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February 26, 2010

John Scardino
Woodlands Ventures, LLC
31200 Via Colinas, Suite 200
Westlake Village, California 91362

SUBJECT: January 2010 Groundwater Elevation Monitoring Report for The Woodlands Development, Nipomo Mesa, San Luis Obispo County, California

Dear Mr. Scardino:

This report documents the monitoring of water levels at thirteen wells in the vicinity of The Woodlands project and at the six wells on The Woodlands property. The monitoring program is being performed to enable compliance with Mitigation Measure 4.1-6d of the Woodlands Specific Plan Environmental Impact Report (1998):

> "Prior to approval of discretionary development (e.g. prior to recordation of the final map, Development Plan approval), the applicant shall conduct a complete survey of wells that could be affected by cumulative water level interference. The applicant shall then implement means to allow for continued production of these wells under drought conditions to the satisfaction of the County Engineer."

Monitoring Report Summary

Cleath-Harris Geologists (CHG) conducted a private domestic well survey between March and May 2000 and has been monitoring water levels in selected offsite wells and in The Woodlands wells on a monthly basis since March 1999. Well locations are shown on Figure 1. There are 19 wells currently being monitored.

Water level monitoring results show no evidence of significant water-level impacts to offsite wells from groundwater production in the four producing onsite wells. Observed water level fluctuations and declines are related to seasonal changes in precipitation and regional well pumping. Regional pumping appears to be heavy north of Camino Caballo.

Long term water level trends have been identified in the shallow aquifer wells. Water levels in wells along Via Concha north of The Woodlands have steadily risen since the end of 2005. Water levels in the Banneker Place and Eucalyptus Road wells southeast of The Woodlands have been dropping since spring 2006.

CHG recommends the following:

- In order to reduce cumulative impacts of pumping north of Camino Caballo, the Homestead well should continue to be utilized as the primary production well, and the Dawn well should be pumped minimally.

- Destroy the Highway 1 monitoring well.

- Installation of a casing liner and filter pack in the Flintcote well to ensure the continued monitoring of the well in the event of failure of the old steel casing.

Onsite Well Monitoring

Four of the onsite wells were constructed as production wells for the project, with the Highway 1 Monitoring well and the Flintcote well utilized as monitoring wells only. The Highway 1 Monitoring well was installed prior to the production wells to identify the aquifer zones beneath the site, evaluate water quality in these zones, and to determine general design parameters for the production wells. The Flintcote well was drilled in 1944, and the five Woodlands project wells were drilled in 1993 and 1994.

Currently, groundwater production is occurring at all four of the production wells. The Homestead well has become the primary supply well after being out of production from August 2007 to April 2009. The Mesa well is now the backup well after being the primary supply well through most of 2008 and until April 2009. The Highway 1 well is configured for golf course irrigation. The Dawn well is not pumped significantly because the Homestead well has become the primary supply well.

After test discharges of treated wastewater in the spring of 2007, consistent wastewater discharges began in September 2007. The effluent is pumped into Pond D where it is blended with water produced from the Highway 1 well and occasionally the Mesa well, and then the water is available for spray irrigation onto golf course turf. According to Fluid Resource Management of San Luis Obispo, approximately 8 million gallons (24 acre feet) of treated
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wastewater were discharged to the ponds during 2008 and approximately 9 million gallons (28 acre feet) of treated wastewater were discharged to the pond during 2009. According to golf course staff, the ratio of potable water pumped to Pond D to effluent pumped to Pond D is approximately 10:1.

Total potable water production from the four onsite wells was 545 acre feet in 2008, and 808 acre feet during 2009. The increase in production reflects the irrigation demand for the new golf course and driving range in March 2009. Well production volumes from the four wells are included in the table below, and are shown graphically on Figure 2.

Table 1
Woodlands 2008 and 2009 Water Usage Summary
Volumes in acre-feet

Month	Well				Total
	Dawn	Homestead	Mesa	Highway 1	
Jan-08	11.6	17.5	3.1	26.5	58.7
Feb-08	31.4	0.0	14.0	8.5	53.9
Mar-08	10.9	0.0	16.6	0.4	27.9
Apr-08	7.5	0.5	27.6	21.7	57.3
May-08	4.8	0.0	36.1	14.3	55.2
Jun-08	18.1	0.1	21.3	3.1	42.6
Jul-08	13.3	0.3	13.5	27.3	54.4
Aug-08	29.6	0.0	0.6	2.0	32.2
Sep-08	1.3	0.0	36.7	12.9	50.9
Oct-08	4.1	0.1	30.2	17.3	51.7
Nov-08	3.8	0.0	18.0	12.7	34.5
Dec-08	0.7	0.0	24.5	0.0	25.2
Total 2008	**137**	**19**	**242**	**147**	**545**
Jan-09	1.4	0.2	11.6	7.8	21.0
Feb-09	1.1	0.0	9.8	0.3	11.2
Mar-09	1.0	0.0	15.9	21.0	37.9
Apr-09	5.2	13.3	21.0	73.4	112.8
May-09	3.8	45.6	0.5	55.8	105.7
Jun-09	0.9	41.5	1.3	63.2	106.9
Jul-09	6.2	29.2	2.6	57.2	95.2
Aug-09	0.7	44.7	1.1	18.7	65.2
Sep-09	1.9	41.0	1.0	61.1	105.0
Oct-09	0.7	19.5	0.8	18.2	39.2
Nov-09	0.0	30.4	0.7	16.7	47.8
Dec-09	0.0	18.4	0.4	40.8	59.6
Total 2009	**23**	**284**	**67**	**434**	**808**

