



Arizona Department of Water Resources
 Records Management Section
 500 N. 3rd Street • Phoenix, Arizona 85004
 (602) 417-2405 • (800) 352-8488
 www.water.az.gov

MAR 10 2009

**Project Completion Report for
 Mineral Exploration Drilling**

- ❖ Review instructions prior to completing form in black or blue ink.
- ❖ This report should be prepared by the well owner or exploration firm in detail and filed with the Department within 30 days following completion of the project as a whole.

| |
|--|
| FILE NUMBER D(3-29)34 |
| WELL REGISTRATION NUMBER 55-217423 |

** PLEASE PRINT CLEARLY **

| SECTION 1: LOCATION OF WELL | | | | | |
|--------------------------------|-------------|-----------|------------|------------|------------|
| WELL LOCATION ADDRESS (IF ANY) | | | | | |
| TOWNSHIP (N/S) | RANGE (E/W) | SECTION | 160 ACRE | 40 ACRE | 10 ACRE |
| 3 S | 29 E | 34 | 1/4 | 1/4 | 1/4 |

Layne Job # 34-1805 & 1819

| SECTION 2: OWNER INFORMATION | | SECTION 3: DRILLING AUTHORIZATION | |
|---|-----|---|-----|
| Well Owner | | Drilling Firm | |
| FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL Phelps Dodge Morenci, Inc | | NAME Layne Christensen Co. | |
| MAILING ADDRESS 4521 US Highway 191 | | DWR LICENSE NUMBER 7 | |
| CITY / STATE / ZIP CODE MORANCI, AZ 85540 | | TELEPHONE NUMBER 480-895-9336 ext. 7103 | FAX |
| CONTACT PERSON NAME AND TITLE Julian Tellez - Geologist | | 4192 4246 | |
| TELEPHONE NUMBER | FAX | 4198 4246-A | |
| | | 4215 | |

Hole #3 →

| SECTION 4: | | |
|---|---|-----------------------------|
| DATE DRILLING PROJECT STARTED 2-19-08 | DATE DRILLING PROJECT COMPLETED 2-19-09 | NUMBER OF HOLES 5 |

| Casing (if installed) | | | | Geologic Log of Well | |
|-------------------------|-------------------------|-----|-----|--|--|
| OUTER DIAMETER (inches) | MATERIAL (T) | | | CHECK ONE | |
| | STEEL | PVC | ABS | <input type="checkbox"/> Unconsolidated Formation | |
| | IF OTHER TYPE, DESCRIBE | | | <input checked="" type="checkbox"/> Consolidated Formation: | |
| None | | | | STATIC WATER LEVEL (IF ENCOUNTERED OR DETECTED) Feet Below Land Surface | |

| SECTION 5: ACTUAL WELL ABANDONMENT DESIGN (if abandoned) | | | | | | | | | | | | | | | |
|--|-----------|--------------------|-----------------|-------------|-------------------------------------|--|-------------|-------------------|-------------------------------------|----------|-------------------|---|--------------------------------------|-------------------------------------|----------------------|
| Casing Treatment (if applicable) | | | | | | Sealing or Fill Material | | | | | | | | | |
| DEPTH FROM SURFACE | | TREATMENT TYPE (T) | | | | DEPTH FROM SURFACE | | MATERIAL TYPE (T) | | | | MIXING RATIO by (check one) <input type="checkbox"/> Weight <input type="checkbox"/> Volume | VOLUME OF MATERIAL USED (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 WAS PERFORATED, DESCRIBE SPACING AND SIZE OF PERFORATIONS THAT WERE ADDED | FROM (feet) | TO (feet) | NEAT CEMENT | CONCRETE | SAND-CEMENT GROUT | | | CEMENT-BENTONITE GROUT | SAND-BENTONITE GROUT |
| None | | | | | | | 0 | 20 | <input checked="" type="checkbox"/> | | | | | | |
| | | | | | | | 20 | T.D. | | | | | | <input checked="" type="checkbox"/> | |

I state that this report is filed in compliance with A.A.C. R12-15-817(C) and is complete and correct to the best of my knowledge and belief.

