Invoice

Moffatt & Nichol
P.O. Box 22648
Long Beach, CA 90801-5648
Phone: (562) 590-6500

Robert Law
De Maximis Inc.
186 Center Street, Suite 290
Clinton, NJ 08809

July 30, 2012
Invoice No: 61646

Project 6664 Lower Passaic River Restoration Modeling Work - Initial Tasks

Professional Services from May 27, 2012 to June 30, 2012

Phase 5 LPR/NB RI/FS Modeling Program TOM5

Task 01 Project Management

Professional Personnel

	Hours	Rate	Amount	
Engineer/Scientist III				
Canizares, Rafael	59.00	185.00	10,915.00	
Totals	59.00		10,915.00	
Total Labor				**10,915.00**
			Total this Task	**$10,915.00**

Task 02 Data Analysis & Monitoring Design Coordination for Use In Numberical Model

Professional Personnel

	Hours	Rate	Amount	
Engineer/Scientist III				
Canizares, Rafael	25.00	185.00	4,625.00	
Engineer/Scientist II				
Mathew, Rooni	1.00	164.00	164.00	
Support Staff Engineer				
Manian, Dinesh	43.00	90.00	3,870.00	
Totals	69.00		8,659.00	
Total Labor				**8,659.00**
			Total this Task	**$8,659.00**

Task 03 System Understanding

Professional Personnel

	Hours	Rate	Amount	
Engineer/Scientist III				
Canizares, Rafael	51.00	185.00	9,435.00	
Support Staff Engineer				
Manian, Dinesh	64.00	90.00	5,760.00	
Totals	115.00		15,195.00	
Total Labor				**15,195.00**
			Total this Task	**$15,195.00**

Task 04 LPR/NB Hydrodynamic Modeling

Professional Personnel

	Hours	Rate	Amount
Engineer/Scientist III			

FOIA_07123_0005025_0001

Canizares, Rafael	4.00	185.00	740.00	
Support Staff Engineer				
Manian, Dinesh	23.00	90.00	2,070.00	
Totals	27.00		2,810.00	
Total Labor				**2,810.00**
			Total this Task	**$2,810.00**

Task 05 LPR/NB Sediment Transport Modeling

Professional Personnel

	Hours	Rate	Amount	
Engineer/Scientist III				
Canizares, Rafael	2.00	185.00	370.00	
Engineer/Scientist II				
Mathew, Rooni	42.00	164.00	6,888.00	
Support Staff Engineer				
Manian, Dinesh	62.00	90.00	5,580.00	
Totals	106.00		12,838.00	
Total Labor				**12,838.00**
			Total this Task	**$12,838.00**

Task 06 LPR/NB Organic Carbon Modeling

Professional Personnel

	Hours	Rate	Amount	
Engineer/Scientist III				
Canizares, Rafael	1.00	185.00	185.00	
Engineer/Scientist II				
Mathew, Rooni	1.50	164.00	246.00	
Totals	2.50		431.00	
Total Labor				**431.00**
			Total this Task	**$431.00**

Task 07 LPR/NB Contaiminant Fate and Transport Modeling

Professional Personnel

	Hours	Rate	Amount	
Engineer/Scientist III				
Canizares, Rafael	2.00	185.00	370.00	
Engineer/Scientist II				
Mathew, Rooni	132.50	164.00	21,730.00	
Staff Engineer/Scientist				
Xiong, Yi	187.00	114.00	21,318.00	
Totals	321.50		43,418.00	
Total Labor				**43,418.00**
			Total this Task	**$43,418.00**

Task 10 Computer Support

Professional Personnel

	Hours	Rate	Amount	
Engineer/Scientist II				
Mathew, Rooni	15.00	164.00	2,460.00	
Totals	15.00		2,460.00	
Total Labor				**2,460.00**
			Total this Task	**$2,460.00**
			Total this Phase	**$96,726.00**

FOIA_07123_0005025_0002

Phase	XY	Expenses		
Reimbursable Expenses				
Computer Software & Hardware			1,085.90	
	Total Reimbursables		**1,085.90**	**1,085.90**
			Total this Phase	**$1,085.90**
			TOTAL THIS INVOICE	**$97,811.90**

Please remit payment of this invoice to:

