

February 12, 2014

Mr. Michael Hinton  
New York State Department of Environmental Conservation (NYSDEC)  
Division of Water, Region 9  
270 Michigan Avenue  
Buffalo, New York 14203-2399

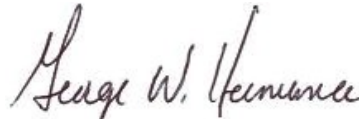
RE: Ekonol Polyester Resins Site (#V00653-9)  
Quarterly Report for Groundwater Monitoring  
Third Quarter 2013

Dear Mr. Hinton:

Attached is the performance and quarterly monitoring report for the third quarter of 2013 at the Ekonol Polyester Resins Site (Site). The performance and quarterly monitoring scope of work is defined in the February 2010 NYSDEC approved "Remedial Action Work Plan (RAWP) for *In Situ* Treatment Using Enhanced Bioremediation," and the NYSDEC-approved (April 10, 2012) changes to the reporting scope and schedule. Documentation of well inspection and maintenance, and sub-slab depressurization system operations and maintenance is also provided in the report.

If you have any questions, please feel free to contact me at (716) 407-4990.

Sincerely,



George Hermance  
Project Manager

#### Attachments

cc: W. Barber, Atlantic Richfield Co.  
S. Fiorenza, BP (e-copy)  
M. Forcucci, NYSDOH (e-copy)  
M. Kolar, Patriot (e-copy)  
J. Sabbatis, Saint-Gobain (e-copy)  
G. Brown, RT Environmental Services (e-copy)



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**PERFORMANCE MONITORING REPORT  
THIRD QUARTER 2013  
IN SITU TREATMENT USING ENHANCED BIOREMEDIATION**

**EkonoI Polyester Resins, NYSDEC # V00653-9  
6600 Walmore Road**

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**Town of Wheatfield, Niagara County, New York**

SUBMITTED TO:



**NEW YORK STATE DEPARTMENT  
OF ENVIRONMENTAL CONSERVATION**

**DIVISION OF HAZARDOUS  
WASTE REMEDIATION**

SUBMITTED BY:

**ATLANTIC RICHFIELD COMPANY**

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**February 2014**

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- ATTACHMENT A: Inspection Records
- ATTACHMENT B: Water Level Measurement, Sampling Matrix and Sampling Records
- ATTACHMENT C: Data Usability Report

## 1.0 INTRODUCTION

This report summarizes the October 2013 performance and routine monitoring following installation of the bioremediation systems at the Ekonol Polyester Resins Site (Site). The scope of work is defined in the February 2010 NYSDEC-approved “Remedial Action Work Plan (RAWP) for *In Situ* Treatment Using Enhanced Bioremediation,” and the NYSDEC-approved (April 10, 2012) changes to the reporting scope and schedule. Additionally, this report includes discussion on site management activities such as: well inspection and maintenance, and sub-slab depressurization system operations and maintenance.

## 2.0 BIOREACTOR AND INJECTION/MONITORING WELL INSPECTION

As part of the October 2013 event, the surface conditions above the bioreactor trenches were inspected for settlement, and the protective casings were inspected for integrity. Inspection records are provided in Attachment A. In October 2013, repair or maintenance of the protective casings or wells associated with the bioreactor was not necessary. Minor pitting and cracking to the new asphalt between the bioreactor trenches was observed in the same location as previously reported. Paving repairs were performed in November 2013 to fill in the minor pits and to prevent rainwater from ponding in this location.

## 3.0 SUB-SLAB DEPRESSURIZATION SYSTEM OPERATIONS AND MAINTENANCE

During the October 2013 sampling event, the sub-slab depressurization system was inspected in accordance with the NYSDEC-approved operations and maintenance plan for the system dated December 5, 2011. Results of the inspection identified that the system is in proper working order. The inspection included a visual inspection of the system’s interior and exterior components, recording of U-Tube manometer measurements, and smoke stick testing. Additionally, the system was shut down temporarily to confirm that the audible alarm functions as designed. The October 2013 inspection checklist for the SSD system is included in Attachment A. In October 2013, repairs and maintenance to the sub-slab depressurization system were not needed.

## 4.0 PERFORMANCE AND QUARTERLY MONITORING

In addition to the operations, monitoring and maintenance (OM&M) activities discussed above, the third of four groundwater sampling events scheduled for 2013 was completed in October in accordance with the approved work plans and previously reported procedures. In addition to monitoring the overall groundwater conditions, performance monitoring was completed to assist in evaluating the effectiveness of the

groundwater remediation from the bioreactor and in the bedrock groundwater treatment area. The following activities were completed as part of the sampling event:

- a complete round of water levels was collected from the monitoring wells,
- wells were purged by low flow techniques and sampled for field laboratory analytes, and
- samples were collected and analyzed for laboratory parameters.

The water levels, sampling matrix, and sampling records are provided in Attachment B. The analytical results for these samples were reviewed for usability with respect to NYSDEC requirements. The data are provided in the data usability report included in Attachment C. The data are considered valid for its intended use.

## 5.0 BIOREACTOR PERFORMANCE AND QUARTERLY MONITORING RESULTS

This section presents the most recent concentrations and data trends for the overburden bioreactor through the October 2013 sampling event. The performance of the *in situ* bioremediation will be evaluated in detail after the fourth sampling event in 2013 which was performed in December 2013. Notable or anomalous changes in historically observed trends are discussed herein.

### OVERBURDEN OBSERVATIONS INSIDE THE BIOREACTOR TRENCHES

CVOC concentrations within the trenches remain at significantly decreased levels (Figures 1 and 2) compared to samples taken within the first 3 - 6 months after installation (the installation of the bioreactors was completed in April 2011). TCE, the primary CVOC, was generally depleted from the shallow groundwater within the first 6 months of remediation. Concentrations of cis-1,2 DCE and VC inside the bioreactor significantly declined during the first year of monitoring, and have remained below original concentration, with the exception of OR-6SM which increased during the first and second quarter of 2013 but decreased to low levels in the third quarter 2013.

TOC concentrations in the bioreactor wells have generally been stable since April 2013. Microbial population results indicate that *Dehalococcoides* (DHC) concentrations have increased slightly within the bioreactor trenches from July 2013 to October 2013 and are between one to four orders of magnitude higher than concentrations measured after bioreactor installation.

### OVERBURDEN OBSERVATIONS OUTSIDE THE BIOREACTOR TRENCHES

Overall, the overburden groundwater total chlorinated ethene concentration (sum of TCE, DCE, and VC) from PMW wells outside the bioreactors decreased from the June

2011 event (2 months after bioreactor installation) to the October 2013 event (30 months after installation). At individual wells, CVOC (TCE, DCE, VC, etc.) concentrations remain variable, with some wells showing increases, some showing decreases and others remaining relatively unchanged.

Between the bioreactors, little evidence of increased TOC concentrations and biodegradation have been observed, with the exception of PMW-2S (south of former containment area). TOC continues to be low between and downgradient of the bioreactor trenches in the shallow performance monitoring wells. Due to the low hydraulic conductivity of the fine-grained silt, clay and sand soils (less than 1 feet/day), it is expected that the transport of TOC and associated expansion of the treatment zone will be slow. Locations between the bioreactors will continue to be further evaluated over time to determine if the treatment zone is expanding. Locations of the highest and most persistent CVOC concentrations in the overburden remain in:

- the area of the former secondary containment excavation (e.g. well MW-2S) which was backfilled with gravel and included remediation piping. This area is (and historically was) a groundwater mound,
- locations downgradient of the southernmost trench at PMW-3S, PMW-4S and PMW-6S.

## OVERBURDEN OBSERVATIONS - OTHER WELLS

Side and down-gradient shallow wells farther away from the bioreactors (over 150 feet), generally showed a decreasing CVOC trend over the long term.

## 6.0 BEDROCK REMEDIATION PERFORMANCE AND QUARTERLY MONITORING RESULTS

This section presents notable and anomalous observations related to historical trends in the recent concentrations for the bedrock remediation system through the October 2013 sampling event. The performance of the *in situ* bioremediation will be evaluated in more detail after the fourth sampling event in 2013 which is planned for December 2013.

### BEDROCK BIOREMEDIATION PERFORMANCE SUMMARY

Figures 3 and 4 provide data tables (last four rounds of samples after the November 2012 injection) and time-series plots (from July 2011 to present) of key CVOCs, total ethene and/or ethane, and TOC concentrations for the bedrock injection and monitoring wells.

The data indicate a continuation of enhanced CVOC biodegradation attributed to the November 2012 injection (see Figure 4). The enhanced degradation patterns (typically including increasing ethane/ethene (E+E) and decreasing TCE accompanied by an

increase in DCE) observed in December 2012 have been sustained or progressed further (TCE decreased and DCE increased then decreased). Wells that showed an enhanced degradation pattern include INJ-1, INJ-11D, INJ-13D, PMW-9D, PMW-13D, PMW-14D, and PMW-17D. An area of decreased sulfide and elevated iron concentration relative to December 2012 substrate injection extends from INJ-7D to INJ-4 and south from PMW-12D to PMW-17D. The majority of this area contains elevated E+E concentrations.

Within the source area and about 60 ft downgradient (PMW-16D), the average total molar chlorinated ethene and ethane concentrations have increased during the remediation. Slightly farther downgradient from the source area, as well as the locations farthest downgradient, the average total chlorinated ethene and ethane concentrations have decreased since the first substrate applications in July 2011.

Groundwater elevation data indicate the groundwater flow conditions have remained similar since the initial June 2011 substrate injections. Groundwater flow is generally southerly across the site with no apparent changes from the bioremediation.

## PERFORMANCE ENHANCEMENT TESTING

Previous sampling results indicated the bedrock remediation was limited by geochemical conditions (low pH and elevated hydrogen sulfide). Wells with the highest degradation rates had a pH above approximately 6.5 SU and/or hydrogen sulfide approximately less than 30 mg/L. As previously discussed, tests were conducted during the November 2012 substrate injections to mitigate potential limitations to the performance of the bedrock remediation system. The tests included addition of calcium carbonate buffer, instead of sodium bicarbonate, throughout the 2012 injection area to raise the pH, and addition of iron at INJ-7D to remove hydrogen sulfide during the substrate injections. Review of the analytical data to date provided the following observations:

- **pH:** The calcium carbonate appeared to lack enough buffering capacity to prevent the initial pH drop (5.5 – 6.0; Figure 5). The pH of most wells in October 2013 was below the target 6.5 SU, which appears to be a more optimum pH at Ekonol.
- **INJ-7D Iron Injection:** Injection of iron (soluble and mineral sources) during the November 2012 substrate injection event resulted in significant increases in iron and decreases in sulfides in INJ-7D and wells downgradient (for example PMW-9D, PMW-12D, PMW-13D, PMW-14D, PMW-15D, and RMW-2D) that have persisted in groundwater, see Figure 6 (A and B). There is also evidence that iron has migrated downgradient to the northern perimeter of the pilot area, as increases in iron and decreases in sulfides can be seen in INJ-01, INJ-02, and INJ-04. Increases in ethene plus ethane and/or DHC were observed in INJ-7D as well as locations downgradient of this well (INJ-9D, INJ-10D, INJ-12D, INJ-

13D, PMW-9D, PMW-10D, PMW-12D, PMW-13D, PMW-14D, PMW-17D and RMW-2D). Based on the results from the iron injections at INJ-7D, it appears that sulfide can be effectively controlled, and that iron will improve the rate of CVOC biodegradation.

The iron injection results impacted the geochemistry and have had a positive effect on biodegradation. Future activities will focus on testing and isolating the best conditions for optimal bioremediation (see below).

## 7.0 GENERAL SITE CONCLUSIONS AND ANTICIPATED FUTURE ACTIVITIES

**Bioreactor:** Results of the October 2013 data indicate that TOC has largely been depleted and that the addition of vegetable oil substrate to the bioreactor trenches is needed to enhance TOC migration and CVOC biodegradation. Injection of additional substrate for the bioreactor trenches is being planned. Additionally, the data indicate that iron should be included in the injections in order to mitigate sulfide formation in the trenches. Pitting of the surface pavement was repaired with asphalt.

**Bedrock Bioremediation Area:** The data to date continue to suggest that the remediation program has not operated to the fullest potential in the bedrock source area. The iron injection test in the bedrock source area indicates that sulfide can be effectively controlled, and it appears that iron will improve the rate of CVOC biodegradation. Downgradient concentrations of CVOCs, particularly TCE, continue to decrease, indicating an overall positive performance of the bedrock remediation system.

**Amendment Evaluation:** Additional testing is currently being performed to evaluate the use of amendments to emulsified vegetable oil substrate including iron, pH buffer, and nutrients, while maintaining sufficient TOC in order to enhance CVOC biodegradation in the bedrock system. The results of this optimization study will be presented in a future report.



## **FIGURES**

**FIGURE 1: OVERBURDEN WELL CONCENTRATIONS**

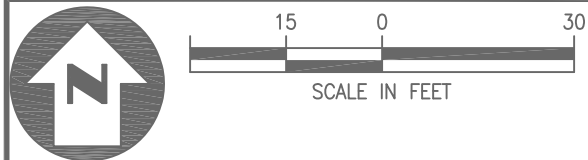
**FIGURE 2: OVERBURDEN TIME SERIES PLOTS**

**FIGURE 3: BEDROCK WELL CONCENTRATIONS**

**FIGURE 4: BEDROCK TIME SERIES PLOTS**

**FIGURE 5: TIME SERIES PLOTS - PH AND TOTAL ORGANIC CARBON  
(TOC)**

**FIGURE 6 (A AND B): TIME SERIES PLOTS IRON, SULFIDES,  
ETHENE, AND ETHANE**



- LEGEND:**
- ===== RAILROAD TRACKS
  - NEW BORING WELL (POST 2010)
  - REPLACEMENT BEDROCK INVESTIGATION WELL
  - OLD BORING WELL (PRE 2010)
  - - - - - FW - - - - - FIRE WATER LINE
  - - - - - G - - - - - GAS LINE
  - - - - - SAN - - - - - SANITARY LINE
  - - - - - STM - - - - - STORM LINE
  - ▣ CB CATCH BASIN
  - MH MANHOLE
  - ▨ MULCH AND GRAVEL BIOREACTOR
  - - - - - EDGE OF NEW ASPHALT

MW-1S	Dec-12	Apr-13	Jul-13	Oct-13	OR-5SM	Dec-12	Apr-13	Jul-13	Oct-13	PMW-2S	Dec-12	Apr-13	Jul-13	Oct-13	PMW-1S	Dec-12	Apr-13	Jul-13	Oct-13	OR-9SM	Dec-12	Apr-13	Jul-13	Oct-13
TCE	17	8.4	14	41	TCE	1 U	1 U	1 U	1 U	TCE	88	1.5 J	1.1 J	1 U	TCE	1.7 J	110	4.8 J	2 J	TCE	1.7 J	1.5 J	4.1 J	1 U
Total DCE	179.3	146.9	178.8	211.3	Total DCE	4.2	75.4	2.4	2.4	Total DCE	283.8	187.9	58.3	109.9	Total DCE	432.3	729.5	337.2	1126.5	Total DCE	355.5	536.1	1919.3	2.4
VC	15	7.7	12	13	VC	13	230	1.6 J	1 U	VC	220	130	37	130	VC	410	380	270	620	VC	130	290	540	1.6 J
TCA	0.8 U	0.8 U	0.8 U	0.8 U	TCA	0.8 U	0.8 U	0.8 U	0.8 U	TCA	0.8 U	0.8 U	0.8 U	0.8 U	TCA	0.8 U	0.8 U	0.8 U	0.8 U	TCA	17	13	27	0.8 U
DCA	1 U	1 U	1 U	1 U	DCA	1.2 J	1 U	1.4 J	1.6 J	DCA	1.1 J	1.2 J	1.8 J	3.1 J	DCA	1.4 J	5.5	7.1	7.3	DCA	7.1	6.7	12	1 U
Ethene	1.2 J	1 U	1 U	1 U	Ethene	20	400	9.5	1.7 J	Ethene	110	74	100	300	Ethene	420	340	360	270	Ethene	29	160	66	6.8
TOC	1.1	1.6	1.3	1.2	TOC	32.5	12.8	20.1	21.7	TOC	19.4	6.6	20.7	20.2	TOC	7.2	20.3	37	32.1	TOC	26.6	13.9	19.3	13.9
Sulfate	2130	2030	2000	1940	Sulfate	1.9 J	276	3 J	1.5 U	Sulfate	34.1	319	4 J	2.5 J	Sulfate	95.9	136	46.4	10.5	Sulfate	82.4	172	97.6	30.8

MW-2S	Dec-12	Apr-13	Jul-13	Oct-13	OR-3SM	Dec-12	Apr-13	Jul-13	Oct-13
TCE	760	2000	1400	730 J	TCE	1 UJ	1 U	10 U	10 U
Total DCE	232320	252360	222130	242470	Total DCE	2.4	2.4	24	24
VC	27000	28000	18000	27000	VC	1 UJ	1 U	10 U	10 U
TCA	80 U	47 J	80 U	400 U	TCA	0.8 UJ	0.8 U	8 U	8 U
DCA	100 U	38 J	100 U	500 U	DCA	1 UJ	1 U	10 U	10 U
Ethene	280	230	130	460	Ethene	1.2 J	1 U	1 U	1 U
TOC	5	4	4.3	5.7	TOC	10.3	5.9	8	6.9
Sulfate	1130	1230	1130	1020	Sulfate	1.7 J	276	13.7	1.5 U

MW-3SM	Dec-12	Apr-13	Jul-13	Oct-13	OR-1SI	Dec-12	Apr-13	Jul-13	Oct-13
TCE	1 UJ	1 U	10 U	10 U	TCE	1600	2300	1900	2300
Total DCE	2.4	2.4	24	24	Total DCE	29597	39789	37778	37866
VC	1 UJ	1 U	10 U	10 U	VC	4900	7800	7200	7800
TCA	0.8 UJ	0.8 U	8 U	8 U	TCA	16 U	4 U	8 U	40 U
DCA	1 UJ	1 U	10 U	10 U	DCA	20 U	11 J	11 J	50 U
Ethene	1.2 J	1 U	1 U	1 U	Ethene	180	350	230	370
TOC	171	69.4	40.1	53.8	TOC	10.3	5.9	8	6.9
Sulfate	1.7 J	276	13.7	1.5 U	Sulfate	1000	1390	1440	1390

MW-5S	Dec-12	Apr-13	Jul-13	Oct-13	OR-2SI	Dec-12	Apr-13	Jul-13	Oct-13
TCE	1600	2300	1900	2300	TCE	1 U	1 U	10 U	10 U
Total DCE	29597	39789	37778	37866	Total DCE	2.4	2.4	24	24
VC	4900	7800	7200	7800	VC	1 UJ	1 U	10 U	10 U
TCA	16 U	4 U	8 U	40 U	TCA	0.8 UJ	0.8 U	8 U	8 U
DCA	20 U	11 J	11 J	50 U	DCA	1 UJ	1 U	10 U	10 U
Ethene	180	350	230	370	Ethene	1.2 J	1 U	1 U	1 U
TOC	10.3	5.9	8	6.9	TOC	10.3	5.9	8	6.9
Sulfate	1000	1390	1440	1390	Sulfate	1.7 J	276	13.7	1.5 U

MW-9S	Dec-12	Apr-13	Jul-13	Oct-13	OR-4SM	Dec-12	Apr-13	Jul-13	Oct-13
TCE	1 U	1 U	1 U	1 U	TCE	1 U	6.9	10 U	8.4 J
Total DCE	747.5	1113.1	484.9	222.4	Total DCE	3.1	2.6	24	2.4
VC	320	640	360	150	VC	1 U	1 U	10 U	1 UJ
TCA	0.8 U	2.6 J	0.8 U	0.8 U	TCA	0.8 U	0.8 U	8 U	0.8 UJ
DCA	3.6 J	7.7	3.6 J	1.5 J	DCA	1 U	1 U	10 U	1 UJ
Ethene	20	35	25	7.3	Ethene	1 U	1 U	1 U	1 U
TOC	4.6	5.8	7.5	16.8	TOC	68.3	54.6	52	62.8
Sulfate	1990	2480	2530	778	Sulfate	1.8 J	2.8 J	5.2	14.7

MW-5S	Dec-12	Apr-13	Jul-13	Oct-13	OR-6SM	Dec-12	Apr-13	Jul-13	Oct-13
TCE	1600	2300	1900	2300	TCE	1 U	3.6 J	9.3 J	10 U
Total DCE	29597	39789	37778	37866	Total DCE	94.8	9167.3	10336.7	164
VC	4900	7800	7200	7800	VC	74	3000	3100	77
TCA	16 U	4 U	8 U	40 U	TCA	0.8 U	3.6 J	2 U	8 U
DCA	20 U	11 J	11 J	50 U	DCA	1 U	12	14	10 U
Ethene	180	350	230	370	Ethene	20	660	670	240 J
TOC	10.3	5.9	8	6.9	TOC	91	64.9	85	88.3
Sulfate	1000	1390	1440	1390	Sulfate	53.6	254	90.2	4 J

MW-3S	Dec-12	Apr-13	Jul-13	Oct-13	OR-7SI	Dec-12	Apr-13	Jul-13	Oct-13
TCE	600	330	310 J	200 J	TCE	1 U	1 U	1 U	1 U
Total DCE	86450	29554	45893	30669	Total DCE	11.4	5.3	6.6	8.2
VC	13000	4900	7600 J	5100	VC	1 U	4.3 J	1.3 J	1.8 J
TCA	40 U	16 U	80 UJ	40 U	TCA	0.8 U	0.8 U	0.8 U	0.8 U
DCA	50 U	24 J	100 U	50 U	DCA	150	49	78	99
Ethene	430	1500	1300	2100	Ethene	1 U	1.7 J	1 U	1 U
TOC	12.8	13.7	15.9	30.6	TOC	3.5	4	4.5	4.3
Sulfate	883	950	648	552	Sulfate	2620	3300	3060	2900

MW-4S	Dec-12	Apr-13	Jul-13	Oct-13	OR-8SI	Dec-12	Apr-13	Jul-13	Oct-13
TCE	230	270	180	100	TCE	1 U	1 U	1 U	1 U
Total DCE	14372	13433	12376	8757	Total DCE	5	2.44	2.44	71
VC	860	1100	830	560	VC	13	1 U	1 U	170
TCA	16 U	0.8 U	8 U	16 U	TCA	0.8 U	0.8 U	0.8 U	8 U
DCA	20 U	19	14 J	20 U	DCA	1 U	1 U	1.1 J	10 U
Ethene	53	48	31	49	Ethene	16 J	1.2 J	1 U	130
TOC	3.7	2.7	3.4	6.7	TOC	39.5	31.2	33.7	30.8
Sulfate	1980	1770	1770	921	Sulfate	34.1	226	107	16.1

MW-6S	Dec-12	Apr-13	Jul-13	Oct-13	OR-10SM	Dec-12	Apr-13	Jul-13	Oct-13
TCE	1 U	1 U	1 U	1 U	TCE	1 U	1 U	1 U	10 U
Total DCE	30.6	3.5	98.7	68.1	Total DCE	5	2.44	2.44	71
VC	110	1.3 J	230	230	VC	13	1 U	1 U	170
TCA	0.8 U	0.8 U	1.1 J	0.87 J	TCA	0.8 U	0.8 U	0.8 U	8 U
DCA	2.8 J	1 U	5.3	7.4	DCA	1 U	1 U	1.1 J	10 U
Ethene	3.3 J	1 U	4.6 J	15	Ethene	16 J	1.2 J	1 U	130
TOC	#N/A	#N/A	#N/A	#N/A	TOC	39.5	31.2	33.7	30.8
Sulfate	#N/A	#N/A	#N/A	#N/A	Sulfate	34.1	226	107	16.1

MW-12S	Dec-12	Apr-13	Jul-13	Oct-13	OR-11SI	Dec-12	Apr-13	Jul-13	Oct-13
TCE	740	1800	2700	980	TCE	1 U	1 U	1 U	1 U
Total DCE	1119.5	984.6	2947.7	2846.7	Total DCE	2.4	2.4	2.4	2.4
VC	280	210	510	430	VC	1 U	1 U	1 U	1 U
TCA	74	51	45	24	TCA	0.8 U	0.8 U	0.8 U	0.8 U
DCA	53	45	49	28	DCA	1 U	1 U	1 U	1 U
Ethene	320	400	320	480	Ethene	1 U	1 U	1.5 J	1 U
TOC	#N/A	#N/A	#N/A	#N/A	TOC	8.4	8.3	8.4	4.4
Sulfate	#N/A	#N/A	#N/A	#N/A	Sulfate	662	254	342	450

OR-13SM	Dec-12	Apr-13	Jul-13	Oct-13
TCE	1 U	1 U	1.2 J	10 U
Total DCE	3.8	3.4	2.7	24
VC	1 U	1 U	1 U	10 U
TCA	0.8 U	0.8 U	0.8 U	8 U
DCA	1 U	1.9 J	1 U	10 U
Ethene	1 U	5.2	1.1 J	1.9 J
TOC	95.4	54.9	54.8	51.3
Sulfate	14.6	50	3.5 J	13.4

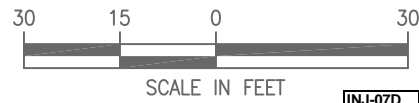
OR-18SM	Dec-12	Apr-13	Jul-13	Oct-13
TCE	1 U	1 U	1 U	1 U
Total DCE	167.8	19.1	7.9	81.7
VC	210	22	14	81
TCA	0.8 U	0.8 U	0.8 U	0.8 U
DCA	1 U	1 U	1 U	1 U
Ethene	340	27	26	140
TOC	27.4	22.3	5.7	14.6
Sulfate	257	226	398	213

PMW-11S	Dec-12	Apr-13	Jul-13	Oct-13
TCE	340	310	230	250
Total DCE	16251	15253	12225	16243
VC	2400	3100	2200	3000
TCA	8 U	4 U	8 U	20 U
DCA	43 J	42	36 J	42 J
Ethene	180	390	220	400
TOC	2	2.5	2.7	2.7
Sulfate	1960	1650	1470	1690

MW-10S	Dec-12	Apr-13	Jul-13	Oct-13
TCE	3.2 J	3 J	4.9 J	1 U
Total DCE	312.8	337.71	353.8	235
VC	280	280	250	170
TCA	0.8 U	0.8 U	0.8 U	0.8 U
DCA	1 U	1 U	1 U	1 U
Ethene	380	280	570	100
TOC	#N/A	#N/A	#N/A	#N/A
Sulfate	#N/A	#N/A	#N/A	#N/A

OR-15SM	Dec-12	Apr-13	Jul-13	Oct-13
TCE	1 U	1 U	10 U	50 UJ
Total DCE	2.4	2.4	24	120
VC	1 U	1 U	10 U	50 UJ
TCA	0.8 U	0.8 U	8 U	40 UJ
DCA	1 U	1 U	10 U	50 UJ
Ethene	1 U	1 U	1 U	1 U
TOC	250	177	173	171
Sulfate	1.5 U	1.5 U	1.5 U	1.5 U





LEGEND:

- +++++ RAILROAD TRACKS
- NEW BORING WELL (POST 2010)
- REPLACEMENT BEDROCK INVESTIGATION WELL
- OLD BORING WELL (PRE 2010)
- - - - FW - - - - FIRE WATER LINE
- - - - G - - - - GAS LINE
- - - - SAN - - - - SANITARY LINE
- - - - STM - - - - STORM LINE
- ▣ CB CATCH BASIN
- MH MANHOLE
- ▨ MULCH AND GRAVEL BIOREACTOR

PMW-1D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	180	230 J	12	10 U
Total DCE	36216	43220	755.63	9526
VC	840	3100	60	3400
TCA	18 J	40 U	0.95 J	8 U
DCA	20 U	50 U	1 U	10 U
Ethene	49	140	20	1500
TOC	1550	1380	73.6	316
Sulfate	6.8	5.5 J	4.8 J	1.5 U

PMW-2D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	9500	700	1100	9000
Total DCE	150410	130231	76146	150390
VC	2500	1500	2300	3600
TCA	80 U	40 U	40 UJ	160 U
DCA	100 U	56 J	50 U	200 U
Ethene	160	140	120	170
TOC	790	821	288	485
Sulfate	99.5	41.6	180	81.6

INJ-01	Dec-12	Apr-13	Jul-13	Oct-13
TCE	3600	5300	4100	3900
Total DCE	100190	150330	120241	140800
VC	2800	3600	3900	4000
TCA	86 J	80 U	80 UJ	400 U
DCA	100 U	140 J	120 J	500 U
Ethene	310	190	370	610
TOC	1640	1060	780	715
Sulfate	498	304	202	66.7

PMW-3D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	3000	1700	7400	11000
Total DCE	16042	25080	66155	57160
VC	270	350	1100	920
TCA	11 J	40 U	17 J	80 U
DCA	26	50 U	83 J	100 U
Ethene	18	28	72	98
TOC	345	323	418	351
Sulfate	752	309 J	203	326

PMW-4D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	930	730	470	1100
Total DCE	51085	24135	39104	53177
VC	700	2500	1200	1400
TCA	61 J	40 U	16 U	80 U
DCA	96 J	61 J	94 J	110 J
Ethene	110	620	210	360
TOC	1020	85.5	253	261
Sulfate	283	895	151	300

RMW-4D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	4300	2100	3200	8500
Total DCE	48087	31095	31102	55177
VC	950	1300	1400	1400
TCA	72 J	22 J	40 U	80 U
DCA	94 J	66 J	71 J	100 U
Ethene	360	420	390	300
TOC	754	197	368	390
Sulfate	496	1090	51.7	189

PMW-7D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	1200	840	1400	830
Total DCE	51096	28093	21110	31116
VC	650	1000	1300	1800
TCA	78 J	140	49 J	58 J
DCA	120 J	190	100 J	93 J
Ethene	280	430	340	400
TOC	689	60.5	36.7	63.6
Sulfate	965	1300	1150	293

INJ-11D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	20000	72000	40000	5800
Total DCE	83390	170460	180500	76250
VC	2700	1700	3500	2300
TCA	170 J	170	160 U	80 U
DCA	100 U	78	200 U	100 U
Ethene	460	420	440	99
TOC	652	270	265	171
Sulfate	337	325	334	178

INJ-13D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	9800	15000	33000	8300
Total DCE	130480	110230	120270	86320
VC	1600	1800	2300	9400
TCA	160 UJ	110	80 U	160 U
DCA	200 UJ	79	100 U	200 U
Ethene	130 J	680	1400	5200
TOC	1420	767	608	530
Sulfate	57.2	80.4	135	133

INJ-02	Dec-12	Apr-13	Jul-13	Oct-13
TCE	3300 J	2400	950	100 U
Total DCE	77160	110320	120196	65160
VC	780 J	2500	2700	5000
TCA	120 J	160 U	80 U	80 U
DCA	100 J	200 U	150 J	100 U
Ethene	340	440	760	830
TOC	782	302	709	1150
Sulfate	680	833	62.3	1.5 U

PMW-6D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	850	2400	460	100
Total DCE	38116	44132	14058	9039
VC	1800	1000	480	2800
TCA	16 U	40 U	16 U	8 U
DCA	74 J	83 J	30 J	19 J
Ethene	330	99	210	300
TOC	502	466	366	108
Sulfate	24.1	428 J	401	8.1

MW-7D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	100 U	190 J	1300	270
Total DCE	110190	64211	59171	72170
VC	930	740	1200	850
TCA	260 J	2600	900	2100
DCA	520	1000	1100	1400
Ethene	250	79	180	120
TOC	935	210	178	216
Sulfate	7.5	10 J	37.9	6.1

MW-21D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	3.1 J	5.4	2.8 J	4.3 J
Total DCE	2219.3	792.3	391.4	671.1
VC	1000	730	600	690
TCA	240	260	160	160
DCA	35	41	29	36
Ethene	12	11	12	23
TOC	#N/A	#N/A	#N/A	#N/A
Sulfate	#N/A	#N/A	#N/A	#N/A

MW-20D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	100	47	37	12 J
Total DCE	3049.5	1761.6	2774.7	971.8
VC	120	330	470	400
TCA	7700	3700	4000	2000
DCA	410	290	490	170
Ethene	2.9 J	22	16	23
TOC	#N/A	#N/A	#N/A	#N/A
Sulfate	#N/A	#N/A	#N/A	#N/A

PMW-9D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	73000	52000	51000	7700
Total DCE	170480	200490	190420	170900
VC	810	1300	1700	18000
TCA	200 J	16 U	40 U	1500 J
DCA	100 U	51 J	50 U	500 U
Ethene	100	340	1200	1600
TOC	4420	2110	1040	830
Sulfate	15.8	43.3	46.4	26.8

PMW-10D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	410000	300000	240000	290000
Total DCE	62139	150290	171600	250900
VC	240 J	450 J	1000 U	860 J
TCA	160 J	210 J	800 U	400 U
DCA	84 J	160 J	1000 U	500 U
Ethene	12	54	240	230
TOC	1620	1170	758	578
Sulfate	395	266	217	317

PMW-11D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	1300	670	760	480
Total DCE	8082	7731	8601	5860
VC	64 J	240	1000	700
TCA	29000	32000	30000	22000
DCA	460	470	800	480
Ethene	3.8 J	18	48	25
TOC	268	32.6	21.6	9.9
Sulfate	309	520	409	492

PMW-12D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	1100	1300	1600	6600
Total DCE	98232	19067	230500	160460
VC	460	120	4800	33000
TCA	76 J	8.6 J	160 U	160 U
DCA	90 J	16	200 U	200 J
Ethene	77	8.9	440	1200
TOC	3900	92.3	1150	1200
Sulfate	3.9 J	6.8	9.4	16.1

PMW-13D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	5100	370	1500	30
Total DCE	23077	10109	15410	111.6
VC	280	360	790	510
TCA	1300	5600	29000	470
DCA	520	860	2300	160
Ethene	6	10	140	40
TOC	547	230	181	57.5
Sulfate	21.2	21 J	40.4	3.5 J

INJ-09D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	29000	12000	3700	20000
Total DCE	90094	81127	120250	250800
VC	340	720	13000	11000
TCA	190	170	150 J	400 U
DCA	80 J	100	210 J	500 U
Ethene	27	80	680	1100
TOC	1320	709	679	784
Sulfate	21.9	15.9	31.9	44.2

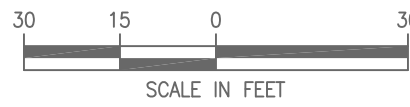
PMW-16D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	5500	5300	12000	12000
Total DCE	67103	47133	64300	40342
VC	470	1500	1000	640
TCA	770	1500	8900	18000
DCA	430	950	2000	2000
Ethene	45	730	170	59
TOC	728	370	294	183
Sulfate	219	28.7	16.5	91.1

PMW-14D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	200	99	42 J	32 J
Total DCE	4902	4330	3562	2748.1
VC	14 J	51	61	59
TCA	19000	17000	17000	10000
DCA	150	210	160	150
Ethene	1 U	3.4 J	2.8 J	3.9 J
TOC	23.6	21.2	3.8	21.1
Sulfate	435	471	574	462

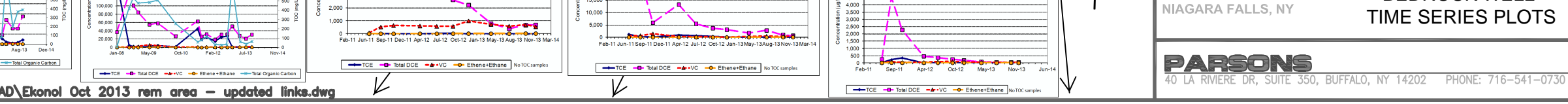
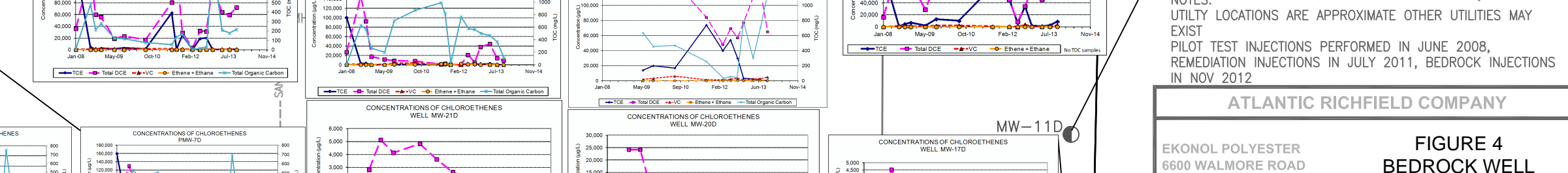
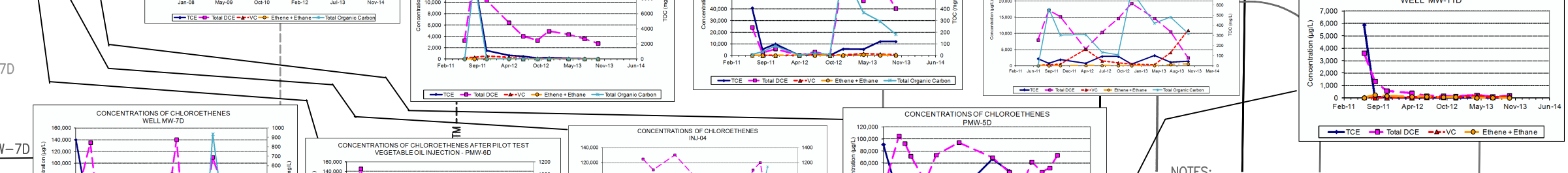
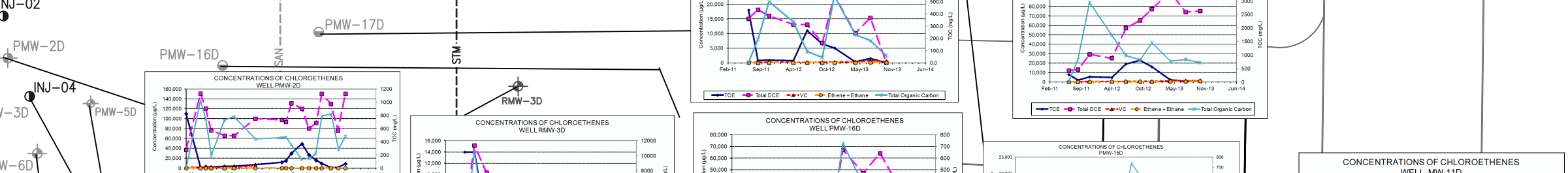
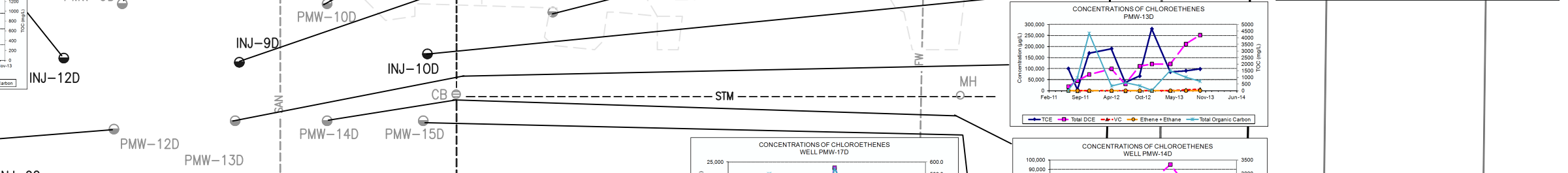
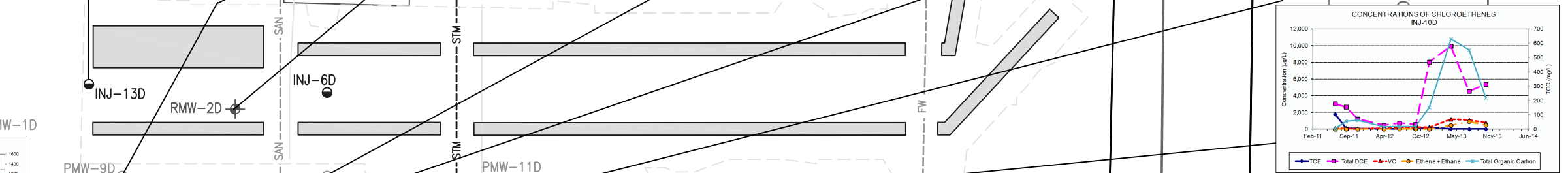
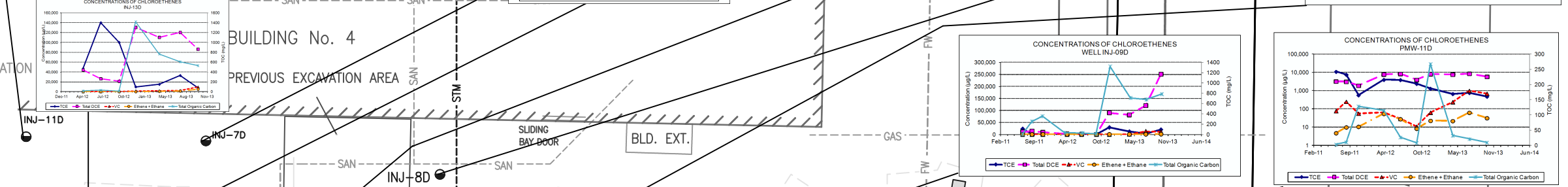
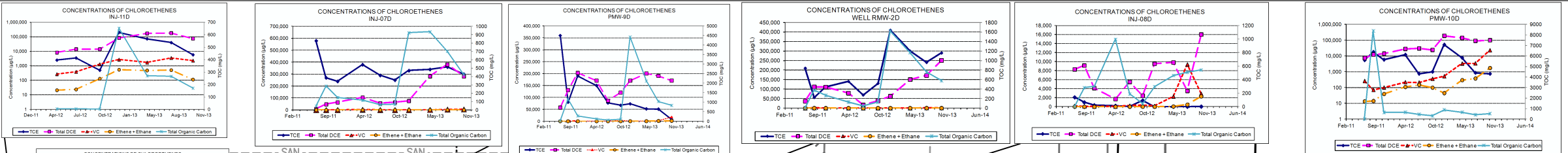
PMW-17D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	5100	370	1500	30
Total DCE	23077	10109	15410	111.6
VC	280	360	790	510
TCA	1300	5600	29000	470
DCA	520	860	2300	160
Ethene	6	10	140	40
TOC	547	230	181	57.5
Sulfate	21.2	21 J	40.4	3.5 J