| | | |
|---|---|------------------------|
| TYPE OR PRINT NAME AND TITLE Mitchel Daniels / Operations Manager | SIGNATURE OF WELL OWNER OR EXPLORATION FIRM <i>[Signature]</i> | DATE 3/12/09 |
|---|---|------------------------|

**ARIZONA DEPARTMENT OF WATER RESOURCES
WATER MANAGEMENT SUPPORT SECTION**

3550 N. Central Avenue
Phoenix, Arizona 85012

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

WELL REGISTRATION NO: 55-217423

AUTHORIZED DRILLER: LAYNE CHRISTENSEN COMPANY LICENSE NO: 7

NOTICE OF INTENTION TO DRILL A MINERAL EXPLORATION WELL(S) HAS BEEN FILED WITH THE DEPARTMENT BY:

WELL OWNER: FREEPORT-MCMORAN COPPER & GOLD INC 4521 US HWY 191 MORENCI, AZ 85540

THE WELL(S) IS/ARE TO BE LOCATED IN THE:

¼ OF THE ¼ OF THE ¼ SECTION 34 TOWNSHIP 3 SOUTH RANGE 29 EAST

NO. OF WELLS IN THIS PROJECT: 100

THIS AUTHORIZATION EXPIRES AT MIDNIGHT ON THE 19TH DAY OF FEBRUARY, 2009

WATER MANAGEMENT SUPPORT

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



ARIZONA DEPARTMENT OF WATER RESOURCES

3550 N. Central Avenue, Phoenix, Arizona 85012
Telephone (602) 771-8500
Fax (602) 771-8691



Janet Napolitano
Governor

Herbert R. Guenther
Director

March 10, 2008

FREEPORT-MCMORAN COPPER & GOLD INC
4521 US HWY 191
MORENCI, AZ 85540

Registration No. 55-217423
File No. D(3-29) 34 000

Dear Well Owner:

Enclosed for your records is an annotated copy of the Notice of Intention to Drill (NOI) and Abandon an Exploration/Specialty Well, which you recently filed with this Department pursuant to A.R.S. § 45-596. This is to inform you that the Department has approved the NOI and has mailed a drilling card authorizing the drilling of the well to your designated well drilling contractor. The driller may not begin drilling until he has received the drilling card, which he must keep in his possession at the well site during drilling.

Well drilling activities must be completed within one year after the date the NOI was filed with the Department. If drilling is not completed within one year, you must file a new NOI before proceeding with further drilling. If it is necessary to change the location of the proposed well, you may not proceed with drilling until you file an amended NOI with the Department. A properly amended drilling card will then be issued and must be in the possession of the well drilling contractor before drilling begins.

If this well is being drilled as a heat pump, cathodic protection, or grounding well, or for exploration purposes, our standard Well Driller Report and Well Log form (DWR form 55-55) will be furnished to the well drilling contractor. If this well is being drilled as a mineral exploration well, a Project Completion Report (DWR form 55-57) will be furnished to the well drilling contractor. These forms must be filed with the Department within 30 days after completion of the well. A Pump Installation Completion Report form (DWR form 55-56) is being furnished to the well owner if pump installation is authorized. This must be completed within 30 days of installing a pump as required by A.R.S. § 45-600. During the drilling of a new well, if it is determined that it must be abandoned, then a Well Abandonment Completion Report (DWR form 55-58) must be submitted per R12-15-816(F).

Please be advised that A.R.S. § 45-593(C) requires the person to whom a well is registered to notify the 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. Any change in well information or a request to change well driller must be filed on a Request to Change Well Information form (DWR form 55-71A), which is enclosed for your future use.

Sincerely,

A handwritten signature in cursive script that reads "Natasha Conner".

