Bolden #1
#77 GW 15634

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources
P. O. Box 10631
Jackson, MS 39289-0631
WATER WELL DRILLERS LOG

COUNTY WELL LOCATED	Benton
WELL NUMBER	Bolden #1
CODED	
	H ~~86~~ 77
DATE WELL COMPLETED	6-18-01
PERMIT NUMBER	MS - GW - ~~15650~~ 15634
NAME OF DRILLING FIRM	Layne Central Co
	Memphis

NAME & MAILING ADDRESS OF LANDOWNER
Magnolia Energy
Two Houston Center
909 Fannin, Suite 2222
Houston, TX 77010

WELL LOCATION — SEC 16 — TOWNSHIP 3 N (S) — RANGE 1 (E) W

DISTANCE _____ Miles — DIRECTION _____ of — NEAREST TOWN _____

OTHER LANDMARK

WELL PURPOSE: Home, Irrigation, Municipal, (Industrial), Fish Pond, etc

PUMP DATA

PUMP TYPE (Circle One)
Submersible, Turbine, Jet, Flowing Well,
Other (Describe) N/A

POWER TYPE (Circle One)
Electric, Tractor, Diesel, Gasoline, Butane,
Other (Describe) _____ H/P _____

Pump Capacity (GPM)	No. of Stages	Setting Depth
500		FT.

PUMP TEST
Well yielded 500 GPM with
a drawdown of 25 ft.
after 24 hours of pumping

WELL DATA

Well Depth	Casing Diameter (In.)	Casing Length (Ft.)
186'	12"	160'
Type of Casing	**Hole Depth**	**Depth to Static Water Level**
Steel	186'	122'

TYPE OF COMPLETION (Circle One or More):
(Gravel Packed), Underreamed, Telescoped,
Natural Development, Open Hole, Other
(Describe) _____

WELL GROUTED TO A DEPTH OF 50 FEET
Type Grout (circle one): Cement, (Bentonite) or Mix.

LOG DATA

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

Name of Organization Running Log
Layne Central Co

GEOLOGIC DATA (Office Use Only)

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

SCREEN DATA

Diameter - Inches	Length - Feet	Slot Size - Inches
12"	25'	.040"
Screen Type		**Depth to Bottom - Feet**
Stainless steel		186'

Driller's Remarks
one piece 12" well with
50' cemented surface casing

Top of Lap Pipe or Reduction in Casing
none FEET
IF TELESCOPED OR MORE THAN ONE SCREEN: USE BACK PAGE

DESCRIPTION OF FORMATIONS ENCOUNTERED	FROM	TO	FORMATIONS (Continued)	FROM	TO
Please see attached					
			IF MORE SPACE IS NEEDED USE BACK		

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FORMATION LOG OF THE WELL OR TEST HOLE

Drilled for: **Magnolia Energy Ashland, MS** Start 6-12-01 Test Hole Number **1 - Bolden**
Location Bolden Sec 16 TS 35 Range 1E Elevation
Latitude Longitude County Benton Job No

Total Depth	Thickness Each Stratum	Formation	Total Depth	Thickness Each Stratum	Formation Sample
0-17	17	Red Sand Clay			
17-37	20	White Clay & Sand Str			
37-141	104	Sand & Clay Str			
141-176	35	Sand Yellow Clay Str			
176-186	10	Sand & Lig			

TEST DATA

	PRELIMINARY TEST	FINAL TEST
Static Water Level		
Pumped GPM		
Pressure Pounds		
Draw Down		
GPFD		
Guaranteed GPM		
Guaranteed Pressure		
Date of Test	6-28-01	

REMARKS

Days on Job 5
Size Test hole 23
Type Bit Used drag

Driller Barry Crook

Field Supt John Oswalt

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FORMATION LOG OF THE WELL OR TEST HOLE

Drilled for: **Magnolia Energy Ashland, MS** Start 05-10 Test Hole Number **1 - Bolden**
Location Bolden Sec 16 TS 35 Range 1E Elevation
Latitude Longitude County Benton Job No

Total Depth	Thickness Each Stratum	Formation
15	15	Red Sand
38	23	White Sand with Clay Str
205	167	White Sand Small Gravel
241	36	Med to Dark very Sandy Clay
241.5	.5	Green Shale (Hard)
261	19.5	Med to Soft Sandy Clay
261.5	.5	Very Hard Rock
318	56.5	Med to Small Light Colored Sand
402	84	Medium to Large Sand
418	16	Hard Clay

Total Depth	Thickness Each Stratum	Formation Sample
		1. 78-98
		2. 98-118
		3. 138-158
		4. 158-178
		5. 178-198
		6. 198-218
		7. 298-318
		8. 318-338
		9. 338-358
		10. 358-378
		11. 378-398

