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

MONTHLY REPORT
of the
Operations & Maintenance Activities
During
July 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
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
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 groundwater treatment system (GWTS) for July 2013. This period is defined as 0600 hours, July 1, 2013, through 0600 hours, August 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 31 days in this reporting period. The plant experienced 7 days of downtime due to an off-site severed power feed. While operating, the treatment system was generally stable with steady flows.

During July, readings of key process parameters were recorded each work day morning. These readings are used to monitor the plant's performance and as a basis for adjustments to the plant processes. These readings are recorded in the Daily Database which is an electronic file maintained in the monthly operating data folders.

1.1 Daily Operations Summary Reports

The 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.

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.

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

- General maintenance activities continued, including outdoor clean up tasks, landscaping tasks, housekeeping, system inspections and system monitoring.
- Scheduled monthly tasks which included motor amp load readings, injection well (IW) depth soundings, IW falling head tests, valve function tests, comprehensive site inspections, and infiltration gallery readings.
- The process pumps were rotated from 2&3 to 1&2
- The motor to pump coupling for INF P2 was replaced
- The sludge tank was drained through the filter press
- Injection Pump-2 failed upon startup. The shaft was bound up and was mechanically freed.
- The extraction well packers were recharged from a portable compressor.
- Vines were cleared from the wires at the front gate.
- The off-site severed power line was repaired by an outside contractor, the power was restored after LIPA inspected the repairs, and the plant restarted.
- Motor wiring at the MCC modules was changed to correct the rotation of the equipment motors.
- The Autodialer failed, however the temporary down time did not affect the system. After troubleshooting, the battery was recharged, a fuse replaced and system returned to service.
- Waste drums were consolidated and Drum 2102-03 was closed.
- A well cover was fabricated and installed on EW-2C.

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

Of the completed project logbooks, 40 are in the process of being scanned and delivered to the NYSDEC and 4 are on file at Claremont. 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

- Other than the plant operators, there were no HRP personnel on site in July.

3.2 NYSDEC Personnel, sub-contractors and other visitors

- Mike Gele of Plainview Water was in to look at site drawings and to mark the underground water lines (7/3)
- Nate Cardino and Mark Feldman (principles of MANA Construction) were in several times during the repairs to the power lines
- Ben Rung (NYSDEC) was onsite for the USEPA 5-yr Review meeting (7/18)
- Maria Jon, Chuck Nace, Bob Alvey, and Cecelia Echols (USEPA) were in for the USEPA meeting (7/18)
- Mike Flaherty (NCDPW) was in for the USEPA meeting (7/18)
- Peter Murray and John Schripter of Geotech were in for an update (7/23)
- TA-NY was in to pick up the PD samples (7/24)

3.3 Deliveries

- Mail was delivered 2x
- UPS delivered insurance papers
- Fed Ex delivered insurance papers

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 July. These worksheets are also on file.

- The plant supervisor completed the HAZWOPER 8-hr Refresher Training by DVD.
- HRP-NY is working on revisions to the site Safety and Health Plan

No safety incidents or accidents occurred during this July 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 July 24 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).

The August PW samples are scheduled for August 20, 2013.

6.0 MONITORING WELL WATER ELEVATIONS

The well system water level elevation data table was updated after the June quarterly groundwater sampling event. This database is available for review. The water level elevation data is included in the quarterly groundwater monitoring report.

Due to the stabilized nature of PDB samples, the water quality data will no longer be recorded. The next update of the water level data will take place after the quarterly groundwater event to be scheduled for September.

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 for July is provided in Table 7-1. The total volume of treated water discharged in July, as measured from 0600 hours on July 1, 2013, to 0600 hours on August 1, 2013, was 12,602,888 gallons. This volume is approximately 84 percent of the monthly targeted treatment goal. The cumulative volume of water discharged for this contract year (June 1, 2013 to present) was 27,009,023 and is ~8 percent 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.) The plant was offline for 164.8 hours.

In July, the plant discharge flow averaged 282 gallons per minute (gpm) and 406545 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	68,314
January '13	0	0
February '13	0	0
March '13	0	0
April '13	0	0
May '13	152	219,330
June '13	333	480,205
July '13	282	406,545
Goal	**335**	**482,400**

The flow monitoring units for the individual IW systems and infiltration galleries are fully functioning. This allows for reading the flow rate and volume discharged to each system. The relative flows for July are indicated below:

Injection Well System	Flow Average (gpm)	Volume Discharged to well (gallons)*
IW-1	14	645,924
IG-1	55	2,456,499
IW-2	66	2,929,654
IW-3	44	1,957,508
IG-3	43	1,922,587
IW-4	67	3,003,355
System	**289**	**12,915,528**

The discrepancy between the individual injection system meter readings and the total plant effluent meter readings (~7 gpm) is due in part to the type of flow meters utilized to measure the discharge (paddle wheel vs. magnetic vs. turbine), sludge build up in the piping at the flow elements, rounding factors in the meters, and the relative time the readings are taken. The flow elements and local pipe were cleaned in February.

