

840 West Sam Houston Pkwy North Suite 600 Houston, Texas 77024-4613 Telephone: +1 281 600 1000 Fax: +1 281 520 4625

www.erm.com

11 October 2023

Stephen Lee, Director Louisiana Department of Natural Resources Office of Conservation – Injection & Mining Division 617 North Third Street, LaSalle Building Baton Rouge, Louisiana 70802-5401 ERM

Reference: 0701093

Subject: Water Well Survey Results

Compliance Order No. IMD 2022-027

Westlake US 2, LLC Sulphur Mines Salt Dome Calcasieu Parish, Louisiana

Dear Mr. Lee:

Environmental Resources Management Southwest, Inc. (ERM), on behalf of Westlake US 2, LLC (Westlake), is pleased to provide the results of the water well survey conducted within one mile of the Sulphur Mines salt dome. This survey was conducted in response to the January 19, 2023 Louisiana Department of Natural Resources (LDNR) Office of Conservation's First Supplement to Compliance Order No. IMD 2022-027.

## 1. SITE SETTING

The Sulphur Mines salt dome is located approximately 2 miles northwest of the City of Sulphur, Louisiana (Figure 1). Economic production of minerals (sulfur, oil and gas, and brine) from within and surrounding the salt dome has been occurring since the early 1900s and continues presently. For brine production, Westlake currently utilizes groundwater from five industrial water wells installed in the 500-foot sand of the Chicot aquifer. The brine caverns within the salt dome are generally greater than 2,000 feet below ground surface (bgs).

The primary source of municipal drinking water supply in the vicinity of the salt dome is the Chicot aquifer, which is also used for industrial, irrigation, and domestic purposes. According to the USGS (*Water Resources of Calcasieu Parish, Louisiana*, January 2017), in 2015 approximately 86 million gallons per day were pumped from the Chicot aquifer system in Calcasieu Parish, with approximately 25 million gallons per day used for public supply (27% total withdrawal). The City of Sulphur utilizes as many as seven water wells for public supply, all of which are screened in the 500-foot sand of the Chicot Aquifer and located approximately 2.5 miles to the southeast of the Sulphur Mines salt dome (see Figure 1). The Houston River Waterworks District 11 utilizes two water wells installed in the 500-foot sand for public supply which are located approximately 2 miles northeast of the salt dome (see Figure 1). Two industrial wells operated by Boardwalk for brine production are located approximately 1.1 miles south of the Sulphur Mines salt dome.

Per the Louisiana Department of Environmental Quality (LDEQ) Risk Evaluation/ Corrective Action Program (RECAP) groundwater classification guidance, water wells and groundwater usage are to be identified within a one-mile radius of the property boundaries. For this survey, the one-mile radius was drawn around the 1,500-feet deep salt contour. Numerous water wells are registered as active within one mile of the salt dome (Figure 2).

Page 2 of 5

## 2. MUNICIPAL WATER SUPPLY

Per the Louisiana Department of Health, there are 44 active public water supply systems in Calcasieu Parish including 11 Calcasieu Parish Waterworks Districts that provide potable water to the residents within their district boundaries and service areas (Figure 3). The majority of properties within one mile of the Sulphur Mines salt dome are within the Houston River Waterworks District 11 boundary. A small percentage of the properties within the one-mile radius is serviced by the City of Sulphur Water System.

## 3. WATER WELL SURVEY

To better understand groundwater usage, ERM conducted a water well survey by contacting property owners within a one-mile radius of the salt dome per RECAP section 2.10 for groundwater/aquifer use classification. Properties selected were wholly or partially within one mile of the 1,500-feet bgs salt contour. The water well survey consisted of a cover letter and survey form mailed to property owners, followed by a visual inspection and face-to-face follow-up visit, as necessary. A copy of the cover letter and survey form is provided in Attachment 1.

## 3.1 Mailing

In July 2023, ERM mailed a survey to the residents of Sulphur, LA within a one-mile radius of the Sulphur Mines Dome brine facility to determine the presence of private water wells (Figure 4). The properties were identified utilizing publicly-available Calcasieu Parish records and are listed in Table 1. Properties were identified by the Tax Assessment Number. Several individual parcels have the same Assessment Number and were considered as one "property". Letters were sent to 111 property owners and 17 property residents, representing 139 total unique properties. In cases where the owner address and the property address were different, a letter was sent to both the owner address and the physical property address. Responses to the letter survey were received by for 34 properties (Figure 4).

## 3.2 Follow-up Property Visit

Following the letter survey, a site visit was conducted to contact property owners/residents who were sent a letter but provided no response. During the visit, the property owner/resident was directly communicated with, if available. If the owner/resident was not available, a follow-up letter was left at the property, and a general visual observation was conducted to identify the presence of a water well and/or evidence of municipal water service. Seventy-two (72) of the properties were visited in person as shown on Figure 4. Thirty-nine (39) properties where no response was received were identified as having no visible infrastructure, mailbox, or access and were not visited (Figure 4). A few individual properties with multiple parcels under the same Assessment Number were also visited.

