

ARIZONA DEPARTMENT OF WATER RESOURCES

Operations Division
500 North 3rd Street
Phoenix, Arizona 85004

WELL DRILLER REPORT

This report should be prepared by the driller in all detail and filed with the Department within 30 days following completion of the well.

1. Owner Name: ADEQ
Address: 3033 N. Central Ave. Phx., Az. 85012
Street City State Zip
2. Driller Name: HEBER MINING & EXPLORATION CO.
Address: 22010 N. 21st Ave. Phx., Az. 85027
Street City State Zip
3. Location: 2 (NS) 2 (EW) 26 1/4 SE 1/4 NW 1/4 SW
Township Range Section 10-acre 40-acre 160-acre
4. Well Registration No. 55- 547462 (Required)
5. Permit No. NA (If issued)

DESCRIPTION OF WELL

6. Total depth of hole 130 ft.
7. Type of casing PVC
8. Diameter and length of casing 4 in. from 0 to 125' in from to
9. Method of sealing at reduction points NA
10. Perforated from 85' to 125' from to from to
11. Size of cuts .020 Number of cuts per foot 125
12. If screen was installed: Length 40 ft. Diam 4 in. Type PVC
13. Method of construction drilled w/ 6 1/4" I.D. hollow stem auger
(drilled, dug, driven, bored, jetted, etc)
14. Date started Feb 6 1995
Month Day Year
15. Date completed Feb 7 1995
Month Day Year
16. Depth to water 95ft @ 12 hours ft. (If flowing well, so state)
17. Describe point from which depth measurements were made, and give sea-level elevation if available
Existing ground near well DEPARTMENT OF WATER RESOURCES
18. If flowing well, state method of flow regulation: NA FEB 17 1995
19. Remarks: Set casing & screen to 125ft., filter pack to 82ft., bent. seal to 78 ft., grouted to the surface w/ approved usalt @ surface.

OPERATIONS DIV DO NOT WRITE IN THIS SPACE OFFICE RECORD	
Registration No.	<u>55-547462</u>
File No	<u>(2-2) 26 cbd</u>
Received	By <u> </u>
Entered	ENTERED MAR 3 1995

MONITOR/PIEZOMETER WELL

ARIZONA DEPARTMENT OF WATER RESOURCES
15 SOUTH 15TH AVENUE
PHOENIX, ARIZONA 85007

MONITOR/PIEZOMETER WELL

FILING FEE \$10.00

WCP-10
95-6133-0203

NOTICE OF INTENTION TO DRILL MONITOR/PIEZOMETER WELL

RECEIVED
FEB 1 1995
FILING FEE \$10.00
MR

Section § 45-596, Arizona Revised Statutes provide: Prior to drilling a monitor or piezometer well, a Notice of Intention to Drill shall be filed with the Department on a prescribed form.

1. WELL LOCATION:

2 N/S | 2 E/XX | 26
Township | Range | Section

10 Acre Subdivision

SE 1/4 | NW 1/4 | SW 1/4
10 ACRE | 40 ACRE | 160 ACRE

2. Position location of the well on the land:

Latitude 33 0 29.04 "

Longitude 112 0 07.50 "

3. County: Maricopa

4. Owner of the land of wellsite:
City of Phoenix

Name
125 E Washington St
Address
Phoenix AZ 85004
City State Zip

5. Lessee of the land of wellsite:

Name
N/A
Address
City State Zip

6. Owner of well:

AZ Dept. of Env. Quality
Name
3033 N Central Ave
Address
Phoenix AZ 85012
City State Zip

7. Consulting Firm: EARTH TECH

Contact Person: Gary Bender

Phone: (602) 894-8482

8. Purpose of well drilled pursuant to this notice

Monitor X

Piezometer

9. If for deepening or modifying, Well Registration Number

55-

10. Construction will start:

02 06 95
Month Day Year

11. Period well will remain in

use 10 XXXXX Years

12. For monitoring wells, is pump equipment to be installed?

Yes No XX

(a) If yes, design pump capacity

(b) What use will be made of the water water quality

13. Drilling firm:

Heber Drilling

Name
2210 N 21st Ave
Address
Phoenix AZ 85027
City State Zip

DWR License No. 269

073350

ROC Category

14. Will this proposed well pump Colorado River water? Yes No X
(See condition VI on reverse)

15. Is the proposed wellsite within 100 feet of a septic tank system, sewage disposal area, landfill, hazardous waste facility, storage area of hazardous material or petroleum storage areas and tanks?
Yes No X