Groundwater elevations for the onsite wells and monthly precipitation are shown on Figure 3. The water level data tables are available upon request. Seasonal water level fluctuations have ranged between approximately 20 feet and 45 feet in the six onsite wells during the 10 years of monitoring. Since 2002, the range of seasonal fluctuation has increased in each of the wells because of higher pumping rates during the dry seasons as compared to the wet seasons. The slightly declining average water levels indicated in the hydrograph from the year 1999 through 2005 is a result of changing climatic conditions in the area during that period. Pumping at the Homestead well beginning in spring 2003, and Mesa, Dawn, and Highway 1 wells beginning in spring 2004 resulted in additional

water level declines. From winter 2004 to the fall of 2006 average water levels were stable because of higher than normal precipitation amounts during the winter of 2004 - 2005, and the late winter and spring precipitation in 2006. Average water levels have decreased slightly since 2006 because of below-normal precipitation.

Water levels in the onsite wells were 29 feet to 34 feet higher in winter 2009 than in summer 2009, representing a typical seasonal water level fluctuation for the wells. Water levels were two and three feet higher in January 2010 than in January 2009 in the Mesa and Dawn wells respectively, and were two feet lower in the Homestead well in January 2010 than in January 2009. The lower water levels in the Homestead well reflect the increased pumping at the well since April 2009.

The slightly higher average water levels measured during 1999 and 2000 of the monitoring program reflect the higher than normal precipitation of the mid and late 1990s. Average to below average annual precipitation occurred from the year 2000 through the winter of 2003 - 2004, and precipitation has been below average from the wet winter of 2004 – 2005 until this current rain year. Historically, water levels in wells generally drop from February through September of each year, after which they recover and rise.

Offsite Well Monitoring

Wells 9K4, 15G1, 10N, 22H, and 23E are currently used as domestic supply wells to single-family homes and are pumped on a regular basis. Wells 10K, 10Q, 14N, and 22G have been inactive since monitoring began. Well 10R2 is used for irrigation supply and has a history of frequent pumping. Well 10F is unequipped. Wells 15B4 and 23D are equipped, but inactive, and are located on properties planned for development. The 13 offsite wells are listed in Table 2.

Groundwater elevations for the offsite wells are shown on Figures 4, 5, and 6. The water level data tables are available upon request. Water levels in wells 9K4, 10F, 10N, 10R2, 15B4, 15G1, and 23D have shown the greatest amount of seasonal fluctuation of all the monitored off-site wells, fluctuating 27 feet to 32 feet between the 2009 dry and wet seasons. The fluctuation in well 14N, penetrating mixed aquifers, was 11 feet. Water levels in wells 14N, 15G1, 10F, 10N, and 10R2, all penetrating the deeper aquifer or mixed aquifers, were a tenth of a foot to four feet higher in January 2010, compared to January 2009. Wells 15B4 and 9K4 were one to two feet lower in January 2010 compared to January 2009.

Hydrographs of wells 22G, 22H, 10K, and 10Q are relatively flat, compared to hydrographs of all the other wells which fluctuate in response to regional pumping. This data, and the relatively high water levels suggest that these wells have been completed within the unconfined dune sand aquifer, whereas other offsite and onsite wells were either completed within a deeper, confined aquifer, or completed within portions of both aquifers. Table 3 shows the aquifers penetrated by the offsite and onsite wells.

Long term water level trends in these shallow aquifer wells indicate that water levels in the Via Concha area north of The Woodlands, as represented by wells 10K and 10Q, have risen slightly more than one foot since the end of 2005. Water levels in Banneker Place and Eucalyptus Road, as represented by wells 22G and 22H, have dropped one and one half to two feet since spring 2006.

Groundwater Movement

Estimated confined aquifer groundwater flow directions and hydraulic gradients on The Woodlands property are shown in Figure 1. Groundwater during December 2009 is inferred to flow generally to the northwest beneath the site at an estimated average hydraulic gradient of 0.0018 vertical feet of head loss per horizontal foot of distance. Wells used for the confined aquifer hydraulic gradient calculations represent the same or similar hydraulic pressure zones. Five onsite wells were used to calculate the hydraulic gradient for the December 2009 monitoring event. The Highway 1 Monitoring well is completed within multiple pressure zones and therefore is not used in gradient calculations.

Conclusions and Recommendations

Mitigation Measure 4.1-6d of the project EIR requires that the applicant shall implement means to allow for continued production of offsite wells that have been significantly affected by well interference from The Woodlands project. Monthly water level monitoring allows early detection of wells most vulnerable to well interference during drought, and will allow for the mitigation of potentially significant water- level impacts before they occur.

