



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, July 10, 2017 at 6:00 p.m.

The Garden Ridge City Quarry Commission will meet in regular session on Monday, July 10, 2017 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 July 7, 2017 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. May 8, 2017 Regular Quarry Commission Meeting
4. Citizens Comments:

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 two (2) minutes per citizen during Item 6.
- d. Citizens' comments will be limited to thirty (30) minutes 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. Status of submission of blasting permit applications for new permit year 10/1/17-9/3/18.
- e. Discuss Grapevine article topics.
- f. Discuss future training sessions.

6. Citizen's Participation: - 2 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

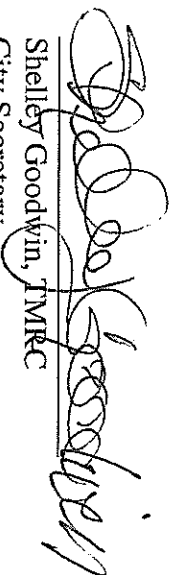
attorney about pending or contemplated litigation, settlement offer or on a matter in which the duty of the attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas conflict with the Open Meetings Act and may invoke this right where the City 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 551.14(c) and the meeting is conducted by all participants in reliance on this opinion.

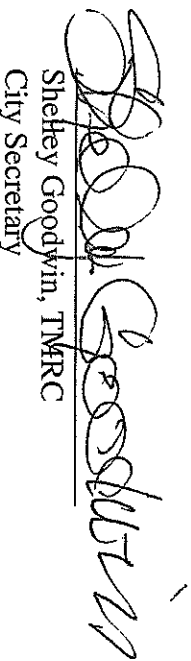
Attendance By Other Elected or Appointed Officials:

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.

A handwritten signature in black ink, appearing to read "Shelley Goodwin".

Shelley Goodwin, TMRC
City Secretary

This is to certify that I, Shelley Goodwin, posted this Agenda at 4:00pm on July 6, 2017 on the bulletin board located at the entrance to the Garden Ridge City Hall, 9400 Municipal Parkway, Garden Ridge, Texas.

A handwritten signature in black ink, appearing to read "Shelley Goodwin".

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 **MAY 8, 2017**

Members Present:

Chairman Mike Shands
Vice Chairman Wayne Mudge
Commissioner Albert Haddad (arrived at 6:17)
Commissioner Johnell Holly
Commissioner Jerry Barucky
Commissioner Mark DuBois

Member Absent:

Commissioner Richard Holloway

City Staff Present:

Nancy Cain, City Administrator
Lori Claus, Administrative Assistant
Bryan Lantzy, Councilmember

1. Call to Order

With a quorum of the Quarry Commission Members present, Chairman Mike Shands called the regular meeting of the Garden Ridge Quarry Commission to order at 6:03 p.m. on Monday, May 8, 2017, in the City Council Chambers of the Garden Ridge City Hall, 9400 Municipal Parkway, Garden Ridge, Texas 78266.

2. Approval of Minutes:

a) March 13, 2017 Regular Quarry Commission Meeting

Motion: Upon motion made by Commissioner Holly and seconded by Commissioner Mudge to approve the March 13, 2017 Regular Quarry Commission Meeting Minutes. The Quarry Commission voted five (5) for, none (0) opposed. The motion carried unanimously.

3. Citizens Comments

No one wished to speak.

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 March blast analysis. He stated that 12 blasts occurred during the month of March and one of the blasts exceeded the limits of Ordinance 34. The highest ppv readings occurred on March 31, 2017 in Upper 3B, with 0.375 ppv recorded at the Warden residence. The strongest air blast occurred on March 7, 2017, in 4A with an overpressure of 122 dB recorded at the Warden property line. He also discussed the timing and shots.

Mr. Rigsby explained that the duration of the vibration during the 3/31/17 blast lasted longer than a typical blast and unexpectedly exceeded their expectations. Recent rain and ground saturation may have contributed to this unexpected reading. Future blasting in this location will most likely wait until the summer under dryer conditions. The sudden increase in wind speed may have contributed to the high overpressure reading of 122 dB on 3/7/17 (122 dB is within the City ordinance and below the Bureau of Mines safe parameter of 133 dB).

He then presented and discussed the April blast analysis. He stated that 12 blasts occurred during the month of April and none of the blasts exceeded the limits of Ordinance 34. The highest ppv readings occurred on April 7, 2017 in 3C, with 0.225 ppv recorded at the Warden residence. The strongest air blast occurred on April 20, 2017 at South Wall C at the Holly residence, with an overpressure of 116 dB recorded. He also discussed the timing and shots.

Mr. Rigsby explained that due to an equipment malfunction, readings at the Cohen residence on 4/26/17 were unobtainable (indicated by an asterisk on the chart).

The Quarry Commission discussed the shots and the blast analysis.

- 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 from Jo Ana Kessler (3/13/17 and 4/10/17) and Valinda Bacon (3/7/17).

Geoffrey Rigsby, Vibra-Tech, reviewed the shot reports for each citizen blast report received during the months of March and April. Ms. Bacon's report coincides with the 122 dB air overpressure reading. Ms. Kessler's report dates coincide with shots on the south wall, which is close to her residence.

The Quarry Commission discussed the shots and which Commissioner will contact the citizens that made the reports. Mr. Rigsby advised that blasts are advancing towards Forest Waters and Georg Ranch along the south wall. The Quarry Commission recommended contacting the HOAs in Forest Waters and George Ranch to discuss presentations at upcoming HOA meetings to inform residents about Quarry activities.

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. There were two requests for monitors by Karen Cozean, 21420 Water Wood Drive, and Juan Trevino, 21903 Paseo Corto. The roving monitor currently located at the Cohen residence will be relocated to the Cozean residence for the months of May and June and moved to the Trevino residence in July. Commissioner Barucky will contact Ms. Cozean to discuss.

Residents who are interested in the placement of a monitor at their home should contact the City of Garden Ridge.

d. Discuss Grapevine article topics.

Jerry Barucky will continue to author Grapevine articles on topics of his choosing. One suggested topic is the blasts on the south wall that may impact the residents of Forest Waters and George Ranch.

e. Discuss future training sessions.

At the next Quarry Commission meeting, Orica will present a program on the different types of "decking", what is it and what it is meant to do.

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

No one wished to speak.

6. Training Session.

"Engineering a Safe and Successful Blast," presented by Nolan Eckroade of Vibra-Tech, was very informative and well received by the Commission. The presentation included information on the science and engineering knowledge required for a blast design, a discussion of electronic detonators, the large amounts of data available to predict blast patterns, the

sophisticated software used to plan the placement of holes and timing of blasts and the ever changing technology available to make blasting more predictable, safe and productive for both a quarry and surrounding areas.

7. Adjournment:

There being no further business, the Monday, May 8, 2017 Garden Ridge Quarry Commission regular meeting was adjourned at 7:38 p.m. by Chairman Shands.

ATTEST

Mike Shands
Quarry Commission Chair

Shelley Goodwin
City Secretary

**SIGN IN TO SPEAK AT THE MAY 8, 2017
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.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____
9.	_____	_____
10.	_____	_____



June 1, 2017

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 May 2017 at the Hanson Aggregates Quarry in Garden Ridge, Texas. Please place this information in your 2017 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 2nd Monday of each month at 7:00 p.m.



Respectfully submitted,

VIBRA-TECH, INC.