DO NOT WRITE IN THIS SPACE
OFFICE RECORD
File No. A(2-2)26CBD
Filed 1-10-95 By sk
Input ENTERED FEB - 1 1995
DUPLICATE
Mailed 1-20-95 By sk
Registration 55- 547462
AMA/INA P-hy
W/S 07 S/B 04

VARIANCE GRANTED SPECIAL REQUIREMENT

16. Proposed method of abandonment of well after project is completed: Well will be backfilled with cement grout per R-12-15-816

17. Is this well to monitor existing contamination? Potential contamination X Please explain: Installation for West Central Phoenix WQARF investigation being conducted by ADEQ

GENERAL INSTRUCTIONS

- 1. Fill out this form in DUPLICATE and send WITH \$10.00 FEE to 15 South 15th Avenue, Phoenix, AZ 85007
- 2. For specific instructions, limitations and conditions, see the reverse side of this form
- 3. Must be signed by land owner or lessee.
- 4. Section §45-596(D), provides that the Director shall determine that all information required on form has been submitted. If not, the person filing will be notified and the drilling, deepening, or modification of the well may not proceed.

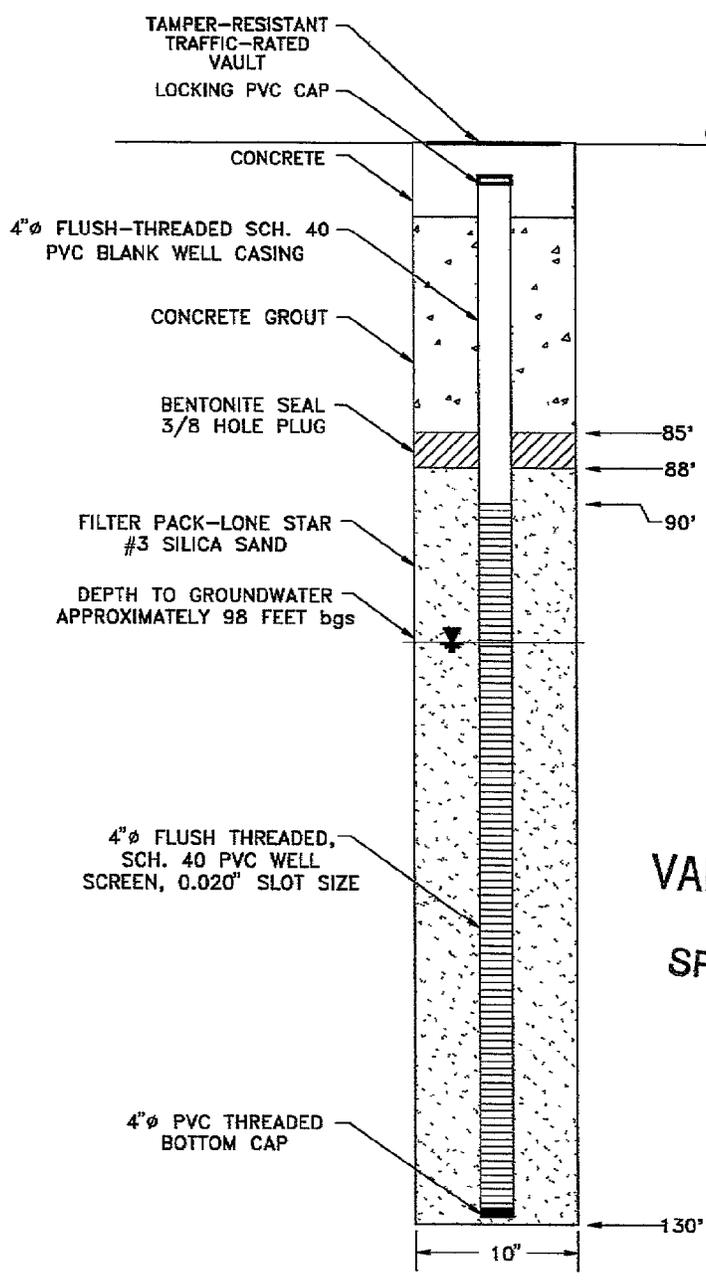
THIS WELL IS TO BE DRILLED PURSUANT TO ARS 49.203.B.1 OR 49-287.J

I state that Notice is filed in compliance with Section § 45-596 and is complete and correct to the best of my knowledge and belief and that I understand the conditions set forth on the reverse side of this form.