#### 4. KNOWN WELL SEARCH RESULTS

LDNR records indicate 48 active water wells within a one-mile radius (see Figure 2). Of those 48, seven are listed as active industrial/chemical manufacturing, two as rig supply, two as public supply, one as irrigation, two as domestic, one as unknown/other, 32 as monitoring wells, and one as an abandoned observation well. Efforts were made to locate each of these active 47 wells to verify status and use. The water well search results are illustrated on Figure 5.

Page 3 of 5

Five of the seven registered industrial wells were located in the field (the five industrial wells used by Westlake for brine operations). The remaining two industrial wells (019-104, and 019-103) were not found. A sketched map on the historical well records for 019-102 indicates that these 2 wells were located along an old service road north of where they are plotted on SONRIS (see Figure 5). Multiple attempts were made to locate these wells in both the SONRIS and replotted locations, but they could not be found. The area is heavily overgrown with vegetation and access is difficult. ERM identified no individuals with knowledge of these wells or their use. These wells were not found and are likely plugged and abandoned; however, the status could not be confirmed. Two industrial wells just outside the one-mile radius (019-1483 and 019-1489) are active and are currently operated by Boardwalk.

The two registered oil and gas rig supply wells (019-466 and 019-467) were not located. Based on the historical well records, the locations where these wells were installed appears to be in the central portion of the dome (see Figure 5). ERM identified no individuals with knowledge of these wells, and they are likely plugged and abandoned.

One of the wells listed as commercial public supply (019-1054) was not found. Based on the historical well records, this well appears to have been the public supply well for sanitary facilities in the office, control room, and other support buildings on the dome (formerly owned and operated by PPG). This well appears to have been located southeast of the current Westlake office building but is no longer present (see Figure 5). ERM identified no individuals with knowledge of this well. It is likely that this well is plugged and abandoned. The other well is registered as public supply (019-1261) for the Sulphur Police firing range. ERM was unable to gain access to this property; however, the well is visible on the current and historical aerial imagery, and it is assumed that this well is still active.

The single irrigation well registered within one mile of the salt dome (019-1238) was not located as plotted. Based on the historical well file, this well was installed in Township 9S, Range 7W, Section 22, which is located approximately 3 miles northwest of the town of lowa. This well appears to be mislocated on the map, based on incorrect coordinates provided on the well registration form.

Two domestic wells are registered as active near the salt dome (019-6559Z and 019-7624Z). Well 019-6559Z was potentially located. A capped pipe with a concrete pad and what appeared to be cut electrical conduit was identified as potentially being the registered well. There was no indication of an actively used water well in the vicinity of the registered well. No owner or resident was present or could be contacted regarding the well. The other well, 019-7624Z, was not located in the field. A resident was contacted at the property with no knowledge of the well. The owner of the well was not available at the time. It is assumed that this well is still active but not used for domestic purposes.

The well listed as unknown/other (019-17636Z) was a previously unregistered well and was referred to as the Cottages well. This well has been included in the groundwater regular groundwater sampling program. According to the records, and verbal communications, this well is installed in the 700-foot sand of the Chicot aquifer. This well supplies water for 8 cottages located approximately 1,000 feet west of the salt dome. The cottages are not continuously occupied; however, per RECAP this well would be classified as a public water supply well, serving more than 6 households.

Page 4 of 5

Efforts were made to locate the shallow monitoring wells located on and near the salt dome. Historical records indicate that there were 21 monitoring wells installed on and near the dome during the investigation work conducted by Meridian Oil in the early 1990s. Two were listed as plugged and abandoned (019-8293Z and 019-8298Z), and no registration records were found for MW-4. Many of these wells were located, but there were several that could not be found. Some have been damaged or plugged. The single abandoned observation well (019-102) was not located, as the area was heavily vegetated and difficult to access. Based on the sketched map on the historical well records this well appears to be installed north of the coordinates listed in SONRIS (see Figure 5). Monitoring wells installed along the pipeline right-of-way east of the salt dome are still present. The status of the monitoring wells is shown on Figure 5.

### 5. PROPERTY SURVEY RESULTS

The results of this survey yielded a current total of 55 responses. Of the 141 properties, only five properties were identified as having unregistered wells not previously known.

The parcel numbers and street addresses of these properties are as follows:

- <u>01163787 (1830 W. Burton St.)</u> not in use, located 60 ft behind the house.
- 01163922 (1831 W. Burton St.) not in use, located back near a pond. City water meter also observed.
- 01234544 (1541 W. Burton St.) unable to verify location or use. A resident was spoken to, but the property owner having knowledge of the well was unavailable. According to the historical records, well 019-7624Z is located in the immediate vicinity of this property and could be the well on the property. The location of the well on the property was not known, and ERM was unable to verify if the well was 019-7624Z or another well.
- 01353480A (1545 N. Claiborne St.) domestic well actively used. One well is already registered on the property (019-13434Z); however, a different well was identified during the survey. Both wells are outside the one-mile radius.
- 01234528 (450 Kim St.) plugged & abandoned (not shown on Figure 5) and unable to verify if this well had been registered previously.

### 6. CONCLUSIONS

The majority of the properties utilize municipal water, primarily from Houston River Waterworks District 11, as confirmed verbally by residents or after a brief visual inspection of the property. The known water wells present within a one-mile radius of the salt dome are shown on Figure 6. Only two known water wells (019-176363Z, and 019-1261) within one-mile of the salt dome are used for public water supply. There is still uncertainty about the presence and potential use of water well 019-7624Z and the well at 1541 W. Burton St.

