TA21

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

FEB 15 2006

FEB 2006

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 Intermediate Well LAOI-3-2A

Enclosed are two copies of the Fact Sheet for Intermediate Well LAOI-3-2A, 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)667-1968, or Tom Whitacre at (505)665-5042.

Sincerely,

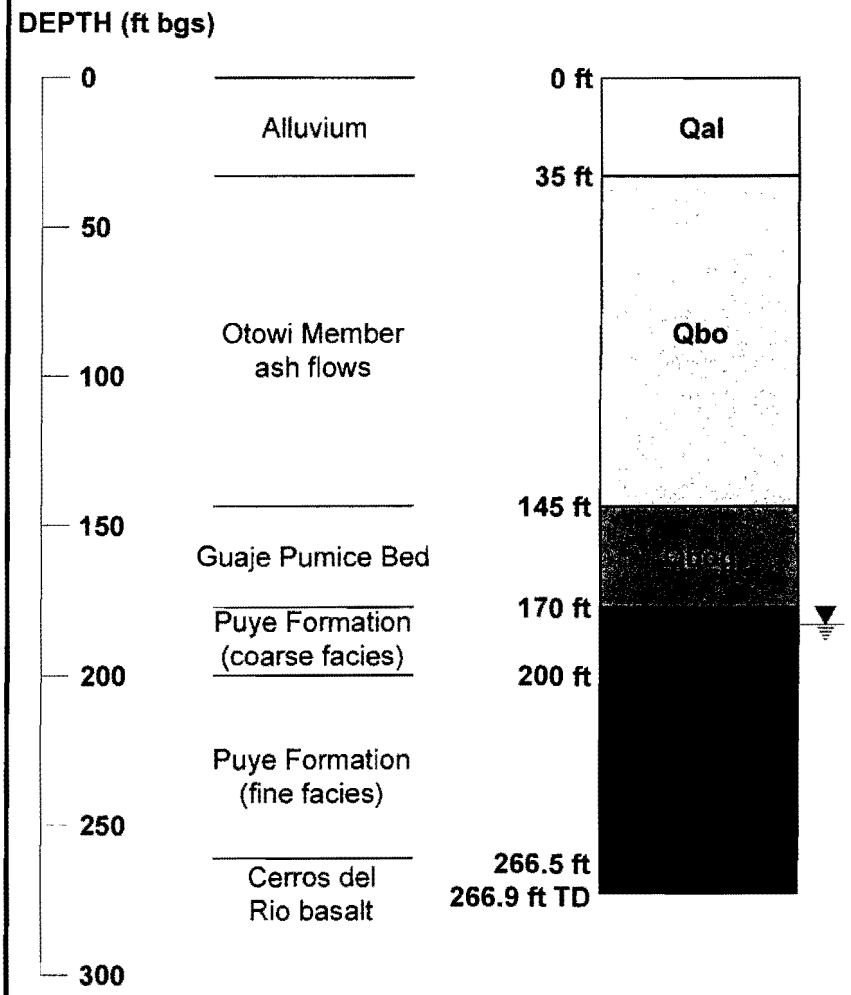
Eugene T. Rodriquez
Acting Assistant Manager
Office of Environmental Stewardship

ES: 2TW-025

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
Mark Everett, ENV-GP, LANL, MS-M992
Steve Pearson, ENV-WQH, LANL, MS-M992
File



DRILLING INFORMATION

DRILLING COMPANY/PERSONNEL

Spectrum Exploration
D. Starnes, J. Sanchez, B. Parisien,
S. Pacheco
DRILL RIG DB-540

DRILLING METHOD

- ☐ HOLLOW-STEM AUGER
- ☒ AIR ROTARY
- ☐ MUD/WATER ROTARY
- ☒ CASING ADVANCE

DRILLING FLUID TYPE

- ☐ BENTONITE
- ☐ WATER
- ☐ POLYMER
- ☒ Air

DRILLING START / FINISH

DATE 01/04/06 TIME 08:00
DATE 01/12/06 TIME 12:40

Note:
Geologic contacts are preliminary and subject to change.

