



# Koch California Ltd.

662 Eucalyptus Road, P.O. Box 1127  
Nipomo, CA 93444

Phone: (805) 929-4153  
Fax: (805) 929-5598  
Email: kochcal@earthlink.net

September 16, 1999

CITY OF PISMO BEACH

Michael Fuson, City Manager  
The City of Pismo Beach  
760 Mattie Road  
Pismo Beach, CA 93449

SEP 17 1999

RECEIVED  
CITY CLERK

(805) 773-4657 Phone  
(805) 773-7006 Phone

## Re: **Request to Inspect and Copy Public Records**

Dear Michael Fuson:

This letter is a request to inspect public records which are in the possession of the **CITY OF PISMO BEACH** pursuant to the California Public Records Act (Govt. Code §6250, et seq.). **Following the inspection, we may request copies** of some or all of the records. In the event we request copying by the **CITY OF PISMO BEACH** we will, at that time, tender any required copying charges. However, we reserve the right to have copies of the records made at your location by an independent copying service of our choosing.

Please make the records available for inspection beginning on **October 8<sup>th</sup>, 1999 at 10:00 a.m.** Unless we are notified otherwise, we shall expect that the records will be available for inspection in the **CITY OF PISMO BEACH** office. The following is a list of the reasonably identifiable public records which we desire to inspect on or after **October 8<sup>th</sup>, 1999 at 10:00 a.m.**

1. **All "Well Completion Reports" for each water well owned and/or operated by CITY OF PISMO BEACH.**
2. **For any water well for which a Well Completion Report is not in the possession of CITY OF PISMO BEACH, such other documents as are in the possession of CITY OF PISMO BEACH which show any of the following information: a) the well location, b) the name and address of the well driller, c) the date the well was completed, d) depth to first water below surface e) total depth of completed well.**
3. **Documents which show the amount of water produced from each water well owned and/or operated by CITY OF PISMO BEACH for each month from the completion of the well through to July 31<sup>st</sup> 1999.**
4. **All reports of hydraulic test results for each water well owned and/or operated by CITY OF PISMO BEACH, for the period beginning with the construction of the each well and ending July 31, 1999, which show any of the following information: a) standing water level, b)**

**pumping water level, c) pumping amount, capacity or GPM.**

- 5. All reports created during repair or maintenance of CITY OF PISMO BEACH wells with a measure of: a) standing water level, b) pumping water level, c) pumping capacity or GPM during pumping water levels (such as those commonly found on Floyd wells or other contractor's Invoice, Repair order Invoice, or Well Drilling logs etc.) for the period beginning with the construction of the each well and ending July 31, 1999.**

If a portion of the information contained in the records we have requested is exempt from disclosure by express provisions of law, Govt. Code §6254 requires segregation and deletion of that material in order that the remainder of the information may be released.

Please take note that Govt. Code §6256 requires the **CITY OF PISMO BEACH** to determine, within ten (10) days after receipt of this request, whether the **CITY OF PISMO BEACH** will comply with this request. If the **CITY OF PISMO BEACH** decides not to comply with all or any portion of this request, Govt. Code §6256 requires notification to us of the reasons for the determination not later than ten (10) days from your receipt of this request. Further, Govt. Code §6256.2 prohibits the use of any provision of the Public Records Act to delay access for the purposes of inspecting public records. Govt. Code §6256.2 also requires that any notification of denial of this request for records must set forth the names and titles or positions of each person responsible for the denial.

Thank you for your timely attention to our request.



John Snyder  
Vice President



**City of Pismo Beach**  
**760 Mattie Road**  
**Pismo Beach, CA 93449**  
**(805)773-4657 Fax: (805) 773-7006**

September 29, 1999

Mr. John Snyder, Vice President  
Koch California Ltd.  
662 Eucalyptus Road  
P.O. Box 1127  
Nipomo, CA 93444

Re: Request to Inspect and Copy Public Records

Dear Mr. Snyder:

My office received your request to inspect and copy records on September 17, 1999. I apologize for the delay in getting back to you. Your request has been forwarded to the pertinent staff.

Pursuant to the Public Records Act, we are requesting a 10-day extension on complying with the request. I will call you as soon as the records are available for inspection at City Hall.

There will be a charge for copies but no charge for viewing the documents. The charge is 75 cents for the first page and 20 cents for each page after that, plus clerical staff time to copy at an hourly rate of approx. \$10.00.

If you have any questions, please let me know.

Sincerely,

A handwritten signature in cursive script that reads "Sharon Jones".

Sharon Jones  
City Clerk

cc: File



# Koch California Ltd.

662 Eucalyptus Road, P.O. Box 1127  
Nipomo, CA 93444

*cc: City Clerk  
D. Belzeit  
R. Rogers*

Phone: (805) 929-4153  
Fax: (805) 929-5598  
Email: kochcal@earthlink.net

September 16, 1999

Michael Fuson, City Manager  
The City of Pismo Beach  
760 Mattie Road  
Pismo Beach, CA 93449

CITY OF PISMO BEACH

SEP 17 1999

*Hand  
delivered*

RECEIVED  
CITY CLERK

(805) 773-4657 Phone  
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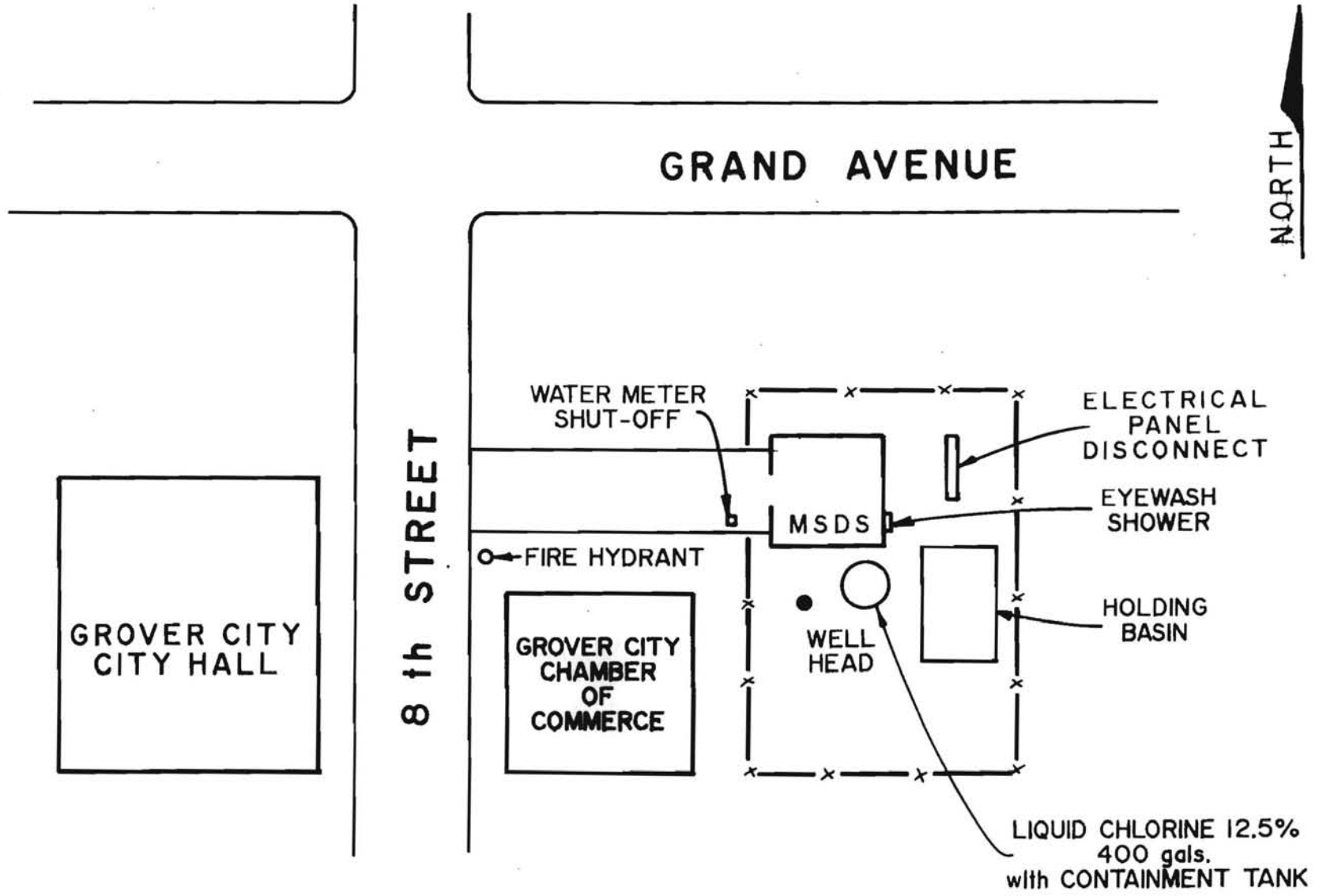
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Thank you for your timely attention to our request.



John Snyder  
Vice President



**WELL # 5 GROVER CITY**



# City of Grover City



154 S. 8th Street ↔ Grover City, California 93433 ↔ P. O. Box 365 ↔ Phone 489-4040

August 21, 1973

Mr. Doug Jones,  
City Administrator - City Clerk  
City of Pismo Beach  
P.O. Box 3  
Pismo Beach, California 93449

Dear Mr. Jones:


Grover City has reviewed your preliminary plot plan for your water well site on the east side of South 8th St., between Grand Ave. and Rockway Ave.

Since this site is in our civic center area, Grover City hereby requests that Pismo Beach adopt the following development standards.

1. That the fence encasing the well area have a west wall six (6) feet high, constructed of either masonry stone or concrete blocks. It is realized that this wall would have a gate sufficient in width to provide passage of a truck for access into the well area.
2. That sidewalks be installed along the street front.
3. That a street tree be planted.
4. That the area between the sidewalk and the masonry wall be permanently landscaped and maintained.

Your City's consideration of this request will be greatly appreciated. If you have any questions on this matter, please do not hesitate to contact me.

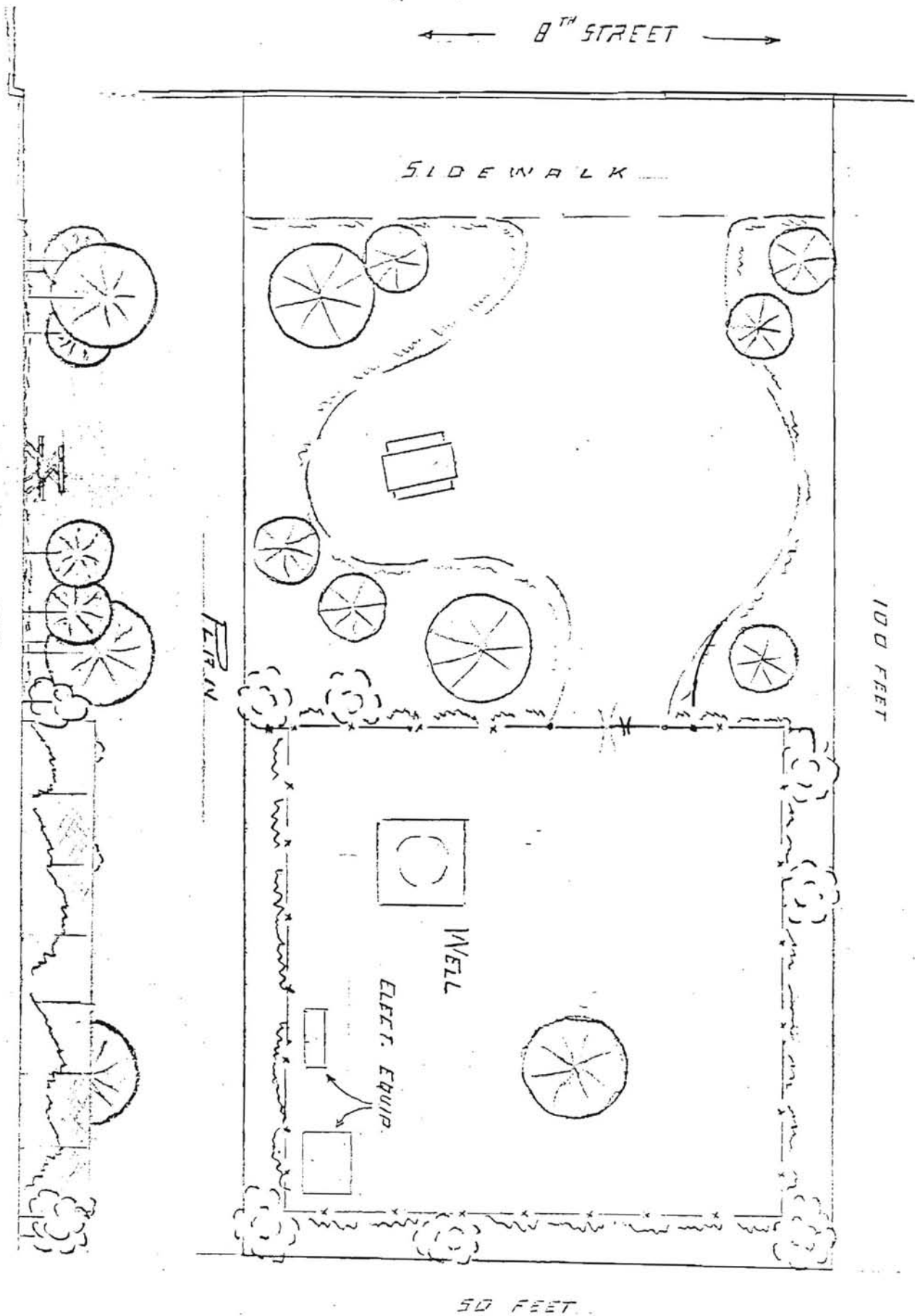
Sincerely,

  
KENNETH O. BERRY,  
City Administrator - City Clerk

KOB/vod



← 8<sup>TH</sup> STREET →



TYPICAL LANDSCAPING  
WELL SITE 167 8<sup>TH</sup> ST. FRODOV CITY  
CITY OF FRODOV BEACH  
FEB 1973  
D.L.J.