Natasha Conner
NOI Unit
Water Management Support Section

Enclosures



Arizona Department of Water Resources
 Water Management Support Section
 P.O. Box 458 • Phoenix, Arizona 85001-0458
 (602) 417-2470 • (800) 352-8488
 www.water.az.gov

**Notice of Intent to
 Drill and Abandon an
 Exploration / Specialty Well**

\$150 FEE

- Review instructions prior to completing form in black or blue ink.
 - You must include with your Notice:
 - \$150 check or money order for the filing fee. Only one Notice of Intent to Drill is required for all wells that are drilled by or for the same person to obtain geophysical, mineralogical or geotechnical data within a single section of land.
 - Well construction diagram showing all proposed well construction features listed in Section 5 and the proposed abandonment specifications listed in Section 6.
 - Authority for fee: A.R.S. § 45-596.
- ** PLEASE PRINT CLEARLY ****

| | | |
|----------|------|--------------|
| AMAT/INA | B | SB |
| RECEIVED | DATE | WS |
| 2/20/08 | | 15 |
| ISSUED | DATE | WQARF CERCLA |

| | |
|--------------------------|---------------|
| FILE NUMBER | D(3-29) 33060 |
| WELL REGISTRATION NUMBER | 55-217423 |

SECTION 1. REGISTRY INFORMATION

| | | | | | | | |
|---|--|-------------|---------|----------|---------|---------|--|
| Well Type | Location of Well | | | | | | |
| CHECK ONE | WELL LOCATION ADDRESS (IF ANY) | | | | | | |
| <input checked="" type="checkbox"/> Mineral Exploration | | | | | | | |
| <input type="checkbox"/> Geotechnical | | | | | | | |
| <input type="checkbox"/> Heat Pump | TOWNSHIP (N/S) | RANGE (E/W) | SECTION | 160 ACRE | 40 ACRE | 10 ACRE | Number of Wells (holes) per 10-acre location |
| <input type="checkbox"/> Cathodic Protection | 35 | 29E | 34 | 1/4 | 1/4 | 1/4 | 100 |
| <input type="checkbox"/> Grounding | Use additional boxes to the right to list 160,40,10 acre descriptions for multiple wells drilled to obtain geophysical or geotechnical data on different 10-acre parcels within a single section of land (160, 40, 10 acre descriptions are not required for mineralogical exploration wells). | | | | | | |
| <input type="checkbox"/> Other (please specify): | | | | 1/4 | 1/4 | 1/4 | |
| COUNTY WHERE WELL(S) ARE LOCATED: | Greenlee | | | | | | |

RECEIVED
 FEB 20 2008

SECTION 2. OWNER INFORMATION

| | | |
|---|--|------------------|
| Well Owner | Landowner (if different from Well Owner) | |
| FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL | FULL NAME OF COMPANY, GOVERNMENT AGENCY, OR INDIVIDUAL | |
| Freeport-McMoran Copper & Gold Inc. | Freeport-McMoran Copper & Gold Inc. | |
| MAILING ADDRESS | MAILING ADDRESS | |
| 4521 US Hwy 191 | 4521 US Hwy 191 | |
| CITY / STATE / ZIP CODE | CITY / STATE / ZIP CODE | |
| Morenci, AZ 85540 | Morenci, AZ 85540 | |
| CONTACT PERSON NAME AND TITLE | CONTACT PERSON NAME AND TITLE | |
| Raymond E. Irwin, Senior Geologist | Raymond E. Irwin, Senior Geologist | |
| TELEPHONE NUMBER | FAX | TELEPHONE NUMBER |
| (928) 865-6270 | (928) 865-3944 | (928) 865-6270 |

WATER MGMT

SECTION 3. DRILLING AUTHORIZATION

| | | |
|-----------------------|-----------------------------------|-----|
| Drilling Firm | Consultant (if applicable) | |
| NAME | CONSULTING FIRM | |
| Layne Christensen Co. | N.A. | |
| DWR LICENSE NUMBER | CONTACT PERSON NAME | |
| 7 | | |
| ROC LICENSE CATEGORY | TELEPHONE NUMBER | |
| 071734 Class A-04 | | |
| TELEPHONE NUMBER | FAX | FAX |
| (480) 895-9336 | (480) 895-9536 | |
| E-MAIL ADDRESS | | |

SECTION 4.

