

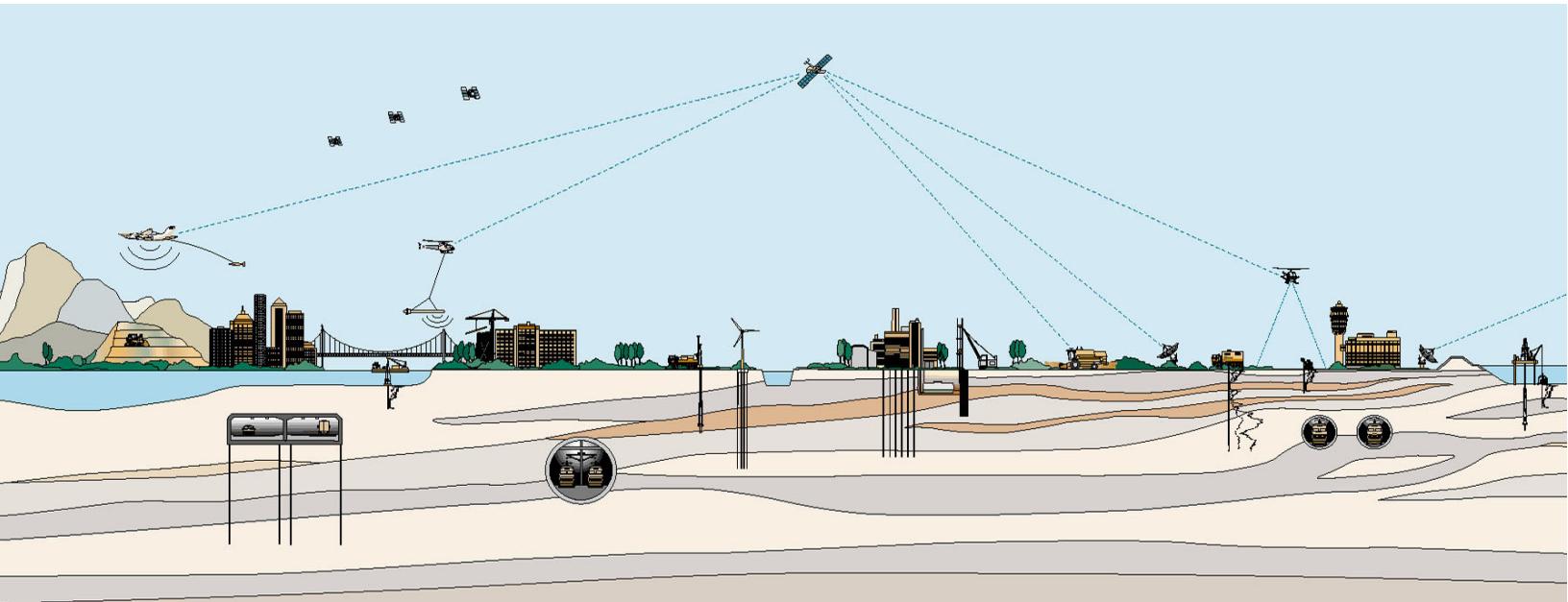
FUGRO CONSULTANTS, INC.



**FOURTH QUARTER 2013
SENTRY WELL MONITORING REPORT
NORTHERN CITIES MANAGEMENT AREA**

Prepared for:
NORTHERN CITIES MANAGEMENT AREA TECHNICAL GROUP

December 2013
Fugro Job No. 04.62130129





FUGRO CONSULTANTS, INC.

December 2, 2013
Project No. 04.62130129
Northern Cities Management Area Technical Group

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Attention: Mr. Daniel Heimel, Water Systems Consulting, Inc.
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**Subject: Fourth Quarter 2013 Sentry Well Monitoring Report,
Northern Cities Management Area**

Fugro is pleased to submit this Quarterly Monitoring Report for the Northern Cities Management Area (NCMA) Technical Group related to the preparation of the 2013 Annual Monitoring Report. This report has been prepared by the project team consisting of Fugro, GEI, and Robert Almy to satisfy the primary requirements of the 2005 Stipulation through preparation of an Annual Monitoring Report. Furthermore, information in this quarterly report supports the Technical Group's on-going objective of effective water resources management.

This quarterly report presents:

- A summary and discussion of the findings of the acquired water level and quality data for the Fourth Quarter monitoring of 2013 performed in October 2013;
- Recommendations; and
- Background and discussion of the acquired data.

If you have any questions, we would be pleased to discuss this report with you and the Technical Group.

Sincerely,

FUGRO CONSULTANTS, INC.

A handwritten signature in black ink, appearing to read "Timothy A. Nicely".

Timothy A. Nicely, PG, CHg
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A handwritten signature in black ink, appearing to read "Robert B. Almy".

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FOURTH QUARTER 2013 SENTRY WELL MONITORING NORTHERN CITIES MANAGEMENT AREA

SUMMARY AND FINDINGS

Water Levels. Water levels measured on October 14, 2013 were lower in all sentry wells compared to measurements taken in October 2012 and lower in all wells except 32S/12E-24B01 and -25B02 compared to July 2013.

- Water levels in the deep sentry wells at the four coastal locations (32S/12E-24B03, 32S/13E-30F03, 32S/13E-30N02 and 12N36W-36L02) measured in October 2013 ranged from 1.49 to 5.13 feet lower than the water levels measured in October 2012.
- Water levels began to decline after seasonal highs in late February 2013, approximately two months earlier than in 2012. Water levels in deep wells 24B03, 30F03, and 30N02 declined steadily after late February through the October 2013 measurement.
- Water level in County Monitoring Well #3 (32C03) is 1.43 feet lower than in July 2013 and 5.21 feet lower than in October 2012.

Deep Well “Index.” The average October 2013 water elevation (Deep Well Index) in representative wells (24B03, 30F03, and 30N02) is 6.31 feet, which is below the “index” of 7.5 feet by 1.19 feet. The October 2013 index value is 0.60 feet lower than the index value of July 2013, and 2.60 feet than the index value of October 2012.

Total Dissolved Solids (TDS). TDS concentrations in all wells were similar to TDS concentrations measured in October 2012, with results for two wells showing no change and the remainder ranging within reasonable percentages. Results are within the historic range for each well. Similar variation occurred between July 2012 and October 2012.

- Where TDS values increased, the current value remained within their normal range and in each case any increase was less than 10%. The lone exception is OCSD Green well; October 2013 results are 20 and 15% lower than July 2013 and October 2012, respectively.

Sodium and Chloride. Sodium and chloride concentrations in all deep wells varied slightly compared to July 2013 and October 2012 with the exception of sodium in the OCSD Blue well which is higher than during July 2013 but within its historic range.

- Shallow wells 24B01 and 30N01 are shallow piezometers and may be influenced by nearby brackish water bodies and seasonal fluctuation in surface water quality.
- TDS, sodium and chloride levels remain elevated in Well 24B01 compared to all other sentry wells.
- Well 24B01 showed a decrease in TDS and chloride compared to July 2013 values. Compared to October 2012, TDS in Well 24B01 remained unchanged, while chloride and sodium decreased slightly.

- Well 30N01 showed a slight increase in TDS, chloride and sodium when compared to July 2013 and October 2012 values.

Well 32C03. Water quality in 32C03 is similar to that reported in October 2012 and July 2013. Water sampled from well 32C03 continues to be lower in TDS, magnesium and calcium than all wells except the OCSD Blue and Yellow Wells (which are lower in calcium). Sodium and chloride values in well 32C03 are within the reported range of the deep sentry wells.

Water Level Trends. The continuous level monitoring sensors placed in three piezometers (24B03, 30F03, and 30N02) continue to show water level fluctuations of 0.4 to 1.6 feet in six-hour periods. In the period of July through October 2013, the highest water levels attained in Wells 30F03 and 30N02 were approximately 2.5 feet lower than in the same period in 2012. In addition, longer term water level fluctuations in deep sentry wells 24B03, 30F03 and 30N02 began to decline steadily in late February 2013. They reached their lowest elevation of the most recent year in October 2013.

- Water level fluctuations in the range of 0.4 to 1.6 feet reflect timing that is similar to ocean tides measured in nearby Port San Luis. In wells 24B03, 30F03 and 30N02, fluctuations also reflect longer term variation in the tidal range.
- The water levels measured in July through October 2013 in well 24B03 were approximately 1.5 feet below the range measured in the same period in 2012. Water levels began to decline in late February 2013, approximately two months earlier than in 2012.
- Water levels in wells 30F03, 24B03, and 30N02 exhibit a sharp decline in late April 2013. By late May 2013, the water levels in these wells recovered to their original level. The sharp decline was coincident with a period of markedly higher than normal groundwater extraction necessary to replace supplies temporarily unavailable from Lopez Lake.
- The continuous level monitoring sensor placed in well 32C03 showed a rise of 0.5 feet between early January and mid-February 2013. A water level fluctuation cycle of approximately 6 to 7 days occurred intermittently throughout the monitoring period. Water levels reached a peak in early March before starting a steady decline of approximately 16 feet over the 10-month period of January to October 2013. Water levels in the well as measured in October 2013 are approximately 5 feet below the levels measured in October 2012.

RECOMMENDATIONS

1. The decline of the deep well index below 7.5 feet results in water level elevations in these wells at their lowest level since the 3rd quarter of 2009. The deep well index provides a representative index for tracking the status of the basin and potential water quality ramifications of lowered water levels on the coastline. Except for the period of pumping in late April 2013 when groundwater production spiked, the steady decline of the deep well index is likely primarily a manifestation of low rainfall. However, until the deep well index rises above 7.5 feet, pumping should continue to be controlled and minimized, and offset with increased use of supplemental supplies.

2. Until the three well index rises above 7.5 feet, the transducer data in wells 24B03, 30F3, and 30N02 should be downloaded monthly and reviewed to evaluate the trend of the index levels. If EC readings in the transducer data increase more than 10% over the previous month's measurement, the three wells (plus 30N03) should be sampled and the samples analyzed for TDS, sodium, chloride and sulfate.
3. Continue detailed water quality monitoring on a quarterly basis, including collection of data from in-well sensors.
4. Continue to measure water level and water quality in OCSD Well #8 until a suitable replacement for OCSD Silver Well is provided.

DISCUSSION AND ANALYSIS

BACKGROUND

This Memorandum summarizes Fourth Quarter 2013 Northern Cities Management Area (NCMA) sentry well monitoring performed October 14, 15 and 16, 2013. Piezometers in multiple completion wells were measured and sampled at five NCMA locations, as was the San Luis Obispo County Monitoring Well #3 (32C03; Figures 1 and 2). In addition, a water sample was taken from OCSD Production Well #8. Data from continuous monitoring devices installed in four of the sentry well piezometers (24B03, 30F03, 30N02, 24B02) and well 32C03 were also collected. The continuous monitors are recording data, including water level (pressure), electrical conductivity (EC), and temperature, every 30 minutes.

The quarterly monitoring event included synoptic water level measurements performed on October 14, 2013. The recorded water levels are based on direct measurements relative to an established measuring point on each well over a period of approximately two hours (Tables 1 through 6). Measurement point locations and elevations were established relative to North American Vertical Datum 1988 (NAVD88).

Water quality samples were collected on October 15 and 16 using techniques specified by ASTM D4448-1. Samples were obtained from a submersible pump used to purge the well casing (the sample from OCSD well #8 was collected on October 16 directly from the discharge line at the wellhead). A summary of the key water quality results are reported in Tables 1 through 6, and the full water quality results are presented in Appendix A. Chloride concentrations are presented graphically on Figure 4. A summary of the water quality is presented as Figure 7. In those wells with continuous monitors, each of the sensors were removed prior to sampling and subsequently replaced at their original elevation (Figures 8 through 12).

In order to measure potential short-term water level fluctuations due to pumping, tidal fluctuation or other factors, pressure, temperature, and electrical conductivity (EC) transducers were installed in the deep wells at three of the sentry well sites (24B03, 30F03, and 30N02) on February 11, 2011. The initial data, recorded at 6-hour intervals, were collected on July 20, 2011. Subsequent data, recorded at 30-minute intervals, were collected during subsequent quarterly sampling through October 2013 (Figures 8 through 11).

To gain insight into tidal fluctuation effects on groundwater levels, as well as tidal and other events (such as storm surge) that may influence salinity in shallow formations, a pressure transducer and EC/temperature sensor was installed in Well 24B01 on March 22, 2011. Data were retrieved during quarterly monitoring beginning in April 2011.

In order to gain insight into water level fluctuation and water quality variation in the area between the NCMA and Nipomo Mesa Management Area (NMMA), a similar pressure, temperature, and EC transducer was installed in well 32C03 in April 2012. Data were retrieved during quarterly monitoring beginning in July 2012 (Figure 11).

All NCMA sentry wells have been surveyed relative to NAVD88, to which all of the water levels reported in this memorandum are referenced. The prior water level measurements were recalculated based on information from updated survey reports and are presented relative to

NAVD88 in Tables 1 and 2. Specifically, the reference elevation for well 32C03 was re-surveyed on June 24, 2013 and is now reported as 47.92 feet NAVD88.

GROUNDWATER ELEVATION

At the five NCMA sentry monitoring sites, individual small-diameter monitoring wells (piezometers) are screened at specific depths to allow measurement of groundwater levels and water quality in the corresponding water bearing zones (Figure 2). At the sixth site, well 32C03 is completed with a relatively larger diameter 5-inch diameter PVC casing to a depth of 170 feet with a screened interval from 90 to 170 below ground surface.

To characterize typical seasonal fluctuations in the NCMA, water levels are measured quarterly and compared to previous measurements, particularly those taken during the same quarter in prior years, to identify trends. Although this comparison is useful, data from the continuous monitors suggests that tidal influence introduces variance of 0.4 to 1.6 feet into water level measurements depending on the timing of the well measurements compared to the tidal cycle (Figures 8 to 11).

In April 2013 groundwater pumpage was increased to replace temporarily unavailable supplies from Lake Lopez. As a result, the groundwater level in Well 30F03 declined by as much as 14 feet in 7 days and was below sea level for a total of 6 days. The rather dramatic decline in water level due to increased pumpage required almost two weeks to recover to the initial water levels observed prior to the increased pumping. Similar water level declines, albeit of less magnitude, were also observed in deep wells 24B03 and 30N02. These sharp water level declines reflect the potential for basin-wide impacts due to heavy pumping.

To provide more detail regarding seasonal and other groundwater level changes in the area between the NCMA and NMMA, detailed water level monitoring of well 32C03 was initiated in April 2012. A sensor was installed to document long- and short-term changes in water level, temperature and EC. The acquired data indicates that water levels in Well 32C03 fluctuate on a daily basis by as much as one foot. The water level in well 32C03 declined between April 2012, when the transducer was installed, and September 2012 by 15 feet, then increased by 10 feet through February 2013. From February 2013 to the latest measurement in October 2013, water levels declined by about 15 feet and have now reached the lowest levels since the data were recorded.

All water levels measured in October 2013 were lower in elevation than those reported in July 2013 with the exception of 32S/12E-24B01 and 24B02. Compared to July 2013, the deepest coastal sentry wells (Wells 24B03, 30F03, 30N02, and 36L02) exhibited water levels 0.02 to 1.08 feet below the level measured in July 2013 and 1.49 to 5.13 below the levels measured in October 2012.

The Annual Monitoring Report prepared by Todd Engineers (2010) indicated that the screened intervals in deep Wells 24B03, 30F03, and 30N02 "closely match" developed production zones in "local pumping wells." Based on their recommendations, water levels in these deep wells are interpreted to reflect ongoing changes in recharge and discharge conditions in the most heavily pumped levels of the aquifer system. Figure 3A shows the average water surface elevation of the three deep wells as a function of time since 1967. Figure

3B shows the index calculated since 2007 based on semiannual, quarterly and, more recently, continuous monitor data.

The average elevation of these three deep wells has been used as a representative index of water levels in the main production zones. As shown on Figures 3A and 3B, the index reflects both seasonal pumping and annual variations in the relationship between recharge and discharge. In October 2013 the average water elevation in the representative key wells was 6.31 feet, which is 1.19 feet below the adjusted “index” of 7.5 feet NAVD88. The calculated index value for October 2013 is 0.60 feet below the index value of July 2013 and 2.60 feet below the index value for October 2012.

As shown on Figure 3B, the index remained below 7.5 feet between October 2007 and August 2009. The index water level increased to 7.37 in October 2009 and 9.65 in January 2010. High levels of chloride and sodium in wells 30N02 and 30N03 occurred between May 2009 and January 2010. This relationship implies a lag in time between lowered water levels in the deep sentry wells and significant increases in sodium and chloride.

This is significant since Figure 3B shows that during April 2013 the calculated index level was as deep as 6 feet below the index value of 7.5 and has remained at or below the index since early June 2013. In addition, water elevation in Well 30F03 was below sea level for 6 days in late April. As discussed below, continued average values below the index suggest an increased risk of sea water intrusion and thus the need to reduce groundwater extractions.

Water levels in wells 30F03 and 30N02 in October 2013 were 5.86 and 4.00 feet NAVD88 which were below July 2013 levels of 6.55 and 5.08 feet, respectively. Considered in the context of the 2008 through 2010 data, current water level information suggests that measures should be taken to raise groundwater levels. If little or no recharge occurs during the winter, groundwater levels may continue to decline. Prolonged periods of time with groundwater levels below the index increase the risk of sea water intrusion. If an increase in TDS, chloride, and sodium occurs in the deep water-bearing zone, prompt measures to increase the gradient and reverse the in-migration of seawater would be necessary. As discussed below, water level fluctuations in the deep coastal wells demonstrate a connection between the deep aquifer and sea water.

Water levels in coastal sentry well locations 24B01, 24B03, 30F03, and 30N02 have been monitored by sensors since the first quarter of 2011. Water level data in County monitoring well 32C03 has been recorded by sensors since April 2012. Changes in water level in the coastal sentry wells indicate a correlation between groundwater elevation and ocean tides measured at Port San Luis (Figures 8 through 11). Each of the wells continues to show distinct water level changes between 0.4 and 1.6 feet within a 6 to 7 hour time frame.

Further evaluation of the data indicates:

- All zones exhibit cyclical water level fluctuations of 0.4 to 1.6 feet, corresponding to measured tide cycles.
- The range of cyclical water level fluctuations in Wells 24B01, 24B03, and 30N02 reflect the longer term (biweekly) variation in tidal range.

- Water levels in deep wells 30F03 and 30N02 reached their lowest level in 2012 in September of that year; the lowest levels observed to date in 2013 were recently measured in October.
- Wells 30F03 and 30N02 both rose to their highest levels of 2013 in February. Since February, water levels have been steadily declining through the most recent measurement in October.
- Well 24B03 showed a more subdued range of water level change with tidally induced fluctuations partially masking the timing of changes from increasing to decreasing water level. Well 24B03 recorded its lowest water level in late April 2013. Well 24B03 is located in the northernmost portion of the basin and a greater distance than the other sentry well sites from the main areas of production.
- The water level in well 24B03 rose slightly between mid-January and mid-February 2013 and began a modest decline in mid-February. During the period between late April and late May 2013, 24B03 showed drawdown impacts from pumping of approximately one week. During the subsequent six-week period water levels recovered and then began to decline again through October.
- Water levels in the deep wells showed significant effects of short-term increased local groundwater extraction in late April. Full recovery of the water levels following cessation of the short-term increased pumping did not occur until early June.
- Water levels in wells 24B03, 30F03 and 30N02 were between 1.49 and 3.61 feet lower in October 2013 than in October 2012.