# H<sub>2</sub>O ORGANIZATION

*Jim, 'craft*  
*File Well #8*

RECEIVED  
JUN 22 1989  
CITY OF PISMO BEACH  
PUBLIC SERVICES

June 20, 1989

City of Pismo Beach  
ATTN: Hal Halldin  
P.O. Box 3  
Pismo Beach, CA 93449

Hal,

As per our June 12th conversation, enclosed please find a copy of our Desalting Proposal made to the City of Morro Bay. If you would like, I can provide additional information at any time.

When you obtain the Well #8 Hydrogen Sulfide information, please drop it in the mail or give me a call a 544-1740. The number on the stationery is my other office and I'm not at that number often.

Thank you again for the opportunity to discuss Desal and observe the U-DAT Team.

Regards,

  
Mike Spangler  
General Manager



PROPOSAL No. 05902

AUGMENTED WATER SUPPLY FOR THE CITY OF MORRO BAY, CALIFORNIA

prepared for the

DEPARTMENT OF PUBLIC WORKS, CITY OF MORRO BAY

June 6, 1989

Prepared by

H2ORGANIZATION, INC.  
San Luis Obispo, CA

Approved: \_\_\_\_\_  
Michael Spangler

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- 1.0 Introduction and Summary
- 2.0 Description of Plant and Processes
- 3.0 Commercial Data

## 1.0 Introduction and Summary

The H2Organization, Inc. of San Luis Obispo, CA, at the request of the Morro Bay Department of Public Works, has prepared this proposal for augmentation of the City's water supply by way of desalination.

H2O is prepared to analyze the possibility of a 200,000 GPD (224 AFY) desalination plant on the local PG&E property and using their outfall and intake structures to facilitate the production of up to this quantity of water from seawater. The primary process to be used is reverse osmosis.

The plant would be sized so as to make use of the most favorable off-peak electric power rates. Thus, the actual utilization of the plant might be about 140 to 175 AFY so as to minimize the production cost of the final product water. If the additional production is needed, the difference between average costs as compared with off-peak costs is not so large as to eliminate 100% operation as an cost effective situation.

The produced water will meet all City, County and State standards for potable water containing less than 500 PPM of total dissolved solids. The finished water will be delivered to the City of Morro Bay at the boundary of the PG&E property at a pressure to be determined during future negotiations. The quality of the water will meet all necessary standards for Langelier Index, corrosivity, and disinfection.

The proposed plant would consist of pretreatment, desalting and posttreatment sections fully automated for minimum operator intervention. The hydraulic recovery rate of the plant is 45% (fraction of seawater converted to potable water). The design availability of the plant is 92.0%, meaning that the mean time to repair (MTTR) is estimated to be less than 36 hours per month. Cleaning and flushing equipment is included as part of the plants design.

An option might exist to have PG&E personnel trained to monitor the plants operation to minimize the cost of dedicating additional personnel. PG&E has skilled persons already available.

All maintenance, repair and technical service activities are to be carried out by the H2Organization, Inc. personnel. Start up and future operations would be handled through maintenance agreements to be negotiated.

The actual delivered cost of the water will depend on the amount of water consumed. The estimated cost per acre-foot (AF) ranges

from a low of \$1416.00/AF during off-peak energy utilization to a high of \$1972.00/AF during times when energy uses are at peak cost. For year-round operation at full plant capacity, the estimated cost of water would be around \$1536.00/AF.

If it becomes necessary to operate the during peak or near peak electric rate times, surcharges will be computed based on the contracted energy costs. If the City finds it necessary to temporarily interrupt the demand for this water source, a flat standby fee of \$668.00/day would be charged to cover costs of maintaining the on line water production availability. The time required to restart the plant depends on the length of time the plant has been off line and is discussed in the body of this proposal.

It is anticipated that mean daily production at off-peak hours will yield an annual flow of water in the amount of 161 AFY. The respective cost is expected to approximately \$1435.00/AF. The plant can be constructed and installed within a period of about 16 to 22 weeks, depending on completion of drawings and the administrative review procedures.

The H2Organization, Inc. was formed to meet the needs of the Central Coast water consumers. The personnel involved have many years of experience in the design, operation and construction of desalting plants. The plant equipment to be constructed is, for the most part, fabricated by California manufacturers and shops including critical components such as membranes and pressure tubes. The manufacturer of the membrane is the world leader in membrane technology having been the original developer of the asymmetric desalting membrane. Personnel involved in this organization have been active in the membrane desalting business for at least 15 years each.

The company is financially sound and can guarantee production of water at the stated quantity and quality in accordance with typical contract specifications.

The best method and approach for delivery of water to the City can only be verified through further investigation and study. Specific items of investigation will include financing methods, demand schedule for water, water quality criteria and monitoring requirements and interconnection and delivery methods. Also important consideration are start-up and interfacing requirements. Because of these special needs, we recommend that the City authorize preparation of a detailed plan and report showing the methods to be used for furnishing the new water supply. This would require involvement of City staff for information and management input. Our fee for preparation of the report is:

H2O Fee \$5,000.00

## 2.0 Description of Plant and Processes

The proposed plant consists of a single train of reverse osmosis (RO) pressure vessels housed in high strength corrosion resistant fiberglass reinforced plastic pressure tubes fitted with corrosion resistant stainless steel fittings. Feedwater for the plant is withdrawn from the PG&E outfall which contains seawater which has been heated by about 20 degrees C. The feedwater is then elevated in pressure and pre-treated in a filtration subsystem where inline coagulation is used to remove particulate and organic matter. The feedwater is then chemically treated with sodium bisulfite to maintain bacteriostatic conditions and to limit oxidative attack of the membranes. During this process, the sodium bisulfite is oxidized to harmless sodium sulfate, a component already found in seawater in large amounts.

The feedwater is then further treated with a commercial scale and fouling inhibitor, Flocon-100, which inhibits formation of sparingly soluble compounds such as calcium sulfate and calcium carbonate. Subsequently, it is further filtered in a five micron cartridge filter to remove smaller particles.

The pre-treated feedwater is then pumped into the suction side of a high pressure plunger-type pump constructed of proven corrosion resistant materials. Typically, this pump would be of quintuplex design and be equipped with pulsation dampeners, an electric motor drive, pulleys and belts. Additionally, in order to conserve energy and minimize production costs, the pump input power is partially furnished by an hydraulic recovery turbine couple to the pump. The turbine recovers energy from the high pressure waste water, the brine, leaving the RO system. Typically, about 40% of the necessary energy is furnished by the recovery turbine.

The proposed plant would operate at or about 900 PSI depending on the feedwater temperature. At higher temperatures, the pressure would be dropped, while at lower temperatures the pressure would increase. Because of the incorporation of an energy recovery turbine, the net power to the RO system will vary only slightly as function of temperature but will decrease somewhat as the temperature rises.

Product from the RO system would flow at an instantaneous rate of about 139 GPM while the feed rate would be 309 GPM. The waste brine flow would be 170 GPM, all of which would be directed to the energy recovery turbine before being admitted to the outfall.

The RO product water will be very low in TDS, about 200-400 PPM, and have a pH of about 6.0 as it exits the RO train. Because of the absence of calcium and alkalinity and having a low pH, the

water requires further treatment. Therefore, the RO product is treated additionally by addition of calcium alkalinity and sodium alkalinity.

This is accomplished by passing the RO product water through beds (calcite filters) of specially prepared calcite which adds calcium alkalinity to the product. To adjust the Langelier Index to the region where corrosion is low, the water is further dosed with a small amount of soda ash which adds a bit more alkalinity and elevates the pH to the desired endpoint. The exact composition of the final post-treated water will depend on the City's requirement for their final blended quality. We will be able to tailor the composition of the treated RO product so as to produce the most favorable quality desired by the City.

To maintain disinfected conditions, a small amount of sodium hypochlorite will be added to the post-treated RO product. The exact amount would be determined by discussion with City personnel. Typically, this value would be around 0.4 PPM of residual chlorine.

The entire plant is controlled by a modern computer - based controller and is capable of unattended operation. Alarm systems prevent operation at off- specification conditions and key personnel are automatically notified in the event of an unscheduled emergency outage.

Whenever the plant shuts down, a freshwater flush of product water is admitted to the membrane feedwater port so as to avoid diffusion of salt from the brine channel into the product stream and to limit fouling of the membranes. On restart, the product water is then free of solids and can be admitted directly to the storage buffer tank before being transferred to the City's main.

From time to time, it will be necessary to clean the RO system so as to remove deposits from the membrane surfaces. This is done by circulation of safe cleaning chemical solutions through the RO system until the deposits are removed. A separate subsystem consisting of a batch tank, agitator, cleaning solution circulating pump and inline filter is used for this purpose.

On occasions, the City may deem it necessary to place the plant in standby either for repair of City mains or lines, or for temporarily discontinuing the production of RO water because of the availability of a different more preferable source. In these case, upon notification, we would partially decommission the plant in a manner suitable for the time selected for decommissioning. If the plant is to be offline for up to 5 days, then it will be simply rinsed with product water and held in the "Standby Mode". In this case, the plant can be restarted within a few minutes, either automatically or manually. If the outage is to be of longer duration, the RO plant would have to be filled



with disinfection preservative solution and then rinsed before start-up. The latter is a longer procedure requiring about 4 hours before restarting the plant.

A small buffer tank receives the treated RO water which is then pumped into the City's lines. The exact pressure required at this point is not known at this time. Quality assurance of the product water at this point would be ensured by automatic monitoring of TDS, chlorine concentration, pH, pressure and temperature. Flow rate and integrated flow additionally would be monitored to determine production data for the purpose of billing.

### 3.0 Commercial Data

We propose to fabricate, install and operate the plant for the sole purpose of augmenting the City's water resources. However, the plant could be operated in a manner permitting transfer and sale of water to other municipal or commercial water purveyors as well. The mode of operation, the length of time between runs will depend in part on demand, cost of operation and storage facilities.

The installation of large storage tanks for facilitating blending and keeping water quality in the line as constant as possible has not been addressed in our design at this time. This factor requires additional evaluation to select the best overall arrangement of equipment, tankage, and RO system operation.

The cost of water to the City will depend largely on the overall demand and time of the day and week that water is being produced. The cost of power to produce the water increases during peak power demands on PG&E's system; conversely, during low use periods and on weekends, the cost of power falls. These energy charges impact the final cost of delivered water.

At times when the City desires to stop flow from the RO plant, standby charges continue to accumulate. These charges are the minimum charges per month that we will charge for maintaining the plant in a state of readiness so that water can be produced in no more than about 4 hours.

