

Drinking Water Source Assessment

Water System

COUNTY SERVICE AREA 11

San Mateo County

Water Source

WELL 02 (WARHEIT) - STANDBY

Assessment Date

November, 2002

California Department of Health Services
Drinking Water Field Operations Branch
LPA San Mateo County

District No.	71
System No.	4100582
Source No.	002
PS Code	4100582-002

Vulnerability Summary

District Name LPA San Mateo County District No. 71 County San Mateo
System Name COUNTY SERVICE AREA 11 System No. 4100582
Source Name WELL 02 (WARHEIT) - STANDBY Source No. 002 PS Code 4100582-002
Completed by chris day Date November, 2002

THE FOLLOWING INFORMATION MUST BE INCLUDED IN THE SYSTEM CONSUMER CONFIDENCE REPORT

A source water assessment was conducted for the WELL 02 (WARHEIT) - STANDBY
of the COUNTY SERVICE AREA 11 water system in November, 2002

The source is considered most vulnerable to the following activities not associated with any detected contaminants:

Historic waste dumps/ landfills

Discussion of Vulnerability

There have been no contaminants detected in the water supply, however the source is still considered vulnerable to activities located near the drinking water source. The source is most vulnerable to the following activities that were identified within the recharge area for Well 02:

1. Historic waste dumps/landfills - a potential source of household and industrial chemicals.
2. Transportation corridors - Road Right-of-ways (herbicide use areas) - possible source of herbicides used to control weeds along the roadside and a possible source of automotive chemicals.
3. Waste transfer/recycling stations - A potential source of illicitly disposed household, industrial or agricultural chemicals. Also a potential source of bacterial contamination.

CSA 11 public water system conducts routine periodic monitoring of the water quality from well 02 to ensure that the water supply is safe for human consumption. The well head is secured and protected from surface flooding.

A copy of the complete assessment may be viewed at:

Environmental Health Services
455 County Center, 4th floor
Redwood City, CA 94063

You may request a summary of the assessment be sent to you by contacting:

Christopher Day
Environmental Health Specialist
650-363-4727
650-363-7882 (fax)
cday@co.sanmateo.ca.us

Physical Barrier Effectiveness (PBE)

District Name LPA San Mateo County District No. 71 County San Mateo
 System Name COUNTY SERVICE AREA 11 System No. 4100582
 Source Name WELL 02 (WARHEIT) - STANDBY Source No. 002 PS Code 4100582-002

Completed by chris day Date November, 2002

Parameter	Possible Points	This Source	Score
Type of Aquifer Confinement			
1. Unconfined, Semi-confined, Fractured Rock, Unknown Aquifer	0		
2. Confined	50	X	50
Pathways of Contamination (All Aquifers)			
Presence of Abandoned or Improperly Destroyed Wells			
1. Present within Zone A (2 year TOT distance)	Yes	0	
	No	5	
	Unknown	0	X
2. Present within Zone B5 (2 -5 year TOT distance)	Yes	0	
	No	3	
	Unknown	0	X
3. Present within Zone B10 (5-10 year TOT distance)	Yes	0	
	No	2	
	Unknown	0	X
Hydraulic Head (Confined Aquifers)			
What is the relationship in the hydraulic head between the confined aquifer and the overlying unconfined aquifer? (i.e. does the well flow under artesian conditions?)			
1. Head in confined aquifer is higher than head in unconfined aquifer under all conditions.	20		
2. Head in confined aquifer is higher than head in unconfined aquifer under static conditions.	10		
3. Head in confined aquifer is lower than or same as head in unconfined aquifer under static conditions.	0		
4. Unknown	0	X	0
Well Construction (All Aquifers)			
Sanitary Seal (Annular Seal) Depth <u>50</u> feet	None of less than 20 feet	0	
	Between 20 and 50 feet	6	
	50 feet or greater	10	X
	Unknown	0	
Surface Seal (concrete cap)	Not present or improperly constructed	0	
	Watertight, slopes away from well at least 2' laterally in all directions	4	X
	Unknown	0	4

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.