Page 5 of 5

If new information becomes available, these survey findings will be revised and resubmitted. Should you need additional information or wish to discuss, please contact Scott Himes at scott.himes@erm.com or (832) 209-8811.

Yours sincerely,

Scott A Himes, P.G.

Managing Technical Consultant, Hydrogeology

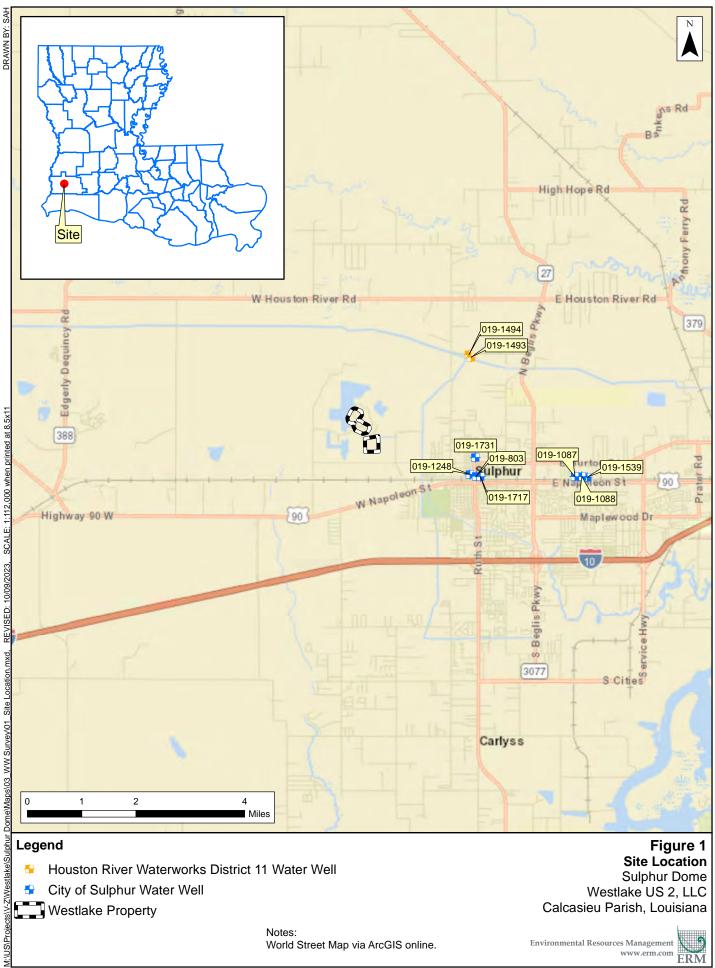
Tril C. Matigne David C. Upthegrove, P.G.

Partner





**FIGURES** 



Houston River Waterworks District 11 Water Well

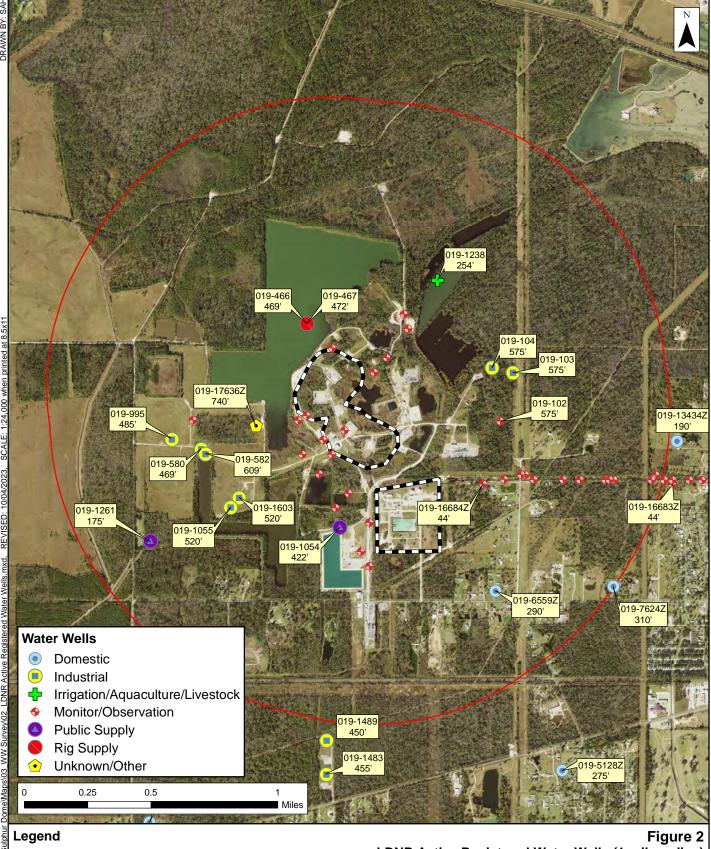
City of Sulphur Water Well

Westlake Property

Notes: World Street Map via ArcGIS online.

