Site: PNM Person Station

Inspector: Frank Sanchez

Date: 4/18/91

EVALUATION OF FACILITY FIELD PROCEDURES & FACILITY LAB PROCEDURES

If appropriate: use "Y" = yes, "N" = no, "N/A" = not applicaable, "U" = unknown.

A. MEASUREMENT OF WELL DEPTHS/WATER ELEVATIONS

Y 1. Are measurements of both depth to standing water and depth to the bottom of the well made and recorded before purging unless the well has a dedicated, permanently installed pump that prevents total depth measurements?

Y 2. Are all water elevations measured within a 24 hour period or less?

Y 3. Are all measurements calculated from the top of the well casing? (i.e., the water elevation and total depth are not measured from the bottom of the well)

Y 4. Are measurements for water elevations taken to the 0.01 feet?

Y 5. Are all total depth measurements recorded to the nearest 0.25 foot or less?

6. What devices are used? Sounder Solinest used

Y 7. Is there a visibly marked surveyed reference point on the well casing rim which was established by a licensed surveyor?

Y 8. Is this reference point accurate to the 0.01 foot with respect to sea level?

Y 9. Is the measuring equipment cleaned before and between well locations by washing with a non-phosphate detergent followed by a tap water rinse?

N 10. If the well has evidenced organic contamination or inorganic contamination, are more stringent decontamination methods used such as a hexane rinse or a hydrochloric acid rinse, respectively?

we just distilled H_2O

N 11. If a plastic or polytetrafluoroethylene (PTFE) measuring tape is used, is the tape checked periodically, at least once a year, with a steel tape for calibration purposes?

Y 12. Does the owner/operator note in the field notebook whether there are there any nearby wells that could potentially impact the water elevation measurements?

Y 13. At sites with relatively flat gradients, are the water elevations measured several times to ensure an accurate measurements?

B. DETECTION OF IMMISCIBLE LAYERS

n/a 1. Are procedures used which will detect heavy phase immiscible layers?

n/a 2. Are procedures used which will detect light phase immiscible layers?

n/a 3. Are procedures used to measure the thickness of the immiscible layers?

C. SAMPLING OF IMMISCIBLE LAYERS

n/a 1. Are the immiscible layers sampled separately prior to well evacuation?

n/a 2. Do the procedures used minimize mixing with water soluble phases?

n/a 3. Describe how the immiscible samples are collected:

n/a 4. Are appropriate methods used to collect the immiscible samples?

D. WELL EVACUATION

n/a 1. Are low yielding wells evacuated once to dryness?

Y 2. Are high yielding wells evacuated so that at least three casing volumes are removed?

Y 3. For high yielding wells, are measurements of pH, specific conductivity, and temperature obtained before, during and after purging in order to verify that these parameters have stabilized? (Stabilization indicates that well has been adequately purged.)

n/a 4. If **NO**, has documentation been provided that demonstrates

that stabilization occurs at this well after a specific volume of water has been purged?

5. What device is used to evacuate the wells:
Bladder/Purge Pump

Y 6. During purging, was the discharge rate slower than the rate used during development?

Y 7. Was the purge rate slow enough to prevent recharging water rushing turbulently into the well?

Y 8. Was the purge water containerized until the groundwater analytical results whether the water is contaminated?
Purge water put through air-stripper in pump/treat station.

Y 9. If the groundwater analyses evidence contamination, is the purge water treated on site in accordance with applicable and relevant regulations or disposed as hazardous waste? See comment above

Y 10. If any problems are encountered (e.g. equipment malfunction) are they noted in a field logbook?

E. SAMPLE WITHDRAWAL

n/a 1. Are samples withdrawn with either fluorocarbon/resins or stainless steel sampling devices?

Y 2. Are sampling devices either bottom valve bailers or positive gas displacement bladder pumps?

Y 3. Are precautions used to ensure that all sampling equipment that could potentially come into contact with the sample is constructed of inert materials?

N 4. Is an inert bailer cord used?

n/a 5. If a non-inert bailer cord is used, is it discarded between sampling points?

Y 6. If bladder pumps are used, are they operated in a continuous manner to prevent aeration of the sample?

N 7. If bladder pumps are used, is a flow rate of 100ml/minute or less used to collect organic samples, metal samples, and any other samples which could be chemically unstable due to aeration and turbulence? ~ 500ml/min.
- use lowest pressure possible to bring up water

n/a 8. If bailers are used, are they lowered slowly to prevent degassing of the water?

n/a 9. If bailers are used, are the contents transferred to the

sample container in a way that minimizes agitation and aeration?

Y 10. Is care taken to avoid placing clean sampling equipment on the ground or other contaminated surfaces prior in insertion into the well?

n/a 11. If dedicated sampling equipment is not used, is all sampling equipment that could potentially come into contact with the sample, dissembled and thoroughly cleaned between samples?

n/a 12. If samples are for inorganic analysis, does the cleaning procedure include the following sequential steps:

___ a. Nonphosphate detergent wash?

___ b. Tap water rinse?

___ c. Dilute acid rinse HNO3 or HCL?

___ d. Distilled or deionized water rinse?

___ e. Air dry before use?

Y 13. If samples are for organic analysis, does the cleaning procedure include the following sequential steps:

Y a. Nonphosphate detergent/hot water wash?

Y b. Tap water rinse?

Y c. Distilled/deionized water rinse?

N d. Acetone rinse?

N e. Pesticide-grade hexane rinse?

F. IN-SITU OR FIELD ANALYSES

n/a 1. For low yielding wells, are official field measurements for pH, specific conductivity, and temperature obtained as soon as the well has recovered enough to yield water for a sample?

Y 2. For high yielding wells, are official field measurements for pH, specific conductivity, and temperature obtained as soon as the unofficial field measurements have stabilized?

Y 3. Are the official field measurements for pH recorded to

the 0.01 pH unit?

Y 4. Are the official field measurements for specific conductivity recorded to the nearest 10 umhos?

5. Indicate which of the following chemically unstable parameters are determined in the field:

✓ pH? ✓ Temperature?

✓ Specific conductivity?

___ Redox potential? ___ Chlorine?

___ Dissolved oxygen? ___ Turbidity?

___ Other:

✓ 6. If the sample is withdrawn from the well, is the parameter measured from a split portion?

Y 7. Is monitoring equipment calibrated according to manufacturers' specifications?

Y 8. Is the date, procedure, and maintenance for equipment calibration documented in the field logbook?

G. SPECIAL HANDLING CONSIDERATIONS

Y 1. Are organic samples handled without filtering?

Y 2. Is one equipment blank prepared each day of groundwater sampling?

Y 3. Is one unfiltered sample taken for total metals?

H. SAMPLE LABELS Appendix IV - Source & Background

Y 1. Are sample labels used?

2. Do they provide the following information:

✓ a. Sample identification number?

✓ b. Name of collector?

✓ c. Date and time of collection?

✓ d. Place of collection?

