Eco•Systems, Inc.
Consultants, Engineers, and Scientists

August 28, 2002

Mr. William McKercher
Environmental Engineer
Office of Pollution Control
Mississippi Department of Environmental Quality (MDEQ)
Jackson, Mississippi 39289-0385

Re: Results of Monitoring Well and Piezometer Installation
Site Investigation Work Plan, dated February 16, 1999
As modified by Addendum 1 – Task 4 for Site Investigation Work Plan, dated March 16, 2000
Hercules Inc. Hattiesburg Facility
Hattiesburg, Mississippi

Dear Mr. Mckercher:

Per the request of the MDEQ, Eco-Systems, Inc. is submitting on behalf of Hercules, Inc. (Hercules) the results of field activities completed in April/May 1999 and February 2000. These field activities were conducted in accordance with Hercules' *Site Investigation Work Plan* (Eco-Systems, February 1999) and additional MDEQ comments. The field activities included the installation of fourteen piezometers (TP-1 through TP-14) and five monitoring wells (MW-7, MW-8, MW-9, MW-10, and MW-11). Boring logs and well completion forms along with site maps depicting well locations are attached for your reference.

If you have any questions or require additional information, please do not hesitate to call Mr. Timothy Hassett at (302) 995-3456 or Caleb Dana (Eco-Systems) at (601) 936-4440.

Sincerely,

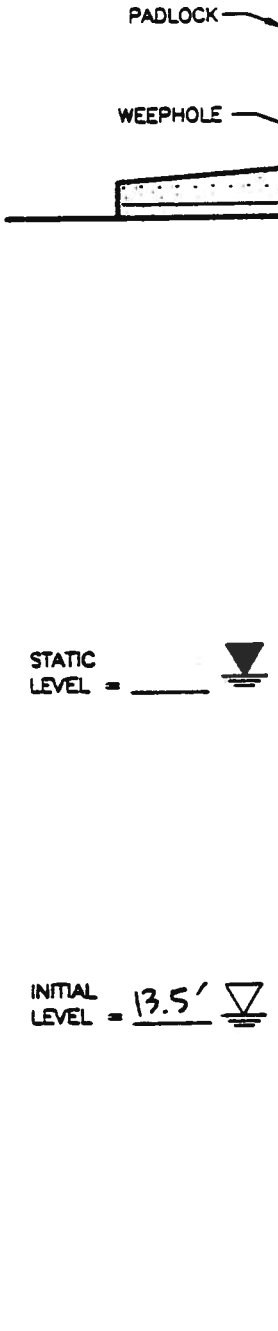
Caleb H. Dana, Jr., P.E., CHMM
Senior Principal Engineer

cc: Timothy Hassett – Hercules Inc. w/ attachments
C. S. Jordan – Hercules, Hattiesburg w/ attachments
Tony Russell, MDEQ w/o attachments
Rick Sumrall, MDEQ w/o attachments

MONITORING WELL COMPLETION FORM

PROJECT NAME Hercules
LOCATION Hattiesburg, MS
DATE COMPLETED 2/22/00
DRILLER G + E Services
GEOLOGIST Ryan

PAGE 1 OF 1
WELL NO MW-7
DRILLING METHOD HSA
METHOD OF DEVELOPMENT



HEIGHT OF TOP OF SURFACE CASING ABOVE GROUND SURFACE
ELEVATION/HEIGHT OF TOP OF RISER PIPE
FILLER MATERIAL
SIZE AND TYPE OF APRON
PAD ELEVATION
GROUND SURFACE ELEVATION
TYPE OF SURFACE SEAL Portland Cement with Sand
INSIDE DIAMETER OF SURFACE CASING 4"
TYPE OF SURFACE CASING 4" x 4" x 5' Hinged Metal Shroud
DEPTH OF SURFACE CASING BELOW GROUND 2.4'
DEPTH OF SURFACE SEAL BELOW GROUND SURFACE 1'
INSIDE DIAMETER OF RISER PIPE 2"
TYPE OF RISER PIPE PVC
DIAMETER OF BOREHOLE 6 3/4"
TYPE OF BACKFILL Pure Gold Bentonite Gel
DEPTH OF TOP OF SEAL (PRE/POST HYDRATION) 6'
TYPE OF SEAL Bentonite Chips
DEPTH OF TOP OF SAND PACK (INITIAL/POST SURGE/FINAL) 8'
DEPTH OF TOP OF SCREENED SECTION 10.4'
TYPE OF SAND PACK 20/40 Filter Pack
TYPE OF SCREENED SECTION PVC Factory Slotted Pipe
OPENING SPACING 10 Slot
OPENING SIZE 0.01"
INSIDE DIAMETER OF SCREENED SECTION 2"
DEPTH OF BOTTOM OF SCREENED SECTION 20.4'
LENGTH OF BLANK SECTION N/A
CENTRALIZER
DEPTH OF BOTTOM OF PLUGGED BLANK SECTION 20.4'
TYPE OF BACKFILL BELOW OBSERVATION PIPE N/A
DEPTH OF BOREHOLE 20.8'

Eco-Systems, Inc.
Environmental Engineers and Scientists

BORING LOG

SHEET 1 OF __

PROJECT NAME: Hercules	BORING IDENTIFICATION: MW-7
PROJECT LOCATION: Hattiesburg, MS	BORE HOLE DIAMETER: 8"
PROJECT NUMBER:	
GEOLOGIST: J Ryan	BORING START TIME: 1045 DATE: 2-22-00
CLASSIFICATION SCHEME:	
DRILLER: C+E Services	BORING COMPLETED TIME: 1159 DATE: 2-22-00
DRILL METHOD: HSA	
WEATHER: Sunny & WARM (62°)	FINAL BORING DEPTH: 20'

RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL PID/blows/6"	LITHOLOGY	GROUNDWATER	FREE PRODUCT
				INITIAL DEPTH ____ DEPTH AFTER ____ MINUTES ____	THICKNESS ____ VOLUME ____
	2				
	4			No Sampling 0-10' (see TP-8 Log)	
	6				
	8				
	10				
10"	13.9	3/15 50/6"	SP	DAMP, med-dense, tan-brown, f.-med f.grn, SiSa w/Si, poorly sorted w/ gravel	
	12			moist, No odor	
13"	10.8	14/30 37/30	SP	wet-sat, Dense, tan-Hibrn, f-med	
	14				
19"	5.9	6/12 18/16	SM	SAT, med-dense, (sdmon fnt), v.f-med, SiSa (14'), trace gravel	
	16			Coarsens, Med-crs, Sa w/ Gravel, Gravelly Sa (16-18')	
13"	20.2	3/3 10/28	SM		
	18			18.4'	
Full	0.1	8/3 6/10	2.25 3.25 3.75	DRY, stiff, tan w/ gray mottling, clay w/Si (18.9')	
	20				
				TD = 20'	

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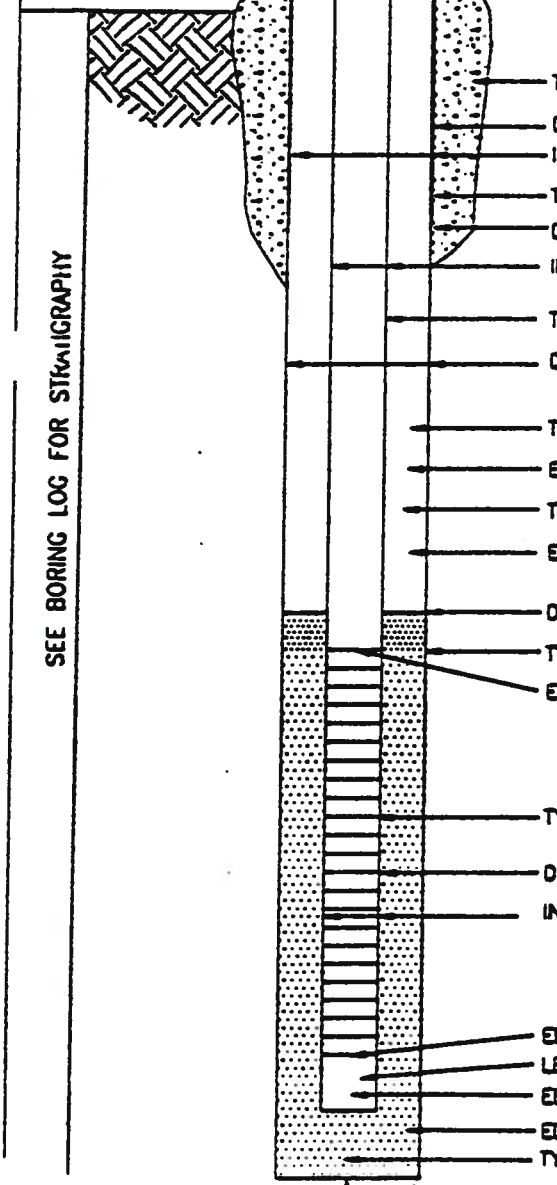
MONITORING WELL COMPLETION FORM

PROJECT NAME Hercules
LOCATION Hattiesburg, MS
DATE COMPLETED 2/22 ORIGINAL DEPTH
DRILLER G+E Services DRILL METHOD HSA
GEOLOGIST J Ryan DATE 2/22/00

PAGE 1 OF 1
WELL NO MW-8
ORIGINAL WATER LEVEL
DEPTH INTERVAL



ELEVATION OF TOP OF SURFACE CASING/RISER PIPE 4.0'
HEIGHT OF TOP OF SURFACE CASING/RISER PIPE ABOVE GROUND SURFACE -NA
TYPE OF SURFACE SEAL Portland Cement w/ Sand
DEPTH OF SURFACE SEAL BELOW GROUND SURFACE 2½"
INSIDE DIAMETER OF SURFACE CASING 4"
TYPE OF SURFACE CASING 4"x4"x5' Hinged Metal Sleeve
DEPTH OF SURFACE CASING BELOW GROUND 2.4"
INSIDE DIAMETER OF RISER PIPE 2.0"
TYPE OF RISER PIPE PVC
DIAMETER OF BOREHOLE 6 3/4"
TYPE OF BACKFILL Pure Gold Bentonite Grout
ELEVATION / DEPTH TOP OF SEAL
TYPE OF SEAL Bentonite Chips
ELEVATION / DEPTH BOTTOM OF SEAL 8.1/2"
DEPTH OF TOP OF SAND PACK 4.0"
TYPE OF SAND PACK 20/40 Filter Pack
ELEVATION / DEPTH TOP OF SCREENED SECTION 6.0"
TYPE OF SCREENED SECTION PVC slotted Pipe
DESCRIBE OPENINGS 10 slot
INSIDE DIAMETER OF SCREENED SECTION 0.01
ELEVATION / DEPTH BOTTOM OF SCREENED SECTION 16.0"
LENGTH OF BLANK SECTION 0.3"
ELEVATION/DEPTH BOTTOM OF PLUGGED BLANK SECTION 16.3"
ELEVATION/DEPTH BOTTOM OF SAND COLUMN -
TYPE OF BACKFILL BELOW OBSERVATION PIPE -
ELEVATION/DEPTH OF HOLE 16.3"

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BORING LOG

SHEET 1 OF ___

PROJECT NAME Hercules
PROJECT LOCATION Hattiesburg, MS
PROJECT NUMBER
GEOLOGIST J. Ryan
CLASSIFICATION SCHEME
DRILLER CLE Services
DRILL METHOD HSA
WEATHER Warm, Sunny, Windy

BORING IDENTIFICATION MW-8
BORE HOLE DIAMETER 6"
BORING START TIME 16:10 DATE 2/22/00
BORING COMPLETED TIME 1635 DATE 2-22-00
FINAL BORING DEPTH 16.3'

RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL	LITHOLOGY
	5		
	10		
	15		

GROUNDWATER
INITIAL DEPTH
DEPTH AFTER ___ MINUTES ___

FREE PRODUCT
THICKNESS
VOLUME

No Sampling
(See TP-10 Log)
- Installed ~7' west of TP-10

- Set MW-8 ~6-16'

Eco-Systems, Inc.
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MONITORING WELL COMPLETION FORM

PROJECT NAME Hercules
LOCATION Hattiesburg, MS
DATE COMPLETED 2/28/00
DRILLER G + E Services
GEOLOGIST

PAGE ____ OF ____
WELL NO MW-9
DRILLING METHOD HSA
METHOD OF DEVELOPMENT

HEIGHT OF TOP OF SURFACE CASING ABOVE GROUND SURFACE ____
ELEVATION/HEIGHT OF TOP OF RISER PIPE 2.8'
FILLER MATERIAL NA
SIZE AND TYPE OF APRON NA
PAD ELEVATION NA
GROUND SURFACE ELEVATION ____
TYPE OF SURFACE SEAL Portland Cement w/ sand
INSIDE DIAMETER OF SURFACE CASING 4"
TYPE OF SURFACE CASING 4" x 4" x 5' Hinged Metal Shroud
DEPTH OF SURFACE CASING BELOW GROUND 2.4'
DEPTH OF SURFACE SEAL BELOW GROUND SURFACE 1'
INSIDE DIAMETER OF RISER PIPE 2"
TYPE OF RISER PIPE PVC
DIAMETER OF BOREHOLE 6 3/4"
TYPE OF BACKFILL Pure Gold Bentonite Gel
DEPTH OF TOP OF SEAL (PRE/POST HYDRATION) 3'
TYPE OF SEAL Bentonite chips
DEPTH OF TOP OF SAND PACK (INITIAL/POST SURGE/FINAL) 5.0'
DEPTH OF TOP OF SCREENED SECTION 7.2'
TYPE OF SAND PACK 20/40 Filter Pack
TYPE OF SCREENED SECTION PVC Factory Slotted Pipe
OPENING SPACING 10 Slot
OPENING SIZE 0.01"
INSIDE DIAMETER OF SCREENED SECTION 2"
DEPTH OF BOTTOM OF SCREENED SECTION 17.2'
LENGTH OF BLANK SECTION 0.3'
CENTRALIZER
DEPTH OF BOTTOM OF PLUGGED BLANK SECTION 17.5'
TYPE OF BACKFILL BELOW OBSERVATION PIPE N/A
DEPTH OF BOREHOLE 17.5'

Eco-Systems, Inc.
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BORING LOG

SHEET 1 OF ___

PROJECT NAME Hercules
PROJECT LOCATION Hattiesburg, MS
PROJECT NUMBER
GEOLOGIST J. Ryan
CLASSIFICATION SCHEME
DRILLER G & E Services
DRILL METHOD HSA
WEATHER Sunny, Warm (70°), Windy

BORING IDENTIFICATION MW-9
BORE HOLE DIAMETER 8"
BORING START TIME 1445 DATE 2/22/00
BORING COMPLETED TIME 1518 DATE 2-22-00
FINAL BORING DEPTH 17.5'

GROUNDWATER
INITIAL DEPTH
DEPTH AFTER ___ MINUTES ___

FREE PRODUCT
THICKNESS
VOLUME

RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL	LITHOLOGY	
	2			No Sampling (0-5') ↓
24" (Full)	4 6.4 6	3/6 7/11		Sandy-Clay, Med-stiff to stiff, mottled coloring (brown, red, grey), sand content increases w/ depth, no odor, dam
	8			
14"	10 12	2/2 4/8		mst ~~to wet~~, firm, gray-tan wet, loose, w/ orange staining; vf-f Si (10-11.6')
	14			
20"	16 16.6	7/13 13/7	SP: CH	SAT, Med-dense, white-tan, Grav. Sand (f-cs) 16.6' 16.6' DRY stiff, brn-tan CL w/Si trace Si stringers
	18			
	20			Set MW-9 (10' Screen) TD=17.5'
	15			