1-10-95

Michelle J. Robertson, Remed. Invest. Super. Hydrologist
Signature of Land Owner or Lessee

U 1995



VARIANCE GRANTED
SPECIAL REQUIREMENT

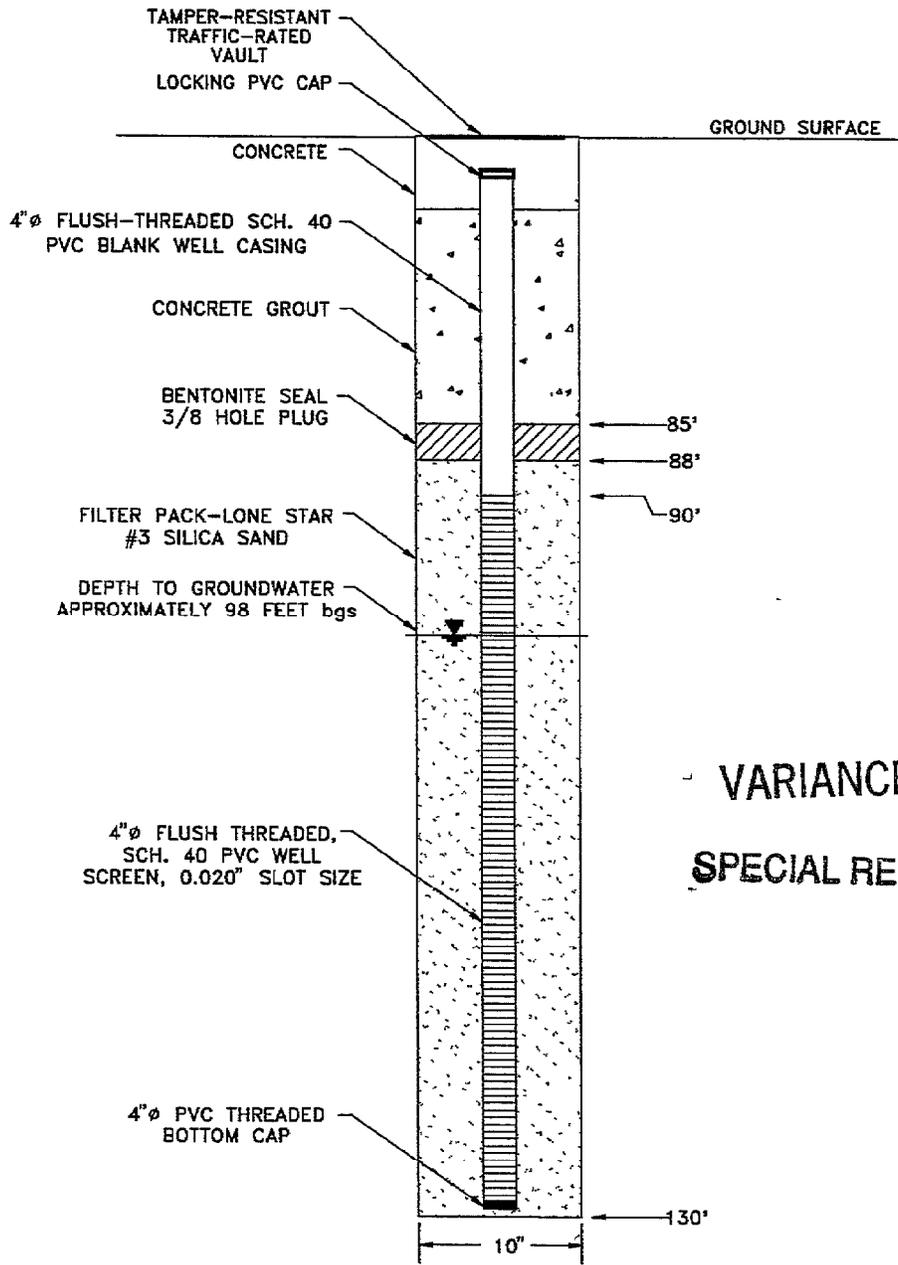
Plot Scale: 1=1
 File Name: C:\ET\956133\0203\WELL.DWG
 Last Date Revised: 1-5-95
 Drawn By: T/T

NOT TO SCALE

	PROJECT NO. 95-6133-02 ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
	WEST CENTRAL PHOENIX PROJECT AREA WQARF PHOENIX, ARIZONA MONITOR WELL DESIGN DETAIL WCP-10 1/95

FIGURE 1

01995



VARIANCE GRANTED
SPECIAL REQUIREMENT

Plot Scale: 1=1
File Name: C:\ET\956133\0203\WELL.DWG
Last Date Revised: 1-5-95
Drawn By: TJT

