IRP-24

APPENDIX E

APPLICATION FOR WELL OPERATING PERMIT

Complete Items No. 1 through 25 and submit application fee as set forth in the Water Resource Development and Operating Regulations. No application fee is required for monitoring wells. Make checks payable to the Treasurer of Guam.

I. Background Information:

1. Date of Application: _____

2. Type of Application:

[✓] New
[ ] Extension Previous Well Operating Numbers: _____

3. Name of Well Owner: United States Air Force, Andersen AFB
(name of individual, company, agency, etc.)

Mailing Address: 36 CES/CEV Building 18001
Andersen Air Force Base
Yigo, Gu 96929 ATTN: J. Poland

Telephone : _____

4. Name of Owner of property on which well is located:
United States Air Force, Andersen Air Force Base
_____

If owner of the land on which the well is located and the owner of the well are not the same, written notarized permission from the owner of the land shall be filed with the application.

II. Well Information:

5. Type of Well (indicate one):

[ ] Public Water Supply Well
[ ] Individual Domestic Well
[ ] Industrial Well
[ ] Recharge or Injection Well
[ ] Agricultural Well
[✓] Monitoring Well
[ ] Irrigation Well (Golf Course)
[ ] Grounding Well
[ ] Others _____

6. Purpose for which water is to be used: Groundwater Monitoring

7. Pumping Rates:

Design Pumping Rate : 0.5 gpm
Maximum Pumping Rate: 25 gpm

8. Estimated Hours of Operation:

_______________ per day

_______________ per month

48 per year

9. Estimated Volume of Water to be Pumped on an Annual Basis:

500 gallons per year

III. Well Location:

10. Provide a plot plan drawn to a scale of 1" = 50' showing known references such as streets, property lines, and survey monuments, including GGTN coordinates of the well to the nearest foot.

IV. Well Drilling Summary:

11. Period of well drilling:

Starting Date: 04/18/95

Completion Date: 04/18/95

12. Well Drilling Contractor: Beylik Drilling Inc.

13. Well Drilling Permit No. 0195-003

14. Total Depth of Well: 430 feet

Elevation (MSL) of Ground Surface at Casing: _____ feet

Elevation (MSL) of Top of Well Casing: _______ feet

15. Describe Method and Type of Drilling:
Dual Wall Air Reverse Circulation

16. Casing:

Casing Hole Diameter: 10 inches

Depth (length from surface): 410 feet

Casing Type: SCH 80 PVC Size (ID): 5 in.

Wall Thickness: .25 inches

Weight: _____ lbs.

Material: PVC

Describe the procedure of the installation of casing:

A 20-foot section of well screen with an end cap was lowered into the borehole. A 20-foot section of riser pipe was then threaded to the well screen and lowered into the borehole, with subsequent sections added until the well screen was at the desired depth.

17. Well Screen:

Screen Type (ID): 5 in. Slot Size: .020 in.

Screen Diameter: 5 in. Material: SCH 80 PVC

Location (from surface) 410 ft. to 430 ft.

Describe Method of Installation:
Following backfilling of the borehole with crushed coral, a 20-foot section of well screen was lowered into the borehole. A 20-foot section of riser pipe was then threaded to the well screen and lowered into the borehole, subsequent sections of riser were added and lowered until the well screen was at the desired depth. The screened interval was then backfilled with filter pack sand and a bentonite seal placed above the sand.

18. Cement Grouting:

Material: Cement/Bentonite Total Depth: 390.5 ft.

Gravel Size: _____ in.

Annular Thickness: .5 feet

Cubic Yards of Cement Placed: 8.88

Describe Method of Grouting Used and Emplacement Placement Procedures:

A cement/bentonite grout was tremied downhole from the top of the bentonite seal to the ground surface. The grouting of the well was done in a maximum of 150 foot lifts to minimize the heat of hydration.

19. Describe Well Development Method(s): Surge, Bail and Pump.

V. Well Construction Summary:

20. Flow Measurement and Testing, if performed:

Pump Capacity: 5.0 gpm

Static Water Level: 309 feet.

Pumping Water Level: _____ feet

Air Line Length: _____ feet

Top Elevation (MSL): _____ feet

Bottom Elevation (MSL): _____ feet

Specific Capacity at Test: _____ gpm

Describe Method Used for Flow Measurement and Testing: N/A

22. Provide a plan(s) of the well showing the following information

(a) Control valves, sampling tap(s), misc. fittings and appurtenances, and discharge piping;

(b) Flow metering device, including size, and flow range and manufacturer;

(c) Vertical cross-section of the well showing details of the casing, grouting, pump setting, gravel pack, water level measurement devices;

(d) Chlorination and fluoridation equipment; and

(e) Elevation and location of permanent benchmark.

23. Describe provisions for protecting the wellhead from erosion and animals and other contamination by specifying provisions for sanitary well seal, casing height above ground, and flood level elevation, etc.

The well is protected by a grout seal, a cement pad and stainless steel cover. Additionally a steel surface casing is set 12" above the concrete pad and the riser stands 2 feet above the pad.

24. Describe methods and procedures used for disinfecting the well:

N/A

25. If not previously submitted, attach a log of the well to the application.

VI. Signature:

I _____, _____
Name Title

state that I have knowledge of the facts herein set and that the same are true and correct to the best of my knowledge and belief and are made on good faith.

Signature: _____ Date: _____

(For Agency Use Only)

Inspection of the well facilities was conducted on _____

_____ by _____

Findings:

Water sample taken on _____ by _____

Results of the water quality analyses are attached.

Reviewed by the Chief Engineer:

_____ Date _____

Recommendations:

[ ] Approved
[ ] Disapproved

Reasons for disapproval:

Signed:

_____ Date _____
Administrator

Well No. _____

Well Operating Permit No. _____

Date Issued _____

Expiration Date _____