PMW-15D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	540	3200	1100	1400
Total DCE	19243	14647	10513	2459
VC	550	370	4100	11000
TCA	7700	48000	16000	10000
DCA	1600	3100	7400	9200
Ethene	10	19	140	210
TOC	739	421	480	319
Sulfate	44.3	139	3.2 J	3.1 J

PMW-14D	Dec-12	Apr-13	Jul-13	Oct-13
TCE	16000	2100	1000	670
Total DCE	77152	95210	74160	75200
VC	550	1100	1100	1500
TCA	500	740	300 J	1300
DCA	430 J	770	730	1100
Ethene	92	460	300	830
TOC	1450	765	838	719
Sulfate	76.6	11.7 J	2.7 J	1.7 J



- LEGEND:**
- +++++ RAILROAD TRACKS
  - NEW BORING WELL (POST 2010)
  - REPLACEMENT BEDROCK INVESTIGATION
  - OLD BORING WELL (PRE 2010)
  - - - - FW FIRE WATER LINE
  - - - - G GAS LINE
  - - - - SAN SANITARY LINE
  - - - - STM STORM LINE
  - ▒ CB CATCH BASIN
  - MH MANHOLE
  - ▒ MULCH AND GRAVEL BIOREACTOR
  - - - - EDGE OF NEW ASPHALT



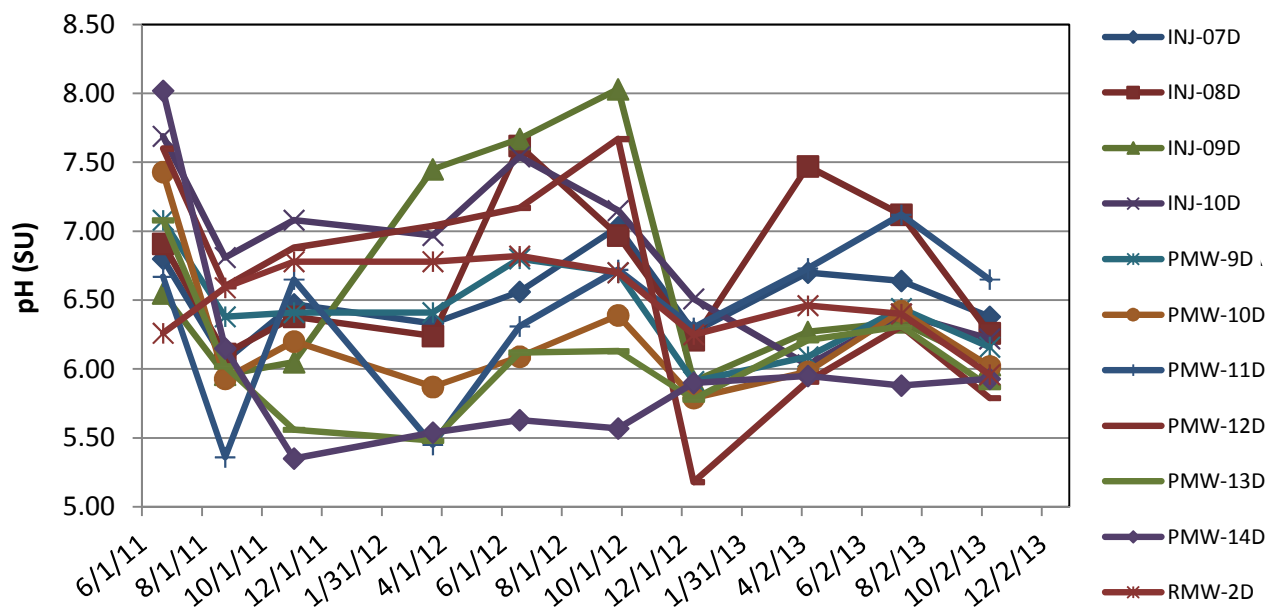
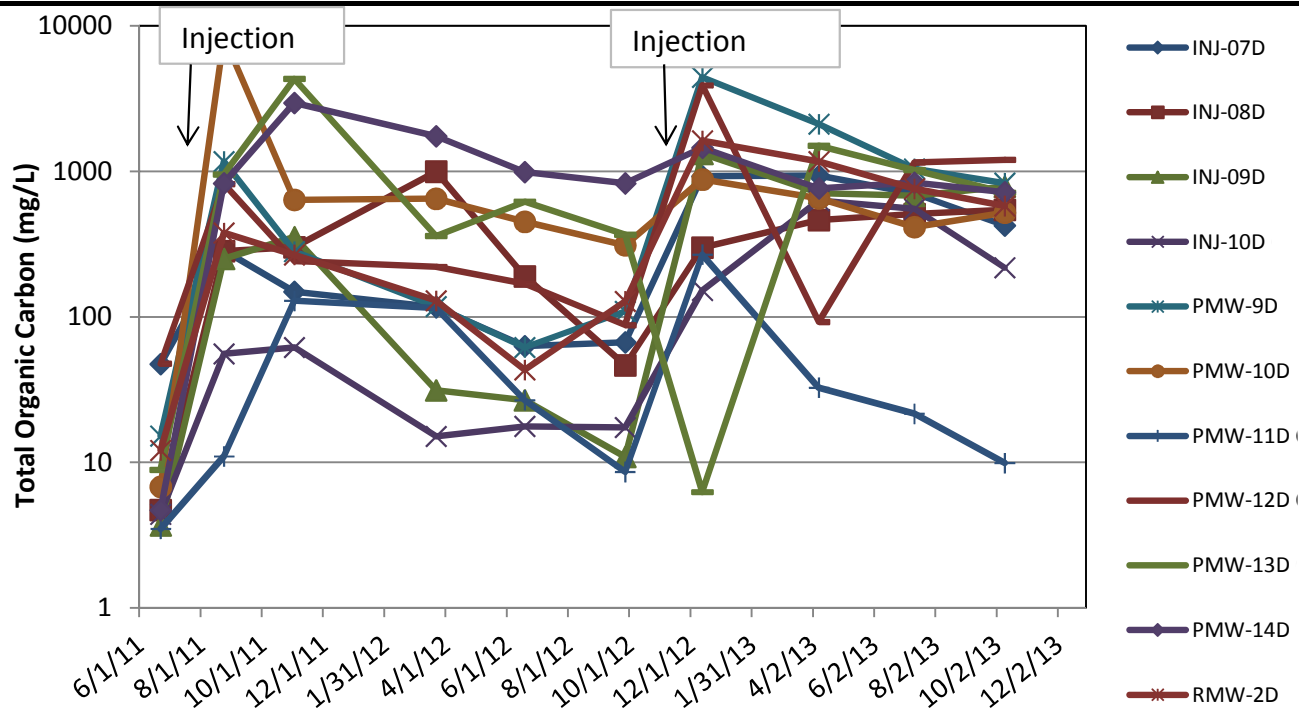
NOTES:  
 UTILITY LOCATIONS ARE APPROXIMATE OTHER UTILITIES MAY EXIST  
 PILOT TEST INJECTIONS PERFORMED IN JUNE 2008,  
 REMEDIATION INJECTIONS IN JULY 2011, BEDROCK INJECTIONS IN NOV 2012

**ATLANTIC RICHFIELD COMPANY**

EKONOL POLYESTER  
 6600 WALMORE ROAD  
 NIAGARA FALLS, NY

**FIGURE 4**  
**BEDROCK WELL**  
**TIME SERIES PLOTS**

**PARSONS**  
 40 LA RIVIERE DR, SUITE 350, BUFFALO, NY 14202 PHONE: 716-541-0730



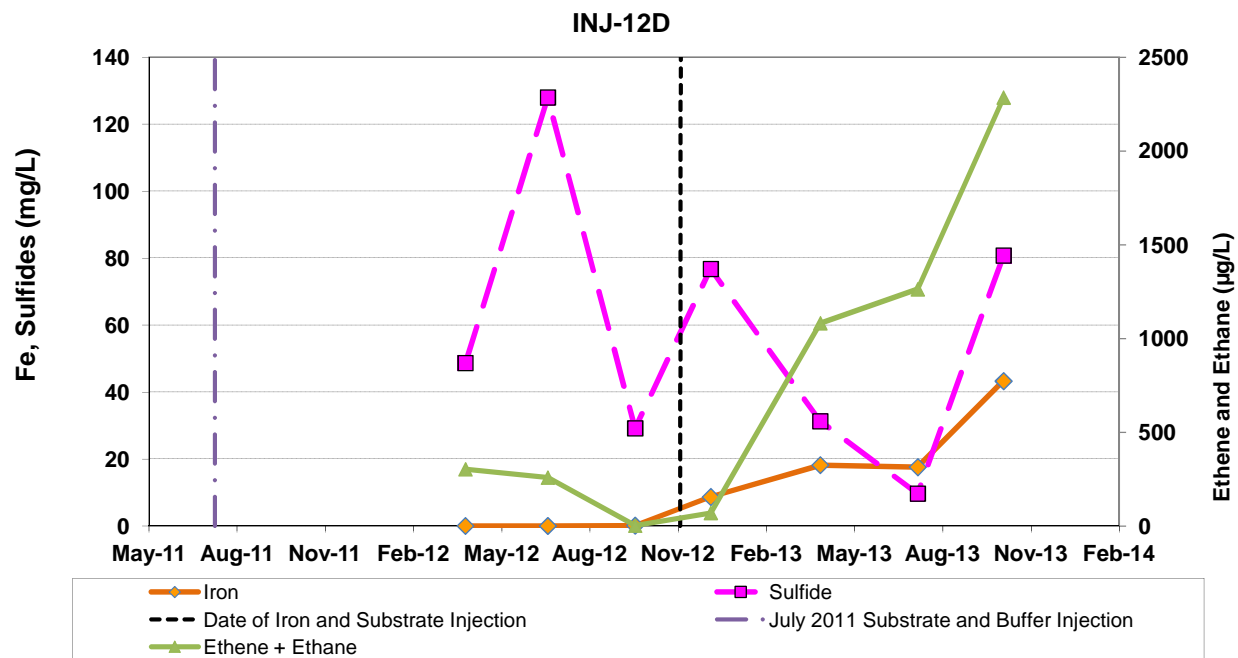
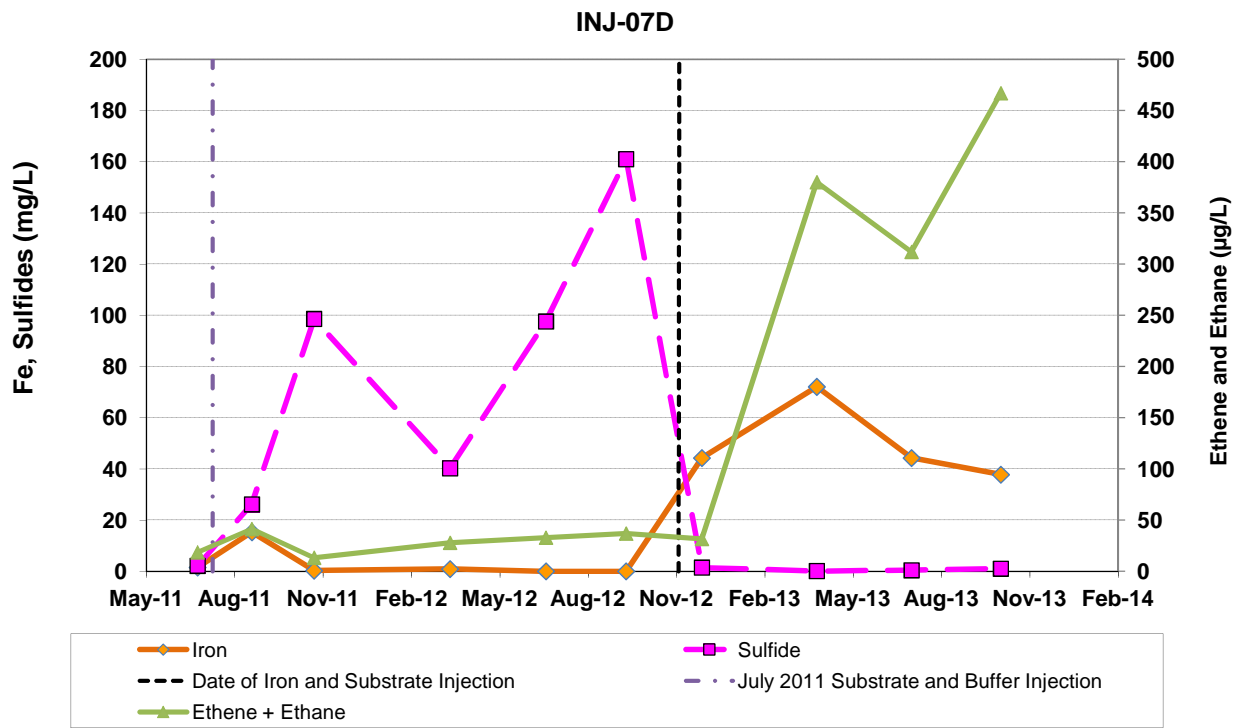
EKONOL POLYESTER, NY  
**TIME-SERIES PLOTS**  
**pH and Total Organic Carbon**

**PARSONS**

40 LA RIVIERE DRIVE · SUITE 350 · BUFFALO, NY 14202 (716) 541-0730

October 2013

**FIGURE 5**



INJ-12D was not part of the monitoring program until April 2012

EKONOL POLYESTER RESINS, WHEATFIELD, NY

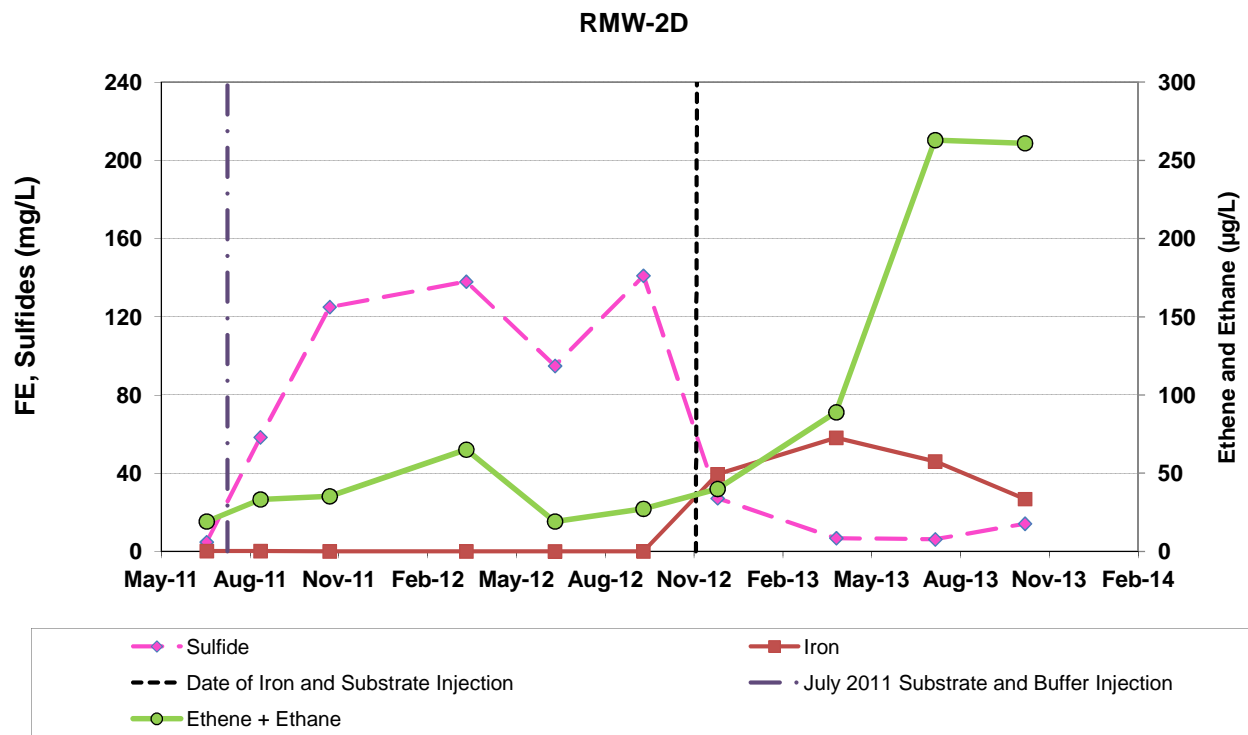
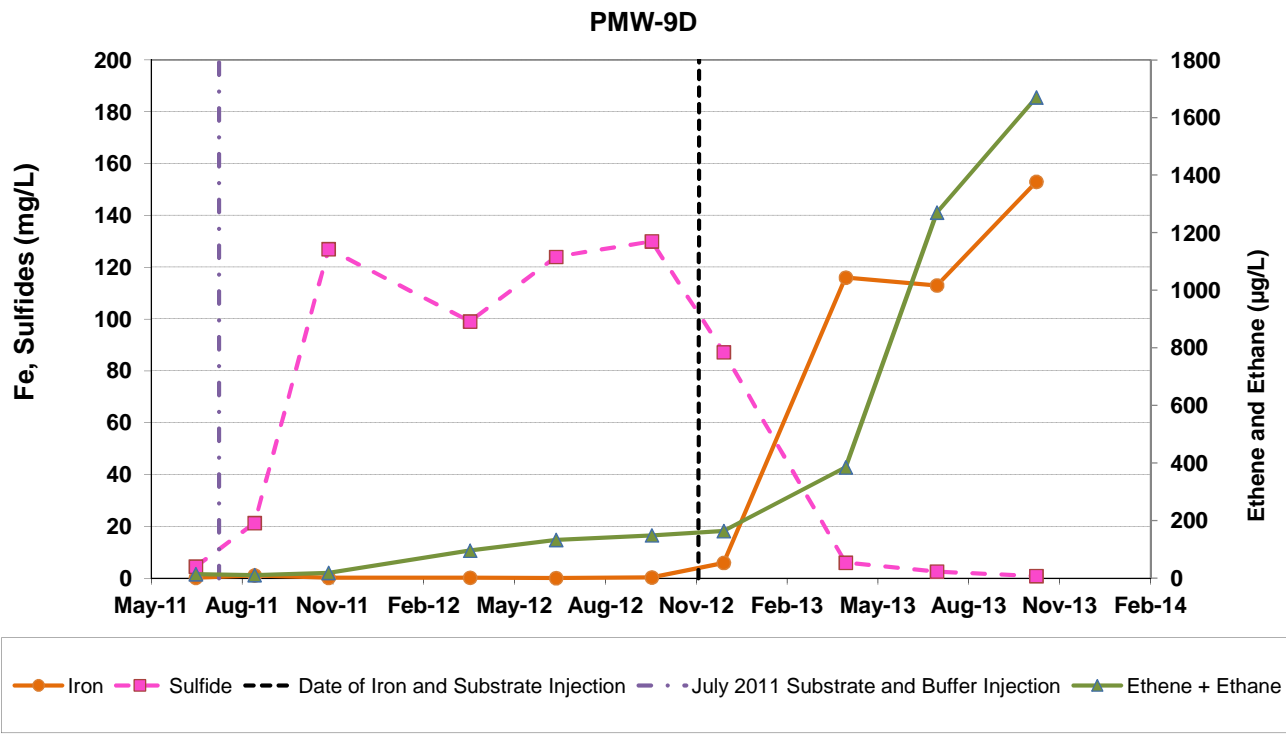
**Time Series Plots**  
**Iron, Sulfides, Ethene and Ethane**

**PARSONS**

40 LA RIVIERE DRIVE · SUITE 350 · BUFFALO, NY 14202 · (716) 541-0730

October 2013

FIGURE 6A



EKONOL POLYESTER RESINS, WHEATFIELD, NY  
 Time Series Plots  
 Iron, Sulfides, Ethene and Ethane

**PARSONS**  
 40 LA RIVIERE DRIVE · SUITE 350 · BUFFALO, NY 14202 · (716) 541-0730

October 2013 FIGURE 6B



**ATTACHMENT A**  
**INSPECTION RECORDS**

# OPERATION, MONITORING AND MAINTENANCE CHECKLIST

Date: 10/17/19

Checklist Completed By: DON CHAMBERLAIN

Project Number: 497986.0200

Property Location: ST. GUBAEN

System Installation Date: \_\_\_\_\_

The purpose of this form is to document the operation and maintenance of the sub-slab depressurization system to provide assurance that the system is functioning as designed or identify and execute any actions required to achieve the mitigation of subsurface vapor intrusion of volatile organic compounds to indoor air

**1. MITIGATION SYSTEM INSPECTION**

Occupant Interview

Any concerns identified by the building occupants?

YES  NO

Comments / Action Items

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Occupant's Initials: \_\_\_\_\_

External Piping

Vent pipes securely fastened to building

YES  NO

Are there any visible openings or breaks in the pipe system

YES  NO

Is the rain cap present and intact at discharge point

YES  NO  N/A

Inspection of the exhaust point verified that no air intakes have been located nearby

YES  NO

The sealing/caulking around wall penetrations is intact

YES  NO

Comments / Action Items

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Mitigation Fan

Fan is mounted securely to building (no excessive vibrations during operation)

YES  NO

Fan cover is installed

YES  NO

No visible damage to fan or cover

YES  NO

Comments / Action Items

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## OPERATION, MONITORING AND MAINTENANCE CHECKLIST

### Internal Piping

Vertical and horizontal pipe runs are secured, including at all penetration points	YES	NO	
The sealing/caulking is intact around the extraction point or points through the basement floor, crawlspace floor, and/or crawlspace/basement wall interface.	YES	NO	
Vibration dampener installed and intact (pertains to fan mount)	YES	NO	N/A
Mitigation system operation placard present and visible/legible	YES	NO	
Contains description of major components, valid contact number and instructions for occupant inquiries and/or system failure	YES	NO	
Mitigation system maintenance tag present and filled out	YES	NO	
Date of last inspection shown on tag: _____			
U-tube manometer present and intact at each extraction point	YES	NO	

*Comments / Action Items*

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### Electrical

Electrical connections secured	<input checked="" type="checkbox"/>	NO	
Junction boxes are closed	<input checked="" type="checkbox"/>	NO	
Conduit is supported	<input checked="" type="checkbox"/>	NO	
Circuit breakers controlling the mitigation fan and alarm circuits operate and are labeled "Mitigation System"	<input checked="" type="checkbox"/>	NO	
Power switch tagged with intact tamper proof seal	<input checked="" type="checkbox"/>	NO	
Audible alarm present	<input checked="" type="checkbox"/>	NO	
Audible alarm switch in "on" position (light on alarm is green)	<input checked="" type="checkbox"/>	NO	

*Comments / Action Items*

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### Water Sumps (skip this section if no sump(s) present)

Sump present	YES	NO	
Number of sumps and locations are all shown on as-built drawing	YES	NO	
Sump pit is sealed to minimize influx of conditioned air	YES	NO	N/A
Penetrations to sump covers to accommodate electrical wiring, water injection pipes or vent pipes are sealed	YES	NO	N/A
Sump pits used as suction pits are identified with a label that reads: "This cover must be properly sealed for effective operation of the mitigation system - Contact Geosyntec Consultants (toll free 1-800-695-4436) for instructions on the correct procedure for replacement and sealing if removal or modification for any reason is performed"	YES	NO	N/A

*Comments / Action Items*

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## OPERATION, MONITORING AND MAINTENANCE CHECKLIST

### 2. OPERATIONAL CHECKS

Fan is operating

Noise and Vibration within normal range	YES	NO
Alarm sounds when fan is turned off	YES	NO

U-Tube manometer indicating negative sub slab pressure

U-Tube Manometer Reading: Location: <u>OFFICE</u>	Vacuum <u>0.9</u>	YES	NO
U-Tube Manometer Reading: Location: _____	Vacuum _____		
U-Tube Manometer Reading: Location: _____	Vacuum _____		
U-Tube Manometer Reading: Location: _____	Vacuum _____		
U-Tube Manometer Reading: Location: _____	Vacuum _____		
U-Tube Manometer Reading: Location: _____	Vacuum _____		
U-Tube Manometer Reading: Location: _____	Vacuum _____		
U-Tube Manometer Reading: Location: _____	Vacuum _____		

Smoke test performed on internal penetrations and pipe joints

Smoke test indicated no leaks	<input checked="" type="checkbox"/> YES	NO	N/A
Smoke test confirms air flow into sump	<input checked="" type="checkbox"/> YES	NO	N/A
Back draft test confirms proper air flow at combustion appliances	<input checked="" type="checkbox"/> YES	NO	N/A
Smoke test indicated no leaks	<input checked="" type="checkbox"/> YES	NO	N/A

### 3. MAINTENANCE

Fan last replaced on (date): \_\_\_\_\_

Fan due to be replaced; \_\_\_\_\_

Additional Maintenance Action Items Performed

### 4. ADDITIONAL ACTION ITEMS/ COMMENTS/COMPLETION DATES

### 5. CERTIFICATION

I certify that the information on this form is true, accurate and complete (all blanks filled in) to the best of my knowledge and ability, and that I have the appropriate training and experience to perform this monitoring/inspection:

Name: Doug Wright Affiliation: ST GOBAIN  
 Signature: [Signature] Date (dd/mm/yy): 10/17/13 am/pm  
DAN CHAMBERLAIN PARSONS  
[Signature] 10/17/13

**EKONOL SITE PAVEMENT INSPECTION FORM  
WHEATFIELD, NEW YORK**

Date of Inspection: 10/16/13

Time: 0900

Inspector(s) Name/Title: DAY CHAMBERLAND

Inspection of	Condition Present?		Action Required?		Comments/Location	Correction Date
	Yes	No	Yes	No		
1. Site Pavement						
A. Surface cracks		✓		✓	New pavement in operation, fixed sinking portion of the lot	
B. Pits/divots		✓		✓		
C. Sinking		✓		✓		
2. Well curb boxes						
A. Cracks		✓		✓		
B. Loose		✓		✓		
C. Well caps missing		✓		✓		
D. Settlement		✓		✓		

**ATTACHMENT B**  
**WATER LEVEL MEASUREMENT, SAMPLING MATRIX AND SAMPLING**  
**RECORDS**

**Ekonom Water Levels**  
**10/7/13 PM - 10/8/13 AM**

#	Well ID	DTW (ft btoc)	Time	Comments
1	INJ-01	5.57	907	
2	INJ-02	7	904	NAPL at 5.45
3	INJ-03	5.01	859	
4	INJ-04	5.91	920	NAPL at 5.60
5	INJ-05	5.88	855	Substrate at 5.80
6	INJ-06D	5.4	1426	
7	INJ-07D	5.59	1428	
8	INJ-08D	5.25	1416	
9	INJ-09D	5.72	947	
10	INJ-10D	4.52	959	
11	INJ-11D	5.18	1430	
12	INJ-12D	6.9	902	NAPL at 5.40
13	INJ-13D	6.46	1014	
14	MW-1S	6.22	1353	
15	MW-2S	2.48	1015	
16	MW-3S	8.57	1452	
17	MW-4S	4.83	924	
18	MW-5S	4.63	1350	
19	MW-6S	5.54	931	
20	MW-7D	5.8	850	
21	MW-7S	6.31	848	
22	MW-8S	5.27	1650	Backpressure on well cap
23	MW-9S	5.6	952	
24	MW-10D	5.67	954	
25	MW-10S	2.14	1403	
26	MW-11D	7.31	1458	
27	MW-11S	5.14	1455	
28	MW-12D	5.97	953	
29	MW-12S	6.18	1454	
30	MW-13D	9.3	945	
31	MW-14D	6.96	1400	
32	MW-15D	7.38	935	
33	MW-16D	10.82	949	
34	MW-17D	6.84	1456	
35	MW-18D	6.53	951	
36	MW-19D	6.08	940	
37	MW-20D	6.68	840	
38	MW-21D	6.41	836	
39	OR-1SI	1.77	1434	
40	OR-2SI	2.76	1440	
41	OR-3SM	2.31	1435	

**Ekonom Water Levels**  
**10/7/13 PM - 10/8/13 AM**

#	Well ID	DTW (ft btoc)	Time	Comments
42	OR-4SM	2.83	1439	
43	OR-5SM	1.7	1418	
44	OR-6SM	5.3	1424	
45	OR-7SI	1.87	1016	backpressure on well
46	OR-8SI	4.5	1422	
47	OR-9SM	3.17	1001	
48	OR-10SM	3.4	1003	
49	OR-11SI	3.27	1416	
50	OR-12SI	3.5	1000	
51	OR-13SM	3.32	1412	
52	OR-14SM	3.58	956	
53	OR-15SM	4.08	1408	
54	OR-16SI	2.63	1406	
55	OR-17SI	3.85	1410	
56	OR-18SM	2.05	1402	
57	PMW-1D	6.78	1444	
58	PMW-1S	1.95	1418	
59	PMW-2D	5.61	923	
60	PMW-2S	2.4	1420	
61	PMW-3D	6.15	910	
62	PMW-3S	4.08	1424	
63	PMW-4D	6.31	854	
64	PMW-4S	4.79	955	
65	PMW-5D	5.47	928	
66	PMW-5S	3.09	1436	
67	PMW-6D	0.2	916	well cap was off
68	PMW-6S	3.98	949	
69	PMW-7D	5.53	851	
70	PMW-7S	3.84	1003	
71	PMW-8D	5.15	857	
72	PMW-8S	3.55	1005	
73	PMW-9D	5.8	1441	
74	PMW-9S	3.68	1414	
75	PMW-10S	5.81	958	
76	PMW-10D	6.05	951	
77	PMW-11D	5.37	1000	
78	PMW-11S	5.19	1404	
79	PMW-12D	5.6	1445	substrate
80	PMW-13D	5.47	943	
81	PMW-14D	5.48	940	
82	PMW-15D	5.31	933	



**Ekonom Water Levels**  
**10/7/13 PM - 10/8/13 AM**

#	Well ID	DTW (ft btoc)	Time	Comments
83	PMW-16D	3.98	1449	
84	PMW-17D	5.85	1450	
85	RMW-1D	6	1351	
86	RMW-2D	5.6	1438	
87	RMW-3D	5.36	1453	
88	RMW-4D	6.16	913	
89	TP-1	5.41	1009	
90	TP-2	5.53	1010	

**TABLE 2  
SUMMARY OF PROPOSED MONITORING  
EKONOL POLYESTER RESINS, WHEATFIELD, NEW YORK**

Location	Synoptic Water Level Measurement <sup>g/</sup>	VOCs <sup>h/</sup> (SW8260B)	Methane, Ethane, Ethene (Lab SOP)	Chloride, Nitrate, Sulfate <sup>h/</sup> (E300.1)	Dissolved Inorganics <sup>b/c/</sup> (SW6010B)	Ortho-phosphate <sup>b/</sup> (EPA 365.1)	Sulfide <sup>b/</sup> (MS 4500-S2-F)	Total Organic Carbon (SW9060)	Total Inorganic Carbon (SW9060)	Microbial Population <sup>d/</sup> (Lab SOP)	Acetylene and Hydrogen	Real time Analyses <sup>e/</sup>	Mobile Lab Analysis <sup>f/</sup>
<b>Overburden Bioreactor Monitoring Wells</b>													
OR-3SM	1	1	1	1	1	1	1	1	1			1	1
OR-4SM	1	1	1	1	1	1	1	1	1			1	1
OR-5SM	1	1	1	1	1	1	1	1	1	1	1	1	1
OR-6SM	1	1	1	1	1	1	1	1	1	1	1	1	1
OR-9SM	1	1	1	1	1	1	1	1	1			1	1
OR-10SM	1	1	1	1	1	1	1	1	1			1	1
OR-13SM	1	1	1	1	1	1	1	1	1	1	1	1	1
OR-14SM	1	1	1	1	1	1	1	1	1	1	1	1	1
OR-15SM	1	1	1	1	1	1	1	1	1			1	1
OR-18SM	1	1	1	1	1	1	1	1	1			1	1
PMW-1S	1	1	1	1	1	1	1	1	1	1	1	1	1
PMW-2S	1	1	1	1	1	1	1	1	1	1	1	1	1
PMW-3S	1	1	1	1	1	1	1	1	1	1	1	1	1
PMW-4S	1	1	1	1	1	1	1	1	1			1	1
PMW-5S	1	1	1	1	1	1	1	1	1			1	1
PMW-6S	1	1	1	1	1	1	1	1	1			1	1
PMW-7S	1	1	1	1	1	1	1	1	1			1	1
PMW-8S	1	1	1	1	1	1	1	1	1			1	1
PMW-9S	1	1	1	1	1	1	1	1	1	1	1	1	1
PMW-10S	1	1	1	1	1	1	1	1	1	1	1	1	1
PMW-11S	1	1	1	1	1	1	1	1	1			1	1
<b>Bedrock Injection/Withdrawal Wells</b>													
INJ-7D	1	1	1	1	1	1	1	1	1	1	1	1	1
INJ-8D	1	1	1	1	1	1	1	1	1			1	1
INJ-9D	1	1	1	1	1	1	1	1	1	1	1	1	1
INJ-10D	1	1	1	1	1	1	1	1	1	1	1	1	1
INJ-11D	1	1	1	1	1	1	1	1	1			1	1
INJ-12D	1	1	1	1	1	1	1	1	1			1	1
INJ-13D	1	1	1	1	1	1	1	1	1			1	1
<b>Bedrock Monitoring Wells</b>													
PMW-9D	1	1	1	1	1	1	1	1	1			1	1
PMW-10D	1	1	1	1	1	1	1	1	1			1	1
PMW-11D	1	1	1	1	1	1	1	1	1	1	1	1	1
PMW-12D	1	1	1	1	1	1	1	1	1			1	1
PMW-13D	1	1	1	1	1	1	1	1	1			1	1
PMW-14D	1	1	1	1	1	1	1	1	1			1	1
PMW-15D	1	1	1	1	1	1	1	1	1	1	1	1	1
PMW-16D	1	1	1	1	1	1	1	1	1			1	1
PMW-17D	1	1	1	1	1	1	1	1	1	1	1	1	1
<b>Pilot Test Wells</b>													
PMW-1D	1	1	1	1	1	1	1	1	1			1	1
INJ-01	1	1	1	1	1	1	1	1	1			1	1
PMW-2D	1	1	1	1	1	1	1	1	1	1	1	1	1
PMW-3D	1	1	1	1	1	1	1	1	1			1	1
PMW-4D	1	1	1	1	1	1	1	1	1			1	1
PMW-6D	1	1	1	1	1	1	1	1	1	1	1	1	1
RMW-4D	1	1	1	1	1	1	1	1	1			1	1
PMW-7D	1	1	1	1	1	1	1	1	1			1	1
MW-7D	1	1	1	1	1	1	1	1	1			1	1
<b>Site Investigation Wells</b>													
MW-1S	1	1	1	1	1	1	1	1	1			1	1
MW-2S	1	1	1	1	1	1	1	1	1	1	1	1	1
MW-3S	1	1	1	1	1	1	1	1	1			1	1
MW-4S	1	1	1	1	1	1	1	1	1			1	1
MW-6S	1	1	1	1	1	1	1	1	1			1	1
MW-10S	1	1	1	1	1	1	1	1	1			1	1
MW-11S	1	1	1	1	1	1	1	1	1			1	1
MW-12S	1	1	1	1	1	1	1	1	1			1	1
RMW-2D	1	1	1	1	1	1	1	1	1	1	1	1	1
RMW-3D	1	1	1	1	1	1	1	1	1			1	1
MW-11D	1	1	1	1	1	1	1	1	1			1	1
MW-17D	1	1	1	1	1	1	1	1	1			1	1
MW-20D	1	1	1	1	1	1	1	1	1			1	1
MW-21D	1	1	1	1	1	1	1	1	1			1	1
<b>Monitoring Subtotal</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>52</b>	<b>52</b>	<b>52</b>	<b>52</b>	<b>52</b>	<b>52</b>	<b>19</b>	<b>15</b>	<b>60</b>	<b>60</b>
<b>Added for Annual</b>													
RMW-1D	1	1	1	1	1	1	1	1	1			1	1
PMW-5D	1	1	1	1	1	1	1	1	1			1	1
PMW-8D	1	1	1	1	1	1	1	1	1			1	1
MW-14D	1	1	1	1	1	1	1	1	1			1	1
MW-15D	1	1	1	1	1	1	1	1	1			1	1
MW-16D	1	1	1	1	1	1	1	1	1			1	1
MW-18D	1	1	1	1	1	1	1	1	1			1	1
MW-19D	1	1	1	1	1	1	1	1	1			1	1
MW-10D	1	1	1	1	1	1	1	1	1			1	1
MW-12D	1	1	1	1	1	1	1	1	1			1	1
MW-13D	1	1	1	1	1	1	1	1	1			1	1
MW-5S	1	1	1	1	1	1	1	1	1			1	1
MW-9S	1	1	1	1	1	1	1	1	1			1	1
MW-7S	1	1	1	1	1	1	1	1	1			1	1
MW-8S	1	1	1	1	1	1	1	1	1			1	1
INJ-02	1	1	1	1	1	1	1	1	1			1	1
INJ-04	1	1	1	1	1	1	1	1	1			1	1
INJ-05	1	1	1	1	1	1	1	1	1			1	1
<b>ANNUAL SUBTOTAL</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18</b>
<b>QA/QC</b>													
Duplicates	4	4	4	4	4	4	4	4	4				
Matrix Spike	4												
Matrix Spike Duplicate	4												
Trip Blanks	15												
<b>TASK TOTAL PER SAMPLING</b>	<b>105</b>	<b>82</b>	<b>74</b>	<b>74</b>	<b>70</b>	<b>70</b>	<b>74</b>	<b>52</b>	<b>19</b>	<b>15</b>	<b>78</b>	<b>60</b>	

<sup>g/</sup> VOCs = volatile organic compounds, including aromatic and chlorinated aliphatic hydrocarbons. If present, an oil sample will also be collected and analyzed for VOCs.  
<sup>h/</sup> All metal and cation samples must be field-filtered and immediately preserved (Al, As, Ca, Fe, K, Mg, Mn, Se, Na)  
<sup>i/</sup> Dissolved inorganic compounds will consist of aluminum (Al), arsenic (As), calcium (Ca), iron (Fe), potassium (K), magnesium (Mg), manganese (Mn), selenium (Se), and sodium (Na). Samples will be field filtered.  
<sup>j/</sup> Analysis of microbial population composition will include concentration measurements of dehalococcoides (DHC) and dehalobacter (DHB) species in cells per milliliter as well as DHC functional genes  
<sup>k/</sup> Well head analyses include dissolved oxygen, oxidation-reduction potential, pH, temperature, electrical conductivity, and visual appearance.  
<sup>l/</sup> Mobile lab analyses include carbon dioxide, alkalinity, sulfide, ferrous iron, and manganese.  
<sup>m/</sup> For the baseline monitoring round, all Site Water Levels will be recorded

