CLAREMONT POLYCHEMICAL SUPERFUND SITE
Groundwater Treatment System
Old Bethpage, New York

MONTHLY REPORT
of the
Operations & Maintenance Activities
During
April 2013

WA D006130-19
SITE # 130015

Prepared for the:

New York State Department of Environmental Conservation

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ACRONYMS AND ABBREVIATIONS

AS	air stripping
ASF	air stripper feed
CA	carbon adsorber
CLP	contract laboratories program
DBA	doing business as
DOSR	daily operations summary report
DTW	depth to water
gpd	gallons per day
gpm	gallons per minute
GW	groundwater
GWTP	groundwater treatment plant
GWTS	groundwater extraction, treatment, and reinjection system
HCl	hydrochloric acid
HMI	human-machine interface
HRP	HRP Associates, Inc. dba HRP Engineering, P.C.
HVAC	heating, ventilation, and air conditioning
IG	infiltration gallery
IW	injection well
LGAC, LCA	Liquid phase granular activated carbon
LTRA	Long Term Response Action
MCC	motor control cabinet
MCP	master (main) control panel
NCDPW	Nassau County Department of Public Works
NYSDEC	New York State Department of Environmental Conservation
O&M	operation and maintenance
PDB	Passive Diffusion Bags
PD	plant discharge
PID	photo ionization detector
PLC	programmable logic controller
psi	pressure in pounds per square inch
PW	process water
SAIC	Science Applications International Corporation
SAP	sampling and analysis plan
SOP	standard operating procedure
SSHP	site safety and health plan
TOB	Town of Oyster Bay
USACE	United States Army Corps of Engineers
VGAC, VCA	vapor-phase granular activated carbon
VFD	variable frequency drive
VOCs	volatile organic compounds

1.0 OPERATION AND MAINTENANCE ACTIVITIES

HRP Associates, Inc. dba HRP Engineering, P.C. (HRP) continued its daily operation and maintenance (O&M) of the Claremont Polychemical Superfund Site and its groundwater treatment system (GWTS) during April 2013. This period is defined as 0600 hours, April 1, 2013, through 0600 hours, May 1, 2013. O&M conducted during this reporting period was performed in accordance with the site O&M Manual.

The plant and grounds were maintained for the 30 days in this reporting period although the treatment system was off line for the whole period (43,200 minutes).

During this shutdown, readings of key process parameters were recorded as necessary. These readings were used to monitor various plant maintenance operations and were recorded in the Daily Database which is an electronic file maintained in the monthly operating data folders.

At the end of this report is a list of the manuals, logs, reports, and databases maintained by the treatment plant. The locations of these documents are included.

1.1 Daily Operations Summary Reports

The daily operation of the GWTS is documented in the Daily Operations Summary Reports (DOSR). The DOSRs include a summary of the daily O&M activities and are based on the daily operating logs and worksheets. These worksheets include:

Daily Operating Log – process meter readings (CPS-Form-008)
Daily Activities Summary Report - plant operator activities (CPS-Form-007)
Daily Site Safety Inspection – Site checklist for unsafe conditions (CPS-Form-009)
Employee Sign-In Sheet – employee log-in (CPS-Form-11)

1.2 Summary of Maintenance Activities

Maintenance of the treatment system and associated equipment is performed in accordance with the Claremont Groundwater Treatment System O&M Manual. Routine activities and equipment function tests completed during this reporting period are summarized in the Monthly Maintenance Log. This report is electronically filed and is available for review.

System maintenance incorporates the equipment manufacturers' recommendations, operations experience, and good engineering and maintenance practices. A detailed accounting of daily operation and maintenance activities is provided in the plant operator's daily logbook, the site supervisor's daily logbook, the operator's daily activities summary reports, and the site supervisor's daily plant activity notes.

Significant maintenance activities completed during this reporting period included the following:

- Scheduled routine monthly tasks which included injection well (IW) depth soundings, valve function tests, and comprehensive site inspections.
- Outdoor site maintenance was performed as needed. This included various clean up tasks and grounds keeping.
- Outdoor landscaping equipment was PM'd and tested for the upcoming season.
- Selected monitoring wells were cleaned up and painted along with the bollards.
- The gas powered blower was repaired and returned to service.
- Repairs were made to the injection pump discharge manifold.
- The monthly truck inspection was completed.
- The repaired areas of the LCA vessels were primer painted.
- Rusted spots on the lower sections of the outdoor storage tanks were ground to bare metal and primed.
- The back-up battery for the emergency light on the NE door was replaced.

2.0 MAINTENANCE LOGS

The following operating logbooks are currently in use:

- Well Maintenance Field Log CL-28
- Sampling support Field Log CL-37
- Site Supervisor's Daily Log CL-45
- Plant Operator's Daily Log CL-46

40 completed logbooks are being scanned and delivered to the NYSDEC. All of the logbooks are identified on a master logbook inventory control file and are routinely checked as part of the site quality control program.

3.0 TECHNICAL SUPPORT ACTIVITIES

3.1 HRP Personnel

- There were no HRP personnel at the GWTP during this period but several engineers continued to work on various aspects of the extraction well system.
- HRP personnel working on the pump depth after packer placement in extraction wells and pumping rates.
- Jen Kotch of the NY office started gathering information for the generation of an operating budget extension.

3.2 NYSDEC Personnel, sub-contractors and other visitors

- Superweld was on site to look at the repairs required on the EQ tank

3.3 Deliveries

- Mail was delivered one time.
- UPS delivered the McMaster Carr order

4.0 HEALTH AND SAFETY

Work at the Claremont Polychemical groundwater treatment plant (GWTP) was conducted in accordance with the approved Site Safety and Health Plan (SSHP). Site safety inspections were performed daily and the reports are filed on-site. In addition to the daily safety inspections, comprehensive safety inspections were performed twice in April. These worksheets are also on file.

The extraction well pump motor controllers and power supplies are locked and tagged out (LOTO). The power modules remain locked out.

Hot Work Permits (4) were issued for the pre-painting repair work on the storage tanks.

No safety incidents or accidents occurred during this April 2013 period.

5.0 PLANNED ACTIVITIES AND SCHEDULES

The status of project work and significant corrective maintenance activities is updated on a monthly basis. This status of plant conditions and concerns was updated April 25 and is electronically filed. It can be found at the end of this report as Table 12-1 – Claremont Corrective Action Summary.