| Questions | Yes | No | If Yes: |
|---|-----|----|--|
| 1. Is the proposed well site within 100 feet of a septic tank system, sewer disposal area, landfill, hazardous materials or petroleum storage area or tank? | | NO | You must submit a letter requesting a variance from the 100-foot setback requirement (A.A.C. R12-15-818). However, if the proposed well is a geotechnical well that will be abandoned before the drill rig leaves the well site, a variance may be requested by simply checking the box below. <input type="checkbox"/> I request a variance from the 100-foot setback requirement for a geotechnical well. |
| 2. If applicable, are you requesting a variance to use thermoplastic casing in lieu of steel in the surface seal? | | NO | The wells must be constructed in a vault as defined in A.A.C. R12-15-801(27). |
| 3. Is there another well name or identification number associated with this well? | | NO | PLEASE STATE |

Notice of Intent to Drill and Abandon an Exploration / Specialty 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. Please submit additional sheets (page 2) and additional well construction diagrams if multiple wells are to be drilled and construction or abandonment details vary.

WELL REGISTRATION NUMBER
55-217423

SECTION 5. PROPOSED WELL CONSTRUCTION PLAN (attach additional page if needed): DATE CONSTRUCTION TO BEGIN
1-8-08

**** Required Information ****

| Borehole | | | Casing (if applicable) | | | | | | | | | | | | |
|--------------------|-----------|----------------------------|------------------------|-----------|-------------------------|---------------------|-----|-----|-------------------------|---------------|-----------|----------------|---------------------------|-------------|---------|
| 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 |
| 0 | 1,200 | 5.5 | NONE | | | | | | | | | | | | |
| 1,200 | 1,500 | 3.02 | NONE | | | | | | | | | | | | |

| Annular Material | | | | | | | | | | | |
|--------------------|-----------|-----------------------------|----------|-----------------------------|------------------------|-----------------|-------|---------|--|--|--|
| DEPTH FROM SURFACE | | ANNULAR MATERIAL TYPE (T) | | | | | | | FILTER PACK | | |
| FROM (feet) | TO (feet) | NONE | CONCRETE | NEAT CEMENT OR CEMENT GROUT | CEMENT-BENTONITE GROUT | BENTONITE GROUT | CHIPS | PELLETS | IF OTHER TYPE OF ANNULAR MATERIAL, DESCRIBE | | |
| | | | | | | | | | <p style="text-align: center;">RECEIVED FEB 20 2008 WATER MGMT</p> | | |
| | | | | | | | | | NONE | | |

| SECTION 6. PROPOSED WELL ABANDONMENT DESIGN (Refer to ADWR'S Well Abandonment Handbook for additional information.) | | | | | | | | | | | | | | | |
|---|-----------|----------------------------------|------------------|-------------|-------------------------------------|---|-------------|--------------------------|------------------|--|--|-----------------------|-----------------------------|--|-------|
| DEPTH FROM SURFACE | | Casing Treatment (if applicable) | | | | DEPTH FROM SURFACE | | Sealing or Fill Material | | | | | | | |
| FROM (feet) | TO (feet) | SONAR JET | BRUSH OR SCRAPER | 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) | GROUT TYPE (T) | | | HIGH SOLIDS BENTONITE | MIXING RATIO by (check one) | ESTIMATED VOLUME OF MATERIAL (cubic feet) | |
| | | | | | | NONE | 0 | 20 | ✓ | | | | | <input type="checkbox"/> Weight | 3.3 |
| | | | | | | | 20 | 1,200 | | | | | | <input checked="" type="checkbox"/> Volume | 198.0 |
| | | | | | | | 1,200 | 1,500 | | | | | | | 15.0 |

| | |
|--|---|
| Proposed Abandonment Method (See Well Abandonment Handbook) CHECK ONE <input checked="" type="checkbox"/> Standard Method <input type="checkbox"/> Alternative 1 <input type="checkbox"/> Alternative 2 <input type="checkbox"/> Alternative 3 <input 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* | Emplacement Method of Sealing or Fill Material CHECK ONE <input type="checkbox"/> Gravity <input type="checkbox"/> Pressure Grouting <input checked="" type="checkbox"/> Tremie Pumped <input type="checkbox"/> Other (please specify): |
|--|---|

REMARKS

I state that this notice is filed in compliance with A.R.S. § 45-596 and is complete and correct to the best of my knowledge and belief.