Moffatt & Nichol
ABA #121000248
Account #4159349729
Swift #WFBIUS6WFFX
Wells Fargo Bank
111 W. Ocean Blvd., Suite 300
Long Beach, CA 90802 USA

FOIA_07123_0005025_0003

Billing Backup

Moffatt & Nichol

Invoice 61646 Dated 7/30/2012

Project 6664 Lower Passaic River Restoration Modeling Work - Initial Tasks

Phase 5 LPR/NB RI/FS Modeling Program TOM5

Task 01 Project Management

Professional Personnel

			Hours	Rate	Amount	
Engineer/Scientist III						
1548	Canizares, Rafael	6/2/2012	3.00	185.00	555.00	
1548	Canizares, Rafael	6/2/2012	2.00	185.00	370.00	
1548	Canizares, Rafael	6/9/2012	4.00	185.00	740.00	
1548	Canizares, Rafael	6/9/2012	8.00	185.00	1,480.00	
1548	Canizares, Rafael	6/9/2012	4.00	185.00	740.00	
1548	Canizares, Rafael	6/16/2012	2.00	185.00	370.00	
1548	Canizares, Rafael	6/16/2012	8.00	185.00	1,480.00	
1548	Canizares, Rafael	6/16/2012	4.00	185.00	740.00	
1548	Canizares, Rafael	6/16/2012	2.00	185.00	370.00	
1548	Canizares, Rafael	6/16/2012	8.00	185.00	1,480.00	
1548	Canizares, Rafael	6/23/2012	6.00	185.00	1,110.00	
1548	Canizares, Rafael	6/30/2012	2.00	185.00	370.00	
1548	Canizares, Rafael	6/30/2012	2.00	185.00	370.00	
1548	Canizares, Rafael	6/30/2012	4.00	185.00	740.00	
Totals			59.00		10,915.00	
Total Labor						**10,915.00**
				Total this Task		**$10,915.00**

Task 02 Data Analysis & Monitoring Design Coordination for Use In Numberical Model

Professional Personnel

			Hours	Rate	Amount	
Engineer/Scientist III						
1548	Canizares, Rafael	6/2/2012	10.00	185.00	1,850.00	
1548	Canizares, Rafael	6/9/2012	2.00	185.00	370.00	
1548	Canizares, Rafael	6/30/2012	13.00	185.00	2,405.00	
Engineer/Scientist II						
2219	Mathew, Rooni	6/9/2012	.50	164.00	82.00	
2219	Mathew, Rooni	6/30/2012	.50	164.00	82.00	
Support Staff Engineer						
2301	Manian, Dinesh	6/16/2012	8.00	90.00	720.00	
2301	Manian, Dinesh	6/16/2012	3.00	90.00	270.00	
2301	Manian, Dinesh	6/23/2012	8.00	90.00	720.00	
2301	Manian, Dinesh	6/23/2012	8.00	90.00	720.00	
2301	Manian, Dinesh	6/23/2012	8.00	90.00	720.00	
2301	Manian, Dinesh	6/30/2012	8.00	90.00	720.00	
Totals			69.00		8,659.00	
Total Labor						**8,659.00**
				Total this Task		**$8,659.00**

Task 03 System Understanding

Professional Personnel

			Hours	Rate	Amount
Engineer/Scientist III					
1548	Canizares, Rafael	6/2/2012	7.00	185.00	1,295.00
1548	Canizares, Rafael	6/9/2012	8.00	185.00	1,480.00
1548	Canizares, Rafael	6/9/2012	12.00	185.00	2,220.00

FOIA_07123_0005025_0004

1548	Canizares, Rafael	6/16/2012	12.00	185.00	2,220.00	
1548	Canizares, Rafael	6/30/2012	12.00	185.00	2,220.00	
Support Staff Engineer						
2301	Manian, Dinesh	6/2/2012	8.00	90.00	720.00	
2301	Manian, Dinesh	6/9/2012	8.00	90.00	720.00	
2301	Manian, Dinesh	6/16/2012	8.00	90.00	720.00	
2301	Manian, Dinesh	6/16/2012	8.00	90.00	720.00	
2301	Manian, Dinesh	6/23/2012	8.00	90.00	720.00	
2301	Manian, Dinesh	6/23/2012	8.00	90.00	720.00	
2301	Manian, Dinesh	6/30/2012	8.00	90.00	720.00	
2301	Manian, Dinesh	6/30/2012	8.00	90.00	720.00	
Totals			115.00		15,195.00	
Total Labor						**15,195.00**
				Total this Task		**$15,195.00**