✓ e. Parameter(s) requested and preservatives used?

Y 3. Do they remain legible even if wet?

Y 4. Are sample seals placed on those containers to ensure samples are not altered?

Y 5. If individual bottle seals are not used, is the container for holding the bottles sealed?

I. FIELD LOGBOOK

Y Is a field logbook maintained?

If yes, does it document the following:

Y 1. Purpose of sampling (e.g., detection or assessment)?

Y 2. Location of well(s)?

Y 3. Total depth of each well?

Y 4. Static water level depth and measurement technique?

n/a 5. Presence of immiscible layers and detection method?

n/a 6. If immiscible layers exist, collection method for immiscible layers?7

Y 7. Well purging procedures?

Y 8. Sample withdrawal procedure?

Y 9. Dates and times of collection?

Y 10. Well sampling sequence?

Y 11. Types of sample containers and sample identification number(s)

Y 12. Preservative(s) used?

Y 13. Field analysis data and method(s)?

___ 14. typical well recharge rates?

J. CHAIN-OF-CUSTODY RECORD

Y 1. Is a chain-of-custody record included with each sample?

Y 2. Does it document the following:

✓ a. Sample number?

✓ b. Signature of collector?

✓ c. Date and time of collection?

✓ d. Sample type?

✓ e. Station location?

✓ f. Number of containers?

✓ g. Parameters requested?

✓ h. Signatures of persons involved in chain-of-custody?

✓ i. Inclusive dates of custody?

B. LABORATORY LOGBOOK

Y 1. Is a laboratory logbook maintained?

X 2. Are experimental conditions (e.g., temperature, humidity, etc.) noted?

Y 3. If a sample for volatile analysis is received with headspace, is this noted?

Y 4. Are the results for all QC samples identified?

Y 5. Is the time, date, and name of person noted for each processing step included?

Site: _____

Inspector: _____

Date: _____

Use "Y" = yes, "N" = no, "N/A" = not applicable, "U" = unknown.

MONITORING WELLS - FACILITY PROVIDED INFORMATION
Applies to 17-800, 19-800, 22-800 (4" PVC, with packer)
These questions should be answered for each different well design and construction present at the facility. Wells designed or constructed using the same procedures may be grouped.

1. Drilling Methods:

a. What drilling method was used for the well? Check which method was used.

___ (1) Hollow-stem auger

___ (2) Solid-stem auger

X (3) Mud rotary

___ (4) Air rotary

___ (5) Reverse rotary

___ (6) Cable tool

___ (7) Jetting

___ (8) Air drill w/casing hammer

___ (9) Other (explain)

Y b. Were any cutting fluids (including water) or additives used during drilling? If **YES**, specify,

(1) Type of drilling fluid (e.g., type of foam, Wyoming pure sodium bentonite, etc.): bentonite

(2) Source of water used: City of Albuquerque domestic water

Y c. Was the drilling equipment steam-cleaned prior to drilling the well?

If other cleaning methods were used, please describe:

None

N d. Was compressed air used during drilling?

NA e. If YES, was the air filtered to remove oil?

f. How were core samples obtained? Check sample collection method used.

___ split spoon ___ core drilling

___ shelby tube X other: Cuttings samples collected at 5 foot intervals

Y g. Were the following analytical tests performed on the core samples or cuttings? Check which tests were performed.

___ Gross description of moisture content (e.g., moist, wet, saturated, etc.)

X Mineralogy (e.g. microscopic tests and x-ray diffraction)

___ Petrographic analysis

X degree of sorting, size fraction (i.e. sieving), texture

X degree of crystalinity and cementation of matrixal variations

___ rock type(s) (e.g., limestone, granite, etc.)

X soil type (sandy loam, sandy clay, etc.)

___ approximate bulk geochemistry (e.g., 5% feldspar, 80% limestone, etc.)

___ existence of microstructures that may effect or indicate fluid flow

___ Falling head tests

___ Static head tests

___ Settling measurements

___ Centrifuge tests

X Column drawings

X Analyses for contaminants. If contaminants were identified, please list: 19-800 & 22-800 drilling fluid analyzed for volatile organics

Y h. Were the sample corings logged by a qualified professional in geology?

~~that to see if drillers log is contained in ASCII~~

j. Does the lithology log (driller's log) include the following information: (Some information reported in report at location different than lithology log)

Y (1) Hole name/number?

Y (2) Date started and finished? (Date finished only)

Y (3) Driller's name?

Y (4) Hole location (i.e. map and elevation)?

Y (5) Drill rig type and bit/auger size?

Y (6) Gross petrography (e.g. rock type) of each geologic unit?

N (7) Gross mineralogy of each geologic unit?

Y (8) Gross structural interpretation of each geologic unit and structural features (e.g. fractures, gouge material, solution channels, buried streams or valleys, identification of depositional material)?

Y (9) Development of soil zones and vertical extent and description of soil type?

Y (10) Depth of water bearing unit(s) and vertical extent of each?

Y (11) Depth and reason for termination of borehole?

Y (12) Depth that water was encountered in hole?

N (13) Depth and location of any contaminant encountered in borehole?

Y (14) Sample location/number?

NA (15) Percent sample recovery?

Y (16) Narrative descriptions of geologic observations?

Y (17) Narrative descriptions of drilling observations?

2. Monitoring Well Construction Materials

a. Identify well construction materials (by number) and diameters (ID/OD)

(1) Primary Casing:

material: PVC

diameter: 4" ID

(2) Secondary or outside casing (double construction)

material: mild steel

diameter: 8 5/8 inch O.D.

(3) Screen

material: PVC

diameter: 4" ID

(4) Sump

material: NA

(5) Centralizers

material: NA

Y b. If PVC materials were used, did they bear the National Sanitation Foundation logo for potable water applications (NSF-pw) or American Society of Testing Materials (ASTM)?

Y c. Were inert materials used below and including the static water level within the well?

d. How are the sections of casing and screen connected?
Check type of connection.

X Pipe sections threaded

___ Couplings (friction) with adhesive or solvent

___ Couplings (friction) with retainer screws

___ Other (specify)

NO e. Were the materials steam-cleaned prior to installation?

If no, how were the materials cleaned?
Certified clean by factory, delivered to site in hermetically sealed packaging.

f. Well Intake Design and Well Development

Y (1) Was a well intake screen installed?

Y (2) Was the screen manufactured?

(3) Provide the slot size: 0.020"

g. If well construction logs were provided, do they

Y 1. depict the dimensions, locations, elevations and depths of the screen, casing, sump, bentonite seal, bentonite-cement seals and other annular seals, filter pack, centralizers?

Y 2. specify materials of construction (casing, screen, sump, centralizers)?

Y 3. specify the screen slot size?

Y 4. specify the total depth of the well?

Y 5. specify the filter pack grain size?

Y 6. specify the mineralogy of the filter pack (e.g., 96% silica, 4% feldspar)?

Y 7. specify the surveyed elevation of the top of casing?

