



## City of Garden Ridge

9400 Municipal Parkway  
Garden Ridge, Texas 78266-2600  
(210) 651-6632  
Fax (210) 651-9638

### AGENDA REGULAR SESSION GARDEN RIDGE QUARRY COMMISSION MEETING Monday, August 8, 2016 at 6:00 P.M.

---

The Garden Ridge City Quarry Commission will meet in regular session on Monday, August 8, 2016 at 6:00 p.m. in the City Council Chambers, 9400 Municipal Parkway, Garden Ridge, Texas. This is an open meeting, open to the public, subject to the Open Meetings Law of the State of Texas, and as required by law, notice is hereby posted on or before August 5, 2016 before 5:00 p.m., providing time, place, date and agenda thereof. The meeting facility is wheelchair accessible and accessible parking spaces are provided. Requests for accommodations or interpretative services must be made 48 hours prior to this meeting.

---

1. Call to Order :
2. Roll Call:
3. Approval of Minutes:
  - a) June 13, 2016 Regular Quarry Commission Meeting
4. Citizens Comments: Please use signup sheet

#### Rules for Citizen's Participation:

The Quarry Commission welcomes citizen participation and comments at all of their Commission Meetings. As a courtesy to your fellow citizens and out of respect to our elected officials, we request that if you speak, that you please follow these guidelines.

- a. Direct your comments to the entire Commission, not to an individual member, nor to the audience.
- b. Show the Commission the same respect and courtesy that you would like to be shown.
- c. Limit remarks to three (3) minutes per citizen during Item 4 and to three (3) minutes per citizen during Item 6.
- d. Citizens' comments will be limited to one (1) hour in Item 4 and thirty (30) minutes in Item 6.
- e. Citizen comments may be deferred to a specific Business Item set forth in Section 5, below, if such comments pertain to such Business Item

*NOTE: The Texas Open Meetings Act permits a member of the public or a member of the governmental body to raise a subject that has not been included in the notice for the meeting. However, any discussion of the subject **must be limited** to a proposal to place the subject on the*

*agenda for a future meeting and any response to a question posed to the Commission is limited to either a statement of specific factual information or a recitation of existing policy. TEX. GOV'T CODE § 551.042.*

5. Business Items:

The City Quarry Commission may discuss, consider, and /or take possible action for possible recommendation to the City Council for the following items:

- a. Review and discussion on the monthly Hanson Quarry blasting analysis data reported by Vibratex. Discussion with Hanson Servtex and Blasting contractors, on recent quarry operations, including any unusual blasts that occurred during reported month/s and/or current month.
  - b. Review individual citizen blast report/s, follow up on citizen blast report/s and/or assign Quarry Commission member contact with citizen/s, as necessary.
  - c. Discussion on number of, placement and location of monitors and other matters related to monitoring of blasts by Vibratex and notification to residents of monitor placements.
  - d. Discuss and possible recommendation of reappointment of Commissioners Holly, Morgan and Barucky due to expiring terms of office (September 30, 2016).
  - e. Discuss and possible recommendation of moving October 10, 2016 Quarry Commission Regular Meeting (Columbus Day) (proposed Monday, October 17, 2016).
  - f. Discuss Grapevine article topics and future author/s of articles.
  - g. Discuss future training sessions.
6. Citizen's Participation: - 3 minute limit per citizen.  
See "Rules for Citizen's Participation" under Item 4.

7. Adjournment:

**AGENDA NOTICES:**

**Decorum Required:**

Any disruptive behavior, including shouting or derogatory statements or comments may be ruled out of order by the Presiding Officer. Continuation of this type of behavior could result in a request by the Presiding Officer that the individual leave the meeting, and if refused, an order of removal.

**Action by Commission Authorized:**

The City Quarry Commission may vote and/or act upon any item within this Agenda. The Commission reserves the right to retire into executive session concerning any of the items listed on this Agenda, pursuant to and in accordance with Texas Government Code Section 551.071, to seek the advice of its attorney about

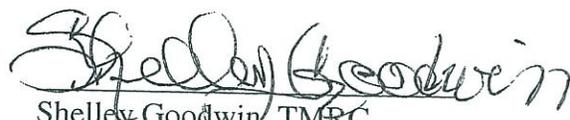
pending or contemplated litigation, settlement offer or on a matter in which the duty of the attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas conflict with the Open Meetings Act and may invoke this right where the City Attorney, the Mayor or a majority of the Governing Body deems an executive session is necessary to allow privileged consultation between the City Attorney and the governing body, if considered necessary and legally justified under the Open Meetings Act. The City Attorney may appear in person, or appear in executive session by conference call in accordance with applicable state law.

**Executive Sessions Authorized:**

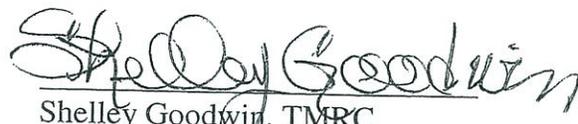
This agenda has been reviewed and approved by the City's legal counsel and the presence of any subject in any Executive Session portion of the agenda constitutes a written interpretation of Texas Government Code Chapter 551 by legal counsel for the governmental body and constitutes an opinion by the attorney that the items discussed therein may be legally discussed in the closed portion of the meeting considering available opinions of a court of record and opinions of the Texas Attorney General known to the attorney. This provision has been added to this agenda with the intent to meet all elements necessary to satisfy Texas Government Code Chapter 551.144(c) and the meeting is conducted by all participants in reliance on this opinion.

**Attendance By Other Elected or Appointed Officials:**

It is anticipated that members of other city board, commissions and/or committees may attend the meeting in numbers that may constitute a quorum of the other city boards, commissions and/or committees. Notice is hereby given that the meeting, to the extent required by law, is also noticed as a meeting of the other boards, commissions and/or committees of the City, whose members may be in attendance. The members of the boards, commissions and/or committees may participate in discussions on the same items listed on the agenda, which occur at the meeting, but no action will be taken by such in attendance unless such item and action is specifically provided for on an agenda for that board, commission or committee subject to the Texas Open Meetings Act.

  
Shelley Goodwin, TMRC  
City Secretary

This is to certify that I, Shelley Goodwin, posted this Agenda at 10:00 am on August 5, 2016 on the bulletin board located at the entrance to the Garden Ridge City Hall, 9400 Municipal Parkway, Garden Ridge, Texas.

  
Shelley Goodwin, TMRC  
City Secretary



# City of Garden Ridge

9400 Municipal Parkway  
Garden Ridge, Texas 78266-2600  
(210) 651-6632  
Fax (210) 651-9638

## MINUTES OF QUARRY COMMISSION REGULAR MEETING JUNE 13, 2016

### **Members Present:**

Chairman Mike Shands  
Vice Chairman Wayne Mudge  
Commissioner Albert Haddad  
Commissioner Jerry Barucky  
Commissioner Johnell Holly  
Commissioner Jim Morgan  
Ex-Officio Member Councilmember Bryan Lantzy

### **Member Absent:**

Commissioner Richard Holloway

### **City Staff Present:**

Nancy Cain, City Administrator  
Cynthia Trevino, City Attorney  
Shelley Goodwin, City Secretary

### **1. Call to Order**

With a quorum of the Quarry Commission Members present, Chairman Shands called the regular meeting of the Garden Ridge Quarry Commission to order at 7:00 p.m. on Monday, June 13, 2016 in the City Council Chambers of the Garden Ridge City Hall, 9400 Municipal Parkway, Garden Ridge, Texas 78266.

### **2. Approval of Minutes:**

#### **a) April 11, 2016 Regular Quarry Commission Meeting**

**Motion:** Upon motion made by Commissioner Holly and seconded by Commissioner Morgan to approve April 11, 2016 Quarry Commission Meeting Minutes. The Quarry Commission voted six (6) for, none (0) opposed. The motion carried unanimously.

### **3. Citizens Comments**

Robert Kessler, 19960 FM 2252, stated he resides right past Schneider Road and feels the blasts coming from the Quarry have gotten worse. He also stated he has lived in his home for over 21 years and recently he has begun to notice cracks.

4. **Business Items:**

**The City Quarry Commission may discuss, consider, and /or take possible action for possible recommendation to the City Council for the following items:**

- a. **Review and discussion on the monthly Hanson Quarry blasting analysis data reported by Vibratex. Discussion with Hanson Servtex and Blasting contractors, on recent quarry operations, including any unusual blasts that occurred during reported month/s and/or current month.**

Geoffrey Rigsby of Vibra-Tech presented and discussed the April blast analysis. He stated that 11 blasts occurred during the month of April and none of the blast exceeded the limits of Ordinance 34. The highest ppv readings occurred on April 22, 2016 in Bench 3B, with .265 ppv recorded at the Warden residence. The strongest air blast occurring on April 22, 2016 with an overpressure of 113.3 recorded at the Warden property line. He also discussed the timing and shots. He then presented and discussed the May blast analysis. He stated that 12 blasts occurred during the month of May and one of the blasts exceeded the limits of Ordinance 34. The highest ppv readings occurred on May 17, 2016 in Bench 3B, with .365 ppv recorded at the Warden residents. The strongest air blast occurring on May 12, 2016 at the Warden residence and May 17, 2016 at the Warden property line with both having an overpressure of 113.5 recorded. He also discussed the timing and shots.

The Quarry Commission reviewed the shots and the blast analysis.

Geoffrey Rigsby of Vibra-Tech explained the graphics.

Elliott Giles of Orica explained the shot designs and the effect the weather had on the blasts during the blasts in April and May.

- b. **Review individual citizen blast report/s, follow up on citizen blast report/s and/or assign Quarry Commission member contact with citizen/s, as necessary.**

The Quarry Commission reviewed the citizen blast reports that were received by Edwin Ford, Betty Eagan, Becky Meek, Robert Kessler (2 reports), and James Walker.

Geoffrey Rigsby, Vibra-Tech, reviewed the shot reports for each citizen blast report received during the months of April and May.