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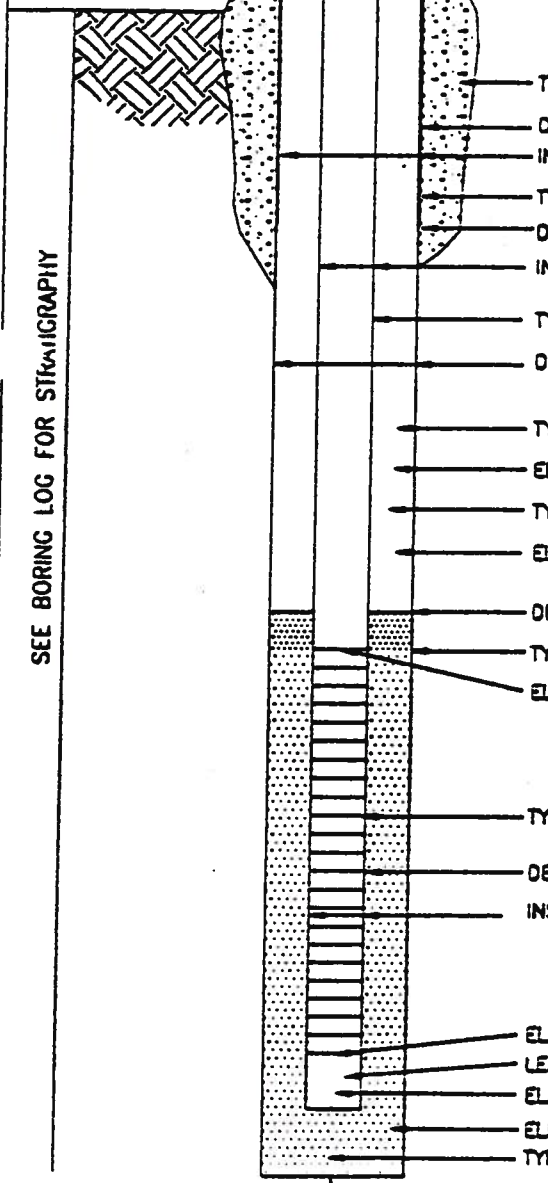
MONITORING WELL COMPLETION FORM

PROJECT NAME Hercules
LOCATION Hattiesburg, MS
DATE COMPLETED 2/23 ORIGINAL DEPTH
DRILLER G+E Services DRILL METHOD HSA
GEOLOGIST JRyan DATE 2/23/00

PAGE 1 OF 1
WELL NO MW-10
ORIGINAL WATER LEVEL
DEPTH INTERVAL



SEE BORING LOG FOR STRATIGRAPHY

ELEVATION OF TOP OF SURFACE CASING/RISER PIPE 3.3'
HEIGHT OF TOP OF SURFACE CASING/RISER PIPE ABOVE GROUND SURFACE NA
TYPE OF SURFACE SEAL Portland Cement w/ Sand
DEPTH OF SURFACE SEAL BELOW GROUND SURFACE 1'
INSIDE DIAMETER OF SURFACE CASING 4"
TYPE OF SURFACE CASING 4" x 4' x 5' Hinged Metal Shovel
DEPTH OF SURFACE CASING BELOW GROUND 2.4"
INSIDE DIAMETER OF RISER PIPE 2"
TYPE OF RISER PIPE PVC
DIAMETER OF BOREHOLE 6 3/4"
TYPE OF BACKFILL Pure Gold Bentonite Gel
ELEVATION / DEPTH TOP OF SEAL
TYPE OF SEAL Bentonite Chips
ELEVATION / DEPTH BOTTOM OF SEAL 2.0"
DEPTH OF TOP OF SAND PACK 4.0"
TYPE OF SAND PACK 20/40 Filter Pack
ELEVATION / DEPTH TOP OF SCREENED SECTION 6.7"
TYPE OF SCREENED SECTION PVC Slotted Pipe
DESCRIBE OPENINGS 10 slot
INSIDE DIAMETER OF SCREENED SECTION 0.01"
ELEVATION / DEPTH BOTTOM OF SCREENED SECTION 14.7"
LENGTH OF BLANK SECTION
ELEVATION/DEPTH BOTTOM OF PLUGGED BLANK SECTION 14.7"
ELEVATION/DEPTH BOTTOM OF SAND COLUMN
TYPE OF BACKFILL BELOW OBSERVATION PIPE N/A
ELEVATION/DEPTH OF HOLE 14.7"

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BORING LOG

SHEET 1 OF ___

PROJECT NAME Hercules
PROJECT LOCATION Hattiesburg, MS
PROJECT NUMBER
GEOLOGIST J Ryan
CLASSIFICATION SCHEME
DRILLER G+E Services
DRILL METHOD HSA
WEATHER

BORING IDENTIFICATION MW-10
BORE HOLE DIAMETER 8"
BORING START TIME 9:55 DATE 2/23/00
BORING COMPLETED TIME 10:07 DATE 2/23/00
FINAL BORING DEPTH 14'

RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL	LITHOLOGY
	5		
	10		
	15		

GROUNDWATER
INITIAL DEPTH
DEPTH AFTER ___ MINUTES ___

FREE PRODUCT
THICKNESS
VOLUME

No Sampling (refer to TP-12)

Eco-Systems, Inc.
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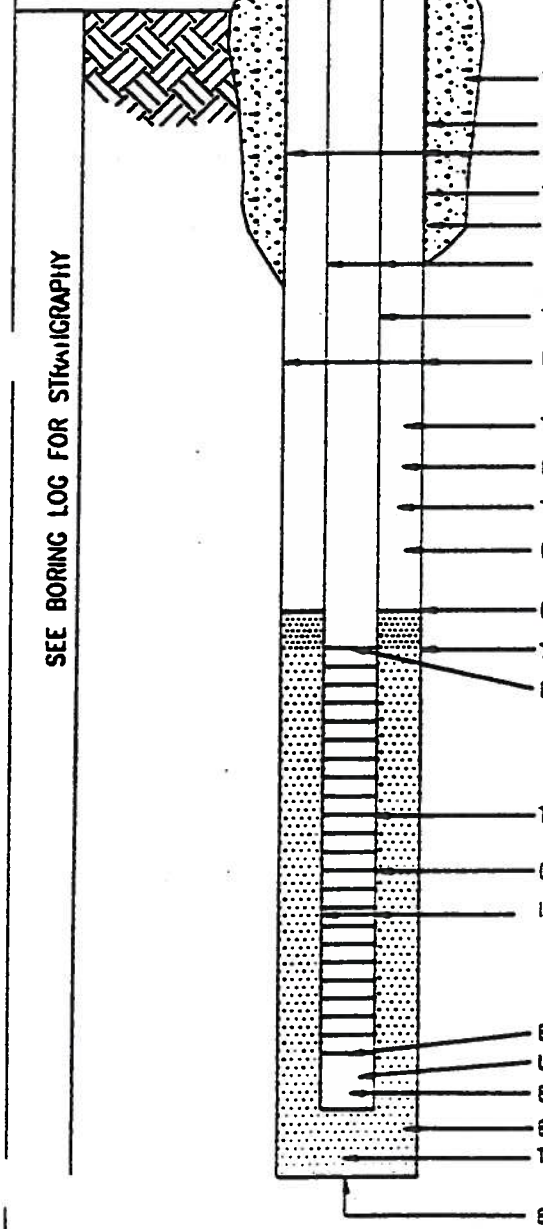
MONITORING WELL COMPLETION FORM

PROJECT NAME Hercules
LOCATION Hattiesburg, MS
DATE COMPLETED 2/23 ORIGINAL DEPTH
DRILLER J Ryan - G+E DRILL METHOD HSA
GEOLOGIST J Ryan DATE 2/23/00

PAGE 1 OF 1
WELL NO MW-11
ORIGINAL WATER LEVEL
DEPTH INTERVAL



SEE BORING LOG FOR STRATIGRAPHY

ELEVATION OF TOP OF SURFACE CASING/RISER PIPE
HEIGHT OF TOP OF SURFACE CASING/RISER PIPE ABOVE GROUND SURFACE
TYPE OF SURFACE SEAL Portland Cement w/ Sand
DEPTH OF SURFACE SEAL BELOW GROUND SURFACE 1"
INSIDE DIAMETER OF SURFACE CASING 4"
TYPE OF SURFACE CASING 4" x 4" x 5' Hinged Metal Shovel
DEPTH OF SURFACE CASING BELOW GROUND 2.4'
INSIDE DIAMETER OF RISER PIPE 2"
TYPE OF RISER PIPE PVC
DIAMETER OF BOREHOLE 6 3/4"
TYPE OF BACKFILL Pure Cold Bentonite Gel
ELEVATION / DEPTH TOP OF SEAL
TYPE OF SEAL Bentonite Chips
ELEVATION / DEPTH BOTTOM OF SEAL - 1.0"
DEPTH OF TOP OF SAND PACK 3.0"
TYPE OF SAND PACK 20/40 Filter Pack
ELEVATION / DEPTH TOP OF SCREENED SECTION 6.7"
TYPE OF SCREENED SECTION PVC Slotted Pipe
DESCRIBE OPENINGS 10 slot
INSIDE DIAMETER OF SCREENED SECTION 0.01
ELEVATION / DEPTH BOTTOM OF SCREENED SECTION 14"
LENGTH OF BLANK SECTION
ELEVATION/DEPTH BOTTOM OF PLUGGED BLANK SECTION 14"
ELEVATION/DEPTH BOTTOM OF SAND COLUMN
TYPE OF BACKFILL BELOW OBSERVATION PIPE
ELEVATION/DEPTH OF HOLE 14"

Eco-Systems
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SHEET 1 OF ___

BORING LOG

PROJECT NAME Hercules
PROJECT LOCATION Hattiesburg, MS
PROJECT NUMBER
GEOLOGIST J Ryan
CLASSIFICATION SCHEME
DRILLER G+E Services
DRILL METHOD HSA
WEATHER Cloudy and Mild

BORING IDENTIFICATION MW-11
BORE HOLE DIAMETER 8"
BORING START TIME AM 8:05 DATE 2/23/00
BORING COMPLETED TIME 8:15 DATE 2/23/00
FINAL BORING DEPTH 14'

RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL	LITHOLOGY
	5		
	10		
	15		

GROUNDWATER
INITIAL DEPTH [redacted]
DEPTH AFTER ___ MINUTES ___

FREE PRODUCT
THICKNESS ___
VOLUME ___

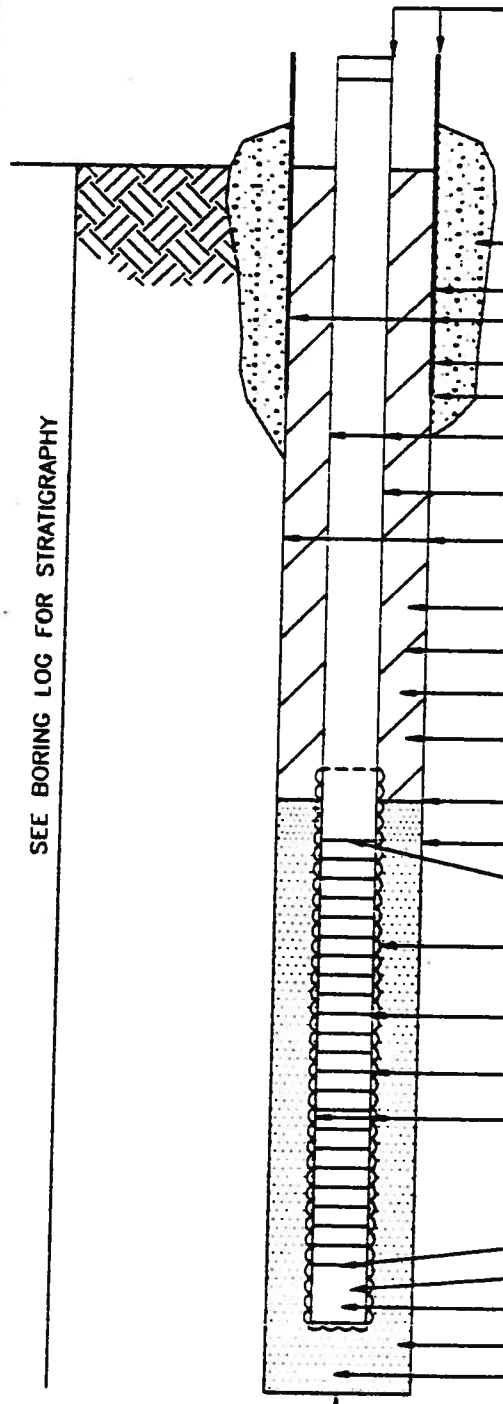
No Sampling (refer to TP-13)

Eco-Systems, Inc.
Environmental Engineers and Scientists

TEMPORARY MONITORING POINT COMPLETION FORM

PROJECT NAME Hercules
LOCATION Hattiesburg MS
DATE COMPLETED 4/28/99
DRILLER G+E Services
GEOLOGIST J Ryan
INSPECTED BY _____
BOREHOLE DEPTH _____
DRILL METHOD HSA
DATE _____

PAGE 1 OF 1
WELL NO. TP-1
BOREHOLE WATER LEVEL ~6'
STATIC WATER LEVEL ~6.3' BLS.
SCREEN INTERVAL 6.8-16.8'



SEE BORING LOG FOR STRATIGRAPHY

ELEVATION OF TOP OF SURFACE CASING/RISER PIPE ~~173.2'~~ 172.18

HEIGHT OF TOP OF SURFACE CASING/RISER PIPE ABOVE GROUND SURFACE NA / 3.2'

TYPE OF SURFACE SEAL NA

DEPTH OF SURFACE SEAL BELOW GROUND SURFACE NA

INSIDE DIAMETER OF SURFACE CASING NA

TYPE OF PROTECTIVE CASING NA

DEPTH OF PROTECTIVE CASING BELOW GROUND NA

INSIDE DIAMETER OF RISER PIPE _____

TYPE OF RISER PIPE 1" PVC

DIAMETER OF BOREHOLE 6"

TYPE OF BACKFILL High-Solid Bentonite Grout

ELEVATION / DEPTH TOP OF SEAL 3'

TYPE OF SEAL Bent. Chips

ELEVATION / DEPTH BOTTOM OF SEAL 5'

DEPTH OF TOP OF SAND PACK 5'

TYPE OF SAND PACK 20/40 Silica Sand Native 12-17' 20/40 4.5-12'

ELEVATION / DEPTH TOP OF SCREENED SECTION 6.8'

FILTER SOCK No!