N h. Was a tailpipe or sump installed?

(1) How far does the sump extend below the screen? NA

NA (2) Was the sump capped with an inert bottom?

If NO, explain:

Y i. Was a filter pack installed? If so:

(1) Specify which wells have an artificial filter pack:
All (17-800, 19-800, 22-800)

Y (2) Does the filter pack consist of inert, siliceous granular material?

___ (3) How was the filter pack installed? Mud thinned, filter pack placed via annular space, measured with tremie pipe

___ (4) What is the particle size range: 10 mesh to 20 mesh

j. Well development

Y (1) Was the well developed?

(2) Check which method was used:)

___ surge block ___bailer ___air

___ surging X water pumping

X other: water jetting

(3) What were the turbidity readings? (Please indicate well number)

N k. Was only an additive free bentonite slurry used as a sealant within the saturated zone 5% bentonite cement

3. Surface protection of the well.

Y a. Is the surficial expression of the well above grade?

N b. Is the surficial expression of the well below grade?

If **YES**, please describe surface configuration of the well.

Y c. Is the upper portion of the borehole sealed with a concrete cap to divert drainage away from the casing?

Y d. Are the dimensions of the concrete cap at least 3 feet by 3 feet by 4 inches thick?

Y e. If motor vehicles can approach the well, is the well fitted with an above-ground protective device and bumper guards?

Y f. Has the protective cover been installed with locks to prevent tampering?

4. Have any facility wells been abandoned or plugged? If yes,

N a. Was only an additive free bentonite slurry used as a plug within the saturated zone?

If **NO**, specify what type of material was used as the additive.

b. How thick was this plug: NA

NA c. Was a different plug used in the unsaturated zone? If yes,

NA (1) If yes, did the plug consist of a bentonite-cement slurry?

NA (2) If bentonite-cement was not used, specify the materials used (grit and type):

NA (3) Was the plug emplaced as a slurry in a continuous process to the surface using a tremie pipe?

NA d. Were the plugs appropriate for the site conditions and ensure an adequate seal and do not adversely affect groundwater chemistry? (E.g., cement was not used in the saturated zone, backfill was not used, bentonite grout was used in the saturated zone, etc)

NA e. Was the casing removed before the wells were plugged?

If **NO**, describe how the screen and filter pack were plugged:

WELL DATA SUMMARY

WELL NO.	UP, DOWN, OR SIDE GRAD?	DATE DRILLED	TOTAL DEPTH	STATIC WATER LEVEL* (6-26-95)	SCREENED INTERVAL **
17-800	UP	8-11-93	745'	5076.51/ 4876.55	4339.01 / 4329.01
19-800	DOWN	3-26-93	795'	5119.08/ 4876.15	4331.28 / 4321.08
22-800	DOWN	3-5-93	795'	5108.56/ 4875.27	4320.96 / 4310.96
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—

* Indicate date measured and elevation of top of casing and static water elevation.

** Indicate elevation of top and bottom

Site: _____

Inspector: _____

Date: _____

Use "Y" = yes, "N" = no, "N/A" = not applicable, "U" = unknown.

MONITORING WELLS - FACILITY PROVIDED INFORMATION

Applies to all 2inch "cluster" wells.

These questions should be answered for each different well design and construction present at the facility. Wells designed or constructed using the same procedures may be grouped.

1. Drilling Methods:

a. What drilling method was used for the well? Check which method was used.

___ (1) Hollow-stem auger

___ (2) Solid-stem auger

X (3) Mud rotary

___ (4) Air rotary

___ (5) Reverse rotary

___ (6) Cable tool

___ (7) Jetting

___ (8) Air drill w/casing hammer

___ (9) Other (explain)

Y b. Were any cutting fluids (including water) or additives used during drilling? If **YES**, specify,

(1) Type of drilling fluid (e.g., type of foam, Wyoming pure sodium bentonite, etc.): bentonite

(2) Source of water used: City of Albuquerque domestic water

Y c. Was the drilling equipment steam-cleaned prior to drilling the well?

If other cleaning methods were used, please describe:
None

N d. Was compressed air used during drilling?

NA e. If **YES**, was the air filtered to remove oil?

f. How were core samples obtained? Check sample collection method used.

___ split spoon ___ core drilling

___ shelby tube X other: Cuttings samples collected at 5 foot intervals

Y g. Were the following analytical tests performed on the core samples or cuttings? Check which tests were performed.

___ Gross description of moisture content (e.g., moist, wet, saturated, etc.)
X Mineralogy (e.g. microscopic tests and x-ray diffraction)
___ Petrographic analysis

X degree of sorting, size fraction (i.e. sieving), texture
X degree of crystalinity and cementation of matrixal variations
___ rock type(s) (e.g., limestone, granite, etc.)

X soil type (sandy loam, sandy clay, etc.)

___ approximate bulk geochemistry (e.g., 5% feldspar, 80% limestone, etc.)
___ existence of microstructures that may effect or indicate fluid flow
___ Falling head tests

___ Static head tests

___ Settling measurements

___ Centrifuge tests

X Column drawings

___ Analyses for contaminants. If contaminants were identified, please list:

Y h. Were the sample corings logged by a qualified professional in geology?

j. Does the lithology log (driller's log) include the following information: (Some information reported at location different than lithology log)

Y (1) Hole name/number?

Y (2) Date started and finished?

Y (3) Driller's name?

Y (4) Hole location (i.e. map and elevation)?

Y (5) Drill rig type and bit/auger size?

Y (6) Gross petrography (e.g. rock type) of each geologic unit?

N (7) Gross mineralogy of each geologic unit?

Y (8) Gross structural interpretation of each geologic unit and structural features (e.g. fractures, gouge material, solution channels, buried streams or valleys, identification of depositional material)?

Y (9) Development of soil zones and vertical extent and description of soil type?

Y (10) Depth of water bearing unit(s) and vertical extent of each?

Y (11) Depth and reason for termination of borehole?

Y (12) Depth that water was encountered in hole?

N (13) Depth and location of any contaminant encountered in borehole?

Y (14) Sample location/number?

NA (15) Percent sample recovery?

Y (16) Narrative descriptions of geologic observations?

Y (17) Narrative descriptions of drilling observations?

2. Monitoring Well Construction Materials

a. Identify well construction materials (by number) and diameters (ID/OD)

(1) Primary Casing:

material: Stainless Steel (SS 304)

diameter: 2 inch ID

(2) Secondary or outside casing (double construction)

material: mild steel

diameter: 16 inch OD, 8 5/8 inch OD (19-700, 19-900 only)
14 inch OD (19-300, 19-400, 19-500, 19-600)

(3) Screen

material: Stainless Steel (SS 304)

diameter: 2 inch ID

(4) Sump

material: Stainless Steel (SS 304)

(5) Centralizers (Spacer rings used in construction of cluster wells)

material: Stainless Steel (SS304) rings used from 10 feet above to 10 feet below associated well screen, mild steel used elsewhere

NA b. If PVC materials were used, did they bear the National Sanitation Foundation logo for potable water applications (NSF-pw) or American Society of Testing Materials (ASTM)?