- c. **Discussion on number of, placement and location of monitors and other matters related to monitoring of blasts by Vibratex and notification to residents of monitor placements.**

The Quarry Commission discussed the placement of the roving monitor. They agreed by consensus for the roving monitor to be placed at the Midla residence and then Carolyn Cohen residence.

**d. Discuss and possible recommendation on meeting time**

The Quarry Commission discussed moving their meetings to 6pm.

**Motion:** Upon motion made by Commissioner Haddad and seconded by Commissioner Morgan to recommend to City Council the Quarry Commission Regular Meetings be moved to 6 p.m. The Quarry Commission voted six (6) for, none (0) opposed. The motion carried unanimously.

**e. Discuss Grapevine article topics and future author/s of articles.**

The Quarry Commission discussed the upcoming Grapevine article topic, which will be written by Commissioner Barucky.

**f. Discuss future training sessions.**

The Quarry Commission discussed future training sessions and felt the effects of ground conditions would be knowledge.

Geoffrey Rigsby of Vibra-Tech stated that there is no research on the ground conditions.

The Quarry Commission did not provide a topic for the August meeting.

**5. Citizen's Participation: - 3 minute limit per citizen.**

No one wished to speak.

**6. Training Session (30 minute limit):**

**a. Demonstration of and discussion on a Blast Monitor.**

Geoffrey Rigsby of Vibra-Tech discussed the Environmental and blast effects as measured by monitor (see attached PowerPoint).

**7. Executive Session**

**The Quarry Commission will recess its open meeting and reconvene in Executive Session**

**a. Pursuant to Texas Government Code 552.071, to consult with the City Attorney regarding legal issues related to Hanson Aggregates operations, blasting and possible amendments to Ordinance 34**

Mike Shands, Quarry Commission Chair announced the Quarry Commission will recess into Executive Session at 8:23 pm, in accordance with Section Codes 552.071, to consult with City Attorney.

Mike Shands, Quarry Commission Chair adjourned the Executive Session at 9:43 p.m. and the City Council reconvened back into regular session.

**8. Business Items (continued)**

**The Quarry Commission will reconvene into Regular Session upon conclusion of the Executive Session and may recall any item posted for Executive Session for action, as Necessary**

No items were recalled.

**9. Adjournment:**

There being no further business, the Monday, June 13, 2016 Garden Ridge Quarry Commission regular meeting was adjourned at 9:43 p.m. by Chairman Shands.

---

Mike Shands  
Quarry Commission Chairman

ATTEST

---

Shelley Goodwin  
City Secretary

**SIGN IN TO SPEAK AT THE JUNE 13, 2016  
QUARRY COMMISSION REGULAR MEETING**

**Rules for Citizen's Participation:**

The Quarry Commission welcomes citizen participation and comments at all of their Meetings. As a courtesy to your fellow citizens and out of respect to our appointed/elected officials, we must request that if you wish to speak, that you follow these guidelines.

- a. Direct your comments to the entire Commission, not to an individual member nor to the audience.
- b. Show the Commission the same respect and courtesy that you expect to be shown to you.
- c. Limit remarks to three (3) minutes.

**Disclaimer:**

Any disruptive behavior, including shouting or derogatory statements or comments, will be ruled out of order by the Presiding Officer. Continuation of this type of behavior could result in a request by the Presiding Officer that the individual leave the meeting, and if refused, an order of removal.

	NAME	ADDRESS	SUBJECT
1.	Robert L. Kessler	19960 FM 2252	Quarry Blasting
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			



## Influence of Non-Vibration Forces

---

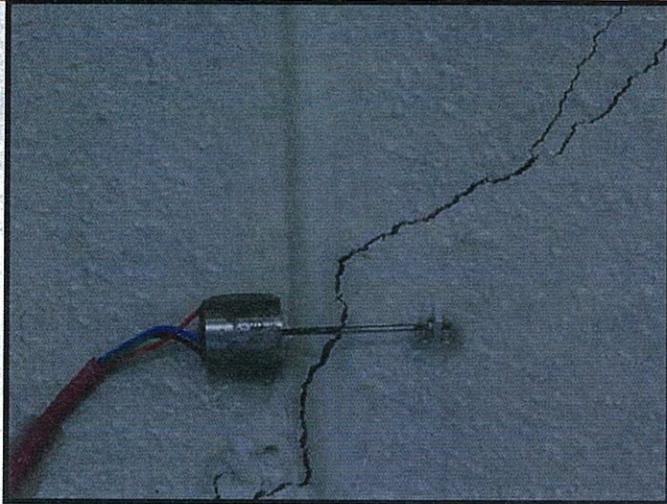
- *There are many forces that begin exerting influence on a structure from the time construction begins.*
- *Many of these forces continue to act for the lifetime of the structure.*



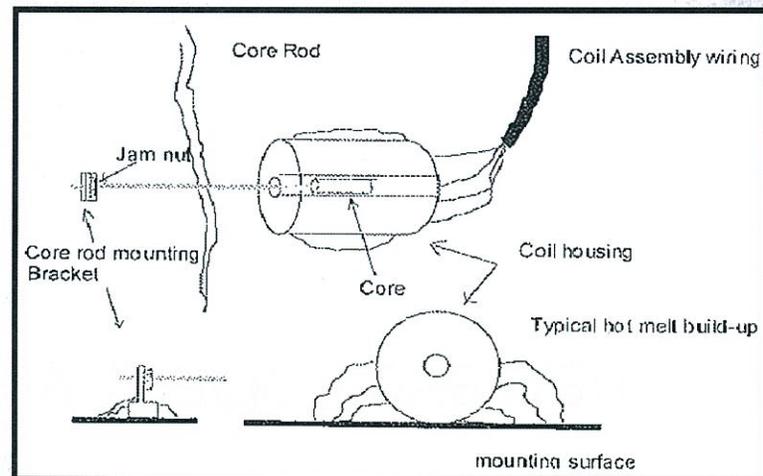
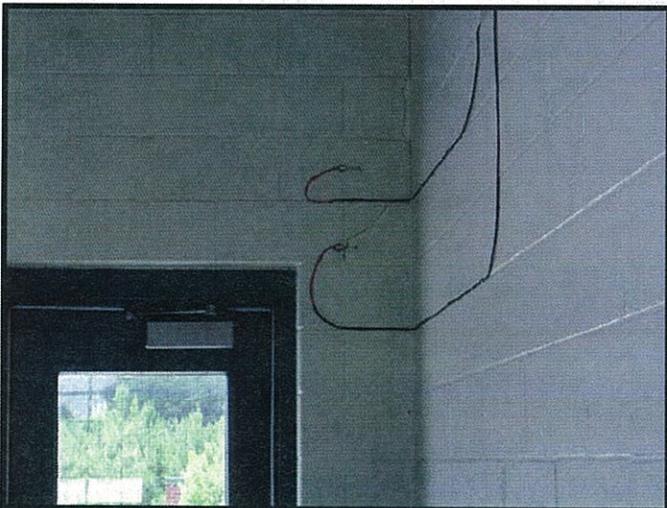
## Examples of Non-Vibration Forces

---

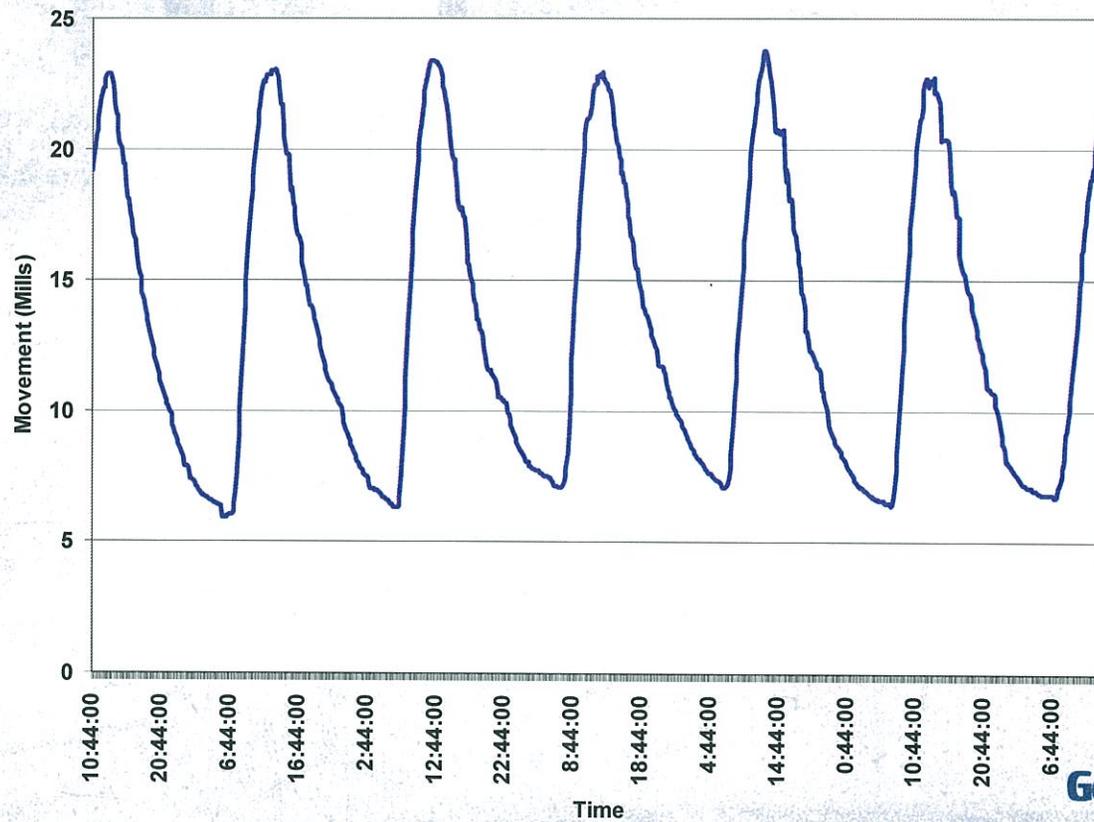
- *Changes in temperature*
- *Changes in moisture*
- *Curing, shrinking or warping of lumber*
- *Drying and curing of plaster, spackle, mortar and concrete*
- *Changes in the live and dead loads of the structure*
- *Aging (chemical and physical deterioration)*
- *Changes in soil conditions*