Site Location Sulphur Dome Westlake US 2, LLC Calcasieu Parish, Louisiana





Salt Dome 1-mile Radius

Westlake Property

## LDNR Active Registered Water Wells (1-mile radius)

Sulphur Domé Westlake US 2, LLC Calcasieu Parish, Louisiana

Notes:

Water wells obtained from LDNR SONRIS database. Only active wells shown. Shallow Monitoring wells (<30') not labeled. 2021 Aerial imagery via USGS Earth Explorer (NAIP).

Environmental Resources Management www.erm.com



1-mile Radius around Sulphur Mines Dome

City Limits

Ward Boundary

Parish Boundary

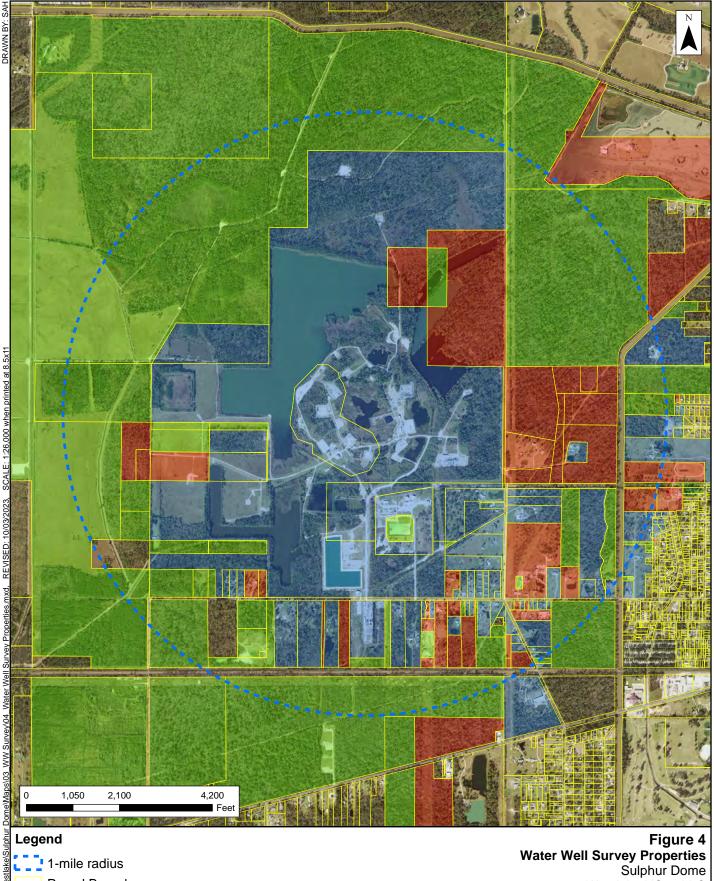
#### Notes:

Waterworks Districts boundaries via Calcasieu Parish Police Jury (https://www.calcasieu.gov/services/special-service-districts/waterworks)

# Figure 3 Calcasieu Parish Waterworks Districts

Sulphur Dome Westlake US 2, LLC Calcasieu Parish, Louisiana

Environmental Resources Management www.erm.com



## Parcel Boundary Letter Response Visited Property

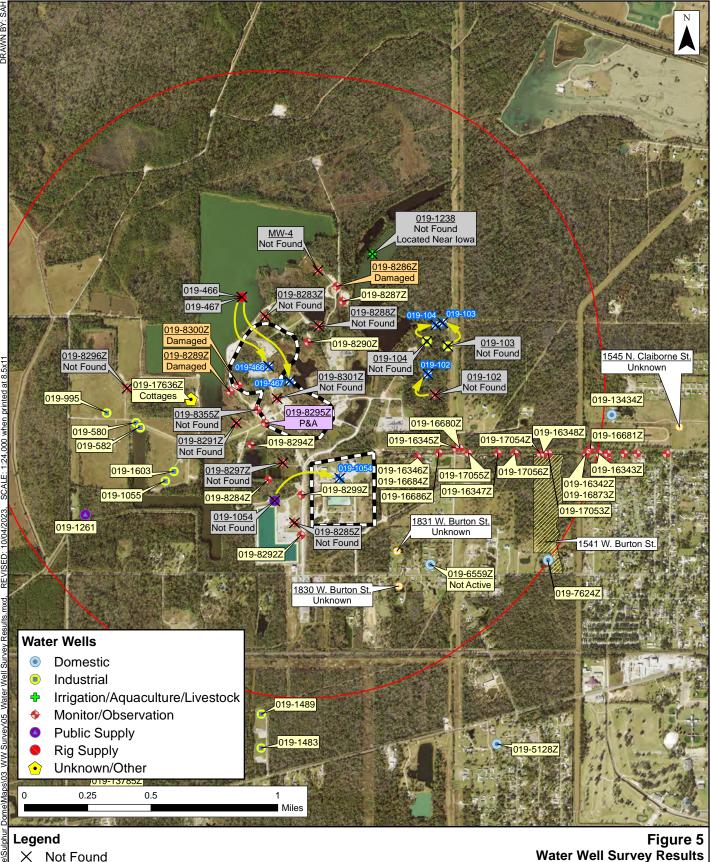
Not Visited

Notes: 2021 Aerial Imagery (NAIP).

