Texas Commission on Environmental Quality
Investigation Report
WILLIAMS BARNETT GATHERING SYSTEM LP
CN602903742

BUNN UNIT
RN105885222

Investigation # 795660 **Incident #**

Investigator: XIN RAO **Site Classification** MIN 0-15 FINS

Conducted: 01/21/2010 -- 01/21/2010 **SIC Code:** 1381

Program(s): AIR NEW SOURCE PERMITS

Investigation Type : Compliance Investigation

Location : NEAR THE 5300 BLOCK OF FLOWER MOUND ROAD IN FLOWER MOUND TEXAS

Additional ID(s) :

Address: ; ,

Activity Type : REGION 04 - DFW METROPLEX
FIAIRMON - FI AIR MON - Air Focused Investigation for General Monitoring
GFIR - Air - Gas Find IR

Principal(s) :

Role	Name
RESPONDENT	WILLIAMS BARNETT GATHERING SYSTEM LP

Contact(s) :

Role	Title	Name	Phone	
Regulated Entity Contact	ENVIRONMENTAL SPECIALIST	MR JEFF STOVALL	Cell	(817) 657-3729
			Fax	(817) 244-7323
			Work	(817) 560-5061

Other Staff Member(s) :

Role	Name
Supervisor	EJAZ BAIG
Investigator	KARA ALLEN

Associated Check List

Checklist Name	Unit Name
AIR FOCUSED INVESTIGATION - GENERAL MONITORING	Bunn Unit A
AIR FOCUSED INVESTIGATION - EQUIPMENT MONITORING	Bunn Unit A

Investigation Comments :

INTRODUCTION

In response to ambient monitoring reports showing elevated levels of various compounds around natural gas sites in the Barnett Shale area and due to increased interest from the public, media, and elected officials, a Focused Investigation - General Monitoring investigation using GasFindIR camera and MiniRae 2000 Photoionization Detector (MiniRae) (FI AIR MON/GFIR/MiniRae) was

conducted to evaluate equipment and to identify any significant sources of volatile organic compound (VOC) emissions at Williams Barnett Gathering System's Bunn Unit A 1H site (Williams - Bunn Unit A), located approximately 2600 feet southeast of the intersection of Farm to Market Road (FM) 1171 and Flower Mound Road in Flower Mound, Denton County, Texas. The investigation was conducted by Ms. Xin Rao (the writer) and Ms. Kara Allen, both of the TCEQ DFW Region Air Section. During the investigation, the following portions of the facility were evaluated: two produced water tanks and two separators. The area surrounding the facility is relatively flat and is primarily pastureland to the north, northwest, west, and southwest. Liberty Elementary School was located approximately 1300 feet to the southeast. A residential subdivision was approximately 1700 feet to the southeast and to the northeast of the facility.

Daily Narrative
On January 21, 2010, the investigators arrived at Williams - Bunn Unit A at 7:55 AM. Equipment at Williams - Bunn Unit A includes two produced water tanks and two separators.

The investigators proceeded to Location 1 at the entrance of Williams - Bunn Unit A to the south of the facility on Flower Mound Road (Attachment 1 for a Survey Map). The wind was out of the west at 2.4 miles per hour (mph), the temperature was 49 degrees Fahrenheit, and the relative humidity was 56%. Off-site observation at Location 1 with the GasFindIR camera did not reveal any emissions from the facility's produced water tanks and separators. The MiniRae readings averaged 0.0 parts per million (ppm) with a peak value of 0.1 ppm, which was within background range.

The investigators proceeded to conduct an odor survey along FM 1171, Flower Mound Road, and Quail Run (Attachment 1 for a Survey Map). No odors were noted during the survey.

The investigators then proceeded to Location 2 approximately 560 feet southeast (downwind) of the produced water tanks. The wind was out of the northwest at 3.2 mph, the temperature was 54 degrees Fahrenheit, and the relative humidity was 62.8%. The MiniRae readings averaged 0.0 ppm with a peak value of 0.2 ppm. A Summa canister air sample was taken at this location. The latitude and longitude for the location were 33.044245 (north) and 97.109647 (west), measured by the Trimble GeoExplorer3 GPS system. No odor was noted at the location.

The Summa sample was sent to the TCEQ Austin Laboratory for analysis of VOCs using Gas Chromatograph/Mass Spectrum (GC/MS). The laboratory analysis results showed no compounds exceeding their respective short-term or long-term Effects Screening Levels (ESLs) (Attachment 2, Summa Sample Laboratory Analysis Results).