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>		Well ID: <u>OR-3SM</u>		Send to SharePoint							
Samplers: <input style="width: 100%;" type="text" value="bill simons"/>		Manual Entry: <input style="width: 100%;" type="text"/>		Well Diameter: <input style="width: 50px;" type="text" value="2"/> inches							
<b>WATER VOLUME CALCULATION</b>											
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot											
Initial Depth to Water (ft): <input style="width: 100px;" type="text" value="2.14"/>				Depth to Well Bottom (ft): <input style="width: 100px;" type="text"/>							
<b>Purging Data</b>		Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="low flow"/>		Date: <input style="width: 100px;" type="text" value="10/09/2013"/>							
Time: <input style="width: 100px;" type="text" value="1320"/> <i>(i.e. 14:32)</i>		1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36						
		4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4						
Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1325	3.44	250	.3	5.42	2.31	33.6	8.5	20.17	5.34	-107	
1335	3.45	250	.9	5.41	.74	33.6	8.35	20	5.27	-120	
1345	3.47	250	1.2	5.4	0	26.1	8.24	19.97	5.18	-126	
1350	3.65	300	1.6	5.4	0	23	8.16	19.77	5.14	-129	
1400	3.67	300	2.4	5.39	0	21.5	8.08	19.75	5.1	-135	
1405	3.67	300	2.8	5.39	0	23.1	8.17	19.72	5.15	-138	
1410	3.68	300	3.2	5.38	0	22.7	8.14	19.74	5.12	-141	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

low flow

10/09/2013

1415

3.2

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	5.38	Alkalinity (g/g)	1,100	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	8.14	Carbon Dioxide (mg/L)	1,540	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	22.7	Ferrous Iron (mg/L)	3.5	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0	Manganese (mg/L)	0.4	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	19.74	Hydrogen Sulfide (mg/L)	0	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-141	DTW (ft)		Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	5.12	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments:				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: <u>OR-4SM</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="C Huey"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>		Initial Depth to Water (ft): <input style="width: 50px;" type="text" value="4.48"/>
Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>		Date: <input style="width: 50px;" type="text" value="10/14/2013"/>
Time: <input style="width: 50px;" type="text" value="1159"/> <i>(i.e. 14:32)</i>		Depth to Well Bottom (ft): <input style="width: 50px;" type="text"/>

	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
	4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1209	4.54	200	0.53	6.51	1.70	12.5	3.329	19.37	2.164	-79.6	Clear w...
1219	4.55	200	1.06	6.48	0.99	11.1	3.371	19.32	2.190	-93.6	
1229	4.61	200	1.59	6.45	0.53	11.2	3.377	18.73	2.196	-99.3	
1234	4.63	200	1.85	6.43	0.42	10.2	3.371	18.73	2.191	-104.4	
1239	4.65	200	2.12	6.44	0.36	11.9	3.372	18.70	2.191	-117.6	
1244	4.66	200	2.38	6.45	0.35	12.8	3.373	18.68	2.192	-119.9	
1249	4.66	200	2.65	6.47	0.29	11.5	3.373	18.60	2.193	-125.3	
1254	4.69	200	2.91	6.50	0.25	11.1	3.370	18.54	2.191	-126.9	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/14/2013

1255

3.75 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.5	Alkalinity (g/g)	1,500	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	3.370	Carbon Dioxide (mg/L)	210	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	11.1	Ferrous Iron (mg/L)	1	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.25	Manganese (mg/L)	0.6	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	18.54	Hydrogen Sulfide (mg/L)	0.3	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-126.9	DTW (ft)	4.69	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	2.191	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: VOAs effervescing				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: <u>OR-5SM</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="C huey"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>	Initial Depth to Water (ft): <input style="width: 50px;" type="text" value="2.64"/>	Depth to Well Bottom (ft): <input style="width: 50px;" type="text"/>

Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>	Date: <input style="width: 100%;" type="text" value="10/10/2013"/>	Time: <input style="width: 100%;" type="text" value="0820"/> <i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
0830	2.64	300	0.79	6.14	1.62	12.0	5.221	18.60	3.394	-79.2	Clear
0840	2.64	250	1.45	6.15	1.13	11.1	5.270	18.78	3.425	-102.3	
0845	2.64	250	1.78	6.15	0.27	10.3	5.303	18.88	3.447	-123.2	
0850	2.65	250	2.11	6.16	0.09	10.1	5.328	18.88	3.463	-131.3	
0855	2.65	250	2.44	6.15	0.00	9.91	5.331	18.90	3.464	-132.2	
0900	2.65	250	2.77	6.15	0.05	9.86	5.340	18.98	3.471	-135.2	
0905	2.65	250	3.10	6.16	0.06	9.14	5.347	19.09	3.476	-139.7	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/10/2013

0910

4.5 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.16	Alkalinity (g/g)	580	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	5.347	Carbon Dioxide (mg/L)	632	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	9.14	Ferrous Iron (mg/L)	1.4	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.06	Manganese (mg/L)	0.1	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	19.09	Hydrogen Sulfide (mg/L)	2	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-139.7	DTW (ft)	2.65	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	3.476	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: VOAs effervescing. Dissolved Hydrogen: start at 0934/ stop at 0949.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input checked="" type="checkbox"/>	1filter		1000 ml
				Hydrogen Acetylene	<input checked="" type="checkbox"/>			

**PARSONS**



## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>	Well ID: OR-6SM Manual Entry: 101013	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="Burkert"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>	Initial Depth to Water (ft): <input style="width: 50px;" type="text" value="4.42"/>	Depth to Well Bottom (ft): <input style="width: 50px;" type="text" value="11.6"/>

Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Peristaltic"/>	Date: <input style="width: 80%;" type="text"/>	Time: <input style="width: 80%;" type="text" value="1025"/> <i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1015	4.42	200	0	6.35	0.02	33.1	6.19	14.37	3.90	-207	
1025	5.85	200	0.5	6.52	0.00	13.4	6.10	16.64	3.83	-254	
1035	5.85	200	0.75	6.53	0.00	6.58	6.04	17.16	3.80	-265	
1045	5.90	200	1.5	6.52	0.00	4.32	5.99	17.51	3.77	-276	
1055	5.95	200	1.9	6.52	0.00	4.16	5.97	17.77	3.76	-281	
1105	6.02	200	2.4	6.52	0.00	4.77	5.93	18.24	3.74	-281	
1110	6.02	200	3	6.52	0.00	5.99	5.91	18.48	3.73	-280	
1115	6.92	200	3.5	6.52	0.00	6.02	5.90	18.66	3.71	-278	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Peristaltic

10/10/2013

1130

3.5 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.52	Alkalinity (g/g)	0	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	5.90	Carbon Dioxide (mg/L)	0	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	6.02	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.00	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	18.66	Hydrogen Sulfide (mg/L)	5	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-278	DTW (ft)	6.02	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	3.71	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Purged water turned black too quickly to do Hach kits. Some effervescence in acid.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input checked="" type="checkbox"/>			1,000 ml
				Hydrogen Acetylene	<input checked="" type="checkbox"/>			20 minutes at 200 ml/min

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: <u>OR-9SM</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 50px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="C Huey"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>		Initial Depth to Water (ft): <input style="width: 100px;" type="text" value="5.6"/>
Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>		Date: <input style="width: 100px;" type="text" value="10/17/2013"/>
Time: <input style="width: 100px;" type="text" value="1226"/> <i>(i.e. 14:32)</i>		Depth to Well Bottom (ft): <input style="width: 100px;" type="text"/>

	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36			
	4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4			

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1241	5.83	190	0.75	6.53	1.02	20.4	1.330	21.24	0.865	-178.5	Clear w...
1251	5.83	190	1.25	6.52	1.00	21.6	1.404	21.21	0.913	-182.6	
1301	5.84	190	1.75	6.50	0.58	8.92	1.696	21.10	1.101	-191.2	Clear
1306	5.84	190	2.0	6.51	0.54	8.02	1.792	21.05	1.180	-196.2	
1311	5.85	190	2.25	6.50	0.38	7.47	1.875	20.91	1.218	-199.6	
1316	5.85	190	2.50	6.50	0.30	7.28	1.949	20.87	1.266	-203.5	
1321	5.85	190	2.75	6.50	0.27	7.14	1.958	20.91	1.300	-205.9	
1326	5.86	190	3.0	6.50	0.27	7.02	1.966	20.89	1.318	-206.6	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/17/2013

1330

3.5 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.5	Alkalinity (g/g)	280	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	1.966	Carbon Dioxide (mg/L)	186	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	7.02	Ferrous Iron (mg/L)	0.2	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.27	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	20.89	Hydrogen Sulfide (mg/L)	3	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-206.6	DTW (ft)	5.86	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.318	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments:				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>	Well ID: OR-10SM Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 40px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="Bill simons"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>	Initial Depth to Water (ft): <input style="width: 60px;" type="text" value="3.45"/>	Depth to Well Bottom (ft): <input style="width: 60px;" type="text" value="11.8"/>

Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>	Date: <input style="width: 100%;" type="text" value="10/08/2013"/>	Time: <input style="width: 100%;" type="text" value="1138"/> <i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1133	3.9	375	1	6.16	2.05	16.3	.604	18.91	.386	-57	
1143	4.05	400	2.1	6.39	1.93	13.8	1.62	19.06	1.06	-141	
1153	4.06	450	3.3	6.46	1.5	8.772	2.27	19.13	1.49	-200	
1203	4.1	425	4.5	6.49	2.46	6.89	2.57	19.41	1.65	-254	
1213	4.12	425	5.7	6.51	2.68	5.1	2.73	19.49	1.75	-277	
1223	4.12	425	6.9	6.51	2.55	6.39	2.76	19.42	1.77	-306	
1233	4.13	425	8.1	6.5	2.6	4.62	2.89	19.62	1.85	-321	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/08/2013

1240

8.5 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.5	Alkalinity (g/g)	600	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	2.89	Carbon Dioxide (mg/L)	1,500	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	0	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	2.6	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	1962	Hydrogen Sulfide (mg/L)	5	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-321	DTW (ft)	3.45	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	185	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: VOAs effervesced H2S is >5				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: <u>OR-13SM</u> Manual Entry:	Send to SharePoint  Well Diameter: <input type="text" value="2"/> inches
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Samplers:

### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="5.01"/>	Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>
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### Purging Data

Method: <i>(i.e. low flow)</i>	Date: <input style="width: 100%;" type="text" value="10/10/2013"/>	Time: <input style="width: 100%;" type="text" value="1405"/>			
<input style="width: 100%;" type="text" value="Low flow"/>		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16
			4-inch=0.64	6-inch=1.4	8-inch=2.5
					10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1415	5.62	160	0.42	6.43	0.27	26.9	4.870	19.70	3.164	-103.8	Slightly...
1425	5.60	160	0.84	6.42	0.17	25.2	4.953	19.53	3.219	-110.3	
1435	5.61	160	1.26	6.42	0.15	27.4	4.878	19.64	3.172	-124.5	
1445	5.61	160	1.68	6.41	0.06	25.2	4.865	19.53	3.162	-147.9	
1450	5.61	160	1.89	6.41	0.03	24.1	4.917	19.51	3.196	-163.4	
1455	5.61	160	2.10	6.40	0.06	20.2	4.944	19.54	3.215	-169.0	
1500	5.61	160	2.31	6.41	0.02	22.6	4.973	19.49	3.232	-172.3	
1505	5.61	160	2.52	6.41	0.04	23.2	4.971	19.52	3.233	-165.4	
1510	5.61	160	2.73	6.41	0.03	22.3	4.975	19.54	3.224	-164.7	
1515	5.61	160	2.94	6.40	0.03	21.9	4.978	19.49	3.236	-161.0	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/10/2013

1520

4.5

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.4	Alkalinity (g/g)	0	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	4.978	Carbon Dioxide (mg/L)	0	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	21.9	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.03	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	19.49	Hydrogen Sulfide (mg/L)	0.3	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-161.0	DTW (ft)	5.61	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	3.236	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Water turned black. Collected MS/MSD (VOCs only-6). Dissolved Hydrogen:start at 1640/ end at 1700.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input checked="" type="checkbox"/>	2- filters		400 ml 460 ml
				Hydrogen Acetylene	<input checked="" type="checkbox"/>			

**PARSONS**



## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>  Samplers: <input style="width: 100%;" type="text" value="Burkert"/>	Well ID: OR-14SM Manual Entry: <input style="width: 100%;" type="text" value="101013"/>	Send to SharePoint  Well Diameter: <input style="width: 50px;" type="text" value="2"/> inches
<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot		
Initial Depth to Water (ft): <input style="width: 100px;" type="text" value="4.92"/>		Depth to Well Bottom (ft): <input style="width: 100px;" type="text" value="12"/>

**Purging Data**

Method: <i>(i.e. low flow)</i>	Date:	Time:				
<input style="width: 100%;" type="text" value="Peristaltic"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text" value="1345"/>				
			1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1347	4.92	200	0	7.12	0.67	44.1	2.67	21.35	1.71	-114	
1357	5.00	200	0.5	6.63	0.00	21.8	2.85	20.51	1.83	-274	
1407	5.02	200	1.0	6.64	0.00	27.5	2.97	20.92	1.90	-292	
1417	5.04	200	1.5	6.62	0.00	12.8	3.03	21.19	1.94	-286	
1427	5.06	200	2.1	6.61	0.00	10.4	3.09	21.46	1.98	-289	
1437	5.08	200	2.6	6.60	0.00	11.8	3.17	21.30	2.03	-291	
1442	5.08	200	2.9	6.59	0.00	11.3	3.19	21.32	2.04	-292	
1447	5.08	200	3.2	6.60	0.00	13.6	3.22	21.47	2.06	-294	
1452	5.08	200	3.5	6.58	0.00	12.7	3.23	21.48	2.07	-294	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Peristaltic

10/10/2013

1500

3.5 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.58	Alkalinity (g/g)	0	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	3.23	Carbon Dioxide (mg/L)	0	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	12.7	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.00	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	21.48	Hydrogen Sulfide (mg/L)	2	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-294	DTW (ft)	5.08	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	2.07	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
Comments: Turned black				Microbial Census	<input checked="" type="checkbox"/>	700 ml 300 ml		
				Hydrogen Acetylene	<input checked="" type="checkbox"/>	20 min at 200 ml		

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: <u>OR-15SM</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
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Samplers:
<input style="width: 90%;" type="text" value="C Huey"/>

### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <input style="width: 80%;" type="text" value="3.76"/>	Depth to Well Bottom (ft): <input style="width: 80%;" type="text"/>
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### Purging Data

Method: <i>(i.e. low flow)</i>	Date: <input style="width: 80%;" type="text" value="10/09/2013"/>	Time: <input style="width: 80%;" type="text" value="1330"/>			
<input style="width: 90%;" type="text" value="Low flow"/>		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16
			4-inch=0.64	6-inch=1.4	8-inch=2.5
					10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1340	4.16	230	0.61	6.52	0.98	20.9	4.401	18.32	2.860	-103.1	Yellow ...
1350	4.17	230	1.21	6.53	0.24	22.7	4.391	18.16	2.855	-105.2	
1400	4.17	230	1.82	6.52	0.15	21.8	4.374	18.17	2.844	-111.3	
1405	4.18	230	2.12	6.52	0.10	22.4	4.373	18.11	2.843	-114.9	
1410	4.19	230	2.43	6.52	0.07	23.1	4.367	18.02	2.838	-116.9	
1415	4.19	230	2.73	6.51	0.04	22.8	4.362	18.04	2.836	-117.4	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/09/2013

1420

3 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.51	Alkalinity (g/g)	1,640	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	4.362	Carbon Dioxide (mg/L)	396	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	22.8	Ferrous Iron (mg/L)	2.2	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.04	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	18.04	Hydrogen Sulfide (mg/L)	0.3	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-117.4	DTW (ft)	4.19	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	2.836	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: VOAs effervescing				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>	Well ID: OR-18SM Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 30px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="C Huey"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>		Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="4.42"/>

Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>	Date: <input style="width: 100%;" type="text" value="10/09/2013"/>	Time: <input style="width: 100%;" type="text" value="1455"/> <i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1505	4.65	220	0.58	6.90	0.53	11.1	1.423	18.36	0.923	-180.0	Clear
1515	4.66	220	1.16	6.58	0.40	10.1	1.610	18.39	1.046	-220.0	
1525	4.66	220	1.74	6.54	0.45	9.89	1.665	18.27	1.082	-237.1	
1530	4.67	220	2.03	6.46	0.45	11.8	1.718	18.14	1.117	-251.6	
1535	4.67	220	2.32	6.45	0.45	10.7	1.723	18.03	1.120	-252.4	
1540	4.67	220	2.61	6.43	0.47	10.0	1.737	18.14	1.130	-250.8	
1545	4.67	220	2.90	6.42	0.46	9.88	1.749	18.15	1.134	-250.8	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/09/2013

1550

3.5

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.42	Alkalinity (g/g)	760	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	1.749	Carbon Dioxide (mg/L)	128	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	9.88	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.46	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	18.15	Hydrogen Sulfide (mg/L)	3	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-250.8	DTW (ft)	4.67	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.134	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Collected duplicate @ 1201 OR-180SM_100913 (VOCs-3, mee-2, c/n/s-2, diss. Inorganics-1, toc-2.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>  Samplers: <input style="width: 100%;" type="text" value="C Huey"/>	Well ID: PMW-1S Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 50px;" type="text" value="2"/> inches
<b>WATER VOLUME CALCULATION</b>		
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot		
Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="2.86"/>		Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>
Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>	Date: <input style="width: 100%;" type="text" value="10/15/2013"/>	Time: <input style="width: 100%;" type="text" value="0858"/> <i>(i.e. 14:32)</i>
		1-inch=0.041      1.5-inch=0.092      2-inch=0.16      3-inch=0.36 4-inch=0.64      6-inch=1.4      8-inch=2.5      10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
0908	3.40	180	0.47	7.02	0.83	5.67	3.530	17.73	2.293	-110.3	Clear
0918	3.35	180	0.95	7.02	0.96	5.82	3.563	17.59	2.316	-150.4	
0928	3.33	180	1.42	6.90	0.79	5.46	3.579	17.46	2.327	-191.6	
0933	3.32	180	1.66	6.90	0.83	5.19	3.577	17.49	2.326	-192.8	
0938	3.32	180	1.90	6.90	0.85	4.86	3.579	17.53	2.326	-201.6	
0943	3.32	180	2.14	6.90	0.88	4.81	3.580	17.55	2.326	-204.9	
0948	3.32	180	2.38	6.90	0.92	4.96	3.579	17.60	2.327	-208.6	
0953	3.32	180	2.62	6.90	0.90	4.83	3.581	17.58	2.328	-211.3	

**Sampling Data**

Method: (i.e. low flow) Date: 10/15/2013 Time: (i.e. 14:32) 0955 Total Volume of Water Purged: 5.5 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.9	Alkalinity (g/g)	140	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	3.581	Carbon Dioxide (mg/L)	144	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	4.83	Ferrous Iron (mg/L)	0.1	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.90	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	17.58	Hydrogen Sulfide (mg/L)	2	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-211.3	DTW (ft)	3.32	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	2.328	* NOTE * HACH test kits are only required for MNA analysis wells.		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Collected duplicate PMW-100S_101513 @1201 (VOCs, mee, c/n/s, diss. Inorganics, toc). Dissolved hydrogen start@1025/end @1045				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input checked="" type="checkbox"/>	1-filter	None	1000 ml
				Hydrogen Acetylene	<input checked="" type="checkbox"/>	1-20ml vial 2-40 ml VOAs	None Na3PO4	

**PARSONS**



## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonomol Facility</u></div>	Well ID: PMW-2S Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint <hr/> Well Diameter: <input style="width: 50px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="C Huey"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>		Initial Depth to Water (ft): <input style="width: 100px;" type="text" value="2.98"/>
Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>		Date: <input style="width: 100px;" type="text" value="10/10/2013"/>
Time: <input style="width: 100px;" type="text" value="1030"/> <i>(i.e. 14:32)</i>		Depth to Well Bottom (ft): <input style="width: 100px;" type="text"/>

	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36			
	4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4			

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1040	5.41	200	0.53	6.39	2.91	38.3	5.474	19.57	3.559	-117.1	
1050	5.84	100	0.79	6.36	1.46	30.6	5.480	19.16	3.560	-136.9	
1100	5.95	100	1.05	6.35	0.43	21.4	5.483	18.82	3.563	-152.8	
1110	6.19	100	1.31	6.33	0.29	27.8	5.507	18.40	3.581	-172.6	
1120	6.30	100	1.57	6.33	0.23	22.8	5.524	18.27	3.591	-185.5	
1130	6.32	100	1.83	6.33	0.23	18.3	5.531	18.25	3.593	-183.9	
1135	6.33	100	1.96	6.32	0.20	19.5	5.548	18.19	3.605	-190.0	
1140	6.39	100	2.09	6.30	0.19	20.4	5.556	18.16	3.611	-191.1	
1145	6.40	100	2.22	6.32	0.12	20.1	5.564	18.16	3.616	-185.5	
1150	6.43	100	2.35	6.31	0.11	19.7	5.571	18.16	3.620	-182.8	
1155	6.45	100	2.48	6.31	0.10	19.5	5.584	18.11	3.629	-183.1	
1200	6.48	100	2.61	6.30	0.11	19.2	5.589	18.30	3.612	-190.5	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/10/2013

1205

4

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.3	Alkalinity (g/g)	520	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	5.589	Carbon Dioxide (mg/L)	188	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	19.2	Ferrous Iron (mg/L)	0.7	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.11	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	18.30	Hydrogen Sulfide (mg/L)	2	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-190.5	DTW (ft)	6.48	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	3.612	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Dissolved Hydrogen: start at 1256/ end at 1326. VOAs effervescing.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input checked="" type="checkbox"/>	1filter		1000 ml
				Hydrogen Acetylene	<input checked="" type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: <u>PMW-3S</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="C Huey"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>		Initial Depth to Water (ft): <input style="width: 50px;" type="text" value="5.7"/>
Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>		Date: <input style="width: 80px;" type="text" value="10/15/2015"/>
Time: <input style="width: 80px;" type="text" value="1116"/> <i>(i.e. 14:32)</i>		Depth to Well Bottom (ft): <input style="width: 50px;" type="text"/>

	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36			
	4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4			

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1126	6.87	150	0.40	6.42	1.79	15.4	5.040	18.63	3.276	-68.4	Clear w...
1136	7.19	100	0.66	6.43	1.41	12.3	5.007	18.68	3.254	-93.6	
1146	7.32	100	0.92	6.43	1.17	11.3	4.990	18.65	3.243	-97.7	
1156	7.39	100	1.18	6.49	1.42	10.7	4.928	18.62	3.203	-132.2	
1206	7.41	100	1.44	6.50	1.29	11.1	4.905	18.59	3.200	-138.9	
1216	7.42	100	1.7	6.42	0.79	11.6	5.098	18.66	3.300	-161.8	
1221	7.43	100	1.83	6.40	0.76	12.2	5.105	18.73	3.317	-167.7	
1226	7.41	100	1.96	6.37	0.98	11.1	5.229	18.77	3.400	-174.7	
1231	7.40	100	2.09	6.38	0.85	10.2	5.245	18.76	3.411	-176.6	
1236	7.40	100	2.22	6.38	0.69	9.87	5.269	18.71	3.436	-188.6	Clear
1241	7.41	100	2.35	6.39	0.66	9.81	5.288	18.68	3.441	-192.4	
1246	7.41	100	2.48	6.40	0.61	9.13	5.281	18.68	3.433	-195.6	
1251	7.41	100	2.61	6.40	0.60	8.96	5.273	18.67	3.429	-201.3	

**Sampling Data**

Method: (i.e. low flow) Date: 10/15/2013 Time: (i.e. 14:32) 1255 Total Volume of Water Purged: 4.5 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.4	Alkalinity (g/g)	880	Parameter	<input type="checkbox"/>	Bottle	Pres.	Method
Spec. Cond. (mS/cm)	5.273	Carbon Dioxide (mg/L)	7.66	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	8.96	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.60	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	18.67	Hydrogen Sulfide (mg/L)	4	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-201.3	DTW (ft)	7.41	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	3.429	* NOTE * HACH test kits are only required for MNA analysis wells.		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Dissolved hydrogen start@ 1316/ end@1346 (100 ml/min) 30 min.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input checked="" type="checkbox"/>	Filter-1	None	1000 ml
				Hydrogen Acetylene	<input checked="" type="checkbox"/>	1-20 ml vial 2-40 ml VOAs	None Na3PO4	

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: <u>PMW-4S</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 50px;" type="text" value="2"/> inches
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Samplers:
<input style="width: 95%;" type="text" value="C Huey"/>

### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <input style="width: 80%;" type="text" value="5.51"/>	Depth to Well Bottom (ft): <input style="width: 80%;" type="text"/>
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### Purging Data

Method: <i>(i.e. low flow)</i>	Date: <input style="width: 80%;" type="text" value="10/14/2013"/>	Time: <input style="width: 80%;" type="text" value="1337"/>			
<input style="width: 95%;" type="text" value="Low flow"/>		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16
			4-inch=0.64	6-inch=1.4	8-inch=2.5
					10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1347	7.50	160	0.42	6.61	2.45	12.7	6.223	19.53	4.044	-71.1	Clear w...
1357	7.53	125	0.75	6.63	1.37	16.0	6.248	19.70	4.060	-83.9	
1407	7.54	125	1.08	6.56	0.90	5.71	6.646	19.41	4.319	-106.4	
1417	7.79	125	1.41	6.55	0.67	6.70	6.629	19.50	4.310	-106.5	
1427	8.01	125	1.74	6.55	0.76	6.48	6.608	19.29	4.296	-118.9	
1432	8.02	125	1.91	6.54	0.71	6.34	6.601	19.16	4.292	-123.4	
1437	8.03	125	2.07	6.55	0.81	6.29	6.632	19.02	4.313	-122.6	
1442	8.05	125	2.24	6.56	0.62	6.73	6.610	18.89	4.296	-126.6	
1447	8.07	125	2.40	6.56	0.58	6.70	6.599	18.93	4.291	-126.7	
1452	8.08	125	2.57	6.55	0.56	6.69	6.592	18.98	4.285	-126.8	
1457	8.09	125	2.73	6.53	0.55	6.65	6.587	18.91	4.275	-129.8	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/14/2013

1500

3

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.53	Alkalinity (g/g)	320	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	6.587	Carbon Dioxide (mg/L)	252	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	6.65	Ferrous Iron (mg/L)	1.1	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.55	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	18.91	Hydrogen Sulfide (mg/L)	0.1	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-129.8	DTW (ft)	8.09	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	4.275	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: VOAs effervescing				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-weight: bold; margin-top: 5px;">Ekonomol Facility</div>	Well ID: PMW-5S Manual Entry: 2013-10-10	Send to SharePoint  Well Diameter: 2 inches								
Samplers: bill simons	WATER VOLUME CALCULATION = (Total Depth of Well - Depth To Water) x Casing Volume per Foot									
<b>Purging Data</b>		Initial Depth to Water (ft): 3.04								
Method: <i>(i.e. low flow)</i> low flow		Depth to Well Bottom (ft): 10								
Date: 10/09/2013	Time: 1510 <i>(i.e. 14:32)</i>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">1-inch=0.041</td> <td style="width: 25%;">1.5-inch=0.092</td> <td style="width: 25%;">2-inch=0.16</td> <td style="width: 25%;">3-inch=0.36</td> </tr> <tr> <td>4-inch=0.64</td> <td>6-inch=1.4</td> <td>8-inch=2.5</td> <td>10-inch=4</td> </tr> </table>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36	4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4
1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36							
4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4							

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1520	6.5	350	.9	5.61	9	0	2.99	21.13	1.85	-24	
1525	7.8	350	1.35	5.63	7.34	1.3	2.87	21.04	1.9	-5	
1530	8.6	350	2.15	5.57	5.48	12.4	4.08	21.07	2.65	5	
1535	8.85	260	2.45	5.64	11.02	107	4.51	21.23	2.88	13	
1540	9.18	175	2.65	5.62	8.3	66	4.41	22.28	2.82	14	
1545	9.23	175	2.85	5.62	7.49	55	4.37	22.73	2.8	11	
1600	8.80	125	3	5.58	7.05	227	4.29	23.23	2.74	-18	well pu...
1605	9.05	125	3.2	5.57	5.74	87	4.31	23.02	2.76	-11	
1610	9.34	125	3.4	5.58	4.83	34	4.31	22.75	2.76	0	
1615	9.6	125	3.6	5.58	.61	52.4	4.4	22.28	2.82	2	
1620	9.85	125	3.8	5.6	2.09	117	4.4	22.31	2.82	-4	well w...

**Sampling Data**

Method: *(i.e. low flow)*

Date:

Time: *(i.e. 14:32)*

Total Volume of Water Purged:

low flow

10/10/2013

0855

3.8

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH		Alkalinity (g/g)	500	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)		Carbon Dioxide (mg/L)	580	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)		Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)		Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)		Hydrogen Sulfide (mg/L)	0	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)		DTW (ft)		Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)		<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: turbidity measured using Horiba				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**



## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-weight: bold; margin-top: 5px;">Ekonol Facility</div>	Well ID: PMW-6S Manual Entry:	Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
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Samplers: <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">Doruk Ucak</div>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot Initial Depth to Water (ft): <input style="width: 50px;" type="text" value="5.96"/>	Depth to Well Bottom (ft): <input style="width: 50px;" type="text"/>
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Purging Data Method: (i.e. low flow) <input style="width: 50px;" type="text" value="LF"/>	Date: <input style="width: 50px;" type="text" value="10/14/2013"/>	Time: <input style="width: 50px;" type="text" value="1235"/> <i>(i.e. 1432)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4


Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1245	6.96	150	0.4	6.31	1.92	19.4	2.76	19.53	1.76	-101	clear, somewhat odor
1255	7.33	120	0.72	6.35	0.88	15.0	2.72	20.37	1.74	-106	
1300	7.61	120	1.04	6.36	0.17	13.6	2.68	20.77	1.72	-108	
1305	7.71	120	1.36	6.37	0.00	10.7	2.69	20.93	1.72	-110	
1310	7.76	120	1.68	6.37	0.00	10.9	2.69	20.77	1.73	-112	
1315	7.81	120	2.00	6.37	0.00	12.5	2.76	20.73	1.77	-112	


Sampling Data Method: (i.e. low flow) <input style="width: 50px;" type="text" value="LF"/>	Date: <input style="width: 50px;" type="text" value="10/14/2013"/>	Time: (i.e. 14:32) <input style="width: 50px;" type="text" value="1320"/>	Total Volume of Water Purged: <input style="width: 50px;" type="text" value="3.0"/> (gal)
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HORIBA		HACH TEST KITS		SAMPLE SET			
pH	6.37	Alkalinity (g/g)	1,300	Parameter	Bottle	Pres.	Method
Spec. Cond. (mS/cm)	2.76	Carbon Dioxide (mg/L)	1,200	Select VOCs	<input checked="" type="checkbox"/>	3-40 mL glass vial	HCl EPA 8260
Turbidity (NTU)	12.5	Ferrous Iron (mg/L)	1.8	MEE	<input checked="" type="checkbox"/>	2-40 mL glass vial	HCl Lab SOP
DO (mg/L)	0.00	Manganese (mg/L)	0.9	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3 SW6010B
Temp.(°C)	20.73	Hydrogen Sulfide (mg/L)	0.3	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40 mL glass (Field Filtered)	None lab specified
ORP (mv)	-112	DTW (ft)	8.00	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None EPA 365.1
				Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic	NaOH/Zn MS-45000-S2-F

TDS (g/L)	1.77	* NOTE * HACH test kits are only required for MNA analysis wells.		(Field filtered)	Acetate		
Comments: <div style="border: 1px solid black; height: 60px; width: 100%;"></div>			Total Organic Carbon	<input checked="" type="checkbox"/>	2-40 mL amber glass vial	H3PO4	SW9060
			Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120 mL glass amber	None	SW9060
			Microbial Census	<input type="checkbox"/>			
			Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**





Time

Accuracy (m)

Latitude

Longitude

Altitude

Velocity

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-weight: bold; margin-top: 5px;">Ekonol Facility</div>	Well ID: PMW-7S Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 30px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="C Huey"/>	WATER VOLUME CALCULATION = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b> Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>		Date: <input style="width: 100%;" type="text" value="10/17/2013"/>
Time: <input style="width: 100%;" type="text" value="1412"/> <i>(i.e. 14:32)</i>		Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="6.15"/>
Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>		

1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36	4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1422	7.22	175	0.46	6.57	2.59	7.42	5.640	18.90	3.666	-52.0	Clear
1432	8.07	120	0.78	6.56	2.17	6.86	5.496	19.59	3.575	-63.9	
1442	8.77	100	1.04	6.53	2.08	6.52	5.439	19.50	3.535	-62.1	
1452	8.90	100	1.3	6.53	2.06	6.40	5.463	19.48	3.551	-63.2	
1502	9.13	100	1.59	6.54	1.95	5.86	5.611	19.71	3.660	-66.7	
1512	9.17	100	1.85	6.55	1.91	5.12	5.636	19.82	3.665	-69.5	
1517	9.19	100	1.98	6.55	1.84	4.96	5.698	19.82	3.702	-73.5	
1522	9.20	100	2.11	6.55	1.76	4.84	5.719	19.47	3.718	-81.6	
1527	9.22	100	2.24	6.55	1.68	4.36	5.734	19.56	3.728	-88.0	
1532	9.23	100	2.37	6.55	1.61	4.18	5.758	19.24	3.742	-93.9	
1537	9.25	100	2.5	6.55	1.60	4.08	5.764	19.12	3.746	-95.4	
1542	9.26	100	2.63	6.55	1.58	4.01	5.765	19.11	3.747	-96.9	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/17/2013

1545

2.75 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.55	Alkalinity (g/g)	227.5	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	5.765	Carbon Dioxide (mg/L)	202	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	4.01	Ferrous Iron (mg/L)	0.9	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	1.58	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	19.11	Hydrogen Sulfide (mg/L)	0.1	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-96.9	DTW (ft)	9.26	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	3.747	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments:				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: <u>PMW-8S</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="Bill simons"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>		Initial Depth to Water (ft): <input style="width: 50px;" type="text" value="3.67"/>
		Depth to Well Bottom (ft): <input style="width: 50px;" type="text" value="11.5"/>

Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>	Date: <input style="width: 100%;" type="text" value="10/08/2013"/>	Time: <input style="width: 100%;" type="text" value="1430"/> <i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1440	6.30	290	.6	6.86	1.26	6.74	4.22	21.23	2.7	-260	
1450	7.25	290	1.2	6.65	.4	9.89	3.25	20.7	2.06	-291	
1500	7.67	290	1.8	6.56	.43	6.19	3.45	20.82	2.21	-294	
1510	8.03	290	2.4	6.55	.65	2.87	3.69	20.58	2.37	-305	
1515	8.22	290	3	6.55	.79	3.49	3.77	19.88	2.41	-311	
1520	8.36	290	3.6	6.54	.92	5.52	2.72	19.78	2.38	-314	
1525	8.43	225	4.2	6.54	1.03	6.51	3.68	19.78	2.35	-316	
1530	8.58	225	5	6.54	1.97	6.76	3.6	19.26	2.3	-320	
1535	8.77	225	5.5	6.59	1.99	6.99	3.58	19.26	2.29	-323	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/08/2013

1550

4.5 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.59	Alkalinity (g/g)	600	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	3.58	Carbon Dioxide (mg/L)	960	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	6.99	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	1.99	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	19.26	Hydrogen Sulfide (mg/L)	5	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-323	DTW (ft)	8.77	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	2.29	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: H2S >5				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-weight: bold; margin-top: 5px;">Ekonol Facility</div>	Well ID: PMW-9S Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 30px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="C Huey"/>	WATER VOLUME CALCULATION = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b> Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>		Date: <input style="width: 100%;" type="text" value="10/15/2013"/>
Time: <input style="width: 100%;" type="text" value="1415"/> <i>(i.e. 14:32)</i>		Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="6.25"/>
Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>		

	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36			
	4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4			

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1425	7.46	100	0.26	6.68	1.62	5.92	5.046	18.73	3.280	-84.5	Clear
1435	7.91	100	0.52	6.68	1.68	6.84	5.038	18.74	3.275	-83.9	
1445	8.02	100	0.78	6.67	1.67	5.84	5.022	18.89	3.269	-91.8	
1455	8.05	100	1.04	6.66	1.65	4.96	5.017	19.01	3.260	-100.6	
1505	8.05	100	1.3	6.66	1.65	4.80	5.017	18.92	3.261	-104.6	
1515	8.05	100	1.56	6.66	1.66	4.70	5.015	18.91	3.260	-104.9	
1525	8.06	100	1.82	6.63	1.52	4.30	5.015	18.90	3.260	-104.2	
1535	8.07	100	2.08	6.62	1.50	4.20	5.015	18.89	3.260	-103.7	
1540	8.07	100	2.21	6.64	1.59	3.86	5.017	18.75	3.261	-105.9	
1545	8.08	100	2.34	6.64	1.63	4.11	5.018	18.69	3.262	-106.2	
1550	8.09	100	2.47	6.64	1.52	4.01	5.019	18.68	3.263	-106.1	
1555	8.09	100	2.60	6.63	1.51	3.98	5.020	18.65	3.265	-106.7	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/15/2013

1605

4

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.63	Alkalinity (g/g)	320	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	5.020	Carbon Dioxide (mg/L)	366	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	3.98	Ferrous Iron (mg/L)	0.1	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	1.51	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	18.65	Hydrogen Sulfide (mg/L)	0.1	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-106.7	DTW (ft)	8.09	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	3.265	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Dissolved hydrogen start @1622/ end@1652				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input checked="" type="checkbox"/>	Filter - 1	None	1000 ml
				Hydrogen Acetylene	<input checked="" type="checkbox"/>	1-20 ml vial 2-40 ml VOAs	None Na3PO4	

**PARSONS**



## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>		Well ID: PMW-10S Manual Entry: 101013		Send to SharePoint  Well Diameter: 2 inches									
Samplers: D c Burkert		<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot											
<b>Purging Data</b>		Initial Depth to Water (ft): 4.42		Depth to Well Bottom (ft): 12									
Method: (i.e. low flow) Peristaltic		Date: <input type="text"/> Time: 1517 (i.e. 14:32)		<table border="1" style="width: 100%; text-align: center;"> <tr> <td>1-inch=0.041</td> <td>1.5-inch=0.092</td> <td>2-inch=0.16</td> <td>3-inch=0.36</td> </tr> <tr> <td>4-inch=0.64</td> <td>6-inch=1.4</td> <td>8-inch=2.5</td> <td>10-inch=4</td> </tr> </table>		1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36	4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4
1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36										
4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4										
Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments		
1517	4.42	300	0	7.55	49.7	85.0	4.66	23.26	2.9	54			
1527	7.66	300	0.75	6.92	13.4	19.8	4.54	20.6	2.90	95			
1537	8.5	300	1.5	6.88	15.5	14.4	4.58	20.55	2.93	106			
1547	9.27	300	2.0	6.94	14.1	9.97	4.55	20.33	2.91	109			
1557	10.08	300	2.7	6.99	13.3	6.16	4.52	19.74	2.89	111			
1607	10.82	300	3.3	7.00	1.5	2.78	4.50	19.43	2.87	103			
1617	11.5	300	4	6.99	0.0	11.3	4.62	18.27	2.96	62	Dry		

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Peristaltic

10/10/2013

0900

4.5 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH		Alkalinity (g/g)	400	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)		Carbon Dioxide (mg/L)	278	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)		Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)		Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)		Hydrogen Sulfide (mg/L)	0	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)		DTW (ft)	5.35	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)		<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: We'll was purged dry.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input checked="" type="checkbox"/>			1,000 ml
				Hydrogen Acetylene	<input checked="" type="checkbox"/>			20 min at 200 ml per min

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>	Well ID: PMW-11S Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="C Huey"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b> Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>		Date: <input style="width: 100%;" type="text" value="10/09/2013"/>
Time: <input style="width: 100%;" type="text" value="1047"/> <i>(i.e. 14:32)</i>		Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="4.45"/>
Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>		

1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36	4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1057	5.92	150	0.39	6.51	2.68	51.8	4.555	19.70	2.957	-75.3	Slightly...
1107	6.45	150	0.79	6.51	1.34	30.5	4.591	19.50	2.985	-118.4	
1117	7.24	120	1.10	6.52	1.22	19.2	4.591	19.59	2.984	-160.4	
1127	7.39	120	1.41	6.54	0.88	17.3	4.604	19.79	2.995	-246.6	
1137	7.61	120	1.72	6.56	0.99	11.9	4.588	18.42	2.984	-208.2	Clear
1142	7.71	120	1.88	6.55	0.83	9.59	4.573	18.53	2.972	-194.4	
1147	7.75	120	2.03	6.52	0.73	9.12	4.578	18.56	2.976	-186.2	
1152	7.78	120	2.19	6.51	0.77	8.46	4.583	18.79	2.979	-178.8	
1157	7.80	120	2.34	6.52	0.83	8.60	4.584	18.81	2.979	-175.6	
1202	7.82	120	2.50	6.53	0.81	8.01	4.570	18.57	2.967	-174.1	
1207	7.84	120	2.65	6.51	0.80	7.87	4.575	18.68	2.974	-174.0	
1212	7.85	120	2.81	6.51	0.84	7.88	4.570	18.69	2.971	-173.6	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/09/2013

