



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, April 11, 2016 at 7:00 P.M.**

The Garden Ridge City Quarry Commission will meet in regular session on Monday, April 11, 2016 at 7:00 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 April 8, 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) February 8, 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 Vibratech. 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 Vibratech and notification to residents of monitor placements.
- d. Discuss Grapevine article topics and future author/s of articles.
- e. Discuss future training sessions.

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

See "Rules for Citizen's Participation" under Item 4.

7. Training Session (30 minute limit):

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

8. 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:

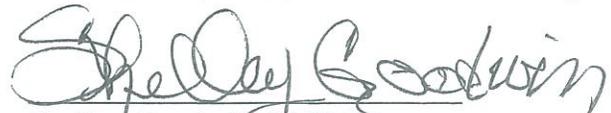
This agenda has been reviewed and approved by the City’s legal counsel and the presence of any subject in any Executive Session portion of the agenda constitutes a written interpretation of Texas Government Code Chapter 551 by legal counsel for the governmental body and constitutes an opinion by the 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 10:30 pm on April 8, 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 FEBRUARY 8, 2016

Members Present:

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

Member Absent:

Commissioner Jerry Barucky

City Staff Present:

Nancy Cain, City Administrator
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 7:03 p.m. on Monday, February 8, 2016 in the City Council Chambers of the Garden Ridge City Hall, 9400 Municipal Parkway, Garden Ridge, Texas 78266.

2. Approval of Minutes:

a) December 14, 2015 Regular Quarry Commission Meeting

Motion: Upon motion made by Commissioner Mudge and seconded by Commissioner Holloway to approve December 14, 2015 Quarry Commission Meeting Minutes. The Quarry Commission voted six (6) for, none (0) opposed. The motion carried unanimously.

3. Citizens Comments

Viviane Midla, 8724 Verano Dr., requested to be put back on the list for the roving blast monitor to be placed on her property.

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 December blast analysis. He stated that 13 blasts occurred during the month of December and none of the blast exceeded the limits of Ordinance 34. The highest ppv readings occurred on December 4, 2015 in Bench 3B, with .270 ppv recorded at the Warden residence. The strongest air blast occurring on December 3, 2015 with an overpressure of 114.8 recorded at the City property line. He also discussed the timing and shots. He then presented and discussed the January blast analysis. He stated that 12 blasts occurred during the month of January and none of the blast exceeded the limits of Ordinance 34. The highest ppv readings occurred on January 8, 2016 in Bench 2B, with .210 ppv recorded at the Holly residence. The strongest air blast occurring on January 25, 2016 with an overpressure of 113.3 recorded at the Warden property line. 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 and the terms used in the blast analysis. He explained the four different methods of blasting.

Elliott Giles of Orica explained the designs that were used during the blast in December and January.

- 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 Dale Schmick, Connie Cain (4 reports), Steve Martin, and Charles Scott.

Geoffrey Rigsby, Vibra-Tech, reviewed the graphics for each citizen blast report received during the months of December and January.

- 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 Cruz residence and then the Midla residence.

d. 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 for the next year.

e. Discuss future training sessions.

The Quarry Commission discussed future training sessions.

Geoffrey Rigsby of Vibra-Tech suggested bringing a blast monitor and demonstrating how the monitor works.

The Quarry Commission agreed by consensus to have Vibra-Tech demonstrate how a monitor works.

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

No one wished to speak.

6. Adjournment:

There being no further business, the Monday, February 8, 2016 Garden Ridge Quarry Commission regular meeting was adjourned at 7:40 p.m. by Chairman Shands.

Mike Shands
Quarry Commission Chairman

ATTEST

Shelley Goodwin
City Secretary

SIGN IN TO SPEAK AT THE QUARRY COMMISSION REGULAR MEETING FEBRUARY 8, 2016

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- 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:

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	NAME	ADDRESS	SUBJECT
1.	Midla	8724 Verano Dr	request monitor placement
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			



March 4, 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 February 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).

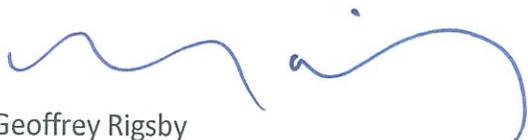
The recorded ground vibrations **satisfy** the Variable Particle Velocity vs. Frequency Limits recommended by the USBM RI-8507 (Nov. 1980), and the levels set forth in Garden Ridge City Ordinance 34.

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 2nd Monday of each month at 7:00 p.m.

Respectfully submitted,

VIBRA-TECH, INC.

A handwritten signature in blue ink, consisting of a series of fluid, connected loops and curves.

