TB-247

January 10, 2006	T-5010 Well No. 5 (T-3825) City of Alamogordo -- Lithologic Log cuttings logged wet, collected with screen from discharge, 0-40' direct mud rotary, 40-1010' reverse mud rotary
depth, ft	description
0-10	cobbles, boulders, sand, soil: 40% soil, flour, vf to f tan sand subrounded to rounded, 60% boulders and pebbles mixed lithology up to 2' in size
10-40	cobbles, pebbles, gravels, sand: 75% gravel, pebbles, and cobbles 2-16 mm cuttings, 25% f-mc sand well rounded qtz.
40-50	cobbley pebbly clay: pinkish tan clay, slightly plastic. Pebbles and cobbles are subrounded to rounded, whitish tan, gray, black
50-60	interbedded cobbly, pebbly, gravelly clay: cobble layer from 50-54' has 64-120 mm clasts. gravelly clay from 54-60' caly is reddish tan with minor (~10%) amounts of gravel in clay.
60-80	interbedded, gravelly, cobbly, pebbly, clay: tan clay with medium plasticity. Gravel beds med-coarse mixed lithology subrounded to rounded. Cobbles are med-coarse mixed lithology and color.
80-90	gravelly pebbles & cobbles: pebbles and gravel are subrounded to subangular, mixed lithology and color
90-120	gravel, pebble, cobbles interbedded with clay: med-large cobbles mixed lithology and color, pebbles and gravel subrounded to rounded mixed lithology and color. light tan clay with medium plasticity.
120-130	clay silt with gravel: orange-red silty clay. medium-coarse gravel mixedlithology and color.
130-270	silty sandy clay: 60% tan clay medium plasticity. 20% f-vf sand qtz. 20%tan silt
270-320	Interbedded clay, cobbles: 60% tan clay medium plasticity. 20% f-vf sand qtz. 20%tan silt., interbedded cobbles small mixed lithology and color
320-340	pebbles, gravels, sand; pebbles small-large mixed lithology and color. gravels med-larger mixed lithology and color.
340-350	silty sandy clay: 55% tan-brown clay, medium plasticity. 25% vf tan sand qtz. 20% tan silt
350-360	interbedded clay and pebbles: 65% tan-brown clay, medium plasticity. 25% gravel mixed lithology and color. 10% pebbles mixed lithology and color
360-370	pebbles, gravels, sand: evenly divided subrounded to rounded mixed lithology and color.
370-390	gravelly sandy silty clay: 75% tan-reddish clay. 25% sand, silt, and gravel of mixed lithology and color
390-400	cobbles, pebbles, gravels: Evenly distributed mixed lithology and color. cobbles up to 4-inches

January 10, 2006	Well No. 5 (T-3825) City of Alamogordo -- Lithologic Log
	cuttings logged wet, collected with screen from discharge, 0-40' direct mud rotary, 40-1010' reverse mud rotary
depth, ft	description
400-470	silty sandy clay interbedded with pebble beds: 50% tan clay, slightly plastic. 25% f-vf qtz sand. 20% tan silt. 5% or less pebbles mixed lithology and color
470-490	cobble, pebble gravel: evenly distributed, cobbles mixed lithology, pebbles and coarse gravels mostly limestone and dolomite.
490-590	silty sandy clay interbedded with cobbles and pebbles: 50% tan-reddish clay slightly plastic. 25% f-vf qtz sand. 15% tan silt. 10% cobbles
590-640	interbedded cobble, gravel, pebble beds with clays: 50% cobbles and pebble gravel of mixed lithology and color- mostly limestone and dolomite. 50% light tan silty sandy clay.
640-740	interbedded cobbles, pebbles, gravels with clays: 75% cobbles and pebble gravel of mixed lithology and color- mostly limestone and dolomite. 25%reddish-tan silty sandy clay.
740-760	clays interbedded with cobbles and pebble gravel: 60% tan silty sandy clay. 40% cobbles and pebble gravel
760-820	cobbles and pebble gravel: cobbles and pebble gravels of mixed lithology-mostly limestone
820-950	cobbles and pebble gravel: cobbles and pebble gravels of mixed lithology-mostly limestone and dolomite
950-1000	interbedded cobbles and pebble gravels with clays: 75% cobbles and pebble gravel of mixed lithology and color- mostly limestone and dolomite. 25%reddish-tan silty sandy clay.
1000-1010	cobbles and pebble gravel: cobbles and pebble gravels of mixed lithology-mostly limestone