1215

3.5

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.51	Alkalinity (g/g)	440	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	4.570	Carbon Dioxide (mg/L)	298	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	7.88	Ferrous Iron (mg/L)	0.8	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.84	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	18.69	Hydrogen Sulfide (mg/L)	0.1	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-173.6	DTW (ft)	7.85	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	2.971	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments:				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-weight: bold; margin-top: 5px;">Ekonol Facility</div>	Well ID: INJ-07D Manual Entry: <input style="width: 100%;" type="text"/>	Well Diameter: <input style="width: 20px;" type="text" value="4"/> inches
Samplers: <input style="width: 100%; height: 20px;" type="text" value="bill simons"/>		
WATER VOLUME CALCULATION = (Total Depth of Well - Depth To Water) x Casing Volume per Foot		
Initial Depth to Water (ft): <input style="width: 50px;" type="text" value="6.45"/>		Depth to Well Bottom (ft): <input style="width: 50px;" type="text"/>

### Purging Data

Method: (i.e. low flow) <input style="width: 100%;" type="text" value="low flow"/>	Date: <input style="width: 100%;" type="text" value="10/10/2013"/>	Time: <input style="width: 100%;" type="text" value="1005"/>				
		(i.e. 1432)	1-inch=0.041      1.5-inch=0.092      2-inch=0.16      3-inch=0.36 4-inch=0.64      6-inch=1.4      8-inch=2.5      10-inch=4			

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1015	6.91	150	.4	7.01	3.98	51	0.518	16	0.331	-275	
1025	7.03	150	.8	7.15	3.2	44.6	0.514	16.08	0.329	-283	black particulate
1035	7.15	150	1.2	7.17	2.2	38.1	0.534	16.08	0.343	-293	
1045	7.22	150	1.6	7.11	1.98	22.3	0.732	16.11	0.490	-296	clear
1055	7.29	150	2	6.44	0	7.7	2.38	16.04	1.5	-263	
1105	7.32	150	2.4	6.37	0	5	2.79	16.12	1.8	-236	
1115	7.35	150	2.8	6.36	0	7.3	2.97	16.19	1.9	-226	
1125	7.37	150	3.2	6.37	0	8.7	3.04	16.21	1.94	-220	
1135	7.42	150	3.6	6.38	0	11.5	3.01	16.15	1.93	-226	



### Sampling Data

Method: (i.e. low flow) <input style="width: 100%;" type="text" value="low flow"/>	Date: <input style="width: 100%;" type="text" value="10/10/2013"/>	Time: (i.e. 14:32) <input style="width: 100%;" type="text" value="1140"/>	Total Volume of Water Purged: <input style="width: 50px;" type="text" value="3.6"/> (gal)
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HORIBA		HACH TEST KITS		SAMPLE SET			
pH	6.38	Alkalinity (g/g)	600	Parameter	Bottle	Pres.	Method
Spec. Cond. (mS/cm)	3.1	Carbon Dioxide (mg/L)	1,080	Select VOCs	<input checked="" type="checkbox"/>	3-40 mL glass vial	HCl EPA 8260

Turbidity (NTU)	11.5	Ferrous Iron (mg/L)	4	MEE	<input checked="" type="checkbox"/>	2-40 mL glass vial	HCl	Lab SOP
DO (mg/L)	0	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	16.15	Hydrogen Sulfide (mg/L)	0.3	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40 mL glass (Field Filtered)	None	lab specified
ORP (mv)	-226	DTW (ft)		Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.93	* NOTE * HACH test kits are only required for MNA analysis wells.		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Dissolved Hydrogen- start @1215/ Stop @1240. Turbidity measured using Horiba. VOAs effervesced.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40 mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120 mL glass amber	None	SW9060
				Microbial Census	<input checked="" type="checkbox"/>	2 filters, 500 ml each		
				Hydrogen Acetylene	<input checked="" type="checkbox"/>	25 min bubble time		

**PARSONS**

	Time	<input type="text"/>	
	Accuracy (m)	<input type="text"/>	
	Latitude	<input type="text"/>	
	Longitude	<input type="text"/>	
	Altitude	<input type="text"/>	
	Velocity	<input type="text"/>	



0930	7.75	150	4.7	6.26	0	90.2	2.95	16.94	1.89	-358	
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**Sampling Data**

Method: (i.e. low flow)  Date:  Time: (i.e. 14:32)  Total Volume of Water Purged:  (gal)

HORIBA		HACH TEST KITS		SAMPLE SET				
pH	6.26	Alkalinity (g/g)	<input type="text"/>	Parameter	<input type="checkbox"/>	Bottle	Pres.	Method
Spec. Cond. (mS/cm)	2.95	Carbon Dioxide (mg/L)	<input type="text"/>	Select VOCs	<input checked="" type="checkbox"/>	3-40 mL glass vial	HCl	EPA 8260
Turbidity (NTU)	90.2	Ferrous Iron (mg/L)	<input type="text"/>	MEE	<input checked="" type="checkbox"/>	2-40 mL glass vial	HCl	Lab SOP
DO (mg/L)	0	Manganese (mg/L)	<input type="text"/>	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	16.94	Hydrogen Sulfide (mg/L)	<input type="text"/>	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40 mL glass (Field Filtered)	None	lab specified
ORP (mv)	-358	DTW (ft)	7.75	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.89	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: effervescent in acid  too dark for Hach kits except H2S				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40 mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120 mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			



Time

Accuracy (m)

Latitude

Longitude

Altitude

Velocity



## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: <u>INJ-09D</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 50px;" type="text" value="4"/> inches
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Samplers: <input style="width: 100%;" type="text" value="bill simons"/>
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### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="6.45"/>	Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>
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### Purging Data

Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="low flow"/>	Date: <input style="width: 100%;" type="text" value="10/10/2013"/>	Time: <input style="width: 100%;" type="text" value="1420"/> <i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1430	7.16	200	.5	6.07	.17	31	3.43	18.73	2.19	-260	
1440	7.35	200	1	6.05	0	11	3.54	18.34	2.26	-294	
1450	7.46	200	1.5	6.05	0	8.7	3.59	17.9	2.31	-310	
1500	7.56	200	2	6.04	0	24	3.6	18.13	2.3	-337	
1510	7.66	200	2.5	6.03	0	30	3.59	18.58	2.29	-373	
1520	7.74	200	3	6.19	0	25	3.56	18.29	2.3	-411	
1530	7.8	200	3.5	6.03	0	26	3.58	18.44	2.29	-422	
1540	7,87	200	4	6.03	0	41	3.55	18.35	2.27	-432	

**Sampling Data**

Method: (i.e. low flow)  Date:  Time: (i.e. 14:32)  Total Volume of Water Purged:  (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	<input type="text" value="6.03"/>	Alkalinity (g/g)	<input type="text"/>	Parameter	<input type="checkbox"/>	Bottle	Pres.	Method
Spec. Cond. (mS/cm)	<input type="text" value="3.55"/>	Carbon Dioxide (mg/L)	<input type="text"/>	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	<input type="text" value="41"/>	Ferrous Iron (mg/L)	<input type="text"/>	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	<input type="text" value="0"/>	Manganese (mg/L)	<input type="text"/>	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	<input type="text" value="18.35"/>	Hydrogen Sulfide (mg/L)	<input type="text" value="5"/>	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	<input type="text" value="-432"/>	DTW (ft)	<input type="text"/>	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	<input type="text" value="2.27"/>	<u>* NOTE * HACH test kits are only required for MNA analysis wells.</u>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Dissolved Hydrogen- start @0943/ Stop @0958. Turbidity measured using the Horiba. VOAs effervesced.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input checked="" type="checkbox"/>	2 filters, 310 ml & 310 ml		
				Hydrogen Acetylene	<input checked="" type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: <u>INJ-10D</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="4"/> inches
Samplers: <input style="width: 100%;" type="text" value="C Huey"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>		Initial Depth to Water (ft): <input style="width: 50px;" type="text" value="3.36"/>
Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>		Date: <input style="width: 50px;" type="text" value="10/16/2013"/>
Time: <input style="width: 50px;" type="text" value="0813"/> <i>(i.e. 14:32)</i>		Depth to Well Bottom (ft): <input style="width: 50px;" type="text"/>

	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
	4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
0823	3.81	140	0.37	6.88	0.80	63.0	1.460	16.62	0.960	-65.2	Slightly...
0833	4.88	140	0.74	6.85	0.70	16.6	1.164	16.55	0.756	-90.9	Clearer
0843	4.90	140	1.11	6.85	0.69	17.2	1.156	16.56	0.751	-96.7	Turnin...
0853	4.91	120	1.43	6.83	0.61	16.8	1.137	16.67	0.739	-103.6	After~3...
0903	4.92	120	1.75	6.81	0.58	16.1	1.118	16.67	0.727	-129.2	
0913	4.95	120	2.07	6.81	0.56	23.3	1.124	16.79	0.731	-136.8	
0923	4.97	120	2.39	6.73	0.60	25.4	1.283	16.80	0.835	-156.7	
0933	4.98	120	2.71	6.69	0.62	22.1	1.341	16.79	0.876	-159.1	
0943	4.99	120	3.03	6.65	0.59	21.1	1.356	16.75	0.891	-162.2	
0948	5.00	120	3.19	6.25	0.34	20.9	1.893	16.79	1.230	-186.6	
0953	5.00	120	3.35	6.24	0.31	21.6	1.899	16.76	1.239	-190.4	
0958	5.01	120	3.51	6.23	0.30	22.1	1.908	16.79	1.241	-192.9	
1003	5.01	120	3.67	6.22	0.29	22.6	1.916	16.81	1.242	-196.1	

**Sampling Data**

Method: (i.e. low flow) Date: 10/16/2013 Time: (i.e. 14:32) 1005 Total Volume of Water Purged: 5.25 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.22	Alkalinity (g/g)	0	Parameter	<input type="checkbox"/>	Bottle	Pres.	Method
Spec. Cond. (mS/cm)	1.916	Carbon Dioxide (mg/L)	0	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	22.6	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.29	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	16.81	Hydrogen Sulfide (mg/L)	1.5	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-196.1	DTW (ft)	5.01	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.242	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Water turned black. VOAs effervescing. Dissolved hydrogen start @1028/ end @1058				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input checked="" type="checkbox"/>	2 filters	None	110 ml 120 ml
				Hydrogen Acetylene	<input checked="" type="checkbox"/>	1-20 ml vial 2-40 ml VOAs	None Na3PO4	

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: <u>INJ-11D</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="4"/> inches
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Samplers:

### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="5.58"/>	Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>
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### Purging Data

Method: <i>(i.e. low flow)</i>	Date: <input style="width: 100%;" type="text" value="10/08/2013"/>	Time: <input style="width: 100%;" type="text" value="1306"/>			
<input style="width: 100%;" type="text" value="Low flow"/>		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16
			4-inch=0.64	6-inch=1.4	8-inch=2.5
					10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1316	5.80	200	0.53	6.51	0.98	43.6	0.912	17.12	0.569	-149.8	Clear w...
1326	5.86	200	1.06	6.46	0.74	32.1	0.840	17.48	0.546	-164.5	Turns b...
1336	5.89	200	1.59	6.34	0.19	26.8	1.189	17.95	0.771	-219.1	
1341	5.90	200	1.85	6.32	0.15	14.5	1.423	17.81	0.991	-224.7	
1346	5.91	200	2.12	6.31	0.11	15.1	1.596	17.69	1.063	-231.6	
1351	5.92	200	2.38	6.30	0.09	14.8	1.616	17.57	1.075	-239.5	
1356	5.92	200	2.65	6.29	0.06	15.6	1.622	17.64	1.102	-240.3	
1401	5.92	200	2.91	6.28	0.05	15.9	1.625	17.59	1.106	-241.2	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/08/2013

1405

3.5 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.28	Alkalinity (g/g)	0	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	1.625	Carbon Dioxide (mg/L)	0	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	15.9	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.05	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	17.59	Hydrogen Sulfide (mg/L)	5	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-241.2	DTW (ft)	5.92	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.106	* NOTE * HACH test kits are only required for MNA analysis wells.		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Collected duplicate -@1201 INJ-110D_100813 (voc, mee, chloride/sulfate/nitrate, diss. Inorganics, toc.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: <u>INJ-12D</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px; text-align: center;" type="text"/> inches
Samplers: <input style="width: 100%;" type="text"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
Purging Data Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text"/>	Date: <input style="width: 100%;" type="text"/>	Time: <input style="width: 100%;" type="text"/>

	Initial Depth to Water (ft): <input style="width: 100%;" type="text"/>	Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>	
1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1122	6.72	175	0.46	6.13	4.36	586	3.169	16.85	2.070	-56.8	Black
1132	7.04	175	0.92	6.07	1.13	692	3.429	17.19	2.226	-133.7	
1142	7.35	175	1.38	5.99	0.68	784	3.735	17.51	2.430	-152.4	
1152	7.61	175	1.84	6.01	0.35	650	3.798	18.32	2.469	-179.1	
1157	7.68	175	2.07	6.02	0.28	640	3.846	18.26	2.511	-198.6	
1202	7.69	175	2.30	6.03	0.23	660	3.902	18.22	2.537	-212.5	
1207	7.70	175	2.53	6.03	0.21	620	3.919	18.31	2.542	-216.7	
1212	7.72	175	2.76	6.05	0.19	610	3.924	18.39	2.556	-218.9	
1217	7.72	175	2.99	6.04	0.14	625	3.936	18.43	2.556	-220.1	
1222	7.73	175	3.22	6.03	0.13	650	3.951	18.46	2.578	-222.4	
1227	7.74	175	3.45	6.05	0.15	640	4.012	18.63	2.612	-226.7	
1232	7.75	175	3.68	6.06	0.15	630	4.077	18.91	2.648	-229.4	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/11/2013

1235

3.9

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.06	Alkalinity (g/g)	0	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	4.077	Carbon Dioxide (mg/L)	0	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	630	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.15	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	18.91	Hydrogen Sulfide (mg/L)	4	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-229.4	DTW (ft)	7.75	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	2.648	* NOTE * HACH test kits are only required for MNA analysis wells.		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Water was black. VOAs effervescing.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**



## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: <u>INJ-13D</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="4"/> inches
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Samplers:
<u>C. Huey</u>

### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <input style="width: 80px;" type="text" value="6.43"/>	Depth to Well Bottom (ft): <input style="width: 80px;" type="text"/>
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### Purging Data

Method: <i>(i.e. low flow)</i>	Date: <input style="width: 80px;" type="text" value="10/08/2013"/>	Time: <input style="width: 80px;" type="text" value="1056"/>			
<input style="width: 100%;" type="text" value="Low flow"/>		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16
			4-inch=0.64	6-inch=1.4	8-inch=2.5
					10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1106	7.24	200	0.53	6.78	2.62	33.5	2.192	17.03	1.430	-132.2	Clear w...
1116	7.59	200	1.06	6.22	2.16	22.3	2.533	16.81	1.760	-174.9	Same
1126	7.63	200	1.59	6.19	1.43	14.3	2.780	16.3	1.808	-198.6	Water ...
1131	7.64	200	1.85	6.36	1.23	13.2	2.859	16.72	1.849	-204.2	
1136	7.65	200	2.12	6.31	1.24	11.5	3.061	16.88	1.986	-209	
1141	7.66	200	2.38	6.23	1.20	12.3	3.219	16.73	2.087	-213.6	
1146	7.66	200	2.65	6.16	1.17	13.6	3.474	16.81	2.092	-217.9	
1151	7.67	200	2.91	6.15	1.15	13.9	3.512	16.91	2.284	-219.6	
1156	7.67	200	3.18	6.08	1.10	13.6	3.839	17.03	2.516	-220	
1201	7.68	200	3.44	6.03	1.01	14.5	4.112	17.19	2.659	-223.9	
1206	7.68	200	3.71	6.06	0.99	13.7	4.115	17.24	2.660	-224	
1211	7.68	200	3.97	6.07	0.98	13.2	4.113	17.26	2.661	-223.3	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/08/2013

1215

4.5 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.07	Alkalinity (g/g)	0	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	4.113	Carbon Dioxide (mg/L)	0	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	13.2	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.98	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	17.26	Hydrogen Sulfide (mg/L)	5	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-223.2	DTW (ft)	7.68	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	2.661	* NOTE * HACH test kits are only required for MNA analysis wells.		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Water turned black, could not run Hach kit analysis. VOAs effervescing.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonomol Facility</u>	Well ID: <u>PMW-9D</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 50px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="Doruk Ucak"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>		Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="7.05"/>

Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="low flow"/>	Date: <input style="width: 100%;" type="text" value="10/16/2013"/>	Time: <input style="width: 100%;" type="text" value="0855"/> <i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
0900	7.61	100	0.13	6.07	2.09	24	3.90	18.25	2.50	-106	odor
0905	7.62	100	0.27	6.14	1.06	17.7	1.93	18.11	2.51	-125	
0910	7.66	100	0.40	6.27	0.92	17.06	3.93	18.04	2.52	-128	
0915	7.71	100	0.53	6.30	0.48	19.3	3.94	17.95	2.52	-137	
0920	7.91	100	0.66	6.31	0.01	22.4	3.94	17.85	2.52	-141	
0925	7.98	100	0.79	6.32	0.00	23.0	3.94	17.84	2.52	-141	
0930	8.04	100	0.92	6.31	0.00	23.3	3.94	17.81	2.52	-142	
0935	8.15	100	1.15	6.31	0.00	23.1	3.94	17.80	2.52	-142	
0940	8.21	100	1.28	6.31	0.00	23.2	3.94	17.81	2.52	-142	
0945	8.26	100	1.41	6.31	0.00	22.5	3.94	17.88	2.52	-143	
0950	8.31	100	1.54	6.32	0.00	20.9	3.93	17.77	2.51	-144	
0955	8.36	100	1.67	6.32	0.00	21.4	3.93	17.75	2.51	-145	
1000	8.41	100	1.80	6.33	0.00	18.1	3.93	17.73	2.51	-146	
1005	8.46	100	1.93	6.33	0.00	17.0	3.92	17.70	2.51	-146	
1010	8.51	100	2.06	6.34	0.00	20.2	3.92	17.54	2.51	-147	
1015	8.51	100	2.19	6.34	0.00	20.9	3.92	17.64	2.51	-147	
1020	8.51	100	2.32	6.34	0.00	24.4	3.91	17.56	2.50	-146	
1025	8.52	100	2.45	6.33	0.00	29.5	3.91	17.55	2.50	-144	
1030	8.52	100	2.58	6.31	0.00	35.1	3.90	17.53	2.50	-142	
1035	8.52	100	2.71	6.28	0.00	36.8	3.88	17.53	2.49	-141	
1040	8.52	100	2.84	6.27	0.00	40.1	3.87	17.54	2.48	-141	
1045	8.55	100	2.84	6.25	0.00	50.3	3.85	17.56	2.46	-141	
1050	8.59	100	2.97	6.23	0.00	49.5	3.82	17.58	2.44	-142	
1055	8.59	100	3.20	6.23	0.00	47.6	3.81	17.62	2.44	-143	

1100	8.59	100	3.33	6.21	0.00	57.6	3.80	17.62	2.43	-142	
1105	8.59	100	3.46	6.18	0.00	68.7	3.77	17.67	2.41	-146	
1110	8.59	100	3.57	6.17	0.00	67.5	3.74	17.71	2.39	-147	
1115	8.59	100	3.70	6.16	0.0	69.9	3.70	17.77	2.37	-148	

**Sampling Data**

Method: (i.e. low flow) DT Date: 10/16/2013 Time: (i.e. 14:32) 1115 Total Volume of Water Purged: 3.70 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
Parameter		Parameter		Parameter	Bottle	Pres.	Method	
pH	6.16	Alkalinity (g/g)		Select VOCs	3-40mL glass vial	HCl	EPA 8260	
Spec. Cond. (mS/cm)	3.70	Carbon Dioxide (mg/L)		MEE	2-40mL glass vial	HCl	Lab SOP	
Turbidity (NTU)	69.9	Ferrous Iron (mg/L)		Dissolved Inorganics	1-250 mL plastic (Field Filtered)	HNO3	SW6010B	
DO (mg/L)	0.00	Manganese (mg/L)		Chloride / Nitrate / Sulfate	2-40mL glass (Field Filtered)	None	lab specified	
Temp.(°C)	17.77	Hydrogen Sulfide (mg/L)	0.3	Ortho Phosphate	1-250 mL plastic (Field filtered)	None	EPA 365.1	
ORP (mv)	-148	DTW (ft)	8.59	Sulfide	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F	
TDS (g/L)	2.37	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Total Organic Carbon	2-40mL amber glass vial	H3PO4	SW9060	
Comments:				Total Inorganic Carbon	1-120mL glass amber	None	SW9060	
				Microbial Census				
				Hydrogen Acetylene				

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonomol Facility</u>	Well ID: <u>PMW-10D</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 50px;" type="text" value="4"/> inches
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Samplers:
<input style="width: 100%;" type="text" value="Doruk Ucak"/>

### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="7.06"/>	Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>
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### Purging Data

Method: <i>(i.e. low flow)</i>	Date: <input style="width: 100%;" type="text" value="10/14/2015"/>	Time: <input style="width: 100%;" type="text" value="1450"/>				
<input style="width: 100%;" type="text" value="LF"/>		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1455	7.41	150	0.20	6.63	4.41	31.3	1.63	23.39	1.04	-132	
1500	7.56	150	0.40	6.62	0.54	17.8	1.66	21.94	1.07	-132	
1505	7.69	150	0.60	6.57	0.00	15.6	1.69	21.70	1.08	-128	
1510	7.76	120	0.76	6.50	0.00	25.8	1.77	21.99	1.14	-132	
1515	7.83	120	0.92	6.36	0.00	30.8	1.89	21.54	1.21	-152	
1520	7.86	120	1.08	6.29	0.00	36.7	1.93	21.72	1.23	-164	
1525	7.89	120	1.24	6.25	0.00	33.6	1.98	21.45	1.26	-192	
1530	7.90	120	1.40	6.23	0.00	32.7	2.02	21.66	1.29	-219	
1535	7.90	120	1.56	6.16	0.00	31.1	2.15	21.71	1.36	-298	
1540	7.91	120	1.72	6.14	0.00	41.6	2.16	22.08	1.40	-334	
1545	7.92	120	1.88	6.08	0.00	31.1	2.31	21.78	1.46	-359	
1550	7.92	120	2.04	6.08	0.00	36.1	2.48	21.48	1.61	-396	
1555	7.96	120	2.20	5.98	0.00	29.4	2.72	21.51	1.74	-415	
1600	7.97	120	2.36	5.98	0.00	29.9	2.62	21.23	1.65	-422	
1605	7.98	120	2.52	6.03	0.00	34.7	2.51	22.13	1.58	-434	
1610	8.01	120	2.68	6.02	0.00	31.8	2.54	22.13	1.63	-437	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

DT

10/14/2013

1615

2.84 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.02	Alkalinity (g/g)		Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	2.54	Carbon Dioxide (mg/L)		Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	31.8	Ferrous Iron (mg/L)		MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.00	Manganese (mg/L)		Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	22.13	Hydrogen Sulfide (mg/L)		Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-437	DTW (ft)	8.02	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.63	* NOTE * HACH test kits are only required for MNA analysis wells.		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Water turned too black for HACH kir				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em; margin-top: 5px;"><u>Ekonol Facility</u></div>		Well ID: PMW-11D Manual Entry: <input style="width: 100%;" type="text"/>		Send to SharePoint <hr/> Well Diameter: <input style="width: 30px;" type="text" value="4"/> inches							
Samplers: <input style="width: 100%;" type="text" value="bill simons"/>		WATER VOLUME CALCULATION									
<b>Purging Data</b> Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="low flow"/>		Date: <input style="width: 100%;" type="text" value="10/16/2013"/>		Time: <input style="width: 100%;" type="text" value="1000"/> <i>(i.e. 14:32)</i>							
		= (Total Depth of Well - Depth To Water) x Casing Volume per Foot	Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="7.07"/>	Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>							
		1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36						
		4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4						
Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1010	7.11	300	.8	6.64	0	110	1.74	16.46	1.12	-389	
1020	7.11	300	1.6	6.65	0	138	1.71	16.42	1.10	-379	clear w...
1025	7.11	300	2	6.65	0	59	1.71	16.35	1.09	-377	
1030	7.11	300	2.4	6.65	0	90.2	1.71	16.40	1.09	-373	
1035	7.11	300	2.8	6.65	0	45	1.70	16.42	1.09	-373	

**Sampling Data**

Method: (i.e. low flow)  Date:  Time: (i.e. 14:32)  Total Volume of Water Purged:  (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	<input type="text" value="6.65"/>	Alkalinity (g/g)	<input type="text"/>	Parameter	<input type="checkbox"/>	Bottle	Pres.	Method
Spec. Cond. (mS/cm)	<input type="text" value="1.70"/>	Carbon Dioxide (mg/L)	<input type="text"/>	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	<input type="text" value="45"/>	Ferrous Iron (mg/L)	<input type="text"/>	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	<input type="text" value="0"/>	Manganese (mg/L)	<input type="text"/>	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	<input type="text" value="16.42"/>	Hydrogen Sulfide (mg/L)	<input type="text" value="0.5"/>	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	<input type="text" value="-373"/>	DTW (ft)	<input type="text"/>	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	<input type="text" value="1.09"/>	* NOTE * HACH test kits are only required for MNA analysis wells.		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Turbidity measured using Horiba. Unable to collect dissolved H sample due to heavy carbon particulate blocking bubbler orifice.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input checked="" type="checkbox"/>	filter 1, 750 ml. filter 2, 250 ml.		
				Hydrogen Acetylene	<input checked="" type="checkbox"/>	Only acetalene.		



## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonomol Facility</u></div>	Well ID: PMW-12D Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="Doruk Ucak"/> <input style="width: 100%;" type="text" value="DPC"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>	Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="7.80"/>	Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>

Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="low flow"/>	Date: <input style="width: 100%;" type="text" value="10/16/2013"/>	Time: <input style="width: 100%;" type="text" value="12:05"/> <i>(i.e. 14:32)</i>	1-inch=0.041 4-inch=0.64	1.5-inch=0.092 6-inch=1.4	2-inch=0.16 8-inch=2.5	3-inch=0.36 10-inch=4
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Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
12:05	7.80	200	0	6.23	9.115	24	1.98	18.79	2.47	-59	odor
12:15	8.5	200	0.5	5.44	0.0	37.7	3.90	18.91	2.50	-63	oily
12:25	8.5	200	1.0	5.56	0.0	29.6	3.92	18.99	2.51	-76	clear , ...
12:35	8.5	200	1.5	5.76	0.0	21.8	3.94	19.04	2.52	-110	same
12:40	8.5	150	1.7	5.81	0.0	28.7	3.95	19.10	2.53	-113	same
12:45	8.5	150	1.9	5.87	0.0	31.1	3.95	19.13	2.53	-116	same
12:50	8.5	150	2.1	5.85	0.0	35.8	3.98	19.12	2.52	-115	
12:55	8.5	150	2.3	5.82	0.0	41.6	3.93	19.12	2.51	-114	same
13:00	8.5	150	2.5	5.80	0.0	43.5	3.93	19.15	2.52	-113	
13:05	8.5	150	2.7	5.79	0.0	47.3	3.93	19.17	2.53	-112	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

low flow

10/16/2013

13:05

2.7 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	5.79	Alkalinity (g/g)		Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	3.93	Carbon Dioxide (mg/L)		Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	47.3	Ferrous Iron (mg/L)		MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.0	Manganese (mg/L)		Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	19.17	Hydrogen Sulfide (mg/L)	0.3	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-112	DTW (ft)	8.50	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	2.53	<u>* NOTE * HACH test kits are only required for MNA analysis wells.</u>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: waxy layer at 7.80ft, needed to punch through it with probe				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**




1555	8.29	100	1.83	5.94	0.00	29.8	3.30	19.22	2.11	-111	
1600	8.30	100	1.96	5.94	0.00	33.0	3.30	19.24	2.11	-111	
1605	8.32	100	2.09	5.93	0.00	37	3.30	19.10	2.11	-111	
1610	8.34	100	2.22	5.93	0.00	44.0	3.28	19.15	2.10	-110	
1615	8.35	100	2.35	5.93	0.00	53.4	3.27	19.09	2.09	-111	
1620	8.35	100	2.48	5.91	0.00	67.1	3.27	19.02	2.09	-111	
1625	8.36	100	2.61	5.91	0.00	77.0	3.25	19.04	2.08	-112	
1630	8.37	100	2.74	5.90	0.00	93.5	3.25	18.99	2.08	-112	
1635	8.38	100	2.87	5.89	0.00	104	3.24	18.97	2.07	-114	
1640	8.39	100	3.00	5.89	0.00	108	3.24	18.9	2.07	-114	
1645	8.41	100	3.13	5.87	0.00	122	3.22	18.91	2.06	-116	
1650	8.42	100	3.26	5.87	0.00	118	3.21	18.86	2.05	-116	


**Sampling Data**

Method: (i.e. low flow) dedicated tubing	Date: 10/16/2013	Time: (i.e. 14:32) 1700	Total Volume of Water Purged: 3.26 (gal)
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HORIBA		HACH TEST KITS		SAMPLE SET				
pH	5.87	Alkalinity (g/g)		Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	3.21	Carbon Dioxide (mg/L)		Select VOCs	<input checked="" type="checkbox"/>	3-40 mL glass vial	HCl	EPA 8260
Turbidity (NTU)	118	Ferrous Iron (mg/L)		MEE	<input checked="" type="checkbox"/>	2-40 mL glass vial	HCl	Lab SOP
DO (mg/L)	0.00	Manganese (mg/L)		Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	18.86	Hydrogen Sulfide (mg/L)	2.0	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40 mL glass (Field Filtered)	None	lab specified
ORP (mv)	-116	DTW (ft)	8.42	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
				Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
						2-40 mL amber glass		

\* NOTE \* HACH test kits are only

TDS (g/L)	2.05	required for MNA analysis wells.	Total Organic Carbon	<input checked="" type="checkbox"/>	vial	H3PO4	SW9060
			Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120 mL glass amber	None	SW9060
Comments: water too dark for Hach kits.			Microbial Census	<input type="checkbox"/>			
			Hydrogen Acetylene	<input type="checkbox"/>			
							



Time



Accuracy (m)

Latitude

Longitude

Altitude

Velocity

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: PMW-14D Manual Entry:	Send to SharePoint  Well Diameter: <input type="text" value="4"/> inches
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Samplers:
C Huey

### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <input type="text" value="6.4"/>	Depth to Well Bottom (ft): <input type="text"/>
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### Purging Data

Method: <i>(i.e. low flow)</i>	Date: <input type="text" value="10/18/2013"/>	Time: <input type="text" value="0812"/>			
<input type="text" value="Low flow"/>		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16
			4-inch=0.64	6-inch=1.4	8-inch=2.5
					10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
0822	7.39	190	0.50	5.97	0.79	96.2	3.323	15.30	2.163	17.3	Turnin...
0832	8.25	190	1.0	5.99	0.27	95.0	3.239	15.23	2.106	-15.3	
0842	8.30	190	1.5	5.98	0.10	93.6	3.115	14.98	2.005	-47.6	
0852	8.32	190	2.0	5.97	0.0	91.0	3.066	14.71	1.993	-55.9	
0902	8.33	190	2.5	5.93	0	88.6	2.986	14.31	1.941	-67.3	
0907	8.34	190	2.75	5.93	0	90.2	2.981	14.26	1.933	-70.1	
0912	8.34	190	3.0	5.91	0	91.7	2.955	14.19	1.920	-120.2	
0917	8.34	190	3.25	5.93	0	94.0	2.920	14.04	1.898	-179.6	
0922	8.34	190	3.5	5.93	0	95.0	2.911	13.92	1.892	-180.2	
0927	8.35	190	3.75	5.93	0	92.1	2.907	13.86	1.889	-181.3	
0932	8.35	190	4.0	5.93	0	92.6	2.904	13.81	1.883	-183.7	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/18/2013

0935

4.25 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	5.93	Alkalinity (g/g)	0	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	2.904	Carbon Dioxide (mg/L)	0	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	92.6	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	13.81	Hydrogen Sulfide (mg/L)	3	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-183.7	DTW (ft)	8.35	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.883	* NOTE * HACH test kits are only required for MNA analysis wells.		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: VOAs effervescing. Water turned black.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>	Well ID: PMW-15D Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 40px; text-align: center;" type="text" value="4"/> inches
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Samplers:
bill simons

### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <input style="width: 80px; text-align: center;" type="text" value="7.05"/>	Depth to Well Bottom (ft): <input style="width: 80px;" type="text"/>
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### Purging Data

Method: <i>(i.e. low flow)</i>	Date: <input style="width: 80px;" type="text" value="10/16/2013"/>	Time: <input style="width: 80px;" type="text" value="0800"/>				
low flow		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
0810	7.4	280	.7	6.2	0	71	2.36	17.21	1.51	-149	
0820	7.32	280	1.4	6.2	0	66	2.36	16.98	1.51	-244	
0830	7.36	280	2.1	6.22	0	58.2	2.36	16.84	1.51	-235	
0840	7.36	280	2.8	6.22	0	58.4	2.35	16.75	1.51	-247	



**Sampling Data**

Method: (i.e. low flow)  Date:  Time: (i.e. 14:32)  Total Volume of Water Purged:  (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	<input type="text" value="6.22"/>	Alkalinity (g/g)	<input type="text"/>	Parameter	<input type="checkbox"/>	Bottle	Pres.	Method
Spec. Cond. (mS/cm)	<input type="text" value="2.35"/>	Carbon Dioxide (mg/L)	<input type="text"/>	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	<input type="text" value="58.4"/>	Ferrous Iron (mg/L)	<input type="text"/>	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	<input type="text" value="0"/>	Manganese (mg/L)	<input type="text"/>	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	<input type="text" value="16.75"/>	Hydrogen Sulfide (mg/L)	<input type="text" value="5"/>	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	<input type="text" value="-247"/>	DTW (ft)	<input type="text"/>	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	<input type="text" value="1.51"/>	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Turbidity measured usng Horiba. Dissolved H bubbler start @ 0912, stop @ 0927. H2S >5.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input checked="" type="checkbox"/>	1 filter, 1000 ml.		
				Hydrogen Acetylene	<input checked="" type="checkbox"/>			

**PARSONS**

**LOW FLOW WELL SAMPLING RECORD**

Site Name: <p align="center"><u>Ekono1 Facility</u></p>	Well ID: <u>PMW-16D</u> Manual Entry: <input style="width:100%;" type="text"/>	Well Diameter: <input style="width:30px;" type="text" value="4"/> inches
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Samplers:
DPC

<b>WATER VOLUME CALCULATION</b>			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Initial Depth to Water (ft): <input style="width:100%;" type="text"/>	Depth to Well Bottom (ft): <input style="width:100%;" type="text"/>		

**Purging Data**

Method: (i.e. low flow)	Date:	Time:				
<input style="width:100%;" type="text" value="low flow"/>	<input style="width:100%;" type="text" value="10/18/2013"/>	<input style="width:100%;" type="text" value="0830"/>				
	<i>(i.e. 1432)</i>		1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
0830	8.95	200	0	5.75	4.25	OR	0.463	14.73	0.240	-196	dirty, odor
0840	6.0	200	0.5	6.13	5.59	500	0.750	15.17	0.471	-283	SAME
0850	5.98	200	1.0	6.17	4.51	179	0.763	15.30	0.494	-307	SUSPENDED SOLIDS
0900	6.08	200	1.5	6.11	0.05	28.8	1.77	15.20	1.15	-348	
0910	6.10	200	2.0	6.11	0.00	15.8	1.82	15.15	1.18	-351	
0915	6.07	200	2.2	6.11	0.0	12.6	1.93	15.10	1.26	-352	
0920	6.05	200	2.5	6.11	0.0	9.21	2.04	15.06	1.31	-354	
0925	6.04	200	2.7	6.13	0.0	9.02	2.03	15.07	1.30	-353	
0930	6.04	200	3.0	6.14	0.0	8.93	2.02	15.08	1.29	-352	
0935	6.03	200	3.2	6.16	0.0	8.65	2.01	15.09	1.29	-354	



**Sampling Data**

Method: (i.e. low flow)	Date:	Time: (i.e. 14:32)	Total Volume of Water Purged:
<input style="width:100%;" type="text" value="DEDICATED TUBING"/>	<input style="width:100%;" type="text" value="10/18/2013"/>	<input style="width:100%;" type="text"/>	<input style="width:100%;" type="text"/> (gal)

<b>HORIBA</b>	<b>HACH TEST KITS</b>	<b>SAMPLE SET</b>			
pH	6.16	Alkalinity (g/g)	297.5	Parameter	Bottle
				Pres.	Method

Spec. Cond. (mS/cm)	2.01	Carbon Dioxide (mg/L)	400	Select VOCs	<input checked="" type="checkbox"/>	3-40 mL glass vial	HCl	EPA 8260
Turbidity (NTU)	8.65	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40 mL glass vial	HCl	Lab SOP
DO (mg/L)	0.00	Manganese (mg/L)		Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	15.09	Hydrogen Sulfide (mg/L)	5.0	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40 mL glass (Field Filtered)	None	lab specified
ORP (mv)	-354	DTW (ft)	6.03	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.29	<u>* NOTE * HACH test kits are only required for MNA analysis wells.</u>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments:    				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40 mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120 mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

	Time	<input type="text"/>	
	Accuracy (m)	<input type="text"/>	
	Latitude	<input type="text"/>	
	Longitude	<input type="text"/>	
	Altitude	<input type="text"/>	
	Velocity	<input type="text"/>	

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>	Well ID: PMW-17D Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint <hr/> Well Diameter: <input style="width: 40px; text-align: center;" type="text" value="4"/> inches
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Samplers:
<input style="width: 90%;" type="text" value="bill simons"/>

### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <input style="width: 80px; text-align: center;" type="text" value="7.25"/>	Depth to Well Bottom (ft): <input style="width: 80px;" type="text"/>
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### Purging Data

Method: <i>(i.e. low flow)</i>	Date: <input style="width: 80px;" type="text" value="10/15/2013"/>	Time: <input style="width: 80px;" type="text" value="1340"/>			
<input style="width: 90%;" type="text" value="low flow"/>		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16
			4-inch=0.64	6-inch=1.4	8-inch=2.5
					10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1350	7.33	210	.6	7.75	0.3	68.3	0.237	21.26	0.154	-300	clear
1400	7.34	210	1.2	7.61	0	53.1	0.238	20.52	0.155	-288	
1410	7.33	210	1.8	7.51	0	51.7	0.255	20.32	0.166	-272	
1420	7.33	210	2.4	7.47	0	42.4	0.285	20.18	0.186	-258	
1425	7.33	210	2.7	7.46	0	41.2	0.296	20.31	0.194	-261	
1430	7.33	210	3	7.46	0	40.5	0.304	20.1	0.199	-268	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

low flow

10/15/2013

1435

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	7.46	Alkalinity (g/g)	700	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	0.304	Carbon Dioxide (mg/L)	760	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	40.5	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	20.1	Hydrogen Sulfide (mg/L)	5	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-268	DTW (ft)		Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	0.199	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Turbidity measured using Horiba. Dissolved H start @ 1702, stop @ 1717.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input checked="" type="checkbox"/>	1 filter, 1000 ml.		
				Hydrogen Acetylene	<input checked="" type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-weight: bold; margin-top: 5px;">Ekonol Facility</div>	Well ID: PMW-1D Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 30px;" type="text" value="4"/> inches
Samplers: <input style="width: 100%;" type="text" value="C Huey"/>	WATER VOLUME CALCULATION = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b> Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>		Date: <input style="width: 100%;" type="text" value="10/11/2015"/>
Time: <input style="width: 100%;" type="text" value="0810"/> <i>(i.e. 14:32)</i>		Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="6.4"/>
Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>		

	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
	4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
0820	6.99	125	0.33	6.11	0.74	10.2	1.980	15.27	1.287	-129.7	Clear w...
0830	7.42	125	0.66	6.07	0.44	9.78	1.979	15.42	1.286	-151.9	
0840	7.88	110	0.95	6.01	0.71	16.8	1.918	15.60	1.247	-165.1	
0850	7.90	110	1.24	6.01	0.59	12.2	1.884	15.65	1.223	-172.4	
0900	7.91	110	1.53	5.96	0.31	11.6	1.801	15.63	1.170	-177.6	
0910	7.92	110	1.82	5.95	0.28	12.9	1.789	15.66	1.152	-179.8	
0920	7.95	110	2.11	6.02	0.22	13.1	1.699	15.72	1.105	-175.6	
0925	7.96	110	2.26	6.02	0.20	12.1	1.691	15.76	1.103	-176.2	
0930	7.97	110	2.4	6.04	0.28	11.9	1.654	15.75	1.076	-175.0	
0935	7.97	110	2.55	6.05	0.30	12.0	1.605	15.74	1.042	-175.8	
0940	8.00	110	2.69	6.07	0.33	12.5	1.513	15.78	0.983	-177.6	Clear a...
0945	8.01	110	2.84	6.07	0.31	10.9	1.494	15.72	0.971	-177.4	
0950	8.01	110	2.98	6.08	0.30	10.1	1.423	15.64	0.933	-178.8	
0955	8.01	110	3.13	6.10	0.30	9.89	1.415	15.59	0.918	-180.2	
1000	8.02	110	3.27	6.11	0.31	9.62	1.363	15.85	0.886	-182.8	
1005	8.02	110	3.42	6.10	0.30	9.53	1.321	15.82	0.861	-182.9	
1010	8.02	110	3.56	6.10	0.31	8.99	1.326	15.83	0.862	-183.3	
1015	8.03	110	3.71	6.09	0.32	8.54	1.291	15.75	0.832	-184.0	
1020	8.03	110	3.85	6.09	0.31	8.12	1.277	15.66	0.830	-184.1	
1025	8.04	110	4.0	6.09	0.31	8.03	1.275	15.69	0.828	-184.2	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/11/2013