** Indicates items required for Source Water Assessment ** Indicates additional items required for Ground Water Rule*

DATA SHEET GENERAL INFORMATION		Actual or Estimated?
System Name		
System Number		
Source of Information (See Note 1)		
Personnel Collecting Information		
Date		
WELL IDENTIFICATION		
* Well Number or Name		
* DHS Source Identification Number (FRDS ID No.)		
DWR Well Log on File? (yes or no)		
State Well Number (from DWR)		
Well Status (Active, Standby, Inactive)		
Date of Inactive Status (if applicable)		
WELL LOCATION		
Latitude		
Longitude		
Elevation		
Street Address		
* Neighborhood/Surrounding Area (see Note 2)	rural	
Site plan on file? (yes or no)		
DWR Ground Water Basin		
DWR Ground Water Sub-basin		
SANTARY CONDITIONS		
** Distance to: Sewer Line, Sewage Disposal, or Septic tank	greater than 200 ft.	
Distance to: Other sanitary concerns		
Distance to: Other Wells (Active)	150 ft.	
Distance to: Other Wells (Abandoned)		
** Size of controlled area around well (square feet)	100 square ft.	
* Type of access control to well site (See Note 3)	cement box	
* Surface Seal? (Concrete slab) (yes or no)	yes	
* Dimensions of concrete surface slab (ft)	10ft. x 10 ft.	
* Within 100 year flood plain? (yes or no)	no	
* Drainage away from well? (yes or no)	yes	
ENCLOSURE/HOUSING		
Type	cement box	
Condition	good	
Pit depth (if applicable)		
Pit Drained? (if applicable)		
Floor (material)		

Inventory of Possible Contaminating Activities (PCA Inventory)

District Name LPA San Mateo County District No. 71 County San Mateo
 System Name COUNTY SERVICE AREA 11 System No. 4100582
 Source Name WELL 02 (WARHEIT) - STANDBY Source No. 002 PS Code 4100582-002

Completed by chris day Date November, 2002

PCA (Risk Ranking)	PCA in Zone A	PCA in Zone B5	PCA in Zone B10	*	Comments
Commercial/Industrial Activities					
Automobile- Body shops (H)	N	N	N		
Automobile- Car washes (M)	N	N	N		
Automobile- Gas stations (VH)	N	N	N		
Automobile- Repair shops (H)	N	N	N		
Boat services/repair/ refinishing (H)	N	N	N		
Chemical/petroleum pipelines (H)	N	N	N		
Chemical/petroleum processing/storage (VH)	N	N	N		
Dry cleaners (VH)	N	N	N		
Electrical/electronic manufacturing (H)	N	N	N		
Fleet/truck/bus terminals (H)	N	N	N		
Furniture repair/ manufacturing (H)	N	N	N		
Home manufacturing (H)	N	N	N		
Junk/scrap/salvage yards (H)	N	N	N		
Machine shops (H)	N	N	N		
Metal plating/ finishing/fabricating (VH)	N	N	N		
Photo processing/printing (H)	N	N	N		
Plastics/synthetics producers (VH)	N	N	N		
Research laboratories (H)	N	N	N		
Wood preserving/treating (H)	N	N	N		
Wood/pulp/paper processing and mills (H)	N	N	N		
Lumber processing and manufacturing (H)	N	N	N		
Sewer collection systems (H, if in Zone A, otherwise L)	N	N	N		
Parking lots/malls (>50 spaces) (M)	N	N	N		
Cement/concrete plants (M)	N	N	N		
Food processing (M)	N	N	N		
Funeral services/graveyards (M)	N	N	N		
Hardware/lumber/parts stores (M)	N	N	N		
Appliance/Electronic Repair (L)	N	N	N		
Office buildings/complexes (L)	N	N	N		
Rental Yards (L)	N	N	N		
RV/mini storage (L)	N	N	N		

Y = Yes N = No U = Unknown

*** = A contaminant potentially associated with this activity has been detected in the water supply.**

Inventory of Possible Contaminating Activities (PCA Inventory)