NO c. Were inert materials used below and including the static water level within the well? (See centralizers question above)

d. How are the sections of casing and screen connected? Check type of connection.

___ Pipe sections threaded

___ Couplings (friction) with adhesive or solvent

___ Couplings (friction) with retainer screws

X Other (specify) Welded slip couplings

Y e. Were the materials steam-cleaned prior to installation?

If no, how were the materials cleaned?

f. Well Intake Design and Well Development

Y (1) Was a well intake screen installed?

Y (2) Was the screen manufactured?

(3) Provide the slot size: 0.020" (0.025" for 21-800; 0.010" for 24-400)

g. If well construction logs were provided, do they

Y 1. depict the dimensions, locations, elevations and depths of the screen, casing, sump, bentonite seal, bentonite-cement seals and other annular seals, filter pack, centralizers?

Y 2. specify materials of construction (casing, screen, sump, centralizers)?

Y 3. specify the screen slot size?

Y 4. specify the total depth of the well?

Y 5. specify the filter pack grain size?

Y 6. specify the mineralogy of the filter pack (e.g., 96% silica, 4% feldspar)?

Y 7. specify the surveyed elevation of the top of casing?

Y h. Was a tailpipe or sump installed?

(1) How far does the sump extend below the screen? 2 feet

Y (2) Was the sump capped with an inert bottom?

If **NO**, explain:

Y i. Was a filter pack installed? If so:

(1) Specify which wells have an artificial filter pack: All wells

Y (2) Does the filter pack consist of inert, siliceous granular material?

___ (3) How was the filter pack installed? A 2 inch tremie pipe was used to place filter pack.

___ (4) What is the particle size range: 10 mesh to 20 mesh

j. Well development

Y (1) Was the well developed?

(2) Check which method was used:)

___ surge block ___bailer X air

___ surging ___water pumping

___ other: _____

air lift pumps used to develop wells, air was filter, blow pipe kept 50 feet above top of well screen.

(3) What were the turbidity readings? (Please indicate well number)

N k. Was only an additive free bentonite slurry used as a sealant within the saturated zone 50% granular bentonite, 50% 10-20 quartz sand

3. Surface protection of the well.

Y a. Is the surficial expression of the well above grade? 17-cluster, 19-cluster, 21-cluster, 22-cluster

Y b. Is the surficial expression of the well below grade? 24-cluster, 25-cluster, 27-cluster

If **YES**, please describe surface configuration of the well.

Y c. Is the upper portion of the borehole sealed with a concrete cap to divert drainage away from the casing?

Y d. Are the dimensions of the concrete cap at least 3 feet by 3 feet by 4 inches thick?

Y e. If motor vehicles can approach the well, is the well fitted with an above-ground protective device and bumper guards?

Y f. Has the protective cover been installed with locks to prevent tampering?

4. Have any facility wells been abandoned or plugged? If yes,

N a. Was only an additive free bentonite slurry used as a plug within the saturated zone?

If **NO**, specify what type of material was used as the additive.

b. How thick was this plug:

NA c. Was a different plug used in the unsaturated zone? If yes,

NA (1) If yes, did the plug consist of a bentonite-cement slurry?

NA (2) If bentonite-cement was not used, specify the materials used (grit and type):

NA (3) Was the plug emplaced as a slurry in a continuous process to the surface using a tremie pipe?

NA d. Were the plugs appropriate for the site conditions and ensure an adequate seal and do not adversely affect groundwater chemistry? (E.g., cement was not used in the saturated zone, backfill was not used, bentonite grout was used in the saturated zone, etc)

NA e. Was the casing removed before the wells were plugged?

If NO, describe how the screen and filter pack were plugged:

WELL DATA SUMMARY

WELL NO.	UP, DOWN, OR SIDE GRAD?	DATE DRILLED	TOTAL DEPTH	STATIC WATER LEVEL*	SCREENED INTERVAL **
17-Cluster	UP	6-3-94	(1)	(2)	(1)
19-Cluster	DOWN	11-9-93/ 1-14-94	(1)	(2)	(1)
21-Cluster	UP	3-25-95	(1)	(2)	(1)
22-Cluster	DOWN/SIDE	3-3-94	(1)	(2)	(1)
24-Cluster	DOWN	11-10-94	(1)	(2)	(1)
25-Cluster	DOWN/SIDE	1-9-95	(1)	(2)	(1)
27-Cluster	DOWN	9-1-95	(1)	(2)	(1)

(1) See Table 3.2.1.1

(2) See Table 3.2.3.1.a

* Indicate date measured and elevation of top of casing and static water elevation.