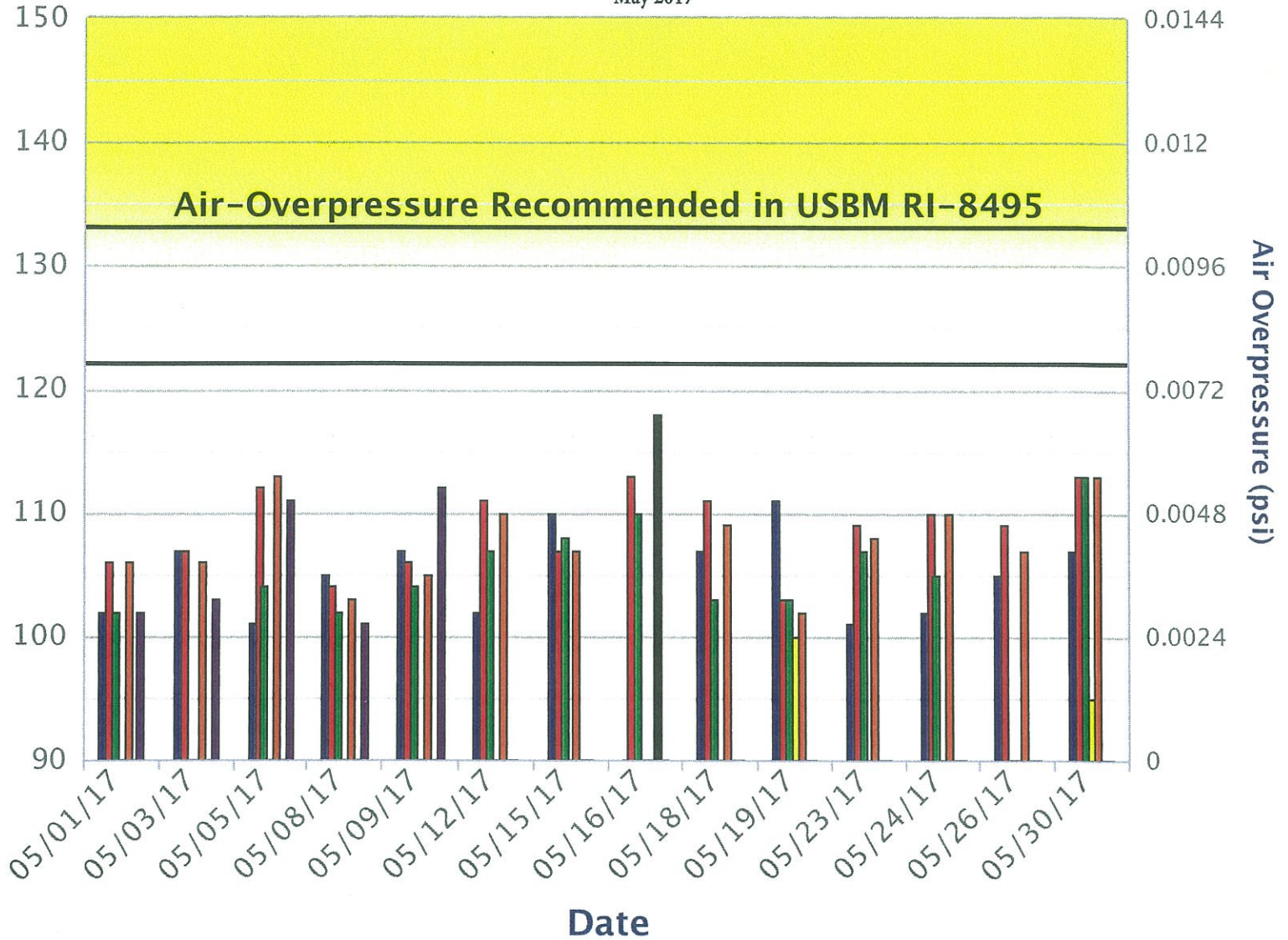
A handwritten signature in black ink, appearing to read "Geoffrey Rigsby".

Geoffrey Rigsby
Southwest Regional Manager

cc: Hal Halamuda, Hanson – Servtex

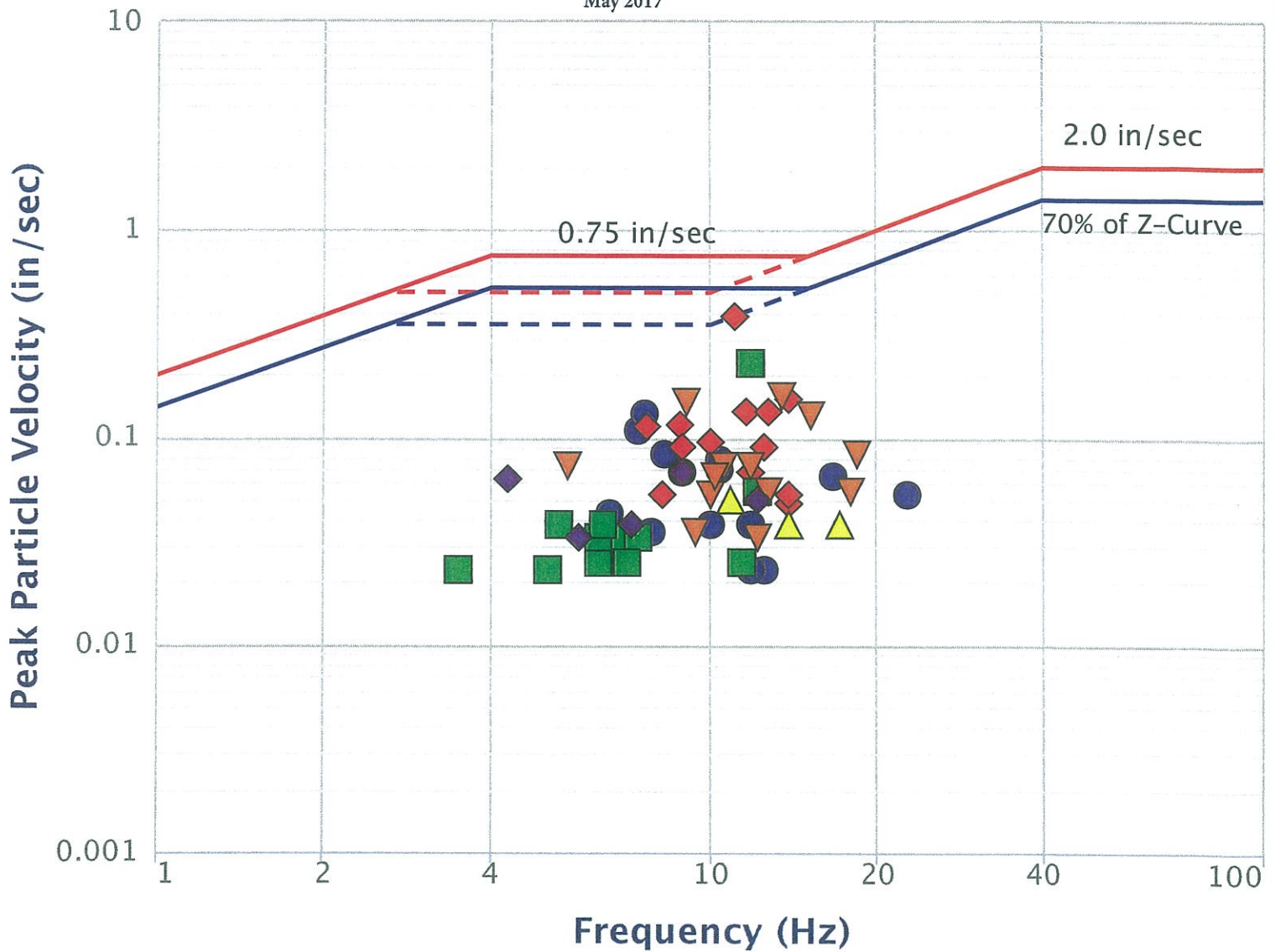


Garden Ridge Quarry Commission
 Garden Ridge, Texas
 AO Graph
 May 2017



Michels Residence Warden Residence City Property Line Trevino Residence
 Warden Property Line Holly Residence Cohen Residence

Garden Ridge Quarry Commission
Garden Ridge, Texas
USBM Graph
May 2017



- Michels Residence
 Warden Residence
 City Property Line
 Trevino Residence
- Warden Property Line
 Holly Residence
 Cohen Residence

**GARDEN RIDGE QUARRY COMMISSION
HANSON - SERVTEX QUARRY
GARDEN RIDGE, TEXAS
MAY 2017**

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
05/01/17	05-01-17 3H	N 29° 39 01.1" W 098° 17' 41.3"	CLEAR 80° SW 20	12:43	0.330	7.0	102.0	1347	953.00	4,055	City Property Line
05/01/17	05-01-17 3H	N 29° 39 01.1" W 098° 17' 41.3"	CLEAR 80° SW 20	12:43	0.068	8.9	102.0	1347	953.00	4,746	Cohen - 10041 Trophy Oaks
05/01/17	05-01-17 3H	N 29° 39 01.1" W 098° 17' 41.3"	CLEAR 80° SW 20	12:43	0.108	7.4	102.0	1347	953.00	3,482	Michels - 9118 Tuscan Hills
05/01/17	05-01-17 3H	N 29° 39 01.1" W 098° 17' 41.3"	CLEAR 80° SW 20	12:43	0.115	8.8	106.0	1347	953.00	3,863	Warden - 21375 Gunther Grove
05/01/17	05-01-17 3H	N 29° 39 01.1" W 098° 17' 41.3"	CLEAR 80° SW 20	12:43	0.083	18.5	106.0	1347	953.00	3,664	Warden Property Line
05/03/17	05-03-17 Bench 5	N 29° 39 05.9" W 098° 17' 15.2"	CLOUDY 80° SW 12	12:16	NT	NT	NT	551	509.00	5,558	City Property Line
05/03/17	05-03-17 Bench 5	N 29° 39 05.9" W 098° 17' 15.2"	CLOUDY 80° SW 12	12:16	0.038	7.2	103.0	551	509.00	5,551	Cohen - 10041 Trophy Oaks
05/03/17	05-03-17 Bench 5	N 29° 39 05.9" W 098° 17' 15.2"	CLOUDY 80° SW 12	12:16	0.023	12.5	107.0	551	509.00	5,829	Michels - 9118 Tuscan Hills
05/03/17	05-03-17 Bench 5	N 29° 39 05.9" W 098° 17' 15.2"	CLOUDY 80° SW 12	12:16	0.048	13.9	107.0	551	509.00	4,865	Warden - 21375 Gunther Grove
05/03/17	05-03-17 Bench 5	N 29° 39 05.9" W 098° 17' 15.2"	CLOUDY 80° SW 12	12:16	0.035	9.4	106.0	551	509.00	4,645	Warden Property Line
05/05/17	05-05-2017 3E	N 29° 38 48.9" W 098° 17' 40.6"	CLEAR 82° N 10	13:17	0.038	5.3	104.0	750	1133.00	2,911	City Property Line
05/05/17	05-05-2017 3E	N 29° 38 48.9" W 098° 17' 40.6"	CLEAR 82° N 10	13:17	0.043	5.5	111.0	750	1133.00	3,509	Cohen - 10041 Trophy Oaks
05/05/17	05-05-2017 3E	N 29° 38 48.9" W 098° 17' 40.6"	CLEAR 82° N 10	13:17	0.053	22.7	101.0	750	1133.00	3,433	Michels - 9118 Tuscan Hills
05/05/17	05-05-2017 3E	N 29° 38 48.9" W 098° 17' 40.6"	CLEAR 82° N 10	13:17	0.073	5.5	113.0	750	1133.00	2,426	Warden Property Line
05/05/17	05-05-2017 3E	N 29° 38 48.9" W 098° 17' 40.6"	CLEAR 82° N 10	13:17	0.113	7.7	112.0	750	1133.00	2,625	Warden - 21375 Gunther Grove

