

CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT

AGENDA REGULAR MEETING BOARD OF WATER COMMISSIONERS Tuesday, JANUARY 5, 2016 – 9:30 a.m. MARGARET H. CHANDLER WATER RECLAMATION PLANT 399 CHANDLER PLACE San Bernardino, California

BOARD OF WATER COMMISSIONERS

TONI CALLICOTT
President

Commissioners
LOUIS A. FERNANDEZ
WAYNE HENDRIX
JUDITH VALLES
DAVID E. MLYNARSKI



STACEY R. ALDSTADT
General Manager
ROBIN L. OHAMA
Deputy General Manager
MIGUEL GUERRERO, P.E.
Director of Water Utility
JOHN A. CLAUS
Director of Water Reclamation
TERRI WILLOUGHBY
Director of Finance
JENNIFER L. SHEPARDSON
Director of Environmental &
Regulatory Compliance

“Trusted, Quality Service since 1905”

Welcome to a meeting of the Board of Water Commissioners of the City of San Bernardino.

- The City of San Bernardino Municipal Water Department recognizes its obligation to provide equal access to those individuals with disabilities. Please contact the General Manager’s Office (909-384-5191) two working days prior to the meeting for any requests for reasonable accommodation, to include interpreters.
- All documents for public review are on file with the Water Department located on the 5th floor of City Hall, 300 North “D” Street, San Bernardino or may be accessed online at http://www.ci.san-bernardino.ca.us/water/newsalerts/agendas_n_minutes.asp
- Please turn off or mute your cell phone while the meeting is in session.
- Any member of the public desiring to speak to the Board of Water Commissioners concerning any matter not on the agenda, but which is within the subject matter jurisdiction of the Board of Water Commissioners, may address the body at the end of the meeting during the period reserved for public comments. Said total period for public comments shall not exceed forty-five (45) minutes, unless such time limit is extended by the Board of Water Commissioners. A three-minute limitation shall apply to each member of the public, unless such time limit is extended by the Board of Water Commissioners. No member of the public shall be permitted to “share” his/her three minutes with any other member of the public.
- The Board of Water Commissioners may refer any item raised by the public to staff for appropriate action or have the item placed on the next agenda of the Board of Water Commissioners. However, no other action shall be taken nor discussion held by the Board of Water Commissioners on any item which does not appear on the agenda unless the action is otherwise authorized in accordance with the provisions of subdivision (b) of Section 54954.2 of the Government Code.
- Public comments will not be received on any item on the agenda when a public hearing has been conducted and closed.

CALL TO ORDER: _____ a.m./p.m.

Attendee Name	Present	Absent	Late	Arrived
President Toni Callicott				
Commissioner Louis Fernández				
Commissioner Wayne Hendrix				
Commissioner Judith Valles				
Commissioner David E. Mlynarski				
General Manager Stacey Aldstadt				
Deputy General Manager Robin Ohama				
Director of WRP John Claus				
Director of WU Miguel Guerrero				
Director of Finance Terri Willoughby				
Director of ERC Jennifer Shepardson				

OTHERS:

1. CLOSED SESSION: _____ a.m./p.m.

Pursuant to Government Code Section(s):

- A. Conference with legal counsel – existing litigation – pursuant to Government Code Section 54956.9(a): *In Re City of San Bernardino, California*, United States Bankruptcy Court, Central District of California (Riverside), Case No. 6: 12-bk-28006-MJ.
- B. Conference with legal counsel – anticipated litigation – significant exposure to litigation – pursuant to Subdivision (b) (1), (2), (3) (A-F) of Government Code Section 54956.9 (one item).
- C. Conference with legal counsel – anticipated litigation – initiation of litigation – pursuant to subdivision (d) (4) of Government Code Section 54956.9.
- D. Conference with legal counsel – personnel – pursuant to Government Code Section 54957.
- E. Conference with legal counsel and security consultant on matters posing a threat to the security of essential public services, including water, drinking water, and wastewater treatment pursuant to Government Code Section 54957 (a).
- F. Conference with labor negotiator – pursuant to Government Code Section 54957.6(a) (one item).

**END OF CLOSED SESSION
RECONVENE MEETING**

CALL TO ORDER: _____ a.m./p.m.

Attendee Name	Present	Absent	Late	Arrived
President Toni Callicott				
Commissioner Louis Fernández				
Commissioner Wayne Hendrix				
Commissioner Judith Valles				
Commissioner David E. Mlynarski				
General Manager Stacey Aldstadt				
Deputy General Manager Robin Ohama				
Director of WRP John Claus				
Director of WU Miguel Guerrero				
Director of Finance Terri Willoughby				
Director of ERC Jennifer Shepardson				

OTHERS:

2. ANNOUNCEMENTS BY MEMBERS OF THE BOARD OF WATER COMMISSIONERS:3. CONSENT CALENDAR

MOTION: That the motions indicated by consent calendar items 3A through 3E3 be adopted, except for _____.

MOTION:_____ SECONDED:_____

A. WAIVE FULL READING OF RESOLUTIONS

MOTION: That full reading of the resolutions on the regular or supplemental agendas of the Board of Water Commissioners be waived.

B. PAYROLL

MOTION: Approve the payroll for the pay periods November 16, 2015 through November 29, 2015.

C. CONTRACTS AND BILLS

MOTION: Approve the payment of contracts and bills to be presented at this meeting.

D. MINUTES

MOTION: Approve the minutes of the meetings of December 1, 2015 of the Board of Water Commissioners.

E. PERSONNEL ACTIONS:

1. APPOINTMENT: Raymundo Ramirez, Water Reclamation Trainee, Section 4020, Range 128, effective January 4, 2016. This position is in the budget and based on the needs and staffing for this section, the position is still justifiable under the budget.
2. PROMOTION: Beverly Castelazo, Customer Service Representative I, Range 133, to the position of Customer Service Representative II, Section 2060, Range 137, ratify effective December 14, 2015. This position is in the budget and based on the needs and staffing for this section, the position is still justifiable under the budget.
3. PROMOTION: Kimberly Chacon, Office Assistant, Range 128, to the position of Bilingual Customer Service Representative I, Section 2060, Range 133, ratify effective December 14, 2015. This position is in the budget and based on the needs and staffing for this section, the position is still justifiable under the budget.

END OF CONSENT CALENDAR

- 4. ADDITIONS TO THE AGENDA: (if any) in accordance with Section 54954.2 (b) (2) of the Government Code (Brown Act), a two-thirds vote (or a unanimous vote if less than two-thirds are present) is required to add an item for action provided that there is a need to take immediate action and that the need for action came to the attention of the agency after the agenda was posted.

MOTION: Approve an additional item(s) to be added to the agenda in accordance with Government Code Section 54954.2(b) (2).

MOTION:_____ SECONDED:_____

- 5. NOVEMBER 2015 DROUGHT MONITORING REPORT: This report continues to monitor and track the effects of the ongoing drought by monitoring groundwater levels in select wells located in the Department’s service area. The Board implemented Stage IIA extreme mandatory restrictions as a result of the State Water Resources Control Board (SWRCB) emergency regulations. **(INFORMATION ONLY)**

- 6. REPORTS:

- A. Report of the President:

- B. Report of the Commissioners:

- C. Report of the Directors:

- D. Report of the General Manager:

7. PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA:8. ADJOURNMENT: The meeting adjourned at _____ a.m./p.m.

NOTE: The next regular meeting of the Board of Water Commissioners is scheduled for *9:30 a.m., January 19, 2016* in the Margaret H. Chandler Water Reclamation Plant Conference Room, 399 Chandler Place, San Bernardino, California, 92408.

MINUTES
BOARD OF WATER COMMISSIONERS
OF THE CITY OF SAN BERNARDINO

REGULAR MEETING
December 1, 2015
Water Reclamation Plant Conference Room
399 Chandler Place
San Bernardino, California
9:30 a.m.

The Regular Meeting of the Board of Water Commissioners of the City of San Bernardino was called to order by President Callicott at 9:30 a.m. on December 1, 2015 in the Water Reclamation Conference Room, 399 Chandler Place, San Bernardino, California.

ROLL CALL: Roll call was taken by the Secretary with the following being present: President Callicott; Commissioners Valles, Fernández, Hendrix, and Mlynarski; staff Aldstadt, Ohama, Claus, Shepardson, Guerrero, and Willoughby; Henry Empeño, City Attorney's Office; Patrick Sanchez, Sr. Business Systems Analyst; Sydney Morrison, Sr. Administrative Coordinator; Amy Smith, Executive Secretary.

George Castillo entered at 9:40 a.m.

1. CLOSED SESSION: None
2. ANNOUNCEMENTS BY MEMBERS OF THE BOARD OF WATER COMMISSIONERS: None
3. CONSENT CALENDAR: Upon motion by Commissioner Valles, duly seconded by Commissioner Mlynarski, it was voted to approve the following Consent Calendar, Agenda Items 3A through 3D:
 - A. WAIVE FULL READING OF RESOLUTIONS: Waive full reading of the resolutions on the regular or supplemental agendas of the Board of Water Commissioners.
 - B. PAYROLL

	<u>Water Fund</u>	<u>Sewer Fund</u>	<u>Total</u>
Claims: 266617-266841			
Accounts Payable	\$497,174.86	\$723,823.28	\$1,220,998.14
Gross Payroll: 11/2/15-11/15/15	<u>258,101.16</u>	<u>185,553.03</u>	<u>443,654.19</u>
TOTALS	<u>\$755,276.02</u>	<u>\$909,376.31</u>	<u>\$1,664,652.33</u>
 - C. CONTRACTS AND BILLS: Contracts and bills presented at this meeting.
 - D. MINUTES: November 17, 2015

END OF CONSENT CALENDAR

4. ADDITIONS TO THE AGENDA: None.
5. REVISED SALARY SCHEDULE EXHIBIT FOR WEBSITE: On June 16, 2015, the Board of Water Commissioners (Board) approved the current Salary Schedule Exhibit on the Water Department's website. Since that time, the Board approved the Title and Range change for Safety Supervisor, Range 258, to Safety Manager, Range 270. The Salary Schedule Exhibit was revised to reflect these changes.

Upon motion by Commissioner Hendrix, duly seconded by Commissioner Valles, it was unanimously voted to approve an additional item(s) to be added to the agenda in accordance with Government Code Section 54954.2(b) (2).

6. REQUEST TO APPROVE LOAN AGREEMENT WITH SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT AND AMEND THE RIX JPA FUND CAPITAL IMPROVEMENT BUDGET: The tertiary treated and disinfected wastewater discharged into the Santa Ana River (SAR) from the Rapid Infiltration/Extraction (RIX) Facility augments the existing flow of the Santa Ana River, in turn contributing to suitable habitat for the Santa Ana sucker, which is listed under the Endangered Species Act as threatened throughout the Santa Ana River basin. The discharge must comply with the RIX Facility's National Pollutant Discharge Elimination System (NPDES) permit. To ensure discharges from the Facility were adequately disinfected, the Department was required to ensure that the ultraviolet (UV) disinfection equipment meet certain guidelines published by the National Water Research Institute. Maintenance of the UV equipment was necessary to meet these guidelines and required the Department to temporarily shut down the Facility's wastewater discharges, which reduced augmentation of Santa Ana River flows and may adversely affect Santa Ana suckers. Similarly, there could be potential effects on Santa Ana suckers during automatic emergency shutdowns associated with alarms that shut down discharges from the Facility to ensure operations are within the NDPEs permit.

The Department was approached by U.S. Fish and Wildlife Service personnel to investigate the feasibility of including additional engineering controls, as soon as possible, to reduce the number of shut downs and/or develop a source of supplemental water to ensure surface flow in the SAR continues downstream of the RIX facility during RIX shut downs. Of the three projects identified by Department staff to address these concerns, two of the projects required modification of, and addition to, the Fiscal Year 2015/16 Capital Improvement Program/Budget, as these projects were either scheduled to occur over the next five years or were not included in the five-year CIP.

After consideration of the financial constraints the Department was experiencing, staff requested the assistance of the San Bernardino Valley Municipal Water District (SBVMWD) in:

1. Funding (through a loan) Years 2 through 5 of the five-year UV System Rehabilitation project, so the entire project can be completed as soon as possible (the estimated cost of the project is \$1.48 million); and
2. Funding a well retrofit project (possibly through the HCP Team participants) that would convert three test wells located on the southwest finger of the RIX

facility property (slated for expansion) as production wells and connecting the wells to the RIX Security and Supervisory Control and Data Acquisition (SCADA) systems so that their operation is interlocked with the RIX operations (triggered to start at the initiation of a RIX shutdown).

Department staff worked with SBVMWD staff to develop funding options. At the SBVMWD Regular Board Meeting of August 18, 2015, the Board authorized the District's participation in the RIX projects, whereby the District will provide a loan up to \$1.2 million for the UV System Rehabilitation project, cash up to \$450,000 for the Well Retrofit project, and will work with the HCP partners to gain their concurrence to cover their respective portions of the total Well Retrofit project cost (estimated at \$1 to \$1.5 million).

The RIX Well Retrofit project was not anticipated during development of the FY 2015/16 CIP and Capital Improvement Budget; therefore, staff recommended amending the RIX Fiscal Year 2015-2016 CIP and the Sewer Fund Capital Improvement Budget, respectively, to include this project. The total project cost was estimated at \$1.5 million, with the RIX JPA's portion estimated at \$225,000.

Upon motion by Commissioner Valles, duly seconded by Commissioner Fernández, it was unanimously voted to approve the addition of the RIX Fund Capital Improvement Project titled *Retrofit of RIX Expansion Project Test Wells into Production Wells*; and

Approve a Sewer Fund capital budget increase in the amount of \$225,000.00 to the project; and

Approve the Loan Agreement with the San Bernardino Valley Municipal Water District for RIX UV System Rehabilitation project improvements for \$1,200,000.00 (One Million Two Hundred Thousand Dollars); and authorize the President and Secretary to execute the agreement.

7. PRESENTATION OF RESOLUTION NO. 876: Resolution No. 876 was presented to George Castillo for more than 17 years of service upon his retirement from the San Bernardino Municipal Water Department.
8. PRESENTATION OF RESOLUTION NO. 877: Resolution No. 877 was mailed to Curtis Burns for more than 27 years of service upon his retirement from the San Bernardino Municipal Water Department.
9. REPORTS:
 - A. Report of the President: None
 - B. Report of the Commissioners: None
 - C. Report of the Directors: None

D. Report of the General Manager:

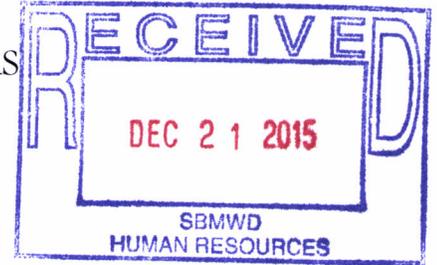
1. General Manager Aldstadt reported she met with Frank Schnetz and J.T. Visbal regarding a non-profit product, First Tee, using golf to teach students "STEM" skills. Mr. Visbal would like to establish a long term lease regarding a piece of property the Department owns.
 2. General Manager Aldstadt reported that the Annual Holiday Employee Breakfast will be held on Thursday, December 10, 2015 from 6:30am-8:30am.
 3. General Manager Aldstadt stated that a holiday luncheon will be scheduled for December 15, 2015.
10. PUBLIC COMMENTS: This is the time specified for public comments concerning specific items not on the agenda or matters of general interest. There being none, the matter was closed.
11. ADJOURN MEETING: The meeting adjourned at 10:04 a.m. to the next Regular Meeting to be held on Tuesday, December 15, 2015, at 9:30 a.m. in Margaret H. Chandler Water Reclamation Plant Conference Room, 399 Chandler Place, San Bernardino, California, 92408.

BY: _____
TONI CALLICOTT
President

BY: _____
ROBIN L. OHAMA
Deputy City Clerk & Ex-Officio Secretary

**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

BOARD OF WATER COMMISSIONERS
STAFF REPORT



TO: Stacey R. Aldstadt, General Manager

FROM: John A. Claus, Director of Water Reclamation

SUBJECT: **APPOINTMENT – WATER RECLAMATION TRAINEE – RAYMUNDO RAMIREZ**

DATE: December 21, 2015

CC: Human Resources, File, Laserfiche

BACKGROUND:

Staff requested Civil Service open appropriate recruitment procedures for the two (2) vacancies that exist in Operations (Section 4020) for the position of Water Reclamation (WR) Trainee. This position is in the budget and based on the needs and staffing for this section, the position is still justifiable under the budget. Interviews were conducted on March 25 and 26, 2015, with Kazi Rasheedi, WR Process Control Supervisor, Vince Bibbee, WR RIX Supervisor, and Ashleigh Adame, Regulatory Analyst. Staff recommends the appointment of Raymundo Ramirez to the vacant position of Water Reclamation Trainee.

RECOMMENDATION:

Staff recommends the Board of Water Commissioners make the following motion:

Approve the appointment of Raymundo Ramirez, to the position of Water Reclamation Trainee, Range 128, effective January 4, 2016.

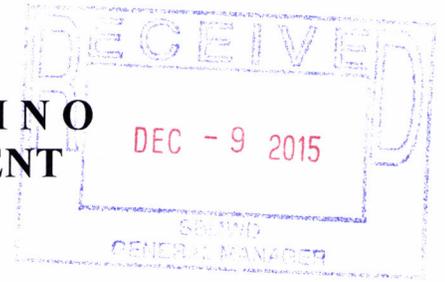
Respectfully submitted,

John A. Claus
Director of Water Reclamation

JAC:er

**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

**BOARD OF WATER COMMISSIONERS
STAFF REPORT**



TO: Stacey R. Aldstadt, General Manager

FROM: Robin L. Ohama, Deputy General Manager

SUBJECT: RATIFY PROMOTION OF BEVERLY CASTELAZO TO CUSTOMER SERVICE REPRESENTATIVE II

DATE: December 9, 2015

CC: K. Hernandez, Human Resources

BACKGROUND:

A vacancy exists in Customer Service, Section 2060, for a Customer Service Representative II due to the promotion of Yanet Gaeta-Conchas to Customer Service Supervisor effective November 16, 2015. This position provides direct customer contact and must be filled in order to continue to provide high levels of customer service. This position is budgeted.

An eligibility list was called for and interviews for this position were conducted on July 14, 2015. Beverly Castelazo was interviewed at that time and remained on the current eligibility list for Customer Service Representative II. She has now been selected as the next best candidate for the position.

This appointment must be ratified as the Regular Board Meeting for December 15, 2015 was cancelled.

RECOMMENDATION:

Staff recommends that the Board of Water Commissioners make the following motion:

- Ratify the promotion of Beverly Castelazo from Customer Service Representative I, Section 2060, Range 133, to Customer Service Representative II, Section 2060, Range 137, effective December 14, 2015.