The flow to IW-1 and IW-3 is maximized and the valves to the galleries are fully open. Both galleries are draining adequately.

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

8.0 CHEMICAL CONSUMPTION

The four chemical feed systems are not in service. 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 presence of volatile or semi volatile organic compounds have not been detected in the discharge of the liquid-phase Carbon Adsorber (LCA) vessels. The influent and effluent streams of the vessels continue to be monitored on a quarterly basis.

As part of the daily monitoring task, the differential pressure across each vessel is recorded. This data and the discharge pressures of the LCA feed pumps are used to determine whether backwashing is required. The vessels were last backwashed in December. Currently the differential pressure across vessel #1 is 4.0 psi and across vessel #2 is 4.0 psi. Backwashing of the vessels is not required at this time.

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

9.2 Vapor-Phase Carbon

Two vapor-phase Carbon Adsorber vessels (VCA) are available for the off gas treatment of the air stripping (AS) stream. Currently, VCA-1 is online. VCA-2 is offline and ready for service. Monitoring of VOCs in the influent and effluent air stream of the active vessel is performed weekly with a photo-ionization detector (PID). No emissions from the vessel were observed in July.

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 was no waste removed from the facility in July.

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 the monthly discharge analytical results, which are included within Section 14.0, indicated all analyzed parameters were below noted permit limits.

The plant's water discharge permit expires December 31, 2013. Efforts are currently underway for the permit renewal/extension.

12.0 OTHER OPERATIONS, MAINTENANCE, OR MANAGEMENT ISSUES

Jennifer Kotch has been named project manager for the Claremont Polychemical Site. The project will be run out of the HRP -NY office.

MANA Construction Group is leasing the Claremont property at the old plant. They will store and stage their equipment there. MANA proposed connecting to our water main and taking over responsibilities for the entire water usage bill. NYSDEC agreed to this change and the connection was made 7/24.

The GWTS lost power (7/10-7/17) when an off-site underground power line was severed. Other than lost time, the plant suffered no damages due to the power outage.

The USEPA conducted its 5-year review of the Claremont System. Discussions included documentation, process changes, and how the project would be terminated. Also discussed was the capture of the off-site generated contamination.

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. In July, the following changes were made:

- The Significant Events document and Monthly O&M Report were revised to include a section for the extraction well packer pressures.

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. Julys' sampling activities included:

- The plant discharge was sampled 7/24 and shipped to TA-Edison for organic analysis.
- The analytical data for the June groundwater samples was uploaded to EQuIS.
- The analytical data for the June plant discharge samples was uploaded to EQuIS.

The plant discharge is sampled monthly. The latest available analytical results are for June 25 2013. The analytical results for these samples follow:

Plant Discharge			
Parameters	**Discharge Limitations**	**Units**	**Results June '13**
pH (range)	5.5 – 8.5	SU	6.52
Tetrachloroethylene	5	ug/l	U
Trichloroethylene	5	ug/l	0.16
1,2-(cis) Dichloroethylene	5	ug/l	U
1,2-(trans)Dichloroethylene	5	ug/l	U
Methylene Chloride	5	ug/l	U
1.1 Dichloroethylene	5	ug/l	U
1,1-Dichloroethane	5	ug/l	U
Chloroform	7	ug/l	U
1,1,1-Trichloroethane	5	ug/l	U
Benzene	0.7	ug/l	U
Toluene	5	ug/l	U
Chlorobenzene	5	ug/l	U
Ethylbenzene	5	ug/l	U
Bis(2-ethylhexyl)phthalate	4200	ug/l	U
Di-n-butyl phthalate	770	ug/l	U
Antimony, Total recoverable	3	ug/l	U
Arsenic, Total recoverable	50	ug/l	U
Barium, Total recoverable	2000	ug/l	NS
Lead, Total recoverable	50	ug/l	NS
Selenium, Total recoverable	40	ug/l	NS
Iron, Total recoverable	500	ug/l	NS
Manganese, Total recoverable	500	ug/l	NS
Nitrogen, Total (as N)	10	mg/l	NS
Solids, Total Dissolved	1000	mg/l	NS
Chromium, Hexavalent	100	ug/l	NS
Chloride Ion	NL	mg/l	NS
Fluoride Ion	NL	mg/l	NS
Sulfate Ion	NL	mg/l	NS

NS not sampled
U analyzed for but not detected
J estimated value
NL monitor only

14.2 Field Data

Treatment plant effluent is 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. A summary of these data is as follows:

Date	pH	Temperature (°C)
July 1, 2013	6.56	18
July 8, 2013	6.63	18
July 22, 2013	6.53	18
July 29, 2013	6.63	18
July Averages	**6.59**	**18**

The NYSDEC discharge permit requires the plant discharge to have an average monthly pH greater than 5.50. The treatment plant effluent pH averaged 6.59 in July and met the monthly average pH discharge requirement. A graph of the plant discharge monthly pH average trend over several months is provided in Table 14-1.