WATER QUALITY RESULTS

Tables 1 through 6 present a summary of key water quality data from the October 2013 sampling in addition to past chemical analyses for the sentry wells for key constituents (TDS, chloride, and sodium). The full water quality data set is presented in Appendix A. The results show that levels of major ions and TDS are generally within the range of previous measurements in the sentry wells and suggest that water quality in the basin continues to be relatively stable. The single exception to this continued water quality stability is the sulfate concentration in 36L02, which in October 2013 increased to its highest recorded level (see Appendix A). Water quality in Well 32C03 is generally lower in TDS, calcium, magnesium, and carbonate than most of the sentry wells.

Chloride concentrations for the sentry wells are presented on Figure 4. Figures 5 through 7 are geochemical diagrams intended to facilitate evaluation of the data. With the exception of shallow Wells 24B01 and 30N01 (discussed below), the data shown in Figures 5 through 7 indicate no significant change compared to recent past measurements. Well 24B01 continues to show higher levels of TDS, chloride and sodium than the other wells in the monitoring network (the data for well 24B01 is not presented in Figure 4).

Well 24B01 shows a slight decrease in TDS and chloride but no change in sodium compared to July 2013. TDS and sodium decreased in comparison to October 2012 results while chloride levels showed no change.

A second shallow well, Well 30N01, shows a slight increase in TDS, sodium and chloride compared to July 2013 and October 2012. Water quality results in the well continue to exhibit

concentration levels of TDS, chloride and sodium more in the range of other sentry wells. In the period July 2011 through April 2012, water quality results for TDS, sodium and chloride were approximately 40% above the historic range for well 30N01, however test results since July 2012 show results in line with the historic range.

Water quality in the 30N well cluster (Pier Avenue) is considered a key indicator of potentially encroaching seawater intrusion. For example, after the period of lower water level in the index wells in 2007 and 2008, wells 30N02 and 30N03 exhibited increased TDS, sodium and chloride in samples collected in 2009 (Tables 1 through 6 and Figures 5 and 6). Beginning in January 2010, both wells have shown lower TDS, sodium and chloride (Table 3) as well as a more narrow range in chemical variation (Figures 5B and 6B). TDS, sodium and chloride values in the October 2013 samples from both 30N02 and 30N03 showed only nominal changes compared to July 2013 and October 2012.

The samples taken from the shallow completion well in this cluster (Well 30N01) continues to show somewhat elevated sodium and chloride; however it appears not to indicate sea level intrusion of the deeper levels that are screened in the groundwater production zone. This conclusion is based on the following related observations:

1. The well is shallow (screened from 15 to 40 feet), located near a coastal lagoon, and may be influenced by periods of high sea level or seasonal stagnation.
2. None of the deeper wells at any of the sentry well locations show high levels of TDS, sodium and chloride (indications of sea water intrusion).
3. Water levels of all deep wells generally exhibit a greater seasonal range than Well 30N01.
4. Compared to July and November 2011, levels of TDS and most other measured water quality parameters declined by January 2012 and continued to decline through July 2012. These parameters have remained relatively stable as of October 2013 with slight increases in TDS, chloride and sodium relative to July 2013.
5. Similar water quality changes have occurred in well 24B01 (North Beach Campground site, which is also located adjacent to a coastal lagoon/lake). That well is equipped with a continuous monitor to measure any changes in water level and TDS during storm surge, high surf or other events that may influence the uppermost water bearing zones.

The water level and water quality in each of the index wells, as well as 30N03, should continue to be monitored carefully and evaluated for changes that would suggest seawater intrusion in the deeper zones. Specifically, these wells should be measured monthly for changes in EC until the deep well index is above 7.5 feet.

The October 2012 water sample from the OCSD Blue well showed a marked increase in TDS, chloride, and sodium compared to the July 2012 samples. However the samples since, including the October 2013 sample, showed levels in TDS, sodium and chloride that while elevated compared to July 2012 are generally consistent with the historical results. However in October 2013 sodium remained slightly above the historic range.

The October 2013 sample from the Green well showed continued decreases in TDS and sodium and chloride compared to July 2013. The sample from the Yellow well showed incremental variation of TDS, sodium and chloride compared to July 2013 and October 2012.

The water sample from production well #8 in October 2013 was similar in all chemical constituents to the sample analyzed in previous quarterly samples beginning in July 2011. Until a monitoring well screened to the same interval as the Silver well can be provided, water quality sampling from production well #8 should continue.

Well 32C03 exhibited incrementally higher sodium and sulfate (SO_4) compared to July 2013 and incrementally lower TDS with virtually unchanged sodium, chloride, and sulfate compared to October 2012. Water in well 32C03 continues to exhibit lower calcium, magnesium, and carbonate than all other wells in the monitoring network.



Table 1: Summary of Key Data - Wells 24B (North Beach Campground)

Well	Production Interval	Date	Depth to Water (feet)	Groundwater Elevation (feet NAVD)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sodium (mg/L)
32S/12E-24B01 North Beach	Screened from 48-65'	10/15/2013	NA	NA	2,860	1,200	560
		10/14/2013	6.07	7.51	NA	NA	NA
		7/9/2013	6.09	7.49	2960	1300	560
		4/10/2013	7.00	6.58	2920	1300	540
		1/14/2013	5.72	7.86	2630	1300	540
		10/29/2012	5.92	7.66	2950	1200	590
		7/23/2012	5.79	7.79	3010	1400	530
		4/18/2012	5.58	8	3000	1500	450
		1/11/2012	5.72	7.86	2750	1200	520
		11/21/2011	5.80	7.78	2740	1200	410
		7/26/2011	6.38	7.2	NA	NA	NA
		7/25/2011	NA	NA	3690	1199.9	530
		4/20/2011	6.40	7.18	2810	1214	500
		1/24/2011	5.78	7.42	2,380	1100	370
		10/28/2010	NA	NA	2,330	960	390
		10/21/2010	6.37	7.21	NA	NA	NA
		7/27/2010	6.48	7.1	616	43	52.5
		4/27/2010	3.84	6.86	676	47	54.7
		1/27/2010	3.13	7.57	694	55	56.2
		10/19/2009	2.28	8.42	766	140	121
		8/20/2009	3.25	7.45	705	94	86.8
		5/12/2009	3.58	7.12	695	100	82.1
		3/26/1996	NA	NA	1,870	773	380
		6/9/1976	NA	NA	1,706	667	400
		1/17/1966	NA	NA	1,700	652	406
32S/12E-24B02 North Beach	Screened from 120-145'	10/15/2013	NA	NA	630	30	44
		10/14/2013	7.08	6.5	NA	NA	NA
		7/9/2013	7.17	6.41	630	30	43
		4/10/2013	6.33	7.25	630	31	44
		1/14/2013	5.61	7.97	620	30	43
		10/29/2012	5.88	7.7	650	29	45
		7/23/2012	6.12	7.46	650	35	45
		4/18/2012	5.48	8.1	630	37	39
		1/11/2012	5.47	8.11	650	33	46
		11/21/2011	5.69	7.89	640	32	39
		7/26/2011	6.51	7.07	NA	NA	NA
		7/25/2011	NA	NA	640	36	48
		4/20/2011	6.30	7.28	620	39	46
		1/24/2011	5.69	7.53	640	43	44
		10/28/2010	NA	NA	650	43	50
		10/21/2010	6.79	6.79	NA	NA	NA
		7/27/2010	7.05	6.53	598	42	48.9
		4/27/2010	4.34	6.36	668	46	52.7
		1/27/2010	3.38	7.32	622	45	58.0
		10/19/2009	2.26	8.44	600	49	59.1
		8/20/2009	4.09	6.61	630	49	63.5
		5/12/2009	4.74	5.96	622	82	67.5
		3/26/1996	NA	NA	652	54	46
		6/9/1976	NA	NA	565	34	52
		1/17/1966	NA	NA	651	62	79
32S/12E-24B03 North Beach	Screened from 270-435'	10/15/2013	NA	NA	720	40	51
		10/14/2013	4.50	9.08	NA	NA	NA
		7/9/2013	4.48	9.1	660	46	47
		4/10/2013	3.41	10.17	670	44	46
		1/14/2013	2.48	11.1	630	45	47
		10/29/2012	3.01	10.57	680	45	49
		7/23/2012	2.98	10.6	670	49	47
		4/18/2012	1.93	11.65	640	50	40
		1/12/2012	2.15	11.43	660	46	48
		11/21/2011	2.93	10.65	660	43	41
		7/26/2011	3.17	10.41	NA	NA	NA
		7/25/2011	NA	NA	650	46.3	50
		4/20/2011	3.25	10.33	650	47	48
		1/24/2011	2.65	10.58	660	46	44
		10/28/2010	NA	NA	660	44	48
		10/21/2010	4.60	8.98	NA	NA	NA
		7/27/2010	4.54	9.04	610	44	51.4
		4/27/2010	1.43	9.27	666	45	53.2
		1/27/2010	0.94	9.76	672	48	56.4
		10/19/2009	0.81	9.89	622	40	55.1
		8/19/2009	4.18	6.52	680	47	54.9
		5/12/2009	3.18	7.52	645	44	53.2
		3/26/1996	NA	NA	646	41	52
		6/9/1976	NA	NA	569	36	53
		1/17/1966	NA	NA	670	79	74

Table 2: Summary of Key Data - Wells 30F (Highway 1)

Well	Production Interval	Date	Depth to Water (feet)	Groundwater Elevation (feet NAVD)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sodium (mg/L)
32S/13E-30F01 Highway 1	Screened from 15- 30 and 40-55'	10/15/2013	NA	NA	530	78	73
		10/14/2013	17.07	6.09	NA	NA	NA
		7/10/2013	NA	NA	480	80	64
		7/9/2013	16.17	6.99	NA	NA	NA
		4/11/2013	NA	NA	460	60	60
		4/10/2013	14.58	8.58	NA	NA	NA
		1/15/2013	NA	NA	440	65	64
		1/14/2013	14.36	8.8	NA	NA	NA
		10/30/2012	14.95	8.21	470	60	66
		7/24/2012	14.00	9.16	470	73	66
		4/19/2012	NA	NA	450	72	52
		4/18/2012	13.42	9.74	NA	NA	NA
		1/10/2012	13.80	9.36	460	67	61
		11/21/2011	13.78	9.38	NA	NA	NA
		11/17/2011	NA	NA	470	70	82
		7/26/2011	13.50	9.66	NA	NA	NA
		7/25/2011	NA	NA	460	65.8	68
		4/20/2011	12.82	10.34	460	71	69
		1/24/2011	13.33	9.97	510	75	64
		10/21/2010	16.55	6.61	540	100	73
		7/26/2010	15.68	7.48	464	74	82.2
		4/27/2010	11.02	9.38	534	72	77.1
		1/28/2010	12.73	7.67	725	140	99.9
		10/19/2009	14.33	6.07	522	74	85.6
		8/19/2009	14.34	6.06	648	92	98.9
		5/12/2009	12.38	8.02	792	110	108
32S/13E-30F02 Highway 1	Screened from 75-100'	10/15/2013	NA	NA	570	50	45
		10/14/2013	17.52	5.64	NA	NA	NA
		7/10/2013	NA	NA	570	50	38
		7/9/2013	17.15	6.01	NA	NA	NA
		4/11/2013	NA	NA	590	50	41
		4/10/2013	15.76	7.4	NA	NA	NA
		1/15/2013	NA	NA	550	50	44
		1/14/2013	15.01	8.15	NA	NA	NA
		10/30/2012	15.27	7.89	610	48	45
		7/24/2012	14.82	8.34	590	56	46
		4/19/2012	NA	NA	600	60	40
		4/18/2012	14.38	8.78	NA	NA	NA
		1/12/2012	14.31	8.85	610	52	45
		11/21/2011	14.94	8.22	580	49	38
		7/26/2011	14.46	8.7	NA	NA	NA
		7/25/2011	NA	NA	590	52.1	46
		4/20/2011	14.23	8.93	600	54	57
		1/24/2011	14.36	8.93	600	51	43
		10/28/2010	NA	NA	610	49	38
		10/21/2010	7.39	15.77	NA	NA	NA
		7/26/2010	16.21	6.95	560	49	45.8
		4/27/2010	12.14	8.26	634	51	50.3
		1/28/2010	13.09	7.31	604	44	52.2
		10/19/2009	14.36	6.04	566	49	49.5
		8/19/2009	14.81	5.59	614	49	51.8
		5/12/2009	14.34	2.96	514	54	48.7
		3/27/1996	NA	NA	678	49	52
		6/9/1976	NA	NA	637	48	55
		1/20/1966	NA	NA	580	68	47
32S/13E-30F03 Highway 1	Screened from 305-372'	10/15/2013	NA	NA	670	41	40
		10/14/2013	17.30	5.86	NA	NA	NA
		7/10/2013	NA	NA	650	50	33
		7/9/2013	16.61	6.55	NA	NA	NA
		4/11/2013	NA	NA	670	45	36
		4/10/2013	14.69	8.47	NA	NA	NA
		1/15/2013	NA	NA	630	45	36
		1/14/2013	12.62	10.54	NA	NA	NA
		10/30/2012	14.61	8.55	650	43	40
		7/24/2012	14.50	8.66	640	51	36
		4/19/2012	NA	NA	640	54	32
		4/18/2012	10.43	12.73	NA	NA	NA
		1/12/2012	12.37	10.79	660	46	39
		11/21/2011	13.24	9.92	650	43	33
		7/26/2011	14.22	8.94	NA	NA	NA
		7/25/2011	NA	NA	650	46.5	46
		4/21/2011	NA	NA	650	48	40
		4/20/2011	12.51	10.65	NA	NA	NA
		1/24/2011	12.67	10.64	650	46	36
		10/28/2010	NA	NA	650	46	37
		10/21/2010	6.62	16.54	NA	NA	NA
		7/26/2010	17.32	5.84	608	45	43.8
		4/27/2010	11.38	9.02	668	48	40.8
		1/28/2010	10.98	9.42	656	40	43.1
		10/19/2009	14.18	6.22	626	48	43.3
		8/19/2009	20.23	0.17	672	45	43.1
		5/12/2009	17.68	2.72	678	49	44.8
		3/27/1996	NA	NA	686	41	40
		6/7/1976	NA	NA	616	43	41
		1/19/1966	NA	NA	642	69	49

Table 3: Summary of Key Data - Wells 30N (Pier Avenue)

Well	Production Interval	Date	Depth to Water (feet)	Groundwater Elevation (feet NAVD)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sodium (mg/L)
32S/13E-30N01 Pier Ave	Screened from 15-40'	10/15/2013	NA	NA	950	200	140
		10/14/2013	9.86	6.27	NA	NA	NA
		7/10/2013	NA	NA	830	175	120
		7/9/2013	9.40	6.73	NA	NA	NA
		4/10/2013	8.98	7.15	860	180	120
		1/14/2013	8.60	7.53	800	170	120
		10/29/2012	8.96	7.17	900	180	120
		7/23/2012	8.54	7.59	840	190	120
		4/18/2012	8.53	7.60	1,050	280	140
		1/9/2012	8.74	7.39	1,050	260	170
		11/21/2011	8.78	7.35	NA	NA	NA
		11/17/2011	NA	NA	1,300	360	320
		7/26/2011	9.01	7.12	NA	NA	NA
		7/25/2011	NA	NA	1,680	445.3	230
		4/20/2011	8.59	7.54	890	210	130
		1/24/2011	8.18	7.35	870	180	100
		10/21/2010	9.99	6.14	890	190	120
		7/27/2010	8.97	7.16	917	200	130
		4/27/2010	6.14	7.36	808	150	130
		1/26/2010	4.90	8.60	902	210	155
		10/20/2009	6.53	7.00	828	200	159
		8/20/2009	6.71	6.82	835	160	150
		5/11/2009	6.03	7.50	960	180	175
32S/13E-30N03 Pier Ave	Screened from 60-135'	10/15/2013	NA	NA	580	60	57
		10/14/2013	10.72	5.41	NA	NA	NA
		7/10/2013	NA	NA	590	60	48
		7/9/2013	10.36	5.77	NA	NA	NA
		4/10/2013	8.26	7.87	600	66	53
		1/14/2013	7.71	8.42	570	66	55
		10/29/2012	8.01	8.12	610	60	56
		7/23/2012	9.15	6.98	600	71	56
		4/18/2012	6.72	9.41	570	80	47
		1/11/2012	7.17	8.96	570	67	55
		11/21/2011	6.45	9.68	600	67	47
		7/26/2011	7.59	8.54	NA	NA	NA
		7/25/2011	NA	NA	590	67	47
		4/20/2011	6.65	9.48	580	76	58
		1/24/2011	6.68	8.75	570	76	48
		10/21/2010	10.76	5.37	550	69	59
		7/27/2010	9.53	6.60	528	72	55.1
		4/27/2010	6.14	7.36	672	89	60.6
		1/26/2010	5.88	7.62	606	110	75.0
		10/20/2009	6.56	6.94	806	180	93.3
		8/20/2009	7.50	6.00	1,070	190	151
		5/12/2009	6.33	7.17	602	97	63.4
		3/27/1996	NA	NA	624	70	62
		6/7/1976	NA	NA	705	90	54
		1/21/1966	NA	NA	804	57	54
32S/13E-30N02 Pier Ave	Screened from 175-255'	10/15/2013	NA	NA	1,030	46	70
		10/14/2013	12.13	4	NA	NA	NA
		7/10/2013	NA	NA	1020	50	61
		7/9/2013	11.05	5.08	NA	NA	NA
		4/10/2013	--	9.07	1,080	48	60
		1/14/2013	--	11.15	1,010	48	63
		10/29/2012	--	7.61	1,030	40	68
		7/23/2012	--	7.82	1,040	54	63
		4/18/2012	--	12.68	990	60	56
		1/11/2012	--	11.25	1,040	49	64
		11/21/2011	5.35	10.78	1,020	46	57
		7/26/2011	7.25	8.88	NA	NA	NA
		7/25/2011	NA	NA	1,050	50.4	81
		4/20/2011	3.53	12.60	1,030	52	63
		1/24/2011	3.67	11.76	1,050	50	60
		10/21/2010	10.42	5.71	1,040	48	52
		7/27/2010	10.02	6.11	777	57	67.6
		4/27/2010	5.26	8.27	800	93	71.9
		2/25/2010	1.72	11.78	1,000	48	71.4
		2/25/2010	1.72	11.78	1,010	74	76.9
		1/26/2010	3.72	9.78	970	50	74.2
		10/20/2009	7.38	6.12	2,080	690	274
		8/20/2009	11.94	1.56	1,350	500	199
		5/11/2009	6.98	6.52	1,290	170	129
		3/27/1996	NA	NA	1,050	50	71
		6/7/1976	NA	NA	1,093	48	62
		1/21/1966	NA	NA	1,069	54	71