TYPE OR PRINT NAME AND TITLE
Raymond E. Irwin, Senior Geologist

SIGNATURE OF WELL OWNER OR EXPLORATION FIRM
Raymond E. Irwin (For Freeport-McMoran)

SIGNATURE OF LANDOWNER, IF APPLICABLE (SEE INSTRUCTIONS)
Raymond E. Irwin (For Freeport-McMoran)

DATE
2/8/08

DATE
2/8/08

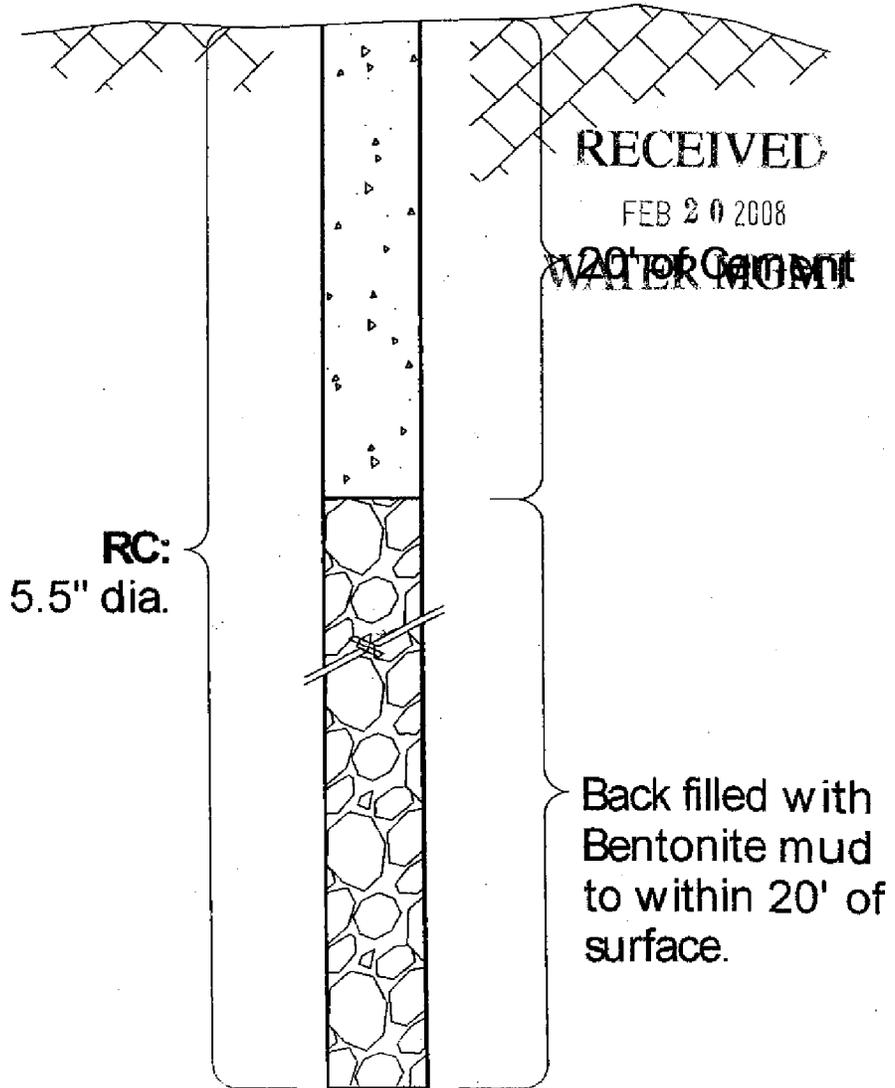
55-217423



"RC" Reverse Circulation Drill hole Well Construction Diagram

Depth of Drill holes
Varies;

Type of
Back Fill



SS-217423



"Core" Drill hole Well Construction Diagram

Depth of Drill holes
Varies;