TYPE OF SCREENED SECTION 1" PVC

DESCRIBE OPENINGS 10-Slot

INSIDE DIAMETER OF SCREENED SECTION 1"

ELEVATION / DEPTH BOTTOM OF SCREENED SECTION 16.8'

LENGTH OF BLANK SECTION 2"

ELEVATION/DEPTH BOTTOM OF PLUGGED BLANK SECTION 17'

ELEVATION/DEPTH BOTTOM OF SAND COLUMN 17'

TYPE OF BACKFILL BELOW OBSERVATION PIPE Native

ELEVATION/DEPTH OF HOLE 17.0'

Eco-Systems, Inc.
Environmental Engineers and Scientists

S.M. 02/15/1999 10:27 M:\DRWG2\FORMS\FRM005

BORING LOG

SHEET 1 OF 1

PROJECT NAME Task 2 - RI Hercules
PROJECT LOCATION Hattiesburg, MS
PROJECT NUMBER HER-99
GEOLOGIST Ryan
CLASSIFICATION SCHEME USCS
DRILLER G+E Services
DRILL METHOD HSA w/ 3 spoon
WEATHER Sunny + Hot (88°)

BORING IDENTIFICATION TP-1
BORE HOLE DIAMETER 6"
BORING START TIME 1355 DATE 4-28-99
BORING COMPLETED TIME 1478 DATE 4-28-99
FINAL BORING DEPTH 17'

GROUNDWATER
INITIAL DEPTH
DEPTH AFTER ____ MINUTES ____

FREE PRODUCT
THICKNESS
VOLUME

RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL	LITHOLOGY
NS	2	Fill 1	NS
	4		
21"	6.0	1/2 3/4	
	6	WH/3	
18"	8	7/13	
15"		WH/4	
	10	5/7	
23"		3/13	
	12	23/32	
NS	14	NS	NS
18"	16	6/6	
		6/12	
	18		
	20		
	15		

DAMP, firm, med-gray, Fill ~ Auger to 4' for obstruction (6-3') (cuttings) CL w/ vf. sand

DAMP, med-stiff gray w/ blue-green, SaSiCL (vf.-f). mottling

SAT, Loose, tan, 7' SiLt (vf)

SAT, med dense, V. Si, trace gravel (f-med)

dense (No Samples 12-15)

SAT, Loose-med, dry, v. stiff, greenish gray, CL w/ Si 17.0

TD = 17.0

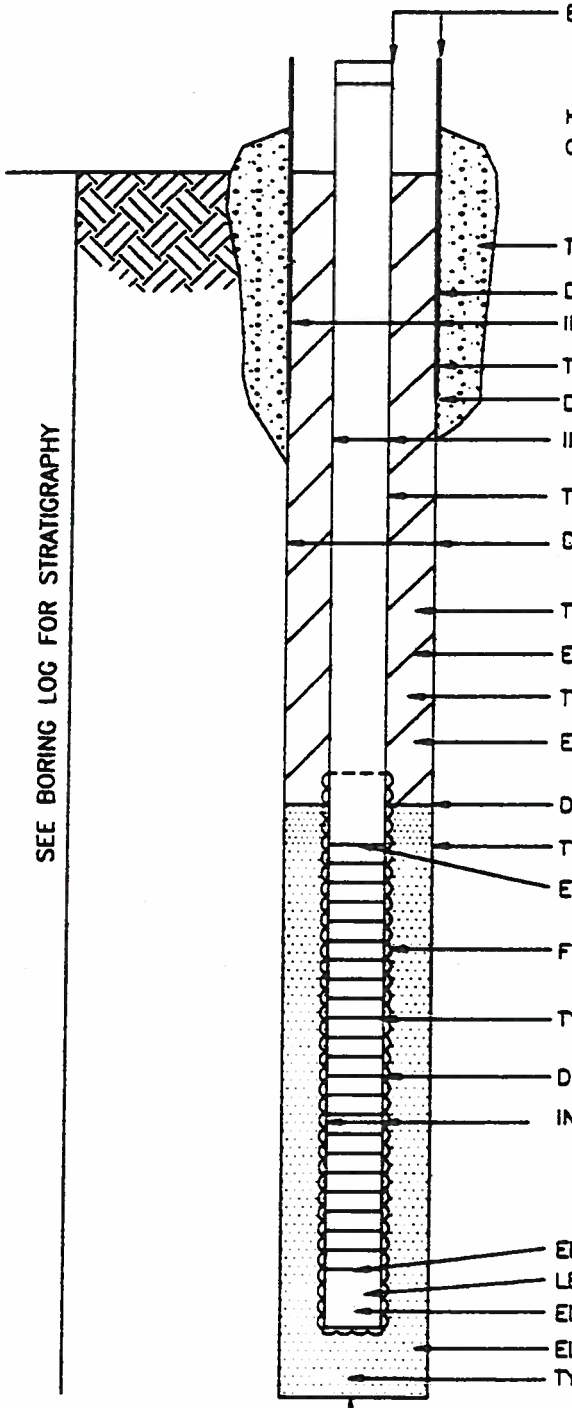
- Set TP-2
- CAVE to 12' b/s.
- 20/40 to 9.6'
- Seal to 3.0' (Hydrate).

Eco-Systems, Inc.
Environmental Engineers and Scientists

TEMPORARY MONITORING POINT COMPLETION FORM

PROJECT NAME Hercules
LOCATION Hattiesburg, MS
DATE COMPLETED
DRILLER G+E
GEOLOGIST Ryan
INSPECTED BY
BOREHOLE DEPTH 17.0'
DRILL METHOD HSA
DATE 4-28-99

PAGE 1 OF 1
WELL NO. TP-2
BOREHOLE WATER LEVEL 8'
STATIC WATER LEVEL
SCREEN INTERVAL 7-17'



SEE BORING LOG FOR STRATIGRAPHY

ELEVATION OF TOP OF SURFACE CASING/RISER PIPE ~~3.0'~~ 171.72

HEIGHT OF TOP OF SURFACE CASING/RISER PIPE ABOVE GROUND SURFACE NA / 3.0'

TYPE OF SURFACE SEAL NA

DEPTH OF SURFACE SEAL BELOW GROUND SURFACE NA

INSIDE DIAMETER OF SURFACE CASING NA

TYPE OF PROTECTIVE CASING NA

DEPTH OF PROTECTIVE CASING BELOW GROUND NA

INSIDE DIAMETER OF RISER PIPE 1"

TYPE OF RISER PIPE 1" PVC

DIAMETER OF BOREHOLE 6"

TYPE OF BACKFILL High-Solids Bentonite ~~Chips~~ Slurry - Hydrated

ELEVATION / DEPTH TOP OF SEAL 3'

TYPE OF SEAL Bentonite Chips

ELEVATION / DEPTH BOTTOM OF SEAL 4.5'

DEPTH OF TOP OF SAND PACK 4.5'

TYPE OF SAND PACK 20/40 Sand (to 13'), Native 13-17'

ELEVATION / DEPTH TOP OF SCREENED SECTION ~~10.8'~~ 6.8'

FILTER SOCK No

TYPE OF SCREENED SECTION 10 Slot PVC

DESCRIBE OPENINGS 10 Slot

INSIDE DIAMETER OF SCREENED SECTION 1"

ELEVATION / DEPTH BOTTOM OF SCREENED SECTION 16.8'

LENGTH OF BLANK SECTION 2'

ELEVATION/DEPTH BOTTOM OF PLUGGED BLANK SECTION 17.0'

ELEVATION/DEPTH BOTTOM OF SAND COLUMN 17.0

TYPE OF BACKFILL BELOW OBSERVATION PIPE Native Sand

ELEVATION/DEPTH OF HOLE 17.0'

Eco-Systems, Inc.
Environmental Engineers and Scientists

S.M. 02/15/1999 10:27 M:\DRWG2\FORMS\FRM005

BORING LOG

SHEET 1 OF _

PROJECT NAME: TASK 2 - RI HERCULES
PROJECT LOCATION: Hattiesburg, MS
PROJECT NUMBER: HER-99
GEOLOGIST: RYAN
CLASSIFICATION SCHEME: USCS
DRILLER: G&E Services, Inc.
DRILL METHOD: HSA w/ S. Spoons
WEATHER: Sunny & Hot (90s)

BORING IDENTIFICATION: TP-2
BORE HOLE DIAMETER: 2" → 6"
BORING START TIME: 1135 DATE: 4-28-99
BORING COMPLETED TIME: 1212 DATE: 4-28-99
FINAL BORING DEPTH: 17.0'

GROUNDWATER
INITIAL DEPTH: ~8'
DEPTH AFTER _____ MINUTES _____

FREE PRODUCT
THICKNESS _____
VOLUME _____

RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL	LITHOLOGY
20"	0.0	2/3	
	2	3/3	
22"	6.0	6/9	
	4	13/15	SM
21"	0.0	21/10	
	6	9/12	SM
23"	0.0	13/15	
	8	17/18	SM
22"	0.0	18/14	
	10	14/15	SM
21"		12/14	
	12	16/18	SM
NS	14	NS	NS
20"	16	3/12	
		10/10	SP
	18		
	20		
	15		

DAMP-DRY, Loose, Brown, organics w/ SAND V.f. SaCL (6"-
MOIST Med dense, Lt Brn, V. Si Sa (vf-f.
w/ gray mottling, v.f. Si Sa tr.
WET tan laminae @6.5' Si Sa (vf)
SAT f-med trace gravel
w/ gravel
NO Sampling 12-15'
Drill out w/ HSA (heaving)
15' SAT, Loose, tan-white, Gravelly Sa w/ Si
17'

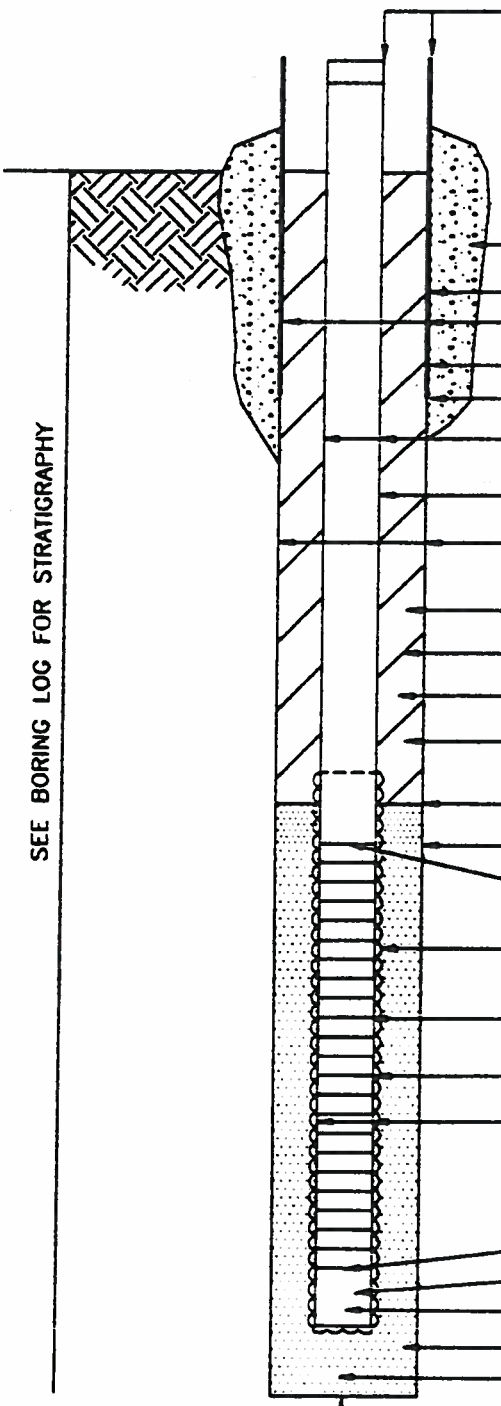
- Set TP-2 from ~6.5-16.5' TD=17.0'
- Backfill w/ native Sand to ~13'
- 20/40 Sand to ~4.5'.
- Pellets to ~0.5'.

Eco-Systems, Inc.
Environmental Engineers and Scientists

TEMPORARY MONITORING POINT COMPLETION FORM

PROJECT NAME Hercules
LOCATION Hattiesburg, MS
DATE COMPLETED 4/28/99
DRILLER TREC Services
GEOLOGIST J Ryan
INSPECTED BY _____
BOREHOLE DEPTH _____
DRILL METHOD HSA
DATE _____

PAGE 1 OF 1
WELL NO. TP-3
BOREHOLE WATER LEVEL ~8'
STATIC WATER LEVEL _____
SCREEN INTERVAL 9.6-14.6'



ELEVATION OF TOP OF SURFACE CASING/RISER PIPE 169.74

HEIGHT OF TOP OF SURFACE CASING/RISER PIPE ABOVE GROUND SURFACE NA/2.5'

TYPE OF SURFACE SEAL NA

DEPTH OF SURFACE SEAL BELOW GROUND SURFACE NA

INSIDE DIAMETER OF SURFACE CASING NA

TYPE OF PROTECTIVE CASING NA

DEPTH OF PROTECTIVE CASING BELOW GROUND NA

INSIDE DIAMETER OF RISER PIPE _____

TYPE OF RISER PIPE 1" PVC

DIAMETER OF BOREHOLE 6"

TYPE OF BACKFILL High Solids Bentonite Grout

ELEVATION / DEPTH TOP OF SEAL 3.0'

TYPE OF SEAL Bentonite Chips

ELEVATION / DEPTH BOTTOM OF SEAL 8.0'

DEPTH OF TOP OF SAND PACK 8.0'

TYPE OF SAND PACK 20/40 Sand (no native)

ELEVATION / DEPTH TOP OF SCREENED SECTION 9.6'

FILTER SOCK No!