Task 04 LPR/NB Hydrodynamic Modeling

Professional Personnel

			Hours	**Rate**	**Amount**	
Engineer/Scientist III						
1548	Canizares, Rafael	6/23/2012	4.00	185.00	740.00	
Support Staff Engineer						
2301	Manian, Dinesh	6/2/2012	8.00	90.00	720.00	
2301	Manian, Dinesh	6/9/2012	4.00	90.00	360.00	
2301	Manian, Dinesh	6/9/2012	8.00	90.00	720.00	
2301	Manian, Dinesh	6/16/2012	3.00	90.00	270.00	
Totals			27.00		2,810.00	
Total Labor						**2,810.00**
				Total this Task		**$2,810.00**

Task 05 LPR/NB Sediment Transport Modeling

Professional Personnel

			Hours	**Rate**	**Amount**	
Engineer/Scientist III						
1548	Canizares, Rafael	6/9/2012	1.00	185.00	185.00	
1548	Canizares, Rafael	6/23/2012	1.00	185.00	185.00	
Engineer/Scientist II						
2219	Mathew, Rooni	6/2/2012	2.50	164.00	410.00	
2219	Mathew, Rooni	6/2/2012	2.00	164.00	328.00	
2219	Mathew, Rooni	6/9/2012	12.00	164.00	1,968.00	
2219	Mathew, Rooni	6/16/2012	4.00	164.00	656.00	
2219	Mathew, Rooni	6/16/2012	4.00	164.00	656.00	
2219	Mathew, Rooni	6/16/2012	4.00	164.00	656.00	
2219	Mathew, Rooni	6/16/2012	6.00	164.00	984.00	
2219	Mathew, Rooni	6/16/2012	.50	164.00	82.00	
2219	Mathew, Rooni	6/23/2012	1.00	164.00	164.00	
2219	Mathew, Rooni	6/23/2012	1.00	164.00	164.00	
2219	Mathew, Rooni	6/30/2012	3.00	164.00	492.00	
2219	Mathew, Rooni	6/30/2012	1.00	164.00	164.00	
2219	Mathew, Rooni	6/30/2012	1.00	164.00	164.00	
Support Staff Engineer						
2301	Manian, Dinesh	6/2/2012	8.00	90.00	720.00	
2301	Manian, Dinesh	6/2/2012	8.00	90.00	720.00	
2301	Manian, Dinesh	6/9/2012	8.00	90.00	720.00	
2301	Manian, Dinesh	6/9/2012	8.00	90.00	720.00	
2301	Manian, Dinesh	6/9/2012	4.00	90.00	360.00	
2301	Manian, Dinesh	6/16/2012	5.00	90.00	450.00	
2301	Manian, Dinesh	6/16/2012	5.00	90.00	450.00	
2301	Manian, Dinesh	6/30/2012	8.00	90.00	720.00	
2301	Manian, Dinesh	6/30/2012	8.00	90.00	720.00	
Totals			106.00		12,838.00	
Total Labor						**12,838.00**
				Total this Task		**$12,838.00**

FOIA_07123_0005025_0005

Task 06 LPR/NB Organic Carbon Modeling

Professional Personnel

			Hours	Rate	Amount	
Engineer/Scientist III						
1548	Canizares, Rafael	6/23/2012	1.00	185.00	185.00	
Engineer/Scientist II						
2219	Mathew, Rooni	6/23/2012	1.00	164.00	164.00	
2219	Mathew, Rooni	6/23/2012	.50	164.00	82.00	
Totals			2.50		431.00	
Total Labor						**431.00**
				Total this Task		**$431.00**