1030

4.25 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.09	Alkalinity (g/g)	0	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	1.275	Carbon Dioxide (mg/L)	0	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	8.03	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.31	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	15.69	Hydrogen Sulfide (mg/L)	2	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-184.2	DTW (ft)	8.04	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	0.828	* NOTE * HACH test kits are only required for MNA analysis wells.		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: VOAs effervescing. Water turned black.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>  Samplers: <input style="width: 100%;" type="text" value="bill simons"/>	Well ID: <u>INJ-01</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 50px;" type="text" value="4"/> inches								
<b>WATER VOLUME CALCULATION</b>										
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot										
Initial Depth to Water (ft): <input style="width: 100px;" type="text" value="7.25"/>		Depth to Well Bottom (ft): <input style="width: 100px;" type="text"/>								
Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="low flow"/>	Date: <input style="width: 100px;" type="text" value="10/14/2013"/>	Time: <input style="width: 100px;" type="text" value="1525"/> <i>(i.e. 14:32)</i>								
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">1-inch=0.041</td> <td style="width: 25%;">1.5-inch=0.092</td> <td style="width: 25%;">2-inch=0.16</td> <td style="width: 25%;">3-inch=0.36</td> </tr> <tr> <td>4-inch=0.64</td> <td>6-inch=1.4</td> <td>8-inch=2.5</td> <td>10-inch=4</td> </tr> </table>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36	4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4
1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36							
4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4							

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1535	8.3	250	0.7	6.06	0	66.5	2.44	17.26	1.55	-421	
1545	8.76	250	1.4	6.04	0	56.8	2.46	17.28	1.58	-452	stained...
1555	9.03	250	2.1	6.02	0	190	2.81	17.25	1.8	-474	
1605	9.18	250	2.8	6.03	0	245	3.11	17.23	2	-472	
1615	9.27	250	3.5	6.04	0	242	3.19	17.21	2.05	-460	
1620	9.3	250	3.9	6.05	0	241	3.29	17.15	2.1	-451	



**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

low flow

10/14/2013

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.05	Alkalinity (g/g)		Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	3.29	Carbon Dioxide (mg/L)		Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	241	Ferrous Iron (mg/L)		MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0	Manganese (mg/L)		Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	17.15	Hydrogen Sulfide (mg/L)	5	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-451	DTW (ft)		Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	2.1	* NOTE * HACH test kits are only required for MNA analysis wells.		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Turbidity measured using Horiba. Only H2S Hach test could be performed due to stained water. H2S > 5.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**



**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

low flow

10/16/2013

1230

4.5 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH		Alkalinity (g/g)	900	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)		Carbon Dioxide (mg/L)	1,220	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)		Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)		Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)		Hydrogen Sulfide (mg/L)	5	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)		DTW (ft)		Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)		<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Turbidity measured using Horiba. h2s >5. pumped dry.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input checked="" type="checkbox"/>	1 filter, 1000 ml		
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-weight: bold; margin-top: 5px;">Ekonol Facility</div>	Well ID: PMW-3D Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="bill simons"/>	WATER VOLUME CALCULATION = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>	Initial Depth to Water (ft): <input style="width: 50px;" type="text" value="6.83"/>	Depth to Well Bottom (ft): <input style="width: 50px;" type="text"/>

Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="low flow"/>	Date: <input style="width: 100%;" type="text" value="10/11/2013"/>	Time: <input style="width: 100%;" type="text" value="0810"/> <i>(i.e. 14:32)</i>	1-inch=0.041 4-inch=0.64	1.5-inch=0.092 6-inch=1.4	2-inch=0.16 8-inch=2.5	3-inch=0.36 10-inch=4
--	---	--	-----------------------------	------------------------------	---------------------------	--------------------------

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
0820	9.05	190	.5	6.57	4.75	0	3.46	14.18	2.22	-362	
0830	10.56	190	1	6.65	3.91	1.4	3.55	14.04	2.27	-365	clear
0840	11.22	190	1.5	6.63	3.24	0	3.56	13.96	2.28	-364	strong ...
0850	11.64	190	2	6.57	2.73	1.3	3.55	14.14	2.27	-360	
0900	11.87	190	2.5	6.53	2.39	5.1	3.52	14.52	2.25	-358	
0910	12.1	190	3	6.59	2	8.3	3.48	15.04	2.22	-356	
0920	12.27	190	3.5	6.48	1.71	3.5	3.43	15.38	2.19	-353	
0930	12.29	190	4	6.45	1.68	3.8	3.39	15.57	2.17	-351	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

low flow

10/11/2013

0940

4 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.45	Alkalinity (g/g)	800	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	3.39	Carbon Dioxide (mg/L)	980	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	3.8	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	1.68	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	15.57	Hydrogen Sulfide (mg/L)	5	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-351	DTW (ft)		Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	2.17	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Turbiiti measured using Horiba. H2S >5.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>		Well ID: PMW-4D Manual Entry: <input style="width: 100%;" type="text"/>		Send to SharePoint <hr/> Well Diameter: <input style="width: 40px;" type="text" value="2"/> inches							
Samplers: <input style="width: 100%;" type="text" value="bill simons"/>		WATER VOLUME CALCULATION									
<b>Purging Data</b> Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="low flow"/>		Date: <input style="width: 100%;" type="text" value="10/11/2013"/>		Time: <input style="width: 100%;" type="text" value="1020"/> <i>(i.e. 14:32)</i>							
		= (Total Depth of Well - Depth To Water) x Casing Volume per Foot		Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="7.25"/>		Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>					
		1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36						
		4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4						
Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1035	8.17	210	.9	6.77	2.25	0	3.37	16.86	2.16	-368	
1045	8.36	210	1.5	6.66	0.05	0	3.46	16.48	2.21	-368	clear
1055	8.59	210	2.1	6.64	0.07	0	3.5	16.48	2.24	-368	
1105	8.63	210	2.7	6.64	0.13	0	3.52	16.64	2.25	-368	
1115	8.56	210	3.3	6.62	0.14	0	3.61	16.80	2.31	-368	
1125	8.6	210	3.9	6.62	0.12	0	3.61	16.8	2.31	-368	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

low flow

10/11/2013

1135

3.9

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.62	Alkalinity (g/g)	1,100	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	3.61	Carbon Dioxide (mg/L)	1,100	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	0	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.12	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	16.80	Hydrogen Sulfide (mg/L)	5	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-368	DTW (ft)		Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	2.31	* NOTE * HACH test kits are only required for MNA analysis wells.		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Turbidity measured using Horiba. H2S >5.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>		Well ID: <u>PMW-6D</u> Manual Entry: <input style="width: 100%;" type="text"/>		Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches							
Samplers: <input style="width: 100%;" type="text" value="C huey"/>		<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot									
<b>Purging Data</b>		Initial Depth to Water (ft): <input style="width: 50px;" type="text" value="2.28"/>		Depth to Well Bottom (ft): <input style="width: 50px;" type="text"/>							
Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>		Date: <input style="width: 50px;" type="text" value="10/09/2013"/>		Time: <input style="width: 50px;" type="text" value="1620"/> <i>(i.e. 14:32)</i>							
		1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36						
		4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4						
Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1630	3.90	100	0.26	7.55	1.28	15.5	0.682	18.07	0.453	-239.6	Clear w...
1640	5.26	100	0.52	7.21	1.09	13.7	0.445	16.52	0.460	-257.3	
1650	7.51	100	0.78	6.97	0.97	8.66	0.289	16.18	0.187	-271.2	
1655	10.12	100	0.91	6.93	0.83	7.61	0.168	15.96	0.109	-270.1	
1700	19.72	400	1.44	7.01	0.74	8.02	0.147	15.97	0.096	-249.2	
1705	21.83	400	1.97	7.10	0.75	13.7	0.146	16.09	0.094	-241.2	
1710	24.60	400	2.50	7.13	0.71	15.2	0.184	15.99	0.120	-228.1	



**Sampling Data**

Method: (i.e. low flow) Date: 10/10/2013 Time: (i.e. 14:32) 1625 Total Volume of Water Purged: 2.5 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	7.13	Alkalinity (g/g)	0	Parameter	<input type="checkbox"/>	Bottle	Pres.	Method
Spec. Cond. (mS/cm)	0.184	Carbon Dioxide (mg/L)	0	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	15.2	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.71	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	15.99	Hydrogen Sulfide (mg/L)	3	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-228.1	DTW (ft)	19.86	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	0.120	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Pumped well dry on 10-9-13. Water turned black. 1615 on 10-10-13 DTW@19.86 sampled well.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input checked="" type="checkbox"/>	2 filters		350 ml 335 ml
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>  Samplers: <input style="width: 100%;" type="text" value="bill simons"/>	Well ID: <u>RMW-4D</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 50px;" type="text" value="2"/> inches								
<b>WATER VOLUME CALCULATION</b>										
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot										
Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="6.39"/>		Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>								
Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="low flow"/>	Date: <input style="width: 100%;" type="text" value="10/14/2013"/>	Time: <input style="width: 100%;" type="text" value="1320"/> <i>(i.e. 14:32)</i>								
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">1-inch=0.041</td> <td style="width: 25%;">1.5-inch=0.092</td> <td style="width: 25%;">2-inch=0.16</td> <td style="width: 25%;">3-inch=0.36</td> </tr> <tr> <td>4-inch=0.64</td> <td>6-inch=1.4</td> <td>8-inch=2.5</td> <td>10-inch=4</td> </tr> </table>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36	4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4
1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36							
4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4							

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1330	8.48	150	.4	7.05	.08	69	3.01	16.89	1.93	-372	
1340	9.16	150	.8	6.79	0	46.6	3.25	16.76	2.09	-371	clear
1350	9.40	150	1.2	6.60	0	39.2	3.44	16.73	2.20	-361	
1400	9.47	150	1.6	6.58	0	34.1	3.39	16.63	2.16	-361	
1410	9.47	150	2	6.54	0	35.8	3.35	16.63	2.15	-360	
1420	9.63	150	2.4	6.49	0	32.5	3.39	16.56	2.18	-360	
1430	9.47	150	2.8	6.47	0	32.2	3.43	16.67	2.2	-358	
1440	9.52	150	3.2	6.46	0	32.5	3.47	16.46	2.22	-358	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

low flow

10/14/2013

1455

3.2

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.46	Alkalinity (g/g)	1,100	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	3.47	Carbon Dioxide (mg/L)	1,300	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	32.5	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	16.46	Hydrogen Sulfide (mg/L)	5	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-358	DTW (ft)		Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	2.22	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Turbidity measured using Horiba. H2S is >5.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>		Well ID: PMW-7D Manual Entry: <input style="width: 100%;" type="text"/>		Send to SharePoint <hr/> Well Diameter: <input style="width: 40px;" type="text" value="2"/> inches							
Samplers: <input style="width: 100%;" type="text" value="bill simons"/>		WATER VOLUME CALCULATION									
<b>Purging Data</b> Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="low flow"/>		Date: <input style="width: 100%;" type="text" value="10/11/2013"/>		Time: <input style="width: 100%;" type="text" value="1230"/> <i>(i.e. 14:32)</i>							
		Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="7.05"/>	Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>								
		1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36						
		4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4						
Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1245	7.76	200	.75	6.84	0.9	23.5	3.58	16.71	2.29	-355	clear
1255	7.78	200	1.25	6.8	0.52	17	3.54	16.51	2.27	-359	
1305	7.88	210	1.75	6.81	0.42	16.1	3.12	16.52	2	-353	
1315	7.83	210	2.25	6.79	0.49	8.4	3.17	16.52	2.03	-358	
1325	7.82	210	2.75	6.76	0	2.3	3.41	16.34	2.18	-363	
1330	7.82	210	3	6.76	0	0	3.41	16.32	2.18	-363	
1335	7.82	210	3.25	6.76	0	0.3	3.4	16.21	2.18	-363	

**Sampling Data**

Method: (i.e. low flow)  Date:  Time: (i.e. 14:32)  Total Volume of Water Purged:  (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	<input type="text" value="6.76"/>	Alkalinity (g/g)	<input type="text" value="1,000"/>	Parameter	<input type="checkbox"/>	Bottle	Pres.	Method
Spec. Cond. (mS/cm)	<input type="text" value="3.4"/>	Carbon Dioxide (mg/L)	<input type="text" value="960"/>	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	<input type="text" value="0.3"/>	Ferrous Iron (mg/L)	<input type="text" value="0"/>	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	<input type="text" value="0"/>	Manganese (mg/L)	<input type="text" value="0"/>	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	<input type="text" value="16.21"/>	Hydrogen Sulfide (mg/L)	<input type="text" value="5"/>	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	<input type="text" value="-363"/>	DTW (ft)	<input type="text"/>	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	<input type="text" value="2.18"/>	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: <input type="text" value="Turbidity measured using Horiba. H2S &gt;5."/>				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>  Samplers: <input style="width: 100%;" type="text" value="bill simons"/>	Well ID: <u>MW-7D</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 50px;" type="text" value="4"/> inches
<b>WATER VOLUME CALCULATION</b>		
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot		
Initial Depth to Water (ft): <input style="width: 100px;" type="text" value="7.30"/>		Depth to Well Bottom (ft): <input style="width: 100px;" type="text"/>

**Purging Data**

Method: <i>(i.e. low flow)</i>	Date: <input style="width: 100px;" type="text" value="10/16/2013"/>	Time: <input style="width: 100px;" type="text" value="1210"/>				
<input style="width: 100%;" type="text" value="low flow"/>		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1215	7.42	230	.3	6.79	0	261	3.36	17.14	2.16	-394	
1220	7.42	230	.6	6.80	0	291	3.39	16.86	2.17	-407	
1225	7.42	230	.9	6.77	0	197	3.39	16.72	2.17	-411	
1240	7.40	230	1.8	6.65	0	75	3.07	17.76	1.94	-406	
1250	7.42	230	2.4	6.33	0	37	2.68	16.7	1.71	-394	
1300	7.42	230	3	6.38	0	56	2.68	16.85	1.71	-390	
1305	7.42	230	3.3	6.28	0	37	2.66	16.88	1.70	-389	
1310	7.42	230	3.6	6.27	0	64	2.66	16.77	1.71	-389	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

low flow

10/16/2013

1320

3.6

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.27	Alkalinity (g/g)	900	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	2.66	Carbon Dioxide (mg/L)	1,000	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	64	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	16.77	Hydrogen Sulfide (mg/L)	5	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-389	DTW (ft)		Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.71	* NOTE * HACH test kits are only required for MNA analysis wells.		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Turbidity measured using Horiba. H2S >5.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**





1225	7.89	110	2.14	6.59	0.00	2.54	3.36	17.12	2.15	-78	purged dry
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**Sampling Data**

Method: *(i.e. low flow)*  Date:  Time: *(i.e. 14:32)*  Total Volume of Water Purged:  (gal)

HORIBA		HACH TEST KITS		SAMPLE SET				
pH	<input type="text"/>	Alkalinity (g/g)	<input type="text" value="200"/>	Parameter	<input type="checkbox"/>	Bottle	Pres.	Method
Spec. Cond. (mS/cm)	<input type="text"/>	Carbon Dioxide (mg/L)	<input type="text" value="184"/>	Select VOCs	<input checked="" type="checkbox"/>	3-40 mL glass vial	HCl	EPA 8260
Turbidity (NTU)	<input type="text"/>	Ferrous Iron (mg/L)	<input type="text" value="0"/>	MEE	<input checked="" type="checkbox"/>	2-40 mL glass vial	HCl	Lab SOP
DO (mg/L)	<input type="text"/>	Manganese (mg/L)	<input type="text" value="0.1"/>	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	<input type="text"/>	Hydrogen Sulfide (mg/L)	<input type="text" value="0"/>	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40 mL glass (Field Filtered)	None	lab specified
ORP (mv)	<input type="text"/>	DTW (ft)	<input type="text" value="7.89"/>	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	<input type="text"/>	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: <input type="text" value="well purged dry"/>				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40 mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120 mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			



Time

Accuracy (m)

Latitude

Longitude

Altitude

Velocity

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonomol Facility</u>	Well ID: <u>MW-2S</u> Manual Entry: <input type="text"/>	Send to SharePoint  Well Diameter: <input type="text" value="2"/> inches
Samplers: <input type="text" value="Doruk Ucak"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>		Initial Depth to Water (ft): <input type="text" value="5.40"/> Depth to Well Bottom (ft): <input type="text"/>

Method: <i>(i.e. low flow)</i> <input type="text" value="low flow"/>	Date: <input type="text" value="10/15/2015"/>	Time: <input type="text" value="1435"/> <i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1435	5.42	200	0	7.00	10.63	2.73	4.76	20.83	3.10	-7	CLEAR, ...
1445	5.44	200	0.53	6.12	0.21	3.72	4.95	20.40	3.17	-22	
1455	6.80	100	0.66	6.14	0.00	3.65	4.93	20.90	3.16	-33	
1500	7.21	100	0.79	6.17	0.00	1.59	4.92	20.32	3.14	-36	
1505	7.63	100	0.92	6.19	0.00	2.93	4.81	20.46	3.08	-40	
1510	7.63	100	1.05	6.20	0.00	3.16	4.78	20.71	3.06	-40	
1515	7.63	100	1.18	6.21	0.00	3.03	4.79	20.66	3.06	-39	
1520	7.63	100	1.31	6.20	0.00	2.15	4.78	20.61	3.06	-37	
1525	7.63	100	1.44	6.21	0.00	2.64	4.75	20.74	3.04	-31	
1530	7.63	100	1.57	6.19	0.00	2.12	4.74	20.73	3.04	-22	
1535	7.63	100	1.70	6.18	0.00	2.79	4.72	21.18	3.02	-16	
1540	7.63	100	1.83	6.18	0.00	2.20	4.75	20.93	3.04	-17	
1550	7.63	100	2.09	6.15	0.00	2.24	4.82	20.40	3.09	-14	
1600	7.63	100	2.35	6.15	0.00	2.43	4.84	20.44	3.10	-11	
1610	7.63	100	2.60	6.14	0.00	2.43	4.85	20.45	3.10	-9	
1620	7.63	100	2.73	6.14	0.00	1.21	4.87	20.50	3.12	-8	
1630	8.00	100	2.86	6.14	0.00	2.22	4.87	20.37	3.12	-8	
1640	8.21	100	3.00	6.14	0.00	2.14	4.87	20.23	3.12	-5	
1645	8.36	100	3.14	6.15	0.00	1.95	4.87	20.21	3.11	-5	
1650	8.51	100	3.28	6.15	0.00	1.99	4.87	20.21	3.11	-5	
1655	8.60	100	3.42	6.15	0.00	1.85	4.87	20.19	3.11	-5	

**Sampling Data**

Method: (i.e. low flow) DT Date: 10/15/2013 Time: (i.e. 14:32) 1700 Total Volume of Water Purged: 3.00 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.15	Alkalinity (g/g)	480	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	4.87	Carbon Dioxide (mg/L)	416	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	1.95	Ferrous Iron (mg/L)	3.9	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.00	Manganese (mg/L)	1.7	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	20.21	Hydrogen Sulfide (mg/L)	0.1	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-5	DTW (ft)		Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	3.11	* NOTE * HACH test kits are only required for MNA analysis wells.		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments:				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input checked="" type="checkbox"/>	1 VIAL 1000 mL		
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>	Well ID: <div style="text-align: center; font-size: 0.8em;">MW-3S</div> Manual Entry: <div style="border: 1px solid black; padding: 2px;">101013</div>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
Samplers: <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
	Initial Depth to Water (ft): <div style="border: 1px solid black; padding: 2px;">7.53</div>	Depth to Well Bottom (ft): <div style="border: 1px solid black; padding: 2px;">12</div>

**Purging Data**

Method: <i>(i.e. low flow)</i>	Date:	Time:				
Peristaltic		1330				
		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1333	7.53	150	0	7.44	3.1	593	19.8	23.24	12.2	-233	
13.43	8.45	150	1	7.44	0	561	17.9	21.00	1.11	-217	
1353	8.90	150	1.25	7.02	0	111	15.0	21.46	9.29	-141	
1403	9.42	150	1.75	7.09	0	96.5	15.6	22.35	9.66	-156	
1413	9.87	150	2.0	7.18	0	259	16.1	22.63	9.97	-163	
1423	10.27	150	2.5	7.33	0	91.3	17.1	22.93	10.6	-183	
1428	10.52	150	2.75	7.41	0	39.5	17.6	22.86	10.9-196	-191	
1433	10.68	150	2.85	7.45	0	171	18.2	22.79	11.3	-196	
1438	11.8	150	3.10	7.5	0	165	19.0	22.71	11.8	-201	Increas...

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Peristaltic

10/10/2013

0800

3.2 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	0	Alkalinity (g/g)	220	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	0	Carbon Dioxide (mg/L)	128	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	0	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	0	Hydrogen Sulfide (mg/L)	0	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	0	DTW (ft)	0	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	0	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: We'll was purged dry.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**



0915	8.62	100	2.7	6.25	0.0	4.99	4.83	15.87	3.05	-302	same
0920	8.63	100	2.9	6.25	0.0	4.67	4.82	15.99	2.99	-305	same

**Sampling Data**

Method: *(i.e. low flow)* DT Date: 10/17/2013 Time: *(i.e. 14:32)* 0920 Total Volume of Water Purged: 2.9 (gal)

HORIBA		HACH TEST KITS		SAMPLE SET				
pH	6.25	Alkalinity (g/g)	560	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	4.82	Carbon Dioxide (mg/L)	386	Select VOCs	<input checked="" type="checkbox"/>	3-40 mL glass vial	HCl	EPA 8260
Turbidity (NTU)	4.67	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40 mL glass vial	HCl	Lab SOP
DO (mg/L)	0.00	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	15.99	Hydrogen Sulfide (mg/L)	4.0	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40 mL glass (Field Filtered)	None	lab specified
ORP (mv)	-305	DTW (ft)	8.63	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	2.99	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments:				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40 mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120 mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			



Time

Accuracy (m)

Latitude

Longitude

Altitude

Velocity

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonomol Facility</u>	Well ID: <u>MW-6S</u> Manual Entry: <input type="text"/>	Send to SharePoint  Well Diameter: <input type="text" value="2"/> inches
Samplers: <input type="text" value="Bill simons"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>		Initial Depth to Water (ft): <input type="text" value="6.8"/> Depth to Well Bottom (ft): <input type="text" value="14"/>

Method: <i>(i.e. low flow)</i> <input type="text" value="Low flow"/>	Date: <input type="text" value="10/17/2013"/>	Time: <input type="text" value="0820"/> <i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
0830	8.2	110	0.3	6.08	1.15	30	6.08	16.03	3.83	-4	
0840	9.05	110	0.6	6.18	0.07	59	5.96	16.77	3.75	-12	
0850	9.55	110	0.9	6.22	0	23	5.78	16.72	3.64	-16	
0900	9.49	110	1.2	6.27	0	21	5.24	16.77	3.28	-19	
0910	9.49	110	1.5	6.30	0	23	4.61	16.84	2.95	-18	
0920	9.55	110	1.8	6.28	0	6	4.78	16.92	3.07	-18	
0930	9.71	110	2.1	6.26	0	0	5.16	17.06	3.26	-17	
0940	9.95	110	2.4	6.26	0	0	5.46	16.98	3.45	-27	
0950	10.21	110	2.7	6.25	0	0	5.63	17.04	3.55	-11	
0955	10.31	110	2.9	6.24	0	0	5.67	17.05	3.58	-8	
1000	10.42	110	3.1	6.24	0	0	5.73	17.06	3.61	-6	
1005	10.55	110	3.25	6.24	0	0	5.82	17.02	3.67	-4	
1010	10.67	110	3.4	6.24	0	0	5.88	17.02	3.71	-3	



**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/17/2013

1020

3.4 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
Parameter	Value	Parameter	Value	Parameter	Bottle	Pres.	Method	
pH	6.24	Alkalinity (g/g)	440	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl EPA 8260	
Spec. Cond. (mS/cm)	5.88	Carbon Dioxide (mg/L)	606	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl Lab SOP	
Turbidity (NTU)	0	Ferrous Iron (mg/L)	0.9	Dissolved Inorganics	<input type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3 SW6010B	
DO (mg/L)	0	Manganese (mg/L)	0	Chloride / Nitrate / Sulfate	<input type="checkbox"/>	2-40mL glass (Field Filtered)	None lab specified	
Temp.(°C)	17.02	Hydrogen Sulfide (mg/L)	0	Ortho Phosphate	<input type="checkbox"/>	1-250 mL plastic (Field filtered)	None EPA 365.1	
ORP (mv)	-3	DTW (ft)		Sulfide	<input type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate MS-45000-S2-F	
TDS (g/L)	3.71	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Total Organic Carbon	<input type="checkbox"/>	2-40mL amber glass vial	H3PO4 SW9060	
Comments: Turbidity measured using Horiba.				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None SW9060	
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: <u>MW-10S</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="Doruk Ucak"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>	Initial Depth to Water (ft): <input style="width: 50px;" type="text" value="5.40"/>	Depth to Well Bottom (ft): <input style="width: 50px;" type="text"/>

Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="low flow"/>	Date: <input style="width: 100%;" type="text" value="10/15/2013"/>	Time: <input style="width: 100%;" type="text" value="0855"/> <i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
0900	5.54	200	0.27	6.01	0.70	24	1.84	13.83	1.15	-125	odor
0905	5.54	250	0.60	6.43	0.09	3.45	1.54	14.02	0.987	-149	
0910	5.54	250	0.93	6.55	0.00	2.47	1.37	14.37	0.871	-151	
0915	5.54	250	1.26	6.63	0.00	2.91	1.33	14.22	0.852	-149	
0920	5.55	250	1.92	6.68	0.00	1.33	1.36	14.27	0.858	-145	
0930	5.55	250	2.25	6.69	0.00	1.36	1.36	14.41	0.869	-144	param...
0940	5.55	250	2.58	6.69	0.00	1.83	1.35	14.51	0.867	-144	
0950	5.56	250	3.24	6.69	0.00	1.18	1.35	14.69	0.866	-147	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

DT

10/15/2013

0950

3.24 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.69	Alkalinity (g/g)	240	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	1.35	Carbon Dioxide (mg/L)	230	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	1.18	Ferrous Iron (mg/L)	2.0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.00	Manganese (mg/L)	0	Dissolved Inorganics	<input type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	14.69	Hydrogen Sulfide (mg/L)	0.1	Chloride / Nitrate / Sulfate	<input type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-147	DTW (ft)		Ortho Phosphate	<input type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	0.866	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments:				Total Organic Carbon	<input type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonomol Facility</u>	Well ID: <u>MW-11S</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="DPC"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>		Initial Depth to Water (ft): <input style="width: 50px;" type="text" value="7.12"/>
Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="low flow"/>		Date: <input style="width: 50px;" type="text" value="10/17/2013"/>
Time: <input style="width: 50px;" type="text" value="10:05"/> <i>(i.e. 14:32)</i>		Depth to Well Bottom (ft): <input style="width: 50px;" type="text"/>

	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
	4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
10:05	7.12	200	0	6.59	0.64	OR	5.73	15.61	3.61	-45	milky
10:15	7.25	200	0.5	6.42	0.0	OR	5.74	15.88	3.61	-84	cloudy,...
10:25	7.26	200	1.0	6.44	0.00	464	5.34	15.99	3.36	-211	same
10:35	7.25	200	1.6	6.45	0.0	245	5.22	16.14	3.29	-225	same
10:40	7.24	200	1.8	6.45	0.0	189	5.12	16.39	3.24	-230	same
10:45	7.25	200	2.0	6.46	0.0	77.3	5.06	16.38	3.19	-234	clear, sl...
10:50	7.25	200	2.2	6.46	0.0	75.7	5.00	16.49	3.17	-237	
10:55	7.25	200	2.5	6.46	0.0	72.5	4.92	16.55	3.15	-240	
11:00	7.25	200	2.7	6.46	00	63.8	4.85	16.60	3.13	-242	
11:05	7.25	200	2.9	6.46	0.0	50.2	4.82	16.67	3.08	-245	
11:10	7.25	200	3.2	6.47	0.0	na	4.77	16.60	3.05	-249	same

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

DT

10/17/2013

1110

3.2

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.47	Alkalinity (g/g)	280	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	4.77	Carbon Dioxide (mg/L)	168	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)		Ferrous Iron (mg/L)	0.8	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.00	Manganese (mg/L)	0	Dissolved Inorganics	<input type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	16.60	Hydrogen Sulfide (mg/L)	1.0	Chloride / Nitrate / Sulfate	<input type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-249	DTW (ft)		Ortho Phosphate	<input type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	3.05	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments:				Total Organic Carbon	<input type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonomol Facility</u></div>	Well ID: <div style="text-align: center; font-size: 1.2em;"><u>MW-12S</u></div> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 40px; text-align: center;" type="text"/> inches
Samplers: <input style="width: 100%;" type="text"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
	Initial Depth to Water (ft): <input style="width: 60px; text-align: center;" type="text"/>	Depth to Well Bottom (ft): <input style="width: 60px; text-align: center;" type="text"/>

**Purging Data**

Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text"/>	Date: <input style="width: 100%;" type="text"/>	Time: <input style="width: 100%;" type="text"/>				
	10/17/2013	0825 <i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
0835	7.21	150	0.40	6.56	1.55	37.1	5.763	16.62	3.742	-16.4	Slightly...
0845	7.30	100	0.66	6.58	1.42	35.7	5.560	16.61	3.619	-22.5	
0855	8.02	100	0.92	6.68	2.33	32.6	4.301	16.58	2.793	-79.6	
0905	8.56	100	1.18	6.65	2.27	28.9	3.925	16.60	2.552	-115.1	
0915	8.58	100	1.44	6.63	1.83	27.2	4.085	16.56	2.655	-138.9	
0925	8.59	100	1.7	6.57	1.39	26.3	4.366	16.62	2.838	-159.8	
0935	8.60	100	1.96	6.57	1.19	27.9	4.292	16.67	2.790	-157.0	
0940	8.61	100	2.09	6.58	1.13	25.9	4.276	16.68	2.779	-164.5	
0945	8.62	100	2.22	6.57	1.12	25.4	4.284	16.65	2.785	-166.5	
0950	8.62	100	2.35	6.56	1.10	20.3	4.292	16.62	2.789	-169.2	
0955	8.63	100	2.48	6.57	1.07	19.7	4.295	16.61	2.792	-170.4	
1000	8.63	100	2.61	6.58	1.05	19.4	4.299	16.65	2.805	-172.2	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/17/2013

1005

2.75 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
Parameter		Parameter		Parameter	Bottle	Pres.	Method	
pH	6.58	Alkalinity (g/g)	220	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl EPA 8260	
Spec. Cond. (mS/cm)	4.299	Carbon Dioxide (mg/L)	316	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl Lab SOP	
Turbidity (NTU)	19.4	Ferrous Iron (mg/L)	0.1	Dissolved Inorganics	<input type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3 SW6010B	
DO (mg/L)	1.05	Manganese (mg/L)	0	Chloride / Nitrate / Sulfate	<input type="checkbox"/>	2-40mL glass (Field Filtered)	None lab specified	
Temp.(°C)	16.65	Hydrogen Sulfide (mg/L)	4	Ortho Phosphate	<input type="checkbox"/>	1-250 mL plastic (Field filtered)	None EPA 365.1	
ORP (mv)	-172.2	DTW (ft)	8.63	Sulfide	<input type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate MS-45000-S2-F	
TDS (g/L)	2.805	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Total Organic Carbon	<input type="checkbox"/>	2-40mL amber glass vial	H3PO4 SW9060	
Comments:				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None SW9060	
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-weight: bold; margin-top: 5px;">Ekonol Facility</div>	Well ID: <div style="text-align: center; font-weight: bold; margin-top: 5px;">RMW-2D</div> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
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Samplers:
bll simons

### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <div style="text-align: center;"><input style="width: 40px;" type="text" value="6.4"/></div>	Depth to Well Bottom (ft): <div style="text-align: center;"><input style="width: 40px;" type="text"/></div>
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### Purging Data

Method: <i>(i.e. low flow)</i>	Date: <input style="width: 60px;" type="text" value="10/15/2013"/>	Time: <input style="width: 60px;" type="text" value="1550"/>			
low flow		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16
			4-inch=0.64	6-inch=1.4	8-inch=2.5
					10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1600	9.25	260	.7	5.63	0	153	3.11	20.11	1.96	-294	
1610	9.07	150	1.1	5.68	0	131	3.08	20.53	1.97	-294	
1620	8.87	150	1.5	5.85	0	89.2	3.46	20.34	2.21	-295	
1630	8.70	150	1.9	5.93	0	140	3.36	20.14	2.27	-335	
1640	8.66	150	2.3	5.94	0	163	3.51	20.19	2.24	-359	
1650	8.70	150	2.7	5.94	0	165	3.42	20.11	2.19	-375	
1655	8.75	150	2.9	5.96	0	154	3.38	19.89	2.15	-378	
1700	8.76	150	3.1	5.96	0	149	3.49	19.90	2.14	-379	



**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

low flow

10/15/2013

1710

3.1

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	5.96	Alkalinity (g/g)		Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	3.49	Carbon Dioxide (mg/L)		Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	149	Ferrous Iron (mg/L)		MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0	Manganese (mg/L)		Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	19.9	Hydrogen Sulfide (mg/L)		Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-379	DTW (ft)		Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	2.14	* NOTE * HACH test kits are only required for MNA analysis wells.		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Turbidity measured using Horiba. Water too stained to conduct colorometric Hach tests.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input checked="" type="checkbox"/>	1-1200 ml 2 - 210 ml		
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: <u>RMW-3D</u> Manual Entry: <input style="width: 100%;" type="text" value="101113"/>	Send to SharePoint  Well Diameter: <input style="width: 50px;" type="text" value="2"/> inches								
Samplers: <input style="width: 100%;" type="text" value="Burkert"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot									
<b>Purging Data</b>		Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="6.98"/>								
Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Peristaltic"/>		Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>								
Date: <input style="width: 100%;" type="text"/>	Time: <input style="width: 100%;" type="text" value="1245"/> <i>(i.e. 14:32)</i>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">1-inch=0.041</td> <td style="width: 25%;">1.5-inch=0.092</td> <td style="width: 25%;">2-inch=0.16</td> <td style="width: 25%;">3-inch=0.36</td> </tr> <tr> <td>4-inch=0.64</td> <td>6-inch=1.4</td> <td>8-inch=2.5</td> <td>10-inch=4</td> </tr> </table>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36	4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4
1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36							
4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4							

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1258	6.98	200	0	6.91	1.12	133	1.85	22.06	1.18	-339	
1308	7.04	200	0.5	6.85	0.00	89.2	1.77	21.22	1.13	-337	
1318	7.04	200	0.9	6.92	0.00	46.1	1.73	20.68	1.11	-342	
1328	7.04	200	1.4	6.96	0.00	5.73	1.69	20.35	1.08	-344	
1338	7.04	200	1.8	6.97	0.00	3.11	1.67	20.41	1.07	-344	
1348	7.04	200	2.2	6.98	0.00	1.95	1.67	20.28	1.07	-345	
1358	7.04	200	2.6	6.98	0.00	1.76	1.66	20.17	1.06	-345	
1403	7.04	200	2.8	6.98	0.00	2.56	1.67	20.24	1.07	-345	
1408	7.04	200	3.2	6.97	0.00	2.08	1.67	20.23	1.07	-345	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Peristaltic

10/11/2013

1410

3.3

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.97	Alkalinity (g/g)	320	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	1.67	Carbon Dioxide (mg/L)	130	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	2.08	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.00	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	20.23	Hydrogen Sulfide (mg/L)	5	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-345	DTW (ft)	7.04	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.07	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments:				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input checked="" type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: <u>MW-11D</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
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Samplers: <input style="width: 100%;" type="text" value="bill simons"/>
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### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="9.75"/>	Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>
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### Purging Data

Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="low flow"/>	Date: <input style="width: 100%;" type="text" value="10/16/2013"/>	Time: <input style="width: 100%;" type="text" value="1535"/> <i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1540	9.8	290	.4	6.8	0	25.7	1.91	14.09	1.22	-303	
1550	9.8	290	1.2	6.8	0	24.3	1.88	14.00	1.20	-293	
1600	9.8	290	1.6	6.78	0	25	1.86	13.95	1.19	-291	
1605	9.8	290	2	6.77	0	25.6	1.89	13.95	1.20	-292	
1610	9.8	290	2.4	6.78	0	25	1.86	13.88	1.19	-289	
1615	9.8	290	2.8	6.77	0	27	1.86	13.90	1.19	-288	
1620	9.8	290	3.2	6.77	0	26	1.86	13.85	1.19	-287	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

low flow

10/16/2013

1625

3.2

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.77	Alkalinity (g/g)	240	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	1.86	Carbon Dioxide (mg/L)	220	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	26	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0	Manganese (mg/L)	0	Dissolved Inorganics	<input type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	13.85	Hydrogen Sulfide (mg/L)	2.0	Chloride / Nitrate / Sulfate	<input type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-287	DTW (ft)		Ortho Phosphate	<input type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.19	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Turbidity measured using Horiba.				Total Organic Carbon	<input type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>		Well ID: <div style="text-align: center; font-size: 0.8em;">MW-17D</div> Manual Entry: <input style="width: 100%;" type="text"/>		Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches							
Samplers: <input style="width: 100%;" type="text" value="C Huey"/>		WATER VOLUME CALCULATION									
<b>Purging Data</b> Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>		Date: <input style="width: 100%;" type="text" value="10/14/2013"/>		Time: <input style="width: 100%;" type="text" value="1545"/> <i>(i.e. 14:32)</i>							
		= (Total Depth of Well - Depth To Water) x Casing Volume per Foot									
		Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="8.79"/>		Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>							
		1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36						
		4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4						
Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1555	8.90	220	0.58	6.98	0.47	6.12	2.433	13.17	1.581	-127.9	Clear
1605	8.91	220	1.16	6.99	0.41	5.92	2.459	13.16	1.598	-136.4	
1615	8.92	220	1.74	7.01	0.30	5.46	2.478	13.11	1.610	-146.6	
1620	8.92	220	2.03	7.02	0.27	5.11	2.477	13.10	1.610	-159.7	
1625	8.92	220	2.32	7.04	0.24	4.96	2.478	13.10	1.611	-167.9	
1630	8.93	220	2.61	7.04	0.25	3.91	2.480	13.08	1.612	-170.5	
1635	8.94	220	2.90	7.04	0.25	3.48	2.481	13.07	1.613	-172.3	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/14/2013

1640

3.25 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
Parameter		Parameter		Parameter	Bottle	Pres.	Method	
pH	7.04	Alkalinity (g/g)	240	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl EPA 8260	
Spec. Cond. (mS/cm)	2.481	Carbon Dioxide (mg/L)	118	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl Lab SOP	
Turbidity (NTU)	3.48	Ferrous Iron (mg/L)	0	Dissolved Inorganics	<input type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3 SW6010B	
DO (mg/L)	0.25	Manganese (mg/L)	0	Chloride / Nitrate / Sulfate	<input type="checkbox"/>	2-40mL glass (Field Filtered)	None lab specified	
Temp.(°C)	13.07	Hydrogen Sulfide (mg/L)	0.7	Ortho Phosphate	<input type="checkbox"/>	1-250 mL plastic (Field filtered)	None EPA 365.1	
ORP (mv)	-172.3	DTW (ft)	8.94	Sulfide	<input type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate MS-45000-S2-F	
TDS (g/L)	1.613	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Total Organic Carbon	<input type="checkbox"/>	2-40mL amber glass vial	H3PO4 SW9060	
Comments: Collected MS/MSD at same time as sample (VOCs only-6).				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None SW9060	
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>	Well ID: <div style="text-align: center; font-size: 0.8em;">MW-20D</div> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
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Samplers:
C Huey

### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <div style="text-align: center;"><input style="width: 50px;" type="text" value="8.22"/></div>	Depth to Well Bottom (ft): <div style="text-align: center;"><input style="width: 50px;" type="text"/></div>
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### Purging Data