There are 19 wells currently being monitored. There are six onsite wells and a total of 13 offsite wells in the program. Based on observed water levels, there are two principal groups of aquifer zones being tapped by the various wells: shallow aquifers (unconfined) and deep aquifers (confined). Table 3 shows the aquifers penetrated by each well in The Woodlands monitoring program.

Water level monitoring results show no evidence of significant water-level impacts to offsite wells from groundwater production in the four producing onsite wells. Observed water level fluctuations and declines are related to seasonal changes in precipitation and regional well pumping. Regional pumping appears to be heavy north of Camino Caballo. In order to reduce cumulative impacts of pumping in this area and on wells such as 10N, 10R2, 15B4, and 15G1 during low rainfall periods, the Homestead well should continue to be utilized as the primary production well, and the Dawn well should be pumped minimally.

CHG recommends the following:

- Abandonment of the Highway 1 monitoring well. The well was installed prior to the production wells to identify the aquifer zones beneath the site, evaluate water quality in these zones, and to determine general design parameters for the production wells. Because the well is completed across multiple aquifer zones, water levels do not compare well with other wells on the site that are completed within the deep zones only. The well should be destroyed in accordance with Department of Water Resources Water Well Standards, Section 23, Requirements for Destroying Wells.

- Installation of a casing liner and filter pack in the Flintcote well to ensure the continued monitoring of the well in the event of failure of the old steel casing.

Water level data sheets including depths to groundwater, groundwater elevations, and changes in water levels for each well are available upon request. If you have any questions regarding this letter report, please call our office.

Sincerely,
CLEATH-HARRIS GEOLOGISTS, INC.

David R. Williams, PG
Associate Geologist

Cc. Dan Garson

Table 3

Aquifers Penetrated by Woodlands Onsite and Offsite Wells

Common Well Name	Aquifer		
	Deep Aquifer (confined)	Shallow Aquifer (water table)	Mixed Aquifers
Mesa	X		
Dawn	X		
Hwy. 1 Production	X		
Hwy. 1 Monitoring			X
Homestead	X		
Flintcote	X		
11N/35W-14N			X
11N/35W-10F	X		
11N/35W-10N			X
11N/35W-22G		X	
11N/35W-15G1			X
11N/35W-10R2			X
11N/35W-9K4			X
11N/35W-10K		X	
11N/35W-22H		X	
11N/35W-10Q		X	
11N/35W-15B4	X		
11N/35W-23E	X		
11N/35W-23D		X	

- Abandonment of the Highway 1 monitoring well. The well was installed prior to the production wells to identify the aquifer zones beneath the site, evaluate water quality in these zones, and to determine general design parameters for the production wells. Because the well is completed across multiple aquifer zones, water levels do not compare well with other wells on the site that are completed within the deep zones only. The well should be destroyed in accordance with Department of Water Resources Water Well Standards, Section 23, Requirements for Destroying Wells.

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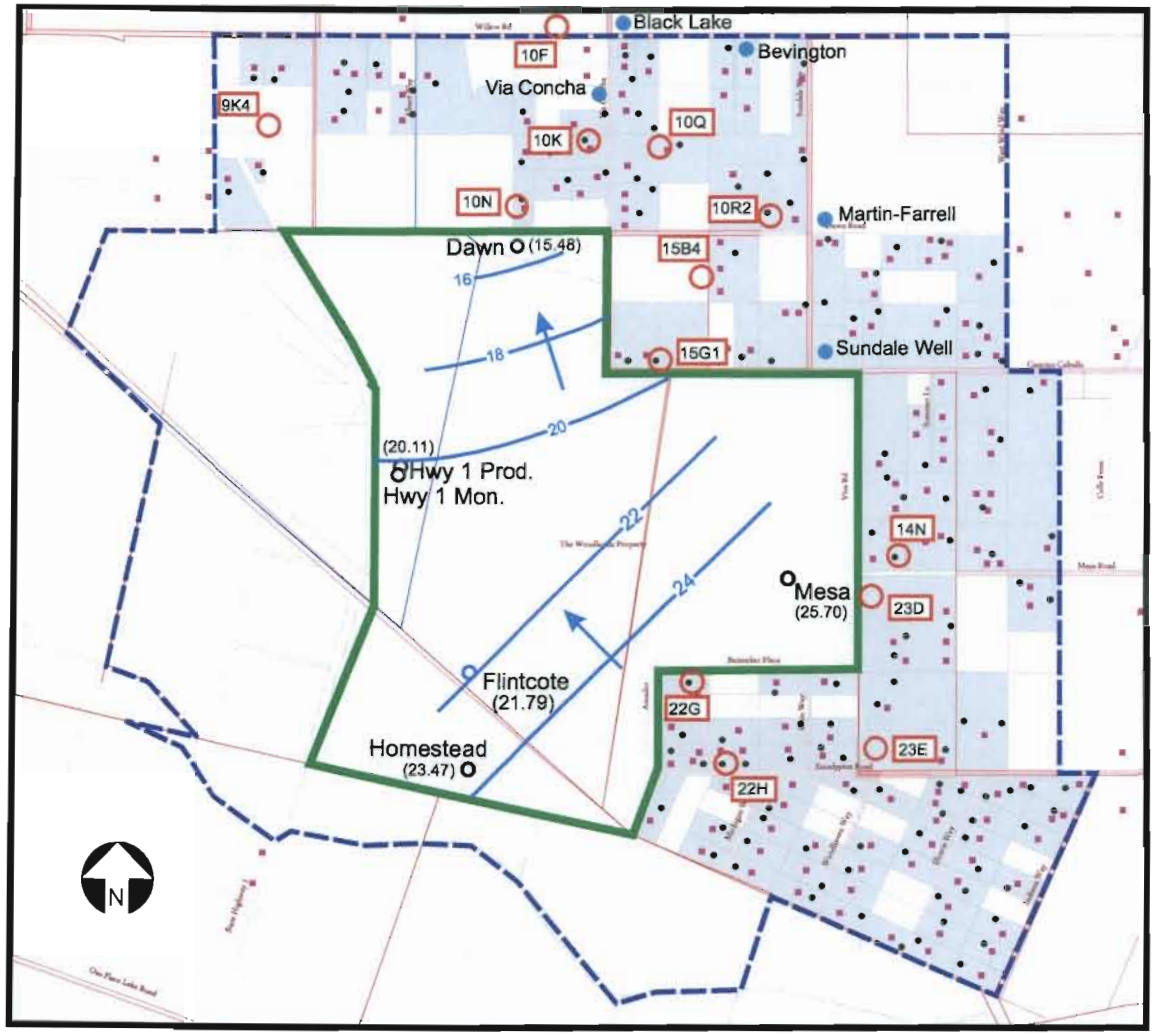