TEST DATA

	PRELIMINARY TEST	FINAL TEST
Static Water Level		
Pumped GPM		
Pressure Pounds		
Draw Down		
GPFD		
Guaranteed GPM		
Guaranteed Pressure		
Date of Test		

REMARKS

Driller Kevin Mitchell

Field Supt John Oswalt

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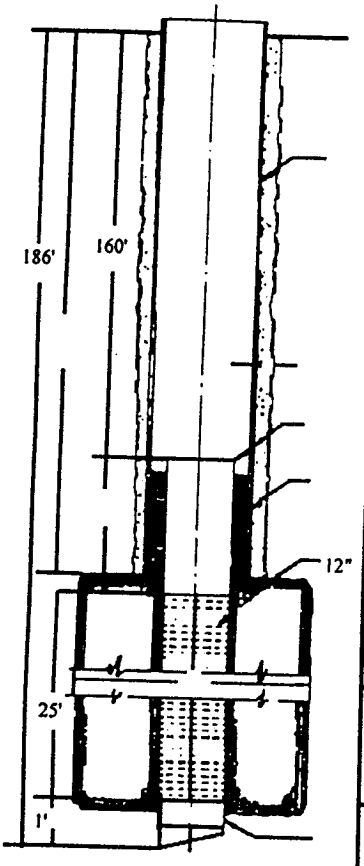
ALL MEASUREMENTS TAKEN FROM (GROUND)

Drawing of the Well



WELL DATA

Started Well 6-12-01 20 01 And Completed 6-18 20 01
Total Depth 186' Elevation ____ Static Water Level 122'
Length Surface Casing 26' Size 50' Thickness .375
Cemented with 4 pallet portland Cement Type Packer ____
Length Well Casing 160' Size 12" Weight .375
Cemented with BULK Cement Type Packer ____
Inner Casing Length ____ Size ____ Weight ____
With ____ Guides Located ____ Type Backoff ____
Lead Seal ____ BackPressure Valve NONE Length 25' Well Strainer
Make HOUSTON WW Size 12" Length 25' Opening 0.040
Type Material SS With Welded Connections
Size Hole Drilled for Surface Casing 32" With Drag
Size Hole Drilled for Well Casing 23" With Drag
Size Hole Drilled for Strainer ____ With ____ Yards of Gravel Used 14 super sack
How Placed Gravel LINE 8-16 How was well developed Air Agitation
Foundation Installed ____ Notes: Gravel well 5' to top cement plug on top
Depth Feeling Line Rods ____ Notes: ____ Rig Used Jet A
Driller Barry Crook Supt John Oswalt

PUMP RECORD

Serial Number ____ Make ____ Foundation ____
Length Column ____ Size ____ Type ____ @ ____ Lengths
Bowl Size ____ Type ____ Stages ____ Material Impeller ____
Material Bowl ____ With ____ Ports and ____ Shaft
Suction Size ____ Length ____ Suction Strainer ____
Is Pump Sealed How ____ Where ____ With What ____
Lubricator Type ____ Size ____ Voltage ____
Length of Airline ____ Size ____ Type Material ____
Air Release Valve Type ____ Size ____
Size Surface Discharge ____ Type ____ Dayton Coupling ____
Pressure Gauge ____ Speed ____
Notes ____
Rig Used to Set Pump ____ Installer ____
Date Pump Installed ____ 20 ____ Date In Operation ____ 20 ____

MOTOR

Make ____ HP ____ Frame ____ Phase ____ Cycle ____ Volt ____
Speed ____ Model ____ Serial Number ____
Top Bearing ____ Bottom Bearing ____ Ratchet ____
Starter ____ Pressure Switch ____ Float ____

GEAR

Make ____ Model ____ HP ____ Serial Number ____
Size Pulley ____ Type Motor Frame ____

ENGINE

Make ____ Model ____ HP ____ Serial Number ____
Speed ____ Size Pulley ____ Foundation ____
Type Fuel Tank ____ Make Mag ____ No. ____
Make Starter ____ No. ____ Type Fuel ____
Make Flexible Shaft ____ Size ____ Length ____ Belt Length ____

GENERAL

Purpose for which this water is used ____
Temperature ____ Is Water Clear Yes Capacity ____
Sand No Hardness -- PH -- Iron -- NaCl --
Type Treatment used ____
Is there a derrick over the well ____ Height ____ Type ____
Can a Truck or Rig easily get to the well ____
Pump House ____ Size Hatch ____

CONTRACT NO 57 - 5094

Our Well No. ____ Their Well No. ____ In Test Hole No. 1

Location of the Well Bolden #1

Installed For Magnolia Energy

Address City Ashland County Benton State MS

Year 2001

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