The water cost table shown below depends on the time of day and exact day on which the water is being delivered to the City. These variations generally follow the PG&E tariff covering commercial power accounts.

ESTIMATED COST OF WATER TO THE CITY OF MORRO BAY

Time of Day	Cost (\$/AF)	
	Summer	Winter
9:30 PM-8:30 AM	1477.00	1416.00
8:30 AM-12:00 N	1650.00	1416.00
6:00 PM-9:30 PM	"	"
12:00 N-6:00 PM	1972.00	1416.00

An option for the City is to contract for 100% plant load in which case we would furnish the maximum capacity of the plant. Under this condition the cost of water would be averaged at:

\$1536.00/AF, average annual cost at 100% plant load

The maximum annual capacity is estimated to be 213 AFY depending on the actual plant availability factor which would be governed by local conditions.

A second option is to "park" the plant until additional water is desired by the City. Under these conditions, there would be a daily standby charge for each day that the City opted not to receive any water. This charge would amount to:

An estimated \$481.00 standby charge per day of zero production

If the City requests production but our plant is down for maintenance or repairs, there would be no daily standby charge. We estimate that the plant would be available 92% of the time and that no outage period due to maintenance or repairs would exceed 28 hours. Thus, the design maximum capacity of the plant is 206. AFY based on the above availability factor. The instantaneous capacity of the plant is 224 AFY.

- 1.0 Monthly management, supervision, and engineering fee: \$668.00
- 2.0 Monthly water billing charges: Net 30 days from invoice date. Invoice to show production time of day totals and charges.

DUPLICATE  
Driller's Copy

STATE OF CALIFORNIA  
THE RESOURCES AGENCY  
DEPARTMENT OF WATER RESOURCES  
WATER WELL DRILLERS REPORT

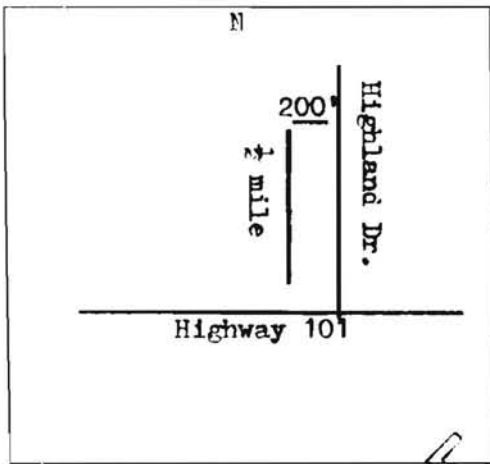
Do not fill in  
No. 174228

Notice of Intent No. \_\_\_\_\_  
Local Permit No. or Date \_\_\_\_\_

State Well No. \_\_\_\_\_  
Other Well No. \_\_\_\_\_

(1) OWNER: Name City of Pismo Beach  
Address P.O. Box 3  
City Pismo Beach, Ca. Zip 93449  
(2) LOCATION OF WELL (See instructions):  
County San Luis Obispo Owner's Well Number #8  
Well address if different from above \_\_\_\_\_  
Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_  
Distance from cities, roads, railroads, fences, etc. 200' West of  
Highland Dr. and 1/2 mile North of Hwy 101

(12) WELL LOG: Total depth 75 ft. Depth of completed well 73 ft.  
from ft. to ft. Formation (Describe by color, character, size or material)  
0 -2 topsoil  
2 -10 silt  
10 -39 fine sand  
39 -62 coarse sand  
62 -70 sand stone  
70 -75 shale



(3) TYPE OF WORK:  
New Well  Deepening   
Reconstruction   
Reconditioning   
Horizontal Well   
Destruction  (Describe destruction materials and procedures in Item 12)  
(4) PROPOSED USE:  
Domestic   
Irrigation   
Industrial   
Pet Well   
Stock   
Municipal   
Other

(5) EQUIPMENT:  
Rotary  Reverse   
Cable  Air   
Other  Bucket

(6) GRAVEL PACK Monte Rey Sand  
Yes  No  Size 6 OR 12  
Diameter of bore 14"  
Packed from 30 to 75

(7) CASING INSTALLED:  
Steel  Plastic  Concrete

(8) PERFORATIONS: slot  
Type of perforation or size of screen \_\_\_\_\_

From ft.	To ft.	Dia. in.	Cage or Wall	From ft.	To ft.	Slot size
+2	73	8"	Sch. 200	33	68	.050

(9) WELL SEAL:  
Was surface sanitary seal provided? Yes  No  If yes, to depth 30 ft.  
Were strata sealed against pollution? Yes  No  Interval \_\_\_\_\_ ft.  
Method of sealing Cement - 2 yards

(10) WATER LEVELS:  
Depth of first water, if known \_\_\_\_\_ ft.  
Standing level after well completion \_\_\_\_\_ ft.

(11) WELL TESTS:  
Was well test made? Yes  No  If yes, by whom? \_\_\_\_\_  
Type of test Pump  Bailer  Air lift   
Depth to water at start of test \_\_\_\_\_ ft. At end of test \_\_\_\_\_ ft.  
Discharge \_\_\_\_\_ gal/min after \_\_\_\_\_ hours Water temperature \_\_\_\_\_  
Chemical analysis made? Yes  No  If yes, by whom? \_\_\_\_\_  
Was electric log made? Yes  No  If yes, attach copy to this report

GRAVEL CHUTE  
33' 2" PVC  
RECEIVED  
-10-31  
Work started 1985 Completed 11-1 1985

WELL DRILLER'S STATEMENT:  
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  
SIGNED \_\_\_\_\_ (Well Driller)  
NAME Myers Brothers, Inc.  
(Person, firm, or corporation) (Typed or printed)  
Address 8650 E Lacey Blvd.  
City Hanford, CA. 93230 Zip \_\_\_\_\_  
License No. 280310 Date of this report 11-6-85

Sent Tim Cleath  
3 copies  
1-15-86

501 N. Main St.  
Templeton, CA 93465

# Miller Drilling Co.

Contractors License No. 324634

BOB MILLER  
(805) 434-1888

## PUMP TEST REPORT

JO # 4501

Well Owner: City of Pismo Beach  
Billing Address: Myers Brothers  
8650 Lacey Blvd.  
Hanford, Calif. 93230

Pump Set: 63' Well # 8"  
Pump Size: 4" Well Depth: 70' x 8"  
Testing Method: Submerible  
Perf Rec: \_\_\_\_\_

Standing Level Before Testing: 11' 06"

TIME	PUMPING LEVEL	TESTING		GPM
		WATER CONDITION	WATER OVER BOWLS	
8.51		start pump		
8.56	29'1"			150
9.01	30'57"	clear		150
9.06	31'68"			"
9.11	32'54"			"
9.21	33'14"			"
9.26	34'67"	clear		"
9.45	36'60"			"
10.02	37'87"			"
10.32	39'40"			"
11.02	40'29"			"
11.42	41'10"			"
12.02 pm	41'36"			"
12.12		increase 20 200 gpm		
12.17	47'74"			200
12.32	48'57"			200
12.28	49'29"			"
12.41	50'14"			"
12.58	50'75"			"
1.18	51'26"			"
1.38	51'73"			"
1.58	52'25"			"
2.13	53'43"	increase to 250 gpm , pumped alot of air, slowed to 212 gpm		

NOTES:

Standing Level After Testing: \_\_\_\_\_

FINAL TEST RESULTS: Produced \_\_\_\_\_ GPM for \_\_\_\_\_ hours on (date) 11/19/85

Test Run By: \_\_\_\_\_

CC:

Recorded 1



501 N. Main St.  
Templeton, CA 93465

# Miller Drilling Co.

Contractors License No. 324634

BOB MILLER  
(805) 434-1888

## PUMP TEST REPORT

JO # 4501

Well Owner: City of Pismo Beach

Pump Set: 6.1' Well # site#8

Billing Address: Myers Brothers

Pump Size: 4" Well Depth: 70' 8" casing

Testing Method: submersible

Perf Rec: \_\_\_\_\_

Standing Level Before Testing: 12.25

TESTING				
TIME	PUMPING LEVEL	WATER CONDITION	WATER OVER BOWLS	GPM
8.25		start pump		
8.30	31.11			150
8.45	34.78	clear		"
9.00	37.32			"
9.15	38.69			"
9.35	40.26	clear		"
9.45	40.83			"
10.05	41.51			"
10.25	42.21			"
10.55:34	42.90	183855		"
11.25:39	43.37	184321		"
11.55:36	43.53	184770		"
12.25:38	43.83	185222		"
12.55:33	43.98	185681		"
1.25:31	44.15	186138		"
1.55:36	44.25	186587		"
2.25:32	44.45	187039		"
2.55:37	44.55 increase	187487		"
3.25:31	45.36	187944		"
3.55:37	45.53	188397		"
4.25:39	45.70	188849		"
4.55:39	45.74	189307		"
5.25:33	45.75	189761		"
5.55:40	45.88	190218		"
6.25:36	46.14	190677		"

NOTES:

Standing Level After Testing: \_\_\_\_\_

FINAL TEST RESULTS: Produced \_\_\_\_\_ GPM for \_\_\_\_\_ hours on (date) 11/20/85

Test Run By: \_\_\_\_\_

CC:

Recorded 3

RANCHO  
SAN  
MIGUELITO

Pels. B, C, & D subject to  
17' R/W for public road  
Granted by Sh. 1436, O.R., Pg. 88

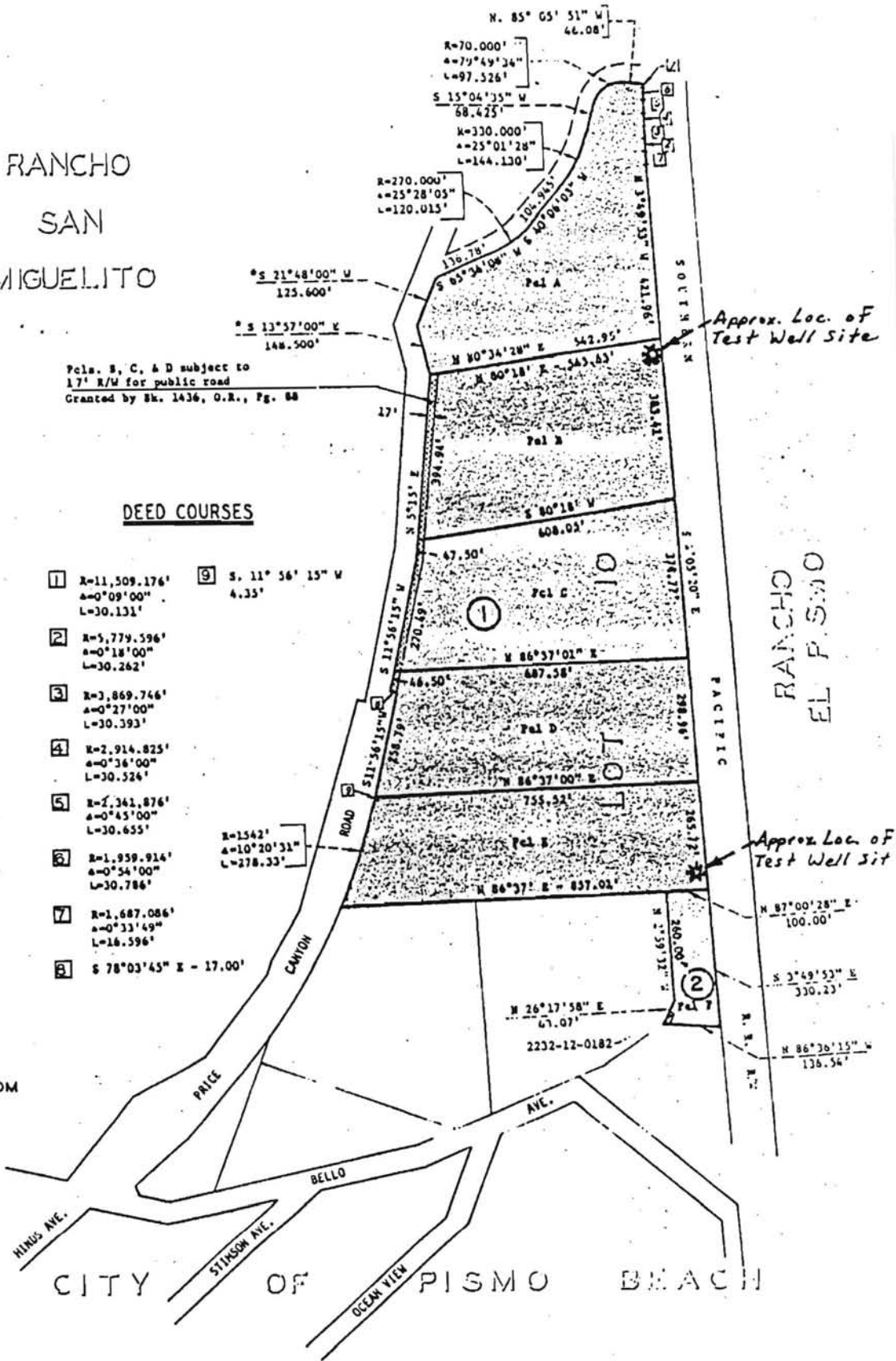
DEED COURSES

- |   |  |   |                           |
|---|--|---|---------------------------|
| 1 | R=11,509.176'<br>A=0°09'00"<br>L=30.131' | 9 | S. 11° 56' 15" W<br>4.35' |
| 2 | R=5,779.596'<br>A=0°18'00"<br>L=30.262'  |   |                           |
| 3 | R=3,869.746'<br>A=0°27'00"<br>L=30.393'  |   |                           |
| 4 | R=2,914.825'<br>A=0°36'00"<br>L=30.526'  |   |                           |
| 5 | R=2,341.876'<br>A=0°45'00"<br>L=30.655'  |   |                           |
| 6 | R=1,959.914'<br>A=0°54'00"<br>L=30.786'  |   |                           |
| 7 | R=1,687.086'<br>A=0°33'49"<br>L=16.596'  |   |                           |
| 8 | S 78°03'45" E - 17.00'                   |   |                           |