Westlake US 2, LLC Calcasieu Parish, Louisiana



Source: ESRI - ArcGIS Online; NAD 1983 UTM Zone 15N



Alternate Location

Well Reported, unknown location

Westlake Property
Salt Dome 1-mile Radius

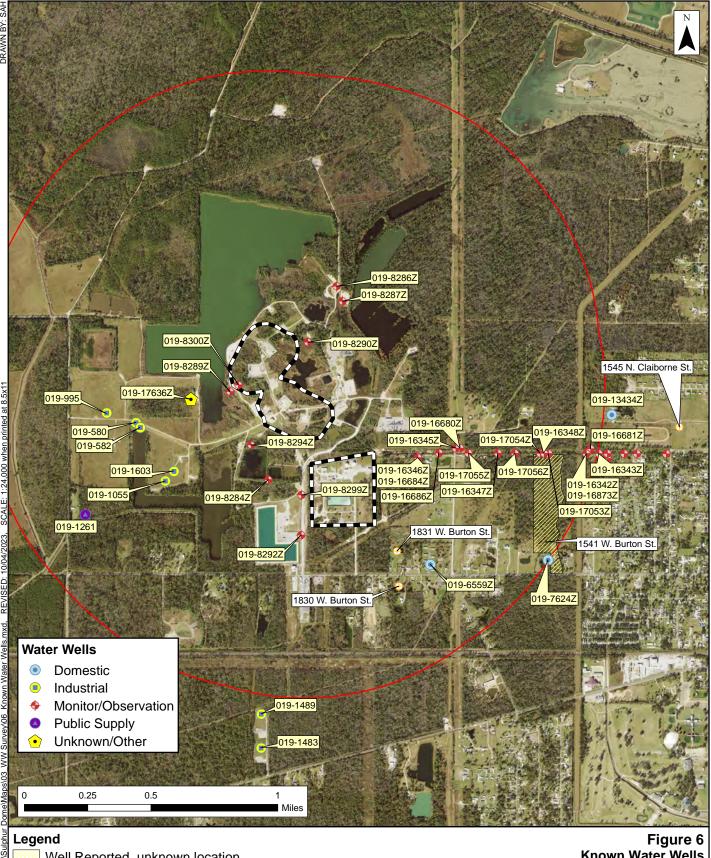
Notes:

Water wells obtained from LDNR SONRIS database. Only active wells shown.

2021 Aerial imagery via USGS Earth Explorer (NAIP).

Water Well Survey Results
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Louisiana





Well Reported, unknown location
Westlake Property

Salt Dome 1-mile Radius

Figure 6 Known Water Wells Sulphur Dome Westlake US 2, LLC Calcasieu Parish, Louisiana

## Notes:

Water wells obtained from LDNR SONRIS database. Only active wells shown.