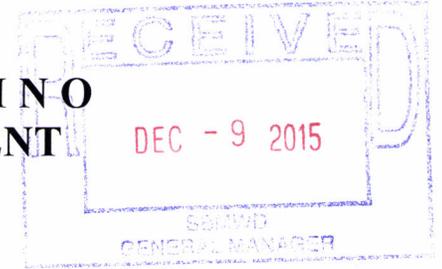
Respectfully submitted,

Robin L. Ohama
Deputy General Manager

sdm

**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

**BOARD OF WATER COMMISSIONERS
STAFF REPORT**



TO: Stacey R. Aldstadt, General Manager

FROM: Robin L. Ohama, Deputy General Manager

**SUBJECT: RATIFY PROMOTION OF KIMBERLY CHACON TO BILINGUAL
CUSTOMER SERVICE REPRESENTATIVE I**

DATE: December 9, 2015

CC: K. Hernandez, Human Resources

BACKGROUND:

A vacancy exists in Customer Service, Section 2060, for a Bilingual Customer Service Representative I due to the promotion of Jessica Calva to Senior Office Assistant effective August 3, 2015. This position provides direct customer contact and must be filled in order to continue to provide high levels of customer service. This position is budgeted.

An eligibility list was called for and interviews for this position were conducted on November 17, 2015. From those interviews, Kimberly Chacon was selected as the best candidate for the position.

This appointment must be ratified as the Regular Board Meeting for December 15, 2015 was cancelled.

RECOMMENDATION:

Staff recommends that the Board of Water Commissioners make the following motion:

- Ratify the promotion of Kimberly Chacon from Office Assistant, Section 2060, Range 128, to Bilingual Customer Service Representative I, Section 2060, Range 133, effective December 14, 2015.

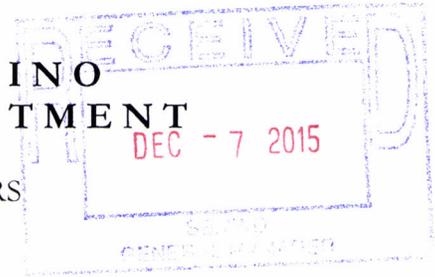
Respectfully submitted,


Robin L. Ohama
Deputy General Manager

sdm

**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

**BOARD OF WATER COMMISSIONERS
STAFF REPORT**



TO: Stacey R. Aldstadt, General Manager

FROM: Miguel J. Guerrero, P.E., Director of Water Utility

SUBJECT: **INFORMATIONAL ITEM ONLY – NOVEMBER 2015 DROUGHT MONITORING REPORT**

DATE: December 4, 2015

COPIES: Robin Ohama (w/o attach), Mike Garland (w/attach), Con Arrieta (w/attach), Greg Gage (w/attach), Sally Duran (w/attach)

BACKGROUND:

Staff continues to monitor and track the effects of the ongoing drought by monitoring groundwater levels in select wells located in the Department's service area. The purpose of this monitoring is to track groundwater level trends as pumping continues during extreme drought conditions. This monthly report to the Board of Water Commissioners (Board) will provide valuable data needed to contemplate important policy decisions related to Water Supply Shortage Stages outlined in Rule and Regulation No. 21 (Rule).

In May 2015, the Board implemented Stage IIA extreme mandatory restrictions as a result of the State Water Resources Control Board (SWRCB) emergency regulations. The State's emergency regulations outlined percentage reduction tiers in gross water production for each urban water retailer in the State. The San Bernardino Municipal Water Department must reduce its gross water production by 28% or face possible enforcement actions from the State, including monetary fines. Stage IIA requires a 28% reduction in potable water use by all of its customers. Stage IIA also restricts outdoor watering to three days per week, prohibits public medians with turf irrigation to be irrigated, and prohibits outdoor irrigation 48 hours after a significant rainfall event.

STAFF ANALYSIS – BASIN CONDITIONS/HYDROGRAPHS:

In order for staff to effectively monitor the basin conditions, index wells within defined sub-regions were selected and are shown on the attached overall figure as well as regional figures along with each well's hydrograph in **Exhibit A**. A well hydrograph graphically depicts the wells water level over time.

Stacey R. Aldstadt, General Manager

Page 2

December 4, 2015

**SUBJECT: INFORMATIONAL ITEM ONLY – NOVEMBER 2015 DROUGHT
MONITORING REPORT**

The attached hydrographs indicate a continued gradual decline of water levels across the entire service area. Due to the lack of rainfall and snowmelt and ensuing recharge for the past four years, the rate of decline in the basin has accelerated. However, it should be noted that water demands in the distribution system have decreased dramatically as the public has responded to the drought message. Many wells that typically are running this time of year are idle, and those particular wells are experiencing water level increases as a result.

Although not as drastic as previous years, water levels in the northwest portion of the Department's service area west and northwest of California State University San Bernardino (Cal State SB) region (Cajon 3, DC-1, and Mallory Well) continued to drop this year. Despite relatively stable levels over the past few months, water levels in this area remain abnormally low.

Wells located just south of Cal State SB, such as Newmark 3, and EPA Wells 006 and 007, are typically shallow wells and are stabilizing with gradual decreases/increases in water levels over the past few months.

Wells situated near the I-210 corridor, notably the 31st Street Well, 40th Street Well and Mt. View Well, and the Gilbert Street Well are now experiencing stabilizing water levels. Some of these wells are seasonably operated (only operated during hot summer months) and are typically running this time of year. Due to decreased demands, most of these wells have been idle, thus the stabilizing water levels.

EPA 001, 002, 003, 004, and 005 wells are operational and are showing a slight increase/decrease in water levels. It appears that the seasonal trend of declining levels in these wells has passed. Water levels are still 30 to 50 feet higher in these wells than the historical low levels experienced during the 2008 and 2009 timeframe.

EPA wells along the western edge of the Muscoy OU (EPA Wells 109 through 112) are showing slight increases in water levels after the extreme decline in the shallow and intermediate aquifers over the last two years. Water levels in the deep aquifer remain steady. Wells in the Cajon Creek and

Stacey R. Aldstadt, General Manager

Page 3

December 4, 2015

SUBJECT: INFORMATIONAL ITEM ONLY – NOVEMBER 2015 DROUGHT MONITORING REPORT

Lytle Creek areas are experiencing the most severe declines in the service area. This is in large part due to the fact that the Department has no means by which to artificially recharge this part of the basin. Staff is looking into long-term solutions to this recharge deficiency and will be briefing the Board in the future on a plan to recharge this part of the basin.

Exhibit B contains a report generated from the Department's database for all of the production well water levels. This report contains calculations to determine the depth of water over pump equipment in each well. The depth of water over pumping equipment is critical to ensure adequate positive suction head for each pumping unit. If the water levels in a well decline to the same elevation as the pumping equipment, the pump will begin to pull air into the pump bowls, inducing equipment damage. If water levels in wells decline to these levels, it prompts the need to rehabilitate the well by pulling the old pump equipment and replacing with new pumping equipment and placing the pump deeper in the well. Staff monitors these water level depths closely to ensure no failures occur and to estimate if and when pump equipment needs to be pulled and replaced to effectively "chase" the declining water levels.

Exhibit C contains a report of total cumulative rainfall at the five (5) rain gauges operated and maintained by the Department. These five (5) gauges are located at the Water Utility Yards, Mill and D Plant, Newmark Plant, Lytle Creek Plant, and Devil Canyon Plant. The report includes calendar year and fiscal year totals. It shows that there was less than an inch of rain in November 2015.

COMPLETED AND PENDING WELL REHABILITATIONS:

EPA Well 003 replacement equipment was ordered this past May to improve overall plant efficiency and is anticipated to be online mid-December. The initial delay was attributable to the order and fabrication of a packer, as it is a long lead item. When installing EPA Well 003 this past month, the contractor encountered issues with the alignment of the equipment that halted the installation and postponed it for December. The rehabilitation of Mt. Vernon began in November and is expected to be completed in December. Other wells slated to be rehabilitated in the near future are EPA 001 and 16th St./Sierra Way.

SERVICE AREA WATER DEMAND REDUCTIONS:

The Department has been reporting monthly production data to the SWRCB as required by the emergency regulations. Department well water production compared to the same month in 2013 is tabulated below.

Stacey R. Aldstadt, General Manager

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December 4, 2015

SUBJECT: INFORMATIONAL ITEM ONLY – NOVEMBER 2015 DROUGHT MONITORING REPORT

SWRCB also requires all urban water suppliers to begin tracking gallons per capita per day (GPCD) beginning in October 2014 for the September 2014 reporting period. The response by the Department's customers to the Board's Stage II and Stage IIA declarations and the mandatory outdoor water use restrictions has been a success, despite some months showing water demand has increased as compared to 2013. GPCD values and percent water reduction as compared to 2013 values are shown below.

Month/Year	GPCD	% Change in Gross Production vs. 2013
November 2014	114.09	+0.47%
December 2014	66.84	-19.12%
January 2015	80.09	-1.60%
February 2015	93.55	+6.33%
March 2015	84.94	+2.75%
April 2015	97.27	-9.52%
May 2015	86.21	-30.52%
June 2015	101.00	-28.11%
July 2015	121.57	-29.83%
August 2015	125.59	-33.56%
September 2015	115.22	-30.88%
October 2014	100.63	-23.44%
November 2015	92.50	-16.60%
Cumulative Compliance	-	-28.05%

The Department experienced a decrease in gross water production of approximately 16.6% in November 2015 compared to November 2013 production. SWRCB tracks compliance on a cumulative basis beginning with June 2015. Cumulative tracking means that the conservation savings will be added together from one month to the next and compared to the amount of water used during the same months in 2013. The cumulative reduction through November 2015 is approximately 28%, meeting the State's 28% reduction goal. The Department's local and regional outreach efforts regarding the drought continue to having an effect on customer water usage. Internally, Water Staff have been directed to make operational changes to minimize water loss from the system, including curtailing certain hydrant flushing programs temporarily. A graph depicting the Department's 2015 monthly gross water production versus the same production in 2013 along with the 28% reduction target is attached for reference.

Stacey R. Aldstadt, General Manager

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December 4, 2015

**SUBJECT: INFORMATIONAL ITEM ONLY – NOVEMBER 2015 DROUGHT
MONITORING REPORT**

The State Water Project (SWP) allocation for 2015 is currently 20% and is expected to remain 20%. As is typically during this time of the year, there is currently no Department recharge activity. Recharge activity is anticipated to continue late spring of 2016.

STAFF'S RECOMMENDATION:

No action is recommended at this time. Staff will continue to monitor the State's continued response to the drought and monitor water level trends of all production wells and provide monthly updates to the Board.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Miguel J. Guerrero", is written over a horizontal line.

Miguel J. Guerrero, P.E.
Director, Water Utility

MJG:swd
Attach.

**SWRCB Emergency Regulations Compliance Tracking
San Bernardino Municipal Water Department (28% Target)**

November 2015

Cumulative Compliance = 28.05%

**2013 Gross Monthly
Production vs. 2015
Gross Production**

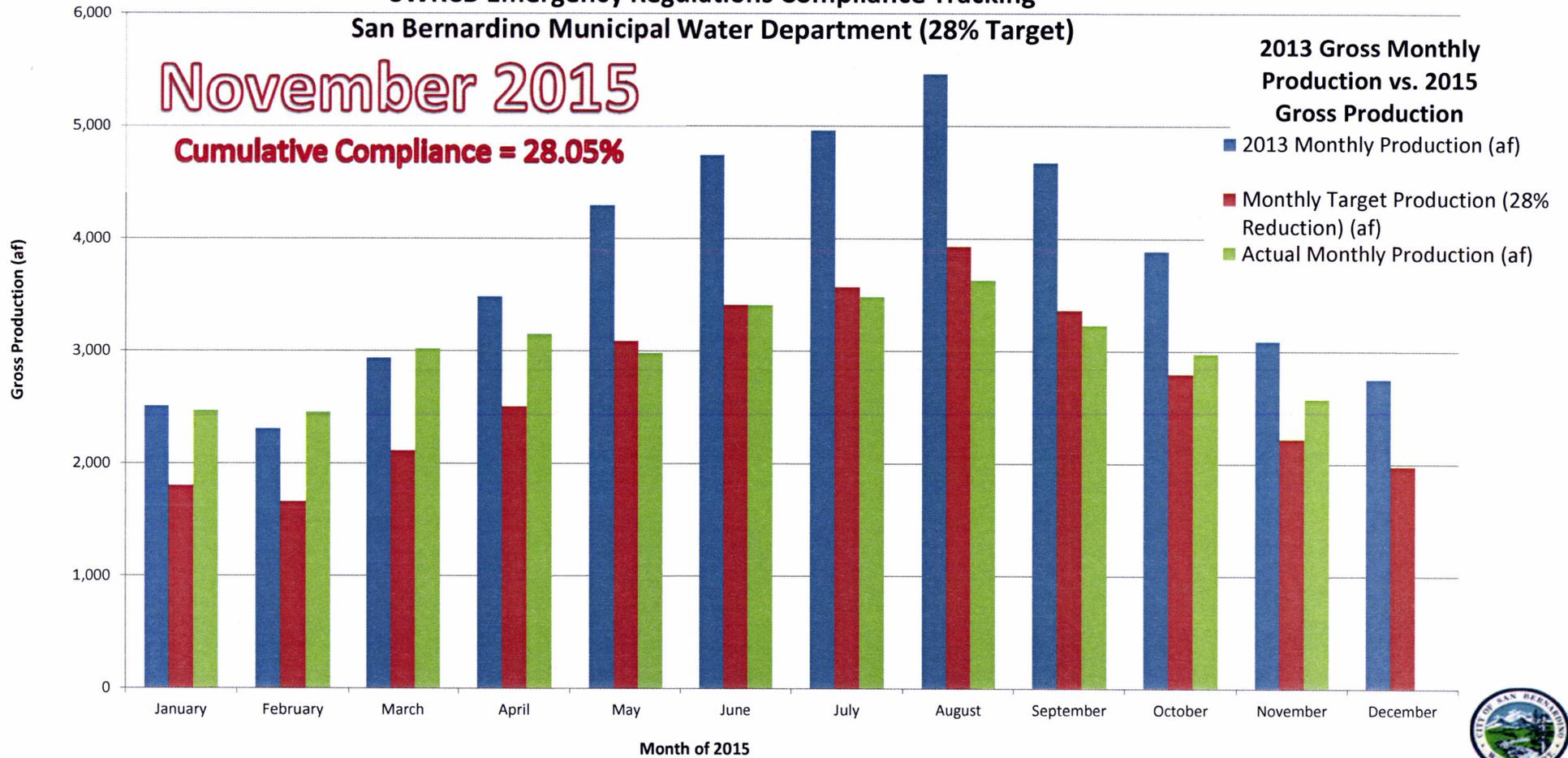
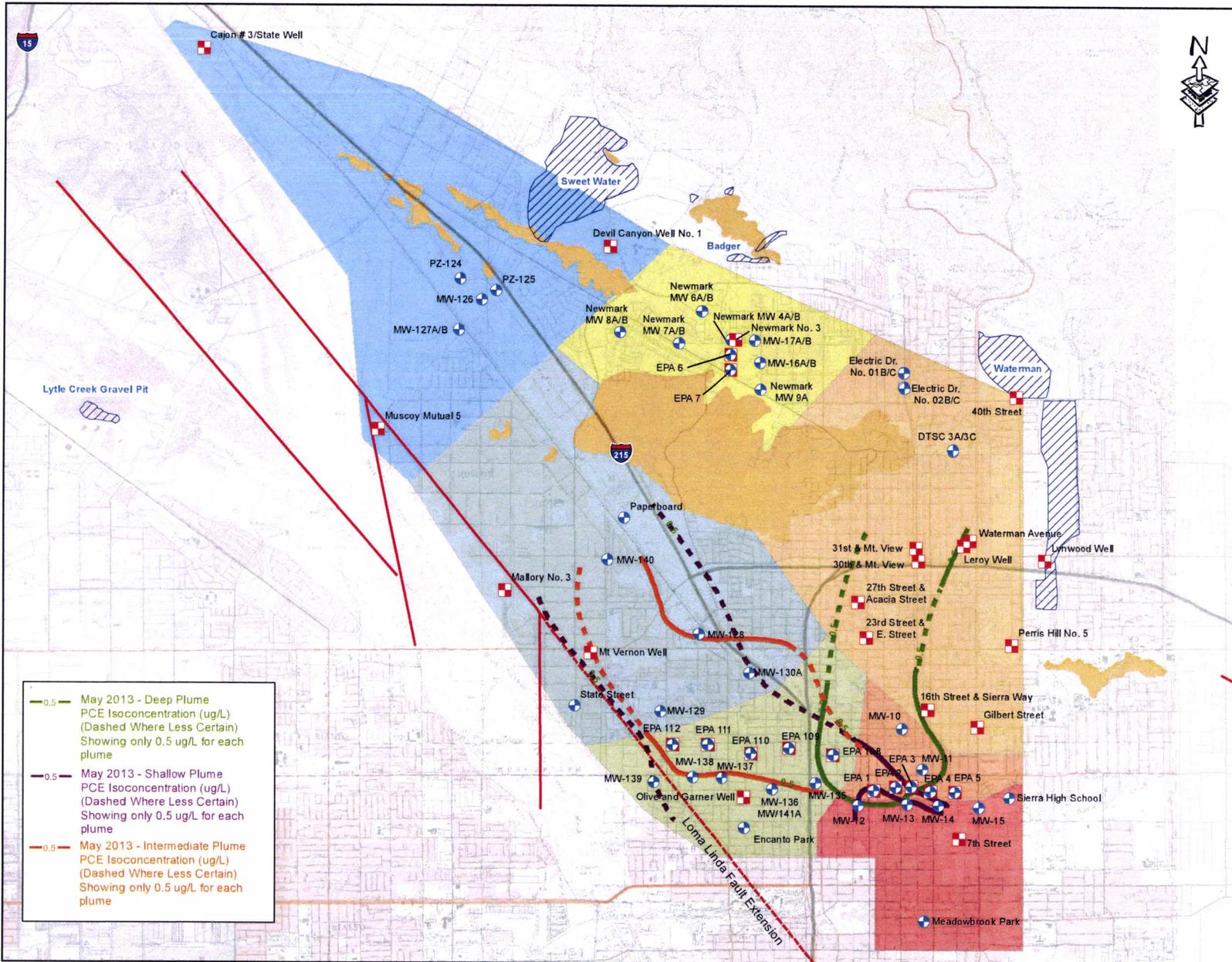


EXHIBIT A



-0.5 May 2013 - Deep Plume
 PCE Isoconcentration (ug/L)
 (Dashed Where Less Certain)
 Showing only 0.5 ug/L for each
 plume

-0.5 May 2013 - Shallow Plume
 PCE Isoconcentration (ug/L)
 (Dashed Where Less Certain)
 Showing only 0.5 ug/L for each
 plume

-0.5 May 2013 - Intermediate Plume
 PCE Isoconcentration (ug/L)
 (Dashed Where Less Certain)
 Showing only 0.5 ug/L for each
 plume



Legend

Hydrograph Wells

- Extraction/Production Well
- Monitoring Well
- Recharge Basins

Hydrograph Areas

- Upgradient
- Muscoy Mid-Plume
- Muscoy Plume
- Newmark North
- Newmark Mid-Plume
- Newmark Plume Front
- Newmark Downgradient

— Faults/Hydraulic Barriers

0 2,250 4,500 9,000
Feet

Datum: NAD 1983 State Plane CA V

Job Number: 185802557

PREPARED BY:

Stantec Consulting, Inc.
290 Conejo Ridge Ave., Suite 200
Thousand Oaks, Ca 91321
(805) 230-1266/230-1277 (fax)