NOT TO SCALE

	PROJECT NO. 95-6133-02
	ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
WEST CENTRAL PHOENIX PROJECT AREA	
WQARF	
PHOENIX, ARIZONA	
MONITOR WELL DESIGN DETAIL WCP-10	
1/95	FIGURE 1

HEBER MINING & EXPLORATION COMPANY

multi-purpose drill rigs for geotechnical & mineral exploration
monitoring wells • hazardous waste studies



Service Since 1981

January 17, 1995

7 95

Ms. Ellen Kane
Arizona Department of Water Resources
500 North Third Street
Phoenix, AZ 85007

RE: **REQUEST FOR VARIANCE FOR A MONITORING WELL PROPOSED AT:**
T2N R2E SECTION 26 SW SW NW

Dear Ms. Kane:

We have been requested by our client for this project, The Earth Technology Corp., to request a variance for the above referenced well.

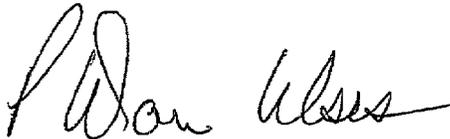
The variance desired is for the use of PVC casing to the ground surface in lieu of the specified steel casing.

This request is made as this well will be completed in an approved vault, flush at the ground surface and therefore, not subject to potential traffic related damage associated with an above ground completion.

Thank you in advance for your assistance in this matter. Should there be any questions concerning the design of this well, please contact Mr. Gary Bender, TETC, at 602-894-8482 directly.

Respectfully submitted,

HEBER MINING & EXPLORATION COMPANY



P. Don Ulses, C.E.T.
President

PDU/ljp

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HEBER MINING & EXPLORATION COMPANY

multi-purpose drill rigs for geotechnical & mineral exploration
monitoring wells • hazardous waste studies



Service Since 1981

January 17, 1995

Ms. Ellen Kane
Arizona Department of Water Resources
500 North Third Street
Phoenix, AZ 85007

RE: **REQUEST FOR VARIANCE FOR A MONITORING WELL PROPOSED AT:**
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Thank you in advance for your assistance in this matter. Should there be any questions concerning the design of this well, please contact Mr. Gary Bender, TETC, at 602-894-8482 directly.

Respectfully submitted,

HEBER MINING & EXPLORATION COMPANY

A handwritten signature in black ink that reads 'P. Don Ulses'. The signature is written in a cursive, flowing style.

P. Don Ulses, C.E.T.
President

PDU/ljp

F:\wp51\adwr\tetc112.ljp

MONITOR/PIEZOMETER WELL

ARIZONA DEPARTMENT OF WATER RESOURCES
15 SOUTH 15TH AVENUE
PHOENIX, ARIZONA 85007

MONITOR/PIEZOMETER WELL

FILING FEE \$10.00

FILING FEE \$10.00

WCP-11
95-6133-0303

NOTICE OF INTENTION TO DRILL MONITOR/PIEZOMETER WELL

Section § 45-596, Arizona Revised Statutes provide: Prior to drilling a monitor or piezometer well, a Notice of Intention to Drill shall be filed with the Department on a prescribed form.

- 1. WELL LOCATION:

2 N/S	2 E/XX	26
Township	Range	Section

10 Acre Subdivision

SW 1/4 10 ACRE	SW 1/4 40 ACRE	NW 1/4 160 ACRE
-------------------	-------------------	--------------------
- 2. Position location of the well on the land:

Latitude 33 ° 0 ' 29 " 13 "

Longitude 112 ° 0 ' 07 " 57 "
- 3. County: Maricopa
- 4. Owner of the land of wellsite:

Name: City of Phoenix

Address: 125 E Washington St

City: Phoenix State: AZ Zip: 85004
- 5. Lessee of the land of wellsite:

Name: N/A

Address: _____

City: _____ State: _____ Zip: _____
- 6. Owner of well:

