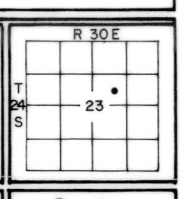
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH
THE DEPARTMENT OF ENERGY

WELL H-8
WATER-RESOURCES INVESTIGATIONS
82-4118

U.S. GEOLOGICAL SURVEY
WELL RECORD

Company FENIX & SCISSON
Well H-8C
Sec. 23 Twp. 24S Rg 30E
Location 2059.36 FNL 1470.14 FEL
County EDDY State NEW MEXICO
Area



	Feet above or below datum	Elevation
Log Measured from	GL	KB 3433.8
Drilling Measured from		DF
Permanent Datum	3433.0	GL 3433.0

Contractor PENNSYLVANIA DRLG. CO.
Spud. 7/27/79 Comp. 8/6/79
TD 808'
Geologist(s) on well DRELLACK, GONZALES, IVES McINTYRE

Casing
SURFACE 13 3/8" @ 5' to 38'
7" OD CASING FROM SURFACE TO 734'

Geologic Tops

Formation	Depth(ft)	Remarks
DUNE SAND AND CALICHE	SURFACE	
GATUNA FORMATION	10	
DEWEY LAKE RED BEDS	153	
RUSTLER FORMATION	399	
MAGENTA DOLOMITE MEMBER	466-488	
CULEBRA DOLOMITE MEMBER	588-614	
SALADO FORMATION	733	
DISSOLUTION RESIDUE	733-774	
MB * 103	774-786	
SALADO SALT	798	* MB - MARKER BED

EXPLANATION

- MUDSTONE, CLAY
- SILTSTONE
- SANDSTONE
- ANHYDRITE
- GYPSUM
- HALITE argillaceous
- POLYHALITE
- DOLOMITE
- DISSOLUTION RESIDUE: UNCONSOLIDATED CLAY AND SILT INTERLAYERED AT IRREGULAR INTERVALS WITH GYPSUM FRAGMENTS
- CALICHE

ABBREVIATIONS FOR DRILLER'S REMARKS

NC	NO CORE
NO SPLS	NO SAMPLES (ROCK BIT, NO RETURNS)
WOB	WEIGHT ON BIT (POUNDS)
RPM	REVOLUTIONS PER MINUTE
PP	PUMP PRESSURE (POUNDS PER SQUARE INCH)
PSPM	PUMP STROKES PER MINUTE
MUD DATA	
WT	WEIGHT (POUNDS)
VIS	VISCOSITY (API)
WL	WATER LOSS (CUBIC CENTIMETERS)
CK	(MUD) CAKE THICKNESS (INCHES)
CL	CHLORIDE ION (PARTS PER MILLION)
FIL	FILTRATE (CUBIC CENTIMETERS)
GL	GROUND LEVEL (LAND SURFACE DATUM)
BGL	BELOW GROUND LEVEL

MUD TYPE: SALT GEL MYLOGEL (38' to 320')
BRINE: (320' to 492')
SALT GEL AND PAPER: (492' to 557')
MAGCOGEL: CMC * (557' to 735')
AIR MIST: (735' to TD)

GEOPHYSICAL LOGS RUN BY DRESSER ATLAS *

* The use of trade names in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey

PERIOD: QUATERNARY; PERMIAN
FORMATION: GATUNA FORMATION; DEWEY LAKE RED BEDS; RUSTLER FORMATION; SALADO FORMATION
KEY MARKER BEDS: DUNE SAND AND CALICHE; MAGENTA DOLOMITE MEMBER; CULEBRA DOLOMITE MEMBER; DISSOLUTION RESIDUE; MARKER BED 103; TOP OF SALADO SALT
GAMMA RAY — API UNITS: 0, 100, 200
DEPTH (FT): 100, 200, 300, 400, 500, 600, 700, 800
DEPTH (M): 50, 100, 150, 200, 250
LITHOLOGY: NC; NO SPLS; NC; NO SPLS; NC; NO SPLS; NC; NO SPLS; NC
POROSITY — LIMESTONE COMPENSATED NEUTRON POROSITY %: 30, 20, 10, 0
FLUID SHIFT
BULK DENSITY — GRAMS/CC: 2.0, 2.5, 3.0
DEPTH REACHED BY DRESSER ATLAS LOGGING TOOL
TD 808' BGL
DRILLING TIME — MIN/FT: 5, 10, 20, 30, 40
NO DATA
DEPTH CORRECTION

REMARKS

MACHINE AUGERED 18" HOLE TO 38'
WOB —
RPM 88
PP 150

FLUID LEVEL AT 101'
WOB 8000
RPM 60
PP 150

LOST CIRCULATION AT 302'
DRILLING WITH BRINE
7' OF FILL AFTER TRIP
WOB 10,000
RPM 100
PP 250

NOTE ALL CORES WITH 10' SPLIT CORE BARREL & 6 11/16" X 3 1/2" DIAMOND CORE BIT.
WOB 10,000
RPM 80
PP 50-100
WOB 10,000
RPM 60
PP 100
PP 125
WT 9.4
PP 7.0
CL 100,000
WOB 12,000
RPM 100
PP 150
WOB 10,000
RPM 87
PP 150
WT 8.7
VIS 36
PH 8.5
FIL 15
CK 1
CL 4,000
WOB 12,000
RPM 80
PP 100-150
WOB 12,000
RPM 100
PP 150
PSPM 60
WT 8.9
VIS 39
PH 7.0
FIL 21
CK 2
CL 16,000
AT 735' RAN DRESSER ATLAS AND U.S.G.S. GEOPHYSICAL LOGS
WOB 10,000
RPM 80
PSI 100
PP 75
WOB 10,000
RPM 80
PP 150

PLATE 1.--LITHOLOGIC AND GEOPHYSICAL LOGS OF BOREHOLE H-8c.