2021 Aerial imagery via USGS Earth Explorer (NAIP).

Environmental Resources Management ). www.erm.com



## **TABLE**

Contacts within 1-mile Radius of Sulphur Salt Dome													
Address 1	Address 2	Address 3	Property City	Property State	Property Zip	Assess No. 1	Assess No. 2	Assess No. 3	Assess No. 4	Assess No. 5	Response	Wells on Property?	Notes
2201 W Burton St	SE Quarter of Section 19		Sulphur	LA	70663-8402	00115924	01323552				Visual Inspection	00115924 - No Unknown 01323552 - Likely No	00115924 - Several Registered Wells 01323552 - Unimproved
2443 W Burton St			Sulphur	LA	70663-8407	00139696					Yes	No	
2731 Edgerly Dequincy Rd			Vinton	LA	70668-5349	00152188					No	Unsure	Left additional letter, unimproved
1011 Mini Ranch Ln			Sulphur	LA	70663-1169	00175102A					Yes	No	
1001 Mini Ranch Ln	NE Quarter of Section 28		Sulphur	LA	70663-1169	00175102U	00175102V				00175102U - Yes 00175102V - No	00175102U - No 00175102V - Likely No	
106 Terrace St			Sulphur	LA	70663-1041	00530344					Yes	No	
733 Woodland St			Sulphur	LA	70663-1046	00623830					Yes	No	
1025 Cass St	2250 E Napoleon St	SE Quarter of Section 28	Sulphur	LA	70663-1058	00628255A	01349130	01349130A			00628255A - Yes 01349130 - Yes 01349130A - Yes	00628255A - No 01349130 - No 01349130A - No	Phone call - no well, city water. Several monitoring wells on property
921 Woodland St			Sulphur	LA	70663-1046	00629332					Yes	No	
105 Terrace St			Sulphur	LA	70663-1040	00631485					No	Unsure	Left additional contact letter
729 Woodland St			Sulphur	LA	70663-1046	00650641					Yes	No	
725 Woodland St			Sulphur	LA	70663-1046	00659959					Yes	No	
108 Terrace St			Sulphur	LA	70663-1041	00670553					No	Likely No	Left additional contact letter
109 Terrace St			Sulphur	LA	70663-1040	00680311					No	Likely No	Left additional contact letter
631 Kim St			Sulphur	LA	70663-3117	01163760B					Yes	No	
near Burton St	1654 W Burton St	1633 W Burton St	Sulphur	LA	70663-0401	01163760D	01299999	01320795			01163760D - No 01299999 - No 01320795 - No	01163760D - Likely No 01299999 - Likely No 01320795 - Likely No	Left additional contact letter
635 Kim St			Sulphur	LA	70663	01163760E					No	Not likely	Left additional contact letter
681 Kim St			Sulphur	LA	70663-3117	01163779					No	Unsure	Left additional contact letter
1830 W Burton St			Sulphur	LA	70663-2490	01163787					Yes	Yes	Well not in use
1708 W Burton St			Sulphur	LA	70663-2449	01163795					Yes	No	
2308 W Burton St			Sulphur	LA	70663-8404	01163817					No	Possibly	Left additional contact letter
2312 W Burton St			Sulphur	LA	70663-8404	01163825					No	Unsure	Left additional contact letter
1831 W Burton St			Sulphur	LA	70663-2490	01163922					Yes	Yes	1 well on property, not used for drinking
1745 W Burton			Sulphur	LA	70663-2449	01163930					Yes	No	
1705 W Burton St			Sulphur	LA	70663-2449	01163949					No	Unsure	Left additional contact letter
1711 W Burton			Sulphur	LA	70663-2449	01163949A					No	Unsure	Left additional contact letter
573 N Kim St			Sulphur	LA	70663-3115	01163957					No	Not likely	Left additional contact letter
551 Kim St			Sulphur	LA	70663-3115	01163965					No	Unsure	Left additional contact letter
501 Kim St			Sulphur	LA	70663-3115	01163973					No	Possibly	Left additional letter, 1 parcel unimproved
100 Terrace St 617 Kim St	678 Kim St	664 Kim St	Sulphur	LA LA	70663-1041 70663	01175351	01299700	01352245			No 01189271 - No 01299700 - Yes 01352245 - No	Not likely 01189271 - Likely No 01299700 - No 01352245 - Likely No	Left additional contact letter  City water
627 N Kim St			Sulphur	LA	70663-3117	01189298					Yes	No	
545 N Kim St			Sulphur	LA	70663-3115	01191438					Yes	No No	
1500 W Burton			Sulphur	LA	70663-2461	01203878					Yes	No	
405 Kim St			Sulphur	LA	70663-3113	01220756					Yes	No	
1995 N Claiborne St			Sulphur	LA	70663	01234498					Yes	No	
450 Kim St	71-Acre Parcel in NW Quarter of Section 28	6-Acre Parcel in NW Quarter of Section 28	Sulphur	LA	70663-3113	01234528	01321128	01321129			01234528 - Yes 01321128 - Yes 01321129 - Yes	01234528 - <b>Yes</b> 01321128 - No 01321129 - No	Well is plugged & abandoned, not in use
1541 W Burton St	1601 W Burton St		Sulphur	LA	70663-2462	01234544	01338330				01234544 - Yes 01338330 - No	Yes	

Contacts within 1-mile Radius of Sulphur Salt Dome													
Address 1	Address 2	Address 3	Property City	Property State	Property Zip	Assess No. 1	Assess No. 2	Assess No. 3	Assess No. 4	Assess No. 5	Response	Wells on Property?	Notes
1613 W Burton St			Sulphur	LA	70663-0401	01234544B					Yes	No	
1865 N Claiborne St			Sulphur	LA	70663-1155	01234560					Yes	No	
658 Kim St			Sulphur	LA	70663-3117	01255932					Yes	No	
1765 N Claiborne St			Sulphur	LA	70663-1154	01256327					No	Likely No	Left additional letter, 2 parcels unimproved
612 N Kim St	1634 W Burton St	1642 W Burton St	Sulphur	LA	70663-3117	01299697	01299719	01336035			01299697 - No 01299719 - Yes 01336035 - No	01299697 - Likely No 01299719 - No 01336035 - Likely No	City water
502 Kim St			Sulphur	LA	70663-3115	01320791					Yes	No	
1689 W Burton St			Sulphur	LA	70663-0401	01320795A					No	Unsure	enclave of 01320795
2126 W Burton St			Sulphur	LA	70663-8409	01321521					No	Unsure	Left additional contact letter
1846 W Burton St	W Burton St		Sulphur	LA	70663-2490	01321526	01321528				01321526 - No 01321528 - No	01321526 - Likely No 01321528 - Likely No	Neighbor 01321526A & B
1850 W Burton St			Sulphur	LA	70663-2490	01321526B					No	Likely No	Neighbor 01321526 & B
1840 W Burton St			Sulphur	LA	70663-2490	01321527					Yes	No	
1744 W Burton			Sulphur	LA	70663-2449	01321531					Yes	No	
1720 W Burton St			Sulphur	LA	70663-2449	01321532					No	Likely No	Left additional contact letter
605 Kim St	605 Kim St		Sulphur	LA	70663-3117	01322422	01325302				01322422 - No 01325302 - No	01322422 - Likely No 01325302 - Likely No	Unimproved, wooded area
1860 W Burton			Sulphur	LA	70663-2490	01323567					Yes	No	
1807 W Burton			Sulphur	LA	70663-2490	01323867					Yes	No	
1630 W Burton			Sulphur	LA	70663-2490	01325287					Yes	No	
1646 W Burton			Sulphur	LA	70663-0401	01325288					Yes	No	
2991 W Houston River Rd	1		Sulphur	LA	70663-0530	01325349					No	Likely No	Unimproved, wooded area
636 N Kim St			Sulphur	LA	70663-3117	01325451					Yes	No	
2389 W Burton St			Sulphur	LA	70663-8404	01326577					Yes	No	
2417 W Burton St			Sulphur	LA	70663-8407	01326577A					Yes	No	
116 Terrace St			Sulphur	LA	70663-1041	01326706					No	Likely No	Left additional letter, 1 parcel unimproved
2258 W Burton St			Sulphur	LA	70663-8402	01327136					No	Likely No	Left additional contact letter
603 Kim St			Sulphur	LA	70663-3117	01329532					No	Likely No	Left additional contact letter
1806 W Burton St			Sulphur	LA	70663-2490	01332241					No	Likely No	Unimproved, neighbor 01332242
1750 W Burton St			Sulphur	LA	70663-2449	01332242					Yes	No	
1524 W Burton St			Sulphur	LA	70663	01337055					No	Likely No	Left additional contact letter
1829 W Burton St			Sulphur	LA	70663-2490	01338898					Yes	No	
534 Kim St	1721 W Burton St	1.97-Acre Parcel in SE Quarter of Section 29	Sulphur	LA	70663-3115	01340329	01349004	01347665			01340329 - Yes 01349004 - Yes 01347665 - Yes	01340329 - No 01349004 - No 01347665 - No	
2439 W Burton St			Sulphur	LA	70663-8407	01340700					No	Likely No	Left additional contact letter
524 Kim St			Sulphur	LA	70663-3115	01340812					No	Likely No	Left additional contact letter
523 Kim St			Sulphur	LA	70663-3115	01345514					No	Likely No	Left additional contact letter