NT = No Trigger, <0.020 ips.

NT = No Trigger, <122dB

**GARDEN RIDGE QUARRY COMMISSION
HANSON - SERVTEX QUARRY
GARDEN RIDGE, TEXAS
MAY 2017**

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
05/08/17	05-08-2017 3F	N 29° 38' 54.2" W 098° 17' 41.6"	CLOUDY 85° SE 10	16:27	0.033	7.4	102.0	916	830.00	3,388	City Property Line
05/08/17	05-08-2017 3F	N 29° 38' 54.2" W 098° 17' 41.6"	CLOUDY 85° SE 10	16:27	0.050	12.2	101.0	916	830.00	4,050	Cohen - 10041 Trophy Oaks
05/08/17	05-08-2017 3F	N 29° 38' 54.2" W 098° 17' 41.6"	CLOUDY 85° SE 10	16:27	0.083	8.3	105.0	916	830.00	3,365	Michels - 9118 Tuscan Hills
05/08/17	05-08-2017 3F	N 29° 38' 54.2" W 098° 17' 41.6"	CLOUDY 85° SE 10	16:27	0.073	11.9	103.0	916	830.00	2,966	Warden Property Line
05/08/17	05-08-2017 3F	N 29° 38' 54.2" W 098° 17' 41.6"	CLOUDY 85° SE 10	16:27	0.090	8.9	104.0	916	830.00	3,164	Warden - 21375 Gunther Grove
05/09/17	05-09-2017 3G	N 29° 38' 57.2" W 098° 17' 41.3"	RAIN 80° SE 8	13:44	0.025	11.4	104.0	722	664.00	3,667	City Property Line
05/09/17	05-09-2017 3G	N 29° 38' 57.2" W 098° 17' 41.3"	RAIN 80° SE 8	13:44	0.033	5.8	112.0	722	664.00	4,353	Cohen - 10041 Trophy Oaks
05/09/17	05-09-2017 3G	N 29° 38' 57.2" W 098° 17' 41.3"	RAIN 80° SE 8	13:44	0.043	6.6	107.0	722	664.00	3,398	Michels - 9118 Tuscan Hills
05/09/17	05-09-2017 3G	N 29° 38' 57.2" W 098° 17' 41.3"	RAIN 80° SE 8	13:44	0.055	12.8	105.0	722	664.00	3,269	Warden Property Line
05/09/17	05-09-2017 3G	N 29° 38' 57.2" W 098° 17' 41.3"	RAIN 80° SE 8	13:44	0.090	12.5	106.0	722	664.00	3,468	Warden - 21375 Gunther Grove
05/12/17	05-12-2017 3H	N 29° 39' 1.7" W 098° 17' 41.6"	CLEAR 85° W 7	14:26	0.025	6.3	107.0	945	693.00	4,106	City Property Line
05/12/17	05-12-2017 3H	N 29° 39' 1.7" W 098° 17' 41.6"	CLEAR 85° W 7	14:26	0.130	7.6	102.0	945	693.00	3,473	Michels - 9118 Tuscan Hills
05/12/17	05-12-2017 3H	N 29° 39' 1.7" W 098° 17' 41.6"	CLEAR 85° W 7	14:26	0.073	10.6	110.0	945	693.00	3,726	Warden Property Line
05/12/17	05-12-2017 3H	N 29° 39' 1.7" W 098° 17' 41.6"	CLEAR 85° W 7	14:26	0.095	10.0	111.0	945	693.00	3,924	Warden - 21375 Gunther Grove
05/12/17	05-12-2017 3H	N 29° 39' 1.7" W 098° 17' 41.6"	CLEAR 85° W 7	14:26	0.038	17.2	79.0	945	693.00	7,040	Trevino Residence

**GARDEN RIDGE QUARRY COMMISSION
HANSON - SERVTEX QUARRY
GARDEN RIDGE, TEXAS
MAY 2017**

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
05/15/17	05-15-2017 Bench 5	N 29° 39' 6.9" W 098° 17' 15.1"	PT CLOUDY 85° SE 10	12:05	0.023	5.1	108.0	667	582.00	5,643	City Property Line
05/15/17	05-15-2017 Bench 5	N 29° 39' 6.9" W 098° 17' 15.1"	PT CLOUDY 85° SE 10	12:05	0.038	11.9	110.0	667	582.00	5,862	Michels - 9118 Tuscan Hills
05/15/17	05-15-2017 Bench 5	N 29° 39' 6.9" W 098° 17' 15.1"	PT CLOUDY 85° SE 10	12:05	0.055	17.9	107.0	667	582.00	4,739	Warden Property Line
05/15/17	05-15-2017 Bench 5	N 29° 39' 6.9" W 098° 17' 15.1"	PT CLOUDY 85° SE 10	12:05	0.068	11.9	107.0	667	582.00	4,960	Warden - 21375 Gunther Grove
05/15/17	05-15-2017 Bench 5	N 29° 39' 6.9" W 098° 17' 15.1"	PT CLOUDY 85° SE 10	12:05	NT	NT	NT	667	582.00	9,398	Trevino Residence
05/16/17	05-16-2017 S Wall D	N 29° 38' 9.9" W 098° 16' 50.4"	CLOUDY 80° SE 7	11:09	0.023	3.5	110.0	639	1027.00	5,746	City Property Line
05/16/17	05-16-2017 S Wall D	N 29° 38' 9.9" W 098° 16' 50.4"	CLOUDY 80° SE 7	11:09	0.068	8.9	118.0	639	1027.00	3,178	Holly - 9916 Trophy Oaks
05/16/17	05-16-2017 S Wall D	N 29° 38' 9.9" W 098° 16' 50.4"	CLOUDY 80° SE 7	11:09	NT	NT	NT	639	1027.00	8,926	Michels - 9118 Tuscan Hills
05/16/17	05-16-2017 S Wall D	N 29° 38' 9.9" W 098° 16' 50.4"	CLOUDY 80° SE 7	11:09	0.053	8.2	113.0	639	1027.00	4,566	Warden - 21375 Gunther Grove
05/16/17	05-16-2017 S Wall D	N 29° 38' 9.9" W 098° 16' 50.4"	CLOUDY 80° SE 7	11:09	NT	NT	NT	639	1027.00	11,194	Trevino Residence
05/18/17	05-18-2017 Lower 6	N 29° 38' 53.5" W 098° 17' 6.8"	CLOUDY 80° SE 15	12:40	0.025	7.1	103.0	830	542.00	5,201	City Property Line
05/18/17	05-18-2017 Lower 6	N 29° 38' 53.5" W 098° 17' 6.8"	CLOUDY 80° SE 15	12:40	0.038	10.0	107.0	830	542.00	6,397	Michels - 9118 Tuscan Hills
05/18/17	05-18-2017 Lower 6	N 29° 38' 53.5" W 098° 17' 6.8"	CLOUDY 80° SE 15	12:40	0.053	10.0	109.0	830	542.00	4,048	Warden Property Line
05/18/17	05-18-2017 Lower 6	N 29° 38' 53.5" W 098° 17' 6.8"	CLOUDY 80° SE 15	12:40	0.133	11.6	111.0	830	542.00	4,255	Warden - 21375 Gunther Grove
05/18/17	05-18-2017 Lower 6	N 29° 38' 53.5" W 098° 17' 6.8"	CLOUDY 80° SE 15	12:40	NT	NT	NT	830	542.00	9,710	Trevino Residence

NT = No Trigger, <0.020 ips.