Task 07 LPR/NB Contaiminant Fate and Transport Modeling

Professional Personnel

			Hours	Rate	Amount	
Engineer/Scientist III						
1548	Canizares, Rafael	6/9/2012	1.00	185.00	185.00	
1548	Canizares, Rafael	6/30/2012	1.00	185.00	185.00	
Engineer/Scientist II						
2219	Mathew, Rooni	6/2/2012	27.50	164.00	4,510.00	
2219	Mathew, Rooni	6/9/2012	7.00	164.00	1,148.00	
2219	Mathew, Rooni	6/9/2012	23.50	164.00	3,854.00	
2219	Mathew, Rooni	6/16/2012	8.00	164.00	1,312.00	
2219	Mathew, Rooni	6/16/2012	4.00	164.00	656.00	
2219	Mathew, Rooni	6/16/2012	4.00	164.00	656.00	
2219	Mathew, Rooni	6/16/2012	4.00	164.00	656.00	
2219	Mathew, Rooni	6/16/2012	2.00	164.00	328.00	
2219	Mathew, Rooni	6/16/2012	3.50	164.00	574.00	
2219	Mathew, Rooni	6/23/2012	7.50	164.00	1,230.00	
2219	Mathew, Rooni	6/23/2012	8.00	164.00	1,312.00	
2219	Mathew, Rooni	6/23/2012	1.00	164.00	164.00	
2219	Mathew, Rooni	6/23/2012	6.00	164.00	984.00	
2219	Mathew, Rooni	6/30/2012	20.50	164.00	3,362.00	
2219	Mathew, Rooni	6/30/2012	2.00	164.00	328.00	
2219	Mathew, Rooni	6/30/2012	4.00	164.00	656.00	
Staff Engineer/Scientist						
2403	Xiong, Yi	6/2/2012	4.50	114.00	513.00	
2403	Xiong, Yi	6/2/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/2/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/2/2012	6.50	114.00	741.00	
2403	Xiong, Yi	6/9/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/9/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/9/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/9/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/9/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/16/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/16/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/16/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/16/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/16/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/23/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/23/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/23/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/23/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/23/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/30/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/30/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/30/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/30/2012	8.00	114.00	912.00	
2403	Xiong, Yi	6/30/2012	8.00	114.00	912.00	
Totals			321.50		43,418.00	
Total Labor						**43,418.00**
				Total this Task		**$43,418.00**

FOIA_07123_0005025_0006

Task 10 Computer Support

Professional Personnel

			Hours	Rate	Amount	
Engineer/Scientist II						
2219	Mathew, Rooni	6/9/2012	1.00	164.00	164.00	
2219	Mathew, Rooni	6/23/2012	2.00	164.00	328.00	
2219	Mathew, Rooni	6/23/2012	4.00	164.00	656.00	
2219	Mathew, Rooni	6/30/2012	2.00	164.00	328.00	
2219	Mathew, Rooni	6/30/2012	6.00	164.00	984.00	
Totals			15.00		2,460.00	
Total Labor						**2,460.00**
				Total this Task		**$2,460.00**
				Total this Phase		**$96,726.00**

Phase XY Expenses

Reimbursable Expenses

Computer Software & Hardware					
AP	175566	4/28/2012	CDW Direct, LLC / Linux Model PC / Invoice:	1,085.90	
		Total Reimbursables		**1,085.90**	**1,085.90**
			Total this Phase		**$1,085.90**
			Total this Project		**$97,811.90**
			Total this Report		**$97,811.90**

FOIA_07123_0005025_0007

MOFFATT & NICHOL

104 West 40th Street
14th floor
New York, NY 10018

(212) 768-7454
Fax (212) 768-7936

Detailed Description of work done by M&N personnel associated to the LPR/NB Modeling Program Task Order Memoranda 5 - Scope of Work for the period 05/27/2012 to 06/30/2012 M&N Project No. 6664

Hydrodynamics Principal Investigator - Rafael Cañizares.

Task 1 – Project Management	• Internal coordination with Deltares and M&N • Calls and Coordination with Project Coordinator including prepare material such as Dash Board reports. • Prepare and review invoices including revision of Deltares budget and invoices • Coordinate with Deltares sedimentologist invoice and final report submittal • Attend TC meeting • Coordinate, prepare and attend MSC meeting • Coordinate, prepare and attend collaboration meeting with EPA • Review minutes of the meeting with ePA
Task 2 – Data Analysis & Monitoring Design Coordination for Use in Numerical Model	• Historical Bathymetries, prepare file and Memo • Digitize and prepare historical bathymetries for pilot analysis at specific river site
Task 3 – System Understanding	• Historical Bathymetry, discussion, review .. • address comments bathymetry presentation, prepare Modeling update presentation. Other internal coordination. • Update Bathymetry presentation • additional work with Han on Bathymetry. Discussion and information • review and compare historical bathymetries to explain core behavior for additional system understanding
Task 4 – LPR/NB Hydrodynamic Model	• write up for ch2mhill describing hd model for 10.9
Task 5 – LPR/NB Sediment Transport Modeling	• Discussion with Han Winterwerp and Rooni Mathew on sediment transport modeling and next tasks
Task 6 – LPR/NB Organic Carbon Modeling	• Discuss OC memo with Leo Postma and Rooni Mathew

