		85		>2000
4AL		85		649

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-97/PZ18-97
DATE COMPLETED: August 25, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	700.58						
2	SW/SC-SANDS AND SANDY CLAYS, fine and medium sands, trace rootlets, well graded, trace plasticity, dark brown, very moist to wet		BENTONITE CHIPS	1AL		90		0.0
	- black staining, weathered, reworked clay at 3.0ft BGS	697.48	2" BOREHOLE 1" PVC WELL SCREEN	2AL		90		1.6
4	CI-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, gray, moist		NATURAL COLLAPSE/SAND					
	- weathered, olive gray at 4.3ft BGS			3AL		90		3.1
6	END OF BOREHOLE @ 6.0ft BGS	694.58						
8	NOTE: SOIL BORING COMPLETED ON AUGUST 25, 2004, TEMPORARY MONITORING WELL COMPLETED ON SEPTEMBER 8, 2004							
10			WELL DETAILS Screened interval: 699.58 to 694.58ft BGS 1.00 to 6.00ft BGS Length: 5ft Diameter: 1in Slot Size: 0.010 Material: PVC Sand Pack: 699.58 to 694.58ft BGS 1.00 to 6.00ft BGS					
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-98
DATE COMPLETED: August 25, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	699.75						
2	SW/SC-SANDS AND SANDY CLAYS, fine and medium sands, trace rootlets, well graded, trace plasticity, dark brown, very moist to wet		2" BOREHOLE	1AL				1.1
		696.75						
4	CI-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, gray, moist - black staining, weathered, reworked clay at 3.9ft BGS		BENTONITE CHIPS	2AL				1.0
6	- weathered, olive gray at 4.2ft BGS	693.75						
	END OF BOREHOLE @ 6.0ft BGS							
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-99
DATE COMPLETED: August 25, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	699.53						
0 to 2	SW/SC-SANDY CLAYS, fine to medium grained, some clays, well graded, trace plasticity, brown, wet - trace foundry sand at 2.1ft BGS		2" BOREHOLE	1AL		80		0.1
2 to 4	CI-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	696.43	BENTONITE CHIPS	2AL		80		0.3
6	END OF BOREHOLE @ 6.0ft BGS	693.53		3AL		80		0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-01
DATE COMPLETED: November 17, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
36						100		0.0
38				8MC		100		0.0
40	- trace coarse grained gravels at 39.0ft BGS					100		0.0
42				9MC		100		0.0
44						100		0.0
46								
48				10MC		100		0.0
50	END OF BOREHOLE @ 50.0ft BGS	664.77				100		0.0
52								
54								
56								
58								
60								
62								
64								
66								
68								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ⬭ GRAIN SIZE ANALYSIS ▭

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-01
DATE COMPLETED: November 17, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	GROUND SURFACE	714.77						
	ASPHALT	714.47						
	GW-SANDS AND GRAVELS, trace silts (FILL), compact, fine grained angular, well graded, light gray, damp	713.77						
2	SM-SILTY SANDS, (FILL), compact, fine grained, poorly graded, dark brown, moist	712.47		1MC 0-2' -231 -232		90		0.0
4	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, light brown, damp - with silts at 4.4ft BGS		4" PVC CASING			90		0.0
6								
8	- trace fine grained rounded gravels, moist at 7.0ft BGS - trace silts, gravel not present at 8.0ft BGS			2MC		100		0.0
10	- medium grained, trace fine grained rounded gravels at 9.5ft BGS		CEMENT BENTONITE GROUT	10-12' -233		100		0.0
12	- wet at 12.0ft BGS			3MC		100		0.0
14	- fine grained, gravel not present, gray at 13.4ft BGS		BACKFILLED WITH CEMENT BENTONITE GROUT			100		0.0
16	CI-SILTY CLAY, trace fine grained rounded gravels (natural), stiff, medium plasticity, gray, moist	698.77	CLAY	4MC		100		0.0
18	- 2" lens wet sands at 16.5ft BGS - 1.5" lens wet sands at 17.0ft BGS							
20	- 2" lens wet sands at 18.1ft BGS - trace fine grained rounded gravels, trace sands at 18.8ft BGS		2-1/2" BOREHOLE			100		0.0
22	- 3" lens wet sandy silts at 20.5ft BGS		BACKFILLED WITH CEMENT BENTONITE GROUT	5MC		100		0.0
24						100		0.0
26								
28				6MC		100		0.0
30						100		0.0
32				7MC		100		0.0
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval) GRAIN SIZE ANALYSIS (rectangle)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-02
DATE COMPLETED: November 17, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
36	- sandy clay, very moist to wet at 35.2ft BGS - silty clay, trace fine grained gravels, moist at 36.0ft BGS					100		0.0
38	- trace coarse grained gravels at 38.5ft BGS			8MC		100		0.0
40						100		0.0
42				9MC		100		0.0
44						100		0.0
46								
48				10MC		100		0.0
50	END OF BOREHOLE @ 50.0ft BGS	665.96				100		0.0
52								
54								
56								
58								
60								
62								
64								
66								
68								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ⬭ GRAIN SIZE ANALYSIS ▭

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-02
DATE COMPLETED: November 17, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	GROUND SURFACE	715.96						
0	ASPHALT	715.56						
	GW-SANDS AND GRAVELS, trace silts (FILL), compact, fine grained, angular, poorly graded, light gray, dry	715.06						
2	SM-SILTY SANDS, (FILL), compact, fine grained, poorly graded, dark brown, moist	712.96		1MC 0-2' -234		70		0.0
4	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, yellowish brown, moist		4" PVC CASING			70		0.0
6	- 1" lens silts at 6.2ft BGS							
	- light brown at 7.2ft BGS			2MC 8.5-10.5 -235		100		0.0
8	- 2" lens fine grained gravels at 8.4ft BGS							
10	- wet at 10.5ft BGS		CEMENT BENTONITE GROUT			100		0.0
	- 2" lens silty sands at 10.8ft BGS			3MC		90		0.0
12			BACKFILLED WITH CEMENT BENTONITE GROUT					
14						90		0.0
16								
	CI-SILTY CLAY, trace fine grained sands, trace fine grained rounded gravels, stiff, medium plasticity, gray, moist, homogeneous	699.26		4MC		100		0.0
18	- 1" lens sands and gravels at 17.1ft BGS		CLAY					
20			2-1/2" BOREHOLE			100		0.0
22			BACKFILLED WITH CEMENT BENTONITE GROUT	5MC		100		0.0
24						100		0.0
26								
28				6MC		100		0.0
30						100		0.0
32				7MC		100		0.0
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval) GRAIN SIZE ANALYSIS (rectangle)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-03
DATE COMPLETED: November 17, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
36						100		0.0
38				8MC		100		0.0
40						100		0.0
42	- trace coarse grained gravels at 42.5ft BGS			9MC		100		0.0
44						100		0.0
46								
48				10MC				0.0
50	END OF BOREHOLE @ 50.0ft BGS	666.86						0.0
52								
54								
56								
58								
60								
62								
64								
66								
68								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ⬭ GRAIN SIZE ANALYSIS ▭

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-03
DATE COMPLETED: November 17, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	GROUND SURFACE	716.86						
0	ASPHALT	716.46						
	GM-SILTY SANDS AND GRAVELS, (FILL), compact, fine grained angular, poorly graded, light brown, dry	715.86						
2	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, light brown, moist			1MC 0-2' -229		80		0.0
4	- 1/2" piece slag at 4.1ft BGS		4" PVC CASING			80		0.0
6								
8	- 3" lens clayey sands, very moist at 8.0ft BGS - medium grained, grayish brown at 8.5ft BGS			2MC 7.5-9.5' -230		90		0.0
10	- wet at 9.5ft BGS - fine grained at 10.0ft BGS		CEMENT BENTONITE GROUT			90		0.0
12				3MC		100		0.0
14	- dark gray at 13.0ft BGS		BACKFILLED WITH CEMENT BENTONITE GROUT			100		0.0
16	CI-SILTY CLAY, (natural), stiff, medium plasticity, gray, moist, homogeneous	700.76	CLAY	4MC		100		0.0
18								
20			2-1/2" BOREHOLE			100		0.0
22			BACKFILLED WITH CEMENT BENTONITE GROUT	5MC		100		0.0
24						100		0.0
26								
28				6MC		100		0.0
30						100		0.0
32				7MC		100		0.0
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval) GRAIN SIZE ANALYSIS (rectangle)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-04
DATE COMPLETED: November 21, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.16						
0	ASPHALT	714.96	2" BOREHOLE					
	GM-SILTY GRAVELS, (FILL), compact, fine grained, poorly graded angular, light gray, moist	713.96						
2	SP-SANDS, trace silts (FILL), loose, fine grained, poorly graded, light brown, moist		BENTONITE CHIPS	1MC		70		0.0
4	- 2" lens trace glass at 3.0ft BGS - 1" lens slag at 3.8ft BGS - steel shavings at 5.0ft BGS					70		0.0
6	- loose to very loose at 6.0ft BGS							
8				2MC		20		0.0
10						20		0.0
12	- wet at 12.0ft BGS			3MC		80		0.0
14						80		0.0
16								
18	CI-SILTY CLAY, (natural), stiff, medium plasticity, gray, moist	698.16		4MC		90		0.0
20	END OF BOREHOLE @ 20.0ft BGS	695.16				90		0.0
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

GRAIN SIZE ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-05
DATE COMPLETED: November 13, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	703.49					
0	CL/CI-SILTY CLAYS, trace sands and fine gravels, trace rootlets, firm, low plasticity, dark brown, moist		1AL				1.8
2	- gray-brown at 0.75ft BGS		2AL				0.0
4	- soft, low to medium plasticity, gray at 4.5ft BGS		3AL				0.4
6			6-8' -212				
	CL-SANDY CLAYS, with silts, trace fine gravels, soft, low plasticity, dark gray to black, moist to very moist fine to coarse grained sands, slight petroleum-like odor	696.74	4AL				13.8
8							
	SC-CLAYEY SANDS, trace silts and fine gravels, loose, soft, fine to coarse grained, poorly graded, dark brown, very moist to saturated, slight petroleum-like odor	694.49	5AL				1.9
10			6AL				1.8
	CL-SILTY CLAYS, trace medium sands, soft to firm, low plasticity, green-gray, moist	692.24					
12	END OF BOREHOLE @ 12.0ft BGS	691.49					
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval) GRAIN SIZE ANALYSIS (rectangle)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-06
DATE COMPLETED: November 13, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	706.11					
0	CL/CI-SILTY CLAYS, trace sands and fine gravels, firm, low plasticity, dark brown, moist - gray-brown at 0.5ft BGS - soft, low to medium plasticity at 2.0ft BGS - gray at 2.5ft BGS		1AL				0.3
2			2AL				0.2
4	SM/SC-SANDS with SILTS and CLAYS, loose, fine to coarse grained, poorly graded, dark brown to gray, saturated, non plastic, slight petroleum-like odor	701.61	3AL				12.8
6	- black staining, sheen, moderate petroleum-like odor at 7.0ft BGS		4AL				23.8
8	CL-SANDY CLAYS, with silts, soft to firm, low plasticity, gray, moist, fine grained sands, trace organics, wood	698.11	5AL				0.8
10	CL-SILTY CLAYS, trace coarse sands, firm, low plasticity, gray, moist	696.61	6AL				0.1
12	END OF BOREHOLE @ 12.0ft BGS	694.11					
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

GRAIN SIZE ANALYSIS ☐

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-07
DATE COMPLETED: November 13, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	705.25					
0	CL-SILTY CLAYS, trace sands and fine gravels, firm, low plasticity, dark brown, moist		1AL				0.3
2	- gray-brown at 0.5ft BGS		2AL				0.2
4	CL-SANDY CLAYS, with silts, trace fine gravels, soft to firm, low plasticity, fine to coarse sands, brown, moist	700.75	3AL				0.4
6			4AL				0.3
8	PT-PEAT, black, wood fragments, with silts and sands	696.75					
	SM/SC-SANDS with SILTS and CLAYS, trace fine gravels, loose, fine to coarse grained, poorly graded, gray-brown, saturated	696.25	5AL				1.7
10	- dark gray, organic odor at 10.8ft BGS	694.25	6AL				0.2
12	CL-SILTY CLAYS, trace coarse sands, firm, low plasticity, gray, moist						
14	END OF BOREHOLE @ 14.0ft BGS	691.25					
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

GRAIN SIZE ANALYSIS ☐

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-08
DATE COMPLETED: November 13, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	706.69					
0	CL-SILTY CLAYS, trace sands and fine gravels, firm, low plasticity, dark brown, moist		1AL				0.2
2	- gray-brown at 0.75ft BGS		2AL				0.3
4			3AL				0.1
6	SC-CLAYEY SANDS, with silts, trace fine gravels, soft to firm, low plasticity to non plastic, fine to coarse sands, brown-gray, moist to very moist	701.44	4AL				0.4
8			5AL				0.6
10			6AL				0.3
12	PT-PEAT, black, wood fragments, with silts and sands	695.44					
	SC-CLAYEY SANDS, with silts, trace fine gravels, soft to firm, low plasticity to non plastic, fine to coarse sands, brown-gray, moist to very moist	694.94					
14	CL-SILTY CLAYS, trace coarse sands, firm, low plasticity, brown and gray mottled, moist	693.94	7AL				0.4
	END OF BOREHOLE @ 14.0ft BGS	692.69					
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

GRAIN SIZE ANALYSIS ☐

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-09
DATE COMPLETED: November 11, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	GROUND SURFACE	713.24						
0	ML-SILTS, with sands, trace clay, trace rootlets and organics (topsoil), loose, fine grained, poorly graded, dark brown, moist	712.74	2" BOREHOLE					
2	ML/CL-CLAYEY SILTS, trace sands (FILL), loose, fine grained, poorly graded, gray, damp		BENTONITE CHIPS	1MC 0-2' -234		50		0.0
4						50		0.0
6		706.74						
8	SP-SANDS, with silts, trace fine grained rounded gravels (FILL), loose, fine grained, poorly graded, brown, dry - trace wood at 7.5ft BGS			2MC		75		0.0
10	- trace concrete and brick at 8.5ft BGS	704.14				75		0.0
12	ML-SILTS, with sands, trace organics (topsoil) (FILL), loose, fine grained, poorly graded, dark brown, moist, faint odor	702.74		3MC		75		0.0
14	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, gray, moist - wet at 11.0ft BGS	700.54				75		0.0
16	CI-SILTY CLAY (natural), firm, medium plasticity, gray, moist, homogeneous							
18				4MC		100		0.0
20	END OF BOREHOLE @ 20.0ft BGS	693.24				100		0.0
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

GRAIN SIZE ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-10
DATE COMPLETED: November 21, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.72						
0	ASPHALT	715.52	2" BOREHOLE					
2	GM-SILTY GRAVELS, (FILL), compact, fine grained, poorly graded angular, gray, moist - with asphalt pieces at 1.0ft BGS	713.22	BENTONITE CHIPS	1MC		80		0.0
4	SM-SILTY SANDS (FILL), compact, fine grained, poorly graded, very moist, brown	711.72				80		0.0
6	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, brown, moist	709.72						
	SM-SILTY SANDS, (FILL), compact, fine grained, poorly graded, brown, moist	708.72						
8	MH-SANDY SILTS, (FILL), compact, fine grained, poorly graded, brown, moist to very moist	707.62		2MC		100		0.0
10	SP-SANDS, trace silts (natural), compact, fine grained, poorly graded, brown, moist					100		0.0
12	- gray, wet at 12.0ft BGS			3MC		70		0.0
14						70		0.0
16	CI-SILTY CLAY, trace fine grained gravels (natural), firm, medium plasticity, gray, moist - 2" lens silts at 17.1ft BGS	700.22		4MC		100		0.0
18	- trace coarse grained gravels at 18.4ft BGS							
20	END OF BOREHOLE @ 20.0ft BGS	695.72				100		0.0
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-11
DATE COMPLETED: November 21, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.60						
0	ASPHALT	715.30	2" BOREHOLE					
	GM-SILTY GRAVELS, (FILL), compact, fine grained, poorly graded, light gray, moist	714.30						
2	SP-SANDS, trace silts (FILL), trace rootlets, compact, fine grained, poorly graded, dark brown, moist		BENTONITE CHIPS	1MC		90		0.0
4	- trace gravels, rootlets not present at 2.0ft BGS					90		0.0
	- 2" trace glass at 2.3ft BGS							
6								
	- with silts, gravels not present at 7.5ft BGS			2MC		100		0.0
8	- 2" lens silty clay at 8.2ft BGS							
	- 2" orange-brown at 8.9ft BGS							
10						100		0.0
12	- medium grained at 12.0ft BGS			3MC		70		0.0
	- fine grained, gray at 12.5ft BGS							
14	- wet at 14.0ft BGS							
						70		0.0
16	CI-SILTY CLAY, (natural), stiff, medium plasticity, gray, moist	699.60		4MC		100		0.0
18								
20	END OF BOREHOLE @ 20.0ft BGS	695.60				100		0.0
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

GRAIN SIZE ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-12
DATE COMPLETED: November 21, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.06						
0	ASPHALT	714.86	2" BOREHOLE					
	GM-SILTY SANDS AND GRAVELS, (FILL), compact, fine grained angular, poorly graded, light brown, moist	713.56	BENTONITE CHIPS					
2	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, brown, moist, odor present			1MC -3-5'-239		70		10.8
4	- black staining, slight oily appearance at 4.5ft BGS					70		50.4
6	- staining not present at 5.0ft BGS							
	- stained black, strong odor at 7.0ft BGS							
8	- 1" yellow color at 7.5ft BGS - brown, moist to very moist at 8.0ft BGS			2MC -7-9'-240		70		137
10						70		585
12	- 2" black staining, odor at 12.0ft BGS			3MC		80		361
	- wet at 13.0ft BGS - gray at 13.4ft BGS							
14	- 1" black stain at 15.2ft BGS					80		37.4
16								
18				4MC		100		45.9
	- 2" black stain at 18.8ft BGS	696.06						
20	CI-SILTY CLAY, (natural), firm, medium plasticity, gray, moist, with occasional 1mm thick horizontal silt lenses	695.06				100		18.4
	END OF BOREHOLE @ 20.0ft BGS							
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

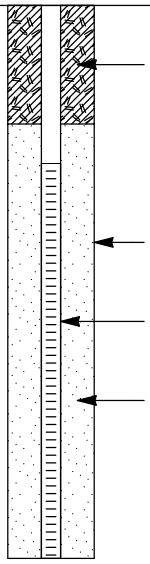
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB18-128/PZ18-128
DATE COMPLETED: September 2, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	715.12
0	ASPHALT	714.82
2	SW-SANDS (FILL), fine to medium sands, trace fine gravels, well graded, dense, dark brown, moist	
4		
6		
7.5	- debris (glass) at 7.5ft BGS	707.92
8	SP-SANDS, fine grained, trace medium sands, poorly graded, dense, dark brown, moist	
10	SM-SILTY SANDS, with clays, trace fine and medium sands, semi-competent, medium plasticity, soft, brown, moist, strong odor	705.32
12	SP-SANDS (FILL), fine grained, poorly graded, dense, black, wet, strong odor	703.12
12.5	- becoming gray at 12.5ft BGS	701.92
14	CL-SILTY CLAYS (native), trace fine sands, competent, stiff, low plasticity, gray, moist	
15	END OF BOREHOLE @ 15.0ft BGS	700.12
16		
18		
20		
22		
24		
26		
28		
30		
32		
34		

TEMP MONITORING WELL



WELL DETAILS
Screened interval:
711.12 to 701.12ft BGS
4.00 to 14.00ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Sand Pack:
712.12 to 701.12ft BGS
3.00 to 14.00ft BGS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1AL				10.1
2AL				36.4
3AL				42.1
4AL				54
5AL				>2000
6AL				>2000
7AL				36.9
8AL				21.1

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-13
DATE COMPLETED: November 21, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.20						
0	ASPHALT	714.90	2" BOREHOLE					
	GM-SILTY GRAVELS, (FILL), compact, fine grained angular, poorly graded, light gray, moist	713.90						
2	SM-SILTY SANDS, (FILL), compact, fine grained, poorly graded, medium brown, moist		BENTONITE CHIPS	1MC 0-2' -236		60		10.4
4				2-4' -237				
6						60		20.8
	DEBRIS, paper fibers, moist, strong odor	709.20						
	- 3" long piece of steel mixed with yellow stained sand at 7.0ft BGS			2MC 8-10' -238		60		2000+
8	- yellow paint sludge, paper, wood, strong odor at 7.5ft BGS	707.20						
	SM-SILTY SANDS, (FILL), trace paper, compact, fine grained, poorly graded, brown, moist to very moist	705.20				60		2000+
10	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, wet, strong odor							
12	- with silts, gray at 12.0ft BGS			3MC		80		2000+
	- trace black staining at 13.0ft BGS							
14	- brown, trace silts at 13.5ft BGS							
	END OF BOREHOLE @ 15.0ft BGS	700.20				80		2000+
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-14
DATE COMPLETED: November 11, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.19						
0	SP-SANDS, trace silts, trace organics (topsoil) (FILL), loose, fine grained, poorly graded, gray, dry		2" BOREHOLE					
2	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, orange-brown, damp	711.69	BENTONITE CHIPS	1MC		90		0.0
4						90		0.0
6								
8				2MC		90		0.0
10						90		0.0
	- moist at 11.0ft BGS							
12	- wet at 11.9ft BGS			3MC		100		0.0
14	MH-SANDY SILTS (FILL), compact, fine grained, poorly graded, gray, very moist	700.79				100		0.0
16	- wet at 16.3ft BGS	698.19						
18	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, brown, very moist			4MC		100		0.0
20	CL-SILTY CLAY, (natural), firm, low plasticity, gray, moist, homogeneous - trace fine grained rounded gravels at 20.0ft BGS	695.19				100		0.0
22				5MC		100		0.0
24								
	END OF BOREHOLE @ 25.0ft BGS	689.19						
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

GRAIN SIZE ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-15
DATE COMPLETED: January 12, 2004
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: S. POOLER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	702.72						
0	SP-SANDS, loose, poorly graded, fine grained, brown, moist, trace rootlets	701.72		1HA				
2	CL-SILTY CLAYS, soft, low plasticity, gray, moist		2" BOREHOLE	2HA				0
4								0
	- firm at 5.0ft BGS		BENTONITE CHIPS	3HA				
6	- medium plasticity, wet at 6.5ft BGS			4HA				0
	END OF BOREHOLE @ 7.0ft BGS	695.72						
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-16
DATE COMPLETED: November 14, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	705.71					
0	SM-SILTY SANDS, trace clay, compact, fine grained, poorly graded, dark brown, moist		1AL 0-2' -213				0.8
2	- brown with orange streaks, oxidation at 0.25ft BGS						
	- saturated at 3.0ft BGS		2AL				0.4
4			4-6' -214				
	CL-SILTY CLAYS, firm, low plasticity, gray, moist	700.71	3AL				0.4
6							
			4AL				0.2
8	END OF BOREHOLE @ 8.0ft BGS	697.71					
10							
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval) GRAIN SIZE ANALYSIS (rectangle)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-17
DATE COMPLETED: November 14, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	704.39					
0	CL/CI-SILTY CLAYS, trace sands and fine gravels, firm, low plasticity, dark brown, moist, trace rootlets		1AL				0.3
2	- gray-brown at 0.5ft BGS						
	- low to medium plasticity at 3.0ft BGS		2AL				0.2
4	SM/SC-SANDS with SILTS and CLAYS, loose, soft, fine to medium grained, poorly graded, low to non-plastic, brown and gray, very moist to saturated	700.39	3AL				0.3
6	- saturated at 5.0ft BGS		4AL				0.3
8	- trace fine gravels at 8.0ft BGS						
	CL-SILTY CLAYS, trace coarse sands, firm, low plasticity, gray, moist	696.14	5AL				0.2
10			6AL				0.1
12	END OF BOREHOLE @ 12.0ft BGS	692.39					
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-27
DATE COMPLETED: February 28, 2006
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: N. RATHBUN