Method: <i>(i.e. low flow)</i>	Date: <input style="width: 50px;" type="text" value="10/16/2013"/>	Time: <input style="width: 50px;" type="text" value="1307"/>			
Low flow		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16
			4-inch=0.64	6-inch=1.4	8-inch=2.5
					10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1317	8.24	250	0.66	7.22	1.66	3.66	1.981	17.48	1.288	-97.2	Clear
1327	8.25	250	1.32	6.94	0.88	3.12	2.002	17.18	1.301	-198.0	
1332	8.25	250	1.65	6.94	0.90	3.20	2.005	17.19	1.303	-199.9	
1337	8.25	250	1.98	6.93	0.82	3.10	2.037	17.21	1.324	-193.2	
1342	8.25	250	2.31	6.93	0.80	3.08	2.039	17.22	1.326	-192.9	
1347	8.25	250	2.64	6.93	0.79	3.02	2.041	17.24	1.327	-191.8	



**Sampling Data**

Method: (i.e. low flow) Date: 10/16/2013 Time: (i.e. 14:32) 1350 Total Volume of Water Purged: 2.8 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.92	Alkalinity (g/g)	240	Parameter	<input type="checkbox"/>	Bottle	Pres.	Method
Spec. Cond. (mS/cm)	2.041	Carbon Dioxide (mg/L)	84	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	3.02	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.79	Manganese (mg/L)	0	Dissolved Inorganics	<input type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	17.24	Hydrogen Sulfide (mg/L)	4	Chloride / Nitrate / Sulfate	<input type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-191.8	DTW (ft)	8.25	Ortho Phosphate	<input type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.327	* NOTE * HACH test kits are only required for MNA analysis wells.		Sulfide	<input type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments:				Total Organic Carbon	<input type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>	Well ID: <div style="text-align: center; font-size: 0.8em;"><u>MW-21D</u></div> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="4"/> inches
---	---	---

Samplers:
<input style="width: 95%;" type="text" value="C Huey"/>

### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <input style="width: 80px;" type="text" value="7.88"/>	Depth to Well Bottom (ft): <input style="width: 80px;" type="text"/>
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### Purging Data

Method: <i>(i.e. low flow)</i>	Date: <input style="width: 80px;" type="text" value="10/16/2013"/>	Time: <input style="width: 80px;" type="text" value="1204"/>			
<input style="width: 95%;" type="text" value="Low flow"/>		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16
			4-inch=0.64	6-inch=1.4	8-inch=2.5
					10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1214	7.88	280	0.74	7.75	0.78	4.86	1.408	16.96	0.919	-86	Clear
1224	7.88	280	1.48	7.28	0.69	3.91	1.599	16.92	1.042	-96.0	
1229	7.88	280	1.85	7.15	0.58	3.26	1.709	16.83	1.111	-130.2	
1234	7.88	280	2.22	7.14	0.60	3.14	1.726	16.81	1.122	-146.3	
1239	7.88	280	2.59	7.14	0.59	3.0	1.729	16.80	1.126	-147.2	
1244	7.88	280	2.96	7.14	0.57	2.96	1.727	16.78	1.127	-147.9	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/16/2013

1245

3.2

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	7.14	Alkalinity (g/g)	200	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	1.727	Carbon Dioxide (mg/L)	174	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	2.96	Ferrous Iron (mg/L)	0.5	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.57	Manganese (mg/L)	0	Dissolved Inorganics	<input type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	16.78	Hydrogen Sulfide (mg/L)	1	Chloride / Nitrate / Sulfate	<input type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-147.9	DTW (ft)	7.88	Ortho Phosphate	<input type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.127	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Collected MS/MSD same time as sample MW-21D_101613 MS / MSD				Total Organic Carbon	<input type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>	Well ID: <u>RMW-1D</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="bill simons"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>	Initial Depth to Water (ft): <input style="width: 50px;" type="text" value="6.91"/>	Depth to Well Bottom (ft): <input style="width: 50px;" type="text"/>

Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="low flow"/>	Date: <input style="width: 100%;" type="text" value="10/16/2013"/>	Time: <input style="width: 100%;" type="text" value="1405"/> <i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1410	6.96	210	.3	7.08	0	49	1.6	16.41	1.03	-238	
1415	6.96	210	.6	7.08	0	36	1.64	15.81	1.05	-256	clear
1420	6.96	210	.9	7.05	0	36	1.7	15.68	1.11	-270	
1430	6.96	210	1.5	6.64	0	33	2.18	15.63	1.39	-323	
1440	6.96	210	2.1	6.64	0	30	2.02	15.57	1.29	-313	
1445	6.96	210	2.4	6.65	0	27	1.95	15.5	1.25	-310	
1450	6.96	210	2.7	6.65	0	27	1.93	15.49	1.23	-308	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

low flow

10/16/2013

1500

2.7

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.65	Alkalinity (g/g)		Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	1.93	Carbon Dioxide (mg/L)		Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	27	Ferrous Iron (mg/L)		MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0	Manganese (mg/L)		Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	15.49	Hydrogen Sulfide (mg/L)		Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-308	DTW (ft)		Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.23	* NOTE * HACH test kits are only required for MNA analysis wells.		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Turbidity measured using Horiba.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>  Samplers: Doruk Ucak bill simons	Well ID: <u>PMW-5D</u> Manual Entry: 20131810	Send to SharePoint  Well Diameter: <input type="text" value="2"/> inches
<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot		
Initial Depth to Water (ft): <input type="text" value="7.35"/>		Depth to Well Bottom (ft): <input type="text"/>

**Purging Data**

Method: <i>(i.e. low flow)</i>	Date: <input type="text" value="10/21/2013"/>	Time: <input type="text" value="1530"/>				
<input type="text" value="low flow"/>		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1535	7.79	NA	0	NA	NA	NA	NA	NA	NA	NA	NA
1540	8.15	100	0.13	8.16	0.00	60.7	1.54	18.94	0.984	-282	no odo...
1545	8.60	100	0.26	9.16	0.00	23.7	1.36	18.69	0.879	-373	same
1550	8.98	100	0.39	9.65	0.00	18.2	1.18	18.55	0.755	-377	same
1555	9.38	100	0.51	9.90	0.00	16.1	1.09	18.36	0.697	-371	same
1600	9.60	100	0.64	9.99	0.00	14.7	1.07	18.26	0.684	-371	same
1605	9.73	50	0.77	10.05	0.0	14.7	1.42	18.17	0.922	-370	flow dr...
1610	10.00	50	0.90	10.13	0.0	14.8	1.51	18.04	0.957	-390	same
1615	10.15	50	1.03	10.22	0.0	12.4	1.52	17.98	0.975	-385	same

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

low flow

10/18/2013

1105

5

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH		Alkalinity (g/g)	438	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)		Carbon Dioxide (mg/L)	804	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)		Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)		Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)		Hydrogen Sulfide (mg/L)	5	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)		DTW (ft)	5.9	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)		<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Purged dry 10-17-13 Leaking J plug. H2S >5.d. MN not analyze				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>	Well ID: PMW-8D Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="bill simons"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>	Initial Depth to Water (ft): <input style="width: 50px;" type="text" value="6.05"/>	Depth to Well Bottom (ft): <input style="width: 50px;" type="text"/>

Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="low flow"/>	Date: <input style="width: 100%;" type="text" value="10/18/2013"/>	Time: <input style="width: 100%;" type="text" value="0820"/> <i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
0825	6.60	200	0.3	6.57	5.35	0	3.94	14.88	2.52	-347	
0830	6.69	200	0.6	6.52	5.51	0	3.98	14.95	2.56	-348	clear
0840	6.76	200	1.2	6.42	2.85	0	4.07	14.83	2.61	-349	
0850	6.81	200	1.8	6.35	2.66	0	4.11	14.88	2.63	-350	
0910	6.92	200	3	6.27	2.18	0	4.11	15.06	2.63	-351	
0915	6.95	200	3.3	6.27	2.09	0	4.10	15.01	2.63	-352	
0920	7.17	200	3.6	6.25	1.96	0	4.11	14.97	2.63	-353	
0935	7.07	200	4.5	6.29	2.02	0	4.11	15.11	2.63	-352	
0945	7.07	200	5.1	6.23	2.07	0	4.11	15.17	2.63	-352	
0950	7.07	200	5.4	6.23	2.06	0	4.11	15.20	2.63	-352	



**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

LOW FLOW

10/18/2013

1000

5.4 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.23	Alkalinity (g/g)	420	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	4.11	Carbon Dioxide (mg/L)	692	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	0	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	2.06	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	15.20	Hydrogen Sulfide (mg/L)	5	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-352	DTW (ft)		Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	2.63	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Turbidity measured using Horiba. MN not analyzed. H2S >5.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-weight: bold; margin-top: 5px;">Ekonol Facility</div>	Well ID: <div style="text-align: center; font-weight: bold; margin-top: 5px;">MW-14D</div>	
Samplers: <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">D c burkert</div>	Manual Entry: <div style="border: 1px solid black; width: 100%; height: 20px; margin-top: 5px;"></div>	Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches

### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <div style="text-align: center; border: 1px solid black; width: 100%; height: 20px; margin-top: 5px;">7.89</div>	Depth to Well Bottom (ft): <div style="text-align: center; border: 1px solid black; width: 100%; height: 20px; margin-top: 5px;"></div>
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### Purging Data

Method: <i>(i.e. low flow)</i> <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">Peristaltic</div>	Date: <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">10/09/2013</div>	Time: <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">10:25</div> <small><i>(i.e. 1432)</i></small>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1041	7.89	300	0	6.13	15.2	0	1.99	15.61	1.32	-207	Initial
1046	7.91	300	.75	7.00	3.3	0	2.02	15.60	1.29	-215	
1056	7.94	300	1.25	7.09	0.0	0.92	1.99	15.14	1.29	-234	
1106	7.94	300	1.75	7.12	0	0.94	1.99	15.59	1.27	-245	
1116	7.94	300	2.5	7.13	0	0.51	1.96	16.01	1.23	-246	
1121	7.94	300	2.8	7.14	0	0.71	1.94	16.18	1.24	-247	
1126	7.94	300	3.3	7.14	0	0.65	1.93	16.53	1.23	-247	



### Sampling Data

Method: <i>(i.e. low flow)</i> <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">Peristaltic</div>	Date: <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">10/09/2013</div>	Time: <i>(i.e. 14:32)</i> <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">1130</div>	Total Volume of Water Purged: <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">3.5</div> (gal)
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HORIBA		HACH TEST KITS		SAMPLE SET			
pH	7.14	Alkalinity (g/g)	280	Parameter	Bottle	Pres.	Method
Spec. Cond. (mS/cm)	1.93	Carbon Dioxide (mg/L)	120	Select VOCs	<input checked="" type="checkbox"/> 3-40 mL glass vial	HCl	EPA 8260
Turbidity (NTU)	0.65	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/> 2-40 mL glass vial	HCl	Lab SOP
DO (mg/L)	0.0	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/> 1-250 mL plastic (Field Filtered)	HNO3	SW6010B
		Hydrogen		Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/> 2-40 mL glass (Field Filtered)	None	lab specified

Temp.(°C)	16.53	Sulfide (mg/L)	0.7	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
ORP (mv)	-247	DTW (ft)	7.94	Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
TDS (g/L)	1.23	<u>* NOTE * HACH test kits are only required for MNA analysis wells.</u>		Total Organic Carbon	<input checked="" type="checkbox"/>	2-40 mL amber glass vial	H3PO4	SW9060
Comments: <div style="border: 1px solid black; height: 40px; width: 100%;"></div>				Total Inorganic Carbon	<input type="checkbox"/>	1-120 mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

Time

Accuracy (m)

Latitude

Longitude

Altitude

Velocity

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonomol Facility</u>  Samplers: <input style="width: 100%;" type="text" value="bill simons"/>	Well ID: <u>MW-15D</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 50px;" type="text" value="2"/> inches
<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot		
Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="7.70"/>		Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>

**Purging Data**

Method: <i>(i.e. low flow)</i>	Date: <input style="width: 100%;" type="text" value="10/09/2013"/>	Time: <input style="width: 100%;" type="text" value="1010"/>				
<input style="width: 100%;" type="text" value="low flow"/>		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1020	8.55	400	1	6.14	4.19	0	2.09	16.19	1.33	-291	
1030	8.6	400	2	6.02	5.07	0	2.23	16.15	1.42	-302	
1040	8.56	400	3	6	3.05	0	2.32	15.68	1.5	-297	
1045	8.6	400	2.5	5.99	3.17	0	2.31	15.8	1.46	-299	
1050	8.61	400	3	5.97	2.89	0	2.32	15.84	1.47	-301	
1055	8.62	400	3.5	5.94	2.56	0	2.34	15.87	1.47	-300	
1100	8.64	400	4	5.94	2.19	0	2.4	15.88	1.49	-301	
1105	8.65	400	4.5	5.94	2.07	0	2.42	15.88	1.53	-300	
1110	8.65	400	5	5.95	1.95	0	2.34	15.88	1.49	-301	
1120	8.70	400	6	5.94	1.96	0	2.39	15.92	1.51	-302	
1125	8.69	400	6.5	5.95	1.91	0	2.41	15.92	1.58	-301	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

low flow

10/09/2013

1135

6.5

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	5.95	Alkalinity (g/g)	200	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	2.41	Carbon Dioxide (mg/L)	260	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	0	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	1.91	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	15.92	Hydrogen Sulfide (mg/L)	4	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-301	DTW (ft)		Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.58	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: inorganic C and Hach tests not required.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: <u>MW-16D</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="C Huey"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>		Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="12.52"/>
Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>		Date: <input style="width: 100%;" type="text" value="10/16/2013"/>
Time: <input style="width: 100%;" type="text" value="1422"/> <i>(i.e. 14:32)</i>		Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>

	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
	4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1432	13.26	250	0.66	6.78	1.01	8.61	4.205	13.33	2.734	-173.9	Clear
1442	13.38	180	1.14	6.79	1.01	7.12	4.211	13.35	2.740	-173.1	
1452	13.40	180	1.62	6.81	1.02	6.36	2.963	13.39	2.741	-173.0	
1457	13.40	180	1.86	6.85	1.03	5.29	2.759	13.42	2.743	-172.9	
1502	13.39	180	2.1	6.87	1.03	4.86	2.742	13.44	2.744	-172.9	
1507	13.39	180	2.34	6.87	0.99	4.12	2.725	13.27	2.770	-173.0	
1512	13.38	180	2.58	6.86	0.98	4.02	2.723	13.13	2.731	-172.9	
1517	13.37	180	2.82	6.86	1.00	3.82	2.719	12.99	2.701	-174.4	

**Sampling Data**

Method: (i.e. low flow) Date: 10/16/2013 Time: (i.e. 14:32) 1520 Total Volume of Water Purged: 3.5 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.86	Alkalinity (g/g)	220	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	2.719	Carbon Dioxide (mg/L)	126	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	3.82	Ferrous Iron (mg/L)	0.1	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	1.00	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	12.99	Hydrogen Sulfide (mg/L)	2	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-174.4	DTW (ft)	13.37	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	2.701	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Collected duplicate MW-160D_101613 @1201. (VOCs-2, mee-2, c/n/s-2 diss Inorganics-1, toc-2)				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>	Well ID: <div style="text-align: center; font-size: 0.8em;"><u>MW-18D</u></div> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="C Huey"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>		Initial Depth to Water (ft): <div style="text-align: center; font-size: 1.1em;">7.05</div>

Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>	Date: <div style="text-align: center; font-size: 1.1em;">10/18/2013</div>	Time: <div style="text-align: center; font-size: 1.1em;">1008</div> <div style="text-align: center; font-size: 0.8em;"><i>(i.e. 14:32)</i></div>	1-inch=0.041 4-inch=0.64	1.5-inch=0.092 6-inch=1.4	2-inch=0.16 8-inch=2.5	3-inch=0.36 10-inch=4
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Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1018	7.12	190	0.5	7.06	3.10	2.60	2.128	12.61	1.384	-66.8	Clear
1028	7.14	190	1.0	7.05	2.31	2.91	2.130	12.65	1.384	-69.6	
1038	7.15	190	1.5	7.05	1.51	2.50	2.128	12.79	1.383	-88.6	
1043	7.15	190	1.75	7.05	1.28	2.61	2.124	12.86	1.382	-91.7	
1048	7.15	190	2.0	7.05	1.12	2.48	2.122	12.94	1.380	-99.9	
1053	7.16	190	2.25	7.04	0.93	2.40	2.125	12.80	1.381	-102.8	
1058	7.16	190	2.5	7.04	0.91	2.36	2.128	12.76	1.384	-104.1	
1103	7.16	190	2.75	7.03	0.90	2.48	2.130	12.71	1.385	-105.9	



**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/18/2013

1105

3

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	7.03	Alkalinity (g/g)	80	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	2.130	Carbon Dioxide (mg/L)	70	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	2.48	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.90	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	12.71	Hydrogen Sulfide (mg/L)	0.5	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-105.9	DTW (ft)	7.16	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.385	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments:				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>	Well ID: <div style="text-align: center; font-size: 0.8em;">MW-19D</div> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
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Samplers:
bill simons

### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <input style="width: 80px;" type="text" value="6.45"/>	Depth to Well Bottom (ft): <input style="width: 80px;" type="text" value="27"/>
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### Purging Data

Method: <i>(i.e. low flow)</i>	Date: <input style="width: 80px;" type="text" value="10/09/2013"/>	Time: <input style="width: 80px;" type="text" value="0825"/>			
low flow		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16
			4-inch=0.64	6-inch=1.4	8-inch=2.5
					10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
0835	6.88	350	1	5.43	0	9.85	6.38	15.51	4.01	-18	
0845	6.88	350	2	5.45	0	6.2	6.26	15.56	3.94	-42	
0855	6.88	400	3.1	5.46	0	5.9	6.3	15.68	3.97	-60	
0900	6.88	400	4.2	5.46	0	4.3	6.32	15.71	3.99	-64	
0905	6.88	400	5.3	5.46	0	4.9	6.33	15.72	3.99	-66	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

low flow

10/09/2013

0915

5.5

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	5.46	Alkalinity (g/g)	600	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	6.33	Carbon Dioxide (mg/L)	680	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	4.9	Ferrous Iron (mg/L)	2	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	15.72	Hydrogen Sulfide (mg/L)	0	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-66	DTW (ft)		Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	3.99	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: inorganic C and Hach tests not required				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>  Samplers: <input style="width: 100%;" type="text" value="Burkert"/>	Well ID: <u>MW-10D</u> Manual Entry: <input style="width: 100%;" type="text" value="101113"/>	Send to SharePoint  Well Diameter: <input style="width: 50px;" type="text" value="2"/> inches
<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot		
Initial Depth to Water (ft): <input style="width: 100px;" type="text" value="6.75"/>		Depth to Well Bottom (ft): <input style="width: 100px;" type="text" value="31"/>

**Purging Data**

Method: <i>(i.e. low flow)</i>	Date:	Time:				
<input style="width: 100%;" type="text" value="Peristaltic"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text" value="1030"/>				
			1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1042	6.75	200	0	7.48	1.85	315	2.02	18.78	1.29	-284	
1052	7.05	200	0.5	7.35	0.00	254	1.95	18.34	1.25	-309	
1102	7.05	200	0.9	7.26	0.00	200	1.95	18.35	1.25	-310	
1112	7.05	200	1.4	7.20	0.00	29.5	1.87	18.44	1.20	-306	
1122	7.05	200	1.8	7.17	0.00	9.33	1.84	18.42	1.18	-302	
1132	7.05	200	2.2	7.14	0.00	7.28	1.81	18.55	1.16	-299	
1137	7.05	200	2.5	7.13	0.00	5.97	1.80	18.64	1.15	-299	
1142	7.05	200	2.7	7.12	.00	5.41	1.78	18.71	1.14	-297	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Peristaltic

10/11/2013

1145

3

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	7.12	Alkalinity (g/g)	260	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	1.78	Carbon Dioxide (mg/L)	130	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	5.41	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.00	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	18.71	Hydrogen Sulfide (mg/L)	2	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-297	DTW (ft)	7.05	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.14	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments:				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>  Samplers: <input style="width: 100%;" type="text" value="C Huey"/>	Well ID: <u>MW-12D</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 50px;" type="text" value="2"/> inches
<b>WATER VOLUME CALCULATION</b>		
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot		
Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="7.54"/>		Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>
Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>	Date: <input style="width: 100%;" type="text" value="10/14/2013"/>	Time: <input style="width: 100%;" type="text" value="1023"/> <i>(i.e. 14:32)</i>
		1-inch=0.041      1.5-inch=0.092      2-inch=0.16      3-inch=0.36 4-inch=0.64      6-inch=1.4      8-inch=2.5      10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1033	7.58	160	0.42	6.78	1.86	6.57	2.573	15.81	1.674	-65.0	Clear
1043	7.59	160	0.84	6.81	1.40	7.98	2.695	15.66	1.752	-158.4	
1053	7.61	200	1.37	6.81	1.30	2.42	2.710	15.50	1.761	-200.4	
1103	7.61	200	1.9	6.83	1.33	1.78	2.734	15.53	1.777	-209.9	
1108	7.61	200	2.16	6.83	1.33	1.53	2.747	15.55	1.786	-215.2	
1113	7.61	200	2.33	6.84	1.32	2.01	2.761	15.39	1.796	-217.1	
1118	7.61	200	2.59	6.82	1.29	2.20	2.767	15.20	1.799	-222.0	
1123	7.61	200	2.85	6.82	1.26	1.51	2.739	15.69	1.798	-225.2	Clear

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/14/2013

1125

3.5

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.82	Alkalinity (g/g)	240	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	2.739	Carbon Dioxide (mg/L)	208	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	1.51	Ferrous Iron (mg/L)	0.1	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	1.26	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	15.69	Hydrogen Sulfide (mg/L)	3	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-225.2	DTW (ft)	7.61	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.798	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments:				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonol Facility</u>	Well ID: MW-13D Manual Entry:	Well Diameter: <input type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="Bill simons"/>		

### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <input style="width: 100%;" type="text" value="10.72"/>	Depth to Well Bottom (ft): <input style="width: 100%;" type="text"/>
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### Purging Data

Method: (i.e. low flow) <input style="width: 100%;" type="text" value="Low flow"/>	Date: <input style="width: 100%;" type="text" value="10/17/2013"/>	Time: <input style="width: 100%;" type="text" value="1535"/>				
			1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1540	11.05	220	0.3	6.16	1.17	0	3.75	13.80	2.41	-310	
1545	11.03	220	0.9	6.12	0	0	3.84	13.62	2.46	-316	
1555	11.05	220	1.5	6.17	0	0	3.77	13.45	2.41	-313	
1605	11.03	220	2.1	6.21	0	0	3.72	13.44	2.38	-306	
1615	11.03	220	2.7	6.23	0	0	3.71	13.29	2.38	-305	
1625	11.03	220	3.3	6.24	0	0	3.5	13.30	2.28	-305	
1630	11.03	220	3.6	6.25	0	0	3.45	13.29	2.20	-303	

### Sampling Data



Method: (i.e. low flow) <input style="width: 100%;" type="text" value="Low flow"/>	Date: <input style="width: 100%;" type="text" value="10/17/2013"/>	Time: (i.e. 14:32) <input style="width: 100%;" type="text" value="1635"/>	Total Volume of Water Purged: <input style="width: 100%;" type="text" value="3.6"/> (gal)
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HORIBA		HACH TEST KITS		SAMPLE SET			
pH	6.25	Alkalinity (g/g)	245	Parameter	Bottle	Pres.	Method
Spec. Cond. (mS/cm)	3.45	Carbon Dioxide (mg/L)	400	Select VOCs	<input checked="" type="checkbox"/> 3-40 mL glass vial	HCl	EPA 8260
Turbidity (NTU)	0	Ferrous Iron (mg/L)	0.2	MEE	<input checked="" type="checkbox"/> 2-40 mL glass vial	HCl	Lab SOP
DO (mg/L)	0	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/> 1-250 mL plastic (Field Filtered)	HNO3	SW6010B
		Hydrogen		Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/> 2-40 mL glass (Field Filtered)	None	lab specified



Temp.(°C)	13.29	Sulfide (mg/L)	4	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
ORP (mv)	-303	DTW (ft)		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
TDS (g/L)	2.20	* NOTE * HACH test kits are only required for MNA analysis wells.		Total Organic Carbon	<input checked="" type="checkbox"/>	2-40 mL amber glass vial	H3PO4	SW9060
Comments: Turb measured using Horiba. MN not measured.				Total Inorganic Carbon	<input type="checkbox"/>	1-120 mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

	Time	<input type="text"/>	
	Accuracy (m)	<input type="text"/>	
	Latitude	<input type="text"/>	
	Longitude	<input type="text"/>	
	Altitude	<input type="text"/>	
	Velocity	<input type="text"/>	

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>	Well ID: MW-55 Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 30px;" type="text" value="2"/> inches
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Samplers:
C. Huey

### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <input style="width: 80px;" type="text" value="4.93"/>	Depth to Well Bottom (ft): <input style="width: 80px;" type="text"/>
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### Purging Data

Method: <i>(i.e. low flow)</i>	Date: <input style="width: 80px;" type="text" value="10/08/2015"/>	Time: <input style="width: 80px;" type="text" value="1435"/>			
<input style="width: 100%;" type="text" value="Low flow"/>		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16
			4-inch=0.64	6-inch=1.4	8-inch=2.5
					10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1445	5.15	180	0.48	7.03	2.48	8.01	4.084	15.14	2.654	-51.5	Clear
1455	5.17	180	0.96	6.97	2.15	8.15	3.937	15.27	2.563	-65.6	
1505	5.16	180	1.44	6.94	1.48	4.93	2.944	15.07	1.913	-114.8	
1515	5.16	180	1.92	6.93	1.35	4.17	2.710	15.02	1.765	-130.1	
1520	5.16	180	2.16	6.93	1.29	3.92	2.683	14.92	1.743	-132.7	
1525	5.17	180	2.40	6.93	1.25	4.02	2.626	14.96	1.706	-133.1	
1530	5.17	180	2.64	6.93	1.21	3.95	2.623	14.94	1.705	-132.8	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/08/2013

1535

2.8

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.93	Alkalinity (g/g)	200	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	2.623	Carbon Dioxide (mg/L)	230	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	3.95	Ferrous Iron (mg/L)	0.5	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	1.21	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	14.94	Hydrogen Sulfide (mg/L)	0	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-132.8	DTW (ft)	5.17	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.705	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Collected MS/MSD same time as sample.. MW-5S_100813 MS/MSD (VOCs only).				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonomol Facility</u>	Well ID: <u>MW-9S</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="2"/> inches
Samplers: <input style="width: 100%;" type="text" value="C Huey"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>		Initial Depth to Water (ft): <input style="width: 50px;" type="text" value="7.03"/>
Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text" value="Low flow"/>		Date: <input style="width: 50px;" type="text" value="10/17/2013"/>
Time: <input style="width: 50px;" type="text" value="1025"/> <i>(i.e. 14:32)</i>		Depth to Well Bottom (ft): <input style="width: 50px;" type="text"/>

	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36			
	4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4			

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1035	7.98	120	0.32	7.05	1.55	31.2	0.911	16.40	0.912	-102.1	Clear w...
1045	8.15	120	0.63	7.01	1.10	27.4	1.140	16.46	0.741	-125.1	
1055	8.17	120	0.95	6.99	1.06	24.4	1.372	16.40	0.893	-139.1	
1105	8.17	120	1.26	6.95	0.93	22.5	1.484	16.46	0.963	-151.4	
1115	8.16	120	1.57	6.90	0.95	20.0	1.623	16.34	1.055	-163.8	
1125	8.15	120	1.88	6.91	0.92	18.5	1.685	16.36	1.096	-169.9	
1130	8.15	120	2.03	6.93	0.91	19.0	1.723	16.38	1.120	-176.3	
1135	8.14	120	2.19	6.93	0.90	18.2	1.729	16.37	1.123	-176.0	
1140	8.14	120	2.34	6.94	0.86	18.0	1.736	16.37	1.129	-175.3	
1145	8.14	120	2.5	6.95	0.83	17.6	1.740	16.45	1.138	-174.9	
1150	8.13	120	2.65	6.95	0.82	18.2	1.746	16.53	1.141	-176.8	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/17/2013

1155

2.75 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.95	Alkalinity (g/g)	160	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	1.746	Carbon Dioxide (mg/L)	144	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	18.2	Ferrous Iron (mg/L)	0.1	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.82	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	16.53	Hydrogen Sulfide (mg/L)	1	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-176.8	DTW (ft)	8.13	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.141	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments:				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>	Well ID: <div style="text-align: center; font-size: 0.8em;">MW-7S</div> Manual Entry: <div style="border: 1px solid black; padding: 2px; text-align: center;">101713</div>	Send to SharePoint  Well Diameter: <input style="width: 20px; text-align: center;" type="text" value="2"/> inches
Samplers: <div style="border: 1px solid black; padding: 2px;">C Huey</div>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
<b>Purging Data</b>		Initial Depth to Water (ft): <div style="border: 1px solid black; padding: 2px; text-align: center;">6.16</div>

Method: <i>(i.e. low flow)</i>	Date: <input style="width: 60px;" type="text"/>	Time: <input style="width: 60px;" type="text" value="1606"/>			
Low flow		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16
			4-inch=0.64	6-inch=1.4	8-inch=2.5
					10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1616	7.21	100	0.26	6.53	2.05	26.2	7.706	17.06	5.008	-48.5	Slightly...
1626	8.32	100	0.52	6.55	1.22	25.1	7.584	17.23	4.928	-74.3	Slight o...
1636	8.81	100	0.78	6.53	1.14	48.2	7.537	17.19	4.897	-90.6	
1646	9.33	100	1.04	6.56	1.03	50.3	7.491	17.29	4.871	-95.3	
1651	9.96	250	1.37	6.53	1.28	27.9	7.665	17.25	4.984	-94.5	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/17/2013

0800

1.4 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	6.53	Alkalinity (g/g)	240	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	7.665	Carbon Dioxide (mg/L)	196	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	27.9	Ferrous Iron (mg/L)	0	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	1.28	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	17.25	Hydrogen Sulfide (mg/L)	0	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-94.5	DTW (ft)	7.66	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	4.984	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
Comments: This well typically pumps dry.				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-size: 1.2em;"><u>Ekonol Facility</u></div>	Well ID: <div style="text-align: center; font-size: 0.8em;">MW-8S</div> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 40px; text-align: center;" type="text"/> inches
Samplers: <input style="width: 100%;" type="text"/>	<b>WATER VOLUME CALCULATION</b> = (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
	Initial Depth to Water (ft): <input style="width: 60px; text-align: center;" type="text"/>	Depth to Well Bottom (ft): <input style="width: 60px; text-align: center;" type="text"/>

**Purging Data**

Method: <i>(i.e. low flow)</i> <input style="width: 100%;" type="text"/>	Date: <input style="width: 100%;" type="text"/>	Time: <input style="width: 100%;" type="text"/>				
	10/09/2013	0810	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
		<i>(i.e. 14:32)</i>	4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
0820	6.68	100	0.26	6.78	3.66	8.12	5.524	15.09	3.590	32.7	Clear
0830	8.44	100	0.52	6.84	1.23	9.89	5.066	15.60	3.283	-0.4	
0840	9.31	100	0.78	6.95	1.21	8.05	3.084	15.93	1.997	-24.0	
0850	9.36	100	1.04	7.00	1.16	11.9	2.401	16.39	1.561	-34.5	
0900	9.36	100	1.30	7.03	1.08	7.83	2.774	16.51	1.809	-40.5	
0910	9.36	120	1.62	7.02	1.07	6.93	3.075	16.53	1.997	-52.6	
0920	9.40	120	1.94	6.97	1.04	3.93	3.156	16.80	2.052	-64.2	
0925	9.41	120	2.10	7.02	1.05	3.84	3.173	16.94	2.062	-69.4	
0930	9.42	120	2.26	7.01	1.04	3.70	3.202	17.03	2.083	-76.7	
0935	9.42	120	2.42	6.99	1.01	3.52	3.336	17.07	2.166	-86.1	
0940	9.43	120	2.58	6.98	0.99	3.29	3.400	16.87	2.202	-88.1	
0945	9.43	120	2.74	6.97	0.96	3.23	3.406	16.94	2.214	-89.4	



**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/09/2013

0948

3.5 (gal)

HORRIBA	
pH	6.97
Spec. Cond. (mS/cm)	3.406
Turbidity (NTU)	3.23
DO (mg/L)	0.96
Temp.(°C)	16.94
ORP (mv)	-89.4
TDS (g/L)	2.214

HACH TEST KITS	
Alkalinity (g/g)	160
Carbon Dioxide (mg/L)	346
Ferrous Iron (mg/L)	0.1
Manganese (mg/L)	0
Hydrogen Sulfide (mg/L)	0
DTW (ft)	9.43

\* NOTE \* HACH test kits are only required for MNA analysis wells.

SAMPLE SET				
Parameter		Bottle	Pres.	Method
Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
Microbial Census	<input type="checkbox"/>			
Hydrogen Acetylene	<input type="checkbox"/>			

Comments:

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonomol Facility</u>	Well ID: <u>INJ-02</u> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 20px;" type="text" value="4"/> inches
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Samplers:
<input style="width: 95%;" type="text" value="Bill simons"/>

WATER VOLUME CALCULATION	
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot	
Initial Depth to Water (ft): <input style="width: 80%;" type="text" value="6.5"/>	Depth to Well Bottom (ft): <input style="width: 80%;" type="text"/>

**Purging Data**

Method: <i>(i.e. low flow)</i>	Date: <input style="width: 80%;" type="text" value="10/17/2013"/>	Time: <input style="width: 80%;" type="text" value="1100"/>				
<input style="width: 95%;" type="text" value="Low flow"/>		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1105	7.06	120	0.2	6.23	0.66	8.2	1.72	16.95	1.10	-151	
1115	7.35	120	0.6	6.19	0	1	1.62	16.73	1.03	-152	
1125	7.59	120	1	6.10	0	1.7	1.63	16.94	1.04	-139	
1135	7.70	120	1.4	5.89	0	0	1.76	17.11	1.13	-111	
1145	7.79	120	1.8	5.68	0	0	2.06	17.36	1.33	-88	
1155	7.90	120	2.2	5.57	0	0	2.37	17.53	1.53	-76	
1205	7.95	120	2.6	5.51	0	0	2.64	17.46	1.69	-71	
1215	8.04	120	3.4	5.49	0	0	2.65	17.42	1.71	-70	
1220	8.09	120	3.6	5.47	0	0	2.69	17.50	1.73	-69	
1225	8.10	120	3.8	5.47	0	0	2.73	17.51	1.75	-60	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

Low flow

10/17/2013

1235

3.8

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	5.47	Alkalinity (g/g)	220	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	2.73	Carbon Dioxide (mg/L)	280	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	0	Ferrous Iron (mg/L)	2.2	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0	Manganese (mg/L)	0	Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	17.51	Hydrogen Sulfide (mg/L)	0	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-60	DTW (ft)		Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.75	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Turbidity measured using Horiba. Oil thickness in well is 1.9'.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <u>Ekonomol Facility</u>	Well ID: <u>INJ-04</u> Manual Entry:	Send to SharePoint  Well Diameter: <input type="text" value="4"/> inches
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Samplers:
Doruk Ucak

### WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Initial Depth to Water (ft): <input type="text" value="7.45"/>	Depth to Well Bottom (ft): <input type="text"/>
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### Purging Data

Method: <i>(i.e. low flow)</i>	Date: <input type="text" value="10/17/2013"/>	Time: <input type="text" value="1240"/>				
low flow		<i>(i.e. 14:32)</i>	1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
1245	7.55	200	0.27	5.70	0.00	84.2	0.365	18.21	0.240	-114	no odor
1250	7.70	150	0.47	5.65	0.00	79.7	0.503	18.33	0.324	-123	same
1255	7.76	150	0.67	5.60	0.00	90.4	0.628	18.19	0.403	-127	same
1300	7.79	150	0.87	5.59	0.00	95.0	0.762	18.54	0.491	-130	same
1305	7.79	100	1.00	5.58	0.00	90.9	0.832	18.57	0.533	-133	same
1310	7.80	200	1.27	5.57	0.00	76.0	0.980	17.81	3.36	-283	same
1315	7.80	100	1.40	5.58	0.00	46	1.06	18.03	0.680	-141	same
1320	7.80	150	1.60	5.59	0.00	42.4	1.11	17.98	0.709	-142	same
1325	7.81	150	1.80	5.60	0.00	45.1	1.05	17.68	0.672	-149	same
1330	7.81	150	2.00	5.61	0.0	37.8	1.11	17.86	0.711	-150	same
1335	8.61	150	2.20	5.61	0.00	35.8	1.15	17.80	0.737	-156	same
1340	8.62	150	2.40	5.62	0.0	5.13	1.24	17.62	0.812	-155	same
1345	7.82	150	2.60	5.63	0.00	33.8	1.41	17.57	0.901	-155	same
1350	7.82	150	2.80	5.64	0.00	27.4	1.46	17.53	0.934	-160	same
1355	7.83	150	3.00	5.66	0.00	25.7	1.54	17.53	0.972	-159	
1400	7.83	150	3.20	5.68	0.00	24.3	1.62	17.54	1.04	-159	
1405	7.83	150	3.40	5.70	0.00	23.7	1.65	17.56	1.06	-158	
1410	7.83	150	3.60	5.72	0.00	23.0	1.68	17.57	1.08	-158	

**Sampling Data**

Method: (i.e. low flow)

Date:

Time: (i.e. 14:32)

Total Volume of Water Purged:

DT

10/17/2013

1415

3.60

(gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	5.72	Alkalinity (g/g)	455	Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	1.68	Carbon Dioxide (mg/L)	404	Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	23.0	Ferrous Iron (mg/L)	4	MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0.00	Manganese (mg/L)		Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	17.57	Hydrogen Sulfide (mg/L)	0.1	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-158	DTW (ft)	7.83	Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	1.08	<i>* NOTE * HACH test kits are only required for MNA analysis wells.</i>		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: DTF 6.9' DTW 7.45'				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

## LOW FLOW WELL SAMPLING RECORD

Site Name: <div style="text-align: center; font-weight: bold; margin-top: 5px;">Ekonol Facility</div>	Well ID: <div style="text-align: center; font-weight: bold; margin-top: 5px;">INJ-05</div> Manual Entry: <input style="width: 100%;" type="text"/>	Send to SharePoint  Well Diameter: <input style="width: 30px; text-align: center;" type="text" value="4"/> inches
Samplers: <input style="width: 100%; height: 20px;" type="text" value="Wps"/>	WATER VOLUME CALCULATION	
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot		
Initial Depth to Water (ft): <div style="text-align: center; font-weight: bold; margin-top: 5px;">7.25</div>		Depth to Well Bottom (ft): <input style="width: 100%; height: 20px;" type="text"/>

### Purging Data

Method: <i>(i.e. low flow)</i>	Date: <input style="width: 80%;" type="text" value="10/17/2013"/>	Time: <input style="width: 80%;" type="text" value="13:25"/>				
<input style="width: 100%; height: 20px;" type="text" value="Low flow"/>	<i>(i.e. 14:32)</i>		1-inch=0.041	1.5-inch=0.092	2-inch=0.16	3-inch=0.36
			4-inch=0.64	6-inch=1.4	8-inch=2.5	10-inch=4

Time (24hrs) (hh:mm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	pH	DO (mg/L)	Turbidity (NTU)	Spec Cond (mS/cm)	Temp (°C)	TDS (g/L)	ORP (mV)	Comments
13:25	7.25	200	0	5.75	6.44	216	2.80	21.46	1.80	-226	Substra...
13:35	7.70	200	0.5	5.62	0.23	153	3.27	18.24	2.10	-347	Turnin...
13:45	8.15	200	1.0	5.47	0.0	239	3.39	16.80	2.14	-461	Same
13:55	8.50	150	1.5	5.36	0.0	654	3.35	16.63	2.15	-475	Same
14:10	8.08	150	2.1	5.67	0.41	681	3.67	17.02	2.35	-455	
14:20	7.95	150	2.3	5.72	0.16	707	3.71	17.06	2.37	-441	
14:30	8.03	150	2.7	5.71	0	29	3.77	16.33	2.41	-424	
14:35	8.1	150	2.9	5.73	0	27	3.76	16.39	2.41	-421	
14:40	8.1	150	3.1	5.72	0	43	3.73	16.39	2.39	-418	

**Sampling Data**

Method: (i.e. low flow) Dedicated tubing Date: 10/17/2013 Time: (i.e. 14:32) 1450 Total Volume of Water Purged: 3.1 (gal)

HORRIBA		HACH TEST KITS		SAMPLE SET				
pH	5.72	Alkalinity (g/g)		Parameter		Bottle	Pres.	Method
Spec. Cond. (mS/cm)	3.73	Carbon Dioxide (mg/L)		Select VOCs	<input checked="" type="checkbox"/>	3-40mL glass vial	HCl	EPA 8260
Turbidity (NTU)	43	Ferrous Iron (mg/L)		MEE	<input checked="" type="checkbox"/>	2-40mL glass vial	HCl	Lab SOP
DO (mg/L)	0	Manganese (mg/L)		Dissolved Inorganics	<input checked="" type="checkbox"/>	1-250 mL plastic (Field Filtered)	HNO3	SW6010B
Temp.(°C)	16.39	Hydrogen Sulfide (mg/L)	5	Chloride / Nitrate / Sulfate	<input checked="" type="checkbox"/>	2-40mL glass (Field Filtered)	None	lab specified
ORP (mv)	-418	DTW (ft)		Ortho Phosphate	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	None	EPA 365.1
TDS (g/L)	2.39	* NOTE * HACH test kits are only required for MNA analysis wells.		Sulfide	<input checked="" type="checkbox"/>	1-250 mL plastic (Field filtered)	NaOH/Zn Acetate	MS-45000-S2-F
Comments: Turbidity measured using Horiba. Water too stained for Hach colorimetric tests. H2S >5.				Total Organic Carbon	<input checked="" type="checkbox"/>	2-40mL amber glass vial	H3PO4	SW9060
				Total Inorganic Carbon	<input type="checkbox"/>	1-120mL glass amber	None	SW9060
				Microbial Census	<input type="checkbox"/>			
				Hydrogen Acetylene	<input type="checkbox"/>			

**PARSONS**

**ATTACHMENT C**  
**DATA USABILITY REPORT**



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# DATA USABILITY SUMMARY REPORT

## EKONOL FACILITY

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*Prepared For:*

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**DECEMBER 2013**

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## LIST OF ATTACHMENTS

ATTACHMENT A VALIDATED LABORATORY DATA

## SECTION 1

### DATA USABILITY SUMMARY

Groundwater samples were collected for the 2013 3<sup>rd</sup> Quarter Monitoring from the Ekonol Facility site in Wheatfield, New York from October 8, 2013 through October 18, 2013. Analytical results from these samples were reviewed by Parsons for usability with respect to the following requirements:

- Work Plan,
- NYSDEC Analytical Services Protocol (ASP), and
- USEPA Region II Standard Operating Procedures (SOPs).