T-05010
File Number: T-5010 TRN-348651

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: City of Alamogordo — Work Phone: 505-439-4220
Contact: Pat McCourt - City Manager — Home Phone: _____
Address: 1376 E Ninth Street

City: Alamogordo — State: NM Zip: 88310-5938

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. NW 1/4 SE 1/4 SW 1/4 Section: 1 Township: 13S Range: 9E N.M.P.M. in Otero County.

B. X = _____ feet, Y = _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant. U.S.G.S. Quad Map _____

C. Latitude: ____d ____m ____s Longitude: ____d ____m ____s

D. East 403,175 (m), North 3,674,926 (m), UTM Zone 13, NAD 27 (27 or 83)

E. Tract No. ____, Map No. ____ of the _____ Hydrographic Survey

F. Lot No. ____, Block No. ____ of Unit/Tract _____ of the _____ Subdivision recorded in _____ County.

G. Other: _____

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Bureau of Land Management

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3. DRILLING CONTRACTOR

License Number: WD-767
Name: Henkle Drilling & Supply Co., Inc. — Work Phone: 620-277-2389
Agent: Bruce Reichmuth — Home Phone: _____
Mailing Address: P.O. Box 639

City: Garden City, — State: KS Zip: 67846

4. DRILLING RECORD

Drilling began: 1/6/2006; Completed: 2/8/2006; Type tools: Reverse Rotary
Size of hole: 22 in.; Total depth of well: 1010 ft.;
Completed well is: shallow (shallow, artesian);
Depth to water upon completion of well: 190 ft.

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)
480	980	500	cobbles and gravel	1,500

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Bottom	Length (feet)	Type of Shoe	Perforations From	To
30	118.65	n/a	0	38	38	none		
14	54.57	n/a	+2	460	462	none		
14	72.09	n/a	460	480	20	none		
14	54.57	n/a	480	980	500	none	480	980
14	54.57	n/a	980	1000	20	plate bottom		

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement
0	38	42		215	Pumped through tremie

8. PLUGGING RECORD

Plugging Contractor: _____
Address: _____
Plugging Method: _____
Date Well Plugged: _____

Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet Top	Bottom	Cubic Feetof Cement
1			
2			
3			
4			
5			

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE

Depth in Feet From	To	Thickness in feet	Color and Type of Material Encountered
0	40	40	cobbles, gravel, and sand, tan
40	130	90	Cobbles and gravel with some clay, tan
130	270	140	Silty sandy clay, tan
270	320	50	Interbedded clay and cobbles
320	340	20	Sand and gravel, mixed colors
340	350	10	Silty sandy clay
350	400	50	Cobbles and gravel, some clay, tan
400	760	360	Silty sand, clay with gravel layers, tan
760	1,010	250	Cobbles and gravel, some clay, tan

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Miguel Camarena	09/21/2006
Driller	(mm/dd/year)

FOR STATE ENGINEER USE ONLY

Quad ____; FWL ____; FSL ____; Use _____; Location No. _____

John R. D Antonio, Jr., P.E.
State Engineer

Las Cruces Office
1680 HICKORY LOOP, SUITE J
LAS CRUCES, NM 88005

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 348651
File Nbr: T 05010
Well File Nbr: T 05010 POD1

Oct. 12, 2006

PAT MCCOURT
CITY OF ALAMOGORDO
1376 E. NINTH STREET
ALAMOGORDO, NM 88310

Greetings:

Enclosed is your copy of the well record for the above numbered permit, which has been accepted for filing.

Sincerely,

Sarah Rodriguez
(505)524-6161

Enclosure
cc: Santa Fe Office

wellrrcv