

January 02, 2019

Work Order #: **EL19044**

Derek Dill  
Water Dynamics, Inc  
4644 W Jennifer Ave # 108  
Fresno, CA 93722

**RE: Houghton-Kearney Elementary School**

Enclosed are the analytical results for samples received by our laboratory on **12/19/18** . For your reference, these analyses have been assigned laboratory work order number **EL19044**.

All analyses have been performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results apply only to samples analyzed.

If you have any questions, please feel free to contact us at the number listed above.

Sincerely,

**Moore Twining Associates, Inc.**



Susan Federico  
Client Services Representative

Water Dynamics, Inc  
4644 W Jennifer Ave # 108  
Fresno CA, 93722

**Project:** Houghton-Kearney Elementary School  
**Project Number:** 1000206  
**Project Manager:** Derek Dill

**Reported:**  
01/02/2019

**Analytical Report for the Following Samples**

Sample ID	Notes	Laboratory ID	Matrix	Date Sampled	Date Received
Well 01		EL19044-01	Ground Water	12/19/18 13:57	12/19/18 16:15

Water Dynamics, Inc  
4644 W Jennifer Ave # 108  
Fresno CA, 93722

**Project:** Houghton-Kearney Elementary School  
**Project Number:** 1000206  
**Project Manager:** Derek Dill

**Reported:**  
01/02/2019

### Analytical Report for Work Order EL19044

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
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**Well 01** Sampled: 12/19/18 13:57 **EL19044-01 (Ground Water)**

**Inorganics**

Nitrate as N		5.5	0.45	mg/L	1	B8L1927	12/19/18	12/20/18	EPA 300.0
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### Quality Control Sample Results - Inorganics

Analyte	Flag	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limits
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**Batch - B8L1927**

**Blank (B8L1927-BLK1)** Prepared: 12/19/18 Analyzed: 12/20/18

**EPA 300.0**

Nitrate as N		ND	0.45	mg/L						
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**LCS (B8L1927-BS1)** Prepared: 12/19/18 Analyzed: 12/20/18

**EPA 300.0**

Nitrate as N		11.4	0.45	mg/L	11.3		101	90-110		
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**LCS Dup (B8L1927-BSD1)** Prepared: 12/19/18 Analyzed: 12/20/18

**EPA 300.0**

Nitrate as N		11.2	0.45	mg/L	11.3		99.0	90-110	2.11	20
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**Matrix Spike (B8L1927-MS1)** Prepared: 12/19/18 Analyzed: 12/20/18 **Source: EL18062-01**

**EPA 300.0**

Nitrate as N		26.6	0.90	mg/L	22.6	4.59	97.5	80-120		
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**Matrix Spike Dup (B8L1927-MSD1)** Prepared: 12/19/18 Analyzed: 12/20/18 **Source: EL18062-01**

**EPA 300.0**

Nitrate as N		26.9	0.90	mg/L	22.6	4.59	98.9	80-120	1.19	20
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**Matrix Spike (B8L1927-MS2)** Prepared: 12/19/18 Analyzed: 12/20/18 **Source: EL19044-01**

**EPA 300.0**

Nitrate as N		27.3	0.90	mg/L	22.6	5.52	96.6	80-120		
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**Matrix Spike Dup (B8L1927-MSD2)** Prepared: 12/19/18 Analyzed: 12/20/18 **Source: EL19044-01**

**EPA 300.0**

Nitrate as N		27.5	0.90	mg/L	22.6	5.52	97.3	80-120	0.597	20
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### Notes and Definitions

- µg/L micrograms per liter (parts per billion concentration units)
- mg/L milligrams per liter (parts per million concentration units)
- mg/kg milligrams per kilogram (parts per million concentration units)
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference

Analysis of pH, filtration, and residual chlorine is to take place immediately after sampling in the field.  
If the test was performed in the laboratory, the hold time was exceeded. **(for aqueous matrices only)**

ANALYTICAL CHEMISTRY DIVISION  
CALIFORNIA ELAP CERTIFICATION # 1371

**WORKORDER #:**  
PAGE 1 OF 2 **EL19044**

REPORT TO:

INVOICE TO:

REPORT COPY TO:

REPORTING:

