

COPY



**ZELN**

1830 N. BROADWAY 124-256, TUCSON, AZ 85719  
TEL. (520) 884-1846, FAX 1-775-796-8858  
ZELENEENVIRONMENTAL.COM

RECEIVED

OCT 19 2007

WATER QUALITY

October 18, 2007

Arizona Department of Water Resources  
3550 North Central Avenue, Suite 200  
Phoenix, AZ 85012

Attn: Shannon Reif

*DENY!*

Enclosed are seven Notice of Intent to Abandon forms for the Toot 'n Moo project in South Tucson. With the six abandonment permits previously issued, this should cover all of the wells drilled in association with this project.

Please cancel the applications previously submitted for registration numbers 55-580457, 55-580458 and 55-580459. It appears that these wells were never installed.

If you have any questions please give me a call.

Sincerely,  
Zelen Environmental

Dennis V. Krantz  
Project Manager

**WITHDRAWN**



Arizona Department of Water Resources  
 Water Management Support Section  
 P.O. Box 33589 Phoenix, Arizona 85067-3589  
 (602) 771-8500 • (800) 352-8488  
 www.azwater.gov

Notice of Intent to  
 Abandon a Well

NO FEE

- Review instructions and the Well Abandonment Handbook prior to completing form with black or blue ink.
- You must include with your Notice:
  - Well construction diagram showing all existing well construction features listed in Section 5 and the proposed abandonment specifications listed in Section 6.

\*\* PLEASE PRINT CLEARLY \*\*

AMA / INA	B	SB
RECEIVED	DATE	WS
ISSUED	DATE	WQARF CERCLA

FILE NUMBER
WELL REGISTRATION NUMBER
55-580458

SECTION 1. REGISTRY INFORMATION	
<b>Well Type</b> CHECK ONE <input type="checkbox"/> Domestic <input type="checkbox"/> Stock <input type="checkbox"/> Irrigation <input type="checkbox"/> Municipal <input checked="" type="checkbox"/> Monitor / Piezometer <input type="checkbox"/> Geotechnical <input type="checkbox"/> Mineral Exploration <input type="checkbox"/> Other (please specify):	<b>Location of Well</b> WELL LOCATION ADDRESS (IF ANY) 2802 S. 6th AVE TOWNSHIP (N/S) RANGE (E/W) SECTION 160 ACRE 40 ACRE 10 ACRE 14 13 14 25 SW 1/4 NW 1/4 NE 1/4 COUNTY ASSESSOR'S PARCEL ID NUMBER COUNTY WHERE WELL IS LOCATED BOOK 119 PARCEL 201 123C PIMA ✓ LATITUDE LONGITUDE 32° 11' 26" N 110° 58' 39" W Degrees Minutes Seconds Degrees Minutes Seconds METHOD OF LATITUDE/LONGITUDE (CHECK ONE) <input type="checkbox"/> GPS: Hand-Held <input type="checkbox"/> U.S.G.C. Map <input type="checkbox"/> Conventional Survey <input type="checkbox"/> GPS: Survey-Grade IF USED, GEOGRAPHIC COORDINATE DATUM (CHECK ONE) <input type="checkbox"/> NAD 83 <input type="checkbox"/> Other (please specify):
ORIGINAL WELL OWNER (IF KNOWN) AOE-Q ORIGINAL WELL DRILLING FIRM (IF KNOWN) YELLOW JACKET 78 DRILL DATE (IF KNOWN) 2/2000	RECEIVED SEP 28 2007 WATER MGMT

WITHDRAWN

SECTION 2. OWNER INFORMATION	
<b>Well Owner</b> FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL ARIZONA DEPT. OF ENV. QUALITY MAILING ADDRESS 1110 W. WASHINGTON CITY / STATE / ZIP CODE PHOENIX AZ 85007 CONTACT PERSON NAME AND TITLE SAMANTHA RODRIGUEZ TELEPHONE NUMBER FAX 800 234 5677	<b>Landowner (if different from Well Owner)</b> FULL NAME OF COMPANY, GOVERNMENT AGENCY, OR INDIVIDUAL City of South Tucson MAILING ADDRESS 1601 S 6th Ave CITY / STATE / ZIP CODE South Tucson AZ 8513 CONTACT PERSON NAME AND TITLE JOE CASTELUO Planner TELEPHONE NUMBER FAX (520) 7922424 (520) 6289619

SECTION 3. ABANDONMENT AUTHORIZATION	
<b>Drilling Firm</b> NAME HOLE TECH TUCSON DWR LICENSE NUMBER 752 TELEPHONE NUMBER 520-975-5060 ROC LICENSE CATEGORY A-4 FAX	<b>Consultant (if applicable)</b> CONSULTING FIRM ZELLEN ENVIRONMENTAL CONTACT PERSON NAME MIKE KAZZ TELEPHONE NUMBER FAX 884-1846 (520) E-MAIL ADDRESS

SECTION 4.			
Questions	Yes	No	If Yes:
1. To your knowledge, is there any information that exists which indicates that the water in this well has been, may be, or is contaminated?		X	EXPLAIN (ATTACH ADDITIONAL PAGE IF NECESSARY)
2. Is there another well name or identification number associated with this well? (e.g., Lot 3 Well, MW-1, etc.)		X	PLEASE STATE
3. Was the well casing video logged?		X	
4. Why is the well being abandoned?	FUTURE Development		

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SEP 28 2007

WELL REGISTRATION NUMBER  
55-380458

Notice of Intent to Abandon a Well

Provide a well construction diagram showing all existing well construction features listed in Section 5 and the proposed abandonment specifications listed in Section 6.

**SECTION 5. ORIGINAL WELL CONSTRUCTION DESIGN** (attach additional page if needed)

Existing Borehole			Existing Casing (to the best of your knowledge)													
DEPTH FROM SURFACE		BOREHOLE DIAMETER (inches)	DEPTH FROM SURFACE		OUTER DIAMETER (inches)	MATERIAL TYPE (T)				PERFORATION TYPE (T)				SLOT SIZE IF ANY (inches)		
FROM (feet)	TO (feet)		FROM (feet)	TO (feet)		STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE		SLOTTED	IF OTHER TYPE, DESCRIBE
0	70	8	0	30	4.5	X										
			30	70	4.5	X							X			.020

Condition of casing:  Good  Fair  Poor

**Existing Annular Material (to the best of your knowledge)**

DEPTH FROM SURFACE		ANNULAR MATERIAL TYPE (T)						FILTER PACK			
FROM (feet)	TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE GROUT	BENTONITE			SAND	GRAVEL	SIZE
						GROUT	CHIPS	PELLETS			
0	30			X							
30	70								X		10-20

WITHDRAWN

**SECTION 6. PROPOSED WELL ABANDONMENT DESIGN** (attach additional page if needed) DATE ABANDONMENT IS TO BEGIN  
 Refer to ADWR's Well Abandonment Handbook for additional information. ASAP