1"=200'

T32SR12E MDM  
SEC 12





DUPLICATE  
Driller's Copy

STATE OF CALIFORNIA  
THE RESOURCES AGENCY  
DEPARTMENT OF WATER RESOURCES  
WATER WELL DRILLERS REPORT

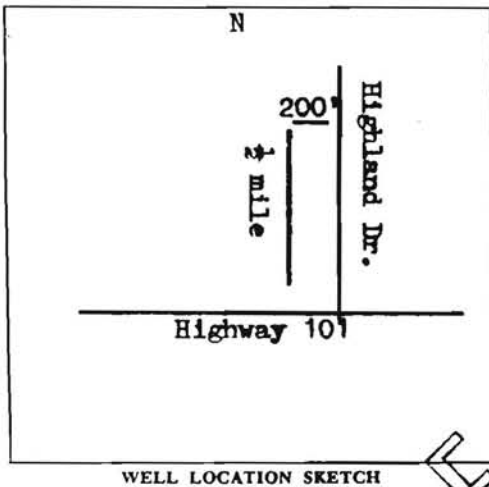
Do not fill in  
No. 174228

Notice of Intent No. \_\_\_\_\_  
Local Permit No. or Date \_\_\_\_\_

State Well No. \_\_\_\_\_  
Other Well No. \_\_\_\_\_

(1) OWNER: Name City of Pismo Beach  
Address P.O. Box 3  
City Pismo Beach, Ca. Zip 93449  
(2) LOCATION OF WELL (See instructions):  
County San Luis Obispo Owner's Well Number #8  
Well address if different from above \_\_\_\_\_  
Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_  
Distance from cities, roads, railroads, fences, etc. 200' West of  
Highland Dr. and 1/2 mile North of Hwy 101

(12) WELL LOG: Total depth 75 ft. Depth of completed well 73 ft.  
from ft. to ft. Formation (Describe by color, character, size or material)  
0 -2 topsoil  
2 -10 silt  
10 -39 fine sand  
39 -62 coarse sand  
62 -70 sand stone  
70 -75 shale



(3) TYPE OF WORK:  
New Well  Deepening   
Reconstruction   
Reconditioning   
Horizontal Well   
Destruction  (Describe destruction materials and procedures in Item 12)  
(4) PROPOSED USE:  
Domestic   
Irrigation   
Industrial   
Test Well   
Stock   
Municipal   
Other

(5) EQUIPMENT:  
Rotary  Reverse   
Cable  Air   
Other  Bucket

(6) GRAVEL PACK Montezuma Sand  
 No  Size 6-12  
Diameter of bore 14"  
Packed from 30 to 75

(7) CASING INSTALLED:  
Steel  Plastic  Concrete

(8) PERFORATIONS: slot  
Type of perforation or size of screen

From ft.	To ft.	Dia. in.	Cage or Wall	From ft.	To ft.	Slot size
+2	73	8"	Sch. 200	33	68	.050

(9) WELL SEAL:  
Was surface sanitary seal provided? Yes  No  If yes, to depth 30 ft.  
Were strata sealed against pollution? Yes  No  Interval \_\_\_\_\_ ft.  
Method of sealing Cement - 2 yards

(10) WATER LEVELS:  
Depth of first water, if known \_\_\_\_\_ ft.  
Standing level after well completion \_\_\_\_\_ ft.

(11) WELL TESTS:  
Was well test made? Yes  No  If yes, by whom? \_\_\_\_\_  
Type of test Pump  Bailer  Air lift   
Depth to water at start of test \_\_\_\_\_ ft. At end of test \_\_\_\_\_ ft.  
Discharge \_\_\_\_\_ gal/min after \_\_\_\_\_ hours Water temperature \_\_\_\_\_  
Chemical analysis made? Yes  No  If yes, by whom? \_\_\_\_\_  
Was electric log made? Yes  No  If yes, attach copy to this report

RECEIVED  
F  
-10-31  
Work started 10-18-85 Completed 11-1-85

WELL DRILLER'S STATEMENT:  
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  
SIGNED \_\_\_\_\_ (Well Driller)  
NAME Myers Brothers, Inc.  
(Person, firm, or corporation) (Typed or printed)  
Address 8650 E Lacey Blvd.  
City Hanford, CA. 93230 Zip \_\_\_\_\_  
License No. 280310 Date of this report 11-6-85

501 N. Main St.  
Templeton, CA 93465

# Miller Drilling Co.

Contractors License No. 324634

BOB MILLER  
(805) 434-1888

## PUMP TEST REPORT

JO # 4501

Well Owner: City of Pismo Beach

Pump Set: 63' Well # Site #8

Billing Address: Myers Brothers

Pump Size: \_\_\_\_\_ Well Depth: \_\_\_\_\_

Testing Method: \_\_\_\_\_

Perf Rec: \_\_\_\_\_

Standing Level Before Testing: 17.25

TESTING				
TIME	PUMPING LEVEL	WATER CONDITION	WATER OVER BOWLS	GPM
6.55:40	46.27	191140		150
7.25:36	46.40	191607		150
7.55:40	46.47	192076		"
8.25:37	46.52	192257		"
8.55:50	46.64	193022		"
9.25:48	46.71	19347.5		"
9.55:30	46.75	19395.2		"
10.25:59	46.80	19445.5		"
10.55:37	46.85	19491.3		"
11.25:40	46.87	19540.0		"
11.55:35	47.0	19584.2		"
12.25:40	47.05	19631.7		"
1.25:35	47.16	19725.6		"
2.25:40	47.35	19837.6		"
3.25	47.60			"
4.25				"
5.25:30	48.0	20132.6		"
6.25:40	48.10	20197.9		"
7.25:35	48.22	20282.8		"
8.30:30	48.46			
RECOVERY:				
		10 min. 24.35'	60 min. 18.56'	
		20 min. 22.25'	90 min. 17.28'	
		30 min. 20.88		
		45 min. 19.55		

NOTES:

Standing Level After Testing: \_\_\_\_\_

FINAL TEST RESULTS: Produced 150 GPM for 24 hours on (date) 11/20/85

Test Run By: Sandy Swarthoff, and Ray Fogle

CC:

Recorded 4

**CITY OF PISMO BEACH, CALIFORNIA**  
**Public Services Department**  
Planning Department  
Building Department  
Engineering Department  
Public Works Department  
Parks and Recreation Department



**CITY HALL**  
**1000 BELLO ST. • P.O. BOX 3**  
**PISMO BEACH, CALIFORNIA 93449**  
**TELEPHONE 805/773/4656**  
**805/773/4658**

M E M O R A N D U M

TO: DIRECTOR OF PUBLIC SERVICES  
FROM: CITY ENGINEER #8  
SUBJECT: PRICE CANYON WELL AND AQUIFER  
DATE: JANUARY 20, 1989

The Price Canyon aquifer is estimated to produce 700 a.f. per year when it is fully developed. The water will need to be treated more extensively and more expensively than the water in Wells #9 and #10. The quality should then be better than State Project Water and less expensive.

Before the treatment is designed, it was recommended that the old water in the aquifer be pumped out so that the better quality creek water can recharge the aquifer. Then the water from the recharged aquifer would be thoroughly tested before the treatment plant is designed. One well and pump have been installed for the purpose of pumping out the aquifer.

The water smells pretty bad from Hydrogen Sulfide. It is so bad it might even pollute Pismo Creek. I have requested Pat Mills to install sprinklers in the discharge pipe to aerate the water and remove the sulfide. In my absence, I would appreciate your expediting the installation of the sprinklers so that we can move forward to prove up or abandon this water source.

A handwritten signature in black ink, appearing to read "Hal Halldin".

HAL HALLDIN  
City Engineer

pcwa

Well #8 City of Pismo Beach

	POWER READINGS	KW	PG&E COST	MG PUMPED
01-Jun-89	832	* 1404 *	\$166.43	4,914,000
01-Jul-89	2236	1006	\$116.67	3,521,000
01-Aug-89	3242	538	\$65.19	1,883,000
01-Sep-89	4036	206	\$37.26	990,500
01-Oct-89	4434	371	\$43.95	1,298,5000
01-Nov-89	4434	0	\$5.00	0

Well #8 City of Pismo Beach

	POWER READINGS	KW	PG&E COST	MG PUMPED
01-Jun-89	832	*1404 *	\$166.43	4,914,000
01-Jul-89	2236	1006	\$116.67	3,521,000
01-Aug-89	3242	538	\$65.19	1,883,000
01-Sep-89	4036	206	\$37.26	990,500
01-Oct-89	4434	371	\$43.95	1,298,5000
01-Nov-89	4434	0	\$5.00	0

0  
12.6 MG or 38 Ac. ft.

Toni  
 Are you sure no  
 substantial use  
 prior to June 89?

Well -

File "Pismo Canyon Well #50" #E

SUBJECT Pump Test Report DATE 12/3/85

MESSAGE Dear Mr. Cleath,

We have enclosed a copy of the test report from Miller Pump Co. on the well we recently drilled for you.

TO City of Pismo Beach P.O. Box 3 Pismo Beach, Ca. 93449

FROM MYERS BROTHERS, INC. 8650 East Lacey Boulevard Hanford, California 93230

SIGNED Frank Gonsalves

SAHITATION AND OPERATION CONSULTANTS INC

31133 W. VIA COLINAS-ST-101  
WESTLAKE VILLAGE, CA. 91362  
(213)885-4226

CITY OF PISMO BEACH  
SAMPLE TYPE-PISMO ADOBE WELL WATER  
DATE SAMPLED-1/31/85  
DATE REPORTED-2/19/85  
LCO NO. -501-1-3342

LAB ANALYSIS

CONSTITUENT	QUANTITY	MAXIMUM LIMIT
IRON-	21.7 MG/L	-
MAGNESIUM-	112.1 MG/L	-
SULFIDE-	1.91 MG/L	-

**RECEIVED**  
MAR 18 1985  
CITY OF PISMO BEACH  
PUBLIC SERVICES

I DECLARE UNDER PENALTY OF PERJURY, THAT THE FOREGOING IS TRUE AND ACCURATE.

J. Lovell  
LAB DIVISION

INVOICE NO. 3217  
DATE DATED 2/19/85

A TOTAL OPERATION SERVICES CORPORATION

SANITATION & WASTE OPERATION CONSULTANTS INC

31133 W. VIA COLINAS-ST-101  
WESTLAKE VILLAGE, CA. 91362  
(213)889-4256

CITY OF PISMO BEACH  
SAMPLE TYPE-PISMO ADOBE WELL  
DATE SAMPLED-2/4/85  
DATE REPORTED-3/12/85  
LOG NO.-801-1-8951

LAB ANALYSIS

CONSTITUENT	QUANTITY		MAXIMUM LIMIT
OIL&GREASE-	1.8	MG/L	-
T.O.C.	22	MG/L	-

I DECLARE UNDER PENALTY OF PERJURY, THAT THE FOREGOING IS TRUE AND ACCURATE.