The analytical laboratories for this project were Eurofins Laboratories, Inc. (Eurofins), Microseeps, Inc. (Microseeps), and Microbial Insights (MI). Eurofins is approved to conduct project analyses through the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP).

#### 1.1 LABORATORY DATA PACKAGES

The laboratory data package turnaround time, defined as the time from sample receipt by the laboratory to receipt of the analytical data packages by Parsons, was 29-40 days for the Ekonol samples. Comments on specific quality control (QC) and other requirements are discussed in detail in the attached data validation report.

#### 1.2 SAMPLING AND CHAIN-OF-CUSTODY

The samples were collected, shipped under a COC record, and received at the laboratory within one day of sampling. All samples were received intact and in good condition at the laboratories. It was noted that volatile samples OR-4SM, OR-14SM, and OR-15SM and the methane, ethane, and ethene samples OR-4SM, OR-6SM, and OR-14SM were received and analyzed at Eurofins with a pH of 6-7 which exceeds the pH<2 preservation requirement.

#### 1.3 LABORATORY ANALYTICAL METHODS

The groundwater samples collected from the Ekonol site were analyzed for certain volatile organic compounds (VOCs) including methane, ethane, and ethene; dissolved metals; dissolved chloride; dissolved nitrate; dissolved orthophosphate; dissolved sulfate; dissolved sulfide; total organic carbon (TOC); total inorganic carbon (TIC); total carbon; hydrogen; acetylene; and/or dechlorinating bacteria and functional genes. Summaries of issues concerning these laboratory analyses are presented in Subsections 1.3.1 through 1.3.3. The data qualifications resulting from the data review and statements on the laboratory analytical precision, accuracy, representativeness, completeness, and comparability (PARCC) are discussed for each analytical

method in Section 2. The laboratory data were reviewed and may be qualified with the following validation flags:

- "U" - not detected at the value given,
- "UJ" - estimated and not detected at the value given,
- "J" - estimated at the value given,
- "N" - presumptive evidence at the value given, and
- "R" - unusable value.

The validated laboratory data were tabulated and are presented in Attachment A.

### **1.3.1 Volatile Organic Analysis Including Methane, Ethane, and Ethene**

The groundwater samples collected from the Ekonol site were analyzed for certain VOCs using the USEPA SW-846 8260C analytical method. In addition, certain groundwater samples were analyzed for methane, ethane, and ethene using the modified USEPA approved RSK-175 analytical method. Certain reported results for these samples were considered estimated based upon holding times and matrix spike/matrix spike duplicate precision and accuracy. The reported VOC and methane, ethane, and ethene analytical results were 100% complete (i.e., usable) based upon the groundwater data presented by Eurofins. PARCC requirements were met.

### **1.3.2 Metals Analysis**

Certain groundwater samples collected from the Ekonol site were analyzed for dissolved metals using the USEPA SW-846 6010C analytical method. Certain reported results for the metals samples were considered estimated based upon instrument calibrations, interference control sample recoveries, and matrix spike recoveries. The reported metals analytical results were 100% complete (i.e., usable) based upon the groundwater data presented by Eurofins. PARCC requirements were met.

### **1.3.3 Other Parameters**

The groundwater samples collected from the Ekonol site were analyzed for dissolved chloride, nitrate, and sulfate using the USEPA 300.0 analytical method; dissolved sulfide using the SM20 4500 analytical method; dissolved orthophosphate using the USEPA 365.3; TOC, TIC, and total carbon using the SM20 5310C analytical method; hydrogen and acetylene using the Microseeps SOP AM20GAX; and/or dechlorinating bacteria and functional genes using the MI SOP. Custody documentation, holding times, laboratory blanks, matrix spike/matrix spike duplicate, laboratory duplicate precision, laboratory control samples, instrument calibrations, quantitation limits, sample result identification, and field duplicate precision were reviewed for compliance. The reported results for these samples did not require qualification resulting from data validation. The reported analytical results for these parameters were 100% complete (i.e., usable) based upon the groundwater data presented by Eurofins, Microseeps, and MI. PARCC requirements were met.

## SECTION 2

### DATA VALIDATION REPORT

#### 2.1 3<sup>RD</sup> QUARTER MONITORING EVENT

Data review has been completed for data packages generated by Eurofins containing groundwater samples collected from the Ekonol Facility site during the 3<sup>rd</sup> Quarter Monitoring event. All of these samples were shipped under a COC record and received intact by the analytical laboratory. Analytical results from the project samples were submitted by Eurofins within the following sample delivery groups (SDGs): BPW74, BPW75, BPW76, BPW77, BPW78, BPW79, BPW80, BPW81, and BPW82. Data validation was performed for all samples in accordance with the most current editions of the USEPA Region II SOPs and the NYSDEC ASP for organic and inorganic data review. This data validation and usability report is presented by analysis type. The validated laboratory data are tabulated and presented in Attachment A.

##### 2.1.1 Volatiles Including Methane, Ethane, and Ethene (MEE)

The following items were reviewed for compliancy in the volatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Laboratory method blank and trip blank contamination
- Instrument performance
- Initial and continuing calibrations
- Internal standard responses
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of holding times and MS/MSD precision and accuracy as discussed below.

## Holding Times

Volatile samples OR-4SM, OR-14SM, and OR-15SM were received by the laboratory with a pH of 6-7 and analyzed one to three days outside the 7-day holding time requirement for unpreserved samples. Similarly, the methane, ethane, and ethene samples OR-6SM and OR-14SM were received by the laboratory with a pH of 7 and analyzed one to two days outside the 7-day holding time requirement for unpreserved samples. Therefore, the results for these samples were considered estimated, possibly biased low, with positive results qualified “J” and nondetected results qualified “UJ” for the affected samples.

## MS/MSD Precision and Accuracy

All MS/MSD precision (relative percent difference; RPD) and accuracy (percent recovery; %R) measurements were considered acceptable and within QC limits for designated spiked project samples with the exception of the high MS/MSD accuracy results for ethene (259%R/245%R; QC limit 35-162%R) during the spiked analyses of OR-3SM; and the high MS/MSD accuracy results for ethene (213%R/236%R; QC limit 35-162%R) during the spiked analyses of OR-13SM. Validation qualification was not required for parent sample OR-3SM since ethene was not detected. However, the positive ethene result for parent sample OR-13SM was considered estimated, possibly biased high, and qualified “J”.

## Usability

All volatile groundwater sample results including methane, ethane, and ethene were considered usable following data validation.

## Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The volatile groundwater presented were 100% (i.e., usable). The validated volatile laboratory data are tabulated and presented in Attachment A.

It was also noted that many samples were diluted and reanalyzed due to the exceedance in instrument calibration ranges for cis-1,2-dichloroethene, 1,1-dichloroethane, trichloroethene, tetrachloroethene, 1,1,1-trichloroethane, vinyl chloride, methane, ethane, and/or ethene. Therefore, the diluted result for these compounds was reported for these samples in the validated laboratory data table in Attachment A.

### **2.1.2 Dissolved Metals**

The following items were reviewed for compliancy in the metals analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration, and preparation blank contamination

- Initial and continuing calibration verifications
- Interference check sample (ICS) recoveries
- Matrix spike recoveries
- Laboratory duplicate precision
- Field duplicate precision
- Laboratory control sample recoveries
- Serial dilutions
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of instrument calibrations, ICS recoveries, and matrix spike recoveries as discussed below.

#### Instrument Calibrations

All initial and continuing calibration verifications were analyzed at the appropriate frequency with recoveries within QC limits. All instrument calibration reference standards were analyzed at the appropriate frequency with recoveries within the 50-150%R QC limit with the exception of the high standard recovery for dissolved calcium (134.9%R) associated with samples collected on 10/11/13 except RMW-3D and samples OR-5SM, PMW-5S, MW-3S, OR-14SM, PMW-10S, and PMW-6D. Positive dissolved calcium were considered estimated, possibly biased high, and qualified “J” for the associated samples.

#### ICS Recoveries

All ICS recoveries were considered acceptable and within the 80-120%R QC limit for all analytes with the exception of the low ICS recovery for dissolved magnesium (78.9%R, 78.1%R) associated with samples collected on 10/11/13. Therefore, the dissolved magnesium results were considered estimated, possibly biased low, with positive results qualified “J” and nondetected results qualified “UJ” for the affected samples.

#### Matrix Spike Recoveries

All matrix spike recoveries were considered acceptable and within the 75-125%R QC limit for all analytes with the exception of the low matrix spike recoveries for dissolved selenium (64%R, 30%R, 24%R, 73%R) associated with samples collected on 10/16/13, 10/17/13, and 10/18/13. Therefore, the dissolved selenium results were considered estimated, possibly biased low, with positive results qualified “J” and nondetected results qualified “UJ” for the affected samples.

### Usability

All metals sample results were considered usable following data validation.

### Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The metals data presented by Eurofins were 100% complete (i.e., usable). The validated groundwater laboratory data are tabulated and presented in Attachment A.



**ATTACHMENT A**  
**VALIDATED LABORATORY DATA**

EkonoL Facility Validated Groundwater Analytical Results Wheatfield, New York 3rd Quarter 2013 (October)		Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	INJ-01 INJ-01_101413 7236825 LANCASTERLABS BPW78 WATER 10/14/2013 16:30 12/5/2013	INJ-02 INJ-02_101713 7242237 LANCASTERLABS BPW81 WATER 10/17/2013 12:35 12/5/2013	INJ-04 INJ-04_101713 7242239 LANCASTERLABS BPW81 WATER 10/17/2013 14:15 12/5/2013	INJ-05 INJ-05_101713 7242240 LANCASTERLABS BPW81 WATER 10/17/2013 14:50 12/5/2013	INJ- 7D INI-7D_101013 7233066/033KJ-2 LANCASTERLABS/MI BPW76/033KJ WATER 10/10/2013 11:40 12/5/2013	INJ- 8D INI-8D_101113 7234661 LANCASTERLABS BPW77 WATER 10/11/2013 9:35 12/5/2013
CAS NO.	COMPOUND	UNITS:						
<b>VOLATILES</b>								
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	400 U	160 U	80 U	160 U	800 U	340
75-34-3	1,1-DICHLOROETHANE	ug/l	500 U	200 U	100 U	200 U	1000 U	510
75-35-4	1,1-DICHLOROETHENE	ug/l	400 U	340 J	80 U	160 U	800 U	16 U
75-00-3	CHLOROETHANE	ug/l	500 U	200 U	100 U	200 U	1000 U	20 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/l	140000	190000	65000	130000	280000	16000
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/l	400 U	160 U	80 U	230 J	1200 J	16 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	400 U	240 J	80 U	160 U	800 U	16 U
79-01-6	TRICHLOROETHYLENE (TCE)	ug/l	3900	270 J	100 U	29000	30000	45 J
75-01-4	VINYL CHLORIDE	ug/l	4000	3800	5000	1400	5500	2900
74-85-1	ETHENE	ug/l	610	690	830	390	430	2300
74-84-0	ETHANE	ug/l	33	86	74	54	37	16
74-82-8	METHANE	ug/l	2100	1500	2700	2400	590	7500
<b>DISSOLVED METALS</b>								
7429-90-5	ALUMINUM	mg/l	0.0828 U	0.0828 U	0.0828 U	0.0942 J	0.0828 U	0.0828 U
7440-38-2	ARSENIC	mg/l	0.0068 U	0.0068 U	0.0068 U	0.0074 J	0.0155 J	0.0068 U
7440-70-2	CALCIUM	mg/l	422	203	114	360	402 J	402 J
7439-89-6	IRON	mg/l	4.47	338	479	0.728	37.8	5.66
7439-95-4	MAGNESIUM	mg/l	201	131	41.5	216	111	117 J
7439-96-5	MANGANESE	mg/l	1.14	2.26	2.11	0.681	1.05	0.892
9/7/7440	POTASSIUM	mg/l	8.1	6.86	4.97	7.69	8.53	13.4
7782-49-2	SELENIUM	mg/l	0.0084 U	0.0084 UJ	0.0084 UJ	0.0084 UJ	0.0084 U	0.0084 U
7440-23-5	SODIUM	mg/l	242	191	75.5	227	187	147
<b>WET CHEMISTRY</b>								
7440-44-0	TOTAL CARBON	mg/l	910				627	792
TOC	TOTAL ORGANIC CARBON	mg/l	715	962	1150	465	424	544
TIC	TOTAL INORGANIC CARBON	mg/l	195				203	247
<b>DISSOLVED INORGANICS</b>								
16887-00-6	CHLORIDE (AS CL)	mg/l	374	256	114	351	479	248
14797-55-8	NITROGEN, NITRATE (AS N)	mg/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
PORTHO	PHOSPHORUS, TOTAL ORTHOPHOSPHATE (AS P)	mg/l	0.6 U	0.03 U	0.03 U	0.6 U	0.03 U	0.6 U
14808-79-8	SULFATE (AS SO4)	mg/l	66.7	1.5 U	1.5 U	211	341	6.8
18496-25-8	SULFIDE	mg/l	128	0.36	0.17	234	1.1	90.9
<b>MICRO GENE ANALYSIS</b>								
BVC	BVC	cells/mL					49700	
DHBt	DHBt	cells/mL					13700	
DHC	DHC	cells/mL					170000	
TCE	TCE	cells/mL					165000	
VCR	VCR	cells/mL					2170	
<b>MICROSEEPS DATA</b>								
74-86-2	Acetylene	ug/l					31	
1333-74-0	Hydrogen	nM					240	

EKONOL FACILITY		Location ID:	INJ-09D	INJ-10D	INJ-11D	Dup of INJ-11D		INJ-12D	INJ-13D
Validated Groundwater Analytical Results		Sample ID:	INJ-09D_101013	INJ-10D_101613	INJ-11D_100813	INJ-11D	INJ-11D	INJ-12D	INJ-13D
Wheatfield, New York		Lab Sample Id:	7233076/033KJ-6/10369001	7239989/033KJ-17	7229758	INJ-110D_100813	INJ-110D_100813	INJ-12D_101113	INJ-13D_100813
3rd Quarter 2013 (October)		Source:	LANCASTERLABS/MI/MS	LANCASTERLABS/MI	LANCASTERLABS	LANCASTERLABS	LANCASTERLABS	LANCASTERLABS	LANCASTERLABS
		SDG:	BPW76	BPW80/033KJ	BPW74	BPW74	BPW74	BPW77	BPW74
		Matrix:	WATER	WATER	WATER	WATER	WATER	WATER	WATER
		Sampled:	10/10/2013 15:50	10/16/2013 10:05	10/8/2013 14:05	10/8/2013 12:01	10/8/2013 12:01	10/11/2013 12:35	10/8/2013 12:15
		Validated:	12/5/2013	12/5/2013	12/5/2013	12/5/2013	12/5/2013	12/5/2013	12/5/2013
CAS NO.	COMPOUND	UNITS:							
<b>VOLATILES</b>									
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	400 U	9900	80 U	80 U	160 U	160 U	
75-34-3	1,1-DICHLOROETHANE	ug/l	500 U	1700	100 U	100 U	200 U	200 U	
75-35-4	1,1-DICHLOROETHENE	ug/l	400 U	150	150 J	140 J	310 J	160 U	
75-00-3	CHLOROETHANE	ug/l	500 U	5 U	100 U	100 U	200 U	200 U	
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/l	250000	5200	76000	72000	210000	86000	
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/l	400 U	17 J	80 U	80 U	330 J	160 U	
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	400 U	16 J	100 J	99 J	190 J	160 U	
79-01-6	TRICHLOROETHYLENE (TCE)	ug/l	20000	13 J	5800	5200	34000	8300	
75-01-4	VINYL CHLORIDE	ug/l	11000	770	2300	2200	9200	9400	
74-85-1	ETHENE	ug/l	1100	470	99	85	2200	5200	
74-84-0	ETHANE	ug/l	23	15	15	13	85	52	
74-82-8	METHANE	ug/l	1600	9100	1800	1700	5100	8500	
<b>DISSOLVED METALS</b>									
7429-90-5	ALUMINUM	mg/l	0.0828 U	0.0828 U	0.0828 U	0.0828 U	0.0828 U	0.0828 U	0.0828 U
7440-38-2	ARSENIC	mg/l	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.013 J	0.0068 U	
7440-70-2	CALCIUM	mg/l	616	235	194	193	463 J	451	
7439-89-6	IRON	mg/l	15.3	2.45	0.186 J	0.194 J	43.3	2.2	
7439-95-4	MAGNESIUM	mg/l	126	50.2	123	122	137 J	126	
7439-96-5	MANGANESE	mg/l	1.3	0.4	0.369	0.375	1.21	0.633	
9/7/7440	POTASSIUM	mg/l	7.91	9.29	10.8	10.8	11	10.7	
7782-49-2	SELENIUM	mg/l	0.0084 U	0.0084 UJ	0.0084 U	0.0084 U	0.0084 U	0.0084 U	
7440-23-5	SODIUM	mg/l	203	224	99.1	101	292	266	
<b>WET CHEMISTRY</b>									
7440-44-0	TOTAL CARBON	mg/l	1060	334	293		895	688	
TOC	TOTAL ORGANIC CARBON	mg/l	784	218	171	165	668	530	
TIC	TOTAL INORGANIC CARBON	mg/l	280	116	122		226	157	
<b>DISSOLVED INORGANICS</b>									
16887-00-6	CHLORIDE (AS CL)	mg/l	402	359	154	161	531	484	
14797-55-8	NITROGEN, NITRATE (AS N)	mg/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	
PORTHO	PHOSPHORUS, TOTAL ORTHOPHOSPHATE (AS P)	mg/l	0.86	0.6 U	0.6 U	0.55	0.55	0.6 U	
14808-79-8	SULFATE (AS SO4)	mg/l	44.2	3.2 J	178	195	176	133	
18496-25-8	SULFIDE	mg/l	27.5	77.6	97		80.8	60.7	
<b>MICRO GENE ANALYSIS</b>									
BVC	BVC	cells/mL	190000	13100					
DHBt	DHBt	cells/mL	9740	3870					
DHC	DHC	cells/mL	1020000	471000					
TCE	TCE	cells/mL	1720000	178000					
VCR	VCR	cells/mL	17500	88200					
<b>MICROSEEPS DATA</b>									
74-86-2	Acetylene	ug/l	2.9						
1333-74-0	Hydrogen	nM							

EkonoL Facility Validated Groundwater Analytical Results Wheatfield, New York 3rd Quarter 2013 (October)		Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	MW- 1S MW-1S_101613 7239991 LANCASTERLABS BPW80 WATER 10/16/2013 11:15 12/5/2013	MW- 2S MW-2S_101513 7238390/033KJ-16 LANCASTERLABS/MI BPW79/033KJ WATER 10/15/2013 17:00 12/5/2013	MW- 3S MW-3S_101013 7233069 LANCASTERLABS BPW76 WATER 10/10/2013 8:00 12/5/2013	MW-4S MW-4S_101713 7242232 LANCASTERLABS BPW81 WATER 10/17/2013 9:20 12/5/2013	MW-5S MW-5S_100813 7229755 LANCASTERLABS BPW74 WATER 10/8/2013 15:35 12/5/2013	MW-6S MW-6S_101713 7242234 LANCASTERLABS BPW81 WATER 10/17/2013 10:20 12/5/2013
CAS NO.	COMPOUND	UNITS:						
<b>VOLATILES</b>								
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.8 U	400 U	0.8 U	0.86 J	0.8 U	0.87 J
75-34-3	1,1-DICHLOROETHANE	ug/l	1 U	500 U	1 U	3.2 J	1 U	7.4
75-35-4	1,1-DICHLOROETHENE	ug/l	2.4 J	670 J	0.8 U	4 J	0.8 U	1.3 J
75-00-3	CHLOROETHANE	ug/l	1 U	500 U	1 U	1 U	1 U	1 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/l	200	240000	0.8 U	1300	1.6 J	66
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/l	0.8 U	400 U	0.8 U	0.8 U	0.8 U	0.8 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	8.9	1800 J	0.8 U	27	0.8 U	0.8 U
79-01-6	TRICHLOROETHYLENE (TCE)	ug/l	41	730 J	1 U	32	1 U	1 U
75-01-4	VINYL CHLORIDE	ug/l	13	27000	1 U	920	30	230
74-85-1	ETHENE	ug/l	1 U	460	1 U	300	1 U	15
74-84-0	ETHANE	ug/l	1 U	43	1 U	20	1.5 J	54
74-82-8	METHANE	ug/l	15	860	69	4400	17	200
<b>DISSOLVED METALS</b>								
7429-90-5	ALUMINUM	mg/l	0.0828 U	0.0828 U	0.0837 J	0.0828 U	0.0828 U	
7440-38-2	ARSENIC	mg/l	0.0068 U	0.0079 J	0.0068 U	0.0068 U	0.0068 U	
7440-70-2	CALCIUM	mg/l	300	449	176 J	327	243	
7439-89-6	IRON	mg/l	0.043 U	4.1	0.228 J	0.24 J	0.591	
7439-95-4	MAGNESIUM	mg/l	392	284	101	468	131	
7439-96-5	MANGANESE	mg/l	0.444	2.23	0.301	0.539	0.166	
9/7/7440	POTASSIUM	mg/l	4.23	3.79	28.4	7.47	2.65	
7782-49-2	SELENIUM	mg/l	0.0084 UJ	0.0084 U	0.0084 U	0.0084 UJ	0.0084 U	
7440-23-5	SODIUM	mg/l	67.9	403	4610	190	90.8	
<b>WET CHEMISTRY</b>								
7440-44-0	TOTAL CARBON	mg/l	68.4	168	52.9	207		
TOC	TOTAL ORGANIC CARBON	mg/l	1.2	5.7	4.4	13.6	1.9	
TIC	TOTAL INORGANIC CARBON	mg/l	67.2	162	48.5	193		
<b>DISSOLVED INORGANICS</b>								
16887-00-6	CHLORIDE (AS CL)	mg/l	38.9	1010	7000	184	149	
14797-55-8	NITROGEN, NITRATE (AS N)	mg/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	
PORTHO	PHOSPHORUS, TOTAL ORTHOPHOSPHATE (AS P)	mg/l	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	
14808-79-8	SULFATE (AS SO4)	mg/l	1940	1020	450	1840	790	
18496-25-8	SULFIDE	mg/l	0.054 U	0.054 U	0.054 U	29.1	0.054 U	
<b>MICRO GENE ANALYSIS</b>								
BVC	BVC	cells/mL		3730				
DHBt	DHBt	cells/mL		185				
DHC	DHC	cells/mL		6340				
TCE	TCE	cells/mL		372				
VCR	VCR	cells/mL		10.3				
<b>MICROSEEPS DATA</b>								
74-86-2	Acetylene	ug/l						
1333-74-0	Hydrogen	nM						

EkonoL Facility Validated Groundwater Analytical Results Wheatfield, New York 3rd Quarter 2013 (October)		Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	MW- 7D MW-7D_101613 7239995 LANCASTERLABS BPW80 WATER 10/16/2013 13:20 12/5/2013	MW-7S MW-7S_101713 7242231 LANCASTERLABS BPW81 WATER 10/17/2013 8:00 12/5/2013	MW- 8S MW-8S_100913 7232099 LANCASTERLABS BPW75 WATER 10/9/2013 9:48 12/5/2013	MW-9S MW-9S_101713 7242236 LANCASTERLABS BPW81 WATER 10/17/2013 11:55 12/5/2013	MW-10D MW-10D_101113 7234658 LANCASTERLABS BPW77 WATER 10/11/2013 11:45 12/5/2013	MW-10S MW-10S_101513 7238382 LANCASTERLABS BPW79 WATER 10/15/2013 9:50 12/5/2013
CAS NO.	COMPOUND	UNITS:						
<b>VOLATILES</b>								
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	2100	0.8 U	0.8 U	0.8 U	250	0.8 U
75-34-3	1,1-DICHLOROETHANE	ug/l	1400	1 U	1 U	1.5 J	30	1 U
75-35-4	1,1-DICHLOROETHENE	ug/l	81 J	0.8 U	0.8 U	0.8 U	13	0.8 U
75-00-3	CHLOROETHANE	ug/l	50 U	1 U	1 U	1 U	1 U	1 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/l	72000	0.8 U	0.8 U	220	1100	230
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/l	65 J	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	89 J	0.8 U	0.8 U	1.6 J	3.2 J	4.2 J
79-01-6	TRICHLOROETHYLENE (TCE)	ug/l	270	1 U	1 U	1 U	4.6 J	1 U
75-01-4	VINYL CHLORIDE	ug/l	850	1 U	1 U	150	250	170
74-85-1	ETHENE	ug/l	120	1 U	1 U	7.3	8.4	100
74-84-0	ETHANE	ug/l	9.9	1 U	1 U	1 U	5	3.2 J
74-82-8	METHANE	ug/l	2400	3 U	3 U	19	82	240
<b>DISSOLVED METALS</b>								
7429-90-5	ALUMINUM	mg/l	0.0828 U	0.0828 U	0.0828 U	0.0828 U	0.0828 U	
7440-38-2	ARSENIC	mg/l	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	
7440-70-2	CALCIUM	mg/l	293	888	253	146	250 J	
7439-89-6	IRON	mg/l	0.043 U	0.307 J	0.122 J	0.22 J	0.125 J	
7439-95-4	MAGNESIUM	mg/l	157	563	290	173	81.7 J	
7439-96-5	MANGANESE	mg/l	0.367	0.405	0.161	0.288	0.134	
9/7/7440	POTASSIUM	mg/l	6.1	6.33	4.55	2.18	3.25	
7782-49-2	SELENIUM	mg/l	0.0084 UJ	0.0084 UJ	0.0084 U	0.0084 UJ	0.0084 U	
7440-23-5	SODIUM	mg/l	162	314	306	52.3	65.5	
<b>WET CHEMISTRY</b>								
7440-44-0	TOTAL CARBON	mg/l	455					
TOC	TOTAL ORGANIC CARBON	mg/l	216	2	4.2	16.8	1.9	
TIC	TOTAL INORGANIC CARBON	mg/l	239					
<b>DISSOLVED INORGANICS</b>								
16887-00-6	CHLORIDE (AS CL)	mg/l	265	1880	439	68.4	102	
14797-55-8	NITROGEN, NITRATE (AS N)	mg/l	0.25 U	0.25 U	0.53	0.25 U	0.25 U	
PORTHO	PHOSPHORUS, TOTAL ORTHOPHOSPHATE (AS P)	mg/l	0.6 U	0.03 U	0.03 U	0.03 U	0.091	
14808-79-8	SULFATE (AS SO4)	mg/l	6.1	12100	1250	778	636	
18496-25-8	SULFIDE	mg/l	219	0.054 U	0.054 U	0.95	3.2	
<b>MICRO GENE ANALYSIS</b>								
BVC	BVC	cells/mL						
DHBt	DHBt	cells/mL						
DHC	DHC	cells/mL						
TCE	TCE	cells/mL						
VCR	VCR	cells/mL						
<b>MICROSEEPS DATA</b>								
74-86-2	Acetylene	ug/l						
1333-74-0	Hydrogen	nM						

EkonoL Facility Validated Groundwater Analytical Results Wheatfield, New York 3rd Quarter 2013 (October)		Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	MW-11D MW-11D_101613 7239996 LANCASTERLABS BPW80 WATER 10/16/2013 16:25 12/5/2013	MW-11S MW-11S_101713 7242235 LANCASTERLABS BPW81 WATER 10/17/2013 11:10 12/5/2013	MW-12D MW-12D_101413 7236818 LANCASTERLABS BPW78 WATER 10/14/2013 11:25 12/5/2013	MW-12S MW-12S_101713 7242233 LANCASTERLABS BPW81 WATER 10/17/2013 10:05 12/5/2013	MW-13D MW-13D_101713 7242242 LANCASTERLABS BPW81 WATER 10/17/2013 16:35 12/5/2013	MW-14D MW-14D_100913 7232096 LANCASTERLABS BPW75 WATER 10/9/2013 11:30 12/5/2013
CAS NO.	COMPOUND	UNITS:						
<b>VOLATILES</b>								
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	500	9.5	1.3 J	24	0.8 U	0.8 U
75-34-3	1,1-DICHLOROETHANE	ug/l	60	49	1 U	28	7.3	1 U
75-35-4	1,1-DICHLOROETHENE	ug/l	7.7	1.3 J	0.8 U	6.7	0.86 J	0.8 U
75-00-3	CHLOROETHANE	ug/l	1 U	1 U	1 U	1 U	1 U	1 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/l	170	160	5.5	2800	220	0.8 U
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/l	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	1.2 J	8.7	0.8 U	40	1.6 J	0.8 U
79-01-6	TRICHLOROETHYLENE (TCE)	ug/l	8.2	70	1 U	980	1 U	1 U
75-01-4	VINYL CHLORIDE	ug/l	140	82	2.7 J	430	170	1 U
74-85-1	ETHENE	ug/l	5.1	120	1 U	480	30	1 U
74-84-0	ETHANE	ug/l	10	3.4 J	42	29	11	4.3 J
74-82-8	METHANE	ug/l	63	760	200	5600	350	28
<b>DISSOLVED METALS</b>								
7429-90-5	ALUMINUM	mg/l			0.0828 U		0.0828 U	0.0828 U
7440-38-2	ARSENIC	mg/l			0.0068 U		0.0068 U	0.0068 U
7440-70-2	CALCIUM	mg/l			592		397	283
7439-89-6	IRON	mg/l			0.043 U		0.176 J	0.043 U
7439-95-4	MAGNESIUM	mg/l			120		196	136
7439-96-5	MANGANESE	mg/l			0.0221		0.0953	0.244
9/7/7440	POTASSIUM	mg/l			3.08		3.85	3.18
7782-49-2	SELENIUM	mg/l			0.0084 U		0.0084 UJ	0.0084 U
7440-23-5	SODIUM	mg/l			48.3		133	82.4
<b>WET CHEMISTRY</b>								
7440-44-0	TOTAL CARBON	mg/l						
TOC	TOTAL ORGANIC CARBON	mg/l			0.88 J		2.8	2
TIC	TOTAL INORGANIC CARBON	mg/l						
<b>DISSOLVED INORGANICS</b>								
16887-00-6	CHLORIDE (AS CL)	mg/l			95.7		547	109
14797-55-8	NITROGEN, NITRATE (AS N)	mg/l			0.25 U		0.25 U	0.25 U
PORTHO	PHOSPHORUS, TOTAL ORTHOPHOSPHATE (AS P)	mg/l			0.6 U		0.03 U	0.03 U
14808-79-8	SULFATE (AS SO4)	mg/l			1370		2350	875
18496-25-8	SULFIDE	mg/l			42.2		5.9	0.69
<b>MICRO GENE ANALYSIS</b>								
BVC	BVC	cells/mL						
DHBt	DHBt	cells/mL						
DHC	DHC	cells/mL						
TCE	TCE	cells/mL						
VCR	VCR	cells/mL						
<b>MICROSEEPS DATA</b>								
74-86-2	Acetylene	ug/l						
1333-74-0	Hydrogen	nM						

EkonoL Facility Validated Groundwater Analytical Results Wheatfield, New York 3rd Quarter 2013 (October)		Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	MW-15D MW-15D_100913 7232098 LANCASTERLABS BPW75 WATER 10/9/2013 11:35 12/5/2013	MW-16D MW-16D_101613 7239999 LANCASTERLABS BPW80 WATER 10/16/2013 15:20 12/5/2013	Dup of MW-16D MW-16D MW-160D_101613 7240000 LANCASTERLABS BPW80 WATER 10/16/2013 12:01 12/5/2013	MW-17D MW-17D_101413 7236822 LANCASTERLABS BPW78 WATER 10/14/2013 16:40 12/5/2013	MW-18D MW-18D_101813 7244055 LANCASTERLABS BPW82 WATER 10/18/2013 11:05 12/5/2013	MW-19D MW-19D_100913 7232100 LANCASTERLABS BPW75 WATER 10/9/2013 9:15 12/5/2013
CAS NO.	COMPOUND	UNITS:						
<b>VOLATILES</b>								
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	44	0.8 U	0.8 U	110	0.8 U	0.8 U
75-34-3	1,1-DICHLOROETHANE	ug/l	27	8.1	8.6	31	1 U	1 U
75-35-4	1,1-DICHLOROETHENE	ug/l	2.3 J	1.6 J	1.7 J	1.5 J	0.8 U	0.8 U
75-00-3	CHLOROETHANE	ug/l	1 U	1 U	1 U	2.8 J	1 U	1 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/l	290	230	240	39	1.1 J	17
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/l	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	3.1 J	1.3 J	1.3 J	0.8 U	0.8 U	0.8 U
79-01-6	TRICHLOROETHYLENE (TCE)	ug/l	1.8 J	1 J	1 J	2.3 J	1 U	1 U
75-01-4	VINYL CHLORIDE	ug/l	320	190	200	50	1 U	1 U
74-85-1	ETHENE	ug/l	10	17	18	11	1 U	1 U
74-84-0	ETHANE	ug/l	1 J	5.5	5.5	4.2 J	1 U	1 U
74-82-8	METHANE	ug/l	67	180	180	110	9.2	24
<b>DISSOLVED METALS</b>								
7429-90-5	ALUMINUM	mg/l	0.0828 U	0.0828 U	0.0828 U		0.0828 U	0.0828 U
7440-38-2	ARSENIC	mg/l	0.0068 U	0.0068 U	0.0068 U		0.0068 U	0.0068 U
7440-70-2	CALCIUM	mg/l	239	384	383		328	541
7439-89-6	IRON	mg/l	0.267 J	0.162 J	0.17 J		0.043 U	2.31
7439-95-4	MAGNESIUM	mg/l	115	139	141		81.9	639
7439-96-5	MANGANESE	mg/l	0.111	0.0629	0.0633		0.0486	0.119
9/7/7440	POTASSIUM	mg/l	4.64	4.01	4.08		2.4	5.28
7782-49-2	SELENIUM	mg/l	0.0084 U	0.0084 UJ	0.0084 UJ		0.0084 UJ	0.0084 U
7440-23-5	SODIUM	mg/l	76.8	114	111		85.9	151
<b>WET CHEMISTRY</b>								
7440-44-0	TOTAL CARBON	mg/l						
TOC	TOTAL ORGANIC CARBON	mg/l	2.1	2.3	2.4		3.4	8.1
TIC	TOTAL INORGANIC CARBON	mg/l						
<b>DISSOLVED INORGANICS</b>								
16887-00-6	CHLORIDE (AS CL)	mg/l	126	223	232		136	316
14797-55-8	NITROGEN, NITRATE (AS N)	mg/l	0.25 U	0.25 U	0.25 U		0.25 U	0.25 U
PORTHO	PHOSPHORUS, TOTAL ORTHOPHOSPHATE (AS P)	mg/l	0.03 U	0.03 U			0.03 U	0.03 U
14808-79-8	SULFATE (AS SO4)	mg/l	726	1000	1020		976	2670
18496-25-8	SULFIDE	mg/l	7.4	2.4			0.54	0.054 U
<b>MICRO GENE ANALYSIS</b>								
BVC	BVC	cells/mL						
DHBt	DHBt	cells/mL						
DHC	DHC	cells/mL						
TCE	TCE	cells/mL						
VCR	VCR	cells/mL						
<b>MICROSEEPS DATA</b>								
74-86-2	Acetylene	ug/l						
1333-74-0	Hydrogen	nM						

EkonoL Facility Validated Groundwater Analytical Results Wheatfield, New York 3rd Quarter 2013 (October)		Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	MW-20D MW-20D_101613 7240001 LANCASTERLABS BPW80 WATER 10/16/2013 13:50 12/5/2013	MW-21D MW-21D_101613 7239992 LANCASTERLABS BPW80 WATER 10/16/2013 12:45 12/5/2013	OR- 3SM OR-3SM_100913 7232094 LANCASTERLABS BPW75 WATER 10/9/2013 14:14 12/5/2013	OR- 4SM OR-4SM_101413 7236819 LANCASTERLABS BPW78 WATER 10/14/2013 12:55 12/5/2013	OR- 5SM OR-5SM_101013 7233067/033KJ-1 LANCASTERLABS/MI BPW76/033KJ WATER 10/10/2013 9:10 12/5/2013	OR- 6SM OR-6SM_101013 7233070/033KJ-4 LANCASTERLABS/MI BPW76/033KJ WATER 10/10/2013 9:48 12/5/2013
CAS NO.	COMPOUND	UNITS:						
<b>VOLATILES</b>								
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	2000	160	8 U	0.8 UJ	0.8 U	8 U
75-34-3	1,1-DICHLOROETHANE	ug/l	170	36	10 U	1 UJ	1.6 J	10 U
75-35-4	1,1-DICHLOROETHENE	ug/l	27	6.4	8 U	0.8 UJ	0.8 U	8 U
75-00-3	CHLOROETHANE	ug/l	5 U	1 U	10 U	1 UJ	1 U	10 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/l	940	660	8 U	0.8 UJ	0.8 U	120
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/l	4 U	0.8 U	8 U	0.8 UJ	0.8 U	8 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	4.8 J	4.7 J	8 U	0.8 UJ	0.8 U	36 J
79-01-6	TRICHLOROETHYLENE (TCE)	ug/l	12 J	4.3 J	10 U	8.4 J	1 U	10 U
75-01-4	VINYL CHLORIDE	ug/l	400	690	10 U	1 UJ	1 U	77
74-85-1	ETHENE	ug/l	23	23	1 U	1 U	1.7 J	240 J
74-84-0	ETHANE	ug/l	1.7 J	1.4 J	170	1.6 J	130	130 J
74-82-8	METHANE	ug/l	200	120	16000	9200	16000	9500 J
<b>DISSOLVED METALS</b>								
7429-90-5	ALUMINUM	mg/l			0.119 J	0.0828 U	0.0828 U	0.0828 U
7440-38-2	ARSENIC	mg/l			0.012 J	0.0068 J	0.0068 U	0.0232 J
7440-70-2	CALCIUM	mg/l			517	538	327 J	641
7439-89-6	IRON	mg/l			22.3	43.7	7.77	7.04
7439-95-4	MAGNESIUM	mg/l			141	137	64.7	188
7439-96-5	MANGANESE	mg/l			2.74	6.83	1.87	4.95
9/7/7440	POTASSIUM	mg/l			41.2	37.9	17.1	37.4
7782-49-2	SELENIUM	mg/l			0.0084 U	0.0084 U	0.0084 U	0.0084 U
7440-23-5	SODIUM	mg/l			929	146	666	443
<b>WET CHEMISTRY</b>								
7440-44-0	TOTAL CARBON	mg/l			403	580	288	552
TOC	TOTAL ORGANIC CARBON	mg/l			53.8	62.8	21.7	88.3
TIC	TOTAL INORGANIC CARBON	mg/l			349	518	267	464
<b>DISSOLVED INORGANICS</b>								
16887-00-6	CHLORIDE (AS CL)	mg/l			1750	205	1230	1060
14797-55-8	NITROGEN, NITRATE (AS N)	mg/l			0.25 U	0.25 U	0.25 U	0.25 U
PORTHO	PHOSPHORUS, TOTAL ORTHOPHOSPHATE (AS P)	mg/l			0.03 U	0.041 J	0.031 J	0.71
14808-79-8	SULFATE (AS SO4)	mg/l			1.5 U	14.7	1.5 U	4 J
18496-25-8	SULFIDE	mg/l			0.66	0.21	1.7	10
<b>MICRO GENE ANALYSIS</b>								
BVC	BVC	cells/mL					1990	1430
DHBt	DHBt	cells/mL					585	467
DHC	DHC	cells/mL					32300	108000
TCE	TCE	cells/mL					4260	37800
VCR	VCR	cells/mL					597	1280
<b>MICROSEEPS DATA</b>								
74-86-2	Acetylene	ug/l					0.5 U	0.5 U
1333-74-0	Hydrogen	nM					4.1	3.4