Casing Treatment					Sealing or Fill Material													
DEPTH FROM SURFACE		TREATMENT TYPE (T)				DEPTH FROM SURFACE		MATERIAL TYPE (T)								ESTIMATE VOLUME OF MATERIAL (cubic feet)		
FROM (feet)	TO (feet)	SONAR JET	BRUSH OR SCRAPE	MILLS KNIFE	CASING REMOVAL (explain in Remarks)	IF OTHER TYPE, DESCRIBE OR IF CASING IS TO BE PERFORATED, DESCRIBE SPACING AND SIZE OF PERFORATIONS TO BE ADDED	FROM (feet)	TO (feet)	NEAT CEMENT	CONCRETE	SAND-CEMENT GROUT	CEMENT-BENTONITE GROUT	SAND-BENTONITE GROUT	HIGH SOLIDS BENTONITE			MIXING RATIO by (check one) <input type="checkbox"/> Weight <input type="checkbox"/> Volume	
0	20				X		3	20	X									
20	30						20	70	X									
30	70	X							X									11 TOTAL

<b>Proposed Abandonment Method</b> (See Well Abandonment Handbook) CHECK ONE <input type="checkbox"/> Standard Method <input type="checkbox"/> Alternative 1 <input type="checkbox"/> Alternative 2 <input type="checkbox"/> Alternative 3 <input checked="" type="checkbox"/> Alternative 4: <input type="checkbox"/> Variance Option * <input type="checkbox"/> Alternative 5: <input type="checkbox"/> Variance Option 1*      * requires a letter requesting a variance <input type="checkbox"/> Variance Option 2*	<b>Emplacement Method of Sealing or Fill Material</b> CHECK ONE <input type="checkbox"/> Gravity <input type="checkbox"/> Pressure Grouting <input checked="" type="checkbox"/> Tremie Pumped <input type="checkbox"/> Other (please specify):
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REMARKS

I state that this notice is filed in compliance with A.R.S. § 45-594 and A.A.C. R12-15-816 and is complete and correct to the best of my knowledge and belief

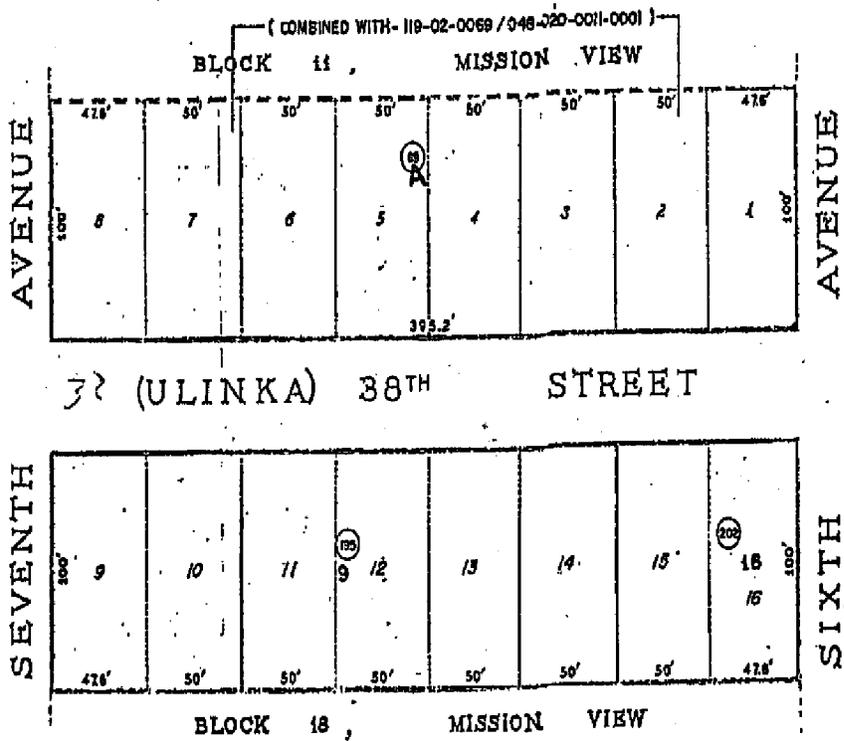
TYPE OR PRINT NAME AND TITLE <i>John Robinson</i> Hydrologist	SIGNATURE OF WELL OWNER <i>John Robinson</i>	DATE 09/28/07
TYPE OR PRINT NAME AND TITLE <i>Joel Gastelum</i> Planner	SIGNATURE OF LANDOWNER IF APPLICABLE (SEE INSTRUCTIONS) <i>Joel Gastelum</i>	DATE 9/28/07

ASSESSOR  
 19-02  
 29/29  
 RECEIVED  
 MAR 31 2000  
 GROUNDWATER MGT

RECORD MAP

BLOCK A, MISSION VIEW ADDITION

WITHDRAWN



MAPPING SECTION  
 NOT TO EXACT  
 TO OBTAIN EXACT SCALE,  
 MEASUREMENTS BY 39

SCALE - 1" = 100'  
 SEE BOOK PAGE 6

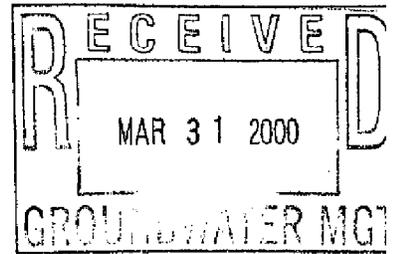


EXHIBIT A

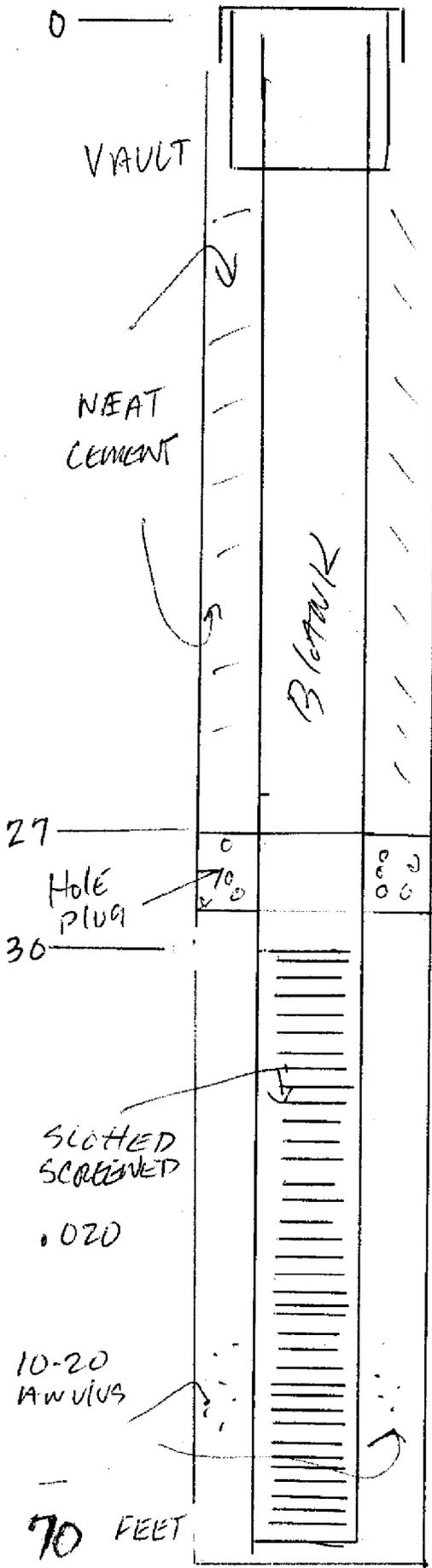
LEGAL DESCRIPTION OF TOOT & MOO SITE (A PORTION OF THE PARCEL ALSO KNOWN AS THE "HALE PROPERTY"):

LOT 16 IN BLOCK "A" OF MISSION VIEW ADDITION, A SUBDIVISION OF PIMA COUNTY, ARIZONA, ACCORDING TO THE MAP OR PLAT IN THE OFFICE OF THE PIMA COUNTY RECORDER IN BOOK 4 OF MAPS AND PLATS AT PAGE 68.