Separate tentative schedules for equipment maintenance events are shown in the O&M Manual and the Sampling and Analysis Plan (SAP).

Currently, the GWTS is off line. It will remain in this mode until the extraction well pumps are re-installed and re-activated. This work is tentatively scheduled for early May.

6.0 MONITORING WELL WATER ELEVATIONS

The well system water level elevation data-table was updated after the March quarterly groundwater sampling event. This database is available for review. The water level elevation data is included in the quarterly groundwater monitoring report. The next table update will occur after the next quarterly sample collection.

Due to the stabilized nature of PDB samples, the water quality data is no longer recorded.

7.0 TREATMENT SYSTEM FLOWS

The volume of treated water discharged by the treatment plant to the injection well field is determined daily from readings of the magnetic flow meter on the plant effluent line. A summary of these meter readings is generally provided in Table 7-1. However, because the GWTS was off line throughout this whole period, there was no plant discharge to record. The total volume of treated water discharged in April, as measured from 0600 hours on April 1, 2013, to 0600 hours on May 1, 2013, was 0 gallons.

The cumulative volume of water discharged for this contract year (June 1, 2012 to present) is 93,525,749 and is ~42% below target. A graphic representation of the daily system flows are provided in Figure 14-1. (Targeted goals are based on a treated water discharge rate of 335 gpm.)

In April, the plant discharge flow averaged 0 gallons per minute (gpm) and 0 gallons per day (gpd).

Month	Flow Average (gpm)	Volume Discharged (gpd)
June '12	380	546,715
July '12	357	513,599
August '12	344	495,778
September '12	338	487,288
October '12	320	460,217
November '12	343	493,409
December '12	47	68,313
January '13	0.7	968
February '13	0	0
March '13	0	0
April '13	0	0
Goal	**335**	**482,400**

The flow monitoring units for the individual IW systems and infiltration galleries allow for reading the flow rate and volume discharged to each system. As indicated above, there was to no discharge in April.

Prior to the shut down, both galleries had been draining adequately.

The plant's total effluent discharge is limited by plumbing constraints, by injection pump capacity and by the ability of the wells to accept water.

8.0 CHEMICAL CONSUMPTION

The four chemical feed systems are offline, and their future use is not anticipated. The systems are periodically tested and are operational. With the exception of the permanganate

feed tank, the chemical feed tanks and feed tubing contain water for testing and inspection purposes. Currently the KMnO4 tank needs a repair to a cracked drain nozzle.

There are no bulk chemicals onsite.

9.0 CARBON SYSTEMS

9.1 Aqueous-Phase Carbon

The liquid side carbon feed system is off line. The LCA vessels were extensively back washed in December.

No carbon has been added to or removed from the vessels in April.

9.2 Vapor-Phase Carbon

The Air Stripper system is off line.

No spent vapor-phase carbon was generated during this period, and no carbon was added to the vessels.

10.0 WASTE DISPOSAL

Currently, there are 8 metal drums of non-hazardous carbon waste stored inside the facility. There is no hazardous waste onsite. There was no waste removed from the facility in April.

11.0 MONTHLY DISCHARGE MONITORING REPORT

The plant is currently operating under an equivalency permit from the New York State Department of Environmental Conservation (NYSDEC). While the permit requires periodic submittal of discharge monitoring results, monthly discharge monitoring reporting is not required. A review of previous monthly discharge analytical results indicated all analyzed parameters were below noted permit limits.

The plant's water discharge permit expires December 31, 2013. The required information for the SPDES permit renewal is being gathered.

12.0 OTHER OPERATIONS, MAINTENANCE, OR MANAGEMENT ISSUES

The GWTS was taken offline on 12/5/12 for extraction well profile sampling as per NYSDEC direction. The treatment system has remained offline for this entire period. QSP Environmental Well Blockers have been specified along with new pump depths for EX-1 and EX-2. The re-installation of the pumps is awaiting the delivery of the blockers and scheduling by the NYSDEC call out contractor. This is tentative for early May.

Local contractors have completed the dismantling of the old Claremont plant. The scrap has been carted away leaving piles of sand and crushed concrete. This task has had no affect on the GWTS.

Both NCDPW and TOB noted spikes in contamination levels at selected monitoring wells after the last groundwater sampling event.

Five new pin-hole leaks were observed in the lower level of the EQ tank.

Other on-going plant maintenance issues are summarized on Table 12-1.

13.0 PLANT DOCUMENTS

Procedures and standard forms are written, reviewed, and revised as needed. During April, no new documents or revisions were required.

14.0 TREATMENT PLANT AND WELL FIELD MONITORING RESULTS

The Claremont Polychemical GWTS is monitored through the analysis of off-site laboratory analytical data and on-site field data.

14.1 Off-site Analytical Data Results

Monthly plant discharge (PD) samples are taken for organic analysis in compliance with the NYSDEC discharge permit. Quarterly groundwater (GW) samples are taken for organic analysis, and quarterly process water (PW) samples are taken for organic, inorganic, and generic analysis. In April, the following sampling activity occurred:

- No samples were taken in April.
- The analytical data from the March GW samples was received and uploaded to the EQuIS system.

14.2 Field Data

Treatment plant effluent is normally monitored for pH and temperature on a weekly basis in order to obtain a monthly average in compliance with the NYSDEC discharge permit requirements. These readings are obtained from discharge samples taken from a controlled point with calibrated portable meters. The plant was offline during April and no discharge readings were taken.

The NYSDEC discharge permit requires the plant discharge to have an average monthly pH greater than 5.50. A graph of the plant discharge monthly pH average trend over several months is provided in Table 14-1.

Normally weekly air monitoring readings are taken with a PID of the influent and effluent air streams of the active vapor phase carbon adsorber vessel following the air stripping tower. Both vessels have been offline for all of April. The VCA vessel monitoring will resume once the plant is operational. PID readings of the plant continue.

Water elevations in the IWs are normally recorded on a daily basis as is the daily total flow discharged to the well field. These are depicted in Figure 14-1. The IW levels were generally steady while the pumps are active. With the exception of IW-1, the transducers in IW-2, IW-3, and IW-4 are producing unreliable signals. The water levels are physically monitored more frequently. On 4/18/13 the DTW readings for the injection wells were recorded.