						Conta	cts within 1	-mile Radius	of Sulphur S	Salt Dome			
Address 1	Address 2	Address 3	Property City	Property State	Property Zip	Assess No. 1	Assess No. 2	Assess No. 3		Assess No. 5	Response	Wells on Property?	Notes
336 Kim St	NW Quarter of Section 32	NW Quarter of Section 28	Sulphur	LA	70663-3100	01347173	01163833	01164023	01234536	01256912	01347173 - No 01163833 - No 01164023 - No 01234536 - No 01256912 - No	01347173 - Likely No 01163833 - Likely No 01164023 - Likely No 01234536 - Likely No 01256912 - Likely No	Phone call, no wells - All wooded areas
1623 W Burton St			Sulphur	LA	70663-0401	01348930					No	Likely No	Left additional contact letter
1525 W Burton St			Sulphur	LA	70663-2462	01349552					Yes	No	1 pacrel wooded area
2463 W Burton St			Sulphur	LA	70663-8407	01351053					Yes	No	
1820 W Burton St			Sulphur	LA	70663-2490	01358772					Yes	No	
987 Ranchette Ln			Sulphur	LA	70663-1167	01359741					Yes	No	
1530 W Burton St			Sulphur	LA	70663	01363101					No	Likely No	Cell phone/Radio tower
SE Quarter of Section 32			Sulphur	LA	70663	00115959					Yes	No	
40-Acre Parcel in NE Quarter of Section 28			Sulphur	LA	70663	00116149					No	Likely No	Unimproved, wooded area
NE Quarter of Section 31			Sulphur	LA	70663	00124370					No	Likely No	Unimproved, wooded area
1.5-Acre Parcel in SW Quarter of Section 30			Sulphur	LA	70663	00137901					No	Likely No	Unimproved
NE Quarter of Section 30			Sulphur	LA	70663	00152021					No	Yes	Visual inspection, Cottages Well
NW Quarter of Section 30	1.11-Acre Parcel in NW Quarter of Section 30		Sulphur	LA	70663	00158968	00158976				00158968 - No 00158976 - No	Likely No	Unimproved, wooded area
NE Quarter of Section 30			Sulphur	LA	70663	00169501					No	Yes	Visual inspection, 2 Westlake wells
NE Quarter of Section 30			Sulphur	LA	70663	00172391					No	Likely No	Unimproved, visual inspection
30.45-Acre Parcel in NE Quarter of Section 28	near Ranchette Dr		Sulphur	LA	70663	00175102	01358522				00175102 - No 01358522 - Yes	00175102 - Likely No 01358522 - No	00175102 Unimproved, wooded area
2-Acre Parcel in SE Quarter of Section 30			Sulphur	LA	70663	00183369					No	Likely No	Unimproved, wooded area
8.81-Acre Parcel in NE Quarter of Section 31	NE Quarter of Section 31 & NW Quarter of Section 32		Sulphur	LA	70663	00756008	01163914				00756008 - No 01163914 - No	Likely No	Unimproved properties
SE Quarter of Section 30			Sulphur	LA	70663	01089854					No	Likely No	Wooded area
NE Quarter of Section 32	SE Quarter of Section 20		Sulphur	LA	70663	01163809	01164058				01163809 - Yes 01164058 - Yes	Unknown	Wooded areas
47-Acre Parcel in NE Quarter of Section 31			Sulphur	LA	70663	01163876					No	Likely No	Unimproved, wooded area
20-Acre Parcel in SE Quarter of Section 30			Sulphur	LA	70663	01163884					No	Likely No	Unimproved, wooded area
51-Acre Parcel in NW Quarter of Section 33			Sulphur	LA	70663	01189727					No	Likely No	Unimproved, wooded area

