



TA 74

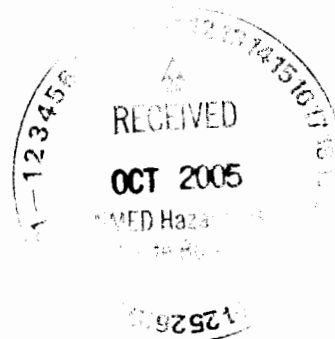
**DEPARTMENT OF ENERGY**  
National Nuclear Security Administration  
Los Alamos Site Office  
Los Alamos, New Mexico 87544



OCT 06 2005

Certified Mail/Return Receipt

Mr. James P. Bearzi, Chief  
NMED-Hazardous Waste Bureau  
2905 Rodeo Park Drive East,  
Building 1  
Santa Fe, NM 87505-6303



Dear Mr. Bearzi:

Subject: Final Fact Sheet for Regional Well R-24

Enclosed are two copies of the Fact Sheet for Regional Well R-24, which was recently completed by Kleinfelder and Associates for the Department of Energy. If you have any questions regarding this report, please contact me at (505)606-0397, or Tom Whitacre at (505)665-5042.

Sincerely,

John C. Ordaz, P.E.  
Assistant Manager  
Office of Environmental Stewardship

ES: 2TW-011

Enclosures

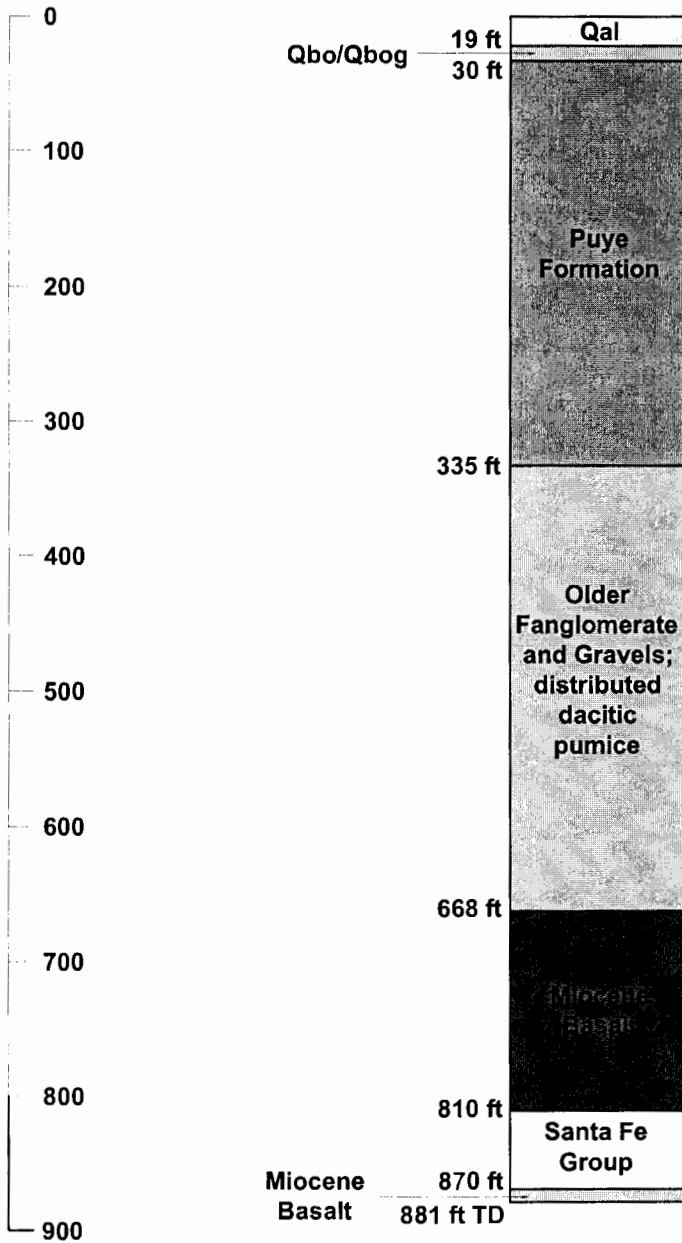
cc w/enclosures:

John Young  
NMED-Hazardous Waste Bureau  
2905 Rodeo Park Drive East,  
Building 1  
Santa Fe, NM 87505-6303

Tom Whitacre, ES, LASO  
Mat Johansen, ES, LASO  
David Gregory, ES, LASO  
Jean Dewart, ENV-GP, LANL, MS-M992  
David McInroy, ENV-RS, LANL, MS-M992  
File



DEPTH (ft bgs)



**DRILLING INFORMATION**

**DRILLING COMPANY/PERSONNEL**

WDC Exploration & Wells  
 Q. Stevens, A. Strain, D. Matthews

DRILL RIG Speedstar 50k

**DRILLING METHOD**

- HOLLOW-STEM AUGER
- AIR ROTARY
- MUD/WATER ROTARY
- 
- 

**DRILLING FLUID TYPE**

- BENTONITE
- WATER
- POLYMER
- AIR
- QUIK-FOAM®, EZ-MUD®

**DRILLING START / FINISH**

DATE 08/4/05 TIME 10:26  
 DATE 08/25/05 TIME 16:22

Note:  
 Geologic contacts are preliminary and subject to change.