SEE ALSO, ASSESSOR'S RECORD MAP, BLOCK A, MISSION VIEW ADDITION ATTACHED AS PAGE 2, HEREOF.

WELL CONSTRUCTION 4"

WELL ABANDONMENT



WELL REG #  
55-580458

RECEIVED SURFACE

SEP 28 2007

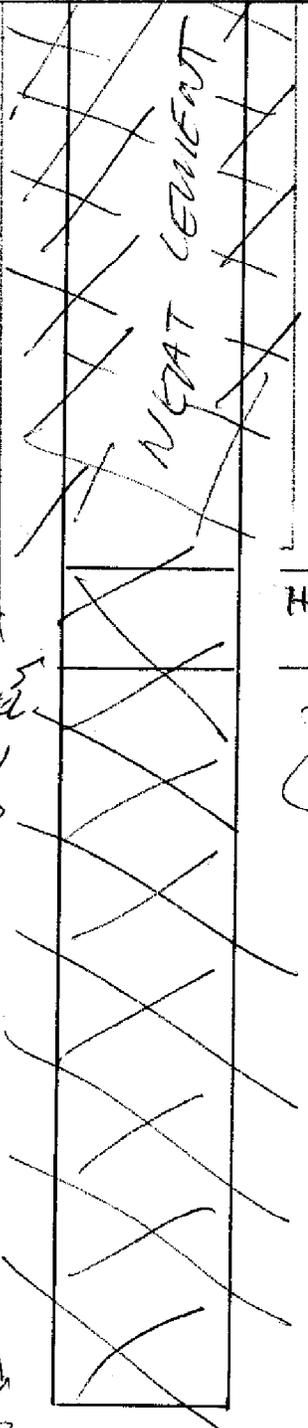
WATER MOUNT 3'

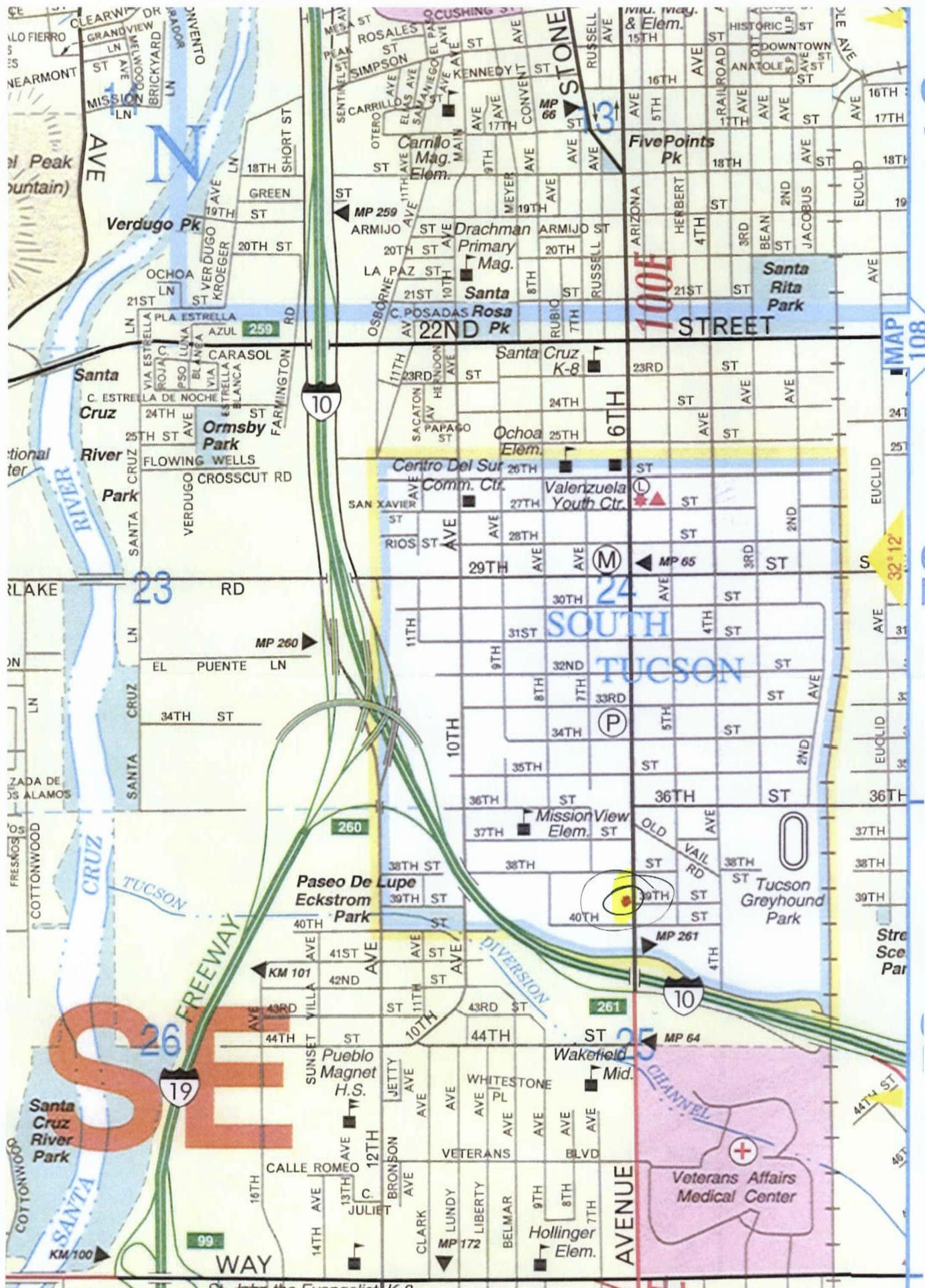
REMOVED

REMOVAL LINE  
CASING TO BE  
REMOVED 0-20'

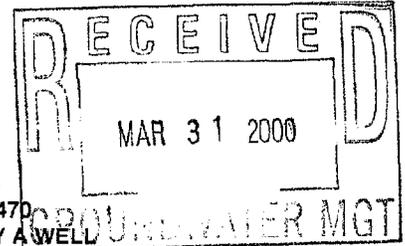
**WITHDRAWN**

SCREENED INTRAVEL  
TO BRUSHED & THEN  
PRESSURE GRouted  
w/ TREMIE PIPE





**ARIZONA DEPARTMENT OF WATER RESOURCES  
GROUNDWATER MANAGEMENT SUPPORT SECTION  
MAIL TO: P. O. BOX 458, PHOENIX, ARIZONA 85001-0458  
FOR MORE INFORMATION CALL: MONICA ORTIZ 602-417-2470  
NOTICE OF INTENTION TO DRILL, DEEPEN, REPLACE OR MODIFY A WELL**



PLEASE COMPLETE ALL ITEMS IN THE BOX BELOW DOWN TO COUNTY OR LOCAL AUTHORITY ENDORSEMENT. IF WATER FROM THE PROPOSED WELL (LISTED BELOW) WILL BE USED FOR DOMESTIC PURPOSES ON A PARCEL OF LAND 20 OR FEWER ACRES, THE APPLICABLE COUNTY OR LOCAL HEALTH AUTHORITY MUST ENDORSE ALL ITEMS IN THE BOX BEFORE SUBMISSION TO THE DEPARTMENT OF WATER RESOURCES. ITEMS C, D, E, AND F MAY BE AVAILABLE FROM YOUR COUNTY ASSESSOR'S OFFICE.