NT = No Trigger, <122dB

**GARDEN RIDGE QUARRY COMMISSION
HANSON - SERVTEX QUARRY
GARDEN RIDGE, TEXAS
MAY 2017**

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
05/19/17	05-19-2017 3C	N 29° 38 42.3" W 098° 17' 40.1"	CLOUDY 85° SE 15	14:15	0.048	8.8	101.0	676	416.00	2,338	City Property Line
05/19/17	05-19-2017 3C	N 29° 38 42.3" W 098° 17' 40.1"	CLOUDY 85° SE 15	14:15	0.070	10.4	111.0	676	416.00	3,600	Michels - 9118 Tuscan Hills
05/19/17	05-19-2017 3C	N 29° 38 42.3" W 098° 17' 40.1"	CLOUDY 85° SE 15	14:15	0.148	9.1	102.0	676	416.00	1,756	Warden Property Line
05/19/17	05-19-2017 3C	N 29° 38 42.3" W 098° 17' 40.1"	CLOUDY 85° SE 15	14:15	0.228	11.9	103.0	676	416.00	1,957	Warden - 21375 Gunther Grove
05/19/17	05-19-2017 3C	N 29° 38 42.3" W 098° 17' 40.1"	CLOUDY 85° SE 15	14:15	0.038	13.9	100.0	676	416.00	6,623	Trevino Residence
05/23/17	05-23-2017 3D	N 29° 38 45.4" W 098° 17' .41"	CLOUDY 84° NE 6	13:33	0.033	6.3	107.0	756	560.00	2,571	City Property Line
05/23/17	05-23-2017 3D	N 29° 38 45.4" W 098° 17' .41"	CLOUDY 84° NE 6	13:33	0.035	7.8	101.0	756	560.00	3,441	Michels - 9118 Tuscan Hills
05/23/17	05-23-2017 3D	N 29° 38 45.4" W 098° 17' .41"	CLOUDY 84° NE 6	13:33	0.065	10.2	108.0	756	560.00	2,076	Warden Property Line
05/23/17	05-23-2017 3D	N 29° 38 45.4" W 098° 17' .41"	CLOUDY 84° NE 6	13:33	0.153	13.9	109.0	756	560.00	2,272	Warden - 21375 Gunther Grove
05/23/17	05-23-2017 3D	N 29° 38 45.4" W 098° 17' .41"	CLOUDY 84° NE 6	13:33	NT	NT	NT	756	560.00	6,586	Trevino Residence
05/24/17	05-24-2017 3E	N 29° 38 49.4" W 098° 17' 41.4"	CLEAR 84° SW 6	14:30	0.038	6.4	105.0	928	760.00	2,930	City Property Line
05/24/17	05-24-2017 3E	N 29° 38 49.4" W 098° 17' 41.4"	CLEAR 84° SW 6	14:30	0.065	16.7	102.0	928	760.00	3,359	Michels - 9118 Tuscan Hills
05/24/17	05-24-2017 3E	N 29° 38 49.4" W 098° 17' 41.4"	CLEAR 84° SW 6	14:30	0.128	15.2	110.0	928	760.00	2,482	Warden Property Line
05/24/17	05-24-2017 3E	N 29° 38 49.4" W 098° 17' 41.4"	CLEAR 84° SW 6	14:30	0.133	12.8	110.0	928	760.00	2,678	Warden - 21375 Gunther Grove
05/24/17	05-24-2017 3E	N 29° 38 49.4" W 098° 17' 41.4"	CLEAR 84° SW 6	14:30	0.050	10.9	89.0	928	760.00	6,648	Trevino Residence

NT = No Trigger, <0.020 ips.

NT = No Trigger, <122dB

GARDEN RIDGE QUARRY COMMISSION
HANSON - SERVTEX QUARRY
GARDEN RIDGE, TEXAS
MAY 2017

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
05/26/17	05-26-2017 Bench 5	N 29° 39' 7.1" W 098° 17' 14.7"	CLOUDY 88° S 8	11:57	NT	NT	NT	667	441.00	4,960	City Property Line
05/26/17	05-26-2017 Bench 5	N 29° 39' 7.1" W 098° 17' 14.7"	CLOUDY 88° S 8	11:57	0.023	11.9	105.0	667	441.00	5,902	Michels - 9118 Tuscan Hills
05/26/17	05-26-2017 Bench 5	N 29° 39' 7.1" W 098° 17' 14.7"	CLOUDY 88° S 8	11:57	0.033	12.2	107.0	667	441.00	4,773	Warden Property Line
05/26/17	05-26-2017 Bench 5	N 29° 39' 7.1" W 098° 17' 14.7"	CLOUDY 88° S 8	11:57	0.053	13.9	109.0	667	441.00	4,994	Warden - 21375 Gunther Grove
05/26/17	05-26-2017 Bench 5	N 29° 39' 7.1" W 098° 17' 14.7"	CLOUDY 88° S 8	11:57	NT	NT	NT	667	441.00	9,471	Trevino Residence
05/30/17	05-30-2017 3C	N 29° 38' 42.3" W 098° 17' 40.8"	PT CLOUDY 80° E 6	12:48	0.055	12.2	113.0	764	442.00	2,306	City Property Line
05/30/17	05-30-2017 3C	N 29° 38' 42.3" W 098° 17' 40.8"	PT CLOUDY 80° E 6	12:48	0.078	10.4	107.0	764	442.00	3,541	Michels - 9118 Tuscan Hills
05/30/17	05-30-2017 3C	N 29° 38' 42.3" W 098° 17' 40.8"	PT CLOUDY 80° E 6	12:48	0.158	13.5	113.0	764	442.00	1,760	Warden Property Line
05/30/17	05-30-2017 3C	N 29° 38' 42.3" W 098° 17' 40.8"	PT CLOUDY 80° E 6	12:48	0.383	11.1	113.0	764	442.00	1,957	Warden - 21375 Gunther Grove
05/30/17	05-30-2017 3C	N 29° 38' 42.3" W 098° 17' 40.8"	PT CLOUDY 80° E 6	12:48	0.038	13.9	95.0	764	442.00	6,562	Trevino Residence

JT = No Trigger, <0.020 ips.

JT = No Trigger, <122dB



July 3, 2017

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 2017 at the Hanson Aggregates Quarry in Garden Ridge, Texas. Please place this information in your 2017 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 2nd 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".