J Lovelace  
LAB DIVISION

INVOICE NO. 3234  
INV. DATED 3/15/85

A TOTAL OPERATION SERVICES CORPORATION



Central  
Coast  
Analytical  
Services

**CENTRAL COAST  
ANALYTICAL SERVICES**  
Air, Water & Hazardous Waste Analysis  
141 Suburban Road, Suite C-4  
San Luis Obispo, California 93401  
(805) 543-2553

LAB NUMBER : B-4519  
COLLECTED : 11/21/85  
RECEIVED : 11/21/85  
REPORTED : 01/29/86  
P.O. NUMBER : Verbal

Submitted By:

SAMPLE DESCRIPTION:  
Test Well Site No. 8  
Price Canyon

City of Pismo Beach  
1000 Bello St.  
Pismo Beach, CA 93449

Collected by: Tim Cleath

**GENERAL MINERAL WATER ANALYSIS**

CONSTITUENT	MILLIGRAMS/LITER	CONSTITUENT	UNITS
CALCIUM (Ca)	- 110.	pH	- 7.3
MAGNESIUM (Mg)	- 100.	CONDUCTANCE (micromhos)	- 2600.
SODIUM (Na)	- 330.	SOLIDS, TOTAL DISSOLVED (mg/l)	- 1800.
ALKALINITY		HARDNESS, TOTAL (CaCO <sub>3</sub> , mg/l)	- 700.
Bicarbonate (HCO <sub>3</sub> )	- 950.	or (grains per gallon)	- 40.9
Carbonate (CO <sub>3</sub> )	- none	IRON (mg/l Fe)	- 0.28
Hydroxide (OH)	- none	MANGANESE (mg/l Mn)	- 0.25
Total	- 950.	COPPER (Cu, mg/l)	- <0.04
CHLORIDE (Cl)	- 190.	ZINC (Zn, mg/l)	- <0.04
SULFATE (SO <sub>4</sub> )	- 230.	FOAMING AGENT (MBAS), mg/l)	- <0.04
NITRATE NITROGEN	- <0.1		
NITRATE (NO <sub>3</sub> )	- <0.4	<b>GENERAL PHYSICAL</b>	
FLUORIDE (F)	- 1.7	COLOR	- 15.
		ODOR	- >8.
		TURBIDITY	- 1.

mg/l = milligrams per liter

**COMMENTS:** (Reference limits Title 22, California Admin. Code 1977, Domestic Water)

- Checklist for reference levels enclosed.
- All constituents analyzed were within the acceptable limits.
- Evaluation of above report was not done.
- Constituents outside limits were: **Manganese, total mineral, odor**
- Suggestions for improving the quality of this water:
  - Aeration
  - Chlorination
  - Filtration
  - Softening
  - When nitrate is elevated suggest bacteria test.
  - Reverse osmosis reduces total mineral.
  - Discuss problems with water conditioning consultant.
  - Quality appears adequate.

Please contact us if further clarification is desired on this report.  
Medical questions should be directed to a physician.

Encl: Invoice #  
MH/js

Respectfully submitted,  
CENTRAL COAST ANALYTICAL SERVICES

cc: Tim Cleath

By Mary Havlicek  
Mary Havlicek, Ph.D., President

CERTIFIED WATER LABORATORY—STATE OF CALIF. DEPT. PUBLIC HEALTH-CHEMISTRY-BACTERIOLOGY

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Central  
Coast  
Analytical  
Services

**CENTRAL COAST  
ANALYTICAL SERVICES**  
Air, Water & Hazardous Waste Analysis  
141 Suburban Road, Suite C-4  
San Luis Obispo, California 93401  
(805) 543-2553

LAB NUMBER B-4519  
COLLECTED 11/21/85  
RECEIVED 11/21/85  
REPORTED 01/28/86  
P.O. NUMBER Verbal

Submitted By:

City of Pismo Beach  
1000 Bello St.  
Pismo Beach, CA 93449

SAMPLE DESCRIPTION:  
Test Well/Site #8

Collected by:  
Tim Cleath

**REPORT**

CONSTITUENT	REPORTED AS	LEVEL FOUND
ALUMINUM	Al	---
ARSENIC	As	<0.01
BARIUM	Ba	0.3
BERYLLIUM	Be	---
CADMIUM	Cd	<0.001
CHROMIUM, TOTAL	Cr	<0.005
CHROMIUM, HEXAVALENT	Cr(VI)	---
COBALT	Co	---
COPPER	Cu	---
LEAD	Pb	<0.005
MERCURY	Hg	<0.0002
MOLYBDENUM	Mo	---
NICKEL	Ni	---
SELENIUM	Se	<0.005
SILVER	Ag	<0.01
THALLIUM	Tl	---
VANADIUM	V	---
ZINC	Zn	---

(<)-means less than and this is the detection limit as applied to this analysis.

Encl: Invoice # 10512

MH/mlo'

Respectfully submitted,  
CENTRAL COAST ANALYTICAL SERVICES

By Mary Havlicek  
Mary Havlicek, Ph.D., President

CERTIFIED WATER LABORATORY BY THE DEPARTMENT OF PUBLIC HEALTH FOR COMPLETE CHEMICAL AND BACTERIOLOGY

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CENTRAL COAST ANALYTICAL SERVICES

CHECKLIST:

WATER ANALYSIS # B-4519

MCL refers to Maximum Contaminant Level as given in Title 22, Domestic Water Quality Standards, California Administrative Code 1977. The full text can be reviewed in our library. Only those constituents listed under 'Inorganic Chemicals' have potential toxic effects when above MCL. All of the other constituents (when above the MCL) may contribute some unacceptable characteristic to the majority of users. NL means 'not listed', in other words no MCL was given in reference, so any level would be acceptable. Space is blank if test was not done.

GENERAL MINERAL	MCL mg/l	LEVEL FOUND below/above	INORGANIC CHEMICALS	MCL mg/l	LEVEL FOUND below/above
Calcium	NL	ok	Fluoride	1.8	X
Magnesium	NL	ok	Nitrate Nitrogen	10.	X
Sodium	NL	ok	Nitrate (NO3)	45.	X
Alkalinity	NL	ok	Arsenic	0.05	✓
Iron	0.3	X	Barium	1.0	X
<u>Manganese</u>	0.05	X	Cadmium	0.010	X
Copper	1.0	X	Chromium	0.05	X
Zinc	5.0	X	Lead	0.05	✓
MBAS	0.5	X	Mercury	0.002	X
			Selenium	0.01	X
			Silver	0.05	X

GENERAL PHYSICAL	units	
Color	15.	X
<u>Odor</u>	3,	X
Turbidity	5,	X

MINERALIZATION	maximum contaminant level ( )			
	Recommended	Upper	Short Term	Above
Conductance, micromhos	____ (900)	____ (1600)	____ (2200)	X
<u>Dissolved Solids, Total mg/l</u>	____ (500)	____ (1000)	____ (1500)	✓
Chloride, mg/l	X (250)	____ (500)	____ (600)	____
Sulfate, mg/l	X (250)	____ (500)	____ (600)	____

**HARDNESS** is due primarily to calcium and magnesium. When water is 'softened' sodium replaces both elements. Persons on low-sodium diets may want to avoid soft water; also, plants do better with hard water. Hard water tends to increase scale formation and subsequent heat loss in boilers and water heaters. Soft water may decrease laundry costs and it may also be more corrosive.

Hardness on this sample: \_\_\_\_\_ soft (up to 100mg/l) \_\_\_\_\_ moderately hard (100-200) \_\_\_\_\_ X very hard (over 200)  
 (grains per gallon) \_\_\_\_\_ (up to 6) \_\_\_\_\_ (6-12) \_\_\_\_\_ ✓ (over 12)

REMARKS:

*Mary [Signature]*

Central  
Coast  
Analytical  
Services

**CENTRAL COAST  
ANALYTICAL SERVICES**  
Air, Water & Hazardous Waste Analysis  
141 Suburban Road, Suite C-4  
San Luis Obispo, California 93401  
(805) 543-2553

LAB NUMBER : B-0572  
COLLECTED : 3/04/85  
RECEIVED : 3/05/85  
REPORTED : 5/20/85  
P.O. NUMBER : Verbal

Submitted By:

City of Pismo Beach  
1000 Bello Ave.  
Pismo Beach, CA 93449

SAMPLE DESCRIPTION:

Surface Water from  
Pismo Creek ← *Felt*  
Sampled by:  
Tim Cleath

**GENERAL MINERAL WATER ANALYSIS**

CONSTITUENT	MILLIGRAMS/LITER	CONSTITUENT	UNITS
CALCIUM (Ca)	- 83.	pH	- 8.3
MAGNESIUM (Mg)	- 60.	CONDUCTANCE (micromhos)	- 1100.
SODIUM (Na)	- 86.	SOLIDS, TOTAL DISSOLVED (mg/l)	- 770.
ALKALINITY		HARDNESS, TOTAL (CaCO <sub>3</sub> , mg/l)	- 540.
Bicarbonate (HCO <sub>3</sub> )	- 420.	or (grains per gallon)	- 31.6
Carbonate (CO <sub>3</sub> )	- none	IRON (mg/l Fe)	- 0.11
Hydroxide (OH)	- none	MANGANESE (mg/l Mn)	- 0.07
Total	- 420.	COPPER (Cu, mg/l)	- <0.04
CHLORIDE (Cl)	- 80.	ZINC (Zn, mg/l)	- <0.04
SULFATE (SO <sub>4</sub> )	- 115.	FOAMING AGENT (MBAS), mg/l)	- 0.06
NITRATE NITROGEN	- <1.		
NITRATE (NO <sub>3</sub> )	- <4.	<b>GENERAL PHYSICAL</b>	
FLUORIDE (F)	- 0.5	COLOR	- 15.
		ODOR	- 3.
		TURBIDITY	- 1.0

mg/l = milligrams per liter

**COMMENTS:** (Reference limits Title 22, California Admin. Code 1977, Domestic Water)

- Checklist for reference levels enclosed.
- All constituents analyzed were within the acceptable limits.
- Evaluation of above report was not done.
- Constituents outside limits were: **MANGANESE**
- Suggestions for improving the quality of this water:
  - Aeration                       When nitrate is elevated suggest bacteria test.
  - Chlorination                   Reverse osmosis reduces total mineral.
  - Filtration                       Discuss problems with water conditioning consultant.
  - Softening                       Quality appears adequate.

Please contact us if further clarification is desired on this report.  
Medical questions should be directed to a physician.

Encl: Invoice # 8771  
MH/dm

Respectfully submitted,  
CENTRAL COAST ANALYTICAL SERVICES

By *Mary Havlipek*  
Mary Havlipek, Ph.D., President

CERTIFIED WATER LABORATORY—STATE OF CALIF. DEPT. PUBLIC HEALTH-CHEMISTRY-BACTERIOLOGY

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Services

**CENTRAL COAST  
ANALYTICAL SERVICES**  
Air, Water & Hazardous Waste Analysis  
141 Suburban Road, Suite C-4  
San Luis Obispo, California 93401  
(805) 543-2553

LAB NUMBER : B-0572  
COLLECTED : 3/04/85  
RECEIVED : 3/05/85  
REPORTED : 5/20/85  
P.O. NUMBER : Verbal

Submitted By:

City of Pismo Beach  
1000 Bello Ave.  
Pismo Beach, CA 93449

SAMPLE DESCRIPTION:  
Surface Water from  
Pismo Creek  
Sampled by:  
Tim Cleath

**REPORT**

CONSTITUENT	REPORTED AS	LEVEL FOUND
ALUMINUM	Al	---
ARSENIC	As	<0.01
BARIUM	Ba	0.2
BERYLLIUM	Be	---
CADMIUM	Cd	<0.005
CHROMIUM, TOTAL	Cr	<0.005
CHROMIUM, HEXAVALENT	Cr(VI)	---
COBALT	Co	---
COPPER	Cu	---
LEAD	Pb	<0.006
MERCURY	Hg	<0.0002
MOLYBDENUM	Mo	---
NICKEL	Ni	---
SELENIUM	Se	<0.005
SILVER	Ag	<0.01
THALLIUM	Tl	---
VANADIUM	V	---
ZINC	Zn	---

<-means less than and this is the detection limit as applied to this analysis.