District Name LPA San Mateo County District No. 71 County San Mateo
 System Name COUNTY SERVICE AREA 11 System No. 4100582
 Source Name WELL 02 (WARHEIT) - STANDBY Source No. 002 PS Code 4100582-002

Completed by chris day Date November, 2002

PCA (Risk Ranking)	PCA in Zone A	PCA in Zone B5	PCA in Zone B10	*	Comments
Agricultural/Rural Activities					
Grazing (> 5 large animals or equivalent per acre) (H in Zone A, otherwise M)	N	N	N		
Concentrated Animal Feeding Operations (CAFOs) as defined in federal regulation1 (VH in Zone A, otherwise H)	N	N	N		
Animal Feeding Operations as defined in federal regulation2 (VH in Zone A, otherwise H)	N	N	N		
Other Animal operations (H in Zone A, otherwise M)	N	N	N		
Farm chemical distributor/ application service (H)	N	N	N		
Farm machinery repair (H)	N	N	N		
Septic systems - low density (<1/acre) (H in Zone A, otherwise L)	N	U	U		
Lagoons / liquid wastes (H)	N	N	N		
Machine shops (H)	N	N	N		
Pesticide/fertilizer/ petroleum storage & transfer areas (H)	N	N	N		
Agricultural Drainage (H in Zone A, otherwise M)	N	Y	Y		
Wells - Agricultural/ Irrigation (H)	N	U	U		
Managed Forests (M)	N	N	N		
Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M)	N	N	Y		
Fertilizer, Pesticide/ Herbicide Application (M)	N	U	U		
Sewage sludge/biosolids application (M)	N	N	N		
Crops, nonirrigated (e.g., Christmas trees, grains, grass seeds, hay, pasture) (L) (includes drip-irrigated crops)	N	N	N		

Y = Yes N = No U = Unknown

*** = A contaminant potentially associated with this activity has been detected in the water supply.**

Inventory of Possible Contaminating Activities (PCA Inventory)

