WELL BORING LOG

Boring/Well Number: HES-25	Permit Number:			
CR 835 at KT Grove Road				
Project Name: C-139 Regional Study	Borehole Start Date:	10/19/09	Borehole Start Time: 8:15	[X] am pm
	End Date:	10/19/09	End Time: 3:00	am [X] pm
Environmental Contractor: URS Corp.	Geologist's Name: David Schulte		Environmental Technician's Name: NA	
Drilling Company: Drill Pro	Pavement Thickness (inches): None		Borehole Diameter (inches): 6	Borehole Depth (feet): 100
Drilling Method(s): Sonic Drill	Apparent Borehole DTW (in feet from soil moisture content): 5		Measured Well DTW (in feet after water recharges in well): 5	OVA (list model and check type): NA FID PID

Disposition of Drill Cuttings [check method(s)]: Drum Spread Backfill Stockpile Other

(describe if other or multiple items are checked): Samples taken off site for examination

Borehole Completion (check one): [X] Well Grout Bentonite Backfill Other (describe)

Shallow well pumped at 1 gpm and Deep well pumped at 2 gpm with 3/8 inch dia tubing - Flush finished well manholes

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Notes:
PH	0-2	24	NA	NA	NA	NA	0-2	Unconsolidated-dark gray fine to mediium grained quartz sand with traces of limestone fragments		D	Depth to Water HES-25S = 5.87'
PH	2-4	24	NA	NA	NA	NA	2-4	Unconsolidated-dark gray to black mediium to fine grained quartz sand with traces of limestone fragments and organic material		D	Depth to Water HES-25D = 5.71'
PH	4-5	12	NA	NA	NA	NA	4-5	Unconsolidated-gray medium to fine grained quartz sand		M	
SC	5-8	36	NA	NA	NA	NA	5-8	Unconsolidated-dark brown medium to fine grained quartz sand with trace of organic material		S	
SC	8-10	24	NA	NA	NA	NA	8-10	Unconsolidated-light gray with gray mottling fine to medium grained quartz sand with traces of silt		S	
SC	10-15	60	NA	NA	NA	NA	10-15	Unconsolidated-light gray fine to medium grained quartz sand with traces of coarse grained quartz sand, silt and dark gray fine phosphatic sand		S	
SC	15-20	60	NA	NA	NA	NA	15-20	Unconsolidated-light gray fine to medium grained quartz sand with traces of coarse grained quartz sand, silt and dark gray medium phosphatic sand		S	
SC	20-25	60	NA	NA	NA	NA	20-25	Unconsolidated-light tan medium to coarse grained quartz sand with some fine grained quartz sand and traces of dark gray fine phosphatic sand		S	2 feet of 0.02 slot well screen set from 18 to 20 feet
SC	25-30	60	NA	NA	NA	NA	25-30	Same as above		S	
SC	30-33	36	NA	NA	NA	NA	30-33	Same as above		S	
SC	33-35	24	NA	NA	NA	NA	33-35	Unconsolidated-light tan medium to coarse grained quartz sand with traces of fine grained quartz sand and cemented worm tubes		S	

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

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Drilling Method(s): Sonic Drill	Apparent Borehole DTW (in feet from soil moisture content): 5		Measured Well DTW (in feet after water recharges in well): 5	OVA (list model and check type): NA FID PID

Disposition of Drill Cuttings [check method(s)]: Drum Spread Backfill Stockpile Other

(describe if other or multiple items are checked): Samples taken off site for examination

Borehole Completion (check one): [X] Well Grout Bentonite Backfill Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Notes:
SC	35-38	36	NA	NA	NA	NA	35-38	Unconsolidated-grayish tan medium to coarse grained quartz sand with traces of fine grained quartz sand, dark gray fine phosphatic sand and cemented sand/shell nodules		S	
SC	38-40	24	NA	NA	NA	NA	38-40	Unconsolidated-grayish tan medium to coarse grained quartz sand and some medium cemented sand/shell nodules with traces of fine grained quartz sand, dark gray fine phosphatic sand		S	
SC	40-45	60	NA	NA	NA	NA	40-45	Unconsolidated-grayish tan medium to coarse grained quartz sand and some medium cemented sand/shell nodules with traces of fine grained quartz sand, dark gray fine phosphatic sand		S	
SC	45-50	60	NA	NA	NA	NA	45-50	Unconsolidated-grayish tan medium to fine grained quartz sand and some small to medium cemented sand/shell nodules with traces of coarse grained quartz sand		W	
SC	50-55	60	NA	NA	NA	NA	50-55	Unconsolidated-gray medium to fine grained quartz sand and some small to large cemented sand/shell nodules with traces of coarse grained quartz sand		W	
SC	55-63	96	NA	NA	NA	NA	55-63	Same as above		W	
SC	63-65	24	NA	NA	NA	NA	63-65	Medium hard gray fossiliferous limestone with traces of light gray fine grained quartz sand		S	
SC	65-70	60	NA	NA	NA	NA	65-70	Same as above		S	
SC	70-75	60	NA	NA	NA	NA	70-75	Same as above		S	
SC	75-80	60	NA	NA	NA	NA	75-80	Hard gray fossiliferous limestone with traces of light gray fine grained quartz sand		S	
SC	80-85	60	NA	NA	NA	NA	80-85	Same as above		S	
SC	85-100	180	NA	NA	NA	NA	85-100	Same as above		S	2 feet of 0.02 slot well screen set from 90 to 92 feet

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