Encl: Invoice # 8771  
MH/dm

Respectfully submitted,  
CENTRAL COAST ANALYTICAL SERVICES

By Mary Havlicek  
Mary Havlicek, Ph.D., President

CERTIFIED WATER LABORATORY BY THE DEPARTMENT OF PUBLIC HEALTH FOR COMPLETE CHEMICAL AND BACTERIOLOGY

ALL REPORTS ARE SUBMITTED AND ACCEPTED AS THE EXCLUSIVE PROPERTY OF CLIENTS. AS A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC AND OURSELVES ANY ADVERTISING OR PUBLICATION OF REPORTS IN WHOLE OR IN PART IS RESERVED PENDING WRITTEN AUTHORIZATION FROM THESE LABORATORIES. LABORATORY LIABILITY IS LIMITED TO COST OF SERVICES.

CENTRAL COAST ANALYTICAL SERVICES

CHECKLIST: WATER ANALYSIS # B-0572

MCL refers to Maximum Contaminant Level as given in Title 22, Domestic Water Quality Standards, California Administrative Code 1977. The full text can be reviewed in our library. Only those constituents listed under 'Inorganic Chemicals' have potential toxic effects when above MCL. All of the other constituents (when above the MCL) may contribute some unacceptable characteristic to the majority of users. NL means 'not listed', in other words no MCL was given in reference, so any level would be acceptable. Space is blank if test was not done.

GENERAL MINERAL	MCL mg/l	LEVEL FOUND		INORGANIC CHEMICALS	MCL mg/l	LEVEL FOUND	
		below	above			below	above
Calcium	NL		ok	Fluoride	1.8	X	
Magnesium	NL		ok	Nitrate Nitrogen	10.	Y	
Sodium	NL		ok	Nitrate (NO3)	45.	X	
Alkalinity	NL		ok	Arsenic	0.05	X	
Iron	0.3		X	Barium	1.0	X	
Manganese	0.05		Y	Cadmium	0.010	Y	
Copper	1.0		X	Chromium	0.05	Y	
Zinc	5.0		Y	Lead	0.05	Y	
MBAS	0.5		X	Mercury	0.002	Y	
				Selenium	0.01	X	
				Silver	0.05	Y	
<u>GENERAL PHYSICAL</u> units							
Color	15.		X				
Odor	3.		X				
Turbidity	5.		X				

MINERALIZATION	maximum contaminant level ( )			
	Recommended	Upper	Short Term	Above
Conductance, micromhos	____ (900)	X ____ (1600)	____ (2200)	____
Dissolved Solids, Total mg/l	____ (500)	Y ____ (1000)	____ (1500)	____
Chloride, mg/l	X ____ (250)	____ (500)	____ (600)	____
Sulfate, mg/l	X ____ (250)	____ (500)	____ (600)	____

HARDNESS is due primarily to calcium and magnesium. When water is 'softened' sodium replaces both elements. Persons on low-sodium diets may want to avoid soft water; also, plants do better with hard water. Hard water tends to increase scale formation and subsequent heat loss in boilers and water heaters. Soft water may decrease laundry costs and it may also be more corrosive.

Hardness on this sample: \_\_\_\_\_ soft (up to 100mg/l) \_\_\_\_\_ moderately hard (100-200) \_\_\_\_\_ X very hard (over 200)

(grains per gallon) \_\_\_\_\_ (up to 6) \_\_\_\_\_ (6-12) \_\_\_\_\_ X (over 12)

REMARKS:

*Mary Hawlich*

CITY OF PISMO BEACH, CALIFORNIA



CITY HALL  
1000 BELLO ST. • P.O. BOX 3  
PISMO BEACH, CALIFORNIA, 93449  
TELEPHONE 805/773/4657

November 27, 1985

Neal O. Rothsberger  
District Land Supervisor  
Pacific Gas & Electric Company  
408 Higuera, Box 592  
San Luis Obispo, CA 93408

Dear Neal:

The enclosed permit and indemnity agreement were reviewed with the well drilling contractor who said he was unable to provide the insurance required by the agreement. As a result, the desired test wells on your property were not drilled.

Thank you very much for your assistance in this matter.

Very truly yours,

A handwritten signature in cursive script, which appears to read "Hal A. Halldin". The signature is written in dark ink and is positioned above the printed name and title.

Hal A. Halldin  
City Engineer

HAH/Lrs

Enclosures

Art Shaw Would appreciate your review  
of this agreement. Don't think we will use though. Next  
time they want something from us we should place the same requirements  
on them  
chal

PERMIT  
AND  
INDEMNITY AGREEMENT

City of Pismo Beach, hereinafter called Permittee, assumes all risk and liability for drilling and immediately refilling two test wells at the locations shown in red on the attached drawing on the parcel SBE 135-40-25B (Parcels 1 and 2) located in Pismo Beach, owned and operated by Pacific Gas and Electric Company, a California corporation, hereinafter called PGandE, who gives its permission as an accommodation to a request made by Permittee.

Permittee shall indemnify and hold PGandE harmless, including its officers, agents and employees from loss, claims, liability, damages (including damages to PGandE's property and personal injury or death, including the City of Pismo Beach, its Contractors, or PGandE, its agents and employees) arising out of Permittee's drilling or other activities pursuant to ground water monitoring.

Permittee's contractors shall maintain during the performance hereof, Comprehensive General Liability and Comprehensive Automobile Liability of not less than \$2,000,000 combined single limit or equivalent for bodily injury, personal injury and property damage as the result of any one occurrence.

Comprehensive General Liability shall include coverage for Premises - Operations, Owners and Contractors Protective, Products/Completed Operations Hazard, Contractual Liability, and Broad Form Property Damage including Completed Operations. Comprehensive Automobile Liability shall include coverage for Owned, Hired, and Non-Owned automobiles.

Such insurance shall include, by endorsement to the policy(ies), PGandE as an additional insured insofar as any liability arising out of the permit by the Permittee with PGandE is concerned, contain a severability of interest clause, provide that PGandE shall not by reason of its inclusion as an additional insured incur liability to the insurance carrier for payment of premium for such insurance, and provide 30-days' written notice to PGandE prior to cancellation, termination, alternation or material change of such insurance.

Evidence of coverage described above shall state that coverage provided is primary and is not excess or contributing with any insurance or self-insurance maintained by PGandE.

PGandE shall have the right to inspect or obtain a copy of the original policy(ies) of insurance.



Permittee shall furnish the required certificates and endorsements to PGandE prior to commencing performance hereof.

Permittee shall contact PGandE's facility manager (R. Large) at 773-4284 and USA (Underground Service Alert at (408) 642-2444 at least 48 hours in advance of the drilling operation to determine exact drilling locations.

All insurance certificates, endorsements, cancellations, terminations, alternations and material changes of such insurance shall be issued and submitted to the following:

PACIFIC GAS AND ELECTRIC COMPANY  
Attention: Manager of Insurance  
77 Beale Street, Room E-280  
San Francisco, Calif. 94106

PACIFIC GAS AND ELECTRIC COMPANY  
Attention: Regional Land Supervisor  
111 Almaden Blvd., Rm 804  
San Jose, Calif. 95115

Permittee agrees to share all findings, reports and analysis, arising out of the drilling conducted on PGandE's property.

PGandE reserves the right to revoke this permission with or without cause and the permit may be superseded by other documents in a form satisfactory to PGandE, to be issued by Mission Trail Region Land Department, to provide for Permittees access to the wells. The parties also agree that this indemnity shall remain in affect notwithstanding the expiration or termination of this permission.

By L. E. Englund By \_\_\_\_\_  
L. E. ENGLUND CITY OF PISMO BEACH  
Regional Land Supervisor Mayor  
Pacific Gas and Electric Co.  
9-19-85 \_\_\_\_\_  
Date Date

RANCHO  
SAN  
MIGUELITO

Pels. B, C, & D subject to  
17' R/W for public road  
Granted by Sh. 1436, O.R., Pg. 68

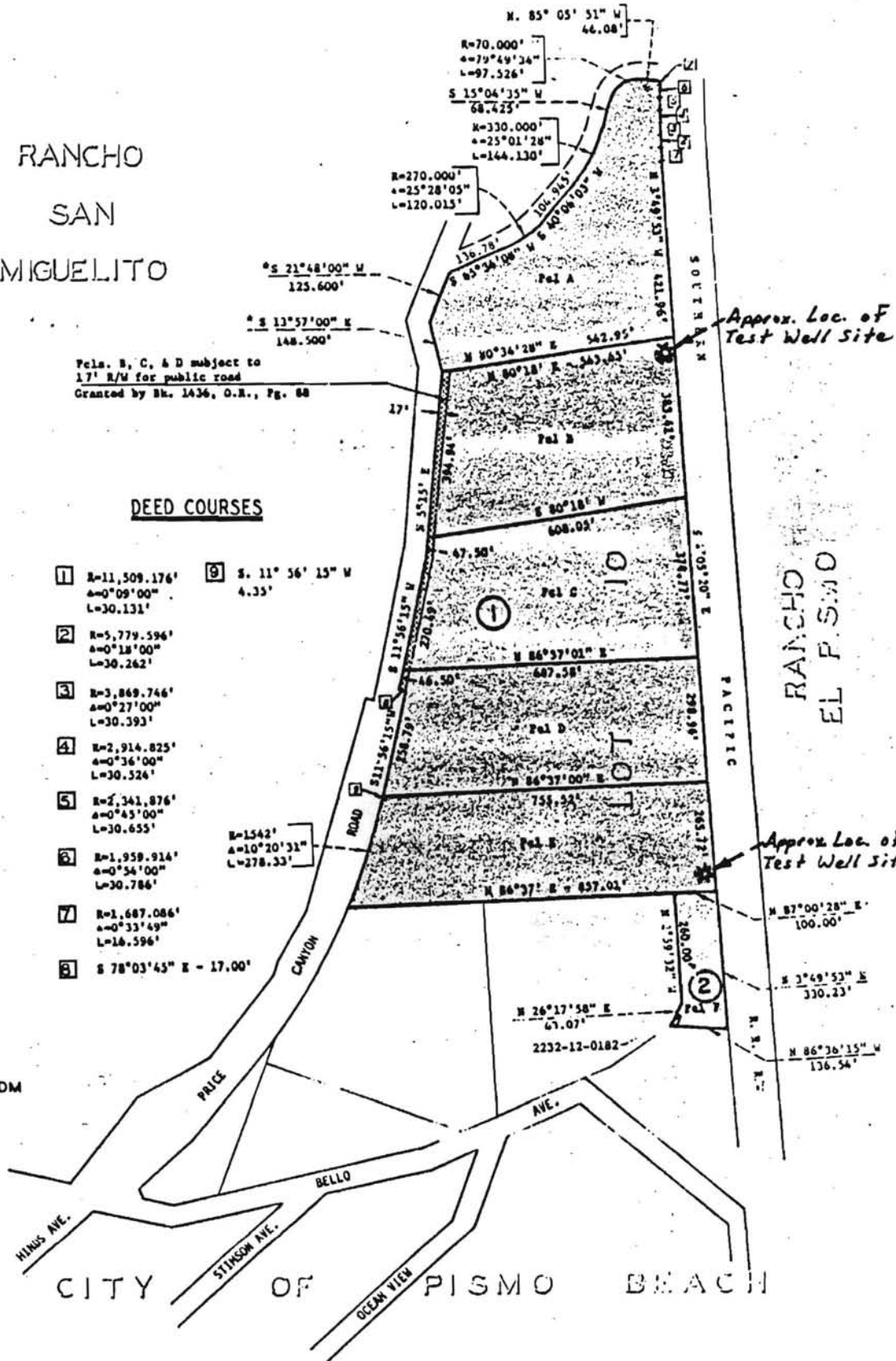
DEED COURSES

- |   |  |   |                           |
|---|--|---|---------------------------|
| 1 | R=11,509.176'<br>A=0°09'00"<br>L=30.131' | 9 | S. 11° 56' 15" W<br>4.35' |
| 2 | R=5,779.596'<br>A=0°18'00"<br>L=30.262'  |   |                           |
| 3 | R=3,869.746'<br>A=0°27'00"<br>L=30.393'  |   |                           |
| 4 | R=2,914.825'<br>A=0°36'00"<br>L=30.524'  |   |                           |
| 5 | R=2,341.876'<br>A=0°45'00"<br>L=30.655'  |   |                           |
| 6 | R=1,959.914'<br>A=0°54'00"<br>L=30.786'  |   |                           |
| 7 | R=1,687.086'<br>A=0°33'49"<br>L=16.596'  |   |                           |
| 8 | S 78°03'45" E - 17.00'                   |   |                           |



1"=200'

T32SR12E MDM  
SEC 12



PACIFIC GAS AND ELECTRIC COMPANY

PG&E

+

406 HIGUERA • BOX 592 • SAN LUIS OBISPO, CALIFORNIA 93406 • (805) 544-3334

D. L. KENNADY  
DISTRICT MANAGER

653.8

October 7, 1985

RECEIVED  
OCT 09 1985  
CITY OF PISMO BEACH  
PUBLIC SERVICES

Mr. Hal Halldin  
City of Pismo Beach  
P. O. Box 3  
1000 Bello Street  
Pismo Beach, CA 93449

RE: Test Wells in Price Canyon

Dear Mr. Halldin:

Attached are three copies of the Permit and Indemnity Agreement for the above-mentioned project. Please have the proper official sign the permit and return the two copies marked "PG&E Co. Copy" in the enclosed envelope. Please send a copy of an insurance certificate with the executed permit.