Using a handheld, calibrated PID meter, weekly air monitoring readings are taken of the influent and effluent air streams of the active vapor phase carbon adsorber vessel following the air stripping tower. Currently vessel #1 is on-line.

Date	Inlet	Outlet
July 1, 2013	0.0	0.0
July 8, 2013	0.0	0.0
July 16, 2013	0.0	0.0
July 22, 2013	0.0	0.0
July 29, 2013	0.0	0.0
*PID readings indicate that the VOCs in the air stream are lower than the part per million levels (ppm) of the instrument's capability.		

No emissions were observed in the discharge of the active vessel VCA-1.

Measurements to determine the well depth from the top of the injection well column to the bottom were taken on 7/29. A summary of the historical data is included in Table 14-2. Although there has been an accumulation of sediment in all four injection wells, the wells currently appear to be stable.

Water elevations in the IWs are 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 7/29 the DTW readings for the injection wells were recorded.

	Sounding Depth (ft)	Transducer	Depth to Water (ft)
IW-1	145.6	160.7	6.5
IW-2	135.8	112.1	8.6
IW-3	247.8	129.3	7.9
IW-4	196.3	128.7	15.6

The injection well falling head test was conducted on July 23. Due to the questionable output of the level transducers, the only data recorded was for IW-1. A graphic representation of the time required to drop the water level to a static condition is presented in Figure 14-2. Comparisons of baseline data from March 2006 to that of recent tests (Figure 14-3) indicate that the performance of IW-1 is unchanged. All wells appear to be draining adequately.

Other routine data collected during July included:

- The plant sound level readings were recorded twice (7/16, 7/26)
- The flow-meter readings and the depth of water in the infiltration galleries were recorded in site supervisor's notebook and included with the monthly filings. (7/25)
- Weekly utility meter readings were recorded.
- The extraction well packer pressures were recorded on several occasions (see Sec. 15.1)

15.0 PROCESS ANALYSIS, INTERPRETATIONS, AND CONCLUSIONS

15.1 Extraction and Influent Processes

- The three extraction well pumps are fully functional and are on-line.
- The three influent pumps are operational with 2 pumps on-line at a time.
- There continues to be some drift in the VFD control of influent pump-1.
- The influent pumps were rotated once in July.
- The 2 influent flow controllers are fully functional.
- Routine maintenance continues.

Extraction Well packer pressure readings:

Date	EX-1	EX-2
7/3	25 psi	43 psi
7/8	24 psi	44 psi
7/9	23 psi – packer charged to 40 psi	43 psi – packer charged to 49 psi
7/16	36 psi	48 psi
7/22	33 psi	48 psi
7/26	31 psi	48 psi

7/29	31 psi	48 psi

15.2 Flow through Aeration Process

- Both treatment trains are on-line and the influent water is matched to the output of the ASF pumps.
- The polymer, potassium permanganate, caustic, and hydrochloric acid feed systems remain out of service as current water conditions make their use unnecessary.
- The flash and flocculation mixers at the clarifiers remain idle due to the discontinued use of the polymer and lack of solids generation.
- The reaction tanks and clarifier systems continue to operate as pass-through settling tanks.

15.3 Settling Filter Process

- The system is fully functional.
- Maintenance is performed as required.

15.4 Air Stripping Process

- The three ASF pumps are operational and are rotated into service two at a time. They were rotated once in July.
- The VFD for ASF P2 exhibits an earth ground fault. When on-line, Pump 2 operates through the off line pump's VFD.
- The VFD for ASF P1 is starting to become problematic. It does not seem to control by tank level and has latched to the VFD for pump 3.
- The blower is checked daily and is fully functional.
- No other issues arose with the air stripping system. Routine maintenance continues.

15.5 Aqueous-Phase Carbon Treatment Process

- All three feed pumps are operational, with two pumps rotated into service at a time. The pumps were rotated once in July.
- Currently the differential pressure across the vessels is rising and backwashing will be required soon.
- Other routine maintenance tasks continued.

15.6 Treated Water Injection Process

The plant's total discharge flow rate and volume are measured by a magnetic flow meter on the injection pump discharge manifold. The paddle wheel flow sensors and flow transmitters installed in the discharge line to each injection well system are on-line and connected to the

MCP and HMI. The turbine flow meters in the infiltration gallery valve boxes are fully functional.

- The plant discharge system is online and operational.
- Difficulties with INJ P2 were repaired and all pumps are operational.
- Except for IW-1, the injection well transducers are all producing unreliable signals.
- The galleries are adequately draining.
- No other issues were encountered with the injection system in July. Routine maintenance tasks continue.

16.0 GROUNDS

Routine maintenance tasks continue outside the plant.

16.1 Plant Perimeter

- General outdoor clean up continues. This includes landscaping tasks.
- Repairs were made to the below ground power feed supplying the facility. (outside contractors)

16.2 Well Field

- The frequency of DTW readings has increased due to the poor signals from the injection well transducers.
- EX well packer pressure readings continue.