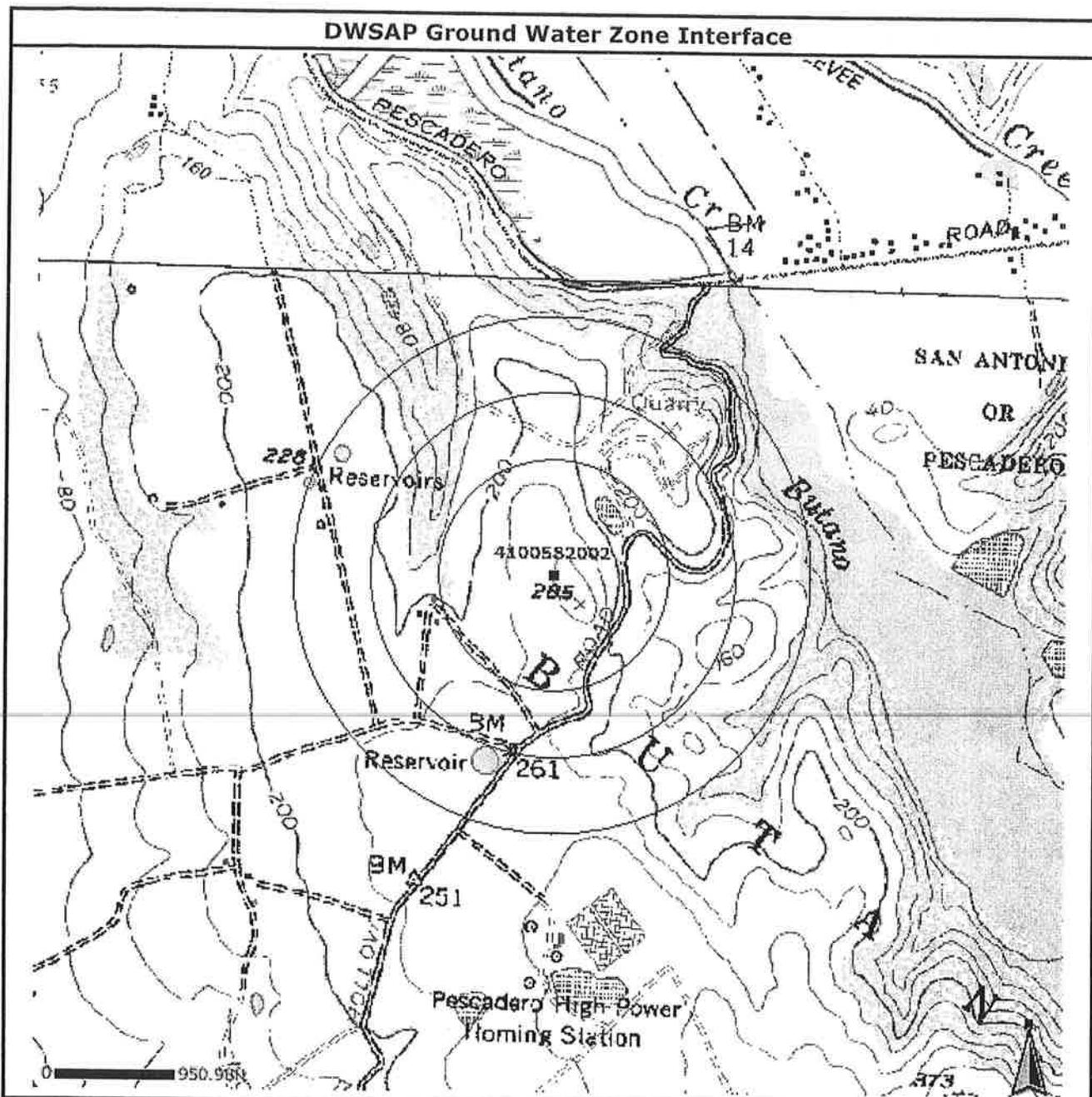
System Name COUNTY SERVICE AREA 11 System No. 4100582

Source Name WELL 02 (WARHEIT) - STANDBY Source No. 002 PS Code 4100582-002

PCA (Risk Ranking)	PCA in Zone A	PCA in Zone B5	PCA in Zone B10	*	Comments
Other Activities					
Transportation corridors - Historic railroad right-of-ways (M)	N	N	N		
Transportation corridors - Road Right-of-ways (herbicide use areas) (M)	Y	Y	Y		
Transportation corridors - Roads/ Streets (L)	Y	Y	Y		
Hospitals (M)	N	N	N		
Storm Drain Discharge Points (M)	N	N	N		
Storm Water Detention Facilities (M)	N	N	N		
Artificial Recharge Projects - Injection wells (potable water) (L)	N	N	N		
Artificial Recharge Projects - Injection wells (non-potable water) (M)	N	N	N		
Artificial Recharge Projects - Spreading Basins (potable water) (L)	N	N	N		
Artificial Recharge Projects - Spreading Basins (non-potable water) (M)	N	N	N		
Medical/dental offices/clinics (L)	N	N	N		
Veterinary offices/clinics (L)	N	N	N		
Surface water - streams/ lakes/rivers (L)	Y	N	Y		irrigation pond
Wells - monitoring, test holes (L)	N	Y	Y		near the old landfill

Y = Yes N = No U = Unknown

*** = A contaminant potentially associated with this activity has been detected in the water supply.**



Well Identification Information					
Well Number	Longitude *	Latitude *	GPS'd	* Well location coordinates have been rounded to 3 decimal places due to security concerns.	
4100582002	-122.400	37.243	Yes		
System Number	System Name	Source Number	Source Name	District Number/Name	County Number/Name
4100582	COUNTY SERVICE AREA 11	002	WELL 02 (WARHEIT) - STANDBY	71/San Mateo County	41/San Mateo County
Well Zone Delineation Information					
Media Type	System Type	Effective Porosity (n)	Screened Interval (h)	Pumping Capacity (q)	Azimuth of Flow (a)
Porous Media	All Other System	0.2	40	150 gpm	0 - No Translation
Radii Measures					
Defaults Used	R2	R5	R10		
No	915 ft	1447 ft	2047 ft		