TYPE OF SCREENED SECTION 10 slot 1" PVC

DESCRIBE OPENINGS 10 slot

INSIDE DIAMETER OF SCREENED SECTION 1"

ELEVATION / DEPTH BOTTOM OF SCREENED SECTION 14.6'

LENGTH OF BLANK SECTION Flush

ELEVATION/DEPTH BOTTOM OF PLUGGED BLANK SECTION 14.6'

ELEVATION/DEPTH BOTTOM OF SAND COLUMN 16.0'

TYPE OF BACKFILL BELOW OBSERVATION PIPE sand 20/40

ELEVATION/DEPTH OF HOLE 16.0'

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Environmental Engineers and Scientists

S.M. 02/15/1999 10:27 M:\DRWG2\FORMS\FRM005

BORING LOG

SHEET 1 OF ___

PROJECT NAME Task 2 - RI Hercules
PROJECT LOCATION Hattiesburg, MS
PROJECT NUMBER HER-99
GEOLOGIST Ryan
CLASSIFICATION SCHEME USCS
DRILLER G+E Services
DRILL METHOD HSA w/ s-spoons
WEATHER Sunny Hot (88°)

BORING IDENTIFICATION TP-3
BORE HOLE DIAMETER 6"
BORING START TIME 1500 DATE 4-28-99
BORING COMPLETED TIME 1527 DATE 4-28-99
FINAL BORING DEPTH 16'

GROUNDWATER
INITIAL DEPTH ___
DEPTH AFTER ___ MINUTES ___

FREE PRODUCT
THICKNESS ___
VOLUME ___

RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL	LITHOLOGY	
NS	2		NS	NO Sampling 0-4'
Full	4 / 0.0	2/4 4/12		OAmP, Med, H-gray+brn V. CLSa 4-5.1' Loose, tan, SiSa (5.1')
	6			NO Sampling (6-9')
22"	8 / 10	12/15 19/5	SM	SAT, Med-dense; tan w/ white, Sa w/Si (F-med) tr. gravel.
	12			NO Sampling
	14	3/4 5/5		SAT, as above (14-14.6'); SiSa to gravel
10"	16			SRV, Med-St - Stiff, buff-tan, SiCl tr. lignite.
	18			
	20			
	25			

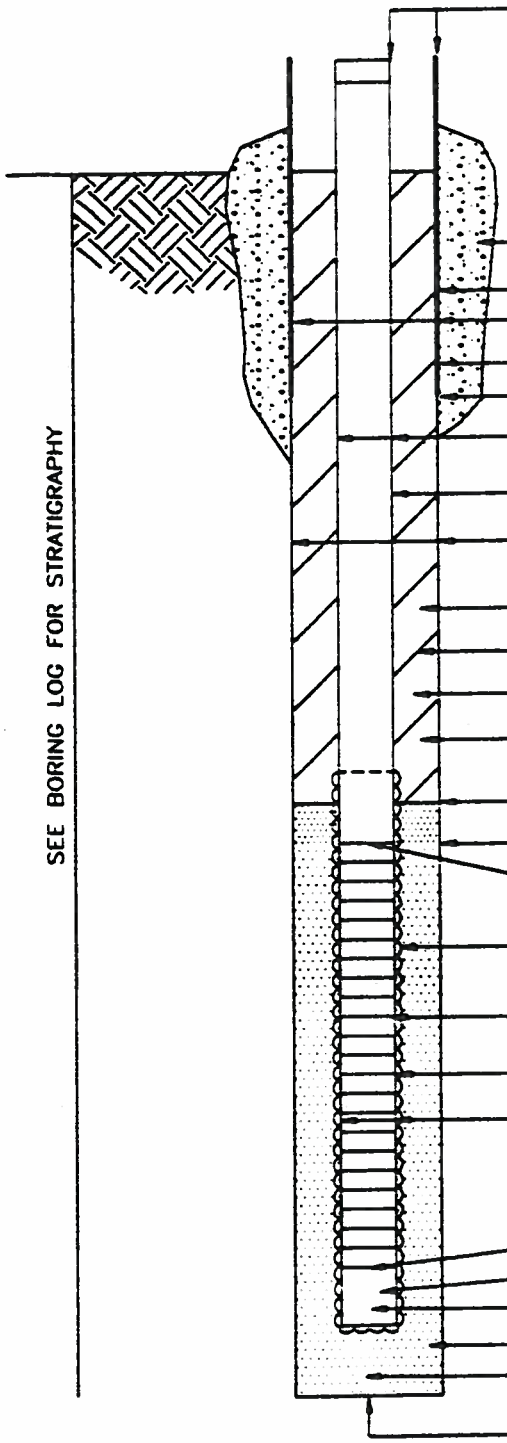
- Set TP-3 to 9.6'-14.6' TD-16.0'

Eco-Systems, Inc.
Environmental Engineers and Scientists

TEMPORARY MONITORING POINT COMPLETION FORM

PROJECT NAME Hercules
LOCATION Hattiesburg MS
DATE COMPLETED 4/23/99
DRILLER G+E Services
GEOLOGIST RyAn
INSPECTED BY _____
BOREHOLE DEPTH _____
DRILL METHOD HSA
DATE _____

PAGE 1 OF 1
WELL NO. TP-4
BOREHOLE WATER LEVEL ~4'
STATIC WATER LEVEL _____
SCREEN INTERVAL 5-10'



ELEVATION OF TOP OF SURFACE CASING/RISER PIPE 163.64

HEIGHT OF TOP OF SURFACE CASING/RISER PIPE ABOVE GROUND SURFACE 2.5'

TYPE OF SURFACE SEAL NA

DEPTH OF SURFACE SEAL BELOW GROUND SURFACE NA

INSIDE DIAMETER OF SURFACE CASING NA

TYPE OF PROTECTIVE CASING NA

DEPTH OF PROTECTIVE CASING BELOW GROUND NA

INSIDE DIAMETER OF RISER PIPE _____

TYPE OF RISER PIPE 1" PVC

DIAMETER OF BOREHOLE 6"

TYPE OF BACKFILL High Solid. Bentonite Grout

ELEVATION / DEPTH TOP OF SEAL 1.6'

TYPE OF SEAL Bentonite Chips

ELEVATION / DEPTH BOTTOM OF SEAL 4'

DEPTH OF TOP OF SAND PACK 4'

TYPE OF SAND PACK 20/40 Sand (Nc native)

ELEVATION / DEPTH TOP OF SCREENED SECTION 5'

FILTER SOCK NO!

TYPE OF SCREENED SECTION 10-Slot 1" PVC

DESCRIBE OPENINGS 10-Slot

INSIDE DIAMETER OF SCREENED SECTION 1"

ELEVATION / DEPTH BOTTOM OF SCREENED SECTION 10'

LENGTH OF BLANK SECTION 2" Flush

ELEVATION/DEPTH BOTTOM OF PLUGGED BLANK SECTION 10'

ELEVATION/DEPTH BOTTOM OF SAND COLUMN 14'

TYPE OF BACKFILL BELOW OBSERVATION PIPE SAND 20/40

ELEVATION/DEPTH OF HOLE 14'

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BORING LOG

SHEET 1 OF ___

PROJECT NAME Task 2 - RI Hercules
PROJECT LOCATION Hattiesburg, MS
PROJECT NUMBER HER-99
GEOLOGIST Ryan
CLASSIFICATION SCHEME USCS
DRILLER G+E Services
DRILL METHOD HSA w/ S-spoons
WEATHER Sunny + hot (88°)

BORING IDENTIFICATION TP-4
BORE HOLE DIAMETER 6"
BORING START TIME 1602 DATE 4-28-99
BORING COMPLETED TIME 1620 DATE 4-28-99
FINAL BORING DEPTH 14'

GROUNDWATER
INITIAL DEPTH ___
DEPTH AFTER ___ MINUTES ___

FREE PRODUCT
THICKNESS ___
VOLUME ___

RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL	LITHOLOGY	
NS	2		NS	Damp, firm, brown, No Sampling (observe cuttings) (0-5') V-CL Sa (U Sa Sil Sa ~4'
17"	4	6/7		v. damp, loose, tan, —
	6	7/6		moist, firm, gray-tan, v. Sa Sil Sa v. sandy (cuttings).
	8	NS	NS	No Sampling 7-16'
22"	10	7/7	CL	DRY, stiff (crumbly), green-gray, Calcareous Clay to Silt.
	12	7/7		v. stiff, w/ brn mottling
	14	7/4		
	16	7/10		
	17			TD = 14.0'

- Sand zone has pinched in this direction.
- Set 5' screen 5-16' b/s.

~~TD = 14.0'~~

Eco-Systems, Inc.
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MONITORING WELL COMPLETION FORM

PROJECT NAME Hercules
LOCATION Hattiesburg, MS
DATE COMPLETED 4/29/99
DRILLER GLE Services
GEOLOGIST R Sartor

PAGE 1 OF 1
WELL NO TP-5
DRILLING METHOD
METHOD OF DEVELOPMENT

HEIGHT OF TOP OF SURFACE CASING ABOVE GROUND SURFACE 460.54
ELEVATION/HEIGHT OF TOP OF RISER PIPE NA/2.6'
FILLER MATERIAL NA
SIZE AND TYPE OF APRON NA
PAD ELEVATION NA
GROUND SURFACE ELEVATION NA
TYPE OF SURFACE SEAL NA
INSIDE DIAMETER OF SURFACE CASING NA
TYPE OF SURFACE CASING NA
DEPTH OF SURFACE CASING BELOW GROUND NA
DEPTH OF SURFACE SEAL BELOW GROUND SURFACE NA
INSIDE DIAMETER OF RISER PIPE 1"
TYPE OF RISER PIPE 1" PVC
DIAMETER OF BOREHOLE 6"
TYPE OF BACKFILL High Solids Bentonite Grout
DEPTH OF TOP OF SEAL (PRE/POST HYDRATION) 6'
TYPE OF SEAL Bentonite Chips
DEPTH OF TOP OF SAND PACK (INITIAL/POST SURGE/FINAL) 7'
DEPTH OF TOP OF SCREENED SECTION 9'
TYPE OF SAND PACK 20/40 Sand (1' of native)
TYPE OF SCREENED SECTION 10-Slot Screen
OPENING SPACING 10-Slot
OPENING SIZE
INSIDE DIAMETER OF SCREENED SECTION 1"
DEPTH OF BOTTOM OF SCREENED SECTION 14'
LENGTH OF BLANK SECTION Flush
CENTRALIZER
DEPTH OF BOTTOM OF PLUGGED BLANK SECTION 14'
TYPE OF BACKFILL BELOW OBSERVATION PIPE Native
DEPTH OF BOREHOLE 15

Eco-Systems, Inc.
Environmental Engineers and Scientists

BORING LOG

SHEET 1 OF ___

PROJECT NAME Task 2 - RI Hercules
PROJECT LOCATION Hattiesburg, MS
PROJECT NUMBER AER-99
GEOLOGIST Ryan
CLASSIFICATION SCHEME USCS
DRILLER G+E Services
DRILL METHOD HSA w/ S-Spoons
WEATHER Sunny + hot

BORING IDENTIFICATION TP-5
BORE HOLE DIAMETER 6"
BORING START TIME 1700 DATE 4/29/99
BORING COMPLETED TIME 1715 DATE 4/29/99
FINAL BORING DEPTH 15

GROUNDWATER
INITIAL DEPTH 9'
DEPTH AFTER ___ MINUTES ___

FREE PRODUCT
THICKNESS ___
VOLUME ___

RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL	LITHOLOGY	moisture density odor color description
19"	2	3/3 4/4		damp loose no Black S. SA w/ coarse sand grains
	5		NS	no samp 2-5
20"	7	2/7 4/6		damp stiff no gray & orange mottling S. CL
	10	7/11	NS	no sampling 7-10 water @ ~9'
18'	12	11/12		saturated loose no tan C SA w/ Si
	13		NS	~~no sampling 12-13~~ ~~12-15~~ RS
13-15 20"	15	2/7 7/8		saturated loose no tan S. SA (9-14') to S. CL (14'-15')
	10			
	15			

- TDC 15'
- Set T.P-5 screen @ 9-14'
- Cave in to 13'
- 20/40 to 7'
- Seal to 6'

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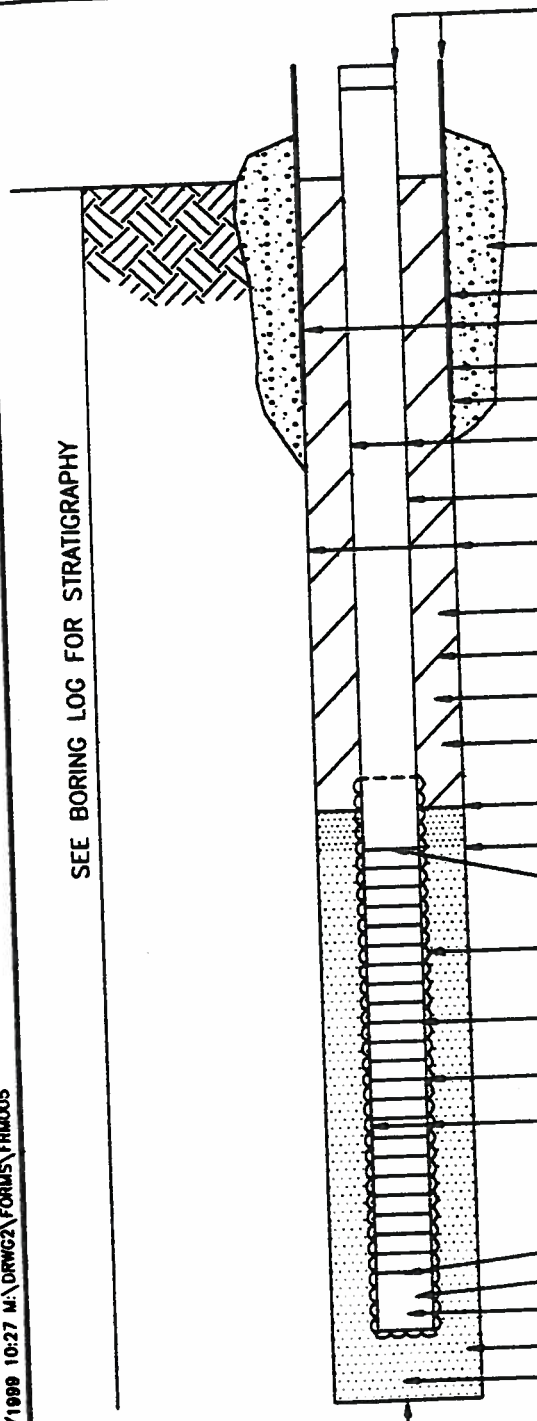
Environmental Engineers and Scientists

TEMPORARY MONITORING POINT COMPLETION FORM

PROJECT NAME Hercules
LOCATION Hattiesburg, MS
DATE COMPLETED 4/28/99
DRILLER G&F Services
GEOLOGIST Ryan
INSPECTED BY
BOREHOLE DEPTH
DRILL METHOD HSA
DATE

PAGE 1 OF 1
WELL NO. TP-6
BOREHOLE WATER LEVEL
STATIC WATER LEVEL
SCREEN INTERVAL



ELEVATION OF TOP OF SURFACE CASING/RISER PIPE 158.63
HEIGHT OF TOP OF SURFACE CASING/RISER PIPE ABOVE GROUND SURFACE NA
TYPE OF SURFACE SEAL NA
DEPTH OF SURFACE SEAL BELOW GROUND SURFACE NA
INSIDE DIAMETER OF SURFACE CASING NA
TYPE OF PROTECTIVE CASING NA
DEPTH OF PROTECTIVE CASING BELOW GROUND NA
INSIDE DIAMETER OF RISER PIPE 1"
TYPE OF RISER PIPE 1" PVC
DIAMETER OF BOREHOLE 6"
TYPE OF BACKFILL High-Solid Bentonite Grout
ELEVATION / DEPTH TOP OF SEAL 2'
TYPE OF SEAL Bentonite Chips
ELEVATION / DEPTH BOTTOM OF SEAL 7.0
DEPTH OF TOP OF SAND PACK 7.0'
TYPE OF SAND PACK 20/40 Sand
ELEVATION / DEPTH TOP OF SCREENED SECTION 10'
FILTER SOCK NO!
TYPE OF SCREENED SECTION 10-Slot Screen
DESCRIBE OPENINGS 10-Slot
INSIDE DIAMETER OF SCREENED SECTION 1"
ELEVATION / DEPTH BOTTOM OF SCREENED SECTION 15'
LENGTH OF BLANK SECTION NA
ELEVATION/DEPTH BOTTOM OF PLUGGED BLANK SECTION Flush
ELEVATION/DEPTH BOTTOM OF SAND COLUMN 15'
TYPE OF BACKFILL BELOW OBSERVATION PIPE 20/40 Sand
ELEVATION/DEPTH OF HOLE 17'

SEE BORING LOG FOR STRATIGRAPHY

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BORING LOG

SHEET 1 OF ___

PROJECT NAME Task 2 - RI Hercules
PROJECT LOCATION Hattiesburg, MS
PROJECT NUMBER HER-99
GEOLOGIST Ryan
CLASSIFICATION SCHEME USCS
DRILLER G&E Services
DRILL METHOD HSA w/ S-spoons
WEATHER sunny + hot (88°)