Geoffrey Rigsby
Southwest Regional Manager

cc: Jacob Scherer, Hanson – Servtex

Cruz



Taveres



McCormick



Warden Property Line



Warden

City Property Line



Holly



02-17-16 4B

02-26-16 4A

02-10-16 3E

02-09-16 3D

02-05-16 3C

02-24-16 3C

02-11-16 3B

02-01-16 Lower 3A

02-29-16 Lower 3A

02-04-16 Upper 3A

02-18-16 Lower 6

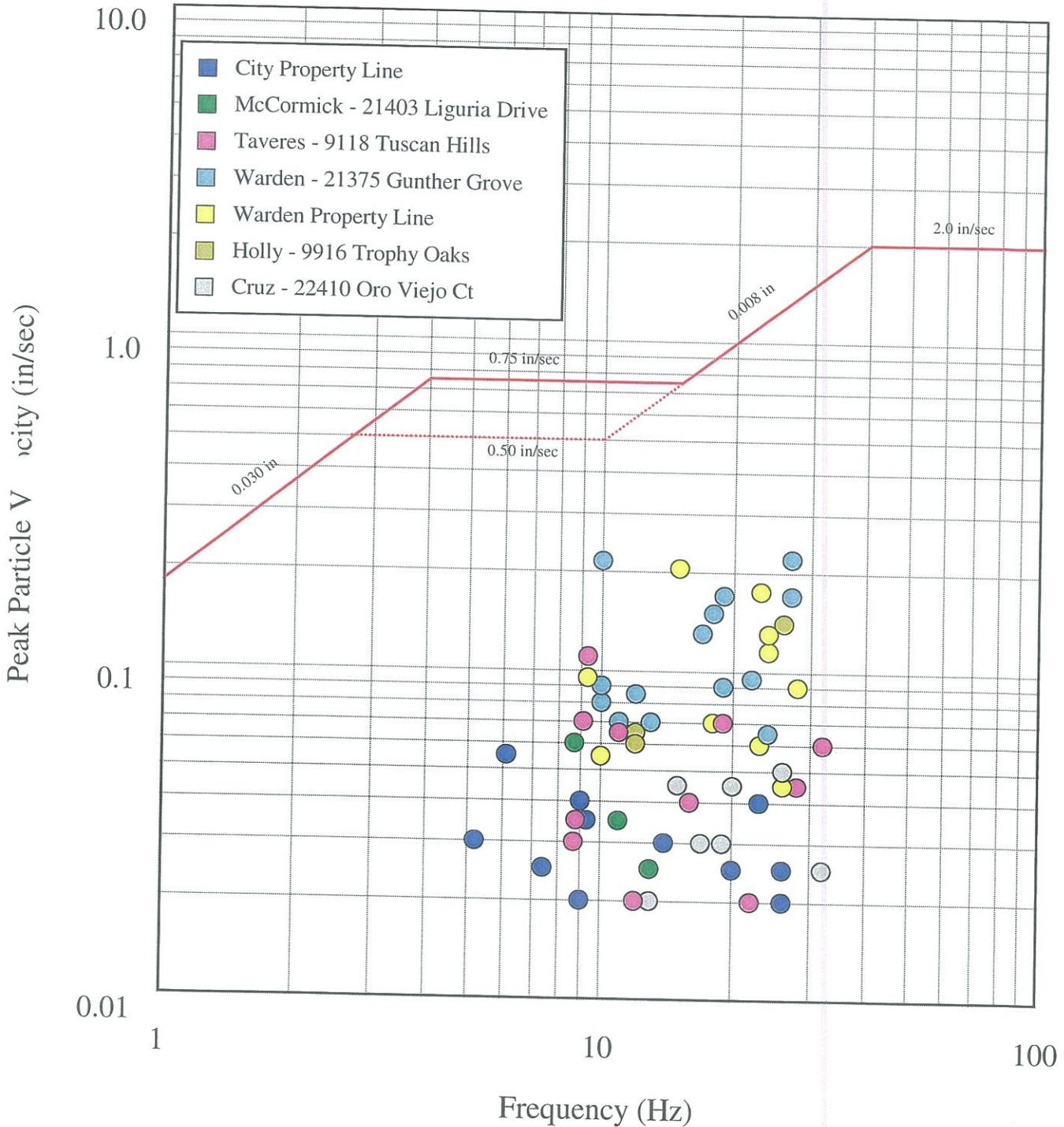
02-19-16 S-Wall Toe

02-02-16 Base Pit 2A

02-25-16 S Wall D



Comparison of Measured Blast Vibrations to Current U.S. Bureau of Mines Recommendations Quarry Commission Garden Ridge February 2016



GARDEN RIDGE QUARRY COMMISSION
GARDEN RIDGE, TEXAS
MONTH OF FEBRUARY 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
02/01/16	02-01-16 Lower 3A	N 29° 38' 38.1" W 098° 17' 33.1"	PT CLOUDY 67° SE 11	12:06	0.020	9.0	98.8	654	225.00	2,416	City Property Line
02/01/16	02-01-16 Lower 3A	N 29° 38' 38.1" W 098° 17' 33.1"	PT CLOUDY 67° SE 11	12:06	NT	NT	NT	654	225.00	4,478	McCormick - 21403 Liguria Drive
02/01/16	02-01-16 Lower 3A	N 29° 38' 38.1" W 098° 17' 33.1"	PT CLOUDY 67° SE 11	12:06	0.030	8.7	97.5	654	225.00	4,316	Taveres - 9118 Tuscan Hills
02/01/16	02-01-16 Lower 3A	N 29° 38' 38.1" W 098° 17' 33.1"	PT CLOUDY 67° SE 11	12:06	0.150	18.0	103.5	654	225.00	1,646	Warden - 21375 Gunther Grove
02/01/16	02-01-16 Lower 3A	N 29° 38' 38.1" W 098° 17' 33.1"	PT CLOUDY 67° SE 11	12:06	0.115	24.0	104.2	654	225.00	1,426	Warden Property Line
02/02/16	02-02-16 Base Pit 2A	N 29° 38' 16.9" W 098° 17' 02.8"	CLEAR 63° NW 18	11:37	0.030	5.2	108.0	756	858.00	4,544	City Property Line
02/02/16	02-02-16 Base Pit 2A	N 29° 38' 16.9" W 098° 17' 02.8"	CLEAR 63° NW 18	11:37	0.140	26.0	97.5	756	858.00	2,052	Holly - 9916 Trophy Oaks
02/02/16	02-02-16 Base Pit 2A	N 29° 38' 16.9" W 098° 17' 02.8"	CLEAR 63° NW 18	11:37	0.025	13.0	98.8	756	858.00	7,261	McCormick - 21403 Liguria Drive
02/02/16	02-02-16 Base Pit 2A	N 29° 38' 16.9" W 098° 17' 02.8"	CLEAR 63° NW 18	11:37	0.020	22.0	95.9	756	858.00	7,628	Taveres - 9118 Tuscan Hills
02/02/16	02-02-16 Base Pit 2A	N 29° 38' 16.9" W 098° 17' 02.8"	CLEAR 63° NW 18	11:37	0.070	11.0	97.5	756	858.00	3,334	Warden - 21375 Gunther Grove
02/04/16	02-04-16 Upper 3A	N 29° 38' 36.4" W 098° 17' 34.6"	CLEAR 51° NE 4	11:01	0.035	9.3	104.2	488	260.00	2,204	City Property Line
02/04/16	02-04-16 Upper 3A	N 29° 38' 36.4" W 098° 17' 34.6"	CLEAR 51° NE 4	11:01	0.035	11.0	100.0	488	260.00	4,325	McCormick - 21403 Liguria Drive
02/04/16	02-04-16 Upper 3A	N 29° 38' 36.4" W 098° 17' 34.6"	CLEAR 51° NE 4	11:01	0.035	8.8	97.5	488	260.00	4,252	Taveres - 9118 Tuscan Hills
02/04/16	02-04-16 Upper 3A	N 29° 38' 36.4" W 098° 17' 34.6"	CLEAR 51° NE 4	11:01	0.215	10.0	105.5	488	260.00	1,439	Warden - 21375 Gunther Grove
02/04/16	02-04-16 Upper 3A	N 29° 38' 36.4" W 098° 17' 34.6"	CLEAR 51° NE 4	11:01	0.170	19.0	106.0	488	260.00	1,219	Warden Property Line

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

**GARDEN RIDGE QUARRY COMMISSION
GARDEN RIDGE, TEXAS
MONTH OF FEBRUARY 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
02/05/16	02-05-16 3C	N 29° 38' 46.6" W 098° 17' 35.6"	CLEAR 54° S 9	12:02	0.055	6.1	101.9	1208	481.00	2,919	City Property Line
02/05/16	02-05-16 3C	N 29° 38' 46.6" W 098° 17' 35.6"	CLEAR 54° S 9	12:02	0.060	8.7	98.8	1208	481.00	4,470	McCormick - 21403 Liguria Drive
02/05/16	02-05-16 3C	N 29° 38' 46.6" W 098° 17' 35.6"	CLEAR 54° S 9	12:02	0.110	9.3	101.9	1208	481.00	3,898	Taveres - 9118 Tuscan Hills
02/05/16	02-05-16 3C	N 29° 38' 46.6" W 098° 17' 35.6"	CLEAR 54° S 9	12:02	0.170	19.0	107.0	1208	481.00	2,423	Warden - 21375 Gunther Grove
02/05/16	02-05-16 3C	N 29° 38' 46.6" W 098° 17' 35.6"	CLEAR 54° S 9	12:02	0.175	23.0	107.5	1208	481.00	2,209	Warden Property Line
02/09/16	02-09-16 3D	N 29° 38' 50.9" W 098° 17' 36.3"	CLEAR 69° W 10	12:10	0.025	20.0	100.0	820	416.00	3,260	City Property Line
02/09/16	02-09-16 3D	N 29° 38' 50.9" W 098° 17' 36.3"	CLEAR 69° W 10	12:10	0.020	13.0	101.0	820	416.00	3,716	Cruz - 22410 Oro Viejo Ct
02/09/16	02-09-16 3D	N 29° 38' 50.9" W 098° 17' 36.3"	CLEAR 69° W 10	12:10	0.045	28.0	95.9	820	416.00	3,799	Taveres - 9118 Tuscan Hills
02/09/16	02-09-16 3D	N 29° 38' 50.9" W 098° 17' 36.3"	CLEAR 69° W 10	12:10	0.085	12.0	102.8	820	416.00	2,846	Warden - 21375 Gunther Grove
02/09/16	02-09-16 3D	N 29° 38' 50.9" W 098° 17' 36.3"	CLEAR 69° W 10	12:10	0.060	23.0	104.9	820	416.00	2,635	Warden Property Line
02/10/16	02-10-16 3E	N 29° 38' 54.4" W 098° 17' 36.8"	CLEAR 61° E 7	11:39	0.020	26.0	106.0	500	819.00	3,557	City Property Line
02/10/16	02-10-16 3E	N 29° 38' 54.4" W 098° 17' 36.8"	CLEAR 61° E 7	11:39	0.025	32.0	101.9	500	819.00	3,612	Cruz - 22410 Oro Viejo Ct
02/10/16	02-10-16 3E	N 29° 38' 54.4" W 098° 17' 36.8"	CLEAR 61° E 7	11:39	0.045	20.0	101.9	500	819.00	3,761	Taveres - 9118 Tuscan Hills
02/10/16	02-10-16 3E	N 29° 38' 54.4" W 098° 17' 36.8"	CLEAR 61° E 7	11:39	0.070	13.0	108.4	500	819.00	3,194	Warden - 21375 Gunther Grove
02/10/16	02-10-16 3E	N 29° 38' 54.4" W 098° 17' 36.8"	CLEAR 61° E 7	11:39	0.045	26.0	109.2	500	819.00	2,986	Warden Property Line