KLEINFELDER		BOREHOLE SUMMARY DATA SHEET Characterization Well LAOI-3.2a Los Alamos Canyon Los Alamos, New Mexico	FIGURE 1
Drawn By: C. Landon	Date: February 2006		
Project No.: 49436	Filename: 49436_01_0.dwg		
Scale: not-to-scale	Revision: –		

TOTAL LENGTH OF CASING AND SCREEN 197.8 FT

PROTECTIVE CASING LOCKING COVER

WELL CAP

PENDING

MONUMENT MARKER

GROUND SURFACE

DIAMETER OF BOREHOLE
7.5" FROM 0 FT TO 245.3 FT BGS
3.8" FROM 245.3 FT TO 266.9 FT BGS

SURFACE COMPLETION INFORMATION
TYPE OF PROTECTIVE CASING
☒ STEEL SIZE OD: 11"
☐
☒ PROTECTIVE POSTS INSTALLED
SURFACE SEAL AND PAD COMPLETION
☒ CHECKED FOR SETTLEMENT
MATERIAL USED: concrete
REINFORCED
☒ YES mesh
☐ NO
PAD DIMENSIONS
5 FT (L) x 5 FT (W) x 0.5 FT (H)

TYPE OF CASING
☒ STAINLESS STEEL
CASING DIAMETER: OD: 3.5" ID: 3.1"
JOINT TYPE: FJT

173.2 DEPTH TO WATER (01/19/06 - 13:00)

181.4 DEPTH TO TOP OF SCREEN (FT BGS)

191.0 DEPTH TO BOTTOM OF SCREEN (FT BGS)

194.1 DEPTH TO BOTTOM OF CASING (FT BGS)

TYPE OF SCREEN
☒ STAINLESS STEEL
CASING DIAMETER: OD: 3.5" ID: 3.1"
JOINT TYPE: FJT
SLOT TYPE: 0.020" Rod based, wire-wrapped

CENTRALIZERS USED
☒ YES AT: 191.8, 176.3, 94.3
☒ STAINLESS STEEL

266.9 DEPTH TO BOTTOM OF BORING (FT BGS)

CEMENT GROUT SURFACE SEAL (0 - 73.4 FT BGS)
☒ CEMENT 95% ☒ BENTONITE 5%
ACTUAL VOLUME (FT³): 23.3
CALCULATED VOLUME (FT³): 17.6
METHOD INSTALLED
☒ POURED

BENTONITE SEAL (73.4 - 164.0 FT BGS)
☒ BENTONITE CHIPS
ACTUAL VOLUME (FT³): 14.8
CALCULATED VOLUME (FT³): 21.7
METHOD INSTALLED
☒ POURED THROUGH CASING

SLOUGH (164.0 - 168.9 FT BGS)

BENTONITE SEAL (168.9 - 174.7 FT BGS)
☒ BENTONITE CHIPS
ACTUAL VOLUME (FT³): 1.8
CALCULATED VOLUME (FT³): 1.4
METHOD INSTALLED
☒ POURED THROUGH CASING

FINE SAND COLLAR (174.7 - 176.7 FT BGS)
☒ 20/40 SILICA SAND
ACTUAL VOLUME (FT³): 2.1
CALCULATED VOLUME (FT³): 0.5
METHOD INSTALLED
☒ POURED THROUGH CASING

FILTER PACK (176.7 - 195.9 FT BGS)
☒ 10/20 SILICA SAND
ACTUAL VOLUME (FT³): 13.4
CALCULATED VOLUME (FT³): 4.7
METHOD INSTALLED
☒ POURED THROUGH CASING

BENTONITE SEAL (195.9 - 199.4 FT BGS)
☒ BENTONITE PELLETS
ACTUAL VOLUME (FT³): 1.3
CALCULATED VOLUME (FT³): 1.1
METHOD INSTALLED
☒ POURED THROUGH CASING

SLOUGH (199.4 - 203.2 FT BGS)

BENTONITE SEAL (203.2 - 213.4 FT BGS)
☒ BENTONITE PELLETS
ACTUAL VOLUME (FT³): 1.5
CALCULATED VOLUME (FT³): 4.0
METHOD INSTALLED
☒ POURED THROUGH CASING

BACKFILL MATERIALS (213.4 - 236.7 FT BGS)
CALCULATED VOLUME (FT³): 6.8
☒ BENTONITE PELLETS
ACTUAL VOLUME (FT³): 1.3
☒ 10/20 SILICA SAND
ACTUAL VOLUME (FT³): 6.8
☒ 20/40 SILICA SAND
ACTUAL VOLUME (FT³): 1.0
☒ FORMATION COLLAPSE
ACTUAL VOLUME (FT³): 0.9
METHOD INSTALLED
☒ POURED THROUGH CASING