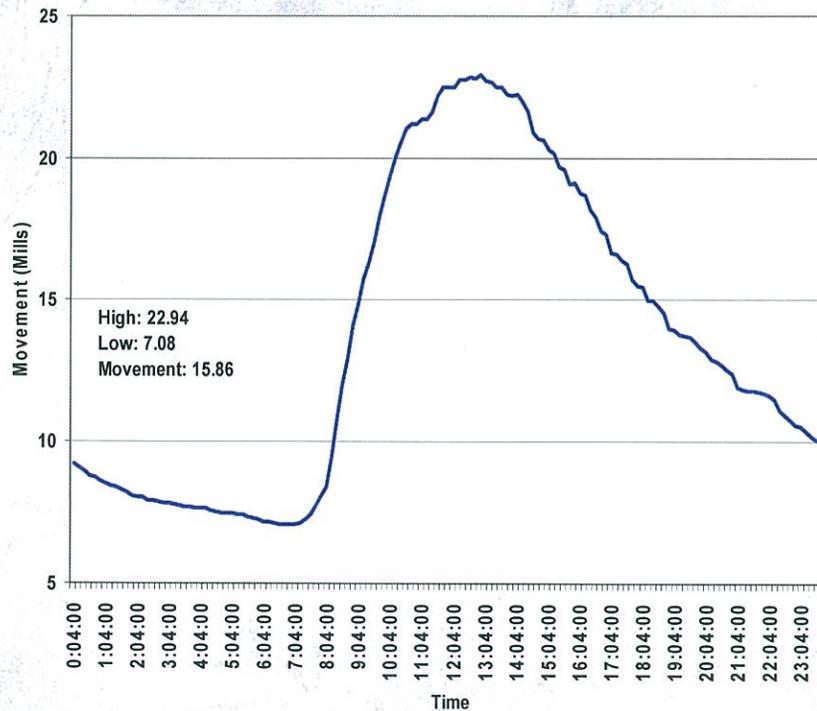
*The **Linear Variable Differential Transformer** is an electromagnetic device that produces an electrical voltage proportional to the displacement of a moveable magnetic core.*



## Example of Weekly Crack Movement

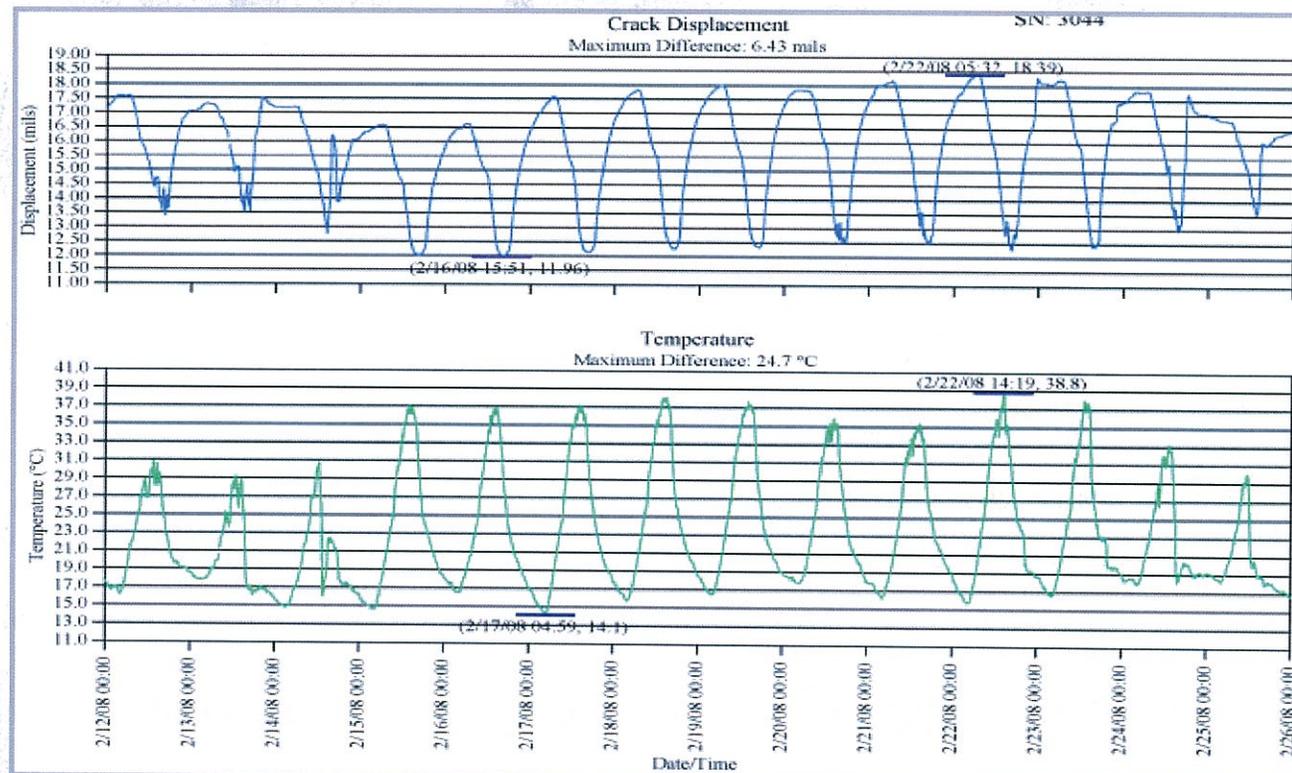


## Example of Daily Crack Movement



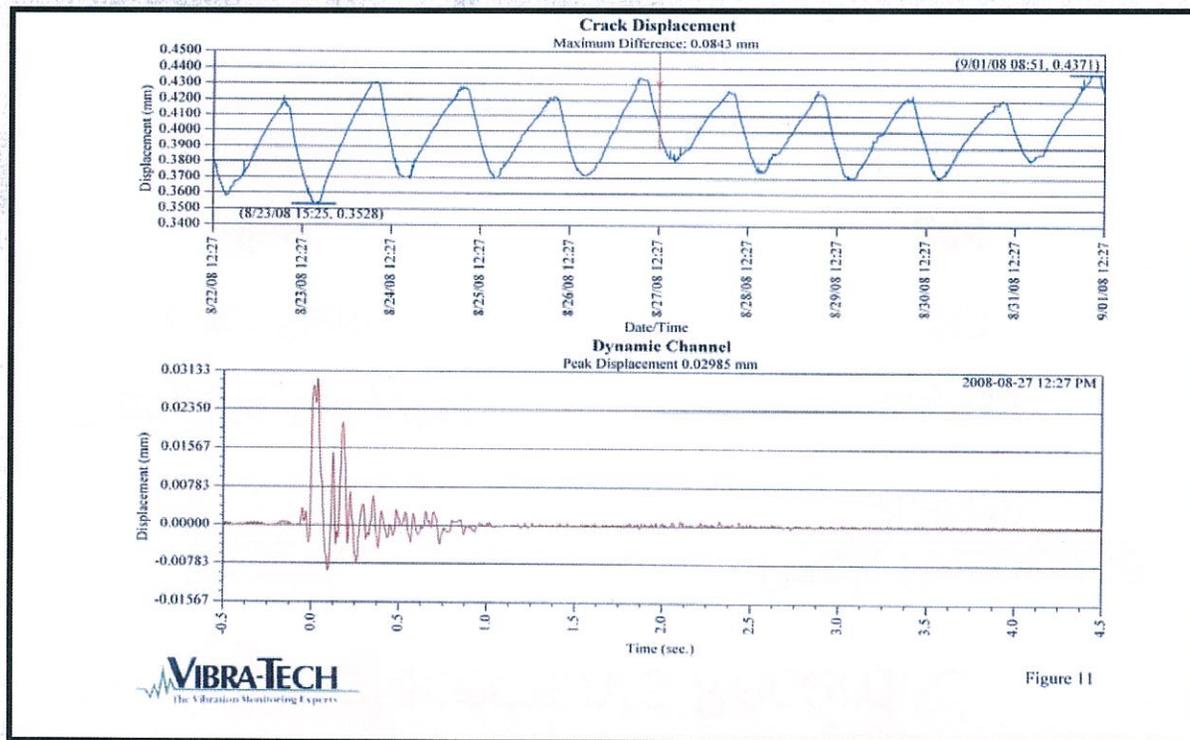
*Cracks can move about the width of a paper match stick...*

# Comparison of Crack Movement to Environmental Effects



# Crack Response

## Blast-Induced versus Weather-Induced





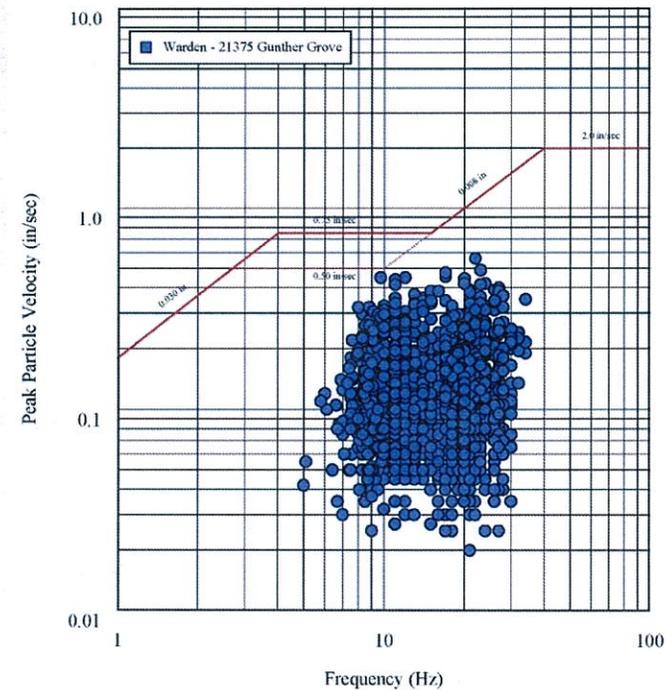
## Summary of Maximum Drywall Crack Displacements Recorded

<u>Event</u>	<u>Peak Response</u> ( $\mu$ -inch)
Change in Temp/RH	15,538
Door Slam	283
<b>Blast</b>	<b>244</b>
Jump	61
Chair Fall	48
Vacuum hit wall	32
Door Shut	22

Data courtesy of Aimone-Martin Associates, Inc.