Geoffrey Rigsby
Southwest Regional Manager

cc: Hal Halamuda, Hanson – Servtex



Trevino

Michels

06-07-2017 3H

06-26-2017 3H

06-08-2017 Bench 5

06-05-2017 3G

06-22-2017 3G

06-02-2017 3F

06-14-2017 3E

06-21-2017 Lower 6 East Wall

06-13-2017 3D

06-28-2017 3D

06-09-2017 Lower 6

06-30-2017 Lower 6 West Wall A

06-23-2017 3C

Warden Property Line
City Property Line

Holly

Garden Ridge

06-06-2017 Bench 5

06-12-2017 South Wall A

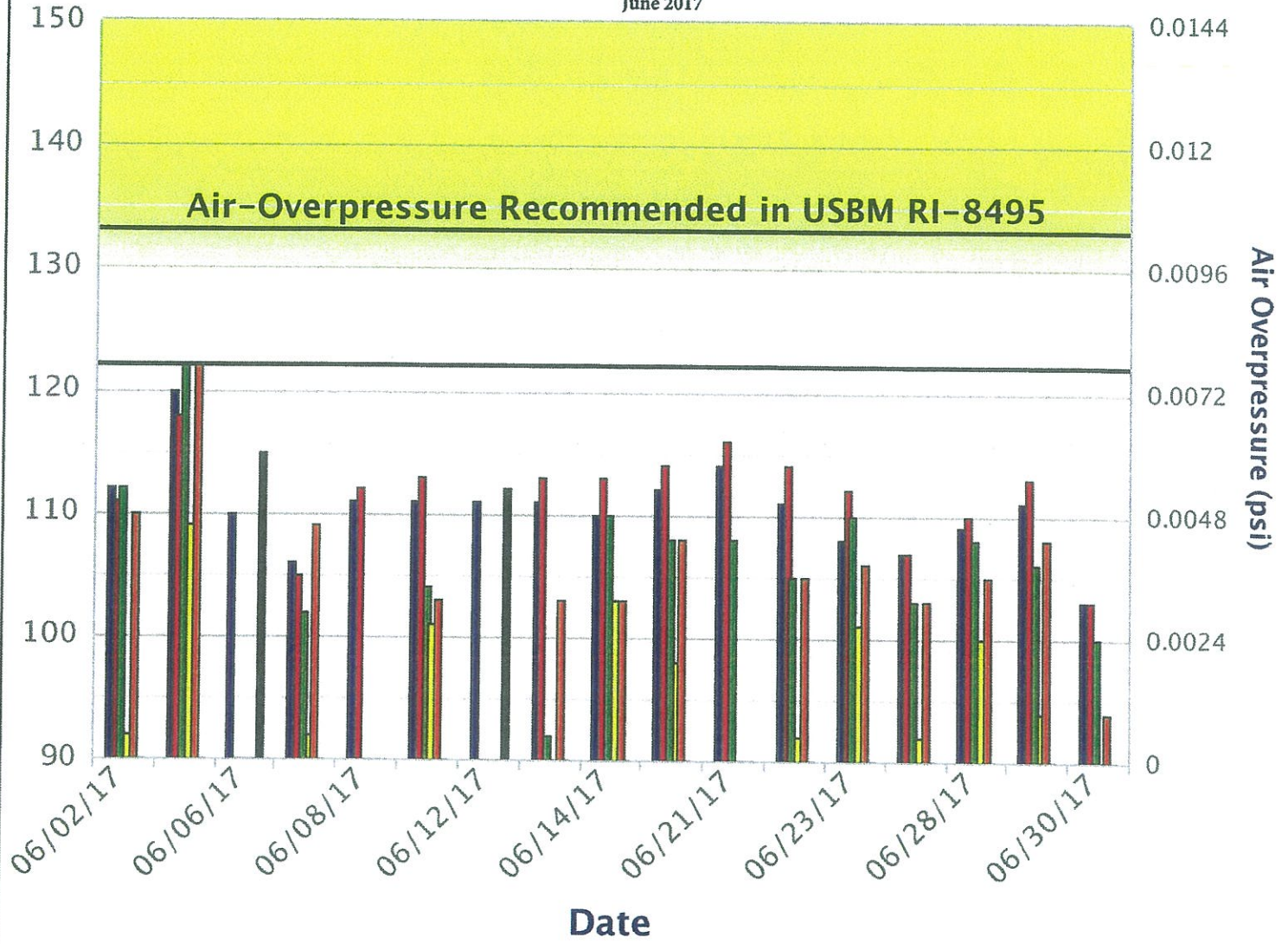
© 2017 Google

Google earth

1995

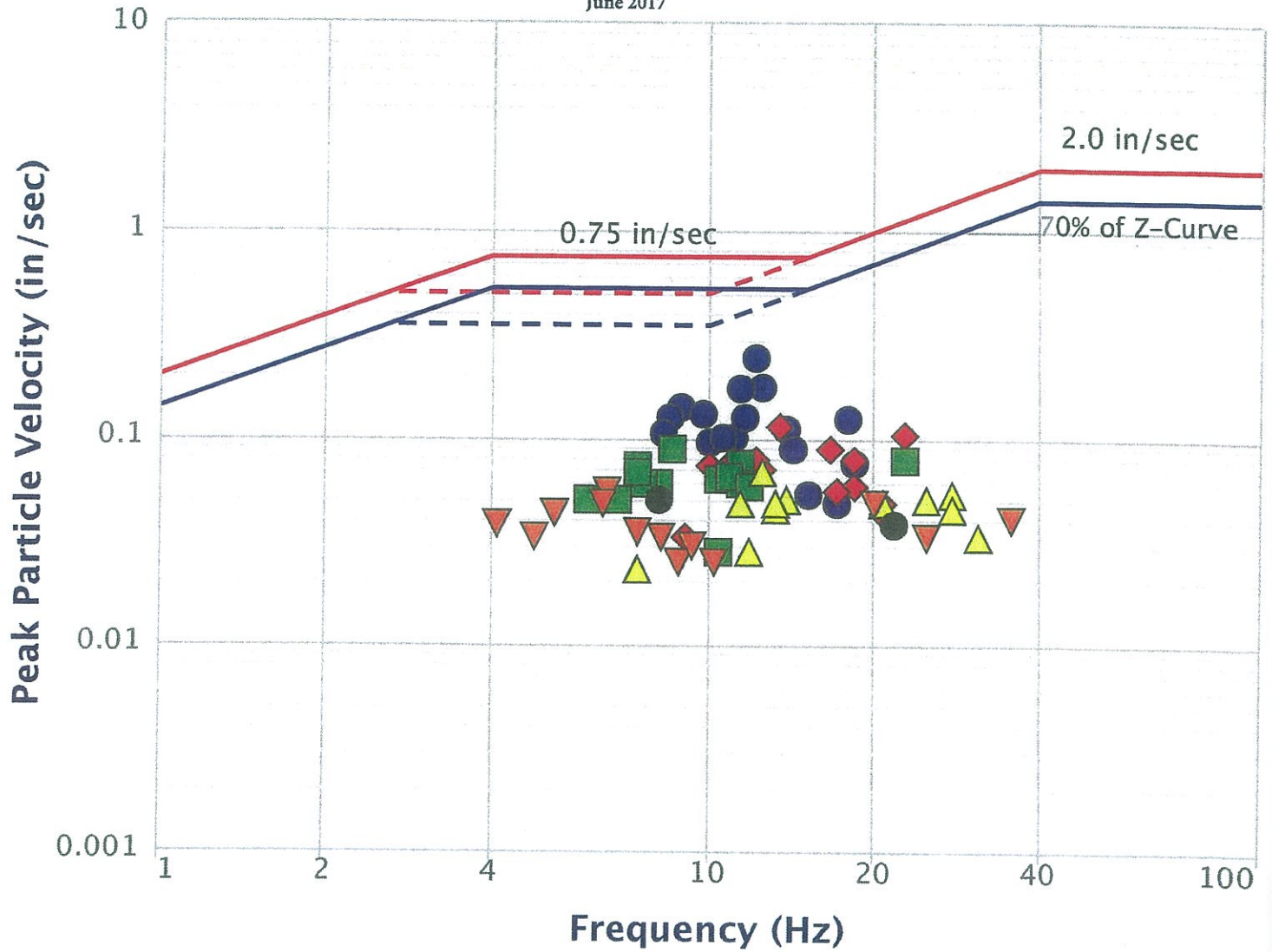
Imagery Date: 1/5/2017 29°38'26.85" N 98°17'31.82" W elev 907 ft eye alt 11188 ft

Garden Ridge Quarry Commission
Garden Ridge, Texas
AO Graph
June 2017



Warden Residence Warden Property Line Michels Residence Trevino Residence
City Property Line Holly Residence

Garden Ridge Quarry Commission
Garden Ridge, Texas
USBM Graph
June 2017



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

GARDEN RIDGE QUARRY COMMISSION
HANSON - SERVTEX QUARRY
GARDEN RIDGE, TEXAS
JUNE 2017

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
06/02/17	06-02-2017 3F	N 29° 38 53.2" W 098° 17' 41.8"	CLOUDY 87° SE 6	14:05	0.043	5.2	110.0	937	776.00	3,728	City Property Line
06/02/17	06-02-2017 3F	N 29° 38 53.2" W 098° 17' 41.8"	CLOUDY 87° SE 6	14:05	0.050	6.8	112.0	937	776.00	3,315	Michels - 9118 Tuscan Hills
06/02/17	06-02-2017 3F	N 29° 38 53.2" W 098° 17' 41.8"	CLOUDY 87° SE 6	14:05	0.053	27.8	92.0	937	776.00	6,718	Trevino Residence
06/02/17	06-02-2017 3F	N 29° 38 53.2" W 098° 17' 41.8"	CLOUDY 87° SE 6	14:05	0.100	11.1	112.0	937	776.00	3,064	Warden - 21375 Gunther Grove
06/02/17	06-02-2017 3F	N 29° 38 53.2" W 098° 17' 41.8"	CLOUDY 87° SE 6	14:05	0.070	12.5	111.0	937	776.00	2,868	Warden Property Line
06/05/17	06-05-2017 3G	N 29° 38 58.4" W 098° 17' 41.6"	CLOUDY 82° N 6	13:19	0.040	35.7	122.0	767	722.00	3,785	City Property Line
06/05/17	06-05-2017 3G	N 29° 38 58.4" W 098° 17' 41.6"	CLOUDY 82° N 6	13:19	0.063	10.4	122.0	767	722.00	3,393	Michels - 9118 Tuscan Hills
06/05/17	06-05-2017 3G	N 29° 38 58.4" W 098° 17' 41.6"	CLOUDY 82° N 6	13:19	0.045	13.2	109.0	767	722.00	6,911	Trevino Residence
06/05/17	06-05-2017 3G	N 29° 38 58.4" W 098° 17' 41.6"	CLOUDY 82° N 6	13:19	0.140	8.9	120.0	767	722.00	3,590	Warden - 21375 Gunther Grove
06/05/17	06-05-2017 3G	N 29° 38 58.4" W 098° 17' 41.6"	CLOUDY 82° N 6	13:19	0.063	11.9	118.0	767	722.00	3,392	Warden Property Line
06/06/17	06-06-2017 Bench 5	N 29° 38 10.8" W 098° 16' .46"	PT CLOUDY 85° NE 9	12:15	NT	NT	NT	666	955.00	6,106	City Property Line
06/06/17	06-06-2017 Bench 5	N 29° 38 10.8" W 098° 16' .46"	PT CLOUDY 85° NE 9	12:15	0.050	8.1	115.0	666	955.00	3,549	Holly - 9916 Trophy Oaks
06/06/17	06-06-2017 Bench 5	N 29° 38 10.8" W 098° 16' .46"	PT CLOUDY 85° NE 9	12:15	NT	NT	NT	666	955.00	9,227	Michels - 9118 Tuscan Hills
06/06/17	06-06-2017 Bench 5	N 29° 38 10.8" W 098° 16' .46"	PT CLOUDY 85° NE 9	12:15	NT	NT	NT	666	955.00	11,555	Trevino Residence
06/06/17	06-06-2017 Bench 5	N 29° 38 10.8" W 098° 16' .46"	PT CLOUDY 85° NE 9	12:15	0.075	18.5	110.0	666	955.00	4,914	Warden - 21375 Gunther Grove

NT = No Trigger, <0.020 ips.