*Confirmation Sample Collected from Pump Discharge at End of Purge;
Confirmation Sample Collected by Standard Method (Baller);*

Table 4a: Summary of Key Data - Oceano CSD Wells

Well	Production Interval	Date	Depth to Water (feet)	Groundwater Elevation (feet NAVD)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sodium (mg/L)
MW-Green Oceano CSD	Screened from 110-130'	10/15/2013	NA	NA	690	30	40
		10/14/2013	30.31	4.32	NA	NA	NA
		7/11/2013	NA	NA	860	60	50
		7/9/2013	29.98	4.65	NA	NA	NA
		4/11/2013	NA	NA	900	60	69
		4/10/2013	23.30	11.33	NA	NA	NA
		1/16/2013	NA	NA	820	66	76
		1/14/2013	23.59	11.04	NA	NA	NA
		10/30/2012	27.31	7.32	780	65	75
		7/25/2012	27.15	7.48	830	76	80
		4/19/2012	NA	NA	790	87	69
		4/18/2012	21.65	12.98	NA	NA	NA
		1/12/2012	23.29	11.34	760	76	85
		11/21/2011	22.46	12.17	720	39	38
		7/26/2011	25.51	9.12	NA	NA	NA
		7/25/2011	NA	NA	760	69.3	66
		4/20/2011	114.79	-80.16	NA	NA	NA
		1/24/2011	106.59	-71.96	310	98	22
		10/28/2010	NA	NA	290	81	26
		10/21/2010	112.71	-82.22	NA	NA	NA
		7/26/2010	95.61	-65.12	438	85	34.3
		4/26/2010	63.90	-33.41	560	83	47.7
		1/27/2010	43.71	-13.22	460	130	45.0
		10/20/2009	29.20	1.29	362	92	39.6
		8/19/2009	24.55	5.94	420	160	48.4
		5/16/1983	15.80	14.69	665	35	40
MW-Blue Oceano CSD	Screened from 190-210' and 245-265'	10/15/2013	NA	NA	360	100	98
		10/14/2013	30.98	3.65	NA	NA	NA
		7/11/2013	NA	NA	370	140	70
		7/9/2013	29.36	5.27	NA	NA	NA
		4/11/2013	NA	NA	340	90	81
		4/10/2013	24.45	10.18	NA	NA	NA
		1/16/2013	NA	NA	360	107	99
		1/14/2013	23.14	11.49	NA	NA	NA
		10/30/2012	27.68	6.95	380	97	100
		7/25/2012	27.18	7.45	240	49	56
		4/19/2012	NA	NA	380	100	87
		4/18/2012	20.10	14.53	NA	NA	NA
		1/12/2012	22.26	12.37	480	96	110
		11/21/2011	22.73	11.90	390	90	78
		7/26/2011	25.29	9.34	NA	NA	NA
		7/25/2011	NA	NA	260	29.3	23
		4/21/2011	NA	NA	580	118	70
		4/20/2011	22.59	12.04	NA	NA	NA
		1/24/2011	24.87	9.76	680	110	60
		10/21/2010	30.11	0.43	770	100	68
		7/26/2010	24.74	5.80	783	130	80.1
		4/26/2010	18.52	12.02	1,130	160	70.2
		1/27/2010	22.06	8.48	1,740	430	55.6
		10/20/2009	27.50	3.04	2,250	1,000	19.5
		8/19/2009	24.65	5.89	322	150	93.2
		5/16/1983	13.30	17.24	840	80	90

Table 4b: Summary of Key Data - Oceano CSD Wells

Well	Production Interval	Date	Depth to Water (feet)	Groundwater Elevation (feet NAVD)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sodium (mg/L)
MW-Silver Oceano CSD	Screened from 395-435' and 470-510'	10/15/2013	NA	NA	0	0	0
		10/14/2013	30.92	3.71	NA	NA	NA
		7/9/2013	30.91	3.72	NA	NA	NA
		4/10/2013	26.08	8.55	NA	NA	NA
		1/14/2013	23.12	11.51	NA	NA	NA
		10/30/2012	27.14	7.49	NA	NA	NA
		7/25/2012	27.68	6.95	NA	NA	NA
		4/18/2012	20.13	14.5	NA	NA	NA
		1/11/2012	23.00	11.63	NA	NA	NA
		11/21/2011	22.85	11.78	NA	NA	NA
		7/26/2011	25.23	9.4	NA	NA	NA
		4/21/2011	NA	NA	410	97	100
		4/20/2011	21.27	13.36	NA	NA	NA
		1/24/2011	22.02	12.61	440	92	90
		10/21/2010	29.11	5.52	460	90	110
		7/26/2010	24.24	6.24	478	83	109
		4/26/2010	19.04	11.44	452	83	83
		1/27/2010	21.05	9.43	496	71	92.2
		10/20/2009	27.52	2.96	564	71	80.8
		8/19/2009	29.34	1.14	522	180	148
		5/16/1983	13.50	16.98	630	40	40
Oceano #8 Oceano CSD		10/15/2013	NA	NA	670	40	44
		10/14/2013	NA	NA	NA	NA	NA
		7/10/2013	NA	NA	670	44	43
		4/11/2013	NA	NA	720	43	40
		1/16/2013	NA	NA	660	43	43
		10/30/2012	NA	NA	660	40	44
		7/24/2012	NA	NA	700	47	44
		4/25/2012	NA	NA	680	48	44
		1/10/2012	NA	NA	690	45	44
		11/22/2011	NA	NA	690	41	39
		7/25/2011	NA	NA	690	44	39
MW-Yellow Oceano CSD	Screened from 625-645"	10/15/2013	NA	NA	410	84	87
		10/14/2013	30.83	3.8	NA	NA	NA
		7/11/2013	NA	NA	420	80	70
		7/9/2013	30.41	4.22	NA	NA	NA
		4/11/2013	NA	NA	450	77	77
		4/10/2013	26.09	8.54	NA	NA	NA
		1/15/2013	NA	NA	420	74	78
		1/14/2013	23.25	11.38	NA	NA	NA
		10/30/2012	27.23	7.40	380	88	99
		7/25/2012	27.69	6.94	390	108	107
		4/19/2012	NA	NA	390	110	83
		4/18/2012	20.05	14.58	NA	NA	NA
		1/12/2012	23.08	11.55	410	94	95
		11/21/2011	22.98	11.65	410	94	83
		7/26/2011	26.73	7.90	NA	NA	NA
		7/25/2011	NA	NA	420	89.7	84
		4/21/2011	NA	NA	380	88	110
		4/20/2011	21.30	13.33	NA	NA	NA
		1/24/2011	22.01	12.62	430	83	73
		10/21/2010	28.22	2.30	410	87	100
		7/26/2010	25.50	5.02	446	94	93.0
		4/26/2010	19.17	11.35	416	96	87.6
		1/27/2010	20.58	9.94	498	89	79.6
		10/20/2009	25.80	4.72	446	100	97.1
		8/19/2009	31.04	-0.52	426	160	101
		5/16/1983	14.30	16.22	770	60	70

Table 5: Summary of Key Data - Wells 36L (Oceano Dunes)

Well	Production Interval	Date	Depth to Water (feet)	Groundwater Elevation (feet NAVD)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sodium (mg/L)
12N/36W-36L01 Oceano Dunes	Screened from 227-237'	10/15/2013	NA	NA	910	40	63
		10/14/2013	21.71	5.06	NA	NA	NA
		7/10/2013	NA	NA	910	39	54
		7/9/2013	21.37	5.4	NA	NA	NA
		4/11/2013	NA	NA	890	38	59
		4/10/2013	20.10	6.67	NA	NA	NA
		1/15/2013	NA	NA	870	39	61
		1/14/2013	18.62	8.15	NA	NA	NA
		10/31/2012	20.11	6.66	910	35	66
		7/24/2012	19.42	7.35	880	43	65
		4/20/2012	18.26	8.03	NA	NA	NA
		4/18/2012	23.83	2.94	880	47	52
		1/1/2012	17.68	9.09	790	41	64
		11/21/2011	18.08	8.69	910	39	55
		7/26/2011	19.63	7.14	NA	NA	NA
		7/25/2011	NA	NA	890	40.5	65
		4/21/2011	NA	NA	890	42	61
		4/20/2011	18.26	8.51	NA	NA	NA
		1/24/2011	17.61	8.68	890	41	55
		10/21/2010	20.75	5.54	910	38	76
		7/27/2010	21.18	5.11	707	36	64.2
		4/26/2010	15.94	8.06	860	42	70.3
		10/21/2009	17.72	6.28	856	38	72.0
		8/20/2009	19.16	4.84	890	39	78.0
		5/11/2009	17.68	6.32	832	63	83.8
		3/26/1996	NA	NA	882	35	66
		6/8/1976	NA	NA	936	38	72
12N/36W-36L02 Oceano Dunes	Screened from 535-545'	10/15/2013	NA	NA	810	90	110
		10/14/2013	23.94	2.83	NA	NA	NA
		7/10/2013	NA	NA	790	105	94
		7/9/2013	23.15	3.62	NA	NA	NA
		4/11/2013	NA	NA	830	100	99
		4/10/2013	15.35	11.42	NA	NA	NA
		1/15/2013	NA	NA	770	110	110
		1/14/2013	11.24	15.53	NA	NA	NA
		10/31/2012	18.81	7.96	800	100	120
		7/24/2012	19.05	7.72	800	134	125
		4/18/2012	10.81	15.96	770	130	95
		1/11/2012	11.18	15.59	900	122	110
		11/21/2011	13.99	12.78	780	130	95
		7/26/2011	18.03	8.74	NA	NA	NA
		7/25/2011	NA	NA	790	128.8	110
		4/21/2011	NA	NA	770	120	90
		4/20/2011	10.33	16.44	NA	NA	NA
		1/24/2011	9.37	16.92	800	120	95
		10/21/2010	19.77	6.52	770	120	130
		7/27/2010	20.53	5.76	737	110	121
		4/26/2010	9.24	14.76	720	100	116
		10/21/2009	17.65	6.35	638	99	113
		8/20/2009	19.15	4.85	785	100	131
		5/11/2009	14.38	9.62	775	120	132
		3/26/1996	NA	NA	772	127	130
		6/8/1976	NA	NA	820	126	118

Table 6: Summary of Key Data - Well 32C3 (County MW-3)

Well	Production Interval	Date	Depth to Water (feet)	Groundwater Elevation (feet NAVD)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sodium (mg/L)
12N/35W-32C03 County MW-3	Screened from 90-170'	10/15/2013	NA	NA	310	58	62
		10/14/2013	45.26	2.66	NA	NA	NA
		7/11/2013	NA	NA	290	60	45
		7/9/2013	43.83	4.09	NA	NA	NA
		4/12/2013	NA	NA	330	58	55
		4/10/2013	37.89	10.03	NA	NA	NA
		1/15/2013	NA	NA	290	62	57
		1/14/2013	32.26	15.66	NA	NA	NA
		10/30/2012	40.05	7.87	330	57	60
		7/25/2012	38.62	9.3	330	67	61
		4/19/2012	23.02	24.9	370	74	52



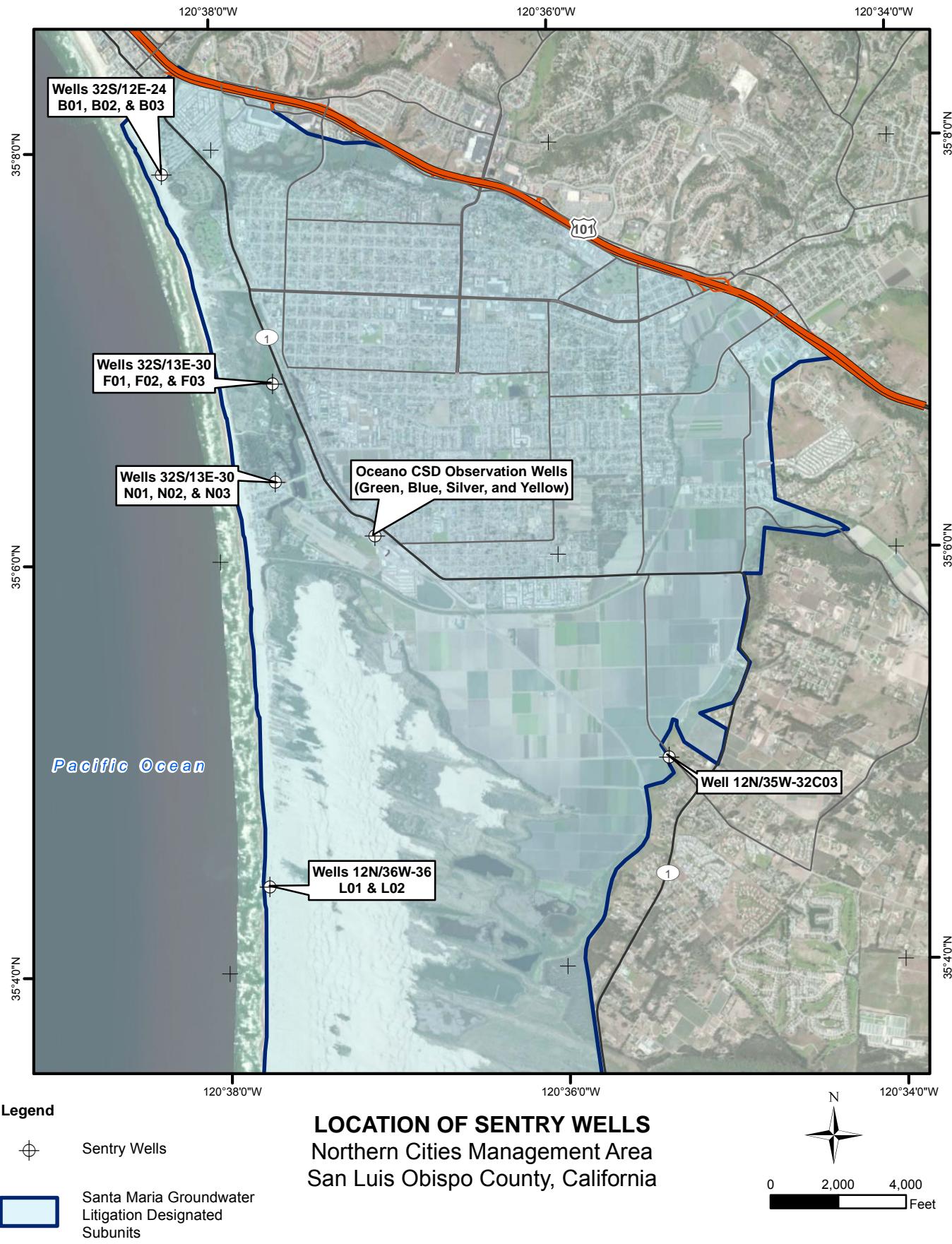
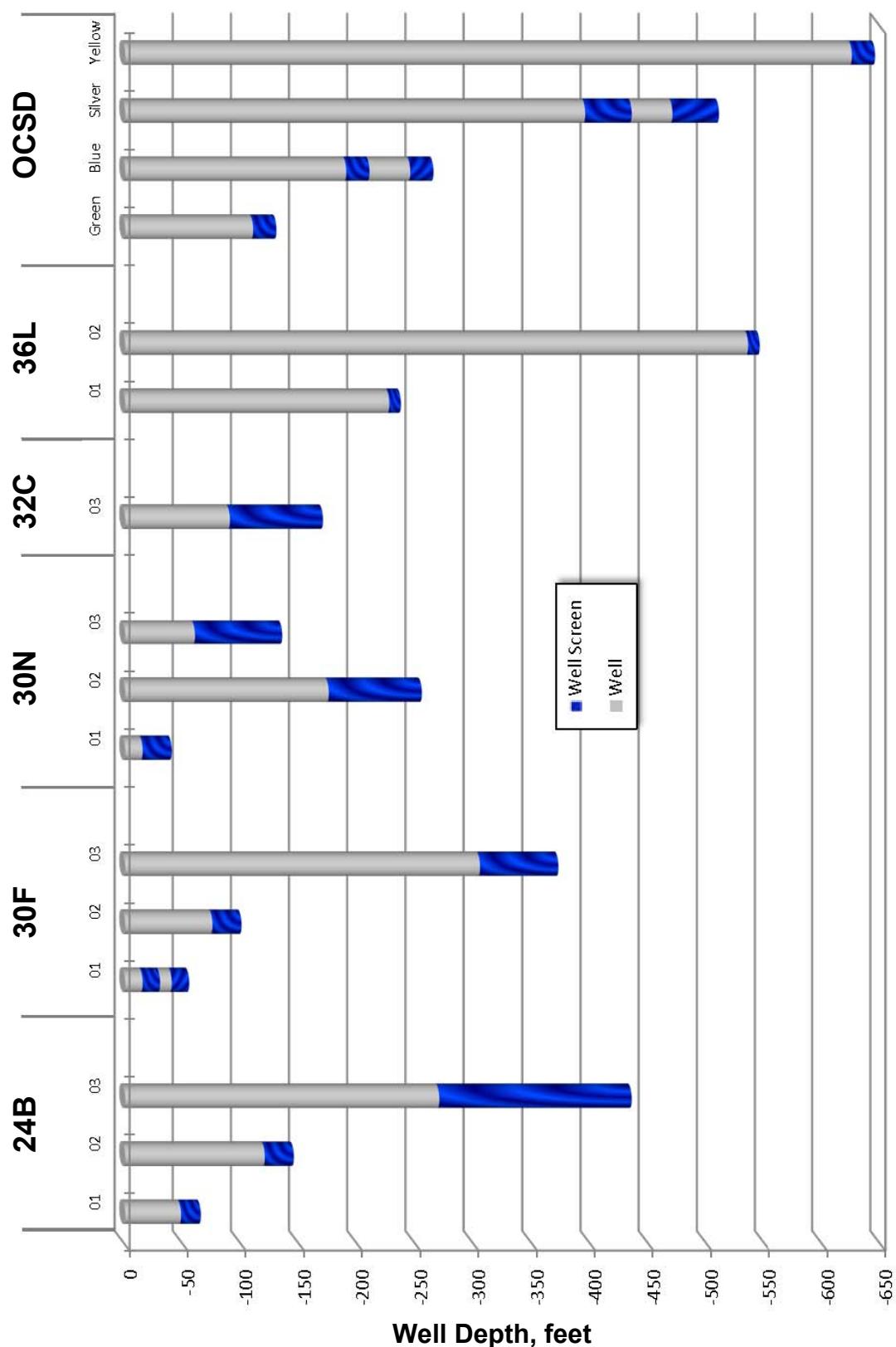
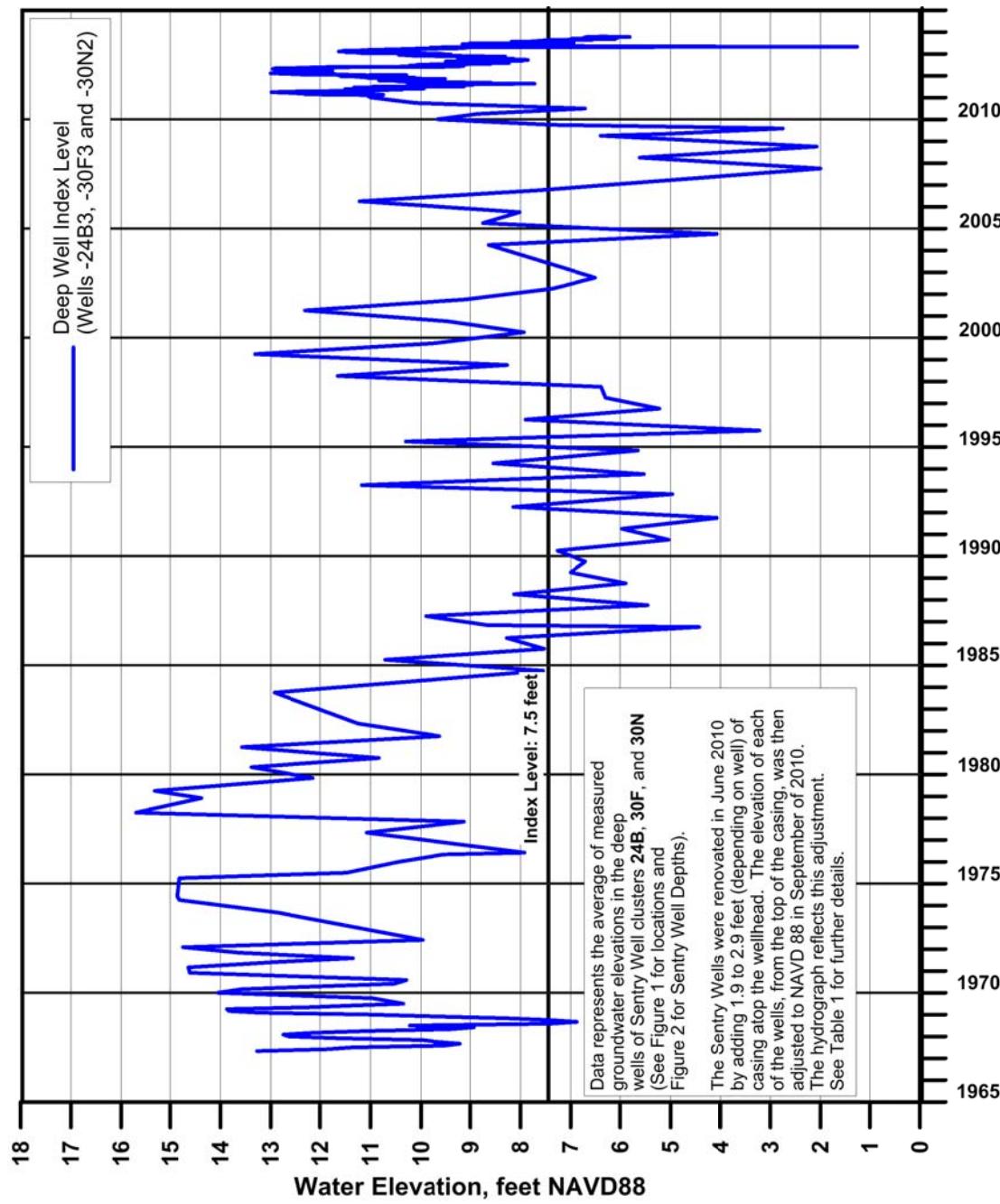