	Sounding Depth (ft)	Transducer	Depth to Water (ft)
IW-1	144.05	72.0	99.50
IW-2	199.10		99.81
IW-3	247.70		100.52
IW-4	197.25		100.55

Measurements to determine the well depth from the top of the injection well column to the bottom were also taken on 4/18/13. A summary of the historical data is included in Table 14-2. There has been an accumulation of sediment in all four injection wells, and while relatively stable, there seems to be more sedimentation activity.

The injection well falling head test was not performed in April. A graphic representation of the time required to drop the water level to a static condition is presented in Figure 14-2 for the December test. A comparison of baseline data from March 2006 to that of recent tests is shown in Figure 14-3. All wells appear to have been draining adequately.

Other routine data collected during April included:

- The plant sound level readings were recorded twice (4/5 and 4/19), (included with the safety inspection sheets)
- Weekly utility meter readings were recorded.
- The plant air was monitored (4/5 and 4/19).
- Mileage and gas consumption summaries for the plant truck were compiled for reporting.
- The DTW and DTB readings for the extraction wells were recorded 4/30.

15.0 PROCESS ANALYSIS, INTERPRETATIONS, AND CONCLUSIONS

For all of April, the GWTS was off line. All process pumps were shut off during this period but were operated manually if necessary.

15.1 Extraction and Influent Processes

- The three extraction well pumps were removed from the wells 12/6.
- The in-line flow monitors are fully functional.
- Rust spots on the EQ tank were ground and spot primed.
- New leaks have been observed in the EQ tank shell. The tank has been emptied.
- The three influent pumps are operational but off-line.
- There is drift in the flow control signal to INF pump-1.
- The 2 influent flow controllers are fully functional.
- Routine maintenance continues.

15.2 Flow through Aeration Process

- Both treatment trains are currently off line.
- The four chemical feed systems remain out of service.
- The flash and flocculation mixers at the clarifiers remain idle.

15.3 Settling Filter Process

- The system is fully functional but offline.

15.4 Air Stripping Process

- The three ASF pumps are off line
- The VFD for ASF P2 exhibits an earth ground fault.
- The blower is fully functional. It is also offline.
- The feed tanks contain 1-3 inches of sand.
- Routine maintenance continues.

15.5 Aqueous-Phase Carbon Treatment Process

- All three feed pumps are fully functional but offline.
- Both feed tanks contain 1-3 inches of sand.
- Other routine maintenance tasks continued.

15.6 Treated Water Injection Process

- All three INJ pumps are functional.
- The leak in the pump discharge pipe was solvent cleaned and re-glued.
- The injection well transducers for IW-2, IW-3, IW-4 are producing unreliable signals.
- The galleries had been adequately draining.
- Routine maintenance tasks continue.

16.0 GROUNDS

Routine maintenance tasks continue outside the plant. This includes weather related clean up tasks and landscaping duties and well maintenance.

16.1 Plant Perimeter

- General outdoor clean up continues. Including wind-blown debris.
- Demolition by an outside contractor on the old Claremont plant has been completed.

16.2 Well Field

- The extraction well pumps, pipes and fixtures were removed from the wells.
- The well areas are routinely inspected.
- The well paths are clear.
- The well caps and bollards of selected monitoring wells have been painted.

16.3 Other

- The monthly in-house inspection of the plant truck was completed.
- Miscellaneous trips for local purchases were made.

There were no other significant issues outside the plant. Routine maintenance continues.