Data Generated By: M. Bartosek

For: **City of San Bernardino
Municipal Water Department**

Approved By: M. Eisen

**Hydrograph Areas
San Bernardino, California**

Date: 3/24/14 Figure: **1-1**

Hydrographs

Region: Cajon Creek

Upgradient Production and Monitoring Wells

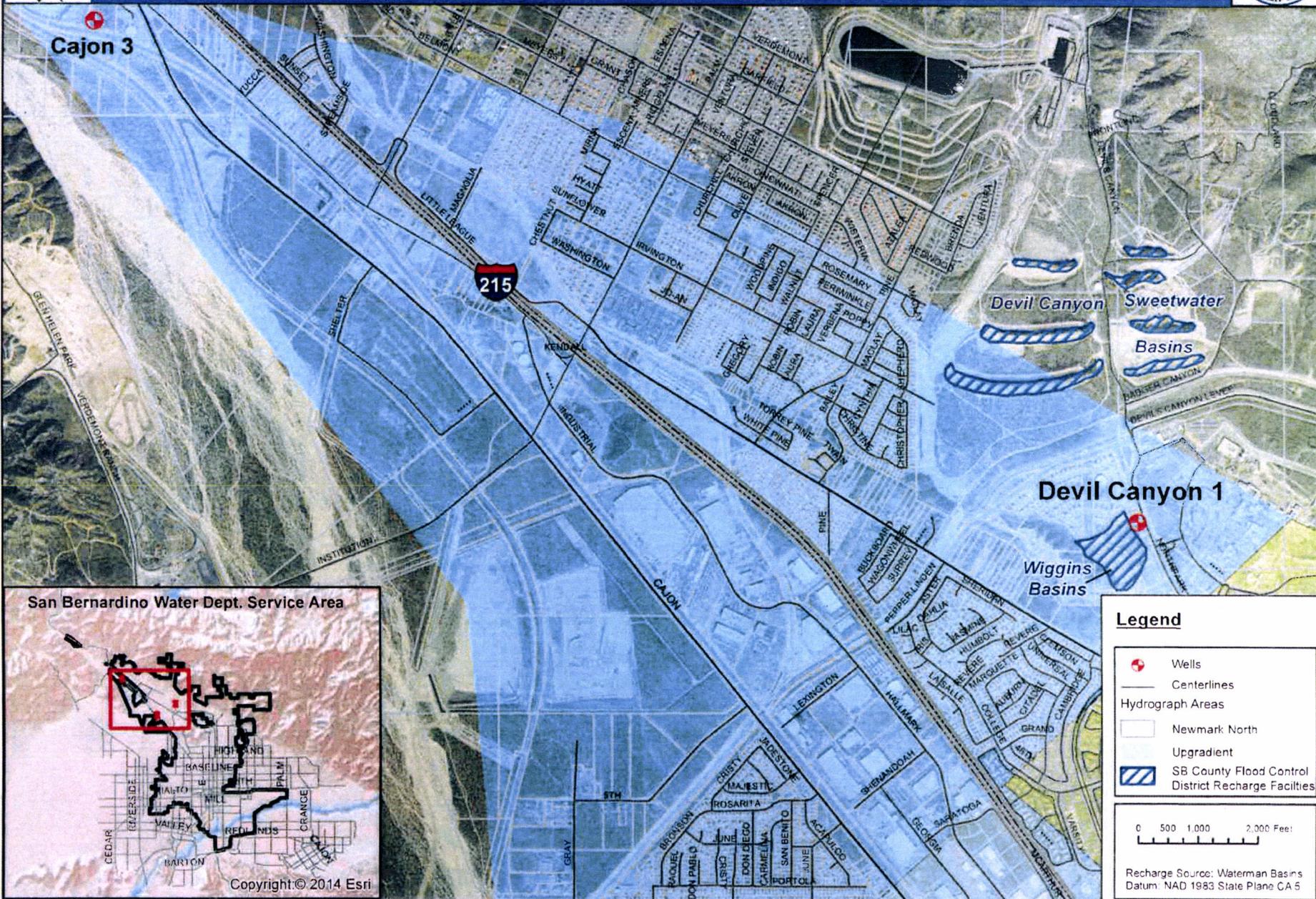
Recharge Source:

Cajon Creek (No Artificial Recharge)

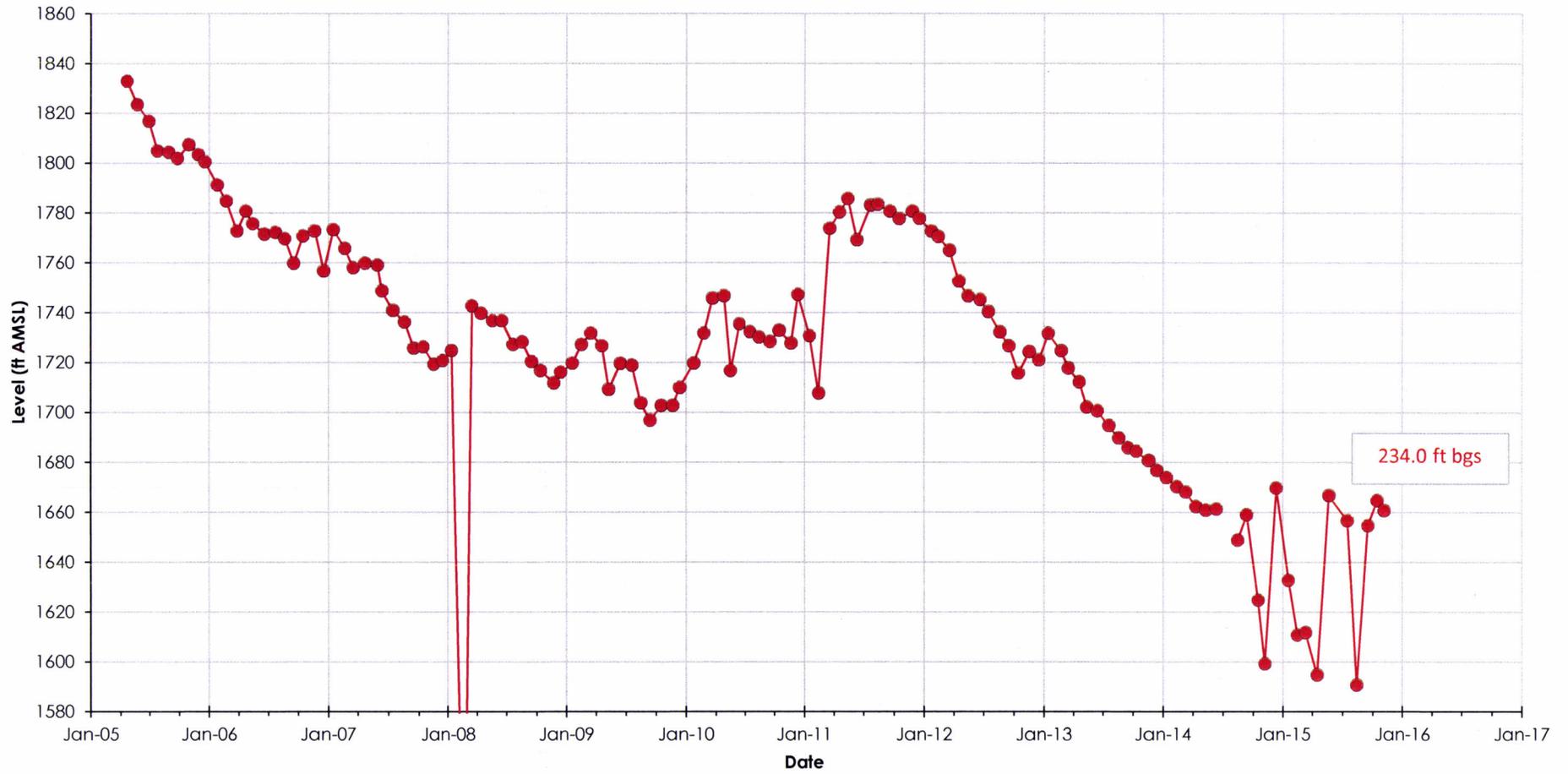


CAJON CREEK REGION

Upgradient Production and Monitoring Wells



1894.9
Ground
Elev.



Client/Project

Water Level Monitoring Program
City of San Bernardino California

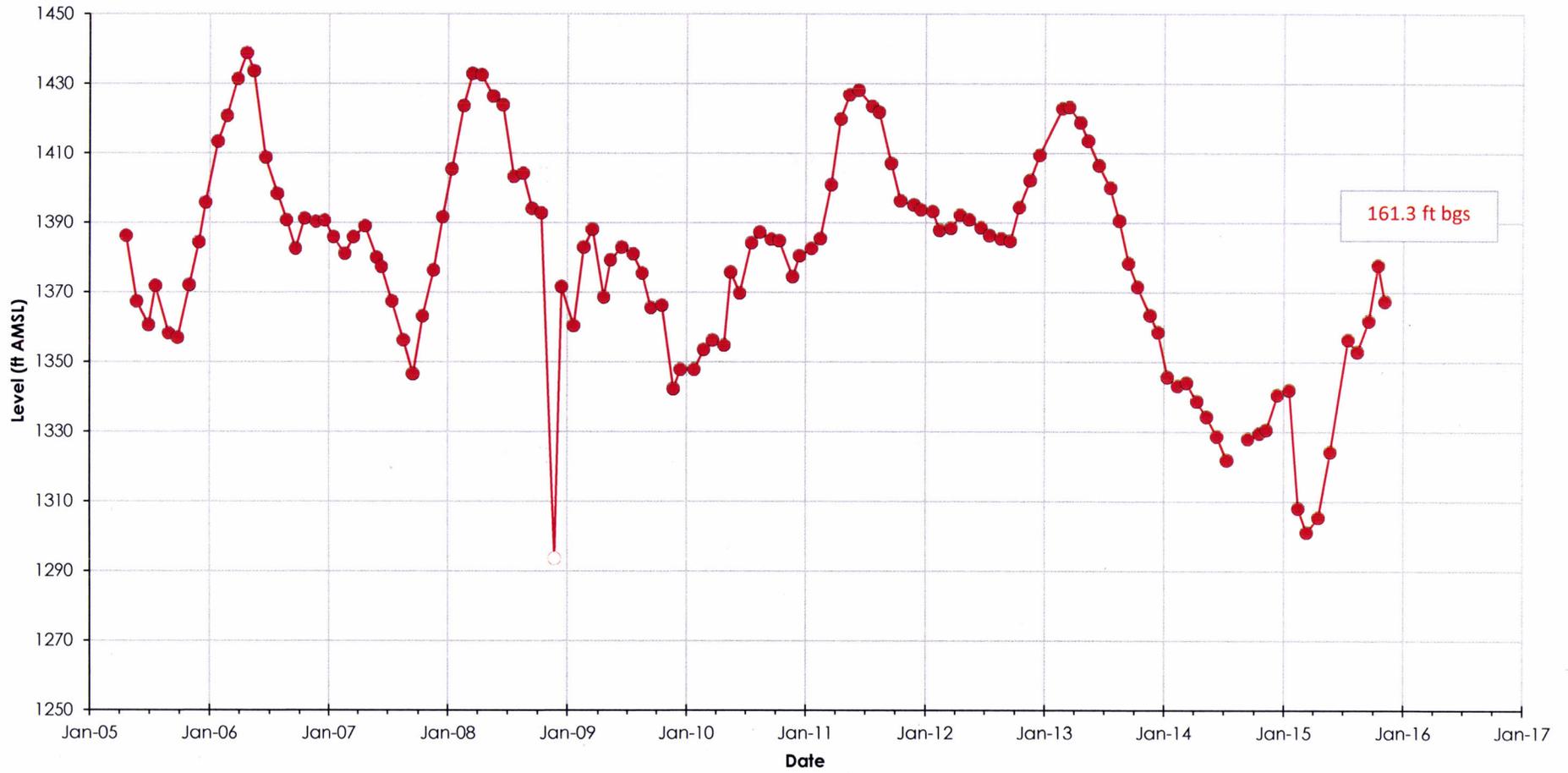
Figure/Well No.

Cajon 3

Title

Water Level Elevations

1528.9
Ground
Elev.



Client/Project

Water Level Monitoring Program
City of San Bernardino California

Figure/Well No.

Devil Canyon 1

Title

Water Level Elevations



Hydrographs

Region: Newmark North

Extraction and Monitoring Wells

Recharge Source:

Sweetwater/Devil Canyon Basins and Badger Basins

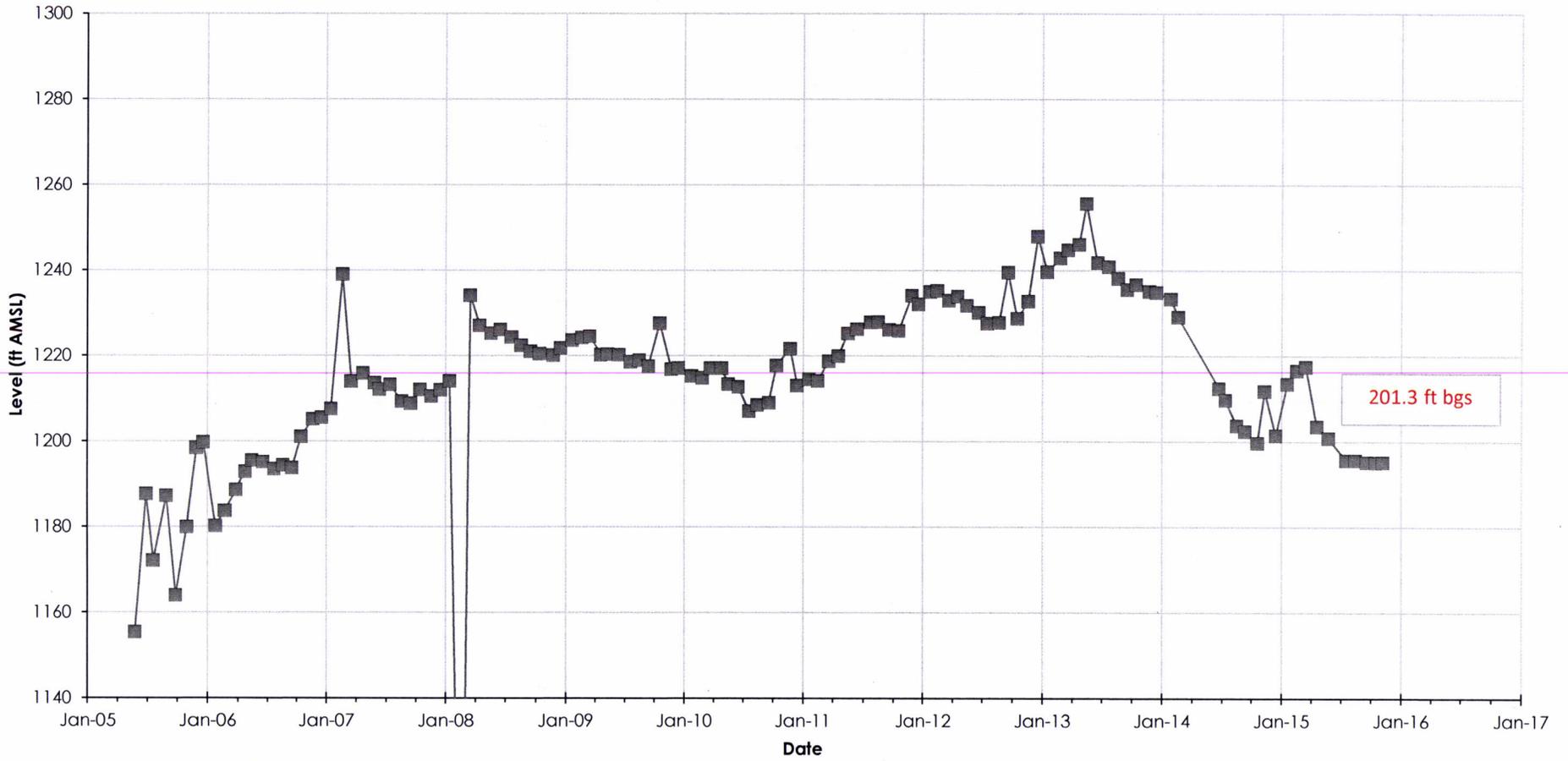


NEWMARK NORTH REGION

Extraction and Monitoring Wells



1396.6
Ground
Elev.



Client/Project

Water Level Monitoring Program
City of San Bernardino California

Figure/Well No.

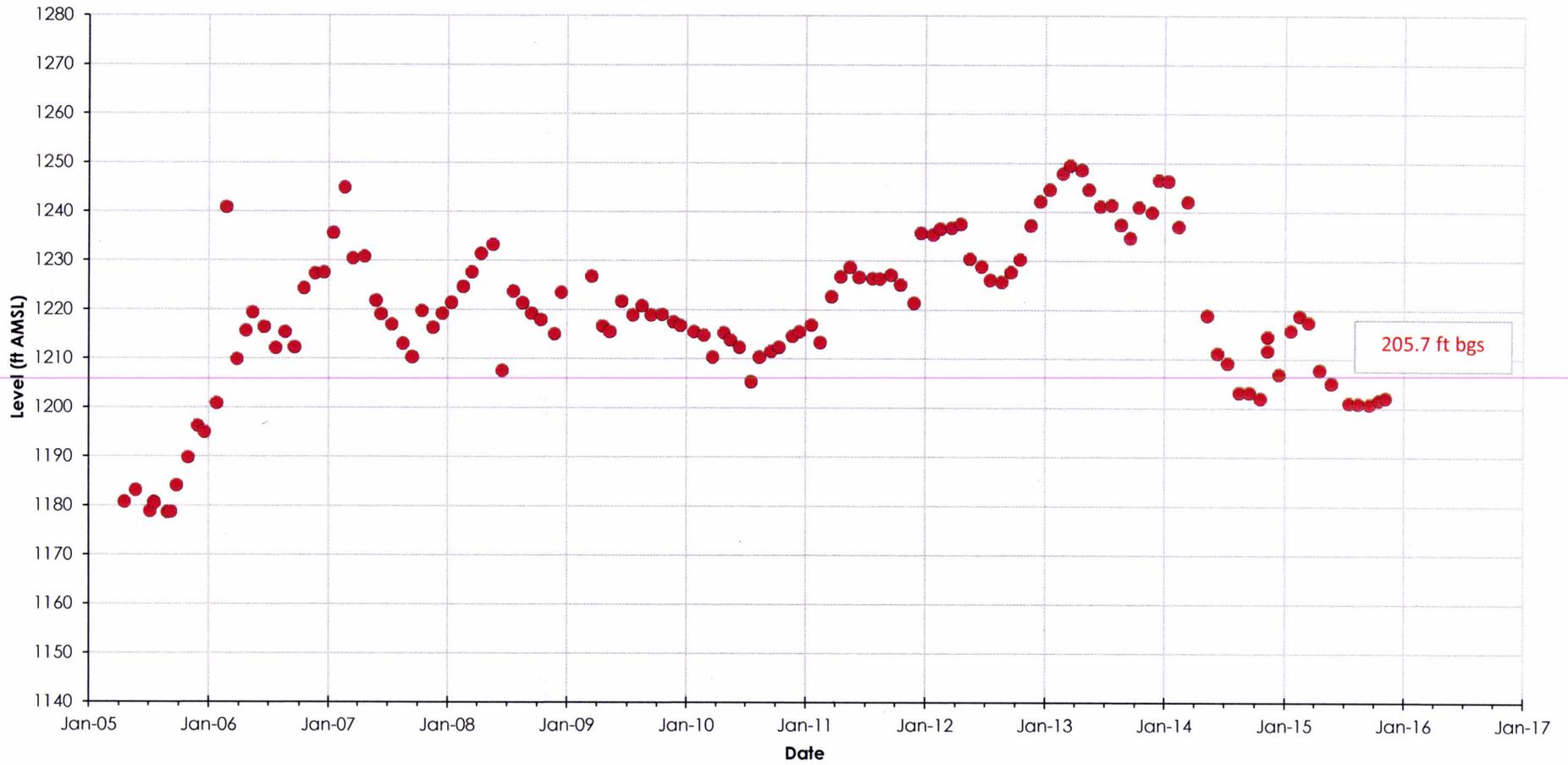
EPA 006

Title

Water Level Elevations



1407.9
Ground
Elev.



Client/Project

Water Level Monitoring Program
City of San Bernardino California

Figure/Well No.

