WELL RECORD

Iowa Department of Natural Resources – Geological Survey
109 Trowbridge Hall, Iowa City, IA 52242-1319 PH (319) 335-1575

PWTS Well No. W2005-100

PWTS Permit No. 2005-091W

County Permit No. _____

Site identification

Property Owner CITY OF MOORLAND Other ID WELL #A

Address 724 GRAND AVE, PO BOX 128

Tenant SAME

Well Depth 425 ft Date completed 12/12/04

Location

County WEBSTER

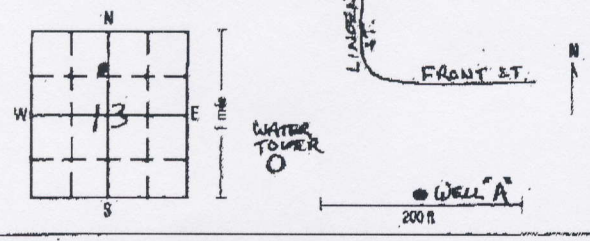
150' (ft) N (S) and 20' (mi) E (W) of intersection of LINDEN ST. and FRONT ST.

NE 1/4 of the NE 1/4 of the NW 1/4 of Sec 13 TWP 88 RNG 30 E (W)

GPS Coordinates (NAD83 datum only) decimal degrees:

_____ N. Latitude _____ W. Longitude.

Show exact location of well in section grid with a dot (•). Sketch map of well location on property.



☐ upland ☐ hillside ☐ valley ☒ level surface. Elevation (if known) _____

Formation log

From	To	Color	Hardness	Formation description
0	168'			TILL/CLAY
168'	173'	BLK.		SHALE
173'	178'	GRAY		SANDSTONE W/CLAY
178'	254'	BLK.		SHALE
254'	290'			SHALE W/LIMESTONE
290'	295'	BLK		SHALE
295'	425'			LIMESTONE W/SHALE

8" LINER WAS INSTALLED TO CASE OFF A SHALE ZONE BELOW ORIGINAL 10" CASING. BOTTOM OF OPEN HOLE WAS BACKFILLED WITH A GROUT PLUG TO APPROX. 405' TO ISOLATE ANOTHER SHALE ZONE AT THE BOTTOM OF THE ORIGINAL OPEN HOLE. SEE ATTACHED DETAIL

use additional sheets as needed

Remarks (including depth of lost drilling fluids, materials, or tools)

Well use

☐ Domestic ☐ Livestock ☐ Test well
☐ Heat pump ☒ Municipal ☐ Public supply ☐ Irrigation
☐ Commercial ☐ Monitoring ☐ Other _____

Drill method

☒ rotary ☐ auger ☐ cable other _____

Hole size

14	inch	from 0 ft	to 267 ft		
9 3/4	inch	from 267 ft	to 425 ft		

hole size continued

____	inch	from ____ ft	to ____ ft		
____	inch	from ____ ft	to ____ ft		

Record all depth measurements from ground level (GL). Use (+) for above GL measurements.

Casing

Drive shoe (yes / no) Fitted w/ adapter (yes / no)

Size (ID/OD)	Type / Wt	Depth top	Depth bottom	Amount (length)
10.75"	0.365"	0	267'	267'
8.625"	0.322"	0	295'	295'

Perforated or slotted casing? (yes / no)

Perforated / slotted from _____ ft to _____ ft

Perforated / slotted from _____ ft to _____ ft

Casing grouted? (yes / no) Placement method PRESSURE - TREMIE

Type	Depth top	Depth bottom	Amount (vol/wt)
NEAT CEMENT	0	267'	6 cyd.

Well screen? (yes / no)

Diameter	Slot size	Depth top	Depth bottom	Length	Material
	0.____				
	0.____				

Bottom capped (yes / no) with _____

Seals / Packers (yes / no) kind _____ depth _____ ft

Gravel packed (yes / no) from _____ ft to _____ ft

type _____ amount _____

Well developed? (yes / no)

Explain AIRLIFTED & PUMPED

(pumped / airlifted / bailed) for 4 hrs at 150+ GPM

Pump installed? (yes / no) Date 11/9/06

Installer's name RODNEY RAY

Type of pump SUBMERSIBLE Depth to intake 390 ft

Pump diameter 6" Rated capacity 75 GPM

Water information

Aquifer: ☐ sand / gravel ☒ limestone ☐ sandstone

Main water-supply zone from 375 ft to 400 ft ☐ seepage well

Static water level 204 ft (below / above) GL: ☐ tape ☐ airline ☒ E-line ☐ estimate