FIGURE 1



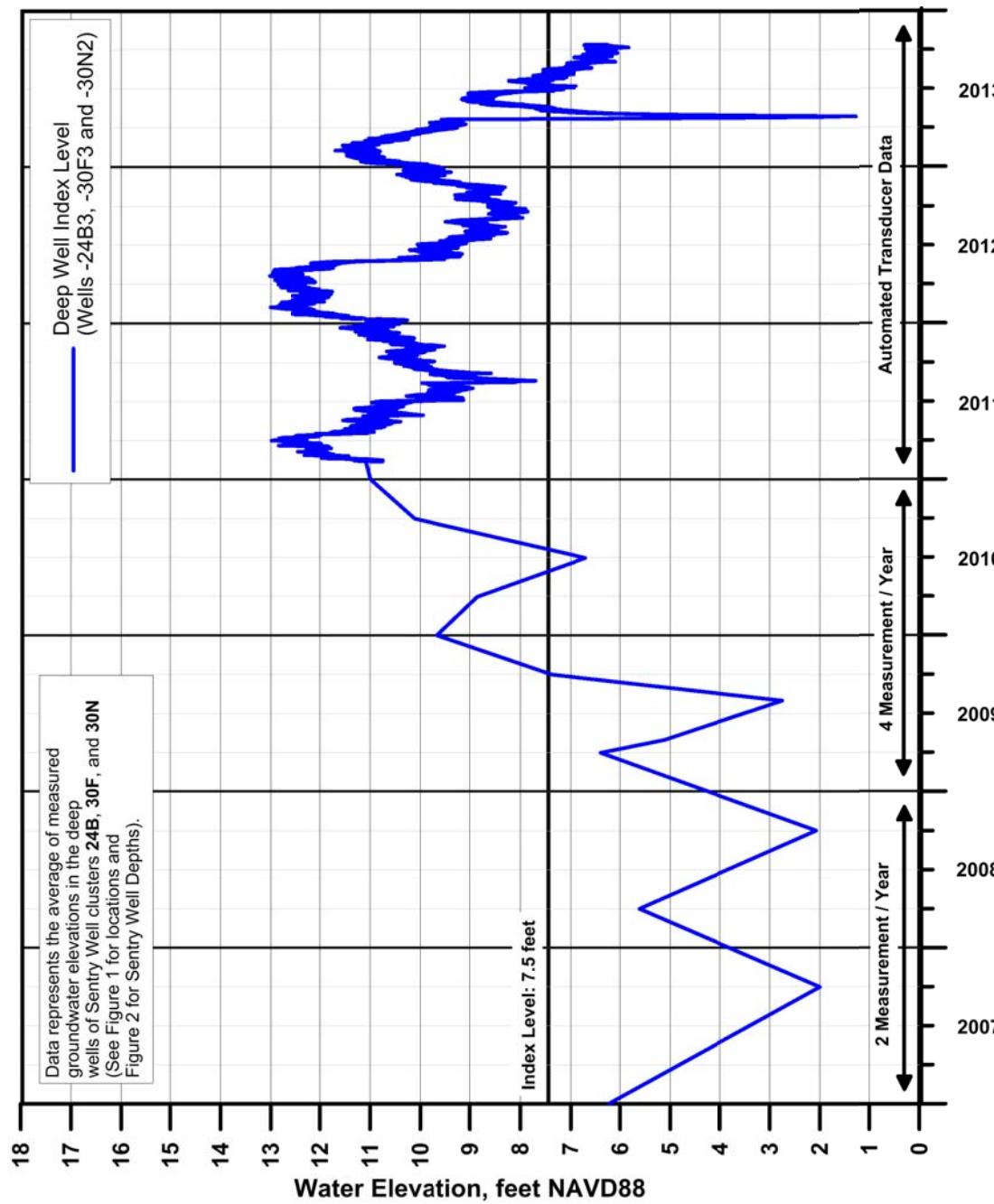
DEPTHS OF SENTRY WELLS
Northern Cities Management Area
San Luis Obispo County, California

FIGURE 2



AVERAGE DEEP SENTRY WELL GROUNDWATER ELEVATION, PERIOD OF RECORD
Northern Cities Management Area
San Luis Obispo County, California

FIGURE 3A



AVERAGE DEEP SENTRY WELL GROUNDWATER ELEVATION, RECENT PERIOD
Northern Cities Management Area
San Luis Obispo County, California

FIGURE 3B

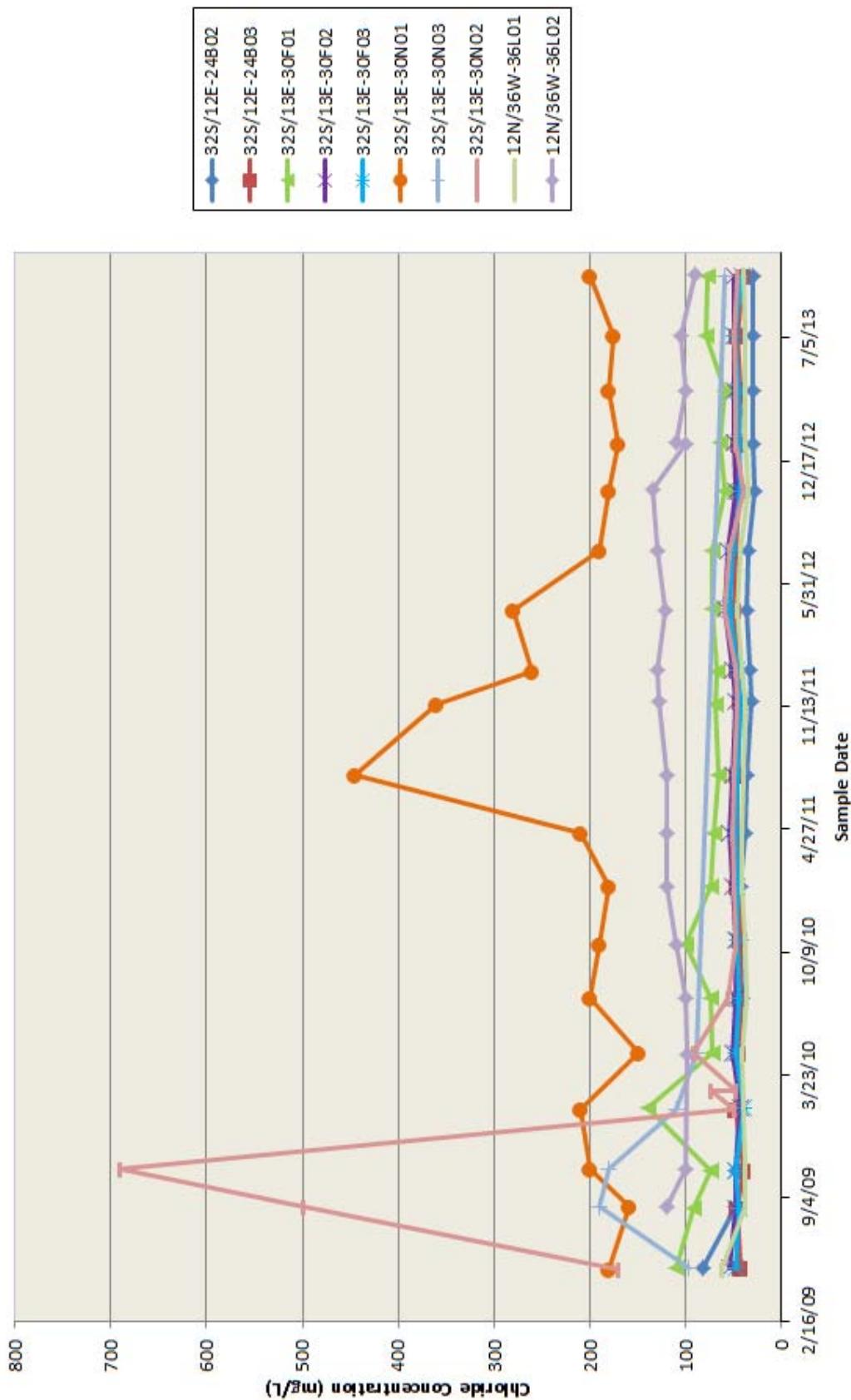
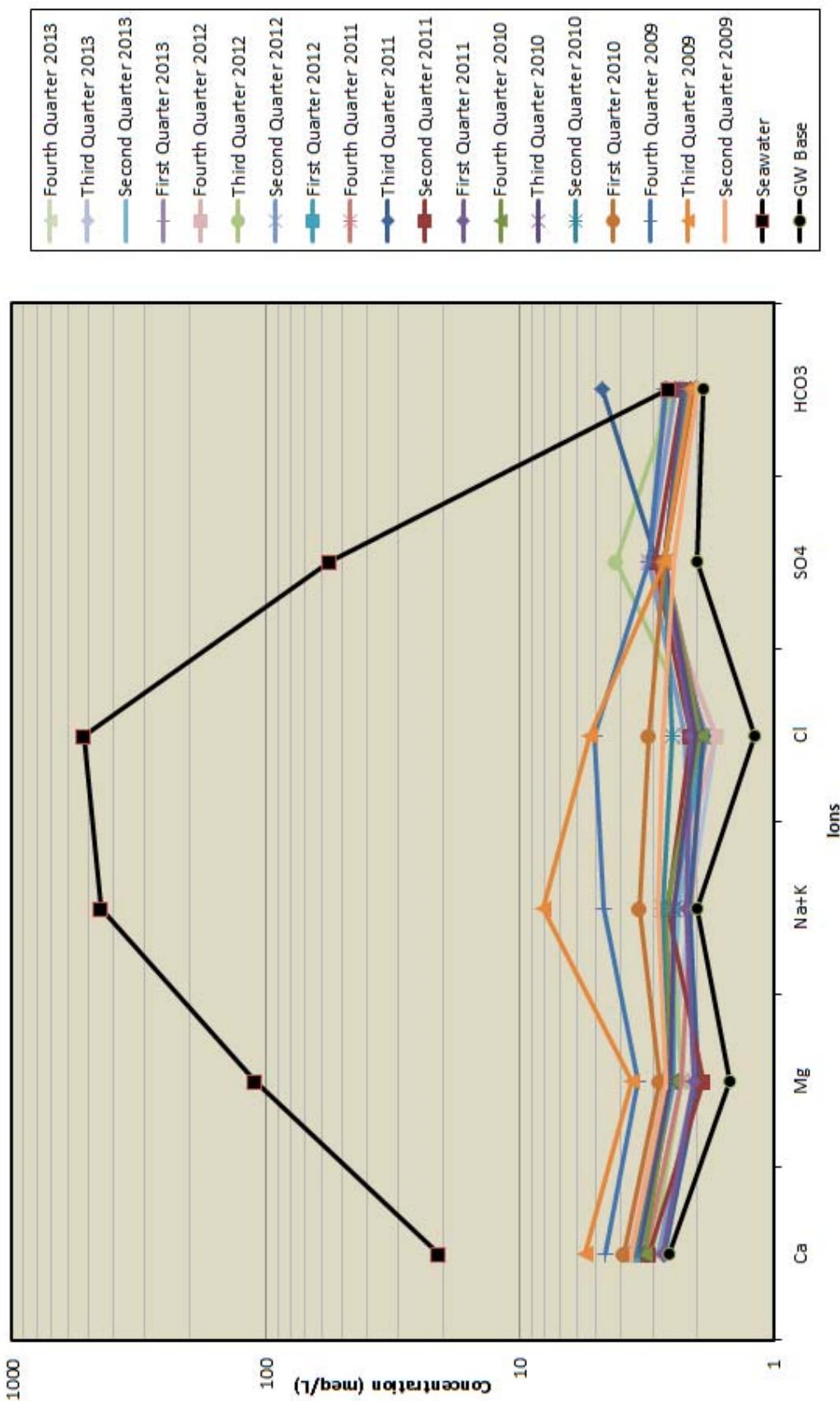
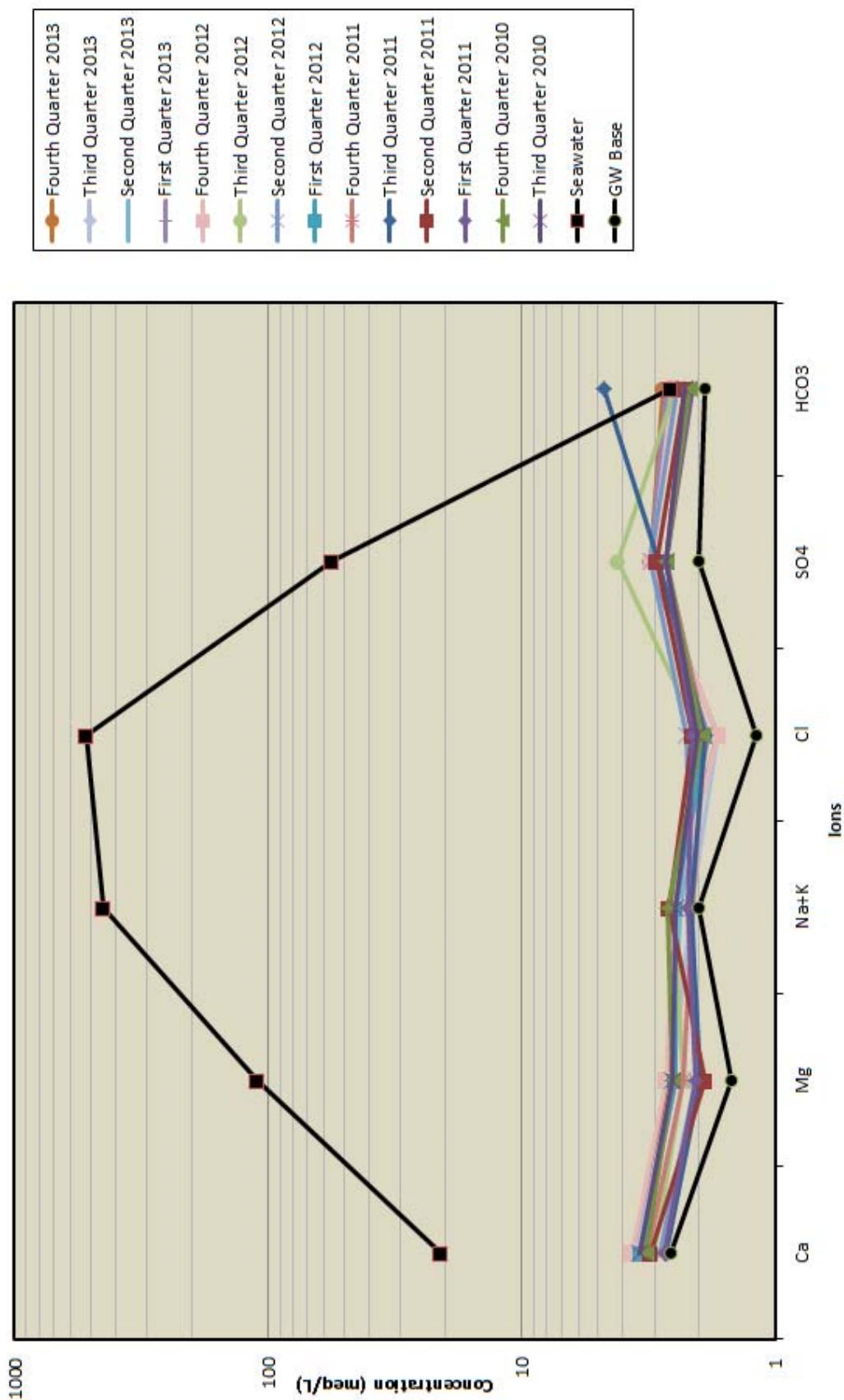


