Drinking Water Source Assessment

Water System

Zone 7 Water Agency

Alameda County

Water Source

CHAIN OF LAKES WELL No. 1 (3S/1E 10 K3)-

Assessment Date

May, 2008

California Department of Health Services Drinking Water Field Operations Branch Zone 7 Water Agency

District No. B7

System No. 0110010

Source No. 023

PS Code 0110010-023

District Name	Zone 7 Water Agency	District No. <u>B7</u>	County	Alameda	
ystem Name	Zone 7 Water Agency			System No.	0110010
ource Name	GRAVEL PITS WELL 1 - PENDING	Source No.	023	PS Code0	110010-023

According to DHS records, this Source is Groundwater. This Assessment was done using the Default Groundwater System Method.

Description of System and Source

The Zone 7 Water Agency (Zone 7) located in Alameda County supplies treated drinking water to retailers in Pleasanton, Livermore, Dublin, and the Dougherty Valley area. Zone 7 supplies drinking water to nearly 200,000 people in its service area.

The source water for Zone 7 is comprised of a mixture of surface water and groundwater. The surface water is comprised of State Water Project Water imported through the Sacramento and San Joaquin River Delta and local rain water captured and stored in Del Valle Reservoir. The groundwater source is the Livermore-Amador Valley Basin which is subdivided into fourteen (14) sub basins. The area of the Basin is approximately 42,000 acres. The Livermore-Amador Valley Basin stores natural recharge from precipitation and surface water courses in the valley that have head waters in the uplands surrounding the valley. Zone 7 currently employs artificial recharge to the basin by releasing surface water supplies into Arroyos in the basin. There are multiple land uses in the basin, including agricultural, industrial, municipal, and undeveloped. These land uses, and especially the water use associated with them, can affect groundwater quality and quantity.

The Chain of Lakes Well Field is located in the center of the Amador sub basin, a portion of the Main basin consisting of the highest quality most productive aquifers in the Livermore-Amador Valley Basin. The Chain of Lakes Well Field will be developed to assist in meeting future water demands and to minimize groundwater drawdown in sub basins currently being utilized for the regions water supply.

Assessment Procedures

ECO:LOGIC Engineering conducted the assessment of the source, Chain of Lakes Well No. 1, for the Zone 7 Water Agency. The assessment was based on multiple sources of information including the following:

Seasonal groundwater elevation contour maps of the Livermore-Amador Valley for the period of 2003 through 2007.

Lithologic cross sections developed from borehole logs.

Pumping Test data for the Gravel Pits Exploratory Well (No. 3S/1E 14 D2), Chain of Lakes Well No. 1 (3S/1E 10 K3), and Chain of Lakes Well No. 2 (3S/1E 11 M3).

Lithologic and Geophysical logs of the Gravel Pits Monitoring Well (No. 3S/1E 10 K2), Chain of Lakes Well No. 1 (3S/1E 10 K3), and Chain of Lakes Well No. 2 (3S/1E 11 M3).

Design Specifications for Chain of Lakes Well Numbers 1 and 2.

The Zone 7 Water Agency Well Master Plan.

The 2006 Zone 7 Water Agency Groundwater Management Plan.

Environmental Database Records Search, Conducted July 2007 by EDR, Inc.

Historical aerial photography.

Assessm	entSun	miley :				
District Name	Zone 7 Water	Agency	District No. B7	County	Alameda	
System Name	Zone 7 Water	Agency			System No	o. <u>0110010</u>
Source Name	GRAVEL PITS	SWELL 1 - PENDING	Source No	023	PS Code	0110010-023
Completed by	James Witty			Do	ite <u>May, 2008</u>	
Contents of th	is Assessm	ent			•	
Yes [X No 🗌	Assessment Summ	nary			
Yes	X No 🗌	Vulnerability Summ	nary			
Yes	X No 🗌	Source Location Fo	min			
Yes	X No 🗌	Delineation of Water	er Protection Zones			
Yes	X No 🗌	Physical Barrier Eff	ectiveness Checklist			
Yes	X No 🗌	Source Data Sheet	,			
Yes	X No 🗆	Inventory of Possib	le Contaminating Acti	vities		
Yes		Vulnerability Rankir	ngi			
Voc	= =	Accomoni Man	_			

District Name	Zone 7 Water Agency	District No. <u>B7</u>	County	Alameda	
System Name	Zone 7 Water Agency	·		System No	o. <u>0110010</u>
Source Name	GRAVEL PITS WELL 1 - PENDING	Source No	023	PS Code	0110010-023
Completed by	James Witty		Da	nto <u>May, 2008</u>	
Tri. Li	FOLLOWING INFORMATION MUST BI	INCLUDED IN THE 8	YSTEM CON	SUMER CONFIDEN	ICE REPORT
				and the second second	
<u></u>	er assessment was conducted for	the GRAVEL PIT	S WELL 1	- PENDING	

with any detected contaminants:

Mining operations - Active Mining operations - Historic

Discussion of Vulnerability

Although no contaminants have been detected in the groundwater in the vicinity of the Chain of Lakes Wells, the source is vulnerable to activities in the area. The greatest risk to the source are the historic and active mining operations in the area. Since the mining operations are for sand and gravel, there is minimal introduction of contaminants to produce the final product. However, the processing of the aggregates could concentrate existing elements in wash water and tailings that could pose a threat to water quality. The source is also susceptible to wells in the capture zone which may provide conduits for surface contamination to reach the underlying aquifer. The majority of the wells in the vicinity have been installed relatively recent and are expected to have been installed in compliance with the California Well Standards. Some wells were completed prior to 1970 and may not have been completed to these standards. The source is also susceptible to underground petroleum storage tanks, and some older tanks have leaked polluting the groundwater. The older tanks responsible for leaks have been closed. Tanks in use are registered and actively monitored.