Pumping water level 272 ft below GL: ☐ tape ☐ airline ☒ E-line ☐ estimate

At yield of 143 GPM: ☒ orifice ☐ volumetric ☐ estimate for 9 hours

Measurements taken at _____ (AM / PM) Date 1/6/05

Water quality test? (yes / no) Date tested ___/___/___

Tested by BY OWNER/ENGINEER

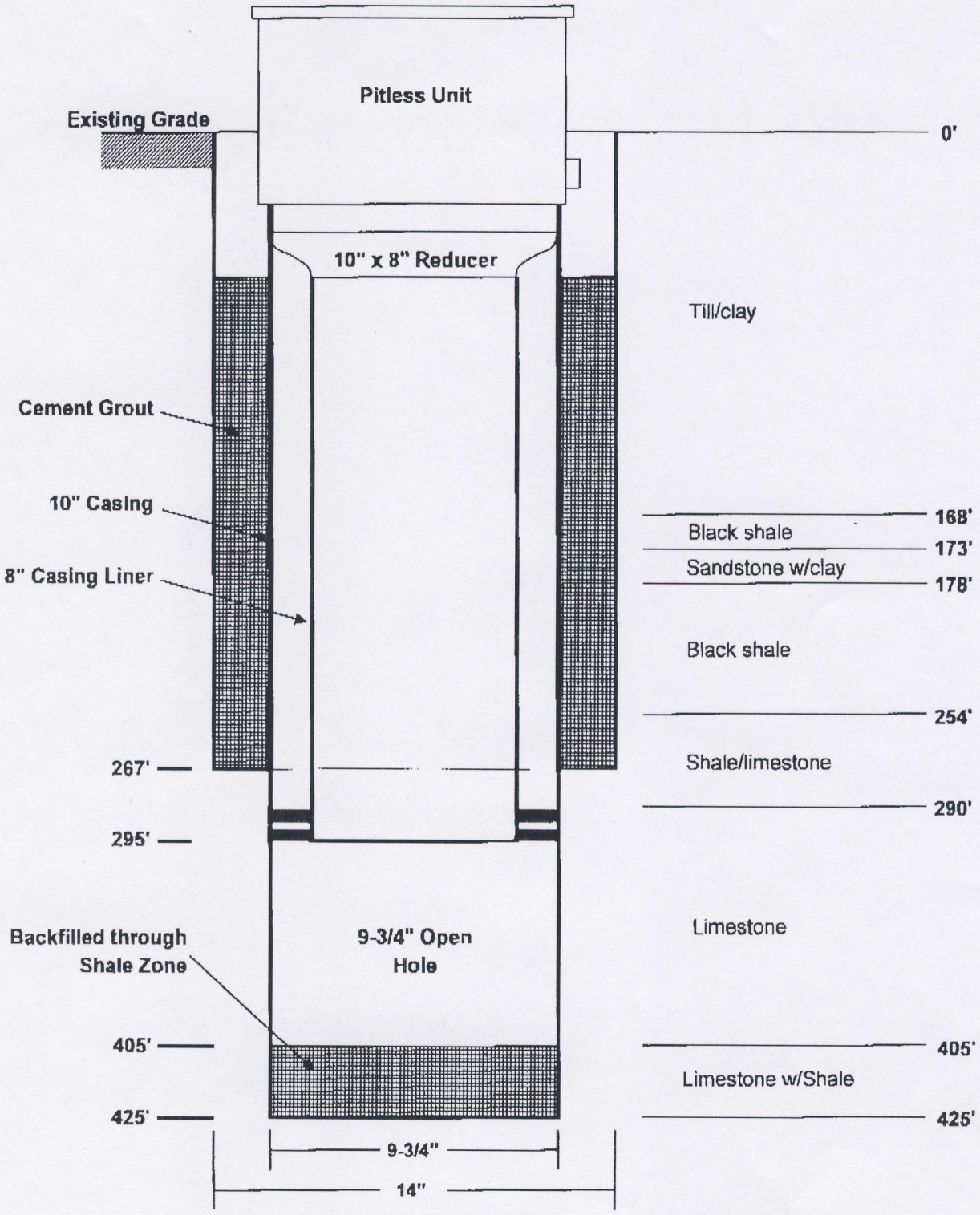
Contractor LAYNE-WESTERN

Address 5000 GATEWAY DR., STE. B, GRIMES, IA

Driller MARK LESLIE Certification no. 3684

Send original form to: **Iowa Department of Natural Resources – Geological Survey** Make photocopies for: **Well Contractor, Customer, and County Health Department**

FINAL WELL CONSTRUCTION DETAIL
CITY OF MOORLAND, IOWA
WELL "A"



NOT TO SCALE