Exit Interview
At the time of the investigation, Mr. Jeff Stovall, Environmental Specialist, Williams met the investigators, and was advised of the monitoring event, and the preliminary findings.

GENERAL FACILITY AND PROCESS INFORMATION

Process Description
Williams - Bunn Unit A is a natural gas gathering site. The equipment on-site includes two produced water tanks and two separators.

BACKGROUND

Monitoring Results
During the investigation, no emissions were observed using the GasFindIR camera. The MiniRae readings averaged 0.0 ppm with a peak value of 0.2 ppm at a location approximately 560 feet downwind of the produced water tanks. Analysis of the Summa canister air sample did not show any VOCs exceeding their respective short-term or long-term ESLs.

Current Enforcement Actions
There were no violations determined as a result of this investigation.

Agreed Orders, Court Orders, and other Compliance Agreements
There have been no orders or other compliance agreements for this facility regarding air quality within the past five years.

Prior Enforcement Issues
There have been no prior enforcement issues for this facility regarding air quality within the past five years.

Complaints
During the past five years, there has been no complaint against Williams - Bunn Unit A.

ADDITIONAL INFORMATION

Conclusions and Recommendations
No emissions were observed using the GasFindIR camera. The MiniRae readings averaged 0.0 ppm with a peak value of 0.2 ppm at a location approximately 560 feet downwind of the produced water tanks. Analysis of the Summa canister air sample did not show any VOCs exceeding their respective short-term or long-term ESLs.

Additional Issues
A more in-depth investigation is not warranted at this time.

Attachments
1. Survey Map
2. Summa Sample Laboratory Analysis Results

No Violations Associated to this Investigation

Signed _____ **Date** 3/18/10
Environmental Investigator

Signed _____ **Date** 03-18-10
Supervisor

Attachments: (in order of final report submittal)

___Enforcement Action Request (EAR)

___Letter to Facility (specify type) : _____

Investigation Report

___Sample Analysis Results

___Manifests

___NOR

___Maps, Plans, Sketches

___Photographs

___Correspondence from the facility

X Other (specify) :