Newmark 3

Title

Water Level Elevations

Hydrographs

Region: Newmark Mid-Plume

Production and Monitoring Wells

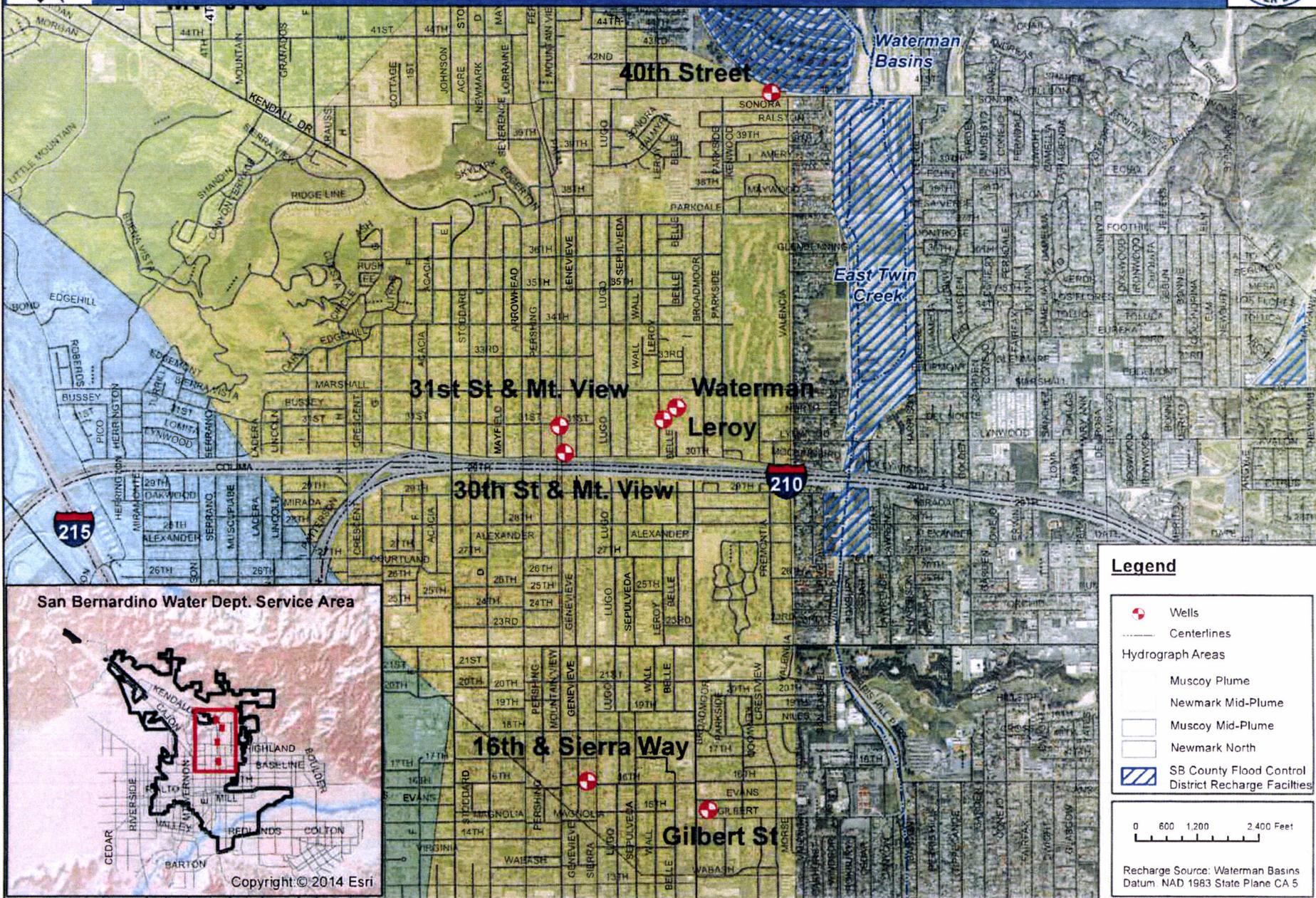
Recharge Source:

Waterman Basins



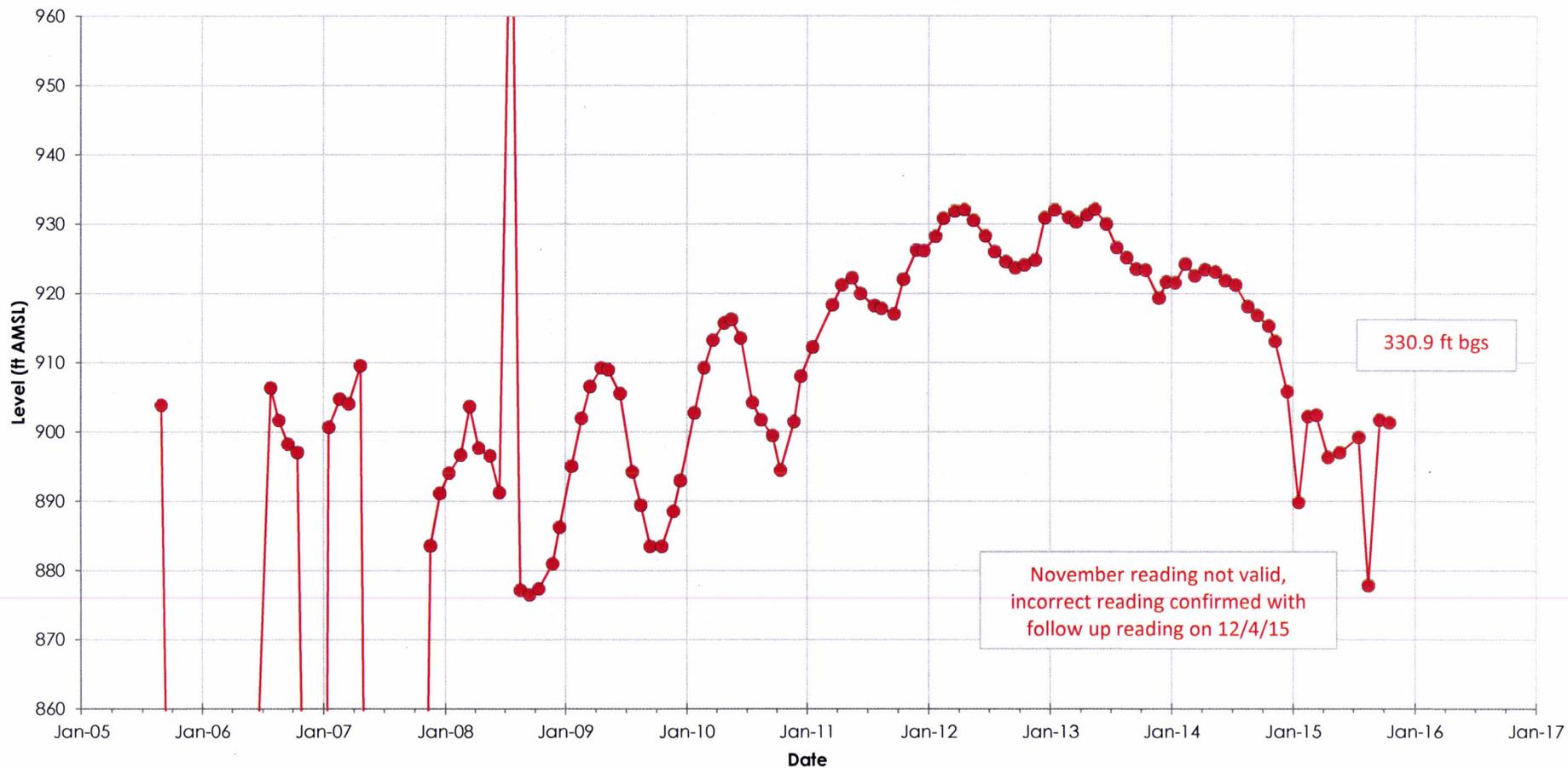
NEWMARK MID-PLUME REGION

Production and Monitoring Wells



Copyright © 2014 Esri

1232.3
Ground
Elev.



Client/Project

Water Level Monitoring Program
City of San Bernardino California

Figure/Well No.

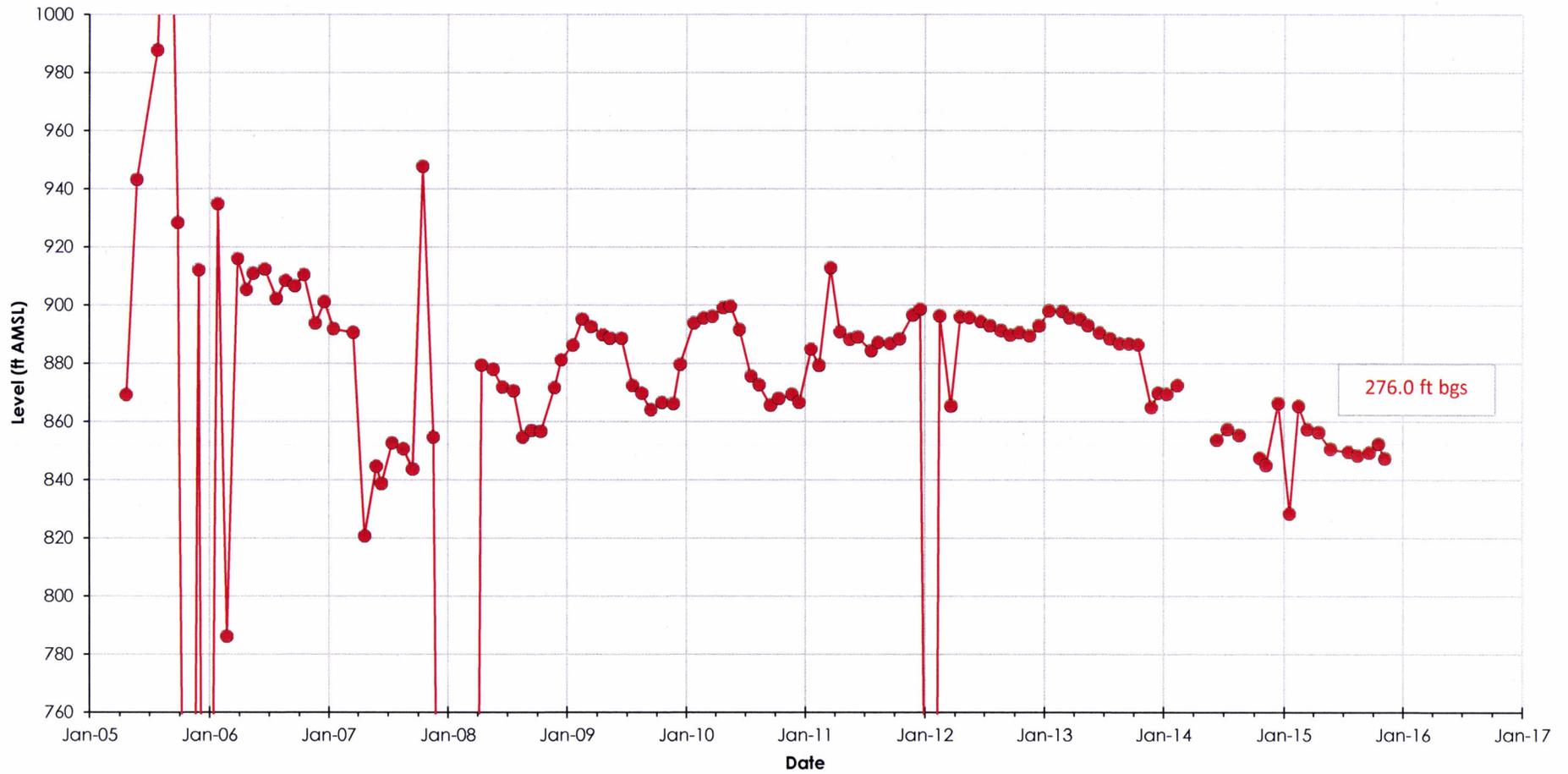
31st & Mt. View

Title

Water Level Elevations



1123.5
Ground
Elev.



Client/Project

Water Level Monitoring Program
City of San Bernardino California

Figure/Well No.

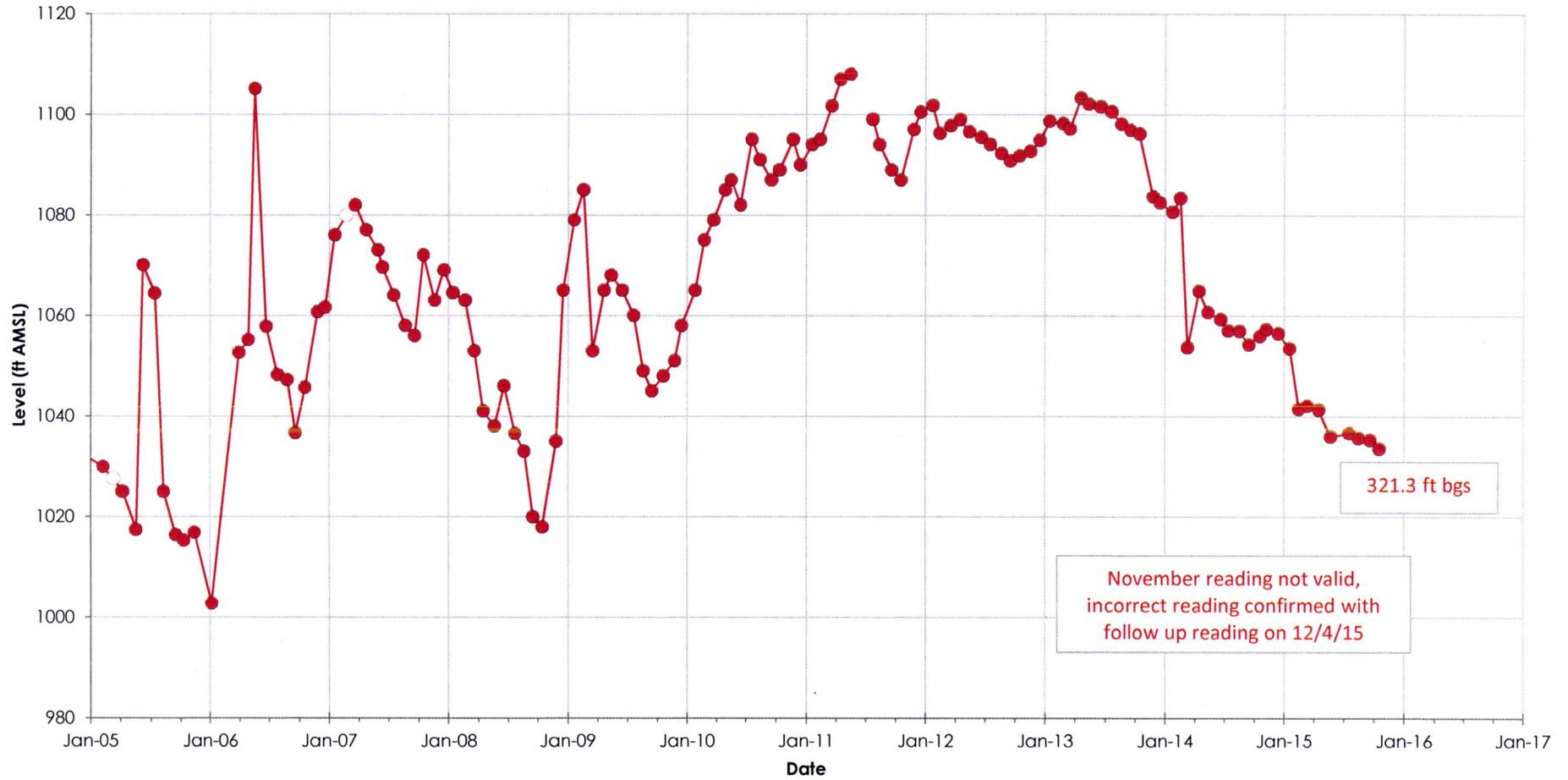
Gilbert

Title

Water Level Elevations



1355.0
Ground
Elev.



November reading not valid,
incorrect reading confirmed with
follow up reading on 12/4/15

321.3 ft bgs



Client/Project

Water Level Monitoring Program
City of San Bernardino California

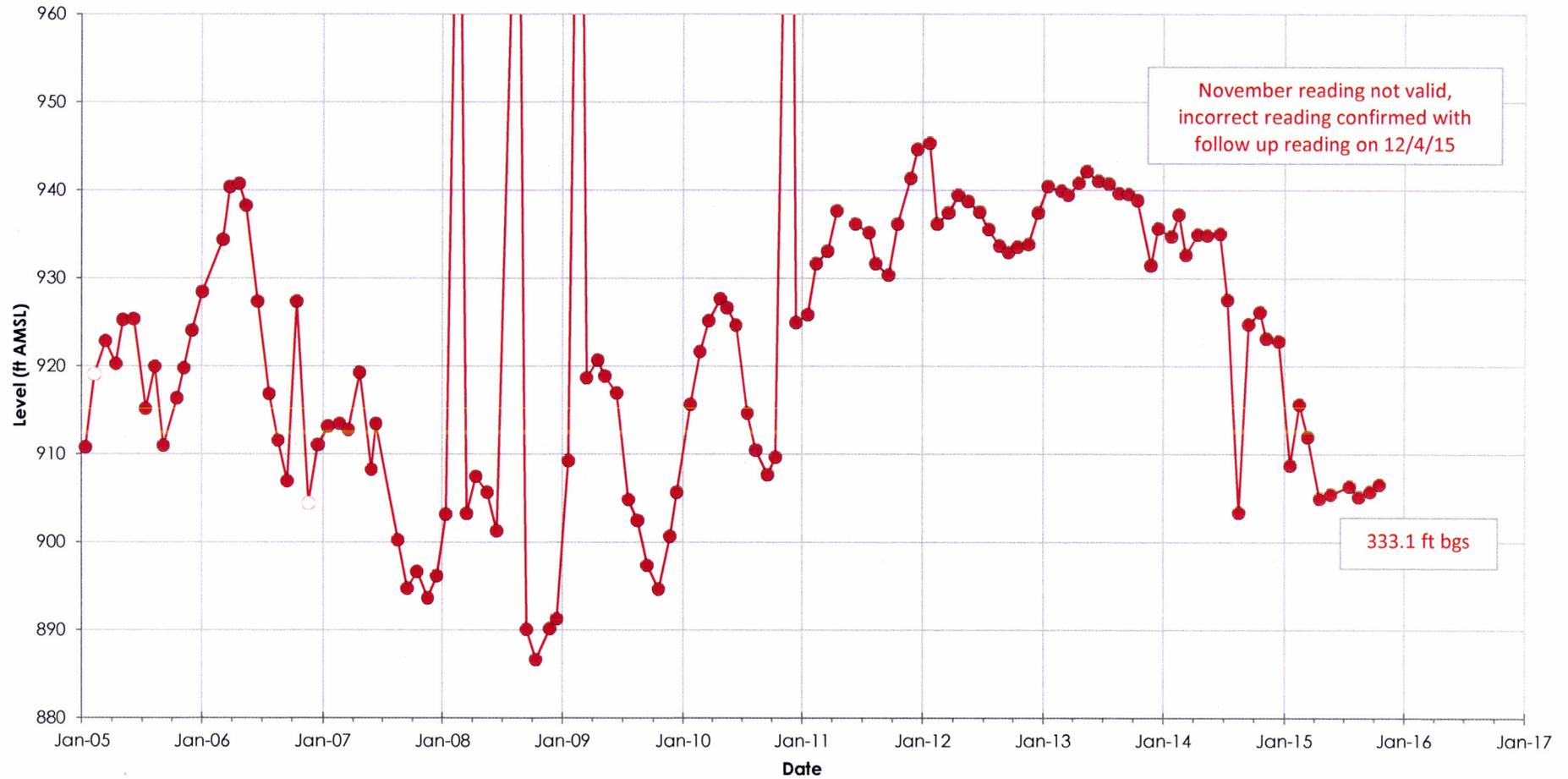
Figure/Well No.

