

Drilling Insight and Surface Casing Estimator Webpage and Tool Overview

Royce Massey, GIT Geographic Information Specialist Railroad Commission of Texas April 2024











Purpose of Drilling Insight and Casing Estimator

 Main purpose is to provide operators with an estimate of protected water depths to gauge the cost of drilling materials

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- Inform users of special drilling requirements and hazards/alerts
- Hub for geologic and groundwater information
- Serves as a research site for multiple disciplines

Navigating to the Drilling Insight and Casing Estimator 1 of 4 the second Google beg drilling insight and surface casing estimator £3 Sign in Images Videos Shopping Forums : More Tools SafeSearch -About 1,070,000 results (0.37 seconds) Search "beg Drilling Insight Bureau of Economic Geology 0 https://www.beg.utexas.edu > sce Surface Casing Estimator and Casing Estimator" This web site provides operators with an estimate of casing depths to assist in obtaining the Groundwater Protection Determination Letter (pdf) Search "beg dice" The University of Texas at Austin \odot https://coastal.beg.utexas.edu > surfacecasing RRC Drilling Insight and Casing Estimator (DICE) Search "beg surface casing Railroad Commission of Texas Drilling Insight and Casing Estimator (DICE) ... There are currently no items to display. BEG Logo ... Nothing to see here! Casing estimator" The Railroad Commission of Texas (.gov) https://www.rrc.texas.gov > groundwater-advisory-unit Geologic Advisory Unit . Surface Casing Estimator Site to share hydrogeologic, geophysical, and drilling alert Search will return Welcome/Home information. The GAU maintains and improves its general geologic . Missing: insight | Show results with: insight Page People also ask : Direct URL What is the surface casing of drilling? \sim https://www.beg.utexas.edu/sce What is the purpose of surface casing? \sim

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What is the diameter of surface casing?

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NERGY	ABOUT US-	RESOURCES -	FORMS	EVENTS -	COMPLAINTS	ACCIDENTS -	CONTACT US	
Ground	dwater Adv	isorv Unit					GAU LINKS	
(GAU)							Geologic Advisory Unit	
	1 2 8 01111 PMT & 168,228,411						GAU Payments	
The Groundwate other undergrou	er Advisory Unit (GAU) prov and activities. The GAU also	vides Groundwater Prote o processes SWR 101 Se	ction Determinati verance Tax Appl	ons for surface casi ications.	ng, underground injection	and	North Central Texas Area Groundwater Protection Determination	
If you are an oil o	or gas operator in Texas, tl	he Railroad Commission	of Texas may rec	uire you to obtain a	Groundwater Protection		GAU Oil & Gas Waste Disposal Well Letter	
Determination (F	Form GW-2), which states t	the base of usable-qualit	y groundwater an	d additional isolatio	n zones that should be pro	otected	GAU Determination for a Seismic Survey	
for a well or mul	Itiple wells within a specifie	ed area.					Creating a Social Map	
Please note that	t many of the recommenda	ation letters issued by the	e GAU are applica	ble to wells within th	ne area specified, such as	а	creating a Scaled Map	
survey section, r	radius, or lease. If no area	is specified, the letter ap	plies to wells wit	nin 200 feet of the lo	ocation coordinates. To sa	ave	Using the RRC Public GIS Viewer	
time and expens	se, consider using the "Sea	rch: All Applications" fur	iction of the onlin	e GW-1 system to fir	nd existing letters that may	y be	Submitting Well Logs Online	
location. Genera	ur wen. Recommendation ally speaking, a GW-2 is va quire a more recent letter :	letters (Gw-2s) are not s lid for a period of 5 years at their discretion	from the date of	issue, however, a Rf	RC District Office may acc	ept an	Instructions for Completing Form GW-1	
	quire a more recent letter (Researching Groundwater Protection	
Note also that m	nany of our letters may be	used for several purpose	s in common, su	ch as those for New	Production Well, Plug and		Determinations and Data	
Abandon, Recon	npietion, and Disposal/Inje	ection Well Pressure Test	(H-5). GW-2 lette	ers issued for lest o	n inactive Well (H-15) fluid	h over		
a large area and	are expressly limited to the	hat purpose only. These	links show how t	o search for previou	isly issued GW-2 letters an	d GW-	SURFACE CASING ESTIMATION	
2 examples. Ple	ease contact the GAU Unit	if you are unsure if an ex	isting letter may l	be used for your well	l or purpose.		Drilling Insight and Casing Estimator (DICE)	
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Drilling Insight and Casing Estimator Homepage



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Home

Drilling Insight and Casing Estimator (DICE)

This web site provides operators with an estimate of casing depths to assist in obtaining the Groundwater Protection Determination Letter (pdf).