See above

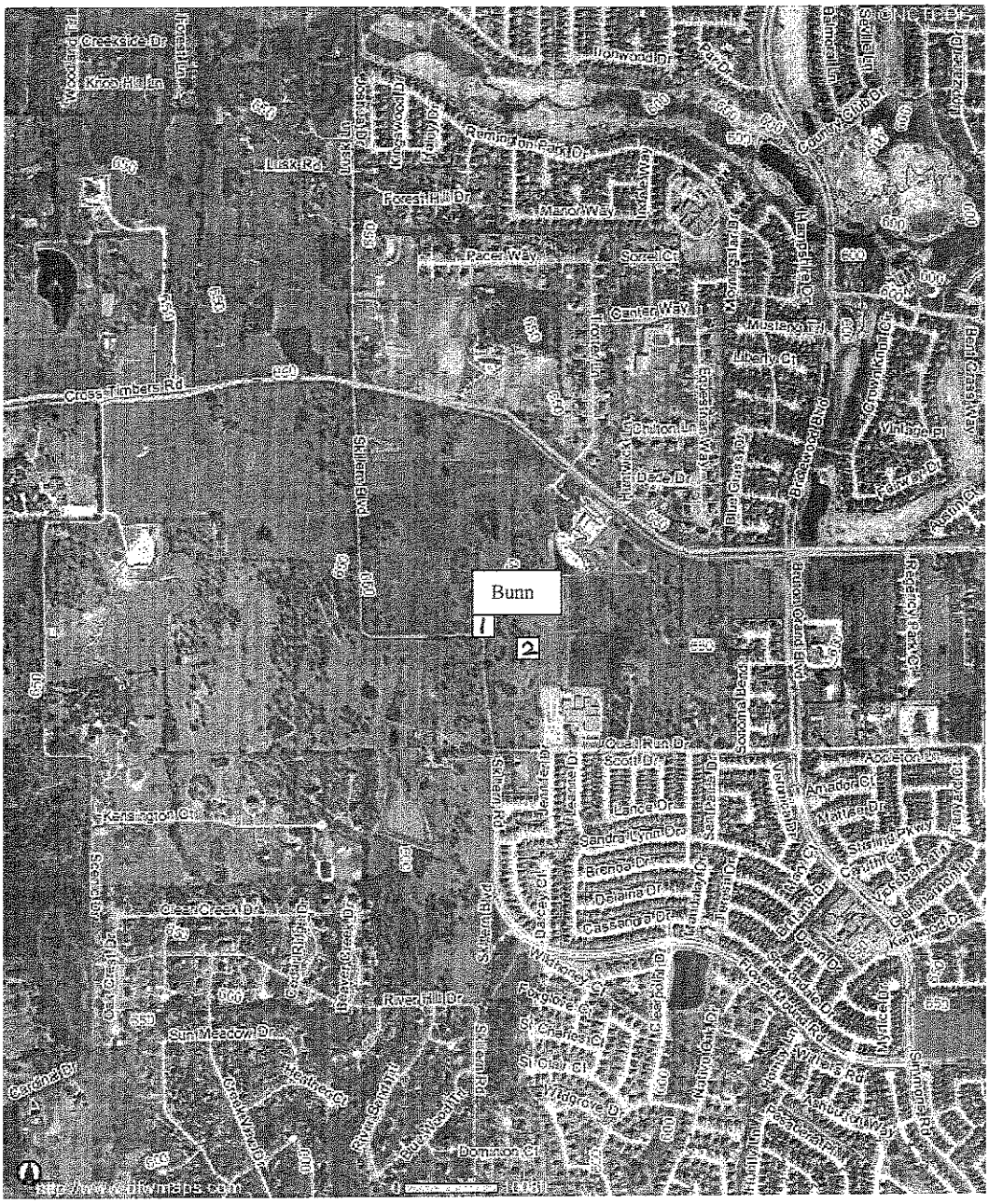
TCEQ

Region 4 - DFW

Attachment 1

Survey Map

Williams Barnett Gathering System LP/Bunn Unit A 1H
RN105885222
CN602903742
January 21, 2010
Investigation #795660



Odor Survey Route on January 21, 2010
__ 2007 elevation contours

No odor was noted during the survey.
Location 1: At the entrance of the facility.
Location 2: Approximately 560 feet downwind of the facility. A Summa sample was taken at this location.

TCEQ

Region 4 - DFW

Attachment 2

Summa Sample Laboratory Analysis Results

Williams Barnett Gathering System LP/Bunn Unit A 1H
RN105885222
CN602903742
January 21, 2010
Investigation #795660

Texas Commission on Environmental Quality

Laboratory and Quality Assurance Section
P.O. Box 13087
Austin, Texas 78711
(512) 239-1716

Bunn Unit A 1H

Laboratory Analysis Results
ACL Number: 100127

ACL Lead: Karen Bachtel Region: T04 Date Received: 1/22/2010
Project(s): Barnett Shale

Facility(ies) Sampled	City	County	Facility Type
William Production Gulf Coast, LP	Flower Mound	Denton	

Laboratory Procedure(s) Performed:

Analysis: AMOR006
Determination of VOC Canisters by GC/MS Using Modified Method TO-15
Procedure:
Prior to analysis, subatmospheric samples are pressurized to twice the collected volume using a sample dilution system. For analysis, a known volume of a sample is directed from the canister into a multitrap cryogenic concentrator. Internal standards are added to the sample stream prior to the trap. The concentrated sample is thermally desorbed and carried onto a GC column for separation. The analytical strategy involves using a GC with dual columns that are coupled to a mass selective detector (MSD) and a flame ionization detector (FID). Mass spectra for individual peaks in the total ion chromatogram are then used for target compound identification and quantitation. The fragmentation pattern is compared with stored spectra taken under similar conditions in order to identify the compound. For any given compound, the intensity of the quantitation fragment is compared with the system response to the fragment for known amounts of the compound. This establishes the compound concentration in the sample. For non-target compound peaks which are at least one-half the height of the internal standard, a library search is performed in an attempt to identify the compound solely upon fracture patterns. These tentatively identified compounds (TIC's) are reported as a sample specific footnote. Accurate quantitation of TICs is not possible. The FID is used for the quantitation of ethane, ethylene, acetylene, propylene and propane and identification is based on matching retention times of standards containing known analytes.