40th Street Well

Title

Water Level Elevations

1239.7
Ground
Elev.



Client/Project

Water Level Monitoring Program
City of San Bernardino California

Figure/Well No.

Leroy Well

Title

Water Level Elevations



Hydrographs

Region: Newmark Plume Front

Extraction and Monitoring Wells

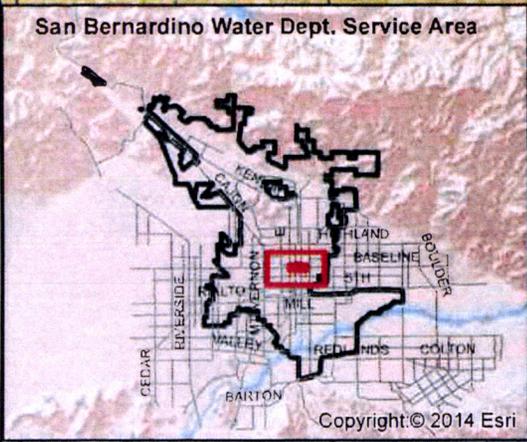
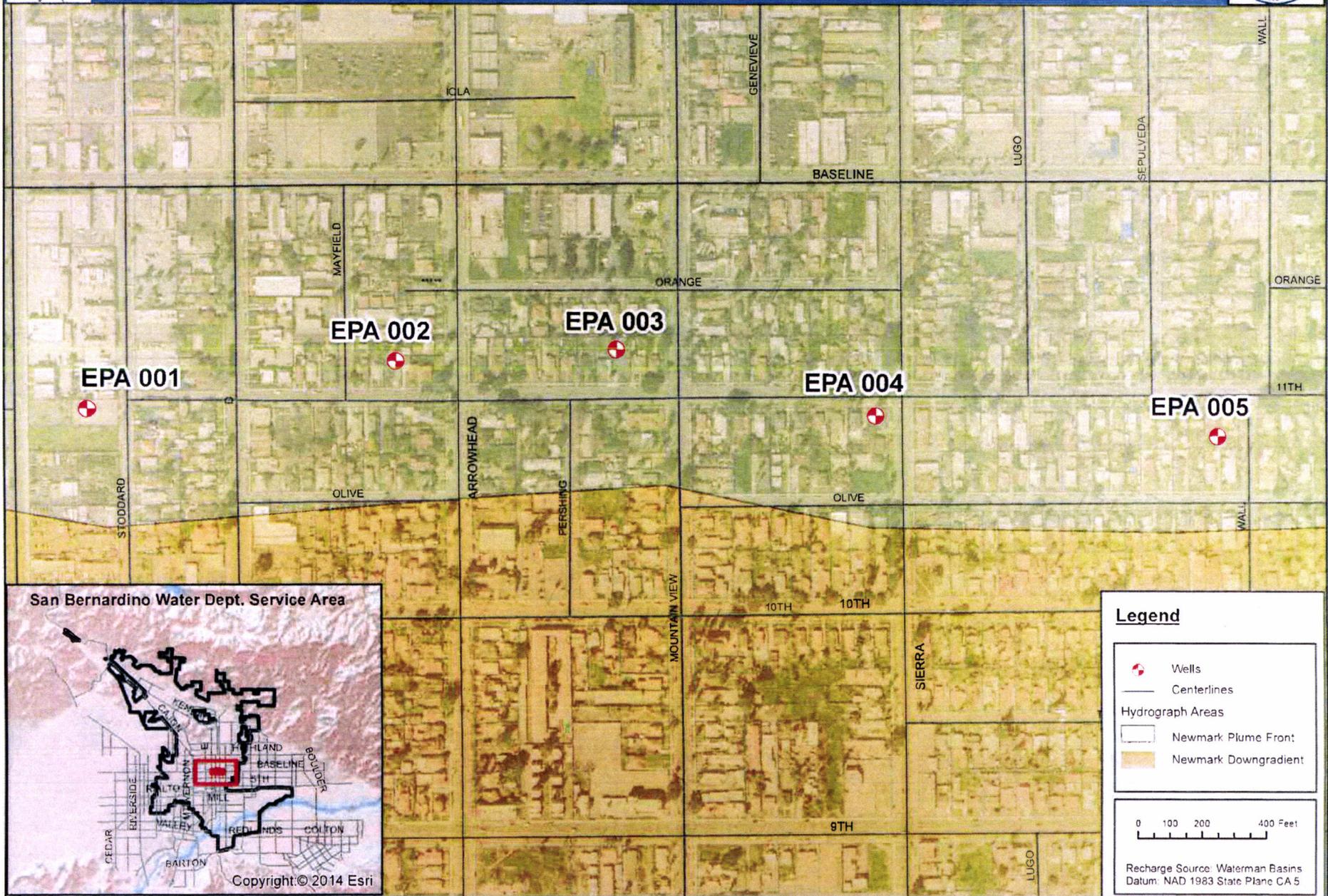
Recharge Source:

Waterman Basins

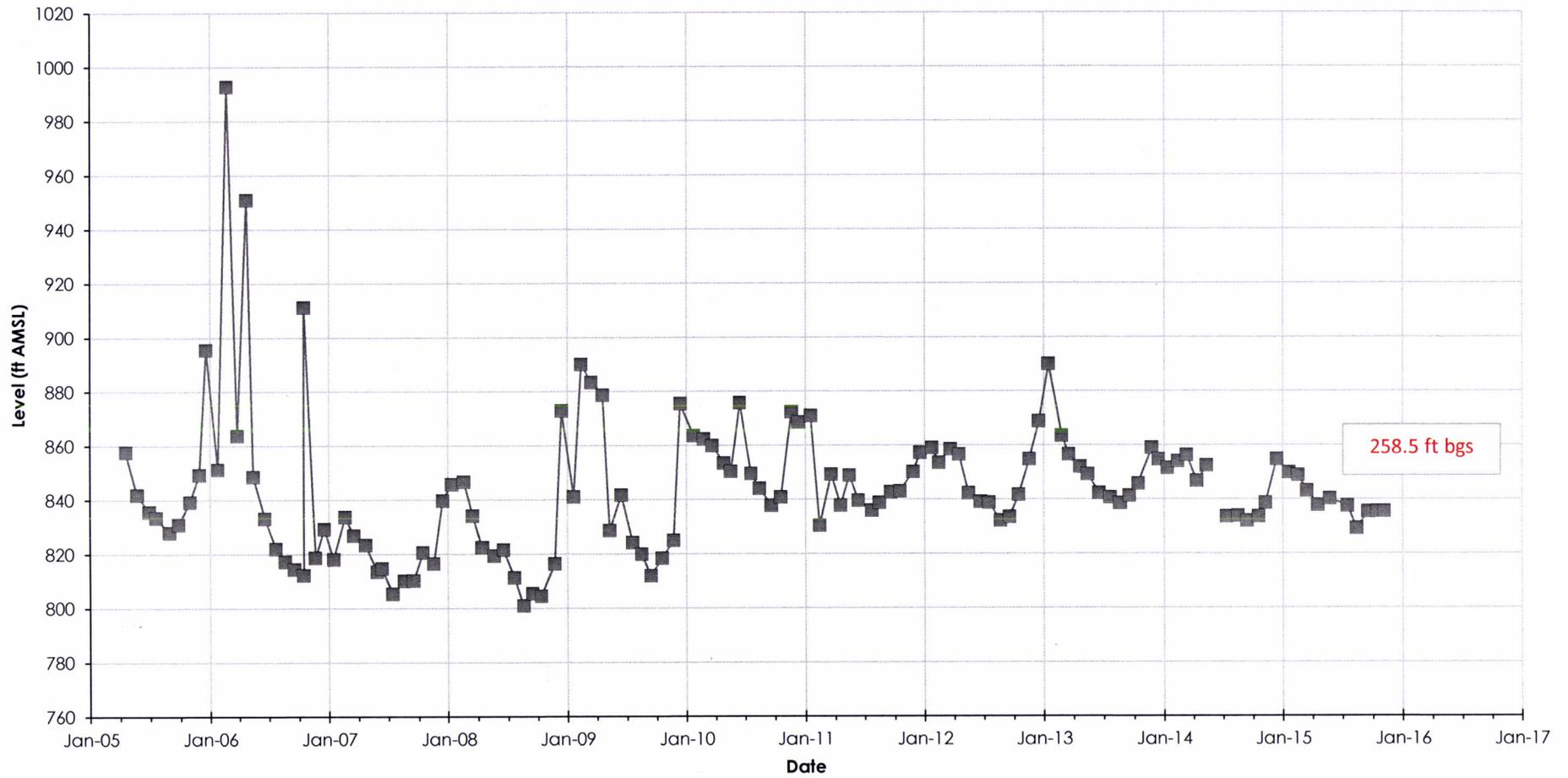


NEWMARK PLUME FRONT REGION

Extraction and Monitoring Wells



1093.9
Ground
Elev.



Client/Project

Water Level Monitoring Program
City of San Bernardino California

Figure/Well No.

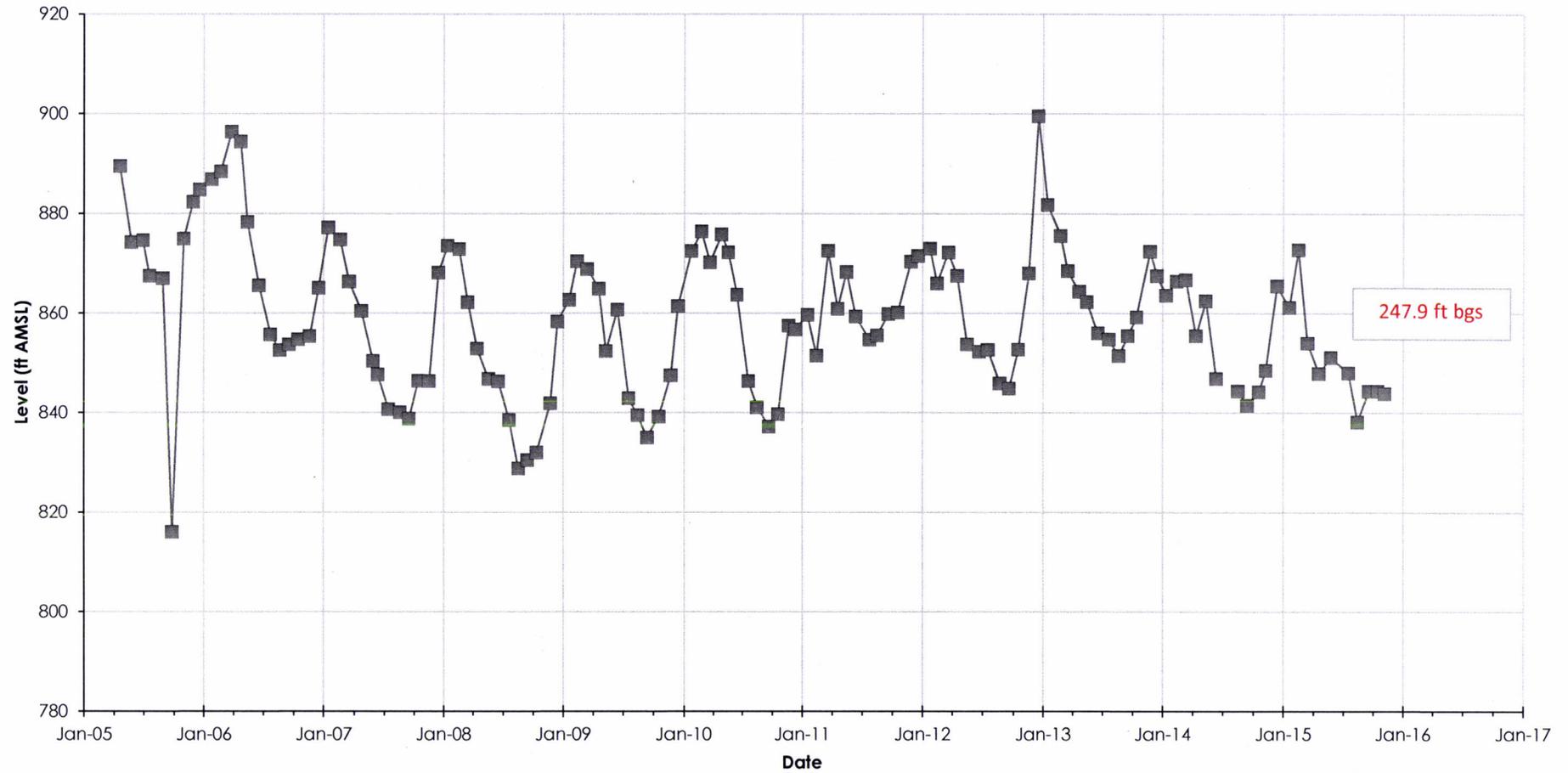
EPA 001

Title

Water Level Elevations



1091.7
Ground
Elev.



Client/Project

Water Level Monitoring Program
City of San Bernardino California

Figure/Well No.

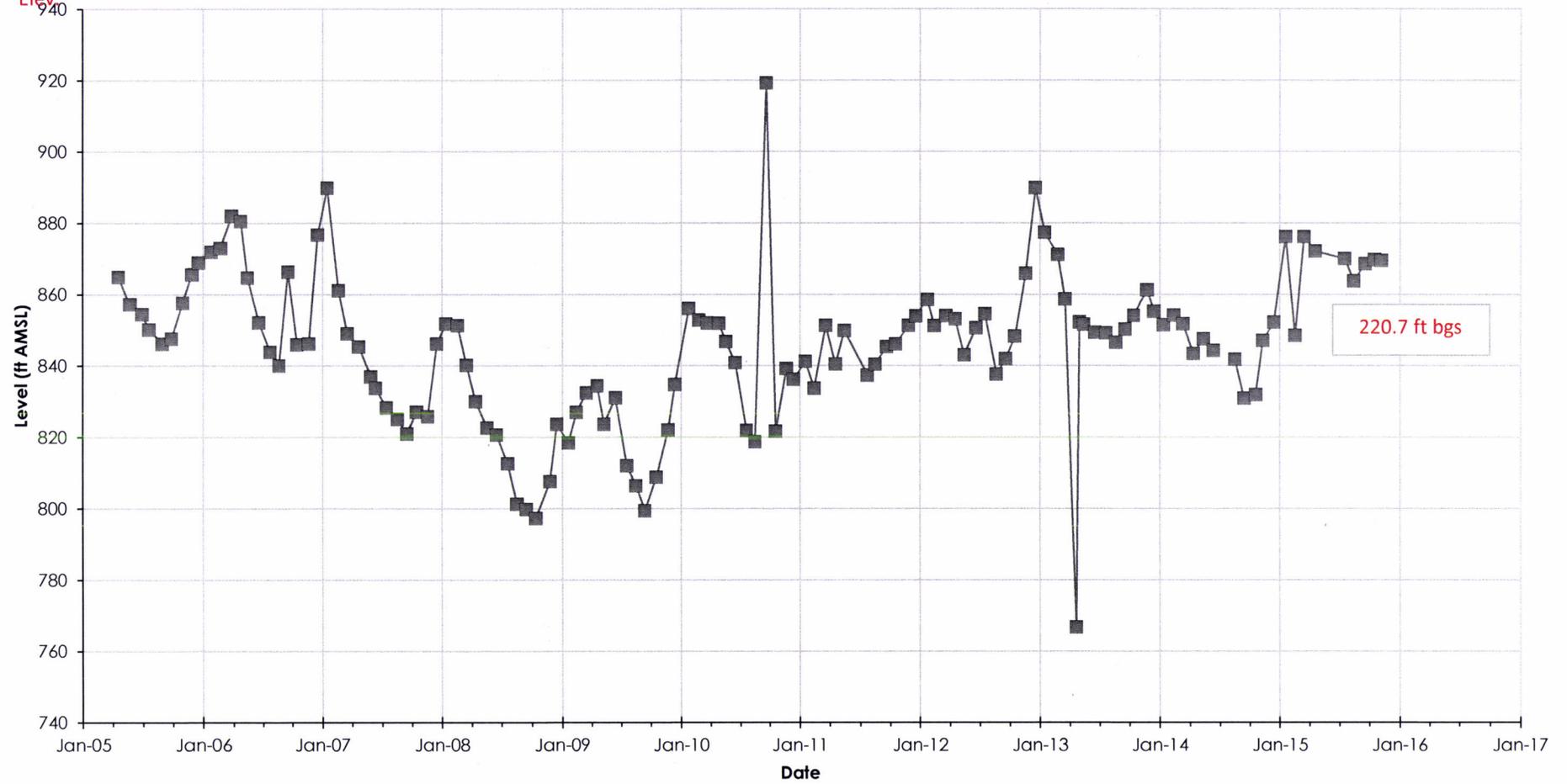
EPA 002

Title

Water Level Elevations



1090.2
Ground
Elev.



Client/Project

Water Level Monitoring Program
City of San Bernardino California

Figure/Well No.

