

GROUNDWATER PROTECTION DETERMINATION

Form GW-2



Groundwater Advisory Unit

Date Issued: 29 August 2019**GAU Number:** 251300

Attention: CIMARRON ENGINEERING,
PO BOX 1536
KINGSVILLE, TX 78364

API Number:
County: BRAZORIA
Lease Name: Blackstone 156

Operator No.: 153471

Lease Number:
Well Number: 1
Total Vertical Depth: 6800
Latitude: 29.211882
Longitude: -95.129019
Datum: NAD27

Purpose: New Production Well**Location:** Survey-Swingle, A.; Abstract-369

To protect usable-quality groundwater at this location, the Groundwater Advisory Unit of the Railroad Commission of Texas recommends:

TAC Title 16 Chapter 3 (a)(2)(C) Protection depth--Depth to which usable-quality water must be protected, as determined by the Groundwater Advisory Unit of the Oil and Gas Division, which may include zones that contain brackish or saltwater if such zones are correlative and/or hydrologically connected to zones that contain usable-quality water.

The GAU has very little shallow data in this area and requests your assistance in obtaining more complete data. Having more complete information would result in more accurate groundwater protection determinations. Therefore, GAU requests that you consider logging the shallow portion of this well from the surface to a depth of 1,000 feet and provide this log to the RRC. Further, to obtain valuable information from the shallow logged section, drill the well in a manner that does not result in extensive drilling fluid infiltration. Infiltration of about 60 inches results in the water quality calculations being equivalent to the resistivity of the drilling fluid and degrades GAU's ability to assess formation water.

Usable-quality water occurs from the land surface to a depth of 1000 feet. Moreover, the Chicot, which is estimated to occur from 650 feet to 1000 feet, contains water of superior quality which must be isolated from water in overlying and underlying beds.

This recommendation is applicable to all wells within a radius of 500 feet of this location.

Groundwater Advisory Unit, Oil and Gas Division

Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. Unless stated otherwise, this recommendation is for normal drilling, production, and plugging operations only.

This determination is based on information provided when the application was submitted on 08/23/2019. If the location information has changed, you must contact the Groundwater Advisory Unit, and submit a new application if necessary. If you have questions, please contact us at 512-463-2741 or gau@rrc.texas.gov.