EXPLANATION:

- Impact Area Boundary
- Site Boundary
- Parcels with one or more domestic wells
- Houses
- Domestic Wells (Inferred)
- Offsite Monitoring Well Location
- Dawn (15.48) — Onsite Production Well Location, groundwater elevation in feet above sea level
- Nipomo Community Services District Well
- 24 — Onsite Groundwater elevation contour on December 15, 2009, for confined aquifer zones, elevation in feet above sea level
- Groundwater flow direction

Base Map: San Luis Obispo County Building & Planning Dept. Assessor's Parcel Maps

Scale In Feet

500 2000 5000

Figure 1

Onsite Groundwater Elevation Contours on December 15, 2009 for Confined Aquifer Zones

The Woodlands

Cleath-Harris Geologists
February 2010

Figure 2
Well Production: January 2007 through December 2009
The Woodlands Onsite Wells

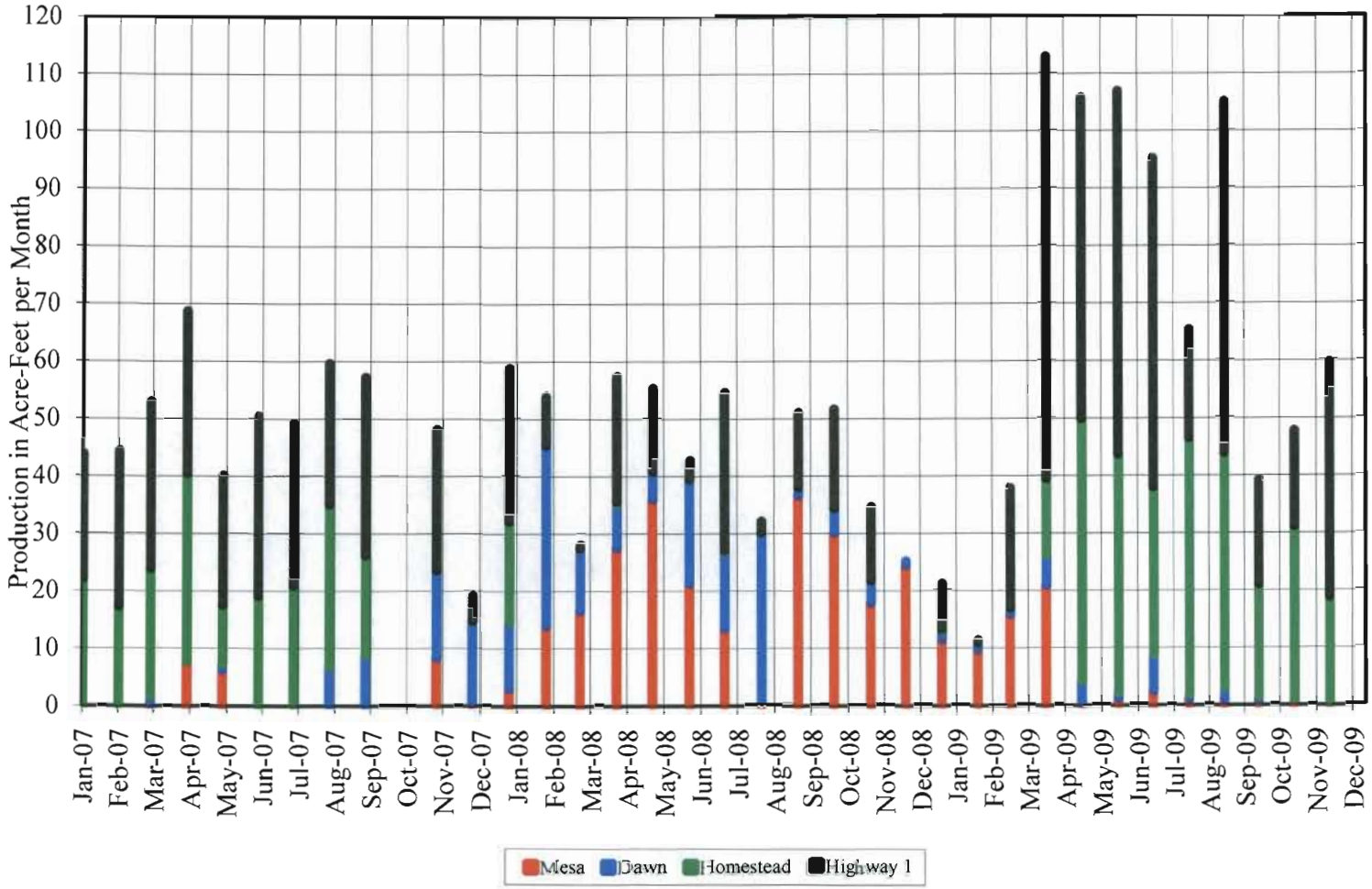


Figure 3
Water Levels: March 1999 to January 2010
The Woodlands Onsite Wells

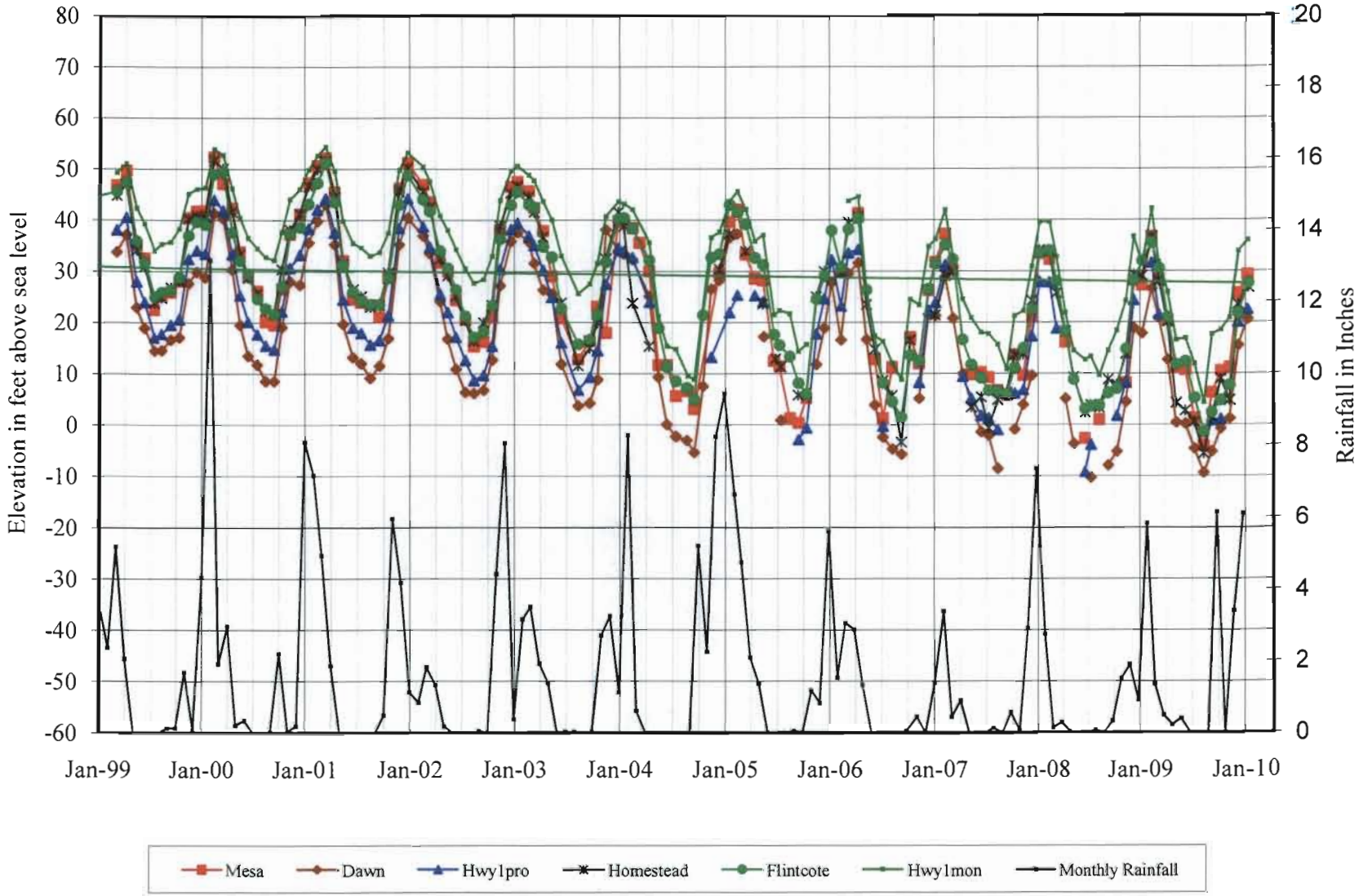


Table 2
Woodlands Offsite Wells

Well Number	Reference Point	Total depth (in feet)	Well Type	Well Status	Date Monitoring Began	Drillers	Year Drilled	Comments
11N/35W-14N	Top of sounding tube (271.2)	--	Irrigation	Equipped, inactive	Nov-00	Floyd V. Wells	1975	--
