

Reference: Quarterly Report April 1992 through June 1992

Dear Mr Horst

Attachments 1, 2, and 3 outlines the work accomplished by the United States Geological Survey (USGS) during the April-June 1992 quarter.

The Appendix II Work Plan was submitted on 13 April 92. The Safety Plan and the Sampling and Analysis Plan are not ready at this time.

A meeting with the Bernalillo County/Kirtland Air Force Base (KAFB) Environmental Working Group (EWG) was held on 21 May 1992. The meeting went well and KAFB even received comments of appreciation from Southwest Organizing Projects (SWOP). However, the SWOP crew and a group of professors orchestrated a "media event" to disrupt the Environmental Protection Agency (EPA)/Sandia National Laboratories (SNL) meeting in the afternoon. After reading their protest against SNL's disposal of possibly radioactive wastes from the Lovelace Inhalation Toxicology Research Institute, they left the meeting and refused to participate.

If you have any questions, please call Mr Harry Davidson at (505) 846-2773.

Sincerely,

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THOMAS A. NORRIS, Colonel, USAF Director Environmental Management Division

- 3 Atchs1. Summary of Field Work, April 922. Summary of Field Work, May 92
- 3. Summary of Field Work, June 92



WORK ACCOMPLISHED IN APRIL 1992

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On April 1, the drill crew left KAFB until April 11.

On April 11, the drill crew returned to KAFB and prepared to move equipment.

On April 12, the crew moved to McCormick Ranch to start drilling monitor well KAFB1001. A hole was drilled and 8-inch surface casing was set to 5 feet. The crew drilled a 7-7/8-inch hole to 220 feet. Foxboro OVA readings were zero at the borehole and the mudpits.

On April 13, drilling of **KAFB**1001 continued to 420 feet. Geophysical borehole logs were made and the water level estimated at about 34 feet below land surface. The well casing, screen, and fittings for this well were deconned.

On April 14, monitor well KAFB1001 was reamed and mud circulated to prepare to set the well screen and casing. The casing was set with the stainless steel screen at 342 to 367 meet deep* The lower volclay seal was set at 375 to 383 feet and the filter sand was placed around the screen and up to a depth of 300 feet. The upper volclay seal was set from 300 to 287 feet. The annulus above the upper seal was grouted with volclay to the surface.

On April 15, the drill crew developed well KAFB1001. The crew left KAFB until April 20.

On April 20, the drill crew continued developing well KAFB1001. The rig and equipment were deconned.

On April 21, the rig and equipment were moved to KAFB1004 at McCormick Ranch. A hole was drilled and 8-inch surface casing was set to 5 feet. The crew drilled a 7-7/8-inch hole to 180 feet.

On April 22, drilling was continued at KAFB1004 to 440 feet. Geophysical logs of the borehole were made and the water level was estimated at about 353 feet below land surface.

On April 23, the borehole for KAFB1004 was reamed and mud circulated to prepare to set the well casing and screen. The casing was set with the stainless steel screen at 348 to 373 feet deep. The lower volclay seal was set from 400 to 375 feet and the filter sand was placed around the screen and up to 265 feet. The upper volclay seal was set from 265 to 250 feet. Volclay grout was placed in the remaining annulus to the surface.

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On April 24, the crew began developing KAFB1004.

On April 25, the crew continued developing KAFB1004. The equipment was moved to the decon area and deconned.

On April 27, the crew left KAFB until May 18.

ANTICIPATED WORK DURING MAY 1992

The drill crew will construct two additional monitoring wells at McCormick Ranch.

POTENTIAL PROBLEMS

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No anticipated problems to report.

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WORK ACCOMPLISHED IN MAY 1992

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On May 4 to 8, employees of the New Mexico District, USGS, WRD who work on the KAFB IRP projects attended the USGS/Department of Defense Environmental Contamination Program Meeting in Las Vegas, Nev.

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On May 11, Bob Tortorelli of the Oklahoma District, WRD, arrived at KAFB for approximately two weeks of surveying for monitor wells and soils borings of Stage 2A. He was assisted in this effort by New Mexico District personnel.

On May 11 through 26, Miko Roybal and four other employees of the USGS, WRD, New Mexico District sampled ground water at the 13 wells drilled under Stage 2 (Sites 1, 2, 5, 6, and 9).

On May 18, the drill crew arrived at KAFB and moved the rig to McCormick Ranch to construct monitor well KAFB1003. A hole was drilled and 8-inch surface casing was set to 5 feet. The crew drilled a 7-7/8-inch hole to 220 feet.

On May 19, drilling was continued at KAFB1003 to 390 feet. Geophysical logs of the borehole were made and the water level was estimated at about 350 feet below land surface.

On May 20, monitor well KAFB1003 was reamed and mud circulated to prepare to set the well screen and casing. The casing was set with the stainless steel screen at 345 to 370 feet deep. The lower volclay seal was set at 390 to 381 feet and the filter sand was placed around the screen and up to a depth of 310 feet. The upper volclay seal was set from 310 to 290 feet. The annulus above the upper seal was grouted with volclay to the surface.

On May 21, the drill crew developed well KAFB1003.

On May 22, the crew continued developing well KAFB1003 and then moved and deconned the drill rig and equipment.

On May 23, the drill crew moved the rig to McCormick Ranch to construct monitor well KAFB1005. A hole was drilled and 8-inch surface casing was set to 5 feet. The crew drilled a 7-7/8-inch hole to 320 feet. At 180 feet the Foxboro OVA readings were zero at the borehole and the mudpits.

On May 24, drilling was continued at KAFB1005 to 390 feet. Geophysical logs of the borehole were made and the water level was estimated at about 368 feet below land surface.