A. City of South Tucson P.O. Box 7307 South Tucson AZ 85 725  
 LANDOWNER'S NAME CURRENT MAILING ADDRESS CITY STATE ZIP

B. TELEPHONE NO. 520 - 792 - 2424 COUNTY ASSESSOR'S PARCEL ID INFORMATION:

C. WELL LOCATED IN Pima COUNTY D. BOOK MAP PARCEL E. # OF ACRES OFFICIAL SEAL OR STAMP

WELL/LAND LOCATION (MUST BE COMPLETED AS REQUESTED):

F. SW ¼ NW ¼ NE ¼ OF SECTION 25 TOWNSHIP 14 N(S) RANGE 13 E(W)  
 10AC 40AC 160AC COUNTY OR LOCAL AUTHORITY ENDORSEMENT

CHECK ONE:  
 G. RECOMMEND APPROVAL \_\_\_\_\_; INSUFFICIENT INFORMATION TO MAKE A DETERMINATION \_\_\_\_\_; VARIANCE REQUIRED \_\_\_\_\_ (EXPLANATION ATTACHED)

H. DATE \_\_\_\_\_ AUTHORIZED SIGNATURE \_\_\_\_\_ TITLE \_\_\_\_\_

1. OWNER OF WELL:  
Arizona Department of Environmental Quality  
 NAME  
3033 North Central Avenue  
 CURRENT MAILING ADDRESS  
Phoenix AZ 85012  
 CITY STATE ZIP  
 TELEPHONE NUMBER 602 - 207 - 4847

2. ACTION REQUESTED:  
 DRILL NEW WELL  DEEPEN \_\_\_\_\_  
 MODIFY \_\_\_\_\_ REPLACE \_\_\_\_\_

WELL REGISTRATION NO 55- \_\_\_\_\_

FOR A REPLACEMENT WELL PROVIDE:  
 MAX. CAPACITY OF THE ORIGINAL WELL  
Not Applicable GALLONS PER MINUTE;

DISTANCE FROM THE ORIGINAL WELL:  
Not Applicable FEET

3. CONSTRUCTION WILL START ABOUT:  
 MONTH April YEAR 2000

4. TYPE OF CASING FOR PROPOSED WELL:  
 SURFACE CASING: Not Applicable  
 DIAMETER: \_\_\_\_\_ " DEPTH: \_\_\_\_\_ "

DOWNHOLE CASING: PVC  
 DIAMETER: 4 " DEPTH: 70 "

5. DESIGN PUMP CAPACITY:  
Not Applicable GALLONS PER MINUTE

6. LESSEE OF LAND OF WELLSITE:  
City of Tucson  
 NAME  
P.O. Box 7307  
 CURRENT MAILING ADDRESS  
South Tucson AZ  
 CITY STATE ZIP  
 TELEPHONE: 520 - 792 - 2424

7. PRINCIPAL USE OF WATER: (BE SPECIFIC)  
Vapor Well

8. OTHER USES OF WATER: (BE SPECIFIC)  
Vapor Well

**FOR DEPARTMENT USE ONLY**

REGISTRATION NO. 55- 580458  
 DATE FILED 3-31-00  
 FILE NO. D(14-13)25 ABC

AMA/INA Tucson  
 W/S 09 S/B 16

PROCESSED BY YLB  
 DATE MAILED 4-20-00

9. PLACE OF USE (LEGAL DESCRIPTION OF LAND):  
SW ¼ NW ¼ NE ¼ SECTION 25  
 10AC 40AC 160AC  
 TOWNSHIP 14 N(S) RANG 13 E(W)

10. TYPE OF WELL (CHECK ONE):  
 EXEMPT  NON-EXEMPT \_\_\_\_\_

11. CHECK ONE:  
 RESIDENTIAL \_\_\_\_\_ STOCKWATER \_\_\_\_\_  
 OTHER Vapor Well

12. IS THE PROPOSED WELLSITE WITHIN 100 FEET OF A SEPTIC TANK SYSTEM, SEWER DISPOSAL AREA, LANDFILL, HAZARDOUS MATERIALS OR PETROLEUM STORAGE AREAS AND TANKS?  
 YES \_\_\_\_\_ NO

13. DRILLING FIRM:  
Geo Mechanics Southwest, Inc.  
 NAME  
7400 S. Nogales Highway # 4  
 MAILING ADDRESS  
Tucson AZ 85706  
 CITY STATE ZIP  
526 - 889 - 7787  
 TELEPHONE NO.  
498  
 DWR LICENSE NUMBER  
079441 Class A-04  
 ROC LICENSE CATEGORY

I STATE THAT THIS NOTICE IS FILED IN COMPLIANCE WITH A.R.S. § 45-596, IS COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THAT I UNDERSTAND THE LIMITATIONS AND CONDITIONS SET FORTH ON THE REVERSE SIDE OF THIS FORM.

Michael Latin AOCQ SW Manager  
 14. TYPE OR PREVIOUS STATUS: **VARIANCE GRANTED**

Michael Latin 3/28/00  
 15. SIGNATURE OF LANDOWNER/LESSEE OF WELLSITE 16. DATE

**SPECIAL REQUIREMENTS**

## APPLICATION GUIDELINES

In accordance with Arizona Revised Statutes ("A.R.S.") §§ 41-1008 and 1079, the Department of Water Resources (Department) provides the following information regarding the application review process for authority to drill.