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

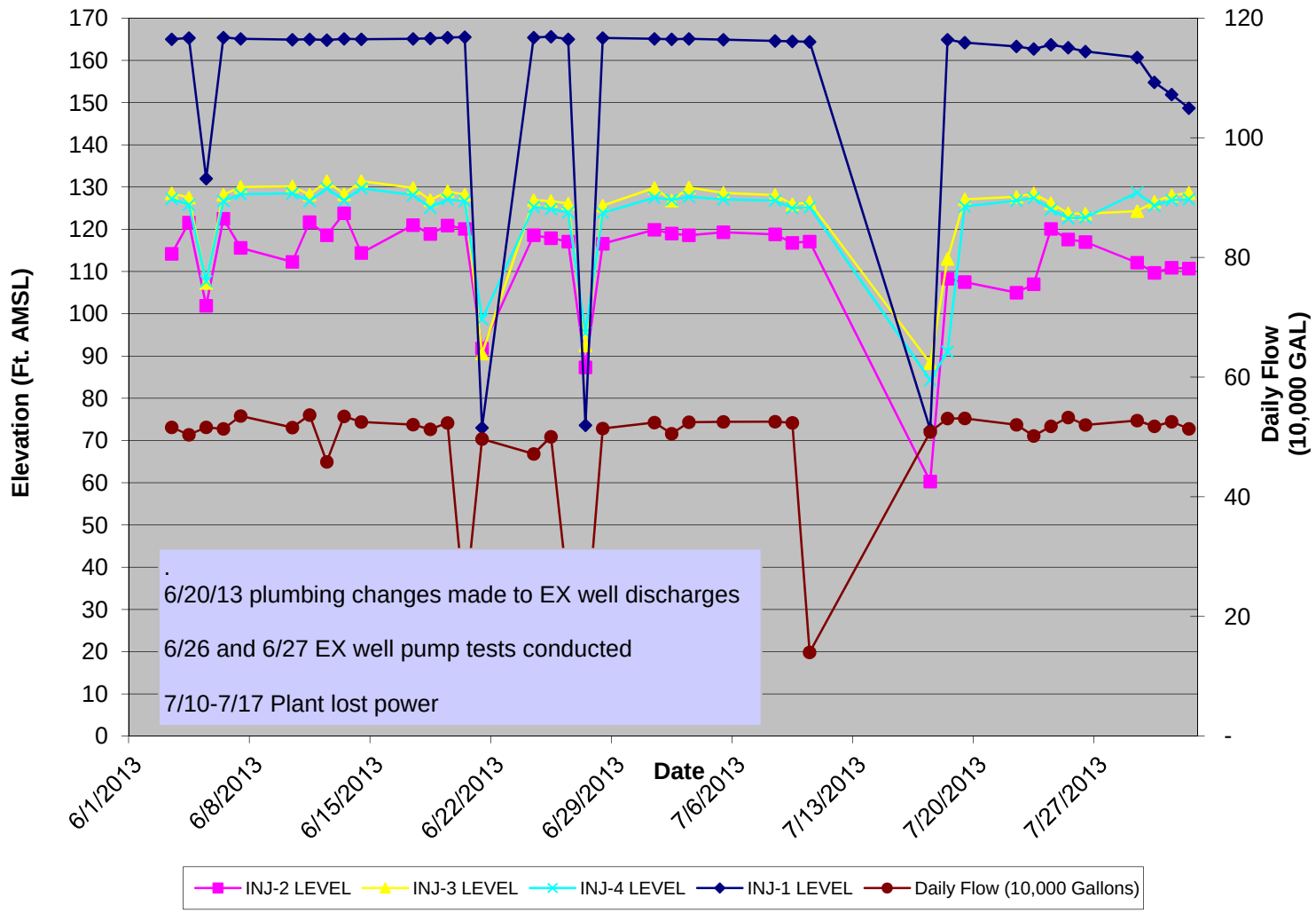


Figure 14-2 Injection