BORING IDENTIFICATION TP-6
BORE HOLE DIAMETER 6"
BORING START TIME 1655 DATE 4-28-99
BORING COMPLETED TIME 1725 DATE 4-28-99
FINAL BORING DEPTH 17'

GROUNDWATER
INITIAL DEPTH ___
DEPTH AFTER ___ MINUTES ___

FREE PRODUCT
THICKNESS ___
VOLUME ___

RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL	LITHOLOGY
14"	2	1/3, 4/6	
18"	4	3/4, 4/4	
22"	6	5/7, 7/7	
22"	8	10/11, 27/22	
20"	10	10/14, 14/14	
	12		
	14		
10"	16	2/6, 10/17	
	18		
	20		
	15		

DRY, soft, dk brn, Silt d/CL
DAMP, stiff-v.st, lt brn w/ mottlings, SiCL tr. sand
V. damp, med, olive-brn, SaCL tr-gravel
wet- ~~med~~ med-dense, dk brn-brn, SaCL tr. gravel @
SAT, ~~med~~ (end-white (Sa), SiSd tr. gravel
(f-med grained) w/ gravel

No Sampling 10-15'

v. damp, med-stiff, gray-green V. SaCL w/ Si

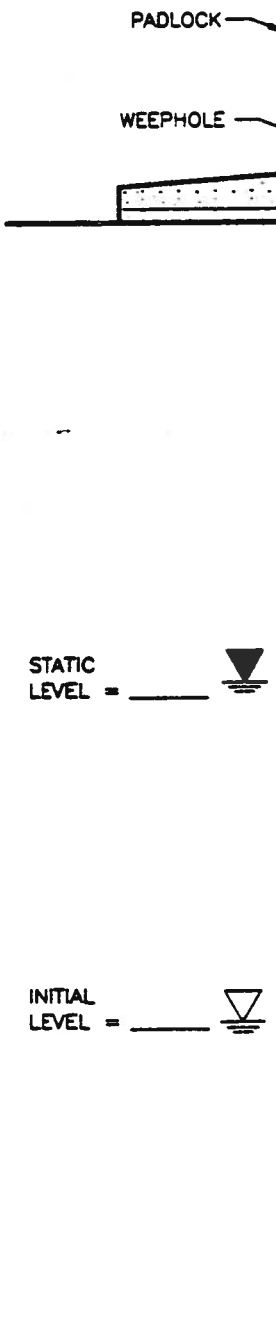
TD = 17'

Eco-Systems, Inc.
Environmental Engineers and Scientists

MONITORING WELL COMPLETION FORM

PROJECT NAME Hercules
LOCATION Hattiesburg, MS
DATE COMPLETED 4/29/99
DRILLER G+E Services
GEOLOGIST J Ryan

PAGE 1 OF 1
WELL NO. TP-7
DRILLING METHOD
METHOD OF DEVELOPMENT



HEIGHT OF TOP OF SURFACE CASING ABOVE GROUND SURFACE 167.17
ELEVATION/HEIGHT OF TOP OF RISER PIPE
FILLER MATERIAL NA
SIZE AND TYPE OF APRON NA
PAD ELEVATION NA
GROUND SURFACE ELEVATION NA
TYPE OF SURFACE SEAL NA
INSIDE DIAMETER OF SURFACE CASING NA
TYPE OF SURFACE CASING NA
DEPTH OF SURFACE CASING BELOW GROUND NA
DEPTH OF SURFACE SEAL BELOW GROUND SURFACE 1'
INSIDE DIAMETER OF RISER PIPE 1"
TYPE OF RISER PIPE 1" PVC
DIAMETER OF BOREHOLE 6"
TYPE OF BACKFILL High-Solid Bentonite Grout
DEPTH OF TOP OF SEAL (PRE/POST HYDRATION) 3'
TYPE OF SEAL Bentonite Chips
DEPTH OF TOP OF SAND PACK (INITIAL/POST SURGE/FINAL) 4.0'
DEPTH OF TOP OF SCREENED SECTION 5'3"
TYPE OF SAND PACK 20/40 Sand (bottom 1' native)
TYPE OF SCREENED SECTION 10-slot screen
OPENING SPACING 10-slot
OPENING SIZE
INSIDE DIAMETER OF SCREENED SECTION 1"
DEPTH OF BOTTOM OF SCREENED SECTION ~10'3"
LENGTH OF BLANK SECTION ~10'3" FLUSH
CENTRALIZER
DEPTH OF BOTTOM OF PLUGGED BLANK SECTION 10'3"
TYPE OF BACKFILL BELOW OBSERVATION PIPE Native Sands
DEPTH OF BOREHOLE 12'

Eco-Systems, Inc.
Environmental Engineers and Scientists

BORING LOG

SHEET 1 OF ___

PROJECT NAME: Task 2 - RI Hercules	BORING IDENTIFICATION: TP-7
PROJECT LOCATION: Hattiesburg, MS	BORE HOLE DIAMETER: 6"
PROJECT NUMBER: HER-95	
GEOLOGIST: Ryan/Sartor	BORING START TIME: 1605 DATE: 4-29-99
CLASSIFICATION SCHEME: USCS	
DRILLER: G+E Services	BORING COMPLETED TIME: 1620 DATE: 4-29-99
DRILL METHOD: HSA w/s-spoons	
WEATHER: Sunny hot	FINAL BORING DEPTH: 12'

GROUNDWATER	FREE PRODUCT
INITIAL DEPTH: 6'	THICKNESS:
DEPTH AFTER ___ MINUTES ___	VOLUME:

	RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL	LITHOLOGY	DESCRIPTION
0-2	12	0-2	2/2 5/5		(moisture / density / odor / color / lithology) Damp loose no brown C/S, w/peat deposits
					No sampling 2-5
5-7	16"	5-7	2/6 9/11		Damp loose no gray w/brown mottle (f-f) Sa S, w/CL
					No sampling 7-10 (from) water @ 6' Si Sa @ 10'
	22"	10-12	4/4 4/8		Damp wet / stiff odor in sand gray/ brown S, Cl @ 11' w/peat

- TD @ 12'
- Convert to TP-7
- Cave in to 9'
- 20/40 to 4.0'
- Seal to 3.0'

Depth scale: 10, 15

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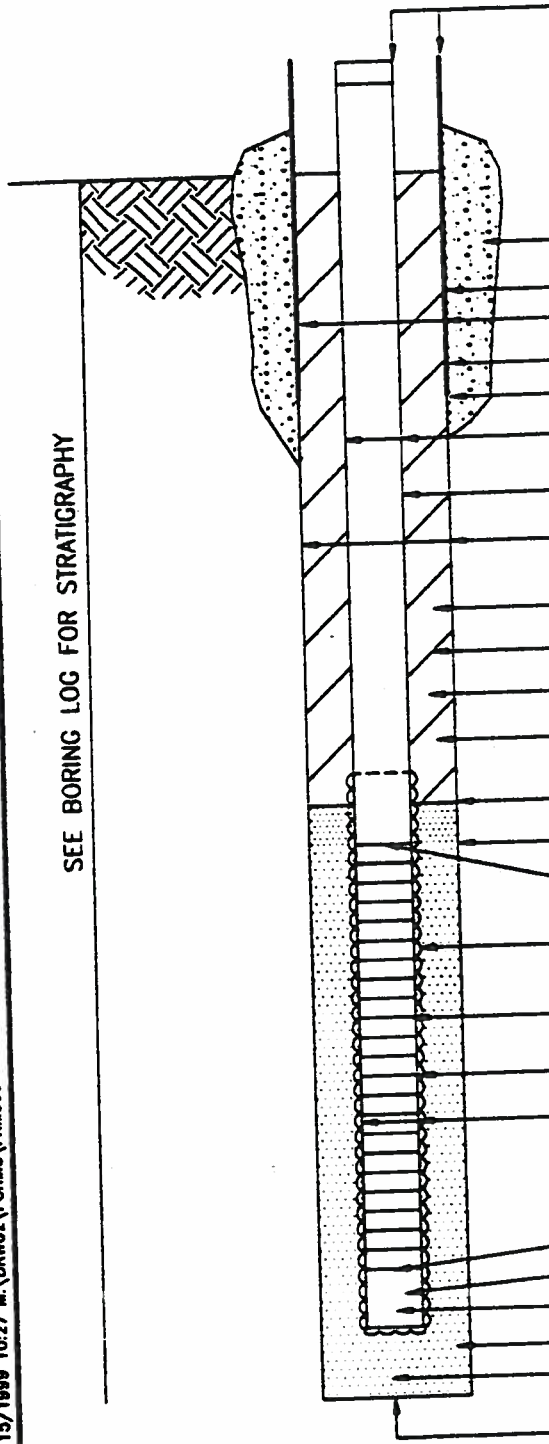
Environmental Engineers and Scientists

TEMPORARY MONITORING POINT COMPLETION FORM

PROJECT NAME Hercules
LOCATION Hattiesburg, MS
DATE COMPLETED 4/29/95
DRILLER G+E Services
GEOLOGIST R Sartor
INSPECTED BY _____
BOREHOLE DEPTH _____
DRILL METHOD HSA
DATE _____

PAGE 1 OF 1
WELL NO. TP-8
BOREHOLE WATER LEVEL _____
STATIC WATER LEVEL _____
SCREEN INTERVAL 12.5-17.5



ELEVATION OF TOP OF SURFACE CASING/RISER PIPE 183.75

HEIGHT OF TOP OF SURFACE CASING/RISER PIPE ABOVE GROUND SURFACE NA

TYPE OF SURFACE SEAL NA

DEPTH OF SURFACE SEAL BELOW GROUND SURFACE NA

INSIDE DIAMETER OF SURFACE CASING NA

TYPE OF PROTECTIVE CASING NA

DEPTH OF PROTECTIVE CASING BELOW GROUND NA

INSIDE DIAMETER OF RISER PIPE 1"

TYPE OF RISER PIPE 1" PVC

DIAMETER OF BOREHOLE 6"

TYPE OF BACKFILL High solids Bentonite Grout

ELEVATION / DEPTH TOP OF SEAL 9'

TYPE OF SEAL Bentonite Chips

ELEVATION / DEPTH BOTTOM OF SEAL 10'

DEPTH OF TOP OF SAND PACK 10'

TYPE OF SAND PACK 20/40 Sand and 0.010" slotted

ELEVATION / DEPTH TOP OF SCREENED SECTION 12.5'

FILTER SOCK ~0!

TYPE OF SCREENED SECTION 10-slot screen

DESCRIBE OPENINGS 10-slot

INSIDE DIAMETER OF SCREENED SECTION 1"

ELEVATION / DEPTH BOTTOM OF SCREENED SECTION 17.5

LENGTH OF BLANK SECTION Flush

ELEVATION/DEPTH BOTTOM OF PLUGGED BLANK SECTION 17.5

ELEVATION/DEPTH BOTTOM OF SAND COLUMN 18.5

TYPE OF BACKFILL BELOW OBSERVATION PIPE 20/40 Sand

ELEVATION/DEPTH OF HOLE 18.5

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Environmental Engineers and Scientists

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BORING LOG

SHEET 1 OF ___

PROJECT NAME Task 2-RI Hercules
PROJECT LOCATION Hattiesburg, MS
PROJECT NUMBER HER-99
GEOLOGIST Ryan/Sartor
CLASSIFICATION SCHEME USCS
DRILLER G+E Services
DRILL METHOD HSA w/ 8-spoons
WEATHER Sunny/Hot

BORING IDENTIFICATION TP-8
BORE HOLE DIAMETER 6"
BORING START TIME 1450 DATE 4/29/99
BORING COMPLETED TIME 1521 DATE 4/29/99
FINAL BORING DEPTH 18.5'

GROUNDWATER
INITIAL DEPTH 13'
DEPTH AFTER ___ MINUTES ___

FREE PRODUCT
THICKNESS ___
VOLUME ___

RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL	LITHOLOGY	Description (moisture, density, odor, color)
18"	0–2	4/7 6/4		Damp medstiff no odor orang brown F.-17-6" SCIS, -4
	2–4		NS	no sampling 2-5
10"	4–6	2/3 7/11		Damp medstiff odor gray w/red mottling SCl
	6–8		NS	no sampling 7-10
10"	10–12	1 44/50		moist Med-dense loose odor orange brown (f-m) S, Sm Lgr Avc
	12–14		NS	no sample 11-15 water @ 13
18"	14–16	13/17 24/17		Saturated Med-dense loose odor tan light (f-m) S. Sand, Lgr Avc
	16–18½		NS	no sampling 17-18.5
	18½–20	5/5 9/12		Damp, stiff, no odor gray SCl
	10			
	15			

- Completed @ 18.5'
- Convert to TP-8, screen @ 12.5-17.5'
- Cave in to 18'
- 20/40 to 10'
- Seal to 9'

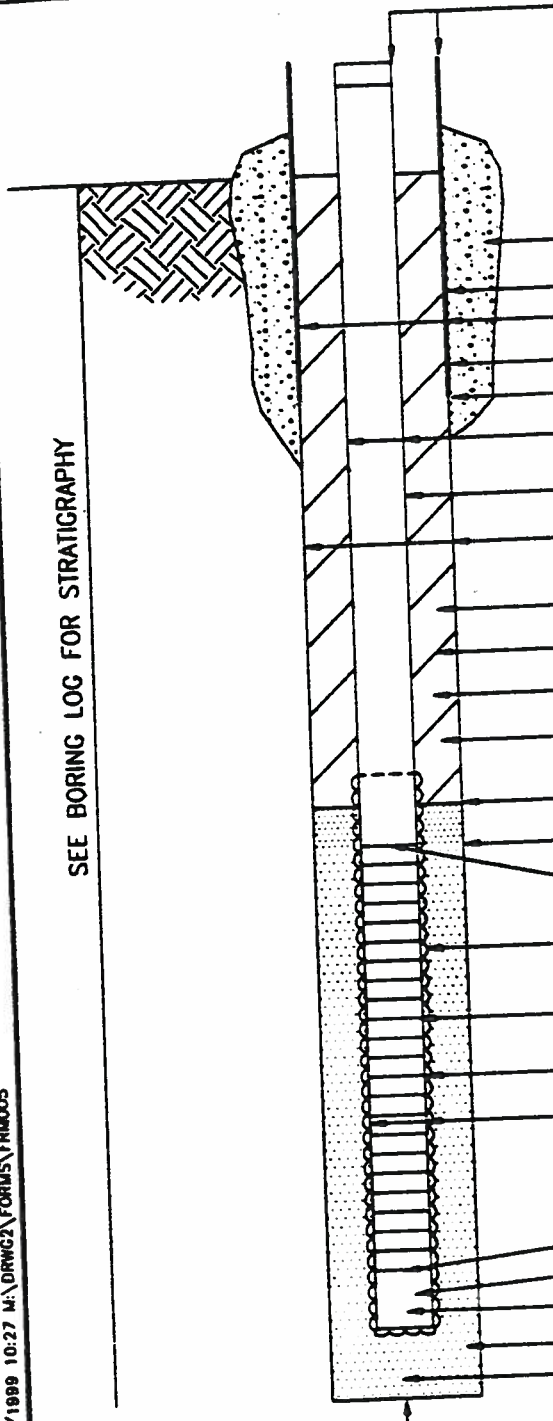
Eco-Systems, Inc.
Environmental Engineers and Scientists

TEMPORARY MONITORING POINT COMPLETION FORM

PROJECT NAME Hercules
LOCATION Hattiesburg, MS
DATE COMPLETED 4/29/99
DRILLER GTE Services
GEOLOGIST RS arter
INSPECTED BY

BOREHOLE DEPTH
DRILL METHOD HSA
DATE

PAGE 1 OF 1
WELL NO. TP-9
BOREHOLE WATER LEVEL
STATIC WATER LEVEL
SCREEN INTERVAL 4-9'



ELEVATION OF TOP OF SURFACE CASING/RISER PIPE 163.44

HEIGHT OF TOP OF SURFACE CASING/RISER PIPE ABOVE GROUND SURFACE NA

TYPE OF SURFACE SEAL NA

DEPTH OF SURFACE SEAL BELOW GROUND SURFACE NA

INSIDE DIAMETER OF SURFACE CASING NA

TYPE OF PROTECTIVE CASING NA

DEPTH OF PROTECTIVE CASING BELOW GROUND NA

INSIDE DIAMETER OF RISER PIPE 1"

TYPE OF RISER PIPE 1" PVC

DIAMETER OF BOREHOLE 6"

TYPE OF BACKFILL High Solids Bentonite Grout

ELEVATION / DEPTH TOP OF SEAL 2'

TYPE OF SEAL Bent Chips

ELEVATION / DEPTH BOTTOM OF SEAL 3'

DEPTH OF TOP OF SAND PACK 3'

TYPE OF SAND PACK 20/40 (Filter)

ELEVATION / DEPTH TOP OF SCREENED SECTION

FILTER SOCK No.