11N/35W-10F	Steel plate on top of casing (277.9)	600	School supply & Irrigation	Unequipped	Dec-02	Enloe Well Drilling	2002	Cascading water enters well at approximately 206 feet depth
11N/35W-10N	Top of casing (246.0)	360	Domestic	Active	Oct-00	Floyd V. Wells	1981	Discontinued Feb-01, Resumed monitoring in Nov-04
11N/35W-22G	Top of casing (279.8)	--	Domestic	Equipped, inactive	Feb-03	--	--	--
11N/35W-15G1	Top of sounding tube (234.8)	380	Domestic	Active	Oct-00	Water Well Supply	1985	--
11N/35W-10R2	Top of casing (269.1)	365	Domestic / Irrigation	Active	Nov-03	Longwell	1956	Pumping often
11N/35W-9K4	Top of sounding port (Wallace 2005 Survey=168.9	--	Domestic	Active	Jan-2004 by Cleath & Associates	Floyd V. Wells	1960's	Pumping often. Monitored by County Public Works Dept. in October and April since 1973
11N/35W-10K	Top of casing (249.3)	210	Domestic	Unequipped	Feb-05	--	--	--
11N/35W-22H	Top of casing (270.1)	--	Domestic	Active	Dec-04	--	--	--
11N/35W-10Q	Top of casing (284.5)	257	Domestic	Inactive	May-05	--	--	--
11N/35W-15B4	Concrete slab (244.8)	500	Domestic	Inactive	Sep-05	Central Coast	2005	Developing lots
11N/35W-23E	Top of casing (302 - est.)	560	Domestic	Active	Mar-09	Central Coast	--	--
11N/35W-23D	Top of casing (276-est)	--	Domestic	Inactive	Jun-09	Central Coast	--	Unimproved lots

Figure 4
Water Levels Through January 2010
The Woodlands Offsite - Southeast Wells