### NECESSARY STEPS & INSTRUCTIONS TO OBTAIN DRILLING AUTHORITY

1. Pursuant to A.R.S. § 45-596, a person may not drill, cause to be drilled, deepen or modify any well for which a permit is not required without first filing a Notice of Intent to Drill with the Department. Only a well drilling contractor licensed in the State of Arizona or a single well licensee (a person licensed to drill or modify one exempt well on his or her own property) is authorized to drill, deepen or modify a well. Drilling may not begin until the well drilling contractor or licensee has possession of a drilling card at the well site, issued by the Director in the name of the well drilling contractor or licensee, and which authorizes the drilling of the specific well in a specific location. To assist you in understanding the requirements for this application, copies of A.R.S. § 45-596 and Arizona Administrative Code ("A.A.C.") R12-15-810 are available at the Department bookstore (602-417-2450 x7127).
2. If replacing, deepening, or modifying an existing well, provide the registration number of the existing well in item 2. A replacement well is one located no more than 660 feet from the original well and that is not expected to annually withdraw more groundwater than historically withdrawn from the original well.
3. Information to complete items 3, 4, 5 and 13 may be available from your driller.
4. Information to complete items 9 and 12 may be available from your County Assessor's Office.
5. For item 10, in an Active Management Area, A.R.S § 45-454 only allows non-irrigation uses for "exempt" wells. If the proposed use includes the growing of 2 or more acres of plants for sale or human/animal consumption (irrigation use), the well does not qualify as an exempt well.
6. An exempt well, referred to in Item 10, means a well with a pump with a maximum capacity of not more than thirty-five gallons per minute and used for non-irrigation purposes.
7. For item 11, in an Active Management Area, A.R.S §45-454 allow up to 56 acre feet per year of pumping from a domestic (residential) or stock watering exempt well, and up to 10 acre ft per year from an exempt well used for other (usually commercial non-irrigation) purposes.
8. If any water from a proposed well on a parcel of twenty or fewer acres will be used for domestic purposes, as defined in § 45-454, the applicant must submit a well site plan of the property. The plan must be on an 8½" x 11" piece of plain paper with representation of the locations of all structures and proximity of adjacent lot lines, to scale. It must include the county assessor's parcel identification number. The plan must show the proposed well location and the location of any septic tank or sewer system that is either located on the property or within one hundred feet of the proposed well site, as well as indicating the measured shortest distance between the proposed well and existing septic tank system. **The plan must demonstrate that the well will not be drilled within one hundred feet of any septic or sewer system.**
9. The site plan must be approved by the county health authority, or by a local health authority in areas where the county health authority has delegated authority to approve septic or sewer systems. Endorsement by the county/local authority is based solely on the best available judgement that the proposed well, as shown on the site plan submitted, is 100 feet or more from all known and visually identifiable sewage treatment systems. It is not a representation that a well placed at this site will be guaranteed as to quantity or quality. In areas where there is no local or county authority that controls installation of septic tanks or sewer systems, or if the health authority is unable to determine whether the proposed well location complies with state and local requirements, the applicant must apply for approval directly to the Department of Water Resources.
10. If an individual other than the land owner or lessee signs this notice, an original letter of authorization from the land owner/lessee, stating that the individual has permission to sign this specific notice on his or her behalf, must accompany the notice.
11. Please mail **two original Notices with original signatures and two site plans** and, in accordance with A.R.S. § 45-113, a **check or money order (no cash) in the amount of \$10.00** to P. O. Box 458, Phoenix Arizona, 85001-0458, or hand deliver to 500 North Third Street, Phoenix, Arizona.
12. Arizona Revised Statute § 45-596(D) provides that the Director of the Department is to determine whether or not all information required on this form has been submitted. If not, the person filing the Notice will be notified, and the drilling or modification of the well may **not** proceed.
13. This form is not applicable for non-exempt wells (those yielding more than thirty-five gallons per minute) within an Active Management Area. Contact Groundwater Management for further information regarding the appropriate notice to file with the Department.

### TIME FRAME FOR REVIEW OF YOUR APPLICATION

Within 15 days after receipt of your Notice of Intention the Arizona Department of Water Resources ("Department") will determine whether your application should be granted or denied, unless this time is extended for lack of a complete application. If your application is incomplete, the Department will notify you in writing and will specify what information is necessary to make the application complete. Until the missing information is received, the time frame for review of your application will be suspended. Your application will not be complete until all of the requested information is received. If you do not supply the missing information within sixty (60) days, the Department may deem your application withdrawn and close the file.

At the end of its review, the Department will send you a written notice either granting or denying your application for drilling authority. If your application is approved, the Drill Card will be mailed directly to the drilling contractor. If denied, the Department's notice will state justification for the denial and an explanation of your right to appeal.

### CONSTRUCTION AND FOLLOW UP REQUIREMENTS

1. Construction and abandonment standards for wells, must be in accordance with Department Regulations. A.R.S. § 45-594 and Arizona Administrative Code R12-15-811 require the well to be constructed with a twenty foot steel surface seal casing, including a one foot steel stickup and one and one-half inches of grout seal around the casing from the surface to a depth of twenty feet, unless a variance is granted (see A.R.S. § 45-596 (G) for procedure to follow in requesting a variance).
2. Pursuant to § 45-596(E), the drilling, deepening or modification of the well must be completed within one year of the date of the Notice of Intent. If the well is not completed within one year, a new Notice of Intent must be filed before proceeding with further construction.
3. If a well which was originally drilled as an exploration well, a monitor well, a piezometer well or for any use other than domestic use is later proposed to be converted to use for domestic purposes as defined in § 45-454, the well owner must file a Notice of Intention to Drill and comply with the requirements of § 45-596 before the well is converted and any water from that well is used for domestic purposes.
4. Within thirty days after installation of pumping equipment, the registered well owner must file a Completion Report with the Department. The person to whom a well is registered also must notify the Department of a change in ownership or a change in data relating to this well.

**ARIZONA DEPARTMENT OF WATER RESOURCES  
GROUNDWATER MANAGEMENT SUPPORT SECTION  
500 North Third Street  
Phoenix, Arizona 85004**