Name: AZ Dept. of Env. Quality

Address: 3033 N Central Ave

City: Phoenix State: AZ Zip: 85012
- 7. Consulting Firm: EARTH TECH
Contact Person: Gary Bender
Phone: (602) 894-8482
- 8. Purpose of well drilled pursuant to this notice
Monitor X
Piezometer _____
- 9. If for deepening or modifying, Well Registration Number 55- _____
- 10. Construction will start: 02 06 95
Month Day Year
- 11. Period well will remain in use 10 ~~XXXX~~ Years
- 12. For monitoring wells, is pump equipment to be installed?
Yes _____ No XX
(a) If yes, design pump capacity _____
(b) What use will be made of the water water quality
- 13. Drilling firm: Heber Drilling
Name: 2210 N 21st Ave
Address: Phoenix AZ 85027
City: _____ State: _____ Zip: _____
DWR License No. 269
073350
ROC Category _____
- 14. Will this proposed well pump Colorado River water? Yes _____ No X
(See condition VI on reverse)
- 15. Is the proposed wellsite within 100 feet of a septic tank system, sewage disposal area, landfill, hazardous waste facility, storage area of hazardous material or petroleum storage areas and tanks?
Yes _____ No X
- 16. Proposed method of abandonment of well after project is completed: Well will be backfilled with cement grout per R-12-15-816
- 17. Is this well to monitor existing contamination? _____ Potential contamination X Please explain: Installation for West Central Phoenix WQARF investigation being conducted by ADEQ

**DO NOT WRITE IN THIS SPACE
OFFICE RECORD**

File No. _____

Filed _____ By _____

Input _____ By _____

DUPLICATE

Mailed _____ By _____

Registration 55- _____

AMA/INA _____

W/S _____ S/B _____

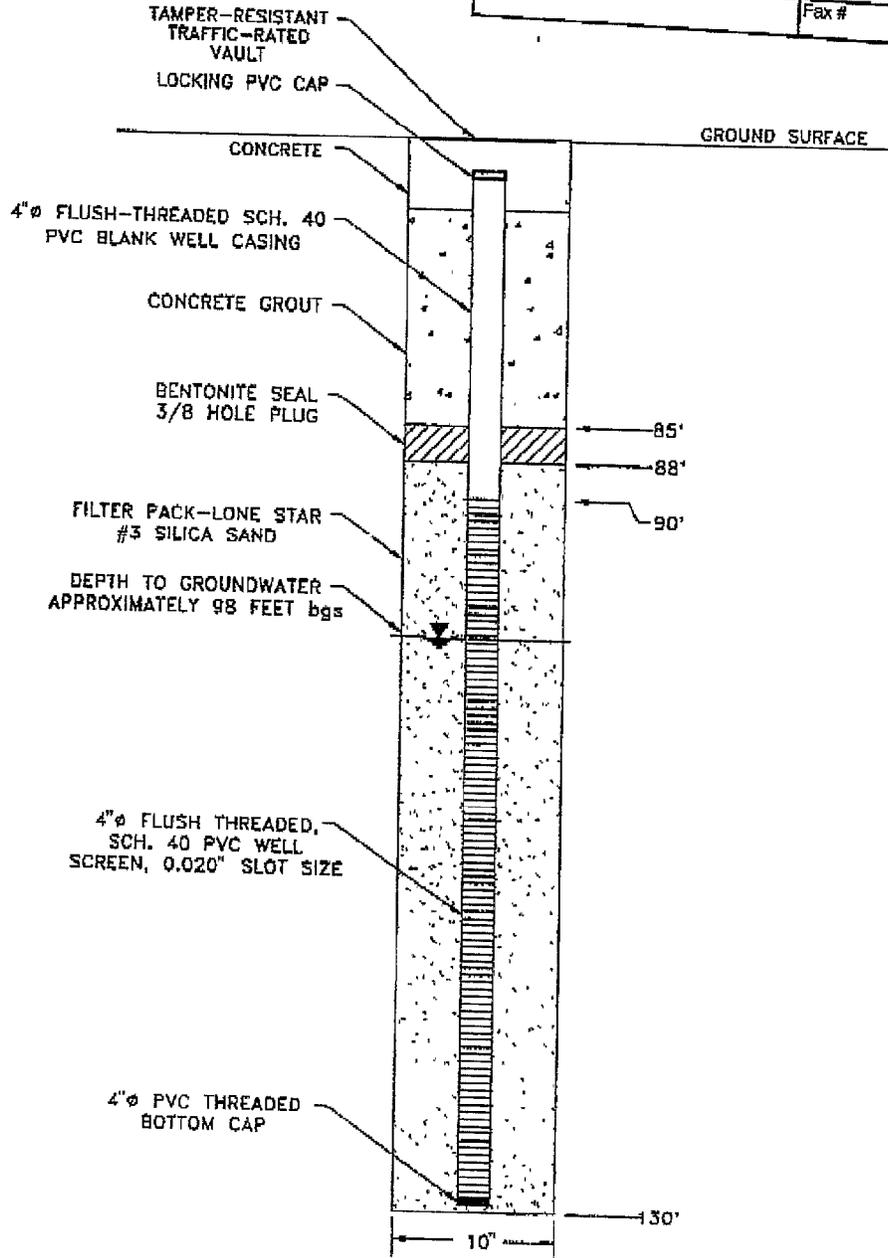
GENERAL INSTRUCTIONS

- 1. Fill out this form in DUPLICATE and send WITH \$10.00 FEE to 15 South 15th Avenue, Phoenix, AZ 85007.
- 2. For specific instructions, limitations and conditions, see the reverse side of this form.
- 3. Must be signed by land owner or lessee.
- 4. Section §45-596(D), provides that the Director shall determine that all information required on form has been submitted. If not, the person filing will be notified and the drilling, deepening, or modification of the well may not proceed.