A copy of the complete assessment may be viewed at:

Zone 7 Water Agency 100 North Canyons Parkway Livermore, CA 94551

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

Gurpal Deol Zone 7 Water Quality Manager (925) 447-0533

Direction of Ground Water Flow

Drinking wat	er Source Assessment and Protec	cuon (Dirane) erogian	<u> </u>		Page
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District Name System Name	Zone 7 Water Agency Zone 7 Water Agency	District No. <u>B7</u>	County _	Alameda System	n No. <u>0110010</u>
Source Name	GRAVEL PITS WELL 1 - PENDIN	G Source No.	023	P8 Code	0110010-023
Completed by	James Witty		Dat	te <u>May, 2006</u>	3
lathad Haad t	o Dennezia Proscionizones				
1. (Calculated Fixed Radius				
X 2. I		Fixed Radius (All	ach docume	ntation for direc	tion of ground water
1. (X 2. I	Calculated Fixed Radius Modified Calculated F		ach docume	ntation for direc	ction of ground water
1. (X 2. 3.	Calculated Fixed Radius Modified Calculated F More Detailed Methods		ach docume		tion of ground water
1. (X 2. I	Calculated Fixed Radius Modified Calculated F More Detailed Methods Arbitrary Fixed Radius (For use only by o	2,200 3,549	gallons/mi	inute /ear	tion of ground water
1. (X 2. I	Calculated Fixed Radius Modified Calculated F More Detailed Methods Arbitrary Fixed Radius (For use only by o	or permission of DHS)	gailons/mi	inute /ear	

Protection Zone	Calculated Value	Minimum Value	Base Radius	Direction	Modified Distance
Zone A - 2 Year TOT*	1,363 Feet	600 Feet	1,363 Feet	upgradient	2,044 Feet
		:		downgradient	681 Feet
Zone B5 - 5 Year TOT*	2,155 Feet	1,500 Feet	2,155 Feet	upgradient	3,232 Feet
				downgradient	1,077 Feet
Zone B10 - 10 Year TOT*	3,047 Feet	0 Feet	3,047 Feet	upgradient	4,571 Feet
				downgradient	1,524 Feet

250.00

degrees

^{*}TOT = Time of Travel

Physical Barrier sirectivenes	13((25))			
District Name Zone 7 Water Agency	District No. B7 Gou	inty Alameda.		
System Name Zone 7 Water Agency			stem No.	0110010
Source Name GRAVEL PITS WELL 1 - PENDI	NG Source No. 023	PS Cod	0110	0010-023
Completed byJames Witty		Date May,	2008	
Parameter		Possible Points	This Source	Score
Type of Aquifer Confinement				
1. Unconfined, Semi-confined, Fractured Rock, Unknow	rn Aquifer	-0	X	0
2. Confined		50		
Aquifer Material (Unconfined Aquifers) Type of material within aquifer				
Porous Media (Interbedded sands, silts, clays, gravel minimum 25' thick above water table within Zone A	s) with continuous clay layer	20		
2. Porous Media (Interbedded sands, slits, clays, gravel	s)	10	Х	10
3. Fractured rock (Low Physical Barrier Effectiveness -	no further questions required)	0		
Pathways of Contamination (All Aquifers) Presence of Abandoned or Improperly Destroyed W	/ells		<u> </u>	
Present within Zone A (2 year TOT distance)	Yes	0		
•	No .	5	X	5
	Unknown	0		
2. Present within Zone B5 (2-5 year TOT distance)	Yes	0	Х	0
	<u>No</u>	3		
	Unknown	0		
3. Present within Zone B10 (5-10 year TOT distance)	Yes	0	X	0
	No	2		
	Unknown	0		
Static Water Conditions (Unconfined Aquifers)				
Depth to Static Water (DTW) 50 feet	0 to 20 feet	0		
Depth to Static Water (DTW) 50 feet	20 to 50 feet	2		
	50 to 100 feet	6	Х	6
	Greater than 100 feet	10		
	Unknown	0		1
Well Operation (Unconfined Aquifers)				
Depth to Uppermost Perforations (DUP)	205_ feet		:	
	200 gallons/minute			
	265 feet			
- · · · · · · · · · · · · · · · · · · ·	Less than 5	0	<u> </u>	
[DUP - DTW/Q/H]	Between 5 and 10	5		
	Greater than 10	10	X	10
	Unknown	0		

Drinking Wate	er Source Assessmei	nt and Protection (DWSAP) Program			Page 7
Physical	Bandad: Hill		Education of	a Park a production	
District Name	Zone 7 Water Agend	y District No. B7 Cour	nty Alameda		
System Name	Zone 7 Water Agenc	<u>y</u>	Sy	stem No	0110010
Source Name	GRAVEL PITS WEL	L 1 - PENDING Source No. 023	PS Cod	0110	0010-023
Completed by	James Witty	The state of the s	Date May,	2008	· · · · · · · · · · · · · · · · · · ·
Parameter			Possible Points	This Source	Score
Well Construction	on (All Aquifers)				
Sanitary Seal (A	nnular Seal) Depth	None or less than 20 feet	0		
	197 feet	Between 20 and 50 feet	6		, , ,
		50 feet or greater	10	X	10
		Unknown	0		
Surface Seal (co	oncrete cap)	Not present or improperly constructed	0		
		Watertight, slopes away from well at least 2 laterally in all directions	4	X	4
		Unknown	0		
Flooding potenti	al at well site	Subject to localized flooding (i.e. in low area or unsealed pit or vault) or within 100 year flood plain	0		
		Not subject to flooding	1	Х	1
		Unknown	0		
Security at well	site	Not secure	Ö		
		Secure	5	Х	5
		Unknown	0		

Score	Effectiveness
0 to 35	Low
36 to 69	Moderate
70 to 100	High

Maximum Score = 70

Score	51
Effectiveness	<u>Moderate</u>

Inventory of Possible Contaminating Activities (PCA inventory)

District Name Zone 7 Water Agency	District I	No. <u>B7</u>	Coun	ty _	Alameda	No. Access
System Name Zone 7 Water Agency					System	
Source Name GRAVEL PITS WELL 1 - PEND	ing 8	ource No.	023		_ PS Code	0110010-023
Completed byJames Witty				Da	ite <u>May, 2008</u>	
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		<u> </u>	
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	Ň	N			
Chemical/petroleum pipelines (H)	U	U	U			
Chemical/petroleum processing/storage (VH)	N	Υ	Y			
Dry cleaners (VH)	N	N	N			
Electrical/electronic manufacturing (H)	N	N	N			
Fleet/truck/bus terminals (H)	N	Ņ	Ň		···	
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	Ņ	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 in Zone A, otherwise L)	Ņ	N	N			
Parking lots/malls [>50 spaces] (M)	N	N	N			
Cement/concrete plants (M)	Y	Υ	Y			
Food processing (M)	N	N	N			