FIGURE 4



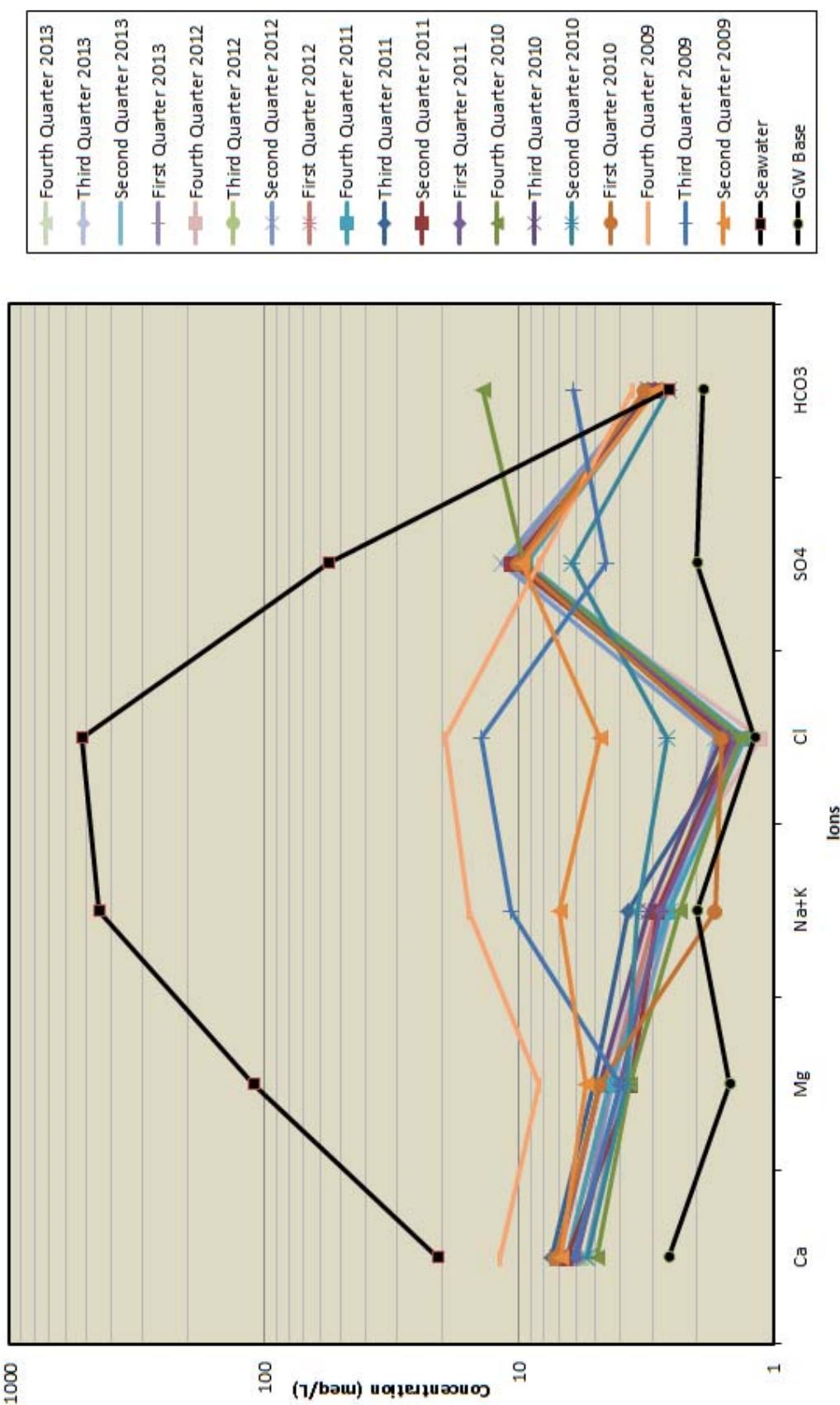
SCHOELLER DIAGRAM SENTRY WELL 30N03 (MAY 2009 – OCTOBER 2013)
Northern Cities Management Area
San Luis Obispo County, California

FIGURE 5A



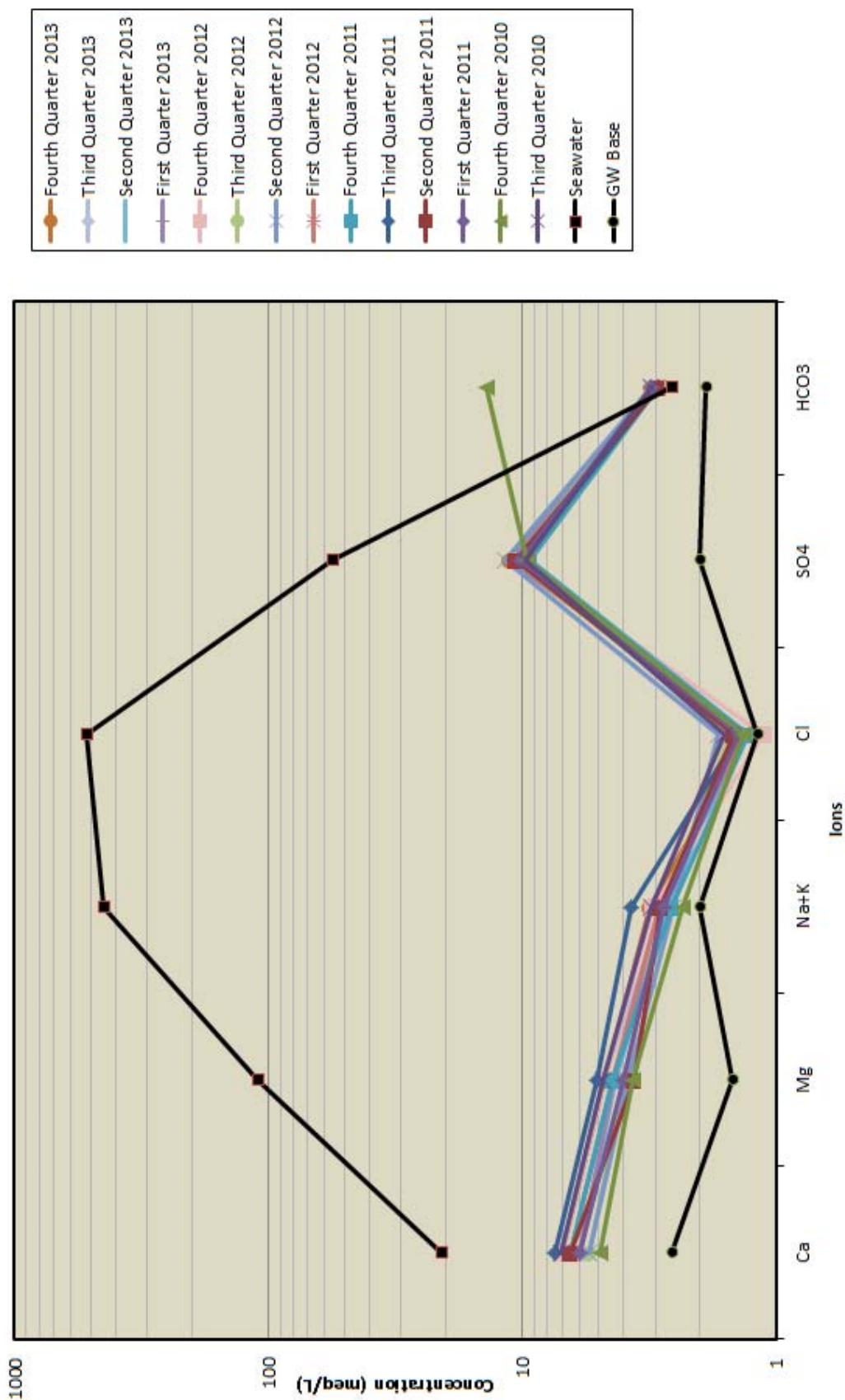
SCHOELLER DIAGRAM SENTRY WELL 30N03 (OCTOBER 2010 – OCTOBER 2013)
Northern Cities Management Area
San Luis Obispo County, California

FIGURE 5B



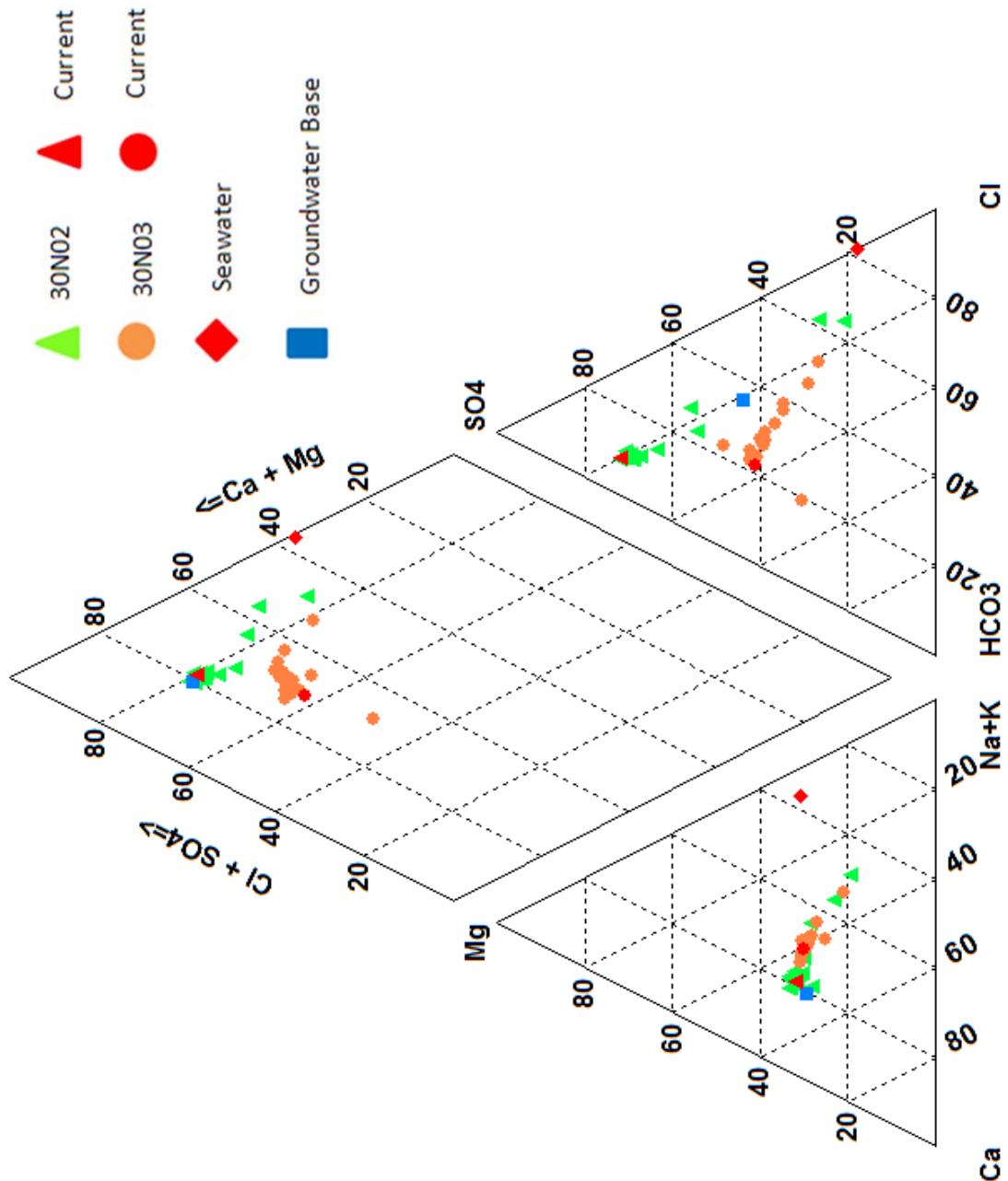
SCHOELLER DIAGRAM SENTRY WELL 30N02 (MAY 2009 – OCTOBER 2013)
Northern Cities Management Area
San Luis Obispo County, California

FIGURE 6A

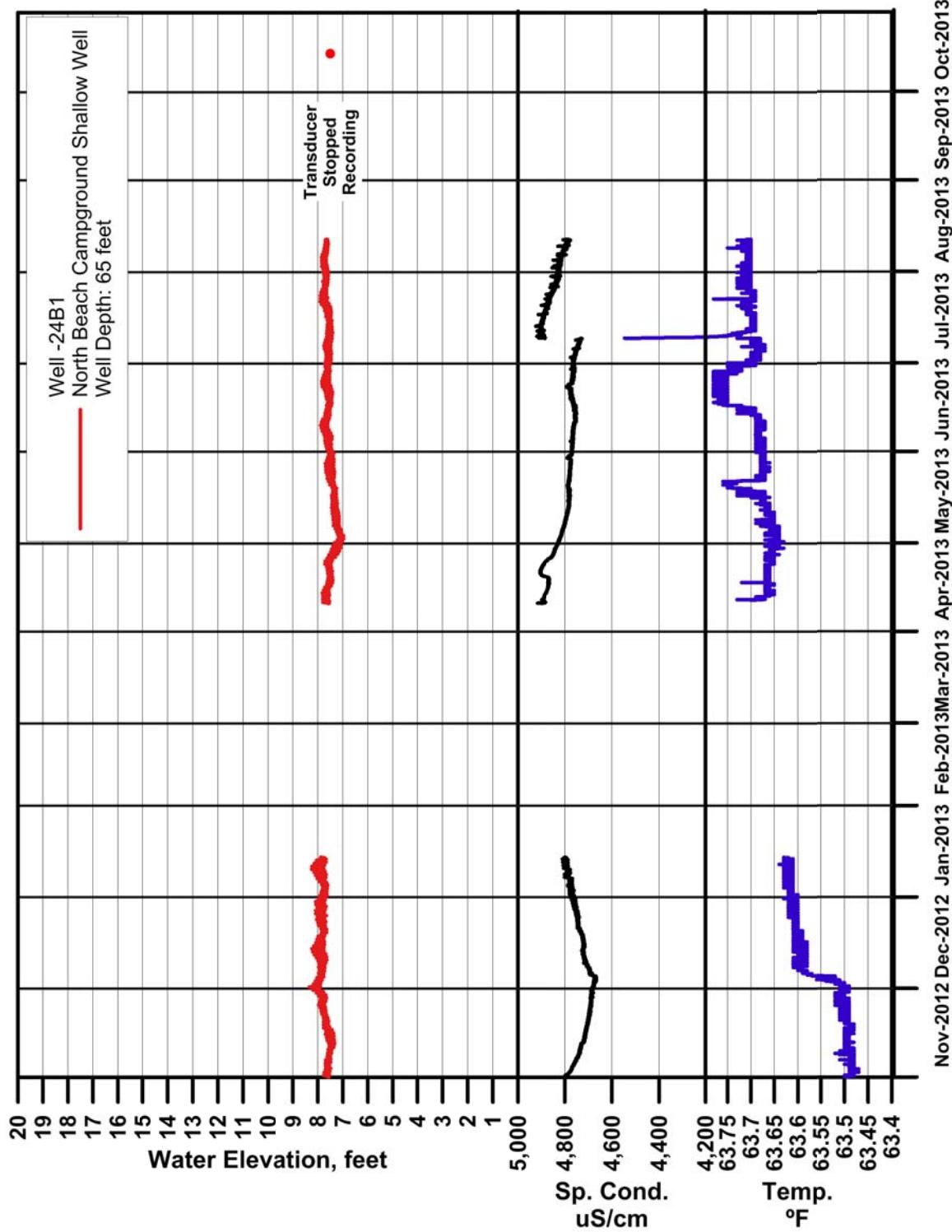


SCHOELLER DIAGRAM SENTRY WELL 30N02 (OCTOBER 2010 – OCTOBER 2013)
Northern Cities Management Area
San Luis Obispo County, California