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	SP-SANDS (FILL), trace silts, gravel and debris (crushed concrete), loose, fine to medium grained, poorly graded, dark brown, moist	1.50	2" BOREHOLE					43.9
2	SC-CLAYEY SANDS, trace silts and brown subrounded gravels, loose, very fine to fine grained, poorly graded, dark brown, moist	3.00	BACKFILLED WITH BENTONITE CHIPS	1AL		60		27.4
4	SP-SANDS (FILL), trace silts, gravel and debris (crushed concrete), loose, fine to medium grained, poorly graded, dark brown, moist	4.30						46.4
6	SM-SILTY SANDS, compact, very fine to fine grained, poorly graded, brown, moist - trace fine subrounded gravels at 6.5ft BGS	6.60		2AL		70		176
8			▽					198
10	SP-SANDS, trace fine subrounded gravels, compact, very fine to fine grained, poorly graded, brown, moist to wet							453
12	- fine to medium grained, dark brown, slight petroleum-like odor at 8.0ft BGS	11.80		3AL		85		861
14	- trace silts, coarse medium grained, grayish brown at 9.0ft BGS							240
16	- coarse with fine well rounded gravels at 11.0ft BGS SM-SILTY SANDS, compact, very fine to fine grained, poorly graded, gray, wet			4AL		90		1050
18								247
20	CI-CLAYS, trace silts, medium plasticity, firm, gray, moist, slight petroleum-like odor	19.20 20.00						
22	END OF BOREHOLE @ 20.0ft BGS							
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

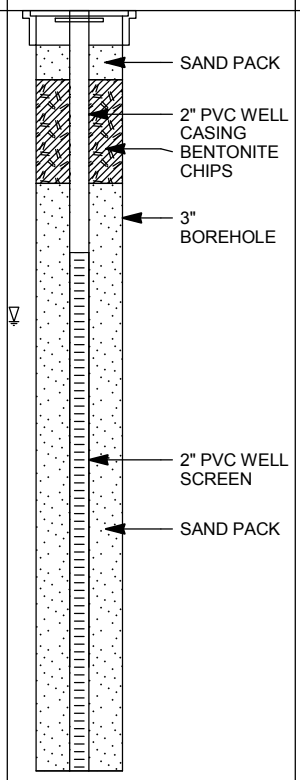
OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-28/MW19-27
DATE COMPLETED: February 28, 2006
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: N. RATHBUN

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	716.90
2	SP-SANDS (FILL), trace silts, gravel and debris (crushed concrete and brick), loose, very fine to fine grained, poorly graded, dark brown to brown, moist	715.40
4	CL-SANDY CLAYS (FILL), trace silts and gravels, low plasticity, firm, brownish gray, moist	714.40
6	SP-SANDS (FILL), trace silts, gravel and debris (crushed concrete and brick), loose, very fine to fine grained, poorly graded, dark brown to brown, moist	712.40
8	SM-SILTY SANDS, compact, poorly graded, very fine to fine grained, tan brown, moist	710.90
10	SP-SANDS, trace silts and brown subrounded gravels, loose, fine to medium grained, poorly graded, dark brown to black, moist, slight petroleum-like odor	707.90
12	SP-SANDS, compact, very fine to fine grained, poorly graded, gray, wet, petroleum-like odor	
14	- petroleum-like substance intermixed with water at 15.0ft BGS	
16		
18	CH-CLAYS, trace silts, high plasticity ,firm, brownish gray, moist	698.90
20	END OF BOREHOLE @ 20.0ft BGS	696.90
22		
24		
26		
28		
30		
32		
34		
36		
38		



WELL DETAILS
Screened interval:
709.90 to 697.90ft BGS
7.00 to 19.00ft BGS
Length: 12ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
711.90 to 697.90ft BGS
5.00 to 19.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				67.2
1AL		60		64.7
				11.4
2AL		65		282
				217
				136
3AL		80		58.3
				54.9
				194
4AL		85		157

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-31
DATE COMPLETED:
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: N. RATHBUN

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
	FILL-SANDS, trace silts and fine to medium subangular gravel debris (crushed concrete), loose, very fine to medium grained, poorly graded, brown, moist	1.00
	SM-SILTY SANDS, compact ,very fine to fine grained, poorly graded, orange hue, moist	4.80
	SP-SANDS, trace silts and fine subangular gravels, compact, fine to medium grained, poorly graded, orangish brown, moist to wet	
	- fine to coarse grained, trace fine subangular gravels at 9.0ft BGS	
	CH-CLAYS, trace silts, high plasticity, firm, gray, moist	14.60
	END OF BOREHOLE @ 15.0ft BGS	15.00

BOREHOLE INSTALLATION: 2" BOREHOLE; BACKFILLED WITH BENTONITE CHIPS; ▽

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1AL		60		0
				0
				0
2AL		60		0
				0
				0
3AL		70		0
				0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-34
DATE COMPLETED:
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: N. RATHBUN

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	FILL-SANDS, trace silts and fine subangular gravels, debris (crushed concrete), loose, fine to medium grained, poorly graded, brown, moist	1.50	2" BOREHOLE					1.1
2	SM-SILTY SANDS, compact, very fine to fine grained, poorly graded, orange, moist		BACKFILLED WITH BENTONITE CHIPS	1AL				60 1.0
4	SP-SANDS, with fine subrounded gravels, trace silts, compact, fine to coarse grained, poorly graded, brown with orange hue, moist to wet	4.80						1.3
6								1.5
8				2AL				70 2.0
10	SP-SANDS, trace silts, compact, very fine to medium grained, poorly graded, brown to brownish gray, wet	10.00	▽					2.1
12				3AL				70 16.8
14	CL-CLAYS, trace silts, medium plasticity, firm, gray, moist	14.40 15.00						147
16	END OF BOREHOLE @ 15.0ft BGS							
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-36
DATE COMPLETED: March 2, 2006
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: N. RATHBUN

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	SP-SANDS (FILL), trace silts, fine to medium subrounded gravels and debris (crushed concrete), loose, fine to medium grained, poorly graded, dark brown, moist	1.00	2" BOREHOLE					1.4
2		2.00	BACKFILLED WITH BENTONITE CHIPS	1AL		60		5.3
4	SC-CLAYEY SANDS (FILL), trace silts and fine subrounded gravels, compact, very fine to fine grained, brown grained, poorly graded, brown, moist	4.90						51.9
6	SP-SANDS (FILL), trace silts, fine to medium subrounded gravels and debris (crushed concrete), loose, fine to medium grained, poorly graded, dark brown, moist	7.00		2AL		80		162
8	SM-SILTY SANDS, compact, very fine to fine grained, poorly graded, tan brown, moist		▽					131
10	SP-SANDS, trace fine brown subrounded gravels, loose, fine to medium grained, poorly graded, brown with orange hue and orange staining	10.50						181
12				3AL		80		103
14	SM-SILTY SANDS, compact, poorly graded, very fine to fine grained, gray, wet							149
16								93.7
18				4AL		85		
20	CL-CLAYS, trace silts, medium, plasticity, firm, gray, moist	19.50 20.00						90.2
22	END OF BOREHOLE @ 20.0ft BGS							
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-37
DATE COMPLETED: March 2, 2006
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: N. RATHBUN

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	SP-SANDS (FILL), trace silts and fine subrounded gravels and debris (crushed concrete), loose, fine to medium grained, poorly graded, dark brown to black, moist	1.20	2" BOREHOLE					4.5
2		1.50		1AL		60		11.0
4	SC-SANDY CLAYS, trace silts, loose, very fine grained, poorly graded, dark brown, moist	4.50	BACKFILLED WITH BENTONITE CHIPS					70.1
6	SP-SANDS (FILL), trace silts and fine subrounded gravels and debris (crushed concrete), loose, fine to medium grained, poorly graded, dark brown to black, moist, black staining at 1.7', pieces of wood	6.00		2AL		60		90.2
8	SM-SILTY SANDS, compact, very fine to fine grained, poorly graded, brown, moist							119
10	SP-SANDS, trace silts, fine to medium subangular to subrounded gravels, compact, fine to medium grained, poorly graded, brown with orange hue, moist							376
12	- with medium to fine to coarse grained, gray at 9.0ft BGS	11.50		3AL		70		234
14	SP-SANDS, trace silts, compact, very fine to fine grained, poorly graded, gray, wet							158
16	- fine grained at 16.5ft BGS							71.8
18	CH-CLAYS, trace silts, high plasticity, firm, gray, moist	17.50		4AL		80		51.8
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-38
DATE COMPLETED: March 2, 2006
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: N. RATHBUN

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
2	SP-SANDS (FILL), trace silts and brown subrounded gravels and debris (crushed concrete), loose, fine to medium grained, poorly graded, dark brown to brown, moist	1.40	2" BOREHOLE					0.5
	ASPHALT	1.50		1AL		60		0.9
4	CL-SANDY CLAYS (FILL), trace silts and fine subrounded gravels, low plasticity, firm, brownish gray, moist	2.00	BACKFILLED WITH BENTONITE CHIPS					8.7
6	SP-SANDS (FILL)	5.50						20.8
	SM-SILTY SANDS, compact, poorly graded, very fine to fine grained, tan, moist	6.00		2AL		70		
8	SP-SANDS, trace silts, fine brown subrounded gravels, loose, fine to medium grained, poorly graded, brownish gray, petroleum-like rainbow, petroleum-like odor		▽					170
10	- with medium to coarse grained, gray at 9.0ft BGS							27.4
12				3AL		80		
14	CH-CLAYS, trace silts, high plasticity, firm, gray, moist	14.30						47.4
	END OF BOREHOLE @ 15.0ft BGS	15.00						241
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

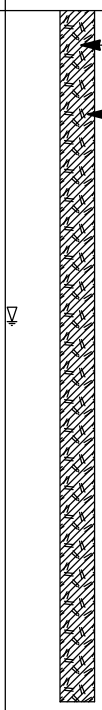
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-39
DATE COMPLETED:
DRILLING METHOD:
FIELD PERSONNEL:

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
	CONCRETE	0.60
2	SP-SANDS (FILL), trace silts, brown fine subrounded gravels, debris (crushed concrete), loose, very fine to fine grained, poorly graded, dark brown, moist	1.60
4	CL-SANDY CLAYS (FILL), trace silts and gravels, low plasticity, firm, brown, moist	3.50
6	SP-SANDS (FILL), trace silts, brown fine subrounded gravels, debris (crushed concrete), loose, very fine to fine grained, poorly graded, dark brown, moist, strong petroleum-like odor, black staining (rainbow)	5.00 6.50
8	SM-SILTY SANDS, compact ,very fine to fine grained, poorly graded, tan brown, moist	9.00
10	SP-SANDS, trace silts and fine brown subrounded gravels, loose, fine to medium grained, poorly graded, dark brown, petroleum-like odor, black staining	
12	SP-SANDS, compact, very fine to fine grained, poorly graded, gray, wet	
14	- clay lens, trace fine brown subrounded gravel (10-10.2') at 10.0ft BGS	
16		
18	CH-CLAYS, trace silts, high plasticity, firm, gray, moist	18.00
20	END OF BOREHOLE @ 20.0ft BGS	20.00
22		
24		
26		
28		
30		
32		
34		
36		
38		

BOREHOLE INSTALLATION



SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				0.9
1AL		60		63.2
				92.6
2AL		75		71.4
				12.3
				10.8
3AL		80		16.2
				63.3
4AL		80		19.4
				144

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

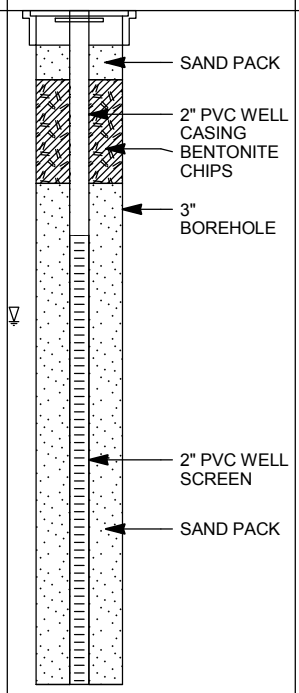
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-40/MW19-28
DATE COMPLETED: March 2, 2006
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: N. RATHBUN

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
0	SP-SANDS (FILL), trace silts, gravel and debris (crushed concrete), loose, very fine to fine grained, poorly graded, dark brown, moist	1.00
2	CL-SANDY CLAYS (FILL), trace silts and gravels, low plasticity, firm, brownish gray, moist	2.50
4	SP-SANDS (FILL), trace silts, gravel and debris (crushed concrete), loose, very fine to fine grained, poorly graded, dark brown, moist	5.00
6	SM-SILTY SANDS, compact, very fine to fine grained, poorly graded, tan, moist	6.00
8	SP-SANDS, trace silts and brown subrounded gravels, loose, fine to medium grained, poorly graded, dark brown, moist	8.00
10	SP-SANDS, compact, very fine to fine grained, poorly graded, gray, wet	
12		
14	SM-SILTY SANDS, compact, very fine to fine grained, poorly graded, gray, wet	13.00
16		
18	CH-CLAYS, trace silts, high plasticity, firm, gray, moist	17.00
20	END OF BOREHOLE @ 20.0ft BGS	20.00

MONITORING WELL



WELL DETAILS
Screened interval:
6.50 to 19.50ft BGS
Length: 13ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Sand Pack:
5.00 to 19.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				2.0
1AL		60		5.3
				13.4
2AL		65		89.8
				16.0
				278
3AL		80		127
				151
4AL		85		125
				33.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-41
DATE COMPLETED: March 2, 2006
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: N. RATHBUN

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	CONCRETE	0.60	2" BOREHOLE					6.2
2	CL-SANDY CLAYS (FILL), trace silts and gravel, low plasticity, firm, brownish gray, moist		BACKFILLED WITH BENTONITE CHIPS	1AL		60		8.3
4		4.60						3.6
6	SM-SILTY SANDS, compact, very fine to fine grained, poorly graded, tan brown, moist	6.50						2.6
8	SP-SANDS, trace silts and fine brown subrounded gravels, loose, fine to medium grained, poorly graded, dark brown, orange bands, moist to wet		▽	2AL		65		7.2
10	- fine to coarse grained at 9.0ft BGS	11.00						2.6
12	SP-SANDS, compact, very fine to fine grained, poorly graded, gray, wet, petroleum-like rainbow, small black dots			3AL		70		19.0
14	- clay lens, trace silts and coarse grained sands at 12.0ft BGS							30.1
16								17.1
18		18.50		4AL		80		16.0
20	CH-CLAYS, trace silts, high plasticity, firm, gray, moist	20.00						
	END OF BOREHOLE @ 20.0ft BGS							
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-42
DATE COMPLETED: March 2, 2006
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: N. RATHBUN

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	CONCRETE	0.60	2" BOREHOLE					0.1
2	CL-SANDY CLAYS (FILL), trace silts ,loose, very fine to fine grained, poorly graded, dark brown, moist, strong petroleum-like odor, black staining		BACKFILLED WITH BENTONITE CHIPS	1AL		60		57.8
4		4.80						162
6	SP-SANDS, with gravels, trace silts, loose, fine to medium grained, fine gravels, poorly graded, black, moist, strong petroleum-like odor	5.90 6.00						35.0
8	SM-SILTY SANDS, compact, very fine to fine grained, poorly graded, tan, moist, slight petroleum-like odor		▽	2AL		70		7.2
10	SP-SANDS, trace silts and brown subrounded gravels, loose, fine to medium grained, poorly graded, dark brown, moist to wet							4.8
12	- coarse grained at 9.0ft BGS	11.00		3AL		60		23.9
14	SP-SANDS, trace silts, compact, very fine to fine, poorly graded, gray, petroleum-like rainbow (15-17')							66.9
16								11.3
18				4AL		80		
20	CH-CLAYS, trace silts, high plasticity, firm, gray, moist	19.00 20.00						57.5
22	END OF BOREHOLE @ 20.0ft BGS							
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-43
DATE COMPLETED: May 31, 2007
DRILLING METHOD: 2-1/2" DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	716.90						
	ASPHALT	716.60						
	GM-SILTY GRAVELS, with fine to coarse sands, compact, fine gravels, gray, moist	715.90						
2				1DP		75		0.4
4	SM-SILTY SANDS, trace fine gravels, compact, fine grained ,trace medium to coarse grained, poorly graded, brown, moist	713.15						
6	SP-SANDS, trace silts, compact, fine grained, poorly graded, light brown, moist - orange brown at 4.3ft BGS		2-1/2" BOREHOLE					
8	- brown at 6.0ft BGS - fine to coarse grained, trace fine gravels, light brown at 7.0ft BGS			2DP		75		0.1
10	- banding-orange, brown, light brown at 8.3ft BGS		BACKFILLED WITH BENTONTITE CHIPS					
12	- brown/gray, very moist to saturated at 12.5ft BGS			3DP		75		0.1
14	- gray, saturated at 13.0ft BGS							
16	- fine grained, no gravels at 16.3ft BGS							
18	CI-SILTY CLAYS, trace fine sands, firm, medium plasticity, gray, moist	698.90		4DP		80		0.1
20	END OF BOREHOLE @ 20.0ft BGS	696.90	WELL DETAILS Screened interval: 703.90 to 699.90ft BGS 13.00 to 17.00ft BGS Length: 4ft					
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-44
DATE COMPLETED: May 31, 2007
DRILLING METHOD: 2-1/2" DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	716.98						
0	ASPHALT	716.68						
2	SM-SILTY SANDS, with fine gravels, compact, fine to coarse grained, poorly graded, brown, moist			1DP		75		0.1
	- rust brown at 2.5ft BGS	713.73						
4	SP-SANDS, trace silts, compact, fine grained, trace medium to coarse grained, poorly graded, orange brown, moist		2-1/2" BOREHOLE					
6	- light brown at 4.3ft BGS							
	- fine to coarse grained, trace fine gravels, brown at 7.0ft BGS			2DP		75		0.2
8	- banding, light brown, orange brown at 8.5ft BGS							
10	- white to beige at 10.0ft BGS		BACKFILLED WITH BENTONTITE CHIPS					
12				3DP		75		0.1
	- light brown, very moist to saturated at 13.0ft BGS							
14	- 2" CL-SILTY CLAY seam, firm, low plasticity, gray at 13.8ft BGS							
16	- fine grained, brown-gray, saturated at 14.0ft BGS							
	- gray at 15.0ft BGS	700.38		4DP		95		0.0
18	CI-SILTY CLAYS, trace fine sands, firm, medium plasticity, gray, moist							
	- 3" ML-SANDY SILT seam, compact, gray, saturated at 18.7ft BGS	696.98						
20	END OF BOREHOLE @ 20.0ft BGS		WELL DETAILS Screened interval: 704.48 to 700.48ft BGS 12.50 to 16.50ft BGS Length: 4ft					
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-45
DATE COMPLETED: May 31, 2007
DRILLING METHOD: 2-1/2" DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	717.67						
	ASPHALT	717.37						
2	SM-SILTY SANDS, with fine gravels, compact, fine to coarse grained, poorly graded, brown, moist			1DP		75		0.4
	- trace fine gravels at 1.0ft BGS	714.17						
4	SP-SANDS, trace silts, compact, fine grained, trace medium to coarse grained, poorly graded, light brown, moist		2-1/2" BOREHOLE					
6	- fine to coarse grained, brown, trace fine gravels at 6.5ft BGS			2DP		75		4.8
8								
10	- light brown at 10.0ft BGS		BACKFILLED WITH BENTONTITE CHIPS					
12				3DP		85		0.0
14	- brown-gray, very moist at 13.5ft BGS - saturated at 14.3ft BGS - fine grained at 14.6ft BGS							
16	- 2" CL-SILTY CLAYS, with fine sands seam firm, gray, low plasticity at 16.5ft BGS							
18	- fine grained, trace medium grained to fine gravels at 17.5ft BGS - fine grained at 18.0ft BGS	699.42		4DP		90		0.0
20	CI-SILTY CLAYS, trace fine sands, firm, medium plasticity, gray, moist	697.67						
22	END OF BOREHOLE @ 20.0ft BGS							
24								
26								
28								
30								
32								
34								
36								
38								

WELL DETAILS
Screened interval:
704.67 to 700.67ft BGS
13.00 to 17.00ft BGS
Length: 4ft

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-46
DATE COMPLETED: May 31, 2007
DRILLING METHOD: 2-1/2" DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	717.30						
0	ASPHALT	717.00						
2	SM-SILTY SANDS, with fine gravels, compact, fine grained, poorly graded, brown, moist			1DP		75		0.1
4	- orange-brown at 3.5ft BGS							
6	- brown at 6.0ft BGS		2-1/2" BOREHOLE					
8	SP-SANDS, trace silts and fine gravels, compact, fine to coarse grained, poorly graded, brown, moist	709.80		2DP		75		0.1
10	- white to beige, some orange banding at 10.0ft BGS		BACKFILLED WITH BENTONTITE CHIPS					
12				3DP		85		0.2
14	- brown-gray, saturated at 13.7ft BGS - light brown, very moist at 13.8ft BGS							
16	- fine grained, trace medium to coarse grained, gray at 15.5ft BGS							
18				4DP		90		0.1
20		698.30						
	CI-SILTY CLAYS, trace fine sands, firm, medium plasticity, gray, moist	697.30						
	END OF BOREHOLE @ 20.0ft BGS							
22								
24								
26								
28								
30								
32								
34								
36								
38								

WELL DETAILS
Screened interval:
703.30 to 699.30ft BGS
14.00 to 18.00ft BGS
Length: 4ft

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

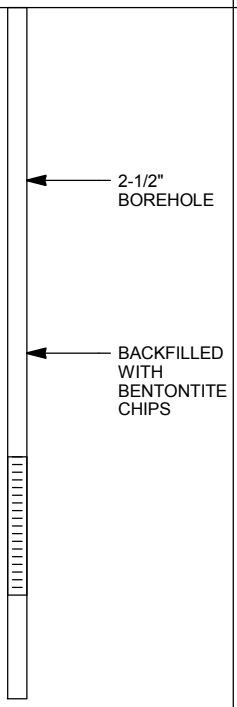
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-47
DATE COMPLETED: May 31, 2007
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	GROUND SURFACE	715.91
0	ASPHALT	715.61
2	GM-SILTY GRAVELS, with fine to coarse sands, compact, fine grained, poorly graded, gray, moist	714.41
4	SM-SILTY SANDS, trace fine gravels, compact, fine grained, trace medium to coarse grained, poorly graded, dark brown, moist - rust brown at 2.3ft BGS	
6	- brown at 3.0ft BGS	709.41
8	SP-SANDS, trace silts and fine gravels, compact, fine to coarse grained, poorly graded, brown, moist - banding-brown, light brown and orange at 8.5ft BGS	
10	- white to beige at 10.5ft BGS	
12	- with orange banding at 11.5ft BGS	
14	- brown gray, very moist to saturated at 13.3ft BGS - saturated at 13.8ft BGS	
16		
18	- fine grained, no gravels at 17.3ft BGS	
20	CI-SILTY CLAYS, trace fine sands, firm, medium plasticity, gray, moist	697.91
22	END OF BOREHOLE @ 20.0ft BGS	695.91
24		
26		
28		
30		
32		
34		
36		
38		

TEMP MONITORING WELL



WELL DETAILS
Screened interval:
702.91 to 698.91ft BGS
13.00 to 17.00ft BGS
Length: 4ft

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		75		0.8
2DP		80		0.2
3DP		80		0.1
4DP		85		0.1

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - WRBC
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-48
DATE COMPLETED: May 31, 2007
DRILLING METHOD: 2-1/2" DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.35						
	ASPHALT	715.05						
2	GM-SILTY GRAVELS, with fine to coarse sands, compact, fine grained, poorly graded, gray, moist	713.85		1DP		75		0.4
4	SM-SILTY SANDS, trace fine gravels, compact, fine grained, trace medium to coarse grained, poorly graded, dark brown, moist - orange-brown at 3.0ft BGS		2-1/2" BOREHOLE					
6	- brown at 3.8ft BGS							
	- dark brown, trace clays at 6.5ft BGS	708.35		2DP		75		0.4
8	SP-SANDS, trace silts and fine gravels, compact, fine to coarse grained, poorly graded, brown, moist							
10	- banding-brown, light brown and orange at 9.0ft BGS		BACKFILLED WITH BENTONTITE CHIPS					
12	- white to beige at 10.5ft BGS - banding-white, brown and orange at 11.5ft BGS			3DP				0.2
14	- very moist to saturated at 12.5ft BGS - saturated, light gray at 13.0ft BGS - fine grained, brown-gray at 14.0ft BGS							
16		699.35						
	SM-SILTY SANDS, compact, fine grained, poorly graded, gray, saturated	698.85		4DP				ND
18	CI-SILTY CLAYS, trace fine sands, firm, medium plasticity, gray, moist							
20	END OF BOREHOLE @ 20.0ft BGS	695.35						
22			WELL DETAILS Screened interval: 703.35 to 699.35ft BGS 12.00 to 16.00ft BGS Length: 4ft					
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/17/11