FIGURES

Figure 14-1 Injection Well Elevations and Daily Flow

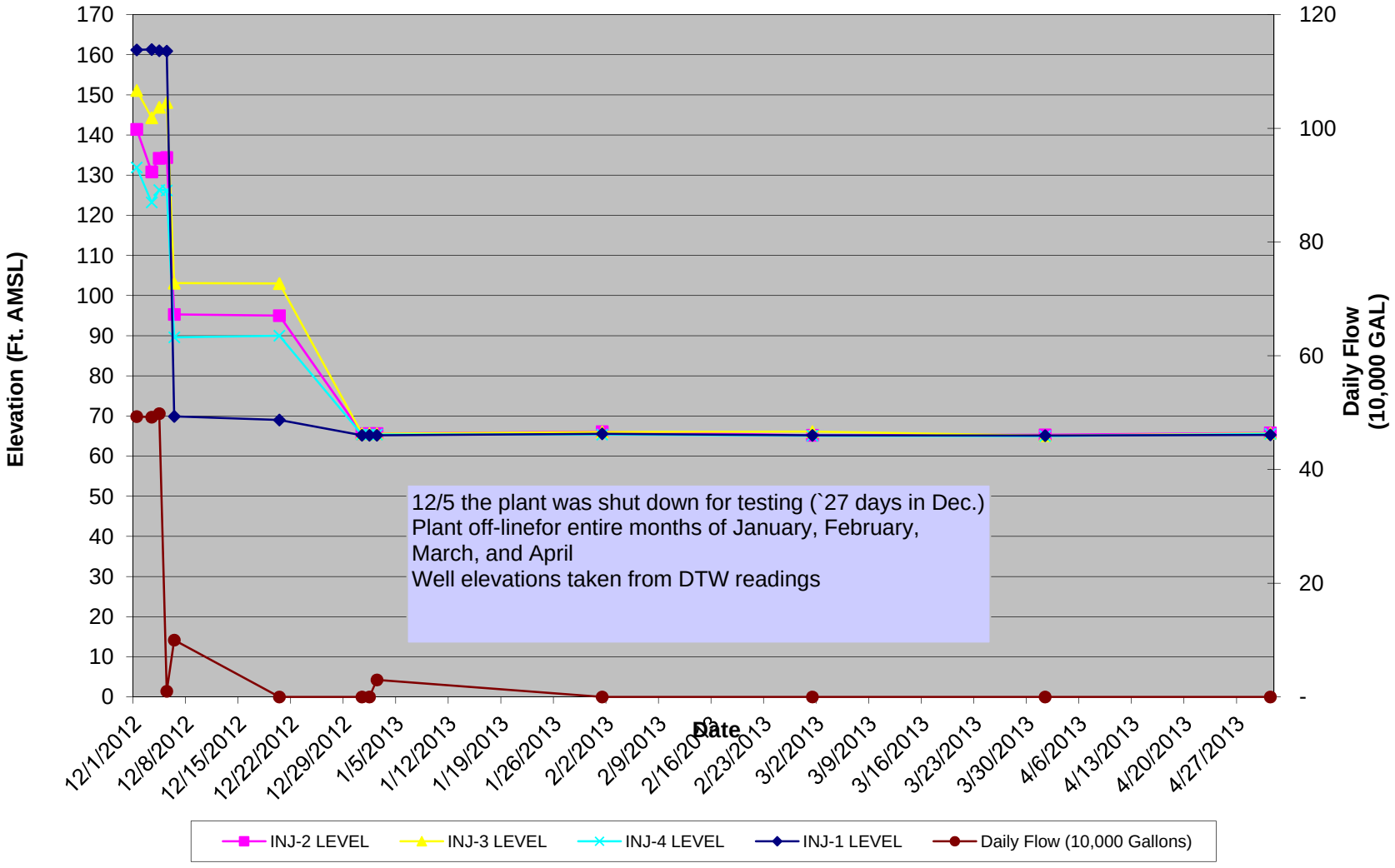


Figure 14-2 Injection Well Falling Head Test - December 19, 2012