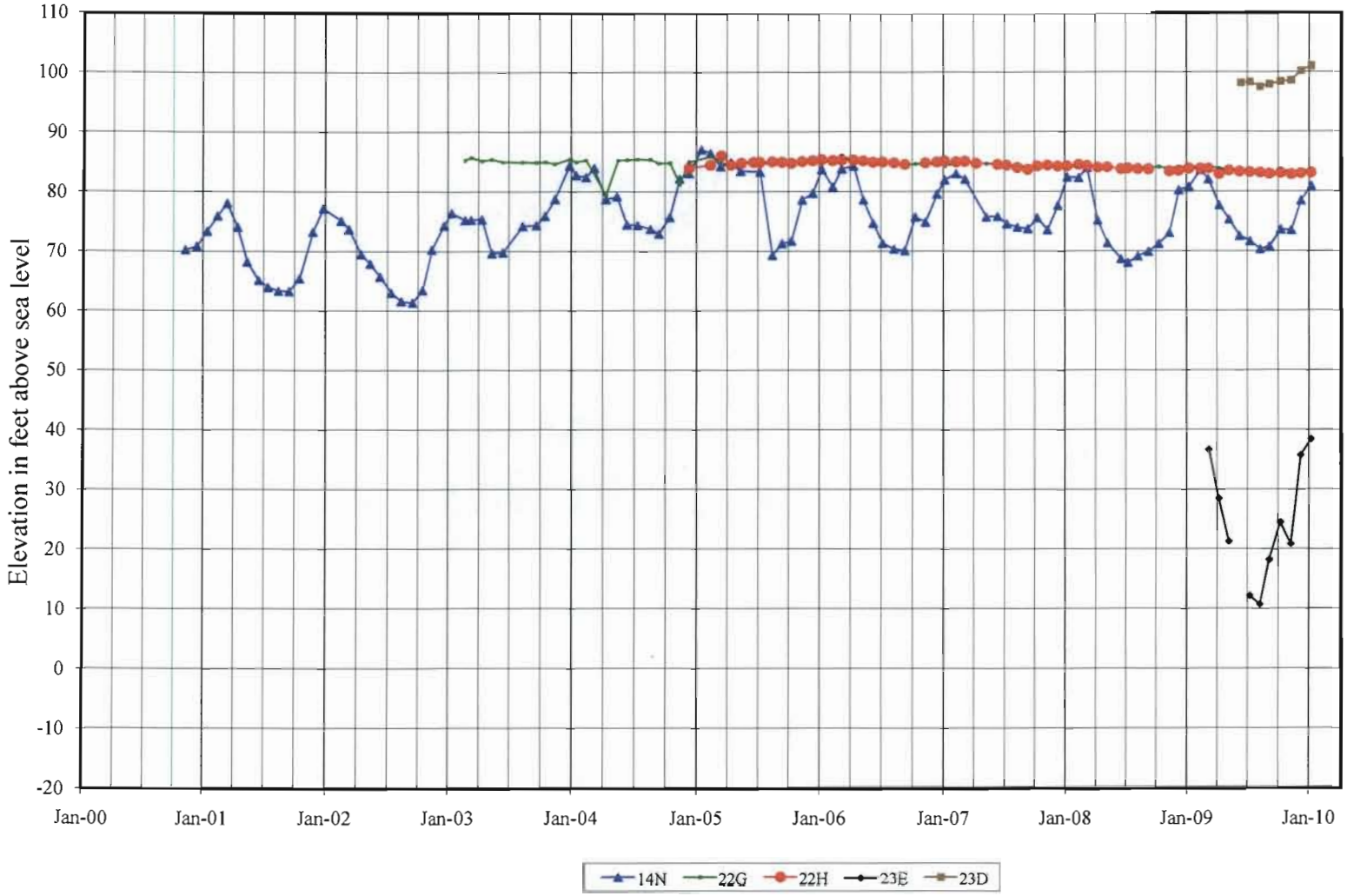


Figure 5
Water Levels Through January 2010
The Woodlands Offsite - Northern Wells