I state that Notice is filed in compliance with Section § 45-596 and is complete and correct to the best of my knowledge and belief and that I understand the conditions set forth on the reverse side of this form.

Post-it® Fax Note 7671

To: <i>Don Ulises</i>	Date: <i>1/11/95</i>	# of pages: <i>6</i>
Co./Dept:	From: <i>Gary Bender</i>	Co:
Phone #:	Phone #:	
Fax #:	Fax #:	



Plot Scale: 1"=1'

File Name: C:\ETV\856133\0303\WELL.DWG

Last Date Revised: 1-5-95

TJF

	PROJECT NO. 95-6133-03
	ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
WEST CENTRAL PHOENIX PROJECT AREA	
WQARF	

HEBER MINING & EXPLORATION COMPANY

multi-purpose drill rigs for geotechnical & mineral exploration
monitoring wells • hazardous waste studies



Service Since 1981

January 17, 1995

Ms. Ellen Kane
Arizona Department of Water Resources
500 North Third Street
Phoenix, AZ 85007

RE: **REQUEST FOR VARIANCE FOR A MONITORING WELL PROPOSED AT:**
T2N R2E SECTION 26 SE NW SW

Dear Ms. Kane:

We have been requested by our client for this project, The Earth Technology Corp., to request a variance for the above referenced well.

The variance desired is for the use of PVC casing to the ground surface in lieu of the specified steel casing.

This request is made as this well will be completed in an approved vault, flush at the ground surface and therefore, not subject to potential traffic related damage associated with an above ground completion.

Thank you in advance for your assistance in this matter. Should there be any questions concerning the design of this well, please contact Mr. Gary Bender, TETC, at 602-894-8482 directly.

Respectfully submitted,

HEBER MINING & EXPLORATION COMPANY

P. Don Ulses, C.E.T.
President - ADWR 269

PDU/ljp

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multi-purpose drill rigs for geotechnical & mineral exploration
monitoring wells • hazardous waste studies



Service Since 1981

January 17, 1995

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Arizona Department of Water Resources
500 North Third Street
Phoenix, AZ 85007

RE: **REQUEST FOR VARIANCE FOR A MONITORING WELL PROPOSED AT:
T2N R2E SECTION 26 SE NW SW**

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Respectfully submitted,

HEBER MINING & EXPLORATION COMPANY

A handwritten signature in black ink, appearing to read 'P. Don Ulses'. The signature is written in a cursive, flowing style.

P. Don Ulses, C.E.T.
President - ADWR 269

PDU/ljp

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MONITOR/PIEZOMETER WELL

ARIZONA DEPARTMENT OF WATER RESOURCES
15 SOUTH 15TH AVENUE
PHOENIX, ARIZONA 85007

MONITOR/PIEZOMETER WELL

FILING FEE \$10.00

FILING FEE \$10.00

WCP-10
95-6133-0203

NOTICE OF INTENTION TO DRILL MONITOR/PIEZOMETER WELL

Section § 45-596, Arizona Revised Statutes provide: Prior to drilling a monitor or piezometer well, a Notice of Intention to Drill shall be filed with the Department on a prescribed form.

1. WELL LOCATION:

2 N/S | 2 E/XX | 26
Township | Range | Section

10 Acre Subdivision

SE 1/4 | NW 1/4 | SW 1/4
10 ACRE | 40 ACRE | 160 ACRE

2. Position location of the well on the land:

Latitude 33 0 29' 04 "

Longitude 112 0 07' 50 "

3. County: Maricopa

4. Owner of the land of wellsite:
City of Phoenix

Name
125 E Washington St
Address
Phoenix AZ 85004
City State Zip

5. Lessee of the land of wellsite:

N/A
Name
Address
City State Zip

6. Owner of well:

AZ Dept. of Env. Quality
Name
3033 N Central Ave
Address
Phoenix AZ 85012
City State Zip