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-49
DATE COMPLETED: February 8, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268341.12
EASTING: 13343889.99

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	718.12						
0	ASPHALT	717.62		0-2' -013				0.0
2	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	717.12		1GP		70		0.0
4	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist							
	- with gravel, trace slag and coal, compact to dense at 3.0ft BGS	713.62 713.12						0.0
6	CONCRETE DEBRIS							0.0
8	SP-SAND (FILL), with clay, trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose, brown, wet			2GP		50		
	- with concrete debris at 8.5ft BGS							26.9
10	- trace wood debris, no concrete debris, compact, slight odor at 9.5ft BGS	708.12		10-11.25' -014				155
12	PAINT SLUDGE	706.87	BENTONITE CHIPS	3GP		75		4.3
	SM-SILTY SAND, fine grained, compact, brown, wet, trace staining							2.3
14	- no staining at 11.8ft BGS							
	- compact to dense at 13.5ft BGS							
16	- fine to medium grained at 15.0ft BGS							0.8
18	- fine grained at 18.5ft BGS			4GP		70		0.0
20	CH-SILTY CLAY, high plasticity, firm, gray, moist	698.12						0.0
22	- stiff at 22.0ft BGS			5GP		100		0.0
24								0.0
	END OF BOREHOLE @ 25.0ft BGS	693.12						
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-50
DATE COMPLETED: February 8, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268384.9
EASTING: 13343866.34

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	718.39						
0	ASPHALT	718.09		0-2' -015/ 016				0.0
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	717.39		1GP		70		0.0
2	SP-SAND (FILL), with gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist							0.0
4	- trace gravel, loose to compact at 4.0ft BGS							0.0
6	- compact at 7.5ft BGS			2GP		70		0.0
8	- wet at 8.0ft BGS							0.0
	- moist at 8.8ft BGS							
10	- compact to dense at 10.0ft BGS		BENTONITE CHIPS	9-11' -017				0.0
	SM-SILTY SAND, fine grained, compact to dense, brown, wet	707.39						0.0
12	- gray at 13.5ft BGS			3GP		75		0.0
14								0.0
16								0.0
18	CH-SILTY CLAY, high plasticity, stiff, gray, moist	700.89		4GP		100		0.0
20	END OF BOREHOLE @ 20.0ft BGS	698.39						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-51
DATE COMPLETED: February 7, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268319.1 EASTING: 13344079.98 GROUND SURFACE	716.99						
0	ASPHALT	716.69						0.0
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	715.99						
2	SP-SAND (FILL), trace clay and gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist		BENTONITE CHIPS	1GP		90		0.0
4	- no clay at 3.0ft BGS			3-6" -010				0.0
	- with clay, no gravel at 5.0ft BGS							
6	END OF BOREHOLE @ 6.0ft BGS	710.99						
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-52
DATE COMPLETED: February 7, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268654.91 EASTING: 13344052.02 GROUND SURFACE	715.48						
0	ASPHALT	715.13	BENTONITE CHIPS	1GP 0-2' -012		100		0.7
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	714.68						
2	SP-SAND (FILL), trace gravel, slag, coal, glass and brick debris, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist	713.48						
4	END OF BOREHOLE @ 2.0ft BGS							
6								
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-53
DATE COMPLETED: February 7, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268493.27 EASTING: 13344169.46 GROUND SURFACE	714.76						
0	CONCRETE	714.51	BENTONITE CHIPS	1GP 1-3' 011		80		0.7
2	SP-SAND (FILL), with gravel and slag, trace coal, paint sludge and brick debris, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	711.76						0.7
4	END OF BOREHOLE @ 3.0ft BGS							
6								
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-54
DATE COMPLETED: February 7, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268464.1
EASTING: 13344319.18

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.79						
0	TOPSOIL	714.04						0.7
2	CL-SANDY CLAY (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, low plasticity, firm, brown, moist	712.79		1GP		80		0.7
4	SP-SAND (FILL), with clay and gravel, fine to coarse sand, fine to coarse gravel, compact, brown, moist		BENTONITE CHIPS					0.7
6	- increase in gravel, with slag, trace wood debris and glass at 5.0ft BGS							0.7
8				2GP 7-9' 009		55		
10	SLAG, with glass	705.79						0.7
	SP-SAND (FILL), with clay, trace gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist	705.39						
12	- black at 9.9ft BGS	704.79						
	END OF BOREHOLE @ 10.0ft BGS							
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-57
DATE COMPLETED: September 5, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	CONCRETE	0.30						
2	SP-SANd, trace silt and fine gravel, compact, fine grained, orangish brown, moist			1GP		80		0.0
4								0.0
6	- bright yellow paint sludge from 4.9 to 5.2ft BGS - degraded paper, strong odor from 5.7 to 5.8ft BGS	5.70	BENTONITE CHIPS	5-7.5' -001				>9999
8	- brown, free product mixed with paint sludge from 6.0 to 6.9ft BGS PAINT SLUDGE, bright yellow, strong odor	6.90		2GP		100		>9999
10	- gray silty clay, mixed with paint sludge at 6.8ft BGS	10.00						
12	SP-SAND, trace silt, compact, fine grained, dark brown, moist, strong odor - bright yellow paint sludge, strong odor at 7.3ft BGS							
14	- black sand, strong odor at 7.9ft BGS - medium grained, brown from 8.5 to 8.9ft BGS							
16	- fine gravel and broken glass, free product, brown from 8.7 to 8.8ft BGS							
18	- fine sand, light brown, slight odor at 8.9ft BGS END OF BOREHOLE @ 10.0ft BGS							
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 9/17/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB-2-03
DATE COMPLETED: March 7, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: M. MATHÉ

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	CONCRETE DEBRIS		2" BOREHOLE					
		1.25	BENTONITE CHIPS					
2	SP-SANDS, trace silts, loose, poorly graded, fine grained, trace medium grained, orangy brown, moist			1AL 2-4'				0.0
4								
6								
8	- 4" sandy clay layer, orange/brown mottled at 7.5ft BGS			2AL 8-10'				45
10								
12				3AL 12-15'				0.0
	CH-SANDY CLAYS, firm, low plasticity, brown/black mottled, moist	12.75						
14	SP-SANDS, trace silts, loose, poorly graded, fine grained, trace medium grained, black, gray and white grains, wet	13.50						
	END OF BOREHOLE @ 15.0ft BGS	15.00						
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB21-01
DATE COMPLETED: November 12, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.92						
0	CONCRETE	714.62	2" BOREHOLE					
2	MH-SILTS WITH SANDS, (FILL), trace clay, loose, fine grained, poorly graded, dark brown, moist - trace concrete, slag, lenses of yellow paint, faint odor at 1.0ft BGS		BENTONITE CHIPS	1MC (1-3'-208)		20		N/A
4						20		0.0
6								
8		706.72		2MC		50		0.0
10	SM-SILTY SANDS, (FILL), compact, fine grained, poorly graded, brown with black streaks, moist to very moist -wet at 8.4ft BGS					50		
12	CL/ML-CLAYEY SILTS, (FILL), compact, fine grained, poorly graded, brown, wet	703.22 702.72		3MC		80		
14	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, brown, wet - dark gray, stronger odor at 13.6ft BGS							
16	CI-SILTY CLAY, trace fine grained rounded gravels (natural), stiff, medium plasticity, gray, moist, homogeneous	699.92				80		
18				4MC		100		
20	END OF BOREHOLE @ 20.0ft BGS	694.92				100		
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB21-02
DATE COMPLETED: November 12, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.14						
0	ASPHALT	714.74	2" BOREHOLE					
	GM-SILTY SANDS AND GRAVELS, (FILL), compact, fine grained angular, well graded, light gray, dry	714.14						
2	MH-SILTS WITH SANDS, trace clay (FILL), loose, fine grained, poorly graded, brown, moist		BENTONITE CHIPS	1MC		80		0.0
4	- trace gravels, concrete, yellow paint sludge at 1.5ft BGS					80		0.0
6	- 3" concrete rubble at 4.8ft BGS - layers of black and yellow at 6.0ft BGS							
8	- 1" wood at 7.5ft BGS - trace glass and steel at 7.7ft BGS			2MC		75		0.0
10	- debris not present at 9.0ft BGS					75		0.0
		704.14						
12	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, brown, wet - 1" black stain at 12.4ft BGS			3MC		80		0.0
		702.34						
14	SM-SILTY SANDS, (FILL), compact, fine grained, poorly graded, gray, wet	701.14				80		0.0
	SP-SANDS WITH SILTS, (FILL), compact, fine grained, poorly graded, gray, wet	699.64						
16	CI-SILTY CLAY, trace fine grained rounded gravels (natural), firm, medium plasticity, gray, moist			4MC		100		0.0
18								
20	END OF BOREHOLE @ 20.0ft BGS	695.14				100		0.0
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB21-03
DATE COMPLETED: November 12, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.80						
0	ASPHALT	714.50	2" BOREHOLE					
	GM-SILTY GRAVELS, (FILL), compact, fine grained, poorly graded, light gray, dry	713.80	BENTONITE CHIPS					
2	MH-SANDY SILTS, (FILL), trace gravels, trace concrete, loose, fine grained, poorly graded, dark brown, moist			1MC		50		0.0
4	- trace yellow paint sludge (1/8" thick) at 1.5ft BGS	710.80				50		0.0
	- trace wood at 1.6ft BGS							
6	- trace concrete at 2.0ft BGS	708.80						
	- brown at 3.5ft BGS							
	SM-SILTY SANDS, (FILL), compact, fine grained, poorly graded, light brown, moist	707.30		2MC		75		0.0
8	MH-SILTS WITH SANDS, (FILL), compact, fine grained, poorly graded, medium brown, moist to very moist							
10	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, medium brown, moist					75		0.0
	- wet at 8.0ft BGS							
12	- gray, odor present at 12.0ft BGS			3MC		100		0.0
14								
	CI-SILTY CLAY, trace fine grained rounded gravels (natural), firm, medium plasticity, gray, moist	699.90				100		0.0
16								
18				4MC		100		0.0
20	END OF BOREHOLE @ 20.0ft BGS	694.80				100		0.0
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB21-04
DATE COMPLETED: November 12, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.77						
0	ASPHALT	714.47	2" BOREHOLE					
	GM-SILTY SANDS AND GRAVELS, (FILL), compact, fine grained, poorly graded, light gray, dry	713.77	BENTONITE CHIPS					
2	MH-SILTS WITH SANDS, trace clay (FILL), loose, fine grained, poorly graded, dark and light brown, trace black streaks, moist			1MC		45		0.0
4	- 3" trace yellow paint at 4.0ft BGS					45		0.0
6	- 3" wood at 6.0ft BGS - debris not present at 6.5ft BGS							
8	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, brown, moist	707.17		2MC		80		0.0
10	- trace fine grained rounded gravels, wet at 8.7ft BGS - gravels not present at 9.0ft BGS					80		0.0
12	- gray, faint odor at 12.3ft BGS			3MC		100		0.0
14						100		0.0
16	CI-SILTY CLAY, trace fine grained rounded gravels (natural), stiff, medium plasticity, gray, moist, homogeneous	699.27		4MC		100		0.0
18								
20	END OF BOREHOLE @ 20.0ft BGS	694.77				100		0.0
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB21-05
DATE COMPLETED: November 12, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.99						
0	ASPHALT	714.59	2" BOREHOLE					
	GM-SILTY SANDS AND GRAVELS, (FILL), compact, fine grained angular, poorly graded, light gray, dry	713.99						
2	MH-SILTS WITH SANDS, (FILL), trace gravels, loose, fine grained, poorly graded, brown, moist		BENTONITE CHIPS	1MC		20		0.0
4	- brown at 3.7ft BGS - 2" trace red and yellow layers at 4.4ft BGS					20		0.0
6		708.49						
	SP-SANDS WITH SILTS, (FILL), compact, fine grained, poorly graded, light brown, moist			2MC		75		0.0
8	- 3" lens sandy silts at 7.4ft BGS - trace silts at 7.8ft BGS - wet, 1/4" lens orange-brown at 8.3ft BGS							
10	- 1/4" lens orange-brown at 9.0ft BGS - 1/4" lens orange-brown at 9.4ft BGS - gray, faint odor at 9.8ft BGS					75		0.0
12	- brown at 10.5ft BGS - gray, medium grained at 13.2ft BGS			3MC		80		0.0
14	- fine grained at 14.2ft BGS							
		699.49				80		0.0
16	CI-SILTY CLAY, trace fine grained rounded gravels, trace fine grained sands (natural), stiff, medium plasticity, gray, moist, homogeneous			4MC		80		0.0
18								
20	END OF BOREHOLE @ 20.0ft BGS	694.99				80		0.0
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB21-06
DATE COMPLETED: November 24, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. DEITNER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.14						
0	ASPHALT	714.94	2" BOREHOLE					
	GM-SILTY GRAVELS, (FILL), compact, fine grained angular, poorly graded, light gray, dry	713.94	BENTONITE CHIPS	1MC				
2	SP-SANDS, trace silts (FILL), compact, fine grained, poorly graded, light brown, moist							
4	- trace fine grained gravels, trace slag at 4.5ft BGS					80		0.0
6								
8				2MC				
10	END OF BOREHOLE @ 10.0ft BGS	705.14				20		0.0
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB22-01
DATE COMPLETED: May 18, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.57						
0	MH-SANDY SILTS, compact, fine sands, poorly graded, dark brown, moist, non plastic	713.82						
2	ML/CL-SILTS AND CLAYS, trace coarse sands, firm, low to non plastic, brown-gray, moist			1DP				0.8
		711.07						
4	CRUSHED CONCRETE, fine sands to fine gravel size, white	710.57						
6	MH-SANDY SILTS, compact, fine to medium sands, poorly graded, medium brown, moist		2" BOREHOLE					
8	- with bricks, cinder, ash, concrete, plastic debris at 7.5ft BGS			2DP 7-9' -319 9-9.5' -320				1.9
		705.57						
	SL-WHITE SLUDGE, soft	705.07						
10	SP-SANDS, trace silts, clays and fine gravels, compact, fine to coarse grained, poorly graded, brown, saturated, slight odor and sheen		BENTONITE CHIPS					
12	- trace wood and glass debris, gray at 10.5ft BGS	702.07		3DP				9.4
14	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist							
		699.57						
16	END OF BOREHOLE @ 15.0ft BGS							
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB22-02
DATE COMPLETED: May 18, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	713.24						
0	MH-SANDY SILTS, compact, fine sands, poorly graded, dark brown, moist, non plastic	712.74						
2	ML/CL-SILTS AND CLAYS, trace coarse sands, firm, low to non plastic, brown-gray, moist			1DP				0.8
		709.99						
4	MH-SANDY SILTS, compact, fine to medium sands, poorly graded, medium brown, moist		2" BOREHOLE					
6								
8	- with brick, cinder, wood, glass, concrete debris, black, slight odor, moist to very moist at 8.3ft BGS			2DP (8-10') -322				2.9
10	- medium brown, trace debris, very moist at 9.8ft BGS - saturated at 10.8ft BGS		BENTONITE CHIPS					
12								
	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist	700.74		3DP				0.3
14								
	END OF BOREHOLE @ 15.0ft BGS	698.24						
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB22-03
DATE COMPLETED: May 18, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	713.80						
0	MH-SANDY SILTS, compact, fine sands, poorly graded, dark brown, moist, non plastic	713.05						
2	ML/CL-SILTS AND CLAYS, trace coarse sands, firm, low to non plastic, brown-gray, moist			1DP				0.8
4	MH-SANDY SILTS, compact, fine to medium sands, poorly graded, medium brown, moist	709.80	2" BOREHOLE					
6								
8	CRUSHED CONCRETE, fine sands to fine gravel size, light green, no odor	705.55 705.05		2DP				0.9
10	MH-SANDY SILTS, compact, fine to medium sands, poorly graded, medium brown, moist - very moist at 9.8ft BGS		BENTONITE CHIPS					
12	- saturated, trace brick and concrete debris at 10.5ft BGS	701.80		3DP				0.7
	PT-PEAT, trace fine to medium sands, black, trace rootlets, organic-like odor	700.80						
14	- dark brown at 12.3ft BGS SP-SANDS, trace silts, clays and fine gravels, compact, fine to coarse grained, poorly graded, brown, saturated, slight odor and sheen	698.30						
16								
18	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist			4DP				0.2
20	END OF BOREHOLE @ 20.0ft BGS	693.80						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB22-04
DATE COMPLETED: May 18, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	714.53						
0	MH-SANDY SILTS, compact, fine sands, poorly graded, dark brown, moist, non plastic	714.03						
2	ML/CL-SILTS AND CLAYS, trace coarse sands, firm, low to non plastic, brown-gray, moist			1DP				0.8
4	MH-SANDY SILTS, compact, fine to medium sands, poorly graded, medium brown, moist	711.03	2" BOREHOLE					
6								
8	- with bricks, cinder, plastic, concrete, wood debris, slight odor, black and gray at 7.5ft BGS			2DP -7-9'- -321				3.5
10	- very moist at 9.5ft BGS - saturated at 10.3ft BGS		BENTONITE CHIPS					
12	SP-SANDS, trace silts, clays and fine gravels, compact, fine to coarse grained, poorly graded, brown, saturated, slight odor and sheen	703.78		3DP				0.4
14	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist	700.78						
16	END OF BOREHOLE @ 15.0ft BGS	699.53						
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (2DP)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB22-05
DATE COMPLETED: May 18, 2004
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.14						
0	MH-SANDY SILTS, compact, fine sands, poorly graded, dark brown, moist, non plastic	714.64						
2	ML/CL-SILTS AND CLAYS, trace coarse sands, firm, low to non plastic, brown-gray, moist	712.14		1DP				0.8
4	MH-SANDY SILTS, compact, fine to medium sands, poorly graded, medium brown, moist	711.14						
	CRUSHED CONCRETE, fine sands to fine gravel size, white	710.48	2" BOREHOLE					
6	MH-SANDY SILTS, compact, fine sands, poorly graded, dark brown, moist, non plastic, trace concrete and brick debris	708.14						
8	CRUSHED CONCRETE, fine sands to fine gravel size, tan	707.39		2DP 9-10' -323				0.8
10	MH-SANDY SILTS, compact, fine sands, poorly graded, dark brown, moist, non plastic, trace concrete and brick debris	704.64	BENTONITE CHIPS					
12	PT-PEAT, trace fine to medium sands, black, trace rootlets, slight petroleum-like odor	702.64		3DP 11-13' -324				7.2
14	SP-SANDS, trace silts, clays and fine gravels, compact, fine to coarse grained, poorly graded, brown, saturated, slight odor and sheen	701.64						
16	CL-SILTY CLAYS, trace fine to medium sands, firm, low plasticity, gray, moist	700.14						
	END OF BOREHOLE @ 15.0ft BGS							
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

Date Start/Finish: 09/16/96 / 09/16/96
Drilling Company: Superior Environmental
Driller's Name: G. Hill
Drilling Method: Hollow Stem Auger
Bit Size: N/A-in. **Auger Size** : 8.25-in.
Rig Type: Mobile B-47
Spoon Size: 2-in.

Borehole Depth: 10 ft.

Geologist: M. Mueller

Well No. SB-2-30

Client:
General Motors Corporation

Location:
Willow Run Assembly Plant
Ypsilanti, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	FID (ppm) Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
									GROUND SURFACE	
									Concrete	Bentonite and cement backfill to 10 feet below land surface
									Sand, brownish yellow (10YR 6/8), fine to medium grained, poorly sorted, no HCL reaction	
5									Sand, very dark grey (10YR 3/1), fine to medium grained, poorly sorted, no HCL reaction	
									Sand, light yellowish brown (10YR 6/4), fine to medium grained, poorly sorted, no HCL reaction	
10									Gravelly sand, grey (10YR 5/1), fine to coarse grained, poorly sorted, 15% rounded to subrounded gravel, no HCL reaction	
15										

BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

Remarks:
Privileged and Confidential Prepared at Request of General Motors Counsel

Saturated Zones

Date / Time	Elevation	Depth

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB23-01
DATE COMPLETED: June 1, 2005
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	717.30						
0	ASPHALT, black	717.00	ASPHALT PATCH					
2	SM-SILTY SANDS, loose, fine to coarse grained, poorly graded, dark brown, moist - brown, some orange streaking, compact at 0.8ft BGS			1DP				28.3
4			2" BOREHOLE	2DP				26.9
6	- trace clays, light brown and orange brown, moist to very moist at 6.8ft BGS			3DP				27.2
8	- no clays, brown, moist, trace orange streaking at 9.0ft BGS							
10	- very moist to saturated at 10.5ft BGS - orange-brown and gray, saturated at 11.0ft BGS		BENTONITE CHIPS	4DP				19.7
12	- gray, slight petroleum-like odor, increase in silt content at 13.0ft BGS			5DP				97.3
14								
16				6DP				383
18	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray, moist	699.80		7DP				292
20	END OF BOREHOLE @ 20.0ft BGS	697.30						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB23-02
DATE COMPLETED: June 3, 2005
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	716.95						
0	ASPHALT, black	716.65	ASPHALT PATCH					
2	SM-SILTY SANDS, loose, fine to coarse grained, poorly graded, dark brown, moist - brown, trace orange streaks at 0.8ft BGS - fine grained, compact at 2.0ft BGS			1DP				12.4
4	- light brown and orange brown mottled at 4.5ft BGS		2" BOREHOLE	2DP				7.2
6								
8	- with clays, increase in moisture content at 7.8ft BGS - no clays, decrease in moisture content, light brown at 8.8ft BGS			3DP				13.4
10	- brown, very moist to saturated at 10.5ft BGS - saturated at 11.0ft BGS		BENTONITE CHIPS	4DP				15.4
12								
14	- gray, slight petroleum-like odor, increase in silt content at 13.3ft BGS - medium to dark gray, moderate petroleum-like odor at 14.0ft BGS			5DP				328
16	- dark gray to black stained, strong petroleum-like odor, heavy sheen to water at 15.5ft BGS	700.20		6DP				2589
18	- dark gray, dark amber coloration to liquid, NAPL, strong petroleum-like odor at 16.3ft BGS			7DP				700
20	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray, moist, slight petroleum-like odor	696.95						
	END OF BOREHOLE @ 20.0ft BGS							
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB23-03
DATE COMPLETED: June 3, 2005
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	718.05						
0	ASPHALT, black	717.75	ASPHALT PATCH					
2	SM-SILTY SANDS, trace fine gravels, compact, fine grained, poorly graded, brown, moist - brown with orange streaks, no gravels at 1.5ft BGS			1DP				18.2
4				2DP				20.2
6			2" BOREHOLE					
8	- very moist, trace clays, increase in silt content at 7.0ft BGS - 1" CL-SILTY CLAY seam, firm, low plasticity, brown-gray, moist at 7.5ft BGS - brown-gray, no clays at 9.0ft BGS			3DP				19.6
10			BENTONITE CHIPS	4DP				29.2
12	- dark gray, slight petroleum-like odor at 12.0ft BGS			5DP				363
14	- black staining, saturated, strong petroleum-like odor, slight sheen to water at 12.5ft BGS - dark gray at 14.0ft BGS							
16	- dark gray to black, strong petroleum-like odor at 16.0ft BGS			6DP				2800
18	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray, moist, slight petroleum-like odor	700.30		7DP				1067
20	END OF BOREHOLE @ 20.0ft BGS	698.05						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1DP)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB23-04
DATE COMPLETED: June 3, 2005
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	717.18						
0	ASPHALT, black	716.88	ASPHALT PATCH					
2	SM-SILTY SANDS, trace fine gravels, compact, fine grained, poorly graded, brown, moist - light brown with orange streaking at 1.8ft BGS			1DP				24.8
4			2" BOREHOLE	2DP				27.1
6								
8	- with clays, brown-gray, very moist at 7.3ft BGS - brown with orange streaking at 8.0ft BGS			3DP				203
10	- no clays, light brown at 9.6ft BGS - orange streaking, very moist at 10.8ft BGS		BENTONITE CHIPS	4DP				259
12	- saturated at 11.5ft BGS							
14	- 4" CL-SILTY CLAY seam, firm, low plasticity, brown and gray mottled, moist at 13.5ft BGS - black staining, strong petroleum-like odor at 14.0ft BGS			5DP				475
16	- moderate sheen to water, very strong petroleum-like odor at 16.5ft BGS	700.18		6DP				509
18	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray, moist, slight petroleum-like odor			7DP				261
20	END OF BOREHOLE @ 20.0ft BGS	697.18						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Former South Culvert Area Approx. 100' north of SB–2–33 Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 16, 1996	
BORING NO.: SB–2–31	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 10' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS: Duplicate 2M2 collected from SB–2–31 (2.2–4.2) for Pb analysis, and 826P (pending P.M. approval) analysis. (Duplicate soil sample)
WEATHER: Snow, 32°, Wind – SW 5–10 mph	

SAMPLE NO.	TEST TYPE	DEPTH FROM	DEPTH TO	NO. OF BLOWS	SOIL DESCRIPTION AND BORING LOG
					0–2" Asphaltic conrete
1	Pb	2"	8"		2"–1' Sand and rock fragments (sub–base), pale yellowish brown.
					1'–1.5' Clayey sand, some rock fragments, grayish brown.
2	Pb	8"	2.2'		1.5'–2' Silty–clayey sand, dark yellowish orange.
	Pb				2'–3' Silty sand, dark yellowish orange.
3	8260*	2.2'	4.2'		3'–4' Paint waste (green, yellow, black).
					4'–4.5' Decomposing layer of apparent black tar paper
4	Pb	4.2'	6.2'		(roofing material?)
					4.5'–7' Clayey sand, dark yellowish orange.
					7'–7.5' Sandy clay, dark yellowish orange.
5	Pb	6.2'	8.2'		7.5'–8.5' Clayey sand, dark yellowish orange.
					8.5'–12' Silty sand, pale yellowish brown.
6	Pb	8.2'	10.2'		(Petroleum sheen noted on soils below 10'BGS – below
					the water table)

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

* – Hold for P.M. approval

m:\480\013\70266.wk3

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Former South Culvert Area Approx. 130' west and 75' north of SB–2–33 Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 16, 1996	
BORING NO.: SB–2–32	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 10' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS:
WEATHER: Snow, 32°, Wind – SW 5–10 mph	

SAMPLE NO.	TEST TYPE	DEPTH FROM	DEPTH TO	NO. OF BLOWS	SOIL DESCRIPTION AND BORING LOG
					0–2" Asphaltic conrete
1	Pb	2"	8"		2"–1' Sand and rock fragments (sub–base), pale yellowish brown.
					1'–1.5' Coal and iron slag, some sand, dusky brown–black.
2	Pb	8"	2.2'		1.5'–2' Gravely sand, moderate–dark yellowish brown.
					2'–3.5' Gravelly sand, moderate yellowish brown.
3	Pb	2.2'	4.2'		3.5'–5.5' Sand, moderate yellowish brown.
					5.5'–7' Silty sand, moderate yellowish brown.
4	Pb	4.2'	6.2'		
					7'–7.5' Silty clay, moderate yellowish brown.
5	Pb	6.2'	8.2'		7.5'–8' Sand, fine to medium grained, moderate yellowish brown.
					8'–8.5' Sandy gravel, dusky brown.
6	Pb	8.2'	10'		'8.5'–10' Silty sand, grayish orange–dark yellowish orange.
					'10'–12' Sandy silt, dark yellowish orange
					End of boring = 12'BGS.