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**GARDEN RIDGE QUARRY COMMISSION
GARDEN RIDGE, TEXAS
MONTH OF FEBRUARY 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
02/11/16	02-11-16 3B	N 29° 38' 40" W 098° 17' 34.5"	CLEAR 77° SW 12	13:05	0.055	10.0	106.0	1208	663.00	2,457	City Property Line
02/11/16	02-11-16 3B	N 29° 38' 40" W 098° 17' 34.5"	CLEAR 77° SW 12	13:05	0.050	26.0	102.8	1208	663.00	4,239	Cruz - 22410 Oro Viejo Ct
02/11/16	02-11-16 3B	N 29° 38' 40" W 098° 17' 34.5"	CLEAR 77° SW 12	13:05	0.070	9.1	101.0	1208	663.00	4,139	Taveres - 9118 Tuscan Hills
02/11/16	02-11-16 3B	N 29° 38' 40" W 098° 17' 34.5"	CLEAR 77° SW 12	13:05	0.220	27.0	110.9	1208	663.00	1,790	Warden - 21375 Gunther Grove
02/11/16	02-11-16 3B	N 29° 38' 40" W 098° 17' 34.5"	CLEAR 77° SW 12	13:05	0.205	15.0	109.9	1208	663.00	1,571	Warden Property Line
02/16/16	02-16-16 South Wall B	N 29° 38' 15" W 098° 16' 44.6"	CLEAR 76° SW 9	12:32	0.025	7.4	105.5	936	1066.00	6,159	City Property Line
02/16/16	02-16-16 South Wall B	N 29° 38' 15" W 098° 16' 44.6"	CLEAR 76° SW 9	12:32	NT	NT	NT	936	1066.00	9,308	Cruz - 22410 Oro Viejo Ct
02/16/16	02-16-16 South Wall B	N 29° 38' 15" W 098° 16' 44.6"	CLEAR 76° SW 9	12:32	0.065	12.0	103.5	936	1066.00	3,646	Holly - 9916 Trophy Oaks
02/16/16	02-16-16 South Wall B	N 29° 38' 15" W 098° 16' 44.6"	CLEAR 76° SW 9	12:32	NT	NT	NT	936	1066.00	9,154	Taveres - 9118 Tuscan Hills
02/16/16	02-16-16 South Wall B	N 29° 38' 15" W 098° 16' 44.6"	CLEAR 76° SW 9	12:32	0.090	19.0	108.0	936	1066.00	4,946	Warden - 21375 Gunther Grove
02/17/16	02-17-16 4B	N 29° 39' 01.6" W 098° 17' 34.4"	CLEAR 69° SE 6	11:37	0.030	14.0	110.6	680	800.00	4,309	City Property Line
02/17/16	02-17-16 4B	N 29° 39' 01.6" W 098° 17' 34.4"	CLEAR 69° SE 6	11:37	0.045	20.0	101.9	680	800.00	3,806	Cruz - 22410 Oro Viejo Ct
02/17/16	02-17-16 4B	N 29° 39' 01.6" W 098° 17' 34.4"	CLEAR 69° SE 6	11:37	0.060	32.0	104.2	680	800.00	4,082	Taveres - 9118 Tuscan Hills
02/17/16	02-17-16 4B	N 29° 39' 01.6" W 098° 17' 34.4"	CLEAR 69° SE 6	11:37	0.080	10.0	110.2	680	800.00	3,943	Warden - 21375 Gunther Grove
02/17/16	02-17-16 4B	N 29° 39' 01.6" W 098° 17' 34.4"	CLEAR 69° SE 6	11:37	0.055	10.0	110.6	680	800.00	3,731	Warden Property Line

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**GARDEN RIDGE QUARRY COMMISSION
GARDEN RIDGE, TEXAS
MONTH OF FEBRUARY 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
02/18/16	02-18-16 Lower 6	N 29° 38' 49.4" W 098° 17' 09.1"	PT CLOUDY 56° S 12	11:03	NT	NT	NT	570	470.00	4,826	City Property Line
02/18/16	02-18-16 Lower 6	N 29° 38' 49.4" W 098° 17' 09.1"	PT CLOUDY 56° S 12	11:03	0.030	17.0	101.0	570	470.00	6,100	Cruz - 22410 Oro Viejo Ct
02/18/16	02-18-16 Lower 6	N 29° 38' 49.4" W 098° 17' 09.1"	PT CLOUDY 56° S 12	11:03	0.040	16.0	98.8	570	470.00	6,295	Taveres - 9118 Tuscan Hills
02/18/16	02-18-16 Lower 6	N 29° 38' 49.4" W 098° 17' 09.1"	PT CLOUDY 56° S 12	11:03	0.095	22.0	105.5	570	470.00	3,769	Warden - 21375 Gunther Grove
02/18/16	02-18-16 Lower 6	N 29° 38' 49.4" W 098° 17' 09.1"	PT CLOUDY 56° S 12	11:03	0.070	18.0	106.5	570	470.00	3,646	Warden Property Line
02/19/16	02-19-16 S Wall Toe	N 29° 38' 19.5" W 098° 16' 39.5"	PT CLOUDY 65° SW 5	10:54	NT	NT	NT	588	286.00	6,553	City Property Line
02/19/16	02-19-16 S Wall Toe	N 29° 38' 19.5" W 098° 16' 39.5"	PT CLOUDY 65° SW 5	10:54	NT	NT	NT	588	286.00	9,535	Cruz - 22410 Oro Viejo Ct
02/19/16	02-19-16 S Wall Toe	N 29° 38' 19.5" W 098° 16' 39.5"	PT CLOUDY 65° SW 5	10:54	NT	NT	NT	588	286.00	4,214	Holly - 9916 Trophy Oaks
02/19/16	02-19-16 S Wall Toe	N 29° 38' 19.5" W 098° 16' 39.5"	PT CLOUDY 65° SW 5	10:54	NT	NT	NT	588	286.00	9,422	Taveres - 9118 Tuscan Hills
02/19/16	02-19-16 S Wall Toe	N 29° 38' 19.5" W 098° 16' 39.5"	PT CLOUDY 65° SW 5	10:54	NT	NT	NT	588	286.00	5,311	Warden - 21375 Gunther Grove
02/24/16	02-24-16 3C	N 29° 38' 46.3" W 098° 17' 35.9"	CLEAR 59° NW 10	11:32	0.040	9.0	89.9	1120	500.00	3,092	City Property Line
02/24/16	02-24-16 3C	N 29° 38' 46.3" W 098° 17' 35.9"	CLEAR 59° NW 10	11:32	0.030	19.0	101.8	1120	500.00	3,896	Cruz - 22410 Oro Viejo Ct
02/24/16	02-24-16 3C	N 29° 38' 46.3" W 098° 17' 35.9"	CLEAR 59° NW 10	11:32	0.070	19.0	100.0	1120	500.00	3,936	Taveres - 9118 Tuscan Hills
02/24/16	02-24-16 3C	N 29° 38' 46.3" W 098° 17' 35.9"	CLEAR 59° NW 10	11:32	0.170	27.0	113.0	1120	500.00	2,460	Warden - 21375 Gunther Grove
02/24/16	02-24-16 3C	N 29° 38' 46.3" W 098° 17' 35.9"	CLEAR 59° NW 10	11:32	0.090	28.0	113.7	1120	500.00	2,285	Warden Property Line