Sample(s) Received

Field ID Number: 20493 Laboratory Sample Number: 100127-0001 Sampled by: Xin Rao
Sampling Site: Downwind of the facility, off-site sample. Date & Time Sampled: 01/21/10 10:25:00 Valid Sample: Yes
Comments:
Canister #20493 was used as a grab sample.

Sample(s) Screening

Texas Commission on Environmental Quality

Laboratory and Quality Assurance Section
P.O. Box 13087
Austin, Texas 78711
(512) 239-1716

Laboratory Analysis Results

ACL Number: 100127

Sample(s) Screening

As a routine procedure, the data from this (these) sample(s) have been screened. No target compounds were detected at or above the Appropriate Comparison Value. Therefore, the TCEQ's Toxicology Division expects no adverse health effects or odors and will not review the data further. Please note that this analytical technique is not capable of measuring all compounds which might have the potential to cause adverse heath effects or odors. For questions on the analytical procedures please contact the laboratory manager at (512)-239-5853. If further health effects evaluation is desired please contact the Toxicology Division at (512)-239-1795.

Analyst: Jianping Loh — Date: 1/27/10
J.P. Loh

Reviewed By: [signature] — Date: 1/28/10
Karen Bachtel

Section Manager: [signature] for SS — Date: 1/29/10
Steve Stubbs

Laboratory Analysis Results

ACL Number: 100127

Analysis Code: AMOR006

Note: Results are reported in units of parts per billion by volume (ppbv)

Lab ID			100127-0001					
Field ID			20493					
Canister ID			20493					
Analysis Date			01/26/10					
Compound	ESL	LOD	Concentration	SDL	Flags**	Concentration	SDL	Flags**
ethane	10000	0.50	16	1.0	D1			
ethylene	1200	0.50	0.53	1.0	J,D1			
acetylene	25000	0.50	0.50	1.0	J,D1			
propane	10000	0.50	11	1.0	D1			
propylene	5000	0.50	ND	1.0	D1			
dichlorodifluoromethane	10000	0.20	0.56	0.40	L,D1			
methyl chloride	500	0.20	0.53	0.40	L,D1			
isobutane	2000	0.23	2.3	0.46	L,D1			
vinyl chloride	26000	0.17	ND	0.34	D1			
1-butene	360	0.20	0.12	0.40	J,D1			
1,3-butadiene	230	0.27	ND	0.55	D1			
n-butane	8000	0.20	4.4	0.40	D1			
t-2-butene	2100	0.18	ND	0.36	D1			
bromomethane	30	0.27	ND	0.55	D1			
c-2-butene	2100	0.27	ND	0.55	D1			
3-methyl-1-butene	250	0.23	ND	0.46	D1			
isopentane	1200	0.27	1.2	0.55	L,D1			
trichlorofluoromethane	5000	0.29	0.24	0.59	J,D1			
1-pentene	100	0.27	ND	0.55	D1			
n-pentane	1200	0.27	1.1	0.55	L,D1			
isoprene	5.0	0.27	ND	0.55	D1			
t-2-pentene	2600	0.27	ND	0.55	D1			
1,1-dichloroethylene	180	0.18	ND	0.36	D1			
c-2-pentene	2600	0.25	ND	0.51	D1			
methylene chloride	75	0.14	0.06	0.28	J,D1			
2-methyl-2-butene	250	0.23	ND	0.46	D1			
2,2-dimethylbutane	1000	0.21	0.03	0.42	J,D1			
cyclopentene	2900	0.20	ND	0.40	D1			
4-methyl-1-pentene	20	0.22	ND	0.44	D1			
1,1-dichloroethane	1000	0.19	ND	0.38	D1			
cyclopentane	1200	0.27	0.07	0.55	J,D1			
2,3-dimethylbutane	990	0.28	ND	0.57	D1			
2-methylpentane	83	0.27	0.24	0.55	J,D1			
3-methylpentane	1000	0.23	0.17	0.46	J,D1			
2-methyl-1-pentene + 1-hexene	20	0.20	ND	0.40	D1			
n-hexane	1500	0.20	0.38	0.40	J,D1			
chloroform	20	0.21	ND	0.42	D1			
t-2-hexene	500	0.27	ND	0.55	D1			
c-2-hexene	500	0.27	ND	0.55	D1			
1,2-dichloroethane	40	0.27	ND	0.55	D1			
methylcyclopentane	750	0.27	0.18	0.55	J,D1			
2,4-dimethylpentane	850	0.27	ND	0.55	D1			
1,1,1-trichloroethane	2000	0.26	ND	0.53	D1			
benzene	180	0.27	0.17	0.55	J,D1			
carbon tetrachloride	20	0.27	0.10	0.55	J,D1			
cyclohexane	420	0.24	0.20	0.48	J,D1			
2-methylhexane	750	0.27	ND	0.55	D1			
2,3-dimethylpentane	850	0.26	0.02	0.53	J,D1			