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\01470266.wk3

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Former South Culvert Area Approx. 136' west and 75' north of SB–2–34 Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 16, 1996	
BORING NO.: SB–2–33	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 11' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS:
WEATHER: Snow, 32°, Wind – SW 5–10 mph	

SAMPLE NO.	TEST TYPE	DEPTH FROM	DEPTH TO	NO. OF BLOWS	SOIL DESCRIPTION AND BORING LOG
1	Pb	2"	8"		0–2' Asphaltic conrete 2'–2.5' Silty clay and clayey sand, some red paint waste fragments
2	Pb	8"	2.2'		2.5'–4.5' Silty sand, dark yellowish orange – moderate yellowish brown.
3	Pb	2.2'	4.2'		4.5'–5' Silty–clayey sand, dark yellowish orange – moderate yellowish brown.
4	Pb	4.2'	6.2'		5'–7' Gravelly sand, moderate–dark yellowish brown.
5	Pb	6.2'	8.2'		7'–8' Sand, dark yellowish brown, coarse to fine grading, some metal fragments.
6	Pb	8.2'	11'		8'–11' Same as SB–2–34 with the addition of some rock fragments.
7	Pb	11'	12'		11'–12' Silty clay, light olive gray. End of boring = 12'BGS.

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\01570266.wk3

SOIL BORING RECORD

EXPLORATION FOR: Subsurface Lithology	LOCATION: Former South Culvert Area Approx. 15' west and 105' south of SB–18–1 Willow Run GM Willow Run Facility Ypsilanti Township, Michigan
DATE: December 16, 1996	
BORING NO.: SB–2–34	
RECORDED BY: Alan Fass	WATER TABLE: Approx. 10' BGS
DRILL TYPE: Simco Earthprobe 200	COMMENTS: Duplicate 3M2 collected from SB–2–34 (8" –2.2') for Pb analysis only. (Duplicate soil sample.)
WEATHER: Snow, 32°, Wind – SW 5–10 mph	

SAMPLE NO.	TEST TYPE	DEPTH FROM	DEPTH TO	NO. OF BLOWS	SOIL DESCRIPTION AND BORING LOG
					0–2' Asphaltic conrete
1	Pb	2"	8"		2"–2' Same as SB–2–31.
					2'–4.5' Sand (very fine) – silty sand, dark yellowish orange.
2	Pb	8"	2.2'		
					4.5'–5' Silty–clay, dark yellowish orange
3	Pb	2.2'	4.2'		
					5'–6' Silty sand, dark yellowish orange.
4	Pb	4.2'	6.2'		
					6'–7' Sandy silt, dark yellowish orange.
5	Pb	6.2'	8.2'		7'–8.25' Silty sand, dark yellowish orange.
					8.25'–8.75' Silty clay, light yellowish orange–pale yellowish brown.
6	Pb	8.2'	10'		8.75'–10' Silty sand – clayey sand, pale yellowish brown –
					light olive gray.
					10'–12' Silty clay, light olive gray.
					End of boring = 12'BGS.

REMARKS

SS – Split Spoon

BLS – Below Land Surface

NR – Not Recorded

m:\480\01670266.wk3

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB24-01
DATE COMPLETED: June 3, 2005
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	718.12						
0	ASPHALT, black	717.82	ASPHALT PATCH					
2	SP-SANDS WITH GRAVELS, trace silts and clays, loose, fine to coarse grained, poorly graded, fine gravels, light brown to beige, moist - dark brown at 1.0ft BGS			1DP				11.1
4				2DP				19.0
6	- gray, slight petroleum-like odor at 5.5ft BGS		2" BOREHOLE					
8	- very moist, with silts and clay at 7.5ft BGS	710.12		3DP				16.8
10	SM-SILTY SANDS, trace fine gravels, compact, fine grained, poorly graded, brown-gray, moist to very moist, slight petroleum-like odor - 3" red paint sludge seam at 9.8ft BGS - very moist at 10.5ft BGS		BENTONITE CHIPS	4DP				338
12	- black staining, saturated, strong petroleum-like odor at 11.0ft BGS - 3" CL-SILTY CLAY seam, firm, low plasticity, brown and gray mottled, moist at 12.2ft BGS			5DP				35.9
14	- gray, slight petroleum-like odor at 12.5ft BGS							
16				6DP				29.3
18	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray, moist	700.12		7DP				9.7
20	END OF BOREHOLE @ 20.0ft BGS	698.12						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB24-02
DATE COMPLETED: June 3, 2005
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	718.12						
0	ASPHALT, black	717.82	ASPHALT PATCH					
2	SM-SILTY SANDS, trace fine gravels, compact, fine grained, trace medium to coarse grained, poorly graded, brown with orange streaking, moist			1DP				14.0
4			2" BOREHOLE	2DP				13.9
6								
8				3DP				396
10	- dark gray to black, moderate petroleum-like odor at 8.5ft BGS - black staining, strong petroleum-like odor at 9.0ft BGS - very moist to saturated, gray at 10.0ft BGS - saturated at 10.5ft BGS		BENTONITE CHIPS	4DP				787
12								
14	- 2" CL-SILTY CLAY seam, firm, low plasticity, brown and gray mottled, moist at 13.3ft BGS - slight petroleum-like odor at 14.5ft BGS			5DP				1156
16				6DP				198
18	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray, moist	700.87		7DP				13.6
20	END OF BOREHOLE @ 20.0ft BGS	698.12						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1DP)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB24-03
DATE COMPLETED: June 8, 2005
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	717.84						
0	ASPHALT, black	717.54	ASPHALT PATCH					
0	SP-SANDS WITH GRAVELS, trace silts and clays, loose, fine to coarse grained, poorly graded, fine gravels, light brown to beige, moist			1DP				17.1
4			2" BOREHOLE	2DP				17.0
8	SM-SILTY SANDS, trace fine gravels, compact, fine to coarse grained, poorly graded, brown, moist	711.09		3DP				9.1
8	- with clays, medium brown, slight increase in moisture content at 7.8ft BGS							
10	- trace clays, brown and orange-brown at 9.0ft BGS		BENTONITE CHIPS	4DP				12.2
10	- no clays, brown at 9.5ft BGS							
12	- brown-gray, very moist to saturated at 10.8ft BGS							
12	- saturated at 11.3ft BGS	705.09						
12	CL-SILTY CLAYS, trace fine sands, firm, low plasticity, brown and gray mottled, moist	704.34		5DP				15.5
14	SM-SILTY SANDS, compact, fine grained, poorly graded, gray, saturated							
16	- increase in silt content at 15.8ft BGS			6DP				12.0
16	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray, moist	701.09						
18				7DP				10.3
20	END OF BOREHOLE @ 20.0ft BGS	697.84						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB24-04
DATE COMPLETED: June 3, 2005
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	718.65						
0	ASPHALT, black	718.35	ASPHALT PATCH					
2	SM-SILTY SANDS, trace clays, compact, fine to coarse grained, poorly graded, dark brown, moist - brown, no clays at 1.8ft BGS - fine grained, light brown, trace orange streaking at 3.0ft BGS			1DP				18.5
4			2" BOREHOLE	2DP				21.5
6	- trace clays, brown and orange-brown, slight increase in moisture content at 6.8ft BGS			3DP				21.4
8	- no clays, light brown at 8.5ft BGS - fine to coarse grained at 9.5ft BGS							
10			BENTONITE CHIPS	4DP				20.0
12	- very moist at 11.0ft BGS - fine to medium grained, saturated brown-gray at 11.3ft BGS			5DP				22.0
14	- 2" CL-SILTY CLAY seam, firm, low plasticity, brown and gray mottled, moist at 14.3ft BGS - gray, increase in silt content at 14.6ft BGS							
16				6DP				19.4
18	CL-SILTY CLAYS, trace fine sands, stiff, low plasticity, gray, moist	701.40		7DP				19.7
20	END OF BOREHOLE @ 20.0ft BGS	698.65						
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB-3-03
DATE COMPLETED: March 7, 2003
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: M. MATHÉ

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	ASPHALT	0.08	2" BOREHOLE					
2	SC-CLAYEY SANDS, trace fine subangular gravel, compact, poorly graded, fine grained, trace coarse grained, dark brown, moist	2.00	BENTONITE CHIPS	1AL 4-5'				6.6
4	SP-SANDS, with silt, loose, poorly graded, fine grained, trace medium grained, orangy brown, moist							
6								
8				2AL 6-8'				7.2
10								
12	- very moist to damp at 12.0ft BGS			3AL 13-15'				6.8
14	- wet at 13.5ft BGS							
16	END OF BOREHOLE @ 15.0ft BGS	15.00						
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 10/5/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SBOS-03A
DATE COMPLETED: September 22, 2011
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	TOPSOIL							1.8
2	SC-CLAYEY SAND, with gravel, fine to coarse sand, fine gravel, poorly graded, compact, brown, very moist	2.00	2-1/4" BOREHOLE	1GP		80		1.9
4		4.00	BACKFILLED WITH BENTONITE CHIPS					
	CL-SANDY CLAY, trace gravel, fine to coarse sand, fine to coarse gravel, low plasticity, firm, brown, moist	5.00						1.2
6								
	SP-SAND, with clay, trace gravel, fine sand, fine to coarse gravel, poorly graded, compact, brown, moist	7.50		2GP		60		2.0
8	- dark brown at 5.5ft BGS							2.2
	- brown at 5.8ft BGS	9.50						
10	CL-SANDY CLAY, with gravel, fine to coarse sand, fine to coarse gravel, low plasticity, firm, brown, moist							1.7
12	SP-SILTY SAND, trace gravel, fine to medium sand, fine to coarse gravel, poorly graded, loose, brown, moist			3GP		80		1.8
14	- wet at 15.0ft BGS							2.7
16	CL-SILTY CLAY, low plasticity, stiff, gray, moist	16.10		4GP		80		1.5
18								0.9
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SBOS-04A
DATE COMPLETED: September 22, 2011
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	TOPSOIL	1.00	2-1/4" BOREHOLE					0.8
2	SC-CLAYEY SAND, fine to medium grained, poorly graded, loose, brown, moist	1.50	BACKFILLED WITH BENTONITE CHIPS	1GP		100		0.5
4	SP-SAND, trace gravel, fine to medium sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist							0.5
6	- fine to coarse sand, with fine to coarse gravel at 2.3ft BGS - fine to medium sand, trace gravel at 2.7ft BGS							0.6
8	- no coarse gravel at 3.0ft BGS - gravelly sand, trace clay, fine to coarse sand, fine to coarse gravel, compact at 4.7ft BGS	7.50		2GP		75		0.7
10	- no clay, loose at 5.0ft BGS	10.00						1.1
12	SM-SILTY SAND, fine grained, poorly graded, loose, brown, moist CL-SILTY SANDY CLAY, fine to coarse sand, low plasticity, stiff, gray, moist	11.00		3GP		55		1.6
14	SP-SAND, with silty clay lenses, fine to medium grained, poorly graded, gray, moist	14.00						1.3
16	CL-SILTY CLAY, trace sand and gravel, fine to coarse sand, fine to coarse gravel, moderate plasticity, stiff, gray, moist	15.00 15.50						0.8
18	SP-SAND, with silt, fine to medium grained, poorly graded, loose to compact, gray, wet			4GP		90		0.7
20	CL-SILTY CLAY, trace sand and gravel, fine to coarse sand, fine to coarse gravel, low plasticity, stiff, gray, moist - 2" sand lens at 18.5ft BGS	20.00						
22	END OF BOREHOLE @ 20.0ft BGS							
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SBOS-06A
DATE COMPLETED: December 1, 2011
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 267995.57
EASTING: 13344704.9

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	711.58						
0	TOPSOIL	711.33						
	CL-SANDY CLAY (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, low plasticity, firm, brown, moist	711.08						0.0
2		709.08		1GP		85		
	SP-SAND (FILL), with clay, trace gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist	708.83						0.0
4		708.08						
	CH-SILTY CLAY (FILL), with sand, trace gravel, fine to medium sand, fine to coarse gravel, moderate plasticity, stiff, brown, moist	707.58						0.0
6		707.08						
	SP-SAND (FILL), with silt, trace gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist	703.58		2GP		70		0.0
8								
	CH-SILTY CLAY (FILL), with sand, trace gravel, fine to medium sand, fine to coarse gravel, moderate plasticity, firm, brown, moist	701.58	2-1/2" BOREHOLE					0.0
10		701.08						
	SP-SAND (FILL), with silt, trace gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist			3GP		60		0.0
12								
	CH-SILTY CLAY (FILL), with sand, trace gravel, fine to medium sand, fine to coarse gravel, high plasticity, firm, brown, moist	697.08	BENTONITE CHIPS					0.0
14								
	SP-SAND (FILL), with silt and clay, trace gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, very moist			4GP		100		0.0
16								
	CH-SILTY CLAY (FILL), with sand, trace gravel, fine to medium sand, fine to coarse gravel, high plasticity, firm, brown, moist			5GP		100		0.0
18								
	SP-SAND (FILL), with silt and clay, trace gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, very moist			6GP		100		0.0
20								
	- gray at 14.0ft BGS			7GP		100		0.0
22		689.58						
	CH-SILTY CLAY (FILL), with sand, trace gravel, fine to medium sand, fine to coarse gravel, high plasticity, stiff, brown, moist							
24								
	END OF BOREHOLE @ 22.0ft BGS							
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SBOS-06B/MWOS-06
DATE COMPLETED: December 1, 2011
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE 711.32 TOP OF CASING 711.07							
0	TOPSOIL	710.57	CONCRETE					0.0
2	CL-SANDY CLAY (FILL), with gravel, fine to medium sand, fine to coarse gravel, low plasticity, firm, brown, moist	709.32	BENTONITE CHIPS	1GP		70		
4	SP-SAND (FILL), with gravel, fine to medium sand, fine to coarse gravel, poorly graded, loose, brown, moist	709.07	2" PVC WELL CASING					0.0
6	CH-SILTY CLAY (FILL), moderate plasticity, stiff, brown, moist	708.57	8-1/2" BOREHOLE					0.0
8	SP-SAND (FILL), with silt, trace gravel, interbedded with gray silty clay lenses, fine to medium sand, fine to coarse gravel, poorly graded, compact, gray, moist			2GP		70		
10	- compact at 3.0ft BGS							0.0
12	- very moist to wet at 7.5ft BGS - moist at 8.0ft BGS							0.0
14				3GP		40		
16	- wet at 15.0ft BGS		2" PVC WELL SCREEN					0.0
18			SAND PACK	4GP		70		
20	END OF BOREHOLE @ 20.0ft BGS	691.32		5GP		65		0.0
22				6GP		60		0.0
24								
26								
28								
30								
32								
34								
36								
38								

WELL DETAILS
Screened interval:
698.32 to 693.32ft BGS
13.00 to 18.00ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
710.32 to 700.32ft BGS
1.00 to 11.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
700.32 to 693.32ft BGS
11.00 to 18.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

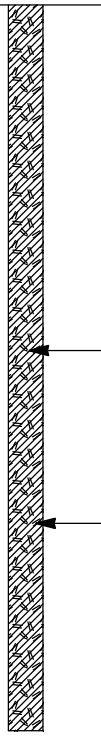
HOLE DESIGNATION: SBOS-06C
DATE COMPLETED: December 1, 2011
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 267992.5
EASTING: 13344705.37

GROUND SURFACE 712.11

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	TOPSOIL	711.11
2	CL-SANDY CLAY (FILL), with gravel, fine to medium sand, fine to coarse gravel, low plasticity, firm, brown, moist	709.86
4	SP-SAND (FILL), with gravel, fine to medium sand, fine to coarse gravel, poorly graded, loose, brown, moist	709.36
6	CH-SILTY CLAY (FILL), with sand, trace gravel, fine to coarse sand, fine to coarse gravel, moderate plasticity, stiff, brown, moist	709.11
8	SP-SAND (FILL), with silt, trace gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist	
10		
12		
14	- gray, moist to very moist at 13.5ft BGS	
16	CH-SILTY CLAY (FILL), with sand, trace gravel, fine to coarse sand, fine to coarse gravel, high plasticity, stiff, gray, moist	697.61
18		
20		
22	END OF BOREHOLE @ 21.0ft BGS	691.11
24		
26		
28		
30		
32		
34		
36		
38		

BOREHOLE INSTALLATION



SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				0.0
1GP		85		0.0
				0.0
2GP		60		0.0
				0.0
3GP		60		0.0
				0.0
4GP		100		0.0
5GP		100		0.0
6GP		100		0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

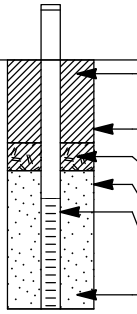
HOLE DESIGNATION: SG19-01
DATE COMPLETED: February 6, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268347.32
EASTING: 13343914.91

TOP OF CASING 720.75
GROUND SURFACE 718.32

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	ASPHALT	717.97
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	717.32
2	SP-SAND (FILL), with gravel, trace clay, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist - trace paint sludge at 1.5ft BGS - no paint sludge, compact at 2.0ft BGS	
4		
6	- with clay, loose at 5.0ft BGS - wet at 5.3ft BGS	
	CONCRETE DEBRIS	712.07 711.82
8	SP-SAND (FILL), with clay and gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose, brown, wet	711.32
	END OF BOREHOLE @ 7.0ft BGS	
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
715.82 to 713.82ft BGS
2.50 to 4.50ft BGS
Length: 2ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
716.82 to 716.32ft BGS
1.50 to 2.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
716.32 to 713.82ft BGS
2.00 to 4.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		50		0.0 0.7
2GP		80		0.7

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

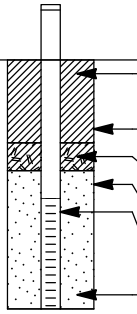
HOLE DESIGNATION: SG19-02
DATE COMPLETED: February 6, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268347.92
EASTING: 13343934.19

TOP OF CASING 720.67
GROUND SURFACE 720.67

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	ASPHALT	720.32
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	719.67
2	SP-SAND (FILL), with gravel, trace clay, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	
	- trace brick debris and paint sludge at 3.0ft BGS	
4	- no brick or pain sludge at 3.8ft BGS	
	- 1" concrete debris at 4.5ft BGS	
6	- with clay, loose, wet at 5.5ft BGS	
	END OF BOREHOLE @ 7.0ft BGS	713.67
8		
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
718.17 to 716.17ft BGS
2.50 to 4.50ft BGS
Length: 2ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
719.17 to 718.67ft BGS
1.50 to 2.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
718.67 to 716.17ft BGS
2.00 to 4.50ft BGS
Material: SAND

SAMPLE				
NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		60		0.0
				0.7
2GP		80		0.7

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

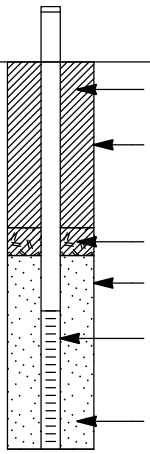
HOLE DESIGNATION: SG19-03
DATE COMPLETED: February 6, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268348.55
EASTING: 13343954.42

TOP OF CASING 719.12
GROUND SURFACE 718.38

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	717.78
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	717.38
2	SP-SAND (FILL), with gravel, trace clay, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	
	- compact at 2.0ft BGS	
4		
6	- with concrete debris at 6.8ft BGS	711.38
	END OF BOREHOLE @ 7.0ft BGS	
8		
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
713.88 to 711.38ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.38 to 714.88ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.88 to 711.38ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		70		0.0
				0.0
2GP		70		0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

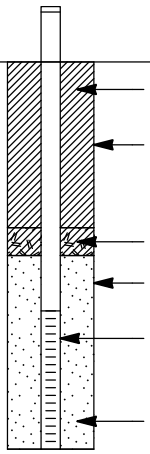
HOLE DESIGNATION: SG19-04
DATE COMPLETED: February 6, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268349.61
EASTING: 13343974.66

TOP OF CASING 718.94
GROUND SURFACE 718.37

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	ASPHALT	717.72
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	717.37
2	SP-SAND (FILL), with gravel, trace clay, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	716.37
	CONCRETE DEBRIS	715.62
4	SP-SAND (FILL), with gravel, trace clay, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist - trace coal and concrete debris at 5.0ft BGS	
6		
	CONCRETE DEBRIS	711.62
	END OF BOREHOLE @ 7.0ft BGS	711.37
8		
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
713.87 to 711.37ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.37 to 714.87ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.87 to 711.37ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		65		0.7
				0.0
2GP		85		0.7

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

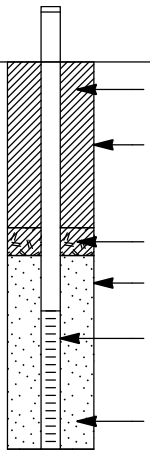
HOLE DESIGNATION: SG19-05
DATE COMPLETED: February 6, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268350.85
EASTING: 13343994.24

TOP OF CASING 718.87
GROUND SURFACE 718.33

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	ASPHALT	717.83					
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	717.58					0.7
2	SP-SAND (FILL), with gravel, trace clay, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist - with coal, trace PVC pipe at 2.5ft BGS - no coal or pipe, compact at 3.0ft BGS - with concrete debris at 3.8ft BGS - no concrete debris at 4.0ft BGS		1GP		70		
4							0.0
6			2GP		60		0.0
7	END OF BOREHOLE @ 7.0ft BGS	711.33					
8							
10							
12							
14							
16							
18							
20							
22							
24							