If you have any questions, please call Mr. Wayne Yamagiwa at 544-3334, extension 436.

Sincerely,

*Neal O. Rotlisberger*  
NEAL O. ROTLISBERGER  
District Land Supervisor

Attachments

501 N. Main St.  
Templeton, CA 93463

# Miller Drilling Co.

Contractors License No. 324634

BOB MILLER  
(805) 434-1888

## PUMP TEST REPORT

JO # 4501

Well Owner: City of Pismo Beach

Pump Set: 63' Well # 8"

Billing Address: Myers Brothers

Pump Size: 4" Well Depth: 70' x 8"

8650 Lacey Blvd.

Testing Method: Submersible

Hanford, Calif. 93230

Perf Rec: \_\_\_\_\_

Standing Level Before Testing: 11' 96"

TESTING				
TIME	PUMPING LEVEL	WATER CONDITION	WATER OVER BOWLS	GPM
8.51		start pump		
8.56	29' 1"			150
9.01	30' 57"	clear		150
9.06	31' 68"			"
9.11	32' 54"			"
9.31	39' 14"			"
9.26	34' 67"	clear		"
9.45	36' 60"			"
10.07	37' 87"			"
10.32	39' 40"			"
11.02	40' 29"			"
11.42	41' 10"			"
12.03 pm	41' 36"			"
12.12		increase to 200 gpm		
12.17	47' 74"			200
12.23	48' 57"			200
12.28	49' 29"			"
12.43	50' 14"			"
12.58	50' 75"			"
1.18	51' 26"			"
1.38	51' 73"			"
1.58	52' 25"			"
2.13	52' 43"	increase to 250 gpm , pumped alot of air, slowed to 212 gpm		

NOTES:

Standing Level After Testing: \_\_\_\_\_

FINAL TEST RESULTS. Produced \_\_\_\_\_ GPM for \_\_\_\_\_ hours on (date) 11/19/85

Test Run By: \_\_\_\_\_

CC:

Recorded 1



581 N. Main St.  
Templeton, CA 93465

# Miller Drilling Co.

Contractors License No. 324634

BOB MILLER  
(805) 434-1888

## PUMP TEST REPORT

JO # 4501

Well Owner: City of Pismo Beach

Pump Set: 63' Well # site#8

Billing Address: Myers Brothers

Pump Size: 4" Well Depth: 70' 8" casing

Testing Method: submerible

Perf Rec: \_\_\_\_\_

Standing Level Before Testing: 12.25

TESTING				
TIME	PUMPING LEVEL	WATER CONDITION	WATER OVER BOWLS	GPM
8.25		start pump		
8.30	31.13			150
8.45	34.78	clear		"
9.00	37.32			"
9.15	38.69			"
9.30	40.26	clear		"
9.45	40.83			"
10.05	41.53			"
10.25	42.21			"
10.55:34	42.90	183855		"
11.25:39	43.37	184321		"
11.55:36	43.53	184770		"
12.25:38	43.83	185222		"
12.55:33	43.98	185683		"
1.25:31	44.15	186138		"
1.55:36	44.25	186587		"
2.25:32	44.45	187039		"
2.55:37	44.55 increase	187487		"
3.25:31	45.36	187944		"
3.55:37	45.53	188397		"
4.25:39	45.70	188849		"
4.55:39	45.74	189307		"
5.25:33	45.75	189761		"
5.55:40	45.88	190218		"
6.25:36	46.14	190677		"

NOTES:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Standing Level After Testing: \_\_\_\_\_

FINAL TEST RESULTS: Produced \_\_\_\_\_ GPM for \_\_\_\_\_ hours on (date) 11/20/85

Test Run By: \_\_\_\_\_

CC:

Recorded 3

501 N. Main St.  
Templeton, CA 93453

# Miller Drilling Co

Contractors License No. 324834

BOB MILLER  
(805) 434-1888

## PUMP TEST REPORT

JO # 4503

Well Owner: City of Pismo Beach Pump Set: 63' Well # site 88  
Billing Address: Myers Brothers Pump Size: \_\_\_\_\_ Well Depth: \_\_\_\_\_  
Testing Method: \_\_\_\_\_  
Perf Rec: \_\_\_\_\_

Standing Level Before Testing: 17.25

TESTING				
TIME	PUMPING LEVEL	WATER CONDITION	WATER OVER BOWLS	GPM
6.55:40	46.27	191140		150
7.25:36	46.40	191607		150
7.55:40	46.47	192076		"
8.25:37	46.52	192257		"
8.55:50	46.64	193022		"
9.25:48	46.71	19347.5		"
9.55:30	46.75	19395.2		"
10.25:59	46.80	19445.5		"
10.55:37	46.85	19491.3		"
11.25:40	46.87	19540.0		"
11.55:35	47.0	19584.2		"
12.25:40	47.05	19631.3		"
1.25:38	47.16	19725.6		"
2.25:40	47.35	19817.6		"
3.25	47.60			"
4.25				"
5.25:30	48.0	20132.6		"
6.25:40	48.10	20197.9		"
7.25:35	48.22	20302.8		"
8.30:30	48.46			"
RECOVERY:				
		10 min. 24.35'	60 min. 18.56	
		20 min. 22.25'	90 min. 17.28	
		30 min. 20.88		
		45 min. 19.55		

### NOTES:

Standing Level After Testing: \_\_\_\_\_

FINAL TEST RESULTS: Produced 150 GPM for 24 hours on (date) 11/20/85

Test Run By: Sandy Swarthoff, and Ray Fogle

CC:

Recorded 1

DUPLICATE  
Owner's Copy

WELL #8

STATE OF CALIFORNIA  
THE RESOURCES AGENCY  
DEPARTMENT OF WATER RESOURCES  
WATER WELL DRILLERS REPORT

Do not fill in  
No. 174228

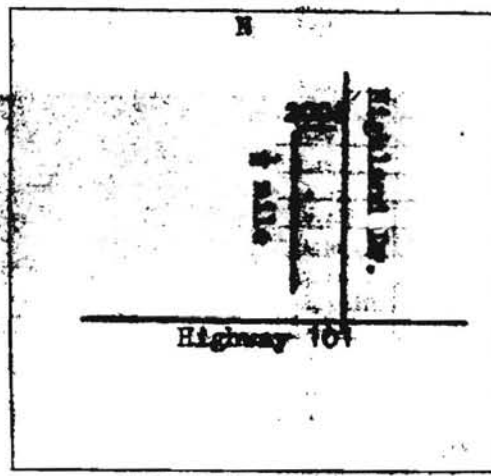
Name of Intent No. \_\_\_\_\_  
Local Permit No. or Date \_\_\_\_\_  
State Well No. \_\_\_\_\_  
Other Well No. \_\_\_\_\_

(1) OWNER: Name City of Pismo Beach  
Address P.O. Box 3  
City Pismo Beach, Ca. Zip 93449

(12) WELL LOG: Total depth 75 ft. Depth of completed well 73 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	-2	topsoil
2	-10	silt
10	-39	fine sand
39	-62	coarse sand
62	-70	sand stone
70	-75	shale

(2) LOCATION OF WELL (See instructions):  
County San Luis Obispo Owner's Well Number #0  
Well address if different from above \_\_\_\_\_  
Township 32 S Range 12 E Section 13 H  
Distance from cities, roads, railroads, fences, etc. 200' West of Highland Dr. and 1/2 mile North of Hwy 101 South of Pismo Creek 100'



(3) TYPE OF WORK:  
New Well  Deepening   
Reconstruction   
Reconditioning   
Horizontal Well   
Destruction  (Describe destruction materials and procedures in Item 12)  
(4) PROPOSED USE:  
Domestic   
Irrigation   
Industrial   
Pest Well   
Stock   
Municipal   
Other

(5) EQUIPMENT:  
Rotary  Reverse   
Cable  Air   
Other  Bucket

(6) GRAVEL PACK Monterey Sand  
Yes  No  Size 6 by 12  
Diameter of bore 14"  
Packed from 30 to 75 ft.

GRAVEL CHIPPES  
0 - 33' 2" PVC  
35 black  
35 screen  
5 black

(7) CASING INSTALLED:  
Steel  Plastic  Concrete

From ft.	To ft.	Dis. in.	Gage or Wall
+2	73	8"	Sch. 200

(8) PERFORATIONS: Slot  
Type of perforation or size of screen

From ft.	To ft.	Slot size
33	68	.050

(9) WELL SEAL:  
Was surface sanitary seal provided? Yes  No  If yes, to depth 30 ft.  
Were strata sealed against pollution? Yes  No  Interval \_\_\_\_\_ ft.  
Method of sealing Cement - 2 yards

(10) WATER LEVELS:  
Depth of first water, if known \_\_\_\_\_ ft.  
Standing level after well completion \_\_\_\_\_ ft.

(11) WELL TESTS:  
Was well test made? Yes  No  If yes, by whom? Miller  
Type of test Pump  Bailer  Air lift   
Depth to water at start of test 13 ft. At end of test \_\_\_\_\_ ft.  
Discharge 150 gal/min after 24 hours Water temperature \_\_\_\_\_  
Chemical analysis made? Yes  No  If yes, by whom? \_\_\_\_\_  
Was electric log made? Yes  No  If yes, attach copy to this report

Work started 1985 Completed 1985  
WELL DRILLER'S STATEMENT:  
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  
SIGNED Richard Myers (Well Driller)  
NAME Myers Brothers, Inc.  
(Person, firm, or corporation) (Typed or printed)  
Address 8650 E Lacey Blvd.  
City Hanford, CA. 93230 Zip \_\_\_\_\_  
License No. 280310 Date of this report 11-6-85



501 N. Main St.  
Templeton, CA 93465

# Miller Drilling Co.

Contractors License No. 324634

BOB MILLER  
(805) 434-1888

## PUMP TEST REPORT

JO # 4501

Well Owner: City of Pismo Beach  
Billing Address: Myers Brothers  
8650 Lacey Blvd.  
Hanford, Calif. 93230

Pump Set: 63' Well # 8"  
Pump Size: 4" Well Depth: 70' x 8"  
Testing Method: Submerible  
Perf Rec: \_\_\_\_\_

Standing Level Before Testing: 11' 86"

TIME	PUMPING LEVEL	TESTING	
		WATER CONDITION	WATER OVER BOWLS
8.51		start pump	
8.56	29'1"		150
9.01	30'57"	clear	150
9.06	31'68"		"
9.11	32'54"		"
9.21	33'14"		"
9.26	34'67"	clear	"
9.45	36'60"		"
10.02	37'87"		"
10.32	39'40"		"
11.02	40'29"		"
11.42	41'10"		"
12.02 pm	41'36"		"
12.12		increase 20 200 gpm	
12.17	47'24"		200
12.22	48'57"		200
12.28	49'29"		"
12.43	50'14"		"
12.58	50'75"		"
1.18	51'26"		"
1.38	51'73"		"
1.58	52'25"		"
2.13	52'43"	increase to 250 gpm , pumped alot of air, slowed to 212 gpm	