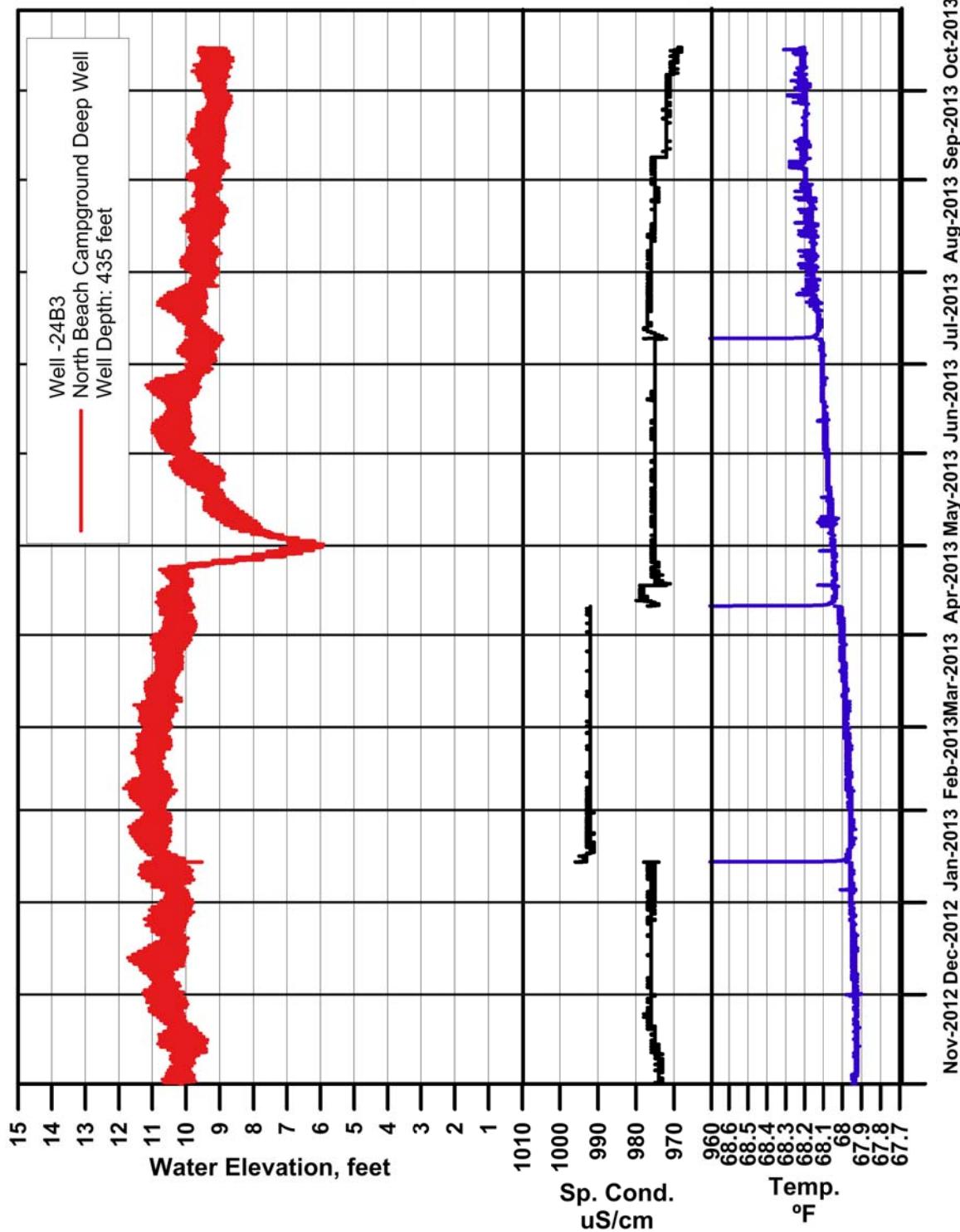
FIGURE 6B



PIPER DIAGRAM
Northern Cities Management Area
San Luis Obispo County, California

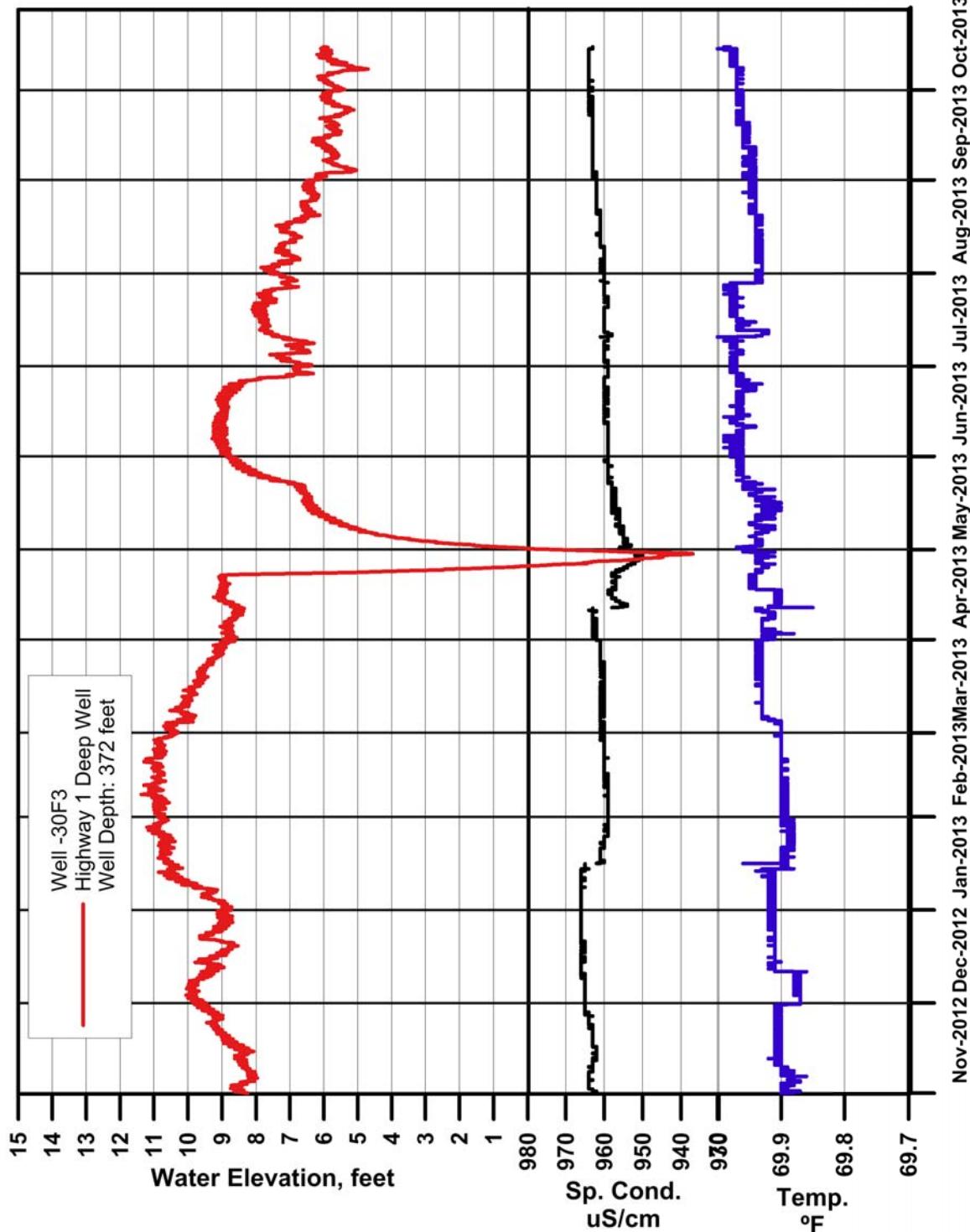


WATER ELEVATION, CONDUCTIVITY, AND TEMPERATURE, WELL 24B1
Northern Cities Management Area
San Luis Obispo County, California



WATER ELEVATION, CONDUCTIVITY, AND TEMPERATURE, WELL 24B3

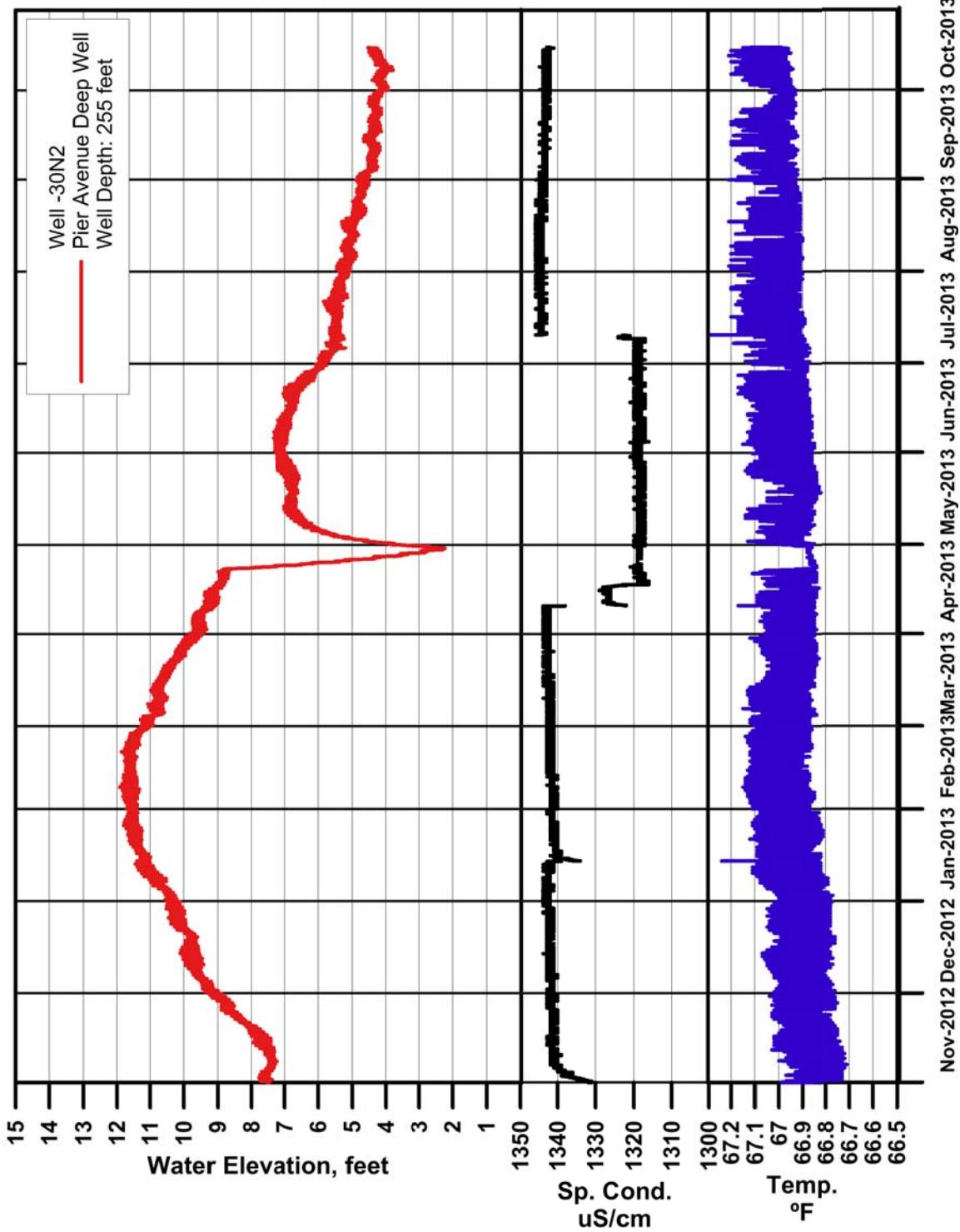
Northern Cities Management Area
San Luis Obispo County, California



WATER ELEVATION, CONDUCTIVITY, AND TEMPERATURE, WELL 30F3

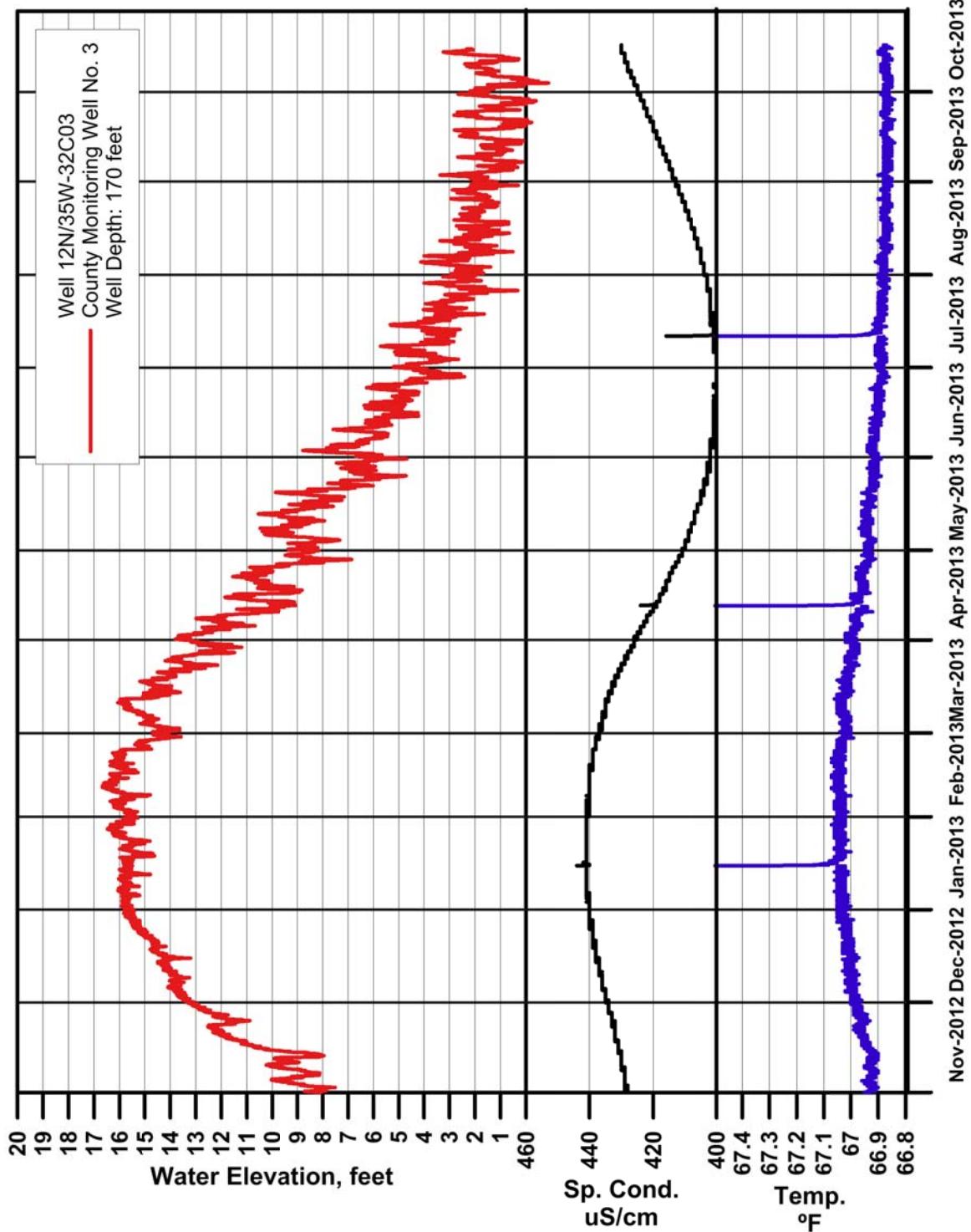
Northern Cities Management Area
San Luis Obispo County, California

FIGURE 10



WATER ELEVATION, CONDUCTIVITY, AND TEMPERATURE, WELL 30N2
Northern Cities Management Area
San Luis Obispo County, California

FIGURE 11



WATER ELEVATION, CONDUCTIVITY, AND TEMPERATURE, WELL 3&C03
Northern Cities Management Area
San Luis Obispo County, California

FIGURE 12

Table A1 : Northern Cities Sentry Well Water Quality Data Summary - Wells 24B North Beach Campground

Well	Construction	Top of Casing Elevation (feet NAVD)	Date	Depth to Water (feet)	Groundwater Elevation (feet NAVD)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Bicarbonate (as CaCO3) (mg/L)	Sulfate (mg/L)	Nitrate (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Boron (mg/L)	Fluoride (mg/L)	Iodide (mg/L)	Manganese (mg/L)	Bromide (mg/L)	Alkalinity, Total (as CaCO3) (mg/L)	Carbonate (as CaCO3) (mg/L)	Hydroxide (as CaCO3) (mg/L)	Specific Conductance (umhos/cm)	Iron (mg/L)	Bromide / Chloride Ratio	Chloride / Bromide Ratio
32S/12E-24B01	Screened from 48-65' - 2-inch diameter	13.58																									
	Height of steel casing added to the concrete pad elevation	2.88	10/15/2013	NA	NA	2,860	1200	560	31	150	160	380	200	<0.25	2.2	0.13	<0.5	<0.01	1.0	3.0	380	<10	<10	4,810	0.75	0.0025	400
	Pad elevation NAVD 88	10.70	10/14/2013	6.07	7.51	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	TOC elevation prior to renovation (Approximate)	10.7	7/9/2013	6.09	7.49	2,960	1300	560	32	150	160	395	215	<0.25	2.4	0.16	<0.5	<0.01	1.1	2.0	395	<10	<10	4,850	0.81	0.0015	650
			4/10/2013	7.00	6.58	2,920	1300	540	30	140	150	410	220	<0.25	1.9	0.16	<0.1	<0.01	1.00	3.5	410	<10	<10	4,830	0.67	0.0027	371
			1/14/2013	5.72	7.86	2,630	1300	540	30	140	140	410	220	<0.05	2.7	0.15	<0.1	<0.01	0.96	2.8	410	<10	<10	4,790	0.72	0.0022	464
			10/29/2012	5.92	7.66	2,950	1200	590	34	150	160	360	200	<0.25	2.4	0.18	<0.5	<0.01	1.1	11	360	<10	<10	4,750	0.78	0.0092	109
			7/23/2012	5.79	7.79	3,010	1400	530	30	120	130	397	210	<0.05	2.1	0.15	<0.1	0.041	0.86	3	397	<10	<10	4,720	1.4	0.0021	467
			4/18/2012	5.58	8.00	3,000	1500	450	27	120	120	400	230	<0.1	2	0.13	<0.01	0.89	3.12	400	<10	<10	4,660	0.6	0.0021	481	
			1/11/2012	5.72	7.86	2,750	1200	520	30	140	140	400	170	<0.1	4	0.18	0.1	0.033	0.94	3.2	400	<10	<10	4,560	0.55	0.0027	375
			11/21/2011	5.80	7.78	2,740	1200	410	25	130	120	380	200	<0.3	2.3	0.13	<0.6	0.053	0.9	2.73	380	<10	<10	4,470	0.7	0.0023	440
			7/26/2011	6.38	7.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
			7/25/2011	NA	NA	3,690	1199.9	530	33	140	150	380	200.2	<0.05	1.8	0.14	<0.1	0.053	0.91	3.281	380	<5	<5	4,900	0.73	0.0027	366
			4/20/2011	6.40	7.18	2,810	1214	500	27	140	130	400	216	<0.05	1.7	0.24	<0.18	0.067	0.95	3.3	400	<2.0	<2.0	4,430	NA	0.0027	368
			1/24/2011	5.78	7.42	2,380	1100	370	24	110	120	380	180	<0.15	1.8	0.16	<0.3	0.63	0.68	2.8	380	<2.0	<2.0	4,020	0.89	0.0025	393
			10/28/2010	NA	NA	2,330	960	390	25	140	140	350	160	<0.1	3.9	0.15	<0.1	NA	0.75	2.6	350	<10	<10	3,860	1.3	0.0027	369
			10/21/2010	6.37	7.21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
			7/27/2010	6.48	7.1	616	43	52.5	6.21	115	44.7	341	160	<0.10	2.9	0.063	<0.10	0.11	0.274	0.18	341	<1.0	<1.0	1,000	9.34	0.0042	239
			4/27/2010	3.84	6.86	676	47	54.7	4.60	107	43.6	327	140	<0.10	0.98	0.0714	<0.10	0.0458	0.18	327	<1.0	<1.0	990	4.06	0.0038	261	
			1/27/2010	3.13	7.57	694	55	56.2	6.80	123	43.2	340	150	0.40	1.7	0.12	<0.10	0.33	0.875	0.19	340	<1.0	<1.0	1,000	16.6	0.0035	289
			10/19/2009	2.28	8.42	766	140	121	16.7	111	52.4	303	150	0.25	2.8	0.0959	0.11	<0.10	0.208	0.47	303	<1.0	<1.0	1,200	7.79	0.0034	298
			8/20/2009	3.25	7.45	705	94	86.8	11.7	116	35.6	286	150	0.21	2.7	NA	<0.10	0.12	0.248	0.38	286	<1.0	<1.0	1,000	7.15	0.0040	247
			5/12/2009	3.58	7.12	695	100	82.1	13.2	108	45	288	150	NA	NA	0.11	NA	0.66	0.29	288	<1.0	<1.0	1,100	23.9	0.0029	345	
			3/26/1996	NA	NA	1,870	773	380	24.0	125	95	427	154	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
			6/9/1976	NA	NA	1,706	667	400	16.2	94	95	474	159	0.4	NA	0.12	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	
			1/17/1966	NA	NA	1,700	652	406	20.0	95	83	440	175	1	NA	0.07	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	
32S/12E-24B02	Screened from 120-145' - 2-inch diameter	13.58																									
	Height of steel casing added to the concrete pad elevation	2.88	10/15/2013	NA	NA	630	30	44	3.8	98	32	290	170	<0.05	<1	<0.05	<0.1	<0.01	0.13	<0.1	290	<10	<10	920	0.39	NA	NA
	Pad elevation NAVD 88	10.70	10/14/2013	7.08	6.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	TOC elevation prior to renovation (Approximate)	10.7	7/9/2013	7.17	6.41	630	30	43	3.9	110	33	295	170	<0.05	<1	0.076	<0.1	<0.01	0.14	<0.1	295	<10	<10	940	0.6	NA	NA
			4/10/2013	6.33	7.25	630	31	44	4	100	32	310	160														