** Indicate elevation of top and bottom

TABLE 3.2.1.1

MONITOR WELL DATA TABLE
PERSON GENERATING STATION CAD ASSESSMENT
PERSON STATION DEEP AQUIFER ASSESSMENT

WELL NUMBER	NORTH NM COORDINATE	EAST NM COORDINATE	DATE OF COMPLETION	CASING HEAD ELEVATION (MSL)	TOP OF SCREENED INTERVAL (MSL)	BOTTOM OF SCREEBED INTERVAL (MSL)	TOTAL DEPTH OF WELL (FEET)	CASING DIAMETER (INCHES)
PSMW-17	1465200.21	383217.29	04/21/92	5,078.40	4,906.36	4,886.36	192.04	4.000
PSMW-17-300	1465193.14	383127.38	06/03/94	5,074.81	4,826.51	4,816.51	260.30	2.000
PSMW-17-400	1465193.14	383127.38	06/03/94	5,074.81	4,741.51	4,731.51	345.30	2.000
PSMW-17-500	1465193.14	383127.38	06/03/94	5,074.81	4,611.51	4,599.51	475.30	2.000
PSMW-17-600	1465193.14	383127.38	06/03/94	5,074.81	4,531.51	4,521.51	555.30	2.000
PSMW-17-700	1465193.14	383127.38	06/03/94	5,074.81	4,436.51	4,424.51	650.30	2.000
PSMW-17-800	1465164.55	383173.88	08/10/93	5,076.51	4,339.01	4,329.01	747.50	4.000
PSMW-17-900	1465193.14	383127.38	06/03/94	5,074.81	4,231.51	4,221.51	855.30	2.000
PSMW-19	1464958.35	383703.76	04/28/92	5,116.86	4,902.58	4,882.58	234.28	4.000
PSMW-19-X	1465027.53	383747.51	12/02/94	5,109.96	4,901.76	4,881.76	228.20	4.000
PSMW-19-300	1464929.84	383747.13	11/09/93	5,118.37	4,836.27	4,826.27	294.10	2.000
PSMW-19-400	1464929.84	383747.13	11/09/93	5,118.37	4,726.27	4,716.27	404.10	2.000
PSMW-19-500	1464929.84	383747.13	11/09/93	5,118.37	4,574.27	4,564.27	556.10	2.000
PSMW-19-600	1464929.84	383747.13	11/09/93	5,118.37	4,464.27	4,454.27	666.10	2.000
PSMW-19-700	1464911.13	383697.39	01/14/94	5,119.40	4,406.30	4,396.30	725.10	2.000
PSMW-19-800	1464900.03	383726.55	03/25/93	5,119.08	4,331.28	4,321.28	797.80	4.000
PSMW-19-900	1464911.13	383697.39	01/14/94	5,119.40	4,222.30	4,212.30	909.10	2.000
PSMW-21	1464868.94	383258.40	05/05/92	5,107.47	4,904.84	4,884.84	222.63	4.000
PSMW-21-400	1464763.53	383240.79	03/25/95	5,108.32	4,744.82	4,734.82	375.50	2.000
PSMW-21-500	1464763.53	383240.79	03/25/95	5,108.32	4,609.82	4,599.82	510.50	2.000
PSMW-21-600	1464763.53	383240.79	03/25/95	5,108.32	4,534.82	4,524.82	585.50	2.000
PSMW-21-700	1464763.53	383240.79	03/25/95	5,108.32	4,434.82	4,424.82	685.50	2.000
PSMW-21-800	1464763.53	383240.79	03/25/95	5,108.32	4,344.82	4,334.82	775.50	2.000
PSMW-21-900	1464763.53	383240.79	03/25/95	5,108.32	4,244.82	4,234.82	875.50	2.000
PSMW-22	1465464.41	383720.03	05/13/92	5,111.62	4,903.53	4,883.53	228.09	4.000
PSMW-22-300	1465385.95	383712.67	03/03/94	5,109.86	4,811.86	4,801.86	310.00	2.000
PSMW-22-400	1465385.95	383712.67	03/03/94	5,109.86	4,706.86	4,696.86	415.00	2.000
PSMW-22-500	1465385.95	383712.67	03/03/94	5,109.86	4,591.86	4,581.86	530.00	2.000
PSMW-22-600	1465385.95	383712.67	03/03/94	5,109.86	4,506.86	4,496.86	615.00	2.000
PSMW-22-700	1465385.95	383712.67	03/03/94	5,109.86	4,406.86	4,396.86	715.00	2.000
PSMW-22-800	1465341.04	383709.11	03/04/93	5,108.56	4,320.96	4,310.96	797.60	4.000

TABLE 3.2.1.1
(Continued)

MONITOR WELL DATA TABLE
PERSON GENERATING STATION CAD ASSESSMENT
PERSON STATION DEEP AQUIFER ASSESSMENT

WELL NUMBER	NORTH NM COORDINATE	EAST NM COORDINATE	DATE OF COMPLETION	CASING HEAD ELEVATION (MSL)	TOP OF SCREENED INTERVAL (MSL)	BOTTOM OF SCREEBED INTERVAL (MSL)	TOTAL DEPTH OF WELL (FEET)	CASING DIAMETER (INCHES)
PSMW-22-900	1465385.95	383712.67	03/03/94	5,109.86	4,201.86	4,191.86	920.00	2.000
PSMW-24	1465389.86	384191.36	09/16/92	5,141.36	4,899.73	4,882.16	259.20	4.000
PSMW-24-400	1465215.28	384192.07	11/10/94	5,139.05	4,703.55	4,693.55	447.50	2.000
PSMW-24-500	1465215.28	384192.07	11/10/94	5,139.05	4,573.55	4,563.55	577.50	2.000
PSMW-24-600	1465215.28	384192.07	11/10/94	5,139.05	4,443.55	4,433.55	707.50	2.000
PSMW-24-700	1465215.28	384192.07	11/10/94	5,139.05	4,388.55	4,378.55	762.50	2.000
PSMW-24-800	1465215.28	384192.07	11/10/94	5,139.05	4,308.55	4,298.55	842.50	2.000
PSMW-24-900	1465215.28	384192.07	11/10/94	5,139.05	4,203.55	4,193.55	947.50	2.000
PSMW-25	1465780.13	384243.49	11/19/92	5,124.08	4,902.00	4,882.00	242.08	4.000
PSMW-25-400	1465680.40	384194.23	01/09/95	5,124.92	4,704.42	4,694.42	432.50	2.000
PSMW-25-500	1465680.40	384194.23	01/09/95	5,124.92	4,569.42	4,559.42	567.50	2.000
PSMW-25-600	1465680.40	384194.23	01/09/95	5,124.92	4,489.42	4,479.42	647.50	2.000
PSMW-25-700	1465680.40	384194.23	01/09/95	5,124.92	4,414.42	4,404.42	722.50	2.000
PSMW-25-800	1465680.40	384194.23	01/09/95	5,124.92	4,309.42	4,299.42	827.50	2.000
PSMW-25-900	1465680.40	384194.23	01/09/95	5,124.92	4,194.42	4,184.42	942.50	2.000
PSMW-27	1465491.18	384562.95	12/03/92	5,151.01	4,902.99	4,882.99	268.02	4.000
PSMW-27-400	1465428.82	384549.02	09/01/95	5,154.05	4,708.85	4,698.85	455.20	2.000
PSMW-27-500	1465428.82	384549.02	09/01/95	5,154.05	4,573.85	4,563.85	590.20	2.000
PSMW-27-600	1465428.82	384549.02	09/01/95	5,154.05	4,448.85	4,438.85	715.20	2.000