## Safe Blasting Guidelines

- Third Party Monitoring
- 10+ Years Data
  - 1,230 Blasts
  - 3,026 Seismic Recordings
  - Warden Residence
  - Average PPV = 0.095 in/sec
  - 13% of the Federal Guideline
  - Average AO = 111.4 dBL
  - 8% of the Federal Guideline





## Environmental vs Dynamic Forces

- Digital Crack Monitoring
  - Charles H. Dowding Ph.D. – Northwestern University
    - Drywall Shear Crack **μinch** Displacement
- Environmental Response vs Blasting Response
  - Recorded Blast: 0.752 in/sec 130 dBL (8 times the Servtex average)
  - Daily Environmental Response = 9.8 times greater
  - Frontal Environmental Response = 11.5 times greater
  - Seasonal Environmental Response = 31.3 times greater
- Dynamic Forces  $\geq$  Typical Blasting Levels
  - Opening/Closing Doors & Windows
  - Running Down Stairs
  - Wind Gusts
  - Lightning - Gun Range - Aircraft



July 21, 2016

Mr. Mike Shands  
Garden Ridge Quarry Commission  
9400 Municipal Parkway  
Garden Ridge, Texas 78266

4818 E. Ben White Blvd.  
Suite 202  
Austin, TX 78741

Phone 512.442.6464  
Fax 512.442.6552

Dear Mr. Shands,

Enclosed is the analysis for the blasting conducted during the month of June 2016 at the Hanson Aggregates Quarry in Garden Ridge, Texas. Please place this information in your 2016 Blast Data Management Book.

At the request of the Garden Ridge Quarry Commission, Vibra-Tech, Inc. personnel used seismographs each day of blasting at various locations.

The attached report contains the original seismograph records obtained from the blasting along with a comparison of the recorded vibrations to the latest recommended U.S. Bureau of Mines (USBM) Variable Particle Velocity vs. Frequency Limits Report of Investigations (RI)-8507 (Nov. 1980).

The recorded ground vibrations **satisfy** the Variable Particle Velocity vs. Frequency Limits recommended by the USBM RI-8507 (Nov. 1980), and the levels set forth in Garden Ridge City Ordinance 34.

The recorded air-borne effects **satisfy** the recommended levels set forth in the USBM RI-8485 (Nov. 1980), and the levels set forth in Garden Ridge City Ordinance 34.

If there are any additional questions, please contact the Quarry Commission, Mike Shands at 210-257-0868, or attend the Quarry Commission meeting held the 2<sup>nd</sup> Monday of each month at 7:00 p.m.

Respectfully submitted,

VIBRA-TECH, INC.

A handwritten signature in black ink, appearing to read "Geoffrey Rigsby". The signature is fluid and cursive, with the first name starting with a large 'G' and the last name starting with a large 'R'.

Geoffrey Rigsby  
Southwest Regional Manager

cc: Jacob Scherer, Hanson – Servtex







**GARDEN RIDGE QUARRY COMMISSION**  
**GARDEN RIDGE, TEXAS**  
**MONTH OF JUNE 2016**

DATE	SHOT # LOCATION	SHOT LOCATION GPS READING	WEATHER	TIME	PPV (in/sec)	FREQ (Hz)	AIR (dB)	SHOT DURATION (MS)	MAX LBS/ DELAY	DISTANCE FROM BLAST	SEISMOGRAPH LOCATION
06/06/16	06-06-16 5B	N 29° 39' 02.7" W 098° 17' 16"	CLEAR 84° N 13	12:16	NT	NT	NT	880	793.00	5,260	City Property Line
06/06/16	06-06-16 5B	N 29° 39' 02.7" W 098° 17' 16"	CLEAR 84° N 13	12:16	NT	NT	NT	880	793.00	10,331	Fields - 21919 Pesa Cove
06/06/16	06-06-16 5B	N 29° 39' 02.7" W 098° 17' 16"	CLEAR 84° N 13	12:16	0.035	10.0	106.5	880	793.00	5,690	Michels - 9118 Tuscan Hills
06/06/16	06-06-16 5B	N 29° 39' 02.7" W 098° 17' 16"	CLEAR 84° N 13	12:16	0.075	14.0	110.9	880	793.00	4,545	Warden - 21375 Gunther Grove
06/06/16	06-06-16 5B	N 29° 39' 02.7" W 098° 17' 16"	CLEAR 84° N 13	12:16	0.045	16.0	110.9	880	793.00	4,324	Warden Property Line
06/07/16	06-07-16 4A	N 29° 38' 57.6" W 098° 17' 38"	PT CLOUDY 86° E 8	13:37	0.045	11.0	116.4	1105	710.00	3,813	City Property Line
06/07/16	06-07-16 4A	N 29° 38' 57.6" W 098° 17' 38"	PT CLOUDY 86° E 8	13:37	NT	NT	NT	1105	710.00	8,334	Fields - 21919 Pesa Cove
06/07/16	06-07-16 4A	N 29° 38' 57.6" W 098° 17' 38"	PT CLOUDY 86° E 8	13:37	0.065	28.0	107.0	1105	710.00	3,692	Michels - 9118 Tuscan Hills
06/07/16	06-07-16 4A	N 29° 38' 57.6" W 098° 17' 38"	PT CLOUDY 86° E 8	13:37	0.120	8.7	112.8	1105	710.00	3,511	Warden - 21375 Gunther Grove
06/07/16	06-07-16 4A	N 29° 38' 57.6" W 098° 17' 38"	PT CLOUDY 86° E 8	13:37	0.055	15.0	113.8	1105	710.00	3,305	Warden Property Line
06/08/16	06-08-16 Lower 6	N 29° 38' 50.5" W 098° 17' 09.2"	PT CLOUDY 87° SE 11	12:03	NT	NT	NT	610	470.00	4,850	City Property Line
06/08/16	06-08-16 Lower 6	N 29° 38' 50.5" W 098° 17' 09.2"	PT CLOUDY 87° SE 11	12:03	NT	NT	NT	610	470.00	10,572	Fields - 21919 Pesa Cove
06/08/16	06-08-16 Lower 6	N 29° 38' 50.5" W 098° 17' 09.2"	PT CLOUDY 87° SE 11	12:03	0.040	11.9	105.0	610	470.00	6,186	Michels - 9118 Tuscan Hills
06/08/16	06-08-16 Lower 6	N 29° 38' 50.5" W 098° 17' 09.2"	PT CLOUDY 87° SE 11	12:03	0.130	15.2	117.0	610	470.00	3,889	Warden - 21375 Gunther Grove
06/08/16	06-08-16 Lower 6	N 29° 38' 50.5" W 098° 17' 09.2"	PT CLOUDY 87° SE 11	12:03	0.065	20.8	115.0	610	470.00	3,683	Warden Property Line
06/10/16	06-10-16 South Wall A	N 29° 38' 15.4" W 098° 16' 41.1"	PT CLOUDY 82° SE 5	12:00	NT	NT	NT	1035	1014.00	6,460	City Property Line

NT = No Trigger, <0.020 ips.  
NT = No Trigger, <122dB

**GARDEN RIDGE QUARRY COMMISSION**  
**GARDEN RIDGE, TEXAS**  
**MONTH OF JUNE 2016**

DATE	SHOT # LOCATION	SHOT LOCATION GPS READING	WEATHER	TIME	PPV (in/sec)	FREQ (Hz)	AIR (dB)	SHOT DURATION (MS)	MAX LBS/ DELAY	DISTANCE FROM BLAST	SEISMOGRAPH LOCATION
06/10/16	06-10-16 South Wall A	N 29° 38' 15.4" W 098° 16' 41.1"	PT CLOUDY 82° SE 5	12:00	NT	NT	NT	1035	1014.00	12,885	Fields - 21919 Pesa Cove
06/10/16	06-10-16 South Wall A	N 29° 38' 15.4" W 098° 16' 41.1"	PT CLOUDY 82° SE 5	12:00	0.067	8.1	110.4	1035	1014.00	3,955	Holly - 9916 Trophy Oaks
06/10/16	06-10-16 South Wall A	N 29° 38' 15.4" W 098° 16' 41.1"	PT CLOUDY 82° SE 5	12:00	0.020	8.1	101.7	1035	1014.00	9,420	Michels - 9118 Tuscan Hills
06/10/16	06-10-16 South Wall A	N 29° 38' 15.4" W 098° 16' 41.1"	PT CLOUDY 82° SE 5	12:00	0.065	20.8	110.6	1035	1014.00	5,245	Warden - 21375 Gunther Grove
06/14/16	06-14-16 4B	N 29° 39' 01.8" W 098° 17' 36"	CLOUDY 81° S 10	11:57	0.022	5.4	107.8	584	793.00	4,273	City Property Line
06/14/16	06-14-16 4B	N 29° 39' 01.8" W 098° 17' 36"	CLOUDY 81° S 10	11:57	0.055	11.9	102.6	584	793.00	3,951	Michels - 9118 Tuscan Hills
06/14/16	06-14-16 4B	N 29° 39' 01.8" W 098° 17' 36"	CLOUDY 81° S 10	11:57	0.067	12.5	91.9	584	793.00	7,205	Midla - 8724 Verano Drive
06/14/16	06-14-16 4B	N 29° 39' 01.8" W 098° 17' 36"	CLOUDY 81° S 10	11:57	0.095	9.1	110.4	584	793.00	3,948	Warden - 21375 Gunther Grove
06/14/16	06-14-16 4B	N 29° 39' 01.8" W 098° 17' 36"	CLOUDY 81° S 10	11:57	0.072	13.5	110.1	584	793.00	3,739	Warden Property Line
06/15/16	06-15-16 3C	N 29° 38' 44.4" W 098° 17' 36.8"	CLEAR 84° S 13	11:50	0.035	10.0	98.3	930	1001.00	2,675	City Property Line
06/15/16	06-15-16 3C	N 29° 38' 44.4" W 098° 17' 36.8"	CLEAR 84° S 13	11:50	0.080	7.1	93.5	930	1001.00	3,832	Michels - 9118 Tuscan Hills
06/15/16	06-15-16 3C	N 29° 38' 44.4" W 098° 17' 36.8"	CLEAR 84° S 13	11:50	0.050	10.0	82.3	930	1001.00	6,633	Midla - 8724 Verano Drive
06/15/16	06-15-16 3C	N 29° 38' 44.4" W 098° 17' 36.8"	CLEAR 84° S 13	11:50	0.202	25.0	104.6	930	1001.00	2,187	Warden - 21375 Gunther Grove
06/15/16	06-15-16 3C	N 29° 38' 44.4" W 098° 17' 36.8"	CLEAR 84° S 13	11:50	0.110	25.0	105.2	930	1001.00	1,975	Warden Property Line
06/21/16	06-21-16 Lower 6	N 29° 38' 50.8" W 098° 17' 09.9"	CLEAR 87° SW 7	11:49	NT	NT	NT	650	470.00	4,818	City Property Line
06/21/16	06-21-16 Lower 6	N 29° 38' 50.8" W 098° 17' 09.9"	CLEAR 87° SW 7	11:49	0.040	15.6	100.5	650	470.00	6,124	Michels - 9118 Tuscan Hills