Drinking Water Source Assessment

Water System

COUNTY SERVICE AREA 11

San Mateo County

Water Source

WELL 01

Assessment Date

November, 2002

California Department of Health Services
Drinking Water Field Operations Branch
LPA San Mateo County

District No.	71
System No.	4100582
Source No.	001
PS Code	4100582-001

Vulnerability Summary

District Name LPA San Mateo County District No. 71 County San Mateo
System Name COUNTY SERVICE AREA 11 System No. 4100582
Source Name WELL 01 Source No. 001 PS Code 4100582-001
Completed by chris day Date November, 2002

THE FOLLOWING INFORMATION MUST BE INCLUDED IN THE SYSTEM CONSUMER CONFIDENCE REPORT

A source water assessment was conducted for the WELL 01
of the COUNTY SERVICE AREA 11 water system in November, 2002

The source is considered most vulnerable to the following activities not associated with any detected contaminants:

Historic waste dumps/ landfills

Discussion of Vulnerability

There have been no contaminants detected in the water supply, however the source is still considered vulnerable to activities located near the drinking water source. The source is most vulnerable to the following activities that were identified within the recharge area for Well 01:

1. Historic Waste Dumps/Landfills - Potential source of household and industrial chemicals.
2. Transportation Corridors - Road Right-of-ways (herbicide use areas) - potential source of herbicides used to control weeds along roadside and potential source of automotive chemicals.

The CSA 11 public water system conducts routine periodic monitoring of the water quality from well 1 to ensure that the water supply is safe for human consumption. The well head is secured and protected from surface flooding.

A copy of the complete assessment may be viewed at:

Environmental Health Services
455 County Center, 4th floor
Redwood City, CA 94063

You may request a summary of the assessment be sent to you by contacting:

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Environmental Health Specialist
650-363-4727
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cday@co.sanmateo.ca.us

Physical Barrier Effectiveness (PBE)

District Name LPA San Mateo County District No. 71 County San Mateo
 System Name COUNTY SERVICE AREA 11 System No. 4100582
 Source Name WELL 01 Source No. 001 PS Code 4100582-001
 Completed by chris day Date November, 2002

Parameter	Possible Points	This Source	Score
Type of Aquifer			
Confinement			
1. Unconfined, Semi-confined, Fractured Rock, Unknown Aquifer	0		
2. Confined	50	X	50
Pathways of Contamination (All Aquifers)			
Presence of Abandoned or Improperly Destroyed Wells			
1. Present within Zone A (2 year TOT distance)	Yes	0	
	No	5	
	Unknown	0	
2. Present within Zone B5 (2 -5 year TOT distance)	Yes	0	X
	No	3	
	Unknown	0	
3. Present within Zone B10 (5-10 year TOT distance)	Yes	0	X
	No	2	
	Unknown	0	
Hydraulic Head (Confined Aquifers)			
What is the relationship in the hydraulic head between the confined aquifer and the overlying unconfined aquifer? (i.e. does the well flow under artesian conditions?)			
1. Head in confined aquifer is higher than head in unconfined aquifer under all conditions.	20		
2. Head in confined aquifer is higher than head in unconfined aquifer under static conditions.	10		
3. Head in confined aquifer is lower than or same as head in unconfined aquifer under static conditions.	0		
4. Unknown	0	X	0
Well Construction (All Aquifers)			
Sanitary Seal (Annular Seal) Depth <u>50</u> feet	None of less than 20 feet	0	
	Between 20 and 50 feet	6	
	50 feet or greater	10	X
	Unknown	0	
Surface Seal (concrete cap)	Not present or improperly constructed	0	
	Watertight, slopes away from well at least 2' laterally in all directions	4	X
	Unknown	0	

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.
 * Indicates items required for Source Water Assessment ** Indicates additional items required for Ground Water Rule