Type of
Back Fill

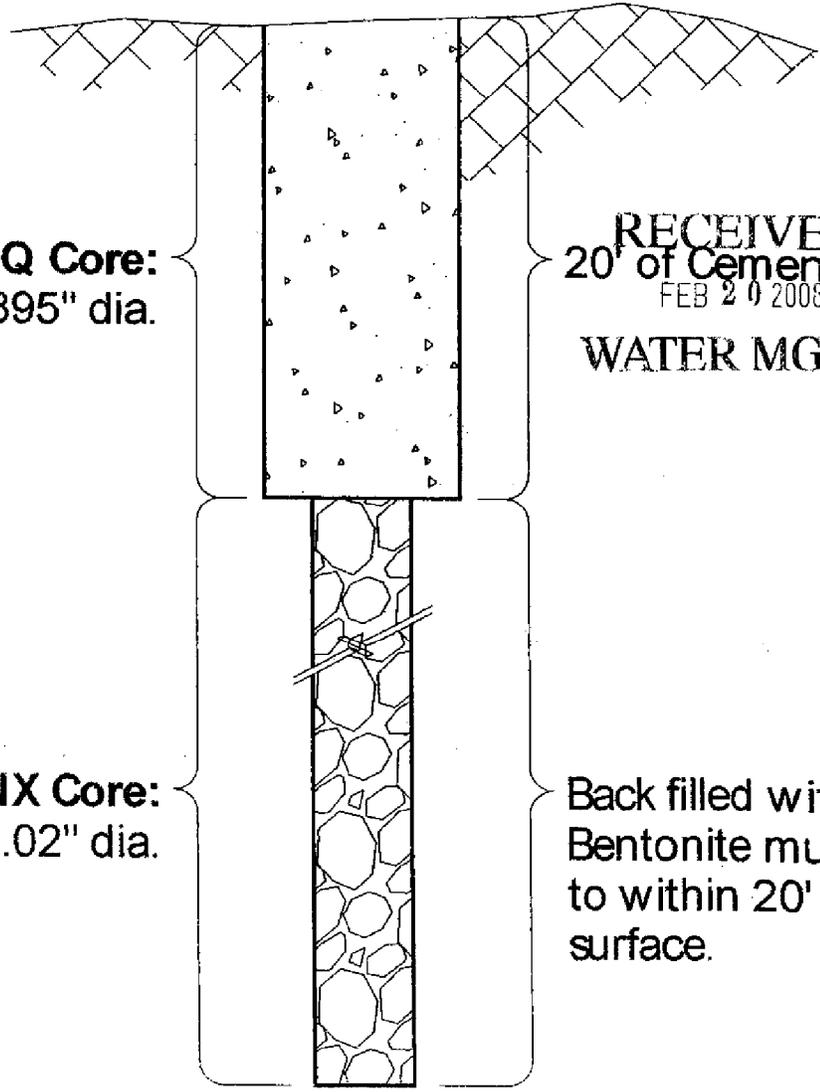
HQ Core:
3.895" dia.

RECEIVED
20' of Cement
FEB 20 2008

WATER MGMT

NX Core:
3.02" dia.

Back filled with
Bentonite mud
to within 20' of
surface.



Arizona Department of Water Resources

3550 N Central Ave
Phoenix AZ 85012

FREEPORT-MCMORAN
COPPER & GOLD
4521 US HWY 191
MORENCI,AZ 85540
928-865-6270

Date: 2/20/2008
Cashier: WRPAB
Type: Mail

RECEIVED
FEB 20 2008
WATER MGMT

| DCS/INV# | DESCRIPTION | ATTR | SIZE | QTY | PRICE | EXT PRICE |
|-----------------------|--|-------|------|-----------|-----------|-----------------|
| F 72 | 4439-06 NOTICE OF INTENT TO DRILL WELL | 15245 | | 34 | 150.00 | 5,100.00 |
| | | | | 1 Unit(s) | Subtotal: | 5,100.00 |
| RECEIPT TOTAL: | | | | | | 5,100.00 |
| Tendered: | | | | | | 5,100.00 |

Check #: 5,100.00 # 049394

FREEPORT-MCMORAN
WELL OWNER