**VARIANCE GRANTED**

**THIS AUTHORIZATION SHALL BE IN POSSESSION OF THE DRILLER DURING ALL DRILL OPERATIONS**

**WELL REGISTRATION NO: 66-680468**

**AUTHORIZED DRILLER: GEOMECHANICS SOUTHWEST, INC.**

**LICENSE NO: 498**

**NOTICE OF INTENTION TO DRILL A VADOSE ZONE WELL(S) HAS BEEN FILED WITH THE DEPARTMENT BY:**

**WELL OWNER: ARIZONA DEPARTMENT OF ENVIROMENTAL QUALITY 3033 N CENTRAL AVE PHOENIX, AZ 85012**

**The well(s) is/are to be located in the:**

**SW ¼ of the NW ¼ of the NE ¼ Section 25 Township 14 SOUTH Range 13 EAST**

**No. of wells in this project: 1**

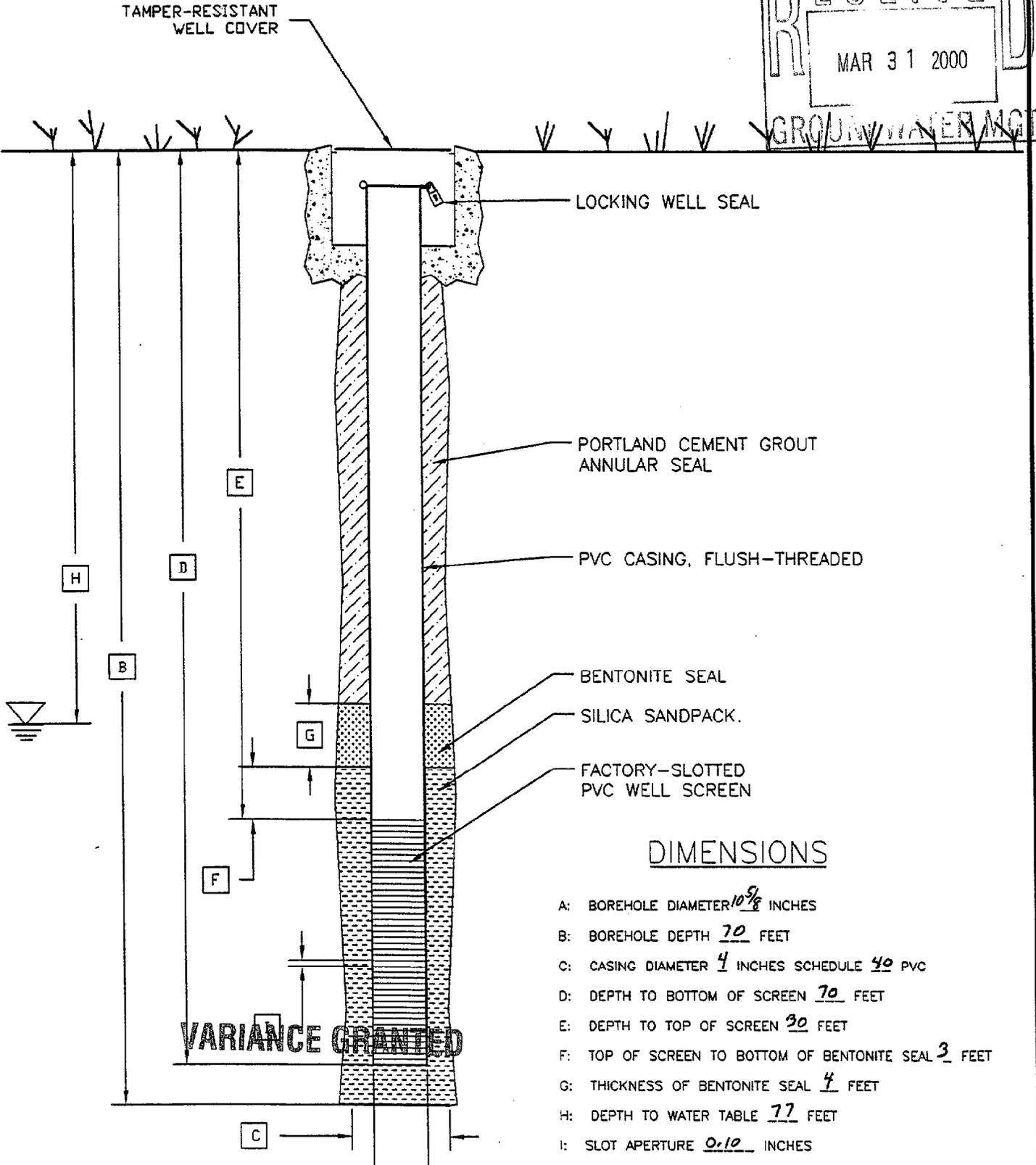
**THIS AUTHORIZATION EXPIRES AT MIDNIGHT ON THE 30TH DAY OF MARCH, 2001**

*ARD*  
**GROUNDWATER MANAGEMENT SUPPORT**

**THE DRILLER MUST FILE A LOG OF THE WELL  
WITHIN 30 DAYS OF COMPLETION OF DRILLING**



RECEIVED  
 MAR 31 2000  
 GROUNDWATER UNIT



**DIMENSIONS**

- A: BOREHOLE DIAMETER  $10\frac{5}{8}$  INCHES
- B: BOREHOLE DEPTH 70 FEET
- C: CASING DIAMETER 4 INCHES SCHEDULE 40 PVC
- D: DEPTH TO BOTTOM OF SCREEN 70 FEET
- E: DEPTH TO TOP OF SCREEN 30 FEET
- F: TOP OF SCREEN TO BOTTOM OF BENTONITE SEAL 3 FEET
- G: THICKNESS OF BENTONITE SEAL 4 FEET
- H: DEPTH TO WATER TABLE 77 FEET
- I: SLOT APERTURE 0.10 INCHES

**VARIANCE GRANTED**

**SPECIAL REQUIREMENTS**

\* NOT TO SCALE

<p><b>MONITOR WELL DIAGRAM</b></p> <p><b>HSI        GEOTRANS</b>        A Tetra Tech Company</p>	DATE:	
	DESIGNED:	
	CHECKED:	
	APPROVED:	
	DRAWN:	JDD
PROJ.:		

ASSESSOR'S RECORD MAP  
 RECEIVED  
 MAR 31 2000  
 GROUNDWATER MGT

ASSESSOR'S RECORD MAP

BLOCK A, MISSION VIEW ADDITION

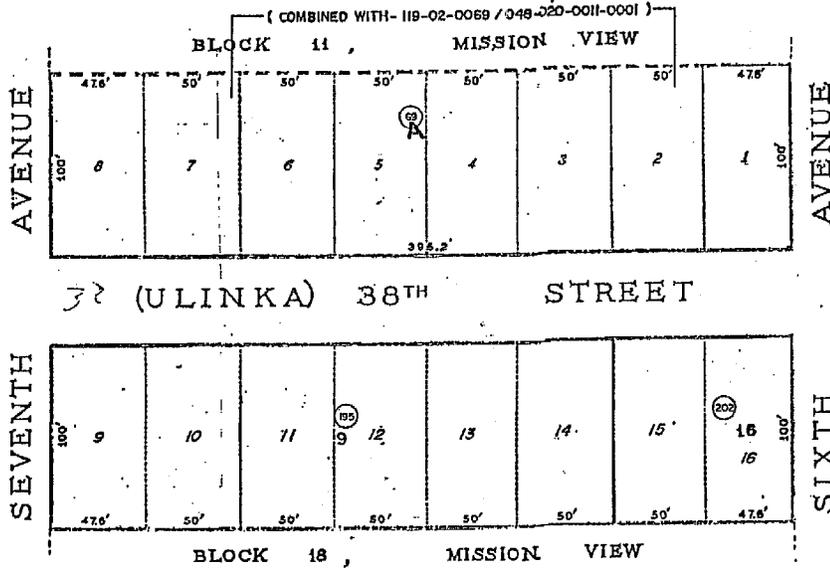


Fig. 2 of 2

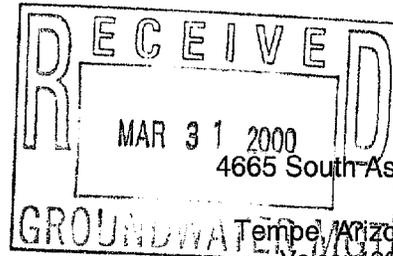
MAPPING SECTION COPY  
 NOT TO EXACT SCALE  
 TO OBTAIN EXACT SCALE, MULTIPLY  
 MEASUREMENTS BY .99102

SCALE-1"=  
 SEE BOOK PAGE 68, M & P.



**HSI  
GEOTRANS**

- *Environmental Consultants*
- *Groundwater Specialists*



4665 South Ash Avenue  
Suite G-1  
Tempe, Arizona 85282  
Voice: 480-839-2800  
Fax: 480-839-2828

# Memorandum

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**To:** Kay McNeely

**From:** Christiaan Culbertson <sup>AE</sup>

**Subject:** NOI for ADEQ State Lead Site in Tucson, AZ

**Date:** March 31, 2000

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Kay,

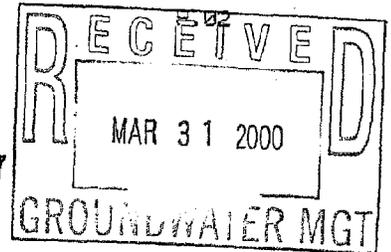
I have provided three Notice of Intents to Drill, Deepen, or Modify a Well (NOI) for a site in Township 14 South, Range 13 East, Section 25. I have also included well construction diagrams, a request for variance, and a letter authorizing the ADEQ to sign the NOIs. We have discussed the permitting and installation of these wells previously. The wells will be installed in the vadose zone and therefore, the inapplicable sections of the NOI were marked not applicable or left blank.

Thank you for your attention to this matter. If you have any questions please call me at (480) 839-2800.

**ARIZONA DEPARTMENT OF WATER RESOURCES**  
**HYDROLOGY DIVISION**  
**MEMORANDUM**

**DATE:** April 18, 2000  
**TO:** GWMSS, NOI Personnel  
**FROM:** James L. Johnson  
**SUBJECT:** NOI with Variance Request  
Completeness Review Time Frame Suspended

The following files(s) 55-580457 through 55-580459 were received from GWMSS on April 6, 2000. From the date received, the completeness (administrative) review time frame is suspended. On that date the substantiative (technical) time frame begins. Once returned to GWMSS the completeness review time frame will begin again.