ATTENTION: <b>Water Dynamics</b>		ATTENTION:		<input type="checkbox"/> STANDARD FORMAT <input type="checkbox"/> EDT (STATE FORM) <input type="checkbox"/> GEOTRACKER/COELT (LUFT) <input type="checkbox"/> PDF <input type="checkbox"/> EXCEL <input checked="" type="checkbox"/> County DHS: <b>EDT</b> <input checked="" type="checkbox"/> Environmental Health Agency: <b>DHS</b> <input type="checkbox"/> OTHER:
NAME: <b>Derek Dill</b>		NAME: <b>James Derby</b>		
ADDRESS: <b>4877 N Jennifer</b>		ADDRESS:		
<b>Fresno CA 93722</b>				
PHONE: <b>(559) 271-0953</b>		PHONE: <b>(559) 430-5833</b>		
FAX: <b>(559) 271-0294</b>		FAX:		

SAMPLE INFORMATION

SAMPLE TYPES:

PROJECT INFORMATION

SAMPLED BY (PRINT): <b>Agustin Antunez</b>		SOLID: BS - BIOSOLID CR - CERAMIC SL - SOIL/SOLID LIQUID: DW - DRINKING WATER GW - GROUND WATER OL - OIL SF - SURFACE WATER ST - STORM WATER WW - WASTE WATER	CONTRACT/P.O. NO.:
SIGNATURE: <i>Agustin Antunez</i>			PROJECT:
<input type="checkbox"/> PUBLIC SYSTEM <input checked="" type="checkbox"/> ROUTINE <input type="checkbox"/> PRIVATE WELL <input type="checkbox"/> REPEAT <input type="checkbox"/> OTHER <input type="checkbox"/> REPLACEMENT			PROJECT NUMBER: <b>1000206</b>
TURN AROUND TIME: <input type="checkbox"/> RUSH, DUE ON:		PROJECT MANAGER:	
<input checked="" type="checkbox"/> STANDARD			

ANALYSIS REQUESTED

LAB USE	NOTES ON RECEIVED CONDITION:				Nitrate (asn)	ANALYSIS REQUESTED									System Number / Station Code
	<input type="checkbox"/> CUSTODY SEAL(S) BROKEN <input type="checkbox"/> SAMPLE(S) DAMAGED <input checked="" type="checkbox"/> ON ICE <input type="checkbox"/> AMBIENT TEMP. <input type="checkbox"/> INCORRECT PRESERVATION 4.8 °C														
CLIENT SAMPLE ID		DATE	TIME	TYPE											
1 well 01		12/19/18	1:57	GW	X										001

COMMENTS/ADDITIONAL INSTRUCTIONS:

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
<i>Agustin Antunez</i>	W10	12/19/18	11:15	<i>Blake Harkley</i>	MTR

COC Info	Sample Integrity	Was temperature within range? Chemistry $\leq 6^{\circ}\text{C}$ Micro $< 10^{\circ}\text{C}$ Temp _____ $^{\circ}\text{C}$	Yes No <input checked="" type="radio"/> <input type="radio"/> N/A	Did all bottle labels agree with COC? Was a sufficient amount of sample received?	Yes No <input checked="" type="radio"/> <input type="radio"/> N/A	Were there bubbles in VOA vials? (Volatiles Only)	Yes No <input checked="" type="radio"/> <input type="radio"/> N/A	Was PM notified of discrepancies? PM: _____ By/Time: _____	Yes No <input checked="" type="radio"/> <input type="radio"/> N/A
	Did all bottles arrive unbroken and intact? Do samples have a hold time < 72 hours?		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	125ml (A) 250ml (B) 1Liter (C) 40ml VOA (V)		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	Bacti Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	None (P)		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	Cr6 Buffer (P) Borate Carbonate Buffer		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	HNO <sub>3</sub> (P)		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	H <sub>2</sub> SO <sub>4</sub> (P)		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	NaOH (P)		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	NaOH+ZnAc (P)		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	Dissolved Oxygen 300ml (P)		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	None (AG)		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	None (CG) 500ml		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 250ml (Brown P) 549		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (AG)		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (AG)		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	Thio/K Citrate		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	NH <sub>4</sub> Cl (AG) 552		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	HCl (AG)		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	None (CG) 500ml		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	H <sub>3</sub> PO <sub>4</sub> (AG)		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	Other:		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	Plastic Bag		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	Low Level Hg/Metals Double Bag		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	Client Own		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	Glass Jar: 125/ 250/ 500		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	Soil Tube: Brass/ Steel/ Plastic		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
	5 g Encore		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A

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