DATA SHEET GENERAL INFORMATION		Actual or Estimated?
System Name		
System Number		
Source of Information (See Note 1)		
Personnel Collecting Information		
Date		
WELL IDENTIFICATION		
* Well Number or Name		
* DHS Source Identification Number (FRDS ID No.)		
DWR Well Log on File? (yes or no)		
State Well Number (from DWR)		
Well Status (Active, Standby, Inactive)		
Date of Inactive Status (if applicable)		
WELL LOCATION		
Latitude		
Longitude		
Elevation		
Street Address		
* Neighborhood/Surrounding Area (see Note 2)	rural	
Site plan on file? (yes or no)		
DWR Ground Water Basin		
DWR Ground Water Sub-basin		
SANITARY CONDITIONS		
** Distance to: Sewer Line, Sewage Disposal, or Septic tank	greater than 200 ft.	
Distance to: Other sanitary concerns		
Distance to: Other Wells (Active)		
Distance to: Other Wells (Abandoned)	150 ft.	
** Size of controlled area around well (square feet)	100 square ft.	
* Type of access control to well site (See Note 3)	concrete box	
* Surface Seal? (Concrete slab) (yes or no)	yes	
* Dimensions of concrete surface slab (ft)	10ft. x 10 ft.	
* Within 100 year flood plain? (yes or no)	no	
* Drainage away from well? (yes or no)	yes	
ENCLOSURE/HOUSING		
Type	concrete box	
Condition	good	
Pit depth (if applicable)		
Pit Drained? (if applicable)		
Floor (material)		

Inventory of Possible Contaminating Activities (PCA Inventory)

District Name LPA San Mateo County District No. 71 County San Mateo
 System Name COUNTY SERVICE AREA 11 System No. 4100582
 Source Name WELL 01 Source No. 001 PS Code 4100582-001

Completed by chris day Date November, 2002

PCA (Risk Ranking)	PCA in Zone A	PCA in Zone B5	PCA in Zone B10	*	Comments
Commercial/Industrial Activities					
Automobile- Body shops (H)	N	N	N		
Automobile- Car washes (M)	N	N	N		
Automobile- Gas stations (VH)	N	N	N		
Automobile- Repair shops (H)	N	N	N		
Boat services/repair/ refinishing (H)	N	N	N		
Chemical/petroleum pipelines (H)	N	N	N		
Chemical/petroleum processing/storage (VH)	N	N	N		
Dry cleaners (VH)	N	N	N		
Electrical/electronic manufacturing (H)	N	N	N		
Fleet/truck/bus terminals (H)	N	N	N		
Furniture repair/ manufacturing (H)	N	N	N		
Home manufacturing (H)	N	N	N		
Junk/scrap/salvage yards (H)	N	N	N		
Machine shops (H)	N	N	N		
Metal plating/ finishing/fabricating (VH)	N	N	N		
Photo processing/printing (H)	N	N	N		
Plastics/synthetics producers (VH)	N	N	N		
Research laboratories (H)	N	N	N		
Wood preserving/treating (H)	N	N	N		
Wood/pulp/paper processing and mills (H)	N	N	N		
Lumber processing and manufacturing (H)	N	N	N		
Sewer collection systems (H, if in Zone A, otherwise L)	N	N	N		
Parking lots/malls (>50 spaces) (M)	N	N	N		
Cement/concrete plants (M)	N	N	N		
Food processing (M)	N	N	N		
Funeral services/graveyards (M)	N	N	N		
Hardware/lumber/parts stores (M)	N	N	N		
Appliance/Electronic Repair (L)	N	N	N		
Office buildings/complexes (L)	N	N	N		
Rental Yards (L)	N	N	N		
RV/mini storage (L)	N	N	N		

Y = Yes N = No U = Unknown

*** = A contaminant potentially associated with this activity has been detected in the water supply.**

Inventory of Possible Contaminating Activities (PCA Inventory)