	Contacts within 1-mile Radius of Sulphur Salt Dome													
Address 1	Address 2	Address 3	Property City	Property State	Property Zip	Assess No. 1	Assess No. 2	Assess No. 3	Assess No. 4	Assess No. 5	Response	Wells on Property?	Notes	
NW Quarter of Section 21 & SW Quarter of Section 16	N Claiborne St		Sulphur	LA	70663	01189743	01164031				01189743 - No 01164031 - No	Likely No	Unimproved, wooded area	
NE Quarter of Section 30			Sulphur	LA	70663	01227793					No	Likely No	Unimproved, visual inspection	
24-Acre Parcel in SW Quarter of Section 28			Sulphur	LA	70663	01234544A					No	Likely No	Unimproved, wooded area	
7.59-Acre Parcel in the S half of Section 29			Sulphur	LA	70663	01320863A					No	No	Boardwalk Brine Pond	
0.31-Acre Parcel in SE Quarter of Section 28			Sulphur	LA	70663	01321921					No	Likely No	Unimproved, outside 1-mile	
SW Quarter of Section 30			Sulphur	LA	70663	01326174					No	Likely No	Unimproved, wooded area	
0.5-Acre Parcel in NW Quarter of Section 33			Sulphur	LA	70663	01327107					Yes	No		
80-Acre Parcel in NE Quarter of Section 30			Sulphur	LA	70663	01328596					Yes	Yes	Visual inspection. 1 Westlake well.	
7 Parcels across Sections 18, 19, 20, 24, 25, 30, & 31			Sulphur	LA	70663	01332036					No	Likely No	Unimproved	
80-Acre Parcel in NW Quarter of section 30	:		Sulphur	LA	70663	01344069					No	Likely No	Unimproved, wooded area	
SE Quarter of Section 28			Sulphur	LA	70663	01347029					No	Likely No	Unimproved, outside 1-mile	
SE Quarter of Section 30			Sulphur	LA	70663	01353291					No	Likely No	Unimproved, outside 1-mile	
SE Quarter of section 21			Sulphur	LA	70663	01363730					No	Likely No	Unimproved, wooded area	
near Kim St	near Kim St		Sulphur	LA	70663	01163760	01163760F				01163760 - No 01163760F - No	Likely No	Unimproved, wooded area	
near W Burton St			Sulphur	LA	70663	01163884C					No	Likely No	Unimproved, wooded area	
near W Burton St			Sulphur	LA	70663	01321526A					Yes	No	1 parcel wooded area	
near N Claiborne St			Sulphur	LA	70663	01353480A					Yes	Yes	1 private drinking water well 1545 N. Claiborne St.	

**SURVEY COVER LETTER AND FORM ATTACHMENT 1** 



840 West Sam Houston Pkwy N Suite 600 Houston, Texas 77024-4613 Telephone: +1 281 600 1000 Fax: +1 281 520 4625

www.erm.com

Date

Owner/Resident Name

Mailing Address

Reference: 0688077

Subject: Water-Well Survey

Dear Property Owner/Resident,

As part of an ongoing groundwater study, Environmental Resources Management (ERM) a private environmental consulting firm, is conducting a water well survey in the area of Sulphur Louisiana in cooperation with the Louisiana Department of Natural Resources (LDNR). The properties are included as part of this survey (see attached map(s)):

Property Address 1 (Assessment No. XXXXXXXX)

Property Address 2 (Assessment No. XXXXXXXX)

This survey is to identify water wells that may be present on the properties either currently or historically. No additional information is required for the water wells that are shown on the attached map. Please take a few minutes of your time to complete the attached survey and return it to ERM using the enclosed self-addressed, stamped envelope, or scan the QR code provided to complete the survey online. If applicable, ERM may contact you about collecting a water sample at no cost to you.

Please feel free to contact me at (832) 209-8811 or at SulphurWWsurvey@erm.com with any questions or comments. I appreciate your time and consideration.

Yours sincerely,

DRAFT

Scott A. Himes, P.G. Senior Hydrogeologist





https://arcg.is/19iiPO



## Water-Well Survey Sulphur, Louisiana

Properties: Property Address 1 (Assessment No. XXXXXXXX)





Property Address 2 (Assessment No. XXXXXXXX)

. ,	•	ty Owner/Resident				nttps://arcg.is/19i	iPO
Length of Residen	cy:			Phone Number:			
Water Well(s) loca	ted on property	/properties? Yes	] No 🗌	Well Owner (if different than	resident):		
Other (plea	ater Well phur water systemse specify): rty/properties:			elow)			
LDNR Water Well No.	Well Depth (feet)	Screen Interval (feet)		tion of Well on Property cription* or coordinates)	Installation Date	Used for Drinking?	Willing to have Sampled?
						Yes / No	Yes / No
	4 W. U.			*or indicate location on attached map and return with			nue on back of form as needed
☐ Water we ☐ Water we	ell is active in us ell is active not in ell is <b>not</b> active ell has been plu		ys used		ter Well Use Descript Domestic Industrial / Manufa Irrigation Monitor / Observat Public Supply Rig Supply Unknown	acturing	
Printed Name (first	t last):		<del> </del>	Signature:		Date:	