Table A2 : Northern Cities Sentry Well Water Quality Data Summary - Wells 30F Highway 1

Well	Construction	Top of Casing Elevation (feet NAVD)	Date	Depth to Water (feet)	Groundwater Elevation (feet NAVD)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Bicarbonate (as CaCO3) (mg/L)	Sulfate (mg/L)	Nitrate (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Boron (mg/L)	Fluoride (mg/L)	Iodide (mg/L)	Manganese (mg/L)	Bromide (mg/L)	Alkalinity, Total (as CaCO3) (mg/L)	Carbonate (as CaCO3) (mg/L)	Hydroxide (as CaCO3) (mg/L)	Specific Conductance (umhos/cm)	Iron (mg/L)	Bromide / Chloride Ratio	Chloride / Bromide Ratio	
32S/13E-30F01	Screened from 15'-30 and 40-55' - 1-inch diameter	23.16																										
	Height of steel casing added to the concrete pad elevation	2.80	10/15/2013	NA	NA	530	78	73	2.3	47	22	86	140	12	<1	0.072	<0.1	<0.01	<.005	0.17	86	<10	<10	830	<0.05	0.0022	459	
	Pad elevation NAVD 88	20.36	10/14/2013	17.07	6.09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	TOC elevation prior to renovation (Approximate)	20.4	7/10/2013	NA	NA	480	80	64	2.2	49	22	85	140	12.2	<1	0.089	<0.1	<0.01	<.005	<0.1	85	<10	<10	770	<0.05	NA	NA	NA
			7/9/2013	16.17	6.99	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
			4/11/2013	NA	NA	460	60	60	2.20	38	18	78	120	12	<1	0.091	<0.1	<0.01	<.005	0.2	78	<10	<10	710	<0.05	0.0033	300	
			4/10/2013	14.58	8.58	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
			1/15/2013	NA	NA	440	65	64	2.40	40	19	95	130	12	<1	0.090	<0.1	<0.01	<.005	0.11	95	<10	<10	720	0.05	0.0017	591	
			1/14/2013	14.36	8.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
			10/30/2012	14.95	8.21	470	60	66	2.50	43	20	75	123	12	<1	0.087	<0.1	<0.01	<.005	0.13	75	<10	<10	720	<0.05	0.0022	462	
			7/24/2012	14.00	9.16	470	73	66	2.70	36	18	86	120	13	<1	<0.1	<0.1	<0.01	0.019	0.11	86	<10	<10	720	<0.05	0.0015	664	
			4/19/2012	NA	NA	450	72	52	1.90	32	15	81	130	13	<1	<0.1	<0.2	<0.01	<.005	<0.2	81	<10	<10	700	<0.1	NA	NA	
			4/18/2012	13.42	9.74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
			1/10/2012	13.80	9.36	460	67	61	2.00	35	17	81	120	11	<1	<0.1	0.12	<0.01	<.005	<0.1	81	<10	<10	720	<0.1	NA	NA	
			11/21/2011	13.78	9.38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
			11/17/2011	NA	NA	470	70	82	2.40	40	19	78	120	12	<1	<0.1	<0.1	<0.01	<.005	0.16	78	<10	<10	720	<0.1	0.0023	438	
			7/26/2011	13.50	9.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
			7/25/2011	NA	NA	460	65.8	68	4.40	37	19	78	117.4	12.17	<1	0.100	0.101	<0.01	0.014	0.178	78	<5	<5	720	0.11	0.0027	370	
			4/20/2011	12.82	10.34	460	71	69	2.60	36	14	87	124	12	<1	0.180	0.11	<0.01	<.005	0.17	87	<2.0	<2.0	730	NA	0.0024	418	
			1/24/2011	13.33	9.97	510	75	64	4.00	34	18	83	140	11	<1	0.170	0.11	<0.01	<.005	<0.1	83	<2.0	<2.0	780	<0.1	NA	NA	
			10/21/2010	16.55	6.61	540	100	73	2.00	43	21	88	120	13	<1.0	0.067	<0.1	NA	<.005	<0.3	88	<10	<10	894	<1.	NA	NA	
			7/26/2010	15.68	7.48	464	74	82.2	2.16	47.9	25.1	88.0	120	12	<0.50	0.098	<0.10	<0.10	0.0817	0.37	88.0	<1.0	<1.0	710	0.79	0.0050	200	
			4/27/2010	11.02	9.38	534	72	77.1	2.59	45.8	23.6	100	140	9.8	0.56	0.129	<0.10	<0.10	0.112	0.29	100	<1.0	<1.0	780	1.02	0.0040	248	
			1/28/2010	12.73	7.67	725	140	99.9	2.70	76.4	35.8	214	170	1.6	0.84	0.120	<0.10	0.112	0.56	214	<1.0	<1.0	1,200	0.640	0.0040	250		
			10/19/2009	14.33	6.07	522	74	85.6	2.35	52.8	26.3	102	150	13	0.70	0.136	<0.10	0.123	0.32	102	<1.0	<1.0	770	1.30	0.0043	231		
			8/19/2009	14.34	6.06	648	92	98.9	3.84	63.1	31.9	113	190	10	0.56	NA	<0.10	0.12	1.03	0.32	113	<1.0	<1.0	970	4.52	0.0035	288	
			5/12/2009	12.38	8.02	792	110	108	2.89	80.2	39.9	136	280	NA	NA	<0.10	NA	0.0353	0.39	136	<1.0	<1.0	1,200	0.261	0.0035	282		
32S/13E-30F02	Screened from 75'-100' - 2-inch diameter	23.16																										
	Height of steel casing added to the concrete pad elevation	2.80	10/15/2013	NA	NA	570	50	45	2.7	75	33	190	140	12	<1	0.69	0.19	<0.01	0.099	0.38	190	<10	<10	890	<0.05	0.0076	132	
	Pad elevation NAVD 88	20.36	10/14/2013	17.52	5.64	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	TOC elevation prior to renovation (Approximate)	20.4	7/10/2013	NA	NA	570	50	38	2.6	78	32	190	180	<0.05	<1	0.08	0.13	<0.01	0.14	<0.1	190	<10	<10	880	<0.05	NA	NA	
			7/9/2013	17.15	6.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
			4/11/2013	NA	NA	590	50	41	2.6	70	30	190	140	14	<1	0.09	0.1	<0.01	0.082	0.43	190	<10	<10	880	<0.05	0.0086	116	
			4/10/2013	15.76	7.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
			1/15/2013	NA	NA	550	50	44	2.9	72	31	200	140	13	<1	0.09	0.1	<0.01	0.011	0.32	200	<10	<10	880	0.12	0.0064	156	
			1/14/2013	15.01	8.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
			10/30/2012	15.27	7.89	610	48	45	3.0	79	34	188	135	13	<1	0.09	<0.1	<0.01	0.06	0.31	188	<10	<10	890	0.011	0.0065	155	
			7/24/2012	14.82	8.34	590	56	46	3.2	69	30	194	140	14	<1	<0.1	0.11	<0.01	0.038	0.27	194	<10	<10	880	<0.05	0.0048	207	
			4/19/2012	NA	NA	600	60	40	2.7	68	30	200	140	14	<1	<0.1	<0.2	<0.01	0.19	0.3	200	<10	<10	890	0.11	0.0050	200	
			4/18/2012	14.38	8.78	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
			1/12/2012	14.31	8.85	610	52	45	3.0	73	32	200	130	12	<1	<0.1	0.25	<0.02	0.29	0.33	200	<10	<10	890	<0.1	0.0063	158	
			11/21/2011	14.94	8.22	580	49	38	2.7	73	30	190	120	13	<1	0.07	<0.1	<0.01	0.022	0.34	190	<10	<10	870	<0.1	0.0069	144	
			7/26/2011	14.46	8.7	NA	NA	NA	NA	NA																		

Table A3 : Northern Cities Sentry Well Water Quality Data Summary - Wells 30N Pier Avenue

Well	Construction	Top of Casing Elevation (feet NAVD)	Date	Depth to Water (feet)	Groundwater Elevation (feet NAVD)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Bicarbonate (as CaCO3) (mg/L)	Sulfate (mg/L)	Nitrate (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Boron (mg/L)	Fluoride (mg/L)	Iodide (mg/L)	Manganese (mg/L)	Bromide (mg/L)	Alkalinity, Total (as CaCO3) (mg/L)	Carbonate (as CaCO3) (mg/L)	Hydroxide (as CaCO3) (mg/L)	Specific Conductance (umhos/cm)	Iron (mg/L)	Bromide / Chloride Ratio	Chloride / Bromide Ratio
32S/13E-30N01	Screened from 15-40' - 1-inch diameter	16.13																									
	Height of steel casing added to the concrete pad elevation	2.60	10/15/2013	NA	NA	950	200	140	32	74	60	330	180	<0.05	<1	0.21	0.33	0.01	0.095	1.3	330	<10	<10	1,570	2.8	0.0065	154
	Pad elevation NAVD 88	13.53	10/14/2013	9.86	6.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	TOC elevation prior to renovation (Approximate)	13.5	7/10/2013	NA	NA	830	175	120	29	71	54	310	185	<0.05	<1	0.22	0.32	0.01	0.087	0.84	310	<10	<10	1,430	2.3	0.0048	208
			7/9/2013	9.40	6.73	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
			4/10/2013	8.98	7.15	860	180	120	29	67	54	320	180	<0.05	1.1	0.21	0.31	0.01	0.087	1.2	320	<10	<10	1,470	2.5	0.0067	150
			1/14/2013	8.60	7.53	800	170	120	32	66	53	280	200	<0.05	1.1	0.22	0.26	<0.01	0.09	1.2	280	<10	<10	1,380	2.5	0.0071	142
			10/29/2012	8.96	7.17	900	180	120	34	77	60	300	190	<0.05	<1	0.21	0.40	0.011	0.098	1.2	300	<10	<10	1,500	2.8	0.0067	150
			7/23/2012	8.54	7.59	840	190	120	31	56	45	266	200	<0.05	<1	0.22	0.43	<0.01	0.096	1.2	266	<10	<10	1,370	2.3	0.0063	158
			4/18/2012	8.53	7.60	1,050	280	140	31	59	47	330	210	<0.1	1.4	0.2	0.50	<0.01	0.078	1.3	330	<10	<10	1,680	2.4	0.0046	215
			1/9/2012	8.74	7.39	1,050	260	170	34	68	52	307	200	<0.05	2.7	0.21	0.41	<0.01	0.088	1.9	307	<10	<10	1,760	2.9	0.0073	137
			11/21/2011	8.78	7.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
			11/17/2011	NA	NA	1,300	360	320	40	90	69	390	220	<0.1	<1	0.23	0.38	0.017	0.11	2.5	390	<10	<10	2,210	3.4	0.0069	144
			7/26/2011	9.01	7.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
			7/25/2011	NA	NA	1,680	445.3	230	42	99	81	380	255.5	<0.05	1.2	0.21	<0.1	<0.01	0.12	3.016	380	<5	<5	2,480	4.2	0.0068	148
			4/20/2011	8.59	7.54	890	210	130	26	68	46	180	215	<0.05	<1	0.24	0.39	0.013	0.086	4.57	180	<2.0	<2.0	1,550	NA	0.0218	46
			1/24/2011	8.18	7.35	870	180	100	28	84	46	240	210	<0.05	<1.0	<0.1	0.34	0.12	0.24	3.63	240	<2.0	<2.0	1,430	18	0.0202	50
			10/21/2010	9.99	6.14	890	190	120	26	58	45	246	200	<0.1	<1.0	<0.1	0.37	NA	0.078	2.3	246	<10	<10	1,498	<0.1	0.0121	83
			7/27/2010	8.97	7.16	917	200	130	30.0	75.0	56.2	241	220	<0.10	<0.50	0.165	0.29	0.23	0.101	2.8	241	<1.0	<1.0	1,400	2.61	0.0140	71
			4/27/2010	6.14	7.36	808	150	130	29	136	55.6	286	210	0.76	1.7	0.171	0.37	0.19	0.276	2.6	286	<1.0	<1.0	1,300	20.4	0.0173	58
			1/26/2010	4.90	8.60	902	210	155	33.5	156	66.4	307	230	<0.10	1.7	0.317	0.30	0.12	0.333	3.2	307	<1.0	<1.0	1,500	27.3	0.0152	66
			10/20/2009	6.53	7.00	828	200	159	34.3	118	59.8	238	230	<0.10	1.3	0.241	0.38	<0.10	0.157	3.2	238	<1.0	<1.0	1,300	5.33	0.0160	63
			8/20/2009	6.71	6.82	835	160	150	27.8	121	49.4	235	220	<0.10	1.3	NA	0.37	0.12	0.228	2.9	235	<1.0	<1.0	1,400	15.9	0.0181	55
			5/11/2009	6.03	7.50	960	180	175	33.5	86.7	46.2	274	220	NA	NA	NA	0.36	NA	0.113	3.2	274	<1.0	<1.0	1,500	2.26	0.0178	56
32S/13E-30N03	Screened from 60-135' - 2-inch diameter	16.13																									
	Height of steel casing added to the concrete pad elevation	2.60	10/15/2013	NA	NA	580	60	57	3.3	71	32	170	150	14	<1	0.057	0.16	<0.01	0.37	0.41	170	<10	<10	910	0.1	0.0068	146
	Pad elevation NAVD 88	13.53	10/14/2013	10.72	5.41	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	TOC elevation prior to renovation (Approximate)	13.5	7/10/2013	NA	NA	590	60	48	3.1	71	31	160	150	15.1	<1	0.074	0.18	<0.01	1.3	0.17	160	<10	<10	900	0.43	0.0028	353
			7/9/2013	10.36	5.77	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
			4/10/2013	8.26	7.87	600	66	53	3.3	69	31	160	150	15	<1	0.11	0.2	<0.01	0.0640	0.35	160	<10	<10	910	<0.05	0.0053	189
			1/14/2013	7.71	8.42	570	66	55	3.4	68	30	165	150	15	<1	0.											

Table A4 : Northern Cities Sentry Well Water Quality Data Summary - Oceano CSD Wells

Well	Construction	Top of Casing Elevation (feet NAVD)	Date	Depth to Water (feet)	Groundwater Elevation (feet NAVD)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Bicarbonate (as CaCO3) (mg/L)	Sulfate (mg/L)	Nitrate (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Boron (mg/L)	Fluoride (mg/L)	Iodide (mg/L)	Manganese (mg/L)	Bromide (mg/L)	Alkalinity, Total (as CaCO3) (mg/L)	Carbonate (as CaCO3) (mg/L)	Hydroxide (as CaCO3) (mg/L)	Specific Conductance (umhos/cm)	Iron (mg/L)	Bromide / Chloride Ratio	Chloride / Bromide Ratio		
Oceano MW-Green	Screened from 110-130' - 3-inch diameter	30.49	-4.14	10/16/2013	NA	NA	690	30	40	3.40	100	49	340	190	<0.05	<1	0.091	0.14	<0.01	0.23	<0.1	340	<10	<10	1,050	7.4	NA	NA	
	Casing relative to concrete pad	34.63	10/14/2013	30.31	4.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	<1	0.18	0.15	0.02	0.28	<0.1	240	<10	<10	1,230	4.9	NA	NA
	Pad elevation above MSL, approximate		7/11/2013	NA	NA	860	60	50	4.40	110	47	240	340	<0.05	<1	0.19	0.14	0.04	0.23	<0.1	240	<10	<10	1,230	4.9	NA	NA		
	All elevations relative to MSL		7/9/2013	29.98	4.65	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	<1	0.2	0.12	0.03	0.28	<0.2	250	<10	<10	1,250	5.7	NA	NA
			4/11/2013	NA	NA	900	60	69	4.60	110	47	250	350	0.82	<1	0.2	0.12	0.03	0.28	<0.2	250	<10	<10	1,250	5.7	NA	NA		
			4/10/2013	23.30	11.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	<1	0.21	0.13	<0.01	0.31	<0.2	260	<10	<10	1,230	4.2	NA	NA
			1/16/2013	NA	NA	820	66	76	5.00	100	47	260	320	<0.1	<1	0.22	0.13	<0.01	0.31	<0.2	260	<10	<10	1,230	4.2	NA	NA		
			1/14/2013	23.59	11.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	<1	0.19	0.14	0.04	0.23	<0.1	255	<10	<10	1,190	4	NA	NA
			10/30/2012	27.31	7.32	780	65	75	4.70	100	46	255	280	<0.05	<1	0.22	0.15	0.04	0.24	<0.1	250	<10	<10	1,220	6.7	NA	NA		
			7/25/2012	27.15	7.48	830	76	80	5.30	96	45	250	310	<0.05	<1	0.22	0.15	0.04	0.24	<0.1	250	<10	<10	1,220	6.7	NA	NA		
			4/19/2012	NA	NA	790	87	69	4.50	52	37	250	270	<0.1	<1	0.19	0.21	0.05	0.17	<0.2	250	<10	<10	1,180	4	NA	NA		
			4/18/2012	21.65	12.98	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	<1	0.23	0.21	0.069	0.23	<0.2	270	<10	<10	1,150	4.8	NA	NA
			1/12/2012	23.29	11.34	760	76	85	4.00	79	40	270	190	<0.1	<1	0.23	0.21	0.069	0.23	<0.2	270	<10	<10	1,150	4.8	NA	NA		
			11/21/2011	22.46	12.17	720	39	38	3.40	96	43	320	180	<0.05	3.5	0.079	0.19	0.013	0.17	<0.1	320	<10	<10	1,050	4.8	NA	NA		
			7/26/2011	25.51	9.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	<1	0.16	0.17	0.041	0.23	0.199	310	<5	<5	1,170	5.3	0.0029	348
			7/25/2011	NA	NA	760	69.3	66	6.40	80	35	310	208.8	<0.05	<1	0.16	0.17	0.041	0.23	0.199	310	<5	<5	1,170	5.3	0.0029	348		
			4/20/2011	114.79	-80.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	<1.0	<0.1	0.2	4.42	0.4	0.63	19.0	<2.0	<2.0	480	10	0.0064	156
			1/24/2011	106.59	-71.96	310	98	22	8.1	34	9.2	19.0	53	<0.05	<1.0	<0.1	0.2	4.42	0.4	0.63	19.0	<2.0	<2.0	480	10	0.0064	156		
			10/28/2010	NA	NA	290	81	26	9.3	64	11	160.0	68	<0.1	<1.0	<0.1	0.2	NA	0.85	0.36	160.0	<10	<10	520	38	0.0044	225		
			10/21/2010	112.71	-82.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	<1.0	<0.1	0.2	NA	NA	NA	NA	NA	NA	NA	NA		
			7/26/2010	95.61	-65.12	438	85	34.3	1.93	61.7	30.4	30.0	210	<0.10	<0.50	0.0435	0.58	0.22	1.46	0.32	30.0	<1.0	<1.0	690	36	0.0038	266		
			4/26/2010	63.90	-33.41	560	83	47.7	5.7	86.1	48.3	62	310	<0.10	0.84	<0.02	<0.1	0.56	2.54	0.31	62.0	<1.0	<1.0	880	233	0.0037	268		
			1/27/2010	43.71	-13.22	460	130	45.0	25.4	682	124	112	100	0.56	NA	<0.0200	0.21	0.25	32.4	0.49	112.0	<1.0	<1.0	760	4,360	0.0038	265		
			10/20/2009	29.20	1.29	362	92	39.6	2.92	19.2	45.1	76.8	110	<0.10	<0.50	0.0697	<0.10	<0.10	0.242	0.39	80.0	3.2	<1.0	590	11.4	0.0042	236		
			8/19/2009	24.65	5.89	322	150	93.2	16.7	23.9	12.1	3.0	4.0	<0.10	1.3	NA	0.19	0.5	0.7	0.74	23.0	20.0	<1.0	640	153	0.0049	203		
			5/16/1983	15.80	14.69	665	35	40	NA	85	65	360	90	<4	NA	NA	0.2	NA	0.01	NA	NA	ND	ND	ND	ND	ND	ND		
Oceano MW-Blue	Screened from 190-210' and 245-265' - 3-inch diameter	30.54	-4.09	10/16/2013	NA	NA	360	100	98	20	3.1	15	66	36	<0.05	<1	0.19	<0.1	0.11	0.057	0.38	139	73	<10	710	4.1	0.0038	263	
	Casing relative to concrete pad	34.63	10/14/2013	30.98	3.65	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	<1	0.2	0.11	0.043	0.44	117	35	<10	730	3.2	0.0031	318	
	Pad elevation above MSL, approximate</																												