NT = No Trigger, <0.020 ips.  
NT = No Trigger, <122dB

**GARDEN RIDGE QUARRY COMMISSION**  
**GARDEN RIDGE, TEXAS**  
**MONTH OF JUNE 2016**

DATE	SHOT # LOCATION	SHOT LOCATION GPS READING	WEATHER	TIME	PPV (in/sec)	FREQ (Hz)	AIR (dB)	SHOT DURATION (MS)	MAX LBS/ DELAY	DISTANCE FROM BLAST	SEISMOGRAPH LOCATION
06/21/16	06-21-16 Lower 6	N 29° 38' 50.8" W 098° 17' 09.9"	CLEAR 87° SW 7	11:49	0.025	11.9	95.1	650	470.00	9,080	Midla - 8724 Verano Drive
06/21/16	06-21-16 Lower 6	N 29° 38' 50.8" W 098° 17' 09.9"	CLEAR 87° SW 7	11:49	0.095	10.6	114.1	650	470.00	3,868	Warden - 21375 Gunther Grove
06/21/16	06-21-16 Lower 6	N 29° 38' 50.8" W 098° 17' 09.9"	CLEAR 87° SW 7	11:49	0.055	19.2	112.9	650	470.00	3,661	Warden Property Line
06/22/16	06-22-16 South Wall B	N 29° 38' 14.4" W 098° 16' 43.5"	PT CLOUDY 89° S 8	12:52	0.020	4.5	105.2	932	1080.00	6,263	City Property Line
06/22/16	06-22-16 South Wall B	N 29° 38' 14.4" W 098° 16' 43.5"	PT CLOUDY 89° S 8	12:52	0.070	7.2	109.3	932	1080.00	3,744	Holly - 9916 Trophy Oaks
06/22/16	06-22-16 South Wall B	N 29° 38' 14.4" W 098° 16' 43.5"	PT CLOUDY 89° S 8	12:52	NT	NT	NT	932	1080.00	9,268	Michels - 9118 Tuscan Hills
06/22/16	06-22-16 South Wall B	N 29° 38' 14.4" W 098° 16' 43.5"	PT CLOUDY 89° S 8	12:52	NT	NT	NT	932	1080.00	11,402	Midla - 8724 Verano Drive
06/22/16	06-22-16 South Wall B	N 29° 38' 14.4" W 098° 16' 43.5"	PT CLOUDY 89° S 8	12:52	0.050	11.4	110.8	932	1080.00	5,052	Warden - 21375 Gunther Grove
06/23/16	06-23-16 Base Pit 3A	N 29° 38' 16.2" W 098° 16' 52.5"	PT CLOUDY 88° SE 5	11:50	NT	NT	NT	674	689.00	5,453	City Property Line
06/23/16	06-23-16 Base Pit 3A	N 29° 38' 16.2" W 098° 16' 52.5"	PT CLOUDY 88° SE 5	11:50	0.060	8.5	107.5	674	689.00	2,953	Holly - 9916 Trophy Oaks
06/23/16	06-23-16 Base Pit 3A	N 29° 38' 16.2" W 098° 16' 52.5"	PT CLOUDY 88° SE 5	11:50	NT	NT	NT	674	689.00	8,472	Michels - 9118 Tuscan Hills
06/23/16	06-23-16 Base Pit 3A	N 29° 38' 16.2" W 098° 16' 52.5"	PT CLOUDY 88° SE 5	11:50	NT	NT	NT	674	689.00	10,590	Midla - 8724 Verano Drive
06/23/16	06-23-16 Base Pit 3A	N 29° 38' 16.2" W 098° 16' 52.5"	PT CLOUDY 88° SE 5	11:50	0.060	19.2	108.7	674	689.00	4,240	Warden - 21375 Gunther Grove
06/28/16	06-28-16 Upper Lower 3A	N 29° 38' 36.5" W 098° 17' 35.5"	CLEAR 91° NE 4	11:20	0.035	8.1	102.6	744	275.00	2,150	City Property Line
06/28/16	06-28-16 Upper Lower 3A	N 29° 38' 36.5" W 098° 17' 35.5"	CLEAR 91° NE 4	11:20	0.040	7.6	88.7	744	275.00	4,175	Michels - 9118 Tuscan Hills
06/28/16	06-28-16 Upper Lower 3A	N 29° 38' 36.5" W 098° 17' 35.5"	CLEAR 91° NE 4	11:20	0.027	12.5	85.5	744	275.00	6,662	Midla - 8724 Verano Drive

NT = No Trigger, <0.020 ips.  
NT = No Trigger, <122dB

**GARDEN RIDGE QUARRY COMMISSION**  
**GARDEN RIDGE, TEXAS**  
**MONTH OF JUNE 2016**

DATE	SHOT # LOCATION	SHOT LOCATION GPS READING	WEATHER	TIME	PPV (in/sec)	FREQ (Hz)	AIR (dB)	SHOT DURATION (MS)	MAX LBS/ DELAY	DISTANCE FROM BLAST	SEISMOGRAPH LOCATION
06/28/16	06-28-16 Upper Lower 3A	N 29° 38' 36.5" W 098° 17' 35.5"	CLEAR 91° NE 4	11:20	0.227	20.0	110.9	744	275.00	1,424	Warden - 21375 Gunther Grove
06/28/16	06-28-16 Upper Lower 3A	N 29° 38' 36.5" W 098° 17' 35.5"	CLEAR 91° NE 4	11:20	0.130	23.8	110.6	744	275.00	1,205	Warden Property Line
06/29/16	06-29-16 4A	N 29° 38' 58.4" W 098° 17' 37.5"	CLEAR 85° NE 7	11:48	0.040	7.8	110.4	1074	675.00	3,904	City Property Line
06/29/16	06-29-16 4A	N 29° 38' 58.4" W 098° 17' 37.5"	CLEAR 85° NE 7	11:48	0.075	8.1	100.2	1074	675.00	3,748	Michels - 9118 Tuscan Hills
06/29/16	06-29-16 4A	N 29° 38' 58.4" W 098° 17' 37.5"	CLEAR 85° NE 7	11:48	0.047	12.5	91.9	1074	675.00	6,952	Midla - 8724 Verano Drive
06/29/16	06-29-16 4A	N 29° 38' 58.4" W 098° 17' 37.5"	CLEAR 85° NE 7	11:48	0.120	9.3	114.1	1074	675.00	3,594	Warden - 21375 Gunther Grove
06/29/16	06-29-16 4A	N 29° 38' 58.4" W 098° 17' 37.5"	CLEAR 85° NE 7	11:48	0.075	12.2	113.9	1074	675.00	3,387	Warden Property Line

NT = No Trigger, <0.020 ips.  
NT = No Trigger, <122dB



August 3, 2016

Mr. Mike Shands  
Garden Ridge Quarry Commission  
9400 Municipal Parkway  
Garden Ridge, Texas 78266

4818 E. Ben White Blvd.  
Suite 202  
Austin, TX 78741

Phone 512.442.6464  
Fax 512.442.6552

Dear Mr. Shands,

Enclosed is the analysis for the blasting conducted during the month of July 2016 at the Hanson Aggregates Quarry in Garden Ridge, Texas. Please place this information in your 2016 Blast Data Management Book.

At the request of the Garden Ridge Quarry Commission, Vibra-Tech, Inc. personnel used seismographs each day of blasting at various locations.

The attached report contains the original seismograph records obtained from the blasting along with a comparison of the recorded vibrations to the latest recommended U.S. Bureau of Mines (USBM) Variable Particle Velocity vs. Frequency Limits Report of Investigations (RI)-8507 (Nov. 1980).

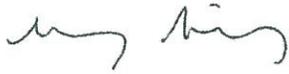
The recorded ground vibrations **satisfy** the Variable Particle Velocity vs. Frequency Limits recommended by the USBM RI-8507 (Nov. 1980), and the levels set forth in Garden Ridge City Ordinance 34.

The recorded air-borne effects **satisfy** the recommended levels set forth in the USBM RI-8485 (Nov. 1980), and the levels set forth in Garden Ridge City Ordinance 34.