Well Falling Head Test - July 23, 2013

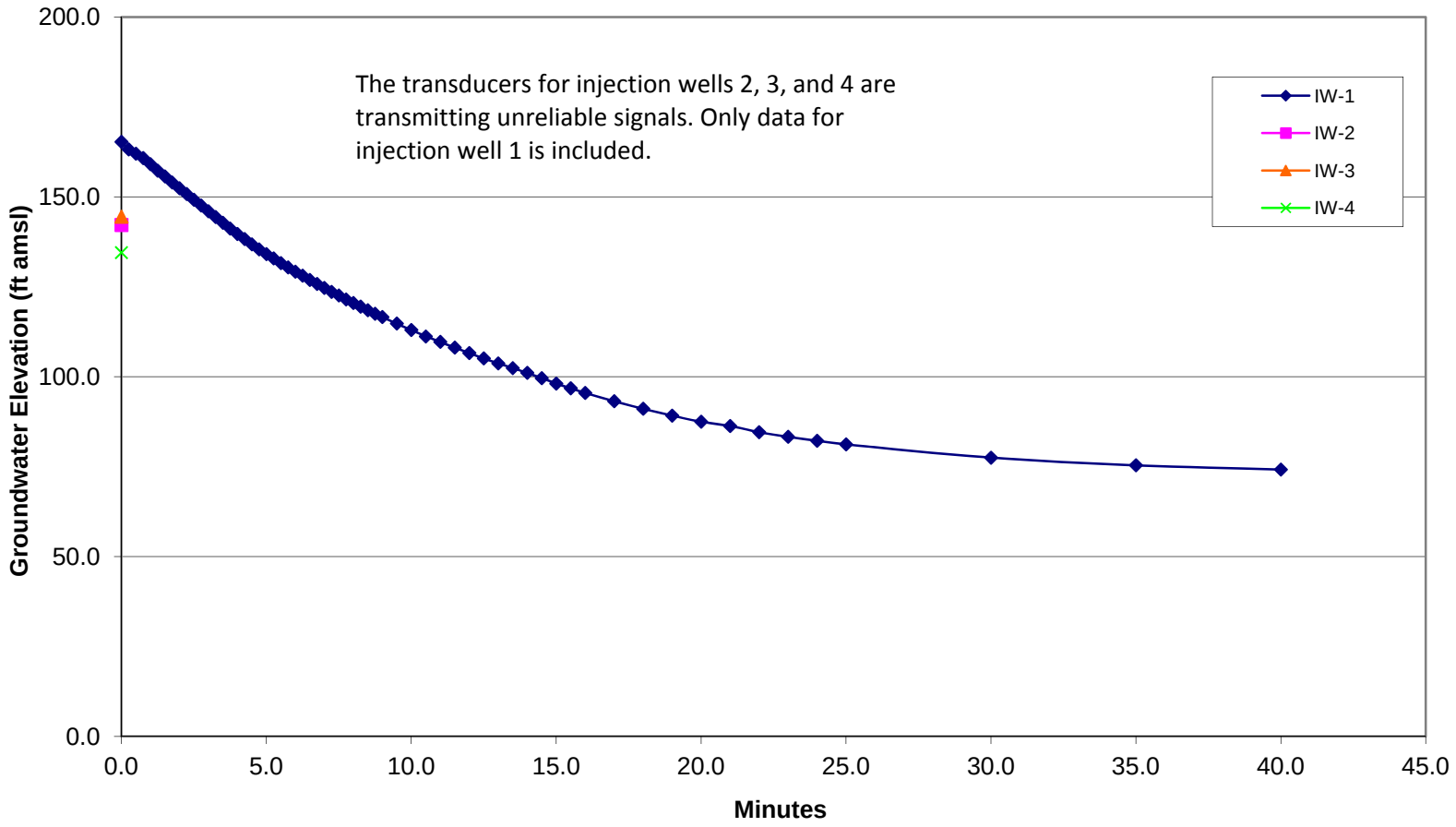
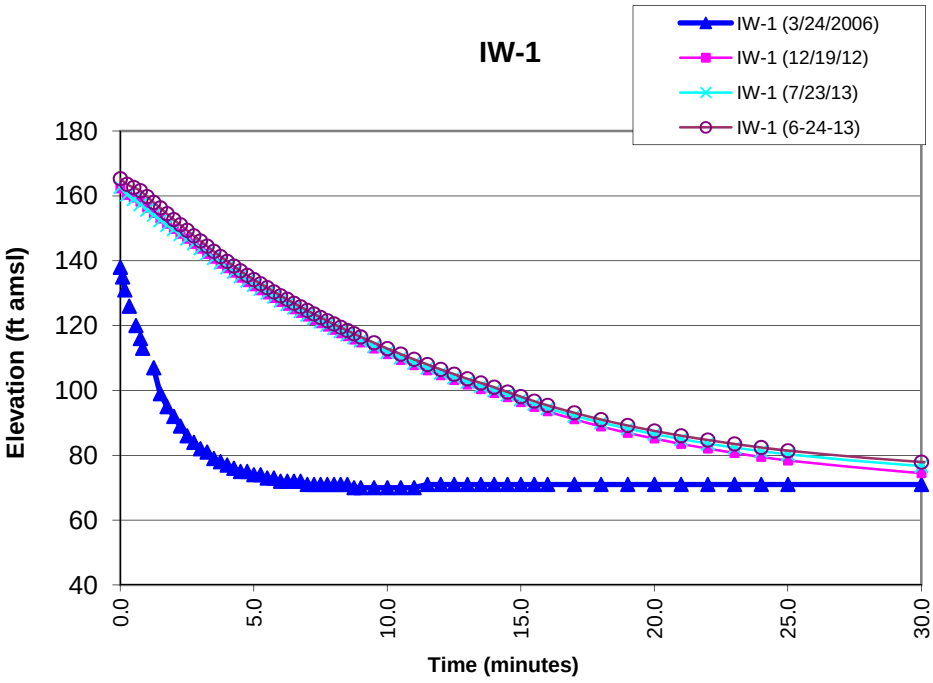