TABLE 3.2.3.1.A
POTENTIOMETRIC SURFACE ELEVATIONS, JUNE 26, 1995
PERSON STATION DEEP AQUIFER ASSESSMENT

WELL I.D.	REFERENCE POINT ELEVATION (MSL)	DEPTH TO GROUNDWATER 6/26/95 (FEET)	GROUNDWATER ELEVATION 6/26/95 (MSL)
PSMW-17	5078.40	181.13	4897.27
PSMW-19	5116.86	221.45	4895.41
PSMW-21	5107.47	210.85	4896.62
PSMW-22	5111.62	216.45	4895.17
PSMW-24	5141.36	247.13	4894.23
PSMW-25	5124.08	229.88	4894.20
PSMW-17-300	5074.81	177.48	4897.33
PSMW-19-300	5118.37	224.36	4894.01
PSMW-22-300	5109.86	216.52	4893.34
PSMW-17-400	5074.81	178.40	4896.41
PSMW-19-400	5118.37	225.08	4893.29
PSMW-21-400	5108.26	213.04	4895.22
PSMW-22-400	5109.86	217.08	4892.78
PSMW-24-400	5139.08	248.49	4890.59
PSMW-25-400	5124.92	235.08	4889.84
PSMW-17-500	5074.81	184.79	4890.02
PSMW-19-500	5118.37	230.54	4887.83
PSMW-21-500	5108.26	NA	NA
PSMW-22-500	5109.86	222.50	4887.36
PSMW-24-500	5139.08	253.00	4886.08
PSMW-25-500	5124.92	239.55	4885.37
PSMW-17-600	5074.81	186.05	4888.76
PSMW-19-600	5118.37	231.66	4886.71
PSMW-21-600	5108.26	220.06	4888.2
PSMW-22-600	5109.86	223.38	4886.48
PSMW-24-600	5139.08	254.33	4884.75
PSMW-25-600	5124.92	240.33	4884.59
PSMW-17-700	5074.81	186.69	4888.12
PSMW-19-700	5119.40	233.18	4886.22
PSMW-21-700	5108.26	220.72	4887.54
PSMW-22-700	5109.86	224.51	4885.35
PSMW-24-700	5139.08	254.55	4884.53
PSMW-25-700	5124.92	240.82	4884.1
PSMW-17-800	5076.51	199.96	4876.55
PSMW-19-800	5119.08	242.93	4876.15
PSMW-21-800	5108.26	232.13	4876.13
PSMW-22-800	5108.56	233.29	4875.27
PSMW-24-800	5139.08	263.98	4875.1
PSMW-25-800	5124.92	250.18	4874.74
PSMW-17-900	5074.81	198.03	4876.78
PSMW-19-900	5119.40	243.07	4876.33
PSMW-21-900	5108.26	231.97	4876.29
PSMW-22-900	5109.86	234.50	4875.36
PSMW-24-900	5139.08	263.77	4875.31
PSMW-25-900	5124.92	249.99	4874.93

TABLE 3.2.3.1.B
POTENTIOMETRIC SURFACE ELEVATIONS, OCTOBER 31, 1995
PERSON STATION DEEP AQUIFER ASSESSMENT

WELL ID	MEASURING POINT ELEVATION	WATER DEPTH 10/31/95	WATER ELEVATION 10/31/95
PSMW-17	5,078.40	181.47	4,896.93
PSMW-19	5,116.86	222.12	4,894.74
PSMW-21	5,107.47	211.21	4,896.26
PSMW-22	5,111.62	217.13	4,894.49
PSMW-24	5,141.36	247.95	4,893.41
PSMW-24	5,124.08	230.99	4,893.09
PSMW-27	5,151.01	258.26	4,892.75
PSMW-17-300	5,074.81	177.33	4,897.48
PSMW-19-300	5,118.37	223.87	4,894.50
PSMW-22-300	5,109.86	215.73	4,894.13
PSMW-17-400	5,074.81	177.79	4,897.02
PSMW-19-400	5,118.37	224.13	4,894.24
PSMW-21-400	5,108.26	212.70	4,895.56
PSMW-22-400	5,109.86	215.98	4,893.88
PSMW-24-400	5,139.08	247.00	4,892.08
PSMW-25-400	5,124.92	233.27	4,891.65
PSMW-27-400	5,154.05	263.43	4,890.62
PSMW-17-500	5,074.81	181.98	4,892.83
PSMW-19-500	5,118.37	227.42	4,890.95
PSMW-21-500	5,108.26	216.31	4,891.95
PSMW-22-500	5,109.86	219.13	4,890.73
PSMW-24-500	5,139.08	249.53	4,889.55
PSMW-25-500	5,124.92	235.63	4,889.29
PSMW-27-500	5,154.05	265.50	4,888.55
PSMW-17-600	5,074.81	182.78	4,892.03
PSMW-19-600	5,118.37	228.18	4,890.19
PSMW-21-600	5,108.26	216.99	4,891.27
PSMW-22-600	5,109.86	219.69	4,890.17
PSMW-24-600	5,139.08	250.40	4,888.68
PSMW-25-600	5,124.92	236.12	4,888.80
PSMW-27-600	5,154.05	266.02	4,888.03
PSMW-17-700	5,074.81	183.24	4,891.57
PSMW-19-700	5,119.40	229.55	4,889.85
PSMW-21-700	5,108.26	217.50	4,890.76
PSMW-22-700	5,109.86	220.52	4,889.34
PSMW-24-700	5,139.08	250.48	4,888.60
PSMW-25-700	5,124.92	236.45	4,888.47
PSMW-17-800	5,076.51	193.80	4,882.71
PSMW-19-800	5,119.08	236.96	4,882.12
PSMW-21-800	5,108.26	226.24	4,882.02
PSMW-22-800	5,108.56	226.96	4,881.60
PSMW-24-800	5,139.08	257.54	4,881.54
PSMW-25-800	5,124.92	243.53	4,881.39
PSMW-17-900	5,074.81	193.17	4,881.64
PSMW-19-900	5,119.40	238.35	4,881.05
PSMW-21-900	5,108.26	227.35	4,880.91
PSMW-22-900	5,109.86	229.40	4,880.46
PSMW-24-900	5,139.08	258.79	4,880.29
PSMW-25-900	5,124.92	244.58	4,880.34

Site: **Public Service Company of New Mexico, Person Generating Station**

Inspector: **Teri Davis**

Date: **August 10, 11, and 12, 1992**

Use "Y" = yes, "N" = no, "N/A" = not applicable, "U" = unknown.

MONITORING WELLS - FACILITY PROVIDED INFORMATION

These questions should be answered for each different well design and construction present at the facility. Wells designed or constructed using the same procedures may be grouped.

1. Drilling Methods:

a. What drilling method was used for the well? Check which method was used.

(1) Hollow-stem auger

* **monitoring wells PSMW-1, 2, 3, 9, 10, 11, 12A, 13A, 14** , 37, 1R, 6R

(2) Solid-stem auger

(3) Mud rotary

* **monitoring wells PSMW-3B, 4, 5, 6, 7, 8A, 8B, 12B, 13B, 16, 17, 18, 19, 20, 21, 22, 23** , 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36

(4) Air rotary

(5) Reverse rotary

(6) Cable tool

(7) Jetting

(8) Air drill w/casing hammer

(9) Other (explain)

Driven, monitoring wells PSMW-1, 2, 3, 3B, 4, 5, 6, 7, 8A, 8B

b. Were any cutting fluids (including water) or additives used during drilling? If **YES**, specify,

Y. All except PSMW-1, 2, 3

(1) Type of drilling fluid (e.g., type of foam, Wyoming pure sodium bentonite, etc.):

Water, Wyoming pure sodium bentonite

(2) Source of water used:

City of Albuquerque

Let me know if you need anything else - Teri

Post-it® Fax Note 7671	Date 4/2/96	# of pages ▶ 8
To Ron Johnson	From Teri Davis	
Co./Dept. PNM	Co. HRMB	
Phone # 241-2948	Phone # 827-1558	
Fax # 848-2340	Fax #	

Y c. Was the drilling equipment steam-cleaned prior to drilling the well?

If other cleaning methods were used, please describe:

d. Was compressed air used during drilling?

Y. PSMW-8B, 8A, 3B

Y e. If YES, was the air filtered to remove oil?

f. How were core samples obtained? Check sample collection method used.