MONITORING WELL



WELL DETAILS
Screened interval:
713.83 to 711.33ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.33 to 714.83ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.83 to 711.33ft BGS
3.50 to 7.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SG19-06
DATE COMPLETED: February 6, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268351.09
EASTING: 13344014.34

TOP OF CASING 718.86
GROUND SURFACE 718.21

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	ASPHALT	717.46	BENTONITE SLURRY 2" PVC WELL CASING					
2	SP-SAND (FILL), with gravel, trace clay, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist			1GP		75		0.0
4			BENTONITE CHIPS 8" BOREHOLE					0.0
6	- loose to compact at 5.0ft BGS		2" PVC WELL SCREEN	2GP		100		0.0
8	END OF BOREHOLE @ 7.0ft BGS	711.21	NATURAL COLLAPSE/ SAND					
10								
12								
14								
16								
18								
20								
22								
24								

WELL DETAILS
Screened interval:
713.71 to 711.21ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.21 to 714.71ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.71 to 711.21ft BGS
3.50 to 7.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SG19-07
DATE COMPLETED: February 3, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268351.84
EASTING: 13344034.61

TOP OF CASING 721.08
GROUND SURFACE 717.90

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	ASPHALT	717.40	BENTONITE SLURRY					
	SP-SAND (FILL), with gravel, trace clay, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist		2" PVC WELL CASING					0.0
2				1GP		65		
			BENTONITE CHIPS					
4	- trace paint sludge at 3.8ft BGS		8" BOREHOLE					0.7
	- 1.5" asphalt debris with brick debris at 4.9ft BGS		2" PVC WELL SCREEN					
	- trace asphalt and brick debris at 5.0ft BGS							
6	- trace gravel, no asphalt or brick debris, no paint sludge at 6.5ft BGS			2GP		100		0.7
		710.90	NATURAL COLLAPSE/ SAND					
8	END OF BOREHOLE @ 7.0ft BGS							
10								
12								
14								
16								
18								
20								
22								
24								

WELL DETAILS
Screened interval:
713.40 to 710.90ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
714.90 to 714.40ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.40 to 710.90ft BGS
3.50 to 7.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

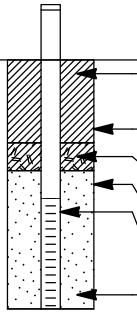
HOLE DESIGNATION: SG19-08
DATE COMPLETED: February 6, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268326.82
EASTING: 13343915.93

TOP OF CASING 720.82
GROUND SURFACE 718.38

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	717.88
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	717.53
2	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	
	- with fine to coarse gravel, trace clay, compact at 1.5ft BGS	
4		
	- with clay, wet at 5.3ft BGS	
6		
	END OF BOREHOLE @ 7.0ft BGS	711.38
8		
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
715.88 to 713.88ft BGS
2.50 to 4.50ft BGS
Length: 2ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
716.88 to 716.38ft BGS
1.50 to 2.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
716.38 to 713.88ft BGS
2.00 to 4.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		60		0.0
				0.0
2GP		80		0.7

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SG19-09
DATE COMPLETED: February 1, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268325.98
EASTING: 13343935.1
TOP OF CASING 720.35
GROUND SURFACE 718.43

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	CONCRETE	718.03	BENTONITE SLURRY; 2" PVC WELL CASING; BENTONITE CHIPS 8"; BOREHOLE 2" PVC WELL SCREEN; NATURAL COLLAPSE/ SAND					
2	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist							0.0
	- trace paint sludge, compact at 2.8ft BGS			1GP		75		
4	- trace clay at 4.0ft BGS							2.2
	PAINT SLUDGE	712.93						
6	SP-SAND (FILL), with clay, trace gravel, trace glass debris, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, wet	712.43		2GP		100		188
	END OF BOREHOLE @ 7.0ft BGS	711.43						
8								
10								
12								
14								
16								
18								
20								
22								
24								

WELL DETAILS
Screened interval:
715.43 to 713.43ft BGS
3.00 to 5.00ft BGS
Length: 2ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
716.43 to 715.93ft BGS
2.00 to 2.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
715.93 to 713.43ft BGS
2.50 to 5.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

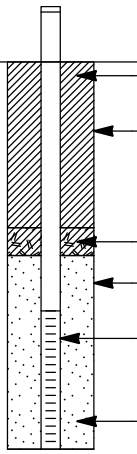
HOLE DESIGNATION: SG19-10
DATE COMPLETED: February 1, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268326.72
EASTING: 13343954.94

TOP OF CASING 721.58
GROUND SURFACE 718.44

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	CONCRETE	717.94
2	SP-SAND (FILL), trace gravel, fine sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist - with clay, compact at 2.0ft BGS	
4	- with paper-like and glass debris, trace paint sludge, strong odor at 3.5ft BGS	
6	PAINT SLUDGE, strong odor	713.44
8	END OF BOREHOLE @ 7.0ft BGS	711.44
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
713.94 to 711.44ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.44 to 714.94ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.94 to 711.44ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		100		11.9
3-5' -001				>2000
2GP 5-7' -002		100		>2000

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

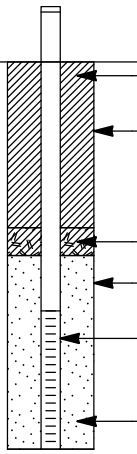
HOLE DESIGNATION: SG19-11
DATE COMPLETED: February 1, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 2683327.45
EASTING: 13343974.54

TOP OF CASING 721.67
GROUND SURFACE 718.49

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	CONCRETE	717.99
2	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist - compact, slight odor at 2.0ft BGS	
	WOOD DEBRIS	715.24 714.99
4	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist, slight odor - with silt at 5.5ft BGS	
6	- no silt at 6.3ft BGS	
	END OF BOREHOLE @ 7.0ft BGS	711.49
8		
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
713.99 to 711.49ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.49 to 714.99ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.99 to 711.49ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		85		9.5
				33.0
2GP		100		45.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

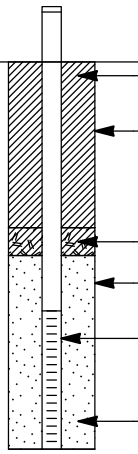
HOLE DESIGNATION: SG19-12
DATE COMPLETED: February 1, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268328.65
EASTING: 13343994.85

TOP OF CASING 721.65
GROUND SURFACE 718.51

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	CONCRETE	718.11
2	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist - compact at 1.3ft BGS	
4		
6	- trace silt at 5.5ft BGS - trace clay at 5.8ft BGS	712.51
	CH-CLAY (FILL), with silt and sand, fine grained, high plasticity, firm, brown, moist, mottled	712.01
8	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	711.51
	END OF BOREHOLE @ 7.0ft BGS	
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
714.01 to 711.51ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.51 to 715.01ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
715.01 to 711.51ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		90		0.0
				0.0
2GP		100		0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

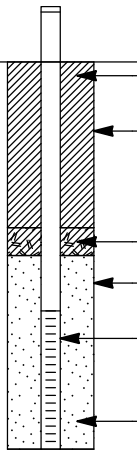
HOLE DESIGNATION: SG19-13
DATE COMPLETED: February 1, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268329.23
EASTING: 13344015.02

TOP OF CASING 721.72
GROUND SURFACE 718.48

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	CONCRETE	717.98
	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose, brown, moist	717.73
2	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, loose to compact, gray, very moist	717.48
4	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	
6	CH-CLAY (FILL), with sand and silt, fine grained, high plasticity, soft, brown, moist, mottled	712.73 712.48
8	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	711.48
	END OF BOREHOLE @ 7.0ft BGS	
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
713.98 to 711.48ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.48 to 714.98ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.98 to 711.48ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		70		0.0
				0.0
2GP		100		0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

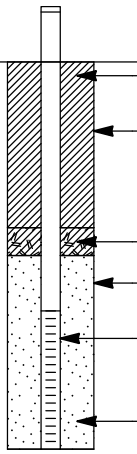
HOLE DESIGNATION: SG19-14
DATE COMPLETED: February 3, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268329.65
EASTING: 13344034.95

TOP OF CASING 718.94
GROUND SURFACE 718.17

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	CONCRETE	717.52
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	717.17
2	SP-SAND (FILL), with clay and gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist - trace gravel and clay at 2.5ft BGS	
4	CL-SANDY CLAY (FILL), fine to medium grained, low plasticity, firm, brown, moist, mottled	714.67 714.17
6	SP-SAND (FILL), trace clay and gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	
	END OF BOREHOLE @ 7.0ft BGS	711.17

MONITORING WELL



WELL DETAILS
Screened interval:
713.67 to 711.17ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.17 to 714.67ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.67 to 711.17ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		80		0.0
				0.7
2GP		100		0.7

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

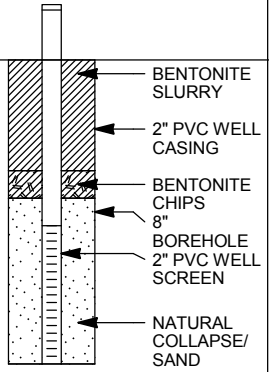
HOLE DESIGNATION: SG19-15
DATE COMPLETED: February 6, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268304.97
EASTING: 13343915.52

TOP OF CASING 720.49
GROUND SURFACE 718.38

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	ASPHALT	717.68
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	716.88
2	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	
	- with gravel, trace clay, compact at 2.0ft BGS	
	- trace gravel, no clay at 2.5ft BGS	
4	- loose to compact at 3.0ft BGS	
	- with silt at 5.0ft BGS	
6	- compact, wet at 6.5ft BGS	
	END OF BOREHOLE @ 7.0ft BGS	711.38
8		
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
715.38 to 712.88ft BGS
3.00 to 5.50ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
716.38 to 715.88ft BGS
2.00 to 2.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
715.88 to 712.88ft BGS
2.50 to 5.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		70		0.0
				0.0
2GP		85		0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

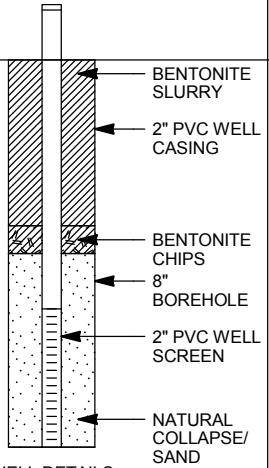
PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SG19-16
DATE COMPLETED: February 1, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268306.25
EASTING: 13343935.41

TOP OF CASING 721.69
GROUND SURFACE 718.51

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	CONCRETE	718.11					
	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist						6.6
2	- compact at 1.0ft BGS		1GP		95		
4							3.6
6	- with clay at 6.0ft BGS		2GP		100		3.6
	- with silt, no clay at 6.8ft BGS	711.51					
8	END OF BOREHOLE @ 7.0ft BGS						
10							
12							
14							
16							
18							
20							
22							
24							



WELL DETAILS
Screened interval:
714.01 to 711.51ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.51 to 715.01ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
715.01 to 711.51ft BGS
3.50 to 7.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

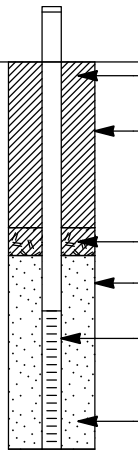
HOLE DESIGNATION: SG19-17
DATE COMPLETED: February 1, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268307.4
EASTING: 13343955.53

TOP OF CASING 721.67
GROUND SURFACE 718.55

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	CONCRETE	718.15
2	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist - compact at 1.8ft BGS - trace slag at 2.5ft BGS - no slag at 3.0ft BGS	
4		
6		712.30
	CH-CLAY (FILL), with silt and sand, fine grained, high plasticity, soft to firm, brown, moist, mottled	712.15
8	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	711.55
	END OF BOREHOLE @ 7.0ft BGS	
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
714.05 to 711.55ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.55 to 715.05ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
715.05 to 711.55ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				5.1
1GP		90		
				22.0
2GP		100		22.9

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

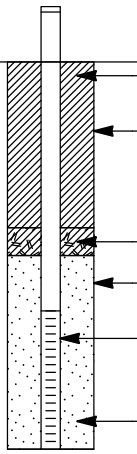
HOLE DESIGNATION: SG19-18
DATE COMPLETED: February 1, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268307.94
EASTING: 13343975.55

TOP OF CASING 721.76
GROUND SURFACE 718.46

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	CONCRETE	718.06
2	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist - compact at 1.0ft BGS	
4	- with silt at 5.0ft BGS	
6	CH-CLAY (FILL), with silt and sand, fine grained, high plasticity, firm, brown, moist, mottled	712.46 712.21
8	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	711.46
	END OF BOREHOLE @ 7.0ft BGS	
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
713.96 to 711.46ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.46 to 714.96ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.96 to 711.46ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				15.5
1GP		90		
				6.6
2GP		100		22.9

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

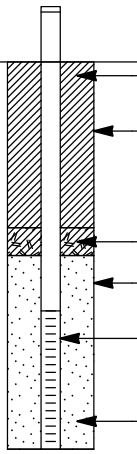
HOLE DESIGNATION: SG19-19
DATE COMPLETED: February 2, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268308.58
EASTING: 13343995.73

TOP OF CASING 721.82
GROUND SURFACE 718.45

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	CONCRETE	718.05
2	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist - compact at 1.0ft BGS	
4		
6	- with silt at 6.0ft BGS	
	CH-CLAY (FILL), with silt and sand, fine grained, high plasticity, soft to firm, brown, moist, mottled	711.65 711.45
8	END OF BOREHOLE @ 7.0ft BGS	
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
713.95 to 711.45ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.45 to 714.95ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.95 to 711.45ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				0.0
1GP		85		
				0.0
2GP		100		2.3

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

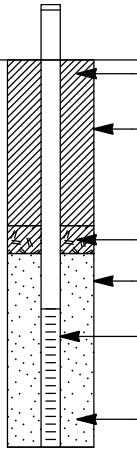
HOLE DESIGNATION: SG19-20
DATE COMPLETED: February 2, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268309.35
EASTING: 13344015.53

TOP OF CASING 721.62
GROUND SURFACE 718.51

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	CONCRETE	717.91
	SP-SAND (FILL), fine to coarse grained, poorly graded, loose to compact, brown, moist	717.51
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	717.01
2	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	
4	- 3" paint sludge at 3.8ft BGS - no gravel at 4.0ft BGS - with silt at 5.0ft BGS	
6	CH-CLAY (FILL), with silt and sand, fine grained, high plasticity, firm, brown, moist, mottled	712.51 712.21
	SP-SAND (FILL), trace silt and gravel, fine to coarse sand, fine to coarse gravel, fine to coarse grained, poorly graded, compact, brown, moist	711.51
8	END OF BOREHOLE @ 7.0ft BGS	
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
714.01 to 711.51ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.51 to 715.01ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
715.01 to 711.51ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		75		0.0 2.3
2GP		100		0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

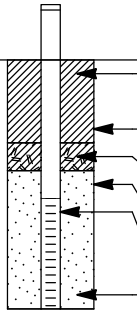
HOLE DESIGNATION: SG19-21
DATE COMPLETED: February 3, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268310.26
EASTING: 13344035.89

TOP OF CASING 720.52
GROUND SURFACE 718.16

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	CONCRETE	717.46
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	716.66
2	SP-SAND (FILL), with gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	
	- trace gravel at 3.0ft BGS	
4		
	- with silt, wet at 5.3ft BGS	
6	CH-CLAY (FILL), with silt and sand, fine grained, high plasticity, soft to firm, brown, moist, mottled	712.31 / 711.86
	SP-SAND (FILL), with clay, trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	711.16
8	END OF BOREHOLE @ 7.0ft BGS	
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
715.66 to 713.66ft BGS
2.50 to 4.50ft BGS
Length: 2ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
716.66 to 716.16ft BGS
1.50 to 2.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
716.16 to 713.66ft BGS
2.00 to 4.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				0.0
1GP		80		
				0.7
2GP		100		0.7

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

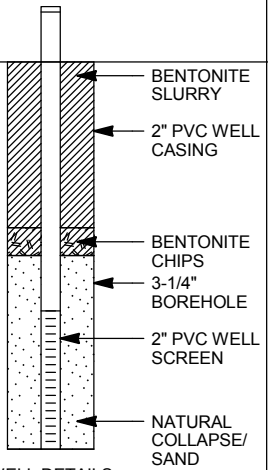
HOLE DESIGNATION: SG19-22
DATE COMPLETED: February 7, 2012
DRILLING METHOD: 3-1/4" HAND AUGER
FIELD PERSONNEL: C. BONDY

NORTHING: 268281.9
EASTING: 13343911.97

TOP OF CASING 719.02
GROUND SURFACE 718.56

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	CONCRETE	718.21					
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	717.56					0.0
2	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, loose to compact, brown, moist		1HA				
	- compact at 2.0ft BGS						0.7
4							
6	- with clay at 6.0ft BGS		2HA				0.7
	END OF BOREHOLE @ 7.0ft BGS	711.56					
8							
10							
12							
14							
16							
18							
20							
22							
24							

MONITORING WELL



WELL DETAILS
Screened interval:
714.06 to 711.56ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.56 to 715.06ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
715.06 to 711.56ft BGS
3.50 to 7.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SG19-23
DATE COMPLETED: February 2, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268285.79
EASTING: 13343936.07

TOP OF CASING 721.57
GROUND SURFACE 718.54

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	CONCRETE	718.09	BENTONITE SLURRY					
	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist		2" PVC WELL CASING					0.7
2	- compact at 1.8ft BGS			1GP		90		
4			BENTONITE CHIPS 8" BOREHOLE					0.7
	- with silt at 5.3ft BGS		2" PVC WELL SCREEN					
6	- with clay at 6.0ft BGS - no clay at 6.4ft BGS			2GP		100		0.7
		711.54	NATURAL COLLAPSE/ SAND					
	END OF BOREHOLE @ 7.0ft BGS							
8								
10								
12								
14								
16								
18								
20								
22								
24								

WELL DETAILS
Screened interval:
714.04 to 711.54ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.54 to 715.04ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
715.04 to 711.54ft BGS
3.50 to 7.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

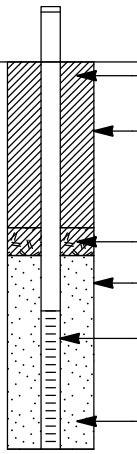
HOLE DESIGNATION: SG19-24
DATE COMPLETED: February 2, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268286.6
EASTING: 13343955.81

TOP OF CASING 721.77
GROUND SURFACE 718.54

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	CONCRETE	718.04
2	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist - compact at 2.0ft BGS	
4		
6	- with clay at 6.0ft BGS	
	END OF BOREHOLE @ 7.0ft BGS	711.54
8		
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
714.04 to 711.54ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.54 to 715.04ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
715.04 to 711.54ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				0.0
1GP		80		
				0.0
2GP		100		0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

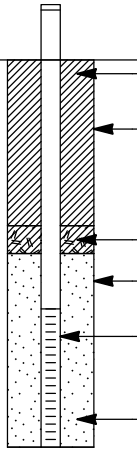
HOLE DESIGNATION: SG19-25
DATE COMPLETED: February 2, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268287.38
EASTING: 13343976.35

TOP OF CASING 721.56
GROUND SURFACE 718.38

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	CONCRETE	718.03
	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	
4	- with silt, compact at 5.5ft BGS	
6	CH-CLAY (FILL), with silt, trace fine sand, moderate plasticity, soft to firm, brown, moist, mottled	712.38 712.08
8	SP-SAND (FILL), with silt, trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	711.38
	END OF BOREHOLE @ 7.0ft BGS	

MONITORING WELL



WELL DETAILS
Screened interval:
713.88 to 711.38ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.38 to 714.88ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.88 to 711.38ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		75		0.0 0.7
2GP		100		0.7

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

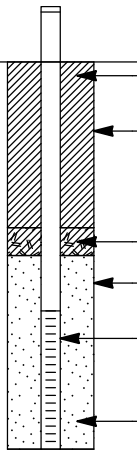
HOLE DESIGNATION: SG19-26
DATE COMPLETED: February 2, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268287.96
EASTING: 13343996.28

TOP OF CASING 721.48
GROUND SURFACE 718.35

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	CONCRETE	718.00
	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	
2	- compact at 2.0ft BGS	
4		
6	- with clay at 5.8ft BGS	
	CH-CLAY (FILL), with silt and sand, fine grained, high plasticity, firm, brown, moist, mottled	711.60
8	END OF BOREHOLE @ 7.0ft BGS	711.35
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
713.85 to 711.35ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.35 to 714.85ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.85 to 711.35ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		90		0.0
				0.7
2GP		100		0.7

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

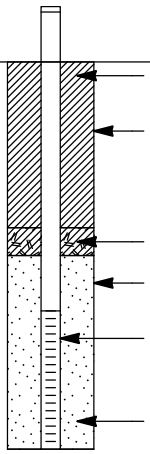
HOLE DESIGNATION: SG19-27
DATE COMPLETED: February 3, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268288.61
EASTING: 13344016.33

TOP OF CASING 721.30
GROUND SURFACE 718.42

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	CONCRETE	717.92
	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	717.17
2	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	716.67
	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist - trace clay at 2.5ft BGS - no clay at 3.3ft BGS	
4		
	- with clay at 5.8ft BGS - with silt at 6.5ft BGS	
6		
	END OF BOREHOLE @ 7.0ft BGS	711.42
8		
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
713.92 to 711.42ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.42 to 714.92ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.92 to 711.42ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				0.7
1GP		90		
				0.7
2GP		100		0.7

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

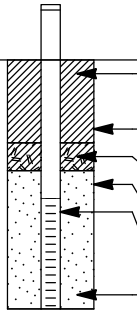
HOLE DESIGNATION: SG19-28
DATE COMPLETED: February 3, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268290.07
EASTING: 13344036.03

TOP OF CASING 720.58
GROUND SURFACE 718.17

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	CONCRETE	717.52
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	716.52
2	SP-SAND (FILL), with gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist - trace gravel at 2.0ft BGS	
4	- with silt, wet at 5.0ft BGS - with clay at 5.3ft BGS	712.42
6	CH-CLAY (FILL), with silt and sand, fine grained, high plasticity, firm, brown, moist, mottled	712.17
	SP-SAND (FILL), with clay, trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	711.17
8	END OF BOREHOLE @ 7.0ft BGS	
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
715.67 to 713.67ft BGS
2.50 to 4.50ft BGS
Length: 2ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
716.67 to 716.17ft BGS
1.50 to 2.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
716.17 to 713.67ft BGS
2.00 to 4.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		75		0.7
				0.7
2GP		100		0.7

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

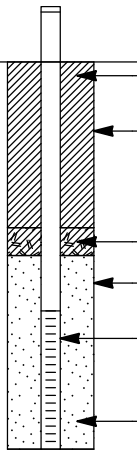
HOLE DESIGNATION: SG19-29
DATE COMPLETED: February 2, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268265.79
EASTING: 13343936.92

TOP OF CASING 721.73
GROUND SURFACE 718.53

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	CONCRETE	718.13
2	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist - compact at 2.0ft BGS	
4	- trace concrete debris at 3.5ft BGS	
6	- trace asphalt debris at 6.5ft BGS - with silt, no concrete or asphalt debris at 6.8ft BGS	711.53
8	END OF BOREHOLE @ 7.0ft BGS	
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
714.03 to 711.53ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.53 to 715.03ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
715.03 to 711.53ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		95		0.7
				0.7
2GP		100		0.7

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

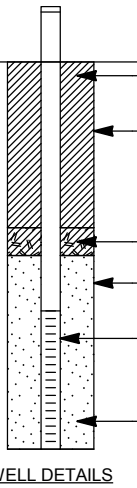
PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SG19-30
DATE COMPLETED: February 2, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268267.13
EASTING: 13343957.34
TOP OF CASING 721.76
GROUND SURFACE 718.56

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	CONCRETE	718.16
2	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist - compact at 1.2ft BGS - trace concrete debris at 2.8ft BGS - with slag, no concrete debris, sulfur-like odor at 3.0ft BGS	
4	- no slag or odor at 3.4ft BGS	
	CONCRETE DEBRIS	714.06
	SP-SAND (FILL), trace gravel, trace concrete debris, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	713.56
6	- with asphalt debris at 6.0ft BGS - no concrete or asphalt debris at 6.3ft BGS	711.56
	END OF BOREHOLE @ 7.0ft BGS	
8		
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
714.06 to 711.56ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.56 to 715.06ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
715.06 to 711.56ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		95		0.7 5.3
2GP		100		0.7

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SG19-31
DATE COMPLETED: February 2, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268267.7
EASTING: 13343977.01

