



Map center is 34° 59' 35"N, 90° 02' 16"W (WGS84/NAD83)
 Horn Lake quadrangle - TopoZone Pro elevation display
 Projection is UTM Zone 15 NAD83 Datum

M=0.135
 G=1.7

FORMATION LOG OF THE WELL OR TEST HOLE

Started Test Hole 2-21 20 02

Finished 3-29 20 02

Test Hole Number 1

Location Nepco/Southaven Desoto Co MS

Sec 15

TS 1

Range 8 Elevation 290'

Total Depth	Thickness Each Stratum	Formation	Total Depth	Thickness Each Stratum	Formation
0-16	16	Clay			Sample Number & Depth
16-42	26	Sand & Gravel			
42-97	55	Clay			1. 1220' - 1251' 6. 1377' - 1409'
97-189	92	Sandy Clay			2. 1251' - 1282' 7. 1409' - 1440'
189-199	10	Sandy Clay			3. 1282' - 1314' 8. 1440' - 1471'
199-220	21	Sand			4. 1314' - 1345' 9. 1471' - 1503'
220-243	23	Fine Sand			5. 1345' - 1377' 10. 1503' - 1534'
243-290	47	Sand & Clay			
290-300	10	Clay			
300-320	20	Clay & Sand Streaks	Mud Pit Size ____ Ft. X ____ Ft. X ____ Ft. Deep		
320-376	56	Sand	Type Bit Used to Cut Sand		
376-407	31	Sandy Clay	Size of Test Hole Through Sand		
407-428	21	Sand	Type of Bit Used to Cut Upper Formations		
428-430	2	Sand	____ Size		
430-438	8	Hard Shale	Type Mud Pump Used		
438-469	31	Sand	Drilling Pressure in Sand		
469-495	26	Sandy Shale	Type of Mud Used		
495-500	5	Hard Shale	Notes:		
500-532	32	Clay			
532-540	8	Shale			
540-562	22	Hard Shale			
562-594	32	Sandy Shale			
594-626	32	Sandy Shale			
626-658	32	Sandy Clay			
658-689	31	Clay			
689-721	32	Sand			
721-753	32	Sandy Clay			
753-784	31	Sandy Clay	Test Data Final Test		
784-815	31	Sandy Clay	Static Water Level	131'	
815-982	167	Fine Sand & Clay Streaks	Pumped GPM		
982-1064	82	Hard Sandy Shale	Pressure Pounds		
1064-1220	156	Hard Shale	Draw Down		
1220-1251	31	Sandy Shale	GPPD		
1251-1282	31	Sandy Shale	Guaranteed GPM	1200	
1282-1377	95	Hard Shale	Guaranteed Pressure		
1377-1440	63	Hard Sand	Date of Test		
1440-1471	31	Sandy Shale	REMARKS		
1471-1525	54	Sand	Lat. 34 Degrees 59' 35N		
1525-1534	9	Shale	Long. 90 Degrees 02' 16W		
			Elevation 290'		
			RECEIVED		
			APR 08 2002		
			BY: OLWR		
			Driller <u>Lynwood Hathcock</u>		
			Field Supt <u>Ray Smith</u>		

RECEIVED
APR 08 2002
BY: OLWR

If well telescopes please sketch and show depths.

GROUND LEVEL

SECTION _____

Please indicate well location X.

Pump Capacity (GPM)	No. of Stages	Setting Depth
1209	6	290 FT.

PUMP TEST

Well yielded 1209 GPM with
a drawdown of 61 ft.
after 8 hours of pumping

LOG DATA

TYPE OF LOG RUN (Circle One): Electric, Gamma Ray, Density, Sonic, Neutron, No Log Run, Other (Describe) _____

Name of Organization Running Log

Layne Central

GEOLOGIC DATA (Office Use Only)

Surface Elev.	Geologic Unit	Unit Thickness	Depth to Top
Subs. SWL	Date	Analysis	Aquifer Test

Driller's Remarks

If more than one screen,
show location of each on sketch.

Log # 83 B73



Geophysical Services

GAMMA RAY/SP/ELECTRIC

COMPANY : NEPCO
 WELL : WELL #2
 LOCATION/FIELD : STATELINE ROAD
 COUNTY : DESOTO
 STATE : MS
 SECTION :

OTHER SERVICES:

 NONE

TOWNSHIP : RANGE :

DATE : 03/03/02
 DEPTH DRILLER : 1534
 LOG BOTTOM : 1513.50
 LOG TOP : 1.20

PERMANENT DATUM :

LOG MEASURED FROM:
 DRL MEASURED FROM: G.L.

KB
 DF
 GL

CASING DIAMETER : 26
 CASING TYPE : STEEL
 CASING THICKNESS: 0

LOGGING UNIT : 9819
 FIELD OFFICE : MEMPHIS
 RECORDED BY : M. BURGNER

BIT SIZE : 9 7/8
 MAGNETIC DECL. : 0
 MATRIX DENSITY : 2.71
 NEUTRON MATRIX : Dolomite

BOREHOLE FLUID : MUD
 RM : 0
 RM TEMPERATURE : 0
 MATRIX DELTA T : 54

FILE : ORIGINAL
 TYPE : 9041A

THRESH: 4000

N 34.90068 W 090.00963

MISCELLANEOUS NETWORK DATA 706=QW, WL, WD*

R=114	T=A	730#1	Beg. Year	115=	End Year	116=	Agency Source	120=A	117=	Freq.	118=
R=121	T=A	730#2	Beg. Year	115=	End Year	116=	Agency Source	117=		Freq.	118=