Y = Yes N = No U = Unknown

Funeral services/graveyards (M)

Hardware/lumber/parts stores (M)

Appliance/Electronic Repair (L)

Office buildings/complexes (L)

Rental Yards (L)

RV/mini storage (L)

Ň

N

N

N

N

N

N

N

N

N

N

N

N

N

N

N

N

N

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

Inventory of Possible Continuing Notice (1992) inventory

District Name	Zone 7 Water Agency		No. B7	Coun		Alameda	
System Name	Zone 7 Water Agency	Diediot	NO. <u>D7</u>		٠,		10010
Source Name	GRAVEL PITS WELL 1 - PENDIN	G 5	ource No.	023		PS Code	
	ONLY LETTO WELL 1-FEMOLIA	<u> </u>	- Cuitt No.				
Completed by	James Witty	Date May, 2008					
PCA (Risk Rankin	g)	PCA in Zone A	PCA in Zone B5	PCA in Zone B10	*	Comments	
Residential/M	unicipal Activities						
Airports - Maintenai	nce/fueling areas (VH)	N	N	N			
Landfilis/dumps (VI	1)	N	N	N			
Railroad yards/mair	ntenance/fueling areas (H)	N	N	N			
Septic systems - higotherwise M)	gh density [>1/acre] (VH in Zone A,	N	N	N			
Sewer collection sy	stems (H in Zone A, otherwise L)	Y	N	Y			MART
Utility stations - mai	ntenance areas (H)	N	N	Ņ			
Wastewater treatme	ent plants (VH in Zone A, otherwise H)	N	N	N			
Drinking water treat	ment plants (M)	N	N	N			
Golf courses (M)	and the second s	Y	Y	Y			
Housing - high dens	sity [>1 house/0.5 acres] (M)	Ņ	N	Υ			
Motor pools (M)		N	N	N			
Parks (M)		N	N	N			
Waste transfer/recy	cling stations (M)	N	N	N			
Apartments and cor	ndominiums (L)	Ŋ	N	N			
Campgrounds/Recr	eational areas (L)	N	N	N			
Fire stations (L)		N	N	N			
RV Parks (L)		N	N	N		. " 	
Schools (L)		N	N	N			
Hotels, Motels (L)	21.2	N	N	N			
Agricultural/R	tural Activities						
Grazing [> 5 large a Zone A, otherwise i	ınimals or equivalent per acre] (H in M)	N	N	N			
	al Feeding Operations [CAFOs] as agulation1 (VH in Zone A, otherwise	N	N	N			
	erations as defined in federal Zone A, otherwise H)	N	N	N			
Other Animal opera	tions (H in Zone A, otherwise M)	N	N	N			
Farm chemical distr	ibutor/ application service (H)	N	N	N			
Farm machinery rep	pair (H)	N	N	N			,
Septic systems - lov otherwise L)	w density [<1/acre] (H in Zone A,	Y	Y	Υ			

Y = Yes N = No U = Unknown

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

ainventory of Possible Contaminating Activity (2074 Inventory)

District Name	Zone 7 Water Agency	District I		Coun	ty _	Alameda	
System Name	Zone 7 Water Agency					System	No. <u>0110010</u>
Source Name	GRAVEL PITS WELL 1 - PENDIN	<u>G</u> 8	ource No.	023		P8 Code	0110010-023
Completed by	James Witty			,	Da	nte <u>May, 2008</u>	
PCA (Risk Rankin	g)	PCA in Zone A	PCA in Zone B5	PCA in Zone B10	*	Comments	
Agricultural/F	Rural Activities						
Lagoons/liquid was	tes (H)	N	N	N			
Machine shops (H)		N	N	N			
Pesticide/fertilizer/p	petroleum storage & transfer areas (H)	N	Ň	N			
Agricultural Drainas	ge (H in Zone A, otherwise M)	N	N	N			
Wells - Agricultura	l/ Irrigation (H)	N	Υ	Y			
Managed Forests (M)	Ņ	N	N			
	erries, hops, mint, orchards, sod, vards, nurseries, vegetable] (M)	Y	Y	Υ			
Fertilizer/Pesticide/	Herbicide Application (M)	U	U	U			
Sewage sludge/bio	solids application (M)	N	Ň	N			
Crops, nonirrigated seeds, hay, pasture	[e.g., Christmas trees, grains, grass a] [includes drip-irrigated crops] (L)	Y	Y	Y			
Other Activiti	es						
NPDES/WDR perm	vitted discharges (H)	N	N	N			
Underground Inject Discharges (VH)	ion of Commercial/Industrial	И	N	N			
Historic gas station	s (VH)	Ņ	N	N			
Historic waste dum	ps/landfills (VH)	N	N	N			
Illegal activities/una	authorized dumping (H)	U	U	U			
Injection wells/dry	vells/ sumps (VH)	U	U	U			
Known Contamina	nt Plumes (VH)	N	Υ	Y			
Military installations	s (VH)	N	N	N			
Mining operations -	Historic (VH)	Υ	Y	Υ			
Mining operations	Active (VH)	Y	Υ	Y			
Mining - Sand/Grav	/el (H)	Y	Υ	Υ	Γ		
Wells - Oil, Gas, G	eothermal (H)	N	N	N	Г		· · · · · ·

Y = Yes N = No U = Unknown

Salt Water Intrusion (H)

tanks (L)

Recreational area - surface water source (H)