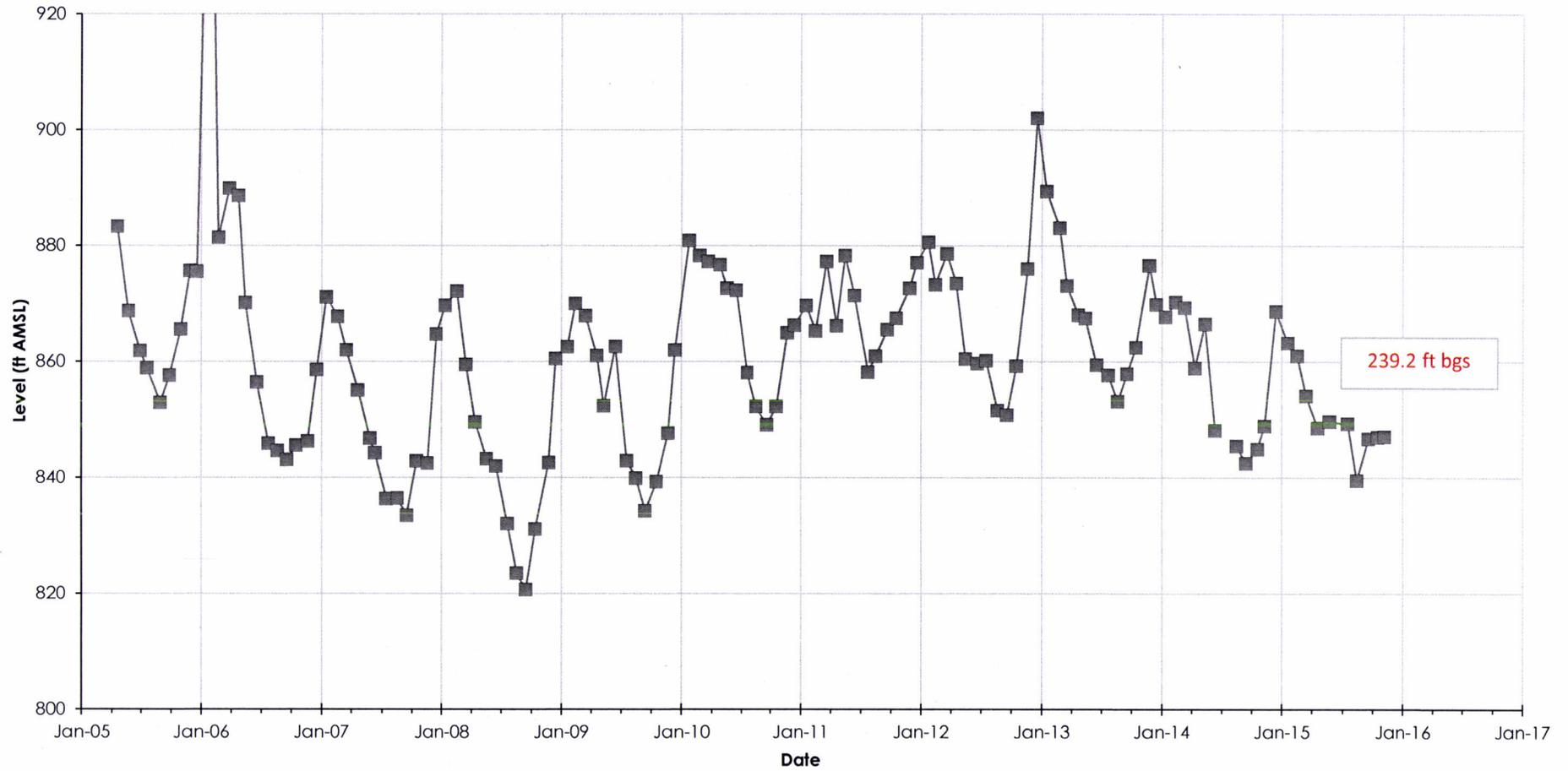
EPA 003

Title

Water Level Elevations



1086.3
Ground
Elev.



Client/Project

Water Level Monitoring Program
City of San Bernardino California

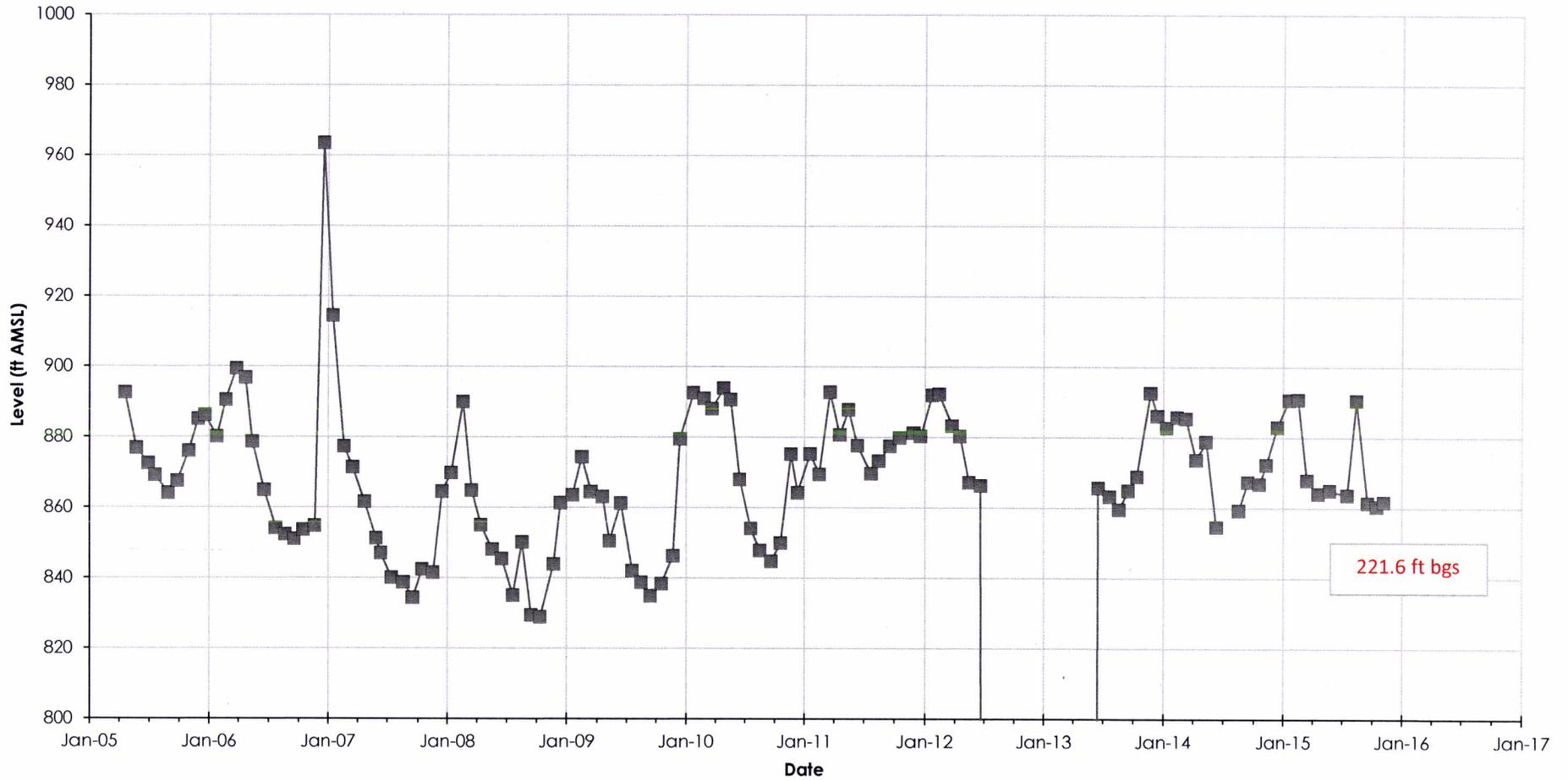
Figure/Well No.

EPA 004

Title

Water Level Elevations

1083.3
Ground
Elev.



Client/Project

Water Level Monitoring Program
City of San Bernardino California

Figure/Well No.

EPA 005

Title

Water Level Elevations

Hydrographs

Region: Muscoy Mid-Plume

Production and Monitoring Wells

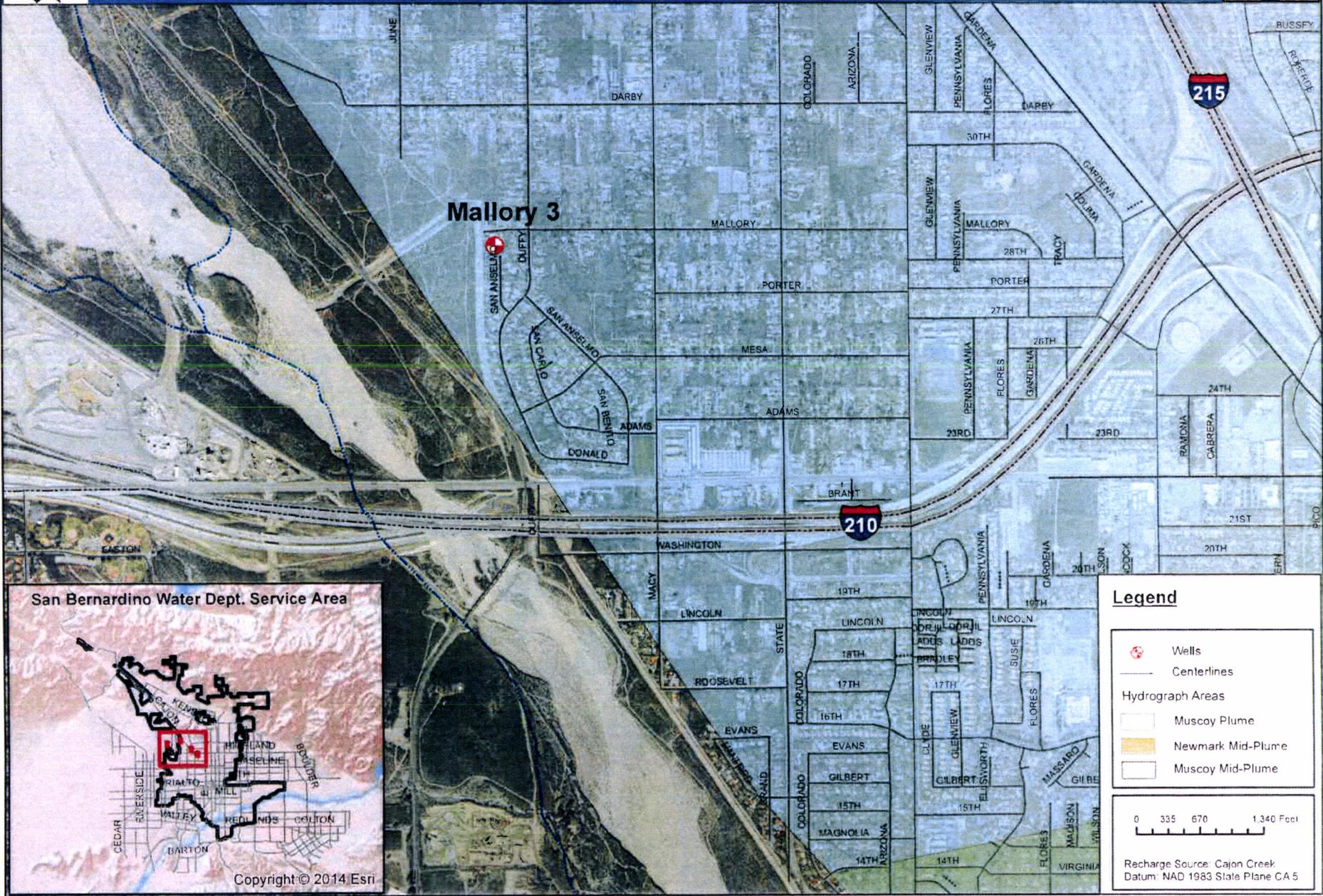
Recharge Source:

Cajon Creek (No Artificial Recharge)



Muscoy Mid-Plume Region

Production and Monitoring Wells



Legend

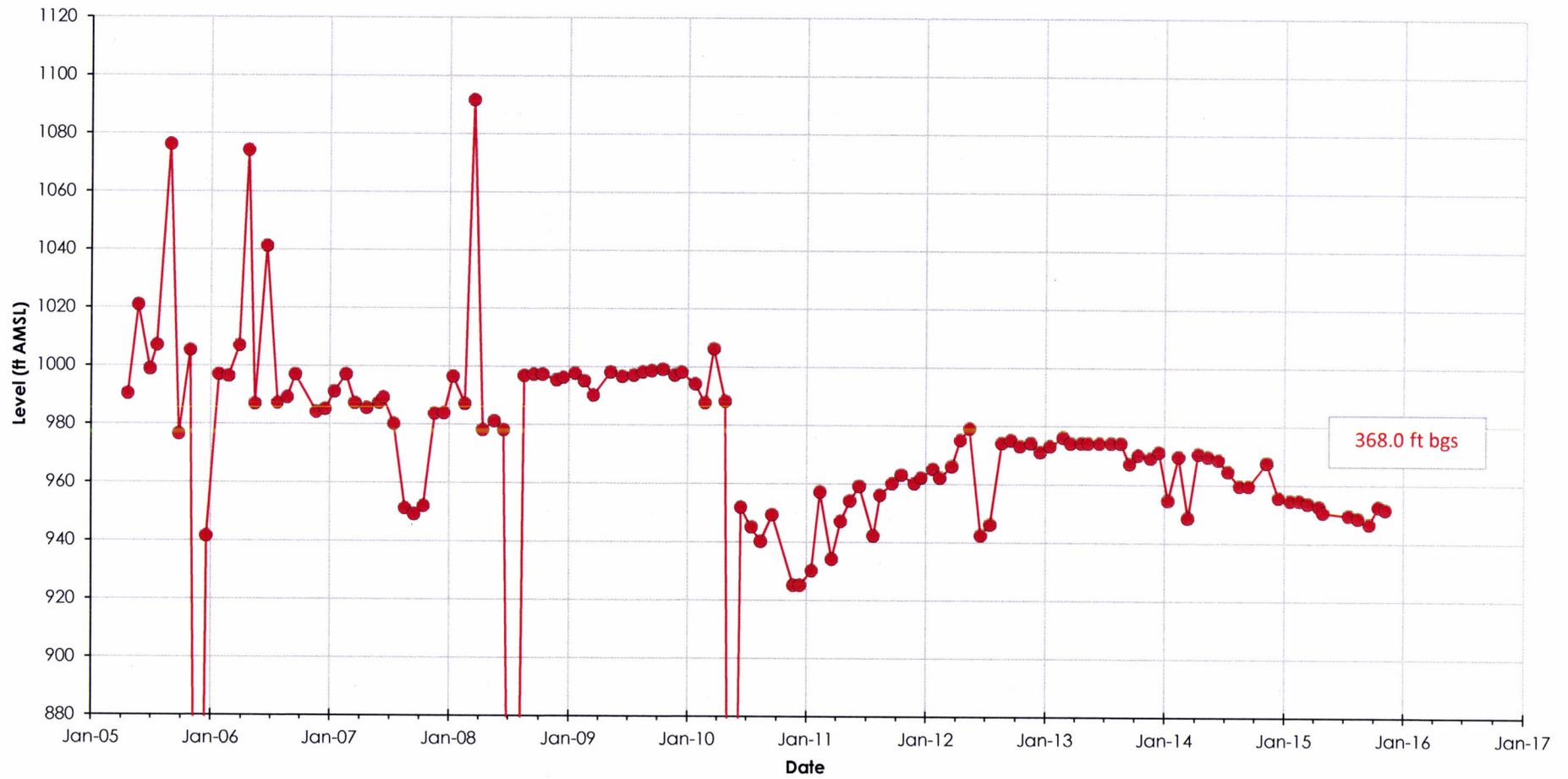
- Wells
- Centerlines
- Hydrograph Areas
 - Muscoy Plume
 - Newmark Mid-Plume
 - Muscoy Mid-Plume

0 335 670 1,340 Feet

Recharge Source: Cajon Creek
Datum: NAD 1983 State Plane CA 5



1319.8
Ground
Elev.



Client/Project

Water Level Monitoring Program
City of San Bernardino California

Figure/Well No.

Mallory 3

Title

Water Level Elevations



Hydrographs

Region: Muscoy Plume

Production, Extraction, and Monitoring Wells

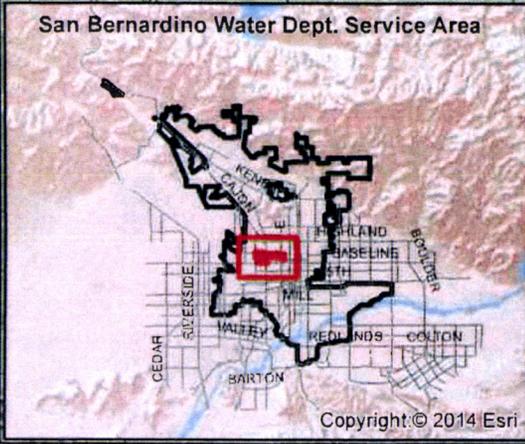
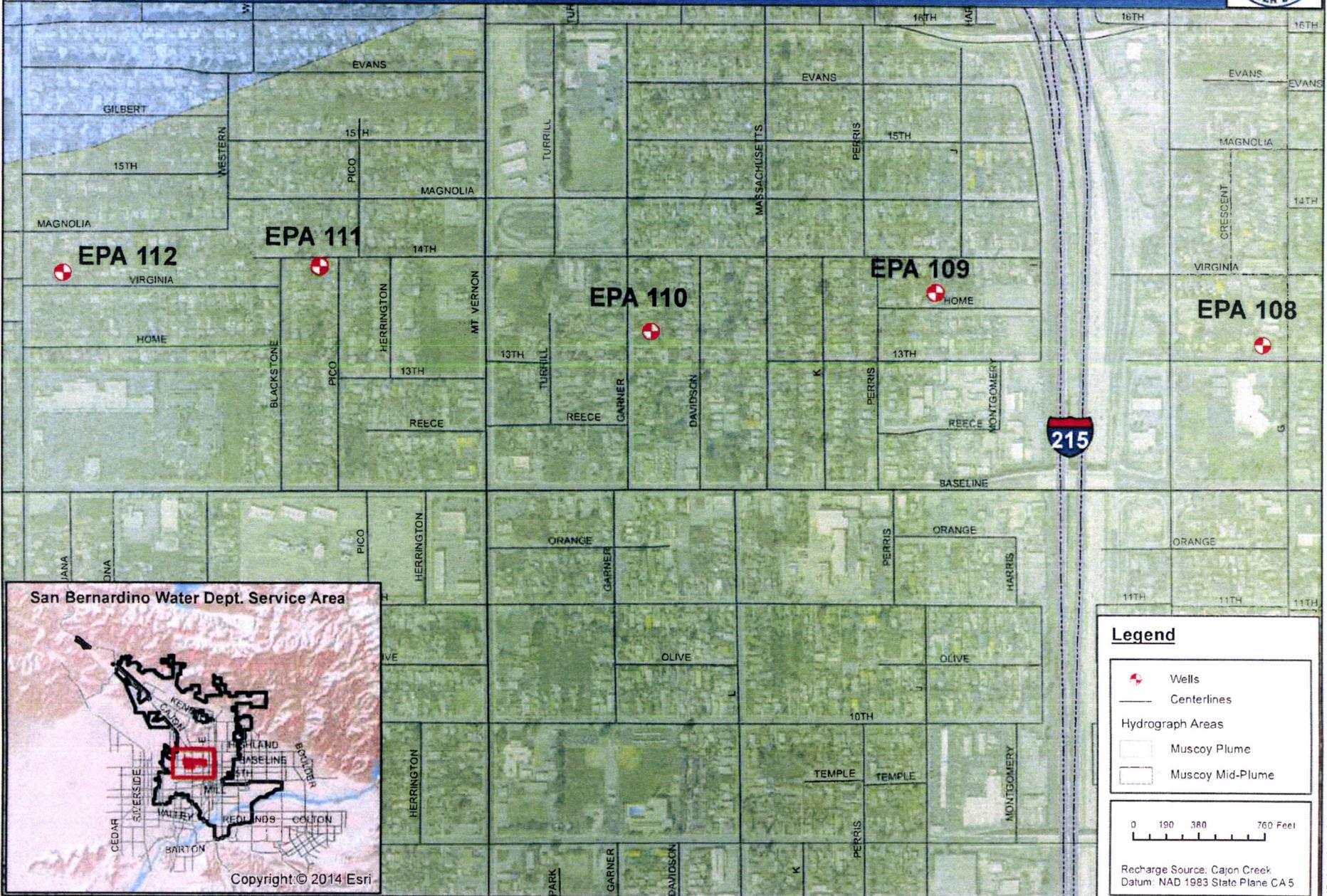
Recharge Source:

Cajon Creek (No Artificial Recharge)

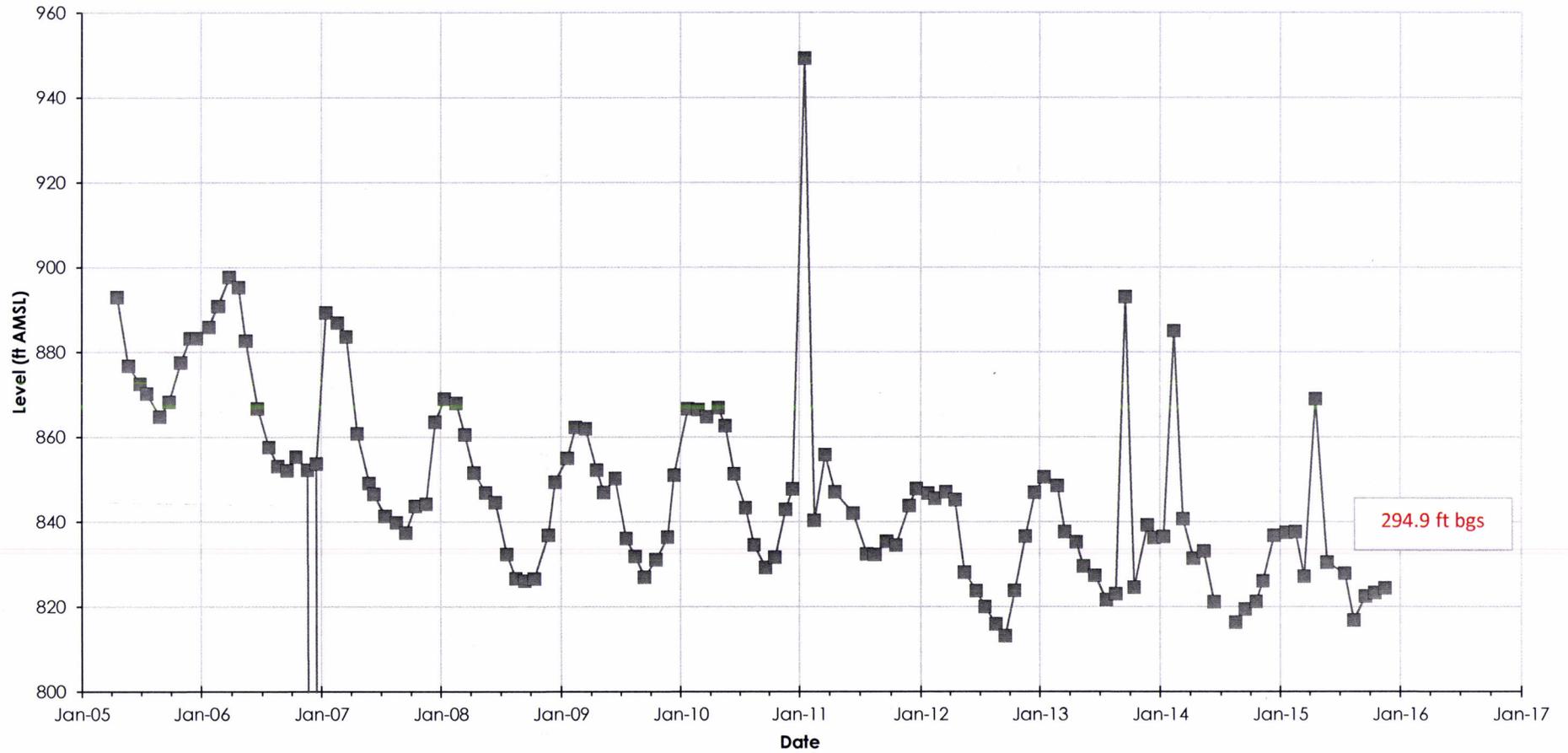


Muscoy Plume Region

Production, Extraction, and Monitoring Wells



1119.3
Ground
Elev.



Client/Project

Water Level Monitoring Program
City of San Bernardino California

Figure/Well No.

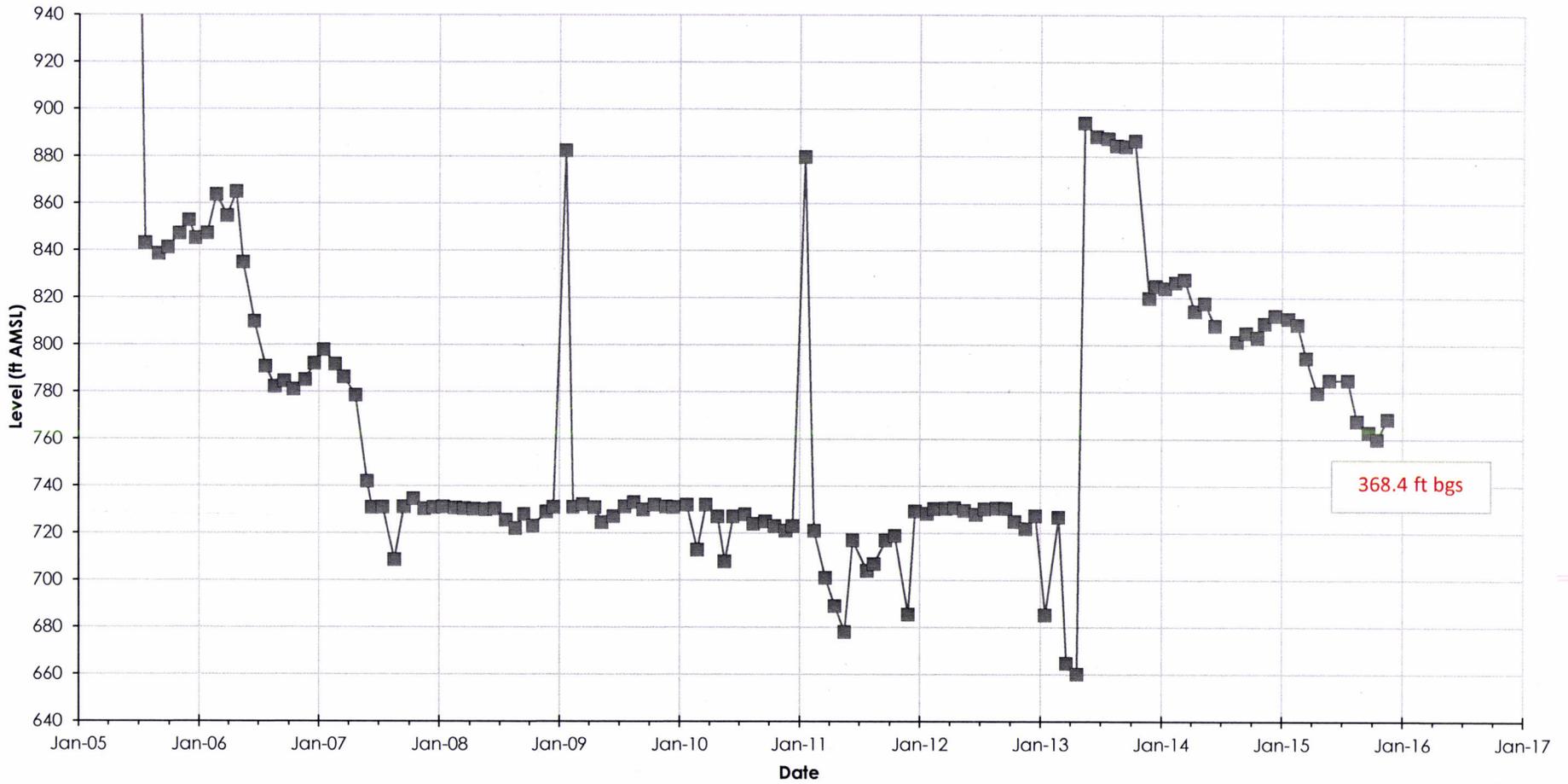
EPA 108

Title

Water Level Elevations



1137.0
Ground
Elev.



Client/Project

Water Level Monitoring Program
City of San Bernardino California

Figure/Well No.

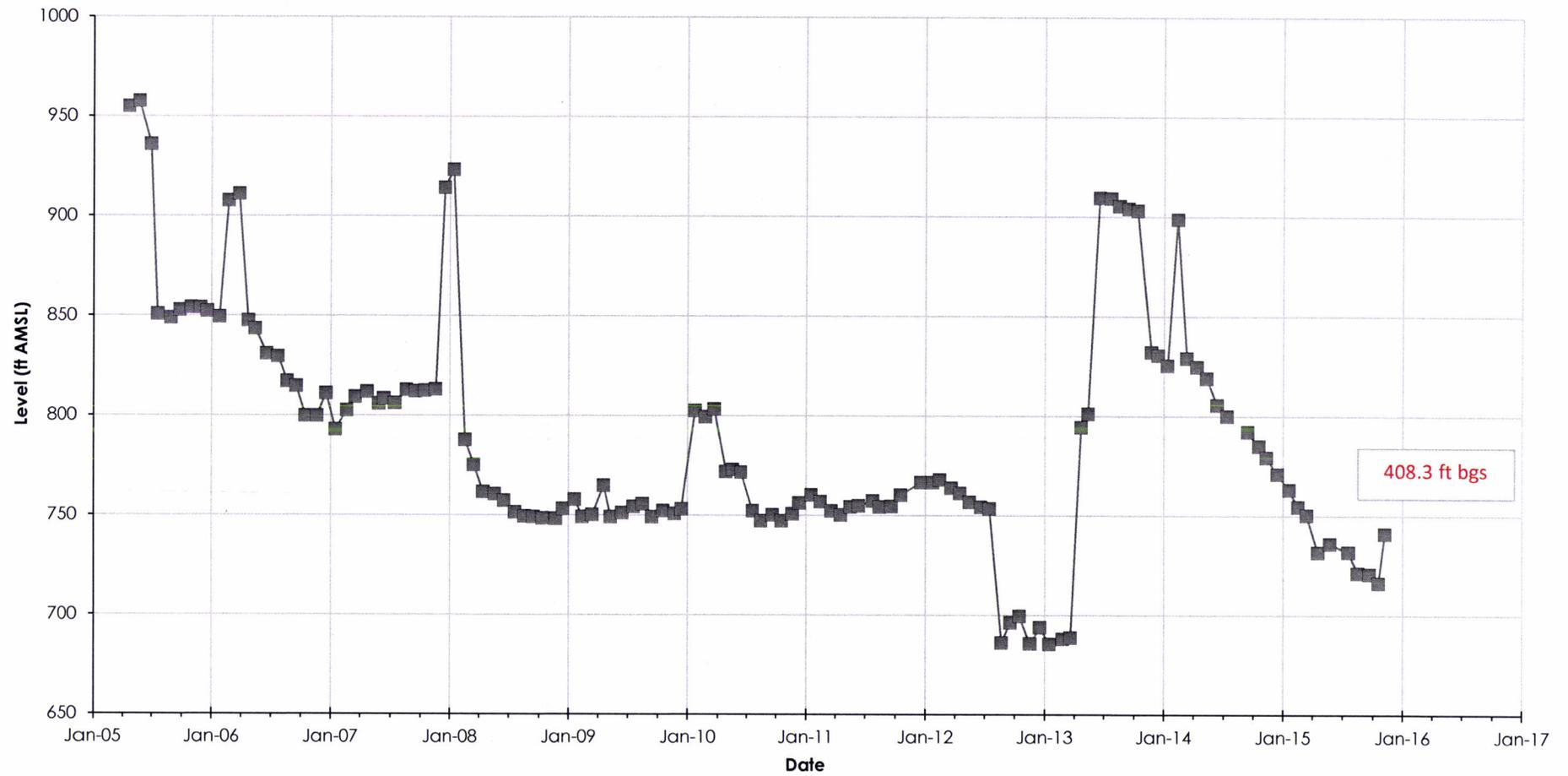
EPA 109

Title

Water Level Elevations



1149.3
Ground
Elev.



Client/Project

Water Level Monitoring Program
City of San Bernardino California

Figure/Well No.

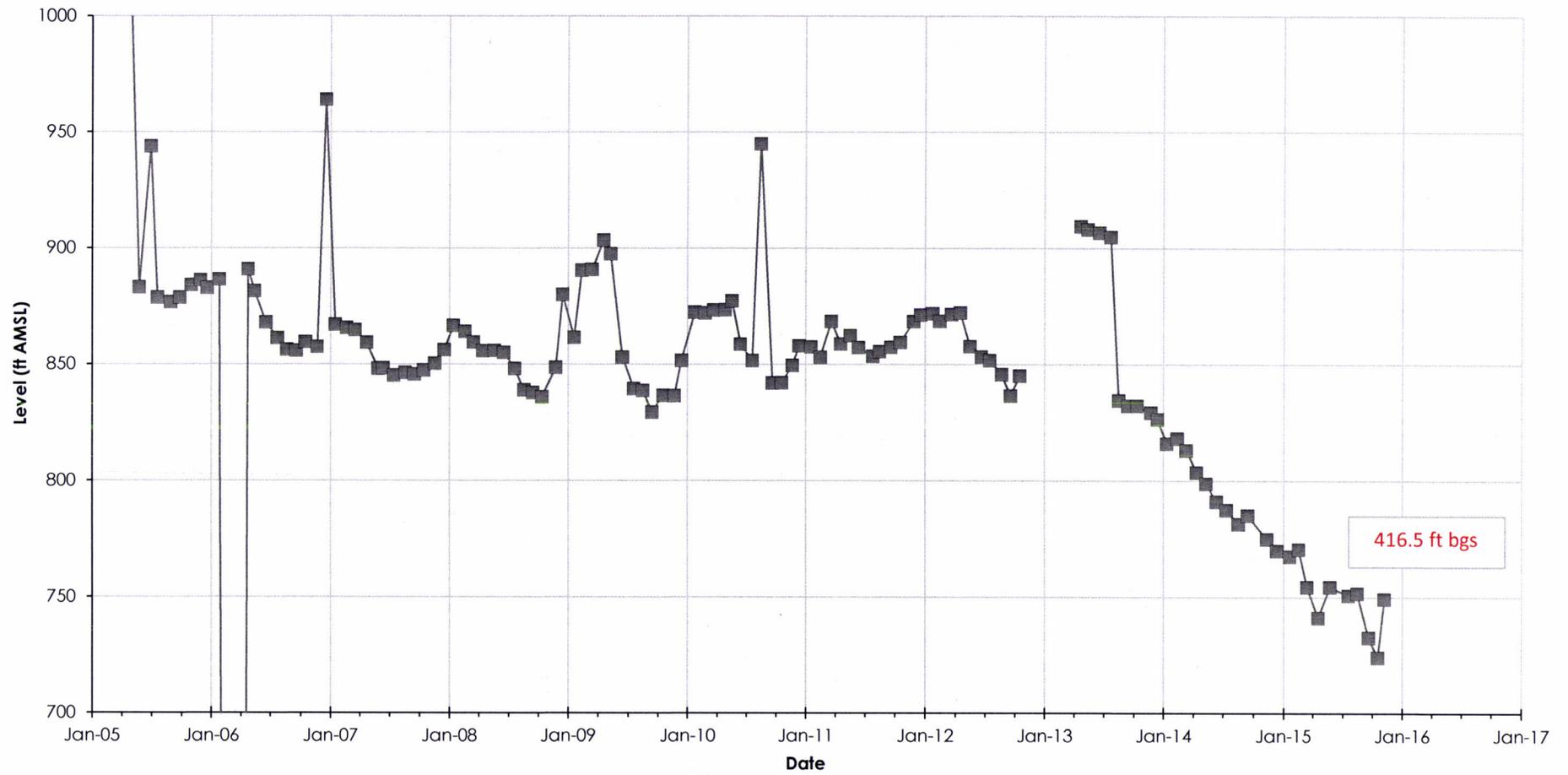
EPA 110

Title

Water Level Elevations



1165.7
Ground
Elev.



Client/Project

Water Level Monitoring Program
City of San Bernardino California

Figure/Well No.

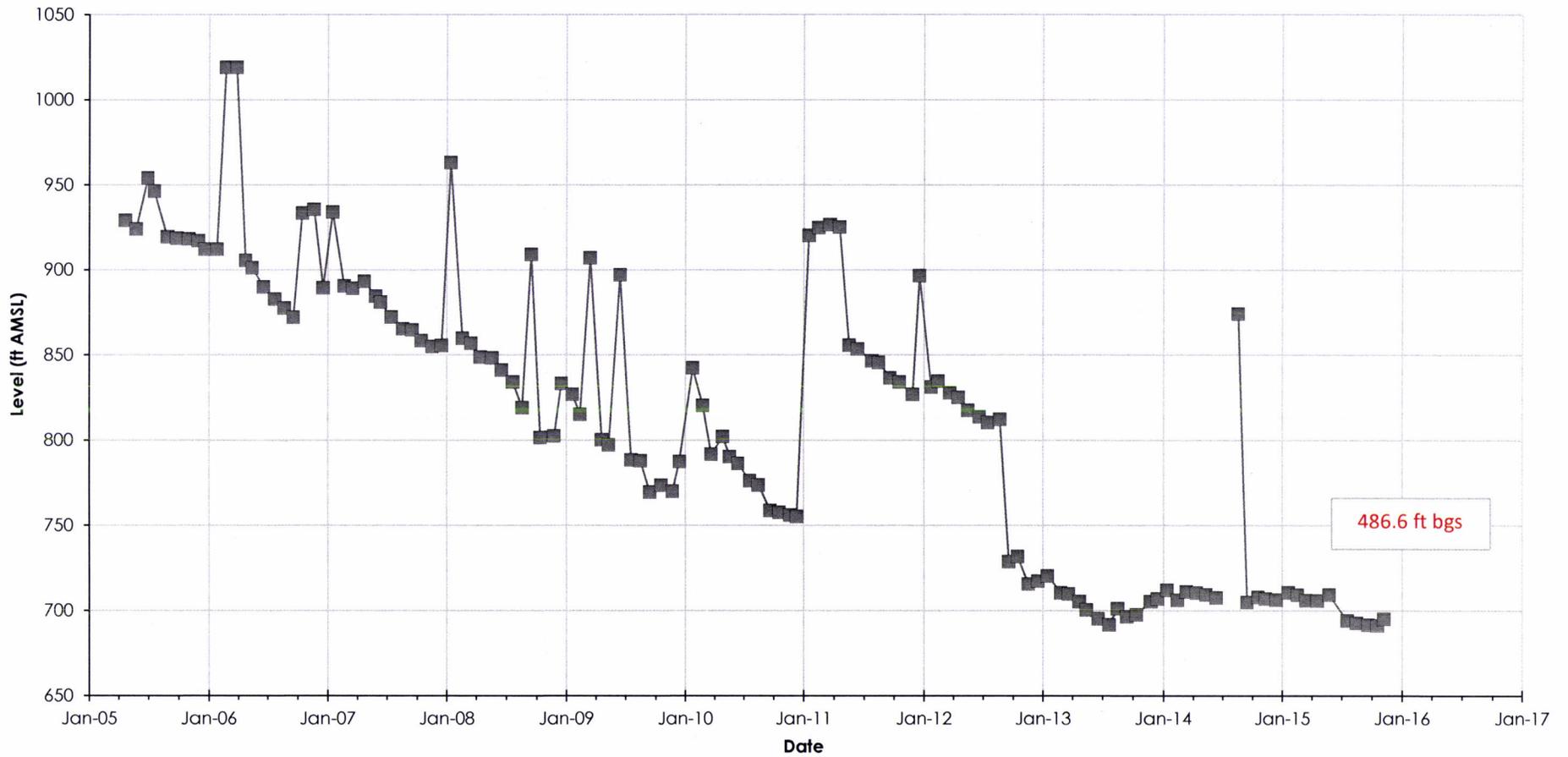
EPA 111

Title

Water Level Elevations



1181.8
Ground
Elev.



Client/Project

Water Level Monitoring Program
City of San Bernardino California

Figure/Well No.