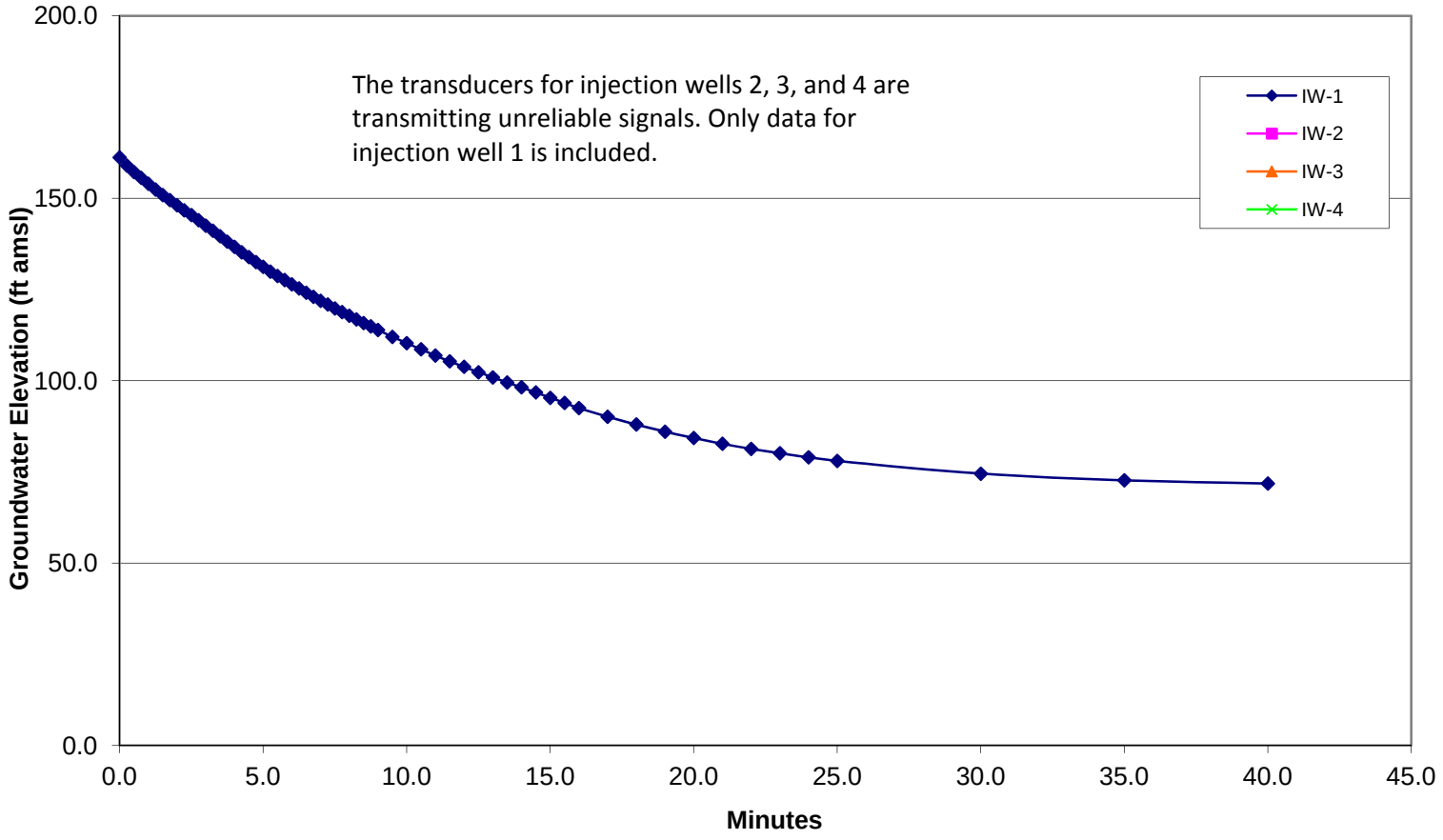
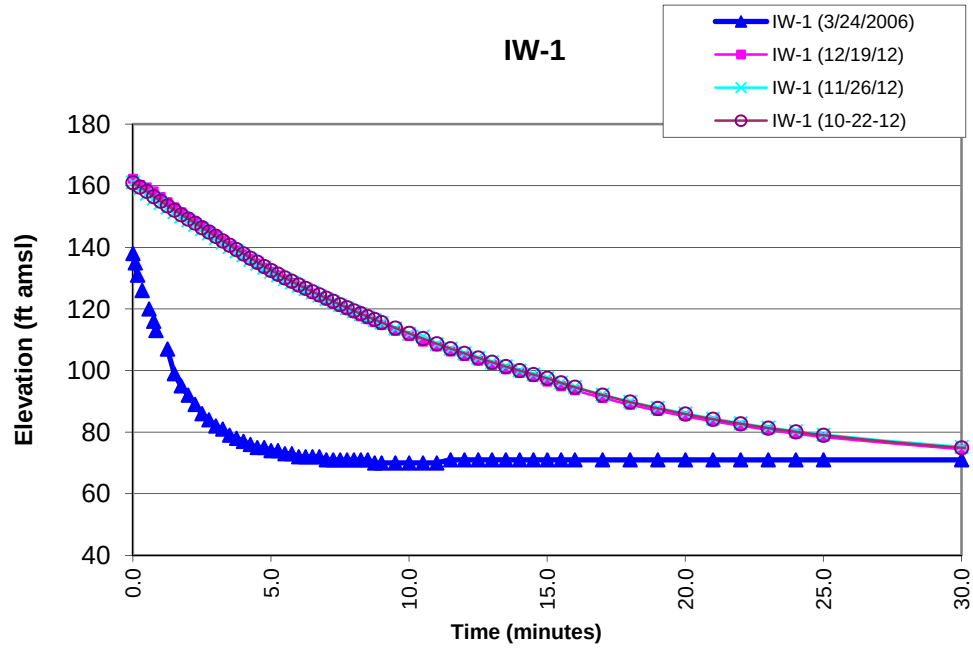
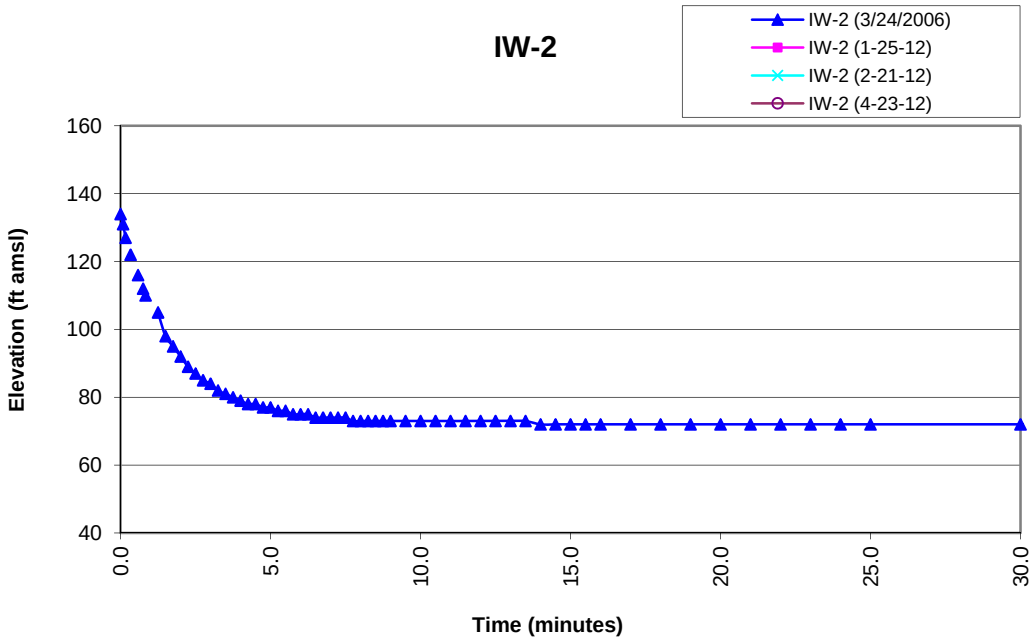
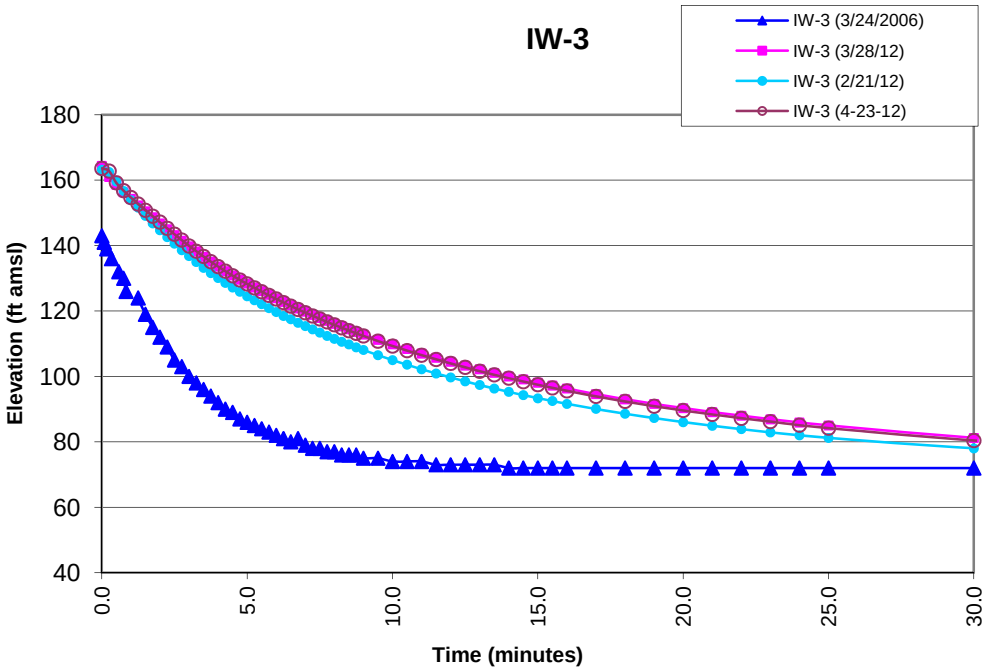
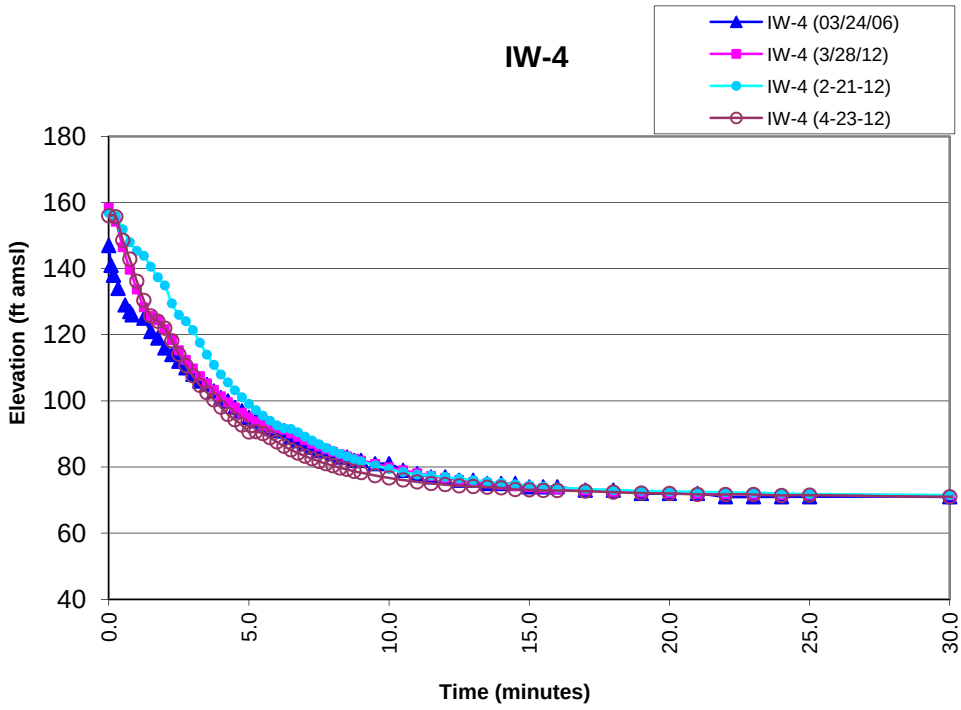