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

GARDEN RIDGE QUARRY COMMISSION
GARDEN RIDGE, TEXAS
MONTH OF FEBRUARY 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
02/25/16	02-25-16 S Wall D	N 29° 38' 11.1" W 098° 16' 51.7"	CLEAR 68° W 3	12:17	0.020	9.0	111.2	825	951.00	3,844	City Property Line
02/25/16	02-25-16 S Wall D	N 29° 38' 11.1" W 098° 16' 51.7"	CLEAR 68° W 3	12:17	NT	NT	NT	825	951.00	3,633	Cruz - 22410 Oro Viejo Ct
02/25/16	02-25-16 S Wall D	N 29° 38' 11.1" W 098° 16' 51.7"	CLEAR 68° W 3	12:17	0.060	12.0	106.5	825	951.00	4,424	Holly - 9916 Trophy Oaks
02/25/16	02-25-16 S Wall D	N 29° 38' 11.1" W 098° 16' 51.7"	CLEAR 68° W 3	12:17	0.020	12.0	104.2	825	951.00	3,856	Taveres - 9118 Tuscan Hills
02/25/16	02-25-16 S Wall D	N 29° 38' 11.1" W 098° 16' 51.7"	CLEAR 68° W 3	12:17	0.065	24.0	111.2	825	951.00	3,429	Warden - 21375 Gunther Grove
02/26/16	02-26-15 4A	N 29° 38' 57.7" W 098° 17' 36.9"	PT CLOUDY 54° E 7	11:47	0.040	23.0	108.8	825	871.00	3,859	City Property Line
02/26/16	02-26-15 4A	N 29° 38' 57.7" W 098° 17' 36.9"	PT CLOUDY 54° E 7	11:47	0.045	15.0	102.8	825	871.00	3,577	Cruz - 22410 Oro Viejo Ct
02/26/16	02-26-15 4A	N 29° 38' 57.7" W 098° 17' 36.9"	PT CLOUDY 54° E 7	11:47	0.065	11.0	102.8	825	871.00	3,789	Taveres - 9118 Tuscan Hills
02/26/16	02-26-15 4A	N 29° 38' 57.7" W 098° 17' 36.9"	PT CLOUDY 54° E 7	11:47	0.090	10.0	111.5	825	871.00	3,527	Warden - 21375 Gunther Grove
02/26/16	02-26-15 4A	N 29° 38' 57.7" W 098° 17' 36.9"	PT CLOUDY 54° E 7	11:47	0.095	9.3	111.5	825	871.00	3,319	Warden Property Line
02/29/16	02-29-16 Lower 3A	N 29° 38' 38.3" W 098° 17' 33.9"	CLOUDY 69° SE 7	11:48	0.025	26.0	98.8	568	250.00	2,376	City Property Line
02/29/16	02-29-16 Lower 3A	N 29° 38' 38.3" W 098° 17' 33.9"	CLOUDY 69° SE 7	11:48	NT	NT	NT	568	250.00	4,366	Cruz - 22410 Oro Viejo Ct
02/29/16	02-29-16 Lower 3A	N 29° 38' 38.3" W 098° 17' 33.9"	CLOUDY 69° SE 7	11:48	NT	NT	NT	568	250.00	4,243	Taveres - 9118 Tuscan Hills
02/29/16	02-29-16 Lower 3A	N 29° 38' 38.3" W 098° 17' 33.9"	CLOUDY 69° SE 7	11:48	0.130	17.0	102.8	568	250.00	1,641	Warden - 21375 Gunther Grove
02/29/16	02-29-16 Lower 3A	N 29° 38' 38.3" W 098° 17' 33.9"	CLOUDY 69° SE 7	11:48	0.130	24.0	103.5	568	250.00	1,421	Warden Property Line

NT = No Trigger, <0.020 ips.

NT = No Trigger, <122dB



April 5, 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 March 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 2nd Monday of each month at 7:00 p.m.

○ Respectfully submitted,

VIBRA-TECH, INC.

A handwritten signature in blue ink, consisting of two distinct, wavy, horizontal strokes.

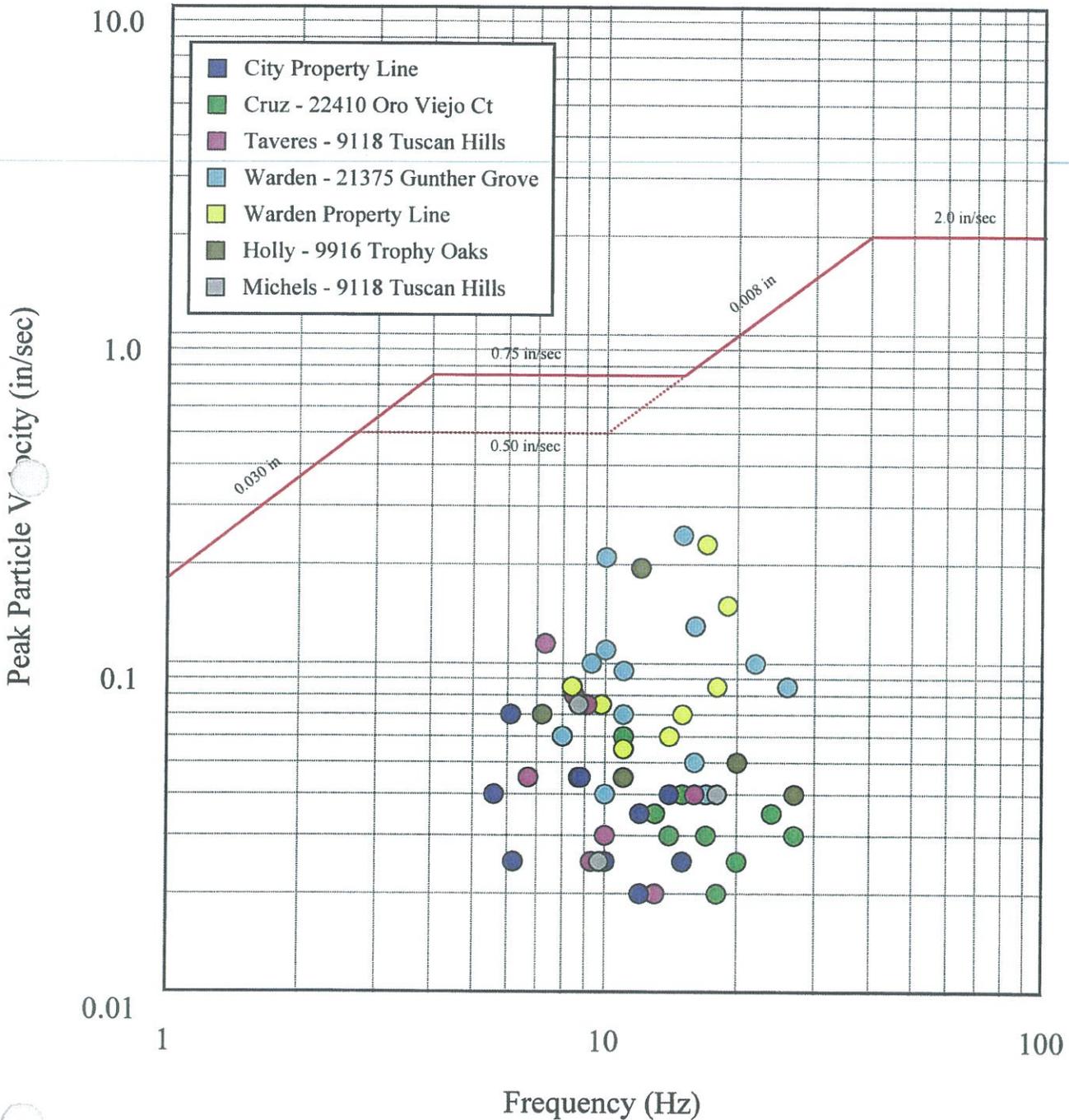
Geoffrey Rigsby
Southwest Regional Manager