MISCELLANEOUS REMARKS DATA

R=183	T=A	311#1	Date of Remarks	184=	03-28-2002	Remarks	185=	MS-GW-15556
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DISCHARGE DATA

R=146	T=A	Pump/Flow	147#1	Date	148=	03-28-2002	Type	703=	(P) F	Discharge	150=	1209
Meth. Dis.	152=	R	Static Water Level	154=	Source WL	155=	Sp. Capacity	272=		<i>W/a drawdown of 61 ft. after 8 hours of pumping</i>		

GEOHYDROLOGIC DATA

R=90	T=A	721#1	Depth Top	91=	Depth Bottom	92=	Unit ID	93=	124WLCXL	304=P
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HYDRAULIC DATA

R=98	T=A	790#1	Unit Tested	100=	103=
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HISTORICAL WATER LEVEL DATA

R=234	T=A	235#	Date	03-28-2002	Water Level	237=	131.	243=L	244=	D.	239=R	247=MS008
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*2 miles W. of Hwy 51/NEPCO POWER
Stateline & Hwy 51*

Total Depth	Thickness Each Stratum	Formation
0-16	16	Clay
16-42	26	Sand & Gravel
42-97	55	Clay
97-189	92	Sandy Clay
189-199	10	Sandy Clay
199-220	21	Sand
220-243	23	Fine Sand
243-290	47	Sand & Clay
290-300	10	Clay
300-320	20	Clay & Sand Streaks
320-376	56	Sand
376-407	31	Sandy Clay
407-428	21	Sand
428-430	2	Sand
430-438	8	Hard Shale
438-469	31	Sand
469-495	26	Sandy Shale
495-500	5	Hard Shale
500-532	32	Clay
532-540	8	Shale
540-562	22	Hard Shale
562-594	32	Sandy Shale
594-626	32	Sandy Shale
626-658	32	Sandy Clay
658-689	31	Clay
689-721	32	Sand
721-753	32	Sandy Clay
753-784	31	Sandy Clay
784-815	31	Sandy Clay
815-982	167	Fine Sand & Clay Streaks
982-1064	82	Hard Sandy Shale
1064-1220	156	Hard Shale
1220-1251	31	Sandy Shale
1251-1282	31	Sandy Shale
1282-1377	95	Hard Shale
1377-1440	63	Hard Sand
1440-1471	31	Sandy Shale
1471-1525	54	Sand
1525-1534	9	Shale

Coded by HRH 4/2002
 Checked by HRH 4/2002
 Entered by HRH 4/2002
 Date 4/2002

GW15556

U.S. GEOLOGICAL SURVEY
 WATER RESOURCES DIVISION
 MISSISSIPPI DISTRICT

E-Log No. 83 Well No. B73
 County Desoto 2913
 Agency

WELL RECORD

Agency Code U S G S Site ID 1= 345935090021601 Project No. 5=
 Station Name 12= 8073 DESOTO NEPCO Latitude 9= 345935
 Longitude 10= 0900216 Lat/Long Ac. 11= 1 Lat/Long Met. 35= D Lat/Long Datum 36= NAD83 Dist Code 6= 28 State Code 7= 28 County Code 8= 033

WELL # 2

Land Net Location 13= SWS ESW S15T01SR08W Meridian Chickasaw, O=Choctaw, H=Huntsville, S=St. Stephens, W=Washington
 Location Map 14= HORN LAKE Altitude 280 Accuracy 5 Method Meas. 17= M
 Altitude Datum 22= NAVD88 Hydrologic Unit 20= 08010211 Topo Set. 19= Agency Use 803= A I Date Invented 711=
 Station Type 802= Data Type 804= A I O Gr. Time 813= -06 Loc. Time 814= Y Web-R 32= Reliability 3= C L M U Date of Construction 21= 03-28-2002
 Well Use 23= W Water Use 24= N Primary Aquifer 714= 124WLCXL Hole Depth 27= 1534. Well Depth 28= 1404.

CONSTRUCTION DATA Construction Date 29 Contractor 63= 064 Method 65= H Finish 66= G
R=58 T=A 723#1 60= 03-28-2002 Name Layne Central

CONSTRUCTION CASING DATA
 Top/Casing Bottom/Casing Diameter
R=76 T=A 725#1 59#1 77= 0. 78= 1340. 79= 20.
R=76 T=A 725#2 59#1 77= 1244. 78= 1304. 79= 12.

CONSTRUCTION OPENINGS DATA
 Top/Depth Bottom/Depth Diameter Type Length Width
R=82 T=A 726#1 59#1 83= 1304. 84= 1404. 87= 12. 85= S 89= 88= .02.
R=82 T=A 726#2 59#1 83= 84= 67= 85= 89= 88=

CONSTRUCTION LIFT DATA
R=42 T=A 254#1 Lift Type 43= T Date 38= 03-28-2002 Intake 44= 290
 Power 45= E H.P. 46= 200. Serial No. 49=

MISCELLANEOUS OWNR DATA Date of Ownership 159= 03-28-2002 Owner: Robert D. Pelts
R=158 T=A 718#1 Owner Name 161= SOUTHAVEN PWR LLC-COGEN TRX

MISCELLANEOUS OTHER ID DATA E-Log No. 190= 83. Assigner 191= M I S S D I S T
R=189 T=A 736#1

MISCELLANEOUS LOGS DATA
 Log Type Beg. Depth End Depth
R=198 T=A 739#1 199= E 200= 1.2. 201= 1513.5.
R=198 T=A 739#2 199= D 200= 0. 201= 1534.