Figure 14-3 Comparison of Falling Head Tests






IW-3
IW-3 (3/24/2006)
IW-3 (3/28/12)
IW-3 (2/21/12)
IW-3 (4-23-12)
Elevation (ft amsl)
180
160
140
120
100
80
60
40
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Time (minutes)


IW-4
IW-4 (03/24/06)
IW-4 (3/28/12)
IW-4 (2-21-12)
IW-4 (4-23-12)
Elevation (ft amsl)
180
160
140
120
100
80
60
40
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Time (minutes)

TABLES

TABLE 7-1

MAGNETIC FLOWMETER DAILY TOTALIZER READINGS

DATE	TOTALIZER READING	GALLONS PER DAY	GALLONS PER MINUTE
12/1/2012	650282281	68314	47
1/1/2013	652400000	968	1
2/1/2013	652430000	0	0
3/1/2013	652430000	0	0
4/1/2013	652430000	0	0
5/1/2013	652430000		
Apr. '13 Treated Water Volume		**0**	
Apr. '13 Avg. GPM Discharged			**0**

TABLE 12-1

Plant Corrective Action Summary: Plant conditions and concerns (updated 4/30/13)

Date	Condition to be corrected	Status	Priority	Notes
2007	PD manifold leak	**In-place preparation of leaking joint and multiple layers of pvc glue - untested**	3	Leak is monitored and deemed to be not serious
2008	Check Valve failures	Valves are manually controlled	2	Plant wide – 13 units, this situation creates problems for any remote control of the processes.
2008	Injection Pump 1&2 shut off valve failures	Leave as is	2	Minimum 4 units. Pumps cannot be isolated
Aug '08	Air Compressor overhaul	Run system on an 'as needed' basis	4	This method has been working well. A failure may prevent some tasks.
2009	EQ tank isolation valve failure	Leave as is	2	The tank cannot be isolated
2009	Filter press hydraulic fluid leak	Add fluid as needed	4	The hydraulic pump system will require outside service.
2009	Sludge tank transfer piping replacement	Use M-8 pump and hoses The M-4 pump is available	4	Hoses and an M-8 are being used in place of the hard plumbed system.
Aug '10	IWs transducer replacement	Leave as is and manually measure water levels	3	3 units, only the transducer in IW-1 gives a reliable signal
Aug '10	Access stairs from plant to wellfield	Leave as is	4	Need to generate a plan with costs
May '11	pH meter failures at RX1, 2, and ASF	Leave as is	3	pH control is no longer required
June '11	ASF P2 VFD repair	Leave out of service	2	P-2 is run on off-line pump's VFD
July '11	INF P1 VFD repair	Leave as is	2	Pump flow is controlled by throttling the P-1 discharge valve
Jan '12	INF P2 motor noise	Await failure	4	Replace motor at failure
Apr '12	INJ P2 leak	Leave as is	2	Shut down item – replace seal
Apr '12	Permanganate tank repair	Leave as is	4	Off line, tank is not needed
Sept '12	Optimize PD flow	Leave as is	4	-Change extraction containment flow requirements -change discharge & manifold plumbing -change out pump impellers -resize pumps
Nov. '12	Clean Process tanks	Clean when possible EQ , TW, ASF	4	Plant shutdown items: See below for completed tanks
Ongoing	Non-Hazardous Waste Accumulation	Indoor storage	3	Waste removal will be scheduled when sufficient quantity is accumulated.
Jan '13	Rust spots on storage tank shells	**Project has started, lower sections of the TW and EQ tanks have been spot primed**	2	**Rusted areas are to be abraded clean and spot painted**

March '13	**More EQ tank pin-hole leaks**	**Welder has been contacted to provide quote prior to NYSDEC approvals**	**1**	**5 leaks have been observed**
Recently completed Tasks	Condition	Remedy		
12/14/12	ASF Tank Level alarm faults	Units cleaned and returned to service.		Plant is down so effectiveness of remedy has not been tested
11/15/12	Out Door Heat Trace controllers	Two units for the 3 tanks have been installed and actuated		
11/15/12	IW-2 high water level	Reduced plant flow and several shut down periods righted the problem		
11/14/12	Plant truck emission test	Truck passed		
12/6/12	PID failure	New unit purchased and in use		
12/11/12	INJ Flow meter errors	Cleaned flow elements and piping spool pieces		
12/12/12	EX flow meters	Cleaned flow elements and piping spool pieces		
12/4/12	Plow pump leaks	Unit was rebuilt		
12/20	Clean EQ strainer	Cleaned when tank was emptied		
Sept '12	Emergency light failure NE door	New unit installed 1/30/13	2	Fully functional
Nov. '12	Clean process flow monitoring systems	Ex cleaned 12/12 PD cleaned 1/3 IW cleaned12/11	3	Plant shutdown items: PD, INJ, INF, EX
Dec. '12	AST media evaluation	Tower opened and media inspected 1/14	4	Iron sludge coating, media open - OK
Dec. '12	Valve Actuators on Settling tanks are a potential hazard	Actuators removed 1/18	3	Controllers disconnected, actuators stowed
June '11	ASF P3 motor replacement	Replaced motor with one removed from P2 (1/18/11)	2	Has not been tested under load
Dec '11	LCA vessel 2 - pin hole leaks	Repaired 2/14	3	Fully functional Feb '13
Nov. '12	Clean Process tanks	Clean when possible EQ , RX-1, RX-2, ST-1	4	Tanks cleaned during shutdown: RX-1, RX2, CL1, CL2, ST1, ST2, GACF1 ASF1
Dec '12	Plant heater failure	The heater was adjusted and is now functional	3	Fully Functional Feb '13
Dec. '12	LCA vessel 1 pinhole leaks	Repaired 2/15	3	Fully functional
Dec. '12	EQ tank pin hole leaks	Repaired 2/19	2	Fully functional