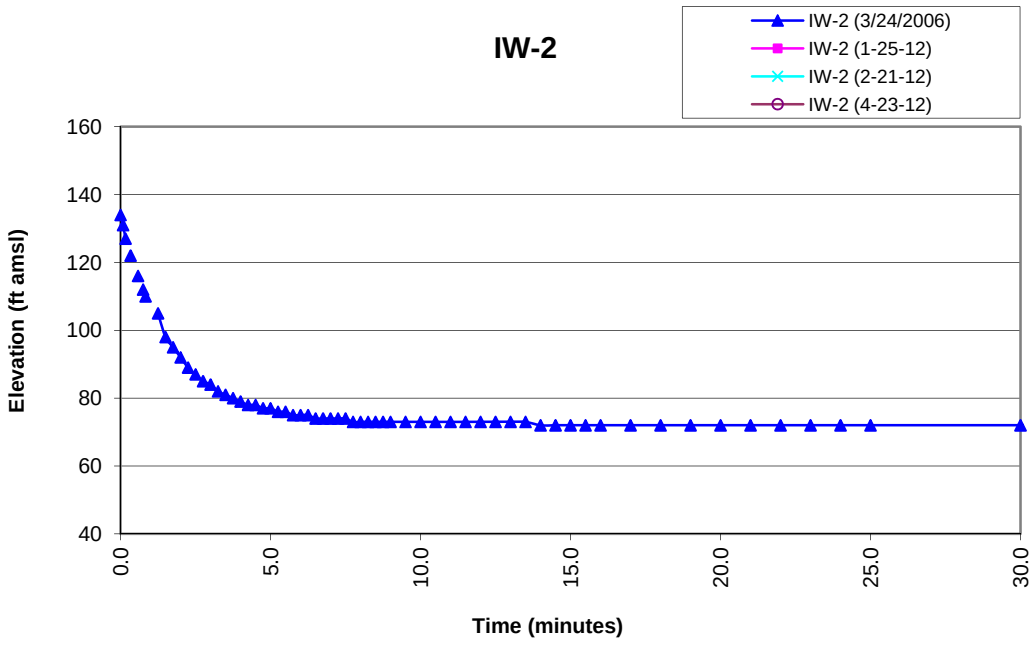
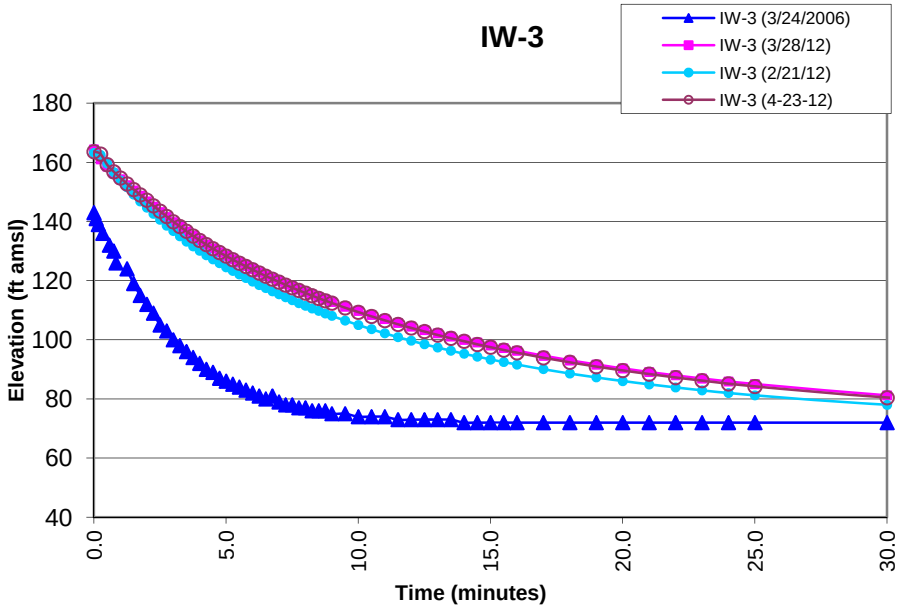
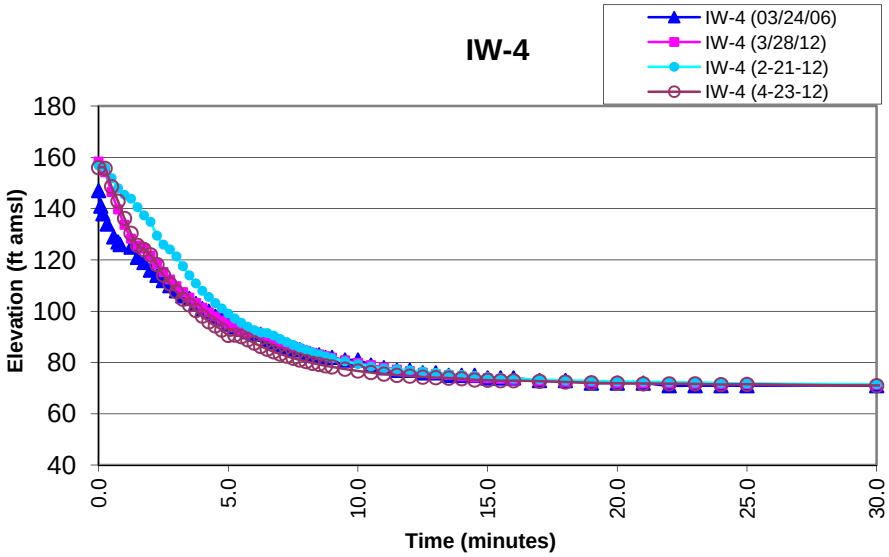