On May 25, monitor well KAFB1005 was reamed and deepened to 398.7 feet and mud circulated to prepare to set the well screen and casing. The casing was set with the stainless steel screen at 363 to 388 feet deep. Filter sand was placed around the screen and up to a depth of 270 feet. The upper volclay seal was set from 270 to 245 feet. The annulus above the upper seal was grouted with volclay to the surface.

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On May 26, the drill crew developed well KAFB1005.

On May 27, the crew continued developing well KAFB1005. The crew then moved and deconned the drill rig and equipment. The crew left KAFB until June 3.

ANTICIPATED WORK DURING JUNE 1992

The drill crew will construct additional monitoring wells at the Fire Training Area (site 4), Landfill No. 2 (site 2), and Lake Christian (site 19).

POTENTIAL PROBLEMS

No anticipated problems to report.

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WORK ACCOMPLISHED IN JUNE 1992

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On June 4, the drill crew arrived at KAFB and deconned the drill pipe. They then moved the rig and equipment to the Fire Training Area to construct monitor well KAFB0417. A hole was drilled and 10-inch surface casing was set to 5 feet. The crew drilled a 7-7/8-inch hole to 385 feet. Foxboro OVA readings were zero at the borehole and the mudpits.

On June 5, borehole KAFB0417 was reamed and deepened to 500 feet and mud circulated to prepare for geophysical logging. Geophysical logs of the borehole were made and the water level was estimated at about 435 feet below land surface. The casing and screen for this well were deconned.

On June 6, borehole KAFB0417 was reamed and mud circulated to prepare to set the well screen and casing. The casing was set with the stainless steel screen at 430 to 455 feet deep. The borehole was backfilled with pea gravel to 468 feet. The lower volclay seal was set from 468 to 462 feet. Filter sand was placed around the screen and up to a depth of 360 feet. The upper volclay seal was set from 360 to 346 feet. The annulus above the upper seal was grouted with volclay to the surface.

On June 7, the crew developed monitor well KAFB0417.

On June 8, the crew developed monitor well KAFB0417. The Foxboro OVA reading was zero for water produced during development. The rig and equipment were deconned and moved to Landfill No. 2 to construct monitor well KAFB0218. A hole was drilled and 4 feet of surface casing was set.

On June 9, the crew drilled an 8-3/4-inch hole to 300 feet. Foxboro OVA readings were zero at the borehole and the mudpits. The crew drilled a 7-7/8-inch hole to 430 feet and circulated mud to prepare for geophysical logging. Geophysical logs were made and the water level was estimated at about 386 feet below land surface.

On June 10, borehole KAFB0218 was reamed and mud was circulated to prepare to set the well screen and casing. The casing was set with the stainless steel screen at 391 to 416 feet deep. The borehole was backfilled with pea gravel to 418 feet. The lower volclay seal was set from 418 to 413 feet. Filter sand was placed around the screen and up to a depth of 332 feet. The upper volclay seal was set from 332 to 316 feet. The annulus above the upper seal was grouted with volclay to the surface.

On June 11, the crew developed monitor well KAFB0218. The Foxboro OVA reading was zero for water produced during development.

On June 12, the crew continued developing well KAFB0218. The crew then moved and deconned the drill rig and equipment. The crew left KAFB until June 24.

On June 12, USGS personnel (Jerry Larson, Ralph Wilcox, Tom Crouch, Bill Dam, Joe Szalona, and Carol Remington) met with AFCEE personnel (Dennis Lundquist, Jim Williams, and Jo Mullens). Interim site reports and ITIR°s were discussed, as well as the change to the May 1991 AFCEE handbook and determination of background contamination levels.

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On June 24, the drill crew arrived at KAFB and moved the rig and equipment to Lake Christian to construct monitor well KAFB1903. A hole was drilled and 10-inch surface casing was set to 3.5 feet.

On June 24-26, USGS personnel (Jerry Larson, Ralph Wilcox, and Tom Crouch) met with AFCEE and MITRE personnel at AFCEE Headquarters. The main topic was changes to be incorporated in Mod 3 of Kirtland Stage 2A. Other items discussed were RMAL lab procedures, background determination for Stages 2 and 2A, and changes brought about by the May 1991 AFCEE Handbook.

On June 25, a 6-inch hole was drilled to 20 feet. Large gravel and limestone fragments continued caving in the hole and prevented further drilling. The surface casing was removed and the hole was reamed to 12-1/2 inches. A hydraulic line broke and contaminated the drill rig and some equipment. Contamination on the ground was placed in containers.

On June 26, the hydraulic line was repaired and the rig and equipment were deconned. An 8-inch surface casing was set to 18 feet and grouted.

On June 27, the crew drilled a 6-inch hole to 140 feet and a 5-1/8-inch hole to 205 feet.

On June 28, the hole was reamed to 5-5/8-inch to 205 feet and drilling continued to 240 feet. Drilling stopped at this depth due to loss of drilling mud in the hole. Borehole geophysical logs were made and the water level was estimated at about 75 feet below land surface.

On June 29, the borehole was backfilled with pea gravel to about 125 feet. The hole was reamed to 7-7/8 inches to a depth of 116 feet. A neutron log was made and the water level was estimated at about 84 feet below land surface. The casing was set with the stainless steel screen at 79 to 104 feet deep. Filter sand was placed around the screen and up to a depth of 65 feet. The upper volclay seal was set from 65 to 57 feet. The annulus above the upper seal was grouted with volclay to the surface.

On June 30, the drill crew and USGS personnel attended the annual 8-hour hazardous materials refresher course required for IRP workers.

ANTICIPATED WORK DURING JULY 1992

The drill crew will construct additional monitoring wells at Lake Christian (site 19), Landfill No. 2 (site 2), and Landfills 4, 5, and 6 (site 3).

POTENTIAL PROBLEMS

No anticipated problems to report.

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