cc: Jacob Scherer, Hanson – Servtex

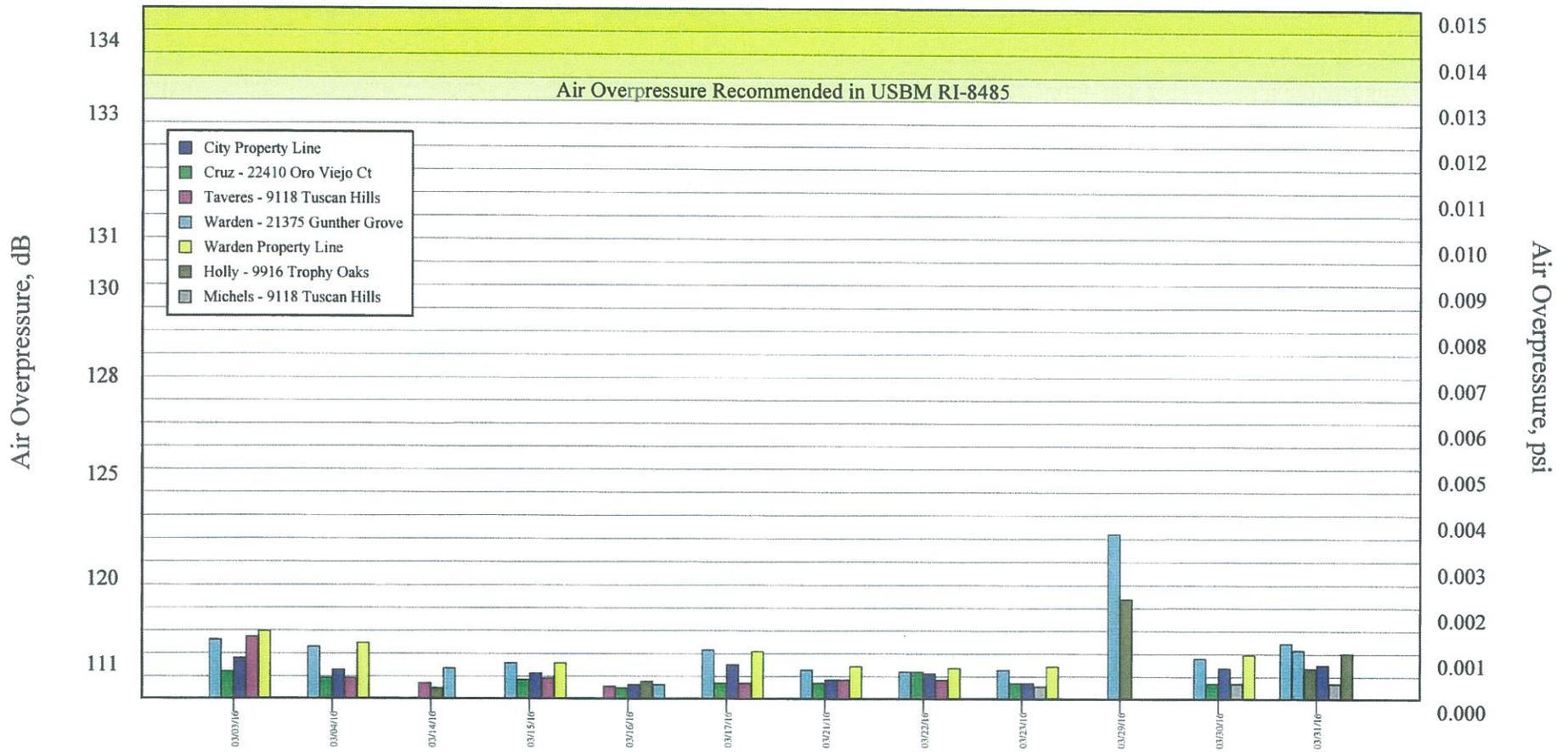
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**Comparison of Measured Blast Vibrations
to Current U.S. Bureau of Mines Recommendations
Quarry Commission
Garden Ridge
March 2016**



**Air Overpressure Levels from
Quarry Commission
Garden Ridge
March 2016**





**GARDEN RIDGE QUARRY COMMISSION
GARDEN RIDGE, TEXAS
MONTH OF MARCH 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
03/03/16	03-03-16 3D	N 29° 38' 51.8" W 098° 17' 36.7"	CLEAR 80° N 16	12:14	0.045	8.7	109.9	600	910.00	3,324	City Property Line
03/03/16	03-03-16 3D	N 29° 38' 51.8" W 098° 17' 36.7"	CLEAR 80° N 16	12:14	0.040	15.0	106.5	600	910.00	3,663	Cruz - 22410 Oro Viejo Ct
03/03/16	03-03-16 3D	N 29° 38' 51.8" W 098° 17' 36.7"	CLEAR 80° N 16	12:14	0.080	8.5	113.5	600	910.00	3,762	Taveres - 9118 Tuscan Hills
03/03/16	03-03-16 3D	N 29° 38' 51.8" W 098° 17' 36.7"	CLEAR 80° N 16	12:14	0.095	11.0	113.1	600	910.00	2,933	Warden - 21375 Gunther Grove
03/03/16	03-03-16 3D	N 29° 38' 51.8" W 098° 17' 36.7"	CLEAR 80° N 16	12:14	0.075	9.8	114.2	600	910.00	2,723	Warden Property Line
03/04/16	03-04-16 3B	N 29° 38' 41.5" W 098° 17' 35.2"	CLEAR 70° SE 8	11:55	0.070	6.1	107.0	1148	663.00	2,528	City Property Line
03/04/16	03-04-16 3B	N 29° 38' 41.5" W 098° 17' 35.2"	CLEAR 70° SE 8	11:55	0.060	11.0	104.2	1148	663.00	4,117	Cruz - 22410 Oro Viejo Ct
03/04/16	03-04-16 3B	N 29° 38' 41.5" W 098° 17' 35.2"	CLEAR 70° SE 8	11:55	0.115	7.3	104.2	1148	663.00	4,037	Taveres - 9118 Tuscan Hills
03/04/16	03-04-16 3B	N 29° 38' 41.5" W 098° 17' 35.2"	CLEAR 70° SE 8	11:55	0.245	15.0	112.0	1148	663.00	1,922	Warden - 21375 Gunther Grove
03/04/16	03-04-16 3B	N 29° 38' 41.5" W 098° 17' 35.2"	CLEAR 70° SE 8	11:55	0.230	17.0	112.6	1148	663.00	1,705	Warden Property Line
03/14/16	03-14-16 S Wall 0	N 29° 38' 18.4" W 098° 16' 38.5"	CLEAR 83° SW 15	14:25	NT	NT	NT	784	1027.00	6,661	City Property Line
03/14/16	03-14-16 S Wall 0	N 29° 38' 18.4" W 098° 16' 38.5"	CLEAR 83° SW 15	14:25	NT	NT	NT	784	1027.00	9,633	Cruz - 22410 Oro Viejo Ct
03/14/16	03-14-16 S Wall 0	N 29° 38' 18.4" W 098° 16' 38.5"	CLEAR 83° SW 15	14:25	0.040	27.0	98.8	784	1027.00	4,198	Holly - 9916 Trophy Oaks
03/14/16	03-14-16 S Wall 0	N 29° 38' 18.4" W 098° 16' 38.5"	CLEAR 83° SW 15	14:25	0.020	13.0	101.9	784	1027.00	9,518	Taveres - 9118 Tuscan Hills
03/14/16	03-14-16 S Wall 0	N 29° 38' 18.4" W 098° 16' 38.5"	CLEAR 83° SW 15	14:25	0.040	17.0	107.5	784	1027.00	5,437	Warden - 21375 Gunther Grove
03/15/16	03-15-16 5B	N 29° 39' 01.8" W 098° 17' 16.8"	PT CLOUDY 75° SW 8	11:54	0.025	10.0	106.0	744	663.00	5,145	City Property Line