EPA 112

Title

Water Level Elevations



EXHIBIT B

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT
Monthly Depth To Water For Wells Maintained By Operations
November 2015

Well Name	State Well Number Rec. Number	Reading Date	Depth to Water	Ref. Point Elev.	WL Elev.	Pump Elev.	WL-Pump Elev.	Tech	Not Measured/Why	Status/ Method
10TH & J ST	01S/04W-B04S 3603207	11/9/2015	245.00	1112.8	867.8	762.8	105.0	TR	[]	Static Airline
16TH & SIERRA WAY	01N/04W-34G03 S 3600726	11/9/2015				757.3	0.0	JMA	[X] Well Undergoing Maintenance	N/A Electric Wire Sounder
17TH & SIERRA WAY 2	01N/04W-34G01 S 3603208	11/9/2015				766.9	0.0	JMA	[X] Well Blocked	N/A Electric Wire Sounder
19TH ST 1	01N/04W-32D03 S 3600717	11/10/2015	337.00	1231.2	894.2	881.2	13.0	JMA	[]	Static Electric Wire Sounder
19TH ST 2	01N/04W-32D04 S 3600718	11/10/2015	344.00	1236.1	892.1	616.1	276.0	JMA	[]	Static Electric Wire Sounder
25TH & NORTH E ST	01N/04W-27M01 S 3600721	11/10/2015	313.80	1192.1	878.3	912.1	33.8	JMA	[]	Static Electric Wire Sounder
27TH & ACACIA	01N/04W-27M02 S 3600720	11/10/2015	305.20	1183.4	878.2	843.4	34.8	JMA	[]	Static Electric Wire Sounder
30TH ST	01N/04W-27G01 S 3600719	11/9/2015	341.00	1226.8	885.8	826.8	59.0	JMA	[]	Static Electric Wire Sounder
31ST ST & MT. VIEW	01N/04W-27B01 S 3602081	11/9/2015	350.20	1232.3	882.1	792.3	89.8	JMA	[]	Static Electric Wire Sounder
40TH & VALENCIA	01N/04W-14P01 3603472	11/9/2015	280.00	1355.0	1075.0	905.0	170.0	JMA	[]	Static Electric Wire Sounder
7TH STREET	01S/04W-03J05 S 3602265	11/9/2015	189.70	1056.5	866.8	726.5	140.3	JMA	[]	Static Electric Wire Sounder
ANTIL 5	01S/04W-02K02 S 3600731	11/9/2015				787.8	0.0	JMA	[X] Well Blocked	Static Electric Wire Sounder

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT
Monthly Depth To Water For Wells Maintained By Operations
November 2015

Well Name	State Well Number Rec. Number	Reading Date	Depth to Water	Ref. Point Elev.	WL Elev.	Pump Elev.	WL-Pump Elev.	Tech	Not Measured/Why	Status/ Method
ANTIL 6	01S/04W-02K08 S 3602422	11/9/2015	185.30	1052.5	867.2	777.5	89.7	JMA	[]	Static Electric Wire Sounder
BASELINE & CALIFORNIA	01N/04W-32N01 S 3602400	11/9/2015	334.00	1184.9	850.9	799.9	51.0	AO	[]	Static Airline
CAJON 2	01N/05W-03HO2 S 3601844	11/10/2015	245.00	1887.1	1642.1	1537.1	105.0	AO	[]	Static Airline
CAJON 3	01N/05W-03A02 S 3602821	11/10/2015	234.00	1894.9	1660.9	1537.9	123.0	AO	[]	Static Airline
CAJON 4	01N/05W-03A-S G363792	11/9/2015	234.42	1923.0	1688.6	1523.0	165.6	AO	[]	Static Electric Wire Sounder
CAJON CANYON	02N/05W-19K02 S 3600710	11/9/2015	91.20	2328.0	2236.8	2178.0	58.8	AO	[]	Static Electric Wire Sounder
DEVIL CANYON 1	01N/04W-08M01 S 3600712	11/9/2015	161.30	1528.9	1367.6	1278.9	88.7	AO	[]	Pumping Electric Wire Sounder
DEVIL CANYON 1	01N/04W-08M01 S 3600712	11/9/2015	151.40	1528.9	1377.5	1278.9	98.6	AO	[]	Static Electric Wire Sounder
DEVIL CANYON 2	01N/04W-07F01 S 3600711	11/9/2015	151.74	1622.0	1470.3	1370.5	99.8	AO	[]	Static Electric Wire Sounder
DEVIL CANYON 3	01N/04W-06H02 S 3602206	11/9/2015	28.82	1888.5	1859.7	1853.5	6.2	AO	[]	Static Electric Wire Sounder
DEVIL CANYON 4	01N/04W-06H01 S 3602205	11/9/2015	42.00	1903.4	1861.4	1848.4	13.0	AO	[]	Pumping Electric Wire Sounder
DEVIL CANYON 4	01N/04W-06H01 S 3602205	11/9/2015	41.15	1903.4	1862.3	1848.4	13.8	AO	[]	Static Electric Wire Sounder

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT
Monthly Depth To Water For Wells Maintained By Operations
November 2015

Well Name	State Well Number Rec. Number	Reading Date	Depth to Water	Ref. Point Elev.	WL Elev.	Pump Elev.	WL-Pump Elev.	Tech	Not Measured/Why	Status/ Method
DEVIL CANYON 5	01N/04W-08M02 S 3602844	11/9/2015	145.23	1561.7	1416.4	1261.7	154.8	AO	[]	Static Electric Wire Sounder
DEVIL CANYON 6	01N/04W-06A01 S 3603580	11/9/2015	22.50	2039.3	2016.8	1994.3	22.5	AO	[]	Static Steel Tape
DEVIL CANYON 7	01N/04W-06A02 S 3603579	11/9/2015	23.20	2041.9	2018.7	1996.9	21.8	AO	[]	Static Steel Tape
ELLENA BROTHERS	01N/04W-08P01 S 3602712	11/9/2015	179.60	1476.7	1297.1	1175.7	121.4	AO	[]	Static Electric Wire Sounder
EPA 001	01S/04W-03D04 S G3603688	11/9/2015	258.45	1093.9	835.5	731.9	103.6	WB	[]	Pumping Electric Wire Sounder
EPA 002	01S/04W-03C03 S G3603689	11/9/2015	247.85	1091.7	843.9	791.7	52.2	WB	[]	Pumping Electric Wire Sounder
EPA 003	01S/04W-03C04 S G3603690	11/9/2015	220.70	1090.2	869.5	655.2	214.3	WB	[]	Static Electric Wire Sounder
EPA 004	01S/04W-03B03 S G3603691	11/9/2015	239.20	1086.3	847.1	786.3	60.8	WB	[]	Pumping Electric Wire Sounder
EPA 005	01S/04W-03A04 S G3603692	11/9/2015	221.63	1083.3	861.7	779.3	82.4	WB	[]	Static Electric Wire Sounder
EPA 006	01N/04W-16M03 S G3603693	11/9/2015	201.32	1396.6	1195.2	1096.6	98.7	WB	[]	Pumping Electric Wire Sounder
EPA 007	01N/04W-16M04 S G3603694	11/9/2015	205.61	1404.5	1198.9	1144.5	54.4	WB	[]	Pumping Electric Wire Sounder
EPA 108	01N/04W-33Q-S G363786	11/19/2015	294.91	1119.3	824.4	654.3	170.1	WB	[]	Pumping Electric Wire Sounder

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT
Monthly Depth To Water For Wells Maintained By Operations
November 2015

Well Name	State Well Number Rec. Number	Reading Date	Depth to Water	Ref. Point Elev.	WL Elev.	Pump Elev.	WL-Pump Elev.	Tech	Not Measured/Why	Status/ Method
EPA 108	01N/04W-33Q-S G363786	11/9/2015	255.51	1119.3	863.8	654.3	209.5	WB	[]	Static Electric Wire Sounder
EPA 108S	01N/04W-33R003S G3603917	11/9/2015	230.88	1119.3	888.4	669.3	219.1	WB	[]	Static Electric Wire Sounder
EPA 109	01N/04W-33P-S G363787	11/10/2015	268.00	1137.0	869.0	482.0	387.0	TR	[]	Static Electric Wire Sounder
EPA 109	01N/04W-33P-S G363787	11/19/2015	368.41	1137.0	768.6	482.0	286.6	TR	[]	Pumping Electric Wire Sounder
EPA 110	01N/04W-33N-S G363788	11/10/2015	408.30	1149.3	741.0	589.3	151.7	TR	[]	Pumping Electric Wire Sounder
EPA 111	01N/04W-32R-S G363789	11/10/2015	416.50	1165.7	749.2	625.7	123.5	TR	[]	Pumping Electric Wire Sounder
EPA 112	01N/04W-32P-S G363790	11/10/2015	486.55	1181.8	695.2	616.8	78.4	TR	[]	Pumping Electric Wire Sounder
GILBERT ST .	01N/04W-35M03 S 3600729	11/10/2015	276.00	1123.5	847.5	783.5	64.0	JMA	[]	Pumping Airline
INTER CITY IRRIGATION		11/9/2015		-999.0		-999.0	0.0		[X] No Data	
INTER CITY MUTUAL 08	01S/04W-23N 3601316	11/9/2015	105.12	1028.0	922.9	1028.0	0.0	JMA	[]	Static Electric Wire Sounder
IVDA 11	01S/03W-07A06 S 3603649	11/9/2015	229.30	1140.0	910.7	910.0	0.7	JMA	[]	Static Electric Wire Sounder
KENWOOD 1	02N/05W-19R01S 3603471	11/9/2015	235.00	2350.8	2115.8	2027.8	88.0	AO	[]	Pumping Electric Wire Sounder

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT
Monthly Depth To Water For Wells Maintained By Operations
November 2015

Well Name	State Well Number Rec. Number	Reading Date	Depth to Water	Ref. Point Elev.	WL Elev.	Pump Elev.	WL-Pump Elev.	Tech	Not Measured/Why	Status/ Method
KENWOOD 2	02N/05W-19R-S G363791	11/9/2015	216.10	2289.0	2072.9	2089.0	16.1	AO	[]	Pumping Electric Wire Sounder
LEROY	01N/04W-27A02 S 3602401	11/9/2015	346.30	1239.7	893.4	859.7	33.7	JMA	[]	Static Electric Wire Sounder
LYNWOOD	01N/04W-26E02 S 3600727	11/9/2015	329.30	1236.2	906.9	791.2	115.7	JMA	[]	Static Electric Wire Sounder
LYTLE CREEK 2	01N/05W-36J01 3603027	11/9/2015				722.2	0.0	AO	[X] Well Blocked	N/A Electric Wire Sounder
LYTLE CREEK 3-1	01N/05W-36R01 3600713	11/9/2015	391.50	1247.8	856.3	1247.8	0.0	AO	[]	Static Electric Wire Sounder
MALLORY NO.3	01N/04W-30M01S 3601845	11/9/2015	374.00	1319.8	945.8	829.8	116.0	TR	[]	Pumping Airline
MALLORY NO.3	01N/04W-30M01S 3601845	11/9/2015	368.00	1319.8	951.8	829.8	122.0	TR	[]	Static Airline
MILL & D	01S/04W-10N06 S 3600737	11/9/2015	162.50	1001.1	838.6	711.1	127.5	JMA	[]	Pumping Electric Wire Sounder
MILL & D	01S/04W-10N06 S 3600737	11/9/2015	109.70	1001.1	891.4	711.1	180.3	JMA	[]	Static Electric Wire Sounder
MT VERNON WATER CO	01N/04W-31A01 S 3600319	11/9/2015	361.90	1258.8	896.9	838.8	58.1	AO	[]	Static Electric Wire Sounder
NEWMARK 1	01N/04W-16E01 S 3600714	11/9/2015	203.03	1412.7	1209.7	1092.7	117.0	AO	[]	Static Electric Wire Sounder
NEWMARK 2	01N/04W-16E02 S 3600715	11/9/2015	205.00	1405.3	1200.3	1065.3	135.0	AO	[]	Static Steel Tape

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT
Monthly Depth To Water For Wells Maintained By Operations
November 2015

Well Name	State Well Number Rec. Number	Reading Date	Depth to Water	Ref. Point Elev.	WL Elev.	Pump Elev.	WL-Pump Elev.	Tech	Not Measured/Why	Status/ Method
NEWMARK 3	01N/04W-16E03 S 3600716	11/9/2015	205.74	1407.9	1202.2	1087.9	114.3	WB	[]	Pumping Electric Wire Sounder
NEWMARK 4	01N/04W-16E04 S 3602399	11/9/2015	199.90	1413.6	1213.7	1113.6	100.1	AO	[]	Static Electric Wire Sounder
OLIVE & GARNER	01S/04W-04D02S 3603206	11/9/2015	260.75	1132.5	871.8	682.5	189.3	TR	[]	Static Electric Wire Sounder
PERRIS HILL 4	01N/04W-35C03 S 3601117	11/9/2015	286.90	1168.3	881.4	898.3	16.9	JMA	[]	Static Electric Wire Sounder
PERRIS HILL 5	01N/04W-26P03 S 3601115	11/9/2015	288.80	1173.5	884.7	873.5	11.2	JMA	[]	Static Electric Wire Sounder
SB COUNTY 1-34A	01S/04W-03Q	11/10/2015				47.0	0.0	JMA	[X] Dry	Static Electric Wire Sounder
VINCENT	02N/05W-19Q01 S 3602426	11/9/2015	104.24	2314.3	2210.1	2144.3	65.8	AO	[]	Static Electric Wire Sounder
WATERMAN AVE.	01N/04W-27A01 S 3600728	11/9/2015	248.30	1244.8	996.5	794.8	201.7	JMA	[]	Static Electric Wire Sounder

EXHIBIT C

City of San Bernardino Municipal Water Department

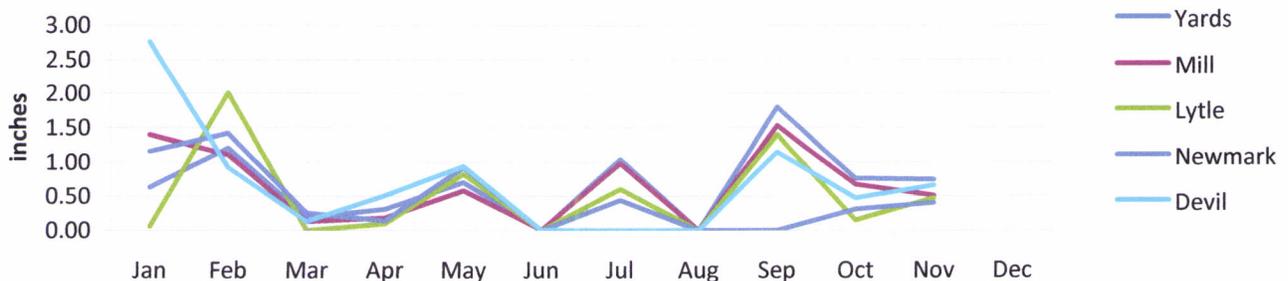
Monthly Weather Report

November 2015

Location	Yards		Mill & D	Lytle Creek	Newmark	Devil Canyon
	Max Temp deg F	Min Temp deg F	1/100 of an inch increments			
1	90.9	58.9	0.00	0.00	0.00	0.00
2	78.2	57.1	0.00	0.02	0.03	0.03
3	67.5	52.8	0.00	0.38	0.23	0.10
4	65.9	0.0	0.00	0.00	0.00	0.00
5	73.2	46.2	0.00	0.00	0.00	0.00
6	79.3	49.5	0.00	0.00	0.00	0.00
7	82.0	49.7	0.00	0.00	0.00	0.00
8	81.2	49.0	0.00	0.00	0.00	0.00
9	67.7	50.5	0.00	0.00	0.00	0.00
10	66.3	51.8	0.00	0.00	0.00	0.00
11	77.1	46.2	0.00	0.00	0.00	0.00
12	83.1	45.0	0.00	0.00	0.00	0.00
13	83.7	49.8	0.00	0.00	0.00	0.00
14	82.9	48.5	0.00	0.00	0.00	0.00
15	69.0	51.0	0.00	0.00	0.00	0.13
16	63.5	46.9	0.00	0.00	0.00	0.01
17	78.5	55.3	0.00	0.00	0.00	0.00
18	83.3	49.0	0.00	0.00	0.00	0.00
19	90.9	52.9	0.00	0.00	0.00	0.00
20	93.7	53.2	0.00	0.00	0.00	0.00
21	86.0	56.6	0.00	0.00	0.00	0.00
22	89.5	54.0	0.00	0.00	0.00	0.00
23	83.6	50.4	0.00	0.00	0.00	0.00
24	74.2	49.8	0.00	0.00	0.00	0.00
25	61.6	49.1	0.12	0.07	0.20	0.14
26	63.3	48.5	0.09	0.06	0.04	0.02
27	61.5	45.3	0.00	0.00	0.00	0.00
28	64.9	39.2	0.00	0.00	0.00	0.00
29	66.9	45.2	0.00	0.00	0.00	0.00
30	70.3	39.2	0.00	0.00	0.00	0.00
31						

	Max	Min					
TOTALS	93.7	0.0	0.21	0.53	0.50	0.43	0.71
YTD			7.37	7.10	5.61	5.04	7.54

Monthly Rain Totals



SAN BERNARDINO MUNICIPAL WATER DEPARTMENT

FISCAL YEAR 2015-2016
RAIN READS

DATE	MILL & D	LOWER YARDS	D.C.	L.C.	NEWMARK	AVERAGE
Jul-15	0.95	1.02	0.71	0.59	0.41	0.74
Aug-15	0.00	0.00	0.00	0.00	0.00	0
Sep-15	1.53	1.80	1.15	1.40	0.89	1.35
Oct-15	0.62	0.69	0.38	0.15	0.30	0.43
Nov-15	0.53	0.21	0.71	0.50	0.43	0.48
TOTAL	3.63	3.72	2.95	2.64	2.03	2.99

All values are in inches

MICHAEL GARLAND
Water Utility
Operations Superintendent

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT
RAINFALL
July 2015 THROUGH June 2016