Drawn By: C. Bhongir	Date: September 2005
Project No.: 49436	Filename: 49436_01_0.dwg
Scale: not-to-scale	Revision: -

**WELL SUMMARY DATA SHEET**  
**Characterization Well R-24**  
 TA-74 / Bayo Canyon  
 Los Alamos, New Mexico

FIGURE  
**1**

TOTAL LENGTH OF CASING AND SCREEN 870.2 FT

DEPTH TO WATER FOLLOWING INSTALLATION (TOC) 715.71 FT BGS (9/13/05)

DIAMETER OF BOREHOLE  
 21.6" FROM 0 FT TO 40 FT BGS  
 15.0" FROM 40 FT TO 645 FT BGS  
 10.625" FROM 645 FT TO 881 FT BGS

**SURFACE COMPLETION INFORMATION**

TYPE OF PROTECTIVE CASING

STEP 1 SLIT

PROTECTIVE POSTS INSTALLED  
 SURFACE SEAL AND PAD COMPLETION

CHECKED FOR SETTLEMENT

MATERIAL USED:

REINFORCED

YES

NO

PAD DIMENSIONS

FT (L) x FT (W) x FT (H)

3 DEPTH TO TOP OF SURFACE SEAL (FT BGS)

79 DEPTH TO TOP OF BENTONITE SEAL (FT BGS)

811 DEPTH TO TOP OF FINE SAND COLLAR (FT BGS)

813 DEPTH TO TOP OF FILTER PACK (FT BGS)

825 DEPTH TO TOP OF SCREEN (FT BGS)

848.31 DEPTH TO BOTTOM OF SCREEN (FT BGS)

854 DEPTH TO TOP OF BACKFILL MATERIAL (FT BGS)

861.54 DEPTH TO BOTTOM OF CASING (FT BGS)

872 DEPTH TO TOP OF FORMATION COLLAPSE (FT BGS)

881 DEPTH TO BOTTOM OF BORING (FT BGS)

LOCKING COVER

WELL CAP

ELEVATION OF PROTECTIVE CASING

ELEVATION OF TOP OF ALL CASING (FT AMSL)

GROUND SURFACE ELEVATION (FT AMSL)

MONUMENT MARKER ELEVATION (FT AMSL)

SLOPED CONCRETE PAD / SURFACE SEAL

**GROUT FORMULA (PROPORTION OF EACH)**

CEMENT 13% BENTONITE not added to grout mix

WATER 9% OTHER Aggregate 78%

ACTUAL VOLUME 135 ft<sup>3</sup>

CALCULATED VOLUME 82.9 ft<sup>3</sup>

**METHOD INSTALLED**

TREMIE

Pumper truck with hose at 5 ft bgs

POURED

NOT USED

**BENTONITE SEAL**

PELLETS

SLURRY

POWDER/GRANULAR

QUANTITY USED 1453.5 ft<sup>3</sup>

CALCULATED VOLUME 798.5 ft<sup>3</sup>

**METHOD INSTALLED**

TREMIE

NOT USED

POURED

**FINE SAND COLLAR (OPTIONAL)**

SIZE / TYPE 20/40 Fine Sand

ACTUAL VOLUME 3.5 ft<sup>3</sup>

CALCULATED VOLUME 0.96 ft<sup>3</sup>

**FILTER PACK**

SAND SIZE 10/20

ACTUAL VOLUME 30.0 ft<sup>3</sup>

CALCULATED VOLUME 19.7 ft<sup>3</sup>

MATERIAL

**METHOD INSTALLED**

TREMIE

**BACKFILL MATERIAL**

MATERIAL: Bentonite / 10/20 Sand

**FORMATION COLLAPSE**

Slough

**CENTRALIZERS USED**

YES AT: 723.30 FT

823.30 FT

849.29 FT

STAINLESS STEEL

**TYPE OF CASING**

STAINLESS STEEL

CASING DIAMETER

SCHEDULE 40 PVC

INSIDE 4.5 in.

SCHEDULE 80 PVC

OUTSIDE 5.0 in.

API L/T 8

JOINT TYPE API L/T (threaded collars)

**TYPE OF SCREEN**

STAINLESS STEEL

SCREEN DIAMETER

SCHEDULE 40 PVC

INSIDE 4.5 in.

SCHEDULE 80 PVC

OUTSIDE 5.2 in.

RB - Rod Based Stainless Wire Wrap

SLOT SIZE 0.020 in.

JOINT TYPE API L/T (threaded collars)

**WELL COMPLETION BEGAN**

DATE 8/29/05 TIME 15:00

**WELL COMPLETION FINISHED**

DATE 9/12/05 TIME 18:30

**WELL DEVELOPMENT INFORMATION**

DEVELOPMENT METHOD

SWABBING

CLEANING

TOTAL LARGE VOLUMES

BAILING

GALLONS

**FINAL PARAMETER MEASUREMENTS**

pH

TEMPERATURE

SPECIFIC CONDUCTANCE

TURBIDITY



Drawn By: C. Bhongir

Date: September 2005

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**AS-BUILT WELL SCHEMATIC**  
 Characterization Well R-24  
 TA 74 / Bayo Canyon  
 Los Alamos, New Mexico

FIGURE

2