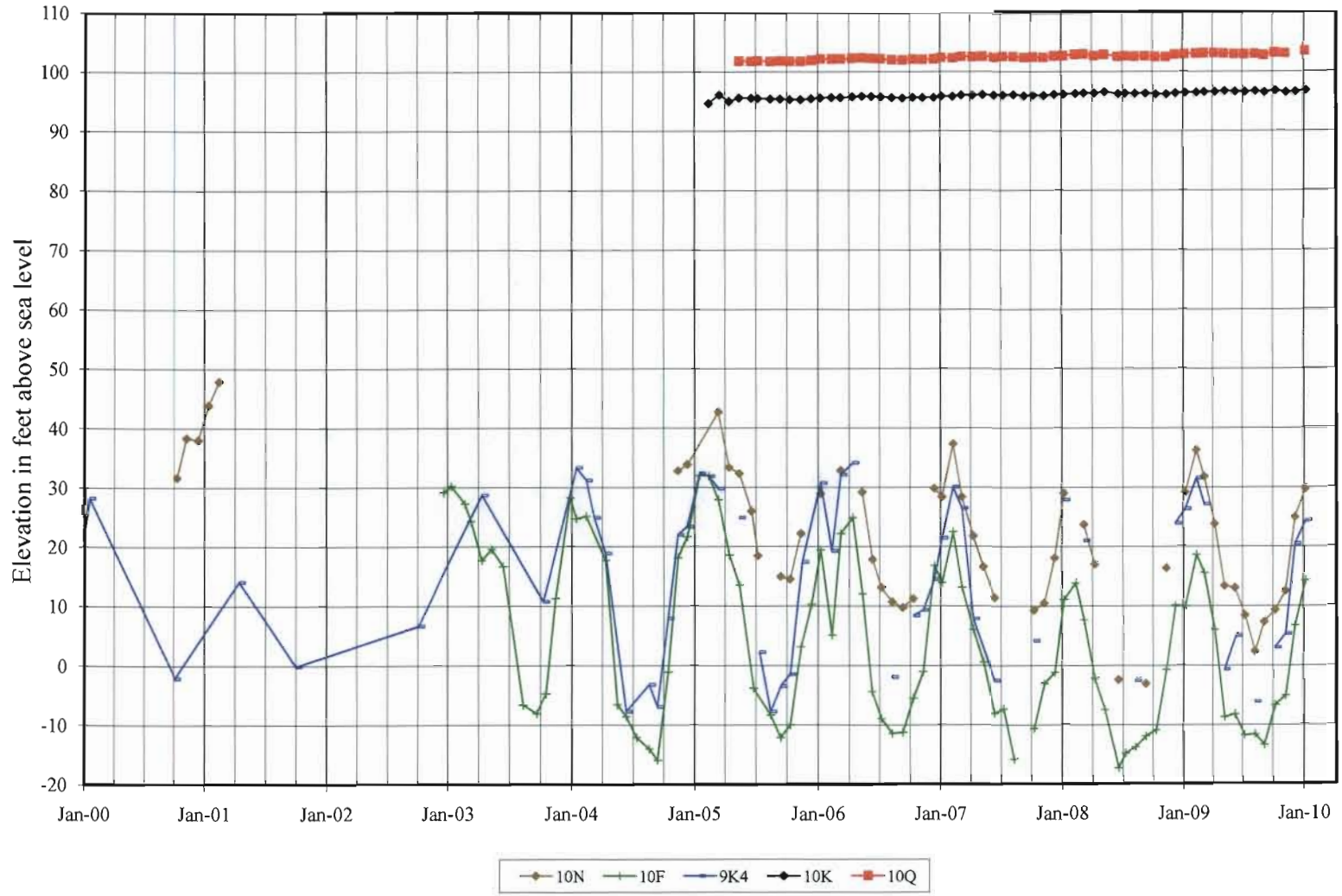
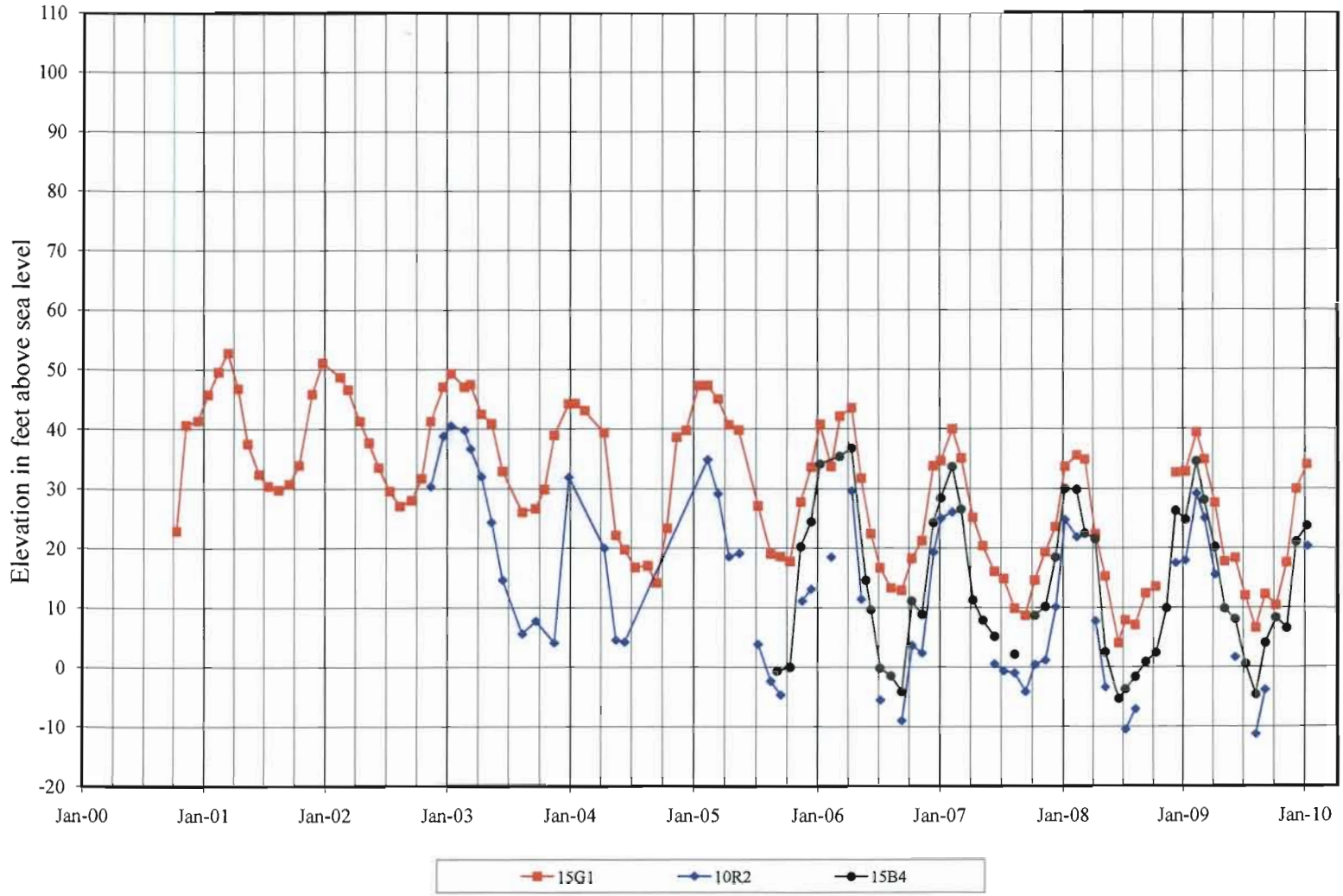


Figure 6
Water Levels Through January 2010
The Woodlands Offsite - Northeast Wells



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11N/35W-10F	X		
11N/35W-10N			X
11N/35W-22G		X	
11N/35W-15G1			X
11N/35W-10R2			X
11N/35W-9K4			X
11N/35W-10K		X	
11N/35W-22H		X	
11N/35W-10Q		X	
11N/35W-15B4	X		
11N/35W-23E	X		
11N/35W-23D		X	