EkonoL Facility Validated Groundwater Analytical Results Wheatfield, New York 3rd Quarter 2013 (October)		Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	OR-9SM OR-9SM_101713 7242238 LANCASTERLABS BPW81 WATER 10/17/2013 13:30 12/5/2013	OR-10SM OR-10SM_100813 7229762 LANCASTERLABS BPW74 WATER 10/8/2013 12:40 12/5/2013	OR-13SM OR-13SM_101013 7233072/033KJ-8 LANCASTERLABS/MI BPW76/033KJ WATER 10/10/2013 15:20 12/5/2013	OR-14SM OR-14SM_101013 7233071/033KJ-5 LANCASTERLABS/MI BPW76/033KJ WATER 10/10/2013 15:00 12/5/2013	OR-15SM OR-15SM_100913 7232095 LANCASTERLABS BPW75 WATER 10/9/2013 14:20 12/5/2013	OR-18SM OR-18SM_100913 7232101 LANCASTERLABS BPW75 WATER 10/9/2013 15:50 12/5/2013
CAS NO.	COMPOUND	UNITS:						
<b>VOLATILES</b>								
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.8 U	8 U	8 U	8 UJ	40 UJ	0.8 U
75-34-3	1,1-DICHLOROETHANE	ug/l	1 U	10 U	10 U	10 UJ	50 UJ	1 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.8 U	8 U	8 U	8 UJ	40 UJ	0.8 U
75-00-3	CHLOROETHANE	ug/l	2.6 J	10 U	10 U	10 UJ	50 UJ	1 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/l	0.8 U	55	8 U	8 UJ	40 UJ	78
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/l	0.8 U	8 U	8 U	8 UJ	40 UJ	0.8 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.8 U	8 U	8 U	8 UJ	40 UJ	2.9 J
79-01-6	TRICHLOROETHYLENE (TCE)	ug/l	1 U	10 U	10 U	10 UJ	50 UJ	1 U
75-01-4	VINYL CHLORIDE	ug/l	1.6 J	170	10 U	10 UJ	50 UJ	81
74-85-1	ETHENE	ug/l	6.8	130	1.9 J	14 J	1 U	140
74-84-0	ETHANE	ug/l	8.1	19	2.7 J	14 J	1.1 J	20
74-82-8	METHANE	ug/l	13000	16000	12000	12000 J	14000	13000
<b>DISSOLVED METALS</b>								
7429-90-5	ALUMINUM	mg/l	0.0828 U	0.0828 U	0.0839 J	0.0828 U	0.0828 U	0.0828 U
7440-38-2	ARSENIC	mg/l	0.0094 J	0.0077 J	0.0163 J	0.0093 J	0.0074 J	0.0068 U
7440-70-2	CALCIUM	mg/l	176	278	439	397 J	690	252
7439-89-6	IRON	mg/l	0.462	1.94	20.1	5.14	71.3	0.043 U
7439-95-4	MAGNESIUM	mg/l	34.9	89.3	169	191	123	64.7
7439-96-5	MANGANESE	mg/l	0.524	1.49	4.75	3.77	9.23	0.637
9/7/7440	POTASSIUM	mg/l	10.8	14.2	37.9	74.8	148	16
7782-49-2	SELENIUM	mg/l	0.0084 UJ	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U
7440-23-5	SODIUM	mg/l	260	303	376	128	187	68.2
<b>WET CHEMISTRY</b>								
7440-44-0	TOTAL CARBON	mg/l	208	306	492	542	796	198
TOC	TOTAL ORGANIC CARBON	mg/l	13.9	30.8	51.3	79.8	171	14.6
TIC	TOTAL INORGANIC CARBON	mg/l	194	275	441	462	625	183
<b>DISSOLVED INORGANICS</b>								
16887-00-6	CHLORIDE (AS CL)	mg/l	277	413	682	182	238	62.4
14797-55-8	NITROGEN, NITRATE (AS N)	mg/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
PORTHO	PHOSPHORUS, TOTAL ORTHOPHOSPHATE (AS P)	mg/l	0.83	1.6	0.03 U	2.2	0.03 U	0.6 U
14808-79-8	SULFATE (AS SO4)	mg/l	30.8	16.1	13.4	19.6	1.5 U	213
18496-25-8	SULFIDE	mg/l	28.3	16.9	4.5	8.4	0.054 U	67.5
<b>MICRO GENE ANALYSIS</b>								
BVC	BVC	cells/mL			5.7	325		
DHBt	DHBt	cells/mL			1010	1190		
DHC	DHC	cells/mL			1060	6210		
TCE	TCE	cells/mL			279	661		
VCR	VCR	cells/mL			8.2	100		
<b>MICROSEEPS DATA</b>								
74-86-2	Acetylene	ug/l			0.5 U	0.5 U		
1333-74-0	Hydrogen	nM			2.8	12		

Ekonomol Facility Validated Groundwater Analytical Results Wheatfield, New York 3rd Quarter 2013 (October)		Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	Dup of OR-18SM OR-18SM OR-180SM_100913 7232102 LANCASTERLABS BPW75 WATER 10/9/2013 12:01 12/5/2013	PMW-1D PMW-1D_101113 7234660 LANCASTERLABS BPW77 WATER 10/11/2013 10:30 12/5/2013	PMW-1S PMW-1S_101513 7238383/033KJ-10 LANCASTERLABS/MI BPW79/033KJ WATER 10/15/2013 9:55 12/5/2013	Dup of PMW-1S PMW-1S PMW-100S_101513 7238384 LANCASTERLABS BPW79 WATER 10/15/2013 12:01 12/5/2013	PMW-2D PMW-2D_101513 7238385/033KJ-11 LANCASTERLABS/MI BPW79/033KJ WATER 10/15/2013 12:30 12/5/2013	PMW-2S PMW-2S_101013 7233065/033KJ-3/103690005 LANCASTERLABS/MI/MS BPW76/033KJ/10369 WATER 10/10/2013 12:05 12/5/2013
CAS NO.	COMPOUND	UNITS:						
<b>VOLATILES</b>								
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.8 U	8 U	0.8 U	0.8 U	160 U	0.8 U
75-34-3	1,1-DICHLOROETHANE	ug/l	1 U	10 U	7.3	7.4	200 U	3.1 J
75-35-4	1,1-DICHLOROETHENE	ug/l	0.8 U	8 U	6.5	8.6	160 J	0.8 U
75-00-3	CHLOROETHANE	ug/l	1 U	10 U	1 U	1 U	200 U	1 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/l	79	9500	1100	1300	150000	100
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/l	0.8 U	8 U	0.8 U	0.8 U	160 U	0.8 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	2.7 J	18 J	20	27	230 J	9.1
79-01-6	TRICHLOROETHYLENE (TCE)	ug/l	1 U	10 U	2 J	2.1 J	9000	1 U
75-01-4	VINYL CHLORIDE	ug/l	82	3400	620	820	3600	130
74-85-1	ETHENE	ug/l	110	1500	270	350	170	300
74-84-0	ETHANE	ug/l	16	27	970	900	10	380
74-82-8	METHANE	ug/l	13000	11000	11000	14000	4700	16000
<b>DISSOLVED METALS</b>								
7429-90-5	ALUMINUM	mg/l	0.0828 U	0.0828 U	0.0828 U	0.0828 U	0.0828 U	0.0828 U
7440-38-2	ARSENIC	mg/l	0.0068 U	0.0099 J	0.0084 J	0.0068 U	0.0068 U	0.0068 U
7440-70-2	CALCIUM	mg/l	246	76.2 J	157	433	283	283
7439-89-6	IRON	mg/l	0.043 U	36.4	0.0703 J	0.0631 J	0.043 U	1.28
7439-95-4	MAGNESIUM	mg/l	63.6	20.8 J	20.7	20.4	207	53.1
7439-96-5	MANGANESE	mg/l	0.645	0.969	0.409	0.413	0.471	1.3
9/7/7440	POTASSIUM	mg/l	15.8	12.5	12.4	12.5	10.2	18
7782-49-2	SELENIUM	mg/l	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U
7440-23-5	SODIUM	mg/l	66.9	108	546	569	288	691
<b>WET CHEMISTRY</b>								
7440-44-0	TOTAL CARBON	mg/l		345	84.9		733	237
TOC	TOTAL ORGANIC CARBON	mg/l	14.9	316	32.1	33.4	485	20.2
TIC	TOTAL INORGANIC CARBON	mg/l		28.9	52.8		248	216
<b>DISSOLVED INORGANICS</b>								
16887-00-6	CHLORIDE (AS CL)	mg/l	64.7	111	963	1000	530	1200
14797-55-8	NITROGEN, NITRATE (AS N)	mg/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
PORTHO	PHOSPHORUS, TOTAL ORTHOPHOSPHATE (AS P)	mg/l		0.059 J	0.037 J		0.6 U	0.24
14808-79-8	SULFATE (AS SO4)	mg/l	210	1.5 U	10.5	10.8	81.6	2.5 J
18496-25-8	SULFIDE	mg/l		1.8	17.1		223	6.4
<b>MICRO GENE ANALYSIS</b>								
BVC	BVC	cells/mL			1450		458	3580
DHBt	DHBt	cells/mL			1110		380	589
DHC	DHC	cells/mL			120000		890	244000
TCE	TCE	cells/mL			5410		759	12000
VCR	VCR	cells/mL			9810		17	4730
<b>MICROSEEPS DATA</b>								
74-86-2	Acetylene	ug/l						0.5 U
1333-74-0	Hydrogen	nM						2.7

Ekonomol Facility Validated Groundwater Analytical Results Wheatfield, New York 3rd Quarter 2013 (October)		Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	PMW-3D PMW-3D_101113 7234662 LANCASTERLABS BPW77 WATER 10/11/2013 9:40 12/5/2013	PMW-3S PMW-3S_101513 7238386/033KJ-12 LANCASTERLABS/MI BPW79/033KJ WATER 10/15/2013 12:55 12/5/2013	PMW-4D PMW-4D_101113 7234659 LANCASTERLABS BPW77 WATER 10/11/2013 11:35 12/5/2013	PMW-4S PMW-4S_101413 7236821 LANCASTERLABS BPW78 WATER 10/14/2013 15:00 12/5/2013	PMW-5D PMW-5D_101813 7244058 LANCASTERLABS BPW82 WATER 10/18/2013 11:05 12/5/2013	PMW-5S PMW-5S_101013 7233068 LANCASTERLABS BPW76 WATER 10/10/2013 8:55 12/5/2013
CAS NO.	COMPOUND	UNITS:						
<b>VOLATILES</b>								
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	80 U	40 U	80 U	16 U	44 J	40 U
75-34-3	1,1-DICHLOROETHANE	ug/l	100 U	50 U	110 J	20 U	97 J	50 U
75-35-4	1,1-DICHLOROETHENE	ug/l	80 U	59 J	80 U	17 J	81 J	76 J
75-00-3	CHLOROETHANE	ug/l	100 U	50 U	100 U	20 U	50 U	50 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/l	57000	30000	53000	8500	73000	37000
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/l	80 U	40 U	80 U	16 U	90 J	40 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	80 U	610	97 J	240	91 J	790
79-01-6	TRICHLOROETHYLENE (TCE)	ug/l	11000	200 J	1100	100	8900	2300
75-01-4	VINYL CHLORIDE	ug/l	920	5100	1400	560	2900	7800
74-85-1	ETHENE	ug/l	98	2100	360	49	450	370
74-84-0	ETHANE	ug/l	27	400	28	220	21	56
74-82-8	METHANE	ug/l	3300	9900	5600	9200	4600	2600
<b>DISSOLVED METALS</b>								
7429-90-5	ALUMINUM	mg/l	0.0828 U	0.0828 U	0.0828 U	0.0828 U	0.0828 U	0.0828 U
7440-38-2	ARSENIC	mg/l	0.0068 U	0.0112 J	0.0068 U	0.0141 J	0.0068 U	0.0068 U
7440-70-2	CALCIUM	mg/l	409 J	526	341 J	503	339	478 J
7439-89-6	IRON	mg/l	0.043 U	0.847	0.043 U	1.83	0.043 U	0.17 J
7439-95-4	MAGNESIUM	mg/l	176 J	224	238 J	245	214	283
7439-96-5	MANGANESE	mg/l	0.358	2.73	0.307	0.777	0.353	1.66
9/7/7440	POTASSIUM	mg/l	9.92	9.34	10.8	5.97	13.8	4.11
7782-49-2	SELENIUM	mg/l	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 UJ	0.0084 U
7440-23-5	SODIUM	mg/l	210	391	236	711	306	161
<b>WET CHEMISTRY</b>								
7440-44-0	TOTAL CARBON	mg/l	581	308	563	109		160
TOC	TOTAL ORGANIC CARBON	mg/l	351	30.6	261	6.7	254	6.9
TIC	TOTAL INORGANIC CARBON	mg/l	230	278	302	103		153
<b>DISSOLVED INORGANICS</b>								
16887-00-6	CHLORIDE (AS CL)	mg/l	304	984	355	1570	536	478
14797-55-8	NITROGEN, NITRATE (AS N)	mg/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
PORTHO	PHOSPHORUS, TOTAL ORTHOPHOSPHATE (AS P)	mg/l	0.6 U	0.41	0.6 U	0.03 U	0.6 U	0.03 U
14808-79-8	SULFATE (AS SO4)	mg/l	326	552	300	921	326	1390
18496-25-8	SULFIDE	mg/l	252	16.9	305	0.054 U	184	0.054 U
<b>MICRO GENE ANALYSIS</b>								
BVC	BVC	cells/mL		16600				
DHBt	DHBt	cells/mL		226				
DHC	DHC	cells/mL		24600				
TCE	TCE	cells/mL		12000				
VCR	VCR	cells/mL		2960				
<b>MICROSEEPS DATA</b>								
74-86-2	Acetylene	ug/l						
1333-74-0	Hydrogen	nM						

EkonoL Facility Validated Groundwater Analytical Results Wheatfield, New York 3rd Quarter 2013 (October)		Location ID: Sample ID: Lab Sample ID: Source: SDG: Matrix: Sampled: Validated:	PMW-6D PMW-6D_101013 7233077/033KJ-9 LANCASTERLABS/MI BPW76/033KJ WATER 10/10/2013 16:25 12/5/2013	PMW-6S PMW-6S_101413 7236827 LANCASTERLABS BPW78 WATER 10/14/2013 13:20 12/5/2013	PMW-7D PMW-7D_101113 7234656 LANCASTERLABS BPW77 WATER 10/11/2013 13:45 12/5/2013	PMW-7S PMW-7S_101713 7242241 LANCASTERLABS BPW81 WATER 10/17/2013 15:45 12/5/2013	PMW-8D PMW-8D_101813 7244059 LANCASTERLABS BPW82 WATER 10/18/2013 10:00 12/5/2013	PMW-8S PMW-8S_100813 7229761 LANCASTERLABS BPW74 WATER 10/8/2013 15:50 12/5/2013
CAS NO.	COMPOUND	UNITS:						
<b>VOLATILES</b>								
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	8 U	1.6 U	58 J	0.8 U	40 U	8.3
75-34-3	1,1-DICHLOROETHANE	ug/l	19 J	2 U	93 J	99	50 U	12
75-35-4	1,1-DICHLOROETHENE	ug/l	11 J	1.9 J	40 U	0.8 U	40 U	0.8 U
75-00-3	CHLOROETHANE	ug/l	10 U	2 U	50 U	1 U	50 U	2.6 J
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/l	9000	1000	31000	6.6	44000	60
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/l	8 U	1.6 U	86 J	0.8 U	52 J	0.8 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	28 J	57	76 J	0.8 U	40 U	2.7 J
79-01-6	TRICHLOROETHYLENE (TCE)	ug/l	100	2 U	830	1 U	9900	2.6 J
75-01-4	VINYL CHLORIDE	ug/l	280	1100	1800	1.8 J	3000	89
74-85-1	ETHENE	ug/l	300	110	400	1 U	350	130
74-84-0	ETHANE	ug/l	9.7	15	30	1 U	19	11
74-82-8	METHANE	ug/l	3700	7400	8400	9.1	3000	11000
<b>DISSOLVED METALS</b>								
7429-90-5	ALUMINUM	mg/l	0.0828 U	0.0828 U	0.0828 U	0.0828 U	0.0828 U	0.0828 U
7440-38-2	ARSENIC	mg/l	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U
7440-70-2	CALCIUM	mg/l	61.1 J	472	232 J	503	378	285
7439-89-6	IRON	mg/l	0.0858 J	32.3	0.043 U	0.594	0.043 U	2
7439-95-4	MAGNESIUM	mg/l	15.2	138	229 J	732	346	233
7439-96-5	MANGANESE	mg/l	0.152	5.44	0.32	0.163	0.345	0.927
9/7/7440	POTASSIUM	mg/l	3.49	27.1	19.7	6.54	7.18	9.66
7782-49-2	SELENIUM	mg/l	0.0084 U	0.0084 U	0.0084 U	0.0084 UJ	0.0084 UJ	0.0084 U
7440-23-5	SODIUM	mg/l	23.1	129	252	186	214	270
<b>WET CHEMISTRY</b>								
7440-44-0	TOTAL CARBON	mg/l	141	486	342	167		186
TOC	TOTAL ORGANIC CARBON	mg/l	108	55.8	63.6	4.3	129	10.4
TIC	TOTAL INORGANIC CARBON	mg/l	32.6	430	278	163		175
<b>DISSOLVED INORGANICS</b>								
16887-00-6	CHLORIDE (AS CL)	mg/l	23.7	169	369	305	273	531
14797-55-8	NITROGEN, NITRATE (AS N)	mg/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
PORTHO	PHOSPHORUS, TOTAL ORTHOPHOSPHATE (AS P)	mg/l	0.034 J	0.03 U	0.6 U	0.03 U	0.6 U	0.22
14808-79-8	SULFATE (AS SO4)	mg/l	8.1	88.2	293	2900	1230	1110
18496-25-8	SULFIDE	mg/l	3	0.25	219	0.054 U	190	17
<b>MICRO GENE ANALYSIS</b>								
BVC	BVC	cells/mL	41300					
DHBt	DHBt	cells/mL	7530					
DHC	DHC	cells/mL	1030000					
TCE	TCE	cells/mL	443000					
VCR	VCR	cells/mL	74500					
<b>MICROSEEPS DATA</b>								
74-86-2	Acetylene	ug/l						
1333-74-0	Hydrogen	nM						

EkonoL Facility Validated Groundwater Analytical Results Wheatfield, New York 3rd Quarter 2013 (October)		Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	PMW-9D PMW-9D_101613 7240004 LANCASTERLABS BPW80 WATER 10/16/2013 11:15 12/5/2013	PMW-9S PMW-9S_101513 033KJ-14 MI 033KJ Water 10/15/2013 0:00 12/5/2013	PMW-9S PMW-9S_101513 7238388 LANCASTERLABS BPW79 WATER 10/15/2013 16:05 12/5/2013	PMW-10D PMW-10D_101413 7236826 LANCASTERLABS BPW78 WATER 10/14/2013 16:15 12/5/2013	PMW-10S PMW-10S_101013 7233075/033KJ-7 LANCASTERLABS/MI BPW76/033KJ WATER 10/10/2013 9:00 12/5/2013	PMW-11D PMW-11D_101613 7240002/033KJ-19 LANCASTERLABS/MI BPW80/033KJ WATER 10/16/2013 10:45 12/5/2013
CAS NO.	COMPOUND	UNITS:						
<b>VOLATILES</b>								
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	1500 J		4 U	160 U	0.8 U	22000
75-34-3	1,1-DICHLOROETHANE	ug/l	500 U		5 U	230 J	1 U	480
75-35-4	1,1-DICHLOROETHENE	ug/l	500 J		9.9 J	190 J	0.8 U	240
75-00-3	CHLOROETHANE	ug/l	500 U		5 U	200 U	1 U	20 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/l	170000		3800	99000	0.8 U	5600
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/l	400 U		4 U	160 U	0.8 U	83 J
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	400 U		32	160 U	0.8 U	20 J
79-01-6	TRICHLOROETHYLENE (TCE)	ug/l	7700		5700	740 J	1.3 J	480
75-01-4	VINYL CHLORIDE	ug/l	18000		42	23000	4.3 J	700
74-85-1	ETHENE	ug/l	1600		3.1 J	1700	1 U	25
74-84-0	ETHANE	ug/l	70		4.8 J	24	1.4 J	6.7
74-82-8	METHANE	ug/l	4900		79	7700	72	260
<b>DISSOLVED METALS</b>								
7429-90-5	ALUMINUM	mg/l	0.0828 U		0.0828 U	0.0828 U	0.0828 U	0.0828 U
7440-38-2	ARSENIC	mg/l	0.0068 U		0.0068 U	0.0068 U	0.0068 U	0.0068 U
7440-70-2	CALCIUM	mg/l	384		499	290	411 J	248
7439-89-6	IRON	mg/l	153		0.043 U	141	0.043 U	0.254 J
7439-95-4	MAGNESIUM	mg/l	114		632	65.9	599	80.7
7439-96-5	MANGANESE	mg/l	1.61		0.401	1.46	0.357	0.264
9/7/7440	POTASSIUM	mg/l	12.9		6.75	5.96	5.16	3.26
7782-49-2	SELENIUM	mg/l	0.0084 UJ		0.0084 U	0.0084 U	0.0084 U	0.0084 UJ
7440-23-5	SODIUM	mg/l	304		140	116	133	79.7
<b>WET CHEMISTRY</b>								
7440-44-0	TOTAL CARBON	mg/l	970		127	643	118	108
TOC	TOTAL ORGANIC CARBON	mg/l	830		3.2	520	2.8	9.9
TIC	TOTAL INORGANIC CARBON	mg/l	140		124	123	116	98.1
<b>DISSOLVED INORGANICS</b>								
16887-00-6	CHLORIDE (AS CL)	mg/l	586		138	205	156	121
14797-55-8	NITROGEN, NITRATE (AS N)	mg/l	0.25 U		0.25 U	0.25 U	0.25 U	0.25 U
PORTHO	PHOSPHORUS, TOTAL ORTHOPHOSPHATE (AS P)	mg/l	0.03 U		0.03 U	0.03 U	0.061 J	0.6 U
14808-79-8	SULFATE (AS SO4)	mg/l	26.8		2870	2.3 J	2710	492
18496-25-8	SULFIDE	mg/l	0.82		0.054 U	3.5	0.054 U	33.2
<b>MICRO GENE ANALYSIS</b>								
BVC	BVC	cells/mL		0.5 U			0.5 U	43300
DHBt	DHBt	cells/mL		23.6			11.2	1760
DHC	DHC	cells/mL		2.3			2.6	98500
TCE	TCE	cells/mL		0.9			0.8	42400
VCR	VCR	cells/mL		0.5 U			0.5 U	54.7
<b>MICROSEEPS DATA</b>								
74-86-2	Acetylene	ug/l						
1333-74-0	Hydrogen	nM						

EkonoL Facility Validated Groundwater Analytical Results Wheatfield, New York 3rd Quarter 2013 (October)		Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	PMW-11S PMW-11S_100913 7232097 LANCASTERLABS BPW75 WATER 10/9/2013 12:15 12/5/2013	PMW-12D PMW-12D_101613 7239997 LANCASTERLABS BPW80 WATER 10/16/2013 13:05 12/5/2013	PMW-13D PMW-13D_101613 7240003 LANCASTERLABS BPW80 WATER 10/16/2013 17:00 12/5/2013	PMW-14D PMW-14D_101813 7244057 LANCASTERLABS BPW82 WATER 10/18/2013 9:35 12/5/2013	PMW-15D PMW-15D_101613 033KJ-18 MI 033KJ Water 10/16/2013 0:00 12/5/2013	PMW-15D PMW-15D_101613 7239990 LANCASTERLABS BPW80 WATER 10/16/2013 8:50 12/5/2013
CAS NO.	COMPOUND	UNITS:						
<b>VOLATILES</b>								
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	20 U	160 U	400 U	1300		10000
75-34-3	1,1-DICHLOROETHANE	ug/l	42 J	200 J	500 U	1100		9200
75-35-4	1,1-DICHLOROETHENE	ug/l	33 J	300 J	760 J	120 J		200
75-00-3	CHLOROETHANE	ug/l	25 U	200 U	500 U	100 U		29 J
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/l	16000	160000	250000	75000		2200
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/l	20 U	160 U	780 J	80 U		71
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	210	160 U	400 U	80 U		59
79-01-6	TRICHLOROETHYLENE (TCE)	ug/l	250	6600	98000	670		1400
75-01-4	VINYL CHLORIDE	ug/l	3000	33000	6400	1500		11000
74-85-1	ETHENE	ug/l	400	1200	560	830		210
74-84-0	ETHANE	ug/l	43	33	69	22		380
74-82-8	METHANE	ug/l	2500	1900	1000	7700		1100
<b>DISSOLVED METALS</b>								
7429-90-5	ALUMINUM	mg/l	0.0828 U	0.0828 U	0.0828 U	0.0828 U		0.0828 U
7440-38-2	ARSENIC	mg/l	0.0068 U	0.0068 U	0.0068 U	0.0068 U		0.0068 U
7440-70-2	CALCIUM	mg/l	540	561	453	345		299
7439-89-6	IRON	mg/l	1.08	278	134	73.1		33.3
7439-95-4	MAGNESIUM	mg/l	322	128	114	108		96.4
7439-96-5	MANGANESE	mg/l	0.471	3.17	1.93	1.89		2.02
9/7/7440	POTASSIUM	mg/l	4.44	22.6	15.2	8.29		6.19
7782-49-2	SELENIUM	mg/l	0.0084 U	0.0084 UJ	0.0084 UJ	0.0084 UJ		0.0084 UJ
7440-23-5	SODIUM	mg/l	175	230	188	211		141
<b>WET CHEMISTRY</b>								
7440-44-0	TOTAL CARBON	mg/l	143	1410	985	880		525
TOC	TOTAL ORGANIC CARBON	mg/l	2.7	1200	715	719		319
TIC	TOTAL INORGANIC CARBON	mg/l	141	216	270	161		206
<b>DISSOLVED INORGANICS</b>								
16887-00-6	CHLORIDE (AS CL)	mg/l	422	468	344	316		279
14797-55-8	NITROGEN, NITRATE (AS N)	mg/l	0.25 U	0.25 U	0.25 U	0.25 U		0.25 U
PORTHO	PHOSPHORUS, TOTAL ORTHOPHOSPHATE (AS P)	mg/l	0.03 U	0.03 U	0.03 U	0.03 U		0.062 J
14808-79-8	SULFATE (AS SO4)	mg/l	1690	16.1	59.1	1.7 J		3.1 J
18496-25-8	SULFIDE	mg/l	0.054 U	0.53	6.4	23.7		0.58
<b>MICRO GENE ANALYSIS</b>								
BVC	BVC	cells/mL					320000	
DHBt	DHBt	cells/mL					17100	
DHC	DHC	cells/mL					1060000	
TCE	TCE	cells/mL					924000	
VCR	VCR	cells/mL					24	
<b>MICROSEEPS DATA</b>								
74-86-2	Acetylene	ug/l						
1333-74-0	Hydrogen	nM						

EkonoL Facility Validated Groundwater Analytical Results Wheatfield, New York 3rd Quarter 2013 (October)		Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	PMW-16D PMW-16D_101813 7244056 LANCASTERLABS BPW82 WATER 10/18/2013 9:35 12/5/2013	PMW-17D PMW-17D_101513 7238387/033KJ-13 LANCASTERLABS/MI BPW79/033KJ WATER 10/15/2013 14:35 12/5/2013	RMW-1D RMW-1D_101613 7239998 LANCASTERLABS BPW80 WATER 10/16/2013 15:00 12/5/2013	RMW-2D RMW-2D_101513 7238389 LANCASTERLABS BPW79 WATER 10/15/2013 17:10 12/5/2013	RMW-3D RMW-3D_101113 7234663 LANCASTERLABS BPW77 WATER 10/11/2013 14:10 12/5/2013	RMW-4D RMW-4D_101413 7236820 LANCASTERLABS BPW78 WATER 10/14/2013 14:55 12/5/2013
CAS NO.	COMPOUND	UNITS:						
<b>VOLATILES</b>								
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	18000	470	270	400 U	10000	80 U
75-34-3	1,1-DICHLOROETHANE	ug/l	2000	160	6.4	500 U	150	100 U
75-35-4	1,1-DICHLOROETHENE	ug/l	300	6	4.3 J	500 J	140	80 U
75-00-3	CHLOROETHANE	ug/l	50 U	1 U	1 U	500 U	10 U	100 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/l	40000	100	280	250000	2600	55000
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/l	380	5.1	0.8 U	1200 J	11 J	80 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	42 J	5.6	0.98 J	400 U	8.1 J	97 J
79-01-6	TRICHLOROETHYLENE (TCE)	ug/l	12000	30	12	290000	32 J	8500
75-01-4	VINYL CHLORIDE	ug/l	640	510	7.6	860 J	59	1400
74-85-1	ETHENE	ug/l	59	40	1 U	230	3.9 J	300
74-84-0	ETHANE	ug/l	5.7	23	17	31	1 J	33
74-82-8	METHANE	ug/l	290	3900	76	330	36	2800
<b>DISSOLVED METALS</b>								
7429-90-5	ALUMINUM	mg/l	0.0828 U	0.0828 U	0.0828 U	0.0828 U	0.0828 U	0.0828 U
7440-38-2	ARSENIC	mg/l	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U
7440-70-2	CALCIUM	mg/l	268	180	308	484	222	453
7439-89-6	IRON	mg/l	0.043 U	0.0954 J	0.26 J	26.8	0.0701 J	0.043 U
7439-95-4	MAGNESIUM	mg/l	86.9	62.2	91.9	125	69.4 J	183
7439-96-5	MANGANESE	mg/l	0.304	0.405	0.145	1.08	0.178	0.296
9/7/7440	POTASSIUM	mg/l	3.86	8.47	3.08	7.87	2.96	6.14
7782-49-2	SELENIUM	mg/l	0.0084 UJ	0.0084 U	0.0084 UJ	0.0084 U	0.0084 U	0.0084 U
7440-23-5	SODIUM	mg/l	113	85.3	70	224	71.5	198
<b>WET CHEMISTRY</b>								
7440-44-0	TOTAL CARBON	mg/l	329	72.9		815	101	641
TOC	TOTAL ORGANIC CARBON	mg/l	183	57.5	1.6	578	21.1	390
TIC	TOTAL INORGANIC CARBON	mg/l	146	15.4		238	79.5	251
<b>DISSOLVED INORGANICS</b>								
16887-00-6	CHLORIDE (AS CL)	mg/l	156	86.4	111	507	108	300
14797-55-8	NITROGEN, NITRATE (AS N)	mg/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
PORTHO	PHOSPHORUS, TOTAL ORTHOPHOSPHATE (AS P)	mg/l	0.6 U	0.6 U	0.03 U	0.067 J	0.11	0.6 U
14808-79-8	SULFATE (AS SO4)	mg/l	91.1	3.5 J	780	317	462	189
18496-25-8	SULFIDE	mg/l	191	212	7.6	14.2	22.7	276
<b>MICRO GENE ANALYSIS</b>								
BVC	BVC	cells/mL		25300				
DHBt	DHBt	cells/mL		1680				
DHC	DHC	cells/mL		53400				
TCE	TCE	cells/mL		88200				
VCR	VCR	cells/mL		768				
<b>MICROSEEPS DATA</b>								
74-86-2	Acetylene	ug/l						
1333-74-0	Hydrogen	nM						

EkonoL Facility Validated Groundwater Analytical Results Wheatfield, New York 3rd Quarter 2013 (October)		Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	FIELDQC TB13266-A 7229754 LANCASTERLABS BPW74 WATER 9/29/2013 0:00 12/5/2013	FIELDQC TB13266-B 7232092 LANCASTERLABS BPW75 WATER 9/29/2013 0:00 12/5/2013	FIELDQC TB13266-C 7232093 LANCASTERLABS BPW75 WATER 9/29/2013 0:00 12/5/2013	FIELDQC TB13266-D 7233063 LANCASTERLABS BPW76 WATER 9/29/2013 0:00 12/5/2013	FIELDQC TB13266-E 7233064 LANCASTERLABS BPW76 WATER 9/29/2013 0:00 12/5/2013	FIELDQC TB13266-F 7234655 LANCASTERLABS BPW77 WATER 9/29/2013 0:00 12/5/2013
CAS NO.	COMPOUND	UNITS:						
	<b>VOLATILES</b>							
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
75-34-3	1,1-DICHLOROETHANE	ug/l	1 U	1 U	1 U	1 U	1 U	1 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
75-00-3	CHLOROETHANE	ug/l	1 U	1 U	1 U	1 U	1 U	1 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/l	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/l	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
79-01-6	TRICHLOROETHYLENE (TCE)	ug/l	1 U	1 U	1 U	1 U	1 U	1 U
75-01-4	VINYL CHLORIDE	ug/l	1 U	1 U	1 U	1 U	1 U	1 U
74-85-1	ETHENE	ug/l						
74-84-0	ETHANE	ug/l						
74-82-8	METHANE	ug/l						
	<b>DISSOLVED METALS</b>							
7429-90-5	ALUMINUM	mg/l						
7440-38-2	ARSENIC	mg/l						
7440-70-2	CALCIUM	mg/l						
7439-89-6	IRON	mg/l						
7439-95-4	MAGNESIUM	mg/l						
7439-96-5	MANGANESE	mg/l						
9/7/7440	POTASSIUM	mg/l						
7782-49-2	SELENIUM	mg/l						
7440-23-5	SODIUM	mg/l						
	<b>WET CHEMISTRY</b>							
7440-44-0	TOTAL CARBON	mg/l						
TOC	TOTAL ORGANIC CARBON	mg/l						
TIC	TOTAL INORGANIC CARBON	mg/l						
	<b>DISSOLVED INORGANICS</b>							
16887-00-6	CHLORIDE (AS CL)	mg/l						
14797-55-8	NITROGEN, NITRATE (AS N)	mg/l						
PORTHO	PHOSPHORUS, TOTAL ORTHOPHOSPHATE (AS P)	mg/l						
14808-79-8	SULFATE (AS SO4)	mg/l						
18496-25-8	SULFIDE	mg/l						
	<b>MICRO GENE ANALYSIS</b>							
BVC	BVC	cells/mL						
DHBt	DHBt	cells/mL						
DHC	DHC	cells/mL						
TCE	TCE	cells/mL						
VCR	VCR	cells/mL						
	<b>MICROSEEPS DATA</b>							
74-86-2	Acetylene	ug/l						
1333-74-0	Hydrogen	nM						



Ekonomol Facility Validated Groundwater Analytical Results Wheatfield, New York 3rd Quarter 2013 (October)		Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	FIELDQC TB13266-H 7236817 LANCASTERLABS BPW78 WATER 9/29/2013 0:00 12/5/2013	FIELDQC TB13266-I 7238381 LANCASTERLABS BPW79 WATER 9/29/2013 0:00 12/5/2013	FIELDQC TB13266-J 7239986 LANCASTERLABS BPW80 WATER 9/29/2013 0:00 12/5/2013	FIELDQC TB13266-K 7239987 LANCASTERLABS BPW80 WATER 9/29/2013 0:00 12/5/2013	FIELDQC TB13266-L 7239988 LANCASTERLABS BPW80 WATER 9/29/2013 0:00 12/5/2013	FIELDQC TB13266-M 7242229 LANCASTERLABS BPW81 WATER 9/29/2013 0:00 12/5/2013
CAS NO.	COMPOUND	UNITS:						
	<b>VOLATILES</b>							
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
75-34-3	1,1-DICHLOROETHANE	ug/l	1 U	1 U	1 U	1 U	1 U	1 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
75-00-3	CHLOROETHANE	ug/l	1 U	1 U	1 U	1 U	1 U	1 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/l	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/l	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
79-01-6	TRICHLOROETHYLENE (TCE)	ug/l	1 U	1 U	1 U	1 U	1 U	1 U
75-01-4	VINYL CHLORIDE	ug/l	1 U	1 U	1 U	1 U	1 U	1 U
74-85-1	ETHENE	ug/l						
74-84-0	ETHANE	ug/l						
74-82-8	METHANE	ug/l						
	<b>DISSOLVED METALS</b>							
7429-90-5	ALUMINUM	mg/l						
7440-38-2	ARSENIC	mg/l						
7440-70-2	CALCIUM	mg/l						
7439-89-6	IRON	mg/l						
7439-95-4	MAGNESIUM	mg/l						
7439-96-5	MANGANESE	mg/l						
9/7/7440	POTASSIUM	mg/l						
7782-49-2	SELENIUM	mg/l						
7440-23-5	SODIUM	mg/l						
	<b>WET CHEMISTRY</b>							
7440-44-0	TOTAL CARBON	mg/l						
TOC	TOTAL ORGANIC CARBON	mg/l						
TIC	TOTAL INORGANIC CARBON	mg/l						
	<b>DISSOLVED INORGANICS</b>							
16887-00-6	CHLORIDE (AS CL)	mg/l						
14797-55-8	NITROGEN, NITRATE (AS N)	mg/l						
PORTHO	PHOSPHORUS, TOTAL ORTHOPHOSPHATE (AS P)	mg/l						
14808-79-8	SULFATE (AS SO4)	mg/l						
18496-25-8	SULFIDE	mg/l						
	<b>MICRO GENE ANALYSIS</b>							
BVC	BVC	cells/mL						
DHBt	DHBt	cells/mL						
DHC	DHC	cells/mL						
TCE	TCE	cells/mL						
VCR	VCR	cells/mL						
	<b>MICROSEEPS DATA</b>							
74-86-2	Acetylene	ug/l						
1333-74-0	Hydrogen	nM						

Ekonol Facility Validated Groundwater Analytical Results Wheatfield, New York 3rd Quarter 2013 (October)		Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	FIELDQC TB13266-N 7242230 LANCASTERLABS BPW81 WATER 9/29/2013 0:00 12/5/2013	FIELDQC TB13266-O 7244054 LANCASTERLABS BPW82 WATER 9/29/2013 0:00 12/5/2013
CAS NO.	COMPOUND	UNITS:		
<b>VOLATILES</b>				
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.8 U	0.8 U
75-34-3	1,1-DICHLOROETHANE	ug/l	1 U	1 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.8 U	0.8 U
75-00-3	CHLOROETHANE	ug/l	1 U	1 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/l	0.8 U	0.8 U
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/l	0.8 U	0.8 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.8 U	0.8 U
79-01-6	TRICHLOROETHYLENE (TCE)	ug/l	1 U	1 U
75-01-4	VINYL CHLORIDE	ug/l	1 U	1 U
74-85-1	ETHENE	ug/l		
74-84-0	ETHANE	ug/l		
74-82-8	METHANE	ug/l		
<b>DISSOLVED METALS</b>				
7429-90-5	ALUMINUM	mg/l		
7440-38-2	ARSENIC	mg/l		
7440-70-2	CALCIUM	mg/l		
7439-89-6	IRON	mg/l		
7439-95-4	MAGNESIUM	mg/l		
7439-96-5	MANGANESE	mg/l		
9777440	POTASSIUM	mg/l		
7782-49-2	SELENIUM	mg/l		
7440-23-5	SODIUM	mg/l		
<b>WET CHEMISTRY</b>				
7440-44-0	TOTAL CARBON	mg/l		
TOC	TOTAL ORGANIC CARBON	mg/l		
TIC	TOTAL INORGANIC CARBON	mg/l		
<b>DISSOLVED INORGANICS</b>				
16887-00-6	CHLORIDE (AS CL)	mg/l		
14797-55-8	NITROGEN, NITRATE (AS N)	mg/l		
PORTHO	PHOSPHORUS, TOTAL ORTHOPHOSPHATE (AS P)	mg/l		
14808-79-8	SULFATE (AS SO4)	mg/l		
18496-25-8	SULFIDE	mg/l		
<b>MICRO GENE ANALYSIS</b>				
BVC	BVC	cells/mL		
DHBt	DHBt	cells/mL		
DHC	DHC	cells/mL		
TCE	TCE	cells/mL		
VCR	VCR	cells/mL		
<b>MICROSEEPS DATA</b>				
74-86-2	Acetylene	ug/l		
1333-74-0	Hydrogen	nM		