Figure 14-3 Comparison of Falling Head Tests






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

July 2013

DATE	TOTALIZER READING	GALLONS PER DAY	GALLONS PER MINUTE
7/1/2013	673635365	554635	385
7/2/2013	674190000	510000	354
7/3/2013	674700000	1010000	351
7/5/2013	675710000	1620000	375
7/8/2013	677330000	550000	382
7/9/2013	677880000	500000	347
7/10/2013	678380000	140000	97
7/17/2013	678520000	430000	299
7/18/2013	678950000	480000	333
7/19/2013	679430000	1640000	380
7/22/2013	681070000	520000	361
7/23/2013	681590000	500000	347
7/24/2013	682090000	520000	361
7/25/2013	682610000	530000	368
7/26/2013	683140000	1560000	361
7/29/2013	684700000	530000	368
7/30/2013	685230000	520000	361
7/31/2013	685750000	488253	339
8/1/2013	686238253		
July '13 Treated Water Volume		**12,602,888**	
July '13 Avg. GPM Discharged			**282**

Table 12-1

Plant conditions and concerns (updated 7/24/13)

Date	Condition to be corrected	Status	Priority	Notes
2007	PD manifold leak	Leave as is and monitor	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.
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
June '12	ASF Level Monitor	Operate as is	3	Monitor give false LL conditions which cycles the pump
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 prepped and spot primed	2	Rusted areas are to be abraded clean and spot painted
May '13	VFD for ASF P1 – not tracking tank levels	P1 system is currently tracking VFD 3	2	Need electronics tech to look at control system
May '13	EX well Blockers – leaking air	Periodically charging bladders. The pumps and packers were pulled, repairs were made, and then were re-installed (6/17). **EX-2 holds pressure, EX-1 loses pressure over time. Bladder recharged as needed.**	**1**	Charged system affects the transducer activity.
May '13	EX well capacity testing	**Pump tests completed 6/227**	2	Equipment may not support the tests as designed
May '13	INJ P2 is not functioning	**Repairs made 7/2**	3	Further testing is required

June '13	Flow control on EX discharge lines is not adequate.	Butterfly valves are shut off valves not control valves Globe valves were installed. Flanged connections replaced BF valve immediately downstream of flow element. BF shut off valve was moved as far down stream as possible.	1	Install globe upstream of flow elements. Re-plumb as possible to move disturbances away from flow element
July '13	**INF P2 motor to pump coupling failure**	**Replace coupling** **coupling replaced and pump returned to service 7/23**	**2**	**Take pump out of service and replace element.**
July '13	**Well caps (drive-over) are missing or damaged at EW-6c and EW-2c**	**fabricate or purchase caps**	**4**	**one well is on golf course and one at the paper processor**
July '13	**Rotation of motors was reversed when repairs to broken power leads was made**	**Reverse wires in MCC Repairs made 7/17**	**1**	**possible damage to motors and impellers as well as low output**
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
March '13	More EQ tank pin-hole leaks	Welder has been contacted to provide quote prior to NYSDEC approvals – Tank repaired(5/16)	1	5 leaks have been observed
2009	Sludge tank transfer piping replacement	Piping disconnected and pump removed	4	Hoses and an M-8 are being used in place of the hard plumbed system.

Priority Level 1- Urgent and must be done
2- Not urgent but must be done
3- Not urgent but should 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
May '13	6.05
June '13	6.33
July '13	6.59