TOP OF CASING 721.58
GROUND SURFACE 718.39

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	CONCRETE	718.04	BENTONITE SLURRY					
	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist		2" PVC WELL CASING					0.7
2				1GP		65		
	- compact at 3.0ft BGS - trace concrete debris, sulfur-like odor at 3.3ft BGS		BENTONITE CHIPS					2.3
4	- no concrete debris or odor at 3.6ft BGS		8" BOREHOLE					
			2" PVC WELL SCREEN					
6	- with silt at 6.0ft BGS			2GP		100		0.7
	END OF BOREHOLE @ 7.0ft BGS	711.39	NATURAL COLLAPSE/ SAND					
8								
10								
12								
14								
16								
18								
20								
22								
24								

WELL DETAILS
Screened interval:
713.89 to 711.39ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.39 to 714.89ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.89 to 711.39ft BGS
3.50 to 7.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

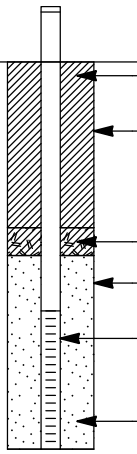
HOLE DESIGNATION: SG19-32
DATE COMPLETED: February 2, 2012
DRILLING METHOD: POWERPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268268.21
EASTING: 13343996.58

TOP OF CASING 721.79
GROUND SURFACE 718.38

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	CONCRETE	718.03
2	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	
	- trace clay, compact at 2.5ft BGS	
4		
	- with asphalt debris at 5.5ft BGS	
6	- with silt, no asphalt debris at 6.2ft BGS	
	CH-CLAY (FILL), with silt and sand, fine grained, high plasticity, brown, moist, mottled	711.63 711.38
8	END OF BOREHOLE @ 7.0ft BGS	
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
713.88 to 711.38ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.38 to 714.88ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.88 to 711.38ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				0.0
1GP		95		
				0.0
2GP		100		2.3

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

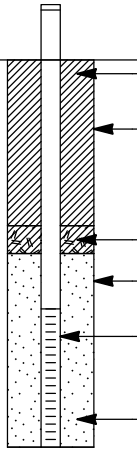
HOLE DESIGNATION: SG19-33
DATE COMPLETED: February 3, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268269.33
EASTING: 13344016.9

TOP OF CASING 721.56
GROUND SURFACE 718.46

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	CONCRETE	717.96
	SP-SAND (FILL), trace gravel, fine to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	717.46
2	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	716.96
	SP-SAND (FILL), trace gravel and clay, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	
4	- with asphalt debris at 4.9ft BGS - with silt, no asphalt debris at 5.3ft BGS	
6	- with clay at 6.3ft BGS	
	CH-CLAY (FILL), with silt and sand, fine grained, high plasticity, firm, brown, moist, mottled	711.71
8	END OF BOREHOLE @ 7.0ft BGS	711.46
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
713.96 to 711.46ft BGS
4.50 to 7.00ft BGS
Length: 2.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.46 to 714.96ft BGS
3.00 to 3.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.96 to 711.46ft BGS
3.50 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				0.7
1GP		100		
				0.7
2GP		100		0.7

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

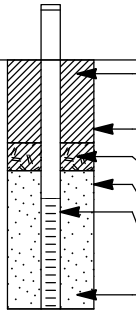
HOLE DESIGNATION: SG19-34
DATE COMPLETED: February 3, 2012
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 268270
EASTING: 13344037.02

GROUND SURFACE 720.49
TOP OF CASING 718.21

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
	CONCRETE	719.89
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, compact, gray, moist	719.69
2	SP-SAND (FILL), with gravel, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	
	- with clay at 1.8ft BGS	
4	- clayey sand, trace gravel at 3.8ft BGS - 1" clay with silt and sand seam, fine grained, high plasticity, firm, mottled at 4.0ft BGS	
	- with silt, no clay, wet at 5.0ft BGS	
6	- with clay at 6.0ft BGS	
	CH-CLAY (FILL), with silt and sand, fine grained, high plasticity, firm, brown, moist, mottled	713.99 713.49
8	END OF BOREHOLE @ 7.0ft BGS	
10		
12		
14		
16		
18		
20		
22		
24		

MONITORING WELL



WELL DETAILS
Screened interval:
717.99 to 715.99ft BGS
2.50 to 4.50ft BGS
Length: 2ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
718.99 to 718.49ft BGS
1.50 to 2.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
718.49 to 715.99ft BGS
2.00 to 4.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		80		0.7
				0.7
2GP		100		0.7

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

TEST PIT STRATIGRAPHIC AND INSTRUMENTATION LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP18-1
DATE COMPLETED: September 3, 2004
TEST PIT METHOD: EXCAVATOR
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEST PIT	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE PID (ppm)
	GROUND SURFACE	714.00				
0	SW-SANDS (FILL), fine to medium grained, well graded, trace fine gravels, dark brown, moist	712.50		1AL	0.0 - 2.0	0.0
2	SP-SANDS (FILL), fine grained, poorly graded, light brown, moist			2AL	2.0 - 4.0	0.0
4				3AL	4.0 - 6.0	0.0
6	SM-SILTY SANDS (FILL), very fine grained, poorly graded, dense, brown	708.50	BACKFILLED WITH EXCAVATED SOIL			
	- ceramic tile at 5.5ft BGS	707.50		4AL	6.0 - 8.0	0.0
8	SP-SANDS (FILL), fine grained, poorly graded, light brown, moist			5AL	8.0 - 10.0	0.0
	- debris, black/moldy, strong odor at 7.5ft BGS					
10	- debris, strong odor, solidified sludge material at 8.0ft BGS	704.00		6AL	10.0 - 12.0	0.0
	END OF TEST PIT @ 10.0ft BGS					
12						
14						
16						
18						
20						
22						
24						
26						
28						
30						
32						
34						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC AND INSTRUMENTATION LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP18-2
DATE COMPLETED: September 3, 2004
TEST PIT METHOD: EXCAVATOR
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEST PIT	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE PID (ppm)
	GROUND SURFACE	715.00				
0	SW-SANDS (FILL), fine to medium sands, trace fine gravels, well graded			1AL	0.0 - 2.0	0.0
2	- steel 2" line at 2.0ft BGS			2AL	2.0 - 4.0	0.0
3.5	- debris, steel at 3.5ft BGS					
4	SP-SANDS (FILL), fine grained, poorly graded, dense, light brown, moist	711.00	BACKFILLED WITH EXCAVATED SOIL	3AL	4.0 - 6.0	0.0
6				4AL	6.0 - 8.0	0.0
8				5AL	8.0 - 10.0	0.0
10	END OF TEST PIT @ 10.0ft BGS	705.00				
12						
14						
16						
18						
20						
22						
24						
26						
28						
30						
32						
34						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC AND INSTRUMENTATION LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP18-3
DATE COMPLETED: September 8, 2004
TEST PIT METHOD: EXCAVATOR
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEST PIT	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE PID (ppm)
	GROUND SURFACE	715.00				
	ASPHALT	714.60				
	SW/GW-SANDS AND GRAVELS,	713.30				
2	SW-SANDS (FILL), fine and medium grained, well graded					
	- glass, trace black staining at 3.0ft BGS					
4						
	- debris, black staining, stratified layers at 5.0ft BGS					
6	- black staining, debris, plastics, papers, glass bottles at 6.0ft BGS					
	- black staining, debris, plastics, papers, glass, ceramic cups at 7.0ft BGS	707.00				
8	SM-SILTY SANDS (FILL), weathered, oxidized, olive green, strong odor	705.50	BACKFILLED WITH EXCAVATED SOIL			
10	SP-SANDS (FILL), fine grained, poorly graded, intermittent black staining, strong odors, medium brown					
	- wet, strong at 10.0ft BGS				10.0 - 13.0	>2000
12	- saturated, sheeny at 13.0ft BGS					
14					13.0 - 15.0	>2000
16						
	CL-SILTY CLAYS (native), trace fine sands, stiff, competent, low plasticity, gray, moist	698.10				
18						
	END OF TEST PIT @ 19.0ft BGS	696.00				
20						
22						
24						
26						
28						
30						
32						
34						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC AND INSTRUMENTATION LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP18-4
DATE COMPLETED: September 8, 2004
TEST PIT METHOD: EXCAVATOR
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEST PIT	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE PID (ppm)
	GROUND SURFACE	714.50				
0	ASPHALT	714.10				
	SP-SANDS (FILL), fine grained, poorly graded, light brown, moist					
2	- steel drum ring at 2.0ft BGS			1AL	0.0 - 4.0	69.0
	- 3.5' debris (yellow solid paint sludge, plastics, paper products, glass, strong odors) at 3.0ft BGS					
4				2AL	4.0 - 6.0	>2000
6						
	SM-SILTY SANDS (FILL), some fine sands, dense, gray, moist, strong paint odor	707.50		3AL	6.0 - 8.0	>2000
8			BACKFILLED WITH EXCAVATED SOIL			
	- 0.3' silty clay seam, strong odor at 9.3ft BGS					
10	- 0.2' silty clay seam, strong odor at 10.2ft BGS			4AL	8.0 - 12.0	>2000
12						
14				5AL	12.0 - 16.0	>2000
	- trace black staining at 14.7ft BGS	699.70				
	CL-SILTY CLAYS (native), trace fine sands, stiff, competent, low plasticity, gray, moist	698.50				
16	END OF TEST PIT @ 16.0ft BGS					
18						
20						
22						
24						
26						
28						
30						
32						
34						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC AND INSTRUMENTATION LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP18-5
DATE COMPLETED: September 8, 2004
TEST PIT METHOD: EXCAVATOR
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	TEST PIT	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	715.00			
0	ASPHALT	714.60			
	SW/GW-SANDS AND GRAVELLY SANDS (FILL), fine to coarse grained, well graded, dark brown, moist	713.20			
2	SP-SANDS (FILL), fine grained, poorly graded, homogeneous, dense, light brown, moist				
4	- debris, metal shavings, yellow-green at 5.0ft BGS				
6					
8	- steel drum, wet, strong odors, paint odor at 8.0ft BGS				
	- decrease in debris, strong odors, paint-like odor at 9.0ft BGS		BACKFILLED WITH EXCAVATED SOIL		
10	- increase in silts, strong odors, paint-like odor at 10.0ft BGS				
12	- wet at 12.0ft BGS				
14					
16	- trace brown oily product at 15.9ft BGS	699.00			
	CL-SILTY CLAYS (native), trace fine sands, stiff, low plasticity, gray, moist				
18					
	END OF TEST PIT @ 19.0ft BGS	696.00			
20					
22					
24					
26					
28					
30					
32					
34					

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC AND INSTRUMENTATION LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP18-6
DATE COMPLETED: September 8, 2004
TEST PIT METHOD: EXCAVATOR
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	TEST PIT	SAMPLE NUMBER	SAMPLE INTERVAL
0	ASPHALT	0.40			
	SW/GW-SANDS AND GRAVELLY SANDS (FILL), fine to coarse grained, fine to medium gravels, well graded, brown, moist				
2	- electrical conduit line at 2.8ft BGS	2.50			
	SP-SANDS (FILL), fine grained, poorly graded, dense, light brown, moist				
4	- 0.4' seam potassium permanganate, trace debris, black staining at 3.0ft BGS				
	- steel drum (intact), empty at 3.5ft BGS				
6	- steel drum, strong solvent odor, 5-gal bucket at 6.0ft BGS				
	- 2.0' steel and miscellaneous debris, yellow staining at 7.0ft BGS				
8			BACKFILLED WITH EXCAVATED SOIL		
	SM-SILTY SANDS, some fine and medium sands, dense, olive-gray, wet	9.50			
10					
12					
14					
	CL-SILTY CLAYS (native), trace fine sands, stiff, competent, low plasticity, gray, moist	15.00			
16	END OF TEST PIT @ 16.5ft BGS	16.50			
18					
20					
22					
24					
26					
28					
30					
32					
34					

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A1
DATE COMPLETED: June 10, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	715.90		
	ASPHALT	715.50		
	GP-GRAVEL, 2"-3", asphalt underlayment, poorly graded, dry, gray	714.70		
2	SW-SAND, fine to coarse grained with intermixing debris: bricks, concrete, glass, clear vinyl, trace slag and wood debris, dark brown, moist			
4				
		710.90		
6	SP-SAND, medium grained, poorly graded, trace fines, loose, light brown, moist			
8				
	- some silts at 9.3ft BGS			
10				
	END OF TEST PIT @ 10.5ft BGS	705.40		
12				
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A13
DATE COMPLETED: June 13, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	715.10		
0	ASPHALT	714.60		
	GP-GRAVEL (ASPHALT BASE), 2"-3" gravels, poorly graded, gray, dry			
2	SW-SAND & DEBRIS, fine to coarse grained, debris: concrete and steel rebar remnants (1/4"), brown, moist	713.50		
4	SP-SAND, medium grained, poorly graded, medium brown, moist	711.10		
6				
8	SM-SILTY SAND (NATIVE), some medium sands, homogeneous, gray, moist	708.10		
10	END OF TEST PIT @ 9.7ft BGS	705.40		
12				
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A22
DATE COMPLETED: June 10, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	716.70		
	ASPHALT	716.30		
	- partial steel drum remnants at 0.6ft BGS	715.70		
	GP-GRAVEL, 2"-3" cobbles, asphalt underlayment			
	SW-SAND, fine to coarse grained, well graded, loose, dark brown, moist	714.60		
	SP-SAND (NATIVE), medium grained, poorly graded, loose, light brown, moist			
	END OF TEST PIT @ 9.6ft BGS	707.10		

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A23
DATE COMPLETED: June 10, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	716.70		
0	ASPHALT	716.30		
	GP-GRAVEL, 2"-3" cobbles, asphalt underlayment, poorly graded, dry, gray			
	- partial steel drum lid at 1.2ft BGS	715.40		
2	SP-SAND (NATIVE), medium grained, some fines, poorly graded, brown, moist			
10	- very moist, some silts at 10.8ft BGS	705.80		
	END OF TEST PIT @ 10.9ft BGS			

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A30
DATE COMPLETED: June 14, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	715.90		
	ASPHALT	715.50		
	GP-GRAVEL (ASPHALT BASE), 2"-3" gravels, poorly graded, dry, gray			
2	SW-SAND & DEBRIS, fine to coarse sands, well graded, debris: solid paint waste, concrete pieces, wood remnants, tin cans	714.30		
	- yellow paint staining, intermitent to 8' bgs at 2.0ft BGS			
4				
	- 55 gallon drum, approx. 25 gallons of product/H2O, strong solvent odor at 5.5ft BGS			
6	- stained soils (trace NAPL residue) at 5.7ft BGS			
8				
	SW-SAND, fine to coarse sands, well graded, loose, some black foundry sands, strong odor	707.10		
10	- wet at 10.0ft BGS			
12				
14				
16	CL-SILTY CLAY (NATIVE), trace fine gravels, competent, low to medium plasticity, gray, dry to moist	700.10 699.90		
	END OF TEST PIT @ 16.0ft BGS			
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A31
DATE COMPLETED: June 10, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	715.90		
	ASPHALT	715.50		
	GP-GRAVEL (ASPHALT BASE), 2"-3" gravels, poorly graded, gray, dry			
2	SW-SAND & DEBRIS, fine to medium grained, well graded, debris:	714.30		
	- yellow paint solids at 2.0ft BGS			
4	- 35 gallon drum with stained soils at 2.5ft BGS			
	- 35 gallon drum with stained soils at 3.0ft BGS			
	- wood blocks at 3.5ft BGS			
6	- 35 gallon drum containing 10-15 gallons of DNAPL product, brown, strong odors at 4.5ft BGS			
	- 55 gallon drum containing 20-25 gallons of DNAPL product at 5.5ft BGS	709.40		
8	- wood debris, plastics at 6.3ft BGS			
	SW-SAND, fine to coarse sands, some foundry sands, black, loose, gray, moist			
10		705.30		
	END OF TEST PIT @ 10.6ft BGS			
12				
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A32
DATE COMPLETED: June 7, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	714.60		
0	ASPHALT	714.30		
	GP-GRAVEL (FILL), asphalt base, 2"-4" gravels, poorly graded, dry, gray	713.90		
2	SW-SAND, medium to coarse sands, well graded, dark brown, debris: plastics, cardboard, shavings, glass bottles, solidified paint solids, bricks, wood, steel rods, metal scrap material, slag, concrete pieces, brick, dark brown, well graded, moist			
4				
6				
		707.60		
8	SP-SAND, medium grained, poorly graded, homogenous, medium brown, moist			
10	END OF TEST PIT @ 10.0ft BGS	703.80		
12				
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A33
DATE COMPLETED: June 7, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	714.70		
0	ASPHALT	714.40		
	SW/GW-SAND & GRAVELS (FILL MATERIAL), debris: metal shavings, steel rods, concrete, bricks, glass, plastics, trace paint sludges			
2				
	SAND (FILL), medium grained, poorly graded, loose, oxidation, staining, light brown, moist	711.70		
4				
	SP-SAND (NATIVE), medium grained, poorly graded, loose, medium brown, moist	709.20		
6	- trace silty clays at 7.0ft BGS			
8				
10				
12	END OF TEST PIT @ 12.0ft BGS	702.70		
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A35
DATE COMPLETED: June 10, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	714.50		
	ASPHALT	714.10		
	GP-GRAVEL, 2"-3" gravel, poorly graded, asphalt base	713.20		
2	SW-SAND & DEBRIS, fine to coarse grained, well graded, debris: miscellaneous car parts, wire harness, tubular copper products, wood blocks, tire iron, lugnut wrench, center bracket, battery box, center carrier bearings, transmission linkages, u-bolts, shocks (1), cross members and miscellaneous metal scraps, drive shaft			
4	- General Motors Chevrolet Division lables at 5.0ft BGS			
6	SP-SAND, fine grained, some medium sands, poorly graded, light brown, moist	708.70		
8				
10	END OF TEST PIT @ 10.0ft BGS	704.50		
12	* DEBRIS WAS EVIDENT ON ALL FOUR SIDES OF TEST PIT			
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A36
DATE COMPLETED: June 11, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	714.04		
0	ASPHALT	713.64		
	GP-GRAVEL (ASPHALT BASE), 2"-3", poorly graded, dry, gray	712.84		
	- steel drum lid, no other debris at 1.0ft BGS			
2	SP-SAND, medium grained, poorly graded, trace silts, loose			
4				
6				
8	- trace sandy clays at 7.7ft BGS			
10		703.44		
	SP-SILTY CLAYS (NATIVE), some fine and medium sands, semi-competent, mottled, brown-gray, moist	702.54		
12	END OF TEST PIT @ 11.5ft BGS			
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A38
DATE COMPLETED: June 13, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	713.60		
0	ASPHALT	713.20		
	GP-GRAVEL (ASPHALT BASE), 2"-3" gravels, poorly graded, gray, dry - steel plate at 0.9ft BGS			
2	- electrical conduit debris at 1.3ft BGS - telephone pole remnants (5'-6' long) at 1.6ft BGS	711.60		
4	SP-SAND, medium grained, poorly graded, some fines, loose, medium brown, moist			
6				
8				
10	- becoming gray, some silts at 9.6ft BGS - moist to wet at 10.5ft BGS			
12	END OF TEST PIT @ 11.0ft BGS	702.60		
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A39
DATE COMPLETED: June 14, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	713.30		
0	SW-SAND, fine to medium sands, trace vegetation, well graded, dark brown, moist			
2	SP-SAND, medium grained, some fines, poorly graded, light brown, moist - miscellaneous metal scraps at 2.8ft BGS	711.10		
10	SM-SILTY SANDS, fine grained, poorly graded, gray, moist, faint odors	703.40 703.00		
12	SP-SAND, medium grained, some foundry sands, black, poorly graded, strong odor, gray-black, moist - wet at 11.0ft BGS			
	END OF TEST PIT @ 12.9ft BGS	700.40		

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A4
DATE COMPLETED: June 10, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	715.90		
0	ASPHALT	715.50		
	GP-GRAVEL, 2"-3", asphalt underlayment	714.70		
2	SW-SAND, fine to coarse grained, intermixing debris: brick, concrete blocks (refractory), well graded, dark brown, moist	713.30		
	SP-SAND, medium grained, poorly graded, loose, light brown, moist			
4				
6				
8				
	- some silty sands at 9.3ft BGS			
10	END OF TEST PIT @ 10.0ft BGS	705.90		
12				
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A48
DATE COMPLETED: June 8, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	714.50		
0	ASPHALT	714.10		
	GP-GRAVEL, 2" cobbles, asphalt underlayment, gray, dry	713.40		
2	SW-SAND, fine to coarse sands, debris: metal shavings, glass, steel fencing, plastics, springs, 3" rubber gaskets, miscellaneous metal scraps, well mixed, dark brown, dry			
4				
6				
8		706.30		
	SP-SAND, fine grained, poorly graded, brown, oxidation staining, moist			
10		704.30		
	SP-SAND, fine grained, poorly graded, gray, moist to wet, faint odor - wet, faint odor at 11.0ft BGS			
12		701.70		
	END OF TEST PIT @ 12.8ft BGS			
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A5
DATE COMPLETED: June 10, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	715.90		
	ASPHALT	715.50		
	GP-GRAVEL, 2"-3", asphalt underlayment, poorly graded, dry, gray	714.60		
2	SW-SAND, fine to coarse grained, debris, trace metal scraps, trace black tar - tar layer, black, solid from 2.0 to 2.6ft BGS			
	SP-SAND, medium grained, trace fines, poorly graded, loose, light brown, moist	712.90		
4				
6				
8				
10	END OF TEST PIT @ 10.0ft BGS	705.90		
12				
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A60
DATE COMPLETED: June 14, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	714.20		
0	SW-SAND, fine to medium grained, well graded, trace vegetation, dark brown, moist			
2	SP-SAND, medium grained, poorly graded, light brown, moist	712.20		
12	SM-SILTY CLAY, trace clays, trace fine sands, trace plastics, gray, moist	702.60		
	END OF TEST PIT @ 12.5ft BGS	701.70		
	* NO EVIDENCE OF DEBRIS/NAPL			