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

GARDEN RIDGE QUARRY COMMISSION
GARDEN RIDGE, TEXAS
MONTH OF MARCH 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
03/15/16	03-15-16 5B	N 29° 39' 01.8" W 098° 17' 16.8"	PT CLOUDY 75° SW 8	11:54	0.025	20.0	103.5	744	663.00	5,354	Cruz - 22410 Oro Viejo Ct
03/15/16	03-15-16 5B	N 29° 39' 01.8" W 098° 17' 16.8"	PT CLOUDY 75° SW 8	11:54	0.025	9.3	104.2	744	663.00	5,604	Taveres - 9118 Tuscan Hills
03/15/16	03-15-16 5B	N 29° 39' 01.8" W 098° 17' 16.8"	PT CLOUDY 75° SW 8	11:54	0.085	26.0	108.8	744	663.00	4,431	Warden - 21375 Gunther Grove
03/15/16	03-15-16 5B	N 29° 39' 01.8" W 098° 17' 16.8"	PT CLOUDY 75° SW 8	11:54	0.055	11.0	108.8	744	663.00	4,211	Warden Property Line
03/16/16	03-16-16 Base Pit 2B	N 29° 38' 19.0" W 098° 17' 04.8"	PT CLOUDY 72° E 9	11:30	0.025	6.2	101.0	756	897.00	4,346	City Property Line
03/16/16	03-16-16 Base Pit 2B	N 29° 38' 19.0" W 098° 17' 04.8"	PT CLOUDY 72° E 9	11:30	0.030	17.0	98.8	756	897.00	7,567	Cruz - 22410 Oro Viejo Ct
03/16/16	03-16-16 Base Pit 2B	N 29° 38' 19.0" W 098° 17' 04.8"	PT CLOUDY 72° E 9	11:30	0.195	12.0	102.8	756	897.00	1,911	Holly - 9916 Trophy Oaks
03/16/16	03-16-16 Base Pit 2B	N 29° 38' 19.0" W 098° 17' 04.8"	PT CLOUDY 72° E 9	11:30	0.030	10.0	100.0	756	897.00	7,374	Taveres - 9118 Tuscan Hills
03/16/16	03-16-16 Base Pit 2B	N 29° 38' 19.0" W 098° 17' 04.8"	PT CLOUDY 72° E 9	11:30	0.130	16.0	101.0	756	897.00	3,127	Warden - 21375 Gunther Grove
03/17/16	03-17-16 Upper 3A	N 29° 38' 36.7" W 098° 17' 35.2"	CLOUDY 70° NE 1	11:35	0.040	14.0	108.4	360	275.00	2,183	City Property Line
03/17/16	03-17-16 Upper 3A	N 29° 38' 36.7" W 098° 17' 35.2"	CLOUDY 70° NE 1	11:35	0.020	18.0	101.9	360	275.00	4,347	Cruz - 22410 Oro Viejo Ct
03/17/16	03-17-16 Upper 3A	N 29° 38' 36.7" W 098° 17' 35.2"	CLOUDY 70° NE 1	11:35	0.045	6.7	101.9	360	275.00	4,192	Taveres - 9118 Tuscan Hills
03/17/16	03-17-16 Upper 3A	N 29° 38' 36.7" W 098° 17' 35.2"	CLOUDY 70° NE 1	11:35	0.210	10.0	111.5	360	275.00	1,451	Warden - 21375 Gunther Grove
03/17/16	03-17-16 Upper 3A	N 29° 38' 36.7" W 098° 17' 35.2"	CLOUDY 70° NE 1	11:35	0.150	19.0	111.2	360	275.00	1,232	Warden Property Line
03/21/16	03-21-16 3E	N 29° 38' 54.9" W 098° 17' 37.2"	CLEAR 58° SE 10	11:52	0.025	15.0	103.5	440	845.00	3,588	City Property Line
03/21/16	03-21-16 3E	N 29° 38' 54.9" W 098° 17' 37.2"	CLEAR 58° SE 10	11:52	0.035	13.0	101.9	440	845.00	3,571	Cruz - 22410 Oro Viejo Ct

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GARDEN RIDGE QUARRY COMMISSION
GARDEN RIDGE, TEXAS
MONTH OF MARCH 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
03/21/16	03-21-16 3E	N 29° 38' 54.9" W 098° 17' 37.2"	CLEAR 58° SE 10	11:52	0.040	16.0	103.5	440	845.00	3,730	Taveres - 9118 Tuscan Hills
03/21/16	03-21-16 3E	N 29° 38' 54.9" W 098° 17' 37.2"	CLEAR 58° SE 10	11:52	0.070	11.0	107.0	440	845.00	3,242	Warden - 21375 Gunther Grove
03/21/16	03-21-16 3E	N 29° 38' 54.9" W 098° 17' 37.2"	CLEAR 58° SE 10	11:52	0.060	14.0	108.0	440	845.00	3,034	Warden Property Line
03/22/16	03-22-16 4B	N 29° 39' 01.1" W 098° 17' 35.5"	CLEAR 64° S 20	11:52	0.035	12.0	106.0	632	767.00	4,224	City Property Line
03/22/16	03-22-16 4B	N 29° 39' 01.1" W 098° 17' 35.5"	CLEAR 64° S 20	11:52	0.035	24.0	106.5	632	767.00	3,706	Cruz - 22410 Oro Viejo Ct
03/22/16	03-22-16 4B	N 29° 39' 01.1" W 098° 17' 35.5"	CLEAR 64° S 20	11:52	0.075	9.1	103.5	632	767.00	3,976	Taveres - 9118 Tuscan Hills
03/22/16	03-22-16 4B	N 29° 39' 01.1" W 098° 17' 35.5"	CLEAR 64° S 20	11:52	0.110	10.0	106.5	632	767.00	3,881	Warden - 21375 Gunther Grove
03/22/16	03-22-16 4B	N 29° 39' 01.1" W 098° 17' 35.5"	CLEAR 64° S 20	11:52	0.070	15.0	107.5	632	767.00	3,671	Warden Property Line
03/23/16	03-23-16 3D	N 29° 38' 51" W 098° 17' 36.9"	CLOUDY 70° S 20	12:04	0.045	8.8	101.9	660	962.00	3,244	City Property Line
03/23/16	03-23-16 3D	N 29° 38' 51" W 098° 17' 36.9"	CLOUDY 70° S 20	12:04	0.030	14.0	101.9	660	962.00	3,662	Cruz - 22410 Oro Viejo Ct
03/23/16	03-23-16 3D	N 29° 38' 51" W 098° 17' 36.9"	CLOUDY 70° S 20	12:04	0.075	8.7	100.0	660	962.00	3,746	Michels - 9118 Tuscan Hills
03/23/16	03-23-16 3D	N 29° 38' 51" W 098° 17' 36.9"	CLOUDY 70° S 20	12:04	0.100	9.3	107.0	660	962.00	2,851	Warden - 21375 Gunther Grove
03/23/16	03-23-16 3D	N 29° 38' 51" W 098° 17' 36.9"	CLOUDY 70° S 20	12:04	0.085	8.4	108.0	660	962.00	2,641	Warden Property Line
03/29/16	03-29-16 South Wall C	N 29° 38' 12.9" W 098° 16' 48.4"	CLOUDY 67° SE 10	12:43	NT	NT	NT	744	1105.00	5,859	City Property Line
03/29/16	03-29-16 South Wall C	N 29° 38' 12.9" W 098° 16' 48.4"	CLOUDY 67° SE 10	12:43	NT	NT	NT	744	1105.00	9,122	Cruz - 22410 Oro Viejo Ct
03/29/16	03-29-16 South Wall C	N 29° 38' 12.9" W 098° 16' 48.4"	CLOUDY 67° SE 10	12:43	0.045	11.0	117.6	744	1105.00	3,319	Holly - 9916 Trophy Oaks