PSMW-1, 2, 3 ___ split spoon ___ core drilling

___ shelby tube ___ other:

CME continuous sampler: PSMW-9, 10, 11, 12A, 13A, 14, 1R, 6R, 37
Push tube sampler: PSMW-4, 5, 6, 7; All others: cuttings, samples collected at

g. Were the following analytical tests performed on the core samples or cuttings? Check which tests were performed.

N Gross description of moisture content (e.g., moist, wet, saturated, etc.)

Y Mineralogy (e.g. microscopic tests and x-ray diffraction)

N Petrographic analysis

Y degree of sorting, size fraction (i.e. sieving), texture

Y degree of crystalinity and cementation of matrixal variations

~~Y~~ → N rock type(s) (e.g., limestone, granite, etc.)

Y soil type (sandy loam, sandy clay, etc.)

N approximate bulk geochemistry (e.g., 5% feldspar, 80% limestone, etc.)

N existence of microstructures that may effect or indicate fluid flow

N Falling head tests

N Static head tests

N Settling measurements

N Centrifuge tests

Y Column drawings

Y Analyses for contaminants. If contaminants were identified, please list:
PSMW-1, 2, 3 (volatile organics)

Y h. Were the sample corings logged by a qualified professional in geology?

i. Does the lithology log (driller's log) include the following information:

Y (1) Hole name/number?

Y (2) Date started and finished?

Y (3) Driller's name?

Y (4) Hole location (i.e. map and elevation)?

Y (5) Drill rig type and bit/auger size?

Y (6) Gross petrography (e.g. rock type) of each geologic unit?

N (7) Gross mineralogy of each geologic unit?

* N→Y (8) Gross structural interpretation of each geologic unit and structural features (e.g. fractures, gouge material, solution channels, buried streams or valleys, identification of depositional material)?

Y (9) Development of soil zones and vertical extent and description of soil type?

* N→Y (10) Depth of water bearing unit(s) and vertical extent of each?

Y (11) Depth and reason for termination of borehole?

* N→Y (12) Depth that water was encountered in hole?

N (13) Depth and location of any contaminant encountered in borehole?

* N→Y (14) Sample location/number?

N (15) Percent sample recovery?

Y (16) Narrative descriptions of geologic observations?

Y (17) Narrative descriptions of drilling observations?

2. Monitoring Well Construction Materials

a. Identify well construction materials (by number) and diameters.

(1) Primary Casing:

material:

diameter:

2" ID, SS316: PSMW-1, 2, 3, 3B, 4, 5, 6, 7, 8A, 8B
2" ID, PVC: PSMW-9, 10, 11, 12A, 13A, 14, 1R, 6R, 37
4" ID, PVC: PSMW-12B, 13B, 15B, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36

(2) Secondary or outside casing (double construction)

material:

diameter:

6 5/8" OD, mild steel: PSMW-4, 5, 6, 7, 8A, 8B, 3B
8 5/8" OD, mild steel: PSMW-12B, 13B, 15B

(3) Screen

See primary casing

material:

diameter:

NA (4) Sump

material:

NA (5) Centralizers

material:

Y b. If PVC materials were used, did they bear the National Sanitation Foundation logo for potable water applications (NSF-pw) or American Society of Testing Materials (ASTM)?

Y c. Were inert materials used below and including the static water level within the well?

d. How are the sections of casing and screen connected?

X Pipe sections threaded

Couplings (friction) with adhesive or solvent

Couplings (friction) with retainer screws

Other (specify)

* Y e. Were the materials steam-cleaned prior to installation?
Yes - all stainless steel wells
If no, how were the materials cleaned?
All were certified clean by factory, delivered to site in hermetically sealed packaging.

f. Well Intake Design and Well Development

Y (1) Was a well intake screen installed?

* ~~U~~ Y (2) Was the screen manufactured?

* ~~U~~ (3) Provide the slot size: 0.010" - 1, 2, 3, 3B, 4, 5, 6, 7, 8A, 8B, 1R, 9, 10, 11, 12A, 6R, 13A, 14, 37
0.020" - 1B, 12B, 13B, 15B, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36

g. If well construction logs were provided, do they

Y 1. depict the dimensions, locations, elevations and depths of the screen, casing, sump, bentonite seal, bentonite-cement seals and other annular seals, filter pack, centralizers?

Y 2. specify materials of construction (casing, screen, sump, centralizers)?

Y 3. specify the screen slot size?

Y 4. specify the total depth of the well?

Y 5. specify the filter pack grain size?

Y 6. specify the mineralogy of the filter pack (e.g., 96% silica, 4% feldspar)?

Y 7. specify the surveyed elevation of the top of casing?

N h. Was a tailpipe or sump installed?

(1) How far does the sump extend below the screen?

(2) Was the sump capped with an inert bottom?

If NO, explain:

Y i. Was a filter pack installed? If so:

ALL (1) Specify which wells have an artificial filter pack:

* Except 1A, 1, 2, 3, 3B, 4, 5, 6, 6R, 7, 8A, 8B, 9, 10, 11, 12A, 13A, 14, 37 which are natural formation formed.

Y (2) Does the filter pack consist of inert, siliceous granular material?

(3) How was the filter pack installed?

~~Poured in from top~~ via annular space

(4) What is the particle size range:

10/20 mesh

j. Well development

Y (1) Was the well developed?

(2) Check which method was used:)

PSMW-9, 10, 11, 12A, 13A, 14, 37 ___ surge block, bailer, pump

PSMW-1, 2, 3, 3B, 4, 5, 6, 7, 8A, 8B ___ bailer, pump

___ air

___ surging

PSMW-12B, 13B, 15B, 16 to ~~23~~ 36 ___ water pumping, water jetting

___ other: _____

(3) What were the turbidity readings? (Please indicate well number)

Not done

k. Was only an additive free bentonite slurry used as a sealant within the saturated zone

No bentonite sealants used in any wells below water table.

3. Surface protection of the well.

Y a. Is the surficial expression of the well above grade?

N b. Is the surficial expression of the well below grade?

If **YES**, please describe surface configuration of the well.

Y c. Is the upper portion of the borehole sealed with a concrete cap to divert drainage away from the casing?

N d. Are the dimensions of the concrete cap at least 3 feet by 3 feet by 4 inches thick?

All are at least 6" thick. Other dimensions vary from 18" x 18" to 48" x 48".

Y e. If motor vehicles can approach the well, is the well fitted with an above-ground protective device and bumper guards?

Y f. Has the protective cover been installed with locks to prevent tampering?

4. Have any facility wells been abandoned or plugged? If yes,
N

N/A ~~N~~ a. Was only an additive free bentonite slurry used as a plug within the saturated zone?

N/A ~~N~~ If NO, specify what type of material was used as the additive.

N/A ~~N~~ b. How thick was this plug:

~~N~~ c. Was a different plug used in the unsaturated zone? If yes,

NA (1) If yes, did the plug consist of a bentonite-cement slurry?