Task 7 – LPR/NB Contaminant Fate and Transport Modeling	• Coordination and discussions with Leo Postma and Rooni Mathew

Rooni Mathew.

Task 2 – Data Analysis	• Develop stations for CWCM event 4 • Review weather/flows for low-flow event
Task 5 – LPR/NB Sediment Transport Modeling	• Launch ST baseline projection run, review ST calibration run results, review PWCM model-data comparisons, review bathy feedback runs • Review latest ST calibration run results • Develop presentation for MSC/EPA meetings • EPA collaboration meeting • MSC meeting • Meeting debrief call, review runs status, review presentation and next steps with Dinesh Manian • Review ST model status w Han Winterwerp and next steps in NB, review NB source tracking runs, debug alt 4 run crash • Review/edit meeting summary • Debug FFS Alt 3 runscript • Restart ST projection runs • Debug and revise runscript for remediation runs • Debug run crash in FFS Alt 3 run in transition between 15-year cycles • Develop tasks for next 2 weeks
Task 6 – LPR/NB Organic Carbon Modeling	• POC data for OC simplification • Review OC memo
Task 7 – LPR/NB Contaminate Fate and Transport Modeling	• Review and debug RCATOX code and sensitivity runs w and w/o bed layering • Develop presentation for MSC/EPA meetings • Review/debug runs with revised bed layering • Develop Contaminant presentation for MSC/Collaboration Meetings • EPA collaboration meeting • MSC meeting • Meeting debrief call, review runs status, review presentation and next steps with Ying Xiong • Review RCATOX code changes/issues with Ying Xiong • Review/edit meeting summary, review RCATOX code changes, debug RCATOX restart • Debug bed layering changes numerical precision issues • Debug bed layering changes numerical precision issues,

FOIA_07123_0005025_0009

	review LP ideas for particle mixing calibration • Restart toxics bed layering sensitivity runs • Review Hg model inputs, setup ST-SWEM run to generate carb_RCAF14, discuss RCATOX next steps w LP • Debug negative sediment concentration bug • Develop plan for particle mixing calibration standalone runs and discuss with Leo Postma • Develop tasks for next 2 weeks, review RCA status, review Hg results with carb_RCAF14 correction for CPG grid
Task 10 – Computer Support	• Review/benchmark new machine from CDW • Debug Linux machines connectivity issues/Matlab license issues • Remap IP addresses on Linux machines • Set up new machines

Dinesh Manian

Task 2 – Data Analysis	• Processing and analyzing SSP contaminant data collected in 2012 • SSP contaminant data 2012: Plotting bathymetric transects at location of cores • SSP 2012 data analysis; Contaminant cores in relation to current and historical bathymetric transects • SSP 2012 data analysis; Open earth database of contaminant concentrations and grain size • SSP 2012 data analysis; plotting spatial contaminant concentrations in relation to grain size, bathy etc. • SSP data analysis - transects with historical bathy from 1931,36 etc. Comparison of surface conc. with shear stress exceedance
Task 3 – System Understanding	• Deltares support: Analysis of flow volume near the mouth of the river; Comparison with cross-section area used in the model • Computing sediment mass-balance in different reaches of the Passaic and Newark Bay • Accounting sediment budget in different reaches of the lower Passaic and Newark Bay; • Computing tidal flow volume for exchange between LPR and NB; Updating wave shear stresses and percentage exceedance of TauCr due to waves in NB; • NB system understanding: Investigating model velocities and shear stresses near RM 0 (to assess erodibility) • NB system understanding: Tracking sediment budget over different reaches of NB separately for channels and shallows; Understanding exchange among Passaic, Hackensack and NB