NT = No Trigger, <122dB

**GARDEN RIDGE QUARRY COMMISSION
HANSON - SERVTEX QUARRY
GARDEN RIDGE, TEXAS
JUNE 2017**

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
06/07/17	06-07-2017 3H	N 29° 39 0.7" W 098° 17' 41.8"	PT CLOUDY 90° NE 8	12:07	0.025	8.8	109.0	1003	675.00	4,004	City Property Line
06/07/17	06-07-2017 3H	N 29° 39 0.7" W 098° 17' 41.8"	PT CLOUDY 90° NE 8	12:07	0.075	11.4	102.0	1003	675.00	3,428	Michels - 9118 Tuscan Hills
06/07/17	06-07-2017 3H	N 29° 39 0.7" W 098° 17' 41.8"	PT CLOUDY 90° NE 8	12:07	0.048	20.8	92.0	1003	675.00	6,983	Trevino Residence
06/07/17	06-07-2017 3H	N 29° 39 0.7" W 098° 17' 41.8"	PT CLOUDY 90° NE 8	12:07	0.095	10.0	106.0	1003	675.00	3,824	Warden - 21375 Gunther Grove
06/07/17	06-07-2017 3H	N 29° 39 0.7" W 098° 17' 41.8"	PT CLOUDY 90° NE 8	12:07	0.058	18.5	105.0	1003	675.00	3,626	Warden Property Line
06/08/17	06-08-2017 Bench 5	N 29° 39 0.7" W 098° 17' 14.4"	PT CLOUDY 85° SE 8	11:00	NT	NT	NT	810	473.00	5,689	City Property Line
06/08/17	06-08-2017 Bench 5	N 29° 39 0.7" W 098° 17' 14.4"	PT CLOUDY 85° SE 8	11:00	NT	NT	NT	810	473.00	5,925	Michels - 9118 Tuscan Hills
06/08/17	06-08-2017 Bench 5	N 29° 39 0.7" W 098° 17' 14.4"	PT CLOUDY 85° SE 8	11:00	NT	NT	NT	810	473.00	9,459	Trevino Residence
06/08/17	06-08-2017 Bench 5	N 29° 39 0.7" W 098° 17' 14.4"	PT CLOUDY 85° SE 8	11:00	0.053	15.2	111.0	810	473.00	4,996	Warden - 21375 Gunther Grove
06/08/17	06-08-2017 Bench 5	N 29° 39 0.7" W 098° 17' 14.4"	PT CLOUDY 85° SE 8	11:00	0.033	9.1	112.0	810	473.00	4,776	Warden Property Line
06/09/17	06-09-2017 Lower 6	N 29° 38 53.1" W 098° 17' 8.1"	PT CLOUDY 89° S 10	11:03	0.033	4.8	103.0	948	562.00	5,085	City Property Line
06/09/17	06-09-2017 Lower 6	N 29° 38 53.1" W 098° 17' 8.1"	PT CLOUDY 89° S 10	11:03	0.060	8.1	104.0	948	562.00	6,282	Michels - 9118 Tuscan Hills
06/09/17	06-09-2017 Lower 6	N 29° 38 53.1" W 098° 17' 8.1"	PT CLOUDY 89° S 10	11:03	0.023	7.4	101.0	948	562.00	9,590	Trevino Residence
06/09/17	06-09-2017 Lower 6	N 29° 38 53.1" W 098° 17' 8.1"	PT CLOUDY 89° S 10	11:03	0.125	8.5	111.0	948	562.00	4,147	Warden - 21375 Gunther Grove
06/09/17	06-09-2017 Lower 6	N 29° 38 53.1" W 098° 17' 8.1"	PT CLOUDY 89° S 10	11:03	0.070	7.4	113.0	948	562.00	3,939	Warden Property Line

NT = No Trigger, <0.020 ips.

NT = No Trigger, <122dB

**GARDEN RIDGE QUARRY COMMISSION
HANSON - SERVTEX QUARRY
GARDEN RIDGE, TEXAS
JUNE 2017**

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
06/12/17	06-12-2017 South Wall A	N 29° 38' 12.6" W 098° 16' 37.0"	PT CLOUDY 80° SE 5	12:08	NT	NT	NT	466	955.00	6,855	City Property Line
06/12/17	06-12-2017 South Wall A	N 29° 38' 12.6" W 098° 16' 37.0"	PT CLOUDY 80° SE 5	12:08	0.038	21.7	112.0	466	955.00	4,323	Holly - 9916 Trophy Oaks
06/12/17	06-12-2017 South Wall A	N 29° 38' 12.6" W 098° 16' 37.0"	PT CLOUDY 80° SE 5	12:08	NT	NT	NT	466	955.00	9,865	Michels - 9118 Tuscan Hills
06/12/17	06-12-2017 South Wall A	N 29° 38' 12.6" W 098° 16' 37.0"	PT CLOUDY 80° SE 5	12:08	NT	NT	NT	466	955.00	12,300	Trevino Residence
06/12/17	06-12-2017 South Wall A	N 29° 38' 12.6" W 098° 16' 37.0"	PT CLOUDY 80° SE 5	12:08	0.048	17.2	111.0	466	955.00	5,604	Warden - 21375 Gunther Grove
06/13/17	06-13-2017 3D	N 29° 38' 45.7" W 098° 17' 41.4"	PT CLOUDY 85° S 11	11:53	0.033	8.2	103.0	608	502.00	2,587	City Property Line
06/13/17	06-13-2017 3D	N 29° 38' 45.7" W 098° 17' 41.4"	PT CLOUDY 85° S 11	11:53	0.073	7.4	92.0	608	502.00	3,409	Michels - 9118 Tuscan Hills
06/13/17	06-13-2017 3D	N 29° 38' 45.7" W 098° 17' 41.4"	PT CLOUDY 85° S 11	11:53	0.028	11.9	86.0	608	502.00	6,566	Trevino Residence
06/13/17	06-13-2017 3D	N 29° 38' 45.7" W 098° 17' 41.4"	PT CLOUDY 85° S 11	11:53	0.125	11.6	111.0	608	502.00	2,304	Warden - 21375 Gunther Grove
06/13/17	06-13-2017 3D	N 29° 38' 45.7" W 098° 17' 41.4"	PT CLOUDY 85° S 11	11:53	0.078	12.2	113.0	608	502.00	2,108	Warden Property Line
06/14/17	06-14-2017 3E	N 29° 38' 50.1" W 098° 17' 41.4"	PT CLOUDY 90° S 10	14:15	0.038	4.1	103.0	916	770.00	2,996	City Property Line
06/14/17	06-14-2017 3E	N 29° 38' 50.1" W 098° 17' 41.4"	PT CLOUDY 90° S 10	14:15	0.060	11.4	110.0	916	770.00	3,354	Michels - 9118 Tuscan Hills
06/14/17	06-14-2017 3E	N 29° 38' 50.1" W 098° 17' 41.4"	PT CLOUDY 90° S 10	14:15	0.048	11.4	103.0	916	770.00	6,665	Trevino Residence
06/14/17	06-14-2017 3E	N 29° 38' 50.1" W 098° 17' 41.4"	PT CLOUDY 90° S 10	14:15	0.123	17.9	110.0	916	770.00	2,749	Warden - 21375 Gunther Grove
06/14/17	06-14-2017 3E	N 29° 38' 50.1" W 098° 17' 41.4"	PT CLOUDY 90° S 10	14:15	0.088	16.7	113.0	916	770.00	2,552	Warden Property Line

NT = No Trigger, <0.020 ips.