All estimates derived from this Web site must be verified by the RRC Groundwater Advisory Unit Team and final recommendations will be provided in the Groundwater Protection Determination Letter.

Railroad Commission of Texas regulations require that anyone drilling for oil and gas or reentering an existing oil and gas well must have a plan for the well design that is approved by the RRC. Part of the plan must include use of surface casing and cement to protect fresh water (generally a salinity of less than 1000 mg/I TDS) and useable quality water (generally a salinity of less than 3000 mg/I TDS). Surface casing also helps protect the well from caving in and blowing out.

The well operator must have a letter from the RRC Groundwater Advisory unit, which is then provided to the RRC, which outlines where fresh and usable-quality water is located. The RRC uses the recommendations in the Groundwater Protection Determination Letter for designing well requirements.

For a full explanation of the procedures and available resources for obtaining the Groundwater Protection Determination Letter, please visit the **RRC Groundwater Advisory Unit page** that includes sample application forms, surface casing rules, expedited application procedures, and contact information.

To acquire surface casing information, click the map below:



Click Here



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Go to the Drilling Insight and Casing Estimator (DICE) >

This site is prepared in cooperation with the Railroad Commission of Texas and was financed through funds from the Railroad Commission of Texas and the Texas Commission on Environmental Quality.

Effective September 1, 2011, the Drilling Insight and Casing Estimator (DICE) project is coordinated through the RRC Groundwater Advisory Unit. Prior to September 1, 2011, the Drilling Insight and Casing Estimator (DICE) project was coordinated through the Texas Commission on Environmental Quality.

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Drilling Insight and Casing Estimator Default Layers

Drilling Insight and Casing Estimator (DICE)

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Drilling Insight and Casing Estimator Alert Layer

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Drilling Insight and Casing Estimator Alert Layer

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Drilling Insight and Casing Estimator Survey Layer



Drilling Insight and Casing Estimator Groundwater Pick Layer





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Set Area of Interest Tool



DICE Groundwater Pick Data Export Table for Q-30a

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Longitude	Latitude	OBJECTID	PickName	TopOrBase	PickDepthGsfc	GroundSurfaceElev	QNum	County	QWellId	PickElevMSL
-102.6964771	31.58518285400004	25703	Santa Rosa	base	291.3276633	2720.297363	Q-30a	CRANE	29141	2428.9697
-102.6964771	31.58518285400004	25702	USDW	base .	346.8246633	2720.297363	Q-30a	CRANE	29139	2373.4727
-102.6964771	31.58518285400004	25701	Rustler	base	1643.577063	2720.297363	Q-30a	CRANE	29138	1076.7203



Surface Fault Layer

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TWDB Groundwater TDS Database Layer

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Minor Aquifers of Texas Layer



Major Aquifers of Texas Layer

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Using the Casing Depth Tool



Casing Query Result

Well Casir	ng Result
Longitude	-95.60722
Latitude	29.75356
Ground Elevation	82 ft.
Aquifers	Gulf Coast Aquifer
Base of Fresh Water Isolation Zone	1565' Depth (1483' Below MSL)
Protected Base of Usable Quality Water (BUQW)	2470' Depth (2389' Below MSL)
Base of USDW	2945' Depth (2864' Below MSL)
The base of the Fresh water is estimated to occur at a depth of 1505 it	eet (1483 feet Below MSL).
The base of the Usable Quality Water is estimated to occur at a depth of 1965 in The USDW (10,000 ppm TDS) is estimated to occur at a depth of 2945	eet (1483 feet Below MSL). of 2470 feet (2389 feet Below MSL). feet (2864' Below MSL).