Priority Level 1- urgent and must be done 3- not urgent but should be done
2- not urgent but must be done 4- not urgent but would like done

TABLE 14-1

Month	$pH_{AVG.}$
May '11	6.25
June '11	6.33
July '11	6.12
Aug '11	6.39
Sept '11	6.38
Oct '11	6.22
Nov '11	6.62
Dec '11	6.60
Jan '12	6.58
Feb '12	6.50
Mar '12	6.57
Apr '12	6.52
May '12	6.28
June '12	6.32
July '12	6.54
Aug '12	6.32
Sept '12	6.20
Oct '12	6.15
Nov '12	6.39
Dec '12	6.11
Jan '13	6.35
Feb '13	nr
Mar '13	nr
Apr '13	nr

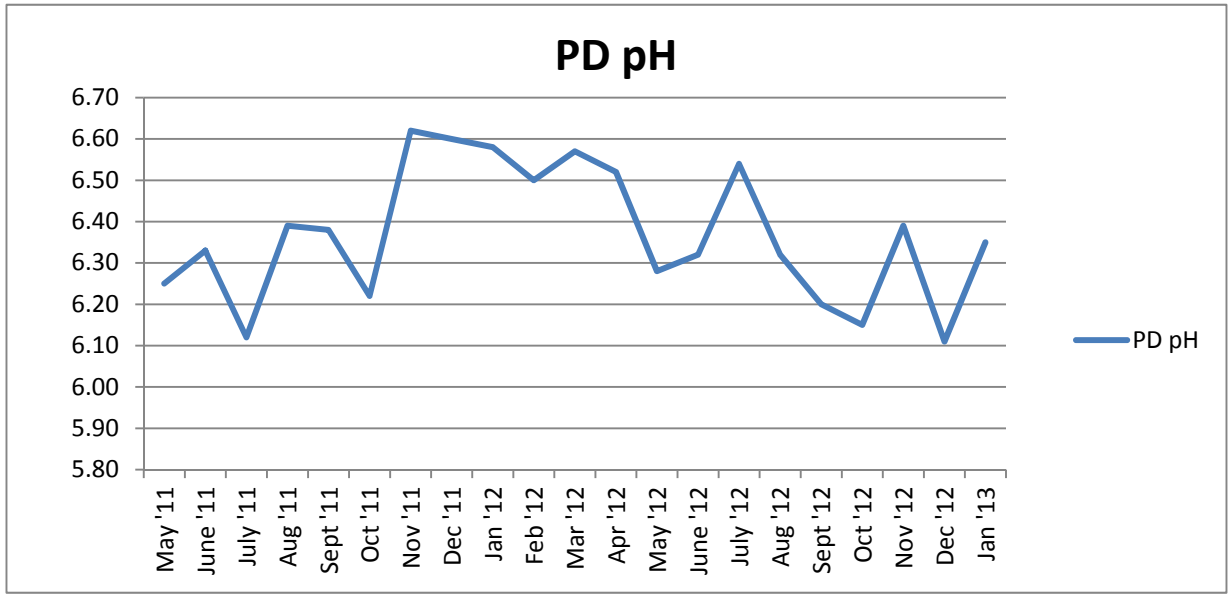
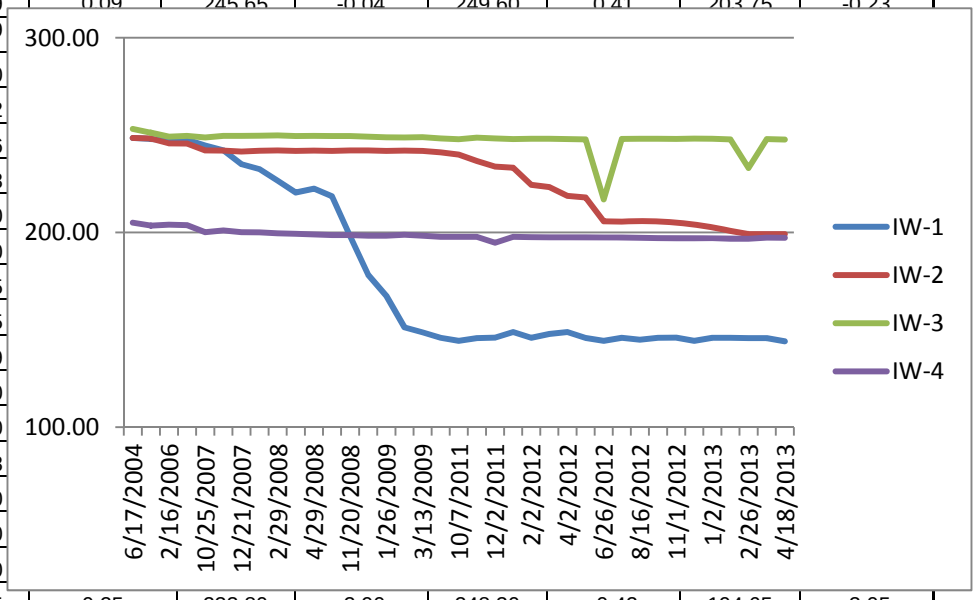