NA (2) If bentonite-cement was not used, specify the materials used (grit and type):

NA (3) Was the plug emplaced as a slurry in a continuous process to the surface using a tremie pipe?

NA d. Were the plugs appropriate for the site conditions and ensure an adequate seal and do not adversely affect groundwater chemistry? (E.g., cement was not used in the saturated zone, backfill was not used, bentonite grout was used in the saturated zone, etc)

NA e. Was the casing removed before the wells were plugged?

If NO, describe how the screen and filter pack were plugged:

WELL DATA SUMMARY

see following two pages

Table 2

Monitor Well Data Table
Person Generating Station CAD (NMT 360010342)

Well Id	North NM Coordinate	East NM Coordinate	Date of Completion	Casing Head Elevation (MSL)	Top of Screened Interval (MSL)	Bottom of Screened Interval (MSL)	Total Depth of Well (feet)	Casing Diameter (inches)
PSMW-1	1465669.78	382404.80	02/06/84	5,028.78	4,918.08	4,898.02	130.76	2.0
PSMW-1R	1465668.59	382417.48	01/13/93	5,030.32	4,909.92	4,889.92	140.40	~~4.0~~ 2.0
PSMW-1B	1465666.53	382432.37	12/10/92	5,030.50	4,882.03	4,872.03	158.47	4.0
PSMW-2	1465675.80	382306.81	02/07/84	5,024.96	4,918.13	4,898.13	126.83	2.0
PSMW-3	1465710.94	382357.38	02/08/84	5,026.14	4,918.69	4,898.69	127.45	2.0
PSMW-3B	1465710.62	382366.03	12/05/84	5,027.26	4,894.81	4,879.81	147.45	2.0
PSMW-4	1465041.24	382225.24	03/23/84	5,022.72	4,915.64	4,895.64	127.08	2.0
PSMW-5	1464990.54	382832.34	03/27/84	5,060.72	4,919.10	4,899.10	161.62	2.0
PSMW-6	1466058.78	382854.53	03/24/84	5,038.52	4,919.43	4,899.43	139.09	2.0
PSMW-7	1466085.34	382294.25	03/27/84	5,010.54	4,919.47	4,899.47	111.07	2.0
PSMW-8A	1465670.86	382885.00	11/14/84	5,046.00	4,912.60	4,892.60	153.40	2.0
PSMW-8B	1465680.46	382885.88	11/30/84	5,046.26	4,891.86	4,876.86	169.40	2.0
PSMW-9	1465862.93	382893.83	02/28/92	5,041.68	4,908.63	4,888.63	153.05	2.0
PSMW-10	1465562.41	383103.58	03/13/92	5,058.72	4,906.12	4,886.12	172.60	2.0

Table 2
(Continued)
Monitor Well Data Table
Person Generating Station CAD (NMT 360010342)

Well Id	North NM Coordinate	East NM Coordinate	Date of Completion	Casing Head Elevation (MSL)	Top of Screened Interval (MSL)	Bottom of Screened Interval (MSL)	Total Depth of Well (feet)	Casing Diameter (inches)
PSMW-11	1465213.30	382843.00	02/13/92	5,056.06	4,909.95	4,889.95	166.11	2.0
PSMW-12A	1465715.35	382614.84	02/14/92	5,035.31	4,910.40	4,890.40	144.91	2.0
PSMW-12B	1465728.86	382612.43	02/11/92	5,034.57	4,880.80	4,870.80	163.77	4.0
PSMW-13A	1465460.95	382871.46	02/27/92	5,052.73	4,908.43	4,888.43	164.30	2.0
PSMW-13B	1465449.51	382859.71	04/13/92	5,051.97	4,876.97	4,866.97	185.00	4.0
PSMW-14	1466293.85	382916.20	03/11/92	5,046.64	4,909.06	4,889.06	157.58	2.0
PSMW-15B	1465376.86	382593.77	01/31/92	5,041.30	4,880.00	4,870.00	171.30	4.0
PSMW-16	1465500.26	383481.43	04/15/92	5,094.38	4,905.11	4,885.11	209.27	4.0
PSMW-17	1465200.21	383217.29	04/21/92	5,078.40	4,906.36	4,886.36	192.04	4.0
PSMW-18	1465861.77	383310.74	04/23/92	5,071.91	4,905.54	4,885.54	186.37	4.0
PSMW-19	1464958.35	383703.76	04/28/92	5,116.86	4,902.58	4,882.58	234.28	4.0
PSMW-20	1465860.79	383762.16	05/07/92	5,110.50	4,903.35	4,883.35	227.15	4.0
PSMW-21	1464868.94	383258.40	05/05/92	5,107.47	4,904.84	4,884.84	222.63	4.0
PSMW-22	1465464.41	383720.03	05/13/92	5,111.62	4,903.53	4,883.53	228.09	4.0
PSMW-23	1465861.77	383310.74	07/16/92	5,088.31	4,905.51	4,885.51	202.80	4.0

Table 2
(Continued)
Monitor Well Data Table
Person Generating Station CAD (NMT 360010342)

Well Id	North NM Coordinate	East NM Coordinate	Date of Completion	Casing Head Elevation (MSL)	Top of Screened Interval (MSL)	Bottom of Screened Interval (MSL)	Total Depth of Well (feet)	Casing Diameter (inches)
PSMW-24	1465389.86	384191.36	09/16/92	5,141.36	4,899.73	4,879.73	261.63	4.0
PSMW-25	1465780.13	384243.49	11/19/92	5,124.08	4,902.00	4,882.00	242.08	4.0
PSMW-26	1465007.19	384219.41	11/25/92	5,147.55	4,901.54	4,881.54	266.01	4.0
PSMW-27	1465491.18	384562.95	12/03/92	5,151.01	4,902.99	4,882.99	268.02	4.0
PSMW-28	1466131.94	384684.66	02/18/93	5,162.75	4,900.90	4,880.90	281.85	4.0
PSMW-29	1464684.89	385483.44	02/11/93	5,223.88	4,898.66	4,878.66	345.22	4.0
PSMW-30	1464104.75	384313.07	02/25/93	5,145.16	4,899.96	4,879.96	265.20	4.0
PSMW-31	1465041.54	385661.46	03/04/93	5,230.86	4,900.54	4,880.54	350.32	4.0
PSMW-32	1465608.94	385735.14	03/10/93	5,229.27	4,900.67	4,880.67	348.60	4.0
PSMW-33	1464458.48	385065.80	03/16/93	5,217.63	4,900.69	4,880.69	336.94	4.0
PSMW-34	1464063.60	384920.85	03/22/93	5,186.06	4,901.93	4,881.93	304.13	4.0
PSMW-35	1465900.22	385537.58	04/22/93	5,232.29	4,901.85	4,881.85	350.44	4.0
PSMW-36	1466148.92	385167.04	04/28/93	5,196.00	4,901.53	4,881.23	314.77	4.0
PSMW-37	1465723.90	381981.75	05/17/93	5,005.79	4,912.78	4,892.78	113.01	2.0