District Name LPA San Mateo County District No. 71 County San Mateo
 System Name COUNTY SERVICE AREA 11 System No. 4100582
 Source Name WELL 01 Source No. 001 PS Code 4100582-001

Completed by chris day Date November, 2002

PCA (Risk Ranking)	PCA in Zone A	PCA in Zone B5	PCA in Zone B10	*	Comments
Agricultural/Rural Activities					
Grazing (> 5 large animals or equivalent per acre) (H in Zone A, otherwise M)	N	N	N		
Concentrated Animal Feeding Operations (CAFOs) as defined in federal regulation1 (VH in Zone A, otherwise H)	N	N	N		
Animal Feeding Operations as defined in federal regulation2 (VH in Zone A, otherwise H)	N	N	N		
Other Animal operations (H in Zone A, otherwise M)	N	N	N		
Farm chemical distributor/ application service (H)	N	N	N		
Farm machinery repair (H)	N	N	N		
Septic systems - low density (<1/acre) (H in Zone A, otherwise L)	N	U	U		
Lagoons / liquid wastes (H)	N	N	N		
Machine shops (H)	N	N	N		
Pesticide/fertilizer/ petroleum storage & transfer areas (H)	N	N	N		
Agricultural Drainage (H in Zone A, otherwise M)	N	Y	Y		
Wells - Agricultural/ Irrigation (H)	N	U	U		
Managed Forests (M)	N	N	N		
Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M)	N	N	N		
Fertilizer, Pesticide/ Herbicide Application (M)	N	U	U		
Sewage sludge/biosolids application (M)	N	N	N		
Crops, nonirrigated (e.g., Christmas trees, grains, grass seeds, hay, pasture) (L) (includes drip-irrigated crops)	N	N	N		

Y = Yes N = No U = Unknown

*** = A contaminant potentially associated with this activity has been detected in the water supply.**

Inventory of Possible Contaminating Activities (PCA Inventory)

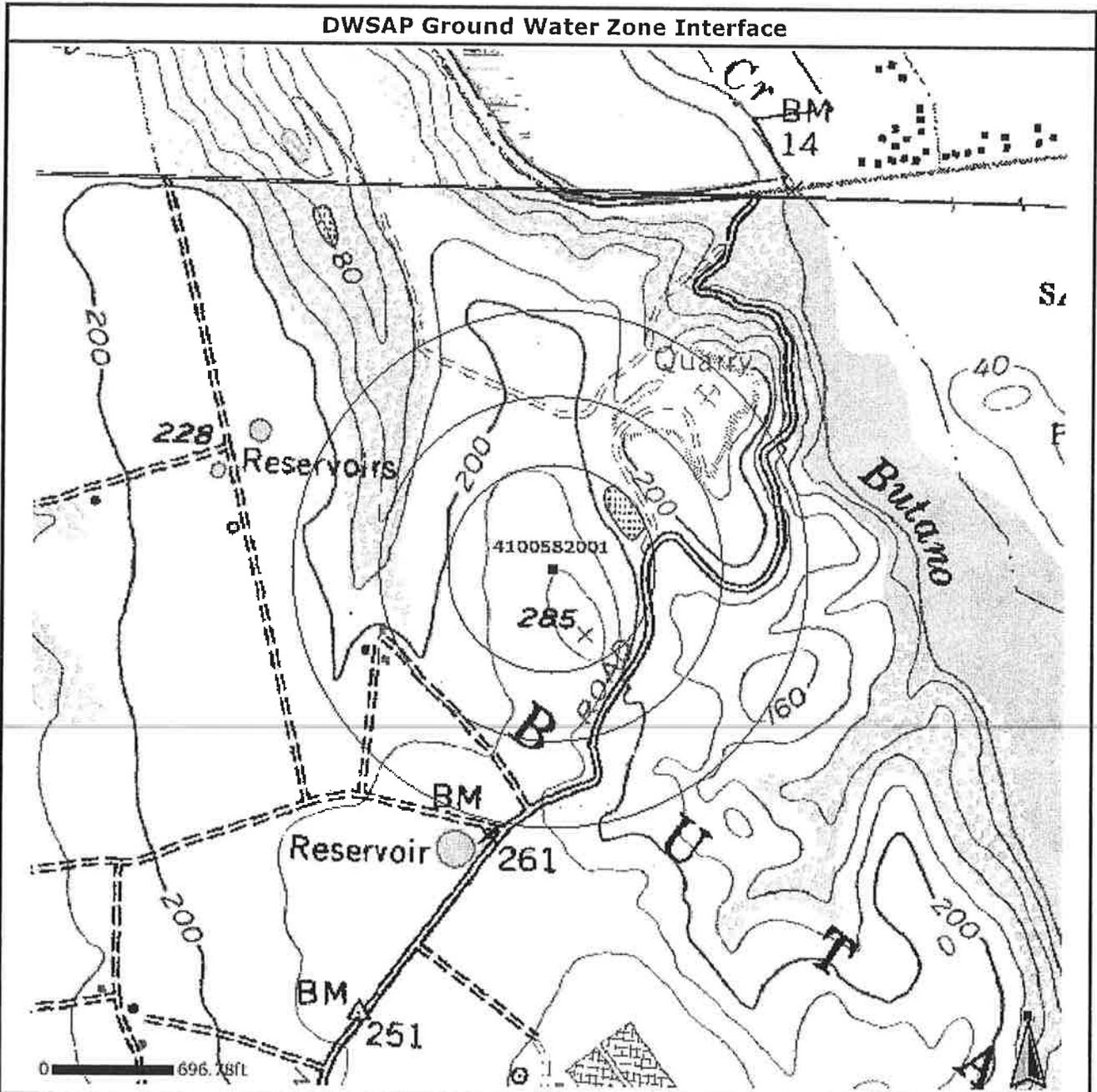
System Name COUNTY SERVICE AREA 11 System No. 4100582