NOTES:

Standing Level After Testing: \_\_\_\_\_

FINAL TEST RESULTS: Produced \_\_\_\_\_ GPM for \_\_\_\_\_ hours on (date) 11/19/85

Test Run By: \_\_\_\_\_

CC:

Recorded 1



## PUMP TEST REPORT

JO # 4501

Well Owner: City of Pismo Beach

Pump Set: 63' Well # site#8

Billing Address: Myers Brothers

Pump Size: 4" Well Depth: 70' 8" casing

Testing Method: submerible

Perf Rec: \_\_\_\_\_

Standing Level Before Testing: 12.25

TIME	PUMPING LEVEL	TESTING	
		WATER CONDITION	WATER OVER BOWLS
8.25		start pump	
8.30	31.11		150
8.45	34.78	clear	"
9.00	37.32		"
9.15	38.69		"
9.35	40.26	clear	"
9.45	40.83		"
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5.55:40	45.88	190218	"
6.25:36	46.14	190677	"

NOTES:

Standing Level After Testing: \_\_\_\_\_

FINAL TEST RESULTS: Produced \_\_\_\_\_ GPM for \_\_\_\_\_ hours on (date) 11/20/85

Test Run By: \_\_\_\_\_

CC:

Recorded 3

*Top up by [unclear] - [unclear] - [unclear] - [unclear] - [unclear]*

**PACIFIC GAS AND ELECTRIC COMPANY**

**PG&E** +

406 HIGUERA • BOX 592 • SAN LUIS OBISPO, CALIFORNIA 93406 • (805) 544-3334

D. L. KENNADY  
DISTRICT MANAGER

653.8

October 7, 1985

OCT 09 1985

UNITED STATES POSTAL SERVICE  
PISMO BEACH, CA

Mr. Hal Halldin  
City of Pismo Beach  
P. O. Box 3  
1000 Bello Street  
Pismo Beach, CA 93449

RE: Test Wells in Price Canyon

Dear Mr. Halldin:

Attached are three copies of the Permit and Indemnity Agreement for the above-mentioned project. Please have the proper official sign the permit and return the two copies marked "PG&E Co. Copy" in the enclosed envelope. Please send a copy of an insurance certificate with the executed permit.

If you have any questions, please call Mr. Wayne Yamagiwa at 544-3334, extension 436.

Sincerely,

*Neal O. Rotlisberger*  
NEAL O. ROTLISBERGER  
District Land Supervisor

Attachments

PERMIT  
AND  
INDEMNITY AGREEMENT

---

City of Pismo Beach, hereinafter called Permittee, assumes all risk and liability for drilling and immediately refilling two test wells at the locations shown in red on the attached drawing on the parcel SBE 135-40-25B (Parcels 1 and 2) located in Pismo Beach, owned and operated by Pacific Gas and Electric Company, a California corporation, hereinafter called PGandE, who gives its permission as an accommodation to a request made by Permittee.

Permittee shall indemnify and hold PGandE harmless, including its officers, agents and employees from loss, claims, liability, damages (including damages to PGandE's property and personal injury or death, including the City of Pismo Beach, its Contractors, or PGandE, its agents and employees) arising out of Permittee's drilling or other activities pursuant to ground water monitoring.

Permittee's contractors shall maintain during the performance hereof, Comprehensive General Liability and Comprehensive Automobile Liability of not less than \$2,000,000 combined single limit or equivalent for bodily injury, personal injury and property damage as the result of any one occurrence.

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PGandE shall have the right to inspect or obtain a copy of the original policy(ies) of insurance.

P.G.&E. CO.  
COPY

Permittee shall furnish the required certificates and endorsements to PGandE prior to commencing performance hereof.

Permittee shall contact PGandE's facility manager (R. Large) at 773-4284 and USA (Underground Service Alert at (408) 642-2444 at least 48 hours in advance of the drilling operation to determine exact drilling locations.

All insurance certificates, endorsements, cancellations, terminations, alternations and material changes of such insurance shall be issued and submitted to the following:

PACIFIC GAS AND ELECTRIC COMPANY  
Attention: Manager of Insurance  
77 Beale Street, Room E-280  
San Francisco, Calif. 94106

PACIFIC GAS AND ELECTRIC COMPANY  
Attention: Regional Land Supervisor  
111 Almaden Blvd., Rm 804  
San Jose, Calif. 95115

Permittee agrees to share all findings, reports and analysis, arising out of the drilling conducted on PGandE's property.

PGandE reserves the right to revoke this permission with or without cause and the permit may be superseded by other documents in a form satisfactory to PGandE, to be issued by Mission Trail Region Land Department, to provide for Permittees access to the wells. The parties also agree that this indemnity shall remain in affect notwithstanding the expiration or termination of this permission.

By *L. E. Englund* By \_\_\_\_\_  
L. E. ENGLUND CITY OF PISMO BEACH  
Regional Land Supervisor Mayor  
Pacific Gas and Electric Co.  
9-19-83 \_\_\_\_\_  
Date Date

RANCHO  
SAN  
MIGUELITO

Pcls. B, C, & D subject to  
17' R/W for public road  
Granted by Bk. 1436, O.R., Pg. 88

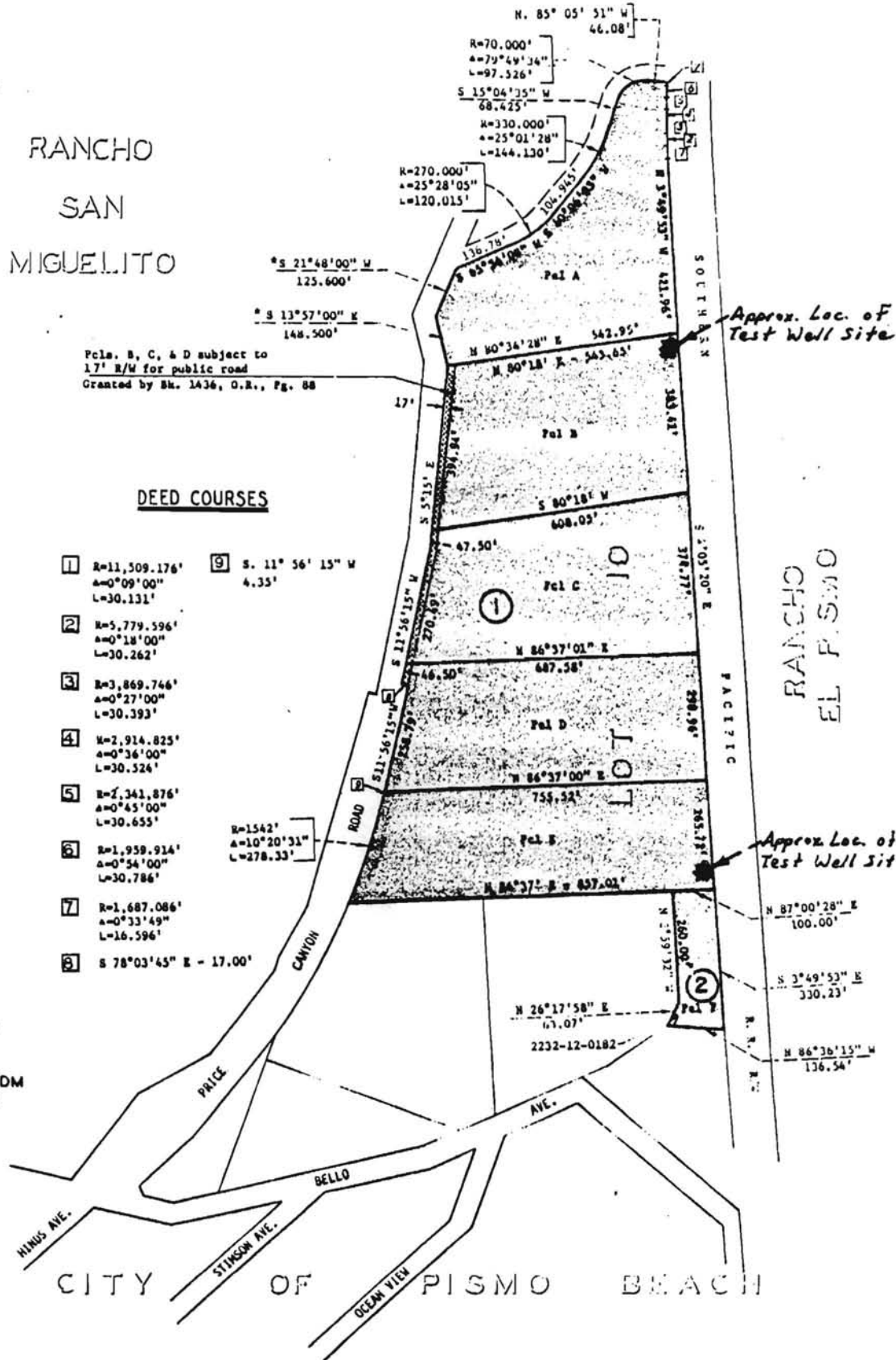
DEED COURSES

- |  |                                     |
|--|-------------------------------------|
| 1 R=11,509.176'<br>A=0°09'00"<br>L=30.131' | 9 S. 11° 56' 15" W<br>4.35'         |
| 2 R=5,779.596'<br>A=0°18'00"<br>L=30.262'  |                                     |
| 3 R=3,869.746'<br>A=0°27'00"<br>L=30.393'  |                                     |
| 4 R=2,914.825'<br>A=0°36'00"<br>L=30.524'  |                                     |
| 5 R=2,341.876'<br>A=0°45'00"<br>L=30.655'  |                                     |
| 6 R=1,959.914'<br>A=0°54'00"<br>L=30.786'  | R=1542'<br>A=10°20'31"<br>L=278.33' |
| 7 R=1,687.086'<br>A=0°33'49"<br>L=16.596'  |                                     |
| 8 S 78°03'45" E - 17.00'                   |                                     |



1"=200'

T32SR12E MDM  
SEC 12



PERMIT  
AND  
INDEMNITY AGREEMENT

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City of Pismo Beach, hereinafter called Permittee, assumes all risk and liability for drilling and immediately refilling two test wells at the locations shown in red on the attached drawing on the parcel SBE 135-40-25B (Parcels 1 and 2) located in Pismo Beach, owned and operated by Pacific Gas and Electric Company, a California corporation, hereinafter called PGandE, who gives its permission as an accommodation to a request made by Permittee.

Permittee shall indemnify and hold PGandE harmless, including its officers, agents and employees from loss, claims, liability, damages (including damages to PGandE's property and personal injury or death, including the City of Pismo Beach, its Contractors, or PGandE, its agents and employees) arising out of Permittee's drilling or other activities pursuant to ground water monitoring.

Permittee's contractors shall maintain during the performance hereof, Comprehensive General Liability and Comprehensive Automobile Liability of not less than \$2,000,000 combined single limit or equivalent for bodily injury, personal injury and property damage as the result of any one occurrence.

Comprehensive General Liability shall include coverage for Premises - Operations, Owners and Contractors Protective, Products/Completed Operations Hazard, Contractual Liability, and Broad Form Property Damage including Completed Operations. Comprehensive Automobile Liability shall include coverage for Owned, Hired, and Non-Owned automobiles.

Such insurance shall include, by endorsement to the policy(ies), PGandE as an additional insured insofar as any liability arising out of the permit by the Permittee with PGandE is concerned, contain a severability of interest clause, provide that PGandE shall not by reason of its inclusion as an additional insured incur liability to the insurance carrier for payment of premium for such insurance, and provide 30-days' written notice to PGandE prior to cancellation, termination, alternation or material change of such insurance.

Evidence of coverage described above shall state that coverage provided is primary and is not excess or contributing with any insurance or self-insurance maintained by PGandE.

PGandE shall have the right to inspect or obtain a copy of the original policy(ies) of insurance.

P.G.&E. CO.  
COPY



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By *L. E. Englund* By \_\_\_\_\_  
L. E. ENGLUND CITY OF PISMO BEACH  
Regional Land Supervisor Mayor  
Pacific Gas and Electric Co.  
7-17-82 \_\_\_\_\_  
Date Date