TABLE 14-2 Injection Well Soundings

This table contains selected dates and data

	Injection Well 1		Injection Well 2		Injection Well 3		Injection Well 4	
Date	Depth to Bottom (ft)	Difference	Depth to Bottom (ft)	Difference	Depth to Bottom (ft)	Difference	Depth to Bottom (ft)	Difference
6/17/2004	248.50	--	248.50	--	253.20	--	205.00	--
7/23/2004	247.97	-0.53	248.19	-0.31	251.20	-2.00	203.50	-1.50
2/16/2006	247.50	-0.01	245.69	-0.40	249.19	-0.02	203.98	0.00
3/23/2006*	247.59	0.09	245.65	-0.04	249.60	0.41	203.75	-0.23
10/25/2007	244.69							
11/19/2007	242.20							
12/21/2007	235.02							
1/29/2008	232.46							
2/29/2008	226.58							
3/27/2008	220.50							
4/29/2008	222.50							
5/30/2008	218.55							
11/20/2008	198.05							
12/29/2008	178.29							
1/26/2009	167.50							
2/25/2009	151.20							
3/13/2009	148.68							
9/21/2011	145.90							
10/7/2011	144.30							
11/17/2011	145.70							
12/2/2011	145.95	0.25	233.80	-2.90	248.30	-0.42	194.65	-3.05
1/5/2012	148.80	2.85	233.20	-0.60	247.98	-0.32	197.70	3.05
2/2/2012	145.85	-2.95	224.45	-8.75	248.10	0.12	197.60	-0.10
3/7/2012	147.85	2.00	223.30	-1.15	248.10	0.00	197.50	-0.10
4/2/2012	148.80	0.95	218.80	-4.50	247.97	-0.13	197.50	0.00
5/18/2012	145.80	-3.00	217.95	-0.85	247.78	-0.19	197.49	-0.01
6/26/2012	144.30	-1.50	205.70	-12.25	217.00	-30.78	197.40	-0.09
7/20/2012	145.85	1.55	205.55	-0.15	248.00	31.00	197.40	0.00
8/16/2012	144.90	-0.95	205.70	0.15	248.10	0.10	197.20	-0.20
9/20/2012	145.84	0.94	205.70	0.00	248.09	-0.01	197.10	-0.10
11/1/2012	145.95	0.11	205.15	-0.55	248.00	-0.09	197.00	-0.10
11/16/2012	144.30	-1.65	203.90	-1.25	248.15	0.15	197.00	0.00
1/2/2013	145.90	1.60	202.65	-1.25	248.10	-0.05	197.05	0.05
1/29/2013	145.90	0.00	200.80	-1.85	247.78	-0.32	196.78	-0.27
2/26/2013	145.70	-0.20	199.10	-1.70	233.10	-14.68	196.76	-0.02
3/18/2013	145.70	0.00	199.10	0.00	247.95	14.85	197.30	0.54
4/18/2013	144.05	-1.65	199.10	0.00	247.70	-0.25	197.25	-0.05



		DTB Well	Changes		
June ' 04 to	Present	**-104.45**	**-49.40**	**-5.50**	**-7.75**
June '04 to	Feb '06	-1.00	-2.81	-4.01	-1.02

*Injection wells IW-2 and IW-3 redeveloped during week ending 3/17/2006					
Mar '06 to	Oct '07	-2.90	-3.57	-0.87	-3.61
Injection wells IW-1 and IW-3 were redeveloped during week ending 11/9/07					
Nov '07 to	Mar '08	-21.70	-0.10	-0.10	-1.75
Injection wells IW-1 and IW-3 were redeveloped during week ending 4/25/08					
Apr '08 to	Present	**-78.45**	**-42.92**	**-1.90**	**-1.73**

Associated and Referenced Documents

Document	Location
Daily Worksheets Daily Operating Log Daily activities Summary Report Daily Site Safety Inspection Employee Sign-in Sheet	Original paper copies in monthly file folders at plant. Electronic copies on Farmington Server: >Claremont Data>year>month>month daily worksheets
Supporting Worksheets Visitor/Subcontractor Sign-in Sheet Air Monitoring Log Sound Monitoring Worksheet Daily Plant Activity Notes Comprehensive Site Safety Inspections	Original paper copies in monthly file folders at plant. Electronic copies on Farmington Server: -with daily worksheets -with monthly filings -with monthly filing >operating data>Daily Plant Activity Notes>yr>month >with monthly filing.
Plant Operator's Daily Log Book	Current book issued to operator, completed books on file in shop cabinet
Site Supervisor's Daily Log Book	Current book issued to supervisor, completed books on file in shop cabinet
Daily Database	Current database is an Electronic file on site, in Claremont Docs/Claremont Ops Data/ monthly folder. Past docs on server: > Claremont Data>yr>month>
Daily Operations Summary Report	Current report is an Electronic file on site, in Claremont Docs/Claremont Ops Data/ monthly folder. Past docs on server: > Claremont Data>yr>month>
Monthly O&M Report	Electronic file on server: >Claremont Data>yr>month>
Monthly Maintenance Log	Electronic file on server: > Claremont Data>yr>month>
Project Status Report formerly Activities Schedule	Electronic file on server: >Claremont Data>yr>month>
Groundwater Elevation and Water Quality Database	Electronic file on server: >Operating data
Monthly Plant Truck Inspection Worksheet	Electronic file on server: >Claremont Data>yr>month>
Stand Alone Documents Claremont O&M Manual Site Safety and Health Plan Standard Operating Procedures and Instruction manual Sampling and Analysis Plan Log of Operating System Drawings	Bindered copies in control room, electronic copies on server> Stand Alone Documents
Sampling forms	Electronic file on server: >Sampling> Sampling Forms
Chain of Custody Documents	Electronic File on server: >Sampling> yr>mo
Claremont Site Notebook	Electronic file on server : >Stand alone documents> Claremont notebook

ATTACHMENT 1

Maintenance and project tasks proposed for the upcoming extended plant process shutdown:

Task	Equipment	Sub tasks
Clean Process Flow Sensors	Plant Discharge Injection well Influent Extraction well	Isolate units Remove flow sensor element Remove pipe section Clean pipe Reassemble Calibrate as necessary
Clean Process tanks	Train 1 Train 2 ASF if necessary GACF if necessary VCA	Empty tanks and Flush/vacuum to sump Clean clarifier baffles and pump out sludge Power wash screens on settling tank drains
Backwash LCA Vessels	LCA-1 LCA-2	Perform multiple cycles for each vessel over several days to allow for water volume disposition
Evaluate leak at INJ P2	Determine if gasket leak or mechanical seal issue (Seal will need to be purchased ~$300)	Remove motor Remove pump head Evaluate surfaces.
PM check valves	ASF GACF INF INJ	Remove covers Clean an lubricate surfaces Note what more extensive work is required.
Refurbish isolation valves on INJ Pumps	P1 and P2	Remove valve Evaluate Clean as possible
Clean EQ tank Strainer	EQ Tank	Isolate and remove strainer Clean unit reinstall
Evaluate ASF Tank level monitors	LAHH-2-1-1-1 LAHH-2-1-1-2	Remove units Clean as possible reinstall
Evaluate AS Tower Media		Open tower man-ways Inspect media Determine further action

<u>Items not requiring shutdown</u>:

- Install motor at ASF P-3 using motor taken from P2 in 2011
- Cut grass at monitoring wells
- Post storm – clean paths to monitoring wells
- Clean mold on metal surfaces
- General plant and equipment painting
- Remove actuators from discharge valves of settling tanks
- Continuing adding fill to BP-3 well path