BENTONITE SEAL (236.7 - 250.1 FT BGS)
☒ BENTONITE PELLETS
ACTUAL VOLUME (FT³): 2.7
CALCULATED VOLUME (FT³): 3.0
METHOD INSTALLED
☒ POURED THROUGH CASING

SLOUGH (250.1 - 266.9 FT BGS)

WELL DEVELOPMENT INFORMATION

WELL COMPLETION BEGAN
DATE 01/12/06 TIME 14:00
WELL COMPLETION FINISHED
DATE 01/20/06 TIME 11:50

WELL DEVELOPMENT BEGAN
DATE 02/01/06 TIME 10:15
WELL DEVELOPMENT FINISHED
DATE 02/01/06 TIME 16:07

DEVELOPMENT METHOD
☒ SWABBING ☒ BAILING
☒ PUMPING
TOTAL PURGE VOLUME 1914 GALLONS

PARAMETER MEASUREMENTS
pH 6.8
TEMPERATURE 12.7 °C
SPECIFIC CONDUCTANCE 254 µS/cm
TURBIDITY 2.2 NTU

KLEINFELDER

Drawn By: C. Landon	Date: February 2006
Project No.: 49436	Filename: 49436_02_0.dwg
Scale: not-to-scale	Revision: –

WELL SCHEMATIC SUMMARY DATA SHEET
Characterization Well LAOI-3.2a
Los Alamos Canyon
Los Alamos, New Mexico

FIGURE
2

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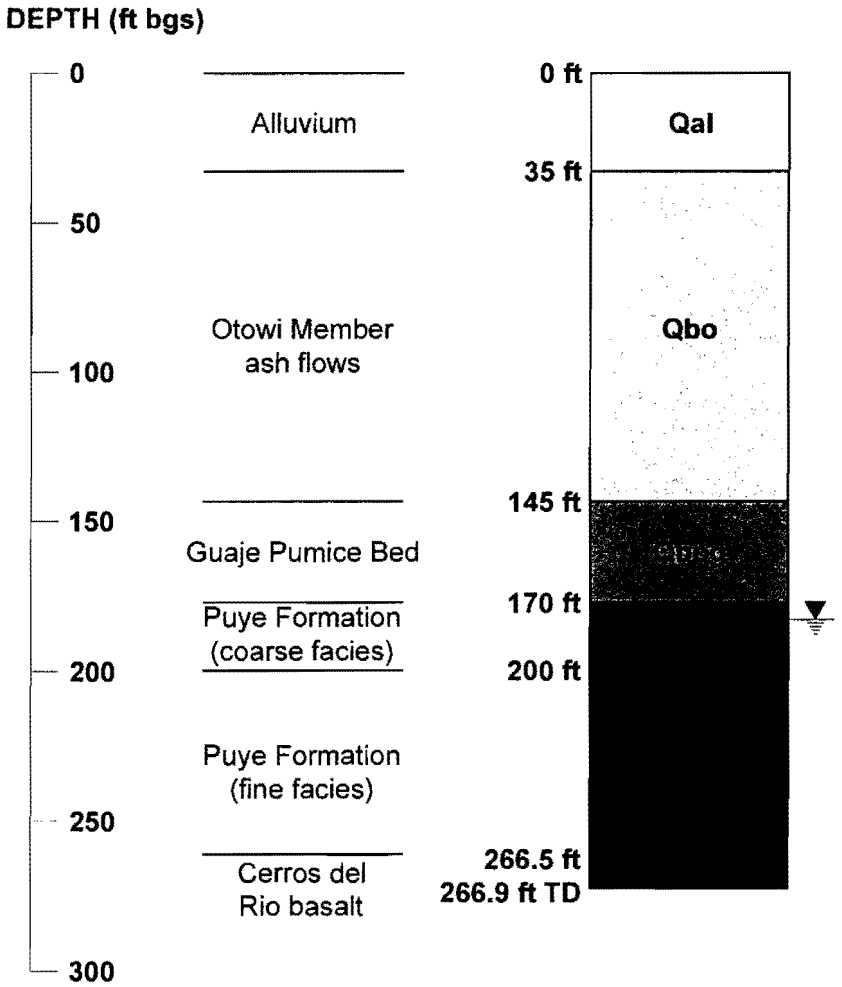

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FIGURE
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