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A6N
DATE COMPLETED: June 9, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	715.40		
0	ASPHALT	715.00		
	GP-GRAVEL, 2"-3" asphalt underlayment, some sands, fine grained, dry, gray	714.10		
2	SW-SAND/DEBRIS, fine to coarse grained, debris: misc. metal scraps, angle iron plastics, cardboards, trace black solids, trace solid tar, cement bricks			
	- partial steel drum (dry) at 3.0ft BGS			
4				
6	SP-SAND, medium grained, poorly graded, brown, moist	709.70		
8				
	- some silts at 8.8ft BGS			
10				
12	END OF TEST PIT @ 11.9ft BGS	703.50		
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A6S
DATE COMPLETED: June 9, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	715.30		
0	ASPHALT	714.90		
	GP-GRAVEL, asphalt underlayment, 2"-3" gravels, dry, gray	713.80		
2	SW-SAND/DEBRIS, debris: miscellaneous metal scraps, angle iron, plastics, cardboards, trace black sludge, trace solid tar, 6" steel pipes - black oily tar, partial drum (containing 2-3 gallons of black tar) at 2.5ft BGS			
4	- partial drum (dry) at 4.0ft BGS			
6	Solidified tar layer, hard, black	709.30		
8	SP-SANDS, fine to medium sands, trace sandy clays, brown-black staining, trace foundry sands	707.50		
10				
12	- wet at 11.8ft BGS	703.30		
	END OF TEST PIT @ 12.0ft BGS			
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-A6S2
DATE COMPLETED: June 13, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	715.80		
0	ASPHALT	715.30		
	GP-GRAVELS WITH SANDS (ASPHALT BASE), 2-3" gravels, poorly graded, gray, dry			
2	- trace metal scraps from 1.3 to 1.9ft BGS	713.80		
	SP-SAND, medium grained, poorly graded, medium brown, moist			
4				
6				
8	CL-SILTY CLAY AND SANDS, some fine and medium sands, intermixing silty clays, gray, moist	708.30		
10	END OF TEST PIT @ 9.5ft BGS	706.30		
12				
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-C
DATE COMPLETED: June 13, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	714.70		
0	ASPHALT	714.30		
	GP-GRAVEL (ASPHALT BASE), 2"-3" gravels, poorly graded, gray, dry	713.40		
2	SP-SAND, medium grained, poorly graded, medium brown, brown, moist			
4				
6				
8				
	SM-SILTY SAND, trace silty clays, trace medium sands, poorly graded, gray, moist to wet	706.20		
10				
	END OF TEST PIT @ 11.0ft BGS	703.70		
12	* NO DEBRIS FOUND			
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-C3
DATE COMPLETED: June 11, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	714.30		
	ASPHALT	713.90		
	GP-GRAVEL (ASPHALT BASE), 2"-3" gravels, poorly graded, gray, dry	713.00		
2	SW-SAND, fine to coarse grained, well graded, dark brown, moist - 2" steel pipe, 2' long at 2.1ft BGS - large concrete pieces (3) at 3.0ft BGS			
4		710.10		
	SP-SAND, medium grained, poorly graded, light brown, moist			
6				
8		706.30		
	SM-SILTY SANDS, some fine and medium sands, dense, gray, moist to wet			
10				
		703.00		
12	END OF TEST PIT @ 11.3ft BGS			
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-D1
DATE COMPLETED: June 11, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	ASPHALT	0.40		
	GP-GRAVEL (ASPHALT BASE), 2"-3" gravels, poorly graded, gray, dry	1.30		
2	SP-SAND, medium grained, poorly graded, medium brown, moist - 2 pieces of 2" steel pipe and trace other metal scraps at 2.5ft BGS			
4				
6				
8	SM/SP-SILTY SAND, some clay intermixing, semi-competent, mottled brown, gray, moist	7.70		
10	- moist to wet at 10.5ft BGS			
	END OF TEST PIT @ 11.0ft BGS	11.00		
12				
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-D2
DATE COMPLETED: June 11, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	ASPHALT	0.40		
	GP-GRAVEL (ASPHALT BASE), 2"-3" gravels, poorly graded, dry	1.50		
2	SP-SAND, medium grained, poorly graded, light brown, moist - trace metal scraps, screen material at 2.0ft BGS - copper grounding rod, 6' long 1" diameter at 2.5ft BGS			
4				
6				
8	SM-SILTY SANDS, some fine and medium grained sands, poorly graded, gray, moist to wet	7.60		
10				
	END OF TEST PIT @ 10.5ft BGS	10.50		
12				
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-E
DATE COMPLETED: June 11, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	713.60		
0	ASPHALT	713.20		
	GP-GRAVEL (ASPHALT BASE), 2"-3" gravels, gray, dry - trace steel scraps (pipe) at 1.0ft BGS	711.80		
2	SP-SAND (NATIVE), medium grained, poorly graded, medium brown, trace oxidation staining			
4				
6				
8	- becoming gray, silty at 8.5ft BGS			
10	END OF TEST PIT @ 9.6ft BGS	704.00		
12				
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-F
DATE COMPLETED: June 13, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	713.80		
0	ASPHALT	713.40		
	GP-GRAVEL (ASPHALT BASE), 2"-3" gravel, poorly graded, gray, dry			
2	- trace scrap, 1" piece at 1.8ft BGS	712.10		
	SP-SAND, medium grained, poorly graded, brown, moist			
4				
6				
8				
	SM-SILTY SANDS, some fines, poorly graded, gray, moist to wet	704.90		
10				
	END OF TEST PIT @ 11.0ft BGS	702.80		
12				
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-G
DATE COMPLETED: June 11, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	713.70		
0	ASPHALT	713.30		
	GP-GRAVEL (ASPHALT BASE), 2"-3" gravels, poorly graded, gray, dry	712.40		
2	SP-SAND, medium grained, poorly graded, loose, light brown, moist			
4	- one piece of concrete and rebar at 4.0ft BGS			
6				
8	SM/SP-SILTY SANDS, fine grained, some silty clays, semi-competent, brown-gray, moist	705.70		
10				
	END OF TEST PIT @ 11.0ft BGS	702.70		
12				
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-H
DATE COMPLETED: June 13, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	713.60		
	ASPHALT	713.20		
	GP-GRAVEL (ASPHALT BASE), 2"-3" gravels, poorly graded, gray, dry			
	SP-SAND, medium grained, poorly graded, medium brown, moist	712.00		
	- oxidation staining at 7.0ft BGS			
	- silty sands, gray at 9.3ft BGS			
	- moist to wet at 10.6ft BGS			
	END OF TEST PIT @ 11.0ft BGS	702.60		
	* NO DEBRIS FOUND			

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-I
DATE COMPLETED: June 8, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	714.50		
0	ASPHALT	714.20		
	GP-GRAVEL, 2" cobbles, asphalt underlayment, poorly graded, dry, gray	713.40		
2	SW-SAND & DEBRIS, fine to coarse sands, debris: 2" steel cables, steel tire rims, truck rotor, drive-chain, glass, solidified paint waste (purple), slag, plastics, 6" rubber gaskets and misc. scrap materials			
	- 2 empty partial drums found from 2.0 to 3.0ft BGS			
4	- partial steel drum, with black and oily sludge at 4.0ft BGS			
6				
8	SP-SAND, fine grained, some medium sands, intermixing silty clays, brown, moist	706.80		
	- black staining at 8.4ft BGS			
10				
	- wet, trace sheens at 11.0ft BGS			
12				
	END OF TEST PIT @ 12.8ft BGS	701.70		
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-J
DATE COMPLETED: June 8, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	714.00		
0	ASPHALT	713.60		
	GP-GRAVEL, 2" cobbles, asphalt underlayment, dry, gray	713.20		
	SW-SAND (FILL), fine to coarse grained, well graded, trace steel debris, dark brown, moist	712.80		
2	SW-SAND (FILL), fine to medium grained, debris: steel wiring, springs, steel pipe 2", wood blocks, trace slag, dark brown, moist			
4	SP-SAND (NATIVE), fine grained, poorly graded, oxidation staining, light brown, moist	710.00		
6				
8	- trace silty sands, gray at 8.0ft BGS			
10				
	- wet at 11.5ft BGS			
12	END OF TEST PIT @ 12.0ft BGS	702.00		
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-K
DATE COMPLETED: June 8, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	713.90		
0	ASPHALT	713.50		
	GRAVEL, 2" cobbles, asphalt underlayment, gray, dry	712.90		
2	SW-SAND, fine to coarse sands, debris fragments of 3-4 decayed steel drums, broken glass bottles, slag, steel meshing, steel wiring, trace paint solids (yellow), brown, moist			
4				
6		707.60		
	SW-SAND (FILL), fine to medium grained, trace coarse sands, well graded, moist			
8				
10	- wet at 10.0ft BGS			
	END OF TEST PIT @ 10.5ft BGS	703.40		
12				
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-L
DATE COMPLETED: June 8, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	714.10		
0	ASPHALT	713.80		
	GW-GRAVEL, underlayment for asphalt, 2"-3" gravels, poorly graded, dry, gray	713.30		
2	SW-SAND, fine to coarse sands, with intermixing debris, steel pipes 2"-4" diameter, 2" steel cables, springs, misc steel scraps, yellow-purple paint solids, cement bricks, partial steel drum remnants, all corners of the test pit contained debris			
4				
6				
		707.10		
8	SP-SAND (NATIVE), fine grained, poorly graded, medium brown, moist			
10	- oxidation staining at 10.0ft BGS			
12	- wet at 12.0ft BGS			
	END OF TEST PIT @ 12.5ft BGS	701.60		
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

TEST PIT STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TP-M
DATE COMPLETED: June 7, 2005
TEST PIT METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	714.40		
	ASPHALT	714.10		
	GRAVEL (FILL) underlayment, 2" cobbles, dry, gray	713.40		
2	SW-SAND (FILL), medium to coarse sands, debris, steel scraps, drum rim, solid yellow paint sludges, rubber gaskets, wood, plastics, clear glass, bricks, paper products, trace slag, drum fragments			
4				
6				
		707.40		
8	SP-SAND, medium grained, poorly graded, dense, brown, moist			
	- becoming gray, trace silty clays at 9.0ft BGS			
10				
	- wet at 11.5ft BGS			
12	END OF TEST PIT @ 12.0ft BGS	702.40		
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TRENCH 1
DATE COMPLETED: June 13, 2005
DRILLING METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	713.90		
0	ASPHALT	713.50		
	GP-GRAVEL WITH SANDS (ASPHALT BASE), 2"-3" gravels, poorly graded, gray, dry	712.40		
2	SP-SAND, medium grained, poorly graded, medium brown, brown, moist			
4				
6				
8	SM-SILTY SANDS, intermixing silty clays, some fine sands, gray, moist	706.60		
10	- wet, faint odors, slight sheen at 10.0ft BGS			
	- trace black fine sands at 11.0ft BGS			
12	CL-SILTY CLAY, trace fine sands, competent, stiff, low plasticity, gray, dry	702.10		
14				
16	END OF TEST PIT @ 15.9ft BGS	698.00		
	* NO EVIDENCE OF NAPL/DEBRIS			
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC LOG

PROJECT NAME: GM - CVO
PROJECT NUMBER: 17303
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TRENCH 2
DATE COMPLETED: June 13, 2005
DRILLING METHOD: BACKHOE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL
	GROUND SURFACE	713.90		
0	ASPHALT	713.50		
	GP-GRAVEL (ASPHALT BASE), 2"-3" gravels, poorly graded, gray, dry	712.60		
2	SP-SAND, medium grained, poorly graded, light brown, moist			
4				
6				
8				
	SM-SILTY SANDS, some fine sands, dense, gray, moist	705.00		
10				
	END OF TEST PIT @ 10.5ft BGS	703.40		
12	* NO EVIDENCE OF DEBRIS			
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

TEST PIT LOG 17303-TEST PITS.GPJ CRA_CORP.GDT 10/14/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

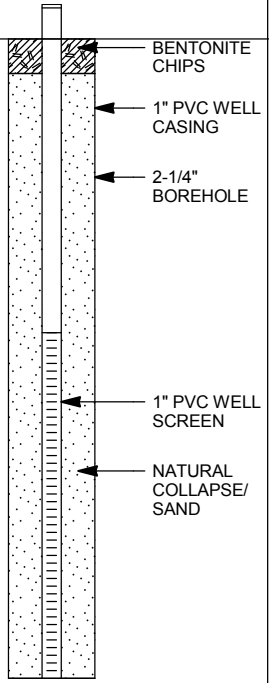
PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TWOS-01
DATE COMPLETED: September 23, 2011
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 267943.43
EASTING: 13344321.1

TOP OF CASING 720.97
GROUND SURFACE 719.64

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	719.29
2	CL-SANDY CLAY, with silt and gravel, fine to coarse sand, fine to coarse gravel, low plasticity, stiff, brown, moist	716.64
4	SC-CLAYEY SAND, with gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist	715.64
6	SP-SAND, with gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist	712.64
8	- with clay at 4.0ft BGS	711.24
	- no clay at 5.0ft BGS	710.94
10	SC-CLAYEY SAND, with gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, very moist	710.14
12	CL-SANDY CLAY, with silt and gravel, fine to coarse sand, fine to coarse gravel, low plasticity, stiff, brown, moist	709.89
14	SC-CLAYEY SAND, with gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist	705.14
16	CL-SANDY CLAY, with silt and gravel, fine to coarse sand, fine to coarse gravel, low plasticity, stiff, brown, moist	
18	CH-SILTY CLAY, trace fine sand, high plasticity, soft to firm, brown, very moist	
20	SP-GRAVELLY SAND, medium to coarse sand, fine to coarse gravel, poorly graded, loose to compact, brown, moist	700.14
22	CH-SILTY CLAY, trace fine sand, high plasticity, soft to firm, brown, very moist	699.64
24	END OF BOREHOLE @ 20.0ft BGS	
26	NOTE: PVC PULLED AND BACKFILLED WITH BENTONITE CHIPS, WELL ABANDONED ON 11/30/11	
28		
30		
32		
34		
36		
38		



WELL DETAILS
Screened interval:
711.14 to 701.14ft BGS
8.50 to 18.50ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Seal:
719.64 to 718.64ft BGS
0.00 to 1.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
718.64 to 701.14ft BGS
1.00 to 18.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1GP		85		2.4
				2.8
				3.0
2GP		65		2.7
				1.9
3GP		70		2.4
				2.0
				2.2
4GP		85		2.0
				1.8

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

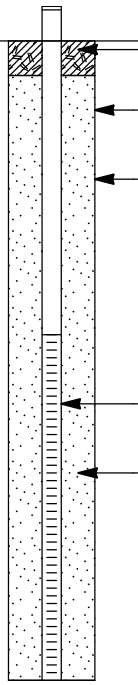
HOLE DESIGNATION: TWOS-02
DATE COMPLETED: September 23, 2011
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 267959.05
EASTING: 13344536.88

TOP OF CASING 719.85
GROUND SURFACE 718.37

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	718.02
	CL-SILTY CLAY, trace fine sand, low plasticity, stiff, brown, moist	716.62
2	SC-CLAYEY SAND, trace gravel, fine to medium sand, fine gravel, poorly graded, compact, brown, moist	716.12
4	SP-SAND, trace gravel, fine to medium sand, fine gravel, poorly graded, compact, brown, moist	714.12
6	CL-SANDY CLAY, fine to medium grained, low plasticity, stiff, brown, moist	713.87
8	SP-SAND, with fine to coarse gravel, fine to medium sand, fine gravel, poorly graded, compact, brown, moist	712.37
10	SC-CLAYEY SAND, with fine to coarse gravel, fine to medium sand, fine gravel, poorly graded, compact, brown, moist	709.87
12	CL-SILTY CLAY, trace fine sand, low plasticity, stiff, brown, moist	709.37
14	SP-GRAVELLY SAND, fine to coarse sand, fine to coarse gravel, poorly graded, compact, brown, moist	703.57
16	- gray at 11.5ft BGS	703.37
18	ML-SILT, no plasticity, firm to stiff, gray, wet	700.37
	SM-SILTY SAND, fine grained, poorly graded, compact, gray, moist to very moist	700.12
20	CL-SILTY CLAY, low plasticity, stiff, gray, moist	699.12
22	SM-SILTY SAND, fine to medium grained, poorly graded, compact, gray, moist to very moist	698.37
24	CL-SILTY CLAY, low plasticity, stiff, gray, moist	
26	END OF BOREHOLE @ 20.0ft BGS	
28	NOTE: CONVERTED TO A PERMANENT MONITORING WELL MWOS-02 ON 11/30/11	
30		
32		
34		
36		
38		

TEMP MONITORING WELL



WELL DETAILS
Screened interval:
709.87 to 699.87ft BGS
8.50 to 18.50ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Seal:
718.37 to 717.37ft BGS
0.00 to 1.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
717.37 to 699.87ft BGS
1.00 to 18.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				0.9
1GP		60		1.0
				2.2
2GP		65		1.6
				2.0
				2.8
3GP		55		1.9
				0.7
4GP		60		1.3
				0.9

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 8/13/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

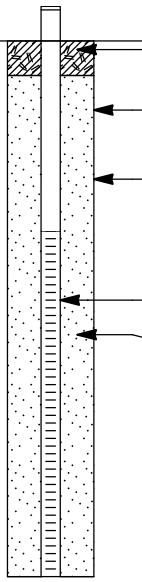
HOLE DESIGNATION: TWOS-03
DATE COMPLETED: September 23, 2011
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 267976.07
EASTING: 13344722.12

TOP OF CASING 718.15
GROUND SURFACE 713.39

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	TOPSOIL	712.39
2	CL-SANDY CLAY, with gravel and silt, fine to medium sand, fine to coarse gravel, low plasticity, stiff, brown, moist	
	- increase in sand at 3.0ft BGS	709.79
4	SC-CLAYEY SAND, with gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist	708.39
6	SP-SAND, with gravel and silt, medium to coarse sand, fine to coarse gravel, poorly graded, loose, brown, moist	
8	- fine to medium grained, no gravel at 7.0ft BGS	
10	- fine grained at 7.5ft BGS	
	- gravelly sand, fine to coarse sand, fine to coarse gravel, compact, gray at 10.0ft BGS	
12	- medium to coarse sand at 10.5ft BGS	
	- with silty clay lenses at 13.0ft BGS	699.89
14	SM-SILTY SAND, fine grained, poorly graded, compact, gray, very moist	698.89
		698.39
16	CL-SILTY CLAY, trace sand, fine to medium grained, low plasticity, stiff, gray, moist	697.89
18	SM-SILTY SAND, fine grained, poorly graded, compact, gray, wet	
	CL-SILTY CLAY, trace sand, fine to medium grained, low plasticity, stiff, gray, moist	
20	END OF BOREHOLE @ 20.0ft BGS	693.39
22	NOTE: PVC PULLED AND BACKFILLED WITH BENTONITE CHIPS, WELL ABANDONED ON 11/30/11	
24		
26		
28		
30		
32		
34		
36		
38		

TEMP MONITORING WELL



WELL DETAILS
Screened interval:
707.89 to 697.89ft BGS
5.50 to 15.50ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Seal:
713.39 to 712.39ft BGS
0.00 to 1.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
712.39 to 697.89ft BGS
1.00 to 15.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				1.2
1GP		85		1.5
				1.1
				0.8
2GP		90		0.2
				0.9
3GP		60		1.3
				1.3
				1.1
4GP		100		0.8

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

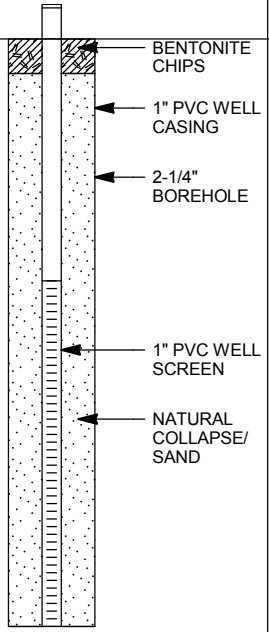
PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: TWOS-04
DATE COMPLETED: September 23, 2011
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

NORTHING: 267977.2
EASTING: 13344881.44

TOP OF CASING 714.58
GROUND SURFACE 712.05

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	TOPSOIL	711.40
	GP-GRAVEL (FILL), fine to coarse grained, poorly graded, loose, gray, moist	711.05
2	ASPHALT DEBRIS	709.55
	- with concrete debris at 2.0ft BGS	709.25
4	SC-CLAYEY SAND, with gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist	706.30
6	SP-SAND, with gravel, fine to medium sand, fine to coarse gravel, poorly graded, compact, brown, moist	
8	- gravelly sand, medium to coarse sand, fine to coarse gravel at 4.3ft BGS	
10	SM-SILTY SAND, fine to medium grained, poorly graded, compact, light gray, moist	700.80
	- very moist at 10.0ft BGS	700.45
12	CL-SILTY CLAY, trace sand and gravel, fine to medium sand, fine to coarse gravel, low plasticity, firm, brown, moist	700.05
14	SM-SILTY SAND, fine to medium grained, poorly graded, compact, light gray, very moist to wet	697.05
16		696.55
18	CL-SILTY CLAY, trace sand and gravel, fine to medium sand, fine to coarse gravel, low plasticity, firm, brown, moist	
20	SM-SILTY SAND, fine to medium grained, poorly graded, compact, light gray, wet	692.05
22	CL-SILTY CLAY, trace sand and gravel, fine to medium sand, fine to coarse gravel, low plasticity, firm, brown, moist	
24	END OF BOREHOLE @ 20.0ft BGS	
26	NOTE: PVC PULLED AND BACKFILLED WITH BENTONITE CHIPS, WELL ABANDONED ON 11/30/11	
28		
30		
32		
34		
36		
38		



WELL DETAILS
Screened interval:
705.05 to 695.05ft BGS
7.00 to 17.00ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Seal:
712.05 to 711.05ft BGS
0.00 to 1.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
711.05 to 695.05ft BGS
1.00 to 17.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				1.0
1GP		85		1.4
				1.7
2GP		80		2.4
				1.3
				0.8
3GP		65		1.5
				1.1
4GP		100		0.9
				1.2