Underground storage tanks - Confirmed leaking tanks

Underground storage tanks - Decommissioned - inactive

N

N

N

N

N

N

Y

N

N

N

Y

Y

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

inventory (or residence in		[e]/;\(c)i	MHOLE	[2]	actice will (a	
District Name Z	one 7 Water Agency	District I	No. B7	Coun	tv	Alameda	
_	one 7 Water Agency				٠.	System No.	0110010
<u> </u>	RAVEL PITS WELL 1 - PENDIN	G8	ource No.	023			10010-023
Completed by	ames Witty	·			De	nte <u>May, 2008</u>	
PCA (Risk Ranking)		PCA in Zone A	PCA in Zone B5	PCA in Zone B10	*	Comments	
Other Activities							
Underground storage to smaller than regulatory	anks - Non-regulated tanks [tanks limit] (H)	N	N	N			
Underground storage to registered tanks (H)	anks - Not yet upgraded or	N	N	N			*****
Underground storage to - active tanks (L)	anks - Upgraded and/or registered	N	Y	Y			
Above ground storage	tanks (M)	Ņ	N	N			
Wells - Water supply (N	(1)	Y	Y	Υ			
Construction/demolition	n staging areas (M)	N	N	N			
Contractor or governme yards (M)	ent agency equipment storage	N	N	N			
Dredging (M)		N	N	.N		, , , , , , , , , , , , , , , , , , ,	· · · · · · · · · · · · · · · · · · ·
Transportation corridors	s - Freeways/state highways (M)	N .	N	Υ			
Transportation corridor	s - Railroads (M)	N	N	N			
Transportation corridors (M)	s - Historic railroad right-of-ways	Ň	N	N			
Transportation corridor use areas] (M)	s - Road Right-of-ways [herblcide	Y	Y	Y			
Transportation corridors	s - Roads/Streets (L)	Υ	Υ	Υ			
Hospitals (M)		N	N	N			· · · · ·
Storm Drain Discharge	Points (M)	Υ	Υ	Y			
Storm Water Detention	Facilities (M)	N	N	N			· · · · · · · · · · · · · · · · · · ·
Artificial Recharge Proj water] (L)	ects - Injection wells (potable	N	N	N			· · · · · · · · · · · · · · · · · · ·
Artificial Recharge Proj water] (M)	ects - Injection wells [non-potable	N	N	N			
Artificial Recharge Proj water] (L)	ects - Spreading Basins [potable	N	Ň	N			
Artificial Recharge Proj [non-potable water] (M)	ects - Spreading Basins	N	N	N			
Medical/dental offices/d	dinics (L)	N	N	N			
Veterinary offices/clinic	* (L)	N	N	N			
Surface water - stream	s/iakes/rivers (L)	Y	Υ	Υ			
Wells - monitoring, test	holes (L)	Y	Υ	Υ			

Y = Yes N = No U = Unknown

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

Drinking Water Source Assessment and Protection (DWSAP) Program Page 12 Vulnerability Ranking District Name Zone 7 Water Agency District No. B7 County Alameda System No. System Name 0110010 Zone 7 Water Agency 0110010-023 Source Name **GRAVEL PITS WELL 1 - PENDING** Source No. 023 PS Code Completed by James Witty Date May 2008 **PCA Risk** PBE Vulnerability Zone **Points** Points **Points** Score Zone PCA (Risk Ranking) A 7 3 Mining operations - Active (VH) 5 15 7 A Mining operations - Historic (VH) 5 3 15 3 A Mining - Sand/Gravel (H) 5 5 13 Septic systems - low density [<1/acre] (H in Zone A, otherwise L) 5 5 3 13 Α 3 A Sewer collection systems (H in Zone A, otherwise L) 5 5 13 **B5** Chemical/petroleum processing/storage (VH) 7 3 3 13 **B**5 Known Contaminant Plumes (VH) 7 3 3 13 7 3 **B**5 Mining operations - Active (VH) 3 13 7 3 Mining operations - Historic (VH) **B5** 3 13 7 3 **B**5 Underground storage tanks - Confirmed leaking tanks (VH) 3 13 3 3 Α Cement/concrete plants (M) 5 11 A 3 5 3 11 Crops, irrigated [Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable] (M) Golf courses (M) 3 11 A 3 5 3 5 3 11 Storm Drain Discharge Points (M) Ä Transportation corridors - Road Right-of-ways [herbicide use areas] (M) 3 3 5 11 Α 3 3 11 Wells - Water supply (M) 5 A **B**5 Mining - Sand/Gravel (H) 5 3 3 11 5 3 11 3 **B**5 Wells - Agricultural/Irrigation (H) **B10** Chemical/petroleum processing/storage (VH) 7 1 3 11 7 11 **B10** 3 Known Contaminant Plumes (VH) 1 **B10** Mining operations - Active (VH) 7 1 3 11 7 1 3 11 **B10** Mining operations - Historic (VH) **B10** 7 3 11 Underground storage tanks - Confirmed leaking tanks (VH) 1 7 0 3 10 A injection wells/dry wells/ sumps (VH) **B**5 Injection wells/dry wells/ sumps (VH) 7 0 3 10 **B10** 7 n 3 10 Injection wells/dry wells/ sumps (VH)

Crops, nonirrigated [e.g., Christmas trees, grains, grass seeds, hay,

pasture] [includes drip-irrigated crops] (L)

Surface water - streams/takes/rivers (L)

Α

A

3

3

5

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9

9

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

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District Name Zone 7 Water Agency District No. B7 County Alameda

System Name Zone 7 Water Agency System No. 0110010

Source Name GRAVEL PITS WELL 1 - PENDING Source No. 023 PS Code 0110010-023

Completed by James Witty Date May, 2008

Zone	PCA (Risk Ranking)		PCA Risk Points	Zone Points	PBE Points	Vulnerability Score
Ä	Transportation corridors - Roads/Streets (L)		1	5	3	.0
Α	Wells - monitoring, test holes (L)		1	. 5	3	9
B5	Cement/concrete plants (M)		3	3	3	9
85	Crops, Irrigated [Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable] (M)		3	3	3	9
B5	Golf courses (M)		3	3	3	9
B5	Storm Drain Discharge Points (M)		3	3	3	9
B5	Transportation corridors - Road Right-of-ways [herbicide use areas] (M)		3	3	3	9
B 5	Wells - Water supply (M)		3	3	3	9
B10	Mining - Sand/Gravel (H)		5	1	3	9
B10	Wells - Agricultural/Irrigation (H)	·	5	1	3	9
A	Chemical/petroleum pipelines (H)		5	0	3	8
Α	Illegal activities/unauthorized dumping (H)		5	0	3	8
B5	Chemical/petroleum pipelines (H)		5	0	3	8
B5	Illegal activities/unauthorized dumping (H)		5	0	3	8
B10	Chemical/petroleum pipelines (H)	.]	.5	0	3	. 8
B10	Illegal activities/unauthorized dumping (H)		5	0	.3	8