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

UNDERGROUND STORAGE TANK  
CORRECTIVE ACTION AGREEMENT

This Corrective Action Agreement ("Agreement") is made this \_\_\_\_\_ day of \_\_\_\_\_, 1999, by and between the Arizona Department of Environmental Quality ("ADEQ") and City of South Tucson ("Owner").

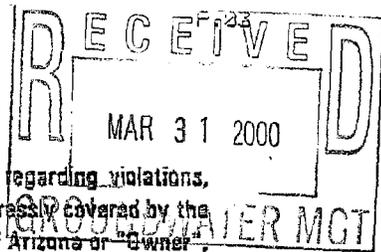
RECITALS:

The following is a recital of the facts underlying this agreement:

"Owner" is the owner, as defined by Arizona Revised Statutes ("A.R.S.") § 49-1001.01.A., of an Underground Storage Tank ("UST"), as defined by A.R.S. § 49-1001.17., located at See Exhibit A, Arizona ("Property"). A release, as defined by A.R.S. § 49-1001.14., of petroleum from the UST occurred on or before \_\_\_\_\_. "Owner" and ADEQ desire that corrective actions required by A.R.S. § 49-1005. be carried out at the Property and that ADEQ take such action pursuant to A.R.S. § 49-1017.

THEREFORE, the parties ("Parties") to this Agreement, in consideration of the promises and agreements contained herein, and for other good and valuable consideration, the receipt and legal sufficiency of which is hereby acknowledged, agree as follows:

1. **STATE-LEAD CORRECTIVE ACTION.** That this matter meets the requirements for ADEQ to take corrective action, at the property, pursuant to A.R.S. § 49-1017.A.1.(a)-(c), and ADEQ shall take such corrective action.
2. **ASSIGNMENT OF SAF REIMBURSEMENT.** "Owner" assigns any right it may have to reimbursement of corrective action costs, pursuant to A.R.S. § 49-1052., from the State Assurance Fund ("SAF"), to ADEQ.
3. **REIMBURSEMENT OF DIRECT COSTS.** "Owner" shall reimburse ADEQ for all direct costs of the corrective action, pursuant to A.R.S. § 49-1017.C., as follows:
  - a. "Owner" shall be responsible for all direct costs, up to the amount of its deductible, pursuant to A.R.S. § 49-1054.A., and;
  - b. "Owner" shall be responsible for all direct costs that exceed the amount of SAF reimbursement available, pursuant to A.R.S. §§ 49-1052. and 1054.
  - c. Payment of direct costs shall be made in Accordance with Departmental approved "Payment Schedule".



4. **SCOPE OF AGREEMENT.** This Agreement does not encompass issues regarding violations, releases, contamination, sources, operations, facilities or processes not expressly covered by the terms of this Agreement, and is without prejudice to the rights of the State of Arizona or "Owner", arising under any federal or Arizona environmental statutes and rules with regard to such issues.

5. **PROPERTY ACCESS.** "Owner" shall provide to ADEQ, all access to the Property necessary to complete the corrective action and incorporated in this Corrective Action Agreement as Addendum A. This right of access shall be in addition to, and not in limitation of or substitution for ADEQ's rights under applicable law.

6. **OBLIGATIONS OF LAW.** Nothing in this Agreement shall in any way alter, modify or revoke federal, state, or local law, or relieve "Owner" in any manner of its obligation to comply with such laws. Compliance with the terms of this Agreement shall be no defense to any action to enforce any such laws.

7. **CURRENT INFORMATION.** This Agreement is based solely upon currently available information. If additional information is discovered, which indicates that the actions taken under this Agreement are or will be inadequate to protect the human health, safety, or the environment, or to conform with applicable federal or state laws, the ADEQ shall have the right to require further action, beyond the requirements of this Agreement.

8. **MODIFICATIONS.** Any modifications of this Agreement shall be in writing and approved by "Owner" and the Director of ADEQ.

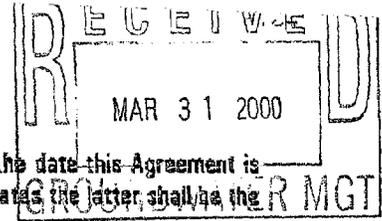
9. **CORRESPONDENCE TO ADEQ.** All correspondence to ADEQ arising as a result of this Agreement shall be mailed to the following address:

Phil McNeeley, Manager  
Underground Storage Tank Section  
Waste Programs Division  
Arizona Department of Environmental Quality  
3033 North Central Avenue, T-4024  
Phoenix, Arizona 85012

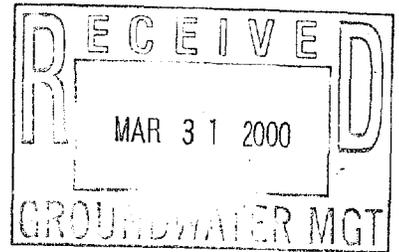
10. **CORRESPONDENCE TO "OWNER".** All correspondence to "Owner" arising as a result of this Agreement shall be mailed to the following address:

City of South Tucson  
PO Box 7307  
South Tucson, Arizona

11. **AUTHORIZATION.** The undersigned representative of ADEQ certifies that she is fully authorized to execute this Agreement on behalf of ADEQ and to legally bind ADEQ to this Agreement. The undersigned representative of "Owner" certifies that he is fully authorized to execute this Agreement on behalf of "Owner" and to legally bind "Owner" to this Agreement.



12. **EXECUTION DATE.** The execution date of this Agreement shall be the date this Agreement is signed by "Owner" and ADEQ. If such signatures occur on different dates, the latter shall be the execution date of this Agreement.
13. **ENTIRE AGREEMENT.** This Agreement constitutes the entire understanding between the parties with respect to the subject matter hereof, superseding all negotiations, prior discussions and agreements.
14. **CAPTIONS.** The captions of the paragraphs of this Agreement are for the convenience of reference only and shall not be considered or referred to when resolving questions of interpretation.
15. **SEVERABILITY.** If any term or provision of this Agreement or the application thereof to any person or circumstance shall to any extent be found to be invalid, void or unenforceable, then, to the extent the basic intentions of the parties to this Agreement remain unchanged, the remaining provisions and any application thereof shall, nevertheless, continue in full force and effect without being impaired or invalidated in any way.



EXECUTED this 2nd day of September, 1999.

Shirley Villegas  
"Owner"  
Shirley Villegas  
"Owner" City of South Tucson  
by Mayor Shirley Villegas

APPROVED AS TO FORM:

Brad Brown  
Brad Brown  
City Attorney

EXECUTED this 17<sup>th</sup> day of September, 1999.

Jean Calhoun  
Jean Calhoun  
Director  
Waste Programs Division  
Arizona Department of Environmental Quality

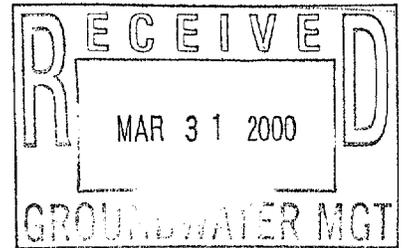


EXHIBIT A

LEGAL DESCRIPTION OF TOOT & MOO SITE (A PORTION OF THE PARCEL ALSO KNOWN AS THE "HALE PROPERTY"):

LOT 16 IN BLOCK "A" OF MISSION VIEW ADDITION, A SUBDIVISION OF PIMA COUNTY, ARIZONA, ACCORDING TO THE MAP OR PLAT IN THE OFFICE OF THE PIMA COUNTY RECORDER IN BOOK 4 OF MAPS AND PLATS AT PAGE 68.