FOIA_07123_0005025_0010

	by looking at phase difference in vel. • NB system understanding: Updating wave analysis. Computing percent exceedance maps of TauCr over the 14 yr prediction period • Plotting contaminant cores showing concentrations, and grain size information near the shoals at RM 0; Updating model predictions of maximum scour during high flow event based on latest model runs
Task 4 – LPR/NB Hydrodynamic Model	• Investigating salinity over-prediction in Spring 2010: Making Passaic-Only-Model simulations with salinity boundary derived from data at RM 1.4 to verify model circulation is as expected within the Passaic. • Hydro model performance in Spring 2010: Processing Passaic-only model • Simulation of Hurricane Irene and a 100 yr Passaic discharge to compute shear stresses at RM 10.9 • Debug and run hydro simulation with post-dredge bathymetry in the lower miles and NB.
Task 5 – LPR/NB Sediment Transport Modeling	• Evaluating the effectiveness of continuity correction as a means of having some bathymetric feedback to SedTran without having to make a parallel Hydro simulation; (comparison of bed evolution) • Processing long-term sediment transport simulation with continuity correction and other updated parameters. • Comparison of bed evolution in model-run with sed-hydro feedback to run with continuity correction, and to run with no feedback • Processing long-term sediment-transport run to evaluate model performance, comparisons with data; Putting together slides/figures for presentation • Running and processing Remediation Projection sediment transport simulation • Processing continuity correction simulation for WY 2010 using SMOLAR2 numerical scheme for advection, and reduced timestep, to achieve mass balance; • Debugging baseline projection run - refining the code for continuity correction to handle wetting-drying • Running and processing baseline projection, and remediation projection runs

Yi Xiong

• **Task 7 – LPR/NB Contaminate Fate and Transport Modeling**	• Continue work on RCATOX post processor; Debug the code. • Modify the code in terms of mixing length and sediment bed input file. • Run the modified code for one year.

FOIA_07123_0005025_0011

	• Work on the RCATOX postprocessor. • Read the codes on organic chemicals kinetics; Generate erosion, deposition, diffusion mass and top 6" concentration. • Take a look at the GIS map, and try to set a method to figure out the initial NPS. • Work on Fortran program for calculating erosion, resuspension, exchange and total mass, respectively. • Work on RCAF54 and RCAF55 to figure out sediment bed mass conservation. • Work on the output files for contaminant mass advect. • Fix the original and revised codes, launch the 3 RCATOX runs. • Modify the code and write the upstream/downstream fluxes separately. • Read the materials about fluff layer. • Read the revised code and try to find the bug • Think about how to add the fluff layer in RCATOX and modify the code to write down upstream and downstream flux separately. • Do some research on carb_RCAF14; find the read Fortran program for RCAF14; • Re-compile original RCATOX code and Re-run the Mercury model; • Restart the 3 scenarios runs for TCDD again; search the carb_RCAF14. • Run ST-SWEM. Run 14-year RCATOX model. • Try to understand Sediment decay. • Read ST-SWEM code. • Work on carb_RCAF14 linkage file. • Work on code for generating carbon linkage file. • Work on sediment diagenesis model output and extract the data to be used for RCATOX Mercury Modeling. • Work on ST-SWEM code.

FOIA_07123_0005025_0012

ORIGINAL COPY

The Right Technology. Right Away.™

www.cdw.com
800-800-4239

Tax Identification
36-4530079

INVOICE NO.	ACCOUNT NO.	INVOICE DATE
G996406	4771375	3-12-12

SOLD TO
MOFFATT & NICHOL ENGINEERS
3780 KILROY AIRPORT WAY STE 75
ACCOUNTS PAYABLE
LONG BEACH, CA 90806-2457
5625906500

SHIP TO
MOFFATT & NICHOL ENGINEERS
104 WEST 40TH ST. FLOOR
NEW YORK, NY 10018
YOUR P.O.# SW-122811-NY

ACCOUNT MANAGER	DATE ORDERED	DATE SHIPPED	WEIGHT	SHIPPED VIA	TERMS
JASON HIGGIN	12-30-11	3-12-12		FEDEX Ground	NET 30 Days