NT = No Trigger, <122dB

GARDEN RIDGE QUARRY COMMISSION
HANSON - SERVTEX QUARRY
GARDEN RIDGE, TEXAS
JUNE 2017

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
06/19/17	06-19-2017 3F	N 29° 38 54.3" W 098° 17' 41.8"	PT CLOUDY 90° SE 6	12:06	0.033	25.0	108.0	858	828.00	3,384	City Property Line
06/19/17	06-19-2017 3F	N 29° 38 54.3" W 098° 17' 41.8"	PT CLOUDY 90° SE 6	12:06	0.088	8.6	108.0	858	828.00	3,321	Michels - 9118 Tuscan Hills
06/19/17	06-19-2017 3F	N 29° 38 54.3" W 098° 17' 41.8"	PT CLOUDY 90° SE 6	12:06	0.050	13.9	98.0	858	828.00	6,753	Trevino Residence
06/19/17	06-19-2017 3F	N 29° 38 54.3" W 098° 17' 41.8"	PT CLOUDY 90° SE 6	12:06	0.110	13.9	112.0	858	828.00	3,176	Warden - 21375 Gunther Grove
06/19/17	06-19-2017 3F	N 29° 38 54.3" W 098° 17' 41.8"	PT CLOUDY 90° SE 6	12:06	0.078	18.5	114.0	858	828.00	2,979	Warden Property Line
06/21/17	06-21-2017 Lower 6 East Wall	N 29° 38 53.5" W 098° 17' 3.3"	PT CLOUDY 89° NE 9	11:05	NT	NT	NT	775	562.00	5,450	City Property Line
06/21/17	06-21-2017 Lower 6 East Wall	N 29° 38 53.5" W 098° 17' 3.3"	PT CLOUDY 89° NE 9	11:05	0.028	10.4	108.0	775	562.00	6,706	Michels - 9118 Tuscan Hills
06/21/17	06-21-2017 Lower 6 East Wall	N 29° 38 53.5" W 098° 17' 3.3"	PT CLOUDY 89° NE 9	11:05	NT	NT	NT	775	562.00	10,012	Trevino Residence
06/21/17	06-21-2017 Lower 6 East Wall	N 29° 38 53.5" W 098° 17' 3.3"	PT CLOUDY 89° NE 9	11:05	0.105	8.3	114.0	775	562.00	4,472	Warden - 21375 Gunther Grove
06/21/17	06-21-2017 Lower 6 East Wall	N 29° 38 53.5" W 098° 17' 3.3"	PT CLOUDY 89° NE 9	11:05	0.055	17.2	116.0	775	562.00	4,269	Warden Property Line
06/22/17	06-22-2017 3G	N 29° 38 58.5" W 098° 17' 0.42"	PT CLOUDY 89° SW 6	12:06	0.030	9.3	105.0	880	704.00	3,785	City Property Line
06/22/17	06-22-2017 3G	N 29° 38 58.5" W 098° 17' 0.42"	PT CLOUDY 89° SW 6	12:06	0.065	10.9	105.0	880	704.00	3,361	Michels - 9118 Tuscan Hills
06/22/17	06-22-2017 3G	N 29° 38 58.5" W 098° 17' 0.42"	PT CLOUDY 89° SW 6	12:06	0.050	25.0	92.0	880	704.00	6,882	Trevino Residence
06/22/17	06-22-2017 3G	N 29° 38 58.5" W 098° 17' 0.42"	PT CLOUDY 89° SW 6	12:06	0.100	10.6	111.0	880	704.00	3,602	Warden - 21375 Gunther Grove
06/22/17	06-22-2017 3G	N 29° 38 58.5" W 098° 17' 0.42"	PT CLOUDY 89° SW 6	12:06	0.048	20.8	114.0	880	704.00	3,405	Warden Property Line

NT = No Trigger, <0.020 ips.

NT = No Trigger, <122dB

**GARDEN RIDGE QUARRY COMMISSION
HANSON - SERVTEX QUARRY
GARDEN RIDGE, TEXAS
JUNE 2017**

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
06/23/17	06-23-2017 3C	N 29° 38 42.7" W 098° 17' 41.2"	PT CLOUDY 95° SW 7	14:17	0.055	6.5	106.0	844	323.50	2,324	City Property Line
06/23/17	06-23-2017 3C	N 29° 38 42.7" W 098° 17' 41.2"	PT CLOUDY 95° SW 7	14:17	0.060	7.6	110.0	844	323.50	3,496	Michels - 9118 Tuscan Hills
06/23/17	06-23-2017 3C	N 29° 38 42.7" W 098° 17' 41.2"	PT CLOUDY 95° SW 7	14:17	0.053	27.8	101.0	844	323.50	6,532	Trevino Residence
06/23/17	06-23-2017 3C	N 29° 38 42.7" W 098° 17' 41.2"	PT CLOUDY 95° SW 7	14:17	0.243	12.2	108.0	844	323.50	1,999	Warden - 21375 Gunther Grove
06/23/17	06-23-2017 3C	N 29° 38 42.7" W 098° 17' 41.2"	PT CLOUDY 95° SW 7	14:17	0.103	22.7	112.0	844	323.50	1,804	Warden Property Line
06/26/17	06-26-2017 3H	N 29° 39 1.6" W 098° 17' 42.3"	CLOUDY 85° SE 7	13:15	0.025	10.2	103.0	854	280.00	4,100	City Property Line
06/26/17	06-26-2017 3H	N 29° 39 1.6" W 098° 17' 42.3"	CLOUDY 85° SE 7	13:15	0.068	7.4	103.0	854	280.00	3,417	Michels - 9118 Tuscan Hills
06/26/17	06-26-2017 3H	N 29° 39 1.6" W 098° 17' 42.3"	CLOUDY 85° SE 7	13:15	0.048	13.2	92.0	854	280.00	6,988	Trevino Residence
06/26/17	06-26-2017 3H	N 29° 39 1.6" W 098° 17' 42.3"	CLOUDY 85° SE 7	13:15	0.088	14.3	107.0	854	280.00	3,937	Warden - 21375 Gunther Grove
06/26/17	06-26-2017 3H	N 29° 39 1.6" W 098° 17' 42.3"	CLOUDY 85° SE 7	13:15	0.043	20.8	107.0	854	280.00	3,741	Warden Property Line
06/28/17	06-28-2017 3D	N 29° 38 46.4" W 098° 17' 41.7"	PT CLOUDY 95° SW 6	14:46	0.035	7.4	105.0	636	372.50	2,640	City Property Line
06/28/17	06-28-2017 3D	N 29° 38 46.4" W 098° 17' 41.7"	PT CLOUDY 95° SW 6	14:46	0.058	11.9	108.0	636	372.50	3,370	Michels - 9118 Tuscan Hills
06/28/17	06-28-2017 3D	N 29° 38 46.4" W 098° 17' 41.7"	PT CLOUDY 95° SW 6	14:46	0.045	27.8	100.0	636	372.50	6,554	Trevino Residence
06/28/17	06-28-2017 3D	N 29° 38 46.4" W 098° 17' 41.7"	PT CLOUDY 95° SW 6	14:46	0.130	9.8	109.0	636	372.50	2,376	Warden - 21375 Gunther Grove
06/28/17	06-28-2017 3D	N 29° 38 46.4" W 098° 17' 41.7"	PT CLOUDY 95° SW 6	14:46	0.078	11.1	110.0	636	372.50	2,182	Warden Property Line

**GARDEN RIDGE QUARRY COMMISSION
HANSON - SERVTEX QUARRY
GARDEN RIDGE, TEXAS
JUNE 2017**

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
06/29/17	06-29-2017 3E	N 29° 38' 48.6" W 098° 17' 41.6"	PT CLOUDY 92° E 4	12:17	0.048	20.0	108.0	824	752.00	2,848	City Property Line
06/29/17	06-29-2017 3E	N 29° 38' 48.6" W 098° 17' 41.6"	PT CLOUDY 92° E 4	12:17	0.078	22.7	106.0	824	752.00	3,349	Michels - 9118 Tuscan Hills
06/29/17	06-29-2017 3E	N 29° 38' 48.6" W 098° 17' 41.6"	PT CLOUDY 92° E 4	12:17	0.068	12.5	94.0	824	752.00	6,611	Trevino Residence
06/29/17	06-29-2017 3E	N 29° 38' 48.6" W 098° 17' 41.6"	PT CLOUDY 92° E 4	12:17	0.175	12.5	111.0	824	752.00	2,598	Warden - 21375 Gunther Grove
06/29/17	06-29-2017 3E	N 29° 38' 48.6" W 098° 17' 41.6"	PT CLOUDY 92° E 4	12:17	0.113	13.5	113.0	824	752.00	2,402	Warden Property Line
06/30/17	06-30-2017 Lower 6 West Wall A	N 29° 38' 47.1" W 098° 17' 9.5"	PT CLOUDY 89° SE 10	10:48	0.048	6.4	94.0	645	557.00	4,636	City Property Line
06/30/17	06-30-2017 Lower 6 West Wall A	N 29° 38' 47.1" W 098° 17' 9.5"	PT CLOUDY 89° SE 10	10:48	0.050	6.0	100.0	645	557.00	6,178	Michels - 9118 Tuscan Hills
06/30/17	06-30-2017 Lower 6 West Wall A	N 29° 38' 47.1" W 098° 17' 9.5"	PT CLOUDY 89° SE 10	10:48	0.033	31.3	89.0	645	557.00	9,360	Trevino Residence
06/30/17	06-30-2017 Lower 6 West Wall A	N 29° 38' 47.1" W 098° 17' 9.5"	PT CLOUDY 89° SE 10	10:48	0.173	11.4	103.0	645	557.00	3,630	Warden - 21375 Gunther Grove
06/30/17	06-30-2017 Lower 6 West Wall A	N 29° 38' 47.1" W 098° 17' 9.5"	PT CLOUDY 89° SE 10	10:48	0.073	10.0	103.0	645	557.00	3,430	Warden Property Line