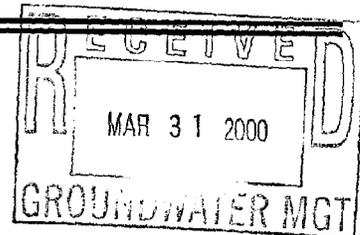
SEE ALSO, ASSESSOR'S RECORD MAP, BLOCK A, MISSION VIEW ADDITION ATTACHED AS PAGE 2, HEREOF.

**Geomechanics Southwest, Inc.**  
"GeoEnvironmental Exploration and Well Construction"

ADWR Lic. No. 498  
AROC Lic. No. 079441, Class. A-04

March 27, 2000

MAR 28 REC'D



Mr. Greg Wallace  
Hydrology Division  
Arizona Department of Water Resources  
500 North 3rd Street  
Phoenix, Arizona, 85004

**RE: Request for Variance – Monitor Well(s)**  
**ADEQ – Pima County, AZ, T14S, R13E, S25**

Dear Mr. Wallace:

Geomechanics Southwest, Inc. request variances for the construction of three (3) vadose well(s) at the above referenced site. All other construction practices will be in accordance with ADWR standards. The variances are as follows:

- Thermoplastic (PVC) inner casing (riser) with a locking watertight cap will be used in lieu of the required 20-foot steel surface casing. The riser will comply with ASTM Standard Guide D5092, Section 6.5. (R12-15-811.B.1) and
- The well will be installed in a vandal-proof, flush-grade, traffic-rated vault in lieu of above grade completion. (R12-15-811.B.1)(R12-15-811.I).

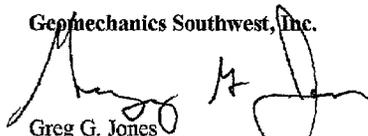
The Consultant that will be conducting the work is:

HSIGeotrans, Inc.  
4665 S. Ash Ave., Suite G-1  
Tempe, AZ 85282  
Mr. Christiaan Culbertson  
480-839-2800

If you have any questions, please call Christiaan Culbertson or myself. Thank you.

Sincerely,

**Geomechanics Southwest, Inc.**



Greg G. Jones  
Operations Manager / Phoenix  
HSI0327  
GGJ/sm

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7400 S. Nogales Highway, #4, Tucson, AZ, 85706 Ph. (520) 889-7787 FAX (520) 889-8561  
1212 S. 9th Street, Phoenix, Arizona 85034 Ph. (602) 252-0559 FAX (602) 252-0721

**ARIZONA DEPARTMENT OF WATER RESOURCES**

**Hydrology Division**

500 North Third Street, Phoenix, Arizona 85004

Telephone 602-417-2448

Fax 602-417-2425



JANE DEE HULL  
Governor

RITA P. PEARSON  
Director

April 18, 2000

Geomechanics Southwest  
1212 South 9<sup>th</sup> Street  
Phoenix, Arizona 85034

Attn: Greg G. Jones

**Re: Variance for Construction of Three Vadose Wells  
Registration Numbers 55-580457 through 55-580459**

Dear Mr. Jones:

The Arizona Department of Water Resources received your request dated March 27, 2000 for a variance for construction of three vadose wells to be located in Pima County.

The Arizona Department of Water Resources approves this request for the following variance:

- Thermoplastic casings (risers) with a watertight cap may be used in lieu of steel casings (R12-15-811.B.1).

The following *special requirements* are conditions for this variance (R12-15-821.):

- The PVC inner casings (risers) shall comply with ASTM Standard Guide D5092, Section 6.5.
- The wells shall be constructed per the "Variance Granted" Notice of Intention to Drill.
- The wells shall be abandoned (decommissioned) per A.A.C. R12-15-816.

If you have any questions, please contact James L. Johnson of my staff at 602-417-2400 ext. # 7268.

Sincerely,

A handwritten signature in cursive script that reads "Frank Corkhill".

*FC*  
Frank Corkhill  
Technical Support Section Supervisor

FC/JLJ/ef  
503011

**ARIZONA DEPARTMENT OF WATER RESOURCES**

500 North 3rd Street, Phoenix, Arizona 85004

Telephone (602) 417-2470

Fax (602) 417-2422



**JANE DEE HULL**

Governor

**RITA P. PEARSON**

Director

April 20, 2000

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY  
3033 N CENTRAL AVE  
PHOENIX, AZ 85012

Registration No. 55-580458

File No. D(14-13) 25 ABC

Dear Well Owner:

Enclosed for your records is an annotated copy of the Notice of Intention to Drill a well. This is returned to you as evidence of compliance with A.R.S. §45-596. A drilling card has been mailed to your designated driller. Prior to drilling he must have it in his possession.

Since this well is being drilled as a Monitor well, or for Cathodic Protection, Grounding, Geotechnical or Piezometer purposes, our standard driller report form is also being furnished to the driller. He is required to complete it and return it to the Department within 30 days after the completion of the well. A Completion Report form is being furnished for monitor wells where pump installation is authorized. This must be completed within thirty days of installation as required by A.R.S. §45-600.

A Change of Well Information form is enclosed for your future use. If you deem it necessary to change the location of the proposed well, please notify the Department on the enclosed form. A properly amended Drilling Card will then be issued and must be in possession of the driller before drilling begins. During the drilling of a new well, if it is determined that it must be abandoned, then a Well Abandonment Completion Report must be submitted per R12-15-816.F.

Per A.R.S. §45-593, the person to whom a well is registered shall notify this Department of a change of ownership of the well and/or information pertaining to the physical characteristics of the well, in order to keep the well registration file current and accurate.

Sincerely,

Toni Bergeman  
Water Resource Technician  
Groundwater Management Support Section

Enclosures

ADEG

### VARIANCE CHECKLIST - HYDROLOGY

DATE RECEIVED 3-27-00

POTENTIAL REG. Nº 55- \_\_\_\_\_

DATE TO HYDRO 4-6-00

DATE TO GMSS 4-19-00

55-580457 THRU 55-580459

FRONT OF N.O.I COMPLETE/CORRECT: YES  NO

VARIANCE (?) LETTER RECEIVED YES  NO

WELL DIAGRAM (?) RECEIVED YES  NO

SITE PLAN (?) RECEIVED YES  NO

#### TYPE AND NUMBER OF WELLS:

\_\_\_\_\_ MONITOR \_\_\_\_\_ CATHODIC PROTECTION

\_\_\_\_\_ PIEZOMETER \_\_\_\_\_ GROUNDING

\_\_\_\_\_ GEOTECHNICAL \_\_\_\_\_ HEAT PUMP

\_\_\_\_\_ MINERAL EXPLORATION

\_\_\_\_\_ WATER PRODUCTION  OTHER vadose zone

DESCRIBE TYPE OF WELL

#### VARIANCE:

REQUIRED  GRANTED

\_\_\_\_\_ NOT REQUIRED \_\_\_\_\_ NOT GRANTED

\_\_\_\_\_ LETTER ISSUED

#### ATTENTION!!! NOTICE OF INTENT TEAM:

\_\_\_\_\_ HARD COPY OF LETTER TO FOLLOW

\_\_\_\_\_ CALL FOR PICKUP

#### COMMENTS:

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

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