ORD.	SHP	B/O	ITEM NUMBER	DESCRIPTION	UNIT PRICE	EXTENSION
5	1	0	2560899 (01) MFG#: BX80623I72700K	INTEL 2ND GEN CORE I7 2700	362.69	362.69
5	1	0	1944170 (01) MFG#: WD20EARS SERIAL#: WCAWZ1997804	WD CAVIAR GREEN SATA 2TB 5	164.96	164.96
5	1	0	2275995 (01) MFG#: NSK4482	ANTEC NSK4882 ATX MID TOWE	104.39	104.39
5	1	0	1813338 (01) MFG#: 98240	MEMOREX DVR 24X INT MULTI-	39.93	39.93
5	1	0	2582346 (01) MFG#: H67A-G43(B3)	MSI MB H67A-G43 H67 B3 LGA	109.10	109.10
20	4	0	1778751 (01) MFG#: KVR1066D3N7/4G	KINGSTON 4GB DDR3 1066MHZ	26.71	106.84
5	1	0	1706189 (01)	CDW HARDWARE INSTALL FOR D	11.86	11.86

PLEASE REMIT TO:
CDW DIRECT, LLC, PO BOX 75723, CHICAGO, IL 60675-5723

INVOICE TOTAL → US Currency

Continued

EXPLANATION OF OUR RETURN AND FREIGHT POLICIES ARE ON BACK OF THIS INVOICE. IF YOU HAVE ANY QUESTIONS ABOUT THE ORDER OR INVOICE, PLEASE WRITE OR CALL

CDW offers the best service and support in the industry with:

✔ Account managers dedicated to providing solutions specific to your computing needs ✔ Custom configuration ✔ Extended service plans ✔ Toll-free technical support ✔ Comprehensive product selection and secure online ordering at www.cdw.com

CDW: servicing your PC needs since 1982

Visit us on the Internet! www.cdw.com

Your Business is Appreciated

The Right Technology. Right Away.™
www.cdw.com
800-800-4239

C1910
1151
5-28-12

ORIGINAL COPY

CDW® The Right Technology. Right Away.™

www.cdw.com
800-800-4239

Tax Identification
36-4530079

INVOICE NO.	ACCOUNT NO.	INVOICE DATE
G896406	4771375	3-12-12

SOLD TO
MOFFATT & NICHOL ENGINEERS
3780 KILROY AIRPORT WAY STE 75
ACCOUNTS PAYABLE
LONG BEACH, CA 90806-2457
5625906500

SHIP TO
MOFFATT & NICHOL ENGINEERS
104 WEST 40TH ST. FLOOR
NEW YORK, NY 10018
YOUR P.O.# SW-122811-NY

ACCOUNT MANAGER	DATE ORDERED	DATE SHIPPED		WEIGHT	SHIPPED VIA	TERMS
JASON HIGGIN	12-30-11	3-12-12			FEDEX Ground	NET 30 Days

ORD.	SHP.	B/O	ITEM NUMBER	DESCRIPTION	UNIT PRICE	EXTENSION
			MFG#: HWINSTALLDTLTPRT			
5	1	0	1713544 (01)	CDW SPECIAL CONFIG REQ - 1	74.65	74.65
			MFG#: SPECCFGREQ12CRED			
				Subtotal:		974.42
				Freight:		22.96
				Sales Tax:		88.52

Date MY Invoice Amount 1085.90

Check	Check	Disc.	Balance	Amount
6664	XY			1085.90

Description
Approved Date
Approved Date

PLEASE REMIT TO:
CDW DIRECT,LLC, PO BOX 75723, CHICAGO, IL 60675-5723

INVOICE TOTAL → US Currency 1085.90

EXPLANATION OF OUR RETURN AND FREIGHT POLICIES ARE ON BACK OF THIS INVOICE. IF YOU HAVE ANY QUESTIONS ABOUT THE ORDER OR INVOICE, PLEASE WRITE OR CALL.

CDW offers the best service and support in the industry with:
✔ Account managers dedicated to providing solutions specific to your computing needs ✔ Custom configuration ✔ Extended service plans
✔ Toll-free technical support ✔ Comprehensive product selection and secure online ordering at www.cdw.com

CDW: servicing your PC needs since 1982

Visit us on the Internet! www.cdw.com

Your Business is Appreciated

CDW® The Right Technology. Right Away.™
www.cdw.com
800-800-4239