7. Consulting Firm: EARTH TECH

Contact Person: Gary Bender

Phone: (602) 894-8482

8. Purpose of well drilled pursuant to this notice

Monitor X

Piezometer

9. If for deepening or modifying, Well Registration Number

55-

10. Construction will start:

02 06 95
Month Day Year

11. Period well will remain in

use 10 XXXXX/Years

12. For monitoring wells, is pump equipment to be installed?

Yes No XX

(a) If yes, design pump capacity

(b) What use will be made of the water water quality

13. Drilling firm:

Heber Drilling
Name
2210 N 21st Ave
Address
Phoenix AZ 85027
City State Zip

DWR License No. 269

073350

ROC Category

14. Will this proposed well pump Colorado River water? Yes No X
(See condition VI on reverse)

15. Is the proposed wellsite within 100 feet of a septic tank system, sewage disposal area, landfill, hazardous waste facility, storage area of hazardous material or petroleum storage areas and tanks?

Yes No X

DO NOT WRITE IN THIS SPACE
OFFICE RECORD
File No. _____
Filed _____ By _____
Input _____ By _____
DUPLICATE
Mailed _____ By _____
Registration 55- _____
AMA/INA _____
W/S _____ S/B _____

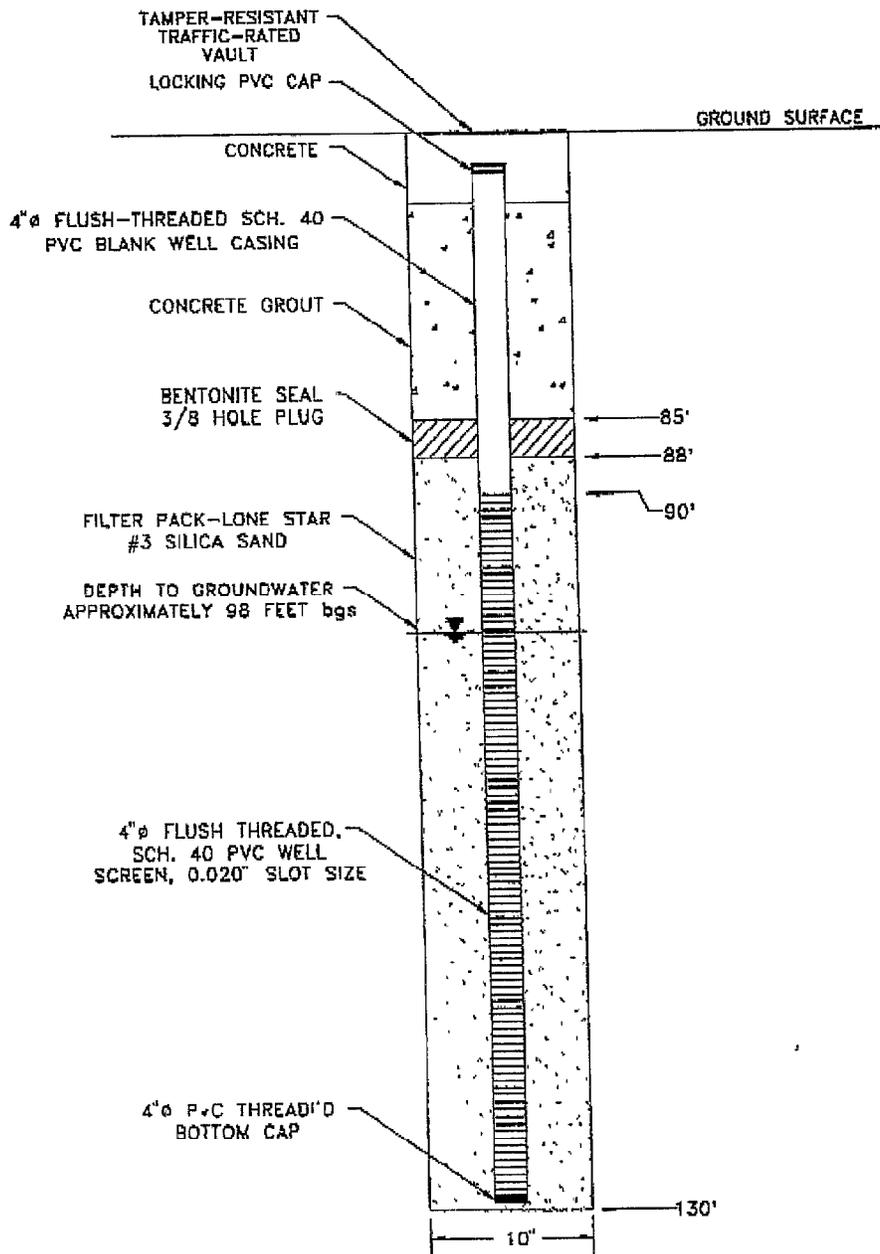
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GENERAL INSTRUCTIONS