TYPE OF SCREENED SECTION 10-Slot

DESCRIBE OPENINGS 10 - Slot

INSIDE DIAMETER OF SCREENED SECTION 1"

ELEVATION / DEPTH BOTTOM OF SCREENED SECTION 9'

LENGTH OF BLANK SECTION Flush

ELEVATION/DEPTH BOTTOM OF PLUGGED BLANK SECTION 9'

ELEVATION/DEPTH BOTTOM OF SAND COLUMN 10'

TYPE OF BACKFILL BELOW OBSERVATION PIPE Native

ELEVATION/DEPTH OF HOLE @ 10'

Eco-Systems, Inc.
Environmental Engineers and Scientists

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BORING LOG

SHEET 1 OF ___

PROJECT NAME Task 2 - RI Hercules
PROJECT LOCATION Hattiesburg, MS
PROJECT NUMBER AER-99
GEOLOGIST Ryan / Sartor
CLASSIFICATION SCHEME USCS
DRILLER G+E Services
DRILL METHOD HSA w/ S-spoons
WEATHER Sunny / Hot

BORING IDENTIFICATION TP-9
BORE HOLE DIAMETER 6"
BORING START TIME 1815 DATE 4/29/99
BORING COMPLETED TIME ___ DATE ___
FINAL BORING DEPTH ___

GROUNDWATER
INITIAL DEPTH -4
DEPTH AFTER ___ MINUTES ___

FREE PRODUCT
THICKNESS ___
VOLUME ___

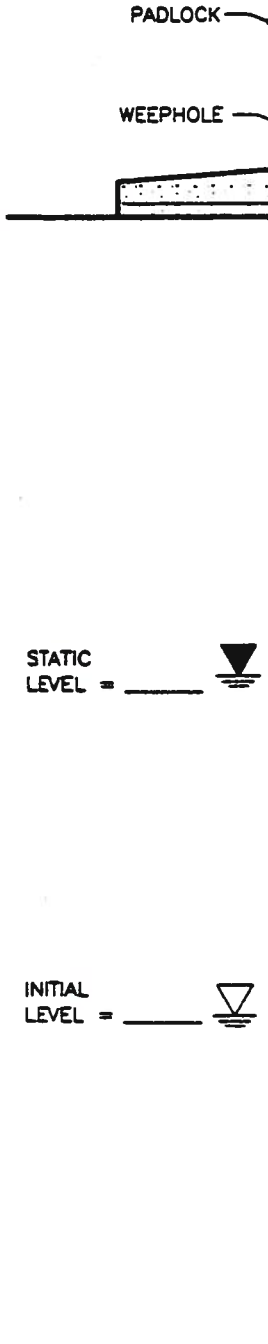
RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL	LITHOLOGY	
18"	0	2/2		damp loose loader Black/gray S.Sa/gravel
	2	2/2		no sampling 2-5 water @ 4'
	5			
10"		1/1		damp, stiff no odor gray w/mottling S.Cl
	7	1/1		to moist
				No Sample 7-10
	10			
20"		2/3		damp stiff no graphite S.Cl
	12	4/6		no sampling 12-15
	15			
				damp stiff no gray/green S.Cl
20		2/3		no sampling 17-20
	17	10/11		
	15			
	15			
	10			
20		4/9		damp dense no grey Cl w/ silt
		12/14		
				+ Drill new boring to 10 ft bgs
				screen @ 4-9'
				• Set TP-9
				• Cave in to 8'
				• 20/40 to 3'
	15			• Seal to 2'

Eco-Systems, Inc.
Environmental Engineers and Scientists

MONITORING WELL COMPLETION FORM

PROJECT NAME: Hercules
LOCATION: Hattiesburg, MS
DATE COMPLETED: 4/29/99
DRILLER: G & E Services
GEOLOGIST: R Sartor

PAGE: 1 OF 1
WELL NO.: T1-10
DRILLING METHOD:
METHOD OF DEVELOPMENT: 8-14.5'



HEIGHT OF TOP OF SURFACE CASING ABOVE GROUND SURFACE:
ELEVATION/HEIGHT OF TOP OF RISER PIPE: 179.69/ 2'
FILLER MATERIAL: NA
SIZE AND TYPE OF APRON: NA
PAD ELEVATION: NA
GROUND SURFACE ELEVATION: NA
TYPE OF SURFACE SEAL: NA
INSIDE DIAMETER OF SURFACE CASING: NA
TYPE OF SURFACE CASING: NA
DEPTH OF SURFACE CASING BELOW GROUND: NA
DEPTH OF SURFACE SEAL BELOW GROUND SURFACE: 4 1/2'
INSIDE DIAMETER OF RISER PIPE: 1"
TYPE OF RISER PIPE: 1" PVC
DIAMETER OF BOREHOLE: 6"
TYPE OF BACKFILL:
DEPTH OF TOP OF SEAL (PRE/POST HYDRATION):
TYPE OF SEAL: Bentonite Chips
DEPTH OF TOP OF SAND PACK (INITIAL/POST SURGE/FINAL): 5 1/2"
DEPTH OF TOP OF SCREENED SECTION: 8'
TYPE OF SAND PACK: 20/40 Sand Pack (Agwative)
TYPE OF SCREENED SECTION: 10-slot PVC
OPENING SPACING: 10-slot
OPENING SIZE:
INSIDE DIAMETER OF SCREENED SECTION: 1"
DEPTH OF BOTTOM OF SCREENED SECTION: 14.5'
LENGTH OF BLANK SECTION: Flush
CENTRALIZER
DEPTH OF BOTTOM OF PLUGGED BLANK SECTION: 14.5'
TYPE OF BACKFILL BELOW OBSERVATION PIPE: Native
DEPTH OF BOREHOLE: 17

Eco-Systems, Inc.
Environmental Engineers and Scientists

BORING LOG

SHEET 1 OF

PROJECT NAME Task 2 - RI Hercules
PROJECT LOCATION Hattiesburg, MS
PROJECT NUMBER 468-95
GEOLOGIST Sartor
CLASSIFICATION SCHEME USCS
DRILLER G+E Services
DRILL METHOD HSA w/ s-spoons
WEATHER Sunny/Hot

BORING IDENTIFICATION TP-10
BORE HOLE DIAMETER 6"
BORING START TIME 1058 DATE 4-29-95
BORING COMPLETED TIME 1115 DATE 4-29-95
FINAL BORING DEPTH 17 ~~16.5'~~

GROUNDWATER
INITIAL DEPTH ~11'
DEPTH AFTER ___ MINUTES ___

FREE PRODUCT
THICKNESS
VOLUME

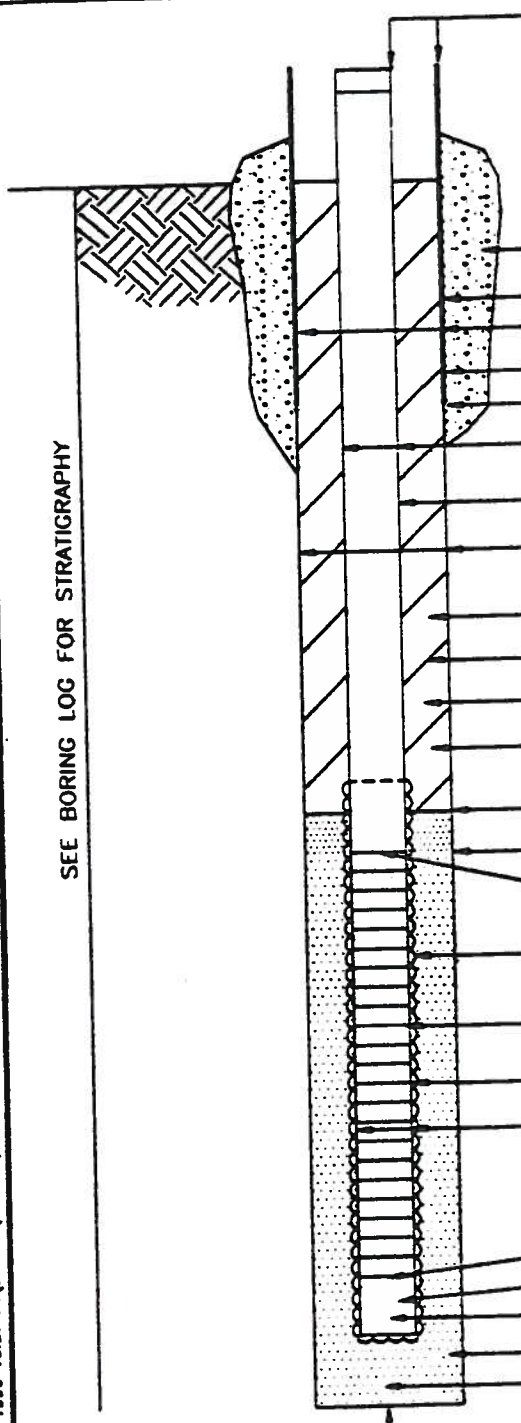
RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL	LITHOLOGY	DESCRIPTION
22"	0.0	3/4 6/5		Dry Loose Brown/Black (vf f) Si Sa (Fill)
12"	1.0	6/6 3/3		Damp / / / (f-m)
12"	4.0	3/3 6/3		Moist Firm -5 unmarked odor Gray Silty clay
14"	2.0	3/4 4/4		Moist Loose ↓ grayish (vf f) Si Sa
12"	5.4	3/4 4/5		Moist Loose
10"	25	7/9 12/12		wet (saturated) medium dense tan (f-m) Gr Si Sa ~~(...)~~ RS
20"	138	10/10 14/17		saturated / ↓ / /
				no sample 14-14.5
20"	16	1/1 4/5		~~saturated~~ damp stiff ↓ gray w/ mottling ~~(f-m) ...~~ w/ silt S Clw/Gr
	18			
	10			• completed @ 1115 @ 16.5' TD (14.5-17')
				• Convert to TP-10 (8-14.5')
				• 20/40 to 5½'
				• Seal to 4½'
				• 1' of Cave in to 13.5'
	15			

Eco-Systems, Inc.
Environmental Engineers and Scientists

TEMPORARY MONITORING POINT COMPLETION FORM

PROJECT NAME Hercules
LOCATION Hattiesburg, MS
DATE COMPLETED 4/29/99
DRILLER GtE Services
GEOLOGIST R Sartor
INSPECTED BY _____
BOREHOLE DEPTH _____
DRILL METHOD HSA
DATE _____

PAGE 1 OF 1
WELL NO. TP-11
BOREHOLE WATER LEVEL _____
STATIC WATER LEVEL _____
SCREEN INTERVAL 8-13



ELEVATION OF TOP OF SURFACE CASING/RISER PIPE 162.26

HEIGHT OF TOP OF SURFACE CASING/RISER PIPE ABOVE GROUND SURFACE NA

TYPE OF SURFACE SEAL NA

DEPTH OF SURFACE SEAL BELOW GROUND SURFACE NA

INSIDE DIAMETER OF SURFACE CASING NA

TYPE OF PROTECTIVE CASING NA

DEPTH OF PROTECTIVE CASING BELOW GROUND NA

INSIDE DIAMETER OF RISER PIPE 1"

TYPE OF RISER PIPE PVC

DIAMETER OF BOREHOLE 6"

TYPE OF BACKFILL Hyb Solids Bentonite Grout

ELEVATION / DEPTH TOP OF SEAL 5.5

TYPE OF SEAL Bent Chips

ELEVATION / DEPTH BOTTOM OF SEAL 6.5

DEPTH OF TOP OF SAND PACK 6.5'

TYPE OF SAND PACK 20/40 Sand (4' of fallback)

ELEVATION / DEPTH TOP OF SCREENED SECTION 8'

FILTER SOCK No!