Table A4 : Northern Cities Sentry Well Water Quality Data Summary - Oceano CSD Wells

Well	Construction	Top of Casing Elevation (feet NAVD)	Date	Depth to Water (feet)	Groundwater Elevation (feet NAVD)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Bicarbonate (as CaCO3) (mg/L)	Sulfate (mg/L)	Nitrate (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Boron (mg/L)	Fluoride (mg/L)	Iodide (mg/L)	Manganese (mg/L)	Bromide (mg/L)	Alkalinity, Total (as CaCO3) (mg/L)	Carbonate (as CaCO3) (mg/L)	Hydroxide (as CaCO3) (mg/L)	Specific Conductance (umhos/cm)	Iron (mg/L)	Bromide / Chloride Ratio	Chloride / Bromide Ratio
Oceano MW-Silver	Screened from 395-435' and 470-510' - 3-inch diameter	30.48																									
	Casing relative to concrete pad	-4.15	10/14/2013	30.92	3.71	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pad elevation above MSL, approximate	34.63	7/9/2013	30.91	3.72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	All elevations relative to MSL		4/10/2013	26.08	8.55	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
			1/14/2013	23.12	11.51	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
			10/30/2012	27.14	7.49	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
			7/25/2012	27.68	6.95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
			4/18/2012	20.13	14.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
			1/11/2012	23.00	11.63	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
			11/21/2011	22.85	11.78	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
			7/26/2011	25.23	9.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
			4/2/2011	NA	NA	410	97	100	7.2	3.5	21	80	134	<0.05	<1	0.23	0.18	0.097	0.065	0.42	100	20	<2.0	770	NA	0.0043	231
			4/20/2011	21.27	13.36	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
			1/24/2011	22.02	12.61	440	92	90	9.2	3.4	27	90	140	<0.05	<1.0	0.25	0.11	0.94	0.041	0.35	110	20	<2.0	810	2.2	0.0038	263
			10/21/2010	29.11	5.52	460	90	110	15	6.8	32	94	140	<0.1	<1.0	0.2	0.1	NA	0.1	0.38	124	30	<10	868	3.5	0.0042	237
			7/26/2010	24.24	6.24	478	83	109	5.94	52.9	30.4	122.0	94	<0.10	<0.50	0.255	<0.10	0.41	0.477	0.56	130.0	8.0	<1.0	730	61.0	0.0067	148
			4/26/2010	19.04	11.44	452	83	83	7.42	29.3	34.5	72.0	190	<0.1	0.56	0.134	<0.10	0.65	0.702	0.4	86.0	14.0	<1.0	810	71.0	0.0048	208
			1/27/2010	21.05	9.43	496	71	92.2	10.6	22.9	39.1	13.0	230	<0.10	<0.50	0.323	<0.10	0.20	0.604	0.29	51.0	38.0	<1.0	780	54.4	0.0041	245
			10/20/2009	27.52	2.96	564	71	80.8	8.63	33.2	49.8	49.6	310	<0.10	<0.50	0.148	<0.10	0.37	0.32	64.0	14.4	<1.0	850	20.0	0.0045	222	
			8/19/2009	29.34	1.14	522	180	148	71.6	95.2	8.42	30.0	3.5	<0.10	1.7	NA	0.24	0.52	2.36	0.76	170	140	<1.0	1,000	278	0.0042	237
			5/16/1983	13.50	16.98	630	40	40	NA	90	50	330	80	<4	NA	NA	0.1	NA	0.02	NA	330	ND	ND	900	0.05	NA	NA
Oceano # 8																											
	Casing relative to concrete pad		10/16/2013	NA	NA	670	40	44	2.6	100	47	350	180	0.47	<1	<0.05	0.15	<0.01	0.03	<0.1	350	<10	<10	1,053	0.11	NA	NA
	Pad elevation above MSL, approximate		7/10/2013	NA	NA	670	44	43	2.8	110	52	350	180	<0.05	<1	0.072	0.12	<0.01	0.032	<0.1	350	<10	<10	1,070	0.11	NA	NA
	All elevations relative to MSL		4/11/2013	NA	NA	720	43	40	2.7	98	46	350	170	<0.05	<1	0.072	0.14	<0.01	0.029	<0.1	350	<10	<10	1,070	0.12	NA	NA
			1/16/2013	NA	NA	660	43	43	2.7	100	47	360	180	<0.05	<1	0.07	0.1	<0.01	0.031	<0.1	360	<10	<10	1,060	0.130	NA	NA
			10/30/2012	NA	NA	660	40	44	2.9	110	49	345	170	<0.05	<1	0.071	0.14	<0.01	0.03	<0.1	345	<10	<10	1,070	0.086	NA	NA
			7/24/2012	NA	NA	700	47	44	2.8	93	45	356	180	<0.05	<1	<0.1	0.17	<0.01	0.029	<0.1	356	<10	<10	1,070	0.660	NA	NA
			4/25/2012	NA	NA	680	48	44	2.7	95	43	350	200	<0.1	<1	<0.1	0.26	<0.01	0.032	<0.2	350	<10	<10	1,070	0.200	NA	NA
			1/10/2012	NA	NA	690	45	44	2.6	100	44	340	160	<0.05	<1	<0.1	0.2	<0.01	0.024	<0.1	340	<10	<10	1,070	0.100	NA	NA
			11/22/2011	NA	NA	690	41	39	2.7	100	46	350	160	<0.1	<1	0.046	<0.2	0.013	0.03	<0.2	350	<10	<10	1,010	0.0	NA	NA
			7/25/2011	NA	NA	690	44	39	4.5	86	40	340	166.9	<0.05	<1	<0.1	0.145	<0.01	0.026	<0.1	340	<5	<5	1,070	0.01	NA	NA
Oceano MW-Yellow	Screened from 625-645' - 3																										

Table A5 : Northern Cities Sentry Well Water Quality Data Summary - Wells 36L Oceano Dunes

Well	Construction	Top of Casing Elevation (feet NAVD)	Date	Depth to Water (feet)	Groundwater Elevation (feet NAVD)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Bicarbonate (as CaCO3) (mg/L)	Sulfate (mg/L)	Nitrate (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Boron (mg/L)	Fluoride (mg/L)	Iodide (mg/L)	Manganese (mg/L)	Bromide (mg/L)	Alkalinity, Total (as CaCO3) (mg/L)	Carbonate (as CaCO3) (mg/L)	Hydroxide (as CaCO3) (mg/L)	Specific Conductance (umhos/cm)	Iron (mg/L)	Bromide / Chloride Ratio	Chloride / Bromide Ratio
12N/36W-36L01	Screened from 227-237' - 2-inch diameter	26.77																									
Height of steel casing added to the concrete pad elevation Pad elevation NAVD 88 TOC elevation prior to renovation (Approximate)	2.79	10/16/2013	NA	NA	910	40	63	4.5	120	43	170	460	0.76	<1	0.13	<0.2	<0.01	<0.005	<0.2	170	<10	<10	1,210	<0.05	NA	NA	
	23.98	10/14/2013	21.71	5.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	24.0	7/10/2013	NA	NA	910	39	54	3.2	120	42	175	430	0.78	<1	0.14	<0.1	<0.01	<0.005	<0.1	175	<10	<10	1,210	0.18	NA	NA	
		7/9/2013	21.37	5.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		4/11/2013	NA	NA	890	38	59	3.6	110	43	180	420	0.82	<1	0.16	<0.2	<0.01	<0.005	<0.2	180	<10	<10	1,200	<0.05	NA	NA	
		4/10/2013	20.10	6.67	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		1/15/2013	NA	NA	870	39	61	3.4	110	41	178	440	0.57	<1	0.15	<0.2	<0.01	<0.005	<0.2	178	<10	<10	1,190	0.13	NA	NA	
		1/14/2013	18.62	8.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		10/31/2012	20.11	6.66	910	35	66	4.0	130	46	165	400	1.60	<1	0.16	0.2	<0.01	<0.005	<0.5	165	<10	<10	1,200	<0.05	NA	NA	
		7/24/2012	19.42	7.35	880	43	65	3.9	110	41	168	420	<0.05	<1	0.16	<0.1	<0.01	0.02	<0.1	168	<10	<10	1,190	0.19	NA	NA	
		4/20/2012	18.26	8.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		4/18/2012	23.83	2.94	880	47	52	3.2	95	36	180	450	0.42	<1	0.12	<0.2	<0.01	<0.005	<0.2	180	<10	<10	1,190	<0.1	NA	NA	
		1/11/2012	17.68	9.09	790	41	64	4.1	120	44	170	380	1.30	<1	0.19	0.18	<0.02	<0.005	<0.2	170	<10	<10	1,190	<0.1	NA	NA	
		11/21/2011	18.08	8.69	910	39	55	3.5	110	40	180	380	0.37	<1	0.16	<0.2	<0.01	<0.005	<0.2	180	<10	<10	1,200	<0.1	NA	NA	
		7/26/2011	19.63	7.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		7/25/2011	NA	NA	890	40.5	65	5.7	110	43	170	408.9	0.39	<1	0.15	<0.1	<0.01	<0.005	<0.1	170	<5	<5	1,200	0.024	NA	NA	
		4/21/2011	NA	NA	890	42	61	4.2	100	30	170	415	0.60	<1	0.19	0.07	<0.01	<0.005	<0.1	170	<2.0	<2.0	1,200	NA	NA	NA	
		4/20/2011	18.26	8.51	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		1/24/2011	17.61	8.68	890	41	55	5.1	98	36	180	400	0.50	<1.0	0.20	0.15	<0.10	<0.005	<0.1	180	<2.0	<2.0	1,200	<0.1	NA	NA	
		10/21/2010	20.75	5.54	910	38	76	3.6	130	47	169	400	0.39	<1.0	0.10	<0.1	NA	<0.005	<0.3	169	<10	<10	1,213	<0.1	NA	NA	
		7/27/2010	21.18	5.11	707	36	64.2	3.70	127	47.4	182	420	0.40	<0.50	0.158	<0.10	<0.10	<0.0500	0.11	182	<1.0	<1.0	1,100	<0.0031	327		
		4/26/2010	15.94	8.06	860	42	70.3	4.13	129	48.9	191	400	0.45	0.77	0.23	<0.1	0.15	0.057	0.14	191	<1.0	<1.0	1,100	0.43	0.0033	300	
		10/21/2009	17.72	6.28	856	38	72.0	4.64	131	48.2	192	420	0.49	0.84	0.150	0.12	<0.10	0.0994	0.13	192	<1.0	<1.0	1,100	0.68	0.0034	292	
		8/20/2009	19.16	4.84	890	39	78.0	4.21	138	48.1	184	390	0.49	0.56	NA	<0.10	<0.10	0.185	0.14	184	<1.0	<1.0	1,200	0.203	0.0036	279	
		5/11/2009	17.68	6.32	832	63	83.8	4.88	111	45.4	204	330	NA	NA	NA	0.12	NA	0.551	0.22	204	<1.0	<1.0	1,200	0.402	0.0035	286	
		3/26/1996	NA	NA	882	35	66	4.8	124	47	233	408	2	NA	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		6/8/1976	NA	NA	936	38	72	3.5	130	48	223	423	0.6	NA	0.15	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
12N/36W-36L02	Screened from 535-545' - 2-inch diameter	26.77																									
Height of steel casing added to the concrete pad elevation Pad elevation NAVD 88 TOC elevation prior to renovation (Approximate)	2.79	10/16/2013	NA	NA	810	90	110	6.4	91	40	260	240	<0.05	2.2	0.32	<0.1	0.1	0.15	0.32	260	<10	<10	1,220	0.54	0.0036	281	
	23.98	10/14/2013	23.94	2.83	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	24.0	7/10/2013	NA	NA	790	105	94	5.8	88	38	260	240	<0.05	2.5	0.34	<0.1	0.08	0.13	0.11	260	<10	<10	1,240	0.31	0.0010	955	
		7/9/2013	23.15	3.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		4/11/2013	NA	NA	830	100	99	6.2	83	37	260	220	<0.05	2.2	0.35	<0.1	0.098	0.14	0.45	260	<10	<10	1,240	0.60	0.0045	222	
		4/10/2013	15.35	11.42	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		1/15/2013	NA	NA	770	110	110	6.7	84	38	265	220	<0.05	2.8	0.36	<0.1	0.02	0.14	0.20	265	<10	<10	1,240	0.61	0.0018	550	
		1/14/2013	11.24	15.53	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		10/31/2012	18.81	7.96	800	100	120	7.3	90	39	265	200	<0.1	2.4	0.4	0.34	0.12	0.14	0.34	265	<10	<10	1,250	0.30	0.0034	294	
		7/24/2012	19.05	7.72	800	134	125	7.4	83	35	277	200	<0.05	2.3	0.42	0.13	0.12	0.14	0.31	277	<10	<10	1,250	0.52	0.0023	432	
		4/18/2012	10.81	15.96	770	130	95	6.2	75	33	270	210	0.42	4	0.35	0.36	0.12	0.13	<0.2	270	<10	<10	1,250	0.77	NA	NA	
		1/11/2012	11.18	15.59	900	122	110	7.2	95	37	290	170	<0.1	4.8	0.48	0.28	<0.02	0.17	0.45	290	<10	<10	1,250	1.80	0.0037	271	
		11/21/2011	13.99	12.78	780	130	95	6.1	77	33	270	160	<0.1	<1	0.4	<0.2	<0.01	0.13	0.45	270	<10	<10	1,240	0.40	0.0035	289	
		7/26/2011	18.03	8.74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		7/25/2011	NA	NA	790	128.8	110	9.1	74	33	280	177	<0.05	2.3	0.36	0.12	0.14	0.13	0.51	280	<5	<5	1,280	2.30	0.0040	252	
		4/21/2011	NA	NA	770	120	90	5.3	86	26	280	206	<0.05	2.3	0.24	0.26	0.14	0.004	0.57	280	<2.0	<2.0	1,270	NA	0.0048	211	
		4/20/2011	10.33	16.44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		1/24/2011	9.37	16.92	800	120	95	7.6	75	30	300	190	<0.05	2.3	0.39	0.16	1.31	0.13	0.53	300	<2.0	<2.0	1,270	1.40	0.0044	226	
		10/21/2010	19.77	6.52	770	120	130	7.6	89	44	275	160	<0.1	3.4	0.48	<0.1	NA	0.15	0.54	275	<10	<10	1,293	0.12	0.0045	222	
		7/27/2010	20.53	5.76	737	110	121	7.81	91.1	38.9	268	190	<0.10	<0.50	0.427	0.10	0.77	0.180	0.80	268	<1.0	<1.0	1,200	0.845	0.0073	138	
		4/26/2010	9.24	14.76	720	100	116	6.88	85.4	32.4	215	210	1.5	0.77	0.382	0.2	0.28	0.167	0.7	215	<1.0	<1.0	1,100	3.870	0.0070	143	
		10/21/2009	17.65	6.35	638	99	113	6.15	81.6	23.0	172	200	<0.10	3.2	0.268	0.33	57	0.128	0.61	172	<1.0	<1.0	940	0.255	0.0062	162	

Table A6 : Northern Cities Sentry Well Water Quality Data Summary - County MW #3

Well	Construction	Top of Casing Elevation (feet NAVD)	Date	Depth to Water (feet)	Groundwater Elevation (feet NAVD)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Bicarbonate (as CaCO ₃) (mg/L)	Sulfate (mg/L)	Nitrate (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Boron (mg/L)	Fluoride (mg/L)	Iodide (mg/L)	Manganese (mg/L)	Bromide (mg/L)	Alkalinity, Total (as CaCO ₃) (mg/L)	Carbonate (as CaCO ₃) (mg/L)	Hydroxide (as CaCO ₃) (mg/L)	Specific Conductance (umhos/cm)	Iron (mg/L)	Bromide / Chloride Ratio	Chloride / Bromide Ratio
County MW-3 12N/35W-32C03	Screened from 90-170' - 5-inch diameter	47.92																									
Casing relative to concrete pad Pad elevation above MSL, approximate All elevations relative to MSL		47.92	10/16/2013	NA	NA	310	58	62	2.9	15	6.4	54	38	7.5	<1	0.06	<0.1	<0.01	0.009	0.1	54	<10	<10	450	0.21	0.0017	580
			10/14/2013	45.26	2.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
			7/11/2013	NA	NA	290	60	45	2.4	14	5.9	61	30	7.4	<1	0.071	<0.1	<0.01	0.006	<0.1	61	<10	<10	440	0.17	NA	NA
			7/9/2013	43.83	4.09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
			4/12/2013	NA	NA	330	58	55	2.9	16	6.6	60	35	7.5	<1	0.091	<0.1	<0.01	0.019	0.1	60	<10	<10	460	0.49	0.0017	580
			4/10/2013	37.89	10.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
			1/15/2013	NA	NA	290	62	57	2.8	15	6.3	55	38	8.3	<1	0.089	<0.1	<0.01	0.01	<0.1	55	<10	<10	470	0.23	NA	NA
			1/14/2013	32.26	15.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
			10/30/2012	40.05	7.87	330	57	60	3.3	19	7.5	60	36	7.8	<1	0.09	<0.1	<0.01	0.033	<0.1	60	<10	<10	470	1.9	NA	NA
			7/25/2012	38.62	9.3	330	67	61	3.3	17	6.4	59	35	8.2	<1	<0.1	<0.1	<0.01	0.068	<0.1	59	<10	<10	460	0.49	NA	NA
			4/19/2012	23.02	24.9	370	74	52	2.9	30	12	120	58	5	<1	0.17	0.2	<0.01	0.056	<0.2	120	<10	<10	580	1.3	NA	NA