- 1. Fill out this form in DUPLICATE and send WITH \$10.00 FEE to 15 South 15th Avenue, Phoenix, AZ 85007.
- 2. For specific instructions, limitations and conditions, see the reverse side of this form.
- 3. Must be signed by land owner or lessee.
- 4. Section §45-596(D), provides that the Director shall determine that all information required on form has been submitted. If not, the person filing will be notified and the drilling, deepening, or modification of the well may not proceed.

I state that Notice is filed in compliance with Section § 45-596 and is complete and correct to the best of my knowledge and belief and that I understand the conditions set forth on the reverse side of this form.



Plot Scale: 1"=1'

File Name: C:\ET\956133\0203\WELL.DWG

Last Date Revised: 1-5-95

Drawn By: JTF

NOT TO SCALE

 <p>EARTH TECH</p>	<p>PROJECT NO. 95-6133-02</p> <p>ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY</p>
	<p>WEST CENTRAL PHOENIX PROJECT AREA</p> <p>WQARF</p> <p>PHOENIX, ARIZONA</p> <p>MONITOR WELL DESIGN DETAIL WCP-10</p>
<p>1/95</p>	<p>FIGURE 1</p>

ARIZONA DEPARTMENT OF WATER RESOURCES

Hydrology Division

Park Place

500 North Third Street, Phoenix, Arizona 85004

Telephone (602) 417-2448

Fax (602) 417-2401

January 19, 1995



FIFE SYMINGTON
Governor

RITA P PEARSON
Director

Heber Drilling
22010 N. 21st Avenue
Phoenix, Arizona 85027
ATTN: Don Ulses

**Re: Variance for Construction of Two Monitor Wells
Registration Numbers 55-547461 and 55-547462**

Dear Mr. Ulses:

The Arizona Department of Water Resources received your request dated January 17, 1995 for a variance for construction of two monitor wells to be located in Maricopa County. The purpose of these wells will be to evaluate potential groundwater contamination.

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 wells shall be completed flush-to-ground with vandalproof, traffic-rated vaults per ASTM Standard Guide D5092, Section 8.9.2.3.
- 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 ASTM Standard Guide D5299, Section 7.3.8.

If you have any questions, please contact James Goff of my staff at (602) 417-2400 ext.# 7325.

Sincerely,

A handwritten signature in cursive script that reads "Greg Wallace".

Greg Wallace
Chief Hydrologist

ARIZONA DEPARTMENT OF WATER RESOURCES

500 N 3RD ST., PHOENIX, AZ. 85004

Telephone (602) 417-2470

Fax (602) 417-2401



FIFE SYMINGTON
Governor

RITA P. PEARSON
Director

January 20, 1995

ADEQ
3033 N. CENTRAL AVE.
PHOENIX, AZ. 85012

RE: Registration No. 55-547461 55-547462

File No. VARIOUS

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.

For additional information, you may contact the Operations Division at (602) 542-1581.

Sincerely,

Ellen Kane
Ellen Kane

Groundwater Permit Specialist

**ARIZONA DEPARTMENT OF WATER RESOURCES
OPERATIONS DIVISION**

500 North Third Street
Phoenix, Arizona 85004-3903
Phone (602) 417-2470

DUPLICATE

THIS AUTHORIZATION SHALL BE IN POSSESSION OF THE DRILLER DURING ALL DRILL OPERATIONS
WELL REGISTRATION NO. 55-547462

AUTHORIZED DRILLER: **HEBER DRILLING CO.**

LICENSE NO. 269

NOTICE OF INTENTION TO DRILL A MONITOR WELL HAS BEEN FILED WITH THE DEPARTMENT BY:

Owner of Well(s)
ADEQ

3033 N. CENTRAL AVE.

PHOENIX

AZ 85012

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

SE 1/4 NW 1/4 SW 1/4 Section 26 Township 2.0 NORTH Range 2.0 EAST
10 acre 40 acre 160 acre

NUMBER OF WELLS IN PROJECT: 1

THIS AUTHORIZATION EXPIRES AT MIDNIGHT ON JAN 9TH, 1996

THE DRILLER SHALL FILE A LOG OF THE WELL WITHIN 30 DAYS OF
COMPLETION OF DRILLING.



**VARIANCE
GRANTED**

CHIEF, OPERATIONS DIVISION