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Casing Query Result w/ Warning Notice(s)

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1/19/24, 2:30 PM RRC Dri	Iling Insight and Casing Estimator (DICE)			
Well Ca	asing Result			
Longitude	-99.72083			
Latitude	28.30821			
Ground Elevation	614 ft.			
Aquifers	Carrizo and Wilcox			
Top of Carrizo isolation interval	1175' Depth (561' Below MSL)			
Bottom of fresh water isolation interval	1633' Depth (1019' Below MSL)			
Protected Base of Usable Quality Water (BUQW)	1966' Depth (1352' Below MSL)			
Base of USDW	2765' Depth (2150' Below MSL)			
The base of the Usable Quality Water is estimated to occur at a dep The USDW (10,000 ppm TDS) is estimated to occur at a depth of 27	oth of 1966 feet (1352 feet Below MSL). 65 feet (2150' Below MSL).			
Protect to the Base of Glen Rose if encountered.				
Injection wells have additional requirements for isolation from Base of Usable-Quality water (BUWQ) and Underground Source of Drinking Water (USDW). In cases where the depth to BUWQ/USDW is not indicated consult the Groundwater Advisory Unit (GAU) at 512-463-2741. For a more detailed description of the H-1/W-14 forms requirement for underground injections click <u>here.</u>				
Note: This is an approximate recommendation and is subject to confirmation by a <u>RRC Groundwater Advisory Unit</u> (formerly TCEQ Surface Casing) geologist. An isolation buffer zone has not been included in these recommendations. Surface casing query tool result(s) are not				
https://coastal.beg.utexas.edu/surfacecasing/casing/28_308213626596043/-99_72082903778283	1			
V19/24, 2:30 PM RRC Dri applicable for salt structures at this time.	iling Insight and Casing Estimator (DICE)			

Full Extent Button

Drilling Insight and Casing Estimator (DICE) XY Ozark Las Vegas Colorado Tulsa Plateau Plateau Oklahoma Santa Fe Oklahoma City Arkansas Canadian 0 Albuquerque Amar Ilo Memphis 0 Fancisco Plateau Little Rock Ouachita Mountains New Mexico Arizona Lubbock Phoenix 0 1 Diego Sonoran Mexicali Mississippi Desert Jackson Tucson 0 Millan Juárez Louisiana Edwar Baton Rouge Plateau New Orleans Hermosillo Bahia Chihuahua Sebastian Viscaino Gulf of California BUREAU OF ECONOMIC GEOLOGY 36.066541°N, 116.468442°W 200 km DD \wedge 100 mi Monterrey

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sri, USGS | Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS

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Go to Latitude/Longitude Button



Go to County Button



Find Wells by API Button



Frequently Asked Questions

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Drilling Insight and Casing Estimator (DICE)

Frequently Asked Questions

This application says that there are scanned logs from a county where no well markers are shown. How can I get access to these scans? To access scanned logs from counties where interpretation has not yet been completed, you will need to contact the <u>Railroad Commission Groundwater</u> <u>advisory unit</u>.

What is the coordinate system used in the exported pick data? Data are exported in the WGS84 (EPSG 4326) coordinate system.

Can I download the full underlying data from this application?

No. The data used to generate this application's recommendations are arranged in such a way that they are not usable without the application to provide context. As such, they are not made available for download by members of the public. The application does provide a means of downloading a subset of those data in a more user-friendly format by using the "area of interest" tool.

What do the "SWR 101 Area Designation Polygons" layers represent?

2.000 ft

The reduction or elimination of state severance taxes provides an economic incentive to operators to undertake activities that produce oil and gas resources that otherwise might remain unrecovered. Texas recognized back in the late 1980's that incentives to increase the state's oil and gas production were extremely valuable. Economic studies have shown that for each dollar invested in the oil and gas industry and for each dollar of production, there is a positive

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ri, NASA, NGA, USGS, FEMA | Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, Foursquare, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

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Questions?

Contact Information

royce.massey@rrc.texas.gov Phone: 512-463-6921