If there are any additional questions, please contact the Quarry Commission, Mike Shands at 210-257-0868, or attend the Quarry Commission meeting held the 2<sup>nd</sup> Monday of each month at 7:00 p.m.

Respectfully submitted,

VIBRA-TECH, INC.



Geoffrey Rigsby  
Southwest Regional Manager

cc: Jacob Scherer, Hanson – Servtex

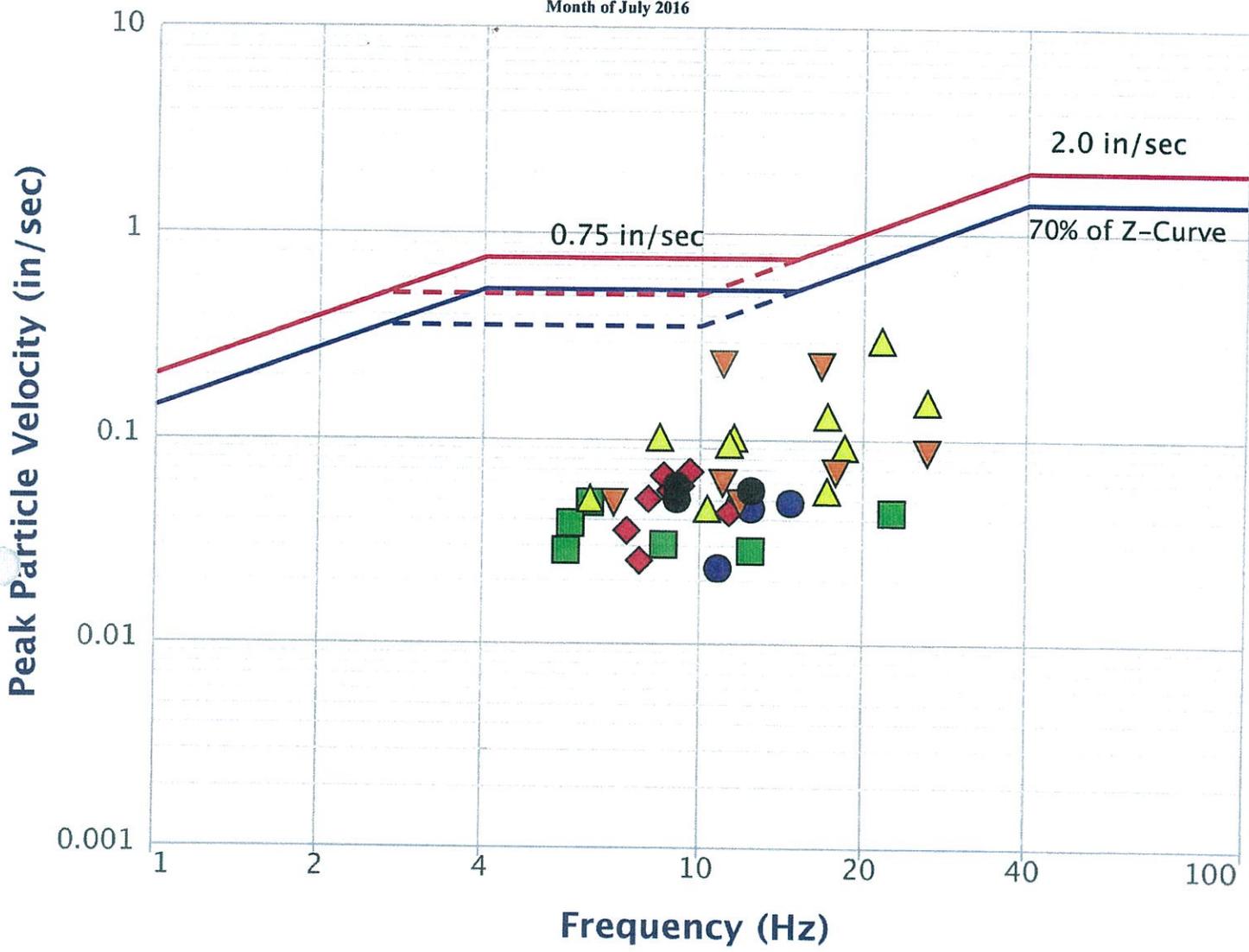


Google earth

© 2016 Google

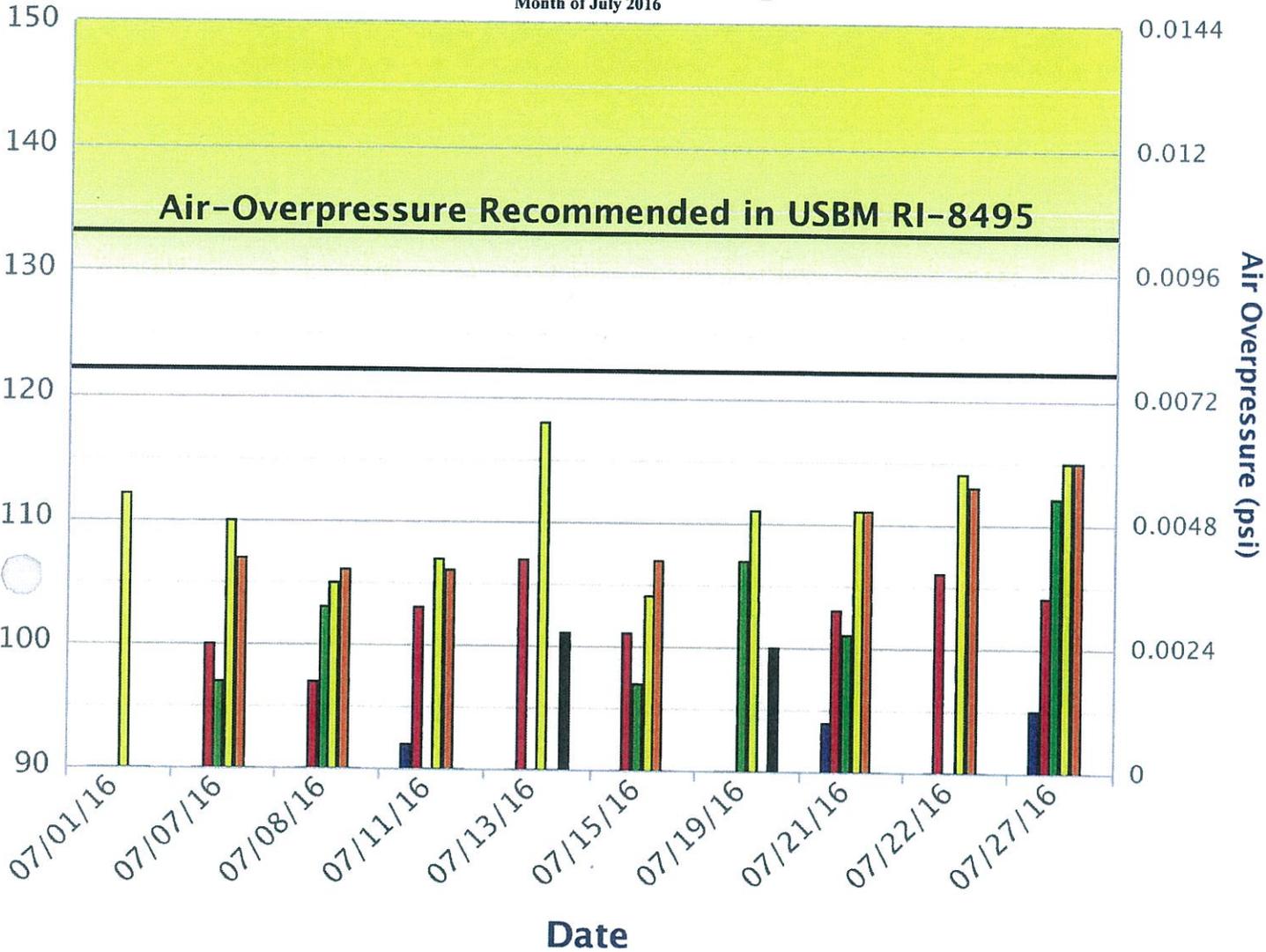


Garden Ridge Quarry Commission  
 Garden Ridge, Texas  
 USBM Graph  
 Month of July 2016



- Midla Residence    ◆ Michels Residence    ■ City Property Line    ▲ Warden Residence
- ▼ Warden Property Line    ● Holly Residence

Garden Ridge Quarry Commission  
 Garden Ridge, Texas  
 AO Graph  
 Month of July 2016



- Midla Residence
  Michels Residence
  City Property Line
  Warden Residence
- Warden Property Line
  Holly Residence