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

WELL DATA SHEET (Page 1 of 3)

* Indicates items required for Source Water Assessment		
** Indicates additional items required for assessments and Ground Wi	ater Rule	
	(separate multiple entries in field with semi-colon)	Actual, Estimated or Default?
DATA SHEET GENERAL INFORMATION		
System Name	Zone 7 Water Agency	from DHS detebase
System Number	9110010	from DHS detabase
Source of Information (well to, DHS/County file), system (19)		
Organization Collecting Information (DHS, County, System, other)	System's Consultant	
Date Information Collected/Updated	2/4/2008	A Clay of the Property of the Control of the Contro
WELL IDENTIFICATION		
	Chain of Lakes Well No 1	
* Well Number or Name	(023)	from DHS detabase
* 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)	Active	from DHS database
WELL LOCATION		
Latitude	37°41' 08.493"	from DHS detabase
Longitude	-121° 50' 46.672"	from DHS database
Ground Surface Elevation (ft above Mean Sea Level)	360	Estimated
Street Address		
Nearest Cross Street	Elcharo Road	and the second second
Cily	Pleasinton	
County	Alemeede .	
* Neighborhood/Surrounding Area (see Note 1)	Ru, Re, I, Mu, Ö	
Site plan on file? ("YES" or "NO")		In Progress
DWR Ground Water Basin	Livermoore Valley	to come from DWR
DWR Ground Water Sub-basin	Amador	to come from DWR
SANITARY CONDITIONS	<u> </u>	
** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft)	26.5	75% Design
Distance to Active Wells (ft)	764	Estimated from Coordinates
Distance to Abandoned Wells (ft)	4635	Estimated from Coordinates
Distance to Surface Water (ft)	116	actual
** Size of controlled area around well (square feet)	49,670	Planned
* Type of access control to well site (fencing, building, etc)	Fencing	Planned
* Surface Seal? (Concrete slab)("YES", "NO" or "UNKNOWN")	Yes	Planned
* Dimensions of concrete slab: Length(ft)/ Width(ft)/ Thick(in)	109.33/52/0.66	Planned
* Within 100 year flood plain? ("YES", "NO" or "UNKNOWN")	No	
* Drainage away from well? ("YES" or "NO")	Yes	Planned
ENCLOSURE/HOUSING		
Enclosure Type (building, vault, none, etc.)	Building	Planned
Floor material	Concrete	Planned
Located in Pit? ("YES" or "NO")	No	
Pit depth (feet) (if applicable)		
WELL CONSTRUCTION		
Pate drilled	Morember 2007	
ethics Molites		1997年1998年1998年1998年1998年1998年1998年1998年
Depth of soce fold (ee) below ground surface)	3.50	
Casing Beginning Depth/Ending Depth(filbelow surface);	2 E-1410/E-14107/27403/2	
2nd Cesing Beginning Depth/Ending Depth/3rd Desing, etc.	\$ 20 20 1706 206 (530) \$ 20 20 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Aginla

WELL DATA SHEET (Page 2 of 3)

Complete as much information as possible. Leave blank if information is not av	eilable, use N.A. if not applica	ble.
* Indicates items required for Source Water Assessment		
** Indicates additional items required for assessments and Ground Wate	or Ruid 1803598386380376986648	
	0.975 HBLA Start	POTENTIAL LANGUE CONTRACTOR
	Desmail News	Association of the second seco
	Connector: 0.876"	
Casing Material; 2nd Casing Material; 3rd Gasing, etc.	Stainless Siesi	Actual Malara describer of the state of the
	(separate multiple entries in	
	field with semi-colon)	Actual, Estimated or Default?
WELL CONSTRUCTION (continued)		
(Conductor casing used? ("YES", "NO" OF UNKNOWN") (See Note 2)	Yes	
Conductor casing removed? ("YES!::NO" or UNKNOWN")	10 10 10 10 10 10 10 10 10 10 10 10 10 1	Bergorius Amerikan Salah Salah Salah
Depth to highest perforations/screens (ft below surface) (or	205	
"UNKNOWN")	205/265; 305/440;	CONTRACT DESCRIPTION OF PROPERTY AND ADDRESS.
Screened Interval Beginning Depth/Ending Depth (ft below surface); 2nd Screened Interval Beg. Depth/Ending Depth; 3rd Screened Interval, etc.	206/205 805/440 480/530	
Total length of screened interval (ft)		
(default * 10% pump capacity in gpm) (or "UNKNOWN")	265 market	
Annular Seal?("YES; "NO or "UNKNOWN") (See Note 3)	Yes	
Depth of Annular Seal (ft)	197	
Material of Annular Seal (cement grout, bentonite, etc.)	Cement Sand Grout	
Grave pack Depth to top (to below ground surface)	0	第四周的第三人称单数
Total length of gravel pack (ft)	630	STATE OF THE PROPERTY OF THE P
AQUIFER		
* Aquifer Materials	and the second contribution and	
(list all that apply sand, silt, clay, gravel, rock fractured rock)	sand six clay grave	
* Effective porosity (decimal percent) (default = 0.2) (or "UNKNOWN")	0.2	default
*Confining layer (Impervious Strata) above aquifer?	0.2	Cerault
("YES", "NO" or "UNKNOWN")	Υρικ	um pada pagas properties per
Thickness of confining layer, if known (ft)	20	Borehole Log
Depth to confining layer, if known (ft below ground)	180	Borehole Log
	ga ship wa ilikuwa sanaa sanaa	Average during construction
* Static water level (ft below ground surface)	60	period
Static water level measurement: Date/Method	11/17/07 Electric Tape	
Pumping water level (it below ground surface)	190)	Predicted 90 day drawdown
Pumping water level measurement: Date/Method	max design drawdown	
WELL PRODUCTION		
Well Yield (gpm) Well Yield Based On (i.e., pump lest; etc.)	2/2(00)	
Date measured	Pumping (es) Dec 07 2 Feb 08	
is the well metered? ("YES" or "NO")	Yes	Planned
Production (gations per year)	TBD	Planned for Intermittant
Frequency of Use (hours/year)	TBD	operation on an as needed
Typical pumping duration (hours/day)	T 8 D	basis primarily for drought
PUMP		and emergencies
Make	TBĎ	
Туре	TBO	
Size (hp)	600	Planned
* Capacity (gpm)	3,000	Planned
Depth to suction intake (ft below ground surface)	275	Planned
Lubrication Type Type of Power: (i.e., electric, diesel, etc.)	Water Electric	Planned Planned
Auxiliary power available? ("YES" or "NO")	TBD	r iai (1890
Operation controlled by: (i.e., level in tank, pressure, etc.)	Remote as needed	Planned
akaitrian adminina nii fuari iatai in imin' hi aashia' ato'l	I VENTOLE BY HERVIEW	I. william