TYPE OF SCREENED SECTION 10slot

DESCRIBE OPENINGS 10 slot screen

INSIDE DIAMETER OF SCREENED SECTION 1"

ELEVATION / DEPTH BOTTOM OF SCREENED SECTION 13'

LENGTH OF BLANK SECTION Flush

ELEVATION/DEPTH BOTTOM OF PLUGGED BLANK SECTION 13'

ELEVATION/DEPTH BOTTOM OF SAND COLUMN 15'

TYPE OF BACKFILL BELOW OBSERVATION PIPE Native

ELEVATION/DEPTH OF HOLE 15'

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Environmental Engineers and Scientists

S.M. 02/15/1999 10:27 M:\DRWG2\FORMS\FRM005

BORING LOG

SHEET 1 OF ___

PROJECT NAME Task 2 - RI Hercules
PROJECT LOCATION Hattiesburg, MS
PROJECT NUMBER AER-95
GEOLOGIST Ryan
CLASSIFICATION SCHEME USCS
DRILLER G+E Services
DRILL METHOD HSA w/ S-Spoons
WEATHER sunny/hot

BORING IDENTIFICATION TP-11
BORE HOLE DIAMETER 6"
BORING START TIME 1735 DATE 4/27/99
BORING COMPLETED TIME 1755 DATE 4/28/99
FINAL BORING DEPTH 15'

GROUNDWATER
INITIAL DEPTH 7.5'
DEPTH AFTER ___ MINUTES ___

FREE PRODUCT
THICKNESS ___
VOLUME ___

RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL	LITHOLOGY	
20'	2	3/11 2/4		damp loose wooden Black S, Sa/gravel
	3 4 5		NS	no sample 5-7
5-7 12"	7 8 9 10	2/2 4/5		moist loos wooden tan S, Sa/gravel water @ 8.5
			NS	no sampling 7-10
10-12 22"	12	3/3 5/9		Saturated loose wooden gray/tan S, Sa/gravel
20"	14	7/7 13/13		saturated firm wooden gray S, Cl
	15			

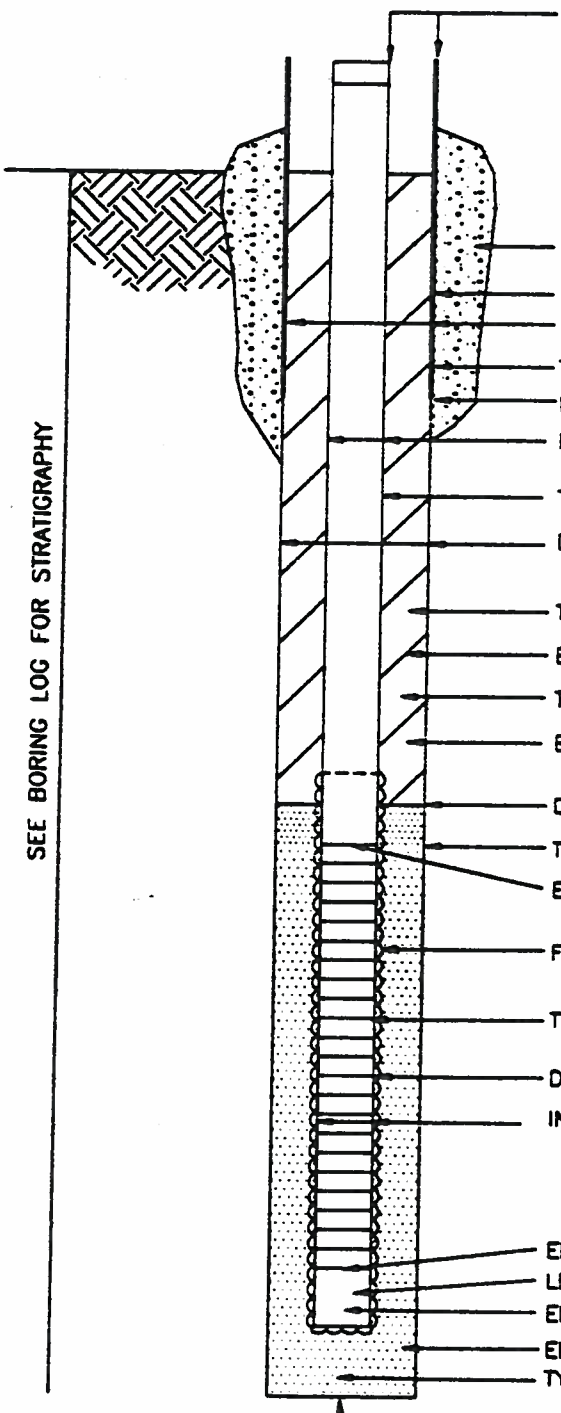
- Completed @ 15 ft bgs
- TP-11 screen @ 8-13'
- Cave in to 9'
- 20/40 to 6.5'
- Seal to 5.5'

Eco-Systems, Inc.
Environmental Engineers and Scientists

TEMPORARY MONITORING POINT COMPLETION FORM

PROJECT NAME Hercules
LOCATION Hattiesburg, MS
DATE COMPLETED 4/29/99
DRILLER G+E Services
GEOLOGIST RSartor
INSPECTED BY
DATE
BOREHOLE DEPTH
DRILL METHOD HSA

PAGE 1 OF 1
WELL NO. TP-12
BOREHOLE WATER LEVEL ~7'
STATIC WATER LEVEL
SCREEN INTERVAL 5-13'



ELEVATION OF TOP OF SURFACE CASING/RISER PIPE 159.95
HEIGHT OF TOP OF SURFACE CASING/RISER PIPE ABOVE GROUND SURFACE 2.5'
TYPE OF SURFACE SEAL NA
DEPTH OF SURFACE SEAL BELOW GROUND SURFACE NA
INSIDE DIAMETER OF SURFACE CASING NA
TYPE OF PROTECTIVE CASING NA
DEPTH OF PROTECTIVE CASING BELOW GROUND NA
INSIDE DIAMETER OF RISER PIPE 1"
TYPE OF RISER PIPE 1" PVC
DIAMETER OF BOREHOLE 6"
TYPE OF BACKFILL High Solids Bentonite Grout
ELEVATION / DEPTH TOP OF SEAL 3'
TYPE OF SEAL Bentonite chips
ELEVATION / DEPTH BOTTOM OF SEAL
DEPTH OF TOP OF SAND PACK Native to 8' bgs, 20/40 Sand to 3'
TYPE OF SAND PACK 20/40 Sand
ELEVATION / DEPTH TOP OF SCREENED SECTION 5'
FILTER SOCK 1/cs
TYPE OF SCREENED SECTION 10-slot 1" PVC
DESCRIBE OPENINGS 10-slot
INSIDE DIAMETER OF SCREENED SECTION 1"
ELEVATION / DEPTH BOTTOM OF SCREENED SECTION 13'
LENGTH OF BLANK SECTION Flush
ELEVATION/DEPTH BOTTOM OF PLUGGED BLANK SECTION 13'
ELEVATION/DEPTH BOTTOM OF SAND COLUMN 17'
TYPE OF BACKFILL BELOW OBSERVATION PIPE Native
ELEVATION/DEPTH OF HOLE 17'

Eco-Systems, Inc.
Environmental Engineers and Scientists

S.M. 02/15/1999 10:27 M:\DRWG2\FORMS\FRM005

BORING LOG

SHEET 1 OF __

PROJECT NAME	Task 2 -RI Hercules	BORING IDENTIFICATION	TP-12
PROJECT LOCATION	Hattiesburg, MS	BORE HOLE DIAMETER	6"
PROJECT NUMBER	HER-99		
GEOLOGIST	Ryan / Sartor	BORING START TIME	925 DATE 4-29-99
CLASSIFICATION SCHEME	USCS		
DRILLER	G+E Services	BORING COMPLETED TIME	0943 DATE 4-29-99
DRILL METHOD	HSA w/ s-spoons		
WEATHER	sunny/hot	FINAL BORING DEPTH	17'

GROUNDWATER

INITIAL DEPTH ~7'

DEPTH AFTER ____ MINUTES ____

FREE PRODUCT

THICKNESS ____

VOLUME ____

	RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL	LITHOLOGY	DESCRIPTION
0-2	22"	2	3/3 3/3		Damp Loose brown/tab (fi) Si Sa w/cl orange GISA
2-4	~~20~~"	4	2/3 3/4		NO Sampling orange to tan ~~stiff~~ Si Sand
4-6	18"	6	3/6 6/6		tan/gray vf-ft Si Sa
	NS	8		NS	NO Sampling 6-10'
	22"	10, 12	5/9 12/13		saturated loose tan (f-M) Si Sand/gravel
		14		NS	no sampling 12-15 ~~Cl~~ 13' (Driller said TOP clay). Si Cl
	16"	16	6/7 8/10		Damp medstiff Si Cl gray w/ orange
		18			TD=17'
		20			

- Convert to TP-12 f10 5'-13'
- Native to 8'
- 20/40 to 4'
- Seal to 3'

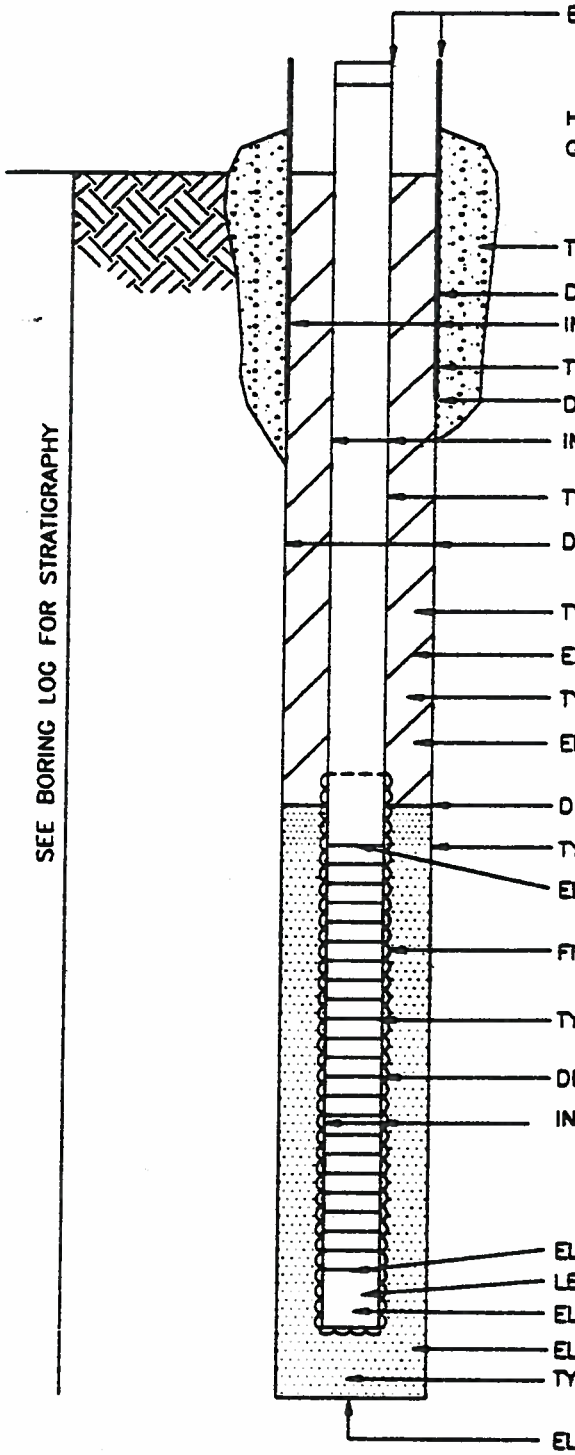
-15-

Eco-Systems, Inc.
Environmental Engineers and Scientists

TEMPORARY MONITORING POINT COMPLETION FORM

PROJECT NAME Hercules
LOCATION Hattiesburg, MS
DATE COMPLETED 4/29/99
DRILLER G&E Services
GEOLOGIST J Ryan
INSPECTED BY _____
BOREHOLE DEPTH _____
DRILL METHOD HSA
DATE _____

PAGE 1 OF 1
WELL NO. TP-13
BOREHOLE WATER LEVEL ~5'
STATIC WATER LEVEL _____
SCREEN INTERVAL 4-11'



ELEVATION OF TOP OF SURFACE CASING/RISER PIPE 156.99
HEIGHT OF TOP OF SURFACE CASING/RISER PIPE ABOVE GROUND SURFACE 3'
TYPE OF SURFACE SEAL NA
DEPTH OF SURFACE SEAL BELOW GROUND SURFACE NA
INSIDE DIAMETER OF SURFACE CASING NA
TYPE OF PROTECTIVE CASING NA
DEPTH OF PROTECTIVE CASING BELOW GROUND NA
INSIDE DIAMETER OF RISER PIPE 1"
TYPE OF RISER PIPE 1" PVC
DIAMETER OF BOREHOLE 6"
TYPE OF BACKFILL High Solids Bentonite Grout
ELEVATION / DEPTH TOP OF SEAL 2'
TYPE OF SEAL Bentonite Chips
ELEVATION / DEPTH BOTTOM OF SEAL 3'
DEPTH OF TOP OF SAND PACK 3' 20/40 Sand (No Native)
TYPE OF SAND PACK Grey
ELEVATION / DEPTH TOP OF SCREENED SECTION 4'
FILTER SOCK Yes
TYPE OF SCREENED SECTION 10-slot 1" PVC
DESCRIBE OPENINGS 10-slot
INSIDE DIAMETER OF SCREENED SECTION 1"
ELEVATION / DEPTH BOTTOM OF SCREENED SECTION 11'
LENGTH OF BLANK SECTION Flush
ELEVATION/DEPTH BOTTOM OF PLUGGED BLANK SECTION 11'
ELEVATION/DEPTH BOTTOM OF SAND COLUMN 14'
TYPE OF BACKFILL BELOW OBSERVATION PIPE Soil Cuttings
ELEVATION/DEPTH OF HOLE 14'

Eco-Systems, Inc.
Environmental Engineers and Scientists

S.M. 02/15/1999 10:27 M:\DRWG2\FORMS\FRM005

BORING LOG

SHEET 1 OF ___

PROJECT NAME	Task 2 - RI Hercules	BORING IDENTIFICATION	TP-13
PROJECT LOCATION	Hattiesburg, MS	BORE HOLE DIAMETER	6"
PROJECT NUMBER	HER-99		
GEOLOGIST	Sartor	BORING START TIME	810 DATE 4-29-99
CLASSIFICATION SCHEME	USCS		
DRILLER	G+E Services	BORING COMPLETED TIME	835 DATE 4-29-99
DRILL METHOD	HSA w/ S-spoons		
WEATHER	sunny/hot	FINAL BORING DEPTH	14'

GROUNDWATER

INITIAL DEPTH ~5'

DEPTH AFTER ___ MINUTES ___

FREE PRODUCT

THICKNESS ___

VOLUME ___

RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL	LITHOLOGY	DESCRIPTION
18"	0.6 / 2	5/4, 5/6	SC	Dry, Loose, brn-gray, CL-Sa (0-2')
19"	1.0 / 4	4/4, 4/4	SC	Damp, Loose, lt gray (tan), CL Sa w/gravel (2'-5')
8"	16.4 / 6	4/4, 3/5	SM	Saturated (5'), Med-dense, (vf-f) Si Sa w/trace gravel (5'-7')
18"	0.4 / 8	6/17, 16/18	SP	(f-med) Gravelly Sand w/Si (7-…)
12"	1.1 / 10	3/5, 6/12	SP	Loose, (f) V Gravelly Sand w/silt (…)
10"	0.1 / 12	3/2, 4/7	CL	Damp, stiff, brown+gray mottling, Si Cl ~~10-10.5'~~
14"	0.0 / 14	2/5, 7/8	CL	
	16			
	18			
	20			
	15			

TD = 14'

- Convert to TP-13 from 4-11'.
- Add filter sock + 20/40 from TD.
-

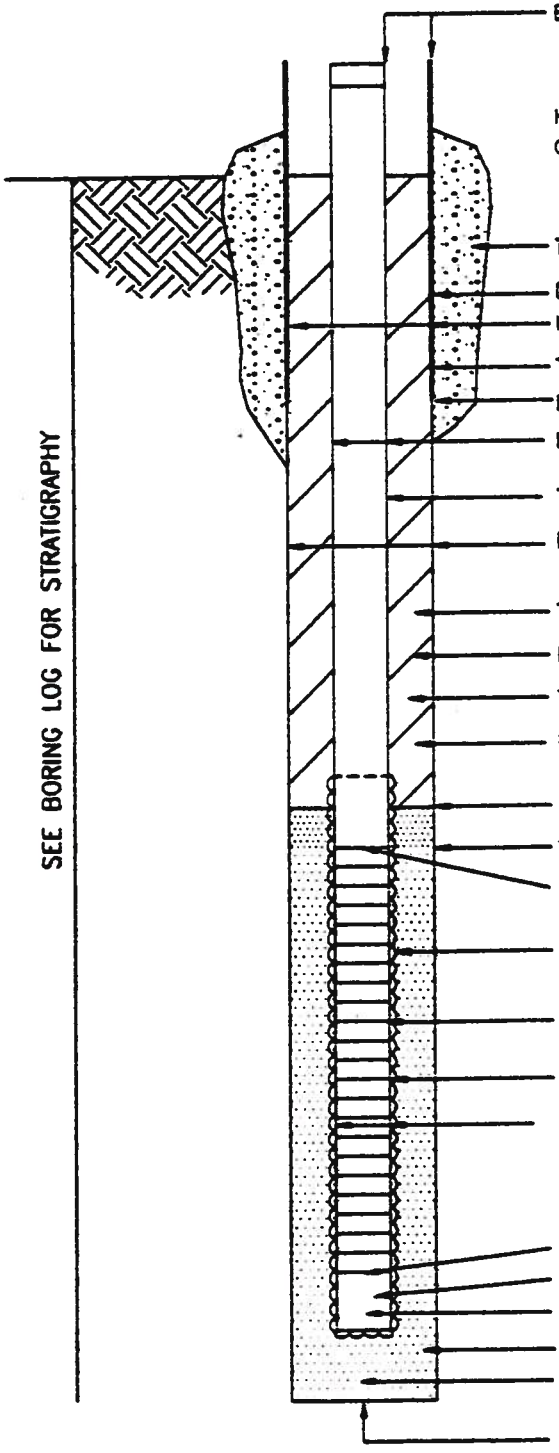
Eco-Systems, Inc.
Environmental Engineers and Scientists