**GARDEN RIDGE QUARRY COMMISSION**  
**GARDEN RIDGE, TEXAS**  
**MONTH OF JULY**  
**2016**

DATE	SHOT # LOCATION	SHOT LOCATION GPS READING	WEATHER	TIME	PPV (in/sec)	FREQ (Hz)	AIR (dB)	SHOT DURATION (MS)	MAX LBS/ DELAY	DISTANCE FROM BLAST	SEISMOGRAPH LOCATION
07/01/16	07-01-16 South Wall A	N 29° 38' 15" W 098° 16' 40.6"	PT CLOUDY 87° S 6	11:58	*	*	*	871	1000.00	6,508	City Property Line
07/01/16	07-01-16 South Wall A	N 29° 38' 15" W 098° 16' 40.6"	PT CLOUDY 87° S 6	11:58	0.058	9.1	76.0	871	1000.00	3,999	Holly - 9916 Trophy Oaks
07/01/16	07-01-16 South Wall A	N 29° 38' 15" W 098° 16' 40.6"	PT CLOUDY 87° S 6	11:58	NT	NT	NT	871	1000.00	9,477	Michels - 9118 Tuscan Hills
07/01/16	07-01-16 South Wall A	N 29° 38' 15" W 098° 16' 40.6"	PT CLOUDY 87° S 6	11:58	NT	NT	NT	871	1000.00	11,644	Midla - 8724 Verano Drive
07/01/16	07-01-16 South Wall A	N 29° 38' 15" W 098° 16' 40.6"	PT CLOUDY 87° S 6	11:58	0.045	10.4	112.0	871	1000.00	5,294	Warden - 21375 Gunther Grove
07/07/16	07-07-16 1B	N 29° 38' 34.4" W 098° 17' 33.5"	CLEAR 92° S 12	11:42	0.027	5.7	96.7	720	130.00	2,162	City Property Line
07/07/16	07-07-16 1B	N 29° 38' 34.4" W 098° 17' 33.5"	CLEAR 92° S 12	11:42	0.035	7.4	100.0	720	130.00	4,420	Michels - 9118 Tuscan Hills
07/07/16	07-07-16 1B	N 29° 38' 34.4" W 098° 17' 33.5"	CLEAR 92° S 12	11:42	NT	NT	NT	720	130.00	6,832	Midla - 8724 Verano Drive
07/07/16	07-07-16 1B	N 29° 38' 34.4" W 098° 17' 33.5"	CLEAR 92° S 12	11:42	0.127	17.2	109.9	720	130.00	1,289	Warden - 21375 Gunther Grove
07/07/16	07-07-16 1B	N 29° 38' 34.4" W 098° 17' 33.5"	CLEAR 92° S 12	11:42	0.230	11.1	106.6	720	130.00	1,069	Warden Property Line
07/08/16	07-08-16 3B	N 29° 38' 39.2" W 098° 17' 35.8"	PT CLOUDY 96° S 12	14:43	0.047	6.3	102.6	1388	520.00	2,320	City Property Line
07/08/16	07-08-16 3B	N 29° 38' 39.2" W 098° 17' 35.8"	PT CLOUDY 96° S 12	14:43	0.067	9.6	96.7	1388	520.00	4,055	Michels - 9118 Tuscan Hills
07/08/16	07-08-16 3B	N 29° 38' 39.2" W 098° 17' 35.8"	PT CLOUDY 96° S 12	14:43	0.055	12.5	82.3	1388	520.00	6,654	Midla - 8724 Verano Drive
07/08/16	07-08-16 3B	N 29° 38' 39.2" W 098° 17' 35.8"	PT CLOUDY 96° S 12	14:43	0.232	16.1	105.2	1388	520.00	1,683	Warden - 21375 Gunther Grove
07/08/16	07-08-16 3B	N 29° 38' 39.2" W 098° 17' 35.8"	PT CLOUDY 96° S 12	14:43	0.225	16.7	105.5	1388	520.00	1,466	Warden Property Line

NT = No Trigger, <0.020 ips.  
NT = No Trigger, <122dB  
\* = Instrument Unavailable

**GARDEN RIDGE QUARRY COMMISSION**  
**GARDEN RIDGE, TEXAS**  
**MONTH OF JULY**  
**2016**

DATE	SHOT # LOCATION	SHOT LOCATION GPS READING	WEATHER	TIME	PPV (in/sec)	FREQ (Hz)	AIR (dB)	SHOT DURATION (MS)	MAX LBS/ DELAY	DISTANCE FROM BLAST	SEISMOGRAPH LOCATION
07/11/16	07-11-16 Lower 6	N 29° 38' 51.2" W 098° 17' 10.6"	CLEAR 96° S 19	12:25	NT	NT	NT	650	470.00	4,824	City Property Line
07/11/16	07-11-16 Lower 6	N 29° 38' 51.2" W 098° 17' 10.6"	CLEAR 96° S 19	12:25	0.050	8.1	103.0	650	470.00	6,061	Michels - 9118 Tuscan Hills
07/11/16	07-11-16 Lower 6	N 29° 38' 51.2" W 098° 17' 10.6"	CLEAR 96° S 19	12:25	0.023	10.9	92.0	650	470.00	9,038	Midla - 8724 Verano Drive
07/11/16	07-11-16 Lower 6	N 29° 38' 51.2" W 098° 17' 10.6"	CLEAR 96° S 19	12:25	0.100	8.5	107.0	650	470.00	3,894	Warden - 21375 Gunther Grove
07/11/16	07-11-16 Lower 6	N 29° 38' 51.2" W 098° 17' 10.6"	CLEAR 96° S 19	12:25	0.048	7.0	106.0	650	470.00	3,685	Warden Property Line
07/13/16	07-13-16 South Wall C	N 29° 38' 12.3" W 098° 16' 49.1"	CLEAR 95° S 16	14:02	NT	NT	NT	578	1050.00	5,809	City Property Line
07/13/16	07-13-16 South Wall C	N 29° 38' 12.3" W 098° 16' 49.1"	CLEAR 95° S 16	14:02	0.050	9.1	101.1	578	1050.00	3,262	Holly - 9916 Trophy Oaks
07/13/16	07-13-16 South Wall C	N 29° 38' 12.3" W 098° 16' 49.1"	CLEAR 95° S 16	14:02	0.025	7.8	106.9	578	1050.00	8,914	Michels - 9118 Tuscan Hills
07/13/16	07-13-16 South Wall C	N 29° 38' 12.3" W 098° 16' 49.1"	CLEAR 95° S 16	14:02	NT	NT	NT	578	1050.00	10,956	Midla - 8724 Verano Drive
07/13/16	07-13-16 South Wall C	N 29° 38' 12.3" W 098° 16' 49.1"	CLEAR 95° S 16	14:02	0.037	6.2	118.4	578	1050.00	4,612	Warden - 21375 Gunther Grove
07/15/16	07-15-16 3C	N 29° 38' 44.4" W 098° 17' 37.1"	CLEAR 87° S 11	11:35	0.042	22.7	96.7	930	1001.00	1,621	City Property Line
07/15/16	07-15-16 3C	N 29° 38' 44.4" W 098° 17' 37.1"	CLEAR 87° S 11	11:35	0.065	8.6	100.8	930	1001.00	3,813	Michels - 9118 Tuscan Hills
07/15/16	07-15-16 3C	N 29° 38' 44.4" W 098° 17' 37.1"	CLEAR 87° S 11	11:35	0.047	11.9	85.5	930	1001.00	5,597	Midla - 8724 Verano Drive
07/15/16	07-15-16 3C	N 29° 38' 44.4" W 098° 17' 37.1"	CLEAR 87° S 11	11:35	0.150	26.3	104.3	930	1001.00	2,191	Warden - 21375 Gunther Grove
07/15/16	07-15-16 3C	N 29° 38' 44.4" W 098° 17' 37.1"	CLEAR 87° S 11	11:35	0.085	26.3	107.2	930	1001.00	1,927	Warden Property Line

NT = No Trigger, <0.020 ips.  
NT = No Trigger, <122dB  
\* = Instrument Unavailable

**GARDEN RIDGE QUARRY COMMISSION**  
**GARDEN RIDGE, TEXAS**  
**MONTH OF JULY**  
**2016**

DATE	SHOT # LOCATION	SHOT LOCATION GPS READING	WEATHER	TIME	PPV (in/sec)	FREQ (Hz)	AIR (dB)	SHOT DURATION (MS)	MAX LBS/ DELAY	DISTANCE FROM BLAST	SEISMOGRAPH LOCATION
07/19/16	07-19-16 South Wall A	N 29° 38' 15.4" W 098° 16' 38.8"	CLOUDY 94° SE 12	14:34	0.038	5.8	107.0	788	975.00	6,661	City Property Line
07/19/16	07-19-16 South Wall A	N 29° 38' 15.4" W 098° 16' 38.8"	CLOUDY 94° SE 12	14:34	0.055	12.5	100.0	788	975.00	4,158	Holly - 9916 Trophy Oaks
07/19/16	07-19-16 South Wall A	N 29° 38' 15.4" W 098° 16' 38.8"	CLOUDY 94° SE 12	14:34	NT	NT	NT	788	975.00	9,607	Michels - 9118 Tuscan Hills
07/19/16	07-19-16 South Wall A	N 29° 38' 15.4" W 098° 16' 38.8"	CLOUDY 94° SE 12	14:34	NT	NT	NT	788	975.00	11,794	Midla - 8724 Verano Drive
07/19/16	07-19-16 South Wall A	N 29° 38' 15.4" W 098° 16' 38.8"	CLOUDY 94° SE 12	14:34	0.055	17.2	111.0	788	975.00	5,445	Warden - 21375 Gunther Grove
07/21/16	07-21-16 4A	N 29° 38' 58.7" W 098° 17' 37.9"	CLEAR 96° SE 12	15:24	0.030	8.6	101.0	1022	737.00	3,443	City Property Line
07/21/16	07-21-16 4A	N 29° 38' 58.7" W 098° 17' 37.9"	CLEAR 96° SE 12	15:24	0.058	9.3	103.0	1022	737.00	3,691	Michels - 9118 Tuscan Hills
07/21/16	07-21-16 4A	N 29° 38' 58.7" W 098° 17' 37.9"	CLEAR 96° SE 12	15:24	0.048	14.7	94.0	1022	737.00	6,876	Midla - 8724 Verano Drive
07/21/16	07-21-16 4A	N 29° 38' 58.7" W 098° 17' 37.9"	CLEAR 96° SE 12	15:24	0.100	11.6	111.0	1022	737.00	3,587	Warden - 21375 Gunther Grove
07/21/16	07-21-16 4A	N 29° 38' 58.7" W 098° 17' 37.9"	CLEAR 96° SE 12	15:24	0.060	11.1	111.0	1022	737.00	3,367	Warden Property Line
07/22/16	07-22-16 Lower 6	N 29° 38' 49.9" W 098° 17' 05.9"	CLEAR 91° SE 6	11:37	NT	NT	NT	530	470.00	5,056	City Property Line
07/22/16	07-22-16 Lower 6	N 29° 38' 49.9" W 098° 17' 05.9"	CLEAR 91° SE 6	11:37	0.043	11.4	106.0	530	470.00	6,478	Michels - 9118 Tuscan Hills
07/22/16	07-22-16 Lower 6	N 29° 38' 49.9" W 098° 17' 05.9"	CLEAR 91° SE 6	11:37	NT	NT	NT	530	470.00	9,410	Midla - 8724 Verano Drive
07/22/16	07-22-16 Lower 6	N 29° 38' 49.9" W 098° 17' 05.9"	CLEAR 91° SE 6	11:37	0.090	18.5	114.0	530	470.00	4,056	Warden - 21375 Gunther Grove
07/22/16	07-22-16 Lower 6	N 29° 38' 49.9" W 098° 17' 05.9"	CLEAR 91° SE 6	11:37	0.068	17.9	113.0	530	470.00	3,856	Warden Property Line