Source Name WELL 01 Source No. 001 PS Code 4100582-001

PCA (Risk Ranking)	PCA in Zone A	PCA in Zone B5	PCA in Zone B10	*	Comments
Other Activities					
Transportation corridors - Historic railroad right-of-ways (M)	N	N	N		
Transportation corridors - Road Right-of-ways (herbicide use areas) (M)	Y	Y	Y		
Transportation corridors - Roads/ Streets (L)	N	Y	Y		
Hospitals (M)	N	N	N		
Storm Drain Discharge Points (M)	N	N	N		
Storm Water Detention Facilities (M)	N	N	N		
Artificial Recharge Projects - Injection wells (potable water) (L)	N	N	N		
Artificial Recharge Projects - Injection wells (non-potable water) (M)	N	N	N		
Artificial Recharge Projects - Spreading Basins (potable water) (L)	N	N	N		
Artificial Recharge Projects - Spreading Basins (non-potable water) (M)	N	N	N		
Medical/dental offices/clinics (L)	N	N	N		
Veterinary offices/clinics (L)	N	N	N		
Surface water - streams/ lakes/rivers (L)	Y	N	N		irrigation pond
Wells - monitoring, test holes (L)	N	Y	Y		near the old landfill

Y = Yes N = No U = Unknown

*** = A contaminant potentially associated with this activity has been detected in the water supply.**



Well Identification Information					
Well Number	Longitude *	Latitude *	GPS'd	* Well location coordinates have been rounded to 3 decimal places due to security concerns.	
4100582001	-122.400	37.244	Yes		
System Number	System Name	Source Number	Source Name	District Number/Name	County Number/Name
4100582	COUNTY SERVICE AREA 11	001	WELL 01	71/San Mateo County	41/San Mateo County
Well Zone Delineation Information					
Media Type	System Type	Effective Porosity (n)	Screened Interval (h)	Pumping Capacity (q)	Azimuth of Flow (a)
Porous Media	All Other System	0.2	40	45 gpm	0 - No Translation
Radii Measures					
Defaults Used	R2	R5	R10		
No	600 ft	1000 ft	1500 ft		