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GARDEN RIDGE QUARRY COMMISSION
GARDEN RIDGE, TEXAS
MONTH OF MARCH 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
03/29/16	03-29-16 South Wall C	N 29° 38' 12.9" W 098° 16' 48.4"	CLOUDY 67° SE 10	12:43	NT	NT	NT	744	1105.00	8,942	Michels - 9118 Tuscan Hills
03/29/16	03-29-16 South Wall C	N 29° 38' 12.9" W 098° 16' 48.4"	CLOUDY 67° SE 10	12:43	0.050	16.0	121.9	744	1105.00	4,659	Warden - 21375 Gunther Grove
03/30/16	03-30-16 Lower 6	N 29° 38' 49.8" W 098° 17' 08.9"	CLOUDY 70° S 14	11:47	0.020	12.0	107.5	590	500.00	4,831	City Property Line
03/30/16	03-30-16 Lower 6	N 29° 38' 49.8" W 098° 17' 08.9"	CLOUDY 70° S 14	11:47	0.030	27.0	101.9	590	500.00	6,110	Cruz - 22410 Oro Viejo Ct
03/30/16	03-30-16 Lower 6	N 29° 38' 49.8" W 098° 17' 08.9"	CLOUDY 70° S 14	11:47	0.040	18.0	101.9	590	500.00	6,215	Michels - 9118 Tuscan Hills
03/30/16	03-30-16 Lower 6	N 29° 38' 49.8" W 098° 17' 08.9"	CLOUDY 70° S 14	11:47	0.100	22.0	109.9	590	500.00	3,857	Warden - 21375 Gunther Grove
03/30/16	03-30-16 Lower 6	N 29° 38' 49.8" W 098° 17' 08.9"	CLOUDY 70° S 14	11:47	0.085	18.0	110.6	590	500.00	3,653	Warden Property Line
03/31/16	03-31-16 South Wall 0	N 29° 38' 18.9" W 098° 16' 38"	CLEAR 78° NW 12	12:16	0.040	5.6	108.4	856	1027.00	6,702	City Property Line
03/31/16	03-31-16 South Wall 0	N 29° 38' 18.9" W 098° 16' 38"	CLEAR 78° NW 12	12:16	NT	NT	NT	856	1027.00	8,651	Cruz - 22410 Oro Viejo Ct
03/31/16	03-31-16 South Wall 0	N 29° 38' 18.9" W 098° 16' 38"	CLEAR 78° NW 12	12:16	0.070	7.2	107.5	856	1027.00	4,246	Holly - 9916 Trophy Oaks
03/31/16	03-31-16 South Wall 0	N 29° 38' 18.9" W 098° 16' 38"	CLEAR 78° NW 12	12:16	0.025	9.7	101.9	856	1027.00	9,541	Michels - 9118 Tuscan Hills
03/31/16	03-31-16 South Wall 0	N 29° 38' 18.9" W 098° 16' 38"	CLEAR 78° NW 12	12:16	0.060	8.0	111.5	856	1027.00	5,477	Warden - 21375 Gunther Grove
03/31/16	03-31-16 Signature Hole	N 29° 38' 09.8" W 098° 16' 54.9"	CLEAR 78° NW 12	12:24	NT	NT	NT	0	880.00	5,363	City Property Line
03/31/16	03-31-16 Signature Hole	N 29° 38' 09.8" W 098° 16' 54.9"	CLEAR 78° NW 12	12:24	NT	NT	NT	0	880.00	8,808	Cruz - 22410 Oro Viejo Ct
03/31/16	03-31-16 Signature Hole	N 29° 38' 09.8" W 098° 16' 54.9"	CLEAR 78° NW 12	12:24	0.050	20.0	110.9	0	880.00	2,790	Holly - 9916 Trophy Oaks
03/31/16	03-31-16 Signature Hole	N 29° 38' 09.8" W 098° 16' 54.9"	CLEAR 78° NW 12	12:24	NT	NT	NT	0	880.00	8,585	Michels - 9118 Tuscan Hills

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

**GARDEN RIDGE QUARRY COMMISSION
GARDEN RIDGE, TEXAS
MONTH OF MARCH 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
03/31/16	03-31-16 Signature Hole	N 29° 38' 09.8" W 098° 16' 54.9"	CLEAR 78° NW 12	12:24	0.040	10.0	112.6	0	880.00	4,192	Warden - 21375 Gunther Grove

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

City Secretary

From: noreply@civicplus.com
Sent: Tuesday, February 02, 2016 12:38 PM
To: City Administrator; City Secretary
Subject: Online Form Submittal: Citizen Quarry Blast Impact Report

Citizen Quarry Blast Impact Report

First Name	Beverly
Last Name	Pickering
Report Date	2/2/2016
Phone Number:	2105957082
E-Mail Address	bpick117@satx.rr.com
Address1	20428 Wahl Lane
Blast Date/Time:	2/2/2016 @11:38
Please describe the event.	I heard a loud rumble and the house shook and the couch I was sitting moved
How did this blast compare to other blasts?	Worse than anything I have heard in awhile
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?	sitting in living room
In what general direction does you house face? (N,E,S or W)	Field not completed.
What is the approximate square footage of your home?	2700
Is your home a 1 story, 1 1/2 , or 2 story or large?	2
Would you like a Quarry Commission member to	No

2/2/16 / 1-2

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.](#)

From: noreply@civicplus.com
Sent: Wednesday, February 24, 2016 11:58 AM
To: City Administrator; City Secretary
Subject: Online Form Submittal: Citizen Quarry Blast Impact Report

Citizen Quarry Blast Impact Report

First Name	Edwin
Last Name	Ford
Report Date	2/24/2016
Phone Number:	210-946-8123
E-Mail Address	eford3@satx.rr.com
Address1	21360 Gunther Grove
Blast Date/Time:	2/24/16 11:35 am
Please describe the event.	Quarry blast excessive, not acceptable for a normal quality of life standard.
How did this blast compare to other blasts?	<i>Field not completed.</i>
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?	cleaning pool
In what general direction does you house face? (N,E,S or W)	NE
What is the approximate square footage of your home?	5K
Is your home a 1 story, 1 1/2 , or 2 story or large?	1
Would you like a Quarry Commission member to	No

contact you regarding
your report?