NT = No Trigger, <0.020 ips.  
NT = No Trigger, <122dB  
\* = Instrument Unavailable

**GARDEN RIDGE QUARRY COMMISSION**  
**GARDEN RIDGE, TEXAS**  
**MONTH OF JULY**  
**2016**

DATE	SHOT # LOCATION	SHOT LOCATION GPS READING	WEATHER	TIME	PPV (in/sec)	FREQ (Hz)	AIR (dB)	SHOT DURATION (MS)	MAX LBS/ DELAY	DISTANCE FROM BLAST	SEISMOGRAPH LOCATION
07/27/16	07-27-16 4B	N 29° 39' 02.1" W 098° 17' 36.4"	CLOUDY 86° SW 6	12:47	0.028	12.5	112.0	612	780.00	4,289	City Property Line
07/27/16	07-27-16 4B	N 29° 39' 02.1" W 098° 17' 36.4"	CLOUDY 86° SW 6	12:47	0.055	8.9	104.0	612	780.00	3,925	Michels - 9118 Tuscan Hills
07/27/16	07-27-16 4B	N 29° 39' 02.1" W 098° 17' 36.4"	CLOUDY 86° SW 6	12:47	0.045	12.5	95.0	612	780.00	7,185	Midla - 8724 Verano Drive
07/27/16	07-27-16 4B	N 29° 39' 02.1" W 098° 17' 36.4"	CLOUDY 86° SW 6	12:47	0.093	11.4	115.0	612	780.00	3,975	Warden - 21375 Gunther Grove
07/27/16	07-27-16 4B	N 29° 39' 02.1" W 098° 17' 36.4"	CLOUDY 86° SW 6	12:47	0.048	11.9	115.0	612	780.00	3,767	Warden Property Line
07/28/16	07-28-16 S Wall C	N 29° 38' 13.2" W 098° 16' 46.3"	PT CLOUDY 84° S 4	11:59	NT	NT	NT	490	1027.00	6,036	City Property Line
07/28/16	07-28-16 S Wall C	N 29° 38' 13.2" W 098° 16' 46.3"	PT CLOUDY 84° S 4	11:59	0.035	7.8	86.0	490	1027.00	3,502	Holly - 9916 Trophy Oaks
07/28/16	07-28-16 S Wall C	N 29° 38' 13.2" W 098° 16' 46.3"	PT CLOUDY 84° S 4	11:59	NT	NT	NT	490	1027.00	9,095	Michels - 9118 Tuscan Hills
07/28/16	07-28-16 S Wall C	N 29° 38' 13.2" W 098° 16' 46.3"	PT CLOUDY 84° S 4	11:59	NT	NT	NT	490	1027.00	11,181	Midla - 8724 Verano Drive
07/28/16	07-28-16 S Wall C	N 29° 38' 13.2" W 098° 16' 46.3"	PT CLOUDY 84° S 4	11:59	0.035	19.2	104.0	490	1027.00	4,833	Warden - 21375 Gunther Grove

NT = No Trigger, <0.020 ips.

NT = No Trigger, <122dB

\* = Instrument Unavailable

CITY OF GARDEN RIDGE

CITIZEN QUARRY BLAST IMPACT REPORT

Name: ROBERT KESSLER Report Date: 7/19/2016

Address: 19960 Fm 2252 E-Mail Address: \_\_\_\_\_

Phone: 210-421-3587 Blast Date/Time: 7/19/2016 / 2:32 pm

Please describe the event.

BLAST SHOOK HOUSE - GRAND DAUGHTER  
WANTED TO KNOW WHAT HAPPEND

How did this blast compare to other blasts? SAME. HOUSE SHAKE  
AND MOVEMENT - WITH SOME SHAKING  
AGAIN @ 2:34 pm.

On a 1 to 5 scale, please rate the blast intensity. (1= minor, 5= major) 5

What was your activity at the time of the blast? COMPUTER WORK.

In what general direction does your house face? (N, E, S or W) NORTH

Is your home a 1 story, 1 1/2 story, or 2 story or larger? 1 STORY

What is the approximate square footage of your home? 2800

Would you like a Quarry Commission member to contact you regarding your report?  
(Yes or No) \_\_\_\_\_

*We encourage you to attend the next meeting of the Quarry Commission. Representatives of the monitoring company and the blasting contractor as well as the Quarry Manager normally attend every meeting and are available to answer questions. The Commission meets the second Monday of each month at 7:00 PM in the Municipal Courtroom.*

**RECEIVED**

JUL 22 2016

Please complete the form and print it, then submit the completed report(s) to the City Hall or to [quarrycom@ci.garden-ridge.tx.us](mailto:quarrycom@ci.garden-ridge.tx.us). Thank you for submitting the form.

PER JH

2016/2-7  
Ant. Q.C. 7-28-16

CITY OF GARDEN RIDGE

CITIZEN QUARRY BLAST IMPACT REPORT

Name: ROBERT KESSLER Report Date: 7/1/2016

Address: 19960 Fm 2252 E-Mail Address: \_\_\_\_\_

Phone: 214-421-3587 Blast Date/Time: 7/1/2016 / 11:55 AM

Please describe the event.

HOUSE SHAKING AND MOVEMENT

How did this blast compare to other blasts? SAME

On a 1 to 5 scale, please rate the blast intensity. (1= minor, 5= major) 3

What was your activity at the time of the blast? PAPER WORK

In what general direction does your house face? (N, E, S or W) (N)

Is your home a 1 story, 1 1/2 story, or 2 story or larger? 1

What is the approximate square footage of your home? 2800

Would you like a Quarry Commission member to contact you regarding your report?  
(Yes or No) \_\_\_\_\_

*We encourage you to attend the next meeting of the Quarry Commission. Representatives of the monitoring company and the blasting contractor as well as the Quarry Manager normally attend every meeting and are available to answer questions. The Commission meets the second Monday of each month at 7:00 PM in the Municipal Courtroom.*

2016/1-7  
**RECEIVED**  
Sent  
QC 7-6

Please complete the form and print it, then submit the completed report(s) to the City Hall or to [quarrycom@ci.garden-ridge.tx.us](mailto:quarrycom@ci.garden-ridge.tx.us). Thank you for submitting the form.

JUL 06 2016

PER JH

CITY OF GARDEN RIDGE

CITIZEN QUARRY BLAST IMPACT REPORT

Name: ROBERT KESSLER Report Date: 6/23/2016

Address: 19960 Fm 2252 E-Mail Address: \_\_\_\_\_

Phone: 210-421-3587 Blast Date/Time: 6/23/2016 / 11:48 Am

Please describe the event.

HOUSE SHAKING AND MOVEMENT OF CHAIRS - TABLE

How did this blast compare to other blasts? SAME

On a 1 to 5 scale, please rate the blast intensity. (1= minor, 5= major) 4

What was your activity at the time of the blast? PAPER WORK

In what general direction does your house face? (N, E, S or W) NORTH

Is your home a 1 story, 1 1/2 story, or 2 story or larger? 1

What is the approximate square footage of your home? 2800

Would you like a Quarry Commission member to contact you regarding your report? (Yes or No) \_\_\_\_\_

*We encourage you to attend the next meeting of the Quarry Commission. Representatives of the monitoring company and the blasting contractor as well as the Quarry Manager normally attend every meeting and are available to answer questions. The Commission meets the second Monday of each month at 7:00 PM in the Municipal Courtroom.*

2016/2-6  
**RECEIVED**  
sent  
QC 7-6  
JUL 06 2016

Please complete the form and print it, then submit the completed report(s) to the City Hall or to [quarrycom@ci.garden-ridge.tx.us](mailto:quarrycom@ci.garden-ridge.tx.us). Thank you for submitting the form.

PER J.H.

## City Secretary

---

**From:** noreply@civicplus.com  
**Sent:** Wednesday, June 22, 2016 1:12 PM  
**To:** City Administrator; City Secretary  
**Subject:** Online Form Submittal: Citizen Quarry Blast Impact Report

### Citizen Quarry Blast Impact Report

First Name	MJ
Last Name	Mills
Report Date	6/22/2016
Phone Number:	210 744 5297
E-Mail Address	<a href="mailto:jerrymills@hotmail.com">jerrymills@hotmail.com</a>
Address1	<i>Field not completed.</i>
Blast Date/Time:	12.52 Wednesday June 22 2016
Please describe the event.	The whole house shook horizontally , music flew off the piano ,
How did this blast compare to other blasts?	20302 REGENCY RUN
On a 1 to 5 scale, please rate the blast intensity. (1=minor, 5 = major)	5
What was your activity at the time of blast?	Doing therapy with my handicapped daughter . She got traumatized by the brusque movements . We heard no previous warning signal either .
In what general direction does you house face? (N,E,S or W)	NE
What is the approximate square footage of your home?	4000
Is your home a 1 story, 1 1/2 , or 2 story or large?	Two story
Would you like a Quarry	No

2016/1-6

Commission member to  
contact you regarding  
your report?

---

We encourage you to attend the next meeting of the Quarry Commission.  
*Representatives of the monitoring company and the blasting contractor as well as  
the Quarry Manager normally attend every meeting and are available to answer  
questions. The Commission meets the second Monday of every other month at  
7:00 PM in the City Council Chambers in City Hall.*

---

By filing this report, you consent to the public release of this information.

---

Email not displaying correctly? [View it in your browser.](#)