WELL DATA SHEET (Page 3 of 3)

Complete as much information as possible. Leave blank if information is not ave	illable, use N.A. Il not applica	ıble.
* Indicates items required for Source Water Assessment		
** Indicates additional items required for assessments and Ground Wate		
Pump to Waste capability? ("YES" or "NO")	TBO	
Discharges to: (i.e., distribution system, storage, etc.)	Distibution System	Planned
REMARKS AND DEFECTS (use additional sheets as necessary)		<u> </u>
Sanitary Sewer will be of special material and sleved where it crosses wa	ster main.	
NOTE8		
Neighborhood/Surrounding Area (list all that apply): A= Agricultural, Ru =		
Rural, Re = Residential, Co = Commercial,		
I = Industrial, Mu = Municipal, P = Pristine, O = Other		
Conductor Casing - Oversized casing used to stabilize bore hole during well construction. Should be removed during installation of annular seal.	· · · · · · · · · · · · · · · · · · ·	
3. Annular Seal - Seal of grout in the space between the well casing and the		
wall of the drilled hole. Sometimes called "sanitary seal".	<u>.</u>	
	·	
Please Note:		
The information on this Well Data Sheet is considered confidential. To		
allow the information to be included		
in the permit report, or made available subject to a public information		
act request, the waiver clause below has		
to to be signed and dated by the owner (public water system). In lieu		1
of this signature, the WDS has to be		<u> </u>
retained in a confidential file, or the information shown in the shaded		
rows has to be "blacked out."		·
I/We, (Name),]
certify that i/We am/are the present owners of the well described		1
on this well data sheet. I/We have reviewed the information		
presented on this well data sheet and I/We take no exception to		
having the information inicuded in the Department of Health		1
Services' Engineering Report. I/We understand that by including		
the well data sheet in the Engineering Report, it will be part of a		,
public document that can be reviewed and copied subject to the		
public information act request.		}
	11-11-11-11-11-11-11-11-11-11-11-11-11-	
(Signature) (Date)		
		.

WELL DATA SHEET (Page 1 of 3)