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From: noreply@civicplus.com
Sent: Wednesday, February 24, 2016 12:16 PM
To: City Administrator; City Secretary
Subject: Online Form Submittal: Citizen Quarry Blast Impact Report

Citizen Quarry Blast Impact Report

First Name	Connie
Last Name	Cain
Report Date	2/24/2016
Phone Number:	210 651-6757
E-Mail Address	conniecain@satx.rr.com
Address 1	9967 Trophy Oaks Drive
Blast Date/Time:	2/24/16
Please describe the event.	At 11:30 am on a sunny, windy day. The blast was long, felt like an earth quake in my kitchen. I looked out of my kitchen window and saw the dust. I went outside to the front and took pictures of the dust blowing over my property and went to the back yard and took pictures of the dust above the yard. There was a strong odor of sulfur. I know that this report will never receive any consideration as past experience have thought me. Shame on you.
How did this blast compare to other blasts?	It was dirty and it smelled as bad as the lies the Quarry feeds us., Thank you for destroying the air we breath. Unlike the Quarry employees we do not wear protection gear and continue to suffer. The Quarry laughs at us all the way to the bank.
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?	working in the kitchen
In what general direction does you house face? (N,E,S or W)	Field not completed.

sent to Doc 2/24/16

2016/3-2

What is the approximate square footage of your home? 2630

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 your report? 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 every other month at 7:00 PM in the City Council Chambers in City Hall.*

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

City Secretary

From: City Secretary
Sent: Thursday, February 25, 2016 2:45 PM
To: City Secretary
Subject: FW: Online Form Submittal: Citizen Quarry Blast Impact Report

I asked Mr. McCormick to complete the Blast Impact Report (originally he completed the Citizen Concern/Input form I sent earlier). So this form goes with 2016/4-2.

From: noreply@civicplus.com [<mailto:noreply@civicplus.com>]
Sent: Thursday, February 25, 2016 2:29 PM
To: City Administrator; City Secretary
Subject: Online Form Submittal: Citizen Quarry Blast Impact Report

Citizen Quarry Blast Impact Report

First Name	David
Last Name	McCormick
Report Date	2/25/2016
Phone Number:	210-272-0920
E-Mail Address	dmmccormick1982@gmail.com
Address1	19902 Regency Run
Blast Date/Time:	02/25 @ 12:18 pm
Please describe the event.	Sudden earthquake-type shaking
How did this blast compare to other blasts?	A little more prominent
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 my desk
In what general direction does you house face? (N,E,S or W)	S
What is the approximate square footage of your	3500 sf

nomt. to EQ 1 2-25-16

2016/4-2

home?

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

Would you like a Quarry Commission member to contact you regarding your report? 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 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.](#)

From: Citizen Concern/Input Form <do_not_reply@civicplus.com>
Sent: Thursday, February 25, 2016 12:36 PM
To: City Secretary
Subject: New request received

Category Citizen Concern/Input Form has received a new request.

Here is what we have on file:

Citizen Concern/Input Form

#52

[View Request](#)

		SUBMITTER
Category:	Citizen Concern/Input Form	
Priority:	3	
Assigned To:	Cain Nancy	
Submitted:	2/25/2016 12:36 PM	CONTACT
Source:	Website 70.123.237.76	

REQUEST DETAILS

Description

Should a problem require urgent attention, please call us immediately. For a police emergency, dial 911. Otherwise, call (210)651-6632 during regular business hours or for after hours, holidays or weekends call (210)651-6831.

Got a problem or suggestion?

Help us help you -- use this "Citizen Concern/Input Form"
Fill it in -- Send it in
We will do the rest!

If you are wanting to make a Citizen Quarry Blast Impact Report, see Citizen Blast Report. This form is under the Quick Links on the "home page" of the website.

Contact Information

Your Name

David McCormick

Your Address

19902 Regency Run

Please answer the question

Email Address

Location of Problem

Home

Citizen suggestions/comments

Brief Description (for other problem not listed)

Quite concerned over home shaking -- presumably due to the Quarry blasting. Have had 2 significant shakes this month - first on Feb. 2 @ 11:30 a.m. and the other today, Feb. 25 @

mult. @ 2-25-16 2016/2-25

12:18 p.m. It seems these "shakes" are getting more and more frequent and as a home owner, I am quite concerned of the negative impact this is having on our homes.

RECEIVED

CITY OF GARDEN RIDGE

FEB 26 2016

CITIZEN QUARRY BLAST IMPACT REPORT

Name: ROBERT KESSLER Report Date: 2/17/2016

Address: 19960 FM 2252 E-Mail Address:

Phone: 210-421-3587 Cell Blast Date/Time: 2/14/2016 / 12 pm

Please describe the event.

BLAST SHOCK THE WHOLE HOUSE AS IT USUALLY DOES. CHINA HUTCH ITEMS SHAKE. SOME TIMES THINGS ARE KNOCKED OVER.

How did this blast compare to other blasts? THIS TIME BATHROOM DOOR NOW STICKS WHEN OPENED OR CLOSED

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? WATCHING TV

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.

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.

2016/5-2

RECEIVED

MAR 08 2016

CITY OF GARDEN RIDGE
CITIZEN QUARRY BLAST IMPACT REPORT

PER ¹⁰ Name: Connie Cain Report Date: 3/4/16
Address: 9967 Trophy Oaks Dr E-Mail Address: conniecain@SATX.FC.COM
Phone: 210 651-6757 Blast Date/Time: 3/4/16 11:55 AM

Please describe the event.

Sunny, beautiful and peaceful day. The Quarry Blast was loud, long and shook the windows and ceiling fans. I took pictures of the large cloud of dust blowing and moving toward the Elementary School.

How did this blast compare to other blasts?

One of the worst.

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? in the kitchen making lunch

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 story

What is the approximate square footage of your home? 2430

Would you like a Quarry Commission member to contact you regarding your report?

(Yes or No) 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 every other month at 7:00 PM in the Municipal Courtroom.

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. Thank you for submitting the form.

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2016/1-3

CITY OF GARDEN RIDGE
CITIZEN QUARRY BLAST IMPACT REPORT

Name: Carolyn Cohen Report Date: 3-16-16
Address: 10041 Trophy Oaks E-Mail Address: _____
Phone: (214) 651-9695 Blast Date/Time: 3-16-16 11:35a

Please describe the event.

Blast shook house & her. She was in foyer.
Even at 11:45 gas odor & cloud
still in air.

How did this blast compare to other blasts? Never experience one
this bad. Intense; worse than any
other blast.

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? walking in foyer

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

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? 5,800

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 every other month at 7:00 PM in the Municipal Courtroom.

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

taken over her
sq
2016/2-3
sent to qc

From: noreply@civicplus.com
Sent: Wednesday, March 16, 2016 11:40 AM
To: City Administrator; City Secretary
Subject: Online Form Submittal: Citizen Quarry Blast Impact Report

Citizen Quarry Blast Impact Report

First Name	Edwin
Last Name	Ford
Report Date	3/16/2016
Phone Number:	<i>Field not completed.</i>
E-Mail Address	eford3@satx.rr.com
Address1	21360 Gunther Grove
Blast Date/Time:	11:31 am
Please describe the event.	House shaking excessive
How did this blast compare to other blasts?	<i>Field not completed.</i>
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>Field not completed.</i>
In what general direction does your house face? (N,E,S or W)	West
What is the approximate square footage of your home?	8500 sf
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	No

2016/3-3
sent to QC

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.*

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From: noreply@civicplus.com
Sent: Wednesday, March 16, 2016 11:58 AM
To: City Administrator; City Secretary
Subject: Online Form Submittal: Citizen Quarry Blast Impact Report

Citizen Quarry Blast Impact Report

First Name	Missy
Last Name	LANTZY
Report Date	3/16/2016
Phone Number:	210.651.3531
E-Mail Address	Mmlantzy@hotmail.com
Address1	20515 Wahl Lane
Blast Date/Time:	3/16/16. 11:30am
Please describe the event.	Shook the entire house
How did this blast compare to other blasts?	<i>Field not completed.</i>
On a 1 to 5 scale, please rate the blast intensity. (1=minor, 5 = major)	3
What was your activity at the time of blast?	On the phone
In what general direction does your 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 1/2
Would you like a Quarry Commission member to contact you regarding	No

2016/4-3
sent to AC

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.*

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