Laboratory Analysis Results

ACL Number: 100127

Analysis Code: AMOR006

Note: Results are reported in units of parts per billion by volume (ppbv)								
Lab ID			100127-0001					
Compound	BSL	LOD	Concentration	SDL	Flags**	Concentration	SDL	Flags**
3-methylhexane	750	0.20	0.11	0.40	J,D1			
1,2-dichloropropane	100	0.17	ND	0.34	D1			
trichloroethylene	100	0.29	ND	0.59	D1			
2,2,4-trimethylpentane	750	0.24	0.02	0.48	J,D1			
2-chloropentane	190	0.27	ND	0.55	D1			
n-heptane	670	0.25	0.12	0.51	J,D1			
c-1,3-dichloropropylene	10	0.20	ND	0.40	D1			
methylcyclohexane	150	0.26	ND	0.53	D1			
t-1,3-dichloropropylene	10	0.20	ND	0.40	D1			
1,1,2-trichloroethane	100	0.21	ND	0.42	D1			
2,3,4-trimethylpentane	750	0.24	ND	0.48	D1			
toluene	170	0.27	0.24	0.55	J,D1			
2-methylheptane	750	0.20	0.03	0.40	J,D1			
3-methylheptane	750	0.23	ND	0.46	D1			
1,2-dibromoethane	0.50	0.20	ND	0.40	D1			
n-octane	750	0.19	0.05	0.38	J,D1			
tetrachloroethylene	770	0.24	ND	0.48	D1			
chlorobenzene	100	0.27	ND	0.55	D1			
ethylbenzene	460	0.27	ND	0.55	D1			
m & p-xylene	80	0.27	0.16	0.55	J,D1			
styrene	25	0.27	ND	0.55	D1			
1,1,2,2-tetrachloroethane	10	0.20	ND	0.40	D1			
o-xylene	380	0.27	0.05	0.55	J,D1			
n-nonane	2000	0.22	ND	0.44	D1			
isopropylbenzene	100	0.24	ND	0.48	D1			
n-propylbenzene	3.8	0.27	ND	0.55	D1			
m-ethyltoluene	18	0.11	ND	0.22	D1			
p-ethyltoluene	8.3	0.16	ND	0.32	D1			
1,3,5-trimethylbenzene	250	0.25	ND	0.51	D1			
o-ethyltoluene	250	0.13	ND	0.26	D1			
1,2,4-trimethylbenzene	250	0.27	ND	0.55	D1			
n-decane	620	0.27	ND	0.55	D1			
1,2,3-trimethylbenzene	250	0.27	ND	0.55	D1			
m-diethylbenzene	70	0.27	ND	0.55	D1			
p-diethylbenzene	0.39	0.27	ND	0.55	D1			
n-undecane	550	0.27	ND	0.55	D1			

Laboratory Analysis Results

ACL Number: 100127

Analysis Code: AMOR006

Note: Results are reported in units of parts per billion by volume (ppbv)

ESL - Effects Screening Level. (Short-term Health and Odor Based in units of ppbv)
LOD - Limit of Detection.
ND - not detected
NQ - concentration can not be quantified.
SDL - Sample Detection Limit (MDL adjusted for dilutions).
INV - Invalid.
J - Reported concentration is below SDL.
L - Reported concentration is at or above the SDL and is below the lower limit of quantitation.
E - Reported concentration exceeds the upper limit of instrument calibration.
M - Result modified from previous result.

* SDL is equal to LOD
** Quality control flags explanations are listed on the last page of this report.
# Compound concentration is equal to or greater than the Effects Screening Level.

TCEQ laboratory customer support may be reached at kbachtel@tceq.state.tx.us

Laboratory Analysis Results

ACL Number: 100127

Analysis Code: AMOR006

Quality Control Notes:

Quality control notes for sample 100127-0001.

D1 - sample was diluted 4.04 times to determine the compound concentrations.

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