TEMPORARY MONITORING POINT COMPLETION FORM

PROJECT NAME Hercules
LOCATION Hattiesburg, MS
DATE COMPLETED 5/10/99
DRILLER G&E Services
GEOLOGIST J Ryan
INSPECTED BY _____

BOREHOLE DEPTH _____
DRILL METHOD HSA
DATE _____

PAGE 1 OF 1
WELL NO. TP-14
BOREHOLE WATER LEVEL _____
STATIC WATER LEVEL _____
SCREEN INTERVAL _____



SEE BORING LOG FOR STRATIGRAPHY

ELEVATION OF TOP OF SURFACE CASING/RISER PIPE 164.84

HEIGHT OF TOP OF SURFACE CASING/RISER PIPE ABOVE GROUND SURFACE 2.6'

TYPE OF SURFACE SEAL NA
DEPTH OF SURFACE SEAL BELOW GROUND SURFACE NA
INSIDE DIAMETER OF SURFACE CASING NA
TYPE OF PROTECTIVE CASING NA
DEPTH OF PROTECTIVE CASING BELOW GROUND NA
INSIDE DIAMETER OF RISER PIPE 1"
TYPE OF RISER PIPE PVC
DIAMETER OF BOREHOLE 6"
TYPE OF BACKFILL High Solids Bentonite Grout
ELEVATION / DEPTH TOP OF SEAL 1'
TYPE OF SEAL Bentonite Pellets
ELEVATION / DEPTH BOTTOM OF SEAL 3'
DEPTH OF TOP OF SAND PACK 5.0'
TYPE OF SAND PACK 20/40 Sand
ELEVATION / DEPTH TOP OF SCREENED SECTION 7.6'
FILTER SOCK Yes
TYPE OF SCREENED SECTION 10-slot 1" PVC
DESCRIBE OPENINGS 10-slot
INSIDE DIAMETER OF SCREENED SECTION 1"
ELEVATION / DEPTH BOTTOM OF SCREENED SECTION 12.6"
LENGTH OF BLANK SECTION Flush
ELEVATION/DEPTH BOTTOM OF PLUGGED BLANK SECTION 12.6"
ELEVATION/DEPTH BOTTOM OF SAND COLUMN 14'
TYPE OF BACKFILL BELOW OBSERVATION PIPE Native
ELEVATION/DEPTH OF HOLE 14"

Eco-Systems, Inc.
Environmental Engineers and Scientists

S.M. 02/15/1999 10:27 M:\DRWG2\FORMS\FRM005

BORING LOG

SHEET 1 OF ___

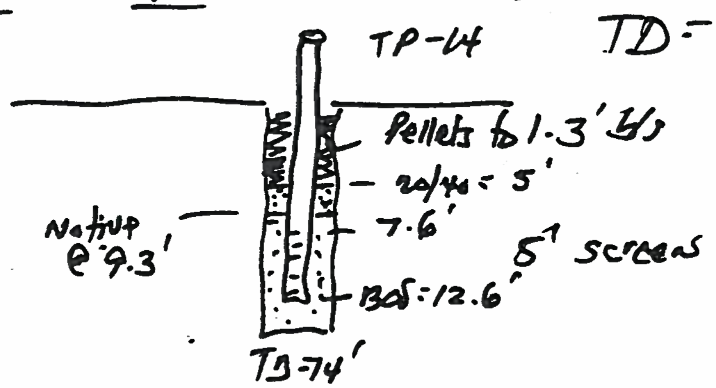
PROJECT NAME: Task 2 - RI Hercules
PROJECT LOCATION: Hattiesburg, MS
PROJECT NUMBER: HER-95
GEOLOGIST: Ryan
CLASSIFICATION SCHEME: USCS
DRILLER: G+E Services
DRILL METHOD: HSA w/ s-spoons
WEATHER:

BORING IDENTIFICATION: TP-14
BORE HOLE DIAMETER: 3"
BORING START TIME: 1630 DATE: 5-10-99
BORING COMPLETED TIME: 1650 DATE: 5-10-99
FINAL BORING DEPTH:

RECOVERY (INCHES)	DEPTH IN FEET	SYMBOL	LITHOLOGY	GROUNDWATER	FREE PRODUCT
				INITIAL DEPTH ~7'	THICKNESS
				DEPTH AFTER ___ MINUTES ___	VOLUME

DEPTH IN FEET	DESCRIPTION
2	DAMP, firm, brown, CCSc; moist (@2') black stained - Fill w/ ... (2.5'-3.1')
4	DAMP (3.5'), loose, lt. brown, SiSa tr. cL (3.1'-5')
6	moist (5'), firm, brown, SiSa (5'-7')
8	wet-sat, SAT, loose, lt. brown, tan, SiSa f-med (trace gravel) 7'- w/ gravel @10.5'
10	
12	
14	
16	
10	
15	

TD = 14'



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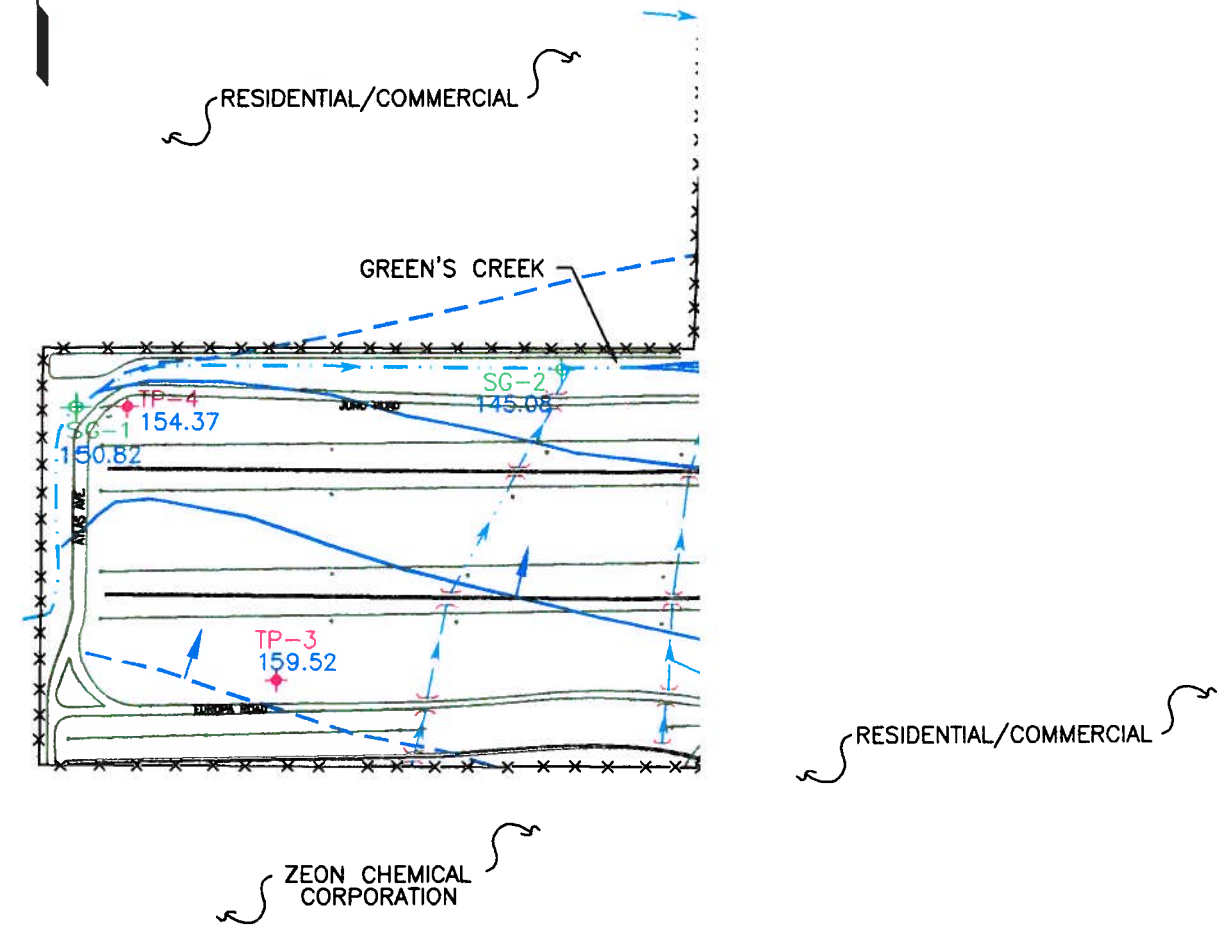
Environmental Engineers and Scientists



LEGEND

- TP-1 — PIEZOMETER LOCATION AND IDENTIFICATI
- SG-1 — STAFF GAUGE LOCATION AND IDENTIFICA
- MW-2 — EXISTING GROUNDWATER MONITORING WE LOCATION AND IDENTIFICATION
- APPROXIMATE PROPERTY BOUNDARY
- FACILITY ACCESS ROADS
- INTERMITTENT DRAINAGE DITCH
- FACILITY RAILROAD
- 157.38 — POTENTIOMETRIC SURFACE ELEVATION (5
- POTENTIOMETRIC SURFACE CONTOUR WI

NOTES

1. BASE MAP PROVIDED BY HERCULES, INCORPOR

HERCULES
CHEMICAL SPECIALTIES

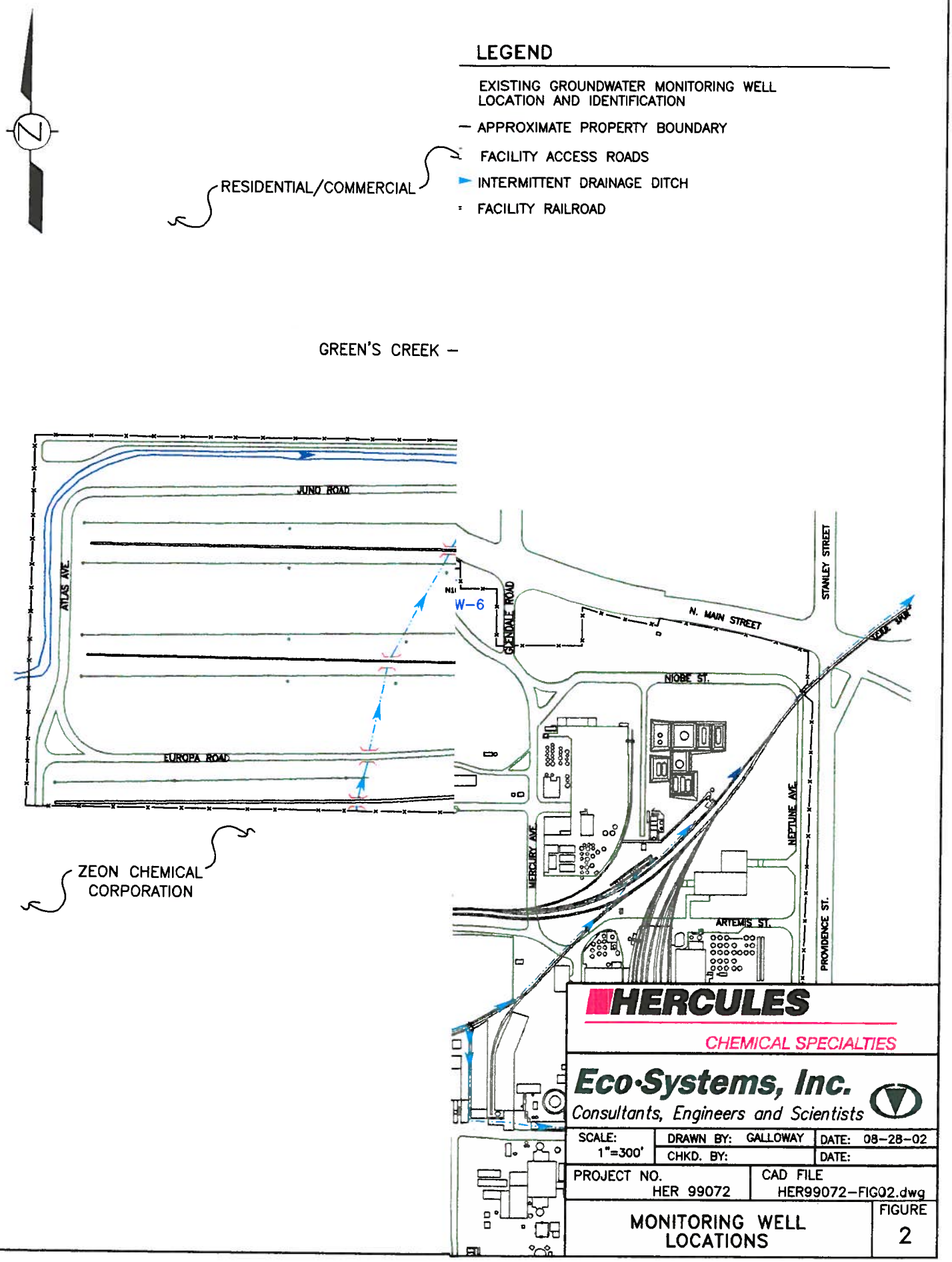
Eco-Systems, Inc.
Consultants, Engineers and Scientists

SCALE: 1"=400'	DRAWN BY: GALLOWAY	DATE: 08-28-02
	CHKD. BY:	DATE:
PROJECT NO. HER99072	CAD FILE HER99072-FIG01.dwg	

UPPERMOST WATER-BEARING ZONE
POTENTIOMETRIC SURFACE MAP
MAY 11, 1999

FIGURE 1

J.W.G. 08/28/2002 S:PROJECTS\HER99072\HER99072-FIG01.dwg



J.W.G. 08/28/02 S:\PROJECTS\HER99072\HER99072-FIG02.dwg

Tony Russell
08/27/2002 10:01 AM

To: thassett@herc.com
Subject: Fax dated August 23

Tim,

I have been out of the office since last Thursday and just got your fax dated August 23. Your summary of comment #4 is incorrect. We did not say that we would not issue an order. I said that I would let Hercules know as we would take your proposal under consideration, which was that Hercules be allowed to move forward without an order.

MDEQ attendees met and discussed the site after the meeting and your proposal for not issuing an order. The attendees believe that it would be in all parties best interest to issue an administrative order. We will discuss the issue with MDEQ legal staff prior to making our final decision.

Tony Russell
Mississippi Department of Environmental Quality
Uncontrolled Sites Branch
601-961-5318