DATA SHEET GENERAL INFORMATION System Name System Number Source of Information (well log, DHS/County files, system, etc) Organization Collecting Information (DHS, County, System, other) Date Information:Collected/Updated 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) WELL LOCATION Latitude Longitude Ground Surface Elevation (ft above Mean Sea Level) Street Address Nearest Cross Street City County "Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS "Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Abandoned Wells (ft)	separate multiple entries in field with semi-colon)	Actual, Estimated or Default' from DHS database from DHS database from DHS database
DATA SHEET GENERAL INFORMATION System Name System Number Source: of: Information: (well log. DHS/County files: system. etc) Organization Collecting Information (DHS, County, System, other) Date: Information: Collected/Updated WELL IDENTIFICATION CI 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) WELL LOCATION Latitude Longitude Ground Surface Elevation (ft above Mean Sea Level) Street Address Nearest Cross: Street City County: Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS "Distance to Active Wells (ft) Distance to Abandoned Wells (ft)	Zone 7 Water Agency 0110010 Well Log System's Consultant 2/6/2008 hain of Lakes Well No 1 (023) No Active	from DHS database from DHS database from DHS database
System Name System Number Source of Information (well log, DHS/County files, system, etc) Organization Collecting Information (DHS, County, System, other) Date Information Collected/Updated WELL IDENTIFICATION CI 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) WELL LOCATION Latitude Longitude Ground Surface Elevation (ft above Mean Sea Level) Street Address Nearest Cross Street City County * Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS ** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Abandoned Wells (ft) Distance to Abandoned Wells (ft)	0110010 Well Log System's Consultant 2/6/2008 hain of Lakes Well No 1 (023) No Active 37° 41' 08.493"	from DHS database from DHS database
System Number Source of Information (well log, DHS/County files, system, etc) Organization Collecting Information (DHS, County, System, other) Date Information Collected/Updated WELL IDENTIFICATION CI Well Number or Name DHS Source Identification Number (FRDS ID No.) DWR Well Log on File? ("YES" of "NO") State Well Number (from DWR) Nell Status (Active, Standby, Inactive) WELL LOCATION atitude ongitude Ground Surface Elevation (ft above Mean Sea Level) Street Address Nearest Gross Street City County Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS "Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Abandoned Wells (ft)	0110010 Well Log System's Consultant 2/6/2008 hain of Lakes Well No 1 (023) No Active 37° 41' 08.493"	from DHS database from DHS database
Source of Information (well log. DHS County files, system, etc.) Organization Collecting Information (DHS, County, System, other) Date Information Collected/Updated WELL IDENTIFICATION CI 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 LOCATION attitude congitude Ground Surface Elevation (ft above Mean Sea Level) Street Address Nearest Gross Street City County Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS "Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Abandoned Wells (ft) Distance to Abandoned Wells (ft)	Well Log System's Consultant 2/8/2008 hain of Lakes Well No 1 (023) No Active 37° 41' 08.493"	from DHS database
Organization Collecting Information (DHS, County, System, other) Date Information Collected/Updated WELL IDENTIFICATION CHAPTER CONTROL CONT	System's Consultant 2/6/2008 hain of Lakes Well No 1 (023) No Active 37° 41' 08.493"	
Well Number or Name Well Number or Name DHS Source Identification Number (FRDS ID No.) WR Well Log on File? ("YES" or "NO") State Well Number (from DWR) Well Status (Active, Standby, Inactive) Well LoCATION Latitude Longitude Ground Surface Elevation (ft above Mean Sea Level) Street Address Nearest Cross Street City County Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS ** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Abandoned Wells (ft) Distance to Abandoned Wells (ft)	2/6/2008 hain of Lakes Well No 1 (023) No Active 37° 41' 08.493"	
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) WELL LOCATION Latitude Longitude Ground Surface Elevation (ft above Mean Sea Level) Street Address Nearest Cross Street City County Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS *** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Abandoned Wells (ft)	hain of Lakes Well No 1 (023) No Active 37° 41' 08.493"	
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) WELL LOCATION atitude congitude Ground Surface Elevation (ft above Mean Sea Level) Street Address Nearest Gross Street City County: Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS ** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Abandoned Wells (ft)	(023) No: Active 37° 41' 08.493"	
Well Number or Name DHS Source Identification Number (FRDS ID No.) WR Well Log on File? ("YES" or "NO") State Well Number (from DWR) Well Status (Active, Standby, Inactive) WELL LOCATION atitude congitude Ground Surface Elevation (ft above Mean Sea Level) Street Address Nearest Gross Street City County: Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS ** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Abandoned Wells (ft)	(023) No: Active 37° 41' 08.493"	
DHS Source Identification Number (FRDS ID No.) DWR Well Log on File? ("YES" or "NO") State:Well Number (from DWR) WELL LOCATION Latitude Longitude Ground Surface Elevation (ft above Mean Sea Level) Street Address Nearest Cross Street City County Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS *** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Abandoned Wells (ft)	Active 37° 41′ 08.493"	
OWR Well Log on File? ("YES".or."NO") State:Well Number (from DWR) Well Status (Active, Standby, Inactive) WELL LOCATION Latitude Longitude Ground Surface Elevation (ft above Mean Sea Level) Street Address Nearest Cross Street City County Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS *** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Abandoned Wells (ft)	Active 37° 41' 08.493"	from DHS database
State:Well Number (from DWR) Well Status (Active, Standby, Inactive) WELL LOCATION Latitude Longitude Ground Surface Elevation (ft above Mean Sea Level) Street Address Nearest Cross Street City County Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS "Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Active Wells (ft) Distance to Abandoned Wells (ft)	Active 37° 41' 08.493"	from DHS database
WELL LOCATION Attitude Longitude Ground Surface Elevation (ft above Mean Sea Level) Street Address Nearest Cross Street City County Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS To Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Abandoned Wells (ft)	37°41' 08.493"	from DHS database
WELL LOCATION Latitude Longitude Ground Surface Elevation (ft above Mean Sea Level) Street Address Nearest Cross Street City County * Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS *** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Active Wells (ft) Distance to Abandoned Wells (ft)	37°41' 08.493"	ITOM UPIO (18(80856
Longitude Ground Surface Elevation (ft above Mean Sea Level) Street Address Nearest Cross Street City County Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS "Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Abandoned Wells (ft)		I
Longitude Ground Surface Elevation (ft above Mean Sea Level) Street Address Nearest Cross Street City County * Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS *** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Abandoned Wells (ft)		
Ground Surface Elevation (ft above Mean Sea Level) Street Address Nearest Cross Street City County * Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS ** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Active Wells (ft) Distance to Abandoned Wells (ft)	404 ⁰ EO! 4& &70 ¹ !	from DHS database
Street Address Nearest Cross Street City County Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS "Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Abandoned Wells (ft)		from DHS database
Nearest Cross Street City County Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS "Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Abandoned Wells (ft)	360	Estimated
County Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS ** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Active Wells (ft) Distance to Abandoned Wells (ft)		perfect of publications are appropriate to the second
County Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS ** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Active Wells (ft) Distance to Abandoned Wells (ft)	El Charro Road	
* Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS *** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Active Wells (ft) Distance to Abandoned Wells (ft)	Pleasanton	
* Neighborhood/Surrounding Area (see Note 1) Site plan on file? ("YES" or "NO") DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS *** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Active Wells (ft) Distance to Abandoned Wells (ft)	Alameada	
DWR Ground Water Basin DWR Ground Water Sub-basin SANITARY CONDITIONS "Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Active Wells (ft) Distance to Abandoned Wells (ft)	Ru, Re, I, Mu, O	
DWR Ground Water Sub-basin SANITARY CONDITIONS "Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Active Wells (ft) Distance to Abandoned Wells (ft)		In Progress
** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Active Wells (ft) Distance to Abandoned Wells (ft)	Livermoore Valley	to come from DWR
** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft) Distance to Active Wells (ft) Distance to Abandoned Wells (ft)	Amador	to come from DWR
Distance to Active Wells (ft) Distance to Abandoned Wells (ft)		
Distance to Active Wells (ft) Distance to Abandoned Wells (ft)	26.5	75% Design
Distance to Abandoned Wells (ft)	764	Estimated from Coordinates
	4635	Estimated from Coordinates
Distance to Surface Water (ft)	116	actual
** Size of controlled area around well (square feet)	49,670	Planned
* Type of access control to well site (fencing, building, etc)	Fencing	Planned
* Surface Seal? (Concrete slab)("YES", "NO" or "UNKNOWN")	Yes	Planned
* Dimensions of concrete slab: Length(ft)/ Width(ft)/ Thick(in)	109.33/52/0.66	Planned
" Within 100 year flood plain? ("YES", "NO" or "UNKNOWN")	No	
* Drainage away from well? ("YES" or "NO")	Yes	Planned
ENCLOSURE/HOUSING		
Enclosure Type (building, vault, none, etc.)	Building	Planned
Floor material	Concrete	Planned
Located in Pit? ("YES" or "NO")	No	
Pit depth (feet) (if applicable)		
WELL CONSTRUCTION		
Date drilled	November 2007	
Drilling Method	Mud Rotary	
Depth of Bore Hole (feet below ground surface)	550	actual
Casing Beginning Depth/Ending Depth(ft below stifface); 2nd Casing Beginning Depth/Ending Depth; 3rd Gasing, etc.	-1/100 -1/197 -2/203; 203/205; 205/530	Actual
	40: 30: 18:625: 18:625:	Actual