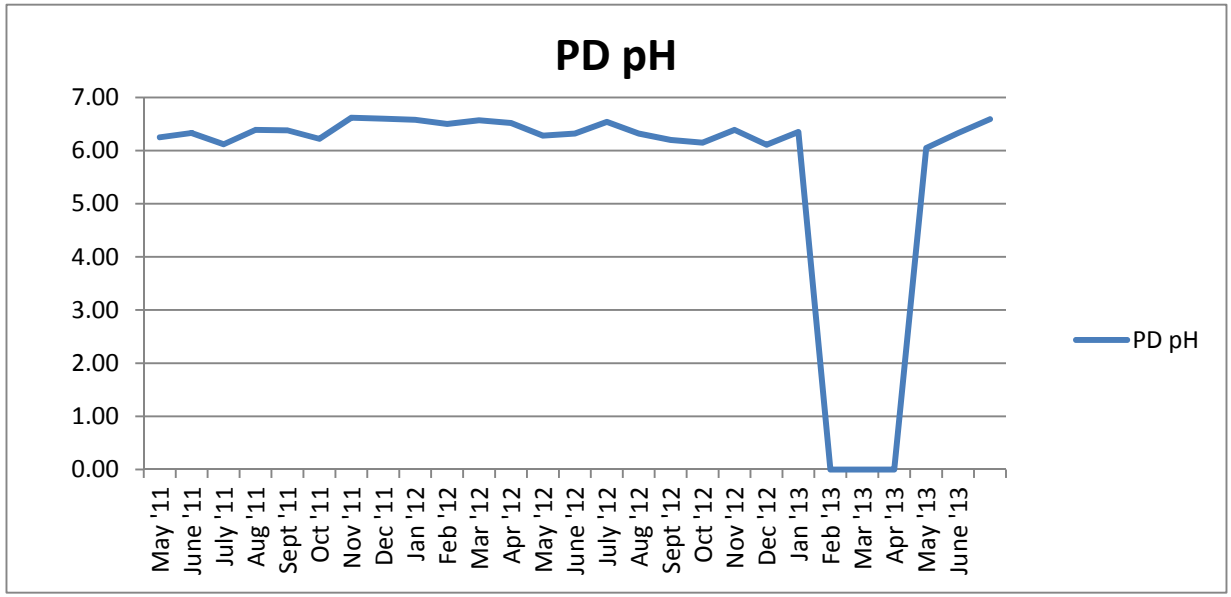
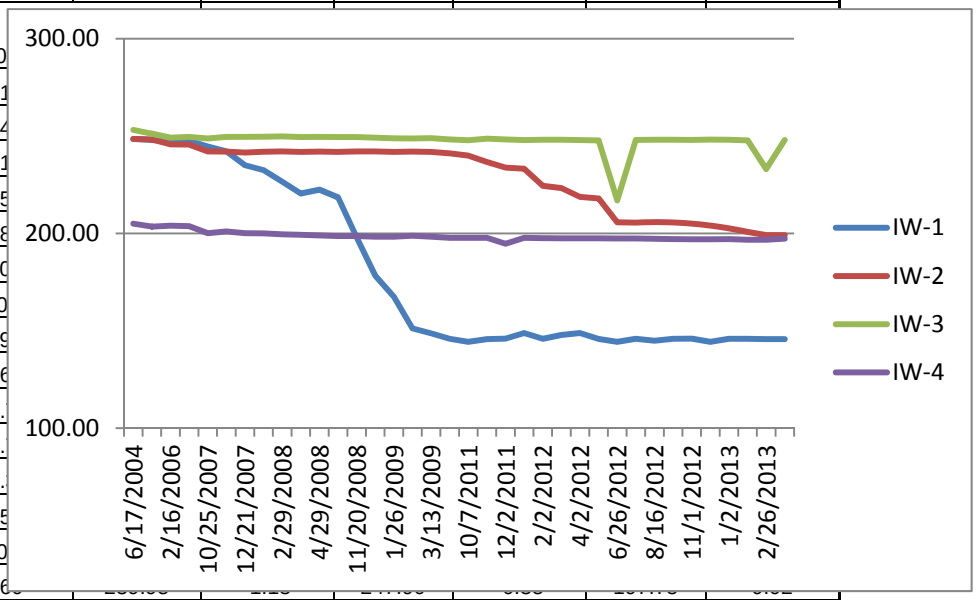


TABLE 14-2 Injection Well Soundings

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	0.0						
10/25/2007	244.69	-1.1						
11/19/2007	242.20	-2.4						
12/21/2007	235.02	-7.1						
1/29/2008	232.46	-2.5						
2/29/2008	226.58	-5.8						
3/27/2008	220.50	-6.0						
4/29/2008	222.50	2.0						
5/30/2008	218.55	-3.9						
11/20/2008	198.05	-2.6						
12/29/2008	178.29	-19.						
1/26/2009	167.50	-10.						
2/25/2009	151.20	-16.						
3/13/2009	148.68	-2.5						
9/21/2011	145.90	0.0						
10/7/2011	144.30	-1.6						
11/17/2011	145.70	1.40	236.70	-3.25	248.72	0.82	197.70	-0.05
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
5/14/2013	145.70	1.65	198.10	-1.00	247.80	0.10	198.43	1.18
6/27/2013	145.55	-0.15	198.10	0.00	247.80	0.00	198.43	0.00
7/29/2013	145.60	0.05	135.80	-62.30	247.80	0.00	196.27	-2.16



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
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

Associated documents and worksheets used to generate this report can also be found on shared folder' CPC Monthly Logs from Plant'