#	Month	Blast Date	Blast time	Date Received	Name	Address	Phone #	Rating	# stories	sq footage	request contact	Misc	Date sent to Quarry Commission
2017-9Q	May	5/1/2017	12:43 PM	5/1/2017	John Thomas	8809 Tuscan Hills Dr.	210-541-5661	5			Yes	While washing windows at rear of house, the whole house shook, rattling things on the walls all the way to the front of the house where the steel doors shook.	5/10/2017
2017-10Q	May	5/5/2017	1:23 PM	5/9/2017	Lawrence Scott	21916 Deer Canyon Dr.	210-651-3320	4	2	4200	No	Significant blast	5/10/2017
2017-11Q	May	5/9/2017	1:45 PM	5/9/2017	Lawrence Scott	21916 Deer Canyon Dr.	210-651-3320	4	2	4200	No	Wife and I were in the kitchen when blast occurred. It shook the house, rattled the dishes and windows.	5/10/2017
2017-12Q	May	5/19/2017	2:16 PM	5/30/2017	Armando Diaz	21010 Gunther Grove	210-721-0112	4	1	2900	No	It was significant enough that I stopped working and noted time of blast. It shook my whole house.	5/30/2017
2017-13Q	May	5/30/2017	12:48 PM	5/30/2017	Denise Diaz	21010 Gunther Grove	210-843-2946	4	1	2900	No	This blast was significant enough for me to first call city Hall, then submit this form!	5/30/2017

2017-14Q	June	Varies	Varies	6/9/2017	Toni Anderson	20920 Klein Circle	210-241-9536	5	1	3766	Yes	Due to the blast over the years, I have brick breaking off my home and windows that have lost their seal and look gross and costing in electricity since the air is going outside. Who do I speak to about this? I feel there should be some responsibility on the Quarry's part. I even have cracks in the ceiling.	N/A (City Secretary circulated)
2017-15Q	June	6/9/2017	11:05AM	6/9/2001	Leon Timmermann	9926 Trophy Oaks	210-651-1615	5			?	blast was so severe that the dishes rattled in the kitchen cabinets. The house shook terribly it was so bad it sounded like the walls and doors were coming down - like an earthquake. The Grapevine stated a blast on March 31, 17 was recorded slightly above the ordinance ground vibration maximum level. The reason stated saturated soil from recent rains. If this blast doesn't record a very high level, I'd like to be present when the monitor is checked since it is right behind our house. This is the first report we have sent since we moved to Garden Ridge. If we would have been aware	6/9/2017
2017-16Q	June	6/26/2017	2:16PM [sic]	6/26/2017	Clarissa Lara	22117 Paseo Corto Drive	210-651-0520	4	1	3200	Yes	Shook the roof of my house / more disruptive.	6/26/2017

CITY OF GARDEN RIDGE

CITIZEN QUARRY BLAST IMPACT REPORT

Name: John Thomas Report Date: 5/1/17

Address: 8809 Tuscan Hills Dr. E-Mail Address: _____

Phone: 541-5661 Blast Date/Time: 5/1/17 / 12:43 pm

Please describe the event.

While washing windows at rear of house, at the
time of blast, the whole house shook, rattling
things on the wall all the way to the front
of the house where his steel doors shook.

How did this blast compare to other blasts? He noticed strong blasts
in the past, but this one was the strongest in
quite some time.

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? Washing windows at rear of house

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

Is your home a 1 story, 1 ½ story, or 2 story or larger? _____

What is the approximate square footage of your home? _____

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

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.

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. Thank you for submitting the form.

* taken via phone call to
City Hall (LC)

5/10/17
2017
9Q

CITY OF GARDEN RIDGE
CITIZEN QUARRY BLAST IMPACT REPORT

Office use:

Date Received: 5/1/17

Person Received Form: LC

Date forwarded: 5/10/17

Adm Liaison

From: City Secretary
Sent: Wednesday, May 10, 2017 9:20 AM
To: Adm Liaison
Subject: FW: Online Form Submittal: Citizen Quarry Blast Impact Report

From: noreply@civicplus.com [<mailto:noreply@civicplus.com>]
Sent: Tuesday, May 09, 2017 2:00 PM
To: City Administrator; City Secretary
Subject: Online Form Submittal: Citizen Quarry Blast Impact Report

Citizen Quarry Blast Impact Report

First Name Lawrence

Last Name Scott

Report Date 5/9/2017

Phone Number: 2106513320`

E-Mail Address scootermickey@yahoo.com

Address1 21916 deer canyon dr

Blast Date/Time: 5-5-17 1:23pm

Please describe the event. Significant blast

How did this blast strong
compare to other blasts?

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

What was your activity at in home office
the time of blast?

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

What is the approximate 4200
square footage of your
home?

2017-
10 Q Shoh
oc

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

Would you like a Quarry No
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
6:00 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.](#)

Adm Liaison

From: City Secretary
Sent: Wednesday, May 10, 2017 9:20 AM
To: Adm Liaison
Subject: FW: Online Form Submittal: Citizen Quarry Blast Impact Report

From: noreply@civicplus.com [<mailto:noreply@civicplus.com>]
Sent: Tuesday, May 09, 2017 1:54 PM
To: City Administrator; City Secretary
Subject: Online Form Submittal: Citizen Quarry Blast Impact Report

Citizen Quarry Blast Impact Report

First Name	Lawrence
Last Name	Scott
Report Date	5/9/2017
Phone Number:	210-651-3320
E-Mail Address	scootermickey@yahoo.com
Address1	21916 Deer Canyon Drive
Blast Date/Time:	5/9/17 1:45pm
Please describe the event.	Wife and I were in the kitchen when blast occurred it shook the house, rattled the dishes and windows.
How did this blast compare to other blasts?	Stronger
On a 1 to 5 scale, please rate the blast intensity. (1=minor, 5 = major)	4
What was your activity at the time of blast?	In the kitchen
In what general direction does you house face? (N,E,S or W)	SW
What is the approximate	4200

2017-11Q
5/10/17
QC

square footage of your
home?

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

Would you like a Quarry No
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
6:00 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.](#)

Adm Liaison

From: noreply@civicplus.com
Sent: Tuesday, May 30, 2017 1:06 PM
To: City Administrator; City Secretary; Adm Liaison
Subject: Online Form Submittal: Citizen Quarry Blast Impact Report

Citizen Quarry Blast Impact Report

First Name Armando

Last Name Diaz

Report Date 5/30/2017

Phone Number: 210-721-0112

E-Mail Address avasophman@gmail.com

Address1 21010 Gunther Grove, Garden Ridge

Blast Date/Time: May 19, 2017 / 2:16 pm

Please describe the event. Significant blast felt at my home.

How did this blast compare to other blasts? It was significant enough that I stopped working and noted time of blast. It shook my whole house.

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

What was your activity at the time of blast? I was working at my computer.

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

What is the approximate square footage of your home? 2900 sq ft.

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

Would you like a Quarry Commission member to

No

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 6:00 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.](#)

Adm Liaison

From: noreply@civicplus.com
Sent: Tuesday, May 30, 2017 1:11 PM
To: City Administrator; City Secretary; Adm Liaison
Subject: Online Form Submittal: Citizen Quarry Blast Impact Report

Citizen Quarry Blast Impact Report

First Name	Denise
Last Name	Diaz
Report Date	5/30/2017
Phone Number:	210-843-2946
E-Mail Address	akdiaz12@yahoo.com
Address1	21010 Gunther Grove, Garden Ridge
Blast Date/Time:	May 30, 2017 /12:48 pm
Please describe the event.	Blast shook my whole house!
How did this blast compare to other blasts?	This blast was significant enough for me to first call City Hall, then submit this form!
On a 1 to 5 scale, please rate the blast intensity. (1=minor, 5 = major)	4
What was your activity at the time of blast?	I was sitting in my kitchen.
In what general direction does you house face? (N,E,S or W)	S
What is the approximate square footage of your home?	2900 sq. ft.
Is your home a 1 story, 1 1/2 , or 2 story or large?	1 story
Would you like a Quarry Commission member to	No

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 6:00 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.](#)

Adm Liaison

From: noreply@civicplus.com
Sent: Monday, June 26, 2017 1:20 PM
To: City Administrator; City Secretary; Adm Liaison
Subject: Online Form Submittal: Citizen Quarry Blast Impact Report

Citizen Quarry Blast Impact Report

First Name Clarissa

Last Name Lara

Report Date 6/26/2017

Phone Number: 2106510520

E-Mail Address oeodoed@yahoo.com

Address1 22117 Paseo Corto Dr

Blast Date/Time: 6/26/17 2:16 PM

Please describe the event. shook the roof of my house

How did this blast compare to other blasts? more disruptive

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

What was your activity at the time of blast? at home

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

What is the approximate square footage of your home? 3200

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

Would you like a Quarry Commission member to contact you regarding Yes

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 6:00 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.](#)