WELL DATA SHEET (Page 2 of 3)

Complete as much information as possible. Leave blank if information is not ave Indicates items required for Source Water Assessment	indore, dec /til to live approximation	
Indicates items required for source vivaler Assessment	er Pule	
* Indicates additional items required for assessments and Ground Wat	0.5 Steel 0.375 Steel	
	0.076" HSLA SIGN	energy of the second
	Disamiak Métals	pace in the form of the as
	Connector 0.375"	and the state of t
		Actual
Casing Material; 2nd Casing Material; 3rd Casing, etc.	32 THE R. LEWIS CO., LANSING, MICH. 40 P. LEWIS CO., LANSING,	CAUG
	(separate multiple entries in	Actual, Estimated or Default
	field with semi-colon)	Actual, Estimated or Deliabit
WELL CONSTRUCTION (continued)	Y 66	
Conductor casing used? ("YES;"NO" or "UNKNOWN") (See Note 2)	No 2	the state of the s
Conductor casing removed? ("YES", "NO" or "UNKNOWN")	F. State of the Control of the Contr	
Depth to highest perforations/screens (ft below surface) (or "UNKNOWN")	205	
Screened Interval Beginning Depth/Ending Depth (ft below surface);	205/265; 305/440;	
2nd Screened Interval Beg. Depth/Ending Depth; 3rd Screened Interval, etc.	460/530	geveralistic province with the
Total length of screened interval (ft)		
(default = 10% pump capacity in gpm) (or "UNKNOWN")	265	
Annular Seal?("YES", "NO" or "UNKNOWN") (See Note 3)	2000 CONTRACTOR (1985)	American residence and a second second
Depth of Annular Seal (ft)	197	25. 6 4. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
Material of Annular Seal (cement grout, bentonite, etc.)	Cement Sand Grout	
Gravel pack, Depth to top (ft below ground surface)	0.00	
Total length of gravel pack (ft)	530	
AQUIFER		and the second s
* Aquifer Materials	The state of the s	
(list all that apply: sand, silt, clay, gravel, rock, fractured rock)	sand, silt, clay, gravel	
		defeatly
* Effective porosity (decimal percent) (default = 0.2) (or "UNKNOWN")	0.2	default
*Confining layer (Impervious Strata) above aquifer?	and the state of t	helialeten et de granden dagen et mer
("YES", "NO" or "UNKNOWN")	ALLES OF THE YES LEADING TO BE	Description of the second of the second
Thickness of confining layer, if known (ft)	20	Borehole Log
Depth to confining layer, if known (ft below ground)	180	Borehole Log Average during construction
A street place at the season of	to a mention of the second	
* Static water level (ft below ground surface)	50	period
Static water level measurement: Date/Method	11/17/07 Electric Tape	Devil and the state of the stat
Rumping water level (tibelow ground surface)	191	Predicted 90 day drawdown
Pumping water level measurement: Date/Method	max design drawdown	
WELL PRODUCTION	200 Miles and Charles 200 A	
Well Yield (gpm)	2,200	
Well Yield Based On (Le., pump test, etc.)	Pumping Test	
Date measured	Dec 07 & Feb 08	
is the well metered? ("YES" or "NO")	Yes	Planned
Production (gallons per year)	TBD	Planned for Intermittant
Frequency of Use (hours/year)	TBD	operation on an as needed
Typical pumping duration (hours/day)	TBD	basis primarily for drought
PUMP	#AA	and emergencies
Make	TBO	
Туре	TBD	Bloomed
Size (hp)	400	Planned
* Capacity (gpm)	2,200	Planned
Depth to suction intake (ft below ground surface)	200	Planned
Lubrication Type	Water	Planned
Type of Power: (i.e., electric, diesel, etc.)	Electric	Planned
Auxiliary power available? ("YES" or "NO")	TBD	Diament .
Operation controlled by: (i.e., level in tank, pressure, etc.)	Remote as needed	Planned
Pump to Waste capability? ("YES" or "NO")	TBD	

WELL DATA SHEET (Page 3 of 3)

Complete as much information as possible. Leave blank if information is not avail	lable, use N.A. if not applica	able.
* Indicates items required for Source Water Assessment		
** Indicates additional items required for assessments and Ground Water	r Rule	
Discharges to: (i.e., distribution system, storage, etc.)	Distibution System	Planned
REMARKS AND DEFECTS (use additional sheets as necessary)		
Sanitary Sewer will be of special material and sleved where it crosses we	eler main	
NOTES	MING Lithman	
1. Neighborhood/Surrounding Area (list all that apply): A= Agricultural, Ru =	· · · · · · · · · · · · · · · · · · ·	
Rural, Re = Residential, Co = Commercial,		
= Industrial, Mu = Municipal, P = Pristine, O = Other		
Conductor Casing - Oversized casing used to stabilize bore hole during well construction. Should be removed during installation of annular seal.		
3. Annular Seal - Seal of grout in the space between the well casing and the		
wall of the drilled hole. Sometimes called "sanitary seal".		
Please Note:		
The information on this Well Data Sheet is considered confidential.]
To allow the information to be included		
in the permit report, or made available subject to a public information		
act request, the waiver clause below has		
to to be signed and dated by the owner (public water system). In lieu		ł l
of this signature, the WDS has to be		
retained in a confidential file, or the information shown in the shaded		
rows has to be "blacked out."		
L/We, (Name)		
certify that i/We am/are the present owners of the well described		
on this well data sheet. I/We have reviewed the information		
presented on this well data sheet and I/We take no exception to		1
having the information inicuded in the Department of Health		
Services' Engineering Report. I/We understand that by including		
the well data sheet in the Engineering Report, it will be part of a		
public document that can be reviewed and copied subject to the		
public information act request.		
(0.0)		
(Signature) (Date)		
<u> </u>		