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-66
DATE COMPLETED: December 7, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	ASPHALT	0.40						
	CONCRETE DEBRIS			1DP		70		0.0
2								
		3.40						
4	SM-SILT, compact, light brown, moist, small concrete pieces throughout	3.90						0.0
	INDUSTRIAL DEBRIS, concrete, asphalt, copper wiring, turquoise powder							--
6								
				2DP		5		--
8								
10	SP-SAND, trace silt, compact, fine grained, orangish brown, moist	10.00	BENTONITE CHIPS					0.0
	- wet at 10.8ft BGS			3DP		70		
12								
	- gray from 13.7 to 15.2ft BGS			(12.5-15 -065)				0.0
14								
16	CL-CLAY, trace silt, stiff, low plasticity, gray, moist	15.20						0.0
				4DP		100		
18								0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 5/27/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-67
DATE COMPLETED: December 7, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	PID (ppm)
0	ASPHALT	0.40						0.0
	CONCRETE DEBRIS	1.80		1DP				
2	SM-SILT, few fine grained sand, compact, dark brown, moist, small pieces of concrete throughout	3.00						0.0
4	PULVERIZED CONCRETE	4.20						
	MIXTURE, asphalt, trace concrete pieces and black sand, no odor	5.00						0.0
6	- turquoise powder at 4.3ft BGS							
8	SP-SAND, few silt, compact, fine grained, orangish brown, moist			2DP				0.0
	- flat material, white, with orange between sheets from 7.4 to 7.9ft BGS		BENTONITE CHIPS					
10	- silt seam from 9.6 to 9.7ft BGS							0.0
	- wet at 10.3ft BGS	11.50						
12	CL-CLAY, with silt, low plasticity, brown, moist	12.30		3DP				
	SP-SAND, trace silt, compact, fine grained, orangish brown, wet			(12.5-15' -063/ 064)				0.0
14	- gray from 14.6 to 17.2ft BGS							
16								0.0
	CL-CLAY, trace silt, stiff, low plasticity, gray, moist	17.20		4DP				
18								0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-68
DATE COMPLETED: December 7, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40						
	CONCRETE DEBRIS	1.50						0.0
2	- trace silt orangish brown from 1.8 to 7.1ft BGS			1DP		70		
4	SP-SAND, few silt, compact, fine grained, brown, moist							0.0
6	- silt seam, concrete debris mixed in, orangish red from 3.1 to 3.2ft BGS							0.0
8	- silty sand, orangish brown from 7.1 to 7.5ft BGS		BENTONITE CHIPS	2DP		70		
	- silty seam, orangish red from 7.4 to 7.5ft BGS							50.7
10	- trace silt, orangish brown from 7.5 to 8.8ft BGS							
	- grayish brown from 8.8 to 11.5ft BGS			10-12.5 -061				330
12	- stained black lens, slight odor (0.03" thick) at 9.2ft BGS							
	- wet at 10.4ft BGS			3DP		80		
	- trace silt, gray, wet, odor from 11.5 to 14.0ft BGS							170.8
14	- sheen, odor from 12.5 to 14.0ft BGS	14.00						
	CL-CLAY, with silt, firm, low plasticity, gray, very moist	15.00						
16	- trace silt, stiff, moist from 14.3 to 20.0ft BGS							
18	END OF BOREHOLE @ 15.0ft BGS							
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-69
DATE COMPLETED: December 7, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	ASPHALT	0.40						
	CONCRETE DEBRIS							0.0
2		2.40		1DP		80		
	SP-SAND, with silt, compact, fine grained, dark orangish brown, moist							
4	- pulverized concrete from 3.2 to 3.3ft BGS							0.0
	- trace silt, orangish brown from 3.3 to 5.0ft BGS							
6	- silt seam, dark brown from 3.5 to 3.6ft BGS							--
	- orangish brown sand, nail in bottom of sleeve from 5.0 to 10.0ft BGS		BENTONITE CHIPS	2DP		5		
8								--
10	- trace silt, gray, wet, strong odor from 10.0 to 13.2ft BGS							
				10-12.5 -059				195
12				3DP		90		
		13.20						
14	CL-CLAY, few silt, firm, low plasticity, gray, very moist							0.0
	- trace silt, stiff from 13.8 to 15.0ft BGS	15.00						
16	END OF BOREHOLE @ 15.0ft BGS							
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-70
DATE COMPLETED: December 7, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40	BENTONITE CHIPS					0.0
	CONCRETE DEBRIS							
2	SP-SAND, few silt, compact, fine grained, dark brown, moist	2.20		1DP		70		0.0
4	- asphalt, black from 2.9 to 3.0ft BGS - trace silt, trace fine gravel, orangish brown from 3.0 to 7.3ft BGS							
6								0.0
8	- silty sand from 7.3 to 7.8ft BGS - silt seam from 7.6 to 7.8ft BGS - trace silt from 7.8 to 15.2ft BGS			2DP		65		0.0
10	- silt lens, light brown (0.02' thick) at 9.6ft BGS - wet at 10.5ft BGS							0.0
12				3DP		90		
14	- grayish brown from 13.8 to 15.2ft BGS			(12.5-15 -062)				0.0
16	CL-CLAY, trace silt, stiff, low plasticity, gray, moist	15.20		4DP				0.0
18								0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-71
DATE COMPLETED: December 7, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	ASPHALT	0.40						0.0
	CONCRETE DEBRIS - asphalt, black from 2.8 to 2.9ft BGS	3.20		1DP		70		0.0
	SP-SAND, few silt, compact, fine grained, brown, moist - trace silt, orangish brown from 4.1 to 5.5ft BGS - silty sand, orangish brown from 5.5 to 8.0ft BGS - wet at 7.3ft BGS - silt seam, light gray/brown, very moist from 8.0 to 8.4ft BGS - trace silt, orangish brown, wet from 8.0 to 10.3ft BGS - silty clay, gray, very moist from 10.3 to 10.7ft BGS - silty sand, grayish brown, wet from 10.7 to 12.1ft BGS - silt seam from 12.1 to 12.2ft BGS - trace silt from 12.2 to 15.0ft BGS - silty sand from 15.0 to 15.8ft BGS	15.80	BENTONITE CHIPS	2DP		80		0.0
				10-12.5 -060				0.0
				3DP		90		0.0
	CL-CLAY, trace silt, stiff, low plasticity, gray, moist			4DP				0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-72
DATE COMPLETED: December 7, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40	BENTONITE CHIPS					0.0
2	CONCRETE DEBRIS - wood debris, black from 1.8 to 2.0ft BGS	2.00		1DP		80		0.0
4	SP-SAND, trace silt, compact, fine grained, moist, light brown - orangish brown from 2.5 to 8.3ft BGS							0.0
6	- with silt from 5.7 to 8.3ft BGS			2DP		70		0.0
8	- wet at 7.3ft BGS - silt seam, light gray, very moist from 8.3 to 8.5ft BGS							0.0
10	- with silt, grayish brown, wet from 8.5 to 11.2ft BGS							0.0
12	- grayish brown, wet from 11.2 to 13.2ft BGS			3DP (12.5-15') -057/ 058		90		0.0
14	- gray from 13.2 to 20.0ft BGS							0.0
16								0.0
18	CL-CLAY, trace silt, stiff, low plasticity, gray, moist	16.90		4DP		100		0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-73
DATE COMPLETED: December 4, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40		0-2' -008				0.0
2	SP-SAND, few silt, trace fine gravel, compact, fine grained, brown, moist			1DP		70		
4	- silt lens from 3.7 to 3.8ft BGS - pulverized concrete from 3.8 to 3.9ft BGS - tan from 3.9 to 8.5ft BGS							0.0
6								0.0
8	- sandy silt, tan/gray from 8.5 to 9.4ft BGS			6-8' -009 2DP		70		
10	- trace silt, gray from 9.4 to 16.2ft BGS - wet at 10.0ft BGS		BENTONITE CHIPS					0.0
12	- silty clay seam from 11.9 to 12.2ft BGS			10-12.5' -010				0.0
				3DP		80		
14								0.0
16	- silty clay seam from 16.1 to 16.2ft BGS - silty sand, wet from 16.2 to 18.3ft BGS							0.0
18		18.30		4DP		100		
	CL-CLAY, trace silt, stiff, low plasticity, gray, moist							0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-74
DATE COMPLETED: December 4, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40		0-2' -003				0.0
2	SP-SAND, trace silt, compact, fine grained, brown to dark brown, moist			1DP		70		
	- silt lens, brown from 2.8 to 2.9ft BGS							0.0
4	- tan from 3.3 to 13.3ft BGS							
6								0.0
	- sandy silt seam, tan from 6.8 to 7.1ft BGS			6-8" -004 2DP		70		
8	- clay lens, gray from 8.3 to 8.4ft BGS		BENTONITE CHIPS					
	- gray from 8.4 to 15.0ft BGS							0.0
10	- silty sand, wet from 10.0 to 10.2ft BGS							
12								0.0
	- alternating layers of silty clay and fine sand, wet at 12.7ft BGS			3DP		80		
14		14.30						0.0
	CL-CLAY, with silt, firm, low plasticity, gray, moist	15.00						
16	END OF BOREHOLE @ 15.0ft BGS							
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-75
DATE COMPLETED: December 4, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40		0-2' -005				0.0
2	SP-SAND, few silt, trace fine gravel, compact, fine grained, brown, moist			1DP		70		
4	- higher silt content, dark brown, pieces of wooden board from 3.7 to 5.0ft BGS - fine san, gray, moist, wood board at bottom of run from 5.0 to 10.0ft BGS							0.0
6								0.0
8			BENTONITE CHIPS	6-8' -006 2DP		70		
10	- wet at 10.0ft BGS							0.0
12	- silty clay seam, gray from 11.5 to 11.7ft BGS - black staining at 12.2ft BGS - silty clay seam, gray from 12.9 to 13.0ft BGS			10-12.5' -011				0.0
14	- sheen from 14.1 to 14.2ft BGS	14.20		3DP 12-14' -007		85		0.0
16	CL-CLAY, with silt, firm, low plasticity, gray, moist END OF BOREHOLE @ 15.0ft BGS	15.00						
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-76
DATE COMPLETED: December 4, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40		0-2' -001				0.0
2	SP-SAND, few silt, trace fine gravel, compact, fine grained, brown to dark brown, moist - silt seam from 2.7 to 3.2ft BGS - pulverized concrete from 2.8 to 3.0ft BGS			1DP				
4	- trace silt, tan from 3.4 to 7.1ft BGS							0.0
6								0.0
	- with silt from 7.1 to 9.5ft BGS			6-8" -002 2DP				
8								0.0
10	- sandy silt, gray from 9.5 to 9.7ft BGS - wet at 10.0ft BGS		BENTONITE CHIPS					
12				3DP				0.0
14	- gray from 13.8 to 20.0ft BGS - clay lens, gray from 14.5 to 14.6ft BGS							0.0
		14.90						
16	CL-CLAY, with silt, firm, low plasticity, gray, very moist							0.0
18	- no silt, stiff at 17.4ft BGS			4DP				0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-77
DATE COMPLETED: December 4, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40		0-2' -012				0.0
2	SP-SAND, trace silt and fine gravel, compact, fine grained, brown, moist - silt seam from 2.6 to 2.7ft BGS			1DP		70		
4	- orangish tan from 4.0 to 11.5ft BGS							0.0
6								0.0
8	- higher silt content from 8.3 to 8.7ft BGS			2DP 6.5-8.5' -013		70		0.0
10	- wet at 10.5ft BGS		BENTONITE CHIPS					
12	- gray from 11.5 to 20.0ft BGS			10-12.5' -014				0.0
				3DP		80		
14								0.0
16	- sandy silt from 15.9 to 17.5ft BGS							0.0
18	CL-CLAY, trace silt, stiff, low plasticity, gray, moist	17.50		4DP		100		0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-78
DATE COMPLETED: December 5, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40		0-2' -031				0.0
2	SP-SAND, trace silt, compact, fine grained, orangish brown, moist			1DP		70		
4	- higher silt content from 3.8 to 4.3ft BGS							0.0
6								0.0
8	- silty sand from 6.9 to 9.2ft BGS - tan from 8.6 to 12.8ft BGS			2DP 7.5-9.5' -032		70		0.0
10			BENTONITE CHIPS					
12	- wet at 11.6ft BGS - gray from 12.8 to 20.0ft BGS			3DP		75		0.0
14				12.5-15' -034				0.0
16	- sheen, dark gray, black and dark brown from 15.7 to 16.7ft BGS			14.7-16.7' -033				123.6
	CL-CLAY, trace silt, stiff, low plasticity, gray, moist	16.70		4DP		90		
18								0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-79
DATE COMPLETED: December 5, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40		0-2' -035				0.0
2	SP-SAND, trace silt, compact, fine grained, orangish brown, moist			1DP		65		
	- with silt, brown from 2.8 to 3.6ft BGS							0.0
4	- silty clay seam, brown from 3.0 to 3.1ft BGS - fine sand, tan from 3.6 to 7.5ft BGS							
6								0.0
	- higher silt content from 7.5 to 8.4ft BGS			2DP		70		
8				8-10' -036				0.0
10			BENTONITE CHIPS					
	- silty sand from 11.0 to 17.4ft BGS							0.0
12	- wet at 11.8ft BGS - gray from 12.2 to 20.0ft BGS			3DP		80		
14				12.5-15 -037				0.0
16	- silty clay seam from 15.6 to 15.7ft BGS							0.0
	- silty clay seam from 16.9 to 17.0ft BGS							
18	- stained black, no odor from 17.0 to 17.4ft BGS	17.40		4DP		95		
	CL-CLAY, trace silt, stiff, low plasticity, gray, moist							0.0
20		20.00						
	END OF BOREHOLE @ 20.0ft BGS							
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-80
DATE COMPLETED: December 5, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40		0-2' -022				0.0
2	SP-SAND, trace silt and fine gravel, compact, fine grained, orangish brown, moist - concrete from 2.4 to 2.7ft BGS - silt seam from 2.9 to 3.0ft BGS - higher silt content from 4.1 to 5.3ft BGS			1DP		60		
4								0.0
6								0.0
8				2DP		60		
				8-10' -023				0.0
10			BENTONITE CHIPS					
								0.0
12	- wet at 12.0ft BGS - gray from 12.5 to 20.0ft BGS			3DP		80		
14				12.5-15' -025				14.1
				14.3-16.3' -024				
16	- sheen, bands of brown, black and dark gray from 15.7 to 16.3ft BGS	16.30						443
18	CL-CLAY, trace silt, stiff, low plasticity, gray, moist			4DP		100		
								0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-81
DATE COMPLETED: December 5, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40						
2	SP-SAND, few silt, compact, fine grained, brown, moist							0.0
	- pulverized concrete from 2.8 to 2.9ft BGS			1DP		60		
4	- higher silt content, dark green from 2.9 to 3.4ft BGS							62.4
	- pulverized concrete from 3.4 to 3.5ft BGS							
6	- silty sand, dark gray to black, odor, dark gray to black, odor, wood bard particles at bottom of run from 3.5 to 10.5ft BGS							--
8				2DP		20		395
10			BENTONITE CHIPS					
	- very silty sand, gray, wet from 10.5 to 13.0ft BGS			10-12.5 -015				195
12	- silty clay seam, no odor from 12.3 to 12.4ft BGS			3DP		70		
	- trace silt from 13.0 to 17.5ft BGS							0.0
14								
16								0.0
	- dark gray to black, no odor from 17.0 to 17.5ft BGS							
18		17.50		4DP		90		0.0
	CL-CLAY, trace silt, stiff, low plasticity, gray, moist							
20		20.00						
	END OF BOREHOLE @ 20.0ft BGS							
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (10-12.5 -015)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-82
DATE COMPLETED: December 5, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	PID (ppm)
	ASPHALT	0.40		0-2' -019/ 020				0.0
2	SP-SAND, trace silt and fine gravel, compact, fine grained, brown, moist			1DP				
4	- silt seam, black from 3.1 to 3.2ft BGS - possible piece of fly ash (1x1") at 3.8ft BGS							0.0
6	- higher silt content from 4.7 to 5.0ft BGS							0.0
8	- silty sand, orangish brown from 8.1 to 8.7ft BGS			2DP 8-10' -021				0.0
10	- tan from 9.6 to 12.7ft BGS		BENTONITE CHIPS					
12	- wet at 12.2ft BGS - gray from 12.7 to 20.0ft BGS			3DP				0.0
14	- very silty sand from 14.7 to 16.9ft BGS							0.0
16								0.0
	CL-CLAY, trace silt, stiff, low plasticity, gray, moist	16.90		4DP				
18								0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-83
DATE COMPLETED: December 5, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40		0-2' -016				0.0
2	SP-SAND, with silt, trace fine gravel, compact, brown to orangish brown, moist - mixture of pulverized concrete and soil from 2.5 to 3.7ft BGS			1DP		65		
4	- piece of concrete from 3.7 to 3.8ft BGS - trace silt, fine sand, tan from 3.8 to 7.4ft BGS							0.0
6								0.0
8	- silty clay seam, tan from 7.4 to 7.6ft BGS - silty sand, brown to orangish brown from 7.6 to 9.1ft BGS			2DP 7.5-9.5' -017		70		0.0
10	- gray from 8.7 to 20.0ft BGS - trace silt from 9.1 to 16.0ft BGS		BENTONITE CHIPS					0.0
12	- black stain, no odor from 11.3 to 11.4ft BGS - wet at 11.5ft BGS - silty clay seam, gray from 12.4 to 12.6ft BGS			3DP		80		0.0
14	- silty clay seam, gray, slight odor from 13.0 to 13.2ft BGS			12.5-15' -018				0.0
16	- few silt from 16.0 to 17.0ft BGS							0.0
18	CL-CLAY, with silt, low plasticity, firm, gray, moist - stiff from 17.6 to 20.0ft BGS	17.00		4DP		100		0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-84
DATE COMPLETED: December 5, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	ASPHALT	0.40						
2	SP-SAND, with silt, fine gravel, compact, fine grained, brown, moist - pulverized concrete from 2.6 to 2.7ft BGS - silty clay, brown from 2.7 to 3.1ft BGS			1DP		60		0.0
4								0.0
6								0.0
8	- concrete/metal, reddish from 7.9 to 8.0ft BGS - trace silt, black to dark gray, strong odor from 8.0 to 17.2ft BGS			2DP		65		268
10			BENTONITE CHIPS					
12	- silty clay seam, gray from 11.4 to 11.5ft BGS - wet at 11.7ft BGS			3DP		80		596
14	- sheen from 14.3 to 15.0ft BGS			(12.5-15 -026)				712
16								502
18	CL-CLAY, trace silt, stiff, low plasticity, gray, moist, no odor	17.20		4DP		100		0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-85
DATE COMPLETED: December 6, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: C. TORT

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	ASPHALT	0.40		0-2' -042				6.7
	- trace silt, dark brown from 0.7 to 2.5ft BGS							
2	SP-SAND, with fine gravel, fine grained, light brown, moist			1DP		80		
	- paint sludge, yellow, solid, light weight from 2.5 to 3.0ft BGS							20.5
4	- trace silt, dark brown from 3.0 to 6.0ft BGS							
6	SM-SILTY SAND, trace fine grained sand	6.00		5-7' -043				356
	CL-CLAY, brown, moist	7.00		2DP		70		
8	SM-SILTY SAND, moist	8.00						311
10	- wet at 10.0ft BGS		BENTONITE CHIPS					
	CL-CLAY	10.50						311
12				3DP		75		
	SM-SILTY SAND, dark brown to gray	13.00						5.4
14								
16								9.0
	CL-CLAY, gray	17.00		4DP		90		
18								0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-86
DATE COMPLETED: December 6, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: C. TORT

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	ASPHALT	0.33		0-2' -045				12.2
	SP-SAND, and gravel, fine grained, brown, dry	0.83						
2	SP-SAND, trace clay, trace fine gravel, trace silt, brown, dry			1DP		60		1.3
4								
6	- silty, gray at 6.0ft BGS							0.0
8				2DP		90		
				8-10' -046				0.0
10			BENTONITE CHIPS					
	CL-SILTY CLAY, brown	11.00						0.0
12	- saturated at 12.0ft BGS			3DP		80		
	SP-SAND, trace silt, fine grained, gray, saturated	13.00						0.0
14		14.00						
	SM-SILT, very fine grained, gray, saturated							0.0
16								
	CL-CLAY, gray	17.00		4DP		95		
18								0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-87
DATE COMPLETED: December 6, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40						
2	SP-SAND, trace silt, compact, fine grained, brown, moist - pulverized concrete from 2.3 to 2.4ft BGS							0.0
				1DP		75		
4	- tan from 2.4 to 4.3ft BGS - grayish tan from 4.3 to 6.6ft BGS							0.0
6	- slight odor from 5.7 to 6.6ft BGS - perched water from 6.4 to 6.6ft BGS							143.7
				2DP		75		
8	- clayey silt seam, greenish gray from 6.6 to 7.3ft BGS - gray, strong odor from 7.3 to 11.0ft BGS							536
10			BENTONITE CHIPS					
	CL-SILTY CLAY, firm, low plasticity, greenish brown, moist, no odor	11.00						747
12	- alternating seams of stained sand, black, dark gray, brown, wet from 12.5 to 16.7ft BGS	12.50		3DP		80		
				(12.5-15 -048)				592
14	SP-SAND, with silt, compact, fine grained, black to gray, wet, strong odor							
16	- sheen, strong odor from 15.9 to 16.7ft BGS							370
	CL-CLAY, few silt, firm, low plasticity, gray, moist	16.70		4DP		90		
18	- fine to medium grained sand, gray, moist, no odor from 17.1 to 17.2ft BGS							0.0
20	- trace silt, stiff from 17.2 to 20.0ft BGS	20.00						
	END OF BOREHOLE @ 20.0ft BGS							
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-88
DATE COMPLETED: December 6, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: C. TORT

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.33		0-2' -040				0.0
	SP-SAND, and gravel, fine sand, gray, dry	0.83						
2	SP-SAND, fine grained, brown, moist	1.83		1DP		70		
	CONCRETE	1.92						0.0
4	SP-SAND, trace fine gravel, fine grained, dark brown, moist							
6	SP-SAND, and silt, fine grained, brown, moist	6.00		2DP		80		0.0
8	SM-SILT, trace fine grained sand, moist	8.00		7-9' -041				0.0
10	- saturated at 10.0ft BGS		BENTONITE CHIPS	3DP		70		
12								0.0
	CL-CLAY, with silt	13.00						
14				4DP		80		0.0
16								0.0
18				5DP		80		
20	END OF BOREHOLE @ 20.0ft BGS	20.00						0.0
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-89
DATE COMPLETED: December 6, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: C. TORT

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40						14.9
	- no gravel from 0.7 to 2.0ft BGS							
2	SP-SAND, with fine gravel, compact, fine grained, dark gray, moist	2.00		1DP		70		
		3.00						9.5
4	CL-SANDY CLAY, firm, low plasticity, brown, moist	4.00						
	SP-SAND, with fine gravel, fine grained, dark brown, moist	5.00						53.4
6	CL-SANDY CLAY, brown, moist							
	SP-SAND, with silt, fine grained, gray to dark gray, moist			2DP		70		
8								638
10			BENTONITE CHIPS					
	- dark gray at 11.0ft BGS							2438
12	- wet at 12.0ft BGS	12.00		3DP		80		
	CL-CLAY, gray	13.00		(12.5-15 -044)				145
14	- fine to medium sand lens, gray at 12.5ft BGS							
	SM-SILTY SAND, gray							
16	- sheen from 13.5 to 13.7ft BGS	15.50						28.3
	CL-CLAY, gray			4DP		100		
18								0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (12.5-15 -044)

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-90
DATE COMPLETED: December 5, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40		0-2' -027				0.0
2	CL-CLAY, with silt, trace fine gravel, firm, low plasticity, brown, moist	2.70		1DP		70		
4	SP-SAND, trace silt, compact, fine grained, orangish tan, moist							0.0
6	- silty clay seam, orangish brown from 4.9 to 5.0ft BGS - with silt from 5.0 to 11.2ft BGS							0.0
8				2DP		75		
10	- silt seam, gray to dark gray from 8.8 to 8.9ft BGS - light gray at 8.9ft BGS - silty clay seam, gray from 9.7 to 9.8ft BGS		BENTONITE CHIPS	8-10' -028/ 029				0.0
12	- fine sand seam, gray from 11.5 to 11.6ft BGS	11.20						0.0
	CL-CLAY, with silt, firm, low plasticity, gray, very moist	12.90		3DP		80		
14	- fine sand seam, gray from 12.0 to 12.2ft BGS - fine sand lens, gray (0.05' thick) at 12.5ft BGS							0.0
16	SP-SAND, trace silt, compact, fine grained, gray, wet	17.00		15-17.5' -030				0.0
18	CL-CLAY, trace silt, stiff, low plasticity, gray, moist			4DP				0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-91
DATE COMPLETED: December 6, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40						
2	SP-SAND, trace silt, compact, fine grained, orangish brown, moist - pulverized concrete at 2.2ft BGS			1DP		85		14.9
4	- small pieces of coal-like substance, stained black, slight odor from 2.2 to 3.5ft BGS - orangish tan from 3.5 to 6.1ft BGS							0.0
6	- higher silt content, gray-brown, strong odor from 6.1 to 7.4ft BGS							296
8	- silt seam, greenish gray, odor from 7.4 to 7.6ft BGS			2DP		70		
10	- gray, slight odor from 7.6 to 9.4ft BGS - silt from 9.4 to 10.0ft BGS - few silt from 10.0 to 11.1ft BGS - wet at 10.9ft BGS		BENTONITE CHIPS					97.2
12	- gray from 11.1 to 20.0ft BGS	11.90						0.0
	CL-CLAY, with silt, firm, low plasticity ,gray, very moist	12.80		3DP		80		
14	SP-SAND, trace silt, compact, fine grained, gray, wet - with silt from 15.7 to 17.6ft BGS			(12.5-15 -049)				0.0
16								0.0
18	CL-CLAY, trace silt, stiff, low plasticity, gray, moist	17.60		4DP		90		0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-92
DATE COMPLETED: December 6, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40		0-2' -051				0.0
	CONCRETE DEBRIS	1.20		1DP		70		0.0
2	SP-SAND, trace silt, compact, fine grained, orangish brown, moist							
4	- pulverized concrete from 3.4 to 3.5ft BGS - silty clay lens, brown (0.04' thick) at 4.1ft BGS							0.0
6								0.0
8				2DP 7.5-9.5' -052		40		0.0
10	- pulverized concrete at 9.0ft BGS		BENTONITE CHIPS					0.0
12	- gray from 11.4 to 20.0ft BGS - wet at 11.5ft BGS - silty clay seam, gray from 12.2 to 12.3ft BGS			3DP		70		
14	- silty clay lens, gray (0.04' thick) at 12.9ft BGS - silty clay seam, gray from 14.6 to 15.1ft BGS			12.5-15' -053				0.0
16	- silty sand, gray, wet from 15.1 to 15.5ft BGS	15.50						0.0
18	CL-CLAY, trace silt, stiff, low plasticity, gray, moist			4DP		100		0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-93
DATE COMPLETED: December 7, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40						
	CONCRETE DEBRIS	1.00						0.0
2	SP-SAND, trace silt, compact, fine grained, brown, moist	2.50		1DP		70		
4	CL-SILTY CLAY, trace fine gravel, firm, low plasticity, dark gray, pieces of concrete throughout							140.9
6	- silty sand, concrete debris mixed in, gray from 3.9 to 4.4ft BGS - silty sand, gray, odor from 4.9 to 5.0ft BGS							248
8	SM-SILTY SAND, trace clay, compact, fine grained, dark gray, very moist, odor	7.70		2DP		80		
10	- mixture of glass, metal screws, red brick and silt from 9.4 to 10.0ft BGS - stained black from 10.0 to 11.5ft BGS		BENTONITE CHIPS					174
12	SP-SAND, with silt, compact, fine grained, dark gray, wet	11.50		3DP		80		75
14	- silty clay, gray from 13.7 to 14.3ft BGS - silty sand, gray, wet from 14.3 to 15.9ft BGS			(12.5-15 -056)				0.0
16	- trace silt from 15.9 to 17.1ft BGS							0.0
18	CL-CLAY, trace silt, stiff, low plasticity, gray, moist	17.10		4DP		100		0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-94
DATE COMPLETED: December 6, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: E. MICKELSON

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.40						
2	SP-SAND, few silt, compact, fine grained, brown, moist - pulverized concrete from 2.6 to 2.7ft BGS			1DP		60		0.0
4	- concrete at 3.8ft BGS - pulverized concrete at 4.5ft BGS							0.0
6								0.0
8	- glass shards at 7.4ft BGS - concrete from 8.0 to 8.1ft BGS - gray, strong odor at 8.3ft BGS			2DP		70		738
10	- stained black, odor at 8.6ft BGS		BENTONITE CHIPS					
12	- wet at 11.6ft BGS - with silt, strong odor from 11.8 to 12.9ft BGS			3DP		60		110
14	- stained black, strong odor at 12.7ft BGS - silty clay seam, gray, no odor from 14.7 to 15.0ft BGS			(12.5-15 -050)				42.5
16	- trace silt, no odor from 15.0 to 17.8ft BGS							0.0
18	CL-CLAY, trace silt, stiff, low plasticity, gray, moist	17.80		4DP		90		0.0
20	END OF BOREHOLE @ 20.0ft BGS	20.00						
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 17303.GPJ CRA_CORP.GDT 1/24/13